

FISHERY STATISTICS OF THE UNITED STATES

1963



STATISTICAL DIGEST NO. 57

UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

Bureau of Commercial Fisheries



UNITED STATES DEPARTMENT OF THE INTERIOR

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OF THE UNITED STATES**

1963

BY

Charles H. Lyles

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Fishery statistics of the United States are compiled and published annually to make available information on both the economic and biological aspects of the domestic commercial fisheries.

Data on the economic aspects are necessary to persons engaged in the commercial fishery and to governmental agencies concerned with its regulation and protection. Those here given cover the total catch and value by species, the yield and value of manufactured products, the employment of men, craft, and gear in the capture of fishery products; and related information.

From the biological standpoint these data are important to sound fishery management in providing detailed information on fluctuations in the commercial catch by species, locality, and gear, and type of craft operated. They assist conservation agencies in regulating the commercial fisheries so as to produce maximum yields without depletion.

Previous statistical reports on the fishery industries were issued under the Department of the Interior in the Administrative Report series for 1938 and in the Statistical Digest series for succeeding years. Reports for preceding years were issued in the Administrative Report series of the former Bureau of Fisheries.

The following is a listing of the various editions of "Fishery Statistics of the United States" issued since 1939:

Statistical Digest Number	Title
No. 1	Fishery Statistics of the United States, 1939
4	Fishery Statistics of the United States, 1940
7	Fishery Statistics of the United States, 1941
11	Fishery Statistics of the United States, 1942
14	Fishery Statistics of the United States, 1943
16	Fishery Statistics of the United States, 1944
18	Fishery Statistics of the United States, 1945
19	Fishery Statistics of the United States, 1946
21	Fishery Statistics of the United States, 1947
22	Fishery Statistics of the United States, 1948
25	Fishery Statistics of the United States, 1949
27	Fishery Statistics of the United States, 1950
30	Fishery Statistics of the United States, 1951
34	Fishery Statistics of the United States, 1952
36	Fishery Statistics of the United States, 1953
39	Fishery Statistics of the United States, 1954
41	Fishery Statistics of the United States, 1955
43	Fishery Statistics of the United States, 1956
44	Fishery Statistics of the United States, 1957
49	Fishery Statistics of the United States, 1958
51	Fishery Statistics of the United States, 1959
53	Fishery Statistics of the United States, 1960
54	Fishery Statistics of the United States, 1961
56	Fishery Statistics of the United States, 1962
57	Fishery Statistics of the United States, 1963

FISHERY STATISTICS OF THE UNITED STATES, 1963

CHARLES H. LYLES, Acting Chief, Branch of Fishery Statistics

Division of Economics

CONTENTS

	Page
Section 1.—General Review	4
U.S. Summaries	11
U.S. Catch Off Foreign Coasts	28
Relative Volume of the Catch, by Species	29
Relative Value of the Catch, by Species	30
U.S. Catch, Live Weight Basis	31
World Catch of Fish, Crustaceans, Mollusks, etc., by Countries	32
Seed Oyster Fishery	33
Wholesaling and Manufacturing	33
Manufactured Fishery Products	34
Canned Fishery Products	43
Industrial Fishery Products	56
Packaged Fishery Products	61
Frozen Fishery Trade	65
Foreign Fishery Trade	74
Section 2.—New England Fisheries	88
Sectional Summaries	94
Maine	104
New Hampshire	107
Massachusetts	108
Rhode Island	112
Connecticut	115
Supplementary Surveys	
Landings at Maine Ports	118
Landings at Massachusetts Ports	124
Survey Procedure in the New England States	140
Section 3.—Middle Atlantic Fisheries	143
Sectional Summaries	148
New York	155
New Jersey	158
Delaware	163
Supplementary Survey — Hudson River Shad Fishery	165
Section 4.—Chesapeake Fisheries	166
Sectional Summaries	170
Maryland	175
Virginia	179
Catch by Waters	184
Supplementary Survey — Potomac River Shad and Alewife Fishery	187
Section 5.—South Atlantic Fisheries	188
Sectional Summaries	192
North Carolina	200
South Carolina	203
Georgia	205
Florida, East Coast	207
Supplementary Surveys	
Florida, Operating Units by Districts	211
Florida, Catch by Districts	212
South Atlantic Shrimp Fishery	214
Survey Procedure in the South Atlantic States	217
Section 6.—Gulf Fisheries	219
Sectional Summaries	225
Florida, West Coast	234
Alabama	238
Mississippi	240
Louisiana	242
Texas	245
Supplementary Survey — Gulf Shrimp Fishery	249
Survey Procedure in the Gulf of Mexico	255

CONTENTS - Continued

	Page
Section 7.-Pacific Coast Fisheries	257
Sectional Summaries	267
Alaska	278
Washington	287
Oregon	294
California	299
Supplementary Surveys	
Landings by Halibut Fleet at Seattle, Washington	317
Whaling	318
Fur Seal Industry of the Pribilof Islands	319
Section 8.-Great Lakes Fisheries	321
United States and Canadian Catch	324
Sectional Summaries	327
Operating Units and Fishing Effort, by Gears	339
Catch by Lake, State, and Gear	347
Section 9.-Mississippi River Fisheries	356
Sectional Summaries	358
Operating Units and Catch by States and Waters	366
Supplementary Survey - Great Lakes and Mississippi River Catch by State and Species	390
Section 10.-Hawaii Fisheries	391
Sectional Summaries	393
Operating Units by Island and Gear	395
Catch by Islands	397
Catch by Gear	400
Section 11.-Puerto Rico Fisheries	403
Section 12.-Review of Certain Major Fisheries	406
U.S. Cod Fishery	407
Atlantic Coast Haddock Fishery	408
Pacific Coast Halibut Fishery	409
Atlantic Ocean Perch Fishery	410
Pacific Coast Salmon Fishery	411
Pacific Coast Sardine Fishery	416
Pacific Mackerel Fisheries	417
Pacific Tuna Fishery	418
U.S. Menhaden Fishery	421
U.S. Clam Fishery	425
U.S. Crab Fishery	427
U.S. Oyster Fishery	430
U.S. Shrimp Fishery	434
U.S. Fish Otter Trawl Fleet	438
Section 13.-Historical Fishery Statistics	443
Commercial Fisheries of the Great Lakes, 1879-1963	444
Atlantic and Gulf Coast Menhaden Fishery, 1873-1963	467
Pacific Sardine Fishery, 1915-63	470
Atlantic Ocean Perch Fishery, 1930-63	475
Pacific Coast States Tuna Fishery, 1911-63	478
Section 14.-Statistical Survey Procedure	483
Sectional Surveys	483
Local and Special Surveys	488
Practices and Terms	490
Conversion Factors	491
Section 15.-Glossary	496
Section 16.-Pictorial Section	503
Section 17.-Statistical Publications	521

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The cooperation of the many contributors is gratefully acknowledged. Cooperators are given credit for their information in the section of the report in which the data appear.

PREFACE

This report contains a review of the fishery statistics for the year 1963 collected by the Branch of Fishery Statistics, Division of Economics. These statistics include data on the volume and value of the catch of fishery products, employment in the fisheries, quantity of gear operated, number of fishing craft employed in the capture of fishery products, information on the volume and value of the production of manufactured fishery products, data on cold storage freezings and holdings, and on foreign trade in fishery commodities.

Data on employment of fishermen, fishing craft and gear in the fisheries, and on the catch of fish, shellfish, etc., are shown for States having commercial fisheries. There is also information on the pack of canned tuna and industrial products for Puerto Rico and American Samoa included in the manufactured products tables. In section 11, Puerto Rico; there is also shown operating units.

In all of the catch tables in this report, except the one on page 31 entitled, "U.S. Catch, 1963 - Live Weight Basis," the volume of fish, crustaceans, and such mollusks as squid is shown in round (live) weight. However, the weights shown for univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.) represent the weights of meats, excluding the shell. The weight of shells omitted from the catch in 1963 amounted to about 1.3 billion pounds. It should be noted, however, that the table on page 32 "World Catch of Fish, Crustaceans, Mollusks, Etc., by Countries" is shown on a live weight basis.

In assembling the data on the fisheries, all appropriate records collected by the various State fishery agencies were used. In certain areas, information complete enough to be used by the Statistical agents was available from State agencies, and in these States, only partial surveys were conducted. Information on the means of collecting the data and an explanation of terms used may be found in Section 14 of this publication.

Complete statistical surveys covering the fisheries of the United States were conducted in all areas for 1963. The first complete survey of the fisheries of the United States was made by the Bureau of the Census for 1908. Others were made by the Bureau of Fisheries and the Fish and Wildlife Service for the years 1931, 1950, and for the years 1954 to 1960 and for 1962.

To assist persons interested in reviewing historical statistics of the domestic fisheries, a bibliography was published in the 1956 edition of "Fishery Statistics of the United States", listing the sources of data on the fisheries of the various regions of the United States for the years from 1880 to 1956.

SECTION 1 - GENERAL REVIEW

In 1963, the commercial fisheries of the United States yielded a catch of 4.8 billion pounds, worth \$377 million to the fishermen. The volume was 507 million pounds and \$19 million less than the previous year. The average value was 7.78 cents per pound. Record catches of flounders, clams, and crabs were taken. The catch was made by 128,470 fishermen operating 11,928 vessels of 5 net tons and greater, and 66,045 motor and other boats. Compared with 1962, there was an increase of 2,137 fishermen, 417 vessels, and 1,823 boats. Most of the increase was in shrimp otter trawlers and salmon trollers. Several large tuna purse seiners were also added to the fleet. The average lengths and ages of the vessels were about the same as the previous year. Many new vessels entered the shrimp, salmon, and menhaden fisheries, but the number was not large enough to make any substantial change from the previous year. Four New England groundfish vessels were constructed under the vessel construction subsidy bill.

Principal States. Louisiana again led with a total of 761 million pounds--nearly 16 percent of the entire U.S. catch. California was next with 514 million pounds (11 percent), followed by Massachusetts, 468 million pounds (10 percent); and Alaska, 392 million (8 percent). Six States (Alaska, California, Louisiana, Massachusetts, Mississippi, and Virginia) accounted for 59 percent of the total U.S. landings. California led in value with \$49 million, followed by Alaska, \$46 million; and Massachusetts, \$41 million. San Pedro, Calif., was again the leading port, with landings of 348 million pounds, followed closely by Pascagoula, Miss., Empire, La., and Cameron, La., 300, 253, and 238 million pounds, respectively.

Groundfish. The catch of ocean perch at New England ports in 1963 was only 108 million pounds--the lowest since 1940, and nearly 16 million pounds less than in 1962. The price improved a bit in 1963, but the increase was not sufficient to stimulate the already depressed fishery. The Massachusetts ocean perch fishery suffered the most severe loss. Landings in that State were 19 percent less than in 1962. Few vessels were added to the ocean perch fishing fleet during 1963, and sinkings and transfers more than offset these additions. Because of the continued depressed ex-vessel price, this fleet put less effort into the fishery. The Maine catch of ocean perch was down 8 percent from the previous year.

The catch of haddock, 124 million pounds, was 10 million pounds (8 percent) less than in the previous year, but the value increased \$792,000. The principal reason for the increased value was the greater proportion of large haddock taken. While large haddock normally demand a higher price than scrod, the price situation, because of a somewhat less plentiful supply, was generally improved for all sizes.

The 42.1-million-pound catch of Atlantic cod was 4.7 million pounds less than in 1962, but the Pacific coast catch of 6.4 million pounds was double that of 1962.

Halibut. The 1963 catch of 99.8 million pounds of halibut (round weight) in the eastern North Pacific, was nearly identical to that of 1962. The catch was made by fishermen from three nations--United States, Canada, and Japan. This was the first time the Japanese fished in the North Pacific under the rules of the International Pacific Halibut Commission. The United States catch (45.6 million pounds worth \$6.9 million) was down 15 percent in volume and 41 percent in value, while the Canadian production was up 7 percent. The record Canadian catch exceeded the United States production for the first time.

Sea herring. The catch of sea herring during 1963 totaled 193.6 million pounds worth \$2.4 million, down 3 percent in volume and 24 percent in value compared with 1962. Imports of fresh Canadian sea herring which are used principally for canning and reduction in Maine, were 45.5 million pounds--17 million pounds less than in 1962. The Maine pack of sardines canned from sea herring declined 500,000 cases or 25 percent in volume and 34 percent in

value. Small herring were plentiful throughout the season, but heavy stocks of canned sardines and slow sales caused canners to curtail operation. The catch would have been even less had there not been a greater use of herring for bait. In Alaska, where the catch is used for reduction to fish meal or for bait, landings were 31 million pounds--the smallest since 1917.

Pacific and jack mackerel. The combined 1963 catch of 136 million pounds of Pacific and jack mackerel was 2 percent, or 2.9 million pounds less than in 1962. With a reduced California sardine production, canners substituted mackerel for the sardine export trade. This kept the mackerel fleet fishing most of the year. In December 1963, the vessel owners at San Pedro, Calif., asked for a \$10-a-ton increase for mackerel; however, the canners did not agree to this request and fishing was discontinued for the rest of the year. This tie-up had little or no effect on the 1963 production because the fleet normally remains in port the latter part of December. The 1963 catch could have been considerably larger, but the canners' nightly catch limit of 20 to 30 tons per vessel curtailed production. The entire catch of mackerel is used for canning. During 1963, ex-vessel prices remained constant at \$42.50 per ton for both Pacific and jack mackerel. These prices have been in effect since March 1961.

Menhaden. The catch of menhaden was 1,815,798,000 pounds--23 percent less than in 1962. The decline occurred chiefly in the New England, Middle Atlantic, and Chesapeake States, where the total was 632 million pounds--about 500 million pounds less than in 1962. The catch of 968 million pounds in the Gulf was 8 percent less than in the previous year. An increase of almost 60 million pounds occurred in the South Atlantic, principally because of the North Carolina catch. Weather is an important factor in North Carolina, for most of the fishing is done in late November, December, and early January. In some years, storms prevent fishing and disperse the schools; but in 1963, the weather permitted more fishing than in the previous year.

The menhaden catch was taken by 179 vessels--1 less than in the previous year. The trend to replace older vessels with larger, more modern craft continued. Larger and lighter seines were replacing old seines and more refrigerated vessels were used. The continuing trend of increased imports of fish meal was not a factor in limiting the catch: Greater use of fish meal kept prices relatively stable during 1963. The industry expressed concern over the continuing decline in menhaden landings in the North and Middle Atlantic States, especially from Delaware north. The concern was sharpened by the realization that, despite new and improved fishing craft and gear, landings continued to decline. Some industry members felt that the menhaden might be overfished.

Sardines, Pacific coast. Sardines again failed to appear off the California coast, and only 7 million pounds were caught. Less than half was taken during the fall season, when the catch frequently exceeded more than 1 billion pounds from 1934 through 1944. The 1963 catch was only one-half of 1 percent of the record 1.5 billion pounds taken in 1936. At one time, California sardines were landed in greater quantity than any other species in the United States. Because of the limited quantity taken in 1963, nearly all the fish were canned in the 1-pound oval cans in tomato sauce.

Salmon. During 1963, the salmon catch in the Pacific Coast States was 204,177,000 pounds worth \$49,011,000. This was 26 percent of the volume and 39 percent of the value of the Pacific Coast catch of all fish and shellfish in 1963. Pink salmon were the most important, with a catch of 156,603,000 pounds or 53 percent of the total 1963 salmon production. Among the highlights of the 1963 season were the large run of pinks in southeastern Alaska and the disappointing catch of red salmon in Bristol Bay, where forecasters had expected a somewhat larger run of fish.

GENERAL REVIEW

As a result of a larger than expected run of sockeye salmon on the Fraser River and a price dispute between Canadian fishermen and buyers during the peak of the July sockeye run, American fishermen were given additional fishing time to prevent overseeding of the spawning grounds. United States fishermen caught over 1.3 million sockeyes in convention waters, compared with over 600,000 by Canadian fishermen. The United States catch would have been larger if American fishermen were not restricted to waters south of the international boundary; this restriction permitted a considerable part of the run to escape through Canadian waters during the tie-up of the Canadian fleet.

Because of a heavy run of pinks again in 1963 and a carryover of these fish from the previous year, the industry experienced difficulty in marketing the pack. Reds or sockeyes, however, were in short supply and consequently, readily marketed. Prices quoted for some of the canned pink and chum salmon appeared to be near or below the cost of packing these fish, and was expected to affect developments in the salmon fishery.

A highlight of the 1963 salmon fishery of the Pacific coast was the pink salmon fishery in the State of Washington. In Puget Sound, pink salmon appear only in odd-numbered years. During 1963, the troll fleet made a record catch of this species. Some observers felt that recently developed baits and lures were responsible for the increased pink catch by trolling. In an ordinary pink salmon year, it can be assumed that the greatest share of pink salmon receipts in Seattle will be canned, but because of the heavy increases in troll receipts during 1963, much of the catch was sold fresh. Daily receipts of pink salmon from the troll fleet, while steady, did not provide the volume necessary for profitable cannery operations. Fresh pink salmon were featured in many of the chain stores on the Pacific coast and inland as far east as Denver and Omaha. It was not until large quantities of the Fraser River pink salmon were available that canneries were able to operate at capacity on seine caught as well as troller caught fish.

While the catch of red or sockeye salmon was down sharply in Alaska, where most of the catch of this species is taken, production on Puget Sound, based largely on the run of these fish to the Fraser River in British Columbia, was up over 50 percent. Because of a price disagreement, Canadian fishermen stopped fishing during 3 weeks when the sockeye run was at its height; so, for the first time in the memory of most fishermen, only United States nationals fished the Fraser River run at its peak. The Fraser River sockeye salmon fishery is under the control and supervision of the International Pacific Salmon Fisheries Commission, with headquarters at New Westminster, British Columbia. One of the functions of the commission is equal division of the catch of sockeye and pink salmon between United States and Canadian fishermen. It is difficult to determine the degree to which the inactivity of the Canadian fishermen helped the United States fleet. Confined to one side of the international boundary, the United States had no access to salmon in Canadian waters, and the chief advantage they received was additional fishing time to prevent over-spawning of the fishing grounds.

Tuna. Landings of tuna in 1963, excluding deliveries by U.S. craft to Puerto Rico, were 321,619,000 pounds worth \$40,170,000. This was an increase of 3 percent in volume, but a decline of 11 percent in value. The value declined despite an increase of 14.8 million pounds in the Pacific Coast States' catch of the more expensive albacore. This species represented the most successful segment of the tuna fishery in 1963.

Tuna accounted for 27 percent of the volume and 30 percent of the value of all Pacific Coast fisheries in 1963. Landings of albacore and skipjack increased, but the catch of bluefin and yellowfin declined compared with 1962. The albacore fishery in California and Oregon was very good--the catch for the two States totaled 60.3 million pounds, 32 percent more than in the previous year.

GENERAL REVIEW

The conversion from the pole and line method to purse seining for skipjack and yellowfin was completed in 1963. The principal additions to the fleet during the year were new vessels or vessels converted from military craft.

There were important developments in the corporate structure of some of the tuna canneries during 1963. Early in the year, the H.J. Heinz Company of Pittsburgh, Pa., packers of food products, acquired Star Kist Foods, Inc. In February, the Van Camp Seafood Company merged with the Ralston-Purina Company, packers of cereal food products and animal food. During the middle of the year, the C.H.B. Foods of Pico Rivera, Calif., acquired the Franco-Italian Packing Company of Terminal Island. These mergers follow a general trend in the U.S. food processing industry to integrate all types of food processing.

Crabs. The 1963 catch of 252.3 million pounds of crabs worth \$21.4 million was up 8 percent in volume and 14 percent in value. Chiefly responsible for the increase was the expanding king crab fishery in Alaska, where landings of 78.7 million pounds, were 26 million pounds above the previous year. The Dungeness crab catch of 24.9 million pounds was 6 percent more than in 1962. Most of the increase was in Alaska, where because of a crab scarcity on the Washington, Oregon, and California coasts, this latent fishery expanded considerably. The catch of blue crabs was 145.3 million pounds, a decline of 10 million pounds, principally because crabs were scarce and reduced effort resulting from the more plentiful supply of shrimp. Fishermen found their efforts more rewarding in the shrimp fishery.

Shrimp. The 1963 catch of 240.5 million pounds of shrimp, worth \$70 million to the fishermen, was a 26-percent increase in volume but a 4-percent decline in value. An unusually good catch of both brown and white shrimp in the Gulf of Mexico so depressed prices that the total value declined, despite the larger catches. In contrast to the good catches in the Gulf of Mexico, shrimp were very scarce in the South Atlantic where catches of pink and white shrimp in North Carolina, South Carolina, and Georgia were down sharply. Because of the serious shortage of shrimp in the South Atlantic, many of the vessels migrated to the Gulf. Many shrimp taken in Louisiana, Mississippi, and Alabama, and to a lesser extent in eastern Texas waters, were small, which reduced the average value considerably. The volume of landings in Louisiana was so great, at times, that processing plants were unable to handle them, which resulted in some individual boat owners peddling their catches to retailers and consumers.

The shrimp industry expanded into the grounds off South America. The fishery resources off the South American countries had been known since the Bureau did exploratory work there in 1941 and 1942, but the fishing industry had not taken full advantage of this knowledge.

Oysters. The production of 58.4 million pounds of oyster meats, valued at \$27.1 million, was a 4-percent increase in volume but a 7-percent decline in value. The volume and value increased in the New England, South Atlantic, and Gulf, but declined in the Middle Atlantic, Chesapeake, and Pacific Coast States. The Gulf States had a phenomenal increase, and production of oyster meats there increased from 18.8 million pounds in 1962 to 24.1 million pounds in 1963. Chiefly responsible was the larger volume of oysters taken for canning; the Gulf pack was over 60 percent more than in 1962. In addition, large quantities of fresh oysters were produced for the eastern and northern trade because the Middle Atlantic and Chesapeake Bay States were unable to supply their usual markets. Mortalities on the oyster reefs in the Chesapeake and Middle Atlantic States were chiefly responsible for the declines in the production in these areas. Some shucking plants in the Chesapeake and Middle Atlantic States continued to handle oysters trucked in from the Gulf States. The average price per gallon of shucked oysters declined slightly, as did the total quantity produced. The production of breaded oysters increased and the average price per pound for this item also advanced.

GENERAL REVIEW

Scallops. Landings of 21.5 million pounds of scallop meats in 1963 were down 23 percent in volume, while the value of the catch--\$10.3 million--was down 15 percent. The total supply of scallops in 1963 (domestic catch plus imports) was down 11 percent or 4.5 million pounds from the 1962 record supply of 39.4 million pounds. The Canadian fleet continued to grow, and most of the new units fished Georges Bank--the same grounds fished by the United States fleet. Competition for the available scallops on Georges Bank became more keen.

Total Supply. In 1963, the total supply of fishery products (domestic catch plus imports) on a round weight basis was a record 11,459,000 pounds and, for the first time, more than half the supply (57.7 percent) came from imports. The decline in the U.S. production of fish meal and increased imports of this product, principally from Peru, were responsible for imports exceeding domestic production. U.S. production accounted for 52.9 percent of the supply of edible products, but only 34.5 percent of the supply of industrial products.

Processed Fishery Products. The total value of processed fishery products in 1963 was \$914.5 million--down \$44.3 million (5 percent) from the previous year, but 6 percent above the 5-year average (1959-63).

Frozen raw, peeled and deveined shrimp, which have been becoming increasingly popular for the past few years, were again produced in greater quantity. While the volume increased 4 million pounds and \$3.7 million, the average price per pound declined from \$1.22 in 1962 to \$1.16 in 1963. Breaded shrimp--another popular shrimp product--was down 1 percent in volume and 14 percent in value compared with the previous year. Declining ex-vessel prices for shrimp were also reflected in the lower average price of the breaded product in 1963.

The greatest decline was in the canned items--down \$35.3 million (8 percent)--principally in canned salmon (down \$18.7 million) and tuna (down \$8.2 million), pet food (down \$6.8 million), and Maine sardines (down \$6.8 million). There were gains in canned shrimp, oysters, and crab meat.

The production of fresh and frozen packaged fillets and steaks totaled 166 million pounds valued at \$57.5 million--a 3-percent decline in both volume and value compared with 1962. The decline in volume was chiefly the result of decreased production of haddock and Atlantic ocean perch fillets (each down 5 million pounds) and halibut, down 1 million pounds. The production of flounder fillets was up 8 million pounds and \$2.3 million, primarily because of higher yellowtail landings at New Bedford, Mass.

Whales. During 1963, three whaling companies operated on the Pacific Coast, the same number as in the previous year. These firms caught 259 whales--11 more than in 1962. More sperm, humpback, and sei whales were taken during 1963, while the number of fin whales, considered by the industry to be more valuable because of the greater meat yield, declined sharply in 1963. The change in the composition of the catch resulted in a 21-percent decrease in the volume of processed products and a 23-percent decline in the value.

Fishery Imports. In 1963, over 100 countries (or areas) on 6 continents exported fishery products worth \$490.7 million to the United States. Imports from North America accounted for 41 percent of the value, followed by Asia (24 percent), South America (14 percent), and Europe (13 percent). Canada led other countries in the value of fishery products sent to the United States, accounting for 24 percent of the total value. Japan was in second place with 19 percent, followed by Mexico with 12 percent.

A total of 91 countries (or areas) on 6 continents sent 1.2 billion pounds (product weight) of edible fishery products to the United States in 1963. Only 7 items--fresh and frozen tuna, canned tuna in brine, canned sardines, fillets and steaks, shrimp, lobster, and

pickled or salted fish--accounted for 79 percent of the total. Shipments from countries in North America made up 48 percent of the total, followed by Asia (22 percent), Europe (15 percent), South America (8 percent), Africa (5 percent), and Australia and Oceania (2 percent). Canada led other countries in the volume of edible fishery products sent to the United States in 1963, accounting for 35 percent of the total. Japan was in second place with 19 percent, followed by Mexico, 9 percent, and Iceland and Peru with 5 percent each.

According to domestic catch and import statistics the production segment of the U.S. fishing industry has failed to hold its share of the market. While U.S. landings by the domestic fleet have stabilized, imports have continued to rise and in 1963 constituted 58 percent of the total U.S. supply. If this trend continues, only a small portion of the total supply will come from the U.S. fleet within the next decade. The tendency in recent years has been to use more of the domestic catch of fish for industrial purposes and less for human food.

In 1963, the world catch of fish, crustaceans, mollusks, etc., was a record 102.3 billion pounds--2.4 billion pounds more than in 1962. Peru again made the most spectacular gain and for the second year was first among the nations of the world in volume of production of fishery products. The United States continued in fifth place.

Detailed summaries of the catch and operating unit data for the United States have been previously published in Current Fishery Statistics No. 3727.

Summaries of operating unit and catch statistics for each region of the United States have been published in the Current Fishery Statistics series of bulletins. "Fisheries of the United States," a preliminary review available each April, contains current information on many aspects of the fisheries, such as domestic and world catch, per capita consumption, price indexes, foreign trade, supplies, etc.; and comparative data for previous years. This publication may be obtained free from the Office of Information, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

The current statistical publications of the Bureau that contain data on the domestic fisheries are listed in Fishery Leaflet 432 "Fishery Statistical Publications of the Bureau of Commercial Fisheries." The publication also lists other Federal agencies, interstate commissions, and international and nongovernmental sources of fishery statistics. Copies of this leaflet may be obtained from the Office of Information.



GENERAL REVIEW

CATCH OF FISH AND SHELLFISH, 1945-63

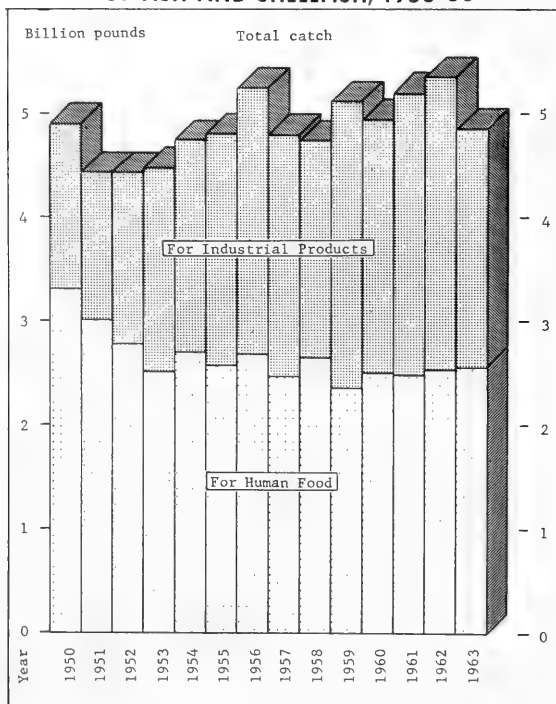
(ROUND WEIGHT BASIS)

YEAR	CATCH FOR HUMAN FOOD	CATCH FOR INDUSTRIAL PRODUCTS ^{1/}	TOTAL		AVERAGE PRICE PER POUND
	MILLION POUNDS	MILLION POUNDS	MILLION POUNDS	MILLION DOLLARS	CENTS
1945	3,167	1,431	4,598	270	5.87
1946	3,049	1,418	4,467	313	7.01
1947	3,020	1,329	4,349	312	7.16
1948	3,146	1,367	4,513	371	8.22
1949	3,305	1,499	4,804	343	7.13
1950	3,307	1,594	4,901	347	7.09
1951	3,048	1,385	4,433	365	8.23
1952	2,778	1,654	4,432	364	8.20
1953	2,519	1,968	4,487	356	7.94
1954	2,705	2,057	4,762	359	7.55
1955	2,579	2,230	4,809	339	7.05
1956	2,690	2,578	5,268	372	7.06
1957	2,475	2,314	4,789	354	7.39
1958	2,651	2,096	4,747	373	7.66
1959	2,369	2,753	5,122	346	6.76
1960	2,498	2,444	4,942	354	7.15
1961	2,490	2,697	5,187	362	6.98
1962	2,540	2,614	5,154	396	7.40
1963	2,556	2,291	4,847	377	7.78

^{1/} MANUFACTURED INTO MEAL, OIL, FISH SOLUBLES, HOMOGENIZED CONDENSED FISH, SHELL PRODUCTS, AND USED AS BAIT AND ANIMAL FOOD.

NOTE:--DOES NOT INCLUDE DATA ON THE HAWAIIAN CATCH PRIOR TO 1946.

U. S. CATCH AND UTILIZATION OF FISH AND SHELLFISH, 1950-63



GENERAL REVIEW

11

SUMMARY OF CATCH, 1963

(MILLIONS OF POUNDS AND MILLIONS OF DOLLARS)

REGION	FISH		SHELLFISH, ETC.		WHALE PRODUCTS		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND	758	37	71	31	-	-	829	68
MIDDLE ATLANTIC	496	11	54	10	-	-	550	21
CHESAPEAKE	335	8	95	22	-	-	430	30
SOUTH ATLANTIC	298	9	73	11	-	-	371	20
GULF	1,140	25	259	74	-	-	1,399	99
PACIFIC	950	106	149	17	8	1	1,117	124
GREAT LAKES	59	5	-	-	-	-	59	5
MISSISSIPPI RIVER AND TRIBUTARIES	63	6	17	1	-	-	80	7
HAWAII	12	3	(1)	(1)	-	-	12	3
TOTAL	4,121	210	718	166	8	1	4,847	377

1/ LESS THAN 500,000 POUNDS OR \$500,000.

SUMMARY OF OPERATING UNITS, 1963

ITEM	NEW ENGLAND	MIDDLE ATLANTIC	CHESAPEAKE	SOUTH ATLANTIC	GULF
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:					
ON VESSELS	4,202	3,057	3,795	3,414	11,374
ON BOATS AND SHORE	17,226	5,496	13,989	8,526	13,109
TOTAL	21,428	8,553	17,784	11,940	24,483
VESSELS:					
MOTOR	733	599	1,209	1,157	3,369
GROSS TONNAGE	47,581	33,669	26,281	41,811	142,809
SAIL	-	-	65	-	-
GROSS TONNAGE	-	-	720	-	-
TOTAL VESSELS	733	599	1,274	1,157	3,369
TOTAL GROSS TONNAGE	47,581	33,669	27,001	41,811	142,809
BOATS:					
MOTOR	10,070	4,085	9,495	5,711	9,992
OTHER	676	288	888	819	626
GEAR:					
HAUL SEINES	15	78	252	132	128
STOP NETS AND SEINES	166	4	-	-	-
PURSE SEINES AND LAMPARA NETS:					
HERRING	2	-	-	-	-
MACKEREL AND SARDINE	4	-	-	-	-
MENHADEN	-	57	39	57	72
TUNA	10	5	5	-	-
OTHER	15	23	-	2	4
BAG NETS	14	-	-	20	-
BEAM TRAWLS	-	7	-	-	-
OTTER TRAWLS:					
CRAB	-	-	-	337	5
FISH	613	303	83	101	110
LOBSTER	-	35	-	-	-
SHRIMP	28	-	-	2,445	9,224
WEIRS	81	5	-	-	-
FOUND NETS	61	142	3,780	655	-
FLOATING TRAPS	44	-	-	-	-
FYKE AND HOOP NETS	5	291	1,198	280	12,822
POTS AND TRAPS:					
CONCH	1,015	50	-	-	-
CRAB	1,460	5,450	192,083	58,870	66,938
CRAWFISH	-	-	-	-	6,680
EEL	1,145	1,045	7,033	410	-
FISH	-	17,425	4,778	15,623	275
LOBSTER	857,100	9,800	-	20,240	60,050
TURTLE	-	150	247	25	-
BOX TRAPS	-	-	4	-	-
SLAT TRAPS	-	-	3	-	-

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	NEW ENGLAND	MIDDLE ATLANTIC	CHESAPEAKE	SOUTH ATLANTIC	GULF
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
GEAR - CONTINUED:					
GILL NETS:					
ANCHOR, SET OR STAKE . . .	39	177	2,898	3,194	239
DRIFT	85	91	1,044	675	11
RUNAROUND	-	35	-	479	1,107
TRAWL NETS	-	-	-	5	644
HOOKS AND BAITS	550,211	242,834	961,221	1,284,866	1,382,439
OIL NETS	404	-	415	2,550	23,073
PUSH NETS	-	9	-	-	-
CAST NETS	-	-	-	17	29
HARPOONS	95	12	-	-	-
SPEARS	21	23	-	135	257
SCRAPES	-	-	614	-	-
DREDGES:					
CLAM	73	107	312	26	-
CRAB	-	56	407	-	-
MUSSEL	1	-	-	-	-
OYSTER	45	140	695	171	1,341
SCALLOP	1,070	1,580	6	70	101
OTHER	-	11	-	-	-
TONGS AND OYSTER GRABS . . .	1,097	2,945	7,574	366	2,528
RAKES	1,814	2,035	773	302	-
HOES	3,254	14	-	-	-
FORKS	39	14	-	-	-
BRUSH TRAPS	-	-	-	-	43,160
GRABS, FROG	-	-	-	-	54
HOOKS, SPONGE	-	-	-	-	69
DIVING OUTFITS	616	-	-	-	18
ITEM	PACIFIC	GREAT LAKES	MISSISSIPPI RIVER AND TRIBUTARIES	HAWAII	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	15,191	894	267	256	40,052
ON BOATS AND SHORE	18,421	1,810	9,287	554	88,418
TOTAL	33,612	2,704	9,287	820	128,470
VESSELS:					
MOTOR	4,791	1/ 400	-	56	11,863
GROSS TONNAGE	143,046	7,172	-	1,728	408,058
SAIL	-	-	-	-	65
GROSS TONNAGE	-	-	-	-	720
TOTAL VESSELS	4,791	1/ 400	-	56	11,928
TOTAL GROSS TONNAGE	143,046	7,172	-	1,728	408,778
BOATS:					
MOTOR	13,269	1,156	8,059	360	62,090
OTHER	303	95	237	23	3,955
GEAR:					
HAUL SEINES	117	82	250	(2)	1,054
STOP NETS AND SEINES	-	-	-	-	170
PURSE SEINES AND LAMPARA NETS:					
ANCHOVY	23	-	-	-	23
HERRING	15	-	-	-	17
MACKEREL AND SARDINE	90	-	-	-	94
MENHADEN	-	-	-	-	179
SALMON	1,699	-	-	-	1,699
SQUID	24	-	-	-	141
TUNA	134	-	-	-	24
OTHER	8	-	-	-	141
BAG NETS	-	-	-	(2)	52
BEAM TRAWLS	37	-	-	-	34
OTTER TRAWLS:					
CRAB	-	-	-	-	44
FISH	233	19	1	-	342
LOBSTER	-	-	-	-	1,324
SHRIMP	49	-	-	-	35
WEIRS	1	-	52	-	11,325
POUND NETS	2	136	37	-	139
TRAP NETS	-	1,773	237	-	4,813
					2,010

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

13

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	PACIFIC	GREAT LAKES	MISSISSIPPI RIVER AND TRIBUTARIES	HAWAII	TOTAL, EXCLUSIVE OF DUPLICATION
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
GEAR - CONTINUED:					
FLOATING TRAPS	4	-	-	-	48
FYKE AND HOOP NETS	-	263	54,954	-	69,813
POTS AND TRAPS:					
CONCH	-	-	-	-	1,065
CRAB	103,485	-	-	(2)	427,986
CRAWFISH	600	-	15,230	-	22,510
EEL	-	-	-	-	9,633
FISH	100	-	3,712	(2)	41,913
LOBSTER	12,730	-	-	(2)	959,470
OCTOPUS	275	-	-	-	275
SHRIMP	190	-	125	-	315
TURTLE	-	-	-	-	422
BOX TRAPS	-	-	-	-	9
WIRE BASKETS	-	-	2,808	-	2,808
SLAT TRAPS	-	-	-	-	3
GILL NETS:					
ANCHOR, SET OR STAKE	2,699	1,416	7,167	(2)	17,829
DRIFT	5,407	-	-	-	7,313
RUNAROUND	-	-	-	-	1,615
TRAMMEL NETS	8	-	4,033	-	4,689
HOOKS AND BAITS	1,035,385	60,774	4,062,203	(2)	9,575,509
DIP NETS	206	5	1,277	-	27,930
BRAIL OR SCOOP NETS	89	-	-	-	89
REEF NETS	83	-	-	-	83
PUSH NETS	-	-	-	-	9
WHEELS	6	-	-	-	6
CAST NETS	-	-	-	(2)	46
HARPOONS	24	-	-	-	128
SPEARS	-	-	-	(2)	436
SCRAPES	-	-	-	-	614
DREDGES:					
CLAM	4	-	-	-	522
CRAB	-	-	-	-	463
MUSSEL	-	-	-	-	1
OYSTER	86	-	-	-	2,476
SCALLOP	-	-	-	-	2,813
OTHER	-	-	-	-	11
TONGS AND OYSTER GRABS	30	-	-	-	14,540
RAKES	-	-	-	-	4,924
HOES	-	-	-	-	3,268
FORKS	-	-	-	-	39
SHOVELS	1,750	-	-	-	1,750
BRUSH TRAPS	-	-	-	-	43,160
CROWFOOT BARS	-	-	1,383	-	1,383
GRABS, FROG	-	-	159	-	213
HOOKS, SPONGE	-	-	-	-	69
DIVING OUTFITS	130	-	-	-	764

1/ INCLUDES 4 VESSELS OPERATED IN LAKE WINNEBAGO.

2/ DATA ON THE NUMBER OF GEAR OPERATED IN HAWAII ARE NOT AVAILABLE.

VESSELS OBTAINING DOCUMENTS AS FISHING CRAFT, 1954-63

YEAR	FIRST DOCUMENTATION	REDOCUMENTATION	TOTAL
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
1954	717	28	745
1955	418	23	441
1956	521	17	538
1957	601	18	619
1958	684	29	713
1959	479	34	513
1960	408	24	432
1961	410	20	430
1962	352	16	368
1963	569	21	590

GENERAL REVIEW

U.S. CATCH BY WATERS, FISHERMEN, CRAFT, PLANTS AND EMPLOYMENT, BY STATES 1963

STATE	MARINE WATERS AND COASTAL RIVERS		LAKES 1/		MISSISSIPPI RIVER AND TRIBUTARIES		TOTAL		FISHERMEN		FISHING CRAFT		WHOLESALE AND MANUFACTURING	
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	NUMBER	NUMBER	NUMBER	NUMBER	EMPLOYEES	
													AVERAGE FOR YEAR	NUMBER
ALABAMA	14,888	3,714	-	6,746	985	4,699	2,460	268	2,460	1,437	72	1,147	768	
ALASKA	391,938	45,703	-	-	-	391,938	45,703	2,286	17,014	7,970	181	7,907	2,609	
ARIZONA	-	-	-	-	-	-	-	-	-	-	1	48	36	
ARKANSAS	519,746	49,286	-	4,198	457	4,158	4,57	1,199	1,953	1,106	65	67	7,032	
CALIFORNIA	5,047	1,247	-	-	-	51,045	49,286	1,464	1,31	1,106	18	9,373	307	
CONNECTICUT	104,168	1,292	-	-	-	104,168	1,292	663	663	195	20	663	4,958	
DELAWARE	186,211	27,720	9,311	1,329	-	105,722	29,048	1,423	4,73	4,955	52	2,298	1,845	
FLORIDA	21,011	2,613	-	-	-	21,011	2,613	1,883	820	696	16	2,560	1,845	
GEORGIA	21,011	2,613	-	-	-	21,011	2,613	1,883	820	696	16	2,560	1,845	
HAWAII	2,679	-	285	6,261	689	8,546	721	614	614	503	93	1,058	934	
ILLINOIS	-	-	-	-	-	-	-	-	-	-	-	-	-	
INDIANA	-	-	0	2,438	173	2,438	173	377	377	377	32	1,077	320	
IOWA	-	-	-	-	-	-	-	-	-	-	-	-	-	
KANSAS	-	-	-	44	12	44	12	44	43	35	1	44	44	
KENTUCKY	492	3,970	-	3,970	492	3,970	492	670	670	651	21	132	132	
LOUISIANA	752,284	33,941	-	8,378	1,254	760,662	35,195	1,498	11,758	5,857	224	6,092	2,820	
MAINE	265,636	21,216	-	-	-	285,636	21,216	141	9,667	5,867	252	6,438	2,739	
MARYLAND	191,256	7,047	502	-	-	191,256	7,047	328	8,757	5,919	68	6,096	4,254	
MASSACHUSETTS	467,693	41,234	-	-	-	467,693	41,234	209	1,286	5,617	265	3,716	4,471	
MICHIGAN	20,326	2,322	20,326	2,322	-	20,326	2,322	631	14,759	686	26	320	149	
MINNESOTA	5,336	2,255	5,336	2,255	-	5,336	2,255	325	344,278	8,916	61	1,632	1,235	
MISSISSIPPI	341,313	8,591	-	9,423	325	341,313	8,591	40	349	593	36	1,927	1,235	
MISSOURI	-	-	-	349	40	349	40	243	243	242	-	239	224	
NEBRASKA	-	-	-	269	32	269	32	135	135	172	-	47	39	
NEVADA	-	-	-	472	42	472	42	365	365	181	11	96	79	
NEW HAMPSHIRE	1,201	443	-	-	-	1,201	443	363	363	1,679	114	2,554	2,006	
NEW JERSEY	256,020	10,335	502	-	-	256,020	10,335	4,526	4,526	2,585	332	3,960	3,584	
NEW YORK	191,256	7,047	502	-	-	191,256	7,047	328	8,757	5,919	68	6,096	4,254	
NORTH CAROLINA	256,652	7,047	-	-	-	256,652	7,047	25	5,802	2,975	165	2,664	974	
NORTH DAKOTA	-	-	-	283	21	283	21	25	25	6	2	16	12	
OHIO	14,223	1,151	14,223	1,151	-	14,223	1,151	564	564	272	94	955	317	
OKLAHOMA	-	-	-	444	57	444	57	1,017	1,017	1,017	57	1,994	1,991	
OREGON	61,362	7,679	1,412	105	-	61,362	7,679	2,408	2,408	1,079	60	1,883	1,883	
PENNSYLVANIA	69,312	4,149	-	-	-	69,312	4,149	1,694	1,694	1,139	32	392	317	
RHODE ISLAND	22,015	3,236	-	-	-	22,015	3,236	222	1,957	1,002	67	871	579	
SOUTH CAROLINA	-	-	-	-	-	-	-	1,357	1,357	277	4	4	2	
TENNESSEE	12,669	1,296	-	1,296	-	12,669	1,296	6,243	6,243	1,526	163	3,265	3,265	
TEXAS	166,344	30,067	-	782	96	166,344	30,067	1,419	1,419	759	357	4,853	3,130	
VIRGINIA	374,745	19,036	-	-	-	374,745	19,036	9,048	9,048	4,465	177	4,099	3,207	
WASHINGTON	149,687	21,437	-	-	-	149,687	21,437	1,423	1,423	1,423	78	829	546	
WISCONSIN	-	-	16,916	12,673	5	16,916	12,673	29,899	29,899	113	-	829	546	
WYOMING	-	-	-	180	5	180	5	2	2	2	-	2	-	
TOTAL	4,698,742	363,151	68,517	79,850	7,393	4,647,109	377,162	2,128,470	2,128,470	2,66,045	4,194	87,252	54,492	

1/ INCLUDES THE CATCH OF THE GREAT LAKES, THE INTERNATIONAL LAKES OF MINNESOTA, AND THE INLAND LAKES OF FLORIDA.

2/ EXCLUSIVE OF DUPLICATION.

GENERAL REVIEW

SUMMARY OF U. S. FISHING VESSELS, BY TONNAGE GROUPS, 1963

GROSS TONNAGE	NEW ENGLAND	MIDDLE ATLANTIC	CHESA-PEAKE 1/	SOUTH ATLANTIC	GULF	PACIFIC	GREAT LAKES 2/	HAWAII	TOTAL EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
5 - 9	38	53	807	223	190	1,006	65	1	2,378
10 - 19	131	145	274	260	746	2,010	209	15	3,774
20 - 29	89	87	60	167	438	674	81	15	1,567
30 - 39	84	67	28	179	450	377	26	10	1,133
40 - 49	60	49	17	155	424	272	17	8	917
50 - 59	42	39	12	60	279	107	2	5	506
60 - 69	47	31	7	42	530	51	-	1	674
70 - 79	52	27	11	13	175	37	-	1	278
80 - 89	20	9	1	1	42	32	-	-	100
90 - 98	21	3	-	2	11	29	-	-	64
100 - 109	16	5	4	2	9	20	-	-	47
110 - 119	30	11	4	2	2	17	-	-	57
120 - 129	12	3	4	3	2	15	-	-	35
130 - 139	13	1	2	-	2	9	-	-	24
140 - 149	7	4	5	2	6	5	-	-	24
150 - 159	16	4	4	1	1	4	-	-	22
160 - 169	9	2	1	-	5	12	-	-	28
170 - 179	6	5	-	2	7	7	-	-	19
180 - 189	2	4	-	2	7	7	-	-	22
190 - 199	6	31	8	15	11	15	-	-	64
200 - 209	1	-	-	-	-	1	-	-	2
210 - 219	3	-	-	-	3	4	-	-	8
220 - 229	3	4	1	3	4	1	-	-	13
230 - 239	3	2	1	2	4	4	-	-	14
240 - 249	3	1	2	4	1	-	-	-	11
250 - 259	4	2	5	6	3	3	-	-	15
260 - 269	2	-	4	4	3	4	-	-	15
270 - 279	-	-	-	-	-	5	-	-	5
280 - 289	-	3	1	1	-	3	-	-	3
290 - 299	2	1	1	2	1	-	-	-	8
300 - 309	2	2	-	2	1	1	-	-	6
310 - 319	2	2	-	-	1	4	-	-	9
320 - 329	3	-	1	1	-	2	-	-	6
330 - 339	-	-	-	-	-	2	-	-	2
340 - 349	-	-	-	-	-	4	-	-	4
350 - 359	-	-	-	-	-	7	-	-	7
360 - 369	-	-	-	-	-	4	-	-	4
370 - 379	1	-	1	-	-	10	-	-	11
380 - 389	1	-	1	-	-	3	-	-	3
390 - 399	-	-	1	-	-	2	-	-	3
400 - 409	-	-	-	-	-	1	-	-	1
410 - 419	-	-	-	-	1	2	-	-	3
420 - 429	-	-	-	-	-	2	-	-	2
430 - 439	-	-	-	-	-	4	-	-	4
440 - 449	-	-	-	-	-	4	-	-	4
450 - 459	1	-	-	-	-	2	-	-	3
460 - 469	-	-	-	-	1	2	-	-	3
470 - 479	-	-	-	-	5	2	-	-	8
480 - 489	-	-	1	-	2	3	-	-	5
490 - 499	-	-	-	-	-	1	-	-	1
530 - 539	-	-	1	1	-	-	-	-	1
540 - 549	-	-	1	1	-	-	-	-	1
580 - 589	1	-	1	-	-	1	-	-	1
600 - 609	-	-	-	-	1	-	-	-	1
610 - 619	-	-	-	-	1	-	-	-	1
630 - 639	-	-	-	-	-	1	-	-	1
640 - 649	-	-	-	-	1	-	-	-	1
680 - 689	-	1	-	-	-	-	-	-	1
720 - 729	-	1	-	-	-	1	-	-	1
770 - 779	-	-	-	-	-	1	-	-	1
800 - 809	-	-	-	-	-	1	-	-	1
810 - 819	-	-	-	-	-	1	-	-	1
TOTAL VESSELS	733	599	1,274	1,157	3,369	4,791	400	56	11,928
TOTAL GROSS TONNAGE	47,581	33,669	27,001	41,811	142,809	143,046	7,172	1,728	408,778

1/ INCLUDES SAILING VESSELS.

2/ INCLUDES 4 VESSELS OPERATED IN LAKE WINNEBAGO.

GENERAL REVIEW

LENGTH DISTRIBUTION OF U. S. FISHING VESSELS, 1963

LENGTH IN FEET	NEW ENGLAND	MIDDLE ATLANTIC	CHESA-PEAKE	SOUTH ATLANTIC	GULF	PACIFIC	GREAT LAKES	HAWAII	TOTAL EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
23.	1	-	-	-	-	-	-	-	1
24.	-	-	-	1	-	-	-	-	7
25.	-	-	-	11	1	2	3	-	43
26.	1	1	2	9	5	69	4	-	89
27.	3	6	1	16	6	274	10	-	316
28.	3	4	2	9	11	226	8	-	264
29.	5	4	2	9	11	226	8	-	264
30.	7	6	2	22	17	214	10	-	278
31.	15	1	9	25	23	319	13	-	397
32.	11	10	16	50	34	211	28	-	356
33.	11	7	51	37	45	271	37	-	459
34.	17	12	86	46	60	241	25	1	484
35.	16	10	122	38	57	227	20	-	489
36.	13	22	116	46	64	256	38	-	554
37.	19	13	156	52	94	225	48	-	605
38.	13	24	128	50	67	193	16	1	505
39.	13	28	97	36	74	172	30	2	450
40.	11	19	81	31	76	145	12	2	374
41.	7	13	44	41	92	140	13	1	341
42.	11	9	38	31	75	131	10	-	304
43.	11	15	21	29	81	130	9	2	293
44.	12	15	27	45	59	110	7	1	296
45.	12	12	20	29	107	97	9	1	272
46.	12	14	23	28	97	64	6	1	234
47.	18	10	17	30	88	70	11	1	235
48.	8	4	5	42	130	79	7	3	260
49.	9	12	12	33	106	229	2	1	390
50.	11	12	15	46	133	37	5	4	241
51.	17	14	7	50	136	37	3	2	236
52.	10	8	16	15	83	21	4	2	150
53.	12	6	5	25	115	25	1	-	176
54.	10	8	8	23	77	18	-	2	137
55.	16	6	11	30	134	20	2	2	200
56.	22	15	6	13	119	26	2	1	198
57.	16	9	11	50	9	14	1	1	101
58.	14	18	12	31	136	19	2	1	208
59.	6	5	4	5	162	43	-	1	164
60.	12	13	7	5	65	29	-	1	126
61.	17	22	8	28	313	20	-	1	389
62.	7	12	5	5	84	27	-	1	134
63.	8	7	2	4	37	14	-	-	69
64.	10	6	2	3	38	11	-	-	63
65.	8	6	1	4	52	20	-	2	90
66.	9	5	-	3	13	15	-	2	44
67.	5	4	-	1	16	8	-	-	36
68.	3	5	1	5	19	9	-	-	39
69.	16	4	1	1	10	9	-	2	40
70.	17	5	1	2	8	19	-	1	49
71.	6	7	2	3	11	13	-	3	40
72.	17	2	1	-	-	11	-	4	34
73.	9	4	-	-	-	8	-	-	20
74.	7	7	1	-	-	3	-	-	23
75.	10	1	1	-	-	3	-	-	29
76.	7	5	1	-	-	1	-	1	15
77.	9	5	2	1	2	6	-	-	22
78.	4	1	1	-	3	10	-	-	19
79.	10	6	1	-	-	13	-	-	29
80.	4	2	-	2	4	6	-	1	18
81.	4	-	-	-	2	4	-	-	10
82.	4	2	1	-	-	9	-	-	14
83.	7	2	-	-	-	2	-	-	9
84.	8	1	-	-	-	1	-	-	10
85.	14	4	3	1	1	1	-	-	16
86.	5	-	-	-	-	2	-	-	7
87.	4	-	-	-	-	4	-	-	7
88.	10	3	2	-	-	1	-	-	12
89.	12	2	1	-	-	6	-	-	20

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

LENGTH DISTRIBUTION OF U. S. FISHING VESSELS, 1963 - Continued

LENGTH IN FEET	NEW ENGLAND	MIDDLE ATLANTIC	CHESA-PEAKE	SOUTH ATLANTIC	GULF	PACIFIC	GREAT LAKES	HAWAII	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
90.	9	3	2	-	3	3	-	-	15
91.	4	3	-	1	2	3	-	-	11
92.	10	3	1	-	1	-	-	-	11
93.	1	-	-	-	-	1	-	-	2
94.	3	1	-	-	1	4	-	-	8
95.	4	1	-	-	2	1	-	-	7
96.	2	1	1	-	-	5	-	-	7
97.	2	-	1	-	-	1	-	-	4
98.	3	-	-	-	-	1	-	-	4
99.	1	-	1	-	-	3	-	-	3
100.	2	-	-	-	2	2	-	-	6
101.	1	2	1	2	-	2	-	-	5
102.	8	-	-	-	-	2	-	-	10
103.	4	-	-	-	1	1	-	-	6
104.	9	7	4	-	2	-	-	-	13
105.	2	2	2	1	6	-	-	-	12
106.	3	1	1	-	1	3	-	-	8
107.	1	4	3	1	-	1	-	-	8
108.	-	1	-	-	1	-	-	-	1
109.	1	1	-	-	2	1	-	-	5
110.	1	-	-	-	-	1	-	-	2
111.	2	1	1	1	1	2	-	-	4
112.	-	1	-	-	2	1	-	-	4
113.	-	-	2	2	-	-	-	-	2
114.	5	-	-	-	-	5	-	-	10
115.	-	-	1	-	-	3	-	-	4
116.	-	1	2	1	-	1	-	-	4
117.	1	-	-	-	-	11	-	-	11
118.	2	1	1	-	-	15	-	-	18
119.	1	-	-	-	1	2	-	-	4
120.	-	5	2	-	1	1	-	-	9
121.	-	3	1	-	-	2	-	-	6
122.	-	-	2	-	2	-	-	-	4
123.	-	-	-	-	-	1	-	-	1
124.	2	2	3	1	7	3	-	-	16
125.	1	7	6	8	7	3	-	-	23
126.	1	3	5	6	3	2	-	-	16
127.	-	2	3	2	-	2	-	-	7
128.	-	1	1	-	-	1	-	-	3
129.	-	1	1	1	-	2	-	-	4
130.	-	11	1	5	2	2	-	-	16
131.	3	-	-	-	-	1	-	-	4
132.	-	-	1	-	-	1	-	-	2
133.	3	-	-	-	-	2	-	-	5
134.	-	3	-	-	1	1	-	-	5
135.	-	-	-	-	1	-	-	-	1
136.	-	-	-	-	-	1	-	-	1
138.	-	-	-	-	-	-	-	-	1
139.	1	-	-	1	2	3	-	-	5
140.	-	4	-	4	1	-	-	-	5
141.	-	1	-	1	2	-	-	-	3
142.	-	1	1	3	2	-	-	-	5
143.	-	1	-	-	-	-	-	-	1
145.	-	-	-	-	1	-	-	-	1
146.	-	5	1	4	2	-	-	-	7
147.	-	3	-	3	-	-	-	-	3
150.	-	-	1	-	6	-	-	-	7
152.	-	-	-	-	-	1	-	-	1
153.	-	-	-	-	1	2	-	-	3
156.	-	2	-	-	-	1	-	-	2
160.	-	-	-	-	2	-	-	-	2
166.	-	-	2	2	-	-	-	-	2
168.	1	-	1	-	-	1	-	-	1
171.	-	-	-	-	-	1	-	-	1
172.	-	-	-	-	-	1	-	-	1
193.	-	-	-	-	1	-	-	-	1
194.	-	-	-	-	1	-	-	-	1
195.	-	-	-	-	1	-	-	-	1
TOTAL	733	599	1,274	1,157	3,369	4,791	400	56	11,928

GENERAL REVIEW

AGE DISTRIBUTION OF U. S. VESSELS ENGAGED IN
COMMERCIAL FISHING, 1961-63

YEAR BUILT	1961	1962	1963
	VESSELS	VESSELS	VESSELS
	NUMBER	NUMBER	NUMBER
1865.	1	1	1
1872.	2	2	2
1873.	1	2	2
1874.	1	-	-
1875.	1	1	1
1876.	1	2	4
1877.	2	2	2
1881.	2	2	2
1882.	3	3	3
1883.	4	3	3
1884.	2	3	3
1885.	2	3	3
1887.	3	3	3
1888.	3	3	3
1889.	3	2	2
1890.	2	2	1
1891.	6	6	3
1892.	3	3	2
1893.	5	5	5
1894.	3	3	2
1896.	5	5	6
1897.	3	2	2
1898.	5	4	3
1899.	9	7	6
1900.	12	11	10
1901.	27	23	22
1902.	20	12	13
1903.	17	21	19
1904.	18	19	16
1905.	20	20	18
1906.	23	23	21
1907.	26	25	23
1908.	19	20	19
1909.	28	25	23
1910.	29	29	29
1911.	37	39	41
1912.	61	58	58
1913.	69	57	56
1914.	53	49	52
1915.	72	61	68
1916.	42	36	39
1917.	113	112	111
1918.	108	101	99
1919.	70	63	64
1920.	103	107	106
1921.	46	41	41
1922.	48	46	47
1923.	64	61	62
1924.	113	111	115
1925.	140	128	134
1926.	143	139	145
1927.	173	160	165
1928.	214	197	200
1929.	195	187	184
1930.	155	158	164
1931.	114	106	106
1932.	69	62	66
1933.	53	46	54
1934.	98	97	99
1935.	155	155	154

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

AGE DISTRIBUTION OF U. S. VESSELS ENGAGED IN COMMERCIAL FISHING, 1961-63 - Continued

YEAR BUILT	1961 VESSELS	1962 VESSELS	1963 VESSELS
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
1936	192	181	182
1937	215	198	197
1938	202	201	209
1939	202	189	195
1940	222	211	218
1941	226	214	227
1942	266	263	259
1943	292	269	288
1944	448	444	447
1945	522	501	516
1946	680	648	655
1947	599	565	589
1948	514	476	476
1949	446	430	425
1950	360	359	345
1951	386	353	350
1952	400	353	374
1953	452	424	415
1954	412	383	377
1955	265	248	252
1956	323	319	314
1957	422	390	388
1958	434	408	406
1959	290	270	270
1960	171	171	188
1961	105	179	197
1962	-	96	187
1963	-	-	195
UNKNOWN	99	93	90
TOTAL	11,964	11,511	11,928



GENERAL REVIEW

CATCH BY REGION, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	NEW ENGLAND		MIDDLE ATLANTIC		CHESAPEAKE		SOUTH ATLANTIC		GULF	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ALBACORES	13,497	145	35	1	27,551	481	15,123	152	836	25
AMBERJACK	-	-	(1)	(1)	-	-	6	(1)	14	1
ANCHOVIES	83	2	-	-	-	-	-	-	-	-
ANGLERFISH	43	1	30	1	-	-	-	-	-	-
BALLYHOO	-	-	-	-	-	-	(1)	(1)	82	12
BARRACUDA	-	-	-	-	-	-	-	-	2	(1)
BULLFISH	5	(1)	-	-	-	-	-	-	-	-
BLUEFISH	181	26	1,541	203	674	84	2,289	229	898	78
BLUE RUNNER	-	-	-	-	-	-	25	1	1,496	30
BONITO	110	10	94	9	6	1	1	(1)	1	(1)
BOWFIN	-	-	-	-	-	-	(1)	(1)	925	102
BUFFALO FISH	-	-	-	-	-	-	-	-	-	-
BUTTERFISH	6,009	560	2,539	273	1,422	110	202	14	-	-
CABJO	-	-	-	-	33	2	23	2	39	3
CARP	2	(1)	101	7	491	15	168	5	41	3
CATFISH AND BULLHEADS	-	-	47	4	2,046	137	15,391	2,094	6,157	1,265
CIGARFISH	-	-	-	-	-	-	-	-	389	25
COD	39,901	2,794	2,076	292	200	20	-	-	-	-
CRAPPIE	-	-	-	-	3	(1)	-	-	-	-
CREVALLE	-	-	-	-	-	-	77	2	725	17
CROAKER	-	-	-	-	124	31	2,427	170	172	13
CUSK	1,909	110	-	-	-	-	-	-	-	-
DOLPHIN	-	-	-	-	-	-	4	1	5	(1)
DRUM:										
BLACK	-	-	8	(1)	350	15	170	12	1,834	135
RED	-	-	-	-	3	(1)	205	25	2,198	366
EELS:										
COMMON	117	26	238	33	574	68	40	2	-	-
CONGER	17	1	9	(1)	-	-	-	-	-	-
FLOUNDERS	106,767	8,744	12,552	1,820	2,308	472	3,011	506	861	173
GARFISH	-	-	-	-	5	(1)	-	-	613	32
GIZZARD SHAD	-	-	-	-	26	(1)	-	-	-	-
GROUPERS	-	-	(1)	(1)	-	-	200	21	7,324	740
GRUNTS	-	-	-	-	-	-	34	3	60	4
HADDOCK	123,881	11,695	91	10	-	-	-	-	-	-
HAKE:										
RED	5,239	58	1,417	38	56	1	-	-	-	-
WHITE	6,126	253	118	6	5	(1)	-	-	-	-
HALIBUT	-	-	-	-	-	-	2	-	-	-
HARVEST FISH	-	-	-	-	108	9	20	-	-	-
HERRING, SEA	154,513	1,699	238	5	19	(1)	-	-	-	-
HICKORY SHAD	-	-	-	-	33	1	294	9	-	-
HOGFISH	-	-	-	-	-	-	4	1	16	2
HOGCHOKER	-	-	-	-	4	(1)	-	-	-	-
JEW FISH	-	-	-	-	-	-	17	1	122	10
KING MACKEREL	-	-	-	-	10	1	2,231	259	2,817	296
KING WHITING OR "KING FISH"	1	(1)	21	2	80	7	2,588	249	1,209	65
LAUNCE	245	15	-	-	-	-	-	-	-	-
MACKEREL	2,653	257	180	39	81	18	1	(1)	-	-
MEHADEN	353	4	372,851	4,270	259,015	3,349	215,886	2,589	967,693	12,174
MOJARRA	-	-	-	-	-	-	151	11	75	5
MULLET	-	-	44	9	47	4	7,527	447	35,077	1,860
OCEAN PERCH, ATLANTIC	108,292	5,147	-	-	-	-	-	-	-	-
OCEAN POUT	1	(1)	-	-	-	-	-	-	-	-
PADDLEFISH	-	-	-	-	-	-	-	-	17	2
PERMIT	-	-	-	-	-	-	4	(1)	14	2
PIGFISH	-	-	-	-	4	(1)	65	5	7	1
PIKE OR PICKEREL	-	-	-	-	4	1	-	-	-	-
POLLOCK	14,601	670	6	(1)	-	-	-	-	-	-
POMPANO	-	-	-	-	-	-	324	178	597	413
TOTAL, SALMON, ATLANTIC	1	1	-	-	-	-	-	-	-	-
SAND PERCH	-	-	-	-	-	-	26	1	4	(1)
SAWFISH	-	-	-	-	-	-	-	-	-	-
SCUP OR FORGY	9,975	629	22,037	1,851	9,619	601	236	14	55	4
SEA BASS, BLACK (ATLANTIC)	160	24	3,388	443	4,620	582	1,069	123	-	-
SEA CATFISH	134	2	31	(1)	75	1	8	1	252	15
SEA ROBIN	-	-	-	-	-	-	-	-	-	-
SEA TROUT OR WEAKFISH:										
GRAY	3	(1)	567	73	1,192	130	1,839	142	-	-
SPOTTED	-	-	-	-	26	7	1,086	279	4,275	1,026
WHITE	-	-	-	-	-	-	-	-	294	21
SHAD	325	64	744	142	3,139	479	1,734	352	-	-
SHARKS:										
GRAYFISH	757	5	82	4	504	13	-	-	-	-
UNCLASSIFIED	31	1	8	(1)	97	2	41	4	4	(1)
TOTAL SHARKS	788	6	90	4	601	15	41	4	4	(1)

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

21

CATCH BY REGION, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	NEW ENGLAND		MIDDLE ATLANTIC		CHESAPEAKE		SOUTH ATLANTIC		GULF	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED										
SHEEPSHEAD:										
FRESH-WATER	-	-	-	-	-	-	-	-	360	33
SALT-WATER	-	-	-	-	-	-	82	6	480	38
SILVERSIDES	-	-	165	18	-	-	-	-	-	-
SKATES	76	2	16	1	2	(1)	-	-	-	-
SMELT	216	65	-	-	-	-	-	-	-	-
SNAPPER:										
MANGROVE	-	-	-	-	-	-	84	15	311	53
MUTTON	-	-	-	-	-	-	83	17	118	25
RED	-	-	-	-	-	-	489	153	12,676	3,381
VERMILION	-	-	-	-	-	-	18	3	68	11
YELLOWTAIL	-	-	-	-	-	-	103	24	729	153
SPADEFISH	-	-	-	-	(1)	(1)	10	1	-	-
SPANISH MACKEREL	-	-	(1)	(1)	79	10	2,267	214	5,447	496
SPOT	-	-	(1)	(1)	1,490	238	4,766	372	405	26
STRIPED BASS	582	87	1,474	212	6,496	690	737	115	-	-
STURGEON, COMMON	18	2	20	3	11	2	99	18	31	4
SUCKERS	2	(1)	1	(1)	1	(1)	5	(1)	-	-
SUNFISH	-	-	(1)	(1)	9	9	-	-	-	-
SMELLFISH	-	-	1,116	49	2,125	48	466	10	-	-
SWORDFISH	2,331	577	240	107	183	79	1	1	-	-
TAUTOG	105	4	62	1	3	(1)	-	-	-	-
TENPOUNDER	-	-	59	-	-	-	(1)	(1)	1,192	27
TILEFISH	194	24	1	7	14	1	-	-	3	(1)
TOWMOOD	-	-	1	(1)	-	-	-	(1)	12	1
TRIGGERFISH	-	-	-	-	-	-	7	(1)	8	-
TRIPLETAIL	-	-	-	-	-	-	2	(1)	-	-
TUNA:										
BLUEFIN	6,591	376	2,850	159	571	50	-	-	-	-
LITTLE	-	-	8	1	4	(1)	-	-	-	-
SKIPJACK	2,204	116	-	-	2,073	98	-	-	-	-
YELLOWFIN	-	-	-	-	456	56	-	-	-	-
UNCLASSIFIED	8	1	-	-	3	(1)	-	-	-	-
TOTAL TUNA	8,803	493	2,858	160	3,107	304	-	-	-	-
WARSAW:										
WHITE PERCH	78	9	110	14	1,714	131	10	1	227	15
WHITING	86,558	1,914	5,777	254	307	10	259	26	-	-
WOLFFISH	768	39	-	-	-	-	1	(1)	-	-
YELLOW PERCH	-	-	1	(1)	106	8	43	3	-	-
UNCLASSIFIED:										
FOR FOOD	4,835	305	347	29	89	8	243	16	1,240	80
BAIT, REDUCTION AND ANIMAL FOOD	58,200	498	62,563	440	5,113	41	13,255	118	80,109	1,313
TOTAL FISH	758,970	37,051	495,903	10,830	335,403	8,412	297,597	9,019	1,140,623	24,576
SHELLFISH, ETC.										
CRABS:										
BLUE:										
HARD	(1)	(1)	1,383	139	63,072	3,697	50,769	2,454	26,519	1,429
SOFT AND PEELER	-	-	36	8	3,057	1,082	83	38	358	167
GREEN	71	5	-	-	-	-	-	-	-	-
ROCK	2,296	115	23	1	-	-	-	-	-	-
STONE	-	-	-	-	-	-	157	63	660	207
TOTAL CRABS	2,367	120	1,442	148	66,129	4,779	51,009	2,555	27,517	1,803
CRANFISH, FRESH-WATER										
HORSESHOE CRABS	-	-	201	1	-	-	-	-	892	134
LOBSTERS:										
NORTHERN	29,120	16,212	1,130	547	24	10	-	-	-	-
SPINY	-	-	-	-	-	-	815	328	2,771	1,081
SHRIMP	561	67	7	7	-	-	15,529	5,246	203,116	63,539
CLAMS:										
HARD	3,987	2,462	7,157	4,322	2,585	1,277	406	155	7	2
OCEAN QUAHOG	104	10	-	2	-	-	-	-	-	-
RAZOR	24	8	8	34	-	-	-	-	-	-
SOFT	2,781	1,393	114	2	6,859	1,499	-	-	-	-
SURF	-	-	38,522	2,671	64	5	-	-	-	-
TOTAL CLAMS	6,896	3,873	45,801	7,029	9,508	2,781	406	155	7	2
CONCHS.										
MUSSELS, SEA	192	34	552	118	347	30	-	-	-	-
OCTOPUS	727	55	74	-	-	-	1	(1)	-	-
OYSTERS, MARKET,										
EASTERN:										
PUBLIC	33	39	66	73	8,401	6,079	691	338	14,637	4,142
PRIVATE	419	494	885	1,082	9,873	7,649	4,146	1,682	9,502	3,044
TOTAL OYSTERS	452	533	951	1,155	18,274	13,728	4,837	2,020	24,139	7,186

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

CATCH BY REGION, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	NEW ENGLAND		MIDDLE ATLANTIC		CHESAPEAKE		SOUTH ATLANTIC		GULF	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC.-CONT'D.										
PERIWINKLES AND COCKLES	34	11	-	-	-	-	-	-	-	-
SCALLOPS:										
BAY	391	492	-	404	-	-	321	122	228	59
CALICO	-	-	-	-	-	-	-	-	(1)	(1)
SEA	17,794	8,257	2,099	978	46	22	-	-	-	-
SQUID	2,682	154	1,668	110	292	16	31	2	73	7
SEA URCHIN	-	3	-	-	-	-	-	-	-	-
TERRAPIN	-	-	3	1	14	4	(1)	(1)	1	(1)
TURTLES:										
GREEN	-	-	-	-	-	-	1	(1)	54	9
LOGGERHEAD	-	-	1	(1)	-	-	-	-	8	1
SNAPPER	-	-	53	6	166	22	16	3	22	4
SOFT-SHELL	-	-	-	-	-	-	152	18	-	-
UNCLASSIFIED	-	-	2	(1)	-	-	-	-	-	-
TOTAL TURTLES	-	-	56	6	166	22	171	21	84	14
FROGS	-	-	-	-	-	-	-	-	6	2
IRISH MOSS	6,967	129	-	-	-	-	-	-	-	-
SPONGES	-	-	-	-	-	-	-	-	55	387
BLOODWORMS	816	772	-	-	-	-	-	-	-	-
SANDWORMS	836	526	-	-	-	-	-	-	-	-
TOTAL SHELLFISH, ETC.	69,919	31,238	54,561	13,515	94,800	21,392	73,120	10,449	258,889	74,214
GRAND TOTAL	828,689	68,269	550,464	21,345	430,203	29,804	370,717	19,468	1,399,512	98,790

SPECIES	PACIFIC		GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES		HAWAII		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH										
ALEWIVES	-	-	5,398	102	-	-	-	-	62,440	906
AMBERJACK	-	-	-	-	-	-	106	29	126	30
ANCHOVIES	4,570	78	-	-	-	-	-	-	4,653	80
ANGLERFISH	-	-	-	-	-	-	-	-	73	2
BALLYHOOD	-	-	-	-	-	-	-	-	82	12
BARRACUDA	-	-	-	-	-	-	11	4	392	66
BILLFISH	379	62	-	-	-	-	-	-	5	(1)
BLUEFISH	-	-	-	-	-	-	-	-	5,583	620
BLUE PIKE	-	-	(1)	(1)	-	-	-	-	(1)	(1)
BLUE RUNNER	-	-	-	-	-	-	-	-	1,521	31
BONITO	4,022	113	-	-	-	-	-	-	4,234	133
BOWFIN	-	-	2	(1)	82	2	-	-	91	2
BUFFALOFISH	-	-	64	8	17,306	1,705	-	-	18,295	1,815
BURBOT	-	-	401	7	49	3	-	-	450	10
BUTTERFISH	-	-	-	-	-	-	-	-	10,172	957
CABEZONE	3	(1)	-	-	-	-	-	-	3	(1)
CABO	-	-	-	-	-	-	-	-	95	7
CABRILLA	37	6	-	-	-	-	-	-	37	6
CARP	1,429	19	6,298	275	21,488	749	-	-	30,018	1,073
CATFISH AND BULLHEADS	-	-	1,496	343	13,477	2,932	-	-	36,614	6,778
CHUBS	-	-	11,023	1,569	-	-	-	-	11,023	1,569
CIGARFISH	-	-	-	-	-	-	-	-	389	25
CISCO	-	-	6	2	-	-	-	-	6	2
COD	6,369	350	-	-	-	-	-	-	48,546	3,456
CRAPPIE	-	-	3	1	7	1	-	-	13	2
CREVALLE	-	-	-	-	-	-	99	41	901	60
CROAKER	-	-	-	-	-	-	-	-	2,723	214
CUSK	-	-	-	-	-	-	-	-	1,909	110
DOLLY VARDEN TROUT	5	1	-	-	-	-	-	-	5	1
DOLPHIN	-	-	-	-	-	-	127	52	136	53
DRUM:										
BLACK	-	-	-	-	-	-	-	-	2,362	162
RED	-	-	-	-	-	-	-	-	2,406	391
EELS:										
COMMON	-	-	19	5	(1)	(1)	-	-	988	134
CONGER	-	-	-	-	-	-	4	(1)	30	1
FLOUNDERS	51,299	3,696	-	-	-	-	-	-	176,798	15,411
FLYING FISH	47	3	-	-	-	-	-	-	47	3
GARFISH	-	-	(1)	(1)	867	42	-	-	1,485	74
GIZZARD SHAD	-	-	5	(1)	1	(1)	-	-	32	(1)
GOATFISHES	-	-	-	-	-	-	128	66	126	66
GOLDFISH	-	-	172	5	-	-	-	-	172	5
GROUPEFS	234	51	-	-	-	-	-	-	7,758	812
GRUNTS	-	-	-	-	-	-	-	-	94	7
HADDOCK	-	-	-	-	-	-	-	-	123,972	11,705
HAKE:										
PACIFIC	540	10	-	-	-	-	-	-	540	10
RED	-	-	-	-	-	-	-	-	6,712	97
WHITE	-	-	-	-	-	-	-	-	6,249	259

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

23

CATCH BY REGION, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	PACIFIC		GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES		HAWAII		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED										
HALBMOON	9	2	-	-	-	-	-	-	9	2
HALIBUT	45,569	6,883	-	-	-	-	-	45,641	6,972	
HARDHEAD	148	30	-	-	-	-	-	148	30	
HARVEST FISH	-	-	-	-	-	-	-	128	11	
HERRING:										
LAKE	-	-	8,477	479	1	(1)	-	-	8,478	479
SEA	38,834	656	-	-	-	-	-	-	193,604	2,360
HICKORY SHAD	-	-	-	-	-	-	-	-	327	10
HOGCHOKER	-	-	-	-	-	-	-	-	20	3
JACK MACKEREL	95,442	1,989	-	-	-	-	401	129	95,843	2,118
JEW FISH	-	-	-	-	-	-	-	-	139	11
KING CROAKER	551	33	-	-	-	-	-	-	551	33
KING MACKEREL	-	-	-	-	-	-	-	-	5,058	556
KING WHITING OR "KING FISH"	-	-	-	-	-	-	-	-	3,899	323
LAKE TROUT	2	1	127	79	-	-	-	-	129	80
LANUCE	-	-	-	-	-	-	-	-	245	15
LINGCOD	4,790	293	-	-	-	-	-	-	4,790	293
MACKEREL	40,243	861	-	-	-	-	-	-	43,158	1,175
MARLIN	-	-	-	-	-	-	532	195	532	155
MENHADEN	-	-	-	-	-	-	-	-	1,815,798	22,386
MOJARRA	-	-	1	(1)	-	-	-	-	225	16
MOONEYE	-	-	-	-	33	2	-	-	34	2
MULLET	-	-	-	-	-	-	39	34	42,734	2,354
OCEAN PERCH:										
ATLANTIC	-	-	-	-	-	-	-	-	108,292	5,147
PACIFIC	23,578	1,172	-	-	-	-	-	-	23,578	1,172
OCEAN POUT	-	-	-	-	-	-	-	-	4	(1)
OPALEYE	4	1	-	-	-	-	-	-	4	1
PADDLE FISH	-	-	-	-	725	71	-	-	742	73
PERCH	323	41	-	-	-	-	-	-	323	41
PERMIT	-	-	-	-	-	-	-	-	18	2
PIGFISH	-	-	-	-	-	-	-	-	96	6
PIKE OR PICKEREL	-	-	140	16	29	2	-	-	173	19
POLLOCK	58	18	-	-	-	-	-	-	14,607	670
POMPAÑO	-	-	5	(1)	677	24	-	-	679	609
QUILLBACK	-	-	-	-	-	-	-	-	682	24
RAT FISH	1,095	7	-	-	-	-	-	-	1,095	7
ROCK BASS	-	-	16	2	-	-	-	-	16	2
ROCKFISHES	25,030	1,328	-	-	-	-	-	-	25,030	1,328
RUDDER FISH	-	-	-	-	-	-	2	1	2	1
SABLE FISH	6,464	654	-	-	-	-	-	-	6,464	654
SALMON:										
ATLANTIC	-	-	-	-	-	-	-	-	-	1
CHINOOK OR KING	27,179	10,911	-	-	-	-	-	-	27,179	10,911
CHUM OR KETA	38,840	3,626	-	-	-	-	-	-	38,840	3,626
PINK	156,603	18,289	-	-	-	-	-	-	156,603	18,289
RED OR SOCKEYE	43,424	10,337	-	-	-	-	-	-	43,424	10,337
SILVER OR COHO	28,131	5,848	-	-	-	-	-	-	28,131	5,848
TOTAL SALMON	294,177	49,011	-	-	-	-	-	-	294,178	49,012
SAND PERCH	-	-	-	-	-	-	-	-	26	1
SARDINE, PACIFIC	7,131	299	-	-	-	-	-	-	7,131	299
SAUGER	-	-	85	10	-	-	-	-	85	10
SAWFISH	-	-	-	-	-	-	-	-	4	(1)
SCULPIN	76	22	3	(1)	-	-	-	-	79	22
SCUP OR PORGY	-	-	-	-	-	-	-	-	41,922	3,099
SEA BASS:										
BLACK (ATLANTIC)	-	-	-	-	-	-	-	-	9,237	1,172
BLACK (PACIFIC)	304	48	-	-	-	-	33	13	337	61
WHITE	898	242	-	-	-	-	-	-	898	242
SEA CAT FISH	-	-	-	-	-	-	-	-	260	16
SEA ROBIN	-	-	-	-	-	-	-	-	240	3
SEA TROUT OR WEAFFISH:										
GRAY	-	-	-	-	-	-	-	-	3,601	345
SPOTTED	-	-	-	-	-	-	-	-	5,387	1,312
WHITE	-	-	-	-	-	-	-	-	294	21
SHAD	1,503	104	-	-	-	-	-	-	7,445	1,141
SHARKS:										
GRAY FISH	867	4	-	-	-	-	-	-	2,210	4
SOUPFIN	4	(1)	-	-	-	-	-	-	4	(1)
UNCLASSIFIED	665	62	-	-	-	-	-	-	846	69
TOTAL SHARKS	1,536	66	-	-	-	-	-	-	3,060	95
SHEEPSHEAD:										
FRESH-WATER	-	-	4,152	84	6,461	308	-	-	10,973	425
SALT-WATER	28	2	-	-	-	-	-	-	590	46

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

CATCH BY REGION, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	PACIFIC		GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES		HAWAII		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED										
SILVERSIDES	-	-	-	-	-	-	-	-	165	18
SKATES	945	15	-	-	-	-	-	-	1,039	18
SMELT	1,663	132	3,015	87	-	-	-	-	4,894	284
SNAPPER:										
MANGROVE	-	-	-	-	-	-	-	-	395	66
MUTTON	-	-	-	-	-	-	-	-	201	42
RED	-	-	-	-	-	-	-	-	13,165	3,534
VERMILION	-	-	-	-	-	-	-	-	86	14
YELLOWTAIL	-	-	-	-	-	-	-	-	832	177
UNCLASSIFIED	-	-	-	-	-	-	292	168	292	168
SPADEFISH	-	-	-	-	-	-	-	-	10	1
SPANISH MACKEREL	-	-	-	-	-	-	-	-	7,793	720
SPLITTAIL	5	1	-	-	-	-	-	-	5	1
SPOT	-	-	-	-	-	-	2	(1)	6,663	636
STEELHEAD TROUT	1,353	395	-	-	-	-	-	-	1,353	395
STRIPED BASS	69	10	-	-	-	-	-	-	9,358	1,314
STURGEON:										
COMMON	401	51	5	5	-	-	-	-	585	85
SHOVELNOSE, ETC.	-	-	-	-	53	9	-	-	53	9
SUCKERS	13	(1)	1,373	45	338	8	-	-	1,733	53
SUNFISH	-	-	9	1	-	-	-	-	18	1
SWELFISH	-	-	-	-	-	-	-	-	3,707	107
SWORDFISH	98	58	-	-	-	-	22	4	2,875	826
TAUTOG	-	-	-	-	-	-	-	-	170	5
TENPOUNDER	-	-	-	-	-	-	8	2	1,200	29
TILEFISH	-	-	-	-	-	-	-	-	270	32
TOMCOD	5	(1)	-	-	-	-	-	-	6	(1)
TRIGGERFISH	-	-	-	-	-	-	1	(1)	20	1
TRIPLETAIL	-	-	-	-	-	-	-	-	10	(1)
TULLIBEE	-	-	2,058	60	1	(1)	-	-	2,059	60
TUNA:										
ALBACORE	60,787	9,159	-	-	-	-	15	5	60,802	9,164
BLUEFIN	30,353	3,392	-	-	-	-	2/ 948	502	2/41,313	2/4,479
LITTLE	-	-	-	-	-	-	60	8	72	9
SKIPJACK	96,620	10,374	-	-	-	-	8,100	1,090	108,997	11,778
YELLOWFIN	109,583	14,530	-	-	-	-	385	153	110,424	14,739
UNCLASSIFIED	-	-	-	-	-	-	-	-	11	1
TOTAL TUNA	297,343	37,455	-	-	-	-	9,508	1,758	321,619	40,170
TURBOT	77	6	-	-	-	-	-	-	97	6
WAHOO	22	7	-	-	-	-	30	6	52	13
WARSAW	-	-	-	-	-	-	-	-	237	16
WHITEAIT	146	11	-	-	-	-	-	-	148	11
WHITE BASS	-	-	1,174	152	84	12	-	-	1,258	164
WHITEFISH:										
COMMON	1	(1)	900	459	147	26	-	-	1,048	485
MONKLINEE	-	-	34	7	-	-	-	-	34	7
WHITE PERCH	-	-	6	(1)	-	-	-	-	2,167	180
WHITING	-	-	-	-	-	-	-	-	92,643	2,178
WOLFFISH	-	-	-	-	-	-	-	-	768	39
YELLOW PERCH	-	-	11,275	1,070	318	25	-	-	11,743	1,107
YELLOW PIKE	-	-	1,264	416	463	72	-	-	1,727	488
YELLOWTAIL	70	7	-	-	-	-	-	-	70	7
UNCLASSIFIED:										
FOR FOOD	16	1	-	-	-	-	330	174	7,100	613
BAIT, REDUCTION AND ANIMAL FOOD	1,034	21	-	-	-	-	-	-	220,274	2,431
TOTAL FISH	960,010	106,322	59,006	5,289	62,607	5,994	11,675	2,636	4,121,794	210,129
SHELLFISH, ETC.										
CRABS:										
BLUE:										
HARD	-	-	-	-	-	-	-	-	141,743	7,719
SOFT AND PEELER	-	-	-	-	-	-	-	-	3,514	1,295
DUNGENESS	24,863	4,306	-	-	-	-	-	-	24,863	4,306
GREEN	-	-	-	-	-	-	-	-	71	5
KING	78,740	7,607	-	-	-	-	-	-	78,740	7,607
ROCK	241	22	-	-	-	-	-	-	2,560	138
STONE	-	-	-	-	-	-	-	-	817	270
UNCLASSIFIED	-	-	-	-	-	-	26	14	26	14
TOTAL CRABS	103,644	11,935	-	-	-	-	26	14	252,334	21,354
CRAWFISH, FRESH-WATER	16	4	-	-	1,227	166	-	-	2,135	304
HORSESHOE CRABS	-	-	-	-	-	-	-	-	201	1
LIMPET	-	-	-	-	-	-	4	9	4	9
LOBSTERS:										
NORTHERN	-	-	-	-	-	-	-	-	30,274	16,769
SPINY	584	381	-	-	-	-	10	8	4,180	1,798

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

25

CATCH BY REGION, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	PACIFIC		GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES		HAWAII		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC.--CONT'D.										
SHRIMP	21,260	1,181	-	-	5	2	(1)	-	240,478	70,044
ABALONE	869	626	-	-	-	-	-	2	869	626
CLAMS:										
HARD	386	183	-	-	-	-	1	2	14,529	8,403
OCEAN QUAHOG	-	-	-	-	-	-	-	-	104	10
RAZOR	377	167	-	-	-	-	-	-	409	177
SOFT	-	-	-	-	-	-	-	-	9,754	2,926
SURF	-	-	-	-	-	-	-	-	38,586	2,676
MIXED	21	10	-	-	-	-	-	-	21	10
TOTAL CLAMS	784	360	-	-	-	-	1	2	63,403	14,202
CONCHS	-	-	-	-	-	-	-	-	1,091	182
MUSSELS, SEA	-	-	-	-	-	-	-	-	801	66
MUSSEL SHELLS	-	-	-	-	15,743	1,062	-	-	15,743	1,062
PEARLS AND SLUGS	-	-	-	-	-	27	-	-	-	27
OCTOPUS	149	13	-	-	-	-	8	4	158	17
OYSTERS, MARKET:										
EASTERN:										
PUBLIC	-	5	-	-	-	-	-	-	23,828	10,671
PRIVATE	14	-	-	-	-	-	-	-	24,839	13,956
PACIFIC	9,746	2,377	-	-	-	-	-	-	9,746	2,377
WESTERN	31	101	-	-	-	-	-	-	31	101
TOTAL OYSTERS	9,791	2,483	-	-	-	-	-	-	58,444	27,105
PERIWINKLES AND COCKLES	-	-	-	-	-	-	-	-	34	11
SCALLOPS:										
BAY	-	-	-	-	-	-	-	-	1,517	1,077
CALICO	-	-	-	-	-	-	-	-	(1)	(1)
SEA	-	-	-	-	-	-	-	-	19,939	9,257
SQUID	11,562	240	-	-	-	-	6	2	16,314	531
SEA URCHIN	-	-	-	-	-	-	(1)	(1)	84	3
TERRAPIN	-	-	-	-	-	-	-	-	18	5
TURTLES:										
BABY	-	-	-	-	26	100	-	-	26	100
GREEN	-	-	-	-	-	-	-	-	55	9
LOGGERHEAD	-	-	-	-	-	-	-	-	9	1
SLIDER	-	-	-	-	9	(1)	-	-	9	(1)
SNAPPER	-	-	-	-	175	21	-	-	434	56
SOFT-SHELL	-	-	-	-	4	(1)	-	-	156	18
UNCLASSIFIED	-	-	-	-	-	-	(1)	(1)	2	(1)
TOTAL TURTLES	-	-	-	-	214	121	(1)	(1)	691	184
FROGS	-	-	-	-	54	21	-	-	60	23
KELP (WITH HERRING EGGS)	199	16	-	-	-	-	-	-	199	16
IRISH MOSS	-	-	-	-	-	-	-	-	6,967	129
SEAWEED	-	-	-	-	-	-	5	2	5	2
SPONGES	-	-	-	-	-	-	-	2	55	387
BLOODWORMS	-	-	-	-	-	-	-	-	816	772
SANDWORMS	-	-	-	-	-	-	-	-	836	526
TOTAL SHELLFISH, ETC.	149,058	17,239	-	-	17,243	1,399	60	43	717,650	166,489
WHALE PRODUCTS:										
MEAL	2,638	153	-	-	-	-	-	-	2,638	153
MEAT	2,684	242	-	-	-	-	-	-	2,684	242
OIL:										
SPERM	700	58	-	-	-	-	-	-	700	58
WHALE	1,429	91	-	-	-	-	-	-	1,429	91
SOLUBLES	14	(1)	-	-	-	-	-	-	14	(1)
TOTAL WHALE PRODUCTS	7,665	544	-	-	-	-	-	-	7,665	544
GRAND TOTAL	1,116,733	124,105	59,006	5,289	79,850	7,393	11,735	2,679	4,847,109	377,162

1/ LESS THAN 500 POUNDS OR \$500.

2/ INCLUDES DATA ON THE CATCH OF BIGEYE TUNA IN HAWAII.

GENERAL REVIEW

CATCH BY GEAR, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

GEAR	NEW ENGLAND		MIDDLE ATLANTIC		CHESAPEAKE	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
HAUL SEINES	1,244	44	1,283	150	13,268	609
STOP NETS AND SEINES	135,460	1,452	51	3	-	-
PURSE SEINES	20,495	570	368,067	4,770	222,146	3,113
BAG NETS	58	17	-	-	-	-
BEAM TRAWLS	-	-	6	6	-	-
OTTER TRAWLS	555,698	33,333	106,247	5,051	21,951	1,719
WEIRS	16,147	202	3	3	-	-
POUND NETS	5,540	341	16,287	437	65,506	1,800
FLOATING TRAPS	8,753	530	-	-	-	-
FYKE AND HOOP NETS	1	(2)	134	11	2,295	68
POTS AND TRAPS	29,663	15,351	3,468	516	3/39,531	3/2,506
GILL NETS	3,356	221	1,769	255	7,581	946
HOOKS AND BAITS	15,044	1,416	2,355	398	11,163	849
DIP NETS	1,752	221	-	-	103	24
FUSH NETS	-	-	1	1	-	-
HARPOONS	449	99	35	13	-	-
SPEARS	10	3	70	9	-	-
SCRAPES	-	-	-	-	1,988	687
DREDGES	19,774	9,523	45,080	6,566	35,100	11,110
TONGS AND RAKES $\frac{1}{2}$	10,387	2,205	4,850	2,915	9,442	6,294
HOOES AND FORKS	4,659	2,719	10	4	-	-
DIVING OUTFITS	52	30	-	-	-	-
BY HAND	47	12	525	217	129	59
TOTAL	928,089	661,289	550,464	21,345	430,203	29,804

GEAR	SOUTH ATLANTIC		GULF		PACIFIC	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
HAUL SEINES	11,343	906	12,798	797	1/4,550	1/393
PURSE SEINES	216,020	2,596	967,731	12,185	1/598,386	1/52,660
BAG NETS	125	37	-	-	-	-
BEAM TRAWLS	-	-	-	-	3,307	147
OTTER TRAWLS	45,781	6,643	286,106	65,119	131,963	7,669
WEIRS	-	-	-	-	20	4
POUND NETS	14,567	359	-	-	605	94
FLOATING TRAPS	-	-	-	-	417	47
FYKE AND HOOP NETS	326	32	1,621	261	-	-
POTS AND TRAPS	39,844	2,758	22,365	2,379	104,545	12,348
GILL NETS	15,399	1,430	38,279	2,800	4/79,949	4/14,587
TRAMMEL NETS	38	22	8,171	1,138	-	-
HOOKS AND BAITS	19,633	2,289	36,031	6,186	170,545	31,730
DIP NETS	1,132	101	1,733	220	5/2,042	5/123
REEF NETS	-	-	-	-	1,006	229
WHEELS	-	-	-	-	18	3
CAST NETS	32	9	24	1	-	-
HARPOONS	-	-	-	-	7,739	589
SPEARS	150	29	164	39	-	-
DREDGES	382	199	17,019	5,051	6/9,504	6/2,433
TONGS AND RAKES $\frac{1}{2}$	3,137	1,298	7,300	2,176	6/320	6/60
SHOWELS	-	-	-	-	746	347
BRUSH TRAPS	-	-	63	28	-	-
GRABS	-	-	6	2	-	-
HOOKS	-	-	29	160	-	-
DIVING OUTFITS	-	-	26	268	870	626
BY HAND	1,888	740	55	20	201	16
TOTAL	370,717	19,468	1,399,512	98,790	1,116,733	124,105

GEAR	GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES	
	QUANTITY	VALUE	QUANTITY	VALUE
HAUL SEINES	8,835	477	16,101	830
OTTER TRAWLS	8,220	259	2,230	67
WEIRS	-	-	841	43
POUND NETS	4,562	199	106	8
TRAP NETS	8,925	971	1,039	32
FYKE AND HOOP NETS	1,197	116	12,702	1,364
POTS AND TRAPS	-	-	1,853	309
GILL NETS	26,998	3,203	10,369	1,010
TRAMMEL NETS	-	-	8,707	762
HOOKS AND BAITS	268	64	7,918	1,714
DIP NETS	1	(2)	186	121

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

27

CATCH BY GEAR, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

GEAR	GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES	
	QUANTITY	VALUE	QUANTITY	VALUE
GRABS	-	-	54	21
BY HAND	-	-	1,772	110
CROWFOOT BARS	-	-	13,972	982
TOTAL	59,006	5,289	79,850	7,393

GEAR	HAWAII		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE
HAUL SEINES	37	13	71,450	4,219
STOP NETS AND SEINES	4	-	135,511	1,455
PURSE SEINES	-	-	2,393,765	75,894
BAG NETS	102	64	285	118
BEAM TRAWLS	-	-	3,313	153
OTTER TRAWLS	-	-	1,158,396	119,860
WEIRS	-	-	17,214	252
POUND NETS	-	-	107,293	3,236
TRAP NETS	-	-	9,964	1,003
FLOATING TRAPS	-	-	9,170	577
FYKE AND HOOP NETS	-	-	18,276	1,872
POTS AND TRAPS	110	47	241,379	36,214
GILL NETS	57	32	183,757	24,504
TRAMMEL NETS	-	-	16,916	1,942
HOOKS AND BAITS	11,111	2,396	274,068	47,042
DIP NETS	-	-	6,949	810
LIFT NETS	208	61	208	61
REEF NETS	-	-	1,006	229
PUSH NETS	-	-	1	1
WHEELS	-	-	18	3
CAST NETS	2	1	58	11
HARPOONS	-	-	8,223	701
SPEARS	5	3	399	83
SCRAPES	-	-	1,988	667
DREDGES	-	-	126,859	34,902
TONGS AND RAKES 7/	-	-	35,436	14,948
HOES AND FORKS	-	-	4,669	2,723
SHOVELS	-	-	746	347
BRUSH TRAPS	-	-	63	28
GRABS	-	-	60	23
HOOKS	-	-	29	120
DIVING OUTFITS	-	-	948	924
BY HAND	9	10	4,626	1,184
UNCLASSIFIED GEAR	94	52	94	52
CROWFOOT BARS	-	-	13,972	982
TOTAL	11,735	2,679	4,647,109	377,162

1/ THE CATCH BY HAUL SEINES IN ALASKA AND BY LAMPARA NETS IN CALIFORNIA HAS BEEN INCLUDED WITH PURSE SEINES.

2/ LESS THAN \$500.

3/ THE CATCH BY SLAT TRAPS IN VIRGINIA HAS BEEN INCLUDED WITH POTS AND TRAPS.

4/ THE CATCH BY TRAMMEL NETS IN CALIFORNIA HAS BEEN INCLUDED WITH GILL NETS.

5/ THE CATCH BY BRAIL OR SCOOP NETS IN CALIFORNIA HAS BEEN INCLUDED WITH DIP NETS.

6/ THE CATCH BY HAND IN WASHINGTON AND OREGON HAS BEEN INCLUDED WITH THE CATCH BY DREDGES. IN CALIFORNIA, IT HAS BEEN INCLUDED WITH TONGS.

7/ INCLUDES THE CATCH BY OYSTER GRABS.



GENERAL REVIEW

CATCH FROM WATERS OFF THE UNITED STATES
AND ON THE HIGH SEAS OFF FOREIGN COASTS, 1963

(MILLION POUNDS)

AREA AND SPECIES	WATERS OFF U.S. COASTS	HIGH SEAS OFF FOREIGN COASTS	TOTAL
	QUANTITY	QUANTITY	QUANTITY
ATLANTIC AND GULF STATES:			
NEW ENGLAND:			
COD	36.9	3.0	39.9
CUSH	1.6	.3	1.9
FLOUNDERS	106.0	.8	106.8
HADDOCK	107.8	16.1	123.9
HAKE, WHITE	5.6	.5	6.1
HALIBUT	1.2	.1	.3
OCEAN PERCH	19.6	89.7	108.3
POLLOCK	10.3	4.3	14.6
SWORDFISH	2.0	.3	2.3
TUNA	8.8	(1)	8.8
WHITING	86.6	(1)	86.6
WOLFFISH . . . . .	.5	.3	.8
SCALLOPS, SEA	17.8	(1)	17.8
UNCLASSIFIED	310.7	.1	310.8
TOTAL	714.4	114.5	828.9
MIDDLE ATLANTIC STATES, UNCLASSIFIED, TOTAL			
	550.5	-	550.5
CHESAPEAKE STATES:			
TUNA	1.0	2.1	3.1
UNCLASSIFIED	427.1	-	427.1
TOTAL	428.1	2.1	430.2
SOUTH ATLANTIC STATES, UNCLASSIFIED, TOTAL			
	370.7	-	370.7
GULF:			
GROUPERS	6.2	1.1	7.3
SNAPPER, RED	7.2	5.5	12.7
SHRIMP	177.9	25.2	203.1
UNCLASSIFIED	1,176.4	-	1,176.4
TOTAL	1,367.7	31.8	1,399.5
TOTAL ATLANTIC AND GULF STATES			
	3,431.4	148.4	3,579.8
PACIFIC COAST STATES:			
ALASKA, WASHINGTON, AND OREGON:			
BOTTOMFISH (WASHINGTON AND OREGON) 2/	39.5	40.4	79.9
HALIBUT	43.1	2.5	45.6
SALMON	282.5	3.8	286.3
UNCLASSIFIED	191.1	.1	191.2
TOTAL	556.2	46.8	603.0
CALIFORNIA:			
BARRACUDA . . . . .	.4	(1)	.4
BONITO	4.0	(1)	4.0
CABRILLA	-	(1)	(1)
FLOUNDERS . . . . .	.8	.3	1.1
GROUPERS	-	.2	.2
KING CROAKER . . . . .	.6	(1)	.6
LINGCOD	1.1	(1)	1.1
MACKEREL, PACIFIC	40.2	(1)	40.2
PERCH . . . . .	.2	(1)	.2
ROCKFISHES	11.5	.2	11.7
SCULPIN . . . . .	.1	(1)	.1
SEA BASS:			
BLACK	(1)	.3	.3
WHITE . . . . .	.4	.5	.9
SHARKS, UNCLASSIFIED . . . . .	.6	(1)	.7
SHEEPSHEAD	(1)	(1)	(1)
SWORDFISH . . . . .	.1	(1)	.1
TUNA:			
ALBACORE	41.9	6.9	48.8
BLUEFIN	7.1	23.2	30.3
SKIPJACK	2.2	94.4	96.6
YELLOWFIN . . . . .	.1	109.5	109.6
WAHO	-	(1)	(1)
YELLOWTAIL	(1)	(1)	(1)
UNCLASSIFIED	166.6	.2	166.8
TOTAL	277.9	235.8	513.7
TOTAL PACIFIC COAST STATES			
	834.1	282.6	1,116.7
GREAT LAKES AND MISSISSIPPI RIVER STATES, UNCLASSIFIED, TOTAL			
	138.9	-	138.9
HAWAII, UNCLASSIFIED, TOTAL			
	11.7	-	11.7
GRAND TOTAL			
	4,416.1	431.0	4,847.1

1/ LESS THAN 50,000 POUNDS.

2/ PRINCIPALLY COD, FLOUNDERS (INCLUDING SOLE), LINGCOD, OCEAN PERCH, ROCKFISHES, AND SABLEFISH.

GENERAL REVIEW

RELATIVE VOLUME OF THE CATCH, BY SPECIES, 1963

SPECIES	QUANTITY	PERCENT OF TOTAL	RECORD CATCH AND YEAR	
	<u>THOUSAND POUNDS</u>	<u>PERCENT</u>	<u>YEAR</u>	<u>THOUSAND POUNDS</u>
MENHADEN	1,815,798	37.5	1962	2,347,944
TUNA	321,619	6.6	1950	391,454
SALMON	294,178	6.1	1936	790,884
CRABS	252,334	5.2	1963	252,334
SHRIMP	240,478	5.0	1954	268,334
INDUSTRIAL FISH 1/	227,374	4.7	1959	247,980
<hr/>				
HERRING SEA:				
ATLANTIC	154,770	3.2	1902	200,598
PACIFIC	36,834	.8	1937	263,200
TOTAL	193,604	4.0	-	-
<hr/>				
FLOUNDERS	176,798	3.6	1963	176,798
HADDOCK	123,972	2.6	1929	293,809
OCEAN PERCH, ATLANTIC	108,292	2.2	1951	258,320
JACK MACKEREL	95,843	2.0	1952	145,522
WHITING	92,643	1.9	1957	133,041
CLAMS	63,403	1.3	1963	63,403
ALEWIVES	62,440	1.3	1908	89,978
OYSTERS	58,444	1.2	2/ 1908	152,046
<hr/>				
COD:				
ATLANTIC	42,177	.9	1880	294,351
PACIFIC	6,369	.1	1915	32,681
TOTAL	48,546	1.0	-	-
<hr/>				
HALIBUT, PACIFIC	45,569	.9	1915	66,696
MULLET	42,734	.9	1902	43,385
SCUP OR PORPY	41,922	.9	1960	49,229
MACKEREL, PACIFIC	40,243	.8	1935	146,727
CATFISH AND BULLHEADS	38,614	.8	1963	38,614
LOBSTERS, NORTHERN	30,274	.6	1960	31,168
CARP	30,018	.6	1908	42,659
ROCKFISHES	25,030	.5	1945	57,686
OCEAN PERCH, PACIFIC	23,578	.5	1963	23,578
SCALLOPS, SEA	19,939	.4	1961	27,461
BUFFALO FISH	18,295	.4	1950	25,873
SQUID	16,314	.3	1946	40,266
MUSSEL SHELLS	15,743	.3	1908	81,869
POLLOCK	14,607	.3	1938	40,694
SNAPPER, RED	13,165	.3	1902	23,457
YELLOW PERCH	11,743	.2	1934	16,282
CHUBS	11,023	.2	1960	16,854
SHEEPSHEAD, FRESH-WATER	10,973	.2	1959	13,644
BUTTERFISH	10,172	.2	1939	17,151
STRIPED BASS	9,358	.2	1961	9,495
SEA BASS, BLACK (ATLANTIC)	9,237	.2	1952	21,997
HERRING, LAKE	8,478	.2	1899	59,914
SPANISH MACKEREL	7,793	.2	1945	11,593
GROUPERS	7,798	.2	1945	6,882
WHALE PRODUCTS 3/	7,665	.2	(4)	(4)
SHAD	7,445	.2	1890	43,000
SARDINE, PACIFIC	7,131	.2	1936	1,502,299
IRISH MOSS	6,967	.1	1961	6,995
HAKE, RED	6,712	.1	(4)	(4)
SPOT	6,663	.1	1952	15,863
SABLEFISH	6,464	.1	1945	17,750
HAKE, WHITE	6,249	.1	1898	39,900
BLUEFISH	5,583	.1	5/ 1897	22,673
SEA TROUT OR WEAKFISH, SPOTTED	5,387	.1	1936	8,800
KING MACKEREL	5,058	.1	1963	5,058
SMELT	4,894	.1	1958	13,303
LINGCOD	4,790	.1	1944	14,262
ANCHOVIES	4,553	.1	1953	86,044
BONITO	4,234	.1	1947	13,918
LOBSTERS, SPINY	4,180	.1	1957	4,687
KING WHITING OR "KINGFISH"	3,899	.1	1952	5,270
SWELLFISH	3,707	.1	1963	3,707
SEA TROUT OR WEAKFISH, GRAY	3,601	.1	1945	41,420
UNCLASSIFIED	63,481	1.3	-	-
TOTAL	4,847,109	100.0	-	-

1/ UNCLASSIFIED SPECIES FOR BAIT, REDUCTION, AND ANIMAL FOOD. 2/ FIRST YEAR IN WHICH AN OYSTER SURVEY WAS MADE IN ALL REGIONS. 3/ SINCE DATA ARE NOT AVAILABLE ON THE POUNDAGE OF WHALES TAKEN, STATISTICS ON THE YIELD OF THESE MAMMALS REPRESENT THE WEIGHT OF THE WHALE PRODUCTS WHICH INCLUDES MEAL, MEAT, AND OIL. 4/ DATA NOT AVAILABLE. 5/ INCLUDES DATA ON NEW ENGLAND CATCH IN 1898.

GENERAL REVIEW

RELATIVE VALUE OF THE CATCH, BY SPECIES, 1963

SPECIES	VALUE	PERCENT OF TOTAL	RECORD VALUE AND YEAR	
	THOUSAND DOLLARS	PERCENT	YEAR	THOUSAND DOLLARS
SHRIMP	70,044	18.6	1953	76,641
SALMON	49,012	13.0	1962	56,353
TUNA	40,170	10.6	1950	61,342
OYSTERS	27,105	7.2	1961	33,204
MENHADEN	22,386	5.9	1956	28,425
CRABS	21,354	5.7	1963	21,354
LOBSTERS, NORTHERN	16,769	4.4	1963	16,769
FLOUNDER	15,411	4.1	1963	15,411
CLAMS	14,202	3.8	1963	14,202
HADDOCK	11,705	3.1	1946	13,043
SCALLOPS, SEA	9,257	2.5	1959	11,805
HALIBUT, PACIFIC	6,893	1.8	1962	11,579
CATFISH AND BULLHEADS	6,775	1.8	1963	6,775
OCEAN PERCH, ATLANTIC	5,147	1.4	1931	12,597
SNAPPER, RED	3,334	1.0	1963	3,334
COD:				
ATLANTIC	3,106	.9	1948	4,742
PACIFIC	350	.1	1959	664
TOTAL	3,456	1.0	-	-
SCUP OR PORGY	3,027	.8	1963	3,099
INDUSTRIAL FISH 1/	3,044	.8	1963	3,044
HERRING, SEA:				
ATLANTIC	1,704	.4	1948	3,798
PACIFIC	656	.2	1947	2,152
TOTAL	2,360	.6	-	-
MULLET	2,354	.6	1945	4,647
WHITING	2,178	.6	1971	2,903
JACK MACKEREL	2,118	.6	1962	4,785
BUFFALOFISH	1,815	.5	1952	3,564
LOBSTERS, SPINY	1,798	.5	1963	1,798
CHUBS	1,569	.4	1956	2,564
ROCKFISHES	1,328	.4	1945	2,648
STRIPED BASS	1,314	.3	1959	1,456
SEA TROUT OR MACKEREL, SPOTTED	1,312	.3	1952	1,761
OCEAN PERCH, PACIFIC	1,172	.3	1963	1,172
SEA BASS, BLACK (ATLANTIC)	1,172	.3	1952	5,206
SHAD	1,141	.3	1945	2,680
YELLOW PERCH	1,107	.3	1956	1,540
SCALLOPS, BAY	1,077	.3	1960	1,474
CARP	1,073	.3	1951	2,007
MUSSEL SHELLS	1,062	.3	(2)	(2)
BUTTERFISH	957	.3	1966	1,005
ALEWIVES	906	.2	1963	906
MACKEREL, PACIFIC	861	.2	1957	1,231
SWORDFISH	826	.2	1946	1,435
GROUPERS	812	.2	1945	1,038
BLOODWORMS	772	.2	1963	772
SPANISH MACKEREL	750	.2	1945	1,221
POLLOCK	670	.2	1945	1,319
SABLEFISH	654	.2	1946	1,634
SPOT	636	.2	1945	975
ABALONE	626	.2	1963	626
BLUEFISH	620	.2	1951	760
POMPAHO	601	.2	1941	695
KING MACKEREL	556	.1	1945	578
WHALE PRODUCTS 3/	544	.1	(2)	(2)
SQUID	531	.1	1947	1,370
SANDWORMS	526	.1	1963	526
YELLOW PIKE	488	.1	1951	1,166
WHITEFISH, COMMON	485	.1	1944	3,784
HERRING, LAKE	479	.1	1952	1,456
SHEEPSHEAD, FRESH-WATER	425	.1	1951	929
STEELHEAD TROUT	395	.1	1963	395
DRUM, RED	391	.1	1945	728
UNCLASSIFIED	7,370	1.9	-	-
TOTAL	37,762	100.0	-	-

1/ UNCLASSIFIED SPECIES FOR BAIT, REDUCTION, AND ANIMAL FOOD, 2/ DATA NOT AVAILABLE, 3/ THE VALUE OF THE WHALE PRODUCTS REPRESENTS THE AMOUNT RECEIVED BY THE MANUFACTURER FOR THE PRODUCTION OF WHALE MEAL, MEAT, AND OIL.

U. S. CATCH - LIVE WEIGHT BASIS

In the annual digest it has been the practice of the Bureau to show the catch of univalve and bivalve mollusks on the basis of the weight of meats. Insofar as possible, all other fish and shellfish items are shown on a live weight basis.

Since world fishery statistics published by the Food and Agriculture Organization of the United Nations represent the live weight of the catch for all items of fish and shellfish, it has been necessary to provide that organization with information on the domestic catch of all species on a live weight basis. Data released by the Food and Agriculture Organization, therefore, indicate that the 1963 U. S. catch was 1.3 billion pounds greater than the figure appearing in Bureau publications. The increase is due to the inclusion of the weight of the shells of univalve and bivalve mollusks in the Food and Agriculture Organization data.

It has been deemed desirable to include in this report a table showing the entire domestic catch on a live weight basis. Information is also published on the catch of fishery products in the principal countries of the world so that the relative importance of the domestic fisheries can be determined. Tables containing these data follow:

U. S. CATCH, 1963 - LIVE WEIGHT BASIS

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

ITEM	QUANTITY	VALUE
FISH	4, 121, 794	210, 129
SHELLFISH, ETC: UNIVALVE AND BIVALVE MOLLUSKS:		
ABALONE	4, 314	626
CLAMS:		
HARD	109, 853	8, 403
OCEAN QUAHOG	534	10
RAZOR	1, 052	177
SOFT	49, 815	2, 926
SURF	203, 634	2, 676
MIXED	98	10
TOTAL CLAMS	365, 286	14, 202
CONCHS	3, 425	182
LIMPETS	20	9
MUSSELS:		
SEA	5, 452	66
FRESH-WATER	17, 317	1, 089
OYSTERS, MARKET	871, 028	27, 105
PERIWINKLES AND COCKLES	142	11
SCALLOPS:		
BAY	12, 617	1, 077
CALICO	2	(1)
SEA	164, 947	9, 257
TOTAL UNIVALVE AND BIVALVE MOLLUSKS	1, 444, 550	53, 624
CRUSTACEANS	529, 602	110, 270
OTHER	26, 203	2, 595
TOTAL SHELLFISH, ETC.	2, 000, 355	166, 489
WHALE PRODUCTS	7, 665	544
GRAND TOTAL	6, 129, 814	377, 162

1/ LESS THAN \$500.

GENERAL REVIEW

WORLD CATCH OF FISH, CRUSTACEANS, MOLLUSKS, ETC., BY COUNTRIES

The 1963 world commercial landings of fish, crustaceans, mollusks, etc., totaled 102.3 billion pounds, according to the "Yearbook of Fishery Statistics, 1963" released by the Food and Agriculture Organization of the United Nations. The landings were 2 percent more than the 1962 production of 99.9 billion pounds and once again established a new record.

In 1962, Peru had replaced Japan as world leader in total fishery landings with a spectacular increase in the catch of industrial fish (anchoveta) used primarily for fish meal. Peru continued to lead in 1963 with 14.9 percent of the world catch, followed by Japan with 14.4 percent. The China, Mainland catch (1959 data) was third with 10.8 percent, the U. S. S. R. was fourth (8.6 percent), and the United States, fifth (6.0 percent). These five nations accounted for 55 percent of the 1963 world catch.

Asia accounted for 38 percent of the world landings, followed by Europe (19 percent); South America (18 percent); North America (10 percent); the U. S. S. R. (9 percent); and Africa (6 percent). An insignificant percentage was taken in Oceania.

WORLD CATCH OF FISH, CRUSTACEANS, MOLLUSKS, ETC., BY COUNTRIES, 1963

(LIVE WEIGHT BASIS)

COUNTRY	BILLION POUNDS	PERCENT
PERU	15.21	14.9
JAPAN	14.77	14.4
CHINA (MAINLAND)	1/11.07	10.8
U. S. S. R.	8.77	8.6
UNITED STATES	2/6.12	6.0
NORWAY	3.05	3.0
CANADA	2.63	2.6
SPAIN	2.42	2.4
INDIA	2.31	2.3
UNITED KINGDOM	2.10	2.1
INDONESIA	2.06	2.0
DENMARK	1.87	1.8
ICELAND	1.73	1.7
CHILE	1.68	1.6
FRANCE	1.64	1.6
GERMANY, WESTERN	1.42	1.4
SOUTH AFRICA	1.30	1.3
PHILIPPINES	1.25	1.2
SOUTH WEST AFRICA	1.23	1.2
PORTUGAL	1.19	1.2
KOREA, SOUTH . . . . .	.98	1.0
THAILAND . . . . .	.92	.9
BRAZIL	3/.84	.8
NETHERLANDS . . . . .	.80	.8
BURMA . . . . .	.79	.8
CHINA (TAIWAN) . . . . .	.77	.7
PAKISTAN . . . . .	.76	.7
SWEDEN . . . . .	.75	.7
VIET-NAM, SOUTH . . . . .	.73	.7
ANGOLA	3/.59	.6
MEXICO . . . . .	.54	.5
FEDERATION OF MALAYA . . . . .	.54	.5
ITALY . . . . .	.51	.5
POLAND . . . . .	.50	.5
GERMANY, EASTERN . . . . .	.41	.4
MOROCCO . . . . .	.39	.4
CAMBODIA . . . . .	.35	.3
OTHER	7.29	7.1
TOTAL	102.29	100.0

1/ 1959 DATA.

2/ REVISED. EXCLUDES WHALE PRODUCTS.

3/ 1962 DATA.

SOURCE:--YEARBOOK OF FISHERY STATISTICS, 1963, VOLUME 16, FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS.

GENERAL REVIEW

33

SEED OYSTER FISHERY, 1963

ITEM	NEW ENGLAND 1/		MIDDLE ATLANTIC 2/		CHESAPEAKE 3/		TOTAL	
	NUMBER		NUMBER		NUMBER		NUMBER	
OPERATING UNITS								
FISHERMEN:								
ON VESSELS	21		-		181		202	
ON BOATS AND SHORE:								
REGULAR	3		35		624		662	
CASUAL	5		223		289		517	
TOTAL	29		258		1,094		1,381	
VESSELS, MOTOR								
GROSS TONNAGE	6		-		75		81	
BOATS:	230		-		476		706	
MOTOR	4		110		630		744	
OTHER	2		-		-		2	
GEAR:								
DREDGES, COMMON	15		-		-		15	
YARDS AT MOUTH	18		-		-		18	
TONGS	2		258		1,094		1,354	
CATCH								
	U. S.		U. S.		U. S.		U. S.	
	BUSHELS	VALUE	BUSHELS	VALUE	BUSHELS	VALUE	BUSHELS	VALUE
OYSTERS, SEED:								
PUBLIC:								
SPRING	252	\$756	88,200	\$120,650	729,576	\$715,721	816,028	\$837,127
FALL	303	909	-	-	542,874	562,213	543,177	553,122
PRIVATE:								
SPRING	11,397	59,796	-	-	37,364	32,503	48,761	92,299
FALL	6,820	27,986	-	-	25,793	22,750	32,613	50,736
TOTAL	18,772	89,447	88,200	120,650	1,335,607	1,333,187	1,442,579	1,543,284

1/ CONFINED TO CONNECTICUT AND MASSACHUSETTS.

2/ CONFINED TO NEW YORK AND NEW JERSEY.

3/ CONFINED TO VIRGINIA.

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES. OF THE TOTAL NUMBER OF PERSONS FISHING FOR SEED OYSTERS, 1,095 WERE DUPLICATED AMONG THOSE FISHING FOR MARKET OYSTERS OR OTHER SPECIES. SIMILARLY, THE FOLLOWING CRAFT AND GEAR WERE DUPLICATED: 62 VESSELS (493 GROSS TONS), 677 MOTOR BOATS, 11 DREDGES (12 YARDS AT MOUTH), AND 1,078 TONGS.

DREDGING OF SEED OYSTERS IN NEW JERSEY DURING 1963 WAS FORBIDDEN BY LAW.

WHOLESALE AND MANUFACTURING, 1963

ITEM	NEW ENGLAND	MIDDLE ATLANTIC	CHESAPEAKE	SOUTH ATLANTIC	GULF
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
WHOLESALE AND MANUFACTURING:					
ESTABLISHMENTS	547	492	655	415	809
PERSONS ENGAGED:					
AVERAGE FOR SEASON	12,529	7,969	10,949	7,617	18,287
AVERAGE FOR YEAR	8,141	6,697	7,384	4,582	10,446
WHOLESALE AND MANUFACTURING:					
ITEM	PACIFIC	GREAT LAKES	MISSISSIPPI RIVER AND TRIBUTARIES	HAWAII	TOTAL
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
ESTABLISHMENTS	593	262	405	16	4,194
PERSONS ENGAGED:					
AVERAGE FOR SEASON	23,737	3,177	2,663	324	87,252
AVERAGE FOR YEAR	12,803	2,105	2,064	270	54,492

GENERAL REVIEW

MANUFACTURED FISHERY PRODUCTS

The 1963 production of manufactured products (packaged fresh and frozen, canned, cured, and industrial products) in the United States, American Samoa, and Puerto Rico was valued at \$914 million to the producers. This was \$44 million less than the previous year. Canned products accounted for 46 percent of the total value; fresh and frozen packaged items, 41 percent, industrial products (principally meal and oil), 8 percent; and cured products, 5 percent.

The canned fish and shellfish pack in 1963 amounted to over 1.0 billion pounds valued at \$422 million to the packers.

The pack for human food was 728.9 million pounds valued at \$381.3 million while that for animal food and bait was 307.0 million pounds valued at \$40.3 million.

The value of three items--salmon, tuna, and animal food--accounted for 78 percent of the total amount received by the producers of canned fishery products excluding specialties in 1963.

Production of fresh and frozen packaged fish and shellfish in 1963 amounted to 670.4 million pounds valued at \$376.0 million. This was an increase in quantity of 23.0 million pounds, and a decrease of \$3.5 million in value when compared with the production and value in 1962.

Industrial fish meal products were valued at \$68.6 million in 1963--a decrease of \$7.0 million compared with the previous year. The production of 255,907 tons of fish meal was 56,352 tons less than in 1962. The yield of marine animal oil in 1963 was 185,827 thousand pounds.

The manufacture of solubles and homogenized condensed fish amounted to 107,402 tons--17,247 tons less than the 124,649 tons produced in 1962.



GENERAL REVIEW

35

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	QUANTITY	VALUE	
ALEWIVES:			
CANNED:			
FISH	STANDARD CASES	93,933	\$374,563
ROE	DO	41,613	536,846
SALTED AND PICKLED	POUNDS	7,959,725	571,985
SMOKED	DO	1,690	169
MEAL AND SCRAP	TONS	713	90,126
OIL	1,000 POUNDS	322	20,249
SOLUBLES	TONS	434	26,610
ANCHOVIES:			
CANNED	STANDARD CASES	(1)	(1)
PASTE	DO	2,102	83,573
ANGLERFISH FILLETS, FROZEN	POUNDS	(1)	(1)
BARRACUDA, SMOKED	DO	3,670	2,647
BLUEFISH FILLETS, FRESH AND FROZEN	DO	(1)	(1)
BUFFALOFISH, SMOKED	DO	(1)	(1)
BUTTERFISH, SMOKED	DO	466,491	329,176
CARP:			
SMOKED	DO	246,100	131,423
MEAL AND SCRAP	TONS	(1)	(1)
CATFISH:			
BREADED, FROZEN	POUNDS	(1)	(1)
SMOKED	DO	(1)	(1)
CHUBS, SMOKED	DO	6,371,291	3,544,485
CISCO, SMOKED	DO	(1)	(1)
COD:			
FILLETS:			
FRESH	DO	6,834,850	2,462,983
FROZEN	DO	3,007,174	802,338
STEAKS, FRESH AND FROZEN	DO	599,723	129,834
SPECIALTIES:			
FROZEN (CAKES, BREADED FILLETS)	DO	2,953,591	1,274,998
CANNED (CAKES, SALTED)	STANDARD CASES	(1)	(1)
SALTED	POUNDS	970,777	450,856
SMOKED	DO	693,866	296,326
LUTEFISK	DO	815,485	207,900
CUSK:			
FILLETS:			
FRESH	DO	211,034	66,465
FROZEN	DO	51,678	15,799
SALTED	DO	(1)	(1)
EELS, SMOKED	DO	250,500	178,180
FLOUNDER:			
FILLETS:			
FRESH	DO	26,979,310	11,107,067
FROZEN	DO	16,914,208	5,319,114
SPECIALTIES, FROZEN:			
BREADED	DO	984,708	412,817
STUFFED, BREADED IN SAUCES, DINNERS	DO	573,138	404,899
GROUPER:			
FILLETS:			
FRESH	DO	235,150	105,840
FROZEN	DO	296,468	146,348
STEAKS:			
FRESH	DO	88,110	32,749
FROZEN	DO	160,000	41,600
HADDOCK:			
FILLETS:			
FRESH	DO	23,604,612	9,008,045
FROZEN	DO	13,103,201	4,275,938
BREADED AND COOKED, FROZEN	DO	655,217	302,171
SPECIALTIES:			
FROZEN (STUFFED, DINNERS, ETC.)	DO	(1)	(1)
CANNED (FINNAN HADDIE, CREAMED)	STANDARD CASES	(1)	(1)
SMOKED:			
FILLETS	POUNDS	(1)	(1)
FINNAN HADDIE	DO	217,560	88,916
HAKE:			
FILLETS:			
FRESH	DO	282,534	65,911
FROZEN	DO	37,480	11,033
SALTED	DO	(1)	(1)

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	QUANTITY	VALUE	
HALIBUT, (INCLUDES ALASKA PRODUCTION):			
FILLETS, FRESH AND FROZEN,	POUNDS	3,553,286	\$1,966,841
STEAKS, FROZEN	DO	5,638,630	2,679,928
SPECIALTIES, FROZEN (AU GRATIN, DINNERS, ETC.)	DO	195,511	163,986
CANNED:			
REGULAR	STANDARD CASES	(1)	(1)
SMOKED	DO	(1)	(1)
SMOKED	POUNDS	329,150	107,113
HERRING, LAKE:			
FILLETS:			
FRESH	DO	20,150	5,268
FROZEN	DO	19,240	5,076
SALTED	DO	1,736,600	204,874
SMOKED	DO	116,695	43,981
HERRING, SEA:			
CANNED:			
MAINE SARDINES	STANDARD CASES	1,619,235	13,243,902
SPECIALTIES (DIPS, TID BITS, IN CREAM AND WINE SAUCES),	DO	10,476	307,340
SALTED:			
BRINED	POUNDS	120,000	43,000
PICKLED	DO	12,906,005	5,559,831
SMOKED	DO	534,097	164,920
SPECIALTIES, CURED AND REFRIGERATED (PARTY SNACKS, ETC.)	DO	(1)	(1)
SALTED EGGS (WITH KELP)	DO	184,500	78,350
MEAL AND SCRAP	TONS	7,537	856,432
OIL	1,000 POUNDS	5,709	292,966
KINGFISH:			
FILLETS, FROZEN	POUNDS	(1)	(1)
STEAKS, FRESH AND FROZEN	DO	(1)	(1)
SMOKED	DO	(1)	(1)
LAKE TROUT:			
FILLETS:			
FRESH	DO	34,358	32,827
FROZEN	DO	17,645	13,635
SMOKED	DO	174,100	139,135
LINGCOD:			
FILLETS:			
FRESH	DO	570,220	131,748
FROZEN	DO	603,463	153,175
SMOKED	DO	(1)	(1)
LUMPFISH CAVIAR, CANNED	STANDARD CASES	(1)	(1)
MACKEREL:			
ATLANTIC:			
FILLETS, FRESH	POUNDS	18,162	5,482
SALTED	DO	(1)	(1)
SMOKED	DO	64,380	39,873
JACK:			
CANNED	STANDARD CASES	877,925	5,244,374
DRIED	POUNDS	36,195	25,900
SMOKED	DO	(1)	(1)
PACIFIC:			
CANNED	STANDARD CASES	397,527	2,359,055
SMOKED	POUNDS	(1)	(1)
MARLIN, SMOKED	DO	1,400	677
MENHADEN:			
MEAL AND SCRAP	TONS	184,205	22,263,320
OIL	1,000 POUNDS	167,635	9,853,302
SOLUBLES	TONS	74,831	4,485,957
MULLET:			
CANNED	STANDARD CASES	(1)	(1)
SALTED:			
FISH	POUNDS	626,500	80,650
ROE	DO	9,800	7,360
SMOKED	DO	(1)	(1)
OCEAN PERCH:			
ATLANTIC FILLETS:			
FRESH	DO	286,846	87,321
FROZEN	DO	29,963,175	8,402,940
BREADED, RAW AND COOKED, FROZEN	DO	2,155,902	824,161
PACIFIC FILLETS:			
FRESH	DO	2,598,826	587,557
FROZEN	DO	4,395,817	1,058,351
MEAL AND SCRAP	TONS	(1)	(1)
OIL	1,000 POUNDS	(1)	(1)

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

37

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	QUANTITY	VALUE
PADDLEFISH, SMOKED	POUNDS	35,550
PIKE OR PICKEREL FILLETS, FRESH OR FROZEN	DO	49,735
POLLOCK:		
FILLETS:		
FRESH	DO	1,477,366
FROZEN	DO	3,969,790
CANNED (FLAKED)	STANDARD CASES	(1)
SALTED (WHOLE, FILLETS AND STRIPS)	POUNDS	20,500
SMOKED	DO	69,775
DRIED	DO	(1)
POMPANO FILLETS, FRESH AND FROZEN	DO	(1)
ROCKFISH FILLETS:		
FRESH	DO	3,501,936
FROZEN	DO	1,768,322
SABLEFISH:		
FILLETS, FROZEN	DO	(1)
STEAKS, FROZEN	DO	(1)
SALTED	DO	33,800
SMOKED	DO	3,138,443
SALMON:		
FILLETS, FROZEN	DO	(1)
STEAKS, FROZEN	DO	1,077,068
CANNED:		
CHINOOK OR KING	STANDARD CASES	96,843
CHUM OR KETA	DO	462,375
PINK	DO	1,956,482
RED OR SOCKEYE	DO	605,947
SILVER OR COHO	DO	165,556
STEELHEAD	DO	7,654
TOTAL	DO	3,294,857
SMOKED	DO	1,405
CAVIAR	DO	4,847
EGGS FOR BAIT	DO	16,321
SPECIALTIES (DIPS, SALTED LIVERS, SPREADS)	DO	147
SALTED:		
MILD-CURED	POUNDS	8,457,615
CAVIAR	DO	488,923
EGGS, FOR FOOD AND BAIT	DO	628,702
SPECIALTIES (SALTED BELLIES)	DO	(1)
SMOKED	DO	8,440,690
MEAL AND SCRAP	TONS	(1)
OIL	1,000 POUNDS	645
SARDINES, PACIFIC:		
CANNED	STANDARD CASES	57,072
SALTED	POUNDS	(1)
MEAL AND SCRAP	TONS	(1)
OIL	1,000 POUNDS	(1)
SAUGER FILLETS:		
FRESH	POUNDS	508,500
FROZEN	DO	249,300
SCUP OR PORGY FILLETS, FRESH	DO	(1)
SEA BASS:		
FILLETS AND STEAKS, FRESH AND FROZEN	DO	(1)
SMOKED	DO	(1)
SEA TROUT FILLETS, FRESH AND FROZEN	DO	(1)
SHAD:		
FILLETS, FRESH (BONED)	DO	(1)
CANNED:		
FISH	STANDARD CASES	10,280
ROE	DO	2,206
SMOKED	POUNDS	90,501
SHARKS:		
SMOKED	DO	(1)
OIL (LIVER)	1,000 POUNDS	(1)
SMELTS:		
COOKED, FROZEN	POUNDS	(1)
SMOKED	DO	(1)
SNAPPER, RED:		
FILLETS:		
FRESH	DO	107,407
FROZEN	DO	294,639
STEAKS:		
FRESH	DO	(1)
FROZEN	DO	(1)
SPECIALTIES (STUFFED)	DO	(1)

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITD1		QUANTITY	VALUE
SPANISH MACKEREL, FILLETS:			
FRESH	POUNDS	55,334	\$20,117
FROZEN	DO	850,200	277,735
STRIPED BASS FILLETS, FRESH:			
	DO	(1)	(1)
STURGEON:			
FILLETS, FROZEN	DO	(1)	(1)
CANNED:			
SMOKED, KIPPERED, AND SPREADS	STANDARD CASES	721	49,182
CAVIAR	DO	(1)	(1)
SMOKED, KIPPERED	POUNDS	1,236,116	2,679,210
SMORDFISH:			
STEAKS, FROZEN	DC	866,691	423,365
SMOKED	DO	(1)	(1)
TUNA:			
SPECIALTIES, FROZEN (PIES, CAKES, ETC.)	DO	1,165,030	240,586
CANNED:			
ALBACORE	STANDARD CASES	5,266,171	68,670,905
LIGHT MEAT (INCLUDING TONNO)	DO	11,289,649	132,916,746
TOTAL	DO	16,553,820	201,587,651
SPECIALTIES (WITH NOODLES, VEGETABLES, SAUCES, AND SMOKED)			
	DO	47,066	598,826
SMOKED AND DRIED	POUNDS	109,511	108,716
TUNALIKE:			
CANNED	STANDARD CASES	71,541	570,403
SMOKED	POUNDS	2,818	2,765
WAHOO:			
CANNED	STANDARD CASES	(1)	(1)
SMOKED	POUNDS	(1)	(1)
WHITE BASS FILLETS:			
FRESH	DO	104,500	52,225
FROZEN	DO	55,000	27,550
WHITEFISH:			
FILLETS:			
FRESH	DO	308,071	224,812
FROZEN	DO	96,240	56,064
CANNED:			
FISH	STANDARD CASES	(1)	(1)
CAVIAR	DO	1,636	116,770
SMOKED	POUNDS	3,037,435	2,442,172
WHITING:			
FILLETS:			
FRESH	DO	9,322	2,213
FROZEN	DO	2,395,204	532,737
SMOKED	DO	417,000	164,504
WOLFFISH:			
FILLETS:			
FRESH	DO	26,610	9,854
FROZEN	DO	209,304	70,522
SPECIALTIES (BREADED AND COOKED)	DO	(1)	(1)
YELLOW PERCH, FILLETS:			
FRESH	DO	3,229,240	1,337,405
FROZEN	DO	908,313	368,625
BREADED, FROZEN	DO	(1)	(1)
YELLOW PIKE, FILLETS:			
FRESH	DO	627,759	503,599
FROZEN	DO	511,525	390,359
BREADED, FROZEN	DO	(1)	(1)
CRABS:			
BLUE, HARD (INCLUDES ROCK CRABS):			
FRESH AND FROZEN, COOKED MEAT	DO	15,983,145	16,938,956
FROZEN SPECIALTIES:			
CAKES AND DEVILED	DO	4,319,323	3,601,763
OTHER (AU GRATIN, STUFFED, ROLLS, STICKS, ETC.)	DO	2,664,262	1,761,538
CANNED:			
REGULAR	STANDARD CASES	54,985	1,239,668
SPECIALTIES (BISSQUE, DEVILED, DIPS, SMOKED, ETC.)	DO	10,974	176,248
BACK SHELLS, CLEANED AND POLISHED	-	-	45,760

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

39

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	QUANTITY	VALUE
CRABS - CONTINUED:		
DUNGENESS:		
FRESH AND FROZEN:		
COOKED MEAT	POUNDS	4,829,236
SECTIONS	DO	1,820,500
SPECIALTIES (COCKTAILS)	DO	(1)
CANNED:		
REGULAR	STANDARD CASES	30,265
SPECIALTIES (COCKTAILS, SPREADS, AND SMOKED)	DO	122
KING:		
FRESH AND FROZEN:		
COOKED MEAT	POUNDS	10,549,300
SECTIONS	DO	860,600
CANNED, REGULAR	STANDARD CASES	292,005
FREEZE-DRIED	POUNDS	(1)
STONE CLAWS, COOKED, FRESH AND FROZEN	DO	38,674
MEAL AND SCRAP	TONS	7,610
CRABFISH SPECIALTIES:		
FROZEN	POUNDS	(1)
CANNED	STANDARD CASES	(1)
LOBSTERS:		
NORTHERN:		
FRESH AND FROZEN, COOKED MEAT	POUNDS	1,045,067
FROZEN WHOLE	DO	(1)
SPECIALTIES:		
FROZEN (COCKTAILS, LOBSTERETTES, NEWBURGS, ETC.)	DO	142,990
CANNED (MEAT, DEVILED, DIPS, NEWBURGS, ETC.)	STANDARD CASES	11,345
SPINY, FRESH AND FROZEN (WHOLE AND TAILS)	POUNDS	2,089,702
SHRIMP:		
FRESH AND FROZEN:		
RAW, HEADLESS	DO	66,441,041
PEELED (INCLUDING DEVILED):		
RAW	DO	22,155,216
COOKED	DO	2,321,882
BREADED (RAW AND COOKED)	DO	76,215,522
SPECIALTIES (BURGERS, COCKTAILS, STICKS, STUFFED, ETC.)	DO	5,101,380
CANNED:		
REGULAR	STANDARD CASES	1,060,297
SPECIALTIES (COCKTAILS, DIPS, SAUCE, STEWS, ETC.)	DO	8,817
CURED:		
FREEZE-DRIED	POUNDS	(1)
SUN-DRIED	DO	454,146
SMOKED	DO	(1)
MEAL AND SCRAP	TONS	247
ABALONE, FROZEN:		
STEAKS	POUNDS	420,101
SPECIALTIES (BREADED)	DO	132,042
CLAMS:		
SHUCKED, FRESH AND FROZEN:		
HARD (INCLUDING SURF AND OCEAN QUAHOG, WHOLE AND MINCED)	GALLONS	2,256,092
RAZOR	DO	12,882
SOFT	DO	754,522
SPECIALTIES, FROZEN:		
BREADED (INCLUDING DEVILED)	POUNDS	1,816,921
OTHER (CROQUETTES, CUTLETS, SLICED, STICKS, ETC.)	DO	3,909,457
CANNED:		
WHOLE AND MINCED:		
HARD, SOFT, AND SURF	STANDARD CASES	541,299
RAZOR	DO	7,049
CHOWDER AND JUICE (HARD, SOFT, AND SURF)	DO	1,683,877
SPECIALTIES	DO	81,626
CONCH MEAT:		
FROZEN	POUNDS	(1)
CANNED:		
MEAT	STANDARD CASES	7,407
SPECIALTIES	DO	(1)
MUSSELS, SEA:		
SPECIALTIES, FROZEN (IN HOT SAUCE)	POUNDS	(1)
CANNED	STANDARD CASES	(1)
MUSSEL SHELL BUTTONS	GROSS	280,991

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM		QUANTITY	VALUE
OSTERS:			
EASTERN:			
SHUCKED, FRESH AND FROZEN.	GALLONS	3,638,301	\$26,983,273
STEAMED.	DO	85,383	1,570,000
FROZEN:			
BREADED.	POUNDS	2,812,072	2,702,958
SPECIALTIES (BURGERS, PIES, STEWS, STUFFED, ETC.).	DO	977,301	386,092
CANNED:			
REGULAR.	STANDARD CASES	372,477	4,549,784
SPECIALTIES (BISQUE, SOUP, AND STEWS).	DO	2,595	38,602
SHELL PRODUCTS:			
CRUSHED SHELL FOR POULTRY GRIT	TONS	304,090	4,622,553
LIME, BURNED AND UNBURNED.	DO	75,781	627,821
PACIFIC:			
SHUCKED, FRESH AND FROZEN.	GALLONS	1,029,560	3,997,660
BREADED.	POUNDS	50,396	44,710
CANNED:			
REGULAR.	STANDARD CASES	73,867	1,083,033
SPECIALTIES:			
SMOKED	DO	893	92,739
OTHER (SOUPS, STEWS AND CASSEROLES).	DO	168,062	2,344,123
SHELL PRODUCTS:			
CRUSHED SHELL FOR POULTRY GRIT	TONS	16,856	208,679
LIME, BURNED	DO	1,856	20,766
WESTERN OYSTERS, SHUCKED	GALLONS	5,399	237,922
SCALLOPS:			
BAY, SHUCKED, FRESH AND FROZEN	DO	136,809	1,337,934
SEA, FRESH AND FROZEN MEATS.	POUNDS	5,939,781	3,077,513
BREADED:			
RAW.	DO	2,187,534	1,326,208
COOKED.	DO	5,104,217	3,565,189
SPECIALTIES (DINNERS, STUFFED, ETC.)	DO	501,329	374,058
SQUID:			
FROZEN:			
NATURAL.	DO	(1)	(1)
IN TOMATO SAUCE.	DO	(1)	(1)
CANNED.	STANDARD CASES	149,307	621,156
TURTLE:			
STEAKS, FROZEN	POUNDS	(1)	(1)
CANNED (MEAT, SOUPS, AND STEWS).	STANDARD CASES	14,333	262,622
OIL.	1,000 POUNDS	(1)	(1)
WHALE:			
MEAT, FROZEN	POUNDS	2,883,713	241,491
MEPL.	TONS	1,318	153,040
OIL:			
SPERM.	1,000 POUNDS	700	57,943
OTHER.	DO	1,429	90,473
SOLUBLES	TONS	7	428
UNCLASSIFIED:			
PACKAGED, FRESH AND FROZEN:			
FISH:			
FILLETS AND STEAKS, RAW, NOT BREADED	POUNDS	897,707	543,328
STICKS, BREADED:			
RAW.	DO	5,163,047	1,855,373
COOKED	DO	74,136,779	29,734,101
FILLETS, STEAKS AND PORTIONS, BREADED (RAW AND COOKED).	DO	92,636,599	33,356,622
PORTIONS, RAW, NOT BREADED	DO	3,054,175	1,034,671
CAKES, RAW AND COOKED.	DO	1,412,974	635,620
FISH AND SHELLFISH SPECIALTIES	DO	15,404,629	11,000,248
CANNED:			
FISH:			
CAKES.	STANDARD CASES	71,586	969,895
CEFLET FISH.	DO	313,116	4,760,459
OTHER.	DO	110,563	2,176,286
ANIMAL FOOD.	DO	6,376,936	39,041,806
SHELLFISH, MISCELLANEOUS (CHOWDERS, GUMBO AND UNCLASSIFIED SHELLFISH IN SOUPS AND STEWES)	DO	17,686	221,603
CURED:			
SMOKED	POUNDS	221,492	148,135
SALTED	DO	6,679,456	4,037,977
DRIED.	DO	224,901	1,343,366

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

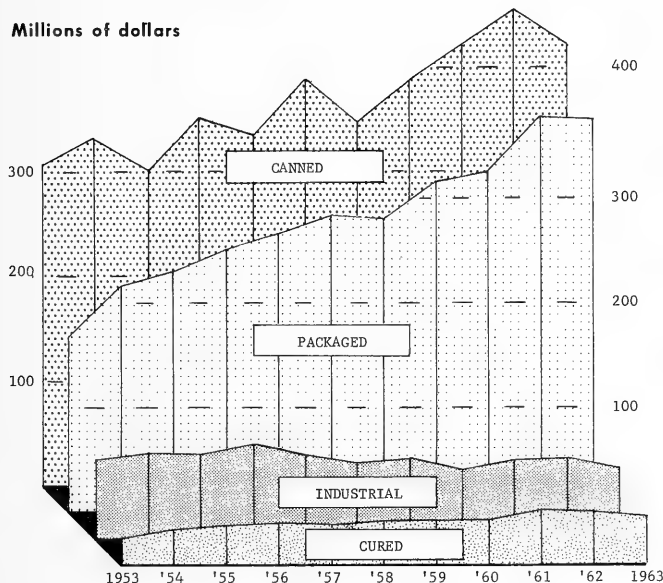
ITEM		QUANTITY	VALUE
UNCLASSIFIED - CONTINUED:			
MEAL AND SCRAP:			
TUNA AND MACKEREL	TONS	26,957	\$2,943,109
UNCLASSIFIED	DO	27,320	3,578,976
OIL:			
BODY:			
TUNA AND MACKEREL	1,000 POUNDS	5,903	273,901
UNCLASSIFIED	DO	3,459	182,202
LIVER	DO	25	29,070
FISH SOLUBLES AND HOMOGENIZED CONDENSED FISH	TONS	32,130	2,238,070
MARINE PEARL SHELL BUTTONS	GROSS	499,978	1,151,549
OTHER (AGAR-AGAR, FISH FEED PELLETS, LIQUID FERTILIZER, GLUE, IRISH MOSS EXTRACT, KELP PRODUCTS, PEARL ESSENCE, ETC.)	-	-	13,713,414
GRAND TOTAL	-	-	914,492,402

1/ INCLUDED WITH UNCLASSIFIED ITEMS.

NOTE:--SOME OF THE ABOVE ITEMS HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM FOREIGN COUNTRIES; THEREFORE, THE PRODUCTION CANNOT BE CORRELATED DIRECTLY WITH THE CATCH. CERTAIN ITEMS, SUCH AS PICKLED ALEWIVES, MILD CURED SALMON, AND STEAMED OYSTERS, ETC., ARE SHOWN IN AN INTERMEDIATE AND ALSO IN A MORE ADVANCED STAGE OF PROCESSING. THE LIME AND POULTRY FEED MANUFACTURED FROM SHELL PRODUCTS WERE PRODUCED FROM LIVE AND REEF MOLLUSK SHELLS THAT ARE NOT INCLUDED IN THE CATCH STATISTICS.

VALUE OF MANUFACTURED FISHERY PRODUCTS 1953 - 63

Millions of dollars



GENERAL REVIEW

SUMMARY OF MANUFACTURED FISHERY PRODUCTS, 1963

(THOUSAND DOLLARS)

ITEM	QUANTITY	VALUE
PACKAGED PRODUCTS, FRESH AND FROZEN:		
FISH:		
NOT BREADED:		
FILLETS AND STEAKS, RAW.	1,000 POUNDS	165,985
OTHER (INCLUDES WHALE MEAT FOR ANIMAL FEEDING)	DO	6,643
BREADED, RAW AND COOKED:		
STICKS	DO	79,300
FILLETS, PORTIONS, AND STEAKS.	DO	95,448
SHELLFISH:		
NOT BREADED.	DO	194,378
BREADED.	DO	92,639
SPECIALTIES, FISH AND SHELLFISH.	DO	35,992
TOTAL FRESH AND FROZEN	DO	670,365
CANNED:		
FISH, SHELLFISH, ETC., FOR HUMAN CONSUMPTION	DO	728,937
SALMON EGGS FOR BAIT	DO	783
ANIMAL FOOD.	DO	306,189
TOTAL BAIT AND ANIMAL FOOD	DO	306,972
TOTAL CANNED	DO	1,035,909
CURED:		
SALTED	DO	41,020
SMOKED	DO	26,182
LUTEFISK	DO	815
DRIED 1/	DO	797
TOTAL CURED.	DO	68,814
INDUSTRIAL:		
MEAL AND SCRAP (2,000 POUNDS PER TON).	DO	511,814
OIL, BODY AND LIVER (7.75 POUNDS PER GALLON)	DO	185,827
FISH SOLUBLES AND HOMOGENIZED CONDENSED FISH	DO	214,804
OYSTER SHELL LIME AND POULTRY GRIT	DO	797,166
MARINE PEARL SHELL AND MUSSEL SHELL BUTTONS.	DO	781
OTHER (AGAR-AGAR, FISH FEED PELLETS, ANIMAL FEEDS, GLUE, IRISH MOSS EXTRACT, KELP PRODUCTS, PEARL ESSENCE, ETC.).	1,000 GROSS	-
TOTAL INDUSTRIAL PRODUCTS.	-	13,759
GRAND TOTAL.	-	68,601
GRAND TOTAL.	-	914,492

1/ INCLUDES FREEZE-DRIED PRODUCTS.



CANNED FISHERY PRODUCTS

The 1963 pack of canned fishery products by 377 plants in the United States, American Samoa, and Puerto Rico amounted to 34.6 million standard cases (1.0 billion pounds) valued at \$421.6 million to the packers. Compared with the pack in 1962, production was down 2.3 million cases and \$35.3 million. The decreases resulted mainly from a sharp decline in the canning of fish for animal food and smaller packs of Alaska salmon, California tuna, and Maine and Pacific sardines.

The pack for human consumption (728.9 million pounds) was 28.4 million pounds less than in 1962. The production of bait and animal food (307.0 million pounds) was down 69.4 million pounds in 1963. The value of three items--salmon, tuna, and animal food--accounted for 78 percent of the total amount received by producers of canned fishery products in 1963. Animal food containing less than 10 pounds of fish per standard case of 48 pounds (4,143,405 standard cases valued at \$16,732,929) has been excluded from this report.

Tuna. The 1963 pack of tuna (16.6 million cases or 326.7 million pounds valued at \$201.6 million) was the second largest in volume and value being exceeded only by the record 1962 pack of 17.0 million cases (335.5 million pounds) valued at \$209.8 million. The California pack fell from 10.5 million cases in 1962 to 9.0 million cases in 1963. In all other areas, production was slightly higher than in 1962.

The tuna industry had shown remarkable growth between the years 1953-1962. However, there was a sharp curtailment of demand for canned tuna early in 1963 that was reflected in a cutback in tuna canning--the first material decrease in production in recent years. Had this not occurred, production would have been the largest in history. It was not until the last half of 1963 that the market situation was reversed and the pace of consumption recovered.

Salmon. The 1963 pack of salmon amounted to 3.3 million cases (158.2 million pounds) valued at \$88.0 million. Compared with 1962, this was a decrease of 506,000 cases and \$18.7 million. Pink salmon accounted for 59 percent of the volume and 49 percent of the value of the 1963 pack.

Production in Washington was 323,000 cases larger than in 1962 because of the excellent run of pink salmon to Puget Sound. However, in Alaska the total pack was 819,000 cases smaller than in 1962. This was due to the sharply reduced runs of red salmon in Western and Central Alaska, pink salmon in Central Alaska, and chum salmon in all regions. The Columbia River pack of 82,000 cases was one of the smallest in history.

Mackerel. The 1963 pack of mackerel (1.3 million cases valued at \$7.6 million) was 55,000 cases over the amount canned in 1962 and the third largest pack since 1952. Because of a limited market for canned mackerel, the 1963 catch was curtailed by canners imposing nightly quotas on the vessels. Mackerel was available to the fleet until late in 1963. Fishermen could have taken larger catches but canneries would not accept more than they could reasonably expect to market.

Sardines. The 1963 pack of Pacific sardines (57,000 cases valued at \$685,000) was the smallest since the fishery was in its early stages of development. The fishery, once the largest in the United States in volume of catch, just about reached the vanishing point in 1963. Sardines just failed to appear in the waters off California, and the catch amounted to only 7.1 million pounds.

The 1963 pack of Maine sardines (sea herring) amounted to 1.6 million cases valued at \$13.2 million. Fish were plentiful throughout the season; however, stocks of canned sardines became heavy, and canning was discontinued when the pack was 528,000 cases less than the 2.1 million cases canned in 1962.

GENERAL REVIEW

Clams. The 1963 pack of clams and clam products amounted to 2.2 million cases valued at \$17.4 million. In 1962, the pack totaled 2.1 million cases valued at \$17.1 million. Whole and minced clams accounted for 25 percent of the pack; and chowders and juices, 75 percent.

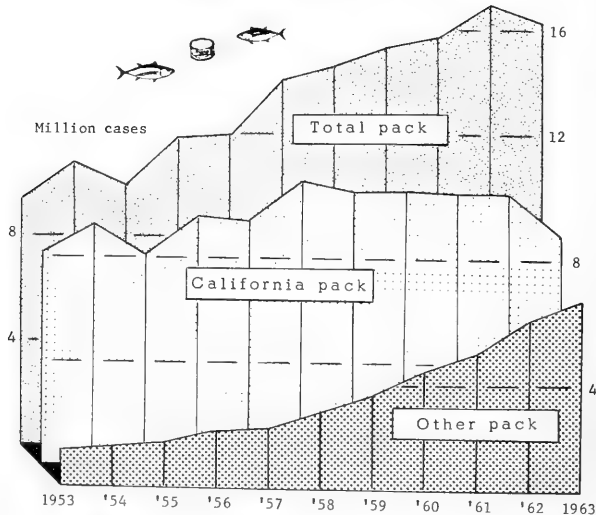
Shrimp. The 1963 pack of shrimp amounted to a record 1.1 million cases valued at \$19.5 million. Compared with 1962, production was up 20 percent in volume and 3 percent in value. The increase occurred in the Gulf States with Louisiana showing the largest gain. On the Pacific Coast, the pack was up a few thousand cases in Washington and Oregon but declined by about 20,000 cases in Alaska.

Crabs. A record pack of 377,000 cases of crab meat valued at an alltime high of \$10.3 million was canned in 1963. Compared with 1962, this was an increase of 89,000 cases and \$2.5 million. The pack of blue crab meat along the Atlantic and Gulf Coasts was up 8,500 cases. The combined packs of Dungeness and king crab meat in Washington and Oregon showed an increase of 12,500 cases. However, the large increase was in Alaska where the pack of king crab meat increased spectacularly from 187,000 cases in 1962 to 256,000 cases in 1963—a gain of 37 percent.

Oysters. The 1963 oyster pack totaled 446,000 cases valued at \$5.6 million compared with 322,000 cases valued at \$4.6 million in 1962. Production of oyster specialties (smoked, stew, bisque, and soup) amounted to 172,000 cases compared with 162,000 cases in 1962.

Animal food. The 1963 pack of animal food containing 10 pounds or more of raw fish per standard case (48 one pound cans) amounted to 6.4 million cases valued at \$39.0 million. Compared with 1962, this was a decline of 18 percent in volume and 15 percent in value. Not included in this report is a canned pack containing less than 10 pounds of fish per case, amounting to 4.1 million cases valued at \$16.7 million.

U.S. CANNED TUNA PACK, 1953-63



GENERAL REVIEW

SUMMARY OF PRODUCTION, BY COMMODITIES, 1963

PRODUCT	NUMBER OF PLANTS	STANDARD CASES	POUNDS PER CASE	POUNDS	VALUE
CANNED PRODUCTS:					
FOR HUMAN CONSUMPTION:					
SALMON	118	3,294,857	48	159,153,136	\$87,962,799
SARDINES:					
MAINE	27	1,619,235	23.4	37,890,099	13,243,902
PACIFIC	7	57,072	45	2,568,240	685,037
TUNA:					
SOLID	36	4,182,690	21	87,836,490	59,310,856
CHUNKS	27	10,772,781	19.5	210,069,230	130,201,772
FLAKES AND GRATED	26	1,600,349	18	28,906,282	12,075,023
TOTAL	<u>1/37</u>	16,555,820	-	326,712,002	201,587,651
TUNALIKE FISH	4	71,541	21-19.5-18	1,386,504	570,403
ALEWIVES	9	93,933	45	4,226,985	374,563
MACKEREL	6	1,275,452	45	57,395,340	7,603,429
SHAD	8	10,280	45	462,600	102,612
FISH CAKES (PRINCIPALLY GROUND FISH)	3	71,586	48	3,436,128	969,895
GEMFLET FISH	5	313,116	48	15,029,568	4,760,459
SALMON, SMOKED AND KIPPERED	28	1,405	48	67,440	113,149
STURGEON, SMOKED, KIPPERED AND SPREADS	14	721	48	34,608	48,182
TUNA SPECIALTIES	10	47,066	48	2,259,168	598,526
ANCHOVY PASTE	4	2,102	48	100,896	83,373
MISCELLANEOUS FISH SPECIALTIES ^{1/}	23	118,090	48	5,668,320	1,622,572
FISH ROE AND CAVIAR	27	53,598	48	2,572,704	2,102,130
TOTAL FISH	-	23,585,874	-	617,963,738	322,429,182
CRAB MEAT	39	377,255	19.5	7,356,472	10,322,026
CRAB MEAT SPECIALTIES	12	11,095	48	532,608	185,771
LOBSTER MEAT AND SPECIALTIES	6	11,345	48	544,560	274,328
SHRIMP	40	1,060,297	15	2/15,904,455	19,531,170
SHRIMP SPECIALTIES	11	8,817	48	423,216	201,400
CLAMS AND CLAM PRODUCTS:					
WHOLE	11	8,552	15	128,280	104,280
MINCED	25	59,796	15	3/8,096,940	6,269,585
CHOWDER	14	1,580,292	30	3/47,408,760	10,543,307
JUICE	10	103,585	30	3/3,107,550	381,551
TOTAL	<u>1/41</u>	2,232,225	-	3/58,741,530	17,449,023
CLAM SPECIALTIES	16	81,626	48	3,918,048	1,550,958
CONCH MEAT	3	7,407	48	353,536	171,508
OYSTERS:					
OYSTER SPECIALTIES:	27	446,344	14	2/6,248,816	5,632,817
SMOKED	8	893	48	42,864	92,739
STEWES	7	168,762	48	8,100,576	2,349,608
BISQUE AND SOUPS	5	1,895	48	90,960	33,117
SQUID	8	149,307	48	7,166,736	621,156
TURTLE MEAT, SOUPS, AND STEWES	7	14,333	48	687,984	262,622
MISCELLANEOUS SHELLFISH SPECIALTIES	7	17,886	48	858,528	221,603
TOTAL SHELLFISH	-	4,589,488	-	110,972,889	58,899,846
TOTAL FOR HUMAN CONSUMPTION	-	28,175,362	-	728,936,627	381,329,028
BAIT AND ANIMAL FOOD:					
ANIMAL FOOD	58	6,378,936	48	306,188,928	39,041,806
SALMON EGGS FOR BAIT	7	16,321	48	783,408	1,235,808
TOTAL BAIT AND ANIMAL FOOD	<u>1/65</u>	6,395,257	-	306,972,336	40,277,614
GRAND TOTAL	<u>1/377</u>	34,570,619	-	1,035,908,963	421,606,642

1/ EXCLUSIVE OF DUPLICATION.

2/ DRAINED WEIGHT.

3/ "CUT OUT" OR "DRAINED" WEIGHTS OF CAN CONTENTS ARE GIVEN FOR WHOLE OR MINCED CLAMS, AND NET CAN CONTENTS FOR OTHER CLAM PRODUCTS.

NOTE:--LISTS OF CANNERS OF FISHERY PRODUCTS BY INDIVIDUAL COMMODITIES MAY BE OBTAINED FROM THE OFFICE OF INFORMATION, U.S. FISH AND WILDLIFE SERVICE, WASHINGTON, D.C. 20240.

GENERAL REVIEW

SUMMARY OF PRODUCTION, BY STATES, 1963

STATE	CANNED FISHERY PRODUCTS	
	POUNDS	VALUE
MAINE	61,333,767	\$10,225,631
MASSACHUSETTS, RHODE ISLAND AND CONNECTICUT	47,347,674	5,810,784
NEW YORK	10,247,796	4,368,007
NEW JERSEY	39,349,921	12,592,096
PENNSYLVANIA AND DELAWARE	12,556,041	4,397,740
MARYLAND	17,762,210	8,259,742
VIRGINIA	7,759,596	961,463
NORTH CAROLINA	1,126,254	565,871
SOUTH CAROLINA	1,401,932	1,392,291
FLORIDA AND ALABAMA	464,936	697,729
MISSISSIPPI	130,651,173	16,324,425
LOUISIANA	13,484,720	14,992,164
TEXAS	605,437	726,765
ILLINOIS	5,884,464	399,937
KANSAS, MICHIGAN, NEBRASKA, OHIO, AND WISCONSIN	12,357,024	1,417,373
ALASKA	133,810,859	76,255,560
WASHINGTON	50,368,697	28,669,377
OREGON	37,265,916	19,754,998
CALIFORNIA	324,090,614	131,466,618
HAWAII AND AMERICAN SAMOA	32,258,039	19,855,471
PUERTO RICO	95,462,863	51,269,400
TOTAL	1,035,906,963	421,606,642

FACTORS USED TO CONVERT STANDARD CASES TO POUNDS

PRODUCT	PRIOR TO 1939	1939 AND 1940	1941	1942	1943
	POUNDS PER CASE	POUNDS PER CASE	POUNDS PER CASE	POUNDS PER CASE	POUNDS PER CASE
SARDINES:					
MAINE	25	25	25	20.3	20.3
PACIFIC	48	48	48	45	45
TUNA AND TUNALIKE FISHES:					
SOLID	24	24	21	22.5	22.5
CHUNKS	-	-	-	-	-
FLAKES	24	24	21	18	18
MACKEREL	48	48	48	45	45
ALEWIVES	48	48	48	45	45
ANCHOVIES	48	48	48	45	45
SHAD	48	48	48	48	48
FISH FLAKES	48	48	48	45	45
OYSTERS	15	15	15	15	22.5
SHRIMP, WET PACK	17.25	17.25	17.25	21	21
CLAM PRODUCTS:					
WHOLE AND MINCED	15	15	15	15	15
JUICE, CHOWDER, BROTH, ETC.	30	30	30	20	30
CRABS	48	39	39	39	39
ALL OTHERS	48	48	48	45	45
PRODUCT	1944 TO 1947	1948 TO 1951	1952	1953 TO 1957	1958 TO 1963
	POUNDS PER CASE	POUNDS PER CASE	POUNDS PER CASE	POUNDS PER CASE	POUNDS PER CASE
SARDINES:					
MAINE	20.3	20.3	20.3	20.3	23.4
PACIFIC	45	45	45	45	45
TUNA AND TUNALIKE FISHES:					
SOLID	21	21	21	21	21
CHUNKS	(1)	(1)	19.5	19.5	19.5
FLAKES	18	18	18	18	18
MACKEREL	45	45	45	45	45
ALEWIVES	45	45	45	45	45
ANCHOVIES	48	48	48	31.25	31.25
SHAD	48	45	45	45	45
FISH FLAKES	42	42	42	42	42
OYSTERS	22.5	14	14	14	14
SHRIMP, WET PACK	21	15	15	15	15
CLAM PRODUCTS:					
WHOLE AND MINCED	15	15	15	15	15
JUICE, CHOWDER, BROTH, ETC.	30	30	30	30	30
CRABS	39	19.5	19.5	19.5	19.5
ALL OTHERS	48	45	45	45	45

1/ PRIOR TO 1952 CHUNK PACK TUNA WAS INCLUDED WITH THE FLAKE PACK.

NOTE:--THE FACTORS LISTED ABOVE WERE USED IN CONVERTING THE STANDARD CASES REPORTED IN THE CANNED FISHERY PRODUCTS BULLETINS FOR THE YEARS INDICATED.

GENERAL REVIEW

47

PLANTS PRODUCING CANNED FISHERY PRODUCTS, 1963

AREA AND STATE	NUMBER OF PLANTS
NEW ENGLAND:	
MAINE	35
MASSACHUSETTS	7
RHODE ISLAND	1
CONNECTICUT	1
TOTAL	44
MIDDLE ATLANTIC:	
NEW YORK	12
NEW JERSEY	14
PENNSYLVANIA	8
DELAWARE	1
TOTAL	35
CHESAPEAKE BAY:	
MARYLAND	6
VIRGINIA	10
TOTAL	16
SOUTH ATLANTIC AND GULF:	
NORTH CAROLINA	6
SOUTH CAROLINA	3
FLORIDA	5
ALABAMA	1
MISSISSIPPI	13
LOUISIANA	22
TEXAS	3
TOTAL	53
GREAT LAKES AND MISSISSIPPI RIVER:	
ILLINOIS	3
IOWA	1
KANSAS	2
MICHIGAN	2
NEBRASKA	1
OHIO	2
WISCONSIN	4
TOTAL	15
PACIFIC COAST:	
ALASKA	100
WASHINGTON	51
OREGON	20
CALIFORNIA	26
TOTAL	207
HAWAII	1
AMERICAN SAMOA	2
PUERTO RICO	4
GRAND TOTAL	377

GENERAL REVIEW

PACK OF SALMON, BY STATES, 1963
(STANDARD CASES)

SPECIES AND CAN SIZE	ALASKA				WASHINGTON				OREGON				TOTAL	
	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE
CHINOOK OR KING:														
1-POUND TALL.....	8,178	\$236,070	3,579	\$55,110	1,977	\$34,528	13,144	\$375,709						
1/2-POUND FLAT.....	29,031	1,159,150	10,117	397,771	1/ 37,624	1,701,975	76,714	3,277,896						
1/4-POUND FLAT.....	1,644	71,650	33,346	33,346	3,870	241,760	34,776	447,896						
4-POUND TALL.....	14	480	272	7,342			266	7,712						
TOTAL.....	39,867	1,467,240	14,505	492,569	43,471	2,027,263	96,443	3,996,142						
CHUM OR KETA:														
1-POUND TALL.....	389,710	7,638,560	20,815	394,313	1,684	30,482	41,114	6,063,425						
1/2-POUND FLAT.....	30,654	771,970	1,934	46,736	148	3,054	6,011	81,762						
1/4-POUND FLAT.....	5	10					10	170						
4-POUND TALL.....	12,336	263,630	5,099	141,754			405,244	1,170						
TOTAL.....	432,665	8,674,250	27,148	582,875	1,842	33,546	462,374	9,230,951						
PINK:														
1-POUND TALL.....	1,380,476	28,976,930	205,548	4,539,004			1,586,024	33,515,934						
1/2-POUND FLAT.....	136,360	3,732,680	154,484	4,172,623	216	5,992	7,911,277	11,184,907						
1/4-POUND FLAT.....	44	1,582	1,582	45,016			3,586	46,496						
4-POUND TALL.....	53,411	1,226,460	23,991	544,510			71,402	1,770,970						
TOTAL.....	1,570,291	33,037,550	365,975	9,301,153	216	5,992	1,656,402	43,244,695						
RED OR SOCKEYE:														
1-POUND TALL.....	253,070	9,152,550	3,526	129,229			256,596	9,280,779						
1/2-POUND FLAT.....	183,358	9,027,010	74,791	3,654,897	782	41,877	261,161	11,734,384						
1/4-POUND FLAT.....	39,659	2,042,260	3,629	2,462,076	802	33,959	4,853,097	6,358,332						
4-POUND TALL.....	9,693	339,020	41,268	47,464			10,953	391,604						
TOTAL.....	483,343	19,562,300	120,940	6,302,668	1,664	95,836	605,947	25,960,804						
SILVER OR COHO:														
1-POUND TALL.....	109,461	3,090,970	2,579	74,108	256	7,680	111,286	3,172,758						
1/2-POUND FLAT.....	14,761	493,560	10,959	366,005	3,359	117,921	29,089	971,466						
1/4-POUND FLAT.....	33	1,210	6,181	245,570	11,337	531,506	17,551	778,286						
4-POUND TALL.....	7,038	206,640	582	16,952			7,620	223,582						
TOTAL.....	130,293	3,792,380	20,311	702,635	14,952	657,107	165,556	5,142,122						
STEELHEAD:														
1-POUND TALL.....	-	-	-	-	348	10,106	348	10,106						
1/2-POUND FLAT.....	-	-	-	-	2,216	61,029	2,216	81,039						
1/4-POUND FLAT.....	-	-	-	-	5,090	234,950	5,090	234,950						
TOTAL.....	-	-	-	-	7,654	326,085	7,654	326,085						
GRAND TOTAL.....	2,655,479	67,454,050	569,579	17,382,900	69,799	3,145,849	3,294,857	87,962,799						

J/ INCLUDES A SMALL PACK PRODUCED IN CALIFORNIA.

NOTE:---"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT 1 POUND CANS. EACH CONTAINING 16 OUNCES. SALMON WERE CANNED IN 76 PLANTS IN ALASKA, 32 PLANTS IN WASHINGTON, 9 PLANTS IN OREGON AND 1 PLANT IN CALIFORNIA. THE PACK OF SMOKED SALMON IS INCLUDED IN THE TABLE "PACK OF MISCELLANEOUS FISHERY PRODUCTS".

GENERAL REVIEW

ALASKA PACK OF SALMON, BY REGIONS, 1963

(STANDARD CASES)

SPECIES AND CAN SIZE	SOUTHEASTERN ALASKA		CENTRAL ALASKA		WESTERN ALASKA		TOTAL	
	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE
CHUM OR KING:								
1-POUND TALL	349	\$10,990	1,369	\$40,050	6,460	\$185,930	8,178	\$236,070
1/2-POUND TALL	38	1,180	8,706	317,530	20,197	823,180	29,031	1,159,150
1/4-POUND FLAT	-	-	1,644	71,650	-	-	1,644	71,650
4-POUND TALL	14	420	-	-	-	-	14	420
TOTAL	401	11,690	11,809	446,490	26,657	1,009,110	38,867	1,457,290
CHUM OR KETA:								
1-POUND TALL	126,635	2,558,520	218,066	4,215,270	45,009	864,770	389,710	7,638,560
1/2-POUND TALL	12,673	315,920	10,466	268,330	7,495	187,700	30,634	771,760
1/4-POUND FLAT	-	-	5	170	-	-	5	170
4-POUND TALL	9,867	205,110	2,469	58,720	-	-	12,336	263,830
TOTAL	149,175	3,079,550	231,006	4,542,510	52,504	1,052,470	432,685	8,674,530
PINK:								
1-POUND TALL	846,594	18,493,620	531,973	10,445,810	1,909	37,500	1,380,476	28,976,930
1/2-POUND FLAT	76,601	2,079,270	59,559	1,633,410	-	-	136,360	3,732,680
1/4-POUND FLAT	-	-	44	1,480	-	-	44	1,480
4-POUND TALL	35,753	801,440	17,658	425,020	-	-	53,411	1,226,460
TOTAL	959,148	21,374,330	609,234	12,525,720	1,909	37,500	1,570,291	33,937,550
RED OR SOCKEYE:								
1-POUND TALL	30,893	1,136,750	68,938	2,470,390	193,239	5,545,410	253,070	9,152,550
1/2-POUND FLAT	13,833	593,040	106,549	4,650,390	65,206	2,776,180	185,588	8,037,610
1/4-POUND FLAT	2,837	125,730	32,183	1,916,790	-	-	35,020	2,042,520
4-POUND TALL	4,451	161,760	5,214	177,860	-	-	9,665	339,620
TOTAL	52,014	2,017,280	212,884	9,223,450	216,445	8,321,590	483,343	19,562,300
SILVER OR COHO:								
1-POUND TALL	40,083	1,159,350	62,793	1,772,590	5,585	159,030	108,461	3,090,970
1/2-POUND FLAT	10,492	337,590	4,064	149,740	205	6,230	14,761	493,560
1/4-POUND FLAT	-	-	33	1,210	-	-	33	1,210
4-POUND TALL	4,624	128,780	2,414	771,860	-	-	7,038	206,640
TOTAL	55,199	1,625,720	69,304	2,001,400	5,790	165,260	130,293	3,792,380
GRAND TOTAL	1,215,937	28,108,570	1,134,237	28,739,550	305,305	10,585,930	2,655,479	67,434,050

GENERAL REVIEW

WASHINGTON AND OREGON SALMON PACK, BY DISTRICTS, 1963

(STANDARD CASES)

SPECIES	PUGET SOUND		COLUMBIA RIVER		COASTAL		TOTAL	
	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE
CHINOOK OR KING	5,439	\$108,021	52,213	\$2,399,052	324	\$13,779	57,976	\$2,520,852
CHUM OR KETA	25,903	547,966	2,625	47,667	1,162	20,788	29,690	616,421
PINK	385,562	9,290,411	-	-	629	16,734	386,191	9,307,145
RED OR SOCKEYE	119,045	6,205,382	2,583	142,818	976	49,304	122,604	6,396,504
SILVER OR COHO	17,607	626,230	17,299	727,394	157	6,118	35,263	1,359,742
STEELHEAD	-	-	7,654	326,085	-	-	7,654	326,085
TOTAL	553,756	16,779,010	82,374	3,643,016	3,248	106,723	639,378	20,528,749

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT 1 POUND CANS, EACH CONTAINING 16 OUNCES.

PUGET SOUND SALMON PACK, BY ORIGIN OF FISH, 1963

(STANDARD CASES)

SPECIES	PUGET SOUND FISH	CANADIAN FISH	ALASKAN FISH	TOTAL FISH
	CASES	CASES	CASES	CASES
CHINOOK OR KING	1/ 5,439	-	-	5,439
CHUM OR KETA	6,376	9,788	9,789	25,903
PINK	366,238	-	19,324	385,562
RED OR SOCKEYE	110,575	-	8,470	119,045
SILVER OR COHO	15,125	-	2,662	17,807
TOTAL	503,753	9,788	40,215	553,756

1/ INCLUDES A SMALL PACK FROM CANADIAN FISH.

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT 1 POUND CANS, EACH CONTAINING 16 OUNCES.

PACK OF MAINE SARDINES, 1963 1/

STYLE OF PACK	STANDARD CASES	VALUE	CAN CONTENTS AND CASE SIZE	ACTUAL CASES	VALUE
IN SOYBEAN OIL	1,365,968	\$11,167,272	3-3/4 OUNCES NET (100 CANS) . .	1,324,661	\$11,236,001
IN MUSTARD SAUCE	186,177	1,523,454	12 OUNCES NET (48 CANS)	6,475	61,452
IN TOMATO SAUCE	38,604	263,746	15 OUNCES NET (48 CANS)	27,866	265,277
OTHER (IN OLIVE OIL, PEANUT OIL, & WITH CHILI PEPPERS)	28,486	289,430	OTHER SIZES CONVERTED TO STANDARD CASES	231,024	1,681,172
TOTAL	1,619,235	13,243,902	TOTAL	1,590,026	13,243,902

1/ INCLUDES SEA HERRING.

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE UNIFORM BASIS OF ONE HUNDRED 1/4 OIL CANS (3-3/4 OUNCES NET) TO THE CASE. SARDINES WERE CANNED IN 27 PLANTS IN MAINE.

PACK OF PACIFIC SARDINES, 1963

STYLE OF PACK	STANDARD CASES	VALUE	CAN CONTENTS AND CASE SIZE	ACTUAL CASES	VALUE
IN TOMATO SAUCE	30,876	\$303,630	1 POUND CAN: 15 OUNCES NET, OVAL (48 CANS)	39,488	\$388,761
IN MUSTARD SAUCE	8,612	85,131	15 OUNCES NET, TALL (48 CANS)	6,908	44,617
OTHER 1/	17,584	296,276	OTHER SIZES CONVERTED TO STANDARD CASES	10,676	251,659
TOTAL	57,072	685,037	TOTAL	57,072	685,037

1/ INCLUDES QUANTITIES PACKED IN BARBECUE SAUCE AND WITHOUT SAUCE.

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE UNIFORM BASIS OF FORTY-EIGHT 1 POUND CANS, EACH CONTAINING 15 OUNCES NET WEIGHT. SARDINES WERE CANNED IN 7 PLANTS IN CALIFORNIA.

GENERAL REVIEW

PACK OF TUNA, 1963

(STANDARD CASES)

SPECIES	CALIFORNIA		WASHINGTON AND OREGON		ATLANTIC COAST, HAWAII, AND TERRITORIES		TOTAL	
	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE
ALBACORE; SOLID PACK	1,098,117	\$15,317,963	818,621	\$12,189,234	1,620,330	\$22,732,530	3,537,068	\$50,239,727
CHUNKS	357,350	4,520,548	80,483	1,003,147	622,399	7,905,425	1,060,232	13,429,120
FLAKES AND GRATED	230,658	1,756,423	121,696	967,461	316,517	2,278,174	668,871	5,002,058
TOTAL	1,686,125	21,594,934	1,020,800	14,159,842	2,559,246	32,916,129	5,266,171	68,670,905
LIGHT MEAT; SOLID PACK 1/	514,263	7,304,246	(2)	(2)	131,359	1,766,883	645,622	9,071,126
CHUNKS	6,197,351	74,890,936	466,236	4,612,887	3,048,962	37,268,629	9,712,549	116,772,652
FLAKES AND GRATED	677,015	5,162,684	(2)	(2)	254,463	1,910,281	931,478	7,072,965
TOTAL	7,388,629	87,357,866	466,236	4,612,887	3,434,784	40,945,993	11,289,649	132,916,746
GRAND TOTAL	9,074,754	108,952,800	1,487,036	18,772,729	5,994,030	73,862,122	16,555,820	201,587,651

1/ INCLUDES PACK OF TONNO.

2/ INCLUDED WITH CALIFORNIA PACK.

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT NO. 1/2 TUNA CANS TO THE CASE, EACH CONTAINING 7 OUNCES NET WEIGHT OF SOLID PACK, 6-1/2 OUNCES NET WEIGHT OF CHUNKS, AND 6 OUNCES NET WEIGHT OF FLAKES OR GRATED. THE PACK OF DIETETIC TUNA IS INCLUDED IN THESE TOTALS. TUNA WERE CANNED IN 11 PLANTS IN CALIFORNIA, 8 PLANTS IN OREGON, 8 PLANTS IN WASHINGTON, 4 PLANTS IN PUERTO RICO, 2 PLANTS EACH IN MARYLAND AND AMERICAN SAMOA, AND 1 PLANT EACH IN MAINE AND HAWAII. DATA ON THE PACK OF TUNA SPECIALTIES CAN BE FOUND IN THE TABLE "PACK OF MISCELLANEOUS FISHERY PRODUCTS." THE PACK OF TUNA FOR ANIMAL FOOD IS NOT INCLUDED IN THE ABOVE TABLE.

PACK OF TUNA, BY CAN SIZES, 1963

CAN AND CASE SIZE	ACTUAL CASES	VALUE
4 POUND (12 CANS)	178,783	\$4,659,007
1 POUND (48 CANS)	416,433	9,265,734
1/2 POUND (48 CANS)	13,620,088	163,768,168
1/4 POUND (48 CANS)	964,698	8,347,853
4 OUNCES (100 CANS)	58,611	923,310
9-1/4 OUNCES (24 CANS)	1,675,578	14,590,813
OTHER SIZES (CONVERTED TO STANDARD CASES)	3,516	31,766
TOTAL	16,917,707	201,587,651

PACK OF TUNA, BY AREAS AND STATES, 1963

(STANDARD CASES)

AREA AND STATE	CASES	VALUE	AREA AND STATE	CASES	VALUE
ATLANTIC COAST, MAINE AND MARYLAND	756,819	\$7,906,155	OTHER: HAWAII AND AMERICAN SAMOA	1,429,900	\$19,057,290
PACIFIC COAST:			PUERTO RICO	3,807,311	46,898,677
WASHINGTON	407,085	4,229,842	TOTAL	5,237,211	65,955,967
OREGON	1,093,374	14,646,718			
CALIFORNIA	9,061,331	108,848,969	GRAND TOTAL	16,555,820	201,587,651
TOTAL	10,561,790	127,725,529			

PACK OF TUNALIKE FISHES, 1963

SPECIES	STANDARD CASES	VALUE
BONITO AND YELLOWTAIL, SOLID PACK, CHUNKS AND FLAKES OR GRATED	71,541	\$570,403

NOTE:--"STANDARD CASES" REPRESENT THE EQUIVALENT OF FORTY-EIGHT NO. 1/2 TUNA CANS TO THE CASE, EACH CONTAINING 7 OUNCES NET WEIGHT OF SOLID PACK, 6-1/2 OUNCES NET WEIGHT OF CHUNKS, AND 6 OUNCES NET WEIGHT OF FLAKES OR GRATED. TUNALIKE FISHES WERE CANNED IN 4 PLANTS IN CALIFORNIA.

GENERAL REVIEW

PACK OF ALEWIVES, 1963

STATE AND NUMBER OF PLANTS	STANDARD CASES	VALUE
MARYLAND (1), AND NORTH CAROLINA (2)	5,457	\$24,304
VIRGINIA (6)	88,476	350,299
TOTAL (9)	93,933	374,563

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS OF 15 OUNCES EACH.

PACK OF MACKEREL, 1963

ITEM	STANDARD CASES	VALUE
JACK MACKEREL:		
NATURAL	739,035	\$4,202,682
IN TOMATO SAUCE 1/	138,690	1,041,692
TOTAL	877,925	5,244,374
PACIFIC MACKEREL, NATURAL 2/	397,527	2,359,055
GRAND TOTAL	1,275,452	7,603,429

1/ INCLUDES A SMALL PRODUCTION PACKED IN HOT SAUCE. 2/ INCLUDES A SMALL PRODUCTION PACKED IN TOMATO SAUCE.
NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS OF 15 OUNCES EACH. MOST OF THE PACK WAS CANNED IN 15 OUNCE CANS. MACKEREL WERE CANNED IN 8 PLANTS IN CALIFORNIA.

PACK OF SHAD, 1963

STATE AND NUMBER OF PLANTS	STANDARD CASES	VALUE
OREGON (5)	9,670	\$95,054
NORTH CAROLINA (1) AND WASHINGTON (2)	610	7,558
TOTAL (8)	10,280	102,612

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS OF 15 OUNCES EACH.

PACK OF ANIMAL FOOD FROM FISHERY PRODUCTS, 1963

STATE AND NUMBER OF PLANTS	STANDARD CASES	VALUE	CAN CONTENTS AND CASE SIZE	ACTUAL CASES	VALUE
MAINE (2), MASSACHUSETTS (3), NEW JERSEY (1), PENN- SYLVANIA (3)	900,620	\$4,538,476	6 OUNCES NET (48 CANS)	212,542	\$710,853
MARYLAND (2), VIRGINIA (3) AND NORTH CAROLINA (1)	41,640	154,427	6-1/2 OUNCES NET (48 CANS) . .	63,417	242,419
ILLINOIS (2), MICHIGAN (1) AND WISCONSIN (2)	99,826	724,669	8 OUNCES NET (48 CANS)	3,995,626	17,263,059
OHIO (1), KANSAS (2), AND NEBRASKA (1)	301,725	1,451,423	15 OUNCES NET (48 CANS)	2,788,884	12,084,965
MISSISSIPPI (4)	74,066	278,644	15-1/2 OUNCES NET (48 CANS) . .	672,565	3,088,891
WASHINGTON (3)	2,620,378	12,475,927	16 OUNCES NET (48 CANS)	622,530	3,651,781
OREGON (6)	66,956	425,888	OTHER SIZES CONVERTED TO STANDARD CASES (16 OUNCES NET-48 CANS)	387,001	1,999,838
CALIFORNIA (14), HAWAII (1), AND AMERICAN SAMOA (2)	1,618,937	13,249,844			
PUERTO RICO (4)	427,187	4,370,723			
TOTAL (58)	6,378,936	39,041,806		8,742,565	39,041,806

NOTE:--EACH STANDARD CASE CONTAINS 10 OR MORE POUNDS OF FISH. AN ADDITIONAL PACK (4,143,405 STANDARD CASES VALUED AT \$16,732,929) HAD LESS THAN 10 POUNDS OF FISH PER STANDARD CASE AND IS NOT INCLUDED IN THE ABOVE PACK OF 6,473,081 STANDARD CASES. "STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS, EACH CONTAINING 16 OUNCES.

PACK OF FISH ROE AND CAVIAR, 1963

PRODUCT AND NUMBER OF PLANTS	STANDARD CASES	VALUE	STATES OF PRODUCTION AND NUMBER OF PLANTS
ALEWIFE ROE (14)	41,613	\$536,846	MARYLAND (1), VIRGINIA (9), AND NORTH CAROLINA (4)
SHAD ROE (8)	2,206	153,188	CALIFORNIA (1), OREGON (5), AND WASHINGTON (2)
SALMON CAVIAR (4)	4,847	426,036	NEW YORK (3), AND ALASKA (1)
WHITEFISH CAVIAR (4), LUMPFISH CAVIAR (1), AND STURGEON ROE (1)	4,932	986,060	NEW YORK (3), AND WISCONSIN (1)
TOTAL EDIBLE ROE AND CAVIAR (27) 1/	53,598	2,102,130	
SALMON EGGS FOR BAIT (7)	16,321	1,235,608	WASHINGTON (7)
GRAND TOTAL (34) 1/	69,919	3,337,938	

1/ EXCLUSIVE OF DUPLICATION.

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS, EACH CONTAINING 16 OUNCES.

PACK OF FISH ROE AND CAVIAR, BY STATES, 1963

STATE AND NUMBER OF PLANTS	STANDARD CASES	VALUE
NEW YORK (3)	9,145	\$1,391,093
MARYLAND (1), AND VIRGINIA (9)	32,913	417,646
NORTH CAROLINA (4)	8,700	119,200
WASHINGTON (9)	16,461	1,247,104
CALIFORNIA (1), OREGON (5), WISCONSIN (1), AND ALASKA (1)	2,700	162,895
TOTAL (34)	69,919	3,337,938

PACK OF CRAB MEAT, 1963

STATE AND NUMBER OF PLANTS	SPECIES	STANDARD CASES	VALUE	CAN CONTENTS AND CASE SIZE	ACTUAL CASES	VALUE
ATLANTIC AND GULF STATES: MAINE (1), NORTH CAROLINA (1), SOUTH CAROLINA (1), ALABAMA (1), LOUISIANA (1), MISSISSIPPI (2), AND TEXAS (1)	BLUE 1/	54,985	\$1,239,668	5 OUNCES NET (24 CANS) 6-1/2 OUNCES NET (24 CANS) 6-1/2 OUNCES NET (48 CANS) 7-1/2 OUNCES NET (24 CANS) 15 OUNCES NET (24 CANS) OTHER SIZES CONVERTED TO STANDARD CASES	35,962 117,623 13,293 372,690 62,494	\$537,360 1,408,880 379,695 5,932,499 1,975,154
TOTAL (8)		54,985	1,239,668	TOTAL	4,208	88,438
PACIFIC STATES: WASHINGTON (5), AND OREGON (2)	DUNGENESS AND KING DUNGENESS KING	50,721 15,659 255,890	1,485,498 580,990 7,015,870		606,270	10,322,026
ALASKA (10)						
ALASKA (14)						
TOTAL, EXCLUSIVE OF DUPLICATION (28)		322,270	9,082,358			
GRAND TOTAL (36)		377,255	10,322,026			

1/ INCLUDES A SMALL QUANTITY OF ROCK CRABS PACKED IN MAINE.

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS TO THE CASE, EACH CONTAINING 6-1/2 OUNCES.

GENERAL REVIEW

PACK OF CLAMS AND CLAM PRODUCTS, 1963

(STANDARD CASES)

SPECIES	WHOLE AND MINCED		CHOWDER AND JUICE		TOTAL	
	CASES	VALUE	CASES	VALUE	CASES	VALUE
CLAMS:						
HARD, SOFT, AND SURF.	541,299	\$6,216,011	1,683,877	\$11,074,858	2,225,176	\$17,290,869
RAZOR	7,049	156,154	-	-	7,049	158,154
TOTAL.	548,348	6,374,165	1,683,877	11,074,858	2,232,225	17,449,023

NOTE:--CLAMS WERE CANNED IN 11 PLANTS IN WASHINGTON, 7 PLANTS IN NEW JERSEY, 5 PLANTS IN MAINE, 4 PLANTS IN ALASKA, 3 PLANTS EACH IN NEW YORK AND OREGON, 2 PLANTS EACH IN MASSACHUSETTS AND PENNSYLVANIA, 1 PLANT EACH IN RHODE ISLAND, CONNECTICUT, DELAWARE AND MARYLAND. "STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF 48 NO. 1 PINTIC CANS, EACH CAN OF WHOLE OR MINCED CLAMS CONTAINING 5 OUNCES OF MEAT, DRAINED WEIGHT; AND EACH CAN OF CHOWDER, JUICE, BROTH, BOUILLON, OR NECTAR, 10 OUNCES NET CONTENT. THE PACK OF CLAMS CANNED IN THE SHELL IS NOT INCLUDED IN THIS TABLE.

CLAM PRODUCTION, BY TYPE OF PACK, 1963

PRODUCT AND NUMBER OF PLANTS	STANDARD CASES	POUNDS	VALUE
CLAMS:			
WHOLE (11).	8,552	128,280	\$104,280
MINCED (25).	539,796	8,096,940	6,269,885
CHOWDER (14).	1,580,292	47,408,760	10,543,307
JUICE (INCLUDES BOUILLON, BROTH AND NECTAR) (10).	103,585	3,107,550	531,551
TOTAL 1/ (41).	2,232,225	58,741,530	17,449,023

1/ EXCLUSIVE OF DUPLICATION.

PACK OF OYSTERS, 1963

STATE AND NUMBER OF PLANTS	STANDARD CASES	VALUE	CAN CONTENTS AND CASE SIZE	ACTUAL CASES	VALUE
ATLANTIC AND GULF STATES:			ATLANTIC AND GULF STATES:		
SOUTH CAROLINA (2) AND			4-2/3 OUNCES (24 CANS). . .	645,786	\$3,943,035
ALABAMA (1).	59,573	\$601,448	6-1/2 OUNCES (24 CANS). . .	55,227	442,666
LOUISIANA (9).	173,410	2,101,753	PACIFIC COAST STATES:		
MISSISSIPPI (10).	139,494	1,646,583	4-2/3 OUNCES (24 CANS). . .	46,821	391,910
TOTAL (22).	372,477	4,549,784	6-1/2 OUNCES (24 CANS). . .	72,049	687,923
PACIFIC COAST STATES:			OTHER SIZES CONVERTED TO		
WASHINGTON (4) AND			STANDARD CASES.	11,402	167,283
OREGON (1).	73,667	1,083,033	GRAND TOTAL.	831,285	5,632,817
GRAND TOTAL (27).	446,344	5,632,817			

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS TO THE CASE, EACH CAN CONTAINING 4-2/3 OUNCES OF OYSTER MEATS.

GENERAL REVIEW

PACK OF SHRIMP, 1963

STATE AND NUMBER OF PLANTS	STANDARD CASES	VALUE	CAN CONTENTS AND CASE SIZE	ACTUAL CASES	VALUE
GULF STATES:					
MISSISSIPPI (10) . . .	199,499	\$4,069,341	4-1/2 OUNCES (24 CANS)	1,879,750	\$15,895,039
LOUISIANA (16) . . .	716,844	12,757,839	5-OUNCES (24 CANS)	378,503	3,213,235
FLORIDA, WEST COAST (1), ALABAMA (1), AND TEXAS (3)	58,293	1,276,704	OTHER SIZES CONVERTED TO STANDARD CASES	25,157	422,896
TOTAL (31)	974,636	18,103,884			
PACIFIC STATES:					
WASHINGTON (2), AND OREGON (2)	23,712	379,716			
ALASKA (5)	61,949	1,047,570			
TOTAL (9)	85,661	1,427,286			
GRAND TOTAL (40)	1,060,297	19,531,170	TOTAL	2,283,410	19,531,170

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS TO THE CASE EACH CONTAINING 5 OUNCES OF SHRIMP MEATS.

PACK OF MISCELLANEOUS FISHERY PRODUCTS, 1963

PRODUCT	STANDARD CASES	VALUE	LOCATION AND NUMBER OF PLANTS
FISH:			
ANCHOVY PASTE	2,102	\$83,573	NEW YORK (2), MARYLAND (1), AND MICHIGAN (1)
CAKES (PRINCIPALLY GROUND FISH) . . .	71,566	969,895	MAINE (1), MASSACHUSETTS (1), AND NEW JERSEY (1)
GEFILTFISH	313,116	4,760,459	NEW YORK (2) AND NEW JERSEY (3)
HERRING SPECIALTIES (BITS, CREAMED DIPS AND SAUCES)	10,476	307,340	MAINE (2) AND NEW YORK (1)
SALMON:			
SMOKED AND KIPPERED	1,405	113,149	WASHINGTON (13), OREGON (4), CALIFORNIA (1), AND ALASKA (10)
SPECIALTIES (DIPS, SPREADS AND SALTED LIVERS)	147	8,226	MAINE (1), WASHINGTON (1), AND OREGON (1)
STURGEON, SMOKED, KIPPERED, AND SPREADS	721	48,182	WASHINGTON (8) AND OREGON (6)
TUNA SPECIALTIES (WITH NOODLES, VEGETABLES, SAUCES, AND SMOKED) . .	47,066	598,826	MAINE (1), PENNSYLVANIA (1), WASHINGTON (2), OREGON (2), AND CALIFORNIA (4)
OTHER (ANCHOVIES, HALIBUT, MULLET, WAHOO, WHITEFISH, SALTED CODFISH, AND OTHER FISH, IN APPETIZERS, BITES, CHOWDERS, CREAMED, AND FLAKES) AND OTHER FISH SPECIALTIES	107,467	1,307,006	MAINE (3), MASSACHUSETTS (1), NEW JERSEY (3), FLORIDA, EAST COAST (1), FLORIDA, WEST COAST (2), MICHIGAN (1), WASHINGTON (1), ALASKA (1) CALIFORNIA (1), AND AMERICAN SAMOA (2)
TOTAL FISH	554,086	8,196,656	
SHELLFISH:			
CRAB SPECIALTIES (BISQUE, COCKTAILS, DEVILED, DIP, SMOKED, SOFT-SHELL, SOUPS AND SPREADS) . . .	11,096	185,771	MAINE (1), NEW JERSEY (1), PENNSYLVANIA (1), MARYLAND (2), SOUTH CAROLINA (1), LOUISIANA (1), WASHINGTON (2), AND OREGON (3)
LOBSTER SPECIALTIES (MEAT, DEVILED, DIPS, NEWBURG, SAUCE, SOUPS, SPREADS, AND THERMIDOR)	11,345	274,328	MAINE (1), CONNECTICUT (1), NEW JERSEY (2), MARYLAND (1), AND PENNSYLVANIA (1)
SHRIMP SPECIALTIES (COCKTAILS, DIPS, PICKLED SAUCE, SOUPS, SPREADS AND STEWS)	8,817	201,400	MAINE (1), NEW JERSEY (2), MARYLAND (1), PENNSYLVANIA (1), LOUISIANA (3), WASHINGTON (1), AND OREGON (2)
CLAM SPECIALTIES (CAKES, DIPS, FRITTERS, A LA KING, SPREADS, IN THE SHELL, SMOKED SOUPS AND STEWS)	81,626	1,550,958	MAINE (2), MASSACHUSETTS (1), CONNECTICUT (1), NEW YORK (1), NEW JERSEY (2), PENNSYLVANIA (1), DELAWARE (1), MARYLAND (2), WASHINGTON (4), AND OREGON (1)
CONCH MEAT	7,407	171,508	NEW YORK (1), NEW JERSEY (1), AND DELAWARE (1)
OYSTER SPECIALTIES: SMOKED	893	92,739	WASHINGTON (8)
STEW	168,762	2,349,608	NEW JERSEY (1), MARYLAND (1), SOUTH CAROLINA (1), WASHINGTON (3), AND OREGON (1)
BISQUE, SOUPS, AND CASSEROLES . . .	1,895	33,117	NEW JERSEY (1), LOUISIANA (2), AND WASHINGTON (2)
SQUID	149,307	621,156	NEW YORK (1), NEW JERSEY (1), AND CALIFORNIA (6)
TURTLE MEAT, SOUPS AND STEWS	14,333	262,622	NEW JERSEY (1), PENNSYLVANIA (2), FLORIDA, WEST COAST (1), LOUISIANA (2), AND OHIO (1)
OTHER SPECIALTIES (CONCH CHOWDER, CRAWFISH BISQUE, CREOLE GUMBO, MUSSELS WHOLE AND IN BISQUE, AND UNCLASSIFIED SHELLFISH IN SOUPS AND CHOWDERS)	17,886	221,603	MAINE (1), CONNECTICUT (1), NEW YORK (1), NEW JERSEY (1), FLORIDA, WEST COAST (1), AND LOUISIANA (2)
TOTAL SHELLFISH	473,367	5,964,610	
GRAND TOTAL	1,027,453	14,161,466	

NOTE:--"STANDARD CASES" REPRESENT THE VARIOUS SIZE CASES CONVERTED TO THE EQUIVALENT OF FORTY-EIGHT CANS, EACH CONTAINING 16 OUNCES NET WEIGHT.

INDUSTRIAL FISHERY PRODUCTS

The production of industrial fishery products by 153 plants in the United States, American Samoa, and Puerto Rico in 1963 was valued at \$68.6 million. Compared with 1962, this was a decrease of \$7.1 million.

Marine animal scrap and meal. The 1963 production of 255,907 tons was 13 percent less than the 312,259 tons manufactured in 1962 and the smallest production since 1958. Menhaden scrap and meal (184,205 tons) was nearly 55,500 tons less than in 1962. There was a shortage of menhaden in 1963 and the catch was less than in 1962. However, imports of meal (376,000 tons) were received in record volume and the supply (domestic production plus imports) totaled 632,000 tons, the largest in history.

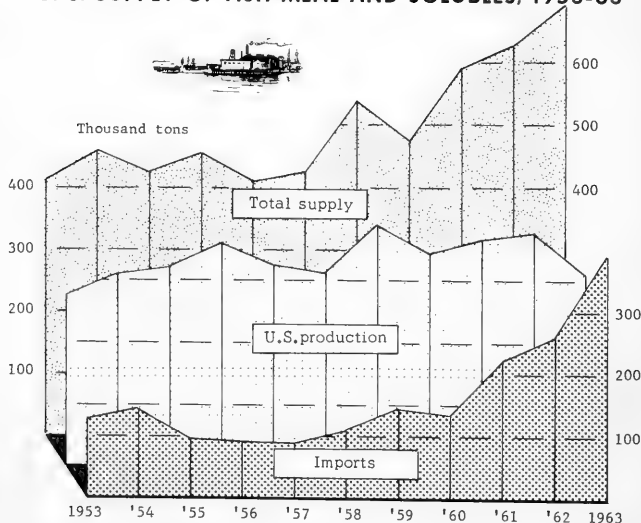
Marine animal oil. Domestic production of marine animal oil fell from 250 million pounds in 1962 to 186 million pounds in 1963. Despite the decline in the catch, the production of menhaden oil (168 million pounds) accounted for 90 percent of the fish oil manufactured in 1963. A record 262 million pounds of fish oils were exported in 1963. Unlike 1962 when there was difficulty in marketing fish oils, conditions changed in 1963. Demand for fish oils increased and prices rose sharply.

Solubles and homogenized condensed fish. The 1963 production of solubles and homogenized condensed fish amounted to 107,000 tons--14 percent less than in the previous year. The production was far below the record 165,000 tons manufactured in 1959.

Other industrial products. Products from oyster shells and buttons from fresh-water and marine mollusk shells were valued at \$7.0 million in 1963. Compared with the previous year, this was a decrease of \$1.5 million.

Other industrial products manufactured in 1963 included agar-agar, fish feed pellets and animal feeds, glue, Irish moss extract, kelp products, liquid fertilizer, pearl essence, and crab shells valued at \$13.8 million. In the previous year, other industrial products were valued at \$13.9 million.

U. S. SUPPLY OF FISH MEAL AND SOLUBLES, 1953-63



GENERAL REVIEW

SUMMARY OF PRODUCTION, BY COMMODITIES, 1963

PRODUCTS	NUMBER OF PLANTS	UNIT	QUANTITY	VALUE
MARINE ANIMAL SCRAP AND MEAL.	99	TONS	255,907	\$30,235,149
MARINE ANIMAL OILS:				
BODY OIL.	66	THOUSAND POUNDS	185,802	10,824,362
LIVER OIL.	4	DO	25	29,070
FISH SOLUBLES AND HOMOGENIZED CONDENSED FISH.	38	TONS	107,402	6,753,065
MARINE PEARL SHELL BUTTONS.	9	GROSS	499,978	1,151,549
MUSSEL SHELL BUTTONS.	8	DO	280,991	369,020
OYSTER SHELL GRIT AND LIME (4 LIVE AND REEF SHELLS ¹).	16	TONS	396,583	5,479,819
MISCELLANEOUS INDUSTRIAL PRODUCTS.	22	-	-	13,759,174
TOTAL.	1/153	-	-	68,601,228

¹/ EXCLUSIVE OF DUPLICATION.

NOTE:--LISTS OF MANUFACTURERS OF FISHERY INDUSTRIAL PRODUCTS BY INDIVIDUAL COMMODITIES MAY BE OBTAINED FROM THE OFFICE OF INFORMATION, U.S. FISH AND WILDLIFE SERVICE, WASHINGTON, D.C. 20240.

SUMMARY OF PRODUCTION, BY STATES, 1963

STATE	VALUE
MAINE.	\$5,229,998
MASSACHUSETTS, RHODE ISLAND, AND CONNECTICUT.	2,647,409
NEW YORK.	2,441,403
NEW JERSEY.	4,295,048
PENNSYLVANIA AND DELAWARE.	1,858,274
MARYLAND.	1,411,205
VIRGINIA.	5,695,961
NORTH CAROLINA.	4,134,971
GEORGIA, FLORIDA, AND ALABAMA.	2,691,718
MISSISSIPPI.	5,565,584
LOUISIANA.	13,116,176
TEXAS AND IOWA.	3,748,030
ALASKA.	507,490
WASHINGTON.	405,217
OREGON.	717,952
CALIFORNIA.	13,431,296
AMERICAN SAMOA AND PUERTO RICO.	703,496
TOTAL.	68,601,228

PLANTS PRODUCING INDUSTRIAL FISHERY PRODUCTS, 1963

AREA AND STATE	NUMBER	AREA AND STATE	NUMBER
NEW ENGLAND:		SOUTH ATLANTIC:	
MAINE.	13	NORTH CAROLINA.	14
MASSACHUSETTS.	5	GEORGIA.	1
RHODE ISLAND.	1	FLORIDA.	6
CONNECTICUT.	1	ALABAMA.	1
TOTAL.	20	MISSISSIPPI.	4
		LOUISIANA.	9
		TEXAS.	4
		TOTAL.	39
MIDDLE ATLANTIC:		MISSISSIPPI RIVER, IOWA.	6
NEW YORK.	4		
NEW JERSEY.	12	PACIFIC COAST:	
PENNSYLVANIA.	2	ALASKA.	1
DELAWARE.	2	WASHINGTON.	12
TOTAL.	20	OREGON.	5
		CALIFORNIA.	22
		TOTAL.	40
CHESAPEAKE:		AMERICAN SAMOA.	2
MARYLAND.	8	PUERTO RICO.	3
VIRGINIA.	15	GRAND TOTAL.	153
TOTAL.	23		

GENERAL REVIEW

NUMBER OF PLANTS PRODUCING INDUSTRIAL FISHERY PRODUCTS, 1963

PRODUCTS	ATLANTIC AND GULF COASTS ^{1/}	PACIFIC COAST ^{2/}	TOTAL
	NUMBER	NUMBER	NUMBER
SCRAP AND MEAL, DRIED:			
ALEWIFE	3	-	3
CRAB	15	2	17
OCEAN PERCH	7	-	7
HERRING, SEA	7	-	7
MENHADEN	31	-	31
SALMON	-	2	2
SARDINE, PACIFIC	-	2	2
SHRIMP	2	1	3
TUNA AND MACKEREL	1	18	19
WHALE	-	3	3
UNCLASSIFIED	22	8	30
OIL:			
BODY:			
ALEWIFE	4	-	4
OCEAN PERCH	1	-	1
HERRING, SEA	2	2	4
MENHADEN	31	-	31
SALMON:			
EDIBLE	-	5	5
INDUSTRIAL	-	1	1
SARDINE, PACIFIC	-	2	2
TUNA AND MACKEREL	-	12	12
WHALE:			
SPERM	-	2	2
OTHER	-	3	3
UNCLASSIFIED	11	4	15
LIVER:			
SHARK	1	1	2
SKIPJACK	1	-	1
TUNA	-	2	2
MUSSEL SHELL PRODUCTS (FRESH- WATER):			
BUTTONS	8	-	8
OYSTER SHELL PRODUCTS:			
CRUSHED SHELL FOR POULTRY FEED	9	5	14
SHELL LIME:			
BURNED	2	-	2
UNBURNED	7	5	12
MARINE PEARL SHELL BUTTONS	9	-	9
AGAR-AGAR	-	1	1
FISH SOLUBLES AND HOMOGENIZED CONDENSED FISH	30	8	38
GLUE	1	-	1
IRISH MOSS EXTRACTS	2	-	2
KELP PRODUCTS	1	3	4
LIQUID FERTILIZER	-	4	4
PEARL ESSENCE	6	-	6
CRAB SHELLS (FOR DEVILED CRAB MEAT)	3	-	3
ANIMAL FEEDS	-	1	1
FISH FOOD PELLETS	-	3	3
TOTAL, EXCLUSIVE OF DUPLICATION	108	45	153

^{1/} INCLUDES FIRMS IN THE MISSISSIPPI RIVER AREA.

^{2/} INCLUDES AMERICAN SAMOA AND PUERTO RICO.

NOTE:—LISTS OF MANUFACTURERS OF INDUSTRIAL FISHERY PRODUCTS BY INDIVIDUAL COMMODITIES MAY BE OBTAINED FROM THE OFFICE OF INFORMATION, U.S. FISH AND WILDLIFE SERVICE, WASHINGTON, D. C. 20240



GENERAL REVIEW

PRODUCTION OF MARINE ANIMAL SCRAP AND MEAL, 1963

PRODUCT	ATLANTIC AND GULF COASTS		PACIFIC COAST AND TERRITORIES		TOTAL	
	TONS	VALUE	TONS	VALUE	TONS	VALUE
DRIED SCRAP AND MEAL:						
ALEWIFE.	713	\$90,126	-	-	713	\$90,126
CRAB	1/7,610	1/334,289	(1)	(1)	7,610	334,289
HERRING.	4,878	516,332	2,659	\$340,100	7,537	856,432
MENHADEN	184,205	22,263,320	-	-	184,205	22,263,320
SHRIMP	1/247	1/15,857	(1)	(1)	247	15,857
TUNA AND MACKEREL.	(2)	(2)	2/26,957	2/2,943,109	26,957	2,943,109
WHALE.	-	-	1,318	153,040	1,318	153,040
UNCLASSIFIED	3/25,240	3/3,366,419	4/2,080*	4/212,557	27,320	3,578,976
TOTAL	222,893	26,586,343	33,014	3,648,806	255,907	30,235,149

1/ A SMALL WEST COAST PRODUCTION IS INCLUDED WITH THE WEST COAST PRODUCTION.

2/ A SMALL EAST COAST PRODUCTION IS INCLUDED WITH THE WEST COAST PRODUCTION.

3/ INCLUDES OCEAN PERCH MEAL AND SCRAP.

4/ INCLUDES PACIFIC SARDINE AND SALMON MEAL AND SCRAP.

PRODUCTION OF MARINE ANIMAL OIL, 1963

PRODUCT	ATLANTIC AND GULF COASTS		PACIFIC COAST AND PUERTO RICO		TOTAL	
	THOUSAND POUNDS	VALUE	THOUSAND POUNDS	VALUE	THOUSAND POUNDS	VALUE
BODY OIL:						
ALEWIFE.	322	\$20,249	-	-	322	\$20,249
HERRING.	(1)	(1)	1/5,709	1/\$292,966	5,709	292,966
MENHADEN	167,635	9,833,302	-	-	167,635	9,833,302
SALMON	-	-	645	53,346	645	53,346
TUNA AND MACKEREL.	-	-	5,903	273,901	5,903	273,901
WHALE:						
SPERM.	-	-	700	57,943	700	57,943
OTHER.	-	-	1,429	90,473	1,429	90,473
UNCLASSIFIED	2/2,887	2/153,182	3/572	3/29,020	3,459	182,202
TOTAL	170,844	10,026,733	14,958	797,649	185,802	10,824,382
LIVER OIL, (TUNA, SHARK, MIXED).	(1)	(1)	25	29,070	25	29,070
GRAND TOTAL	170,844	10,026,733	14,983	826,719	185,827	10,853,452

1/ EAST COAST PRODUCTION INCLUDED WITH WEST COAST PRODUCTION.

2/ INCLUDES OCEAN PERCH OIL.

3/ INCLUDES ANCHOVY AND SARDINE OIL.

PRODUCTION OF FISH SOLUBLES AND HOMOGENIZED CONDENSED FISH, 1963

PRODUCT, STATE, AND NUMBER OF PLANTS	TONS	VALUE
FISH SOLUBLES:		
MAINE (2), MASSACHUSETTS (2).	2,882	\$170,396
NEW YORK (1), NEW JERSEY (3).	12,637	673,146
VIRGINIA (5).	14,496	1,026,439
NORTH CAROLINA (4), EAST COAST OF FLORIDA (1)	8,653	472,940
MISSISSIPPI (3), TEXAS (1).	16,522	955,647
LOUISIANA (7)	25,390	1,485,076
OREGON (1), AND CALIFORNIA (7).	19,598	1,351,501
TOTAL (37)	100,178	6,175,145
HOMOGENIZED CONDENSED FISH, RHODE ISLAND (1).	7,224	577,920
GRAND TOTAL (38)	107,402	6,753,065

NOTE:--INCLUDES MENHADEN SOLUBLES.

GENERAL REVIEW

PRODUCTION OF MENHADEN PRODUCTS, 1963

STATE AND NUMBER OF PLANTS	DRY SCRAP AND MEAL		OIL		SOLUBLES		TOTAL
	TONS	VALUE	POUNDS	VALUE	TONS	VALUE	VALUE
NEW YORK (1), NEW JERSEY (3), AND DELAWARE (2)	36,515	\$4,244,590	39,811,238	\$2,146,386	10,204	\$534,465	\$6,925,441
VIRGINIA (5)	25,163	3,140,195	14,473,125	954,560	14,062	997,829	5,092,584
NORTH CAROLINA (9) FLORIDA (1)	22,472	2,809,000	15,838,536	1,015,520	8,653	472,940	4,297,460
MISSISSIPPI (3)	25,121	3,027,079	29,578,317	1,705,634	12,055	727,646	5,460,359
LOUISIANA (7) AND TEXAS (1)	74,934	9,442,458	67,733,400	4,031,202	29,857	1,753,077	14,828,735
TOTAL (32)	184,205	22,263,320	167,634,616	9,853,302	74,831	4,485,957	36,602,579

NOTE:--INCLUDES A SMALL QUANTITY OF OTHER SPECIES.

PRODUCTION OF OYSTER SHELL PRODUCTS, 1963

("LIVE AND REEF SHELLS")

STATE AND NUMBER OF PLANTS	POULTRY GRIT		LIME, BURNED AND UNBURNED		TOTAL	
	TONS	VALUE	TONS	VALUE	TONS	VALUE
NEW JERSEY (1), PENNSYLVANIA (1), MARYLAND (2), AND VIRGINIA (3)	58,990	\$1,083,331	36,444	\$299,216	95,434	\$1,382,547
FLORIDA (1), ALABAMA (1), AND TEXAS (2)	245,100	3,539,222	39,337	328,605	284,437	3,867,827
WASHINGTON (3), OREGON (1), AND CALIFORNIA (1)	16,856	208,679	1,856	20,766	18,712	229,445
TOTAL (16)	320,946	4,831,232	77,637	648,587	398,583	5,479,819

PRODUCTION OF FRESH-WATER MUSSEL SHELL BUTTONS, 1963

STATE AND NUMBER OF PLANTS	BUTTONS	
	GROSS	VALUE
IOWA (6), NEW JERSEY (1), AND PENNSYLVANIA (1)	280,991	\$369,020

PRODUCTION OF MARINE PEARL SHELL BUTTONS, 1963

STATE AND NUMBER OF PLANTS	GROSS	VALUE
	CONNECTICUT (1), NEW YORK (1), AND PENNSYLVANIA (1)	211,230	$380,186
NEW JERSEY (6)	288,748	771,363
TOTAL (9)	499,978	1,151,549

PRODUCTION OF MISCELLANEOUS INDUSTRIAL FISHERY PRODUCTS, 1963

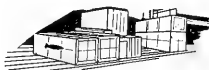
PRODUCTS	STATE AND NUMBER OF PLANTS	VALUE
AGAR-AGAR	CALIFORNIA (1)	} \$13,759,174
FISH FEED PELLETS AND ANIMAL FEEDS	WASHINGTON (2), OREGON (1)	
FISH GLUE	MASSACHUSETTS (1)	
IRISH MOSS EXTRACT	MAINE (2)	
KELP PRODUCTS	MAINE (1), CALIFORNIA (3)	
LIQUID FERTILIZER	WASHINGTON (1), OREGON (1), CALIFORNIA (1)	
PEARL ESSENCE	MAINE (5), MASSACHUSETTS (1)	
CRAB SHELLS (FOR DEVILED CRAB MEAT)	WEST COAST OF FLORIDA (2), TEXAS (1)	

PACKAGED FISHERY PRODUCTS

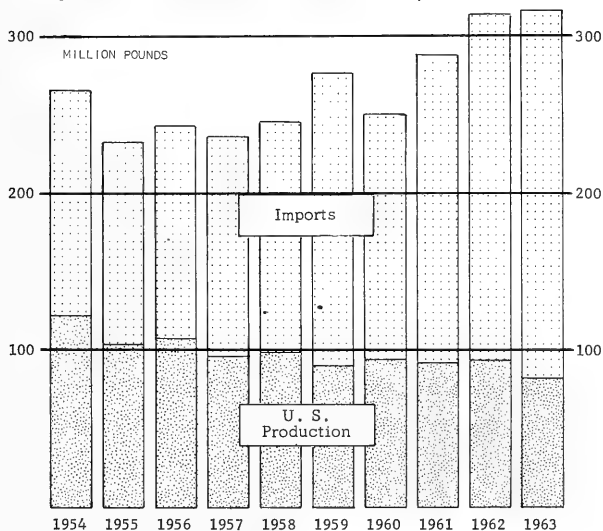
The production of fresh and frozen packaged fish fillets and steaks in the United States, excluding Alaska and Hawaii, during 1963 totaled 166.0 million pounds valued at \$57.5 million to the processors. Compared with the previous year, this was a decrease of 5.5 million pounds and \$1.8 million.

Flounder fillets (45.9 million pounds), haddock fillets (36.7 million pounds) and Atlantic ocean perch fillets (30.2 million pounds) continued to be the leading items and accounted for 68 percent of the total volume and 66 percent of the total value. Halibut and cod fillets and steaks were among other important leading items. The New England area continued to lead all other areas in the production of packaged fish with more than 67 percent of the total volume and 61 percent of the value.

Preliminary data on the production of packaged fish during 1963 have been published in Current Fishery Statistics No. 3455.



SUPPLY OF GROUND FISH FILLETS, 1954-63



GENERAL REVIEW

SUMMARY OF PRODUCTION OF PACKAGED FISH, 1963

ITEM	FILLETS		STEAKS		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FRESH	73,962,993	\$27,790,401	634,219	\$152,119	74,597,212	\$27,942,520
FROZEN	83,337,990	29,452,202	8,049,331	4,065,976	91,387,321	29,518,178
TOTAL	157,300,983	53,242,603	8,683,550	4,218,095	165,984,533	57,460,696



PRODUCTION OF FRESH AND FROZEN PACKAGED FISH, BY SECTIONS, 1963

SPECIES	NEW ENGLAND		MIDDLE ATLANTIC		CHESAPEAKE, SOUTH ATLANTIC, AND GULF	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
COD	5,910,603	\$1,751,315	2,575,287	\$1,183,291	-	-
CUSH	262,712	62,204	-	-	-	-
FLOUNDERS	31,063,476	10,043,307	4,789,316	2,656,069	64,000	\$41,600
GROUPERS	-	-	-	-	779,726	326,537
HADDOCK	35,476,266	12,705,249	1,231,547	578,734	-	-
HAKE	277,014	81,894	43,000	15,050	-	-
HALIBUT	424,200	194,604	-	-	-	-
MACKEREL	16,162	5,482	-	-	-	-
OCEAN PERCH, ATLANTIC	30,250,021	8,490,261	-	-	-	-
POLLOCK	5,447,156	1,059,612	-	-	-	-
SALMON	-	-	-	-	-	-
SNAPPER, RED	58,750	43,640	-	-	402,046	305,751
SPANISH MACKEREL	-	-	-	-	903,534	297,752
SWORDFISH	107,860	49,600	-	-	74,000	26,000
WHITING	2,404,526	534,950	-	-	-	-
WOLFFISH	235,914	80,376	-	-	-	-
UNCLASSIFIED	27,111	34,232	47,000	18,360	407,212	285,669
TOTAL	111,963,973	35,155,966	8,686,150	4,451,524	2,630,520	1,283,309

SPECIES	GREAT LAKES		PACIFIC COAST	
	POUNDS	VALUE	POUNDS	VALUE
COD	-	-	1,045,657	\$460,549
FLOUNDERS	-	-	9,976,724	3,685,205
HALIBUT	-	-	8,463,616	4,292,725
HERRING, LAKE	39,390	\$10,344	-	-
LAKE TROUT	52,003	46,512	-	-
LINGCOD	-	-	1,173,683	264,923
OCEAN PERCH, PACIFIC	-	-	6,994,643	1,645,906
PIKE OR PICKEREL	49,735	23,412	-	-
ROCKFISHES	-	-	5,270,258	1,246,344
SALMON	-	-	1,016,318	743,655
SAUGER	757,800	616,031	-	-
SWORDFISH	-	-	664,831	347,565
WHITE BASS	159,500	79,775	-	-
WHITEFISH	404,311	280,876	-	-
YELLOW PERCH	4,137,553	1,706,030	-	-
YELLOW PIKE	1,139,284	893,956	-	-
UNCLASSIFIED	112,550	93,840	303,534	111,227
TOTAL	6,652,126	3,750,778	24,811,764	12,715,101

GENERAL REVIEW

PRODUCTION OF PACKAGED FISH, BY METHOD OF PREPARATION, 1963

SPECIES	FILLETS			
	FRESH		FROZEN	
	POUNDS	VALUE	POUNDS	VALUE
COD	6,834,850	\$2,462,983	3,007,174	\$602,338
CUSK	211,034	55,465	51,678	15,799
FLOUNDERS	26,979,310	11,107,087	16,914,208	5,319,114
GROUPERS	235,150	105,840	296,466	146,346
HADDOCK	23,604,612	9,008,045	13,103,201	4,275,956
HAKE	282,534	85,911	37,460	11,033
HALIBUT	-	-	3,269,366	1,607,401
HERRING, LAKE	20,150	5,268	19,240	5,076
LAKE TROUT	34,358	32,827	17,645	13,685
LINGCOD	570,220	131,748	603,463	153,175
MACKEREL	18,162	5,482	-	-
OCEAN PERCH:				
ATLANTIC	286,846	87,321	29,963,175	8,402,940
PACIFIC	2,598,826	587,557	4,395,817	1,058,351
PIKE OR PICKEREL	49,735	23,412	-	-
POLLOCK	1,477,366	346,133	3,969,790	713,479
ROCKFISHES	3,501,936	798,824	1,766,322	447,520
SAUGER	508,500	417,805	249,300	196,226
SNAPPER, RED	107,407	98,716	294,639	207,026
SPANISH MACKEREL	53,334	20,117	650,200	277,635
WHITE BASS	104,500	52,225	55,000	27,530
WHITEFISH	308,071	224,812	96,240	56,064
WHITING	9,322	2,213	2,395,204	532,737
WOLFFISH	26,610	9,854	209,304	70,522
YELLOW PERCH	3,229,240	1,337,405	906,313	366,625
YELLOW PIKE	627,759	403,599	511,528	390,359
UNCLASSIFIED	263,161	266,752	351,218	151,252
TOTAL	73,962,993	27,790,401	83,337,990	25,452,202

SPECIES	STEAKS, FRESH AND FROZEN		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
	COD	589,723	\$129,834	10,451,747	$3,395,155
CUSK	-	-	262,712	82,264
FLOUNDERS	-	-	45,893,518	16,426,201
GROUPERS	248,110	74,349	779,728	326,537
HADDOCK	-	-	36,707,813	13,283,983
HAKE	-	-	320,014	96,944
HALIBUT	5,638,630	2,679,926	6,908,016	4,467,329
HERRING, LAKE	-	-	39,390	10,344
LAKE TROUT	-	-	52,003	46,512
LINGCOD	-	-	1,173,683	284,923
MACKEREL	-	-	18,162	5,482
OCEAN PERCH:				
ATLANTIC	-	-	30,250,021	8,490,261
PACIFIC	-	-	6,994,643	1,645,908
PIKE OR PICKEREL	-	-	49,735	23,412
POLLOCK	-	-	5,447,156	1,059,612
ROCKFISHES	-	-	5,270,298	1,246,344
SALMON	1,077,068	787,295	1,077,068	787,295
SAUGER	-	-	757,800	616,031
SNAPPER, RED	-	-	402,046	305,751
SPANISH MACKEREL	-	-	903,534	297,752
SWORDFISH	866,691	423,365	866,691	423,365
WHITE BASS	-	-	159,500	79,775
WHITEFISH	-	-	404,311	280,876
WHITING	-	-	2,404,526	534,950
WOLFFISH	-	-	235,914	160,376
YELLOW PERCH	-	-	4,137,553	1,706,030
YELLOW PIKE	-	-	1,139,284	693,958
UNCLASSIFIED	263,328	123,324	697,707	543,328
TOTAL	8,683,550	4,218,095	165,984,533	57,460,698

GENERAL REVIEW

PRODUCTION OF FISH STICKS, 1963

MONTH	COOKED	RAW	TOTAL
	<u>THOUSAND POUNDS</u>	<u>THOUSAND POUNDS</u>	<u>THOUSAND POUNDS</u>
JANUARY	7,213	341	7,554
FEBRUARY	7,782	459	8,241
MARCH	7,688	365	8,053
APRIL	6,249	297	6,546
MAY	5,369	381	5,750
JUNE	5,826	297	6,125
JULY	4,489	381	4,870
AUGUST	5,427	269	5,696
SEPTEMBER	5,336	329	5,665
OCTOBER	7,200	928	8,128
NOVEMBER	6,026	445	6,471
DECEMBER	5,530	473	6,003
TOTAL	74,137	5,165	79,302
	<u>THOUSAND DOLLARS</u>	<u>THOUSAND DOLLARS</u>	<u>THOUSAND DOLLARS</u>
TOTAL VALUE-YEAR	29,734	1,656	31,590

NOTE:--A FISH STICK IS AN ELONGATED PIECE OF FISH FLESH (GENERALLY CUT FROM A BLOCK OF FILLETS) WEIGHING NOT LESS THAN 3/4 OF AN OUNCE AND NOT MORE THAN 1-1/4 OUNCES WITH THE LARGEST DIMENSION AT LEAST THREE TIMES THAT OF THE NEXT LARGEST DIMENSION.

PRODUCTION OF FISH PORTIONS, 1963

MONTH	BREADED			UNBREADED	TOTAL
	COOKED	RAW	TOTAL		
	<u>THOUSAND POUNDS</u>	<u>THOUSAND POUNDS</u>	<u>THOUSAND POUNDS</u>	<u>THOUSAND POUNDS</u>	<u>THOUSAND POUNDS</u>
JANUARY	1,416	6,563	7,979	194	8,173
FEBRUARY	1,317	5,746	7,063	298	7,361
MARCH	1,406	7,107	8,513	322	8,835
APRIL	1,466	6,271	7,737	182	7,919
MAY	1,769	5,246	7,015	278	7,293
JUNE	846	7,749	8,595	179	8,774
JULY	830	3,482	4,312	212	4,524
AUGUST	1,156	5,264	6,420	264	6,684
SEPTEMBER	1,846	7,475	9,321	300	9,621
OCTOBER	2,001	7,554	9,555	322	9,877
NOVEMBER	1,448	6,397	7,845	291	8,136
DECEMBER	1,122	6,113	7,235	212	7,447
TOTAL	16,623	74,967	91,590	3,054	94,644
	<u>THOUSAND DOLLARS</u>	<u>THOUSAND DOLLARS</u>	<u>THOUSAND DOLLARS</u>	<u>THOUSAND DOLLARS</u>	<u>THOUSAND DOLLARS</u>
TOTAL VALUE-YEAR	6,846	26,099	32,945	1,035	33,980

NOTE:--A FISH PORTION IS A PIECE OF FISH FLESH GENERALLY OF UNIFORM SIZE AND GENERALLY CUT FROM A BLOCK OF FILLETS. IT HAS A THICKNESS, INCLUDING THE BATTER, OF 3/8 OF AN INCH OR MORE, AND DOES NOT CONFORM TO THE DEFINITION OF A FISH STICK.

FROZEN FISHERY TRADE

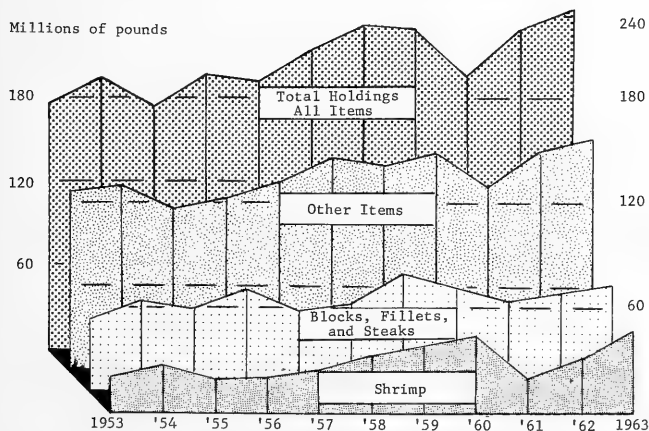
The 1963 production of frozen fish and shellfish by firms reporting monthly to the Bureau of Commercial Fisheries totaled 351.5 million pounds. Leading products frozen were shrimp (112.5 million pounds); bait and animal food (60.0 million pounds); blocks, fillets, and steaks consisting largely of ocean perch and haddock (59.7 million pounds); halibut (32.8 million pounds); and whiting, headed and gutted (21.5 million pounds). An estimated 569.4 million pounds of fish and shellfish (live weight) were required to produce the 351.5 million pounds of frozen fishery items

The New England area led all other areas in freezings with 131.3 million pounds or 37 percent of the total, followed by the South Central area with 76.8 million pounds; South Atlantic area with 44.6 million pounds; Pacific area, 43.7 million pounds; and Alaska with 43.7 million pounds. The Middle Atlantic, North Central East, and North Central West accounted for the remainder.

Data on the freezings and holdings of fishery products for 1963, by firms supplying monthly data on their operations, and a list of cold storage warehouses freezing and storing fishery products were published previously in Current Fishery Statistics No. 3451. Data on freezings and holdings were also published in the preliminary monthly bulletin, Frozen Fish Report, and in the final monthly report, Frozen Fishery Products, which are also in the Current Fishery Statistics series.

In addition to the production of frozen fishery items by cold storage plants reporting to the Bureau, a considerable volume of frozen fillets and steaks is produced by firms operating plate freezers at the end of fillet production lines and by freezers not reporting to the Bureau. Data assembled in the packaged fish survey for 1963 indicates that about 23 million pounds of fillets and steaks were frozen by these firms. An estimated 66.5 million pounds of fish (live weight) were required to produce these items.

HOLDINGS OF FROZEN FISHERY PRODUCTS, 1953 - 63 (ON DECEMBER 31)



GENERAL REVIEW

SUMMARY OF FREEZINGS, BY MONTHS, 1963

(THOUSANDS OF POUNDS)

SPECIES	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
FISH	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
SALT-WATER:						
BLOCKS	55	103	197	319	61	127
FILLETS AND STEAKS:						
COD	143	192	124	223	460	314
FLOUNDER	707	355	303	494	1,222	1,058
HALIBUT	365	509	1,318	2,060	1,110	1,320
HALIBUT	-	-	-	63	113	476
OCEAN PERCH	1,105	1,422	1,789	1,715	3,383	3,882
POLLOCK	143	77	59	77	212	182
SALMON	-	-	-	-	1	4
WHITING	-	-	10	33	32	504
UNCLASSIFIED	135	100	152	243	321	221
TOTAL FILLETS AND STEAKS	2,616	2,655	3,755	4,098	6,858	7,971
TOTAL BLOCKS, FILLETS AND STEAKS	2,673	2,758	3,952	5,227	6,919	8,098
ROUND, DRESSED, ETC.:						
HALIBUT	-	-	-	4,245	8,487	5,771
MACKEREL (EXCEPT SPANISH)	1	21	7	23	75	27
SABLEFISH	162	5	7	49	99	116
SALMON:						
CHINOOK OR KING	-	-	-	58	462	561
SILVER OR COHO	-	-	-	-	1	100
CHUM OR KETA	-	-	-	-	-	17
OTHER	-	-	-	-	124	283
TOTAL SALMON	-	-	-	58	587	961
SMELT	4	37	6	48	15	5
SWORDFISH	-	-	-	1	80	13
TUNA	1	1	20	-	22	8
WHITING, HEADED AND GUTTED	-	-	-	337	295	5,051
OTHER (EXCEPT BAIT)	2,372	2,064	2,503	2,308	1,887	1,695
TOTAL SALT-WATER FISH	5,213	4,886	6,566	12,296	16,465	21,745
FRESH-WATER:						
FILLETS AND STEAKS	6	-	-	1	1	1
ROUND, DRESSED, ETC.:						
CHUBS	9	-	-	2	102	5
TROUT	40	56	46	55	104	59
WHITEFISH	9	-	45	13	33	5
OTHER (EXCEPT BAIT)	4	20	19	64	235	137
TOTAL FRESH-WATER FISH	68	76	110	135	475	207
BAIT AND ANIMAL FOOD (SALT- AND FRESH-WATER)	1,857	2,078	3,560	3,878	8,241	9,863
SHELLFISH						
CRABS (INCLUDING CRAB MEAT)	178	188	187	457	167	515
SPINY LOBSTER (TAILS)	71	45	45	31	196	43
OYSTER MEATS	124	163	524	251	287	44
SCALLOP MEATS	92	115	76	149	333	417
SHRIMP:						
RAW (HEADLESS, SHELL-ON)	2,217	2,289	2,234	2,036	3,154	4,033
ALL OTHER (INCLUDING BREADED)	5,757	5,332	4,920	4,218	3,734	3,182
TOTAL SHRIMP	7,974	7,621	7,154	6,256	6,888	7,215
SQUID	42	139	21	45	1,004	151
OTHER	46	63	82	103	191	181
TOTAL SHELLFISH	8,527	8,334	8,089	7,292	9,066	8,566
TOTAL FISH AND SHELLFISH	15,665	15,374	18,325	23,601	36,248	40,381

SEE NOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

67

SUMMARY OF FREEZINGS, BY MONTHS, 1963 - Continued

(THOUSANDS OF POUNDS)

SPECIES	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
FISH	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
SALT-WATER: BLOCKS	221	433	193	255	28	33	2,025
FILLETS AND STEAKS:							
COD	371	170	261	58	77	39	2,432
FLOUNDER	1,353	1,388	990	1,451	753	371	10,459
HADDOCK	784	1,150	783	922	360	123	10,824
HALIBUT	421	208	295	243	9	-	1,828
OCEAN PERCH	3,048	3,357	1,852	1,994	1,338	1,139	26,024
POLLOCK	40	34	57	225	411	192	1,709
SALMON	4	-	-	-	25	-	34
WHITING	687	216	184	207	101	5	1,979
UNCLASSIFIED	253	277	219	147	145	160	2,373
TOTAL FILLETS AND STEAKS	6,961	6,800	4,641	5,247	3,219	2,029	57,662
TOTAL BLOCKS, FILLETS, AND STEAKS	7,182	7,233	4,834	5,502	3,247	2,062	59,687
ROUND, DRESSED, ETC.:							
HALIBUT	7,983	3,311	1,807	1,012	198	-	32,814
MACKEREL (EXCEPT SPANISH)	135	443	91	26	9	17	875
SABLEFISH	173	385	1,009	520	332	63	2,920
SALMON:							
CHINOOK OR KING	647	792	1,127	737	56	56	4,496
SILVER OR COHO	2,156	1,931	1,472	303	29	-	5,992
CHUM OR KETA	116	90	488	353	863	15	1,942
OTHER	1,257	561	903	17	-	-	3,145
TOTAL SALMON	4,176	3,374	3,990	1,410	948	71	15,575
SMELT	41	9	14	17	16	30	242
SWORDFISH	42	51	313	51	10	-	561
TUNA	444	290	2,324	155	7	-	3,373
WHITING, HEADED AND GUTTED	6,840	4,557	1,552	2,234	587	19	21,543
OTHER (EXCEPT BAIT)	1,645	1,385	1,902	2,743	2,063	2,097	24,664
TOTAL SALT-WATER FISH	28,661	21,138	17,836	13,670	7,417	4,360	162,254
FRESH-WATER:							
FILLETS AND STEAKS	-	-	3	67	10	-	89
ROUND, DRESSED, ETC.:							
CHUBS	9	40	95	106	1	4	373
TROUT	99	75	69	82	73	58	816
WHITEFISH	-	-	10	11	1	1	128
OTHER (EXCEPT BAIT)	173	107	76	137	103	201	1,276
TOTAL FRESH-WATER FISH	281	222	253	403	188	264	2,682
BAIT AND ANIMAL FOOD (SALT- AND FRESH-WATER)	6,841	7,145	5,921	5,467	2,872	2,270	59,993
SHELLFISH							
CRABS (INCLUDING CRAB MEAT)	639	759	800	625	381	464	5,360
SPINY LOBSTER (TAILS)	-	-	-	18	36	20	505
OYSTER MEATS	18	22	53	82	53	54	1,675
SCALLOP MEATS	262	193	177	120	298	164	2,396
SHRIMP:							
RAW (HEADLESS, SHELL-ON)	5,585	6,929	6,325	6,643	4,754	3,957	50,158
ALL OTHER (INCLUDING BREADED)	5,789	7,279	6,401	5,889	5,247	4,590	62,338
TOTAL SHRIMP	11,374	14,208	12,726	12,532	10,001	8,547	112,496
SQUID	55	118	32	39	184	127	1,957
OTHER	313	141	787	71	42	128	2,148
TOTAL SHELLFISH	12,661	15,441	14,575	13,487	10,995	9,504	126,537
TOTAL FISH AND SHELLFISH	48,444	43,946	38,585	33,027	21,472	16,398	351,466

NOTE:--PRODUCTION OF FISH FROZEN ON UNITED STATES FISHING OR TRANSPORTING CRAFT IS NOT INCLUDED IN THIS REPORT.

GENERAL REVIEW

SUMMARY OF FREEZINGS, BY SECTIONS, 1963

(THOUSANDS OF POUNDS)

SPECIES	NEW ENGLAND	MIDDLE ATLANTIC	SOUTH ATLANTIC	NORTH CENTRAL EAST	NORTH CENTRAL WEST
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
FISH					
SALT-WATER:					
BLOCKS	1,922	3	41	-	-
FILLETS AND STEAKS:					
COD	1,663	7	20	-	-
FLOUNDER	9,561	-	31	-	-
HADDOCK	10,621	3	-	-	-
OCEAN PERCH	25,111	-	-	-	-
POLLOCK	1,709	-	-	-	-
WHITING	1,976	1	-	-	-
UNCLASSIFIED	551	25	126	-	2
TOTAL FILLETS AND STEAKS	51,414	36	177	-	2
TOTAL BLOCKS, FILLETS, AND STEAKS	53,336	39	216	-	2
ROUND, DRESSED, ETC.:					
HALIBUT	10	21	-	-	-
MACKEREL (EXCEPT SPANISH)	553	171	-	-	-
SALMON:					
SILVER OR COHO	-	-	-	-	1
OTHER	-	32	-	-	-
TOTAL SALMON	-	32	-	-	1
SMELT	33	107	-	36	-
SWORDFISH	437	25	-	-	-
TUNA	1,674	7	-	-	-
WHITING, HEADED AND GUTTED	21,340	202	-	-	-
OTHER (EXCEPT BAIT)	11,191	2,656	3,559	1	3
TOTAL SALT-WATER FISH	86,783	3,260	3,777	39	6
FRESH-WATER:					
FILLETS AND STEAKS	-	-	-	13	75
ROUND, DRESSED, ETC.:					
CHUBS	-	147	-	70	156
TROUT	-	3	1	3	2
WHITEFISH	-	124	-	-	4
OTHER (EXCEPT BAIT)	57	405	139	333	255
TOTAL FRESH-WATER FISH	57	679	140	419	492
BAIT AND ANIMAL FOOD (SALT- AND FRESH-WATER)	36,349	2,706	736	805	255
SHELLFISH					
CRABS (INCLUDING CRAB MEAT)	-	-	245	-	-
SPINY LOBSTER (TAILS)	29	1	110	-	3
OYSTER MEATS	6	-	994	-	2
SCALLOP MEATS	2,203	107	43	-	-
SHRIMP:					
RAW (HEADLESS, SHELL-ON)	79	1,268	8,366	-	2
ALL OTHER (INCLUDING BREADED)	3	6	30,110	-	-
TOTAL SHRIMP	82	1,274	38,476	-	2
SQUID	586	963	2	-	-
OTHER	1,242	309	56	-	-
TOTAL SHELLFISH	4,148	2,654	39,926	-	7
TOTAL FISH AND SHELLFISH	131,337	9,299	44,579	1,263	760

NOTE:--THE SECTIONS INDICATED INCLUDE THE FOLLOWING STATES:
 NEW ENGLAND--MAINE, MASSACHUSETTS, RHODE ISLAND, AND CONNECTICUT.
 MIDDLE ATLANTIC--NEW YORK, NEW JERSEY, AND PENNSYLVANIA.
 SOUTH ATLANTIC--MARYLAND, DISTRICT OF COLUMBIA, VIRGINIA, NORTH CAROLINA, GEORGIA, AND FLORIDA.
 NORTH CENTRAL, EAST--OHIO, INDIANA, ILLINOIS, MICHIGAN, AND WISCONSIN.
 NORTH CENTRAL, WEST--MINNESOTA, IOWA, MISSOURI, NORTH DAKOTA, NEBRASKA, AND KANSAS.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

69

SUMMARY OF FREEZINGS, BY SECTIONS, 1963 - Continued

(THOUSANDS OF POUNDS)

SPECIES	SOUTH CENTRAL	PACIFIC	ALASKA	TOTAL
FISH	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
SALT-WATER:				
BLOCKS	-	59	-	2,025
FILLETTS AND STEAKS:				
COD	-	733	9	2,432
FLOUNDER	138	709	-	10,459
HADDOCK	-	-	-	10,824
HALIBUT	-	554	1,274	1,828
OCEAN PERCH	-	913	-	26,024
POLLOCK	-	-	-	1,709
SALMON	-	9	25	34
WHITING	-	-	-	1,979
UNCLASSIFIED	76	1,582	11	2,373
TOTAL FILLETTS AND STEAKS	214	4,500	1,319	57,662
TOTAL BLOCKS, FILLETTS, AND STEAKS	214	4,559	1,319	59,687
ROUND, DRESSED, ETC.:				
HALIBUT	-	9,744	23,030	32,814
MACKEREL (EXCEPT SPANISH)	-	151	-	875
SABLEFISH	-	1,847	1,073	2,920
SALMON:				
CHINOOK OR KING	-	2,262	2,234	4,496
SILVER OR COHO	-	2,094	3,897	5,992
CHUM OR KETA	-	1,321	621	1,942
OTHER	-	1,625	1,488	3,145
TOTAL SALMON	-	7,302	8,240	15,575
SMELT	-	64	-	242
SWORDFISH	-	99	-	561
TUNA	-	1,492	-	3,373
WHITING, HEADED AND GUTTED	1	-	-	21,543
OTHER (EXCEPT BAIT)	5,025	2,168	61	24,664
TOTAL SALT-WATER FISH	5,240	27,426	33,723	162,254
FRESH-WATER:				
FILLETTS AND STEAKS	-	1	-	89
ROUND, DRESSED, ETC.:				
CHUBS	-	-	-	373
TROUT	39	765	3	816
WHITEFISH	-	-	-	126
OTHER (EXCEPT BAIT)	85	2	-	1,276
TOTAL FRESH-WATER FISH	124	768	3	2,682
BAIT AND ANIMAL FOOD (SALT- AND FRESH-WATER)	549	11,918	4,675	59,993
SHELLFISH				
CRABS (INCLUDING CRAB MEAT)	167	758	4,190	5,360
SPINY LOBSTER (TAILS)	163	199	-	505
OYSTER MEATS	518	155	-	1,675
SCALLOP MEATS	14	29	-	2,396
SHRIMP:				
RAW (HEADLESS, SHELL-ON)	39,185	844	414	50,158
ALL OTHER (INCLUDING BREADED)	30,705	788	726	62,338
TOTAL SHRIMP	69,890	1,632	1,140	112,496
SQUID	118	288	-	1,957
OTHER	30	511	-	2,148
TOTAL SHELLFISH	70,900	3,572	5,330	126,537
TOTAL FISH AND SHELLFISH	76,813	43,684	43,731	351,466

NOTE:--THE SECTIONS INDICATED INCLUDE THE FOLLOWING STATES:

SOUTH CENTRAL--KENTUCKY, TENNESSEE, ALABAMA, MISSISSIPPI, LOUISIANA, TEXAS, OKLAHOMA, AND ARKANSAS.

PACIFIC--WASHINGTON, OREGON, CALIFORNIA, ARIZONA, COLORADO, UTAH, AND IDAHO.

ALASKA.

PRODUCTION OF FISH FROZEN ON UNITED STATES FISHING OR TRANSPORTING CRAFT IS NOT INCLUDED IN THIS TABLE.

GENERAL REVIEW

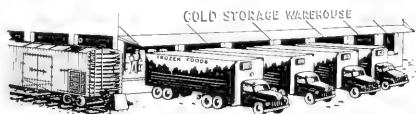
SUMMARY OF FREEZINGS, BY SECTIONS AND MONTHS, 1963

(THOUSANDS OF POUNDS)

MONTH	NEW ENGLAND	MIDDLE ATLANTIC	SOUTH ATLANTIC	NORTH CENTRAL, EAST	NORTH CENTRAL, WEST
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
JANUARY	4,629	314	4,391	4	10
FEBRUARY	4,516	191	4,540	-	2
MARCH	6,105	660	3,313	-	3
APRIL	7,812	1,026	3,669	54	5
MAY	11,666	1,926	3,469	79	466
JUNE	19,601	1,268	2,676	734	6
JULY	20,268	466	3,637	46	5
AUGUST	16,167	834	3,993	53	11
SEPTEMBER	13,742	396	3,717	60	66
OCTOBER	13,395	943	3,677	115	136
NOVEMBER	6,960	680	3,491	85	3
DECEMBER	4,074	595	3,064	33	5
TOTAL	131,337	9,299	44,579	1,203	760

MONTH	SOUTH CENTRAL	PACIFIC	ALASKA	TOTAL
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
JANUARY	4,744	1,435	136	15,665
FEBRUARY	4,068	1,235	620	15,374
MARCH	5,096	1,677	1,471	16,325
APRIL	3,768	3,656	3,361	23,601
MAY	4,443	6,121	7,656	36,246
JUNE	4,737	4,513	6,444	40,381
JULY	7,918	6,385	9,699	46,444
AUGUST	10,668	6,024	4,196	43,946
SEPTEMBER	9,141	4,736	6,705	36,585
OCTOBER	9,606	3,153	2,042	33,027
NOVEMBER	7,253	2,363	617	21,472
DECEMBER	5,371	2,356	350	16,396
TOTAL	76,813	43,664	43,731	351,466

NOTE:--THE STATES INCLUDED IN THE VARIOUS SECTIONS ARE INDICATED ON PAGES 66 AND 69.



COLD STORAGE HOLDINGS OF FROZEN FISHERY PRODUCTS

The 1963 holdings of frozen fishery products were highest on November 30, when 248.7 million pounds of fish and shellfish were in storage. The December 31, 1963 holdings of 244.1 million pounds were second highest, and those of October 31 (243.5 million pounds) were third. The low point occurred on March 31, when stocks totaled only 153.4 million pounds.

Shrimp was the principal item held in storage throughout the year, with cod (blocks and fillets), second, and halibut, third.

GENERAL REVIEW

71

SUMMARY OF HOLDINGS, BY MONTHS, 1963

(THOUSANDS OF POUNDS)

SPECIES	JANUARY 1	JANUARY 31	FEBRUARY 28	MARCH 31	APRIL 30	MAY 31
FISH	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
SALT-WATER:						
BLOCKS	24,328	20,723	15,177	9,409	10,336	11,701
FILLETS AND STEAKS:						
COO	9,677	8,562	6,559	5,945	6,956	7,166
FLOUNDER	6,156	5,352	3,411	2,326	2,113	2,700
HADDOCK	5,397	5,046	3,887	4,535	6,188	6,274
HALIBUT	2,995	2,607	2,210	2,226	2,385	1,940
OCEAN PERCH	13,456	10,106	7,500	5,141	5,504	7,146
POLLOCK	1,039	982	691	546	342	471
SALMON	149	596	261	249	154	115
WHITING	2,585	2,145	1,644	1,109	924	777
UNCLASSIFIED	6,550	5,577	4,956	4,643	4,647	4,909
TOTAL FILLETS AND STEAKS	47,944	40,973	31,119	26,720	29,413	31,498
TOTAL BLOCKS, FILLETS AND STEAKS	72,272	61,696	46,296	36,129	39,749	43,199
FISH STICKS AND PORTIONS (RAW AND COOKED)	11,558	12,263	10,230	8,436	12,004	12,435
ROUND, DRESSED, ETC.:						
HALIBUT	18,496	15,337	12,599	9,205	11,626	17,150
MACKEREL (EXCEPT SPANISH)	860	969	867	637	622	562
SABLEFISH	3,164	3,079	2,861	2,491	2,160	1,915
SALMON:						
CHINOOK OR KING	4,292	3,416	2,964	2,168	1,906	2,008
SILVER OR COHO	5,180	4,218	3,095	2,557	1,729	1,017
CHUM OR KETA	1,361	1,109	1,062	840	795	626
OTHER	1,073	665	843	665	562	643
TOTAL SALMON	11,906	9,630	8,004	6,250	4,992	4,294
SMELT	3,112	2,794	2,371	1,752	1,589	1,322
SWORDFISH	2,485	1,620	1,991	1,919	1,947	2,209
TUNA	1,319	736	134	360	149	147
WHITING, HEADED AND GUTTED	11,345	8,626	6,751	4,892	3,122	1,664
OTHER (EXCEPT BAIT)	18,254	15,642	14,226	11,500	11,976	12,266
TOTAL SALT-WATER FISH	154,771	132,552	106,330	63,771	90,136	97,163
FRESH-WATER:						
FILLETS AND STEAKS	1,443	1,275	906	848	1,100	796
ROUND, DRESSED, ETC.:						
CHUBS	1,440	1,289	783	527	533	825
TROUT	1,249	1,064	1,064	1,056	1,047	1,151
WHITEFISH	1,828	1,780	1,569	1,324	1,054	765
OTHER (EXCEPT BAIT)	2,927	2,455	1,924	2,011	1,737	1,684
TOTAL FRESH-WATER FISH	8,887	7,663	6,248	5,766	5,471	5,221
BAIT AND ANIMAL FOOD (SALT- AND FRESH-WATER)	12,420	10,048	10,611	12,144	13,021	17,936
SHELLFISH						
CRABS (INCLUDING CRAB MEAT)	2,226	1,850	2,016	2,330	2,851	2,535
SPINY LOBSTER (TAILS)	6,665	5,956	6,225	6,414	6,005	6,574
OYSTER MEATS	712	910	927	1,327	1,992	1,828
SCALLOP MEATS	2,749	2,373	1,978	1,571	1,487	1,716
SHRIMP:						
RAW (HEADLESS, SHELL-ON)	31,577	28,487	28,039	27,970	24,964	24,053
ALL OTHER (INCLUDING BREADED)	8,167	9,857	10,618	10,570	11,205	10,857
TOTAL SHRIMP	39,744	38,344	38,657	38,540	36,159	34,910
SQUID	837	827	757	614	561	1,423
OTHER	1,516	1,156	1,197	1,034	1,214	1,399
TOTAL SHELLFISH	54,449	51,416	51,757	51,630	50,269	50,385
TOTAL FISH AND SHELLFISH	230,527	201,879	174,946	153,511	158,897	170,705
CURED FISH						
HERRING, SALTED	6,761	6,038	7,305	8,945	10,121	9,348
SALMON, MILD-CURED	4,005	3,777	3,233	2,851	2,456	2,460
OTHER SALTED	2,824	2,639	2,546	2,563	2,633	2,689
SMOKED FISH	531	450	491	527	466	703
TOTAL CURED FISH	14,121	12,958	13,575	14,886	15,696	15,220

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

SUMMARY OF HOLDINGS, BY MONTHS, 1963 - Continued

(THOUSANDS OF POUNDS)

SPECIES	JUNE	JULY	AUGUST	SEPTEM-	OCTOBER	NOVEMBER	DECEMBER
	30	31	31	BER 30	31	30	31
FISH	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
SALT-WATER:							
BLOCKS	15,528	21,733	27,391	29,296	24,730	23,576	25,634
FILLET AND STEAKS:							
COD	7,679	7,716	8,954	8,269	8,736	10,278	8,916
FLOUNDER	3,611	4,636	5,701	6,475	7,381	6,089	8,021
HADDOCK	7,033	6,479	7,149	6,370	6,430	6,285	4,785
HALIBUT	2,165	2,759	3,021	3,310	4,356	5,301	3,858
OCEAN PERCH	9,052	10,564	13,063	13,844	14,804	15,919	16,339
POLLOCK	443	454	394	311	514	818	966
SALMON	105	116	224	122	433	1,645	741
WHITING	1,052	1,784	1,851	2,029	2,050	2,012	1,755
UNCLASSIFIED	5,014	5,794	6,141	5,834	5,951	6,166	6,497
TOTAL FILLET AND STEAKS	36,154	40,502	46,508	46,564	50,655	56,513	51,898
TOTAL BLOCKS, FILLET AND STEAKS	51,682	62,235	73,899	75,860	75,385	80,089	77,732
FISH STICKS AND PORTIONS (RAW AND COOKED)	12,892	11,745	11,201	10,369	11,564	12,037	13,614
ROUND, DRESSED, ETC.:							
HALIBUT	19,941	25,992	26,994	25,638	25,435	22,707	20,027
MACKEREL (EXCEPT SPANISH)	507	656	1,119	1,024	1,044	792	871
SABLEFISH	1,710	1,562	1,652	2,047	2,337	2,727	2,369
SALMON:							
CHINOOK OR KING	2,135	3,173	3,742	4,784	5,825	5,173	3,542
SILVER OR COHO	895	2,763	3,321	4,252	4,048	4,036	3,505
CHUM OR KETA	716	598	670	1,043	1,216	1,942	1,671
OTHER	859	2,057	2,315	2,736	1,884	1,604	1,350
TOTAL SALMON	4,605	6,591	10,248	12,845	12,973	12,755	10,128
SMELT	1,278	1,282	1,254	1,272	1,453	1,443	1,155
SWORDFISH	1,723	2,124	1,925	2,510	2,892	3,150	2,933
TUNA	1,009	602	1,353	3,576	1,754	1,327	804
WHITING, HEADED AND GUTTED	4,748	11,663	11,624	11,996	11,875	10,296	10,687
OTHER (EXCEPT BAIT)	9,842	10,429	14,166	12,122	10,941	11,511	11,634
TOTAL SALT-WATER FISH	109,137	136,881	155,575	159,259	157,633	158,634	151,954
FRESH-WATER:							
FILLET AND STEAKS	784	628	697	777	2,444	1,416	1,459
ROUND, DRESSED, ETC.:							
CHUBS	805	997	1,137	1,290	1,771	1,890	1,697
TROUT	912	1,131	1,103	1,179	1,221	1,330	1,323
WHITEFISH	956	1,053	1,053	1,267	1,438	1,403	1,220
OTHER (EXCEPT BAIT)	2,631	2,162	2,022	2,966	3,473	3,356	3,009
TOTAL FRESH-WATER FISH	6,268	6,175	6,212	7,479	10,347	9,396	8,708
BAIT AND ANIMAL FOOD (SALT- AND FRESH-WATER)	20,954	21,480	13,184	12,267	7,430	5,822	6,486
SHELLFISH							
CRABS (INCLUDING CRAB MEAT)	2,720	2,997	3,342	3,472	4,689	4,893	5,037
SPINY LOBSTER (TAILS)	6,624	6,494	6,557	5,070	4,603	5,006	5,071
OYSTER MEATS	1,585	1,798	1,444	1,373	1,205	1,216	1,426
SCALLOP MEATS	2,358	2,463	2,905	3,145	3,055	3,551	3,275
SHRIMP:							
RAW (HEADLESS, SHELL-ON)	24,047	25,460	24,803	27,356	37,418	42,142	45,335
ALL OTHER (INCLUDING BREADED)	9,676	11,521	13,194	12,999	13,910	14,635	13,781
TOTAL SHRIMP	33,723	36,981	37,997	40,355	51,328	56,777	59,116
SQUID	1,368	1,115	870	1,035	1,138	1,062	968
OTHER	1,551	2,108	1,513	2,451	2,004	2,098	2,029
TOTAL SHELLFISH	49,929	53,976	54,628	56,901	68,022	74,603	76,922
TOTAL FISH AND SHELLFISH	186,308	218,515	229,599	235,926	243,452	248,654	244,070
CURED FISH							
HERRING, SALTED	9,162	8,292	6,639	5,833	5,082	6,560	5,601
SALMON, MILD-CURED	2,962	3,975	4,979	4,997	4,710	4,417	3,964
OTHER SALTED	2,742	2,516	2,382	2,268	2,096	1,544	1,726
SMOKED FISH	568	488	562	535	612	622	555
TOTAL CURED FISH	15,434	15,271	14,562	13,633	12,500	13,143	11,846

GENERAL REVIEW

73

SUMMARY OF HOLDINGS, BY SECTIONS AND MONTHS, 1963

(THOUSANDS OF POUNDS)

DATE	NEW ENGLAND	MIDDLE ATLANTIC	ATLANTIC	NORTH CENTRAL, EAST	NORTH CENTRAL, WEST
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
JANUARY 1	64,167	36,305	9,690	26,237	11,496
JANUARY 31	53,930	33,051	10,595	24,209	11,267
FEBRUARY 28	36,841	33,234	10,337	21,294	9,800
MARCH 31	26,347	33,393	9,520	17,560	8,816
APRIL 30	33,899	32,635	11,275	16,776	8,300
MAY 31	38,866	30,547	11,866	16,680	8,050
JUNE 30	51,774	31,331	9,062	17,454	8,650
JULY 31	70,972	31,035	9,432	17,214	9,608
AUGUST 31	73,596	34,311	9,135	21,586	9,868
SEPTEMBER 30	77,757	34,914	10,325	20,928	9,406
OCTOBER 31	72,640	36,847	10,640	24,404	10,320
NOVEMBER 30	71,631	43,229	10,643	24,876	11,036
DECEMBER 31	72,934	41,332	11,443	23,087	11,103

DATE	SOUTH CENTRAL	PACIFIC	ALASKA	TOTAL
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
JANUARY 1	21,671	51,195	7,566	230,527
JANUARY 31	18,503	44,446	5,858	201,879
FEBRUARY 28	16,620	40,000	4,820	174,946
MARCH 31	15,479	35,065	5,331	153,511
APRIL 30	15,286	33,958	6,768	158,897
MAY 31	12,923	41,769	9,994	170,705
JUNE 30	12,782	44,667	10,588	186,308
JULY 31	17,140	46,892	16,232	218,515
AUGUST 31	17,698	47,980	15,225	229,599
SEPTEMBER 30	18,650	45,084	18,860	235,926
OCTOBER 31	20,133	51,229	17,239	243,452
NOVEMBER 30	22,268	49,366	15,603	248,654
DECEMBER 31	22,581	49,757	11,833	244,070

NOTE:--THE STATES INCLUDED IN THE VARIOUS SECTIONS ARE INDICATED ON PAGES 68 AND 69.

COLD STORAGE HOLDINGS OF CURED FISH

The 1963 average holdings of salted and smoked cured fish totaled 14.1 million pounds. Cold storage stocks average 7.4 million pounds of cured herring and 3.8 million pounds of mild-cured salmon. These two species accounted for 79 percent of the average cold storage inventories of cured fish.

SUMMARY OF HOLDINGS OF CURED FISH, BY MONTHS, 1963

(THOUSANDS OF POUNDS)

DATE	SALTED			SMOKED	TOTAL
	HERRING, CURED	SALMON, MILD-CURED	OTHER		
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
JANUARY 1	6,761	4,005	2,824	531	14,121
JANUARY 31	6,036	3,777	2,693	450	12,956
FEBRUARY 28	7,305	3,233	2,546	491	13,575
MARCH 31	8,945	2,851	2,563	527	14,886
APRIL 30	10,121	2,456	2,653	466	15,696
MAY 31	9,348	2,480	2,689	703	15,220
JUNE 30	9,162	2,962	2,742	568	15,434
JULY 31	8,292	3,975	2,516	488	15,271
AUGUST 31	6,639	4,979	2,362	552	14,562
SEPTEMBER 30	5,833	4,937	2,268	535	13,633
OCTOBER 31	5,082	4,710	2,096	612	12,500
NOVEMBER 30	6,560	4,417	1,544	622	13,143
DECEMBER 31	5,601	3,964	1,726	555	11,846

GENERAL REVIEW

FOREIGN FISHERY TRADE

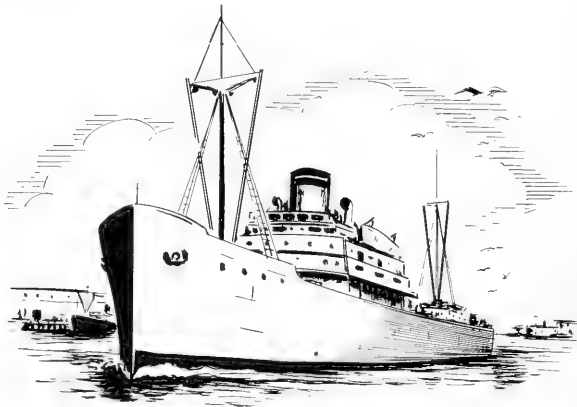
U. S. foreign trade in fishery products was valued at a record \$547 million in 1963--an increase of \$27 million compared with 1962. Imports for consumption amounted to \$491 million and exports more than \$56 million. The value of imports was nearly \$6 million more than in 1962, while exports increased \$21 million.

Imports of edible fishery products in 1963 totaled 1.2 billion pounds valued at \$395 million. Compared with 1962, this was a decrease of 5 percent in volume and 2 percent in value. The loss in volume was due chiefly to decreases in the imports of fresh and frozen tuna, sea herring, and canned sardines. Total volume of imports of edible products would have been lower had not imports of groundfish fillets and blocks, shrimp, and sea scallop meats remained at record levels. Other important edible items received in considerable volume in 1963 were fresh and frozen halibut; tuna loins and discs; fillets (other than groundfish); lobsters (common and spiny); canned tuna in brine; and pickled or salted cod, haddock, hake, pollock, and cusk.

Shrimp was the major item imported with respect to value. Nearly 151 million pounds (including fresh and frozen, canned, and cured) valued at \$103 million were received from over 50 countries. Shrimp accounted for 26 percent of the value of all imported edible items in 1963. Mexico, Panama, and India were among the principal sources. Mexican shrimp accounted for 50 percent of the total imports of shrimp in 1963.

Imports of nonedible fishery products were valued at \$96 million in 1963--15 percent more than in 1962. Increased receipts of fish meal and scrap (376,000 tons--\$37 million) largely accounted for the gain in value. Fish meal accounted for nearly 39 percent of the value of all imported nonedible fishery products in 1963. Other important items were cultured and natural pearls (\$18 million) and fish and marine animal oils (\$8 million).

Exports of domestic edible fishery products totaled 64.7 million pounds valued at \$30.4 million--an increase of 15 percent in quantity and 35 percent in value compared with the previous year. The gain was due to exporting greater quantities of fresh and frozen salmon and shrimp. Exports of nonedible domestic fishery products valued at \$26.2 million were nearly double the value of the 1962 exports (\$13.3 million). The increase was due to the record exports of 262.3 million pounds of fish oils. Nearly 76 percent of 1963 exports of oils were sent to Sweden, United Kingdom, and West Germany. Exports of foreign produced fishery products during 1963 amounted to \$8.5 million compared with \$4.4 million in 1962.





Explanation of Changes In Reporting Statistics on
U. S. Foreign Trade in Fishery Products

Statistics on foreign fishery trade are obtained from compilations made by the Bureau of the Census, Department of Commerce. Statistics on all known imported or exported fishery products have been assembled and published annually since 1926 in statistical digests published by the Bureau of Commercial Fisheries and its predecessor organizations.

Until September 1963, data were compiled from Bureau of the Census records utilizing "Schedule A. Statistical Classification of Commodities Imported into the United States." However, since August 31, 1963, U. S. importers have been required to report shipments in terms of "Tariff Schedules of the United States Annotated." Commencing with September 1963, "Schedule A. Statistical Classification of Commodities Imported into the United States" were replaced by commodity classifications (for statistical reporting and publication purposes) in the "Tariff Schedules of the United States Annotated" (TSUSA).

The principal effect of this change in reporting has been an unavoidable break in the historical and current series of statistics on the imports of fishery commodities. In some instances there were direct correlations between the Schedule A. commodity numbers and TSUSA item numbers; however, there were no apparent correlations for other commodity numbers. A number of fishery items described in Schedule A. classifications lost their identity when the TSUSA classifications became effective. Other fishery items not listed in Schedule A. classifications are described in the new TSUSA classifications.

This publication has been reorganized in an effort to retain continuity in the Bureau's reporting of historical and current statistics of foreign trade in fishery products.



GENERAL REVIEW

EXPORTS OF DOMESTIC FISHERY PRODUCTS, 1962-63

ITEM	UNIT	1962		1963	
		QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS
EDIBLE FISHERY PRODUCTS					
FRESH OR FROZEN:					
FISH:					
COD, HADDOCK, HAKE, POLLOCK, AND CUSK.	1,000 POUNDS	612	127	543	113
SALMON	DO	1,508	872	4,888	2,330
OTHER	DO	13,958	1,135	13,921	1,858
SHELLFISH:					
SHRIMP	DO	3,457	3,299	8,078	7,748
OYSTERS, SHUCKED	DO	411	311	251	191
OTHER (INCLUDING LOBSTERS, SHUCKED CLAMS, AND OYSTERS IN THE SHELL)	DO	876	629	2,580	1,196
TOTAL FRESH AND FROZEN	DO	20,822	6,373	30,261	13,636
CANNED:					
FISH:					
MACKEREL	DO	4,272	671	4,940	681
SALMON	DO	8,978	7,292	10,228	8,239
SARDINES:					
IN OIL	DO	578	218	146	50
NOT IN OIL	DO	7,188	1,285	3,493	666
TUNA	DO	497	233	201	119
OTHER (INCLUDING HERRING)	DO	531	460	723	628
SHELLFISH:					
SHRIMP	DO	2,212	2,572	3,199	3,054
SQUID	DO	7,785	729	8,048	742
OTHER (INCLUDING CRABS AND CRAB MEAT)	DO	1,995	1,507	1,685	1,263
TOTAL CANNED	DO	34,036	14,967	32,663	15,442
CURED, SALTED, PICKLED, OR DRY CURED:					
SALMON	DO	569	528	574	509
MISCELLANEOUS FISH	DO	381	119	309	121
SHRIMP	DO	72	71	80	81
TOTAL CURED	DO	1,022	718	963	711
FISH, SHELLFISH, AND OTHER MARINE ANIMAL PRODUCTS (INCLUDING CANNED OR FROZEN SPECIALTIES AND SMOKED FISH AND SHELLFISH)	DO	650	412	858	587
TOTAL EDIBLE FISHERY PRODUCTS	DO	56,530	22,470	64,745	30,376
NONEDIBLE FISHERY PRODUCTS					
FISH AND MARINE ANIMAL BODY AND LIVER OIL (EXCEPT MEDICINAL)	DO	123,050	6,047	262,342	15,636
WHALE AND SPERM OIL	DO	2,697	254	5,591	457
SEAL FURS, DRESSED OR DYED	1,000 PIECES	64	3,851	75	5,877
PEARL ESSENCE	1,000 POUNDS	18	314	17	276
SHELLS, UNMANUFACTURED	DO	11,041	1,295	14,988	2,137
FISH, SHELLFISH, AND OTHER MARINE ANIMAL PRODUCTS, NONEDIBLE	-	-	1,507	-	1,846
TOTAL NONEDIBLE FISHERY PRODUCTS	-	-	13,258	-	26,229
GRAND TOTAL	-	-	35,728	-	56,605

NOTE:--IN ADDITION TO THE EXPORT FIGURES THAT ARE SHOWN THERE ARE LARGE QUANTITIES OF FISH OILS AND CONCENTRATES THAT ARE EXPORTED FOR MEDICINAL PURPOSES, AND OTHER MISCELLANEOUS FISHERY PRODUCTS THAT CANNOT BE SHOWN BECAUSE THE EXPORT CLASSIFICATION COVERING THESE PRODUCTS INCLUDES OTHER THAN FISHERY PRODUCTS.



EXPORTS OF FOREIGN FISHERY PRODUCTS, 1962-63

ITEM	UNIT	1962		1963	
		QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS
EDIBLE FISHERY PRODUCTS					
FRESH OR FROZEN:					
COD, HADDOCK, HAKE, POLLOCK, AND CUSK.	1,000 POUNDS	3	1	192	50
SALMON	DO	6	4	65	33
OTHER FISH	DO	257	72	1,049	173
SHRIMP	DO	1,992	1,900	5,753	5,276
OTHER SHELLFISH.	DO	184	149	278	234
TOTAL FRESH AND FROZEN	DO	2,442	2,126	7,317	5,766
CANNED:					
MACKEREL	DO	179	21	9	1
SALMON	DO	5	5	-	-
SARDINES:					
IN OIL	DO	104	36	34	12
NOT IN OIL	DO	291	51	237	41
TUNA	DO	4	2	58	20
OTHER FISH	DO	24	69	38	57
SHRIMP	DO	44	41	33	42
SQUID.	DO	-	-	9	1
OTHER SHELLFISH.	DO	2,501	1,349	3,234	1,788
TOTAL CANNED	DO	3,152	1,574	3,652	1,962
CURED, SALTED, PICKLED, OR DRY CURED:					
SALMON	DO	(1)	(1)	3	1
MISCELLANEOUS FISH	DO	139	51	160	59
SHRIMP	DO	102	92	2	3
TOTAL CURED.	DO	241	143	165	63
FISH, SHELLFISH, AND OTHER MARINE ANIMAL PRODUCTS (INCLUDING CANNED OR FROZEN SPECIALTIES, AND SMOKED FISH AND SHELLFISH).					
	DO	110	93	82	84
TOTAL EDIBLE FISHERY PRODUCTS.	DO	5,945	3,936	11,216	7,875
NONEDIBLE FISHERY PRODUCTS					
FISH AND MARINE ANIMAL BODY AND LIVER					
OIL (EXCEPT MEDICINAL).	DO	38	15	1,110	90
WHALE AND SPERM OIL.	DO	2,805	210	4,004	285
SEAL FURS, DRESSED OR DYED	1,000 PIECES	1	24	4	113
PEARL ESSENCE.	1,000 POUNDS	(1)	1	(1)	4
SHELLS, UNMANUFACTURED	DO	64	16	4	1
FISH, SHELLFISH, AND OTHER MARINE ANIMAL PRODUCTS, NONEDIBLE	-	-	183	-	148
TOTAL NONEDIBLE FISHERY PRODUCTS	-	-	449	-	641
GRAND TOTAL.	-	-	4,385	-	8,516

1/ LESS THAN 500 POUNDS OR \$500.



IMPORTS OF FISHERY PRODUCTS ENTERED FOR CONSUMPTION, 1962-63

ITEM	1962		1963		TOTAL 1/	
	EDIBLE FISHERY PRODUCTS		LAST 4 MONTHS			1,000 DOLLARS
	QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS		Q. AMTLY.
FRESH OR FROZEN:						
FISH:						
WHETHER OR NOT WHOLE (EXCEPT FILLETS, STEAKS, ETC.):						
FRESH-WATER:						
1,000 POUNDS						
LAKE HERRING, CISCO, AND CHUB.	1,854	479	1,158	249	1,530	
LAKE TROUT.	2,330	431	1,174	281	2,812	
PIKE, EXCEPT YELLOW PIKE.	(2)	(.1)	(.1)	(.1)	(.1)	
ROCK BASS.	4,485	1,111	2,338	541	3,003	
SALMON (INCLUDING RAINBOW, BROOK, AND BROWN).	15,791	5,784	8,201	4,049	13,985	
WHITEFISH.	1,804	449	1,091	263	1,503	
YELLOW PERCH.	1,804	449	1,091	263	1,503	
YELLOW PIKE.	7,872	1,856	4,579	1,905	7,500	
EELS (FRESH- AND SALT-WATER).	232	105	69	34	297	
UNCLASSIFIED.	4,562	1,111	3,444	527	4,811	
TOTAL FRESH-WATER FISH.	41,000	13,332	25,343	6,690	47,956	
SALT-WATER:						
LOD, HADDOCK, HAKE, POLLOCK, AND MUSK (INCLUDING EELS, AND SHAD FOR LAST 4 MONTHS OF 1963).	1,990	233	1,387	151	2,175	
HALIBUT.	24,752	1,174	10,614	5,117	22,722	
WALLEY.						
FRESH:						
FROZEN.	2,104	307	739	116	1,237	
SALMON.	1,621	241	54	74	1,025	
SALMON.	9,735	5,042	5,042	3,003	8,698	
SFA HERRING.	62,490	1,430	4/22,399	4/567	4/42,455	
SHAD.	5	20	5	8	25	
SMELT.	11,968	1,631	5,752	772	8,781	
STURGEON.						
SWEETSHED.	1,448	710	773	445	1,166	
FROZEN:						
LAKE HERRING.	3,336	1,993	5,143	1,734	9,777	
LAKE TROUT.	82	82	135	53	217	
TUNA (WHOLE AND OTHER THAN WHOLE):						
ALBACORE.	83,940	14,590	43,990	7,090	75,346	
YELLOW FIN.	1,0684	3,411	7,077	9,933	13,775	
SKIPJACK.	34,331	3,627	26,055	1,504	48,593	
UNCLASSIFIED.	211	81	1,429	637	2,067	
TOTAL TUNA.	127,465	41,941	143,721	19,255	111,986	
TUNA LOINS AND DISCS:						
YELLOW FIN.	(.61)	(.70)	(.70)	(.67)	(.61)	
UNCLASSIFIED.	9,330	3,191	3,732	1,698	3,961	
TOTAL LOINS AND DISCS.	10,221	3,874	4,432	2,195	12,114	
UNCLASSIFIED.	10,161	2,466	5,734	1,504	8,635	
TOTAL SALT-WATER FISH.	413,050	69,707	161,700	33,676	354,164	
					59,427	

(CONTINUE ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

GENERAL REVIEW

IMPORTS OF FISHERY PRODUCTS ENTERED FOR CONSUMPTION, 1962-63 - Continued

ITEM	1962		1963		TOTAL 1/	
	EDIBLE FISHERY PRODUCTS - CONTINUED		LAST 4 MONTHS		1,000 DOLLARS	
	QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS
FRESH OR FROZEN - CONTINUED:						
FISH - CONTINUED:						
FILLETS, STEAKS, ETC.:						
GROUND FISH AND OCEAN PERCH:						
COD	32,981	7,608	22,732	5,371	9,977	32,709
HADDOCK, POLLOCK, AND COOK.	25,445	4,523	17,995	4,720	6,819	24,814
MACKEREL	17,740	3,150	10,930	2,593	5,470	16,400
BLACKS OR SLABS	143,541	28,430	100,936	20,593	52,334	153,270
TOTAL GROUND FISH AND OCEAN PERCH	221,450	45,937	152,981	33,287	78,767	231,748
OTHER:						
FLOUNDER OR FLATFISH (EXCEPT HALIBUT)	19,459	5,709	10,640	3,223	5,958	16,598
HALIBUT AND SALMON	3,446	1,909	2,909	1,562	1,979	4,817
WOLF FISH (SEA CATFISH)	9,274	2,057	5,150	3,315	1,964	7,736
UNCLASSIFIED SALT-WATER	9,063	4,063	4,987	1,506	2,737	6,624
YELLOW PERCH	1,276	5,514	5,514	1,742	2,570	8,084
YELLOW PIKE	2,293	2,467	2,286	1,579	2,233	4,519
UNCLASSIFIED FRESH-WATER	6,435	2,227	2,080	738	435	2,515
TOTAL, OTHER THAN GROUND FISH	76,443	26,127	45,908	15,644	22,961	68,869
TOTAL FILLETS, STEAKS, ETC.	207,663	73,064	193,889	48,931	101,748	300,637
FISH STICKS AND SIMILAR PRODUCTS	325	97	299	83	78	29
TOTAL FISH, FRESH AND FROZEN	752,238	155,606	440,987	92,990	231,540	692,527
SHELLFISH, ETC.:						
CRABS:						
FRESH OR FROZEN (INCLUDING PREPARED OR PRESERVED, EXCEPT CANNED)	595	230	500	213	181	681
CRAB MEAT (FRESH COOKED)	2,101	292	210	180	41	251
LOBSTERS:						
FRESH OR FROZEN (INCLUDING FRESH-COOKED MEAT)	22,101	15,000	18,653	13,427	3,194	21,847
SPINX	53,947	42,188	44,161	37,852	3,681	51,843
SHRIMP:						
HEADLESS	59,539	38,928	62,703	42,235	(3)	(3)
BREADED	13,231	164	357	140	27	484
PEELED AND DEVEINED	13,537	8,902	20,281	14,140	(3)	(3)
SHELL-ON	2	2	2	2	49,014	31,987
RAW	2	2	2	2	9,179	6,722
PEELED, COOKED, BUT NOT BREADED	2	2	2	2	6,639	4,639
UNCLASSIFIED	61,876	43,504	67,745	5,274	925	7,870
TOTAL SHRIMP	141,183	91,898	90,086	61,959	60,052	39,942
CLAMS (IN SHELL OR SHUKKED)	640	159	402	87	67	10
OYSTERS:						
EXCEPT SEED OYSTERS	1,140	73	805	334	575	271
UNCLASSIFIED (PRINCIPALLY SEED OYSTERS)	3,190	319	7,290	632	746	24
SCALLOPS:						
UNCLASSIFIED (INCLUDING PREPARED AND PRESERVED)	11,563	4,993	4,117	4,117	2,169	13,342
TURTLES (LIVE ONLY)	2,604	2,582	1,661	1,599	1,274	1,129
TOTAL SHELLFISH, ETC., FRESH AND FROZEN	217,685	157,740	153,001	110,959	60,615	56,795
TOTAL FRESH AND FROZEN FISH, SHELLFISH, ETC.	969,923	313,554	593,988	203,549	332,155	106,425
						926,143
						309,974

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

IMPORTS OF FISHERY PRODUCTS ENTERED FOR CONSUMPTION, 1962-63 - Continued

ITEM	1962			1963			TOTAL 1/
	EDIBLE FISHERY PRODUCTS - CONTINUED			EDIBLE FISHERY PRODUCTS - CONTINUED			
	QUANTITY	1,000 DOLLARS	UNIT	QUANTITY	1,000 DOLLARS	UNIT	
CANNED:							
FISH:							
ANCHOVIES:							
IN OIL	4,904	2,564	1,000 ROUNDS	2,738	1,652	1,162	3,900
NOT IN OIL	36	9	DO	-	-	271	271
SALMON:							
IN OIL	(2)	(2)	DO	(2)	(2)	(2)	(2)
NOT IN OIL	3,436	781	DO	468	383	1	605
SARDINES:							
IN OIL	32,603	13,303	DO	13,303	6,344	6,705	19,906
NOT IN OIL	20,342	2,909	DO	17,556	2,604	798	21,640
HERRING:							
IN OIL	12,134	(2)	DO	(2)	(2)	5	(2)
NOT IN OIL	3,786	3,786	DO	3,160	1,758	1,033	6,554
TUNA:							
IN OIL:							
ALBACORE	261	123	DO	150	79	53	203
OTHER	97	41	DO	21	10	(3)	(3)
TOTAL IN OIL	358	164	DO	171	89	50	224
IN BRINE:							
ALBACORE	27,836	12,656	DO	17,832	8,543	12,308	30,340
OTHER	26,525	10,054	DO	15,779	5,457	3,638	26,930
TOTAL IN BRINE	54,361	22,720	DO	33,611	14,000	23,659	57,270
BONITO AND YELLOWTAIL:							
IN OIL	6,127	1,675	DO	3,018	868	462	3,480
NOT IN OIL	2,600	650	DO	1,166	291	1,210	2,895
TOTAL BONITO AND YELLOWTAIL	8,727	2,325	DO	4,184	1,159	1,681	5,865
POLLOCK, SMOKED	20	12	DO	3	2	3	5
ANTIPASTO, IN OIL	236	211	DO	129	126	95	224
FISH CAKES, BALLS, AND PUDDING	1,447	356	DO	777	193	503	322
CAYLAR AND OTHER FISH ROE (MAY INCLUDE SOME	177	993	DO	189	537	118	421
FISH PASTE AND SAUCE	244	71	DO	106	56	64	170
UNCLASSIFIED FISH:							
IN OIL	748	364	DO	469	241	144	613
NOT IN OIL	2,124	481	DO	630	245	346	996
TOTAL CANNED FISH	147,304	53,803	DO	79,931	29,389	42,322	122,453
SHELLFISH, ETC.:							
ALBACORE (MAY INCLUDE FRESH OR DRIED, AND CANNED	5,243	2,699	DO	4,237	2,297	2,641	6,878
CLAMS (INCLUDES PASTE AND SAUCE)	5	3	DO	60	34	478	60
CRAB MEAT	1,454	891	DO	969	564	281	1,447
CHOWDER, JUICE, ETC.	5	5	DO	5	5	37	37
LOBSTER MEAT (INCLUDES PASTE AND SAUCE)	3,505	4,701	DO	3,206	3,902	2,090	5,296
MAYO	3,111	5,507	DO	1,877	3,376	485	2,362
SHRIMP	198	304	DO	172	269	109	188
TOTAL	(2)	(2)	DO	(2)	(2)	1,304	281
							(2)

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

GENERAL REVIEW

IMPORTS OF FISHERY PRODUCTS ENTERED FOR CONSUMPTION, 1962-63 - Continued

ITEM	1962		1963		TOTAL 1/	
	QUANTITY	1,000 DOLLARS	FIRST 8 MONTHS		LAST 4 MONTHS	
			QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS
EDIBLE FISHERY PRODUCTS - CONTINUED						
CANNED - CONTINUED:						
SHELLFISH, ETC., - CONTINUED:						
OYSTERS AND OYSTER JUICE,	1,000 POUNDS					
SCALLOPS,	7,830	2,810	4,165	4,298	8,463	3,101
SHELLFISH PASTE AND SAUCE,	(2)	(2)	(2)	54	(2)	(2)
UNCLASSIFIED,	113	66	65	33	98	54
TOTAL CANNED SHELLFISH,	25,991	18,195	17,510	12,861	30,033	21,275
TOTAL CANNED FISH, SHELLFISH, ETC.,	173,299	72,000	97,441	42,230	132,506	68,095
CURED:						
DRIED (UNSALTED):						
COD, HADDOCK, HAKE, POLLOCK, AND CUSK,	(2)	(2)	(2)	(2)	(2)	(2)
SHARK FINS,	648	354	62	33	1,028	567
UNCLASSIFIED,	125	102	69	62	51	132
TOTAL DRIED (UNSALTED),	138	119	86	78	133	126
PICKLED OR SALTED:						
ALEWIVES,	931	575	217	173	1,234	887
COD, HADDOCK, HAKE, POLLOCK, AND CUSK:						
SKINNED OR BONED,	-	-	1	(6)	-	(6)
OTHER,	9,823	2,068	5,049	1,524	4,291	2,806
HERRING,	34,135	5,900	20,915	3,524	21,470	5,899
MACKEREL,	25,860	3,625	14,727	2,050	17,774	3,869
SALMON,	2,473	402	832	146	1,257	376
UNCLASSIFIED,	19	7	51	37	1	38
TOTAL PICKLED OR SALTED,	540	265	252	132	56	189
TOTAL CURED,	73,066	13,167	41,247	7,413	29,601	13,081
SMOKED OR KIPPERED:						
COD, HADDOCK, HAKE, POLLOCK, AND CUSK:						
WHOLE, BEHEADED, OR Eviscerated OR BOTH,	125	35	110	28	34	38
HERRING:	1,688	483	890	264	411	381
WHOLE OR BEHEADED:						
HAND DRY SMOKED,	516	62	108	12	44	18
BONED,	932	395	375	607	69	159
NOT BONED (Eviscerated, Split),	422	218	268	667	146	292
SALMON,	(2)	(2)	(2)	(2)	(2)	(2)
UNCLASSIFIED,	45	63	63	84	20	111
TOTAL SMOKED OR KIPPERED,	81	23	69	17	9	22
TOTAL CURED,	4,132	1,032	2,378	621	1,794	1,022
TOTAL CURED,	78,129	14,774	43,842	6,207	32,629	14,990
OTHER FISH AND SHELLFISH, NOT ESPECIALLY PROVIDED FOR:						
TOTAL EDIBLE FISHERY PRODUCTS,	1,485	554	2,425	734	2,953	1,487
TOTAL EDIBLE FISHERY PRODUCTS,	1,222,836	400,882	737,696	254,740	422,702	139,806

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

GENERAL REVIEW

IMPORTS OF FISHERY PRODUCTS ENTERED FOR CONSUMPTION, 1962-63 - Continued

ITEM	1962		1963				TOTAL 1/
	NONEDIBLE FISHERY PRODUCTS		FIRST 9 MONTHS		LAST 4 MONTHS		
	QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS	QUANTITY	1,000 DOLLARS	
OILS, FISH AND MARINE ANIMAL:							
COD:							
INDUSTRIAL	708	324					
MEDICINAL	855	826	594	290	118	53	343
LIVER }	671	671	671	590	304	280	870
HALIBUT	2	22	2	23	(3)	(3)	675
HERRING,	599	206	285	100	11	8	108
SHARKS,	1	(6)					
INCLUDING GRAYFISH:							
BODY	1	(6)	1	4	(3)	(3)	4
LIVER			27	7	11	3	10
WHALE:	37	10					
SPERM:							
LIVER	978	958	323	313	390	397	710
CRUDE	7,951	5,411	5,256	3,289	2,710	2,110	7,974
OTHER	1	4					
UNCLASSIFIED:							
BODY	88	33	58	15	2		17
LIVER	33	92.6	11	237	9	86	323
TOTAL FISH AND MARINE ANIMAL OIL,	11,257	8,730	7,230	5,168	3,561	2,992	10,791
TOTAL FISH AND MARINE ANIMAL OIL,							8,160
MEAL AND SCRAP:							
ANIMAL FEED	238	23,404	252	25,295	113	10,559	35,814
FERTILIZER,	14	894	10	1,163	1	62	1,225
TOTAL MEAL AND SCRAP,	252	24,298	262	26,418	114	10,621	37,039
TOTAL MEAL AND SCRAP,							
COD LIVER OIL CAKE AND MEAL	610	49	495	39	(3)	(3)	(3)
FISH SOLUBLES	6	42.5	3	233	4	261	494
FISH SOUNDS	27	65	17	31	6	23	51
GLUE	14	2			(3)	(3)	(3)
LIVERS FOR DRUGS	832	132	616	100	132	25	148
LIVER	24	34	14	10	11	8	185
ISINGLASS	45	294	20	91	16	36	133
PEARL ESSENCE		442		344		221	565
AQUARIUM FISH (INCLUDING GOLDFISH)		4,549		1,949		967	2,916
FISH (OTHER THAN FOR HUMAN CONSUMPTION)		147		91		33	124
CUTTLEFISH BONE	281		188		77		
SHELLS AND BUTTONS:							
MOTHER-OF-PEARL AND TROUS SHELL,	896	440	375	167	(3)	(3)	(3)
OTHER	2,046	231	2,016	101	(3)	(3)	(3)
MARINE SHELLS, CRUDE,	(2)	(3)	(2)	(2)	909	141	2
SHELL AND MOTHER-OF-PEARL, ORNAMENTED		341		264		326	610
OCEAN AND FRESH-WATER PEARL AND SHELL BUTTONS							
AND BLANKS	528	531	329	353	196	196	542
PEARLS:							
CULTURED,		16,198		12,621		4,806	17,427
NATURAL		737		355		479	1,216
TOTAL PEARLS,		16,935		12,976		4,930	17,906

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

GENERAL REVIEW

U. S. IMPORTS OF FISHERY PRODUCTS, BY COUNTRY OF ORIGIN, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

COUNTRY	EDIBLE		NONEDIBLE	TOTAL
	QUANTITY	VALUE	VALUE	VALUE
NORTH AMERICA:				
GREENLAND	8,618	1,859	255	2,114
CANADA	408,305	109,822	8,218	118,040
MIQUELON AND ST. PIERRE ISLANDS	1,415	349	46	395
MEXICO	100,142	59,419	487	59,906
GUATEMALA	1,953	1,057	24	1,091
BRITISH HONDURAS	494	379	43	422
EL SALVADOR	6,694	4,301	2	4,303
HONDURAS	965	533	27	560
NICARAGUA	2,230	1,412	14	1,426
COSTA RICA	1,699	961	4	965
REPUBLIC OF PANAMA	10,380	7,073	3	7,076
CANAL ZONE	1,207	253	-	253
BAHAMAS	1,440	779	32	811
JAMAICA	211	76	12	88
HAITI	55	83	6	89
DOMINICAN REPUBLIC	26	24	-	24
LEEWARD AND WINDWARD ISLANDS	2	1	-	1
BARBADOS	245	173	-	173
TRINIDAD AND TOBAGO	17,563	2,403	10	2,413
NETHERLANDS ANTILLES	109	47	1	48
TOTAL	562,953	191,014	9,184	200,198
SOUTH AMERICA:				
COLOMBIA	1,877	1,277	807	2,084
VENEZUELA	6,384	3,543	141	3,684
BRITISH GUIANA	5,911	4,658	94	4,752
SURINAM	1,206	1,154	(1)	1,154
FRENCH GUIANA	2,789	1,952	3	1,955
ECUADOR	11,920	5,753	35	5,788
PERU	57,670	6,473	28,565	35,038
BOLIVIA	-	-	(1)	(1)
CHILE	1,994	1,224	4,822	6,046
BRAZIL	4,006	3,834	2,364	6,198
PARAGUAY	-	-	55	55
URUGUAY	11	3	42	45
ARGENTINA	546	124	1,191	1,315
TOTAL	94,114	30,005	38,119	68,124
EUROPE:				
ICELAND	60,852	14,659	347	15,006
SWEDEN	1,998	449	169	618
NORWAY	50,779	15,120	1,658	16,778
DENMARK	18,778	4,899	513	5,412
UNITED KINGDOM	4,648	1,621	2,957	4,578
IRELAND	204	38	15	53
NETHERLANDS	3,446	1,090	2,370	3,460
BELGIUM AND LUXEMBOURG	130	58	315	373
FRANCE	3,090	647	2,077	2,724
WEST GERMANY	5,836	2,265	1,913	4,178
AUSTRIA	9	2	365	367
CZECHOSLOVAKIA	-	-	9	9
HUNGARY	13	3	-	3
SWITZERLAND	-	-	363	363
SPAIN	11,169	2,866	319	3,185
FINLAND	3	(1)	(1)	(1)
POLAND AND DANZIG	45	14	-	14
UNION OF SOVIET SOCIALIST REPUBLICS	58	156	6	162
AZORES	1,192	345	17	362
PORTUGAL	11,273	5,344	189	5,533
ITALY	497	321	1,265	1,586
YUGOSLAVIA	249	131	20	151
FREE TERRITORY OF TRIESTE	14	4	-	4
GREECE	9	3	680	683
BULGARIA	-	-	1	1
TURKEY	17	25	1	26
CYPRUS	-	-	12	12
TOTAL	174,309	50,060	15,581	65,641

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

85

U. S. IMPORTS OF FISHERY PRODUCTS, BY COUNTRY OF ORIGIN, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

COUNTRY	EDIBLE		NONEDIBLE	TOTAL
	QUANTITY	VALUE	VALUE	VALUE
ASIA:				
SYRIAN ARAB REPUBLIC	1	1	15	16
LEBANON	-	-	71	71
IRAN	1,250	1,004	11	1,015
ISRAEL	-	-	166	166
JORDAN	-	-	2	2
ARABIA PENINSULA STATES:				
KUWAIT	3,728	2,756	-	2,756
SAUDI ARABIA	110	58	-	58
ARABIA PENINSULA STATES	30	11	6	17
ADEN	-	-	30	30
INDIA	11,094	7,449	904	8,353
PAKISTAN	1,793	2,331	44	2,375
BURMA	-	-	2	2
THAILAND	1,195	995	12	1,007
CEYLON	-	-	(1)	(1)
VIET-NAM	74	66	2	68
CAMBODIA	-	-	1	1
FEDERATION OF MALAYA	2,497	435	65	500
LAOS	-	-	(1)	(1)
STATE OF SINGAPORE	150	93	3	96
REPUBLIC OF INDONESIA	67	13	12	25
REPUBLIC OF THE PHILIPPINES	226	126	498	624
REPUBLIC OF KOREA	2,695	1,267	78	1,345
HONG KONG	1,432	1,331	634	1,965
TAIWAN	9,488	927	37	964
JAPAN	220,852	67,551	27,806	95,357
NANSEI AND NANPO ISLANDS	236	36	1	37
TOTAL	256,938	86,450	30,400	116,850
AUSTRALIA AND OCEANIA:				
AUSTRALIA	8,812	12,235	285	12,520
NEW ZEALAND	3,026	3,412	19	3,431
FRENCH PACIFIC ISLANDS	417	64	22	86
TRUST TERRITORY OF THE PACIFIC ISLANDS	-	-	1	1
BRITISH WESTERN PACIFIC ISLANDS	6,210	942	1	943
TOTAL	18,465	16,653	328	16,981
AFRICA:				
MOROCCO	650	243	557	800
SEYCHELLES AND DEPENDENCIES	1	1	-	1
TUNISIA	1	1	5	6
UNITED ARAB REPUBLIC (EGYPT)	999	653	3	656
WESTERN PORTUGUESE AFRICA	622	156	-	156
CANARY ISLANDS	5,239	756	-	756
SPANISH AFRICA	52	27	-	27
WESTERN AFRICA	7,979	1,284	(1)	1,284
GHANA	57	16	1	17
FEDERATION OF NIGERIA	46	36	187	223
MADEIRA ISLANDS	-	-	1	1
ANGOLA	1,689	562	61	623
BRITISH WEST AFRICA AND SIERRA LEONE	7,728	934	-	934
ETHIOPIA	-	-	2	2
BRITISH EAST AFRICA AND TANGANYIKA	14	14	60	74
MOZAMBIQUE	81	77	5	82
REPUBLIC OF SOUTH AFRICA	28,461	15,602	1,668	17,270
THE FEDERATION OF RHODESIA AND NYASALAND	-	-	(1)	(1)
TOTAL	53,619	20,364	2,950	22,914
GRAND TOTAL	1,160,398	394,546	96,162	490,708

1/ LESS THAN 500 POUNDS OR \$500.

SOURCE: DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS.

GENERAL REVIEW

U. S. EXPORTS OF FISHERY PRODUCTS,
BY COUNTRY OF DESTINATION, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

COUNTRY	EDIBLE		NONEDIBLE	TOTAL
	QUANTITY	VALUE	VALUE	VALUE
NORTH AMERICA:				
CANADA	18,315	7,694	3,462	11,156
MEXICO	232	112	151	263
GUATEMALA	502	125	3	129
BRITISH HONDURAS	1	-	(1)	1
EL SALVADOR	1,299	272	(1)	272
HONDURAS	130	30	-	30
NICARAGUA	651	125	1	126
COSTA RICA	700	143	1	144
REPUBLIC OF PANAMA	239	57	(1)	87
CANAL ZONE	43	19	4	23
BERMUDA	251	149	16	165
BAHAMAS	284	134	7	145
JAMAICA	815	254	10	264
HAITI	33	1	(1)	1
DOMINICAN REPUBLIC	256	85	20	105
LEEWARD AND WINDWARD ISLANDS	41	15	(1)	15
BARBADOS	11	6	(1)	6
TRINIDAD AND TOBAGO	61	52	20	72
NETHERLANDS ANTILLES	421	237	1	238
FRENCH WEST INDIES	5	-	-	-
TOTAL	24,290	9,546	3,696	13,242
SOUTH AMERICA:				
COLOMBIA	31	12	16	28
VENEZUELA	261	164	19	183
BRITISH GUIANA	13	8	-	8
SURINAM	122	34	5	39
ECUADOR	21	(1)	1	1
PERU	26	23	2	25
BOLIVIA	21	14	-	14
CHILE	2	4	2	6
BRAZIL	3	2	23	25
PARAGUAY	1	1	-	1
URUGUAY	-	-	2	2
ARGENTINA	3	3	27	30
TOTAL	504	265	97	362
EUROPE:				
ICELAND	1	1	-	1
SWEDEN	294	270	4,203	4,473
NORWAY	17	24	1,515	1,539
DENMARK	353	343	32	375
UNITED KINGDOM	9,558	7,697	5,384	13,081
IRELAND	7	4	3	7
NETHERLANDS	909	554	2,039	2,593
BELGIUM AND LUXEMBOURG	445	342	103	445
FRANCE	2,396	1,436	453	1,889
WEST GERMANY	566	405	3,233	3,636
EAST GERMANY	-	-	1	1
AUSTRIA	1	1	12	13
CZECHOSLOVAKIA	-	-	103	103
SWITZERLAND	240	217	2,011	2,228
SPAIN	563	168	10	178
UNION OF SOVIET SOCIALIST REPUBLICS	-	-	3	3
AZORES	2	1	-	1
PORTUGAL	12	-	-	64
MALTA AND GOZO	14	-	-	2
GIBRALTAR	-	-	-	4
ITALY	2,641	644	1,101	1,643
GREECE	2,447	511	11	566
TURKEY	-	-	2	2
CYPRUS	-	1	-	1
TOTAL	24,644	12,117	21,151	32,850
ASIA:				
LEBANON	27	25	3	23
IRAQ	1	3	-	3
IRAN	28	17	5	22
ISRAEL	6	5	1	6
JORDAN	(1)	2	3	5

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GENERAL REVIEW

87

U. S. EXPORTS OF FISHERY PRODUCTS, BY COUNTRY OF DESTINATION, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

COUNTRY	EDIBLE		NONEDIBLE	TOTAL
	QUANTITY	VALUE	VALUE	VALUE
ASIA - CONTINUED:				
ARABIA PENINSULA STATES:				
KUWAIT	5	3	-	3
SAUDI ARABIA	26	24	-	24
ARABIA PENINSULA STATES	2	2	-	2
ADEN	1	1	-	1
STATE OF BAHRAIN	5	5	-	5
AFGHANISTAN	1	(1)	(1)	(1)
INDIA	7	3	-	3
PAKISTAN	(1)	(1)	-	1
BURMA	50	16	5	21
THAILAND	3	2	-	2
VIET-NAM	23	14	-	14
FEDERATION OF MALAYA	63	45	1	46
LAOS	10	6	-	6
STATE OF SINGAPORE	259	167	-	167
REPUBLIC OF INDONESIA	5	5	-	5
REPUBLIC OF THE PHILIPPINES	2,943	393	11	404
REPUBLIC OF KOREA	-	-	5	5
HONG KONG	706	380	8	388
JAPAN	6,040	5,689	2,131	7,820
NANSEI AND NANPO ISLANDS	31	26	-	26
TOTAL	10,274	6,835	2,174	9,009
AUSTRALIA AND OCEANIA:				
AUSTRALIA	352	170	34	204
NEW ZEALAND AND WESTERN SAMOA	1,512	216	14	230
NEW GUINEA	5	5	-	5
FRENCH PACIFIC ISLANDS	519	99	-	99
TRUST TERRITORY OF THE PACIFIC ISLANDS	76	19	-	19
BRITISH WESTERN PACIFIC ISLANDS	1,049	116	-	116
TOTAL	3,513	625	48	673
AFRICA:				
MOROCCO	1	1	-	1
LIBYA	10	10	(1)	10
UNITED ARAB REPUBLIC (EGYPT)	7	2	3	5
CANARY ISLANDS	12	10	-	10
WESTERN EQUATORIAL AFRICA	16	6	-	6
WESTERN AFRICA	2	2	-	2
GUINEA	75	18	1	19
FEDERATION OF NIGERIA	2	1	9	10
ANGOLA	(1)	(1)	-	(1)
BRITISH WEST AFRICA AND SIERRA LEONE	1	1	(1)	1
LIBERIA	161	53	-	53
REPUBLIC OF THE CONGO	1,019	207	1	208
SOMALI REPUBLIC	1	1	1	2
FRENCH SOMALILAND	9	1	-	1
ETHIOPIA	(1)	1	-	1
BRITISH EAST AFRICA AND TANGANYIKA	5	2	-	2
MOZAMBIQUE	(1)	(1)	-	(1)
MALAGASY REPUBLIC (FORMERLY MADAGASCAR)	4	5	-	5
REPUBLIC OF SOUTH AFRICA	63	62	18	80
THE FEDERATION OF RHODESIA AND NYASALAND	82	53	-	53
TOTAL	1,470	436	33	469
GRAND TOTAL	64,745	30,376	26,229	56,605

1/ LESS THAN 500 POUNDS OR \$500.

SOURCE: DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS.

SECTION 2 - NEW ENGLAND FISHERIES

The commercial fisheries of the New England States, (Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut) in 1963 yielded 829 million pounds of fish and shellfish worth \$68.3 million to the fishermen. This harvest represented a decline from 1962 of 43 million pounds (5 percent), but an increase of \$2.5 million (4 percent). The 294.7-million pound catch of groundfish (cod, cusk, haddock, ocean perch, pollock, and white hake) was 10 percent under 1962. Also well below 1962 catches were menhaden, whiting, and sea scallops. Yellowtail flounders showed the largest increase--up 38 percent to 78 million pounds. Average prices for most foodfishes were higher than a year earlier and shellfish prices were much improved.

Landings in the New England States, with the exception of New Hampshire, were down from 1962. Massachusetts led in catch with 56 percent; followed by Maine with 34 percent; Rhode Island, 8 percent; and Connecticut and New Hampshire, 1 percent each. The percentage breakdown by value was Massachusetts, 60; Maine, 31; Rhode Island, 6; Connecticut, 2; and New Hampshire, 1 percent.

Fishermen and vessels. In 1963, New England had 21,428 fishermen using 733 vessels of 5 net tons or greater and 10,746 other craft. This was a gain of 6 vessels, but a decrease of 108 fishermen and 367 other craft compared with 1962.

Vessel construction. Four vessels built under the Fishing Vessel Construction Differential Subsidy Program joined the fleet in 1963, making a total of six built under this law. Public Law 86-516, which expired in June 1963, was passed to provide financial assistance to correct inequities between foreign and domestic costs of construction of fishing vessels. The New England groundfish industry was the only fishery to meet all the eligibility requirements of the program. In addition to the six vessels completed under the program, five more applications were pending and may possibly be completed later. In 1963, bills were introduced in both houses of Congress to replace the program and in October, the Senate passed S. 1006 which would provide a \$10-million annual appropriation for a 5-year period. This bill, if approved, would allow a subsidy of up to 50 percent of the cost of construction rather than the 33 percent under the expired law. Eligibility to apply for subsidies would also be liberalized.

The first U.S. stern trawler, Narragansett, which joined the fleet early in 1963, proved a success. In the first year of operation, this vessel engaged in deep-sea lobstering, flounder and groundfish trawling, and longlining. The Rhode Island shipyard that built the Narragansett had orders for at least three additional stern trawlers to be constructed in 1964.

The U.S.-built former French trawler St. Patrick joined the Boston fleet in December. Built in 1948, the St. Patrick was purchased by Boston interests in 1963 and returned to this country. The 153-foot-long, 483-gross-ton vessel is the largest trawler ever to fish out of Boston. This vessel and the Sturgeon Bay, sister ship of the Massachusetts, both built under the Fishing Vessel Subsidy Program, were welcome additions to the declining Boston fleet.

During 1963 the New England fleet lost 11 vessels at sea--8 from the port of Gloucester. Three fishermen were lost, and the toll might have been heavier had it not been for modern lifesaving equipment. The Gloucester trawler St. Nicholas, on fire at sea, was lost despite assistance from a Russian vessel. Eight new vessels entered the industry--four of which will fish out of New Bedford.

Processing. The 1963 value of manufactured fishery products produced in the New England States was \$121.7 million--a decrease of \$11.2 million (8 percent) compared with 1962. The value of the Maine manufactured products declined \$11.7 million, while there were smaller decreases in New Hampshire, Rhode Island, and Connecticut. Massachusetts, with a gain of \$869,000, was the only State showing an improved value over the previous year. A reduc-

tion of \$6.8 million in the value of the pack of canned Maine sardines was largely responsible for the lower value of the New England manufactured fishery products in 1963.

Weather. A severe storm the last of November caused serious losses to fishermen and waterfront property, particularly in northern New England. Damage to property, boats, vessels, and lobster pots was estimated at over \$1 million in Maine alone. The Boothbay Harbor, Maine, area suffered most severely. At Gloucester, a large section of the breakwater was breached and waterfront property was destroyed. Fortunately, no lives or vessels were lost at sea. The November storm climaxed a year of unusually high winds and poor fishing weather.

Labor. The fishing industry had another year of labor-management tranquility with no major work stoppage or tieups among the fishing fleet. New agreements were signed between fish processors and employee unions at Rockland, Gloucester, and Boston. Wage increases, in general, were moderate, ranging between 5 and 15 cents plus fringe benefits. The agreement reached in Boston was for a 3-year period and will not expire until May 1966.

Legislation. Effective October 1963, all groundfish landed in Massachusetts, with the exception of ocean perch, must be gutted at sea. The new regulation is contained in an amendment to Section 14 of the Rules and Regulations promulgated by the Massachusetts Director of the Division of Marine Fisheries. The amendment was designed, primarily, to prevent the landing of ungutted pollock and small haddock.

Lobsters. This most valuable of all fish and shellfish taken by New England fishermen was in increased demand in 1963. Although the catch of 29 million pounds was up only 3 percent from 1962, the value to the fishermen of \$16.2 million was 13 percent above the previous year. The catch of so-called deep sea lobsters by other trawlers was 2.0 million pounds and was landed at several ports in Massachusetts, Rhode Island, and Connecticut. This fishery continues to attract additional vessels each year and is carried on from Hudson Canyon to the Southeast part of Georges Bank in waters ranging from 100 to 250 fathoms deep. With the increased otter trawl lobster catch have come more frequent calls for a complete investigation into the possible harmful effects this type of fishery might have upon the future of the lobster fishery. Conflicts have also arisen over the increased activities of skin divers--primarily sports fishermen. Skin diving for lobsters is illegal in Maine and New Hampshire but allowed in the other three Coastal New England States.

Groundfish. Landings of groundfish declined to 295 million pounds--31 million pounds below the 1962 catch. However the value of the catch (\$21 million) was slightly higher than in 1962, as the fresh-fish market continued to improve. Landings of cod, haddock, ocean perch, and pollock were below the previous year, while cusk and white hake showed small increases. The available U.S. supply of groundfish fillets in 1963 (catch plus imports) set a new high of just over 315 million pounds. Imports of groundfish fillets were 232 million pounds, a record 73.5 percent of total supply. Included in the imports of groundfish fillets were 153 million pounds in the form of blocks or slabs used primarily by the expanding fish stick and portion industry--a 7-percent increase over 1962 imports.

Whiting. The 1963 catch of whiting was 87 million pounds, 11 percent below the 1962 catch and the lowest since 1953. Massachusetts led in volume with 67 million pounds, followed by Maine with 16 million. The Maine catch dropped 11 percent despite legislation that limited the operations of Massachusetts vessels in Maine waters. Once again Gloucester vessel owners and fishermen attempted to form organizations that would work for higher prices and improved fish handling methods. They were unsuccessful, however, and the whiting industry made no significant changes in its catching, handling, or processing practices. Despite the catch decrease, the supply of frozen whiting appeared adequate, with the consumer market showing some signs of decline. The activities of a large fleet of Russian trawlers was considered by many fishermen and processors to be the dominant factor in the drop in catch. The

NEW ENGLAND FISHERIES

Bureau's Technological Laboratory in Gloucester completed initial tests on the value of refrigerated sea water for holding whiting. The possibility of improving the quality of whiting by better handling practices both afloat and on shore was carefully observed by the industry.

Herring. The 1963 catch of 152.3 million pounds of Maine sea herring was 3 percent less than in 1962. Of this amount, 6.3 million pounds were exported to Canada compared with 5.6 million the previous year. The sardine pack of 1.6 million standard cases was 25 percent below the 1962 production. A greater proportion of the sea herring catch was used for bait and reduction than in 1962. Imports of sea herring from Canada were 45.5 million pounds compared with 62.1 million the previous year. Only 27 canneries packed sardines in 1963--a reduction of 5 plants from the previous year. Imports of canned sardines in 1963 totaled 41.5 million pounds, 22 percent less than in 1962.

Ocean Perch. Only 108 million pounds of ocean perch were landed at New England ports in 1963--the lowest catch since 1940. Maine landings of 64 million pounds were down 8 percent from 1962, but the most severe drop occurred in Massachusetts, where the catch was only 44 million pounds, 19 percent less than the previous year. Although there was some improvement in ex-vessel prices, the fleet continued to decline in the face of ever diminishing returns. One new, large wooden trawler was added to the fishery in Maine, while several older large and medium vessels were removed from the fleet by sinking or transfers to more profitable fisheries. Imports of ocean perch fillets in 1963 were 21.6 million pounds, 11 percent more than in 1962.

Sea Scallops. The 18-million pound landings of sea scallops, valued at \$8.3 million, represented a decline for the second year. The catch was 18 percent less in poundage and 7 percent less in value than the 1962 catch. Landings of 16 million pounds enabled New Bedford to continue to be the leading sea scallop port. Imports of sea scallops, almost entirely from Canada, increased to over 13 million pounds or 15 percent more than the previous year. This was the eighth year of increase. The scallop fleet declined in 1963 as several of the older and marginally profitable vessels were converted to otter trawling or longlining. Some evidence indicated that scallop abundance was decreasing on Georges Bank, as the grounds come under ever increasing fishing pressure from Canadian and United States fishermen.

Yellowtail Flounders. The yellowtail flounder continued its phenomenal comeback to the ranks of major species with total landings of 78 million pounds valued at \$5 million--up 38 percent in poundage and 21 percent in value from 1962. Massachusetts contributed 69 million pounds which were, for the most part, landed and processed in New Bedford. Rhode Island had a total of 9 million pounds, and only insignificant catches were reported from Connecticut. The large quantity of yellowtail flounders encouraged several plants to expand their filleting and packing facilities in New Bedford and although glut periods occasionally occurred, most of the catch was landed and processed in an orderly and stable manner.

Tuna. The tuna seining fleet operating off the Eastern Coast increased to 16 U.S. vessels, which landed 8.3 million pounds of bluefin and skipjack tuna at New England ports. Additional quantities were taken directly to Puerto Rico. In 1962 the fleet had only 7 vessels, which landed 6.7 million pounds. Only one plant processed tuna in New England in 1963. New plants were considered but not built by West Coast interests. Most of the New England landings were shipped frozen to canneries in Maryland, Puerto Rico, and California. Some fish were also shipped to Italy. New Bedford was the leading tuna port, with 3.3 million pounds. Low prices, poor weather conditions, and the comparatively short season tempered the success of the 1963 operation. Additional local canning facilities would greatly improve the outlook for this fishery.

Swordfish. The longline method of fishing for swordfish, which began in 1962, continued to grow in 1963. New England landings of swordfish caught by this gear in 1963 were over 1.9

million pounds. In addition, longlines also caught some tuna and shark. A Maine vessel was the most successful for the year, with one trip taking 514 fish (54,000 pounds), and another trip taking 412 fish (81,000 pounds). Both trips established records at New England ports--the first trip by capturing a record number of fish; the second trip by landing a record poundage. The high percentage of "pups" or fish weighing well under 100 pounds has caused concern because of the lower price of steaks cut from the smaller fish. The average price per pound for dressed swordfish declined to 31 cents from 55 cents the previous year.

Menhaden. Less than 1 million pounds of menhaden were landed in the New England States, compared with 24 million in 1962. Fish were caught north of Cape Cod, as this species once again failed to visit Massachusetts Bay and northward. Rhode Island purse seiners did catch additional menhaden, but the fish were either landed directly on Long Island, N. Y., or taken there by carrier boat.

Other Industrial Species. Landings of unclassified species for industrial purposes totaled 58 million pounds which was slightly under the 1962 catch. Rhode Island received 32 million pounds landed at Point Judith, while Massachusetts landings were 24 million pounds, principally at New Bedford. In addition to these unclassified species, 11 million pounds of alewives were taken by purse seines and landed at Gloucester. Despite somewhat improved industrial product prices, New England plants mostly experienced a poor year due to an insufficient supply of raw materials.

Bait Fishery. For the first time the combined catch of blood and sand worms brought over \$1 million to Maine diggers. The value of the 1963 worm catch, \$1.3 million, was 35 percent above 1962 and the fourth most valuable in the Maine catch. The demand for marine worms continues to grow at a rapid pace, and, providing their abundance can be maintained, the catches should continue to increase markedly over the next few years.

Foreign fishing. Fishing off the New England coast by foreign vessels, primarily Russian, intensified in 1963. The Russian fleet alone totaled almost 300 vessels. There were fewer gill net vessels and more stern trawlers and side trawlers, thus leading to fewer complaints from American vessels concerning nets in their propellers or being forced to detour miles around the strings of gear. The Russians were fishing primarily for whiting and herring. Demands from fishermen and other segments of the industry that the territorial waters be extended beyond the present 3 miles were voiced. Complaints of the Russian activity were greatest during July and August, when the Russian fleet was concentrated on Georges Bank and off Cape Cod.

Irradiation laboratory. Construction began in July on the new building to house the Gloucester irradiation laboratory. An appropriation of \$650,000 was voted by Congress the previous year for this facility, which will be operated jointly by the Atomic Energy Commission and the Bureau of Commercial Fisheries. Work already underway on the radiation pasteurization of seafood products shows great promise of improving the shelf life of fresh fishery products. The new building is expected to be completed in autumn 1964.

Research vessel. The Albatross IV, the most modern and best equipped U.S. fishery research vessel, began its first year of operation in 1963. The 187-foot long, 1,000-ton stern trawler was officially commissioned on May 9 and sailed on its first scientific cruise on May 13. The new vessel has a cruising range of 9,000 miles and is completely equipped with the latest scientific facilities and electronic aids. Invitations to submit bids for the construction of a replacement for the Bureau's aging exploratory fishing vessel, Delaware, were sent out in 1963. Plans call for the vessel to be built as a 155-foot stern trawler, and equipped with the latest facilities for fishery research.

NEW ENGLAND FISHERIES

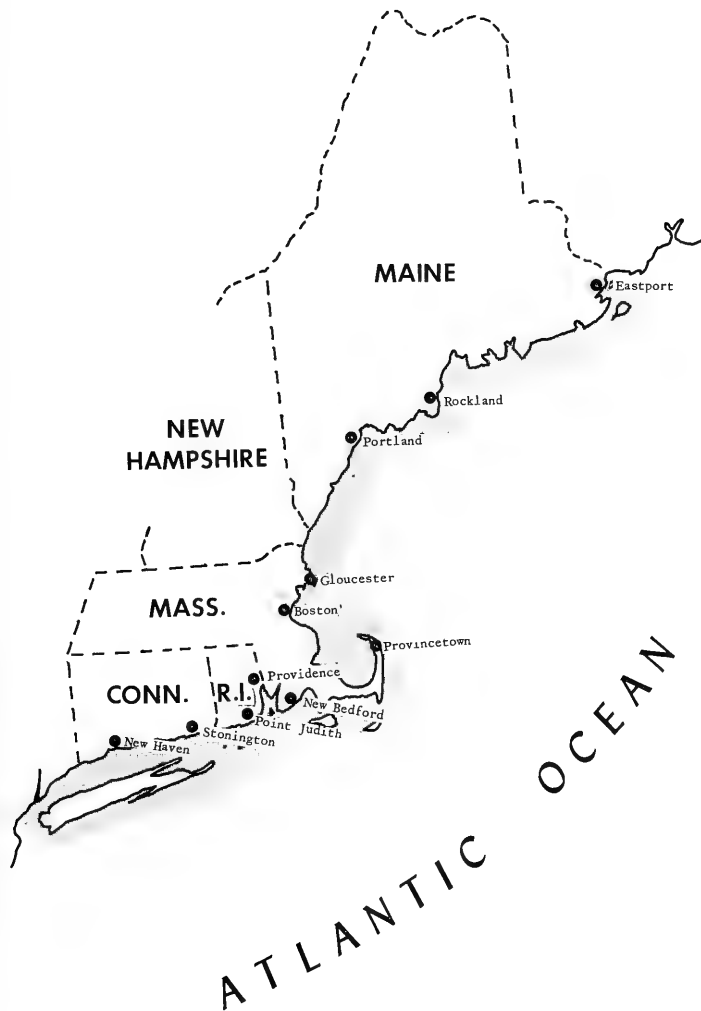
Shore and Plant Development. Construction got underway in New Bedford in 1963 on a 19-acre Maritime Terminal site for the use of fishing and other waterfront businesses. The development will feature a 1,500-foot long bulkhead for the mooring of vessels, and a cold storage warehouse with a capacity of 20 to 30 million pounds. Work also began in New Bedford on a hurricane dike which will cost over \$16 million. In Gloucester, approval was received for a \$1.2-million dredging project which, it is hoped, will stimulate increased exports and imports as well as benefit some of the larger domestic fishing vessels. This project is embodied in the Federal Urban Renewal program, under which a large section of the Gloucester waterfront will eventually be razed and rebuilt. Urban renewal projects both in Gloucester and along the Atlantic Avenue section of Boston are expected to result in the relocation of many fish processing plants.

Training Program. A fishermen's training program was inaugurated at Boston in 1963 with funds provided by the Manpower Development and Training Act. The training course, conducted by vessel owners and the Atlantic Fishermen's Union, included 10 weeks at sea and an intensive 3-week course on shore. Out of the first class of 37 trainees, 13 completed the course. A similar program is scheduled for Gloucester in 1964.

Other information. The following tables contain summarized and detailed information on the 1963 operating units and catch of fish and shellfish in the New England States. Condensed summary data on the operating units and catch by States of the New England area, appearing on the following pages, have been previously published in Current Fishery Statistics No. 3590. Additional data on many aspects of the New England fisheries may be found in Maine, Massachusetts, and Rhode Island monthly and annual landing bulletins released by the Branch of Fishery Statistics and in daily, monthly, and annual reports published by the Bureau's Fishery Market News Office, Commonwealth Pier, Boston, Mass.

Acknowledgments. The following organizations assisted in collecting the data appearing in this section: Maine Department of Sea and Shore Fisheries; New Hampshire Fish and Game Department; Massachusetts Department of Natural Resources, Division of Marine Fisheries; Rhode Island Department of Agriculture and Conservation, Division of Fish and Game; Connecticut State Board of Fisheries and Game; and Connecticut State Shell Fish Commission.





NEW ENGLAND STATES

NEW ENGLAND FISHERIES

SECTIONAL SUMMARIES

SUMMARY OF CATCH, 1963

(MILLIONS OF POUNDS AND MILLIONS OF DOLLARS)

STATE	FISH		SHELLFISH, ETC.		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
MAINE	250	6	36	15	266	21
NEW HAMPSHIRE	(1)	(1)	1	(1)	1	(1)
MASSACHUSETTS	439	29	29	13	468	42
RHODE ISLAND	65	2	4	2	69	4
CONNECTICUT	4	(1)	1	1	5	1
TOTAL	756	37	71	31	829	69

1/ LESS THAN 500,000 POUNDS OR \$500,000.

SUMMARY OF OPERATING UNITS, 1963

ITEM	MAINE	NEW HAMPSHIRE	MASSACHUSETTS	RHODE ISLAND	CONNECTICUT	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	563	-	3,353	437	120	4,202
ON BOATS AND SHORE:						
REGULAR	4,302	90	817	501	76	5,786
CASUAL	4,395	292	5,715	756	252	11,440
TOTAL	9,260	382	9,885	1,694	428	21,426
VESSELS, MOTOR	141	-	4,416	112	41	733
GROSS TONNAGE	6,669	-	37,403	4,574	1,319	47,961
BOATS:						
MOTOR	5,476	173	3,066	1,116	256	10,070
OTHER	397	6	221	23	20	676
GEAR:						
HAUL SEINES, COMMON	1	-	2	2	4	15
LENGTH, YARDS	100	-	465	290	270	1,125
STOP SEINES	166	-	-	-	-	166
LENGTH, YARDS	83,750	-	-	-	-	83,750
PURSE SEINES:						
HERRING	2	-	-	-	-	2
LENGTH, YARDS	800	-	-	-	-	800
MACKEREL	-	-	3	1	-	4
LENGTH, YARDS	-	-	1,150	100	-	1,250
TUNA	1	-	10	3	-	10
LENGTH, YARDS	800	-	7,460	2,630	-	7,460
OTHER	10	-	5	-	-	15
LENGTH, YARDS	3,600	-	2,600	-	-	6,200
BAG NETS	10	4	-	-	-	14
OTTER TRAWLS:						
FISH	119	-	402	63	52	613
YARDS AT MOUTH	2,626	-	10,762	2,036	1,022	15,322
SHRIMP	28	-	-	-	-	28
YARDS AT MOUTH	532	-	-	-	-	532
WEIRS	74	7	-	-	-	81
POUND NETS, FISH	-	-	60	1	-	61
FLOATING TRAPS	5	-	21	18	-	44
FYKE AND HOOP NETS, FISH	-	-	-	-	5	5
POTS AND TRAPS:						
CONCH	-	-	100	285	630	1,015
CRAB	78	150	67	1,145	-	1,460
EEL	-	-	255	395	495	1,145
LOBSTER	730,528	16,500	94,540	7,709	7,623	857,100
BOX TRAPS	5	-	-	-	-	5
GILL NETS:						
ANCHOR, SET OR STAKE	10	-	19	1	10	39
SQUARE YARDS	64,920	-	110,656	100	1,662	174,558
DRIFT:						
SHAD	-	-	-	-	51	51
SQUARE YARDS	-	-	-	-	101,956	101,956
OTHER	-	1	24	-	9	34
SQUARE YARDS	-	2,500	245,000	-	3,622	251,122

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

95

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	MAINE	NEW HAMPSHIRE	MASSACHUSETTS	RHODE ISLAND	CONNECTICUT	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
GEAR - CONTINUED:						
LINES:						
HAND	333	354	2,199	199	29	3,114
HOOKS	410	708	2,475	310	58	3,961
TROLL	-	-	15	30	-	45
HOOKS	-	-	15	30	-	45
LONG OR SET WITH HOOKS	80	5	97	5	-	185
HOOKS	315,000	7,500	222,245	2,610	-	546,205
DIP NETS, COMMON	90	-	207	-	107	404
HARPOONS:						
SWORDFISH	-	-	55	14	-	68
OTHER	19	-	8	-	-	27
SPEARS	-	-	20	-	1	21
DREDGES:						
CLAM	-	-	35	-	9	73
YARDS AT MOUTH	-	-	22	30	9	60
MUSSEL	-	-	-	2	-	2
YARDS AT MOUTH	-	-	21	-	19	45
OYSTER, COMMON	5	-	17	-	29	51
YARDS AT MOUTH	64	-	994	16	-	1,070
SCALLOP	118	-	1,096	13	-	1,213
YARDS AT MOUTH	-	-	-	-	-	-
TONGS:						
OYSTER	-	-	13	16	13	42
OTHER	-	-	177	876	2	1,055
RAKES	390	-	1,208	216	-	1,814
HOES	2,548	37	658	11	-	3,254
FORKS	-	-	39	-	-	39
DIVING OUTFITS	-	-	616	-	-	616

CATCH BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	MAINE		NEW HAMPSHIRE		MASSACHUSETTS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
ALEWIVES	1,480	22	159	2	11,735	119
ANCHOVIES	-	-	-	-	53	1
ANGLERFISH	-	-	-	-	31	1
BILLFISH	-	-	-	-	3	(1)
BLUEFISH	-	-	-	-	47	7
BONITO	-	-	-	-	48	4
BUTTERFISH	13	1	-	-	777	92
COD	1,950	88	75	5	37,221	2,642
CUSK	470	23	8	(1)	1,431	87
EELS:						
COMMON	37	7	5	1	24	6
CONGER	-	-	-	-	3	(1)
FLOUNDERS:						
BLACKBACK	455	22	-	-	11,786	1,338
DAB	49	3	-	-	4,602	353
FLUKE	-	-	-	-	2,296	716
GRAY SOLE	711	66	-	-	2,364	288
LEMON SOLE	1	(1)	-	-	1,958	488
YELLOWTAIL	-	-	-	-	68,875	4,576
TOTAL FLOUNDERS	1,216	91	-	-	91,681	7,759
HADDOCK:						
HADDOCK	2,877	245	40	4	120,940	11,444
HAKE:						
RED	-	-	-	-	5,068	55
WHITE	3,564	125	1	(1)	2,526	126
HALIBUT	92	31	2	1	178	57
HERRING, SEA	152,317	1,649	-	-	1,853	35
LAUNCE	-	-	-	-	245	15
MACKEREL	304	23	2	1	2,243	217
MENHADEN	-	-	-	-	345	4
OCEAN PERCH	63,905	2,936	-	-	44,387	2,211
POLLOCK	2,489	73	10	(1)	12,093	597
SALMON	1	1	-	-	-	-

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	MAINE		NEW HAMPSHIRE		MASSACHUSETTS	
	QUANT. TY	VALUE	QUANTI TY	VALUE	QUANTI TY	VALUE
FISH - CONTINUED						
SCUP OR PORGY	-	-	-	-	747	44
SEA BASS	-	-	-	-	17	2
SHAD	-	-	-	-	22	1
SHARKS:						
GRAYFISH	757	5	-	-	-	-
UNCLASSIFIED	2	(1)	-	-	25	1
TOTAL SHARKS	759	5	-	-	25	1
SKATES						
SMELT	146	40	70	25	51	2
STRIPED BASS	1	(1)	-	-	480	69
STURGEON	1	(1)	-	-	6	1
SWORDFISH	445	101	-	-	1,717	431
TAUTOG	-	-	-	-	10	(1)
TILEFISH	-	-	-	-	93	13
TUNA						
BLUEFIN	912	60	2	(1)	4,957	269
SKIPJACK	-	-	-	-	1,588	79
UNCLASSIFIED	-	-	-	-	8	1
TOTAL TUNA	912	60	2	(1)	6,553	349
WHITE PERCH						
WHITING	15,942	242	-	-	68	8
WOLFFISH	49	2	(1)	(1)	719	37
UNCLASSIFIED:						
FOR FOOD	26	1	-	-	4,797	303
BAIT, REDUCTION, AND ANIMAL FOOD	1,235	9	-	-	24,037	243
TOTAL FISH	250,241	5,775	365	39	439,248	28,544
SHELLFISH, ETC.						
CRABS:						
GREEN	-	-	45	2	18	2
ROCK	2,011	84	25	1	33	5
TOTAL CRABS	2,011	84	70	3	51	7
LOBSTERS, NORTHERN						
SHRIMP	22,604	12,636	747	388	4,506	2,565
	538	64	-	-	23	3
CLAMS:						
HARD:						
PUBLIC	2	2	-	-	1,460	1,025
PRIVATE	-	-	-	-	14	14
RAZOR	-	-	-	-	24	8
SOFT, PUBLIC	1,832	766	-	-	948	606
TOTAL CLAMS	1,834	768	-	-	2,446	1,653
CONCHS						
MUSSELS, SEA	-	2	-	-	32	4
OYSTERS, MARKET:	20	-	-	-	706	53
PUBLIC:						
SPRING	2	2	-	-	9	13
FALL	-	-	-	-	9	11
PRIVATE:						
SPRING	-	-	-	-	14	16
FALL	-	-	-	-	12	16
TOTAL OYSTERS	2	2	-	-	44	56
PERIWINKLES AND COCKLES						
SCALLOPS:	34	11	-	-	-	-
BAY	-	-	-	-	333	422
SEA	1,186	548	-	-	16,608	7,709
SQUID	7	(1)	-	-	1,971	107
SEA URCHINS	84	3	-	-	-	-
IRISH MOSS	5,331	100	-	-	1,636	29
BLOODWORMS	731	697	8	7	77	68
SANDWORMS	813	506	11	6	12	14
TOTAL SHELLFISH, ETC.	35,395	15,441	836	404	28,445	12,690
GRAND TOTAL	285,636	21,216	1,201	443	467,693	41,234

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

97

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	RHODE ISLAND		CONNECTICUT		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
ALEWIVES	129	2	3	(1)	13,497	145
ANCHOVIES	28	1	-	-	83	2
ANGLERFISH	12	(1)	(1)	(1)	43	1
BILLFISH	-	-	-	-	5	(1)
BLUEFISH	62	11	52	8	161	26
BONITO	61	6	1	(1)	110	10
BUTTERFISH	5,122	458	97	9	6,009	560
CARP	-	-	2	(1)	2	(1)
COD	509	48	136	13	39,901	2,794
CUSK	-	-	-	-	1,909	110
EELS:						
COMMON	36	9	15	3	117	26
CONGER	14	1	-	-	17	1
FLOUNDERS:						
BLACKBACK	2,918	172	983	58	16,142	1,590
DAB	1	(1)	-	-	4,652	356
FLUKE	512	161	98	22	2,906	899
GRAY SOLE	14	1	2	(1)	3,091	355
LEMON SOLE	7	1	1	(1)	1,967	489
YELLOWTAIL	8,998	472	136	7	78,009	5,055
TOTAL FLOUNDERS	12,450	807	1,220	87	106,767	8,744
HADDOCK	21	2	3	(1)	123,881	11,695
HAKE:						
RED	150	3	21	(1)	5,239	58
WHITE	34	2	1	(1)	6,126	253
HALIBUT	-	-	-	-	272	89
HERRING, SEA	312	14	31	1	154,513	1,699
KING WHITING OR "KINGFISH"	1	(1)	-	-	1	(1)
LAUNCE	104	16	-	-	349	31
MACKEREL	-	(1)	(1)	(1)	2,549	241
MEMPHEN	3	(1)	5	(1)	353	4
OCEAN PERCH	-	(1)	-	-	108,292	5,147
OCEAN POUT	1	(1)	-	-	1	(1)
POLLOCK	9	(1)	-	-	14,601	670
SALMON	-	-	-	-	1	1
SCUP OR PORGY	8,469	509	759	76	9,975	629
SEA BASS	114	18	29	4	160	24
SEA ROBIN	131	2	3	(1)	134	2
SEA TROUT OR WEAKFISH	-	-	-	-	-	-
GRAY	2	(1)	1	(1)	3	(1)
SHAD	2	(1)	301	63	325	64
SHARKS:						
GRAYFISH	(1)	(1)	(1)	(1)	757	5
UNCLASSIFIED	3	(1)	1	(1)	31	1
TOTAL SHARKS	3	(1)	1	(1)	788	6
SKATES						
SMELTS	9	(1)	16	(1)	76	2
STRIPED BASS	(1)	(1)	-	-	216	65
STURGEON	71	13	30	5	582	87
SUCKERS	3	(1)	8	1	18	2
SWORDFISH	-	-	2	(1)	2	(1)
TAUTOG	169	45	-	-	2,331	577
TILEFISH	74	3	21	1	105	4
TUNA:						
BLUEFIN	101	11	-	-	194	24
SKIPJACK	720	47	-	-	6,591	376
UNCLASSIFIED	616	37	-	-	2,204	116
TOTAL TUNA	-	-	-	-	8	1
TOTAL TUNA	1,336	84	-	-	8,803	493

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	RHODE ISLAND		CONNECTICUT		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED						
WHITE PERCH	10	1	-	-	78	9
WHITING	3,477	99	359	10	86,558	1,914
WOLFFISH	-	-	-	-	768	39
UNCLASSIFIED:						
FOR FOOD	8	1	4	(1)	4,835	305
BAIT, REDUCTION, AND ANIMAL FOOD	32,341	238	587	8	58,200	498
TOTAL FISH	65,398	2,404	3,718	289	758,970	37,051
SHELLFISH, ETC.						
CRABS:						
BLUE, HARD	-	-	(1)	(1)	(1)	(1)
GREEN	8	1	-	-	71	5
ROCK	227	25	-	-	2,296	115
TOTAL CRABS	235	26	(1)	(1)	2,367	120
LOBSTERS, NORTHERN	592	339	4/1	284	29,120	10,212
SHRIMP	-	-	-	-	561	67
CLAMS:						
HARD:						
PUBLIC	2,224	1,295	2	1	3,688	2,323
PRIVATE	-	-	285	125	299	139
OCEAN QUAHOG	104	10	-	-	104	10
FAZOR	-	-	-	-	24	6
SOFT, PUBLIC	1	1	-	-	2,781	1,393
TOTAL CLAMS	2,329	1,306	287	126	6,896	3,873
CONCHS	78	16	82	14	192	34
MUSSELS, SEA	1	(1)	-	-	727	55
OYSTERS, MARKET:						
PUBLIC:						
SPRING	4	5	2	1	17	21
FALL	7	7	-	-	16	18
PRIVATE:						
SPRING	-	-	237	278	251	294
FALL	-	-	156	184	168	200
TOTAL OYSTERS	11	12	395	463	452	533
PERIWINKLES AND COCKLES	-	-	-	-	34	11
SCALLOPS:						
BAY	2	2	56	68	391	492
SEA	-	-	-	-	17,794	8,257
SQUID	666	44	38	3	2,682	154
SEA URCHINS	-	-	-	-	84	3
IRISH MOSS	-	-	-	-	6,967	129
BLOODWORMS	-	-	-	-	816	772
SANDWORMS	-	-	-	-	836	526
TOTAL SHELLFISH, ETC.	3,914	1,745	1,329	958	69,919	31,238
GRAND TOTAL	69,312	4,149	5,047	1,247	828,889	68,289

1/ LESS THAN 500 POUNDS OR \$500.

NOTE:--STATISTICS ON THE CATCH ARE SHOWN IN ROUND (LIVE) WEIGHT EXCEPT FOR SHELL MOLLUSKS. CLAMS, CONCHS, MUSSELS, OYSTERS, AND PERIWINKLES AND COCKLES ARE REPORTED IN WEIGHT OF TOTAL MEATS. SCALLOPS ARE REPORTED IN WEIGHT OF EDIBLE MEATS.

NEW ENGLAND FISHERIES

99

CATCH OF CERTAIN SHELLFISH, 1963

(NUMBER AND BUSHELS)

SPECIES		MAINE		NEW HAMPSHIRE		MASSACHUSETTS	
		QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CRABS:							
GREEN	NUMBER	-	-	643,050	\$2,025	262,936	\$1,976
ROCK	DO	6,032,700	\$84,522	75,000	675	100,200	5,084
CLAMS:							
HARD:	U. S. STANDARD						
PUBLIC	BUSHELS	209	1,515	-	-	132,755	1,025,237
PRIVATE	DO	-	-	-	-	1,227	14,500
RAZOR	DO	-	-	-	-	1,519	7,950
SOFT, PUBLIC	DO	122,107	786,765	-	-	72,685	605,734
CONCHS	DO	-	-	-	-	2,100	4,200
MUSSELS, SEA	DO	1,360	1,407	-	-	70,550	52,975
OYSTERS, MARKET:							
PUBLIC:							
SPRING	DO	240	1,798	-	-	1,400	13,381
FALL	DO	-	-	-	-	1,338	11,528
PRIVATE:							
SPRING	DO	-	-	-	-	2,215	16,200
FALL	DO	-	-	-	-	1,923	15,970
PERIWINKLES AND							
COCKLES	DO	1,894	10,704	-	-	-	-
SCALLOPS:							
BAY	DO	-	-	-	-	55,533	421,614
SEA	DO	197,667	547,923	-	-	2,767,950	7,708,620
SPECIES		RHODE ISLAND		CONNECTICUT		TOTAL	
		QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CRABS:							
BLUE, HARD	NUMBER	-	-	720	\$101	720	\$101
GREEN	DO	110,340	\$1,000	-	-	1,016,326	5,001
ROCK	DO	907,200	24,644	-	-	7,115,100	115,125
CLAMS:							
HARD:	U. S. STANDARD						
PUBLIC	BUSHELS	185,292	1,295,464	150	962	318,406	2,323,178
PRIVATE	DO	-	-	23,767	124,549	24,994	139,049
OCEAN QUAHOG	DO	10,420	10,421	-	-	10,420	10,421
RAZOR	DO	-	-	-	-	1,519	7,950
SOFT, PUBLIC	DO	108	904	-	-	195,100	1,393,403
CONCHS	DO	5,213	15,377	5,440	14,142	12,753	33,719
MUSSELS, SEA	DO	140	284	-	-	72,050	54,636
OYSTERS, MARKET:							
PUBLIC:							
SPRING	DO	643	4,611	195	1,263	2,478	21,053
FALL	DO	971	6,917	-	-	2,309	18,445
PRIVATE:							
SPRING	DO	-	-	30,805	277,806	33,020	294,006
FALL	DO	-	-	20,325	183,560	22,248	199,530
PERIWINKLES AND							
COCKLES	DO	-	-	-	-	1,894	10,704
SCALLOPS:							
BAY	DO	300	2,700	9,097	67,630	64,930	491,944
SEA	DO	-	-	-	-	2,965,617	8,256,543

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

AVERAGE WEIGHTS OF CERTAIN SHELLFISH, 1963

SPECIES		MAINE	NEW HAMPSHIRE	MASSACHUSETTS	RHODE ISLAND	CONNECTICUT
		QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
CRABS:						
BLUE, HARD	NUMBER PER POUND	-	-	-	-	2.40
GREEN	DO	-	14.29	14.29	13.79	-
ROCK	DO	3.00	3.00	3.00	4.00	-
CLAMS:						
HARD:	LBS. OF MEATS					
PUBLIC	PER U. S. STANDARD BUSHEL	11.00	-	11.00	12.00	12.00
PRIVATE	DO	-	-	11.00	-	12.00
OCEAN QUAHOG	DO	-	-	-	10.00	-
RAZOR	DO	-	-	16.00	-	-
SOFT, PUBLIC	DO	15.00	-	13.00	13.00	-
CONCHS	DO	-	-	15.00	15.00	15.00
MUSSELS, SEA	DO	15.00	-	10.00	10.00	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	DO	7.50	-	6.50	7.00	7.70
FALL	DO	-	-	6.50	7.00	-
PRIVATE:						
SPRING	DO	-	-	6.50	-	7.70
FALL	DO	-	-	6.50	-	7.70
PERIWINKLES AND						
COCKLES	DO	18.00	-	-	-	-
SCALLOPS:						
BAY	DO	-	-	6.00	6.00	6.20
SEA	DO	6.00	-	6.00	-	6.20

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

NEW ENGLAND FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	MAINE		NEW HAMPSHIRE	
	QUANTITY	VALUE	QUANTITY	VALUE
ALFIVIVES:				
SALTED AND PICKLED	POUNDS	(1)	-	-
SMOKED	DO	1,690	\$169	-
COD:				
FILLETS, FRESH AND FROZEN.	DO	160,295	49,339	-
SALTED (WHOLE, FILLETS, AND STRIPS)	DO	(1)	(1)	-
SMOKED	DO	(1)	(1)	-
CUSH:				
FILLETS, FRESH AND FROZEN.	DO	79,468	24,233	-
SALTED	DO	(1)	(1)	-
FLOUNDERS:				
FILLETS, FRESH AND FROZEN.	DO	(1)	(1)	-
SPECIALTIES, FROZEN (BREADED IN SAUCES AND DINNERS)	DO	(1)	(1)	-
HADDOCK:				
FILLETS, FRESH AND FROZEN.	DO	791,001	310,428	-
CANNED, FINNAN HADDIE, CREAMED	STANDARD CASES	(1)	(1)	-
SMOKED, FINNAN HADDIE	POUNDS	(1)	(1)	-
HAKE:				
FILLETS, FRESH AND FROZEN.	DO	169,224	55,615	-
SALTED	DO	(1)	(1)	-
HALIBUT, SPECIALTIES, FROZEN (AU GRATIN AND DINNERS)	DO	(1)	(1)	-
HERRING, SEA:				
CANNED:				
SARDINES	STANDARD CASES	1,619,235	13,243,902	-
SPECIALTIES (COCKTAILS AND TIDBITS)	DO	(1)	(1)	-
SMOKED	POUNDS	185,684	58,866	-
MEAL AND SCRAP	TONS	4,647	516,332	-
O. L.	1,000 POUNDS	57c	35,576	-
OCEAN PERCH, FILLETS:				
FRESH AND FROZEN	POUNDS	16,898,699	4,845,016	-
BREADED, RAW, AND COOKED, FROZEN.	DO	(1)	(1)	-
POLLOCK:				
FILLETS, FRESH AND FROZEN.	DO	519,350	87,206	-
SALTED (WHOLE, FILLETS, AND STRIPS)	DO	(1)	(1)	-
SMOKED	DO	(1)	(1)	-
DRIED	DO	(1)	(1)	-
TUNA, CANNED:				
REGULAR	STANDARD CASES	(1)	(1)	-
SPECIALTIES (SHERRY DIPS).	DO	(1)	(1)	-
WHITING, FILLETS, FRESH AND FROZEN	POUNDS	435,030	65,37c	-
WOLFFISH, FILLETS:				
FRESH AND FROZEN	DO	(1)	(1)	-
BREADED AND COOKED, FROZEN	DO	(1)	(1)	-
CRABS:				
COOKED MEAT, FRESH AND FROZEN.	DO	132,501	152,037	-
CANNED:				
REGULAR	STANDARD CASES	(1)	(1)	-
SPECIALTIES (DEVILED, DIPS, AND SPREADS)	DO	(1)	(1)	-
LOBSTERS, NORTHERN:				
FRESH AND FROZEN:				
COOKED MEAT.	POUNDS	298,440	904,887	38,500
WHOLE	DO	(1)	(1)	-
SPECIALTIES (NEWBURGS, PIES, DINNERS, ETC.)	DO	(1)	(1)	-
CANNED:				
REGULAR	STANDARD CASES	(1)	(1)	-
SPECIALTIES (DIPS, BISQUE, SPREADS, ETC.)	DO	(1)	(1)	-
SHRIMP:				
RAW HEADLESS, FRESH	POUNDS	15,050	13,850	-
SPECIALTIES, CANNED (DIPS)	STANDARD CASES	(1)	(1)	-
CLAMS:				
SOFT, FRESH AND FROZEN, SHUCKED, CANNED:				
WHOLE AND MINCED	STANDARD CASES	17,528	251,698	-
CHOWDER AND JUICE.	DO	568,852	3,754,404	-
SPECIALTIES (A LA KING, STEWS, STEAMED, ETC.)	DO	(1)	(1)	-

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	MAINE		NEW HAMPSHIRE	
	QUANTITY	VALUE	QUANTITY	VALUE
SCALLOPS, SEA:				
FRESH AND FROZEN:				
SHUCKED POUNDS	(1)	(1)	-	-
BREADED:				
RAW DO	(1)	(1)	-	-
COOKED DO	(1)	(1)	-	-
SPECIALTIES (DINNERS, ETC.) DO	(1)	(1)	-	-
UNCLASSIFIED:				
FRESH AND FROZEN, PACKAGED:				
FISH:				
PORTIONS:				
RAW:				
NOT BREADED DO	(1)	(1)	-	-
BREADED DO	(1)	(1)	-	-
BREADED AND COOKED DO	(1)	(1)	-	-
STICKS, BREADED, COOKED DO	(1)	(1)	-	-
FISH AND SHELLFISH DO	6,410,678	\$3,151,313	-	-
CANNED STANDARD CASES	169,479	1,970,327	-	-
CURED POUNDS	389,411	77,035	-	-
INDUSTRIAL	-	4,578,090	-	-
TOTAL	-	34,877,442	-	\$554,867
ITEM	MASSACHUSETTS		RHODE ISLAND AND CONNECTICUT	
	QUANTITY	VALUE	QUANTITY	VALUE
ANGLERFISH, FILLETS, FROZEN POUNDS	(1)	(1)	-	-
BUTTERFISH, SMOKED DO	(1)	(1)	-	-
CHUBS, SMOKED DO	(1)	(1)	-	-
COD:				
FRESH AND FROZEN:				
FILLETS DO	5,140,785	\$1,572,142	-	-
STEAKS DO	589,723	129,834	-	-
BREADED AND COOKED, FROZEN:				
FILLETS DO	(1)	(1)	-	-
CAKES DO	(1)	(1)	-	-
CANNED, SALTED STANDARD CASES	(1)	(1)	-	-
SALTED (WHOLE FILLETS, AND STRIPS) POUNDS	(1)	(1)	-	-
SMOKED DO	(1)	(1)	-	-
CUSK, FILLETS, FRESH AND FROZEN DO	183,244	56,031	-	-
FLOUNDERS:				
FILLETS:				
FRESH AND FROZEN DO	28,432,709	9,249,428	(1)	(1)
BREADED AND COOKED, FROZEN DO	812,991	341,732	-	-
SPECIALTIES, FROZEN (IN SAUCES AND DINNERS) DO	(1)	(1)	-	-
HADDOCK:				
FILLETS:				
FRESH AND FROZEN DO	34,685,265	12,394,821	-	-
BREADED AND COOKED, FROZEN DO	655,217	302,171	-	-
DINNERS, BREADED, FROZEN DO	(1)	(1)	-	-
SMOKED:				
FILLETS DO	(1)	(1)	-	-
FINNAN HADDIE DO	(1)	(1)	-	-
HAKE, FILLETS, FRESH AND FROZEN DO	87,790	26,079	-	-
HALIBUT:				
FILLETS, FRESH DO	(1)	(1)	-	-
STEAKS, FROZEN DO	(1)	(1)	-	-
SPECIALTIES, FROZEN (AU GRATIN AND DINNERS) DO	(1)	(1)	-	-
HERRING, SEA:				
SALTED DO	(1)	(1)	-	-
SMOKED DO	48,511	21,812	-	-
MACKEREL:				
FILLETS, FRESH AND FROZEN DO	18,162	5,482	-	-
SMOKED DO	(1)	(1)	-	-
OCEAN PERCH:				
FILLETS:				
FRESH AND FROZEN DO	13,351,122	3,645,245	-	-
BREADED, RAW AND COOKED, FROZEN DO	863,312	370,484	-	-
MEAL AND SCRAP TONS	(1)	(1)	-	-
OIL 1,000 POUNDS	(1)	(1)	-	-
POLLOCK:				
FILLETS, FRESH AND FROZEN POUNDS	4,927,806	972,406	-	-
CANNED, FLAKES STANDARD CASES	(1)	(1)	-	-
SALTED (WHOLE, FILLETS, AND STRIPS) POUNDS	(1)	(1)	-	-
SMOKED DO	(1)	(1)	-	-
SABLEFISH, SMOKED DO	(1)	(1)	-	-
SALMON:				
STEAKS, FROZEN DO	(1)	(1)	-	-
SMOKED DO	(1)	(1)	-	-

SEE FOOTNOTE AT END OR TABLE.

(CONTINUED ON NEXT PAGE)

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	MASSACHUSETTS		RHODE ISLAND AND CONNECTICUT	
	QUANTITY	VALUE	QUANTITY	VALUE
SHAD, FILLETS, FRESH (BONED)	POUNDS	(1)	21,867	\$32,800
SMELT, COOKED, FROZEN	DO	(1)	-	-
SWORDFISH, STEAKS, FROZEN	DO	(1)	-	-
WHITEFISH, SMOKED	DO	(1)	-	-
WHITING, FILLETS, FRESH AND FROZEN	DO	1,969,496	\$449,744	-
WOLFFISH, FILLETS, FRESH AND FROZEN	DO	235,914	EC, 3 1/2	-
CRABS, COOKED MEAT, FRESH AND FROZEN	DO	87,136	1-2,96c	-
MUSSELS (NORTHERN):				
FRESH AND FROZEN, COOKED MEAT	DO	662,926	2,164,65c	43,201
CANNED, SPECIALTIES (DIPS, BISQUE, SPREADS, ETC.),	STANDARD CASES	-	-	(1)
SHRIMP:				
COOKED:				
PEELED AND DEVEINED	POUNDS	(1)	(1)	-
BREADED, FROZEN	DO	608,661	676,517	-
SPECIALTIES, FROZEN (CROQUETTES AND DINNERS)	DO	(1)	(1)	-
CLAMS:				
FRESH AND FROZEN:				
SHUCKED:				
HARD AND SURF	GALLONS	46,083	107,120	336,740
SOFT	DO	98,540	583,132	1,320
BREADED, RAW AND COOKED	POUNDS	(1)	(1)	(1)
SPECIALTIES (STUFFED, SLICED, ETC.)	DO	926,000	477,575	-
CANNED:				
W-HOLE AND MINCED	STANDARD CASES	(1)	(1)	(1)
CHOWDER AND JUICE	DO	(1)	(1)	(1)
SPECIALTIES (A LA KING, STEWS, STEAMED, ETC.)	DO	(1)	(1)	(1)
OYSTERS, SHUCKED, FRESH	GALLONS	-	-	4,356
SCALLOPS:				
FRESH AND FROZEN:				
BAY, SHUCKED	DO	38,080	421,914	6,612
SEA:				
SHUCKED	POUNDS	5,727,223	2,952,319	(1)
BREADED:				
RAW	DO	271,494	186,944	-
COOKED	DO	2,443,553	1,732,699	-
SPECIALTIES (DINNERS, ETC.)	DO	(1)	(1)	-
UNCLASSIFIED:				
FRESH AND FROZEN, PACKAGED:				
FISH:				
PORTIONS:				
RAW:				
NOT BREADED	DO	1,013,832	344,040	-
BREADED	DO	21,492,336	7,526,439	-
BREADED AND COOKED	DO	7,034,662	2,706,516	-
STICKS, BREADED:				
RAW	DO	777,835	295,984	-
COOKED	DO	41,075,416	17,041,375	-
CAKES, COOKED	DO	1,378,506	479,884	-
FISH AND SHELLFISH	DO	9,764,416	6,586,997	2,606,209
CANNED	STANDARD CASES	971,590	5,422,670	47,530
CURED	POUNDS	1,615,089	1,143,314	-
INDUSTRIAL	-	-	1,761,489	-
TOTAL	-	-	-	877,920
TOTAL	-	-	-	3,897,802
TOTAL	-	-	82,406,539	-
TOTAL	-	-	-	3,897,802

1/ INCLUDED WITH UNCLASSIFIED.

NOTE:--SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR A FOREIGN COUNTRY; THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE. CERTAIN ITEMS ARE SHOWN IN AN INTERMEDIATE AND ALSO IN A MORE ADVANCED STAGE OF PROCESSING.



NEW ENGLAND FISHERIES

103

SUMMARY OF MANUFACTURED PRODUCTS, 1963

(VALUE IN THOUSAND DOLLARS)

ITEM		QUANTITY	VALUE
PACKAGED PRODUCTS, FRESH AND FROZEN:			
NOT BREADED:			
FISH	1,000 POUNDS	111,964	35,157
SHELLFISH	DO	13,859	11,385
BREADED:			
FISH	DO	75,766	29,463
SHELLFISH	DO	3,688	2,479
SPECIALTIES, FISH AND SHELLFISH (NOT BREADED AND BREADED)	DO	14,716	9,043
CANNED:			
FISH	1,000 STANDARD CASES	1,805	15,508
SHELLFISH	DO	689	4,985
ANIMAL FOOD	DO	901	4,538
CURED:			
SALTED AND PICKLED (INCLUDING DRIED)	1,000 POUNDS	765	259
SMOKED	DO	1,475	1,042
INDUSTRIAL	-	-	7,878
TOTAL	-	-	121,737

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

STATE	VALUE
MAINE	34,877
NEW HAMPSHIRE	555
MASSACHUSETTS	82,407
RHODE ISLAND	3,414
CONNECTICUT	484
TOTAL	121,737

WHOLESALE AND MANUFACTURING, 1963

ITEM	MAINE	NEW HAMPSHIRE	MASSACHUSETTS	RHODE ISLAND	CONNECTICUT	TOTAL
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
WHOLESALE AND MANUFACTURING:						
ESTABLISHMENTS	252	11	241	32	11	547
PERSONS ENGAGED:						
AVERAGE FOR SEASON	6,438	96	5,528	392	75	12,529
AVERAGE FOR YEAR	2,739	79	4,937	317	69	8,141

NEW ENGLAND FISHERIES

MAINE

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON NUMBER	STOP SEINES NUMBER	PURSE SEINES			BAG NETS NUMBER
			HERRING NUMBER	TUNA NUMBER	OTHER NUMBER	
FISHERMEN:						
ON VESSELS	-	71	9	17	3	-
ON BOATS AND SHORE:						
REGULAR	-	232	-	-	23	3
CASUAL	-	447	-	-	14	9
TOTAL	2	750	9	17	40	12
VESSELS, MOTOR	-	17	2	1	1	-
GROSS TONNAGE	-	373	40	366	24	-
BOATS:						
MOTOR	1	183	1	1	9	6
OTHER	-	214	4	-	15	6
GEAR:						
NUMBER	1	166	2	1	10	10
LENGTH, YARDS	100	83,750	800	800	3,600	-
ITEM	OTTER TRAWLS		WEIRS NUMBER	FLOATING TRAPS NUMBER	POTS AND TRAPS	
	FISH NUMBER	SHIMP NUMBER			CRAB NUMBER	LOBSTER NUMBER
FISHERMEN:						
ON VESSELS	335	-	-	-	-	31
ON BOATS AND SHORE:						
REGULAR	49	28	61	6	4	3,044
CASUAL	20	2	64	3	-	2,628
TOTAL	404	30	145	9	4	5,703
VESSELS, MOTOR	76	-	-	-	-	30
GROSS TONNAGE	7,075	-	-	-	-	318
BOATS:						
MOTOR	43	28	74	5	4	5,153
OTHER	-	-	71	4	-	12
GEAR:						
NUMBER	119	28	74	5	78	730,528
YARDS AT MOUTH	2,628	532	-	-	-	-
ITEM	POTS AND TRAPS -CONTINUED BOX TRAP NUMBER	GILL NETS, ANCHOR, SET OR STAKE NUMBER	LINES		DIP NETS, COMMON NUMBER	HARPOONS NUMBER
			HAND NUMBER	LONG OR SET WITH HOOKS NUMBER		
FISHERMEN:						
ON VESSELS	-	15	8	14	-	5
ON BOATS AND SHORE:						
REGULAR	-	1	85	112	3	17
CASUAL	-	5	240	15	87	11
TOTAL	7	21	333	141	90	33
VESSELS, MOTOR	-	5	5	4	-	2
GROSS TONNAGE	-	106	50	231	-	44
BOATS:						
MOTOR	2	2	62	75	8	17
OTHER	-	-	-	-	1	-
GEAR:						
NUMBER	5	10	333	80	90	19
SQUARE YARDS	-	64,920	-	-	-	-
HOOKS	-	-	410	315,000	-	-
ITEM	DREDGES		RAKES NUMBER	HOES NUMBER	BY HAND NUMBER	TOTAL, EXCLUSIVE OF DUPLI- CATION NUMBER
	OYSTER, COMMON NUMBER	SCALLOP NUMBER				
FISHERMEN:						
ON VESSELS	-	85	-	-	-	563
ON BOATS AND SHORE:						
REGULAR	-	57	-	1,333	52	4,302
CASUAL	8	14	390	1,215	33	4,395
TOTAL	8	156	390	2,548	85	9,260
VESSELS, MOTOR	-	10	-	-	-	141
GROSS TONNAGE	-	775	-	-	-	8,869
BOATS:						
MOTOR	5	48	291	-	-	5,470
OTHER	-	-	75	-	-	397
GEAR:						
NUMBER	5	64	390	2,548	-	-
YARDS AT MOUTH	5	118	-	-	-	-

NEW ENGLAND FISHERIES

105

MAINE - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		STOP SEINES		PURSE SEINES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
HERRING, SEA	-	-	135,447,900	\$1,451,033	930,600	\$7,988
MACKEREL	-	-	11,700	608	13,400	675
SMELT	1,700	\$141	-	-	-	-
STRIPED BASS	-	-	1,400	165	-	-
TUNA, BLUEFIN	-	-	-	-	880,000	57,200
TOTAL	1,700	141	135,460,400	1,451,806	1,824,000	65,863

SPECIES	BAG NETS		OTTER TRAWLS		WEIRS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUTTERFISH	-	-	400	\$48	-	-
COD	-	-	1,122,000	50,206	-	-
CUSK	-	-	264,100	13,942	-	-
FLOUNDERS:						
BLACKBACK	-	-	49,300	2,786	-	-
DAB	-	-	450,800	21,843	-	-
GRAY SOLE	-	-	710,600	65,979	-	-
LEMON SOLE	-	-	500	36	-	-
HADDOCK	-	-	2,662,800	225,934	-	-
HAKE, WHITE	-	-	553,600	23,237	-	-
HALIBUT	-	-	31,800	9,946	-	-
HERRING, SEA	-	-	-	-	15,928,600	\$189,799
MACKEREL	-	-	-	-	31,800	1,996
OCEAN PERCH	-	-	63,904,800	2,935,653	-	-
POLLOCK	-	-	1,659,000	51,636	-	-
SHARKS, GRAYFISH	-	-	900	6	-	-
SMELT	55,500	\$15,727	-	-	-	-
STURGEON	-	-	100	4	-	-
WHITING	-	-	15,941,200	241,613	-	-
WOLFFISH	-	-	47,700	1,514	-	-
UNCLASSIFIED:						
FOR FOOD	-	-	22,700	931	-	-
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	1,225,400	8,767	-	-
LOBSTERS, NORTHERN	-	-	400	312	-	-
SHRIMP	-	-	538,500	63,886	-	-
TOTAL	55,500	15,727	89,186,600	3,718,279	15,960,400	191,795

SPECIES	FLOATING TRAPS		POTS AND TRAPS		GILL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUTTERFISH	12,700	\$1,428	-	-	-	-
CUSK	1,000	27	-	-	443,200	\$25,375
EELS, COMMON	-	-	36,700	\$7,170	5,500	342
HADDOCK	-	-	-	-	53,700	5,260
HAKE, WHITE	-	-	-	-	106,600	5,406
HALIBUT	-	-	-	-	100	27
HERRING, SEA	10,300	222	-	-	-	-
MACKEREL	247,000	19,806	-	-	-	-
POLLOCK	-	-	-	-	139,100	6,662
SALMON	600	600	-	-	-	-
SHARKS:						
GRAYFISH	-	-	-	-	651,400	4,055
UNCLASSIFIED	-	-	-	-	1,500	48
SMELT	-	-	-	-	7,200	1,579
STURGEON	200	14	-	-	400	64
WHITING	900	17	-	-	-	-
WOLFFISH	-	-	-	-	1,100	41
UNCLASSIFIED, FOR BAIT, REDUCTION, AND ANIMAL FOOD	900	18	-	-	-	-
CRABS, ROCK	-	-	2,010,900	84,522	-	-
LOBSTERS, NORTHERN	-	-	22,803,900	12,635,514	-	-
SQUID	6,700	454	-	-	-	-
TOTAL	280,300	22,586	24,851,500	12,727,206	1,409,800	48,859

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

MAINE - CATCH BY GEAR, 1963 - Continued

SPECIES	LINES				DIP NETS	
	HAND		LONG OR SET WITH HOOKS		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE		
ALEWIVES	-	-	-	-	1,480,300	\$21,957
COD	84,300	\$2,213	309,700	\$9,823	-	-
CUSK	4,800	276	195,100	8,696	-	-
EELS, COMMON	-	-	-	-	500	65
FLOUNDERS:						
DAB	-	-	3,800	149	-	-
GRAY SOLE	-	-	151,500	61	-	-
HADDOCK	9,000	667	151,300	13,101	-	-
HAKE, WHITE	5,100	305	2,898,800	96,026	-	-
HALLIBUT	9,700	2,946	50,800	18,115	-	-
POLLOCK	585,300	12,092	105,200	3,092	-	-
SHARKS:						
GRAYFISH	-	-	104,900	681	-	-
UNCLASSIFIED	200	11	-	-	-	-
SMELT	75,900	21,254	-	-	5,600	1,170
SWORDFISH	-	-	445,200	101,291	-	-
TUNA, BLUEFIN	400	21	7,800	1,062	-	-
WOLFFISH	-	-	200	6	-	-
UNCLASSIFIED:						
FOR FOOD	-	-	300	19	2,500	147
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	9,000	73	-	-
SEA URCHINS	-	-	-	-	73,200	1,896
TOTAL	774,700	39,985	4,282,600	252,195	1,562,100	25,235

SPECIES	HARPOOLS		DREDGES		RAKES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
	SHARKS, UNCLASSIFIED	100	\$4	-	-	-
TUNA, BLUEFIN	23,500	2,121	-	-	-	-
OYSTERS, MARKET, PUBLIC	-	-	1,800	\$1,798	-	-
SPRING	-	-	1,186,000	547,923	-	-
SCALLOPS, SEA	-	-	-	-	5,331,000	\$99,542
IRISH MOSS	-	-	-	-	-	-
TOTAL	23,600	2,125	1,187,800	549,721	5,331,000	99,542

SPECIES	HOES		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE
	CLAMS:			
HARD, PUBLIC	2,300	\$1,515	-	-
SOFT, PUBLIC	1,831,600	786,765	-	-
MUSSELS, SEA	20,400	1,407	-	-
PERIWINKLES	-	-	34,100	\$10,704
SEA URCHINS	-	-	11,300	750
BLOODWORMS	730,900	696,887	-	-
SANDWORMS	613,300	506,578	-	-
TOTAL	3,398,500	1,993,152	45,400	11,454



DIP NET

NEW ENGLAND FISHERIES

107

NEW HAMPSHIRE

OPERATING UNITS BY GEAR, 1963

ITEM	BAG NETS	WEIRS	POTS AND TRAPS	
			CRAB	LOBSTER
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	-	-	1	90
CASUAL	4	8	1	134
TOTAL	4	8	2	224
BOATS:				
MOTOR	-	2	2	170
OTHER	-	3	-	5
GEAR, NUMBER	4	7	150	16,500

ITEM	GILL NETS, DRIFT	LINES		HOES	TOTAL, EXCLUSIVE OF DUPLICATION
		HAND	LONG OR SET WITH HOOKS		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	2	12	10	-	90
CASUAL	-	165	-	37	292
TOTAL	2	177	10	37	382
BOATS:					
MOTOR	1	4	5	-	173
OTHER	-	-	-	-	8
GEAR:					
NUMBER	1	354	5	37	-
LENGTH, YARDS	2,500	-	-	-	-
HOOKS	-	708	7,500	-	-

NEW HAMPSHIRE - CATCH BY GEAR, 1963

SPECIES	BAG NETS		WEIRS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	150,000	\$1,500	-	-
EELS, COMMON	-	-	5,000	1,250	-	-
SMELT	2,500	\$1,125	32,000	8,000	-	-
CRABS:						
GREEN	-	-	-	-	45,000	\$2,025
ROCK	-	-	-	-	25,000	875
LOBSTERS, NORTHERN	-	-	-	-	747,000	388,440
TOTAL	2,500	1,125	187,000	10,750	817,000	391,340

SPECIES	GILL NETS, DRIFT		LINES				HOES	
	POUNDS	VALUE	HAND		LONG OR SET WITH HOOKS		POUNDS	VALUE
COD	-	-	45,000	\$3,240	30,000	\$2,160	-	-
CUSK	-	-	-	-	8,000	320	-	-
HADDOCK	-	-	-	-	40,000	3,800	-	-
HAKE, WHITE	-	-	-	-	500	30	-	-
HALIBUT	-	-	500	175	1,800	630	-	-
MACKEREL	2,500	\$450	-	-	-	-	-	-
POLLOCK	-	-	7,500	300	2,500	100	-	-
SMELT	-	-	35,000	15,750	-	-	-	-
TUNA, BLUEFIN	-	-	2,000	120	-	-	-	-
WOLFFISH	-	-	-	-	400	20	-	-
BLOODWORMS	-	-	-	-	-	-	7,500	\$6,750
SANDWORMS	-	-	-	-	-	-	11,500	6,325
TOTAL	2,500	450	90,000	19,585	83,200	7,060	19,000	13,075

NEW ENGLAND FISHERIES

MASSACHUSETTS

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES			OTTER TRAWLS, FISH	FOUND NETS, FISH	FLOATING TRAPS	POTS AND TRAPS	
		MACKEREL	TUR A	OTHER				CONCH	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:	-	22	120	64	2,461	13	5	-	
ON VESSELS									
ON BOATS AND SHORE:									
REGULAR	3	-	-	-	6	59	16	1	
CASUAL	22	-	-	-	4	2	11	-	
TOTAL	25	22	120	64	2,471	74	32	1	
VESSELS, MOTOR	-	3	10	5	395	3	2	-	
GROSS TONNAGE	-	98	2,453	356	29,026	36	25	-	
BOATS:									
MOTOR	3	2	9	5	7	28	11	1	
OTHER	3	3	2	5	-	18	11	-	
GEAR:									
NUMBER	8	3	10	5	402	60	21	100	
LENGTH, YARDS	465	1,150	7,480	2,600	-	-	-	-	
YARDS AT MOUTH	-	-	-	-	10,762	-	-	-	

ITEM	POTS AND TRAPS - CONTINUED			GILL NETS			LINES	
	CRAB	EEL	LOBSTER	ANCHOR, SET OR STAKE	DRIFT	HAND	TROLL	LONG OR SET WITH HOOKS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:	-	-	-	28	2	10	-	149
ON VESSELS								
ON BOATS AND SHORE:								
REGULAR	3	1	322	10	26	89	-	75
CASUAL	-	7	908	6	11	1,952	13	50
TOTAL	3	8	1,230	44	39	2,051	13	274
VESSELS, MOTOR	-	-	-	8	1	4	-	34
GROSS TONNAGE	-	-	-	195	9	77	-	1,510
BOATS:								
MOTOR	3	7	911	11	23	412	5	63
OTHER	-	-	187	-	-	-	-	-
GEAR:								
NUMBER	87	255	94,540	19	24	2,199	15	97
SQUARE YARDS	-	-	-	110,656	245,000	-	-	-
HOOKS	-	-	-	-	-	2,475	15	222,245

ITEM	DIP NETS, COMMON	HARPOONS		SPEARS	DREDGES		
		SWORD FISH	OTHER		CLAM	OYSTER, COMMON	SCALLOP
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:	-	62	-	-	13	-	690
ON VESSELS							
ON BOATS AND SHORE:							
REGULAR	20	-	4	-	41	4	41
CASUAL	187	-	15	20	6	21	481
TOTAL	207	62	19	20	60	25	1,212
VESSELS, MOTOR	-	17	-	-	4	-	62
GROSS TONNAGE	-	481	-	-	143	-	6,081
BOATS, MOTOR	199	39	8	3	31	16	294
GEAR:							
NUMBER	207	55	8	20	35	21	994
YARDS AT MOUTH	-	-	-	-	22	17	1,096

ITEM	TONGS		RAKES	HOES	FORKS	DIVING OUTFITS	BY HAND	TOTAL, EXCLUSIVE OF DUPLICATION
	OYSTER	OTHER						
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:	-	-	-	-	-	-	-	3,353
ON VESSELS								
ON BOATS AND SHORE:								
REGULAR	8	61	103	125	6	-	-	817
CASUAL	5	116	1,105	533	33	616	24	5,715
TOTAL	13	177	1,208	658	39	616	24	9,885
VESSELS, MOTOR	-	-	-	-	-	-	-	488
GROSS TONNAGE	-	-	-	-	-	-	-	37,403
BOATS:								
MOTOR	13	177	1,165	-	22	-	-	3,058
OTHER	-	-	-	-	-	-	-	228
GEAR, NUMBER	13	177	1,208	658	39	616	-	-

NEW ENGLAND FISHERIES

MASSACHUSETTS - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	798,300	\$15,735	10,882,200	\$102,690	13,000	\$130
ANGLER FISH	-	-	-	-	30,400	1,388
BLUEFISH	-	-	-	-	2,700	320
BUTTERFISH	-	-	-	-	593,000	57,899
COD	-	-	-	-	32,884,100	2,345,752
CUSK	-	-	-	-	1,040,000	63,697
EELS, CONGER	-	-	-	-	2,600	62
FLOUNDERS:						
BLACKBACK	-	-	-	-	11,652,100	1,324,224
DAB	-	-	-	-	4,595,700	352,335
FLUKE	-	-	-	-	2,293,500	715,154
GRAY SOLE	-	-	-	-	2,362,800	288,206
LEMON SOLE	-	-	-	-	1,949,400	486,592
YELLOWTAIL	-	-	-	-	68,792,800	4,569,958
HADDOCK	-	-	-	-	118,160,400	11,167,495
HAKE:						
RED	-	-	-	-	5,062,300	54,760
WHITE	-	-	-	-	2,366,600	118,056
HALIBUT	-	-	-	-	125,600	32,761
HERRING, SEA	-	-	-	-	254,800	6,345
LAUNCE	244,900	15,305	-	-	-	-
MACKEREL	-	-	5,600	386	16,000	2,852
MENHADEN	-	-	324,200	3,242	-	-
OCEAN PERCH	-	-	-	-	44,385,900	2,210,757
POLLOCK	-	-	-	-	11,558,300	574,744
SCUP OR PORGY	-	-	-	-	731,800	43,661
SEA BASS	-	-	-	-	15,900	1,800
SHAD	-	-	-	-	500	17
SHARKS, UNCLASSIFIED	-	-	300	10	8,200	327
SKATES	-	-	-	-	50,800	1,967
STRIPED BASS	-	-	-	-	600	80
STURGEON	-	-	-	-	4,300	373
TAUTOG	-	-	-	-	4,100	142
TILEFISH	-	-	-	-	92,600	12,932
TUNA:						
BLUEFIN	-	-	4,580,300	237,577	-	-
SKIPJACK	-	-	1,587,600	78,690	-	-
WHITE PERCH	68,300	7,513	-	-	-	-
WHITING	-	-	-	-	66,745,800	1,562,507
WOLFFISH	-	-	-	-	709,000	37,022
UNCLASSIFIED:						
FOR FOOD	-	-	-	-	4,253,500	263,588
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	-	-	24,014,900	242,303
LOBSTERS, NORTHERN	-	-	-	-	1,406,800	658,663
SHRIMP	-	-	-	-	23,000	2,952
SCALLOPS, SEA	-	-	-	-	300	115
SQUID	-	-	-	-	93,400	5,122
TOTAL	1,111,500	38,553	17,360,200	422,595	406,297,500	27,205,068

SPECIES	POUND NETS		FLOATING TRAPS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	1,600	\$16	-	-	-	-
ANCHOVIES	55,100	819	-	-	-	-
BILLFISH	5,300	265	-	-	-	-
BLUEFISH	8,100	1,293	-	-	-	-
BONITO	47,700	4,381	400	\$37	-	-
BUTTERFISH	161,500	31,318	22,900	2,737	-	-
COD	1,700	116	600	32	-	-
EELS, COMMON	-	-	-	-	15,300	\$3,675
FLOUNDERS:						
BLACKBACK	1,900	143	-	-	-	-
FLUKE	2,500	732	-	-	-	-
HAKE:						
RED	5,600	56	-	-	-	-
WHITE	2,600	23	-	-	-	-
HERRING, SEA	1,595,600	28,440	2,200	95	-	-
MACKEREL	1,562,200	147,993	625,600	57,312	-	-
MENHADEN	20,400	261	-	-	-	-
POLLOCK	24,200	1,277	500	19	-	-
SCUP OR PORGY	15,000	718	-	-	-	-
SEA BASS	900	75	-	-	-	-
SHAD	21,000	1,217	-	-	-	-
SHARKS, UNCLASSIFIED	1,000	40	-	-	-	-
STRIPED BASS	33,400	4,968	300	57	-	-
STURGEON	300	38	-	-	-	-

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

MASSACHUSETTS - CATCH BY GEAR, 1963 - Continued

SPECIES	POUND NETS		FLOATING TRAPS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
TAJTOG	5,600	\$189	-	-	-	-
TUNA, BLUEFIN	143,300	12,940	-	-	-	-
WHITING	16,800	337	7,100	\$250	-	-
UNCLASSIFIED: FOR FOOD	-	-	50,300	3,241	-	-
BAIT, REDUCTION, AND ANIMAL FOOD	21,400	321	-	-	-	-
CRABS:						
GREEN	-	-	-	-	18,400	\$1,976
ROCK	-	-	-	-	33,400	5,084
LOBSTERS, NORTHERN	-	-	-	-	3,046,000	1,875,600
CONCHS	-	-	-	-	27,000	3,600
SQUID	1,877,300	102,296	300	19	-	-
TOTAL	5,632,000	340,272	710,200	63,799	3,140,100	1,889,935

SPECIES	GILL NETS				LINES	
	ANCHOR, SET OR STAKE		DRIFT		HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ANGLERFISH	400	\$18	-	-	-	-
BLUEFISH	-	-	-	-	36,500	\$5,724
COD	690,200	45,461	-	-	2,145,500	126,296
CUSK	3,500	148	-	-	11,100	263
FLOUNDER:						
BLACKBACK	67,600	4,497	-	-	5,500	751
DAB	100	4	-	-	200	76
FLUKE	-	-	-	-	500	41
LEMON SOLE	-	-	-	-	1,900	449
YELLOWTAIL	-	-	-	-	27,700	2,763
HADDOCK	120,900	10,343	-	-	550,100	43,043
HAKE, WHITE	88,500	3,177	-	-	5,300	182
HALIBUT	200	77	-	-	9,300	4,268
MACKEREL	-	-	33,200	\$8,102	800	112
POLLOCK	147,600	6,256	-	-	283,000	10,869
SEA BASS	-	-	-	-	100	15
SHARKS, UNCLASSIFIED	7,600	222	400	17	500	19
STRIPED BASS	-	-	400	78	445,200	63,423
STURGEON	1,300	146	-	-	-	-
TAJTOG	-	-	-	-	100	3
TUNA, BLUEFIN	200	20	-	-	28,200	1,091
WOLFFISH	-	-	-	-	1,400	50
UNCLASSIFIED, FOR FOOD	341,800	24,809	-	-	63,300	4,180
TOTAL	1,469,900	95,178	34,000	8,197	3,616,300	265,618

SPECIES	LINES - CONTINUED				DIP NETS	
	TROLL		LONG OR SET WITH HOOKS			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	-	-	40,000	\$500
COD	-	-	1,497,600	\$122,618	-	-
CUSK	-	-	376,300	22,664	-	-
FLOUNDER:						
BLACKBACK	-	-	50,400	7,468	-	-
DAB	-	-	100	8	-	-
LEMON SOLE	-	-	900	89	-	-
HADDOCK	-	-	2,108,800	223,423	-	-
HAKE, WHITE	-	-	63,300	4,068	-	-
HALIBUT	-	-	42,900	20,277	-	-
OCEAN PERCH	-	-	800	24	-	-
POLLOCK	-	-	79,600	3,589	-	-
SHARKS, UNCLASSIFIED	-	-	7,100	314	-	-
SKATES	-	-	300	14	-	-
SWORDFISH	-	-	1,373,300	349,069	-	-
TUNA:						
BLUEFIN	4,600	\$191	175,200	15,898	-	-
UNCLASSIFIED	-	-	8,100	1,330	-	-
WOLFFISH	-	-	7,600	337	-	-
UNCLASSIFIED: FOR FOOD	-	-	88,000	7,603	-	-
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	200	10	-	-
SCALLOPS, BAY	-	-	-	-	91,400	127,359
TOTAL	4,600	191	5,880,500	778,623	131,400	127,859

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

111

MASSACHUSETTS - CATCH BY GEAR, 1963 - Continued

SPECIES	HARPOONS		SPEARS		DREDGES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
COD	-	-	-	-	1,100	\$59
EELS, COMMON	-	-	9,000	\$2,600	-	-
FLOUNDERS:	-	-	-	-	-	-
BLACKBACK	-	-	-	-	8,000	694
DAB	-	-	-	-	5,500	189
FLUKE	-	-	-	-	200	16
GRAY SOLE	-	-	-	-	1,700	70
LEMON SOLE	-	-	-	-	6,000	841
YELLOWTAIL	-	-	-	-	54,900	2,985
HADDOCK	-	-	-	-	300	17
SHARKS, UNCLASSIFIED	200	\$4	-	-	-	-
SWORDFISH	343,600	82,122	-	-	-	-
TUNA, BLUEFIN	25,400	1,399	-	-	-	-
WOLFFISH	-	-	-	-	500	20
UNCLASSIFIED, FOR FOOD	-	-	-	-	200	9
CLAMS, HARD, PUBLIC	-	-	-	-	522,400	182,868
OYSTERS, MARKET:	-	-	-	-	-	-
PUBLIC:	-	-	-	-	-	-
SPRING	-	-	-	-	3,500	4,981
FALL	-	-	-	-	2,100	2,012
PRIVATE:	-	-	-	-	-	-
SPRING	-	-	-	-	2,000	2,100
FALL	-	-	-	-	1,300	1,400
SCALLOPS:	-	-	-	-	-	-
BAY	-	-	-	-	241,600	294,255
SEA	-	-	-	-	16,607,400	7,708,505
TOTAL	369,200	83,525	9,000	2,600	17,458,900	8,201,021

SPECIES	TONGS		RAKES		HOES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CLAMS:	-	-	-	-	-	-
HARD:	-	-	-	-	-	-
PUBLIC	207,200	\$199,842	680,600	\$603,753	50,100	\$38,774
PRIVATE	-	-	13,500	14,500	-	-
RAZOR	-	-	-	-	24,300	7,950
SOFT, PUBLIC	-	-	57,100	48,798	889,100	555,736
CONCHS	4,500	600	-	-	-	-
MUSSELS, SEA	527,000	39,525	-	-	-	-
OYSTERS, MARKET:	-	-	-	-	-	-
PUBLIC:	-	-	-	-	-	-
SPRING	2,000	1,800	-	-	-	-
FALL	2,900	2,700	-	-	-	-
PRIVATE:	-	-	-	-	-	-
SPRING	12,400	14,100	-	-	-	-
FALL	11,200	14,570	-	-	-	-
IRISH MOSS	-	-	1,636,400	28,636	-	-
BLOOD WORMS	-	-	-	-	76,900	67,700
SANDWORMS	-	-	-	-	12,100	13,590
TOTAL	767,200	273,137	2,387,600	695,687	1,052,500	683,750

SPECIES	FORKS		DIVING OUTFITS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
LOBSTERS, NORTHERN	-	-	51,900	\$29,816	1,100	\$598
CLAMS, SOFT, PUBLIC	1,300	\$1,200	-	-	-	-
MUSSELS, SEA	178,500	13,450	-	-	-	-
OYSTERS, MARKET, PUBLIC:	-	-	-	-	-	-
SPRING	3,600	6,600	-	-	-	-
FALL	3,700	6,816	-	-	-	-
TOTAL	187,100	28,066	51,900	29,816	1,100	598

NEW ENGLAND FISHERIES

RHODE ISLAND

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES		OTTER TRAWLS, FISH	POND NETS, FISH
		MACKEREL	TUNA		
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	-	-	39	253	-
ON BOATS AND SHORE:					
REGULAR	4	-	-	12	1
CASUAL	-	2	-	8	1
TOTAL	4	2	39	273	2
VESSELS, MOTOR	-	-	3	72	-
GROSS TONNAGE	-	-	1,172	2,738	-
BOATS:					
MOTOR	-	1	6	11	1
OTHER	2	-	-	-	-
GEAR:					
NUMBER	2	1	3	83	1
LENGTH, YARDS	2-0	100	2,630	-	-
YARDS AT MOUTH	-	-	-	2,036	-

ITEM	FLOATING TRAPS	POTS AND TRAPS				GILL NETS, ANCHOR, SET OR STAKE
		CONCH	CRAB	EEL	LOBSTER	
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	78	2	4	-	8	-
ON BOATS AND SHORE:						
REGULAR	4	5	8	7	55	2
CASUAL	-	-	1	1	100	-
TOTAL	62	7	13	8	163	2
VESSELS, MOTOR	6	1	22	-	4	-
GROSS TONNAGE	154	16	24	-	42	-
BOATS:						
MOTOR	5	4	6	8	137	1
OTHER	11	-	-	-	-	-
GEAR:						
NUMBER	18	285	1,145	395	7,709	1
SQUARE YARDS	-	-	-	-	-	100

ITEM	LINES			HARPOONS	DREDGES	
	HAND	TROLL	LONG OR SET WITH HOOKS		CLAM	MUSSEL
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	36	11	13	49	31	2
ON BOATS AND SHORE:						
REGULAR	21	1	3	-	28	-
CASUAL	128	18	2	4	2	-
TOTAL	185	30	18	53	61	2
VESSELS, MOTOR	16	5	3	12	15	1
GROSS TONNAGE	296	73	138	528	201	16
BOATS:						
MOTOR	49	12	2	2	15	-
OTHER	-	-	-	9	-	-
GEAR:						
NUMBER	199	30	5	14	30	1
YARDS AT MOUTH	-	-	-	-	30	2
HOOKS OR BAITS	310	30	2,610	-	-	-

ITEM	DREDGES- CONTINUED	TONGS		RAKES	HOES	TOTAL, EXCLUSIVE OF DUPLI- CATION
	SCALLOP	OYSTER	OTHER			
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	-	-	-	-	-	437
ON BOATS AND SHORE:						
REGULAR	4	6	389	96	11	501
CASUAL	4	8	487	120	-	756
TOTAL	8	16	876	216	11	1,694
VESSELS, MOTOR	-	-	-	-	-	112
GROSS TONNAGE	-	-	-	-	-	4,564
BOATS:						
MOTOR	8	16	876	216	-	1,116
OTHER	-	-	-	-	-	23
GEAR:						
NUMBER	16	16	876	216	11	-
YARDS AT MOUTH	13	-	-	-	-	-

NEW ENGLAND FISHERIES

113

RHODE ISLAND - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	112,000	\$1,400	-	-	-	-
ANGLERFISH	-	-	-	-	11,900	\$301
BLUEFISH	100	23	-	-	10,500	1,432
BONITO	-	-	-	-	700	90
BUTTERFISH	-	-	-	-	4,770,200	400,697
COD	-	-	-	-	406,200	38,200
EELS:	-	-	-	-	-	-
COMMON	100	15	-	-	-	-
CONGER	-	-	-	-	14,200	626
FLOUNDERS:	-	-	-	-	-	-
BLACKBACK	-	-	-	-	2,917,400	172,066
DAB	-	-	-	-	700	44
FLUKE	-	-	-	-	470,800	148,587
GRAY SOLE	-	-	-	-	13,900	950
LEMON SOLE	-	-	-	-	6,900	922
YELLOWTAIL	-	-	-	-	8,998,100	472,168
HADDOCK	-	-	-	-	20,700	1,616
HAKE:	-	-	-	-	-	-
RED	-	-	-	-	142,400	2,548
WHITE	-	-	-	-	35,600	1,673
HERRING, SEA	-	-	-	-	267,900	13,029
KING WHITING OR "KINGFISH"	-	-	-	-	300	35
MACKEREL	-	-	3,000	\$434	16,700	3,276
OCEAN POUT	-	-	-	-	1,400	25
POLLOCK	-	-	-	-	5,700	260
SCUP OR PORGY	-	-	-	-	2,021,000	208,589
SEA BASS	-	-	-	-	37,400	5,306
SEA ROBIN	-	-	-	-	1,400	43
SEA TROUT OR WEAKFISH, GRAY	-	-	-	-	1,600	231
SHAD	-	-	-	-	300	13
SHARKS:	-	-	-	-	-	-
GRAYFISH	-	-	-	-	200	6
UNCLASSIFIED	-	-	-	-	2,100	78
SKATES	-	-	-	-	9,200	290
SMELTS, ATLANTIC	400	186	-	-	-	-
STRIPED BASS	11,400	2,217	-	-	-	-
STURGEON	-	-	-	-	5,200	806
TAUTOG	-	-	-	-	2,400	232
TAUTOG	-	-	-	-	47,400	1,450
TILEFISH	-	-	-	-	100,900	11,274
TUNA:	-	-	-	-	-	-
BLUEFIN	-	-	671,700	43,658	-	-
SKIPJACK	-	-	615,700	36,939	-	-
WHITE PERCH	2,200	422	-	-	-	-
WHITING	-	-	-	-	3,390,400	94,793
UNCLASSIFIED:	-	-	-	-	-	-
FOR FOOD	-	-	800	123	800	57
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	-	-	32,341,300	238,006
LOBSTERS, NORTHERN	-	-	-	-	424,500	227,585
CONCHS	-	-	-	-	200	36
SQUID	-	-	-	-	463,200	31,409
TOTAL	126,200	4,263	1,291,200	81,154	56,959,900	2,078,749

SPECIES	POUND NETS		FLOATING TRAPS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	17,300	\$173	-	-
ANCHOVIES	-	-	28,200	1,515	-	-
BLUEFISH	-	-	68,800	8,727	-	-
BONITO	-	-	60,600	5,797	-	-
BUTTERFISH	-	-	351,700	57,025	-	-
COD	-	-	32,500	3,355	-	-
EELS:	-	-	-	-	-	-
COMMON	300	\$60	-	-	35,500	\$8,854
CONGER	-	-	300	9	-	-
FLOUNDERS:	-	-	-	-	-	-
BLACKBACK	-	-	200	13	-	-
FLUKE	-	-	40,300	11,894	-	-
HAKE, RED	-	-	7,700	184	-	-
HERRING, SEA	-	-	44,200	1,430	-	-
KING WHITING OR "KINGFISH"	-	-	500	64	-	-
MACKEREL	-	-	83,600	11,953	-	-
MENHADEN	-	-	2,800	28	-	-
POLLOCK	-	-	3,000	126	-	-
SCUP OR PORGY	-	-	6,448,000	300,793	-	-
SEA BASS	-	-	76,000	12,160	-	-
SEA ROBIN	-	-	130,000	1,628	-	-
SEA TROUT OR WEAKFISH, GRAY	-	-	400	65	-	-
SHAD	-	-	1,900	113	-	-

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

RHODE ISLAND - CATCH BY GEAR, 1963 - Continued

SPECIES	POUND NETS		FLOATING TRAPS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SHARKS:						
GRAYFISH	-	-	100	\$2	-	-
UNCLASSIFIED	-	-	800	24	-	-
STRIPED BASS	-	-	31,800	6,617	-	-
STURGEON	-	-	18,400	463	-	-
TAUTOG	-	-	18,300	2,139	-	-
TUNA, BLUEFIN	6,000	\$960	18,600	-	-	-
WHITE PERCH	-	-	-	-	-	-
WHITING	-	-	86,100	3,947	-	-
UNCLASSIFIED, FOR FOOD	-	-	5,700	652	-	-
CRABS:						
GREEN	-	-	-	-	6,000	\$1,000
ROCK	-	-	-	-	229,600	24,644
LOBSTERS, NORTHERN	-	-	-	-	167,600	111,529
CONCHS	-	-	-	-	73,400	14,711
SQUID	-	-	-	-	-	-
TOTAL	8,300	1,020	7,762,400	443,561	511,300	160,738

SPECIES	GILL NETS		LINES			
	ANCHOR, SET OR STAKE		HAND		TROLL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	1,900	\$305	500	\$50	300	\$34
COD	-	-	69,900	6,203	-	-
FLOUNDER:						
BLACKBACK	-	-	200	13	-	-
FLUKE	-	-	400	132	-	-
MACKEREL	-	-	200	14	-	-
POLLOCK	-	-	300	91	-	-
SEA BASS	-	-	300	91	-	-
STRIPED BASS	-	-	22,300	3,195	400	61
TAUTOG	-	-	8,500	744	-	-
TUNA, BLUEFIN	-	-	-	-	17,900	962
UNCLASSIFIED, FOR FOOD	-	-	300	30	-	-
TOTAL	1,900	305	102,900	10,565	18,600	1,057

SPECIES	LINES - CONTINUED		HARPOONS		DREDGES	
	LONG OR SET WITH HOOKS					
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
COD	200	\$14	-	-	-	-
SWORDFISH	113,500	31,870	55,800	\$13,252	-	-
TUNA, BLUEFIN	11,400	623	-	-	-	-
CLAMS:						
HARD, PUBLIC	-	-	-	-	336,600	\$172,793
OCEAN QUAHOG	-	-	-	-	104,200	10,421
CONCHS	-	-	-	-	4,400	510
MUSSELS, SEA	-	-	-	-	1,400	254
SCALLOPS, BAY	-	-	-	-	1,800	2,700
TOTAL	125,100	32,507	55,800	13,252	448,600	185,778

SPECIES	TONGS		RAKES		HOES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CLAMS:						
HARD, PUBLIC	1,509,400	\$98,138	377,300	\$224,533	-	-
SOFT, PUBLIC	-	-	-	-	1,400	\$904
CONCHS	100	10	100	10	-	-
OYSTERS, MARKET, PUBLIC:						
SPRING	4,500	4,611	-	-	-	-
FALL	6,800	6,917	-	-	-	-
TOTAL	1,520,600	909,676	377,400	224,543	1,400	904

NEW ENGLAND FISHERIES

115

CONNECTICUT

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS, FISH	FYKE AND HOOP NETS, FISH	POTS AND TRAPS		
				CONCH	EEL	LOBSTER
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	-	78	-	3	3	10
ON BOATS AND SHORE:						
REGULAR	-	10	-	10	1	27
CASUAL	6	21	1	4	27	70
TOTAL	6	109	1	17	31	107
VESSELS, MOTOR	-	30	-	1	1	6
GROSS TONNAGE	-	927	-	8	8	51
BOATS:						
MOTOR	1	22	1	10	18	80
OTHER	3	-	-	-	3	-
GEAR:						
NUMBER	4	52	5	630	495	7,823
LENGTH, YARDS	270	-	-	-	-	-
YARDS AT MOUTH	-	1,022	-	-	-	-

ITEM	GILL NETS			LINES, HAND	DIP NETS, COMMON	SPEARS
	ANCHOR, SET OR STAKE	DRIFT				
		SHAD	OTHER			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	-	5	-	-	-	-
ON BOATS AND SHORE:						
REGULAR	-	13	8	2	26	1
CASUAL	12	93	2	26	61	-
TOTAL	12	111	10	28	107	1
VESSELS, MOTOR	-	2	-	-	-	-
GROSS TONNAGE	-	25	-	-	-	-
BOATS:						
MOTOR	2	42	9	22	107	1
OTHER	6	10	-	-	-	-
GEAR:						
NUMBER	10	51	9	29	107	1
SQUARE YARDS	1,862	101,956	3,622	-	-	-
HOOKS	-	-	-	58	-	-

ITEM	DREDGES		TONGS		TOTAL, EXCLUSIVE OF DUPLI- CATION
	CLAM	OYSTER, COMMON	OYSTER	OTHER	
	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:					
ON VESSELS	18	29	-	-	120
ON BOATS AND SHORE:					
REGULAR	2	-	3	2	76
CASUAL	-	-	10	-	262
TOTAL	20	29	13	2	478
VESSELS, MOTOR	8	10	-	-	46
GROSS TONNAGE	192	305	-	-	1,319
BOATS:					
MOTOR	1	-	12	2	258
OTHER	-	-	-	-	20
GEAR:					
NUMBER	9	19	13	2	-
YARDS AT MOUTH	9	29	-	-	-

NEW ENGLAND FISHERIES

CONNECTICUT - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		OTTER TRAWLS		FYKE AND HOOP NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	1,400	\$22	-	-	-	-
ANGLERFISH	-	-	200	35	-	-
BLUEFISH	-	-	9,300	1,314	-	-
BONITO	-	-	500	66	-	-
BUTTERFISH	-	-	97,200	8,831	-	-
CARP	800	113	-	-	-	-
COD	-	-	120,500	11,329	-	-
FLOUNDERS:	-	-	-	-	-	-
BLACKBACK	-	-	982,000	58,160	-	-
FLUKE	-	-	97,700	21,577	-	-
GRAY SOLE	-	-	2,400	164	-	-
LEMON SOLE	-	-	700	96	-	-
YELLOWTAIL	-	-	136,000	7,072	-	-
HADDOCK	-	-	2,900	229	-	-
HAKE:	-	-	-	-	-	-
RED	-	-	21,000	378	-	-
WHITE	-	-	1,000	50	-	-
HERRING, SEA	-	-	31,000	1,519	-	-
MACKEREL	-	-	300	59	-	-
SCUP OR PORGY	-	-	758,600	75,983	-	-
SEA BASS	-	-	28,800	4,059	-	-
SEA ROBIN	-	-	3,400	44	-	-
SEA TROUT OR WEAKFISH, GRAY	-	-	700	108	-	-
SHAD	2,100	440	500	105	-	-
SHARKS:	-	-	-	-	-	-
GRAYFISH	-	-	300	10	-	-
UNCLASSIFIED	-	-	400	14	-	-
SKATES	-	-	16,000	200	-	-
STURGEON	-	-	7,700	971	-	-
SUCKERS	500	10	-	-	1,000	\$15
TAUTOG	-	-	19,300	679	-	-
WHITING	-	-	368,800	10,486	-	-
UNCLASSIFIED:	-	-	-	-	-	-
FOR FOOD	100	8	3,800	240	-	-
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	480,100	6,436	-	-
LOBSTERS, NORTHERN	-	-	220,000	117,920	-	-
CONCHS	-	-	4,500	725	-	-
SQUID	-	-	38,300	2,603	-	-
TOTAL	4,900	593	3,453,900	331,432	1,000	15

SPECIES	POTS AND TRAPS		GILL NETS			
			ANCHOR, SET OR STAKE		DRIFT	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	-	-	25,900	\$3,523
CARP	-	-	-	-	1,200	180
EELS, COMMON	14,600	\$2,468	-	-	-	-
MENHADEN	-	-	-	-	5,100	110
SHAD	-	-	3,300	\$702	294,900	61,860
STRIPED BASS	-	-	-	-	700	110
UNCLASSIFIED, FOR BAIT, REDUCTION, AND ANIMAL FOOD	-	-	-	-	107,000	1,338
LOBSTERS, NORTHERN	251,400	166,175	-	-	-	-
CONCHS	77,100	13,417	-	-	-	-
TOTAL	343,100	182,060	3,300	702	434,800	67,121

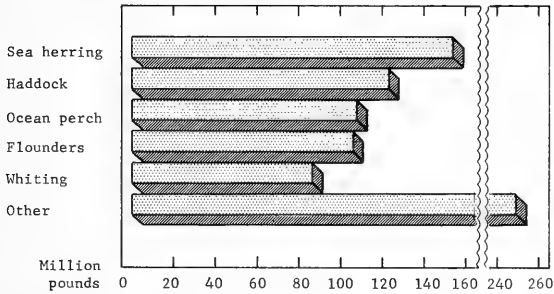
SPECIES	LINES, HAND		DIP NETS		SPEARS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	2,000	\$35	-	-
BLUEFISH	16,800	\$2,797	-	-	-	-
COD	15,900	1,498	-	-	-	-
EELS, COMMON	200	30	-	-	500	\$112
FLOUNDERS:	-	-	-	-	-	-
BLACKBACK	800	71	-	-	-	-
FLUKE	100	20	-	-	-	-
MACKEREL	100	20	-	-	-	-
SHARKS, UNCLASSIFIED	200	4	-	-	-	-
STRIPED BASS	28,600	4,517	-	-	-	-
TAUTOG	1,700	94	-	-	-	-
UNCLASSIFIED:	-	-	-	-	-	-
FOR FOOD	100	8	-	-	-	-
BAIT, REDUCTION, AND ANIMAL FOOD	300	6	-	-	-	-
CRABS, BLUE, HARD	-	-	300	101	-	-
SCALLOPS, BAY	-	-	56,400	67,630	-	-
TOTAL	65,000	9,065	58,700	67,765	500	112

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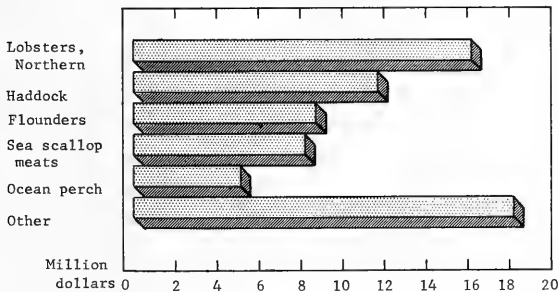
CONNECTICUT - CATCH BY GEAR, 1963 - Continued

SPECIES	DREDGES		TONGS	
	POUNDS	VALUE	POUNDS	VALUE
CLAMS, HARD:				
PUBLIC	-	-	1,800	\$962
PRIVATE	265,200	\$124,549	-	-
OYSTERS, MARKET:				
PUBLIC, SPRING	-	-	1,500	1,263
PRIVATE:				
SPRING	237,200	277,806	-	-
FALL	156,500	183,560	-	-
TOTAL	678,900	585,915	3,300	2,225

NEW ENGLAND STATES CATCH, 1963



VALUE OF NEW ENGLAND STATES CATCH, 1963



NEW ENGLAND FISHERIES

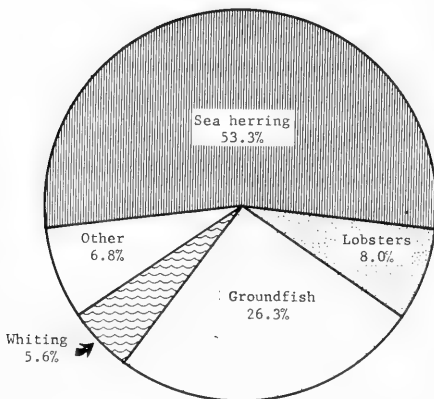
LANDINGS AT MAINE PORTS

In cooperation with the Maine Department of Sea and Shore Fisheries, the Bureau of Commercial Fisheries collects and compiles monthly and annual data on the landings of fish, shellfish, and other aquatic resources in the State of Maine. This information is published monthly in "Maine Landings," which is in the Current Fishery Statistics series of reports. Additional detailed tabulations are prepared for the use of Bureau and State scientists and the International Commission for the Northwest Atlantic Fisheries.

Maine landings data, summarized by species and months, appeared in Digests for the years 1947-58. In 1959, data were shown on the catch off Canada by species and area of capture. Information was also included on the number of fishing craft operated, trips, days absent, and days fished. Since 1960, similar data have been shown for most of the Maine catch, except sea herring, lobsters, sea scallops, and a small amount of other fish. The quantities shown represent the round weight of species except univalve and bivalve mollusks. These shellfish are reported in pounds of meats. The data are comparable with catch figures shown in other tables.

During 1963, landings at Maine ports by fishing craft of all sizes were 286 million pounds, a decline of 9 million pounds from 1962. The major decreases occurred in ocean perch, down 5.5 million pounds; herring, down 4.4 million; and whiting, down 1.9 million pounds. The only item to increase by more than 1 million pounds was Irish moss, up 1.1 million. Slight increases were made in lobster, tuna, and sea worms. The total value of the landings increased by \$851,000--primarily because of increased demand for lobsters, which brought \$1.4 million more than in the previous year.

LANDINGS AT MAINE PORTS, 1963



Total - 285,636,104 pounds

LANDINGS AT MAINE PORTS

SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963

GEAR AND SUBAREA	CRAFT FISHING	TRIPS	DAYS ABSENT	DAYS FISHED	COD, DRAWN			CLUSK, DRAWN	FLOUNDERS, ROUND			
					NUMBER	POUNDS	MARKET		SCROD	GRAY SOLE	LEMON SOLE	YELLOW-TAIL
LINE TRAWLS:	NUMBER	NUMBER	NUMBER	NUMBER	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
EASTERN MAINE	6	60.0	60	30.0	89,287	888	-	-	-	-	-	-
CENTRAL MAINE	50	499.0	499	249.5	83,844	83,175	-	-	-	-	-	-
WESTERN MAINE	23	222.0	222	102.5	25,643	88,500	545	-	-	-	-	-
TOTAL	1/ 79	781.0	781	382.0	46,120	172,563	545	-	-	-	-	-
HAND LINES:	NUMBER	NUMBER	NUMBER	NUMBER	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
EASTERN MAINE	6	29.0	29	14.5	13,523	3,138	-	-	-	-	-	-
CENTRAL MAINE	55	342.0	342	171.0	26,310	29,248	1,745	-	-	-	-	-
WESTERN MAINE	3	3.0	3	1.5	760	630	-	-	-	-	-	-
TOTAL	1/ 62	374.0	374	187.0	27,070	43,401	1,745	4,318	-	-	-	-
HARPOONS:	NUMBER	NUMBER	NUMBER	NUMBER	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
CENTRAL MAINE	1	1.0	1	.5	-	-	-	-	-	-	-	-
WESTERN MAINE	15	59.0	59	21.6	-	-	-	-	-	-	-	-
TOTAL	1/ 16	60.0	60	21.9	-	-	-	-	-	-	-	-
LONG LINES:	NUMBER	NUMBER	NUMBER	NUMBER	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
SOUTHWEST GRAND BANKS	1	3.0	47	25.0	-	-	-	-	-	-	-	-
ST. PIERRE BANK	1	1.5	11	10.0	-	-	-	-	-	-	-	-
CENTRAL AND SOUTHEAST GEORGES	1	1.5	14	9.0	-	-	-	-	-	-	-	-
ST. PIERRE BANKS	1	3.0	52	25.0	-	-	-	-	-	-	-	-
OFF LONG ISLAND	1	3.0	52	25.0	-	-	-	-	-	-	-	-
TOTAL	1/ 1	9.0	140	76.0	-	-	-	-	-	-	-	-
OTTER TRAWLS:	NUMBER	NUMBER	NUMBER	NUMBER	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
NORTHERN GRAND BANKS	1	7.3	5	1.5	-	-	-	-	-	-	-	-
SOUTHWEST GRAND BANKS	12	420	1,318	275.1	-	-	-	-	-	-	-	-
ST. PIERRE BANKS	8	26.3	420	121.5	-	-	-	-	-	-	-	-
EAST GULF OF ST. LAWRENCE	9	8.2	114	32.2	-	-	-	-	-	-	-	-
NORTH GULF OF ST. LAWRENCE	3	15.9	204	61.2	-	-	-	-	-	-	-	-
SOUTH GULF OF ST. LAWRENCE	1	8.7	109	24.5	-	-	-	-	-	-	-	-
NORTHEAST CAPE BRETON	2	1.1	2	.7	-	-	-	-	-	-	-	-
MISAJNE BANK	5	3.2	43	12.5	-	-	-	-	-	-	-	-
MANICOUAN	5	3.7	45	11.6	-	-	-	-	-	-	-	-
CADIZ	14	7.3	114	29.0	-	-	-	-	-	-	-	-
MIDDLE GROUND	5	5.2	64	18.6	-	-	-	-	-	-	-	-
SOUTHEAST SABLE ISLAND BANK	1	.1	1	.4	-	-	-	-	-	-	-	-
HORSESHOE GROUND	10	12.5	172	45.7	7,023	9,930	4,930	-	-	-	-	-
SOUTHWEST SABLE ISLAND BANK	3	1.6	19	5.4	1,700	1,515	1,515	5,265	-	-	-	-
EASTERN NOVA SCOTIA	9	14.0	181	44.2	4,510	8,895	4,395	-	-	-	-	-
BERDAL BANK, SCOTIA	6	3.7	230	56.5	10,045	95	4,185	-	-	-	-	-
EASTERN BROWNS AND LA HAVÉ	6	2.7	36	10.0	4,632	5,003	3,333	-	-	-	-	-
SOUTHERN NOVA SCOTIA	6	2.7	36	10.0	3,340	1,140	1,140	-	-	-	-	-
WESTERN BROWNS	15	12.2	158	44.5	1,795	2,724	1,012	-	-	-	-	-
SOUTHERN NOVA SCOTIA	21	47.5	395	140.1	7,228	11,571	2,080	-	-	-	-	-
SOUTHERN BAY OF FUNDY	22	34.2	292	100.9	3,738	22,566	4,969	-	-	-	-	-
NORTHERN BAY OF FUNDY	3	5.0	27	11.9	1,030	19,175	7,563	-	-	-	-	-
CAPLIN MAINE	5	2.5	6	8.2	11,265	45,985	460	-	-	-	-	-
CENTRAL MAINE	1	425.0	1,670	69.0	47,733	166,198	14,965	-	-	-	-	-
WESTERN MAINE	53	1,425.0	1,743	775.0	47,733	166,198	14,965	-	-	-	-	-
INNER GROUNDS	46	1,541.5	1,743	856.4	151,291	242,165	45,403	-	-	-	-	-
WEST SIDE SOUTH CHANNEL	39	178.3	942	348.2	49,879	81,814	38,038	-	-	-	-	-
EAST SIDE SOUTH CHANNEL	7.1	7.1	57	22.4	2,258	4,573	1,241	-	-	-	-	-
CONNECTICUT SHORE	2	1.8	9	1.8	294	1,124	80	-	-	-	-	-
TOTAL	1/ 117	3,542.0	9,303	3,264.8	295,431	600,452	233,714	710,626	456	-	-	35

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

LANDINGS AT MAINE PORTS
SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	CRAFT FISHING		TRIPS		DAYS ABSENT		DAYS FISHED		COE, CRAWN			CUSK, GRAMM		FLOUNTERS, ROUND				
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	POUNDS	POUNDS	LARGE	MARKET	SCROD	POUNDS	POUNDS	GRAY SOLE	LEMON SOLE	YELLOW-TAIL		
SINK GILL NETS:																		
WESTERN MAINE	6	544.0	544	544	544	544	305,243	510	64,660	-	-	3,660	-	-	-	-		
INNER GROUNDS	1	17.0	17	17	17	17	6,770	-	1,520	-	-	950	-	-	-	-		
TOTAL	7	561.0	561	561	561	561	312,013	510	66,280	-	-	4,610	-	-	-	-		
PURSE SEINE, TUNA: OFF LONG ISLAND	1	2.0	24	24	24	24	-	-	-	-	-	-	-	-	-	-		
SCALLOP DREDGES:																		
EASTERN MAINE	15	107.0	107	107	107	107	-	-	-	-	-	-	-	-	-	-		
CENTRAL MAINE	36	294.0	294	294	294	294	-	-	-	-	-	-	-	-	-	-		
WESTERN MAINE	1	1.0	1	1	1	1	-	-	-	-	-	-	-	-	-	-		
WEST SIDE SOUTH CHANNEL	2	2.0	21	21	21	21	-	-	-	-	-	-	-	-	-	-		
EAST SIDE SOUTH CHANNEL	1	1.0	4	4	4	4	-	-	-	-	-	-	-	-	-	-		
CENTRAL AND SOUTHEAST PEAK	2	131.9	136	136	136	136	-	-	-	-	-	-	-	-	-	-		
MANTUCKET SHOALS AND LIGHTSHIP GROUNDS	1	1.0	7	7	7	7	-	-	-	-	-	-	-	-	-	-		
TOTAL	7	472.0	1,055	1,055	1,055	1,055	-	-	-	-	-	-	-	-	-	-		
TOTAL (LANDED WEIGHT, ALL SPECIES)	1,335	5,601.0	12,298	12,298	12,298	12,298	680,634	6,775	987,269	6,775	415,425	711,171	456	35	-	-		
TOTAL (ROUND WEIGHT, ALL SPECIES 2/1)	-	-	-	-	-	-	796,342	7,927	1,155,102	7,927	469,431	711,171	456	35	-	-		
MISCELLANEOUS GEAR: UNCLASSIFIED WATERS OFF MAINE	-	-	-	-	-	-	-	-	1,053	-	-	-	-	-	-	-		
GRAND TOTAL (ROUND WEIGHT 2/1)	-	-	-	-	-	-	796,342	7,927	1,156,155	7,927	469,431	711,171	456	35	-	-		
GEAR AND SUBAREA	BLACK-BACK		DAB		GRAY-FISH, ROUND		HADLOCK, DRAWN		HAKE, WHITE, DRESSED		HALIBUT, DRAWN		HERRING, SEA		MACKEREL, ROUND		OCEAN PERCH, ROUND	
	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
LINE TRAWLS:																		
EASTERN MAINE	-	-	-	-	-	-	41,595	-	15,751	-	4,453	-	-	-	-	-	-	-
CENTRAL MAINE	-	550	-	550	-	550	7,616	-	2,137,007	-	20,065	-	-	-	-	-	-	-
WESTERN MAINE	-	3,370	-	3,370	-	3,370	33,860	-	5,120	5,380	19,637	-	-	-	-	-	-	-
TOTAL	-	3,920	-	3,920	-	3,920	43,826	-	2,157,678	5,380	44,155	-	-	-	-	-	-	-
HAND LINES:																		
EASTERN MAINE	-	-	-	1,309	-	1,309	-	-	-	-	1,181	-	-	-	-	-	-	-
CENTRAL MAINE	-	-	-	6,527	-	6,527	-	-	-	-	7,290	-	-	-	-	-	-	-
WESTERN MAINE	-	-	-	100	-	100	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	7,936	-	7,936	-	-	-	-	8,471	-	-	-	-	-	-	-
OTTER TRAWLS:																		
NORTH GRAND BANKS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20,000	-
SOUTHWEST GRAND BANKS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17,685	-	-
SOUTHWEST GRAND BANKS	-	200	-	310	-	310	1,600	-	70	-	105	-	-	-	-	6,351	677	-
ST. PIERRE BANKS	-	-	-	-	-	-	-	-	-	-	227	-	-	-	-	1,571	575	-
EAST GULF OF ST. LAWRENCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,446	525	-
NORTH GULF OF ST. LAWRENCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,561	000	-
SOUTH GULF OF ST. LAWRENCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	500	-
NORTHEAST CAPE BRETON	-	670	-	55	-	55	235	-	-	-	-	-	-	-	-	472	600	-
NORTHEAST CAPE BRETON	-	500	-	41	-	41	41	-	-	-	-	-	-	-	-	1,000	000	-
BANQUEREAL	-	1,090	-	195	-	195	580	-	100	-	385	-	-	-	-	6,595	605	-
CANSO	-	2,595	-	3,790	-	3,790	12,276	-	25	-	225	-	-	-	-	1,272	884	-
MIDDLE GROUND	-	3,120	-	2,015	-	2,015	4,605	-	130	-	80	-	-	-	-	715	460	-
SOUTHEAST SABLE ISLAND BANK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	700	-

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

NEW ENGLAND FISHERIES

SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	FLOUNDERS, ROUND-CONTD.		GRAY-NOSE ROUND		HADDOCK, DRAWN		HAKE, WHITE, DRESSED		HALL BUT, DRAWN	HERRING, SEA	MACKEREL, ROUND	OCEAN PERCH, ROUND	
	BLACK-BACK	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS					SMALL
OTTER TRAWLS: -CONTINUED HORSESHOE GROUND, SOUTHWEST SABLE ISLAND BANK EASTERN NOVA SCOTIA EMERALD BANK, CENTRAL NOVA SCOTIA WESTERN NOVA SCOTIA SOUTHERN NOVA SCOTIA SOUTHERN BAY OF FUNDY EASTERN MAINE CENTRAL MAINE WESTERN MAINE INNER GROUNDS WEST SIDE SOUTH CHANNEL EAST SIDE SOUTH CHANNEL CONNECTICUT SHORE TOTAL,													
		5,500	5,890	8,095	1,349	1,425	1,349	1,349	1,425				1,529,740
		275	2,210	2,210	230	1,470	230	230	1,470				230,000
		3,730	7,935	13,180	780	3,765	780	780	3,765				1,600,290
		3,575	2,465	3,030	25	380	25	25	380				558,816
		2,985	9,288	14,453	900	4,306	900	900	4,306				1,689,910
		350	7,412	2,692	560	529	560	560	529				201,950
		4,770	47,205	34,649	44	6,954	44	44	6,954				1,881,322
		60	41,470	34,532	393	6,431	393	393	6,431				2,439,175
		30	33,375	24,910	80	900	80	80	900				41,600
		9,315	89,773	89,773	100	8,425	100	100	8,425				1,339,210
		49,295	465,868	189,774	15,832	3,666	15,832	15,832	3,666				2,323,338
		210,746	354,028	196,776	1,180	82,666	1,180	1,180	82,666				1,471,173
		35,114	196,895	196,895	1,184	52,766	1,184	1,184	52,766				6,796,525
		500	18,391	8,248	184	2,291	184	184	2,291				344,350
	340	5,151	1,788	225	1,166	225	225	1,166				29,200	
	200	10	10	-	-	-	-	-				-	
	49,368	450,755	906	1,514,653	821,107	234,659	178,564	27,528				63,904,800	
SINK GILL NETS:													
WESTERN MAINE			631,495	45,652	587	-	-	76,965	95			-	
INNER GROUNDS			19,875	880	-	-	-	2,585	-			-	
TOTAL,			651,370	46,532	587	-	-	79,551	95			-	
TOTAL (LANDED WEIGHT, ALL SPECIES)	49,368	454,675	757,134	1,687,875	835,520	2,396,369	263,495	80,249				63,904,800	
TOTAL (ROUND WEIGHT, ALL SPECIES 2/).	49,368	454,675	757,134	1,924,178	952,493	3,211,134	353,083	92,286				63,904,800	
MISCELLANEOUS GEAR:													
UNCLASSIFIED WATERS OFF MAINE													
GRAND TOTAL (ROUND WEIGHT 2/).	49,368	454,675	757,134	1,924,178	952,493	3,211,134	353,083	92,286	152,316,727	304,043		-	
GEAR AND SUBAREA	POLLOCK, DRAWN	SHORDBLUEFIN, DRESSED	TUNA	WHITING, ROUND	WOLF-FISH, DRAWN	UNCLASSIFIED FISH FOR FOOD	SCALLOPS, SEA (HEATS)	SHRIMP, ROUND	LOBSTERS, ROUND	UNCLASSIFIED SHELL-FISH, ETC.	TOTAL		
	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS		
LINE TRAWLS:													
EASTERN MAINE	14,220	-	-	-	-	-	-	-	-	-	165,194		
CENTRAL MAINE	35,306	-	-	-	19	210	-	-	-	-	2,433,136		
WESTERN MAINE	43,520	-	-	-	175	285	8,758	-	-	-	590,856		
TOTAL,	93,046	-	-	-	194	285	8,968	-	-	-	2,969,186		
HAND LINES:													
EASTERN MAINE	64,276	-	-	-	-	-	-	-	-	-	80,289		
CENTRAL MAINE	452,141	-	-	-	170	-	-	-	-	-	530,791		
WESTERN MAINE	1,540	-	-	-	-	-	-	-	-	-	4,210		
TOTAL,	517,957	-	-	-	170	-	-	-	-	-	615,290		
HARPOONS:													
CENTRAL MAINE	-	-	115	-	-	-	-	-	-	-	215		
WESTERN MAINE	-	-	23,646	-	-	-	-	-	-	-	23,531		
TOTAL,	-	-	23,646	-	-	-	-	-	-	-	23,746		

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

LANDINGS AT MAINE PORTS

SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	FOLLOCK, DRAWN		SWORD-FISH, DRESSED		TUNA, BLUEFIN, ROUND		WHITING, ROUND		WOLF-FISH, DRAWN		UNCLASSIFIED FISH FOR FOOD		UNCLASSIFIED FISH FOR REDUCTION		SCALLOPS, SEA (MEATS)		SHRIMP, ROUND		LOBSTERS, ROUND		UNCLASSIFIED SHELL-FISH, ETC.		TOTAL	
	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
LONG LINES:																								
SOUTHWEST GRAND BANKS	-	163,507	-	1,556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	165,063
ST. PIERRE BANK	-	46,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46,400
CENTRAL AND SOUTHEAST GEORGES	-	35,190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35,190
ST. GEORGES BANK,	-	55,856	-	1,026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55,882
OFF LONG ISLAND	-	-	-	57,218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57,218
TOTAL	-	395,164	-	7,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	395,164
OTTER TRAWLS:																								
NORTHERN GRAND BANKS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20,000
SOUTHWEST GRAND BANKS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17,985,773
SOUTHEAST GRAND BANKS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,571,575
ST. PIERRE BANKS	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	420
NORTH GULF OF ST. LAWRENCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,446,752
NORTH GULF OF ST. LAWRENCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,591,000
SOUTH GULF OF ST. LAWRENCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23,500
NORTHEAST CAPE BRETON	-	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75
MI SAINE BANK	48,822	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48,827
CHARENTAIS	982	-	-	-	-	-	-	-	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,052,820
CANSO	9,195	-	-	-	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200,820
MIDDLE GROUND	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	742,845
SOUTHEAST SABLE ISLAND BANK	94,076	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,700
HORSESHOE GROUND	7,230	-	-	-	-	-	-	-	3,790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,677,543
SOUTHWEST SABLE ISLAND BANK	150,780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	248,265
EASTERN NOVA SCOTIA	455	-	-	-	-	-	-	-	5,295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,852,715
CHERLAD BANK,	457,945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	582,283
SCOTIA	1,220	-	-	-	-	-	-	-	790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,911,605
EASTERN BROWNS AND LA HAVRE	43,540	-	-	-	-	-	-	-	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	204,605
SOUTHERN NOVA SCOTIA	15,465	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,570,171
WESTERN BROWNS	74,781	-	-	-	-	-	-	-	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,024,895
WESTERN NOVA SCOTIA	2,080	-	-	-	-	-	-	-	185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,653,689
SOUTHERN BAY OF FUNDY	3,575	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	119,605
NORTHERN BAY OF FUNDY	82,552	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	119,595
CENTRAL MAINE	536,522	-	-	-	-	-	-	-	13,549	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,565,018
WESTERN MAINE	17,759	-	-	-	-	-	-	-	1,449	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,213,271
INNER GROUNDS	260,132	-	-	-	-	-	-	-	3,387,570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,54
WEST SIDE SOUTH CHANNEL	4,689	-	-	-	-	-	-	-	12,469,699	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,056,622
EAST SIDE SOUTH CHANNEL	-	-	-	-	-	-	-	-	85,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	403,540
CONNECTICUT SHORE	-	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44,648
TOTAL	1,468,116	-	-	-	-	-	-	-	39,725	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,650
SINK GILL NETS:																								
WESTERN MAINE	120,112	-	-	-	-	-	-	-	15,941,269	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89,322,789
INNER GROUNDS	3,000	-	-	-	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,250,977
TOTAL	123,112	-	-	-	-	-	-	-	920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36,450
PURSE SEINES, TUNA:																								
OFF LONG ISLAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,287,427
SEE FOOTNOTES AT END OF TABLE.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	880,000

(CONTINUED ON NEXT PAGE)

LANDINGS AT MAINE PORTS

SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	POLLOCK, DRAWN		SMORFISH, DRESSED		TUNA, BLUEFIN ROUND		WHITING, ROUND		WOLF-FISH, DRAWN		UNCLASSIFIED FISH FOR FOOD		SCALLOPS, SEA (MEATS)		SHRIMP, ROUND		LOBSTERS, ROUND		UNCLASSIFIED SHELL-FISH, ETC.		TOTAL	
	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
SCALLOP DREDGES:																						
EASTERN MAINE	-	-	-	-	-	-	-	-	-	-	-	-	-	19,362	-	-	-	-	-	-	-	19,362
CENTRAL MAINE	-	-	-	-	-	-	-	-	-	-	-	-	-	92,720	-	-	-	-	-	-	-	92,720
WESTERN MAINE	-	-	-	-	-	-	-	-	-	-	-	-	-	27,200	-	-	-	-	-	-	-	27,200
WEST SIDE SOUTH CHANNEL	-	-	-	-	-	-	-	-	-	-	-	-	-	40,660	-	-	-	-	-	-	-	40,660
NORTHERN EDGE AND NORTHEAST PEAK	-	-	-	-	-	-	-	-	-	-	-	-	-	735,726	-	-	-	-	-	-	-	735,726
CENTRAL AND SOUTHEAST GEORGES	-	-	-	-	-	-	-	-	-	-	-	-	-	259,805	-	-	-	-	-	-	-	259,805
NAUTUCKET SHOALS AND LIGHTSHIP GROUNDS	-	-	-	-	-	-	-	-	-	-	-	-	-	10,455	-	-	-	-	-	-	-	10,455
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	1,185,928	-	-	-	-	-	-	-	-	1,185,928
TOTAL (LANDED WEIGHT, ALL SPECIES)	2,202,231	356,184	911,796	15,941,269	40,839	24,131	1,235,767	1,185,928	536,470	454	-	-	95,666	339	-	-	-	-	-	-	-	95,666,339
TOTAL (ROUND WEIGHT, ALL SPECIES $\frac{2}{1}$)	2,488,521	445,230	911,796	15,941,269	49,007	24,131	1,235,767	1,185,928	536,470	454	-	-	97,660	208	-	-	-	-	-	-	-	97,660,208
MISCELLANEOUS GEAR, UNCLASSIFIED WATERS OFF MAINE	-	-	-	900	-	1,681,124	875	-	-	-	-	-	-	-	-	22,603,911	10,867,263	-	-	-	-	187,975,896
GRAND TOTAL (ROUND WEIGHT $\frac{2}{1}$)	2,488,521	445,230	911,796	15,942,169	49,007	1,705,255	1,236,642	1,185,928	536,470	22,604,365	10,867,263	-	-	285,636,104	-	-	-	-	-	-	-	285,636,104

$\frac{1}{1}$ EXCLUSIVE OF DUPLICATION. $\frac{2}{1}$ ALL SPECIES ARE LISTED AS ROUND WEIGHT EXCEPT UNIVALVE AND BIVALVE MOLLUSKS WHICH ARE REPORTED AS POUNDS OF MEATS. SEA SCALLOPS ARE LISTED AS WEIGHT OF EDIBLE MEAT. LANDED WEIGHT OF FRESH FISH WAS CONVERTED TO ROUND WEIGHT BY MULTIPLYING BY THE FOLLOWING FACTORS: COD, DRAWN 1.17; CUSK, DRAWN 1.13; HADDOCK, DRAWN 1.14; WHITE HAKE, DRESSED 1.34; HALIBUT, DRAWN 1.15; POLLOCK, DRAWN 1.13; SMORFISH, DRESSED 1.25; TUNA, DRESSED 1.66 AND WOLFFISH, DRAWN 1.20.

NOTE:--DAYS ABSENT IS THE MEASURE OF TIME, TO THE NEAREST COMPLETE DAY, THAT A VESSEL IS AWAY FROM PORT DURING A FISHING TRIP. WHEN A CRAFT OPERATES IN TWO OR MORE SUBAREAS DURING A VOYAGE, A FRACTIONAL PART (IN TENTHS) OF THE TRIP IS ALLOTTED TO THE SUBAREA ON THE BASIS OF THE CATCH IN EACH SUBAREA. DAYS FISHED IS THE TIME ACTUAL FISHING OPERATIONS WERE CARRIED ON, EXPRESSED TO THE NEAREST TENTH OF A DAY. TO OBTAIN FISHING TIME IN HOURS, MULTIPLY THE NUMBER OF DAYS FISHED BY 24.



NEW ENGLAND FISHERIES

LANDINGS AT MASSACHUSETTS PORTS

Detailed statistics on landings at Boston, Gloucester, New Bedford, and other Massachusetts ports are collected and published monthly and annually in the Current Fishery Statistics series of bulletins. Additional detailed tabulations are prepared for the use of Bureau and State scientists and the International Commission for the Northwest Atlantic Fisheries. The data usually represent about 98 percent of the total Massachusetts catch. The figures do not include data on shellfish (except the landings of otter trawl caught lobsters, shrimp, sea scallop meats, and squid). Additional landings, not included in the data, consist mostly of crabs, pot caught lobsters, clams, sea mussels, oysters, bay scallop meats, Irish moss, and small amounts of other fish, shellfish, and other marine organisms.

The following tables present a summary of 1963 data on Massachusetts landings by ports, gear, and area of capture. Since the quantities shown are the weights of the actual landings, they are not directly comparable with the catch figures that appear in other tables in this Digest.

Landings by fishing craft of all sizes at Boston, Gloucester, New Bedford, and certain other Massachusetts ports in 1963 were 432 million pounds valued at \$37 million. Compared with 1962 (453 million pounds worth \$36 million), landings decreased 5 percent in volume but increased 2 percent in value. Gloucester was the leading port with 32 percent of the landings, followed closely by New Bedford with 31 percent; Boston, 25 percent; and other Massachusetts Ports, 12 percent. The distribution of value was nearly identical with the previous year: New Bedford, 46 percent; Boston, 29; Gloucester, 18; and other ports, 7 percent.

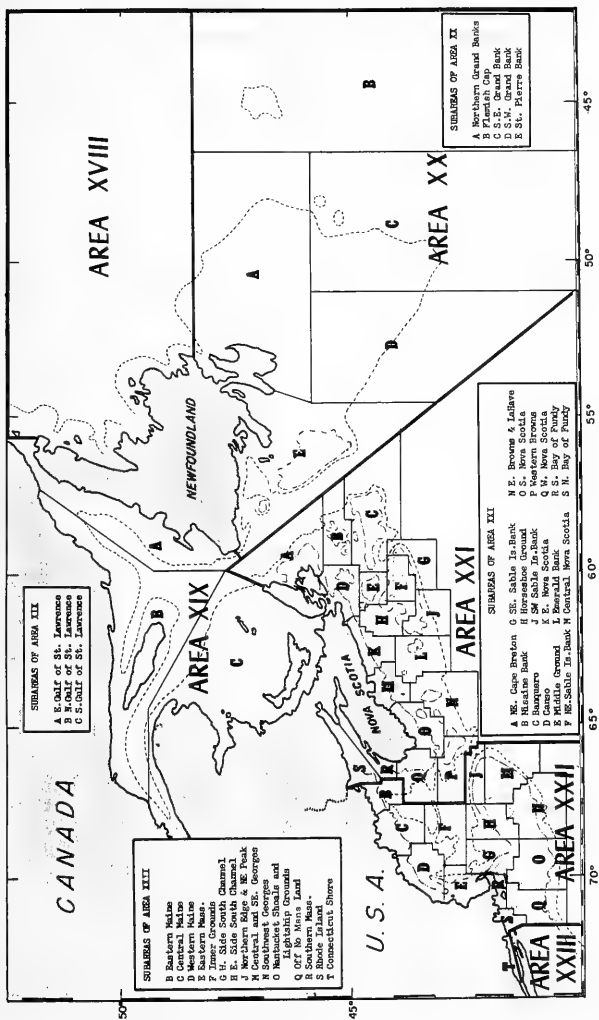
Boston landings of 107.2 million pounds were down 10.4 million pounds from 1962--the lowest level in 41 years. Ex-vessel prices were generally higher and total value of the landings increased \$318,700 over 1962 to the highest level in 4 years. The 8-million-pound decrease in haddock landings was the major factor in the decline in volume. Gloucester vessels, which land much of their groundfish catch at Boston, accounted for 24 percent of the landings at Boston.

Gloucester landings decreased sharply in volume, down 17 percent to the lowest level in 23 years, but because of improved prices, the total value rose 3 percent to the highest level since 1959. A major reason for the decline in volume was the complete absence of menhaden, which provided landings of 16 million pounds in 1962. Ocean perch receipts dropped 19 percent to 43.2 million pounds, the lowest since 1938. Whiting landings fell nearly 4 million pounds to the lowest point in 7 years.

Once again, New Bedford had the best year in its history, with landings of 135 million pounds (up 13 percent) worth \$16.8 million (up 2 percent). Yellowtail flounder landings of 63.8 million pounds (up 37 percent) were responsible for the increase at this port and also established a new record for this species. In 1963, yellowtail landings were second to haddock in Massachusetts--quite a jump over the past few years. The major decline was in sea scallops, which dropped 17 percent because of decreased abundance on Georges Bank. The unit value increased as demand was strong. New Bedford remained the leading New England tuna port (3.3 million pounds) and became the leading port for the new longline swordfish fishery (1.2 million pounds).

At Massachusetts ports, 711 fishing craft captured the 432 million pounds of fish and shellfish landed in 1963. Of these, 402 craft with otter trawls caught 89 percent of the landings. Purse seines and scallop dredges accounted for about 4 percent each, and the remainder was taken on lines, in pound and trap nets, by harpoons, or with gill nets. Fishing grounds off the New England shore yielded 370 million pounds or 86 percent of the entire landings. About 12 percent was taken from grounds off Nova Scotia, while the remainder came from the Gulf of St. Lawrence, the Newfoundland Banks, and from areas off the Middle Atlantic States.

STATISTICAL AREAS AND SUBAREAS USED IN REPORTING THE CATCH LANDED AT CERTAIN MASSACHUSETT PORTS DURING 1963



NEW ENGLAND FISHERIES

LANDINGS AT MASSACHUSETTS PORTS

SUMMARY OF LANDINGS, 1963

SPECIES	BOSTON		GLOUCESTER	
	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES, ROUND	-	-	10,895,230	\$102,820
ANGLERFISH, ROUND	-	-	8,455	264
BONITO, ROUND	-	-	35	2
BUTTERFISH, ROUND	6,525	\$766	94,530	7,034
COD, DRAWN: WHALE	2,700	310	-	-
MARKET	6,630,831	544,672	1,417,104	106,030
SCROD	8,562,945	701,621	1,651,067	133,153
CUSK, DRAWN	2,759,502	214,991	314,483	20,182
EELS, CONGER, ROUND	836,855	62,511	404,618	23,452
FLOUNDERS, ROUND:	220	7	-	-
BLACKBACK: LARGE	736,281	97,591	31,765	2,970
SMALL	22,437	1,867	35,815	1,980
DAG	1,119,695	69,931	1,439,314	79,808
FLUKE: LARGE	2,450	64	40	3
SMALL	2,000	77	-	-
GRAY SOLE	356,045	55,980	916,979	100,118
LEMON SOLE	279,759	43,281	14,245	1,951
YELLOWTAIL	1,084,420	66,833	153,245	9,174
HADDOCK, DRAWN: LARGE	37,797,920	4,355,781	9,153,266	1,042,350
SCROD	37,337,582	3,948,325	7,777,621	781,627
SNAPPER	15,155	1,998	298,140	14,156
HAKE: RED, ROUND	318	36	110,535	2,647
WHITE, DRESSED: LARGE	72,590	8,089	520,195	36,018
MEDIUM	887,435	59,215	280,435	14,932
HALIBUT, DRAWN	54,801	18,457	58,554	18,424
HERRING, SEA, ROUND	-	-	133,210	1,210
MACKEREL, ROUND	150	11	319,155	27,614
OCEAN PERCH, ROUND	1,145,689	67,172	43,238,768	2,143,705
POLOCK: ROUND	51,250	3,054	254,978	8,326
DRAWN	6,512,965	396,790	3,651,433	176,962
SCUP OR PORGY, ROUND, UNCLASSIFIED	-	-	2,300	92
SEA BASS, ROUND, UNCLASSIFIED	-	-	250	31
SHAD, ROUND	-	-	475	17
SHARKS, UNCLASSIFIED, DRAWN	2,750	145	8,009	312
SKATES, ROUND	14,055	565	31,140	1,123
STRIPED BASS, ROUND	-	-	2,333	405
STURGEON, DRAWN	250	30	285	37
SWORDFISH, DRESSED	33,214	14,408	-	-
TILEFISH, DRAWN	900	45	210	18
TUNA, ROUND: BLUEFIN	-	-	35,542	1,484
UNCLASSIFIED	2,111	141	-	-
WHITING: ROUND	7,200	241	49,233,394	1,178,488
DRESSED	150,625	7,379	65,350	3,212
WOLFFISH, DRAWN	404,445	27,337	136,525	7,508
UNCLASSIFIED: FOR FOOD	6,850	423	4,583,973	288,569
SPAWN	253,190	20,670	42,720	3,477
FOR INDUSTRIAL USE	300	15	1,576,375	11,889
LOBSTERS, NORTHERN	-	-	500	150
SHRIMP	-	-	23,056	2,952
SEA SCALLOP MEATS	50	25	545,538	253,784
SQUID	-	-	14,610	626
TOTAL	107,154,660	10,603,494	139,477,812	6,611,066

SPECIES	NEW BEDFORD		OTHER MASSACHUSETTS PORTS	
	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES, ROUND	-	-	1,600	\$16
ANCHOVIES, ROUND	-	-	55,125	819
ANGLERFISH, ROUND	-	-	22,290	1,142
BILLFISH, ROUND	-	-	5,290	265
BLUEFISH, ROUND	-	-	11,422	1,684
BONITO, ROUND	-	-	47,704	4,381
BUTTERFISH, ROUND	108,180	\$9,340	553,670	72,339
COD, DRAWN: WHALE	12,875	1,208	164	24
LARGE	1,378,045	119,368	2,397,397	195,391
MARKET	4,225,508	404,518	1,526,876	124,985
SCROD	366,770	34,639	228,573	13,686

SEE NOTE ON PAGE 128.

(CONTINUED ON NEXT PAGE)

NEW ENGLAND FISHERIES

127

LANDINGS AT MASSACHUSETTS PORTS

SUMMARY OF LANDINGS, 1963 - Continued

SPECIES	NEW BEDFORD		OTHER MASSACHUSETTS PORTS	
	POUNDS	VALUE	POUNDS	VALUE
CUSK, DRAWN	2,725	\$68	19,564	\$576
EELS, CONGER, ROUND	-	-	2,415	55
FLOUNDERS, ROUND:				
BLACKBACK: LARGE	4,129,160	642,770	2,388,320	264,286
SMALL	3,505,330	258,550	902,718	61,941
DAB	1,824,350	169,371	218,123	14,502
FLUKE:				
LARGE	698,420	284,734	10,565	4,211
MEDIUM	494,675	155,334	25,738	7,205
SMALL	1,032,112	255,079	15,417	3,946
GRAY SOLE	732,140	85,260	359,086	46,927
LEMON SOLE	1,629,375	435,610	34,339	7,129
YELLOWTAIL	63,847,825	4,192,485	3,788,271	307,095
HADDOCK, DRAWN: LARGE	5,888,510	589,895	2,690,696	273,937
SCROD	4,269,210	391,818	646,230	42,886
SNAPPER	375	8	115	2
HAKE: RED, ROUND	-	-	4,956,999	52,139
WHITE, DRESSED: LARGE	1,500	30	12,640	675
MEDIUM	960	35	109,435	6,504
HALIBUT, DRAWN	7,613	1,899	33,434	18,396
HERRING, SEA, ROUND	-	-	1,717,015	33,575
MACKEREL, ROUND	2,930	521	1,597,995	156,024
MENHADEN, ROUND	324,220	3,242	20,400	261
OCEAN PERCH, ROUND	225	11	2,015	97
POLLOCK: ROUND	700	35	11,773	349
DRAWN	22,985	1,230	220,911	9,250
SCUP OR PORGY, ROUND: LARGE	1,415	167	7,980	638
MEDIUM	349,200	17,951	268,375	16,614
SMALL	100	4	-	-
UNCLASSIFIED	-	112,212	112,212	8,733
SEA BASS, ROUND: LARGE	-	95	95	9
MEDIUM	5,980	461	2,029	183
SMALL	200	10	-	-
UNCLASSIFIED	-	-	7,875	1,181
SHAD, ROUND	-	-	20,436	1,203
SHARKS, UNCLASSIFIED, DRAWN	4,087	232	6,012	259
SKATES, ROUND	-	-	5,900	293
STRIPED BASS, ROUND	150	6	80,666	11,962
STURGEON, DRAWN	2,045	119	2,005	310
SWORDFISH, DRESSED	1,201,763	348,523	59,769	37,324
TAUTOG, ROUND	500	25	7,609	246
TILEFISH, DRAWN	83,690	12,829	280	40
TUNA, ROUND: BLUEFIN	1,685,024	110,687	3,003,468	155,579
SKIPJACK	1,423,585	71,180	164,000	7,510
UNCLASSIFIED	-	-	5,975	1,189
WHITING: ROUND	-	-	12,006,715	248,477
DRESSED	-	-	3,106,154	125,095
WOLFFISH, DRAWN	5,205	230	51,849	2,338
UNCLASSIFIED: FOR FOOD	45,035	679	137,531	11,444
SPAWN	-	5,880	5,880	623
FOR INDUSTRIAL USE	18,311,722	164,041	4,148,055	66,689
LOBSTERS, NORTHERN	1,377,974	645,491	26,700	12,022
SEA SCALLOP MEATS	15,940,747	7,394,783	121,380	60,028
SQUID	3,480	154	1,737,900	93,769
TOTAL	135,148,620	16,804,673	49,903,195	2,590,420

SEE NOTE ON PAGE 128.



FISH OTTER TRAWL

NEW ENGLAND FISHERIES

LANDINGS AT MASSACHUSETTS PORTS

SUMMARY OF LANDINGS, 1963 - Continued

SPECIES	TOTAL			
	1963		1962	
	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES, ROUND	10,896,830	\$102,836	(1)	(1)
ANCHOVIES, ROUND	55,125	819	-	-
ANGLEFISH, ROUND	30,745	1,406	(1)	(1)
BILLFISH, ROUND	5,290	265	-	-
BLUEFISH, ROUND	11,422	1,684	(1)	(1)
BONITO, ROUND	47,739	4,383	(1)	(1)
BUTTERFISH, ROUND	762,905	89,479	(1)	(1)
COD, DRAWN: WHALE	15,739	1,542	-	-
LARGE	11,823,377	965,462	12,021,991	\$955,969
MARKET	15,966,396	1,364,277	17,078,274	1,392,604
SCROD	3,669,328	283,500	4,940,799	361,809
CUSH, DRAWN	1,263,762	86,627	1,090,235	69,745
EELS, CONGER, ROUND	2,635	62	(1)	(1)
FLOUNDERS, ROUND:				
BLACKBACK: LARGE	7,255,526	1,007,617	-	-
SMALL	4,466,300	324,338	-	-
UNCLASSIFIED	-	-	12,554,024	1,463,561
DAB	4,601,682	352,612	3,904,273	297,504
FLUKE: LARGE	711,475	289,012	-	-
MEDIUM	520,413	162,539	-	-
SMALL	1,049,529	259,102	3,770,407	887,264
GRAY SOLE	2,364,250	288,285	1,978,121	244,255
LEMON SOLE	1,957,718	487,971	2,689,194	639,199
YELLOWTAIL	68,879,761	4,575,887	50,844,325	3,824,920
HADDOCK, DRAWN: LARGE	55,730,392	6,261,963	51,788,105	5,216,654
SCROD	50,030,643	5,164,656	63,574,331	5,480,873
SNAPPER	313,785	16,164	-	-
HAKE: RED, ROUND	5,067,852	54,822	5,340,025	56,511
WHITE, DRESSED: LARGE	606,925	44,812	1,272,195	85,510
MEDIUM	1,278,265	80,686	454,898	21,873
HALIBUT, DRAWN	154,402	57,166	138,540	47,751
HERRINS, SEA, ROUND	1,650,225	34,785	(1)	(1)
MACKEREL, ROUND	1,920,230	184,170	1,344,199	194,208
MENHADEN, ROUND	344,620	3,503	16,031,941	158,813
OCEAN PERCH, ROUND	44,386,697	2,210,985	54,529,520	2,355,580
POLLOCK: ROUND	318,701	11,764	-	-
DRAWN	10,408,294	584,232	12,115,059	599,163
SCUP OR PORGY, ROUND: LARGE	9,395	825	-	-
MEDIUM	617,575	34,565	-	-
SMALL	1,650,225	34,785	-	-
UNCLASSIFIED	114,512	8,825	1,275,833	62,484
SEA BASS, ROUND: LARGE	95	9	-	-
MEDIUM	8,009	644	-	-
SMALL	200	10	-	-
UNCLASSIFIED	8,125	1,182	(1)	(1)
SHAD, ROUND	20,931	1,220	(1)	(1)
SHARKS, UNCLASSIFIED, DRAWN	20,658	948	(1)	(1)
SKATES, ROUND	51,095	1,981	(1)	(1)
STRIPED BASS, ROUND	83,149	12,375	(1)	(1)
TURGEON, DRAWN	4,585	496	(1)	(1)
SWORDFISH, DRESSED	1,294,746	399,895	481,443	264,744
TAUTOG, ROUND	8,109	271	-	-
TILEFISH, DRAWN	85,080	12,932	56,330	7,674
TUNA, ROUND: BLUEFIN	4,924,034	267,750	-	-
SKIPJACK	1,587,585	76,690	-	-
UNCLASSIFIED	8,086	1,330	5,828,699	438,257
WHITING: ROUND	61,249,309	1,427,206	68,600,180	1,462,552
DRESSED	3,322,129	135,686	4,085,940	193,204
WOLFFISH, DRAWN	598,024	37,413	496,508	34,006
UNCLASSIFIED: FOR FOOD	4,773,389	301,115	8,349,767	978,830
SPAWN	301,790	24,770	219,710	90,171
FOR INDUSTRIAL USE	24,036,452	242,633	26,832,299	223,234
LOBSTERS, NORTHERN	1,405,174	657,683	(1)	(1)
SHRIMP	23,068	2,952	(1)	(1)
SEA SCALLOP MEATS	16,607,715	7,708,620	19,529,768	7,968,267
SQUID	1,755,990	94,549	-	-
TOTAL	431,682,287	36,815,673	453,216,933	36,071,210

1/ INCLUDED UNDER UNCLASSIFIED.

NOTE: THIS REPORT INCLUDES ALL LANDINGS IN MASSACHUSETTS EXCEPT THE INSHORE CATCH OF SHELLFISH (LOBSTERS, CLAMS, BAY SCALLOPS, IRISH MOSS, ETC.) AND SMALL QUANTITIES OF FINFISH. IN 1962, THE LANDINGS SHOWN ABOVE ACCOUNTED FOR 97.3 PERCENT OF THE MASSACHUSETTS TOTAL CATCH. THE WEIGHTS OF FISH GIVEN IN THIS BULLETIN REPRESENT THE FRESH FISH AS LANDED AND THE VALUES ARE THOSE RECEIVED BY THE FISHERMEN. THE GRADES OR SIZES GIVEN FOR CERTAIN SPECIES ARE THOSE RECOGNIZED IN THE TRADE. "WHALE" COD ARE CLASSIFIED AS THOSE WEIGHING OVER 25 POUNDS; "LARGE" COD, 10 TO 25 POUNDS; "MARKET" COD, 2-1/2 TO 10 POUNDS; AND "SCROD" COD, 1-1/2 TO 2-1/2 POUNDS. "LARGE" BLACKBACK FLOUNDERS, 1 TO 3-1/2 POUNDS; AND "SMALL" BLACKBACK FLOUNDERS, 3/4 TO 1 POUND. "LARGE" FLUKE, OVER 4 POUNDS; "MEDIUM" FLUKE, 3 TO 4 POUNDS; AND "SMALL" FLUKE, 1-1/2 TO 3 POUNDS. "LARGE" HADDOCK ARE THOSE WEIGHING OVER 2-1/2 POUNDS; "SCROD" HADDOCK, 1-1/2 TO 2-1/2 POUNDS; AND "SNAPPER" HADDOCK, UNDER 1-1/2 POUNDS. "LARGE" HAKE ARE THOSE WEIGHING OVER 6 POUNDS, AND "MEDIUM" HAKE, UNDER 6 POUNDS. THE FOLLOWING TERMS INDICATE THE CONDITION IN WHICH LANDED: "ROUND," "AS CAUGHT;" "DRAWN," "EVISERATED;" AND "DRESSED," "EVISERATED AND HEADED." THE CATEGORY "OTHER MASSACHUSETTS PORTS" INCLUDES PLYMOUTH, PROVINCETOWN, AND OTHER CAPE COD PORTS.

LANDINGS AT MASSACHUSETTS PORTS
SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963

GEAR AND SUBAREA	CRAFT FISHING		TRIPS		DAYS ABSENT		DAYS FISHED		COD, DRAWN			MUSK, DRAWN		FLOURERS, ROUND	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	POUNDS	MARKET	SCROD	POUNDS	POUNDS	POUNDS	POUNDS
LINE TRAMLS:															
WESTERN MAINE	1	1.0			1		.6		65	100			550		
WESTERN MASSACHUSETTS	47	828.0			858		300.4		79,790	123,035			115,703		32,382
INNER GROUNDS	5	116.0			116		76.2		66,726	70,395			180,070		135
WEST SIDE SOUTH CHANNEL	42	975.0			987		501.2		534,461	230,866			34,158		205
SOUTHERN MASSACHUSETTS	2	18.0			18		5.4		69,947	15,505					
TOTAL	1/ 66	1,938.0			1,960		863.8		750,889	439,861			330,481		32,722
HAND LINES:															
EASTERN MASSACHUSETTS	90	1,310.0			1,313		578.2		54,770	21,577			455		5,396
WEST SIDE SOUTH CHANNEL	50	1,979.0			1,979		989.0		1,311,549	426,647			9,416		5
CENTRAL AND SOUTHEAST GEORGES	1	1.0			7		4.2		2,200	4,000					125
NANTUCKET SHOALS AND LIGHTSHIP	1	1.0			3		1.5		3,200	2,750					
SOUTHERN MASSACHUSETTS	1/ 131	3,292.0			3,303		1,573.2		1,373,111	455,479			9,871		5,526
TOTAL															
HARBOONS:															
EASTERN MASSACHUSETTS	3	14.0			14		2.4								
SOUTHEAST GEORGES	4	7.0			61		34.0								
NANTUCKET SHOALS AND LIGHTSHIP	5	15.0			96		53.0								
OFF NO MAN'S LAND	4	7.0			32		18.5								
TOTAL	1/ 12	43.0			203		107.9								
LONG LINES:															
EASTERN MASSACHUSETTS	3	8.0			8		2.4								
NORTHERN EDGE AND NORTHEAST PEAK	6	16.5			28		16.0								
SOUTHEAST GEORGES	10	17.5			127		100.5								
NANTUCKET SHOALS AND LIGHTSHIP	11	32.0			196		137.6								
OFF NO MAN'S LAND	8	12.0			68		43.0								
OFF NEW ENGLAND, UNCLASSIFIED	1	5.0			42		13.8								
OFF LONG ISLAND	5	7.0			50		28.0								
TOTAL	1/ 23	104.0			590		415.8								
OTHER TRAMLS:															
ST. PIERRE BANK	5	3.6			54		11.5			215			150		
EAST GULF OF ST. LAWRENCE	16	25.0			416		117.2		460	500			35		
NORTH GULF OF ST. LAWRENCE	11	12.3			188		47.0		400	15			215		
SOUTH GULF OF ST. LAWRENCE	3	3.1			41		7.3								
NORTHEAST CAPE BRETON	15	13.4			193		54.6								
MISATINE BANK	1	24.0			32		32.8		495	3,940			794		
BANGOREAU	16	26.4			119		37.1		238	4,118			300		
MIDDLE GROUND	9	4.9			71		17.2		63	4,269					
SOUTHEAST SABLE ISLAND BANK	2	.7			10		4.7								
HORSESHOE GROUND	23	35.8			470		121.1		3,015	7,177			2,372		
SOUTHWEST SABLE ISLAND BANK	1	.1			1		109.2						3,657		
EASTERN NOVA SCOTIA	24	30.3			466		109.6		2,163	5,859			4,756		
ENCIALD BANK	6	9.0			97		136.6		2,947	6,659			643		
WESTERN NOVA SCOTIA	25	39.9			597		202.8		101,653	132,970			23,339		6,250
-EASTERN BROWN AND LA HAVRE	40	38.5			676		236.6		37,720	74,195			26,655		1,640
SOUTHERN NOVA SCOTIA	48	72.0			1,041		646.1		360,703	534,594			111,118		6,085
WESTERN BROWNS	59	123.1			1,966		120.4		34,699	62,992			20,909		3,869
WESTERN NOVA SCOTIA	25	23.3			232		147.8		92,679	184,826			7,200		1,573
SOUTHERN BAY OF FUNDY	24	27.6			442		233.9		145,945	359,548			19,912		3,300
NORTHERN BAY OF FUNDY	29	44.2			499		233.9		145,945	359,548			19,912		3,300
EASTERN MAINE	3	4.4			21		8.1		1,295	925					5,363
TOTAL															

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	CRAFT FISHING	TRIPS	DAYS ABSENT	DAYS FISHED	COL., FRESH			CUSH, DRAWN	FLOURISERS, ROUND BLACK-BACK
					LARGE	MARKET	SCROO		
OTTER TRAMMERS - CONTINUED:									
WESTERN MAIN	45	211.4	364	183.5	52,265	106,742	19,400	1,892	
EASTERN MASSACHUSETTS	182	8,518.2	8,975	3,627.6	483,425	935,888	294,267	2,195,429	
INNER GROUNDS	66	99.3	505	244.7	81,804	61,925	44,469	1,062	
WEST SIDE SOUTH CHANNEL	214	1,792.5	6,586	3,876.1	1,366,809	3,195,623	590,533	3,695,881	
EAST SIDE SOUTH CHANNEL	186	946.2	5,265	3,350.6	2,523,968	3,623,565	1,443,399	1,461,862	
NORTHERN EDGE AND NORTHEAST PEAK	174	381.0	4,352	2,862.8	2,143,888	1,928,908	347,000	672,043	
CENTRAL AND SOUTHEAST GEORGES	59	230.6	1,527	947.4	159,722	419,056	30,060	145,706	
SOUTHERN MASSACHUSETTS	161	1,192.5	5,658	3,355.1	159,342	1,361,825	173,813	3,200,685	
OFF NO MAN'S LAND	165	1,600.0	4,667	2,604.4	35,589	134,173	2,690	421,153	
RHODE ISLAND SHORE	72	415.4	837	432.0	1,417	19,039	1,765	627,818	
OFF LONG ISLAND, UNCLASSIFIED	28	52.2	225	100.3	3,940	9,565	375	12,680	
OFF LONG ISLAND	49	80.0	532	341.0	550	4,100	-	1,375	
TOTAL	1/	16,739.0	49,597	26,946.4	9,556,364	14,957,893	3,590,493	920,325	11,650,472
FLOATING TRAPS,									
EASTERN MASSACHUSETTS	9	351.0	358	357.4	-	500	-	-	
SINK GILL NETS,									
EASTERN MASSACHUSETTS	10	512.0	542	540.8	157,999	111,940	1,750	3,085	23,100
DRIIFT GILL NETS,									
EASTERN MASSACHUSETTS	10	109.0	109	51.1	-	-	-	-	-
WEST SIDE SOUTH CHANNEL	1/	22	179.0	121.1	-	-	-	-	-
PURSE SEINES									
WESTERN MASSACHUSETTS	11	180.0	180	55.3	-	-	-	-	-
WEST SIDE SOUTH CHANNEL	2	3.0	23	5.5	-	-	-	-	-
OFF NO MAN'S LAND	1	5.0	5	5.0	-	-	-	-	-
RHODE ISLAND SHORE	1	1.0	3	4.3	-	-	-	-	-
OFF LONG ISLAND	7	19.0	173	45.0	-	-	-	-	-
TOTAL	1/	208.0	364	111.1	-	-	-	-	-
SCALLOP PEDREGES,									
WESTERN BROWNS	1	9	13	9.0	-	-	-	-	-
WESTERN NOVA SCOTIA	1	1	1	1.0	-	-	-	-	-
EASTERN MASSACHUSETTS	9	88.0	108	38.2	178	75	-	5,095	1,135
WEST SIDE SOUTH CHANNEL	30	128.0	1,027	787.9	-	-	-	1,400	
EAST SIDE SOUTH CHANNEL	45	131.1	1,033	745.7	50	200	-	200	
NORTHERN EDGE AND NORTHEAST PEAK	40	159.5	1,827	1,278.2	-	-	-	20	
CENTRAL AND SOUTHEAST GEORGES	52	343.6	3,030	2,305.5	-	-	-	235	
SOUTHERN MASSACHUSETTS	31	89.5	693	496.2	-	-	-	-	
NAUTICET SHOALS AND LIGHTSHIP	1	1.0	4	2.5	-	-	-	-	
OFF NO MAN'S LAND	5	7.0	64	48.0	-	-	-	-	
OFF LONG ISLAND	1/	66	10,209	7,592.7	228	700	-	8,045	
TOTAL	1/	236.0	10,209	7,592.7	-	-	-	-	-
POUND NETS									
WESTERN MASSACHUSETTS	8	742.0	742	735.7	-	923	-	322	
WEST SIDE SOUTH CHANNEL	6	308.0	308	308.0	525	-	-	1,539	
SOUTHERN MASSACHUSETTS	1	43.0	43	43.0	-	-	-	-	
TOTAL	1/	1,093.0	1,093	1,086.7	525	923	-	1,961	
GRAND TOTAL	1/	25,697.0	65,508	39,696.9	11,839,116	15,966,396	3,669,328	11,721,826	

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS
SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

	GEAR AND SUBAREA				FLOUNDER, ROUND - CONTINUED				HADDOCK, DRAWN			HAKE	
	DAB	FLUKE	GRAY SOLE	LEMON SOLE	YELLOW-TAIL	LARGE	SCOD	SNAPPER	RED, ROUND	WHITE, LARGE			
	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS			
LINE TRAWLS:													
WESTERN MAINE	-	-	-	-	1,100	-	-	-	-	2,900			
EASTERN MASSACHUSETTS	-	-	-	-	139,304	-	-	40,305	-	2,950			
INNER GROUNDS	80	-	-	-	359,560	-	-	16,095	-	16,453			
WEST SIDE SOUTH CHANNEL	-	-	11	865	1,222,276	-	-	32,658	18	11,525			
SOUTHERN MASSACHUSETTS	-	-	-	-	-	-	-	-	-	-			
TOTAL	80	-	11	865	1,692,466	149,258	160	18	18	35,810			
HAND LINES:													
EASTERN MASSACHUSETTS	-	-	-	99	290	440	35	-	-	45			
WEST SIDE SOUTH CHANNEL	623	200	-	1,750	271,375	474,809	-	-	-	-			
CENTRAL AND SOUTHEAST GEORGES	-	-	-	-	-	875	-	-	-	-			
TOTAL	633	205	-	1,849	271,673	476,124	-	-	-	45			
OTTER TRAWLS:													
EAST GULF OF ST. LAWRENCE	29	-	140	-	-	865	640	-	1,375	-			
SOUTH GULF OF ST. LAWRENCE	85	-	-	-	-	1,654	30	-	-	-			
BANQUEREAU	5,607	-	96,673	-	-	830	2,231	-	-	200			
CANSO	9,205	-	146,236	-	-	170	125	-	-	-			
GRAND FONDUE	300	-	71,960	-	-	11,435	21,125	-	-	1,411			
HORSESHOE GROUND	643	-	4,910	-	-	4,231	6,927	2,700	-	2,108			
EASTERN NOVA SCOTIA	35	-	-	-	-	-	188	-	-	1,204			
EMERALD BANK	1,165	-	5,361	-	-	5,501	9,845	1,560	-	1,204			
CENTRAL NOVA SCOTIA	23,195	-	2,466	6,420	11,027	95,476	1,673,524	1,560	-	2,778			
EASTERN BROWNS AND LA HAVE	10,782	-	9,146	4,612	45,553	203,342	1,500	-	-	4,554			
SOUTHERN NOVA SCOTIA	27,720	2,000	27,573	4,176	2,600	2,715,524	4,408,937	17,649	-	2,961			
WESTERN BROWNS	9,176	-	350	-	-	386,381	599,703	300	2,400	10,720			
SOUTHERN BAY OF FUNDY	94,607	-	27,190	-	350	436,704	583,977	300	2,400	19,375			
NORTHERN BAY OF FUNDY	50,438	-	26,438	-	-	710,997	888,654	600	3,600	20,921			
EASTERN MAINE	2,990	-	70,625	-	-	726,976	902,214	1,200	3,600	19,951			
CENTRAL MAINE	35,862	-	53,949	-	-	2,322	28,988	9,149	10,992	25,702			
WESTERN MAINE	972,373	10,429	529,017	16,515	3,475,395	21,326	28,988	9,149	10,992	25,702			
EASTERN MASSACHUSETTS	448,550	16,208	300,061	284,759	1,333,213	1,654,408	1,355,417	108,326	935,845	91,842			
INNER GROUND SOUTH CHANNEL	2,216,684	1,125	340,387	470,235	2,224,673	12,784,925	10,596,452	101,054	690,840	117,372			
EAST SIDE SOUTH CHANNEL	285,457	2,145	45,910	759,707	376,913	9,218,642	12,385,602	2,523	733,637	133,323			
NORTHERN EDGE & NORTHEAST PEAK	280,098	94,265	45,910	111,069	3,461,110	5,317,515	1,625	-	9,339	50			
CENTRAL & SOUTHEAST GEORGES	48,375	567,459	269,400	134,668	18,767,522	1,091,752	1,091,752	500	-	440			
NANTUCKET SHOALS & LIGHTSHIP	12,375	390,465	35,340	5,180	62,830	98,440	111,330	-	-	440			
OFF NO MAN'S LAND	-	-	70	525	200	857,745	600	-	2,677,370	-			
PHOENIX ISLANDS	-	-	-	-	-	312,600	-	-	-	-			
PHOENIX ISLAND SHORE	-	-	-	-	-	600	-	-	-	-			
OFF LONG ISLAND	-	626,146	11,800	-	687,745	600	-	-	-	-			
TOTAL	4,595,309	2,276,530	2,362,574	1,949,099	66,791,120	53,461,687	49,874,365	313,625	5,062,259	505,205			
SINK GILL NETS:													
EASTERN MASSACHUSETTS	75	-	40	-	-	99,955	520	-	-	65,865			
SCALLOP DREDGES:													
EASTERN MASSACHUSETTS	-	-	-	-	1,665	-	-	-	-	-			
WEST SIDE SOUTH CHANNEL	5,170	-	-	5,073	20,135	45	-	-	-	-			
NORTHERN EDGE & NORTHEAST PEAK	415	-	675	660	17,590	115	90	-	-	-			
CENTRAL & SOUTHEAST GEORGES	-	200	750	70	13,760	-	-	-	-	-			
SOUTHWEST GEORGES	-	-	-	-	815	-	-	-	-	-			
NANTUCKET SHOALS & LIGHTSHIP	-	-	-	-	815	-	-	-	-	-			
OFF LONG ISLAND	-	-	-	-	815	-	-	-	-	-			
TOTAL	5,565	200	1,625	5,885	54,920	160	90	-	-	-			

(CONTINUED)

SEE NOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	FISHERY, ROUND - CONTINUED										HADDOCK, DRAMM		HACK	
	DAB	FLUKE	GRAY SOLE	LEMON SOLE	YELLOW-TAIL	LARGE	POLLOCK		SCUP OR POLY. ROUND	SPOR. FISH UNRESSED	TILE FISH, DRAMM	WHITE, DRESSED LARVE	POUNDS	POUNDS
							ROUND	DRAMM							POUNDS	POUNDS
ROUND NETS:														
EASTERN MASSACHUSETTS	-	2,462	-	-	-	-	-	-	-	-	-	-	5,575	-
WEST SIDE SOUTH CHANNEL	-	2,462	-	-	-	-	-	-	-	-	-	-	5,575	-
TOTAL	-	4,924	-	-	-	-	-	-	-	-	-	-	11,150	-
GRAND TOTAL	4,601,682	2,261,417	2,364,220	1,957,718	65,873,761	55,730,392	50,030,643	313,785	5,067,852	606,925	-	-	-	-
GEAR AND SUBAREA	HAKE, CONTD.	WHITE, DRESSED MEDIUM	MALIBU, DRAMM	MACKEREL, ROUND	MENHADEN, ROUND	OCEAN PERCH, ROUND	POLLOCK ROUND	SCUP OR POLY. ROUND	SPOR. FISH UNRESSED	TILE FISH, DRAMM	WHITE, DRESSED LARVE	POUNDS	POUNDS	
LINE TRAWLS:														
EASTERN MASSACHUSETTS	175	2,905	24	750	-	-	155,363	-	-	-	-	-	-	
INNER GROUNDS	1,770	13,717	8,110	-	-	-	94,574	-	-	-	-	-	-	
WEST SIDE SOUTH CHANNEL	9,075	19,815	-	-	-	-	500	-	-	-	-	-	-	
SOUTH MASSACHUSETTS	11,020	35,803	-	-	-	754	14	-	-	-	-	200	-	
TOTAL	11,020	35,803	8,134	750	-	-	250,451	-	-	-	-	200	-	
HAND LINES:														
EASTERN MASSACHUSETTS	3,665	-	-	-	-	-	-	-	-	-	-	-	-	
WEST SIDE SOUTH CHANNEL	-	-	-	-	-	-	-	-	-	-	-	-	-	
NANTUCKET SHOALS & LIGHTSHIP	-	-	-	-	-	-	-	-	-	-	-	-	-	
SOUTHERN MASSACHUSETTS	3,665	8,134	750	-	-	-	-	-	-	-	-	-	-	
TOTAL	3,665	8,134	750	-	-	-	-	-	-	-	-	-	-	
HARBOORS:														
SOUTHWEST GEORGES	-	-	-	-	-	-	-	-	-	-	-	88,242	-	
NANTUCKET SHOALS & LIGHTSHIP	-	-	-	-	-	-	-	-	-	-	-	109,545	-	
OFF NO MANS LAND	-	-	-	-	-	-	-	-	-	-	-	20,964	-	
TOTAL	-	-	-	-	-	-	-	-	-	-	-	218,751	-	
LONG LINES:														
NORTHERN EDGE & NORTHEAST PEAK	-	-	-	-	-	-	-	-	-	-	-	63,652	-	
CENTRAL & SOUTHEAST GEORGES	-	-	-	-	-	-	-	-	-	-	-	300,209	-	
SOUTHWEST GEORGES	-	-	-	-	-	-	-	-	-	-	-	249,295	-	
NANTUCKET SHOALS & LIGHTSHIP	-	-	-	-	-	-	-	-	-	-	-	231,242	-	
OFF NO MANS LAND	-	-	-	-	-	-	-	-	-	-	-	39,025	-	
OFF NEW ENGLAND, UNCLASSIFIED	-	-	-	-	-	-	-	-	-	-	-	63,081	-	
OFF LONG ISLAND	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	-	-	-	-	-	-	-	-	-	-	-	1,069,164	-	
OTTER TRAWLS:														
ST. PIERRE BANK	-	629	-	-	741,380	-	-	-	-	-	-	745	-	
EAST GULF OF ST. LAWRENCE	150	1,980	-	-	4,520,525	-	-	-	-	-	-	480	-	
NORTH GULF OF ST. LAWRENCE	110	-	-	-	1,422,610	-	-	-	-	-	-	975	-	
SOUTH GULF OF ST. LAWRENCE	-	690	-	-	2,130,528	-	-	-	-	-	-	4,000	-	
NORTHEAST CAPE BRETON	-	843	-	-	1,105,766	-	-	-	-	-	-	-	-	
BANKS	1,299	4,074	-	-	3,515,168	-	-	-	-	-	-	4,212	-	
BAQUEBEAU	53	152	-	-	1,093,512	-	-	-	-	-	-	7,541	-	
CANSO	52	132	-	-	493,400	-	-	-	-	-	-	1,093,400	-	
MIDDLE GROUND	132	108	-	-	426,400	-	-	-	-	-	-	7,167	-	
SOUTHEAST SABLE ISLAND BANK	994	3,355	-	-	4,303,285	-	-	-	-	-	-	290,834	-	
HORSHEOE GROUND	2,153	6,871	-	-	18,980	-	-	-	-	-	-	130,296	-	
EASTERN NOVA SCOTIA	-	87	-	-	30,700	-	-	-	-	-	-	175	-	
EMERALD BANK	-	-	-	-	-	-	-	-	-	-	-	-	-	

(CONTINUED ON NEXT PAGE)

SEE NOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS
SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	HAKE-CONTD.		HALIBUT, DRAWN POUNDS	MACKEREL, ROUND POUNDS	MENHADEN, ROUND POUNDS	OCEAN PERCH, ROUND POUNDS	POLLOCK		SCUP OR FORCS, ROUND POUNDS	SWORD- FISH, DRESSED POUNDS	TILE FISH, DRAWN POUNDS
	WHITE, DRESSED MEDIUM POUNDS	RED POUNDS					ROUND	DRAWN			
OTTER TRAWLS - CONTINUED:											
CENTRAL NOVA SCOTIA	1,104	4,471				4,977,251		97,361			
EASTERN BROWNS & LA HAVE	2,920	2,920				844,899		182,936			
WESTERN BROWNS	9,298	2,386				4,915,993		845,678			
WESTERN NOVA SCOTIA	7,925	10,911				441,560	11,600	815,612			
WESTERN MASSACHUSETTS	24,280	3,929				82,160		161,902			
NORTHERN BAY OF FUNDY	10,039	1,354				60,720		228,578			
EASTERN MAINE	157,752	1,106				136,563	3,650	440,629			
CENTRAL MAINE	137,225	1,242				207,850		421,456			
WESTERN MAINE	35,617	1,242				649,630	5,112	355,673			
EASTERN MASSACHUSETTS	209,041	9,731				920,283	36,266	763,522	41,408		
INNER GROUNDS	107,085	1,335				1,695,838	5,720	307,760			
WEST SIDE SOUTH CHANNEL	156,364	960				2,570,644	25,603	1,493,848	310		900
WEST SIDE NORTH CHANNEL	272,722	15,339		2,065		1,996,845	20,568	1,270,218			
NORTHERN EDGE & NORTHEAST BEAK	66,950	10,533				47,750	11,000	793,494			
CENTRAL & SOUTHEAST GEORGES	1,173	2,172				550	1,700	27,315			125
SOUTHWEST GEORGES	1,635	960				225	27,500	5,796			2,238
NANTUCKET SHOALS & LIGHTSHIP	1,035			3,065			55,000	61,100			69,030
OFF NO MANS LAND								1,557			8,900
SOUTHERN MASSACHUSETTS								554,430			
RHODE ISLAND SHORE											
OFF LONG ISLAND									32,185		6,100
TOTAL	1,261,240	109,275	16,021			44,385,938	316,451	9,946,249	731,608		85,080
FLOATING TRAPS,											
EASTERN MASSACHUSETTS			306,614					400			
SINK GILL NETS,											
EASTERN MASSACHUSETTS	185	190						121,220			
DRAWL NETS:											
EASTERN MASSACHUSETTS			23,616								
WEST SIDE SOUTH CHANNEL			32,394								
TOTAL			5,590								
PURSE SEINES:											
EASTERN MASSACHUSETTS											
OFF NO MANS LAND											
TOTAL											
POUND NETS:											
EASTERN MASSACHUSETTS	1,955		1,98,016					2,260			
WEST SIDE SOUTH CHANNEL	1,955		1,360,843					9,674			
TOTAL	1,278,265	154,402	1,920,230	344,620	44,386,697	316,701	10,408,294	741,582	1,294,746		85,080
GEAR AND SUBAREA											
TUNA,											
ROUND											
DRESSED											
POUNDS											
TOTAL											
SEA SCALLOP MEATS											
POUNDS											
TOTAL											
WOLFFISH, DRAWN											
POUNDS											
TOTAL											
FOR FOOD											
POUNDS											
FOR INDUSTRIAL USE											
POUNDS											
TOTAL											
OTHER SPECIES											
POUNDS											
TOTAL											

(CONTINUED ON NEXT PAGE)

SEE NOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS

SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	TUNA, ROUND		WHITING		WOLFISH, DRAWN	SEA SCALLOP MEATS	UNCLASSIFIED		OTHER SPECIFICS	TOTAL		
	POUNDS	VALUES	POUNDS	VALUES			FOR FOOD	FOR INDUSTRIAL USE			POUNDS	VALUES
HAND LINES:												
EASTERN MASSACHUSETTS												
WESTERN MASSACHUSETTS												
CENTRAL & SOUTH CHANNEL												
CENTRAL & SOUTHEAST GEORGES												
NANTUCKET SHOALS & LIGHTSHIP												
SOUTHERN MASSACHUSETTS												
TOTAL	10,595		1,200				63,275		47,005	360,290		
									5,391	2,395,491		
										43,265		
										2,111		
										2,747,667		
HARPOON:												
EASTERN MASSACHUSETTS												
SOUTHWEST GEORGES	6,911								125	7,035		
NANTUCKET SHOALS & LIGHTSHIP	4,128									119,573		
OFF NO MANS LAND										20,964		
TOTAL	11,522								125	290,398		
LONG LINES:												
EASTERN MASSACHUSETTS	15,000								590	15,590		
NORTHERN EDGE & NORTHEAST PEAK	4,058								2,159	6,217		
CENTRAL & SOUTHEAST GEORGES	7,747								1,015	8,762		
SOUTHWEST GEORGES	105,997								620	106,617		
NANTUCKET SHOALS & LIGHTSHIP	28,741								200	28,941		
OFF NO MANS LAND	13,775									13,775		
OFF NANTUCKET SHOALS, UNCLASSIFIED										47,765		
OFF LONG ISLAND										77,149		
TOTAL	182,759								4,817	1,257,200		
OTTER TRAWLS:												
ST. PIERRE BANK										742,009		
EAST GULF OF ST. LAWRENCE										4,525,870		
GULF OF ST. LAWRENCE										1,773,574		
SOUTH GULF OF ST. LAWRENCE										9,260		
NORTHEAST CAPE BRETON										2,468,900		
MISALNE HARBOR							960			1,105,689		
BANQUEREAU			990				7,165			3,645,737		
CARSO			160				3,380			1,117,304		
MIDDLE GROUND, LE ISLAND BANK										654,473		
HORSESHOE GROUND										125,508		
EASTERN NOVA SCOTIA										5,368,652		
EMERALD BANK										4,583,547		
CENTRAL NOVA SCOTIA										5,139,356		
SOUTHERN NOVA SCOTIA										4,052,045		
EASTERN BROWNS A LA HAVRE										6,294,649		
WESTERN BROWNS A LA HAVRE										10,024,787		
SOUTHERN BAY OF FUNDY										1,522,554		
EASTERN MAINE										1,719,096		
WESTERN MAINE										2,785,505		
EASTERN MASSACHUSETTS										3,111,205		
INNER GROUNDS										2,005		
EAST SIDE SOUTH CHANNEL										368,970		
NORTHERN EDGE & NORTHEAST PEAK										49,902,513		
CENTRAL & SOUTHEAST GEORGES										1,621,823		
NANTUCKET SHOALS & LIGHTSHIP										57,508,795		
OFF NO MANS LAND										283,311		
TOTAL	2,490		2,000				48,245		3,165	48,000,683		
										66,441		
										3,993,487		
										447,912		
										8,669,377		
										29,775,071		
										45,534,543		

(CONTINUED ON NEXT PAGE)

SEE NOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS
SUMMARY OF FISHERY - BY GEAR AND SUBAREA, 1963 - Continued

GEAR AND SUBAREA	TUNA, ROUND		WHITTING		WOLFFISH, DRAWN	SEA SCALLOP MEATS	UNCLASSIFIED		OTHER SPECIES	TOTAL	
	POUNDS	ROUND	POUNDS	DRESSED			POUNDS	FOR FOOD			FOR INDUS-TRIAL USE
OTTER TRAWLS - CONTINUED:											
SOUTHERN MASSACHUSETTS,	-	-	20	-	-	-	130	57,490	64,957	1,786,254	
RHODE ISLAND SHORE,	-	-	2,500	-	-	-	1,000	-	-	884,200	
OFF LONG ISLAND,	270	-	-	-	-	-	-	-	21,325	3,500	
TOTAL	3,035	61,231,084	3,322,129	590,540	224	4,229,956	24,014,852	2,792,954	382,914,105	1,024,986	
FLOATING TRAPS,	-	-	-	-	-	-	50,300	-	13,280	372,469	
EASTERN MASSACHUSETTS,	206	15	-	-	-	-	341,775	-	7,330	934,350	
SINK GILL NETS,	-	-	-	-	-	-	-	-	966	23,982	
EASTERN MASSACHUSETTS,	-	-	-	-	-	-	-	-	418	9,196	
DRIFT GILL NETS,	-	-	-	-	-	-	-	-	-	-	
EASTERN MASSACHUSETTS,	-	-	-	-	-	-	-	-	-	-	
WEST SIDE SOUTH CHANNEL,	-	-	-	-	-	-	-	-	-	-	
TOTAL	3,031,890	61,249,309	3,322,129	590,540	224	4,229,956	24,014,852	2,792,954	382,914,105	1,024,986	
PURSE SEINES:											
EASTERN MASSACHUSETTS,	210,140	-	-	-	-	-	-	-	-	13,919,970	
WEST SIDE SOUTH CHANNEL,	-	-	-	-	-	-	-	-	-	520,220	
OFF NO MAN'S LAND,	381,220	-	-	-	-	-	-	-	-	36,220	
RHODE ISLAND SHORE,	2,867,677	-	-	-	-	-	-	-	-	2,867,677	
OFF LONG ISLAND,	6,167,927	-	-	-	-	-	-	-	-	17,380,227	
TOTAL	9,826,964	61,249,309	3,322,129	590,540	224	4,229,956	24,014,852	2,792,954	382,914,105	1,024,986	
SCALLOP DREGS:											
WESTERN BROWNS,	-	-	-	-	-	14,705	-	-	-	14,705	
WESTERN NOVA SCOTIA,	-	-	-	-	-	1,634	-	-	-	1,634	
MAINE,	-	-	-	-	-	139,312	-	-	-	146,690	
EASTERN MASSACHUSETTS,	-	-	395	-	-	1,826,712	-	-	10	1,828,037	
EAST SIDE SOUTH CHANNEL,	-	-	-	-	-	1,533,473	-	-	-	1,533,473	
EAST SIDE SOUTH CHANNEL,	-	-	-	-	-	2,831,708	175	-	-	2,864,106	
NORTHERN EDGE & NORTHEAST PEAK,	-	-	-	-	-	4,393,253	-	-	-	4,393,253	
CENTRAL & SOUTHEAST GEORGES,	-	-	-	-	-	4,772,487	-	-	-	4,772,487	
SOUTHWEST GEORGES,	-	-	-	-	-	1,062,487	-	-	-	1,062,487	
NANTUCKET SHOALS & LIGHTSHIP,	-	-	-	-	-	3,359	-	-	-	3,359	
OFF NO MAN'S LAND,	-	-	-	-	-	68,024	-	-	-	68,839	
OFF LONG ISLAND,	-	-	-	-	-	16,607,491	175	-	10	16,695,509	
TOTAL	-	-	395	-	395	16,607,491	175	-	10	16,695,509	
ROUND NETS:											
EASTERN MASSACHUSETTS,	143,252	16,635	-	-	-	-	-	21,400	1,680,809	3,297,856	
WEST SIDE SOUTH CHANNEL,	-	-	-	-	-	-	-	-	1,703,640	2,092,405	
SOUTHERN MASSACHUSETTS,	-	-	-	-	-	-	-	-	7,797	8,884	
TOTAL	143,252	16,635	-	-	-	-	-	21,400	3,392,246	5,398,058	
GRAND TOTAL	6,519,705	61,249,309	3,322,129	596,024	596,024	16,607,715	4,773,389	24,036,452	17,354,094	431,662,287	

J/ EXCLUSIVE OF DUPLICATION.

NOTE: ALL SPECIES ARE LISTED AS LANDED WEIGHT. LANDED WEIGHT OF FINFISH MAY BE CONVERTED TO ROUNDS WEIGHT BY MULTIPLYING BY THE FOLLOWING FACTORS: COD, DRAWN 1.17; CUSK, DRAWN 1.14; WHITE HAKE, DRESSED 1.34; BROWN HAKE, DRESSED 1.19; WHITINGS, DRESSED 1.66; AND WOLFFISH, DRAWN 1.20. THIS REPORT INCLUDES INSHORE CATCH CONSISTING OF LOBSTERS, CLAMS, BAY SCALLOPS, IRISH MOSS, AND OTHER MARINE PRODUCTS. COMPARABLE DATA ON LANDINGS IN 1962 ACCOUNTED FOR 97.3 PERCENT OF THE MASSACHUSETTS TOTAL CATCH, A SINGLE TRIP IS REPORTED FOR EACH VOYAGE. DAYS ABSENT IS THE MEASURE OF TIME. TO THE NEAREST COMPLETE DAY, THE TRIP IS AWAY FROM PORT DURING A FISHING TRIP. WHEN A CRAFT OPERATED IN TWO OR MORE SUBAREAS DURING A VOYAGE, A FRACTIONAL PART (IN TENTHS) OF THE TRIP IS ALLOTTED TO THE SUBAREA ON THE BASIS OF THE CATCH TAKEN IN EACH SUBAREA. "OCCASIONAL" AFTER THE NAME OF A SUBAREA INDICATED THAT THE CATCH CONTRIBUTING TO THE CATCH AS SHOWN FISHED CHIEFLY WITH ANOTHER TYPE OF GEAR. DAYS FISHED IS THE TIME ACTUAL FISHING OPERATIONS WERE CARRIED ON, EXPRESSED TO THE NEAREST TENTH OF A DAY. TO OBTAIN FISHING TIME IN HOURS, MULTIPLY NUMBER OF DAYS FISHED BY 24.

LANDINGS AT MASSACHUSETTS PORTS SUMMARY OF FISHERY - BY AREA AND SUBAREA, 1963

AREA AND SUBAREA	CRAFT FISHING		TRIPS		DAYS ABSENT		DAYS FISHED		COD, DRAWN			CUSK, DRAWN		FLOUNDERS, ROUND		
	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS	NUMBER	POUNDS	LARGE	MARKET	SCROO	BLACK-BACK		LMB		
												POUNDS	POUNDS	POUNDS	POUNDS	
OFF GRAND BANKS (AREA XX),	5		3,6		54		11,5									
ST. PIERRE BANK,																
GULF OF ST. LAWRENCE (AREA XIX):	16		25,0		416		117,2		460		215		150		25	
EAST GULF OF ST. LAWRENCE,	11		12,3		186		47,0				15		35		15	
CANSO,	3		3,1		41		7,3		400		125		215		85	
SOUTH GULF OF ST. LAWRENCE,					645		171,5		860		730		400		110	
TOTAL,	1/ 17		40,4								125		400			
OFF NOVA SCOTIA (AREA XXI):																
NORTHEAST CAPE BRETON,	15		13,4		183		54,6									
MISAINE BANK,	11		6,5		92		30,4									
BANQUEREAU,	16		24,4		340		92,8		495		20		794		5,607	
CANSO,	13		8,4		119		37,1		238				300		300	
MIDDLE GROUND,	9		4,9		71		17,2		63						9,237	
SOUTHEAST SABLE ISLAND BANK,	2				47		12,1		3,015		7,177		2,372		300	
SOUTHWEST SABLE ISLAND BANK,	1				1		2									
EASTERN NOVA SCOTIA,	24		30,3		456		109,6		2,163		5,859		3,657		643	
EMERALD BANK,	6		8		10		3,3				50		112		35	
CENTRAL NOVA SCOTIA,	26		39,9		587		138,6		2,947		8,669		4,756		1,395	
EASTERN BROWNS AND LA HAVE,	49		38,5		392		202,8		101,053		72,175		21,995		6,250	
SOUTHERN NOVA SCOTIA,	48		12,0		1,626		656,0		320,736		121,316		121,316		1,640	
WESTERN BROWNS,	20		23,4		1,197		121,4		534,594		235,529		111,118		6,085	
SOUTHWEST NOVA SCOTIA,	24		27,6		232		147,8		34,693		30,909		19,987		27,720	
SOUTHERN BAY OF FUNDY,	24		44,2		383		239,6		92,279		184,826		7,089		9,176	
NORTHERN BAY OF FUNDY,	1/ 95		494,9		5,273		2,212,9		741,969		1,242,595		401,442		46,868	
TOTAL,	1/ 95															
OFF NEW ENGLAND (AREA XXII):																
EASTERN MAINE,	33		54,7		499		263,3		145,946		359,548		19,912		5,363	
WESTERN MAINE,	4		4,4		21		8,1		52,330		925		19,950		2,990	
EASTERN MASSACHUSETTS,	46		212,4		365		184,1		106,842		48,673		19,950		35,862	
WESTERN MASSACHUSETTS,	337		12,660,2		13,187		6,289,5		776,162		319,873		2,261,694		972,448	
INNER GROUNDS,	70		214,3		621		320,9		148,530		39,535		284,359		1,197	
SOUTH CHANNEL,	5,255,5				10,980		6,337,9		3,213,204		3,853,136		169,920		44,854	
EAST SIDE SOUTH CHANNEL,	1,077,3				6,259		4,066,3		1,862,038		616,652		3,697,034		2,218,864	
NORTHERN EDGE AND NORTHEAST PEAK,	175		99,6		3,236		4,801,7		3,049,164		1,443,392		146,862		290,637	
SOUTHWEST GEORGES,	150		598,7		4,745		3,361,4		2,146,085		3,437,108		54,700		251,138	
SOUTHWEST GEORGES,	193		289,0		6,646		4,043,4		1,591,722		30,060		37,750		145,375	
NAUQUET SHOALS AND LIGHTSHIP,	174		1,625,0		4,746		2,673,4		161,542		173,813		3,200,921		12,375	
OFF NO MANS LAND,	75		477,4		899		480,7		35,569		2,690		421,153		6,870	
SOUTHERN MASSACHUSETTS,	29		53,2		228		100,6		72,856		1,765		627,818			
RHODE ISLAND SHORE,	2				46		14,8		3,940		3,375		121,680			
UNCLASSIFIED,																
TOTAL,	1/ 695		25,045,1		61,709		36,839,4		11,095,737		14,718,971		1,056,330		11,673,563	
OFF MIDDLE ATLANTIC (AREA XXIII):																
OFF LONG ISLAND,	1/ 711		25,697,0		68,508		39,696,9		11,839,116		15,966,396		1,263,762		11,721,826	
GRAND TOTAL,																

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS

SUMMARY OF FISHERY - BY AREA AND SUBAREA, 1963 - Continued

AREA AND SUBAREA	FLOUNDERS, ROUND - CONTINUED				HADDOCKS, DRAWN				HAKE	
	FLUKE	GRAY SOLE	LEMON SOLE	YELLOW-TAIL	LARGE	SCROD	SNAPPER	RED, ROUND	WHITE, DRESSED	
									LARGE	MEDIUM
GULF OF ST. LAWRENCE (AREA XIX):										
GULF OF ST. LAWRENCE		140	-	-	865	640	-	1,375	-	150
NORTH GULF OF ST. LAWRENCE		-	-	-	-	50	-	-	-	110
SOUTH GULF OF ST. LAWRENCE		-	-	-	-	-	-	-	-	-
TOTAL		140	-	-	865	690	-	1,375	-	260
OFF NOVA SCOTIA (AREA XXI):										
BANQUEREAU		98,873	-	-	1,654	2,231	-	-	-	1,299
CANNON POINT		162	-	-	830	750	-	-	-	53
"NOBLE" GROUND		146,296	-	-	170	125	-	-	-	52
HORSESHOE GROUND		7,960	-	-	11,435	21,125	-	-	-	1,411
EASTERN NOVA SCOTIA		4,910	-	-	4,231	6,927	2,700	-	-	2,108
EMERALD BANK		-	-	-	-	9,895	-	-	-	87
CENTRAL NOVA SCOTIA		5,361	-	-	5,501	9,895	1,360	-	-	1,204
EASTERN BROWNS AND LA HAVÉ		2,491	6,420	-	957,926	1,670,857	1,500	-	-	1,878
SOUTHERN BROWNS		6,148	275	-	94,657	203,342	500	-	-	2,778
WESTERN NOVA SCOTIA		8,501	4,616	-	2,715,524	4,408,937	17,649	-	-	4,554
WESTERN BAY OF FUNDY	2,000	27,573	-	-	386,381	599,703	700	2,400	-	2,961
SOUTHERN BAY OF FUNDY		9,164	350	-	439,704	583,977	300	2,400	-	24,280
NORTHERN BAY OF FUNDY		27,190	-	-	710,997	828,654	600	3,600	-	50,052
TOTAL	2,000	344,626	11,661	62,780	5,326,220	8,336,671	25,309	8,400	-	154,242
OFF NEW ENGLAND (AREA XXII):										
EASTERN MAINE		28,438	-	-	726,976	902,214	1,200	3,600	19,621	137,752
WESTERN MAINE		70,625	-	-	2,322	2,888	-	-	1,775	95
EASTERN MASSACHUSETTS		53,949	-	-	221,068	283,985	9,149	10,932	28,502	211,566
WESTERN MASSACHUSETTS	10,429	557,587	16,515	3,477,290	1,894,107	1,356,777	19,560	94,170	17,200	108,656
INNER GROUNDS		29,051	285,743	-	14,482,051	10,631,310	101,060	690,858	128,697	159,304
WEST SIDE SOUTH CHANNEL		18,695	470,236	-	2,224,673	3,947,317	7,695,282	55,567	733,637	272,752
EAST SIDE SOUTH CHANNEL		1,120	179,347	-	397,048	9,218,390	12,385,692	1,625	9,339	68,715
NORTH AND NORTH-EAST PEAK		34,715	772,117	-	18,136,315	5,318,357	5,935,990	-	50	1,625
CENTRAL AND SOUTHEAST GEORGES	2,345	46,685	111,151	3,474,670	2,518,557	1,091,753	1,500	-	440	1,625
SOUTHWEST GEORGES		44,920	134,758	19,545,859	903,753	961,675	-	2,677,370	-	440
NANTUCKET SHOALS AND LIGHTSHIP		567,439	810	16,976,562	16,440	11,126	-	-	-	-
OFF NO MAN'S LAND		568,200	5	5,160	857,745	-	-	-	-	-
SOUTHERN MASSACHUSETTS		390,453	200	-	-	-	-	-	-	-
RHODE ISLAND SHORE		70	525	-	-	-	-	-	-	-
TOTAL		1,653,271	2,007,684	1,946,057	66,497,566	50,395,127	288,476	5,058,077	540,693	1,014,641
MIDDLE ATLANTIC (AREA XXIII):										
OFF LONG ISLAND		626,146	11,800	-	313,415	6,180	-	-	-	-
GRAND TOTAL		2,281,417	2,364,250	1,957,718	69,673,761	55,730,392	50,030,643	313,785	606,925	1,278,265

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS

SUMMARY OF FISHERY - BY AREA AND SUBAREA, 1963 - Continued

AREA AND SUBAREA	HALIBUT, DRAWN		MACKEREL, ROUND		MENHADEN, ROUND		OCEAN PERCH, ROUND		POLLOCK		SCUP OR POGNY ROUND		SWORD- FISH, DRESSED		TITLIFISH, DRAWN		TUNA, ROUND	
	POUNDS		POUNDS		POUNDS		POUNDS		POUNDS		POUNDS		POUNDS		POUNDS		POUNDS	
OFF GRAND BANKS (AREA XX),																		
ST. PIERRE BANK,	629						741,380											
GULF OF ST. LAWRENCE (AREA XIX):																		
EAST GULF OF ST. LAWRENCE	1,580						4,520,525											
NORTH GULF OF ST. LAWRENCE	-						1,422,914											
SOUTH GULF OF ST. LAWRENCE	-						425,510											
TOTAL	1,580						6,720,059											
OFF NOVA SCOTIA (AREA XXI):																		
NORTHEAST CAPE BRETON	690						2,130,528											
MISLAINE BANK,	843						1,103,766											
BANQUEREAU,	4,074						1,093,512											
CANSO,	132						493,400											
SOUTHEAST SABLE ISLAND BANK	108						129,400											
HORSESHOE GROUND,	3,955						4,974,106											
EASTERN NOVA SCOTIA	3,330						4,303,288											
EMERALD BANK,	-						30,700											
CENTRAL NOVA SCOTIA	4,471						4,847,691											
EASTERN BROWNS AND LA HAVÉ	2,980						4,915,983											
WESTERN BROWNS,	10,911						4,441,563											
WESTERN NOVA SCOTIA	3,929						82,160											
SOUTHERN BAY OF FUNDY	1,354						60,720											
NORTHERN BAY OF FUNDY	599						136,563											
TOTAL	39,454						29,232,004											
OFF NEW ENGLAND (AREA XXII):																		
EASTERN MAINE	1,105						207,830											
CENTRAL MAINE	1,242						649,630											
EASTERN MASSACHUSETTS	12,850						920,283											
INNER GROUNDS	15,052						1,695,332											
WEST SIDE SOUTH CHANNEL	39,159						2,590,949											
EASTERN BAY OF FUNDY	14,767						1,276,249											
EASTERN EDGE AND NORTHEAST PEAK	12,761						47,790											
CENTRAL AND SOUTHEAST GEORGES	10,933						47,950											
SOUTHWEST GEORGES	2,172						550											
NAUTUCKET SHOALS AND LIGHTSHIP	960						225											
OFF NO MAN'S LAND,	-						-											
SOUTHERN MASSACHUSETTS,	366						3,065											
RHODE ISLAND SHORE,	-						-											
UNCLASSIFIED,	-						-											
TOTAL	112,739						1,920,230											
OFF NEW ENGLAND (AREA XXIII):																		
MIDDLE ATLANTIC (AREA XXIII),																		
OFF LONG ISLAND,	-						-											
GRAND TOTAL	154,402						1,920,230											

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTE AT END OF TABLE.

LANDINGS AT MASSACHUSETTS PORTS

NEW ENGLAND FISHERIES

SUMMARY OF FISHERY - BY AREA AND SUBAREA, 1963 - Continued

AREA AND SUBAREA	WHITING		WOLFFISH, DRAWN	SEA SCALLOP MEATS	UNCLASSIFIED		OTHER SPECIES	TOTAL		
	ROUND	DRESSED			FOR FOOD				FOR INDUS- TRIAL USE	
					POUNDS	POUNDS			POUNDS	POUNDS
OFF GRAND BANKS (AREA XX),	-	-	-	-	-	-	-	742,009		
ST. PIERRE BANK,	-	-	-	-	-	-	-	4,526,870		
GULF OF ST. LAWRENCE (AREA XIX):	-	-	-	-	-	-	-	1,773,574		
EAST GULF OF ST. LAWRENCE,	-	-	-	-	-	-	-	428,960		
NORTH GULF OF ST. LAWRENCE,	-	-	-	-	-	-	-	6,729,404		
SOUTH GULF OF ST. LAWRENCE,	-	-	-	-	-	-	-			
TOTAL	-	-	-	-	-	-	-			
OFF NOVA SCOTIA (AREA XXI):	-	-	-	-	-	-	-	2,136,198		
NORTHEAST CAPE BRETON	-	-	-	-	980	-	-	1,106,689		
MISMAINE BANK,	-	-	980	-	80	-	-	3,646,737		
BANQUEREAU,	-	-	160	-	7,180	-	-	1,671,074		
MIDDLE GROUND,	-	-	160	-	3,380	-	-	126,508		
SOUTHEAST SABLE ISLAND BANK	-	-	-	-	-	-	-	5,936,662		
HORSHEOE GROUND,	-	-	5,638	-	19,760	-	-	4,583,217		
EASTERN NOVA SCOTIA,	-	-	3,562	-	16,390	-	-	31,347		
ENERALD BANK,	-	-	2,670	-	15,050	-	-	5,139,358		
CENTRAL NOVA SCOTIA	-	-	32,914	-	3,250	-	-	4,062,045		
ASTOR BROWNS AND LA HAVÉ,	2,000	-	199,441	-	13,927	-	4,134	1,639,492		
SOUTHERN NOVA SCOTIA,	-	-	16,130	-	14,705	-	-	0,639,432		
WESTERN NOVA SCOTIA,	-	-	1,100	-	1,100	-	3,166	1,524,188		
SOUTHERN BAY OF FUNDY	-	-	2,132	-	1,400	-	-	1,719,096		
NORTHERN BAY OF FUNDY	-	-	6,888	-	-	-	62	2,785,605		
TOTAL	2,000	9,010	273,660	16,339	121,332	-	7,424	50,345,768		
OFF NEW ENGLAND (AREA XXI1):	-	-	-	-	-	-	-	3,104,363		
EASTERN MAINE	-	55	5,832	-	12,188	-	800	1,111,206		
CENTRAL MAINE	15,213	-	210	-	100,012	-	-	6,029,633		
WESTERN MAINE	3,986,846	7,070	2,240	-	2,205	-	2,005	69,634,891		
EASTERN MASSACHUSETTS	26,403,586	2,568,130	77,790	139,486	4,210,893	1,703,045	13,200,995	4,422,220		
INNER GROUNDS	15,970,638	8,210	1,695	-	44,093	855,090	3,509	66,165,320		
WEST SIDE SOUTH CHANNEL	12,227,150	209,040	66,569	1,826,767	137,183	601,600	1,968,607	39,171,416		
NORTHERN EDGE AND NORTHEAST PEAK,	1,500	456,175	79,441	2,831,708	95,075	-	163,171	3,089,431		
CENTRAL AND SOUTHEAST GEORGES	-	-	42,595	4,393,293	1,000	-	67,630	40,816,631		
SOUTHWEST GEORGES	-	3,900	5,100	4,772,819	-	-	448,927	13,804,015		
MANUICET SHOALS AND LIGHTSHIP	1,185,935	-	2,095	1,022,487	820	237,415	925,157	31,256,459		
OFF NO MAN'S LAND,	1,444,448	58,066	170	3,359	48,245	20,581,612	384,136	45,973,948		
SOUTHERN MASSACHUSETTS,	-	-	-	-	130	-	72,634	1,884,517		
WALDE ISLAND SHORE,	-	-	-	-	-	-	-	922,420		
UNCLASSIFIED,	-	2,500	-	-	1,000	-	-	51,260		
TOTAL	61,247,309	3,313,119	324,364	16,523,352	4,652,057	24,036,452	17,325,052	369,806,455		
MIDDLE ATLANTIC (AREA XXI11):	-	-	-	68,024	-	-	-	21,618		
OFF LONG ISLAND,	-	-	-	16,607,715	-	-	-	17,364,094		
GRAND TOTAL	61,249,309	3,322,129	598,024	16,607,715	4,773,389	24,036,452	17,364,094	431,662,287		

SEE NOTE ON PAGE 135.

NEW ENGLAND FISHERIES

SURVEY PROCEDURE IN THE NEW ENGLAND STATES

Statistical programs in the New England States are under the general supervision of the Bureau's regional office in Gloucester, Mass., with direct supervision by a regional supervisor for statistics also at Gloucester. The operation is carried on by field reporters at Rockland, Boothbay Harbor, and Portland, Me.; Boston, Gloucester, Provincetown, and New Bedford, Mass.; and Warren and Point Judith, R.I. They are specialists trained in obtaining and reporting fishery statistical data on a daily, monthly, and annual basis. Information on the volume and value of the catch by species, gear, and area of capture is obtained from fishermen and buyers of fish, shellfish, and other marine products. Special surveys are conducted for statistics on employment of fishermen, shoreworkers, fishing craft and gear, and the production of processed fishery products.

Catch. The fishery reporting specialists obtain daily individual trip data for all landings at their respective ports. They also interview a high percentage of trips for information on fishing effort and area of capture. These data are entered on punch cards for use in preparing monthly and annual tabulations of catch by species, gear, area of capture, and county where landed. Complete information on State landings is not always included because deliveries may be made at ports not covered daily. Information on these landings is obtained annually.

Maine. Each month, all areas in Maine, except Portland and Rockland, are canvassed by a Bureau representative and a State employee to obtain from each dealer and buyer a report on the quantity of fish, shellfish, and worms, by species, purchased from fishermen. These data are entered on punchcards at the same time as those for the major ports, thus providing complete information on Maine landings for the month.

Current cumulative tabulations of the monthly landings by area are maintained, and shortly after the end of each year, a revised tabulation is prepared listing by county and month all species taken during the year. Any revisions in the monthly data are included, and data on sea moss, which is shown only annually, are added.

Massachusetts. Daily information on Massachusetts landings is assembled for Boston, Gloucester, New Bedford, Plymouth, and Cape Cod ports. Detailed statistics are obtained on the volume and value of the catch for each vessel by species, gear used, and the subarea in which the catch was made. Additional detailed information on the time spent in fishing, depth fished, etc., is obtained for 12 study vessels.

Landings at the major ports in Massachusetts constitute about 98 percent of the total annual catch for that State. Species not covered are most shellfish (other than sea scallops and trawl caught lobsters) and some minor finfish species such as smelt, eels, and river-run alewives. Information on the catch of lobsters is obtained from annual reports which each fisherman is required to file with the State. Statistics on other shellfish and alewife catches are secured from town shellfish wardens. Data on the remaining species are collected by annual personal interviews with fishermen and dealers and are prorated to the area of capture and gear used. The information is forwarded to the Washington office to be machine processed with other figures for the State.

Rhode Island. Data to complete the monthly Rhode Island Landings bulletin are collected and tabulated each month in the fishery statistical office at Warren. Detailed information is assembled on daily landings at Point Judith and Newport. Cumulative tabulations are maintained on the monthly catch by county and by area. After the close of each year, a revised tabulation is prepared and issued as an annual Rhode Island Landings bulletin.

Connecticut. Landings data for Connecticut are obtained by an annual questionnaire which the State sends to each fisherman and by visits that the Bureau's employee stationed at Warren, R.I., pays to fishermen and dealers. At Stonington, a part-time employee records

individual vessel landings (hails). Daily information is obtained by the New York Fishery Market News office on shipments from Connecticut received on the market. These are tabulated at the Gloucester office. At the end of the year, data from these various sources are summarized by the Rhode Island field reporter, listed by county, prorated to area of capture based on interviews with fishermen and dealers, and entered on schedules which are forwarded to the Washington office for processing.

Summary. At the end of the year, all catch data are consolidated into summary tabulations for each State, by species, by county and gear. After being reviewed by the field staff and the Washington office, the tabulations are published.

Operating Units. A set of prepunched Bureau of Customs vessel cards containing the name of the vessel, the official number, the rig code, gross tons, length, and year built is furnished field reporters each year. Reporters interview the captains of the vessels to obtain area fished; number of crew; and number, type, and quantity of gear used in each fishery. The Gloucester office adds to the vessel punchcards the data on the crew and gear. The number of crew is the maximum number of crewmen aboard the vessel at any one time for each gear operated. Number and quantity of gear reported for each vessel is the greatest quantity used at one time. Gear ashore or carried aboard the vessel for replacement is not included. Machine tabulations of vessel landings provide information on the vessels that fished at major ports during the year. Throughout the year, field reporters prepare supplemental vessel lists for areas other than major ports, which are combined into one list at the end of the year. In detailed State operating unit tabulations, operating unit information on the number of men and craft is shown for each gear. In the summary for the State, however, they are shown only once.

Data on crew and gear are added to the vessel punchcards by the Gloucester office. Data relating to the operation of craft of less than 5 net tons and fishermen operating without boats are classified as the shore and boat fishery, and one or more cards are prepared for the total number of boats, etc., using each type of gear in each county.

The vessel, boat, and shore cards are punched at the Gloucester statistical office, processed by the Woods Hole tabulating unit, and returned to Gloucester, where operating unit tables are prepared. These tables are reviewed and corrected by area supervisors, who forward them to the Washington office. Any discrepancies are reconciled by field and central office personnel, and an annual summary entitled New England Fisheries is published.

Processed Fishery Products. Data on the production of processed fishery products are obtained monthly, quarterly, or annually through the use of questionnaires and followup visits where necessary. As the reports are received, they are checked for discrepancies and then forwarded to the Washington office. Summaries of the annual data appear in the Canned, Industrial, Manufactured, and Packaged Fishery Products bulletins.

Fish Sticks and Portions, and Breaded Shrimp. Data on the production of fish sticks and portions and breaded shrimp summarized on a monthly basis are collected quarterly by field reporters on forms (schedules) provided by the central office. The forms are mailed to producers at the end of each quarter, and if the forms are not returned, the firms are contacted by a field reporter. The information is published by the central office in a quarterly report entitled, Fish Sticks, Fish Portions, and Breaded Shrimp. At the end of the year, the data are summarized, figures are obtained on the value of the production, and an annual summary is published.

Fish Meal, Oil, and Solubles. Data on the production of fish meal, oil, and solubles are collected monthly by field reporters, who, on the first of each month, mail the data forms to each of the

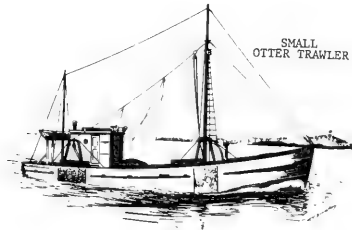
NEW ENGLAND FISHERIES

meal producing firms in the area. The forms request production figures on meal, oil, and solubles; menhaden plants are also asked about the number of fish received. When completed forms are not returned, the field reporter obtains the data by telephone or in person. After review by field personnel, the reports are forwarded to the Washington office, where the data are tabulated and published monthly in a bulletin entitled Fish Meal and Oil. At the end of the year, the data for each firm are returned to the field for review and revision, if necessary, before being tabulated and published in the annual bulletins, Industrial Fishery Products and Fish Meal and Oil.

Freezings and Cold Storage Holdings. Collection of data on the monthly freezings and holdings of fishery products in New England is handled cooperatively by the Bureau and the U.S. Department of Agriculture. Statistical and market news personnel in New England obtain monthly freezings and storage figures from 34 firms in coastal areas. The Department of Agriculture conducts a mail canvass of three firms.

The figures are machine tabulated by the central office of the Branch of Fishery Statistics. National data on freezings and holdings are published in preliminary cold storage reports, which are released on the 15th of each month unless the date falls on a holiday or weekend. Summaries are issued by the Bureau's Fishery Market News offices and the Department of Agriculture. Final monthly reports are published by the Branch of Fishery Statistics, as well as an annual Frozen Fishery Products bulletin, which lists the firms that furnished information on the fishery cold storage activities.

Market News Reporting. A great deal of current fishery data appears in the Fishery Products Reports issued daily by the Boston and New York Fishery Market News offices. These reports show day-to-day fluctuations. Seasonal fluctuations can be determined by reviewing the monthly landings bulletins. The most complete annual data appear in the Statistical Digest, Fishery Statistics of the United States. Information on the catch by waters is not published but is machine processed and tabulations are furnished State and Federal laboratories along the New England coast.



SECTION 3 - MIDDLE ATLANTIC FISHERIES

The 1963 commercial landings of fish and shellfish in the coastal areas of the Middle Atlantic States (New York, New Jersey, and Delaware) totaled 550 million pounds valued at \$21.3 million. Compared with 1962, this was a decline of 394 million pounds (42 percent) and \$3.9 million (15 percent). A drop in landings of menhaden accounted for the major portion of the decline.

New Jersey was the leading producer of the Middle Atlantic States area with 46 percent of the volume and 48 percent of the value; New York was next with 35 percent of the volume and 46 percent of the value. Delaware landings, 99 percent of which was menhaden, accounted for the remaining 19 percent of the volume and 6 percent of the value.

Fishermen and vessels. During 1963 the Middle Atlantic States had 8,553 commercial fishermen--299 more than in 1962. The increase was entirely in casual fishermen who were attracted to a relatively profitable hard clam fishery. Commercial fishing craft operated in these States consisted of 599 vessels, 4,085 motor boats, and 288 other boats. This was an increase of 320 craft, all motor boats.

Processing. Manufactured fishery products were valued at \$86.5 million--\$9.3 million less than in the previous year. New York accounted for 41 percent of the value; New Jersey, 36 percent; and Pennsylvania and Delaware, the remaining 23 percent.

Marketing. An important change in the Philadelphia and New York City markets was the trend toward buying fish and shellfish direct from the producer rather than for the producer to ship on a consignment basis.

Weather. Production was lowered by almost continuous unfavorable weather during January and February. Offshore fisheries for scup, fluke, and sea scallops were adversely affected, and small boats, operating longline gear, lost a great deal of fishing time. The very poor crab season in New Jersey and Delaware was attributed to the extreme cold and freezups of local bays.

Legislation.

New York. Taking shellfish at night was made a misdemeanor, enforcement officers were empowered to seize, without warrant, the tools used or possessed for taking shellfish from uncertified areas or at night, and penalties for taking shellfish from uncertified areas at night were increased. The taking of bay scallops on Sunday with power-operated devices was prohibited, and the present minimum size limit for scallops was continued. It was made clear in the Town Law that towns may regulate the taking of clams, oysters, and shellfish (but not lobsters, crabs, or finfishes) in waters over lands to which title and right of fishing are vested in the town. Provision was made that, until January 1, 1967, nonresidents may, under permit, take lobsters in most of Block Island Sound. The use of purse seines for taking foodfish was prohibited within 3 miles of the Atlantic Coast and in all other tidal waters of the State. The use of beam trawls and otter trawls was prohibited within one-half mile of the coast from Rockway Point to Fire Island Inlet Jetty and in all inshore tidal waters within these limits. The 14-inch size limit for fluke that is now in effect with respect to commercial fishing was extended to angling.

New Jersey--The cost of bay scallop permits for 1963 was increased from \$2.50 to \$25.00 for those fishing scallops on a commercial basis. A \$2.50 permit can be had by anyone who does not catch more than 4 bushels of scallops per day. Striped bass caught along the eastern shore of New Jersey must be 18 inches or more in length; in Delaware Bay, 12 inches; and in Delaware River, 10 inches.

MIDDLE ATLANTIC FISHERIES

Surf clams. The surf clam industry, centered in New Jersey, continued to grow, and production of 38.5 million pounds of meats surpassed the 1962 record catch by 7.8 million pounds of meats. New York had a very small part in this fishery. Most of the surf clam meats processed in New York come from New Jersey producers. The best catch for a 1-month period in New Jersey occurred in October when the 4.3 million pounds of meats taken set a monthly record for this fishery. Five reasons for this amazing rise in production are: fine demand and acceptance of the product by the consumer, creation of inventory by all firms who feel the clam grounds are now beginning to show signs of depletion, a virgin surf clam area found during the early part of the year, addition of six vessels, and favorable weather conditions during periods of intensive fishing.

Crabs. The 1.4 million pounds of hard blue crabs taken were 59 percent less than the previous year. The crabs were small and poor in quality, with very few peelers. High mortality of small crabs during the severe cold weather and ice conditions were considered the major causes for the drop in production. The hard crab production in Delaware Bay was a complete failure, with the lowest catch since 1945.

Menhaden. Menhaden production declined 410 million pounds in 1963. Compared with the previous year, there was a drop of 197 million pounds in New Jersey, 47 million pounds in New York, and 166 million pounds in Delaware. The menhaden catch of 373 million pounds accounted for 68 percent of the total Middle Atlantic landings of all species.

Industrial Fishery. Trawl caught industrial fish have become important in the fisheries of the Middle Atlantic area. Initial landings in quantity, which began in 1962 in the New York area, have increased and have substituted for the declining catch of menhaden. One New York plant continued to process large quantities of trawl caught industrial fish, and another began handling the fish on an experimental basis in the fall of 1963. With the closing of the only Rhode Island reduction plant, the boats from Rhode Island and Connecticut have been landing their industrial fish in New York or sending it by transporter to the plant in that State. The number of boats are limited by mutual agreement so as not to over exploit the fishery. Indications are that Middle Atlantic production will increase at least for another season or until the Rhode Island plant is in operation again.

Otter Trawl Fishery. Landings were drastically reduced by unfavorable weather conditions during the year. This is indicated by smaller landings of scup or porgies, butterfish, and fluke. New York City's Fulton Fish Market landings of fish and sea scallops dropped 32 percent (3.4 million pounds) compared with the previous year's total. Otter trawl vessels and scallopers made 127 fewer trips than in 1962, and 166 fewer trips than in 1961. Fulton Fish Market has mainly transient vessels from New England that land their catches from October through April. Landings at this port are steadily declining. A number of otter trawl vessels were lost during storms, and from fires, and other causes in 1963, and few vessels have been added to the fishery.

Hudson River Fisheries. Commercial landings of Hudson River fish in 1962 were 466,000 pounds worth \$90,800--the poorest season on record. The shad run was very light. Striped bass dropped to as low as 5 cents per pound, giving little incentive for the river fishermen to build special bass nets to fish the early season. Commercial fishing on the Hudson River has declined to a casual, seasonal fishery, with few fishermen making a livelihood from the catch of shad and bass.

Research.

New Jersey. The industry, with technical aid from the Bureau of Commercial Fisheries, used the vessel Mable Susan to make a preliminary survey of potential surf clam producing grounds. No new significantly productive areas were located.

Striped bass. New Jersey catches of striped bass totaled three-quarters of a million pounds--the largest recorded catch of these fish in the State. The New York production was nearly this amount, although not a record. Otter trawl gear was credited with 86 percent of the catch for New Jersey and 26 percent for New York. Otter trawl catches of striped bass have increased in recent years.

Tuna. For the first time in New Jersey's history, tuna were landed in commercial quantities at the ports of Jersey City and Cape May by purse seiners from Massachusetts and California. Because this type of fishing is completely new to New Jersey, dock facilities were not adequate to handle the fish; however, one dock at Cape May installed tuna-handling equipment after it received its first catch, 270,000 pounds, in June. It is anticipated that landings of tuna will continue, and improvements will be made in handling facilities. Total landings of tuna in the Middle Atlantic area for 1963 were 2.9 million pounds worth \$160,000.

Oysters. The oyster industry again had a very poor year and set a new low in landings. In New Jersey, after an encouraging 1962 season, the production declined by 1 million pounds of meats. As a result of early observations of the oyster beds, the State closed the public seed beds at the mouth of the Delaware River. Only two shucking houses were opening New Jersey oysters. Most shucking houses obtained limited supplies from other States. Prices paid for shell stock oysters were the highest in the history of the New Jersey oyster industry. New York production has declined to an insignificant figure compared with the multimillion-dollar industry of 10 or more years ago. Current stocks of market oysters are very low, with no immediate prospects for improvement. The 1963 set of seed oysters for Long Island and Connecticut was insignificant. To supplement their income, oyster growers dredged hard clams on their private grounds. Without this production of hard clams many would have been out of business.

Hard clams. The hard clam market and production improved over the previous year. Seventy-four percent of the hard clam production for the Middle Atlantic area came from New York. Excellent supplies of little necks and cherrystones, shorter supply from other areas, and higher prices gave incentive to local producers in New York to push the production to a higher level. The increase in production in New Jersey was chiefly in medium-sized clams. In general, clams were in demand all year. The value of the production of hard clams exceeded that of any other item of commercial value in the Middle Atlantic Fishery.

The first of a series of steel clam dredge boats were built for operations in the bay areas of Long Island. They cost an average of about \$30,000 each to build and equip. Two vessels were in operation. As additional boats are constructed, old converted oyster dredge boats will be retired from the fishery.

Longline Swordfishing. Vessels in New Jersey took the initiative to make an all-out effort in the longline fishery for swordfish. Seven vessels in New Jersey and a couple from New York entered the fishery. Early spring catches were landed at Hampton, Va. because the port was close to the fishing area. Starting in May, the vessels landed all their swordfish and tuna in New Jersey. Most of these vessels stopped longlining in July and went back to otter trawling because of the drop in swordfish prices. Some fishermen caught few swordfish; however, this was blamed mostly on lack of experience in the use of a new gear for swordfish. It is worthwhile to note that many of the vessels longlining for swordfish during the summer made part of their catch with harpoons.

Bay scallops. Bay scallop landings for 1963 were the poorest for the past 7 years in New York. After a peak production in 1962, the catch declined by 686,000 pounds of meats and \$430,000. A very poor set of scallops in 1962 was the major cause for the decline. New Jersey production dropped 25 percent mainly because of inability to harvest the available supply due to frozen bays and cold in November and December--the bay scallop season.

MIDDLE ATLANTIC FISHERIES

New York. Starfish and other predators on the oyster and clam grounds have been a major concern in the Long Island area where extensive mopping and dredging have not eliminated the starfish. Oyster growers cannot continue to expend large sums of money, time, and equipment to combat starfish unless oyster production increases. The industry has given serious consideration to promoting the growth of oyster seed by artificial means. Four firms in New York have built oyster hatcheries at considerable expense and extensive labor to raise seed oysters from spawn. From all indications, seed oysters can be successfully grown to maturity. Production on an extensive commercial basis has yet to be accomplished; however, some stock raised in the laboratories should be of marketable size.

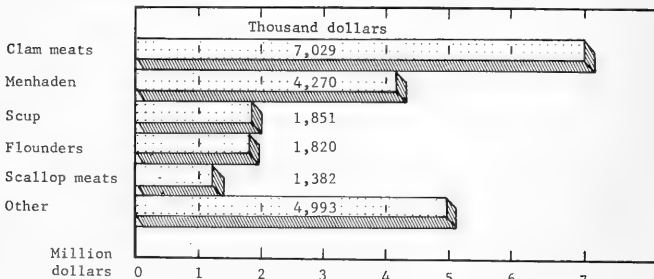
The New York Conservation Department, in cooperation with the industry, trial-tested the Japanese raft method of oyster culture. One trial test survived the winter successfully, and another is being made in Mecox Bay, Southampton, N.Y. A very successful seed set was raised in Salt Pond, Fishers Island. These projects show the effort being made to re-establish the New York oyster industry.

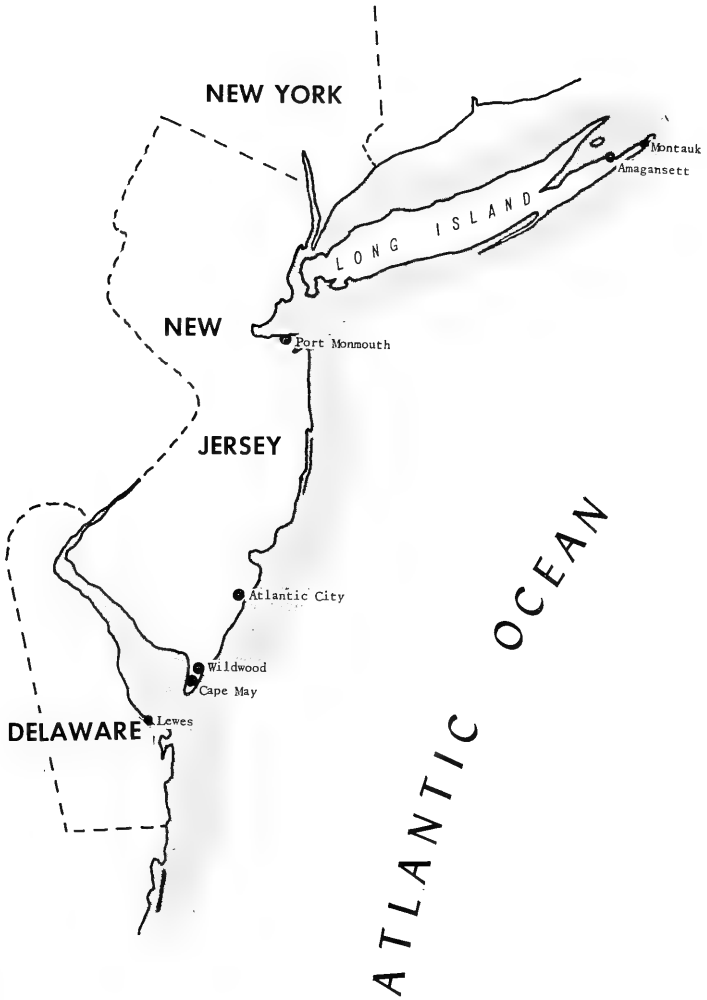
A shellfish transplantation fund with an initial appropriation of \$50,000 was established by the New York Legislature to implement a program of transplanting clams from polluted waters to pure waters from which they may later be safely harvested for human consumption. In conjunction with this legislative appropriation and plans of individual townships, hard clam transplant programs are being implemented.

Other information. Condensed summary data on the operating units and catch, by States, appearing on the following pages have been previously published in Current Fishery Statistics No. 3574. Additional data may be found in the New York and New Jersey monthly and annual landings bulletins published by the Branch of Fishery Statistics in cooperation with the respective States. Information on the daily, monthly, and annual production of fishery products in selected areas of these States is available in reports published by the Bureau's Fishery Market News Service at New York City and Hampton, Va.

Acknowledgements. The following organizations assisted the Bureau to collect the data appearing in this section: New York Conservation Department, Marine Fisheries Division, and Division of Fish and Game; New Jersey Conservation Department, Division of Fish and Game, New Jersey Shellfish Commission; State of Delaware Commission of Shell Fisheries.

VALUE OF MIDDLE ATLANTIC STATES CATCH, 1963





MIDDLE ATLANTIC STATES

MIDDLE ATLANTIC FISHERIES

SECTIONAL SUMMARIES

SUMMARY OF CATCH, 1963

(MILLIONS OF POUNDS AND MILLIONS OF DOLLARS)

STATE	FISH		SHELLFISH, ETC.		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW YORK	181	4	10	6	191	10
NEW JERSEY	212	6	43	4	255	10
DELAWARE	103	1	1	(1)	104	1
TOTAL	496	11	54	10	550	21

1/ LESS THAN \$500,000.

SUMMARY OF OPERATING UNITS, 1963

ITEM	NEW YORK	NEW JERSEY	DELAWARE	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	995	1,661	409	3,057
ON BOATS AND SHORE:				
REGULAR	1,121	663	71	1,855
CASUAL	2,321	1,136	162	3,641
TOTAL	4,437	3,662	662	8,553
VESSELS, MOTOR	247	353	39	599
GROSS TONNAGE	12,201	19,448	4,689	33,669
BOATS:				
MOTOR	2,475	1,471	141	4,085
OTHER	66	208	14	289
GEAR:				
HAUL SEINES, COMMON	45	31	2	78
LENGTH, YARDS	13,741	2,285	1,250	17,276
STOP SEINES	-	4	-	4
LENGTH, YARDS	-	1,600	-	1,600
PURSE SEINES:				
MENHADEN	10	27	21	57
LENGTH, YARDS	4,360	10,540	7,420	21,900
TUNA	-	5	-	5
LENGTH, YARDS	-	4,280	-	4,280
OTHER	-	23	-	23
LENGTH, YARDS	-	9,175	-	9,175
BEAM TRAWLS	-	7	-	7
YARDS AT MOUTH	-	21	-	21
OTTER TRAWLS:				
FISH	172	149	4	303
YARDS AT MOUTH	3,974	3,650	86	7,110
LOBSTER	4	32	-	35
YARDS AT MOUTH	125	870	-	968
WEIRS	-	5	-	5
POUND NETS, FISH	102	-	-	142
FYKE AND HOOP NETS:				
FISH	83	16	63	162
TURTLE	-	-	129	129
POTS AND TRAPS:				
CONCH	50	-	-	50
CRAB	-	3,981	1,469	5,450
EEL	642	323	80	1,045
FISH	650	16,775	-	17,425
LOBSTER	6,900	2,900	-	9,800
TURTLE	-	150	-	150
GILL NETS:				
ANCHOR, SET OR STAKE	81	56	40	177
SQUARE YARDS	75,997	70,607	49,010	195,614
DRIFT:				
SHAD	35	9	5	49
SQUARE YARDS	101,784	7,685	3,800	113,269
OTHER	4	37	1	42
SQUARE YARDS	24,100	255,701	3,600	283,401
RUMAROUND	10	25	-	35
SQUARE YARDS	16,100	199,100	-	215,200
LINES:				
HAND	750	113	-	863
HOOKS	915	165	-	1,080
TROLL:				
TUNA	-	2	-	2
HOOKS	-	2	-	2
OTHER	-	82	-	82
HOOKS	-	82	-	82

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

149

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	NEW YORK	NEW JERSEY	DELAWARE	TOTAL EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER
GEAR - CONTINUED:				
LINES - CONTINUED:				
LONG OR SET WITH HOOKS.	61	84	6	150
HOOKS	46,100	163,450	4,020	232,970
TROT WITH BAITs	-	14	-	14
BAITS	-	8,700	-	8,700
PUSH NETS	-	9	-	9
HARPOONS.	4	8	-	12
SPEARS.	18	5	-	23
DREDGES:				
CLAM.	33	59	15	107
YARDS AT MOUTH.	27	76	19	122
CRAB.	-	42	15	56
YARDS AT MOUTH.	-	57	29	84
OYSTER, COMMON.	26	105	9	140
YARDS AT MOUTH.	37	105	13	155
SCALLOP	1,398	198	-	1,580
YARDS AT MOUTH.	1,453	212	-	1,610
OTHER	-	11	-	11
YARDS AT MOUTH.	-	35	-	35
TONGS:				
OYSTER.	-	200	-	200
OTHER	1,680	1,020	45	2,745
RAKES	1,246	690	99	2,035
HOES.	-	14	-	14

CATCH BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	NEW YORK		NEW JERSEY		DELAWARE		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH								
ALEWIVES.	32	1	3	(1)	-	-	35	1
AMBERJACK	-	-	(1)	(1)	-	-	(1)	(1)
ANGLEFISH.	30	1	(1)	(1)	-	-	30	1
BLUEFISH.	697	102	823	97	21	4	1,541	203
BONITO.	39	5	55	4	-	-	94	9
BULLHEADS	1	(1)	-	-	-	-	1	(1)
BUTTERFISH.	1,151	148	1,386	125	2	(1)	2,539	273
CARP.	10	1	84	5	7	1	101	7
CATFISH	9	1	35	3	2	(1)	46	4
COD	882	138	1,106	(143)	88	11	2,076	292
DRUM, BLACK	-	-	8	(1)	-	-	8	(1)
EELS:								
COMMON.	202	27	24	5	12	1	238	33
CONGER.	7	(1)	2	(1)	-	-	9	(1)
FLOUNDERS:								
BLACKBACK	1,843	99	185	11	37	3	2,065	113
DAB	-	-	2	(1)	-	-	2	(1)
FLUKE	1,306	366	4,444	1,047	17	3	5,767	1,416
GRAY SOLE	9	1	27	2	-	-	36	3
YELLOWTAIL.	4,669	288	13	(1)	-	-	4,682	288
UNCLASSIFIED.	(1)	(1)	(1)	(1)	-	-	(1)	(1)
TOTAL FLOUNDERS	7,827	754	4,671	1,060	54	6	12,552	1,620
GRUNTS.	-	-	(1)	(1)	-	-	(1)	(1)
HADDOCK	88	10	3	(1)	-	-	91	10
HAKE:								
RED.	647	18	769	20	1	(1)	1,417	38
WHITE	5	(1)	113	6	-	-	118	6
HERRING, SEA.	87	2	151	3	(1)	(1)	238	5
KING WHITING OR "KINGFISH".	2	(1)	12	1	7	1	21	2
MACKEREL.	79	19	101	20	-	-	180	39
MENHADEN.	91,650	1,014	178,377	2,197	102,824	1,059	372,851	4,270
MULLET.	-	-	44	9	-	-	44	9
POLLOCK	4	(1)	2	(1)	-	-	6	(1)
SCUP OR PORGY	9,308	784	12,729	1,067	-	-	22,037	1,851
SEA BASS.	576	109	2,812	334	-	-	3,388	443
SEA ROBIN	11	(1)	20	(1)	-	-	31	(1)
SEA TROUT OR WEAKFISH, GRAY	96	19	333	37	148	17	567	73
SHAD.	202	39	442	90	100	13	744	142
SHARKS:								
GRAYFISH.	78	4	4	(1)	-	-	82	4
UNCLASSIFIED.	2	(1)	6	(1)	-	-	8	(1)
TOTAL SHARKS.	80	4	10	(1)	-	-	90	4

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	NEW YORK		NEW JERSEY		DELAWARE		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED								
SILVERSIDES	165	1b	-	-	-	-	165	1b
SKATES	1c	1	-	-	(1)	-	16	1
SPOT	-	-	-	-	(1)	(1)	(1)	(1)
STRIPED BASS	673	97	753	106	46	9	1,474	212
STURGEON	m	1	13	2	2	(1)	20	3
SUCKERS	1	(1)	-	-	-	-	1	(1)
SUNFISH	(1)	(1)	-	-	-	-	(1)	1
SWELLFISH	946	43	161	9	7	(1)	1,116	49
SWORDFISH	47	17	193	60	-	-	240	107
TAUOG	t	(1)	54	1	-	-	62	1
TILEFISH	26	4	31	3	-	-	59	7
TOMCOD	1	(1)	-	-	-	-	1	(1)
TUNA:								
BLUEFIN	22	3	2,628	156	-	-	2,650	159
LITTLE	6	1	-	-	-	-	6	1
TOTAL TUNA	30	4	2,628	156	-	-	2,656	160
WHITE PERCH	26	4	63	6	21	2	110	14
WHITING	2,368	111	3,409	143	-	-	5,777	254
YELLOW PERCH	1	(1)	-	-	-	-	1	(1)
UNCLASSIFIED:								
FOR FOOD	335	26	12	1	-	-	347	29
BAIT, REDUCTION, AND ANIMAL FOOD	62,530	437	33	1	-	-	62,563	440
TOTAL FISH	180,894	3,963	211,665	5,743	103,344	1,124	495,903	10,830
SHELLFISH, ETC.								
CRABS:								
BLUE:								
HARD	-	-	641	105	522	34	1,363	139
SOFT AND PEELER	-	-	33	7	3	1	36	6
ROCK	-	-	23	1	-	-	23	1
TOTAL CRABS	-	-	917	113	525	35	1,442	148
HORSESHOE CRABS	-	-	201	1	-	-	201	1
LOBSTERS, NORTHERN	390	210	75	37	-	-	1,130	547
SHRIMP	-	-	-	-	-	-	7	7
CLAMS:								
HARD:								
PUBLIC	3,438	2,346	1,571	430	119	46	5,126	3,024
PRIVATE	1,873	1,235	13	5	143	58	2,029	1,296
RAZOR	6	2	-	-	-	-	8	2
SOFT, PUBLIC	99	26	15	6	-	-	114	34
SURF	974	91	37,946	2,560	-	-	36,522	2,671
TOTAL CLAMS	6,392	3,702	3,147	3,221	262	106	45,801	7,029
CONCHS	22	5	524	112	6	1	552	116
MUSSELS, SEA	74	11	-	-	-	-	74	11
OYSTERS, MARKET:								
PUBLIC:								
SPRING	-	-	4	4	-	-	4	4
FALL	-	-	62	69	-	-	62	69
PRIVATE:								
SPRING	191	277	14	17	12	7	217	301
FALL	203	295	436	468	29	18	668	781
TOTAL OYSTERS	394	572	414	556	41	25	951	1,155
SCALLOPS:								
BAY	303	292	274	112	-	-	577	404
SEA	1,925	695	174	83	-	-	2,099	978
SQUID	872	68	796	42	-	-	1,668	110
TERRAPIN	-	-	3	1	-	-	3	1
TURTLES:								
LOGGERHEAD	-	-	1	(1)	-	-	1	(1)
SNAPPER	-	-	43	5	10	1	53	6
UNCLASSIFIED	-	-	2	(1)	-	-	2	(1)
TOTAL SHELLFISH, ETC.	10,362	5,755	43,355	4,592	644	168	54,561	10,515
GRAND TOTAL	191,256	9,718	255,020	10,335	104,188	1,292	550,464	21,345

1/ LESS THAN 500 POUNDS OR \$500.

NOTE:--STATISTICS ON THE CATCH ARE SHOWN IN ROUND (LIVE) WEIGHT EXCEPT FOR SHELL MOLLUSKS. CLAMS, CONCHS, MUSSELS, AND OYSTERS ARE REPORTED IN WEIGHT OF TOTAL MEATS. SCALLOPS ARE REPORTED IN WEIGHT OF EDIBLE MEATS.

MIDDLE ATLANTIC FISHERIES

151

CATCH OF CERTAIN SHELLFISH, 1963

(NUMBER AND BUSHELS)

SPECIES	NEW YORK		NEW JERSEY		
	QUANTITY	VALUE	QUANTITY	VALUE	
CRABS:					
BLUE:					
HARD	NUMBER	-	2,065,400	\$104,794	
SOFT AND PEELER	DO	-	114,208	6,640	
ROCK	DO	-	68,400	712	
HORSESHOE CRABS	DO	-	50,300	1,007	
CLAMS:					
HARD:	U. S. STANDARD				
PUBLIC	BUSHELS	286,517	\$2,346,291	157,120	629,747
PRIVATE	DO	156,067	1,235,506	1,320	4,605
RAZOR	DO	525	2,257	-	-
SOFT, PUBLIC	DO	6,162	27,527	1,283	6,392
SURF	DO	57,312	90,524	2,208,729	2,580,151
CONCHS.	DO	1,487	4,797	26,180	112,168
MUSSELS, SEA.	DO	7,430	10,604	-	-
OYSTERS, MARKET:					
PUBLIC:					
SPRING	DO	-	-	543	4,430
FALL	DO	-	-	9,521	68,668
PRIVATE:					
SPRING	DO	25,493	277,470	1,943	17,235
FALL	DO	27,107	295,218	56,730	468,404
SCALLOPS:					
BAY	DO	50,400	291,676	42,138	112,172
SEA	DO	320,733	694,620	26,950	83,248
SPECIES	DELAWARE		TOTAL		
	QUANTITY	VALUE	QUANTITY	VALUE	
CRABS:					
BLUE:					
HARD	NUMBER	1,253,520	\$33,630	3,319,920	\$138,424
SOFT AND PEELER	DO	10,200	1,207	124,408	7,847
ROCK	DO	-	-	68,400	712
HORSESHOE CRABS	DO	-	-	50,300	1,007
CLAMS:					
HARD:	U. S. STANDARD				
PUBLIC	BUSHELS	14,675	48,312	458,512	3,024,350
PRIVATE	DO	17,688	56,143	175,275	1,298,254
RAZOR	DO	-	-	525	2,257
SOFT, PUBLIC	DO	-	-	7,445	33,919
SURF	DO	-	-	2,266,041	2,670,675
CONCHS.	DO	300	525	27,967	117,490
MUSSELS, SEA.	DO	-	-	7,430	10,604
OYSTERS, MARKET:					
PUBLIC:					
SPRING	DO	-	-	543	4,430
FALL	DO	-	-	9,521	68,668
PRIVATE:					
SPRING	DO	1,799	7,200	29,235	301,905
FALL	DO	4,389	17,656	68,226	781,506
SCALLOPS:					
BAY	DO	-	-	92,538	403,648
SEA	DO	-	-	349,683	977,868

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

AVERAGE WEIGHTS OF CERTAIN SHELLFISH, 1963

SPECIES	NEW YORK	NEW JERSEY	DELAWARE
	QUANTITY	QUANTITY	QUANTITY
CRABS:			
BLUE:			
HARD	NUMBER PER POUND	-	2.40
SOFT AND PEELER	DO	-	3.44
ROCK	DO	-	3.00
HORSESHOE CRABS	POUNDS PER CRAB	-	4.00
CLAMS:			
HARD:	LBS. MEATS PER		
PUBLIC	U. S. STANDARD BUSHEL	12.00	10.00
PRIVATE	DO	12.00	10.00
RAZOR	DO	16.00	-
SOFT, PUBLIC	DO	16.00	12.00
SURF	DO	17.00	17.00
CONCHS.	DO	15.00	20.00
MUSSELS, SEA.	DO	10.00	-
OYSTERS, MARKET:			
PUBLIC:			
SPRING	DO	-	7.00
FALL	DO	-	6.46
PRIVATE:			
SPRING	DO	7.50	7.26
FALL	DO	7.50	7.68
SCALLOPS:			
BAY	DO	6.00	6.50
SEA	DO	6.00	6.00

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

MIDDLE ATLANTIC FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	NEW YORK		NEW JERSEY		DELAWARE AND PENNSYLVANIA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ANCHOVY PASTE, CANNED	STANDARD CASES (1)	(1)	(1)	(1)	(1)	(1)
BUTTERFISH, SMOKED.	POUNDS 322,000	\$225,250	(1)	(1)	(1)	(1)
CARP, SMOKED.	DO 99,000	92,600	(1)	(1)	(1)	(1)
CHUBS, SMOKED.	DO 2,288,500	1,418,350	(1)	(1)	(1)	(1)
COO:						
FILLETS, FRESH.	DO 2,086,540	980,476	(1)	(1)	(1)	(1)
SPECIALTIES:						
FROZEN (CAKES, BREADED RAW AND COOKED).	DO (1)	(1)	(1)	(1)	1,204,145	\$558,798
CANNED (CAKES).	STANDARD CASES (1)	(1)	(1)	(1)	-	-
SALTED, SMOKED AND DRIED.	POUNDS (1)	(1)	(1)	(1)	-	-
EELS, SMOKED.	DO 115,000	92,300	57,000	\$37,050	-	-
FLOUNDER:						
FILLETS, FRESH AND FROZEN SPECIALTIES, FROZEN (STUFFED, BREADED RAW AND COOKED).	DO (1)	(1)	(1)	(1)	(1)	(1)
HADDOCKS:						
FILLETS, FRESH.	DO 745,300	364,842	(1)	(1)	(1)	(1)
SPECIALTIES, FROZEN (STUFFED, BREADED, COOKED).	DO (1)	(1)	-	-	-	-
SMOKED.	DO (1)	(1)	-	-	-	-
HAKE FILLETS, FRESH.	DO 43,000	15,050	-	-	-	-
HALIBUT SPECIALTIES, FROZEN (AU GRATIN).	DO (1)	(1)	-	-	-	-
HERRING, SEA:						
SPECIALTIES:						
CURED AND REFRIGERATED (PARTY SNACKS, ETC.).	DO (1)	(1)	-	-	-	-
CANNED (FILLETS IN CREAM AND IN WINE SAUCE).	STANDARD CASES (1)	(1)	-	-	(1)	(1)
SALTED.	POUNDS 377,854	121,195	-	-	(1)	(1)
SMOKED.	DO 30,702	10,222	-	-	(1)	(1)
LAKE TROUT, SMOKED.	DO 66,000	58,200	-	-	(1)	(1)
LUMPFISH CAVIAR, CANNED	STANDARD CASES (1)	(1)	-	-	-	-
MACKEREL:						
FILLETS, SALTED.	POUNDS (1)	(1)	-	-	(1)	(1)
SMOKED.	DO (1)	(1)	-	-	(1)	(1)
MENHADEN:						
MEAL AND SCRAP.	TONS (1)	(1)	16,257	1,914,920	(1)	(1)
O. L.	1,000 POUNDS (1)	(1)	21,011	1,140,582	(1)	(1)
SOLUBLES.	TONS (1)	(1)	8,503	437,508	-	-
PADDLEFISH, SMOKED.	POUNDS 18,000	18,000	-	-	-	-
POLLOCK FILLETS, FRESH.	DO (1)	(1)	(1)	(1)	(1)	(1)
SABLEFISH, SMOKED.	DO 1,750,000	1,211,500	(1)	(1)	(1)	(1)
SALMON:						
CAVIAR, CANNED.	STANDARD CASES 4,696	419,846	(1)	(1)	(1)	(1)
SMOKED.	POUNDS 6,699,750	10,686,875	(1)	(1)	(1)	(1)
SHAD:						
FILLETS, FRESH.	DO -	-	-	-	(1)	(1)
SMOKED.	DO 23,000	7,900	-	-	(1)	(1)
SHARK LIVER OIL.	1,000 POUNDS (1)	(1)	-	-	-	-
STURGEON:						
CAVIAR, CANNED.	STANDARD CASES (1)	(1)	(1)	(1)	(1)	(1)
SMOKED.	POUNDS 1,081,000	2,646,850	(1)	(1)	(1)	(1)
TUNA, SPECIALTIES:						
FROZEN (WITH NOODLES AND PIES).	POUNDS (1)	(1)	-	-	-	-
CANNED (WITH NOODLES, CREAMED, ETC.).	STANDARD CASES -	-	-	-	(1)	(1)
WHITEFISH:						
CANNED:						
FISH.	STANDARD CASES (1)	(1)	(1)	(1)	-	-
CAVIAR.	DO 1,393	101,957	(1)	(1)	-	-
SMOKED.	POUNDS 1,910,000	1,586,250	(1)	(1)	(1)	(1)

SEE NOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

153

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	NEW YORK		NEW JERSEY		DELAWARE AND PENNSYLVANIA		
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	
WHITING:							
FILLETS, FRESH.	POUNDS	(1)	-	-	-	-	
SMOKED.	DO	161,000	173,000	\$75,350	-	-	
CRAB, BLUE:							
SPECIALTIES:							
FROZEN (CAKES, CUTLETS, DEVILED, ETC.)	DO	(1)	146,382	102,438	2,370,856	\$2,122,620	
CANNED (BISQUE)	STANDARD CASES	-	(1)	(1)	(1)	(1)	
MEAL AND SCRAP.	TONS	-	(1)	(1)	-	-	
LOBSTERS:							
NORTHERN:							
COOKED MEAT, FRESH. . .	POUNDS	-	(1)	(1)	-	-	
SPECIALTIES:							
FROZEN (LOBSTERETTES) CANNED (BISQUE, CHOW- DER, NEWBURG, ETC.). . .	DO STANDARD CASES	- -	- -	- -	(1) (1)	(1) (1)	
SPINY, TAILS, RAW, FROZEN	POUNDS	(1)	(1)	(1)	(1)	(1)	
SHRIMP:							
FROZEN:							
MEAT, PEELED AND DEVILED, RAW AND COOKED	DO DO	(1) 842,500	(1) 673,125	(1) (1)	(1) (1)	(1) (1)	
SPECIALTIES (COCKTAILS, STUFFED, STEAKS, ETC.)	DO	1,455,931	1,302,110	492,798	478,846	(1) (1)	
CANNED, SPECIALTIES (BISQUE, SAUCES, ETC.) . .	STANDARD CASES	-	-	(1)	(1)	(1) (1)	
CLAMS, SURF AND HARD:							
FRESH AND FROZEN:							
SHUCKED	GALLONS	391,467	864,379	1,442,294	2,689,387	(1) (1)	
SPECIALTIES (SHREDDED, STICKS, CROQUETTES, ETC.)	POUNDS	2,524,958	666,209	479,450	337,262	(1) (1)	
CANNED:							
WHOLE AND MINCED. . . .	STANDARD CASES	(1)	(1)	311,931	3,707,005	(1) (1)	
CHOWDER AND JUICE . . .	DO	(1)	(1)	677,342	4,366,407	194,497	1,226,419
SPECIALTIES (SAUCES, SOFT IN SHELL)	DO	(1)	(1)	(1)	(1)	(1) (1)	
CONCH MEAT:							
FROZEN	POUNDS	(1)	(1)	-	-	-	
CANNED.	STANDARD CASES	(1)	(1)	(1)	(1)	(1) (1)	
MUSSELS, SEA:							
SPECIALTIES, FRESH AND FROZEN (IN HOT SAUCE) CANNED (WHOLE AND BISQUE)	POUNDS STANDARD CASES	- -	- -	(1) (1)	(1) (1)	- -	
MUSSEL SHELL BUTTONS. . . .	GROSS	(1)	(1)	(1)	(1)	(1) (1)	
OYSTERS:							
FRESH AND FROZEN:							
SHUCKED	GALLONS	(1)	(1)	77,231	965,388	61,850	724,075
BREADED	POUNDS	-	-	199,813	208,931	330,100	367,722
SPECIALTIES (STEWES, PIES AND FRIED)	DO	-	-	-	-	909,879	433,089
CANNED, SPECIALTIES (BISQUE AND STEW)	STANDARD CASES	-	-	(1)	(1)	(1)	(1)
SHELL GRIT AND LIME	TONS	-	-	(1)	(1)	(1)	(1)
SCALLOPS:							
BAY, SHUCKED, FRESH . . .	GALLONS	33,597	352,770	30,432	304,320	-	-
SEA, BREADED, FROZEN. . .	POUNDS	(1)	(1)	145,042	107,355	755,284	583,915
SPECIALTIES, FROZEN (BON FEMME)	DO	(1)	(1)	-	-	-	-
SQUID:							
NATURAL FROZEN.	DO	(1)	(1)	-	-	-	-
SPECIALTIES, FROZEN (IN TOMATO SAUCE)	DO	(1)	(1)	-	-	-	-
CANNED.	STANDARD CASES	(1)	(1)	(1)	(1)	-	-
TURTLE:							
STEAK, RAW, FROZEN. . . .	POUNDS	-	-	(1)	(1)	-	-
CANNED:							
MEAT.	STANDARD CASES	-	-	(1)	(1)	(1)	(1)
SPECIALTIES (SOUP)	DO	-	-	(1)	(1)	(1)	(1)
OIL	1,000 POUNDS	-	-	(1)	(1)	-	-

SEE NOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	NEW YORK		NEW JERSEY		DELAWARE AND PENNSYLVANIA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
UNCLASSIFIED:						
PACKAGED, FRESH AND FROZEN:						
FILLETS, STICKS, PORTIONS, AND OTHER FISH AND SHELL-						
FISH	POUNDS 5,620,665	\$3,004,076	7,880,302	\$5,665,991	17,200,032	\$5,448,691
CURED	DO 143,800	91,095	1,766,000	2,114,425	2,310,300	2,094,700
CANNED	STANDARD CASES 289,586	4,046,204	298,952	4,516,684	256,363	3,171,321
INDUSTRIAL	-	2,441,403	-	802,038	-	1,858,274
TOTAL	-	35,709,719	-	31,173,907	-	19,589,824

1/ INCLUDED IN UNCLASSIFIED ITEMS.

NOTE:--SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR A FOREIGN COUNTRY; THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE.

SUMMARY OF MANUFACTURED PRODUCTS, 1963

(VALUE IN THOUSANDS OF DOLLARS)

ITEM	QUANTITY	VALUE
PACKAGED PRODUCTS, FRESH AND FROZEN:		
NOT BREADED:		
FISH	1,000 POUNDS	8,686
SHELLFISH	DO	18,435
BREADED:		
FISH	DO	17,328
SHELLFISH	DO	5,017
SPECIALTIES, FISH AND SHELLFISH (NOT BREADED AND BREADED)	DO	17,810
CANNED	1,000 STD. CASES	2,035
CURED:		
SALTED	1,000 POUNDS	868
SMOKED AND DRIED	DO	18,524
INDUSTRIAL	-	-
TOTAL	-	86,474

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

STATE	VALUE
NEW YORK	35,710
NEW JERSEY	31,174
DELAWARE	5,769
PENNSYLVANIA	13,821
TOTAL	86,474

WHOLESALE AND MANUFACTURING, 1963

ITEM	NEW YORK	NEW JERSEY	DELAWARE	PENNSYLVANIA	TOTAL
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
WHOLESALE AND MANUFACTURING:					
ESTABLISHMENTS	304	114	20	54	492
PERSONS ENGAGED:					
AVERAGE FOR SEASON	3,755	2,554	663	997	7,969
AVERAGE FOR YEAR	3,471	2,006	357	863	6,697

MIDDLE ATLANTIC FISHERIES

155

NEW YORK

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES, MENHADEN	OTTER TRAWLS		POUND NETS, FISH	FYKE AND HOOP NETS, FISH	POTS AND TRAPS CONCH
			FISH	LOBSTER			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	37	170	511	16	37	-	-
ON BOATS AND SHORE:							
REGULAR	74	-	8	-	18	9	-
CASUAL	35	-	4	-	16	18	1
TOTAL	146	170	523	16	71	27	1
VESSELS, MOTOR	6	10	166	4	8	-	-
GROSS TONNAGE	299	2,540	6,771	342	85	-	-
BOATS:							
MOTOR	40	20	6	-	15	19	1
OTHER	8	-	-	-	10	2	-
GEAR:							
NUMBER	45	10	172	4	102	83	50
LENGTH, YARDS	13,741	4,360	-	-	-	-	-
YARDS AT MOUTH	-	-	3,974	125	-	-	-

ITEM	POTS AND TRAPS - CONTINUED				GILL NETS		
	EEL	FISH	LOBSTER	ANCHOR, SET OR STAKE	DRIFT		RUNAROUND
					SHAD	OTHER	
NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:							
ON VESSELS	-	2	22	-	-	5	4
ON BOATS AND SHORE:							
REGULAR	11	-	22	12	-	4	10
CASUAL	10	-	25	42	70	-	5
TOTAL	21	2	69	54	70	9	19
VESSELS, MOTOR	-	1	11	-	-	2	2
GROSS TONNAGE	-	8	135	-	-	27	17
BOATS:							
MOTOR	15	-	37	37	35	2	8
OTHER	2	-	-	-	-	-	-
GEAR:							
NUMBER	642	650	6,900	81	35	4	10
SQUARE YARDS	-	-	-	75,997	101,784	24,100	16,100

ITEM	LINES		HARPOONS, SWORDFISH	SPEARS, EEL	DREDGES CLAM
	HAND	LONG OR SET WITH HOOKS			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	32	13	-	69
ON BOATS AND SHORE:					
REGULAR	125	26	-	1	5
CASUAL	625	11	-	17	-
TOTAL	750	69	13	18	74
VESSELS, MOTOR	-	11	4	-	30
GROSS TONNAGE	-	273	109	-	750
BOATS:					
MOTOR	425	23	2	18	2
OTHER	25	-	-	-	-
GEAR:					
NUMBER	750	61	4	18	33
YARDS AT MOUTH	-	-	-	-	27
HOOKS OR BAITS	915	46,100	-	-	-

ITEM	DREDGES - CONTINUED		TONGS	RAKES	TOTAL, EXCLUSIVE OF DUPLI- CATION
	OYSTER, COMMON	SCALLOP			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	50	116	-	-	995
ON BOATS AND SHORE:					
REGULAR	2	223	610	454	1,121
CASUAL	-	485	1,070	782	2,321
TOTAL	52	824	1,680	1,246	4,437
VESSELS, MOTOR	13	11	-	-	247
GROSS TONNAGE	536	1,172	-	-	12,201
BOATS:					
MOTOR	1	467	1,189	930	2,475
OTHER	-	-	20	-	56
GEAR:					
NUMBER	26	1,398	1,680	1,246	-
YARDS AT MOUTH	37	1,453	-	-	-

MIDDLE ATLANTIC FISHERIES

NEW YORK - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	15,000	\$466	-	-	-	-
ANGLERFISH	-	-	-	-	29,600	\$1,199
BLUEFISH	49,700	7,296	-	-	10,900	1,606
BONITO	-	-	-	-	500	60
BUTTERFISH	-	-	-	-	1,044,300	134,251
CARP	4,400	220	-	-	-	-
COD	-	-	-	-	350,700	54,702
EELS, CONGER	-	-	-	-	6,900	224
FLOUNDERS:						
BLACKBACK	-	-	-	-	1,773,100	94,773
FLUKE	-	-	-	-	1,269,200	355,236
GRAY SOLE	-	-	-	-	9,200	1,140
YELLOWTAIL	-	-	-	-	4,623,400	285,141
UNCLASSIFIED	-	-	-	-	400	16
HADDOCK	-	-	-	-	88,300	10,433
HAKE:						
RED	-	-	-	-	643,600	18,021
WHITE	-	-	-	-	5,300	188
HERRING, SEA	-	-	-	-	24,000	512
MACKEREL	-	-	-	-	2,700	653
MENHADEN	-	-	90,600,000	\$1,003,174	-	-
POLOCK	-	-	-	-	4,500	406
SCUP OR PORGY	415,600	34,985	-	-	8,560,200	720,630
SEA BASS	-	-	-	-	387,600	75,071
SEA ROBIN	-	-	-	-	1,100	18
SEA TROUT OR WEAKFISH, GRAY	17,800	3,902	-	-	51,700	11,341
SHAD	7,200	1,359	-	-	100	19
SHARKS:						
GRAYFISH	-	-	-	-	47,000	2,452
UNCLASSIFIED	-	-	-	-	1,500	89
SILVERSIDES	165,200	16,145	-	-	-	-
SKATES	-	-	-	-	15,700	733
STRIPED BASS	374,100	56,205	-	-	177,000	26,591
STURGEON	-	-	-	-	1,400	285
SWELLFISH	-	-	-	-	139,900	6,347
TAUTOG	1,200	50	-	-	2,600	108
TILEFISH	-	-	-	-	27,900	3,635
WHITE PERCH	1,100	174	-	-	-	-
WHITING	-	-	-	-	2,352,700	110,699
UNCLASSIFIED:						
FOR FOOD	27,300	2,710	-	-	214,700	18,842
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	-	-	62,382,100	437,345
LOBSTERS, NORTHERN	-	-	-	-	234,800	115,955
CONCHS	-	-	-	-	5,300	1,132
SQUID	-	-	-	-	805,700	62,651
TOTAL	1,078,600	125,512	90,600,000	1,003,174	85,295,600	2,550,564

SPECIES	POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	17,300	\$625	-	-
BLUEFISH	242,400	\$35,588	-	-	-	-
BONITO	25,200	3,110	-	-	-	-
BULLHEADS	-	-	600	59	-	-
BUTTERFISH	106,700	13,715	-	-	-	-
CARP	-	-	5,700	267	-	-
CATFISH	-	-	5,100	462	-	-
EELS, COMMON	63,800	8,464	-	-	69,100	\$9,149
FLOUNDERS:						
BLACKBACK	55,300	2,956	13,500	722	-	-
FLUKE	17,400	4,910	-	-	-	-
HAKE, RED	3,200	89	-	-	-	-
HERRING, SEA	63,100	1,348	-	-	-	-
KING WHITING OR "KINGFISH"	1,800	274	-	-	-	-
MACKEREL	18,600	4,470	-	-	-	-
MENHADEN	1,050,500	10,505	-	-	-	-
SCUP OR PORGY	331,900	27,938	-	-	-	-
SEA BASS	-	-	-	-	188,800	35,593
SEA ROBIN	9,800	157	-	-	-	-
SEA TROUT OR WEAKFISH, GRAY	7,200	1,578	-	-	-	-
SHAD	63,800	12,406	-	-	-	-
SHARKS:						
GRAYFISH	26,500	1,382	-	-	-	-
UNCLASSIFIED	400	24	-	-	-	-
SKATES	100	5	-	-	-	-
STRIPED BASS	5,000	751	-	-	-	-
SUCKERS	-	-	600	104	-	-
SUNFISH	-	-	300	60	-	-
SWELLFISH	807,800	36,657	-	-	-	-

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

157

NEW YORK - CATCH BY GEAR, 1963 - Continued

SPECIES	POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
TAUTOG	3,200	\$133	-	-	-	-
TOMCOOD	-	-	1,300	\$425	-	-
TUNA, BLUEFIN	2,100	277	-	-	-	-
WHITE PERCH	19,500	3,093	1,900	365	-	-
WHITING	15,000	706	-	-	-	-
YELLOW PERCH	-	-	600	85	-	-
UNCLASSIFIED:						
FOR FOOD	75,900	5,258	-	-	-	-
BAIT, REDUCTION, AND	-	-	-	-	-	-
ANIMAL FOOD	148,000	1,480	-	-	-	-
LOBSTERS, NORTHERN	-	-	-	-	144,200	\$93,755
CONCHS	-	-	-	-	3,700	805
SQUID	66,400	5,164	-	-	-	-
TOTAL	3,230,600	182,438	46,900	3,174	405,800	139,302

SPECIES	GILL NETS					
	ANCHOR, SET OR STAKE		DRIFT		RUNAROUND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	89,400	\$13,124	-	-	41,200	\$6,047
CARP	400	31	-	-	-	-
CATFISH	900	74	-	-	-	-
MACKEREL	-	-	7,200	\$1,682	-	-
SEA TROUT OR WEAKFISH, GRAY	500	110	-	-	8,600	1,884
SHAD	61,500	14,569	69,300	10,948	-	-
STRIPED BASS	46,900	3,518	3,200	385	600	90
STURGEON	2,600	675	300	65	-	-
WHITE PERCH	3,900	429	-	-	-	-
UNCLASSIFIED, FOR FOOD	12,900	1,206	-	-	3,800	350
TOTAL	219,000	33,736	80,000	13,080	54,200	8,371

SPECIES	LINES					
	HAND		LONG OR SET WITH HOOKS		HARPOONS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	263,100	\$38,634	-	-	-	-
BONITO	13,800	1,646	-	-	-	-
CATFISH	-	-	3,000	\$188	-	-
COD	25,700	4,008	505,800	78,949	-	-
EELS, COMMON	-	-	700	105	-	-
MACKEREL	50,300	12,139	-	-	-	-
SHARKS:						
GRAYFISH	-	-	4,500	235	-	-
UNCLASSIFIED	300	18	200	10	-	-
STRIPED BASS	66,000	9,914	-	-	-	-
STURGEON	-	-	300	45	-	-
SWORDFISH	-	-	17,700	6,583	29,100	\$10,813
TAUTOG	700	29	-	-	-	-
TUNA:						
BLUEFIN	19,300	2,497	800	104	-	-
LITTLE	7,600	594	-	-	-	-
TOTAL	447,000	69,479	533,000	86,219	29,100	10,813

SPECIES	SPEARS		DREDGES		TONGS		RAKES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
EELS, COMMON	68,500	\$9,088	-	-	-	-	-	-
FLOUNDERS:								
BLACKBACK	-	-	600	\$32	-	-	-	-
FLUKE	-	-	19,200	5,418	-	-	-	-
YELLOWTAIL	-	-	45,300	2,795	-	-	-	-
SKATES	-	-	100	5	-	-	-	-
LOBSTERS, NORTHERN	-	-	1,000	494	-	-	-	-
CLAMS:								
HARD:								
PUBLIC	-	-	-	-	1,872,400	\$1,268,471	1,565,800	\$1,077,820
PRIVATE	-	-	1,872,800	1,235,506	-	-	-	-
RAZOR	-	-	-	-	-	-	8,400	2,257
SOFT, PUBLIC	-	-	-	-	-	-	98,600	27,527
SURF	-	-	953,900	88,724	-	-	20,400	1,800
CONCHS	-	-	13,300	2,860	-	-	-	-
MUSSELS, SEA	-	-	-	-	-	-	74,300	10,604
OYSTERS, MARKET, PRIVATE:								
SPRING	-	-	191,200	277,470	-	-	-	-
FALL	-	-	203,300	295,218	-	-	-	-
SCALLOPS:								
BAY	-	-	302,400	291,676	-	-	-	-
SEA	-	-	1,924,400	894,620	-	-	-	-
TOTAL	68,500	9,088	5,527,500	3,094,818	1,872,400	1,268,471	1,767,500	1,120,008

MIDDLE ATLANTIC FISHERIES

NEW JERSEY

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	STOP SEINES	PURSE SEINES		
			MENHADEN	TUNA	OTHER
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	-	-	459	60	161
ON BOATS AND SHORE:					
REGULAR	33	4	-	-	20
CASUAL	10	-	-	-	-
TOTAL	43	4	459	60	181
VESSELS, MOTOR	-	-	27	5	20
GROSS TONNAGE	-	-	5,348	1,928	342
BOATS:					
MOTOR	31	4	54	5	23
OTHER	-	-	-	-	16
GEAR:					
NUMBER	31	4	27	5	23
LENGTH, YARDS	2,285	1,600	10,540	4,260	9,175

ITEM	BEAM TRAWLS, SHRIMP	OTTER TRAWLS		WEIRS	POND NETS, FISH
		FISH	LOBSTER		
		<u>NUMBER</u>	<u>NUMBER</u>		
FISHERMEN:					
ON VESSELS	-	471	122	-	54
ON BOATS AND SHORE:					
REGULAR	-	13	3	-	31
CASUAL	7	-	-	6	-
TOTAL	7	484	125	6	85
VESSELS, MOTOR	-	143	31	-	13
GROSS TONNAGE	-	6,141	1,729	-	104
BOATS:					
MOTOR	7	6	1	3	7
OTHER	-	-	-	3	-
GEAR:					
NUMBER	7	149	32	5	47
YARDS AT MOUTH	21	3,650	870	-	-

ITEM	FYKE AND HOOP NETS, FISH	POTS AND TRAPS				
		CRAB	EEL	FISH	LOBSTER	TURTLE
		<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:						
ON VESSELS	1	7	-	18	13	-
ON BOATS AND SHORE:						
REGULAR	8	39	6	29	7	-
CASUAL	-	4	12	2	2	9
TOTAL	9	50	18	49	22	9
VESSELS, MOTOR	1	5	-	9	7	-
GROSS TONNAGE	8	57	-	91	73	-
BOATS, MOTOR	8	38	18	24	6	9
GEAR, NUMBER	16	3,961	323	16,775	2,900	150

ITEM	ANCHOR, SET OR STAKE	DRIFT		RUNAROUND
		SHAD	OTHER	
		<u>NUMBER</u>	<u>NUMBER</u>		NUMBER
FISHERMEN:				
ON VESSELS	9	-	35	15
ON BOATS AND SHORE:				
REGULAR	47	1	36	36
CASUAL	44	13	6	6
TOTAL	100	14	77	57
VESSELS, MOTOR	4	-	15	7
GROSS TONNAGE	43	-	203	54
BOATS:				
MOTOR	55	8	18	18
OTHER	5	2	-	-
GEAR:				
NUMBER	56	9	37	25
SQUARE YARDS	70,607	7,685	255,701	199,100

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

159

NEW JERSEY - OPERATING UNITS BY GEAR, 1963 - Continued

ITEM	LINES				
	HAND	TROLL		LONG OR SET WITH HOOKS	TROT WITH BAIT S
		TUNA	OTHER		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	17	4	23	156	-
ON BOATS AND SHORE:					
REGULAR	7	-	12	46	4
CASUAL	48	-	25	-	6
TOTAL	72	4	60	202	12
VESSELS, MOTOR	9	1	11	55	-
GROSS TONNAGE	101	68	119	1,242	-
BOATS, MOTOR	34	-	37	29	12
GEAR:					
NUMBER	113	2	62	84	14
HOOKS OR BAIT S	165	2	62	183,450	8,700

ITEM	PUSH NETS	HARPOONS	SPEARS	DREDGES	
				CLAM	CRAB
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	28	-	168	54
ON BOATS AND SHORE:					
REGULAR	-	3	1	-	3
CASUAL	9	-	4	-	-
TOTAL	9	31	5	168	57
VESSELS, MOTOR	-	7	-	56	19
GROSS TONNAGE	-	360	-	2,960	481
BOATS:					
MOTOR	-	1	5	-	3
OTHER	9	-	-	-	-
GEAR:					
NUMBER	9	8	5	59	42
YARDS AT MOUTH	-	-	-	76	57

ITEM	DREDGES - CONTINUED			TONGS	
	OYSTER, COMMON	SCALLOP	OTHER	OYSTER	OTHER
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	315	97	25	-	-
ON BOATS AND SHORE:					
REGULAR	19	165	-	133	390
CASUAL	9	-	-	67	630
TOTAL	343	262	25	200	1,020
VESSELS, MOTOR	43	9	10	-	-
GROSS TONNAGE	1,465	941	321	-	-
BOATS:					
MOTOR	13	90	-	160	620
OTHER	-	-	-	-	150
GEAR:					
NUMBER	105	198	11	200	1,020
YARDS AT MOUTH	105	212	35	-	-

ITEM	RAKES	HOES	BY HAND	TOTAL, EXCLUSIVE OF DUPLICATION
				NUMBER
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	-	-	-	1,881
ON BOATS AND SHORE:				
REGULAR	240	4	210	663
CASUAL	450	10	470	1,136
TOTAL	690	14	680	3,682
VESSELS, MOTOR	-	-	-	353
GROSS TONNAGE	-	-	-	19,448
BOATS:				
MOTOR	611	14	552	1,471
OTHER	50	-	43	208
GEAR, NUMBER	690	14	-	-

MIDDLE ATLANTIC FISHERIES

NEW JERSEY - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		STOP SEINES		PURSE SEINES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	3,400	\$125	-	-	-	-
BLUEFISH	-	-	-	-	46,700	\$6,694
BUTTERFISH	-	-	-	-	2,000	344
CARP	33,200	1,702	51,100	\$3,208	-	-
CATFISH	33,400	2,728	-	-	-	-
DRUM, BLACK	-	-	-	-	100	8
EELS, COMMON	100	10	-	-	-	-
FLOUNDERS:						
BLACKBACK	100	6	-	-	-	68
FLUKE	-	-	-	-	1,500	448
MENHADEN	-	-	-	-	166,148,000	2,030,537
MULLET	44,000	6,250	-	-	-	-
SCUP OR PORGY	-	-	-	-	5,631,200	512,725
SEA BASS	-	-	-	-	3,000	192
SEA TROUT OR WEAKFISH, GRAY	-	-	-	-	600	164
SHAD	10,900	1,365	-	-	-	-
SHARKS, UNCLASSIFIED	-	-	-	-	1,900	76
STRIPED BASS	14,100	3,049	-	-	11,700	2,944
STURGEON	-	-	-	-	300	42
TAUTOG	-	-	-	-	2,700	96
TUNA, BLUEFIN	-	-	-	-	2,611,300	153,527
WHITE PERCH	42,200	4,261	-	-	-	-
TOTAL	181,400	22,094	51,100	3,208	174,663,900	2,707,665

SPECIES	BEAM TRAWLS		OTTER TRAWLS		WEIRS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
AMBERJACK	-	-	200	\$7	-	-
ANGLERFISH	-	-	400	8	-	-
BLUEFISH	-	-	33,600	5,063	-	-
BONITO	-	-	300	52	-	-
BUTTERFISH	-	-	1,232,600	112,098	-	-
COD	-	-	125,000	15,473	-	-
DRUM, BLACK	-	-	2,400	126	-	-
EELS:						
COMMON	-	-	-	-	4,500	\$1,800
CONGER	-	-	2,300	52	-	-
FLOUNDERS:						
BLACKBACK	-	-	162,100	8,472	-	-
DAB	-	-	2,500	49	-	-
FLUKE	-	-	4,391,000	1,033,086	-	-
GRAY SOLE	-	-	27,200	1,665	-	-
YELLOWTAIL	-	-	12,700	479	-	-
UNCLASSIFIED	-	-	300	9	-	-
Haddock	-	-	3,200	247	-	-
HAKE:						
RED	-	-	741,200	19,319	-	-
WHITE	-	-	113,500	6,162	-	-
HERRING, SEA	-	-	17,800	356	-	-
KING WHITING OR "KINGFISH"	-	-	11,100	951	-	-
MACKEREL	-	-	19,100	2,645	-	-
MENHADEN	-	-	-	-	100	3
POLLOCK	-	-	1,900	136	-	-
SCUP OR PORGY	-	-	6,827,700	534,922	-	-
SEA BASS	-	-	929,600	109,600	-	-
SEA TROUT OR WEAKFISH, GRAY	-	-	278,800	26,656	-	-
SHAD	-	-	3,800	204	-	-
SHARKS:						
GRAYFISH	-	-	3,700	123	-	-
UNCLASSIFIED	-	-	2,200	86	-	-
STRIPED BASS	-	-	644,200	87,530	-	-
STURGEON	-	-	9,100	1,346	-	-
SWELLFISH	-	-	146,800	5,366	-	-
SWORDFISH	-	-	100	32	-	-
TAUTOG	-	-	4,600	119	-	-
TITLEFISH	-	-	30,700	2,747	-	-
WHITE PERCH	-	-	1,700	294	-	-
WHITING	-	-	3,402,600	142,654	-	-
UNCLASSIFIED:						
FOR FOOD	-	-	7,100	337	-	-
BAIT, REDUCTION, AND ANIMAL FOOD	-	-	32,600	559	-	-
CRABS:						
BLUE, HARD	-	-	200	16	-	-
ROCK	-	-	20,000	542	-	-
HORSESHOE CRABS	-	-	-	-	201,200	1,007
LOBSTERS, NORTHERN	-	-	705,100	311,289	-	-

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

161

NEW JERSEY - CATCH BY GEAR, 1963 - Continued

SPECIES	BEAM TRAWLS		OTTER TRAWLS		WEIRS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SHRIMP	6,000	\$6,000	-	-	-	-
CONCHS	-	-	58,000	\$10,072	-	-
SCALLOPS, SEA	-	-	3,900	1,939	-	-
SQUID	-	-	795,900	41,689	-	-
TOTAL	6,000	6,000	20,810,000	2,485,314	205,800	\$2,810

SPECIES	POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	197,500	\$26,407	-	-	-	-
BUTTERFISH	149,600	12,699	-	-	-	-
COD	-	-	-	-	200	\$23
DRUM, BLACK	3,700	187	-	-	-	-
EELS:						
COMMON	700	103	-	-	17,300	2,749
CONGER	-	-	-	-	100	2
FLOUNDERS:						
BLACKBACK	1,800	168	19,600	\$1,960	-	-
FLUKE	34,700	9,130	-	-	-	-
GRUNTS	-	-	-	-	100	4
HAKE, RED	6,400	170	-	-	20,800	454
HERRING, SEA	132,600	2,449	-	-	-	-
MENHADEN	12,111,800	163,169	-	-	-	-
SCUP OR PORGY	250,300	17,044	-	-	13,500	1,515
SEA BASS	-	-	-	-	1,876,600	223,283
SEA ROBIN	19,700	333	-	-	-	-
SEA TROUT OR WEAKFISH, GRAY	15,200	2,805	-	-	-	-
SHAD	105,800	17,278	300	40	-	-
SHARKS, UNCLASSIFIED	500	10	-	-	-	-
STRIPED BASS	3,100	600	-	-	-	-
STURGEON	3,500	804	-	-	-	-
SWELLFISH	12,500	500	-	-	900	33
TAUTOG	2,900	101	-	-	43,000	906
WHITE PERCH	100	12	5,900	1,488	-	-
WHITING	2,600	107	-	-	-	-
UNCLASSIFIED, FOR FOOD	300	20	400	32	3,800	174
CRABS:						
BLUE:						
HARD	-	-	-	-	694,200	88,631
SOFT AND PEELER	-	-	-	-	33,200	6,640
ROCK	-	-	-	-	2,800	170
LOBSTERS, NORTHERN	-	-	-	-	45,200	25,442
CONCHS	-	-	-	-	200	38
TURTLES:						
LOGGERHEAD	700	70	-	-	-	-
SNAPPER	-	-	200	20	38,800	4,656
TOTAL	13,056,000	254,166	26,400	3,540	2,790,700	354,720

SPECIES	GILL NETS					
	ANCHOR, SET OR STAKE		DRIFT		RUNAROUND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	241,500	\$26,756	296,100	\$31,503
BONITO	-	-	50,000	3,768	4,400	550
BUTTERFISH	-	-	1,700	213	200	17
DRUM, BLACK	-	-	600	42	100	8
HERRING, SEA	-	-	200	5	-	-
KING WHITING OR "KINGFISH"	-	-	400	61	100	10
MACKEREL	-	-	64,600	14,110	-	-
MENHADEN	22,000	\$440	94,900	2,814	300	15
SCUP OR PORGY	-	-	1,100	55	4,500	604
SEA TROUT OR WEAKFISH, GRAY	-	-	3,000	584	33,800	6,557
SHAD	299,100	64,663	22,100	6,331	-	-
SHARKS, UNCLASSIFIED	-	-	700	24	-	-
STRIPED BASS	42,400	5,932	900	165	2,900	516
STURGEON	-	-	100	32	200	29
TUNA, BLUEFIN	-	-	300	39	-	-
WHITE PERCH	4,400	384	7,500	1,126	1,200	144
WHITING	-	-	3,600	111	-	-
UNCLASSIFIED, FOR FOOD	-	-	200	14	-	-
TOTAL	367,900	71,419	493,400	56,270	343,800	39,953

(CONTINUED ON NEXT PAGE)

MIDDLE ATLANTIC FISHERIES

NEW JERSEY - CATCH BY GEAR, 1963 - Continued

SPECIES	LINES							
	HAND		TROLL		LONG OR SET WITH HOOKS		TROT WITH BAITS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	1,000	\$117	3,800	\$507	800	\$76	-	-
BONITO	-	-	100	11	-	-	-	-
CATFISH	1,500	150	-	-	-	-	-	-
COD	1,600	201	-	-	977,900	127,215	-	-
HAKE, RED	1,600	103	-	-	-	-	-	-
MACKEREL	200	4	-	-	-	-	-	-
SCUP OR PORGY	16,900	3,379	-	-	-	-	-	-
SEA BASS	500	44	-	-	-	-	-	-
SEA TROUT OR WEAKFISH, GRAY	3,100	325	-	-	-	-	-	-
SHARKS:	800	183	800	102	-	-	-	-
GRAYFISH	-	-	-	-	400	15	-	-
UNCLASSIFIED	-	-	-	-	700	32	-	-
STRIPED BASS	2,100	415	27,700	4,025	4,200	761	-	-
SWELLFISH	400	14	-	-	-	-	-	-
SWORDFISH	-	-	-	-	186,500	86,872	-	-
TAUTOG	300	10	-	-	-	-	-	-
TUNA, BLUEFIN	100	24	200	10	16,000	1,909	-	-
WHITE PERCH	200	34	-	-	-	-	-	-
WHITING	100	3	-	-	-	-	-	-
UNCLASSIFIED, FOR FOOD	-	-	-	-	300	14	-	-
CRABS, BLUE, HARD	-	-	-	-	-	-	36,200	\$4,525
TOTAL	30,400	5,006	32,600	4,655	1,186,800	216,894	36,200	4,525

SPECIES	PUSH NETS		HARPOONS		SPEARS		DREDGES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
EELS, COMMON	-	-	-	-	1,200	\$230	-	-
FLOUNDERS:	-	-	-	-	-	-	-	-
BLACKBACK	-	-	-	-	-	-	400	\$22
FLUKE	-	-	-	-	-	-	16,400	4,332
SWORDFISH	-	-	6,300	\$2,648	-	-	-	-
CRABS, BLUE, HARD	-	-	-	-	-	-	130,400	11,622
LOBSTERS, NORTHERN	-	-	-	-	-	-	100	38
SHRIMP	1,000	\$1,000	-	-	-	-	-	-
CLAMS:	-	-	-	-	-	-	-	-
HARD, PRIVATE	-	-	-	-	-	-	13,200	4,605
SURF	-	-	-	-	-	-	37,548,400	2,580,151
CONCHS	-	-	-	-	-	-	465,400	102,058
OYSTERS, MARKET:	-	-	-	-	-	-	-	-
PUBLIC:	-	-	-	-	-	-	-	-
SPRING	-	-	-	-	-	-	400	542
FALL	-	-	-	-	-	-	2,100	2,850
PRIVATE:	-	-	-	-	-	-	-	-
SPRING	-	-	-	-	-	-	11,100	13,169
FALL	-	-	-	-	-	-	434,200	465,963
SCALLOPS:	-	-	-	-	-	-	-	-
BAY	-	-	-	-	-	-	273,900	112,172
SEA	-	-	-	-	-	-	169,800	81,309
TOTAL	1,000	1,000	6,300	2,648	1,200	230	39,065,800	3,378,833

SPECIES	TONGS		RAKES		HOCS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CLAMS:	-	-	-	-	-	-	-	-
HARD, PUBLIC	619,300	\$236,189	432,400	\$178,796	-	-	519,500	\$214,762
SOFT, PUBLIC	-	-	-	-	9,900	\$4,109	5,500	2,283
OYSTERS, MARKET:	-	-	-	-	-	-	-	-
PUBLIC:	-	-	-	-	-	-	-	-
SPRING	3,400	3,888	-	-	-	-	-	-
FALL	59,400	65,818	-	-	-	-	-	-
PRIVATE:	-	-	-	-	-	-	-	-
SPRING	3,000	4,066	-	-	-	-	-	-
FALL	1,800	2,441	-	-	-	-	-	-
TERRAPIN	-	-	3,400	1,190	-	-	-	-
TURTLES:	-	-	-	-	-	-	-	-
SNAPPER	-	-	4,300	516	-	-	-	-
UNCLASSIFIED	-	-	1,800	90	-	-	-	-
TOTAL	686,900	312,402	441,900	180,592	9,900	4,109	525,000	217,045

MIDDLE ATLANTIC FISHERIES

163

DELAWARE

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES, MENHADEN	OTTER TRAWLS, FISH	FYKE AND HOOP NETS	
				FISH	TURTLE
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	-	357	6	-	-
ON BOATS AND SHORE:					
REGULAR	-	-	2	10	2
CASUAL	18	-	-	35	5
TOTAL	18	357	8	45	7
VESSELS, MOTOR	-	21	3	-	-
GROSS TONNAGE	-	4,203	78	-	-
BOATS:					
MOTOR	2	42	1	23	6
OTHER	4	-	-	-	-
GEAR:					
NUMBER	2	21	4	63	129
LENGTH, YARDS	1,250	7,420	-	-	-
YARDS AT MOUTH	-	-	86	-	-

ITEM	POTS AND TRAPS		ANCHOR, SET OR STAKE	GILL NETS	
	CRAB	EEL		DRIFT	
				SHAD	OTHER
FISHERMEN, ON BOATS AND SHORE:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
REGULAR	18	2	26	-	-
CASUAL	6	2	52	7	2
TOTAL	24	4	78	7	2
BOATS, MOTOR	15	2	40	5	1
GEAR:					
NUMBER	1,469	80	40	5	1
SQUARE YARDS	-	-	49,010	3,600	3,600

ITEM	LINES, LONG OR SET WITH HOOKS	DREDGES		
		CLAM	CRAB	OYSTER, COMMON
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	6	24	28	12
ON BOATS AND SHORE:				
REGULAR	-	-	-	5
CASUAL	2	-	-	-
TOTAL	8	24	28	17
VESSELS, MOTOR	2	8	11	3
GROSS TONNAGE	24	303	284	98
BOATS, MOTOR	1	-	-	2
GEAR:				
NUMBER	6	15	15	9
YARDS AT MOUTH	-	19	29	13
HOOKS OR BAITS	4,020	-	-	-

ITEM	TONGS	RAKES	TOTAL, EXCLUSIVE OF DUPLI- CATION
			<u>NUMBER</u>
FISHERMEN:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
ON VESSELS	-	-	409
ON BOATS AND SHORE:			
REGULAR	25	15	71
CASUAL	20	84	182
TOTAL	45	99	662
VESSELS, MOTOR	-	-	39
GROSS TONNAGE	-	-	4,689
BOATS:			
MOTOR	28	-	141
OTHER	10	-	14
GEAR, NUMBER	45	99	-

MIDDLE ATLANTIC FISHERIES

DELAWARE - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUTTERFISH	-	-	-	-	2,300	\$233
FLOUNDERS, FLUKE	-	-	-	-	14,800	3,254
KING WHITING OR "KINGFISH"	-	-	-	-	5,600	415
MENHADEN	-	-	102,623,600	\$1,059,083	-	-
SEA TROUT OR WEAKFISH, GRAY	23,000	\$2,760	-	-	104,800	9,674
STRIPED BASS	-	-	-	-	1,000	258
WHITE PERCH	-	-	-	-	7,000	439
CONCHS	-	-	-	-	6,000	525
TOTAL	23,000	2,760	102,623,600	1,059,083	141,700	14,798

SPECIES	FYKE AND HOOP NETS		POTS AND TRAPS		GILL NETS ANCHOR, SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	-	-	21,300	\$3,195
CARP	-	-	-	-	7,500	750
CATFISH	1,500	\$150	-	-	-	-
EELS, COMMON	-	-	12,000	\$840	-	-
FLOUNDERS:						
BLACKBACK	37,000	2,960	-	-	-	-
FLUKE	2,000	160	-	-	-	-
HERRING, SEA	300	6	-	-	-	-
KING WHITING OR "KINGFISH"	-	-	-	-	1,000	150
SEA TROUT OR WEAKFISH, GRAY	100	8	-	-	19,700	4,125
SHAD	-	-	-	-	97,900	12,862
SPOT	500	100	-	-	-	-
STRIPED BASS	-	-	-	-	46,700	8,709
SWELLFISH	7,000	140	-	-	-	-
WHITE PERCH	2,000	240	-	-	12,400	1,398
CRABS, BLUE:						
HARD	-	-	256,100	19,392	-	-
SOFT AND PEELER	-	-	3,400	1,207	-	-
TURTLES, SNAPPER	9,800	920	-	-	-	-
TOTAL	60,200	4,684	271,500	21,439	206,500	31,189

SPECIES	GILL NETS- CONTINUED DRIFT		LINES, LONG OR SET WITH HOOKS		DREDGES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
COD	-	-	87,900	\$10,931	-	-
HAKE, RED	-	-	800	23	-	-
SHAD	2,200	\$538	-	-	-	-
STURGEON	1,700	504	-	-	-	-
CRABS, BLUE, HARD	-	-	-	-	266,200	\$14,238
CLAMS, HARD:						
PUBLIC	-	-	-	-	37,400	15,190
PRIVATE	-	-	-	-	143,100	58,143
OYSTERS, MARKET, PRIVATE:						
SPRING	-	-	-	-	11,800	7,200
FALL	-	-	-	-	28,600	17,886
TOTAL	3,900	1,042	89,700	10,954	487,100	112,657

SPECIES	TONGS		RAKES	
	POUNDS	VALUE	POUNDS	VALUE
CLAMS, HARD, PUBLIC	24,500	\$9,936	57,100	\$23,186
TOTAL	24,500	9,936	57,100	23,186



MENHADEN

MIDDLE ATLANTIC FISHERIES

165

HUDSON RIVER SHAD FISHERY

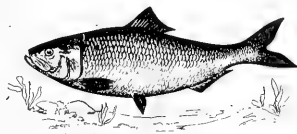
In 1963, the spring run of shad in the Hudson River yielded a commercial catch of 98,074 fish weighing 348,018 pounds, valued at \$81,825 to the fishermen. Compared with the previous year, the poundage declined 34 percent but the value increased 5 percent. Fishermen received an average of nearly 24 cents per pound for shad during 1963 compared with about 15 cents in 1962.

During 1963, there were 142 fishermen employed in the Hudson River shad fishery--26 less than in 1962. Statistics on the 1963 operating units and catch of shad in the Hudson River by New York and New Jersey fishermen are included in the operating unit and catch data for those States.

SUMMARY OF OPERATING UNITS AND CATCH, 1963

ITEM	NEW YORK			NEW JERSEY			TOTAL		
	NUMBER			NUMBER			NUMBER		
OPERATING UNITS									
FISHERMEN:									
ON BOATS AND SHORE:									
REGULAR	6			6					12
CASUAL	102			28					130
TOTAL	108			34					142
BOATS:									
MOTOR	56			21					77
OTHER	-			6					6
GEAR:									
HAUL SEINES	3			-					3
LENGTH, YARDS	393			-					393
GILL NETS:									
ANCHOR, SET OR STAKE	37			9					46
SQUARE YARDS	66,434			19,243					85,677
DRIFT	35			2					37
SQUARE YARDS	101,784			3,554					105,338
CATCH									
	NUMBER	POUNDS	VALUE	NUMBER	POUNDS	VALUE	NUMBER	POUNDS	VALUE
SHAD:									
HAUL SEINES	500	1,700	\$290	-	-	-	500	1,700	\$290
GILL NETS:									
ANCHOR, SET OR STAKE	16,950	61,519	14,569	57,496	208,854	\$54,302	74,446	270,373	66,871
DRIFT	21,261	69,345	10,948	1,867	6,600	1,716	23,128	75,945	12,664
TOTAL	38,711	132,564	25,807	59,363	215,454	56,018	98,074	348,018	81,825

NOTE:--THESE DATA REFLECT THE CATCH OF SHAD IN THE HUDSON RIVER BETWEEN WEEHAWKEN, N. J. AND ALBANY, N. Y.



SHAD

SECTION 4 - CHESAPEAKE FISHERIES

The commercial catch of fish and shellfish landed in Maryland and Virginia during 1963 totaled 430 million pounds, valued at \$30 million to the fishermen. Compared with 1962, this was a decrease of 91 million pounds (18 percent), and \$3.8 million (11 percent). The decline in menhaden and hard blue crabs was the principal cause of the lower landings. Landings of oysters, spot, shad, white perch, and fluke were down also, while tuna, soft clams, hard clams, and striped bass were up.

The landings were divided between Virginia, 375 million pounds, 87 percent; and Maryland, 55 million pounds, 13 percent. In value, the disparity was less, with Virginia landings worth \$19 million, 64 percent; and Maryland, \$11 million, 36 percent. The great difference in poundage was due to the Virginia menhaden fishery, which accounted for 68 percent of that State's catch.

Fishermen and vessels. There were 17,784 fishermen engaged in the fisheries of the Chesapeake area during 1963--978 more than in 1962--1,274 vessels of 5 net tons and over, 9,495 motor boats, and 888 other boats. There was a total increase of 662 craft, principally in the Potomac River oyster fishery.

Processing. The value of the 1963 manufactured fishery products in the Chesapeake States was \$58.1--\$3.5 million less than in 1962. This decrease was due mainly to a decline in the value of menhaden meal and scrap, picked crabmeat, and shucked oysters in Virginia. Of the total value, Maryland had 62 percent and Virginia 38 percent.

Weather. Weather was an unusually strong controlling factor in the fisheries in 1963. January and February were exceptionally cold, with harbors, rivers and portions of the Chesapeake Bay freezing over so that fishermen had to be inactive. Principally affected was the oyster industry. The severe cold was also blamed for the late and small spring runs of fish. The poor hard crab season was attributed to the cold, as many crabs died during these months.

Labor. The wage-hour law of 1961 continued in effect, with packers having adjusted to the higher minimum wage. In most instances, dealers were able to obtain exemption certificates for slower or older workers. There were no great changes in automation of the crab meat or oyster industries during the year.

Legislation. The Potomac River Fisheries Commission was organized and assumed regulation of the fisheries in the Potomac River in June 1963. It has six members--three from Maryland and three from Virginia--who are responsible for the duties of law making, licensing, and taxing, previously performed by the State of Maryland which owns the river and which formerly had granted fishing privileges to Virginia fishermen. Officers and boats from the fishery departments of both States engage in enforcement activities.

After extensive legislative consideration, the James River channel-dredging project was delayed until reports from engineering experts could be submitted. Those in favor of the project were industrialists wishing to make the City of Richmond accessible to deep-draft vessels; those opposed were a group of Hampton Roads industrialists and a large group of oyster tongers both of whom feared that the oyster beds would be damaged by the project. The State of Virginia provided money for a working model of the river.

Oysters. Oyster landings of 18 million pounds of meats were down 8 percent from the 1962 total, a continuation of the decline of the past few years. This was a new low in catch for the Chesapeake area. The adverse winter weather, poor sets of spat, and losses in Virginia due to the MSX organism caused the reduced catch. Prices remained steady and fairly high throughout the year, and the quality of the meats was generally excellent.

The Maryland efforts at rehabilitation of the oyster industry by dredging and scattering old shells to catch spat began to show results in the autumn catch. Unfortunately, results were not as good as anticipated because the first year (1960) in which shells were distributed was a very poor year for setting. During the spring, packers with little local production purchased shellstock and some shucked oysters from Gulf Coast States to fill orders and meet competition. During 1963, Virginia continued its rehabilitation program. The production of seed oysters was nearly one million State bushels valued at \$1.3 million, which was a 27-percent drop in volume and 11-percent in value from the 1962 harvest. The decrease was due to a poor set of spat.

Blue Crabs. Hard blue crab production of 63 million pounds was a 22-percent decline from the record catch of 81 million pounds taken in 1962. The catch of peeler and soft crabs also declined from over 5 million pounds in 1962 to 3 million pounds in 1963. Adverse weather during the winter and spring was considered partially responsible for the decline. Catches were very poor all spring, and it was August before near normal landings were made. Crab pot fishermen were also plagued all season by being unable to obtain a regular supply of menhaden, the most commonly used bait.

Clams. Hard clam production of 2.6 million pounds of meats was a 25-percent increase over the 1962 total. A portion of the increase can be attributed to the fact that the 1962 production was held down by a spring storm which disturbed the clam beds.

Soft clam landings of 6.9 million pounds of meats were up a modest 1 percent over the 1962 record catch. All the production was from Maryland. As in past years, locating new markets was a problem. This resource is capable of yielding far more than can be marketed at the present time.

Menhaden. Menhaden landings were 259 million pounds--69 million (21 percent) below the 1962 total. Purse seiners landed 219 million pounds, and fishermen using other gears landed 40 million. The menhaden industry is concentrated in Virginia, where purse seining is allowed for industrial processing. Menhaden reduction products in 1963 were valued at \$5 million. Part of the catch was used for bait. Menhaden for bait were so scarce in the summer that the price more than doubled that at the beginning of the season.

Alewives. The catch of alewives was 27.6 million pounds--only 100,000 pounds below the bumper crop of 1962. The production was used principally for canning, curing, and reduction into meal and oil. There were signs in the Chesapeake of the growing importance of alewives in pet food. The pet food pack was up in 1963 and is expected to expand further. The value of the canned alewife production, including the pack for pet food, was close to \$1 million.

Tuna. For the first time, West Coast purse seine vessels landed Pacific tuna in Maryland. These vessels also landed Atlantic-caught tuna in the State and at other ports on the East Coast. Three million pounds of bluefin, skipjack, and yellowfin tuna were landed in Maryland. Most of the tuna landed on the East Coast was canned in the Maryland canneries.

Swordfish. This new Virginia fishery promised to be a year-round activity for fishing crews and dealers. At the outset, favorable prices induced Virginia boats to outfit with the necessary longlines, but later in the year, heavy landings in New England drove prices down, causing some Virginia vessels to withdraw. At the close of the year, however, all signs pointed to a continuing and thriving fishery as dealers sought new markets outside New England.

Croakers. Croakers almost disappeared from the Chesapeake area in 1963. Only 124,000

CHESAPEAKE FISHERIES

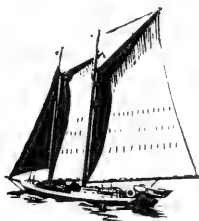
pounds were landed--a drop of 90 percent from the previous year and the lowest catch ever recorded. In 1945, the catch was a record 57.7 million pounds.

Fresh-water fish. Many Chesapeake tributaries have extensive fresh-water areas. In some localities there is a year-round fishery for catfish, the principal species taken from these waters. The fish are handled in two principal ways--live and dressed (skinned). Live are for stocking farm and recreation impoundments; and dressed, for the active demand of out-of-State markets. Carp, eels, white and yellow perch, and snapper turtles are the more plentiful of the remaining fresh-water species that are regularly fished. In 1963, the catfish catch was 2 million pounds--a drop of 700,000 pounds (25 percent) below 1962. The other species were minor in quantity compared with catfish but found ready acceptance in specialized outlets.

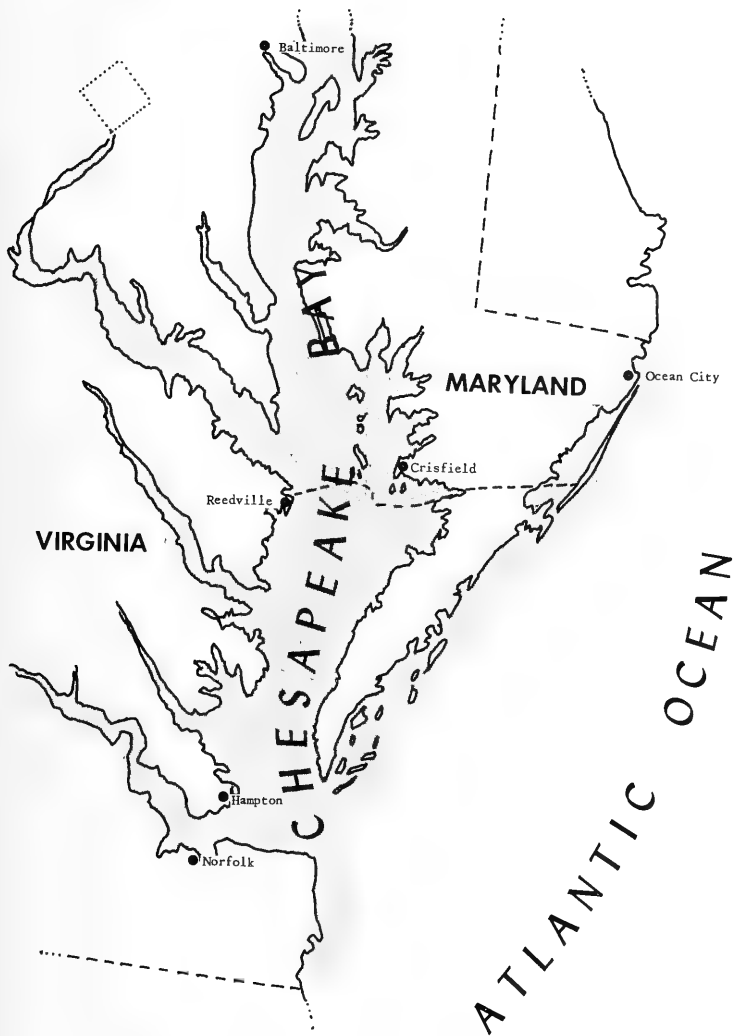
Fish kills. Extensive fish kills occurred during the summer. White perch was the dominant species in the kills, with a few striped bass and other species reported. The kills started on the western shore of the bay and traveled up that side to the head of the bay and then down the eastern shore. Biologists working on the problem attributed the kill, in some instances, to bacteria found in the kidneys and blood stream of the affected fish.

Other information. Condensed summary data on the operating units and catch, by States, appearing on the following pages have been previously published in Current Fishery Statistics No. 3616. The catch of fish and shellfish in the bay and ocean areas of Maryland and Virginia is shown at the end of this section. Additional data may be found in the Maryland and Virginia monthly and annual landing bulletins published by the Branch of Fishery Statistics in cooperation with the respective States. Information on the daily, monthly, and annual production of fishery products in selected areas of these States is available in reports published by the Bureau's Fishery Market News Office at Hampton, Va.

Acknowledgments. The following organizations helped collect the data appearing in this section: Maryland Department of Tidewater Fisheries, Natural Resources Institute of the University of Maryland, Potomac River Fisheries Commission, Virginia Commission of Fisheries, and Virginia Institute of Marine Science.



CHESAPEAKE FISHERIES



CHESAPEAKE STATES

CHESAPEAKE FISHERIES

SECTIONAL SUMMARIES

SUMMARY OF CATCH, 1963

(MILLIONS OF POUNDS AND MILLIONS OF DOLLARS)

STATE	FISH		SHELLFISH, ETC.		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
MARYLAND	21	1	34	10	55	11
VIRGINIA	314	7	61	12	375	19
TOTAL	335	8	95	22	430	30

SUMMARY OF OPERATING UNITS, 1963

ITEM	MARYLAND	VIRGINIA	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER
FISHERMEN:			
ON VESSELS	1,382	2,434	3,795
ON BOATS AND SHORE:			
REGULAR	4,109	3,970	6,079
CASUAL	3,266	2,644	5,910
TOTAL	8,757	9,048	17,784
VESSELS:			
MOTOR	457	759	1,209
GROSS TONNAGE	6,104	20,363	26,281
SAIL	65	-	65
GROSS TONNAGE	720	-	720
TOTAL VESSELS	522	759	1,274
TOTAL GROSS TONNAGE	6,824	20,363	27,001
BOATS:			
MOTOR	5,650	3,846	9,495
OTHER	269	619	688
GEAR:			
HAUL SEINES, COMMON	112	140	252
LENGTH, YARDS	48,900	82,200	131,100
PURSE SEINES:			
MENHADEN	1	39	39
LENGTH, YARDS	375	14,510	14,510
TUNA	5	-	5
LENGTH, YARDS	3,960	-	3,960
OTTER TRAWLS, FISH	18	65	83
YARDS AT MOUTH	472	1,670	2,142
POUND NETS:			
CRAB	6	2,799	2,805
FISH	264	711	975
FYKE AND HOOP NETS, FISH	719	479	1,198
POTS AND TRAPS:			
CRAB	59,983	132,100	192,083
EEL	6,020	1,013	7,033
FISH	587	4,091	4,778
TURTLE	185	62	247
BOX TRAPS	-	4	4
SLAT TRAPS	-	3	3
GILL NETS:			
ANCHOR, SET OR STAKE	1,619	1,279	2,898
SQUARE YARDS	1,738,615	745,720	2,484,335
DRIFT	492	552	1,044
SQUARE YARDS	773,144	672,300	1,445,444
LINES:			
HAND	210	1,186	1,396
HOOKS	210	1,186	1,396
LONG OR SET WITH HOOKS	9	71	80
HOOKS	10,750	14,690	25,440
TROT WITH BAITS	2,160	145	2,305
BAITS	850,675	83,710	934,385
DIP NETS, COMMON	167	248	415
SCRAPES	454	160	614
YARDS AT MOUTH	475	252	727
DREDGES:			
CLAM	276	37	312
YARDS AT MOUTH	278	30	307
CRAB	1	406	407
YARDS AT MOUTH	2	664	666
OYSTER, COMMON	190	505	695
YARDS AT MOUTH	206	585	791
SCALLOP	-	6	6
YARDS AT MOUTH	-	21	21
TONGS:			
OYSTER	3,915	2,630	6,544
OTHER	99	931	1,030
RAKES:			
OYSTER	-	35	35
OTHER	-	738	738

CHESAPEAKE FISHERIES

171

CATCH BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	MARYLAND		VIRGINIA		TOTAL		
	FISH	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ALEWIVES		1,466	22	26,085	459	27,551	481
BLUEFISH		42	5	632	79	674	84
BONITO		-	-	6	1	6	1
BUTTERFISH		44	4	1,378	106	1,422	110
CABO		-	-	33	2	33	2
CARP		164	21	327	11	491	15
CATFISH AND BULLHEADS		292	4	1,754	116	2,046	137
COD		150	15	50	5	200	20
CRAPPIE		3	(1)	-	-	3	(1)
CROAKER		2	(1)	122	31	124	31
DRUM:							
BLACK		22	1	328	14	350	15
RED		-	-	3	(1)	3	(1)
EELS, COMMON		133	13	441	55	574	68
FLOUNDERS:							
BLACKBACK		10	1	2	(1)	12	1
FLUKE		550	123	1,720	345	2,270	468
GRAY SOLE		1	(1)	-	-	1	(1)
UNCLASSIFIED		-	-	25	3	25	3
GARFISH		-	-	5	(1)	5	(1)
GIZZARD SHAD		6	(1)	20	(1)	26	(1)
HAKE:							
RED		53	1	3	(1)	56	1
WHITE		(1)	(1)	5	(1)	5	(1)
HARVESTFISH		-	-	108	9	108	9
HERRING, SEA		8	(1)	11	(1)	19	(1)
HICKORY SHAD		7	(1)	26	1	33	1
HOGCHOKER		4	(1)	-	-	4	(1)
KING MACKEREL		-	-	-	1	10	1
KING WHITING OR "KINGFISH"		14	1	66	6	80	7
MACKEREL		4	1	77	17	81	18
MENHADEN		3,293	54	255,722	3,295	259,015	3,349
MULLET		3	(1)	44	4	47	4
PIGFISH		(1)	(1)	4	(1)	4	(1)
PIKE OR PICKEREL		4	1	-	-	4	1
SCUP OR PORGY		68	3	9,551	598	9,619	601
SEA BASS		304	26	4,316	555	4,620	582
SEA ROBIN		72	1	3	(1)	75	1
SEA TROUT OR WEAKFISH:							
GRAY		94	8	1,098	122	1,192	130
SPOTTED		-	-	26	7	26	7
SHAD		827	132	2,312	347	3,139	479
SHARKS:							
GRAYFISH		36	1	468	12	504	13
UNCLASSIFIED		94	2	3	(1)	97	2
SKATES		2	(1)	-	-	2	(1)
SPADEFISH		-	-	(1)	(1)	(1)	(1)
SPANISH MACKEREL		-	-	79	10	79	10
SPOT		15	2	1,475	236	1,490	238
STRIPED BASS		3,749	534	2,747	356	6,496	890
STURGEON		-	1	4	1	11	2
SUCKERS		(1)	(1)	1	(1)	1	(1)
SUNFISH		9	(1)	-	-	9	(1)
SWELLFISH		1,004	26	1,121	22	2,125	48
SWORDFISH		-	-	183	79	183	79
TAUTOG		2	(1)	1	(1)	3	(1)
TULEFISH		-	-	14	1	14	1
TUNA:							
BLUEFIN		571	50	-	-	571	50
LITTLE		-	-	4	(1)	4	(1)
SKIPJACK		2,073	198	-	-	2,073	198
YELLOWFIN		439	54	17	2	456	56
UNCLASSIFIED		-	-	3	(1)	3	(1)
TOTAL TUNA		3,083	302	24	2	3,107	304
WHITE PERCH		1,372	103	342	28	1,714	131
WHITING		190	5	117	5	307	10
YELLOW PERCH		94	7	12	1	106	8
UNCLASSIFIED:							
FOR FOOD		(1)	(1)	89	8	89	8
BAIT, REDUCTION, AND ANIMAL FOOD		3,819	20	1,294	21	5,113	41
TOTAL FISH		21,116	1,440	314,287	6,972	335,403	8,412
SHELLFISH, ETC.							
CRABS, BLUE:							
HARD		16,934	1,151	46,138	2,546	63,072	3,697
SOFT AND PEELER		2,108	753	949	329	3,057	1,082
TOTAL CRABS		19,042	1,904	47,087	2,875	66,129	4,779
LOBSTERS, NORTHERN		2	1	22	9	24	10

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	MARYLAND		VIRGINIA		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC. - CONTINUED						
CLAMS:						
HARD:						
PUBLIC	489	265	1,720	629	2,209	1,094
PRIVATE	-	-	376	183	376	183
SOFT, PUBLIC	6,859	1,499	-	-	6,859	1,499
SURF	64	5	-	-	64	5
TOTAL CLAMS	7,412	1,769	2,096	1,012	9,508	2,781
CONCHS.	29	4	318	26	347	30
OYSTERS, MARKET:						
PUBLIC:						
SPRING	2,133	1,416	612	641	2,945	2,059
FALL	4,275	3,103	1,181	917	5,456	4,020
PRIVATE:						
SPRING	391	353	3,943	3,059	4,334	3,412
FALL	957	744	4,582	3,493	5,539	4,237
TOTAL OYSTERS	7,756	5,618	10,518	8,110	18,274	13,728
SCALLOPS, SEA	-	-	46	22	46	22
SQUID	39	3	253	13	292	16
TERRAPIN	6	3	6	1	14	4
TURTLES, SNAPPER	53	6	113	16	166	22
TOTAL SHELLFISH, ETC.	34,341	9,306	60,457	12,064	94,600	21,992
GRAND TOTAL	55,457	10,748	374,746	19,056	430,203	29,804

1/ LESS THAN 500 POUNDS OR \$500.

NOTE:--STATISTICS ON THE CATCH ARE SHOWN IN ROUND (LIVE) WEIGHT EXCEPT FOR SHELL MOLLUSKS. CLAMS, CONCHS, AND OYSTERS ARE REPORTED IN WEIGHT OF TOTAL MEATS. SCALLOPS ARE REPORTED IN WEIGHT OF EDIBLE MEATS.

CATCH OF CERTAIN SHELLFISH, 1963

(NUMBER AND BUSHELS)

SPECIES	MARYLAND		VIRGINIA		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CRABS, BLUE:						
HARD	NUMBER					
SOFT AND PEELER	DO	40,641,360	\$1,150,989	137,954,115	\$2,545,537	178,595,475
CLAMS:	U. S.	8,432,400	752,591	5,683,312	326,798	14,115,712
HARD:	STANDARD					
PUBLIC	BUSHELS	61,162	265,368	214,975	629,098	276,137
PRIVATE	DO	-	-	46,962	182,592	46,962
SOFT, PUBLIC	DO	571,542	1,499,405	-	-	571,542
SURF	DO	3,771	5,225	-	-	3,771
CONCHS.	DO	1,470	3,517	15,920	26,195	17,390
OYSTERS, MARKET:						
PUBLIC:						
SPRING	DO	447,233	1,417,486	186,860	641,184	636,093
FALL	DO	909,574	3,103,662	270,963	916,722	1,180,537
PRIVATE:						
SPRING	DO	76,758	352,543	966,348	3,059,369	1,043,106
FALL	DO	193,806	744,391	1,072,998	3,492,914	1,266,604
SCALLOPS, SEA	DO	-	-	7,633	22,236	7,633

NOTE:--THE CAPACITY OF U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

AVERAGE WEIGHTS OF CERTAIN SHELLFISH, 1963

SPECIES		MARYLAND		VIRGINIA	
		QUANTITY		QUANTITY	
CRABS, BLUE:					
HARD	NUMBER PER POUND		2.40		2.99
SOFT AND PEELER	DO		4.00		5.99
CLAMS:	POUNDS OF MEATS				
HARD:	PER U. S.				
PUBLIC	STANDARD BUSHEL		8.00		8.00
PRIVATE	DO		-		8.00
SOFT, PUBLIC	DO		12.00		-
SURF	DO		17.00		-
CONCHS.	DO		20.00		20.00
OYSTERS, MARKET:					
PUBLIC:					
SPRING	DO		4.77		4.30
FALL	DO		4.70		4.36
PRIVATE:					
SPRING	DO		5.09		4.08
FALL	DO		4.94		4.27
SCALLOPS, SEA	DO		-		6.00

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	MARYLAND		VIRGINIA	
	QUANTITY	VALUE	QUANTITY	VALUE
ALEWIVES:				
CANNED:				
FISH	STANDARD CASES	(1)	(1)	88,476
ROE	DO	(1)	(1)	\$350,259
SALTED AND PICKLED	POUNDS	744,424	\$99,902	2,860,525
MEAL AND SCRAP	TONS	-	-	713
OIL	1,000 POUNDS	(1)	(1)	314
SOLUBLES	TONS	-	-	434
ANCHOVY PASTE, CANNED	STANDARD CASES	(1)	(1)	-
BUTTERFISH, SMOKED	POUNDS	50,000	32,500	-
CARP, SMOKED	DO	5,000	3,500	-
CHUBS, SMOKED	DO	50,000	31,000	-
EELS, SMOKED	DO	25,000	17,000	27,000
FLOUNDER FILLETS, FROZEN	DO	-	-	6,000
HALIBUT STEAKS, FROZEN	DO	-	-	(1)
MENHADEN:				
MEAL AND SCRAP	TONS	-	-	22,708
OIL	1,000 POUNDS	-	-	14,473
SOLUBLES	TONS	-	-	14,052
SABLEFISH, SMOKED	POUNDS	125,000	87,500	-
SALMON:				
STEAKS, FROZEN	DO	-	-	(1)
SMOKED	DO	188,000	208,400	-
SEA HERRING:				
SALTED AND PICKLED	DO	120,000	43,000	-
SMOKED	DO	179,000	54,020	-
SPECIALTIES, CURED AND REFRIG- ERATED (PARTY SNACKS, LUNCH HERRING, ETC.)	DO	(1)	(1)	-
SHAD, SMOKED	DO	4,000	1,600	-
STURGEON, SMOKED	DO	10,000	22,500	-
SWORDFISH STEAKS, FROZEN	DO	-	-	74,000
TUNA:				
SPECIALTIES, FROZEN (CAKES, BREADED RAW AND COOKED)	DO	-	-	(1)
CANNED	STANDARD CASES	(1)	(1)	-
MEAL AND SCRAP	TONS	(1)	(1)	-
WHITESH, SMOKED	POUNDS	150,000	120,000	-
CRABS, BLUE:				
FRESH AND FROZEN:				
COOKED MEAT	DO	4,113,107	4,502,272	3,670,300
SPECIALTIES (CAKES, BREADED AND COOKED, ETC.)	DO	1,464,367	1,023,189	327,800
SPECIALTIES, CANNED (SOUPS AND SOFT SHELL)	STANDARD CASES	(1)	(1)	-
MEAL AND SCRAP	TONS	3,462	155,359	1,976
LOBSTER SOUP, CANNED	STANDARD CASES	(1)	(1)	84,861
SHRIMP FROZEN:				
BREADED	POUNDS	-	-	(1)
SPECIALTIES:				
FROZEN	DO	29,928	30,051	101,000
CANNED (SOUPS)	STANDARD CASES	(1)	(1)	-
CLAMS, SOFT:				
SHUCKED FRESH	GALLONS	487,450	2,439,482	8,023
SPECIALTIES, FROZEN (BREADED, ETC.)	POUNDS	442,507	415,226	-
CANNED:				
REGULAR	STANDARD CASES	(1)	(1)	-
SPECIALTIES (STEAMED AND SOFT IN SHELL)	DO	(1)	(1)	-
OYSTERS:				
FRESH AND FROZEN:				
SHUCKED	GALLONS	819,880	6,544,317	1,037,362
STEAMED	POUNDS	-	-	747,100
BREADED AND COOKED	DO	226,224	242,036	576,871
STEWES	DO	105,000	35,000	-
SPECIALTIES, CANNED (STEWES) SHELL, GRIT AND LIME	STANDARD CASES	(1)	(1)	-
SCALLOPS, SEA, BREADED AND COOKED	POUNDS	90,000	76,500	163,948

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	MARYLAND		VIRGINIA	
	QUANTITY	VALUE	QUANTITY	VALUE
UNCLASSIFIED:				
FRESH AND FROZEN PACKAGED:				
FISH:				
STICKS:				
RAW DO	(1)	(1)	652,562	\$217,263
COOKED DO	(1)	(1)	-	-
PORTIONS:				
RAW DO	(1)	(1)	399,465	133,745
BREADED AND COOKED DO	(1)	(1)	-	-
UNBREADED DO	(1)	(1)	-	-
FISH AND SHELLFISH DO	25,097,252	\$10,358,589	474,905	220,863
CANNED STANDARD CASES	773,777	8,259,742	47,060	209,254
INDUSTRIAL -	-	1,255,846	-	177,000
TOTAL -	-	36,059,731	-	22,049,419

1/ INCLUDED WITH UNCLASSIFIED ITEMS.

NOTE:--SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR A FOREIGN COUNTRY; THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE. CERTAIN ITEMS MAY BE SHOWN IN AN INTERMEDIATE AND ALSO IN A MORE ADVANCED STAGE OF PROCESSING.

SUMMARY OF MANUFACTURED PRODUCTS, 1963

(VALUE IN THOUSANDS OF DOLLARS)

ITEM	QUANTITY	VALUE
PACKAGED, FRESH AND FROZEN:		
NOT BREADED:		
FISH 1,000 POUNDS	576	191
SHELLFISH DO	29,289	25,391
BREADED:		
FISH DO	19,276	7,056
SHELLFISH DO	1,261	1,079
SPECIALTIES DO	3,776	3,622
CANNED 1,000 STANDARD CASES	941	9,221
CURED 1,000 POUNDS	10,625	4,426
INDUSTRIAL -	-	7,122
TOTAL -	-	58,108

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

STATE	VALUE
MARYLAND	36,059
VIRGINIA	22,049
TOTAL	58,108

WHOLESALE AND MANUFACTURING, 1963

ITEM	MARYLAND	VIRGINIA	TOTAL
	NUMBER	NUMBER	NUMBER
WHOLESALE AND MANUFACTURING:			
ESTABLISHMENTS	298	357	655
PERSONS ENGAGED:			
AVERAGE FOR SEASON	6,096	4,853	10,949
AVERAGE FOR YEAR	4,254	3,130	7,384

CHESAPEAKE FISHERIES

175

MARYLAND

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES		OTTER TRAWLS, FISH	POUND NETS		FYKE AND HOOP NETS, FISH
		MENHADEN	TUNA		CRAB	FISH	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS,	134	9	80	38	-	102	8
ON BOATS AND SHORE:							
REGULAR	340	-	-	4	2	312	66
CASUAL	100	-	-	-	-	6	40
TOTAL	574	9	80	42	2	422	114
VESSELS, MOTOR,	25	1	5	16	-	20	4
GROSS TONNAGE	236	123	1,862	407	-	169	38
BOATS:							
MOTOR	108	1	5	2	2	83	59
OTHER	100	-	-	-	-	74	-
GEAR:							
NUMBER,	112	1	5	18	6	264	719
LENGTH, YARDS	48,900	375	3,960	-	-	-	-
YARDS AT MOUTH,	-	-	-	472	-	-	-

ITEM	POTS AND TRAPS				GILL NETS	
	CRAB	EEL	FISH	TURTLE	ANCHOR, SET OR STAKE	DRIFT
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS,	139	-	2	-	217	138
ON BOATS AND SHORE:						
REGULAR	373	129	16	17	863	329
CASUAL	134	69	2	2	659	408
TOTAL	646	198	20	19	1,739	875
VESSELS, MOTOR,	117	-	1	-	111	60
GROSS TONNAGE	938	-	14	-	1,028	563
BOATS:						
MOTOR	472	141	18	18	696	406
OTHER	-	-	-	-	35	-
GEAR:						
NUMBER,	59,983	6,020	667	185	1,619	492
SQUARE YARDS,	-	-	-	-	1,738,615	773,144

ITEM	LINES			DIP NETS, COMMON	SCRAPES	DREDGES
	HAND	LONG OR SET WITH HOOKS	TROT WITH BAITS			CLAM
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS,	2	8	78	-	-	186
ON BOATS OR SHORE:						
REGULAR	2	9	1,071	33	227	297
CASUAL	6	1	1,011	134	4	-
TOTAL	10	18	2,160	167	231	483
VESSELS, MOTOR,	1	3	74	-	-	93
GROSS TONNAGE	10	60	572	-	-	785
BOATS:						
MOTOR	8	6	1,966	127	230	182
OTHER	-	-	7	40	-	-
GEAR:						
NUMBER,	210	9	2,160	167	454	276
YARDS AT MOUTH,	-	-	-	-	475	276
HOOKS OR BAITS,	210	10,750	850,675	-	-	-

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

MARYLAND - OPERATING UNITS BY GEAR, 1963 - Continued

ITEM	DREDGES - CONTINUED		TOUGS		BY HAND	TOTAL, EXCLUSIVE OF DUPLICATION
	CRAB	OYSTER, COMMON	OYSTER	OTHER		
	NUMBER	NUMBER	NUMBER	NUMBER		
FISHERMEN:						
ON VESSELS	-	407	334	15	-	1,362
ON BOATS AND SHORE:						
REGULAR	2	59	2,724	64	15	4,109
CASUAL	-	-	697	3	79	3,266
TOTAL	2	466	3,915	102	94	8,757
VESSELS, MOTOR	-	15	239	12	-	457
GROSS TONNAGE	-	175	1,922	95	-	6,104
VESSELS, SAIL	-	65	-	-	-	65
GROSS TONNAGE	-	720	-	-	-	720
TOTAL VESSELS	-	80	239	12	-	522
TOTAL GROSS TONNAGE	-	896	1,922	95	-	6,824
BOATS:						
MOTOR	1	24	3,019	62	-	5,650
OTHER	-	-	32	-	-	269
GEAR:						
NUMBER	1	190	3,915	99	-	-
YARDS AT MOUTH	2	205	-	-	-	-

MARYLAND - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	6,200	\$92	-	-	-	-
BLUEFISH	1,600	202	-	-	4,600	\$347
BUTTERFISH	-	-	-	-	41,700	3,765
CARP	127,400	3,231	-	-	-	-
CATFISH AND BULLHEADS	59,600	4,260	-	-	-	-
COD	-	-	-	-	2,700	305
CROAKER	100	26	-	-	-	-
DRUM, BLACK	-	-	-	-	9,000	544
EELS, COMMON	300	37	-	-	600	19
FLOUNDERS:						
BLACKBACK	-	-	-	-	9,200	541
FLUKE	-	-	-	-	536,400	120,332
UNCLASSIFIED	-	-	-	-	1,300	42
GIZZARD SHAD	200	5	-	-	-	-
HAKE:						
RED	-	-	-	-	51,500	854
WHITE	-	-	-	-	100	2
HERRING, SEA	-	-	-	-	7,700	146
KING WHITING OR "KINGFISH"	-	-	-	-	14,200	1,083
MACKEREL	-	-	-	-	100	13
MENHADEN	3,600	56	1,909,500	\$31,825	-	-
PIGFISH	-	-	-	-	200	5
SCUP OR PORGY	-	-	-	-	67,800	3,402
SEA BASS	-	-	-	-	139,200	10,522
SEA ROBIN	-	-	-	-	72,100	848
SEA TROUT OR WEAKFISH, GRAY	200	20	-	-	68,600	7,641
SHAD	400	50	-	-	100	9
SHARKS:						
GRAYFISH	-	-	-	-	36,300	1,441
UNCLASSIFIED	-	-	-	-	94,300	1,663
SKATES	-	-	-	-	1,500	8
SPOT	5,000	600	-	-	4,100	120
STRIPED BASS	377,800	53,330	-	-	6,000	838
STURGEON	-	-	-	-	7,100	1,039
SUCKERS	200	4	-	-	-	-
SUNFISH	1,300	62	-	-	-	-
SWELLFISH	-	-	-	-	-	-
TALTOG	-	-	-	-	34,700	888
TUNA:						
BLUEFIN	-	-	571,000	49,677	-	-
SKIPJACK	-	-	2,073,100	196,351	-	-
YELLOWFIN	-	-	438,800	59,751	-	-
WHITE PERCH	126,500	9,491	-	-	-	-
WHITING	-	-	-	-	100,400	5,380

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

177

MARYLAND - CATCH BY GEAR, 1963 - Continued

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
YELLOW PERCH.	6,300	\$428	-	-	-	-
UNCLASSIFIED:						
FOR FOOD.	-	-	-	-	200	\$11
BAIT, REDUCTION, AND ANIMAL FOOD.	-	-	-	-	3,818,500	19,507
LOBSTERS, NORTHERN.	-	-	-	-	800	313
CONCHS.	-	-	-	-	29,400	3,517
SQUID.	-	-	-	-	38,900	2,811
TERRAPIN.	300	125	-	-	-	-
TURTLES, SNAPPER.	800	95	-	-	-	-
TOTAL.	718,000	72,121	4,992,400	\$333,604	5,311,400	188,199

SPECIES	POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES.	1,253,300	\$18,840	5,500	\$82	-	-
BLUEFISH.	31,100	3,548	100	17	-	-
BUTTERFISH.	1,800	126	-	-	-	-
CARP.	6,600	170	2,800	70	-	-
CATFISH AND BULLHEADS	37,900	2,710	61,600	4,452	29,200	\$2,085
CRAPPIE.	300	16	2,300	131	-	-
CROAKER.	1,400	359	-	-	-	-
DRUM, BLACK	13,200	724	-	-	-	-
EELS, COMMON.	3,400	388	500	58	127,500	12,842
FLOUNDERS:						
BLACKBACK	100	11	-	-	-	-
FLUKE.	13,400	2,228	300	52	-	-
GIZZARD SHAD.	-	-	100	2	-	-
HAKE, RED.	-	-	-	-	1,500	30
HICKORY SHAD.	200	11	-	-	-	-
HOGCHOKER.	3,700	74	-	-	-	-
MACKEREL.	500	105	-	-	-	-
MENHADEN.	1,361,300	21,336	900	15	-	-
PIKE OR PICKEREL.	800	162	400	82	164,400	15,512
SEA BASS.	-	-	-	-	-	-
SEA TROUT OR WEAFFISH, GRAY	5,400	537	-	-	-	-
SHAD.	132,100	10,776	-	-	-	-
SPOT.	4,400	526	-	-	-	-
STRIPED BASS.	440,300	62,152	1,900	268	-	-
SUCKERS.	-	-	100	2	-	-
SUNFISH.	100	5	3,600	171	-	-
SWELLFISH.	47,100	940	-	-	921,000	24,319
TAUTOG.	-	-	-	-	100	4
WHITE PERCH.	100,500	7,538	41,600	3,120	-	-
YELLOW PERCH.	4,700	320	43,200	2,934	-	-
CRABS, BLUE:						
HARD.	300	20	-	-	8,480,500	576,161
SOFT AND PEELER.	100	36	-	-	198,100	70,721
LOBSTERS, NORTHERN.	-	-	-	-	1,300	753
TERRAPIN.	500	200	-	-	-	-
TURTLES, SNAPPER.	-	-	-	-	50,100	5,871
TOTAL.	3,464,700	133,860	164,900	11,456	9,973,700	708,299

SPECIES	GILL NETS				LINES	
	ANCHOR, SET OR STAKE		DRIFT		HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES.	184,800	\$2,780	16,200	\$244	-	-
BLUEFISH.	1,100	117	1,800	205	1,000	\$165
CARP.	17,700	440	9,100	228	-	-
CATFISH AND BULLHEADS	61,900	4,470	13,300	955	-	-
CRAPPIE.	100	5	-	-	-	-
EELS, COMMON.	700	81	-	-	-	-
FLOUNDERS:						
BLACKBACK	800	83	-	-	-	-
FLUKE.	300	53	-	-	-	-
GIZZARD SHAD.	5,500	165	300	9	-	-
HICKORY SHAD.	6,200	371	400	25	-	-
MACKEREL.	-	-	3,600	731	-	-
MENHADEN.	17,600	279	-	-	-	-
MULLET, BLACK	3,400	269	-	-	-	-
PIKE OR PICKEREL.	2,500	507	200	40	-	-
SEA BASS.	-	-	-	-	600	75

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

MARYLAND - CATCH BY GEAR, 1963 - Continued

SPECIES	GILL NETS				LINES	
	ANCHOR, SET OR STAKE		DRIFT		HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SEA TROUT OR WEAKFISH, GRAY	200	\$22	-	-	-	-
SHAD	394,000	67,825	300,000	\$53,582	-	-
SPOT	100	12	1,600	192	-	-
STRIPED BASS	2,045,700	291,873	877,200	125,307	100	\$16
SUNFISH	4,000	178	-	-	-	-
SWELLFISH	-	-	-	-	1,000	17
TUNA, BLUEFIN	-	-	-	-	300	29
WHITE PERCH	688,200	51,291	414,600	31,012	-	-
YELLOW PERCH	37,400	3,175	2,100	166	-	-
TURTLES, SNAPPER	-	-	-	-	1,800	216
TOTAL	3,472,200	423,997	1,640,600	212,696	4,600	518

SPECIES	LINES - CONTINUED				DIP NETS	
	LONG OR SET WITH HOOKS		TROT WITH BAITS			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CATFISH AND BULLHEADS	28,400	\$2,077	-	-	-	-
COD	147,400	14,140	-	-	-	-
HAKE, RED	200	6	-	-	-	-
CRABS, BLUE:						
HARD	-	-	8,321,000	\$565,826	4,600	\$312
SOFT AND PEELER	-	-	121,600	43,411	5,600	1,998
TOTAL	176,000	16,223	8,442,600	609,237	10,200	2,310

SPECIES	SCRAPES		DREDGES		TONGS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CRABS, BLUE:								
HARD	97,400	\$6,623	30,100	\$2,047	-	-	-	-
SOFT AND PEELER	1,762,700	636,425	-	-	-	-	-	-
CLAMS:								
HARD, PUBLIC	-	-	314,400	174,238	143,700	\$75,054	31,200	\$16,076
SOFT, PUBLIC	-	-	6,858,500	1,499,405	-	-	-	-
SURF	-	-	64,100	5,225	-	-	-	-
OYSTERS, MARKET:								
PUBLIC:								
SPRING	-	-	550,600	393,098	1,582,500	1,024,388	-	-
FALL	-	-	1,078,500	869,865	3,196,500	2,233,797	-	-
PRIVATE:								
SPRING	-	-	308,800	300,706	81,900	51,837	-	-
FALL	-	-	689,500	553,627	267,900	190,564	-	-
TERRAPIN	1,400	529	-	-	5,400	2,161	-	-
TOTAL	1,881,500	643,577	9,894,700	3,796,411	5,277,900	3,577,801	31,200	16,076



CHESAPEAKE FISHERIES

179

VIRGINIA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES, MENHADEN	OTTER TRAWLS, FISH	POUND NETS		FYKE AND HOOP NETS, FISH
				CRAB	FISH	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	31	631	248	12	33	8
ON BOATS AND SHORE:						
REGULAR	294	-	2	359	780	130
CASUAL	201	-	-	104	402	63
TOTAL	526	631	250	475	1,215	201
VESSLS, MOTOR	11	39	64	5	12	3
GROSS TONNAGE	96	8,942	3,601	45	126	26
BOATS:						
MOTOR	176	82	1	427	355	124
OTHER	96	-	-	8	271	24
GEAR:						
NUMBER	140	39	65	2,799	711	479
LENGTH, YARDS	82,200	14,510	-	-	-	-
YARDS AT MOUTH	-	-	1,670	-	-	-

ITEM	POTS AND TRAPS					SLAT TRAPS
	CRAB	EEL	FISH	TURTLE	BOX	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	323	11	5	-	3	-
ON BOATS AND SHORE:						
REGULAR	757	34	69	1	-	-
CASUAL	274	26	57	5	-	3
TOTAL	1,354	71	131	6	3	3
VESSLS, MOTOR	205	4	2	-	1	-
GROSS TONNAGE	1,693	33	22	-	15	-
BOATS:						
MOTOR	940	47	86	3	-	-
OTHER	7	2	8	1	-	3
GEAR, NUMBER	132,100	1,013	4,091	62	4	3

ITEM	GILL NETS			LINES	
	ANCHOR, SET OR STAKE	DRIFT	HAND	LONG OR SET WITH HOOKS	TROT WITH BAITS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	32	85	17	33	2
ON BOATS AND SHORE:					
REGULAR	637	486	26	42	134
CASUAL	423	448	51	21	29
TOTAL	1,092	1,019	94	96	165
VESSLS, MOTOR	14	38	7	7	1
GROSS TONNAGE	102	414	77	294	6
BOATS:					
MOTOR	725	484	51	55	144
OTHER	38	20	10	22	-
GEAR:					
NUMBER	1,279	552	1,186	71	145
SQUARE YARDS	745,720	672,300	-	-	-
HOOKS AND BAITS	-	-	1,186	14,690	83,710

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

VIRGINIA - OPERATING UNITS BY GEAR, 1963 - Continued

ITEM	DIP NETS, COMMON	SCRAPES	DREDGES			
			CLAM	CRAB	OYSTER, COMMON	SCALLOP
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	-	40	8	443	514	31
ON BOATS AND SHORE:						
REGULAR	109	62	40	55	255	-
CASUAL	139	31	12	44	88	-
TOTAL	248	133	60	542	657	31
VESSELS, MOTOR	-	19	3	168	193	3
GROSS TONNAGE	-	202	25	3,046	2,314	480
BOATS:						
MOTOR	246	73	33	56	173	-
OTHER	2	-	-	-	-	-
GEAR:						
NUMBER	248	160	37	406	505	6
YARDS AT MOUTH	-	252	30	664	585	21

ITEM	TONGS		RAKES		BY HAND		TOTAL, EXCLUSIVE OF DUPLI- CATION
	OYSTER	OTHER	OYSTER	OTHER	OYSTER	OTHER	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	548	99	-	6	-	-	2,434
ON BOATS AND SHORE:							
REGULAR	1,256	553	20	451	80	320	3,970
CASUAL	826	279	15	281	25	80	2,644
TOTAL	2,630	931	35	738	105	400	9,048
VESSELS, MOTOR	263	47	-	2	-	-	759
GROSS TONNAGE	2,078	433	-	20	-	-	20,363
BOATS:							
MOTOR	1,495	517	19	413	29	80	3,846
OTHER	22	73	4	72	11	20	619
GEAR, NUMBER	2,630	931	35	738	-	-	-



CRAB TROT LINE

CHESAPEAKE FISHERIES

181

VIRGINIA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	1,041,700	\$15,270	-	-	-	-
BLUEFISH	151,200	18,724	-	-	26,900	\$3,425
BONITO	2,300	174	-	-	-	-
BUTTERFISH	336,800	27,869	-	-	681,600	48,453
CABIO	2,900	205	-	-	-	-
CARP	278,500	8,894	-	-	-	-
CATFISH AND BULLHEADS	133,800	6,521	-	-	-	-
COD	-	-	-	-	300	29
CROAKER	11,500	3,044	-	-	95,900	23,588
DRUM:						
BLACK	28,100	879	-	-	1,400	106
RED	1,700	142	-	-	-	-
EELS, COMMON	38,500	4,645	-	-	-	-
FLOUNDERS:						
BLACKBACK	-	-	-	-	400	43
FLUKE	59,600	11,780	-	-	1,444,900	283,645
UNCLASSIFIED	1,200	118	-	-	19,400	1,900
GARFISH	5,300	102	-	-	-	-
GIZZARD SHAD	10,300	191	-	-	-	-
HAKE:						
RED	-	-	-	-	2,800	130
WHITE	-	-	-	-	5,000	360
HARVESTFISH	41,800	3,670	-	-	22,800	1,823
HICKORY SHAD	1,100	53	-	-	-	-
KING MACKEREL	3,700	508	-	-	-	-
KING WHITING OR "KINGFISH"	10,200	864	-	-	34,200	2,854
MACKEREL	-	-	-	-	1,400	306
MENHADEN	7,719,800	107,530	217,153,400	\$2,779,563	-	-
MULLET, BLACK	7,400	586	-	-	5,600	466
PIGFISH	700	37	-	-	200	10
SCUP OR PORGY	400	22	-	-	9,549,400	597,507
SEA BASS	1,700	156	-	-	4,000,600	521,357
SEA ROBIN	-	-	-	-	3,100	58
SEA TROUT OR WEAKFISH:						
GRAY	349,800	39,222	-	-	84,000	8,814
SPOTTED	13,300	3,648	-	-	-	-
SHAD	4,700	727	-	-	-	-
SHARKS:						
GRAYFISH	26,300	642	-	-	100,100	2,384
UNCLASSIFIED	13,800	-	-	-	2,800	112
SPANISH MACKEREL	774,800	1,765	-	-	-	-
SPOT	174,800	120,612	-	-	17,700	770
STRIPED BASS	1,084,600	139,551	-	-	1,400	215
STURGEON	200	51	-	-	2,200	428
SUCKERS	200	10	-	-	-	-
SWELLFISH	160,600	3,200	-	-	20,500	395
TAUTOG	500	25	-	-	-	-
TILEFISH	-	-	-	-	14,100	1,141
TUNA, LITTLE	2,200	44	-	-	-	-
WHITE PERCH	122,700	10,223	-	-	-	-
WHITING	-	-	-	-	117,100	4,486
YELLOW PERCH	3,500	385	-	-	-	-
UNCLASSIFIED:						
FOR FOOD	8,000	689	-	-	27,300	2,629
FOR BAIT, REDUCTION, AND ANIMAL FOOD	93,800	1,692	-	-	52,900	789
LOBSTERS, NORTHERN	-	-	-	-	18,000	7,037
CONCHS	-	-	-	-	32,500	2,339
SQUID	-	-	-	-	252,900	12,779
TERRAPIN	600	300	-	-	-	-
TOTAL	12,549,800	536,790	217,153,400	2,779,563	16,639,500	1,530,378

SPECIES	POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	23,653,000	\$424,801	1,309,400	\$17,734	-	-
BLUEFISH	429,500	53,500	-	-	-	-
BONITO	3,300	270	-	-	-	-
BUTTERFISH	359,200	29,611	600	46	-	-
CABIO	20,600	1,472	100	7	-	-
CARP	4,100	108	40,500	1,313	-	-
CATFISH AND BULLHEADS	20,200	1,326	287,500	18,510	1,144,100	\$77,193
CROAKER	11,200	2,872	-	-	-	-
DRUM:						
BLACK	285,000	11,956	-	-	-	-
RED	800	67	-	-	-	-

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

VIRGINIA - CATCH BY GEAR, 1963 - Continued

SPECIES	POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
EELS, COMMON	23,600	\$2,562	48,200	\$5,169	329,700	\$42,846
FLOUNDERS:						
BLACKBACK	100	14	-	-	-	-
FLUKE	209,800	48,284	-	-	-	-
UNCLASSIFIED	4,300	412	-	-	-	-
GIZZARD SHAD	300	4	9,600	158	-	-
HARVESTFISH	43,400	3,909	-	-	-	-
HICKORY SHAD	14,900	671	900	41	-	-
KING MACKEREL	6,000	808	-	-	-	-
KING WHITING OR "KINGFISH"	18,300	1,522	-	-	-	-
MACKEREL	2,300	433	-	-	-	-
MENHADEN	30,706,800	405,872	141,600	2,066	-	-
MULLET, BLACK	8,100	405	1,800	139	-	-
PIGFISH	2,300	127	-	-	-	-
SCUP OR PORGY	1,200	92	-	-	-	-
SEA BASS	800	79	-	-	310,300	33,502
SEA TROUT OR WEAKFISH:						
GRAY	605,500	67,401	-	-	-	-
SPOTTED	12,200	3,278	-	-	-	-
SHAD	1,453,300	218,187	32,000	4,836	-	-
SHARKS, GRAYFISH	32,700	714	-	-	-	-
SPADEFISH	100	6	-	-	-	-
SPANISH MACKEREL	65,500	8,139	-	-	-	-
SPOT	387,300	64,896	-	-	-	-
STRIPED BASS	788,900	103,506	129,100	16,434	2,100	300
STURGEON	1,600	421	-	-	-	-
SUCKERS	-	-	500	27	-	-
SWELLFISH	939,000	18,139	-	-	-	-
TAUTOG	400	20	-	-	-	-
TUNA, LITTLE	1,900	38	-	-	-	-
WHITE PERCH	86,200	6,640	108,500	9,132	-	-
YELLOW PERCH	2,900	342	5,400	631	-	-
UNCLASSIFIED:						
FOR FOOD	52,000	4,536	400	35	-	-
FOR BAIT, REDUCTION, AND ANIMAL FOOD	1,128,900	18,016	13,600	219	-	-
CRABS, BLUE:						
HARD	154,500	8,063	-	-	27,470,600	1,541,315
SOFT	499,600	151,301	-	-	238,800	96,986
LOBSTERS, NORTHERN	-	-	-	-	3,700	1,455
CONCHS	-	-	-	-	29,100	2,852
TERRAPIN	2,800	622	400	105	-	-
TURTLES, SNAPPER	-	-	-	-	8,700	1,249
TOTAL	62,041,400	1,665,612	2,130,100	76,602	29,537,100	1,797,698

SPECIES	SLAT TRAPS		GILL NETS			
			ANCHOR, SET OR STAKE		DRIFT	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	20,100	\$300	61,200	\$888	-	-
BLUEFISH	-	-	14,900	1,751	8,600	\$1,059
CARP	-	-	2,200	62	1,300	41
CATFISH AND BULLHEADS	-	-	2,300	121	-	-
CROAKER	-	-	1,500	346	-	-
DRUM, BLACK	-	-	500	25	2,300	570
FLOUNDERS, BLACKBACK	-	-	-	-	-	-
HERRING, SEA	-	-	11,000	330	1,000	60
HICKORY SHAD	100	4	5,600	247	3,000	125
KING WHITING OR "KINGFISH"	-	-	1,000	81	2,400	213
MACKEREL	-	-	-	-	73,700	15,872
MENHADEN	-	-	300	4	-	-
MULLET, BLACK	-	-	12,700	1,177	10,100	917
PIGFISH	-	-	1,300	63	-	-
SEA TROUT OR WEAKFISH:						
GRAY	-	-	35,300	4,074	21,500	2,289
SPOTTED	-	-	200	50	-	-
SHAD	100	13	539,600	81,238	281,600	42,255
SHARKS, GRAYFISH	-	-	3,800	59	304,800	7,834
SPOT	-	-	13,200	22,927	158,300	26,090
STRIPED BASS	-	-	697,900	90,866	42,500	5,334
SUCKERS	100	5	100	6	-	-
SWELLFISH	-	-	-	-	300	8
WHITE PERCH	-	-	25,100	2,053	-	-
WHITING	-	-	-	-	100	10
YELLOW PERCH	-	-	500	59	-	-
UNCLASSIFIED:						
FOR FOOD	-	-	-	-	300	30
FOR BAIT, REDUCTION, AND ANIMAL FOOD	-	-	400	6	4,700	78
TOTAL	20,400	322	1,551,600	206,433	916,900	102,785

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

183

VIRGINIA - CATCH BY GEAR, 1963 - Continued

SPECIES	LINES					
	HAND		LONG OR SET WITH HOOKS		TROT WITH BAITS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	1,200	\$108	-	-	-	-
CABIO	9,300	405	-	-	-	-
CATFISH AND BULLHEADS	-	-	165,200	\$10,726	-	-
COD	-	-	50,200	5,341	-	-
DRUM:						
BLACK	12,600	605	-	-	-	-
RED	200	18	-	-	-	-
EELS, COMMON	-	-	600	82	-	-
FLOUNDERS, FLUKE	2,600	550	-	-	-	-
MULLET, BLACK	1,100	180	-	-	-	-
SCUP OR PORGY	100	10	-	-	-	-
SEA BASS	3,000	371	-	-	-	-
SEA TROUT OR WEAKFISH, GRAY	2,100	340	-	-	-	-
SPOT	2,500	625	-	-	-	-
SWELLFISH	700	12	-	-	-	-
SWORDFISH	-	-	183,200	78,740	-	-
TUNA:						
YELLOWFIN	-	-	16,800	2,080	-	-
UNCLASSIFIED	-	-	3,000	376	-	-
UNCLASSIFIED, FOR FOOD	900	73	-	-	-	-
CRABS, BLUE:					1,959,300	\$100,703
HARD	-	-	-	-	19,200	6,673
SOFT	-	-	-	-	-	-
TURTLES, SNAPPER	99,500	14,562	4,700	679	-	-
TOTAL	135,800	17,859	424,900	98,024	1,978,500	107,374

SPECIES	DIP NETS		SCRAPES		DREDGES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS, FLUKE	-	-	-	-	3,100	\$600
CRABS, BLUE:						
HARD	29,700	\$1,525	-	-	16,525,400	893,933
SOFT	63,100	19,980	106,500	\$43,800	600	266
LOBSTERS, NORTHERN	-	-	-	-	-	-
CLAMS, HARD:						
PUBLIC	-	-	-	-	245,700	129,544
PRIVATE	-	-	-	-	45,900	25,657
CONCHS	-	-	-	-	249,500	20,282
OYSTERS, MARKET, PRIVATE:						
SPRING	-	-	-	-	3,725,400	2,891,938
FALL	-	-	-	-	4,363,700	3,326,480
SCALLOPS, SEA	-	-	-	-	45,800	22,236
TERRAPIN	1,300	288	-	-	400	150
TOTAL	93,100	21,793	106,500	43,600	25,205,500	7,311,086

SPECIES	TONGS		RAKES		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CRABS, BLUE, SOFT	-	-	-	-	21,600	\$10,058
CLAMS, HARD:						
PUBLIC	1,274,900	\$605,658	131,000	\$62,278	68,200	31,618
PRIVATE	244,600	115,612	85,200	41,323	-	-
CONCHS	-	-	-	-	7,200	722
OYSTERS, MARKET:						
PUBLIC:						
SPRING	792,000	624,925	19,400	15,749	700	510
FALL	1,116,300	867,822	65,100	48,900	-	-
PRIVATE:						
SPRING	217,300	167,431	-	-	-	-
FALL	218,000	166,434	-	-	-	-
TERRAPIN	-	-	100	28	-	-
TOTAL	3,863,100	2,547,862	300,800	168,278	97,700	42,908

CHESAPEAKE FISHERIES

CHESAPEAKE STATES - CATCH BY WATERS, 1963

SPECIES	MARYLAND				VIRGINIA	
	OCEAN 1/		CHESAPEAKE BAY		OCEAN 1/	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEMIVES	100	\$2	1,465,900	\$22,036	-	-
BLUEFISH	5,700	520	35,800	4,081	46,600	\$5,663
BUTTERFISH	41,700	3,765	1,800	126	684,700	48,744
CARP	-	-	163,800	4,145	167,600	5,587
CATFISH AND BULLHEADS	-	-	291,900	21,010	-	-
COD	150,100	14,445	-	-	50,500	5,370
CRAPPIE	-	-	2,700	152	-	-
CROAKER	-	-	1,500	385	96,000	23,610
DRUM:						
BLACK	9,000	544	13,200	724	5,300	299
RED	-	-	-	-	700	59
EELS, COMMON	800	25	132,200	13,400	500	25
FLOUNDERS:						
BLACKBACK	9,200	541	900	94	1,500	117
FLUKE	536,400	120,332	14,000	2,333	1,535,500	303,614
GRAY SOLE	1,300	42	-	-	-	-
UNCLASSIFIED	-	-	-	-	19,400	1,900
CARFISH	-	-	-	-	3,500	68
GIZZARD SHAD	-	-	6,100	181	-	-
HAKE:						
RED	53,200	890	-	-	2,800	130
WHITE	100	2	-	-	5,000	360
HARVESTFISH	-	-	-	-	22,800	1,823
HERRING, SEA	7,700	146	-	-	-	-
HICKORY SHAD	-	-	6,800	407	-	-
HOGCHOKER	-	-	3,700	74	-	-
KING WHITING OR "KINGFISH"	14,200	1,083	-	-	37,500	3,131
MACKEREL	3,900	744	500	105	75,100	16,178
MENHADEN	-	-	3,292,900	53,511	29,120,000	372,736
MULLET	3,400	269	-	-	10,500	924
PIG FISH	200	5	-	-	1,800	88
PIKE OR PICKEREL	-	-	3,900	791	-	-
SCUP OR PORGY	67,800	3,402	-	-	9,550,300	597,585
SEA BASS	304,200	26,109	-	-	4,311,600	554,980
SEA ROBIN	72,100	848	-	-	3,100	58
SEA TROUT OR WEAKFISH:						
GRAY	88,700	7,653	5,700	567	91,100	10,024
SPOTTED	-	-	-	-	200	50
SHAD	300	41	826,300	132,202	2,400	520
SHARKS:						
GRAYFISH	36,300	1,441	-	-	409,300	10,301
UNCLASSIFIED	94,300	1,863	-	-	2,800	112
SKATES	1,500	8	-	-	-	-
SPANISH MACKEREL	-	-	-	-	-	-
SPOT	4,100	120	11,100	1,332	100	13
STRIPED BASS	6,400	895	3,742,600	532,889	80,800	12,962
STURGEON	7,100	1,039	-	-	3,100	494
SUCKERS	-	-	300	6	2,200	426
SUNFISH	-	-	9,000	416	-	-
SWELLFISH	35,700	905	968,100	25,259	138,400	2,352
SWORDFISH	-	-	-	-	183,200	76,740
TAUOG	2,200	47	-	-	-	-
TILEFISH	-	-	-	-	14,100	1,141
TUNA:						
SKIPJACK	2,073,100	196,351	-	-	-	-
BLUEFIN	571,300	49,706	-	-	-	-
YELLOWFIN	438,800	53,751	-	-	16,800	2,080
UNCLASSIFIED	-	-	-	-	3,000	376
WHITE PERCH	100	10	1,371,300	102,442	100	10
WHITING	190,400	5,380	-	-	117,200	4,496
YELLOW PERCH	300	24	93,400	6,999	-	-
UNCLASSIFIED:						
FOR FOOD	200	11	-	-	31,000	2,949
BAIT, REDUCTION, AND ANIMAL FOOD	3,816,500	19,507	-	-	294,500	6,711
CRABS, BLUE:						
HARD	202,200	13,750	16,731,700	1,137,239	4,021,200	221,695
SOFT AND PEELER	3,300	1,178	2,104,800	751,413	118,000	61,313
LOBSTERS, NORTHERN	2,100	1,066	-	-	22,300	8,758
CLAMS:						
HARD:						
PUBLIC	465,600	253,144	23,700	12,224	928,700	451,869
PRIVATE	-	-	-	-	161,500	79,614
SOFT, PUBLIC	-	-	6,858,500	1,499,405	-	-
SURF	64,100	5,225	-	-	-	-
CONCHS	29,400	3,517	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	-	-	2,133,300	1,417,486	10,500	8,438
FALL	-	-	4,275,000	3,103,662	13,100	9,899
PRIVATE:						
SPRING	97,600	162,400	293,100	190,143	529,800	429,138
FALL	108,800	163,176	848,600	581,215	1,279,000	959,250

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

CHESAPEAKE FISHERIES

185

CHESAPEAKE STATES - CATCH BY WATERS, 1963 - Continued

SPECIES	MARYLAND				VIRGINIA	
	OCEAN 1/		CHESAPEAKE BAY		OCEAN 1/	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SCALLOPS, SEA	-	-	-	-	45,600	\$22,236
SQUID	36,900	\$2,811	-	-	252,900	12,779
TERRAPIN	-	-	7,600	\$3,015	1,000	450
TURTLES, SNAPPER	-	-	52,700	6,183	-	-
TOTAL	9,662,400	1,120,733	45,794,400	9,627,652	54,568,600	4,347,747
SPECIES	VIRGINIA - CONTINUED				TOTAL	
	CHESAPEAKE BAY		OCEAN 1/		CHESAPEAKE BAY	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	26,085,400	\$458,993	100	\$2	27,551,300	\$481,029
BLUEFISH	585,900	72,904	52,300	6,183	621,700	76,985
BONITO	5,600	444	-	-	5,600	444
BUTTERFISH	693,500	57,255	726,400	52,509	695,300	57,381
CABIO	32,900	2,089	-	-	32,900	2,089
CARP	159,000	4,831	167,600	5,587	322,800	8,976
CATFISH AND BULLHEADS	1,754,100	116,397	-	-	2,046,000	137,407
COD	-	-	200,600	19,815	-	-
CRAPPIE	-	-	-	-	2,700	152
CROAKER	26,400	6,810	96,000	23,610	27,900	7,195
DRUM:						
BLACK	322,300	13,272	14,300	843	335,500	13,996
RED	2,000	168	700	59	2,000	168
EELS, COMMON	440,300	55,279	1,300	50	572,500	68,679
FLOUNDERS:						
BLACKBACK	-	-	10,700	658	900	94
FLUKE	184,500	41,215	2,071,900	423,946	198,500	43,548
GRAY SOLE	-	-	1,300	42	-	-
UNCLASSIFIED	5,500	530	19,400	1,900	5,500	530
GARFISH	1,600	34	3,500	68	1,600	34
GIZZARD SHAD	20,200	353	-	-	26,300	534
HAKE:						
RED	-	-	56,000	1,020	-	-
WHITE	-	-	5,100	362	-	-
HARVESTFISH	85,200	7,579	22,800	1,823	85,200	7,579
HERRING, SEA	11,000	330	7,700	146	11,000	330
HICKORY SHAD	25,600	1,141	-	-	32,400	1,548
HOGCHOKER	-	-	-	-	3,700	74
KING MACKEREL	9,700	1,316	-	-	9,700	1,316
KING WHITING OR "KINGFISH"	26,600	2,403	51,700	4,214	26,600	2,403
MACKEREL	2,300	433	79,000	16,922	2,600	538
MENHADEN	226,601,900	2,922,299	29,120,000	372,736	229,894,800	2,975,810
MULLET	33,300	2,946	13,900	1,193	33,300	2,946
PIGFISH	2,700	149	2,000	93	2,700	149
PIKE OR PICKEREL	-	-	-	-	3,900	791
SCUP OR PORGY	800	46	9,618,100	600,987	800	46
SEA BASS	4,800	485	4,613,800	581,089	4,800	485
SEA ROBIN	-	-	75,200	906	-	-
SEA TROUT OR WEAKFISH:						
GRAY	1,007,100	112,116	179,800	17,677	1,012,800	112,683
SPOTTED	25,500	6,926	200	50	25,500	6,926
SHAD	2,309,100	346,736	2,700	561	3,135,400	478,938
SHARKS:						
GRAYFISH	58,400	1,332	445,600	11,742	58,400	1,332
UNCLASSIFIED	-	-	97,100	1,975	-	-
SKATES	-	-	1,500	8	-	-
SPADEFISH	100	6	-	-	100	6
SPANISH MACKEREL	79,200	9,891	100	13	79,200	9,891
SPOT	1,394,000	222,958	84,900	13,082	1,405,100	224,290
STRIPED BASS	2,743,400	355,712	9,500	1,389	6,486,000	888,601
STURGEON	1,800	472	9,300	1,467	1,800	472
SUCKERS	900	48	-	-	1,300	54
SUNFISH	-	-	-	-	9,000	416
SWELLFISH	982,700	19,402	174,100	3,257	1,950,800	44,661
SWORDFISH	-	-	183,200	78,740	-	-
TAUOG	900	45	2,200	47	900	45
TILEFISH	-	-	14,100	1,141	-	-
TUNA:						
SKIPJACK	-	-	2,073,100	198,351	-	-
BLUEFIN	-	-	571,300	49,706	-	-
LITTLE	4,100	82	-	-	4,100	82
YELLOWFIN	-	-	455,600	55,831	-	-
UNCLASSIFIED	-	-	3,000	376	-	-
WHITE PERCH	342,400	28,238	200	20	1,713,700	130,680
WHITING	-	-	307,600	9,876	-	-
YELLOW PERCH	12,300	1,417	300	24	105,700	8,416
UNCLASSIFIED:						
FOR FOOD	57,900	5,043	31,200	2,960	57,900	5,043
BAIT - REDUCTION, AND ANIMAL FOOD	999,800	14,089	4,113,000	26,218	999,800	14,089

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

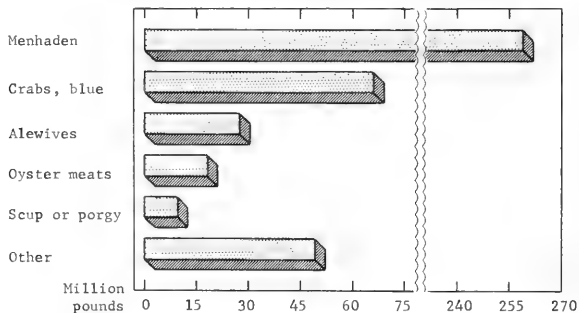
CHESAPEAKE FISHERIES

CHESAPEAKE STATES - CATCH BY WATERS, 1963 - Continued

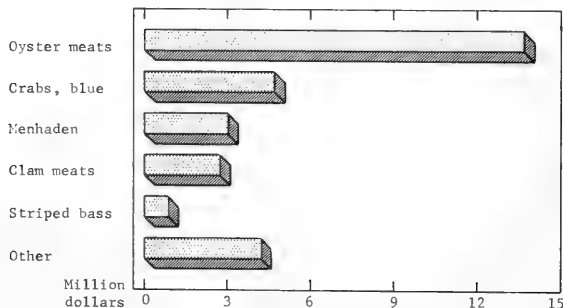
SPECIES	VIRGINIA - CONTINUED		TOTAL			
	CHESAPEAKE BAY		OCEAN 1/		CHESAPEAKE BAY	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CRABS, BLUE:						
HARD	42,117,300	\$2,323,642	4,223,400	\$235,645	56,849,000	\$3,460,881
SOFT AND PEELER	630,800	267,485	121,300	62,491	2,935,600	1,018,698
LOBSTERS, NORTHERN	-	-	24,400	9,824	-	-
CLAMS:						
HARD:						
PUBLIC	791,100	377,229	1,394,300	705,013	814,800	389,453
PRIVATE	214,200	102,976	161,500	79,614	214,200	102,976
SOFT, PUBLIC	-	-	-	-	6,856,500	1,499,405
SURF	-	-	64,100	5,225	-	-
CONCHS	256,000	20,895	91,800	8,617	256,000	20,895
OYSTERS, MARKET:						
PUBLIC:						
SPRING	801,600	632,746	10,500	8,438	2,934,900	2,050,232
FALL	1,168,300	906,823	13,100	9,899	5,443,300	4,010,485
PRIVATE:						
SPRING	3,412,900	2,630,231	627,400	591,536	3,706,000	2,820,374
FALL	3,302,700	2,533,664	1,367,600	1,122,426	4,151,300	3,114,879
SCALLOPS, SEA	-	-	45,600	22,236	-	-
SQUID	-	-	291,800	15,590	-	-
TERRAPIN	4,600	1,043	1,000	450	12,200	4,058
TURTLES, SNAPPER	112,900	16,490	-	-	165,600	22,673
TOTAL	320,157,300	14,707,440	64,271,200	5,466,460	365,951,700	24,335,092

1/ INCLUDES BAYS AND CREEKS, EXCLUSIVE OF CHESAPEAKE BAY, WHICH DRAIN INTO THE ATLANTIC OCEAN.

CHESAPEAKE STATES CATCH, 1963



VALUE OF CHESAPEAKE STATES CATCH, 1963



CHESAPEAKE FISHERIES

187

POTOMAC RIVER SHAD AND ALEWIFE FISHERY

The 1963 shad catch in the Potomac River was 214,900 pounds (87,605 fish) valued at \$35,797 to the fishermen. This was a decline of 18 percent in poundage, 6 percent in number, and 4 percent in value compared with the previous year.

In 1963, the Potomac River alewife catch of 8 million pounds (17 million fish) valued at \$136,499 was down 27 percent in poundage, 34 percent in number, and 37 percent in value compared with 1962.

There were 432 fishermen in the Potomac River shad and alewife fisheries during 1963--25 less than in the previous year. Statistics on the catch and operating units of these fisheries are included in data for Maryland and Virginia.



SUMMARY OF OPERATING UNITS AND CATCH, 1963

ITEM	MARYLAND			VIRGINIA			TOTAL		
	NUMBER			NUMBER			NUMBER		
OPERATING UNITS									
FISHERMEN, ON BOATS AND SHORE:									
REGULAR	75			130			205		
CASUAL	106			121			227		
TOTAL	181			251			432		
BOATS:									
MOTOR	102			97			199		
OTHER	17			39			56		
GEAR:									
HAUL SEINES, COMMON .	1			5			6		
LENGTH, YARDS	500			2,700			3,200		
POUND NETS,	1			140			141		
FYKE AND HOOP NETS, .	1			48			49		
GILL NETS:									
ANCHOR, SET OR STAKE	182			-			182		
SQUARE YARDS,	152,300			-			152,300		
DRIFT	1			19			20		
SQUARE YARDS,	1,000			25,000			26,000		
CATCH									
	NUMBER	POUNDS	VALUE	NUMBER	POUNDS	VALUE	NUMBER	POUNDS	VALUE
SHAD:									
HAUL SEINES	-	-	-	375	900	\$150	375	900	\$150
POUND NETS,	-	-	-	43,611	104,600	17,863	43,611	104,600	17,863
FYKE AND HOOP NETS, .	-	-	-	1,550	3,700	600	1,550	3,700	600
GILL NETS:									
ANCHOR, SET OR STAKE.	30,321	77,700	\$12,411	-	-	-	30,321	77,700	12,411
DRIFT	56	100	23	11,692	27,900	4,750	11,748	28,000	4,773
TOTAL	30,377	77,800	12,434	57,228	137,100	23,363	87,605	214,900	35,797
ALEWIVES:									
HAUL SEINES	208	100	2	12,900	6,200	100	13,108	6,300	102
POUND NETS,	1,040	500	8	16,410,210	7,761,400	131,907	16,411,250	7,761,900	131,915
FYKE AND HOOP NETS, .	2,080	1,000	15	304,171	146,000	2,433	306,251	147,000	2,448
GILL NETS, ANCHOR									
SET OR STAKE	15,808	7,600	114	239,588	115,000	1,920	255,396	122,600	2,034
TOTAL	19,136	9,200	139	16,966,869	8,028,600	136,360	16,986,005	8,037,800	136,499

NOTE:--EXCLUDES TRIBUTARIES OF THE POTOMAC RIVER, BEGINNING JULY 1963.

SECTION 5 - SOUTH ATLANTIC FISHERIES

The 1963 commercial catch of fish and shellfish landed at ports of the South Atlantic States (North Carolina, South Carolina, Georgia, and the East Coast of Florida), including the commercial catch from fresh-water areas of Florida, was 371 million pounds, valued at \$19.5 million. Compared with the previous year, this was an increase of over 65 million pounds, but a decrease of nearly \$4 million. Record landings of blue crabs and larger catches of menhaden in North Carolina waters were the major factors in the increased landings. The decrease in value was due to an almost complete "crop failure" of shrimp in nearly all South Atlantic waters. In addition to poor catches, the ex-vessel prices for shrimp were relatively low during the peak production periods. Compared with 1962, North Carolina total landings increased 41 percent; and the value, 4 percent. In other States, the volume and value declined from 1962--South Carolina, 3 and 31; Georgia, 5 and 43; and Florida, East Coast 9 and 12 percent, respectively.

Fishermen and vessels. There were 11,940 commercial fishermen in the South Atlantic area--569 less than in 1962. Most of the decrease was among fishermen in the shore and boat category. Over the past several years, the fisheries prosecuted by these small craft and by gear operated from shore have become less remunerative, and fishermen have shifted to industries which appeared to offer more stable employment and higher income. Vessels of 5 net tons and over numbered 1,157--an increase of 16 over the previous year. In December, a North Atlantic vessel, using longlines, caught swordfish about 40 miles off Oregon Inlet on the western edge of the Gulf Stream. This interested North Carolina fishermen, several of whom made plans to rig their vessels for taking swordfish during 1964.

Processing. The value of processed fishery products during 1963 was \$40.1 million--\$5.3 million less than the previous year. Processed shrimp items, production of which is centered in Georgia and Florida, accounted for nearly one-half of the total value.

Weather. There was no unusual curtailment of fishing because of weather. No damage was caused by hurricane Ginny, which swept the offshore waters of the South Atlantic coast during October, although side effects--heavy rains, ground swells, and gusty winds--reduced fishing for a 4-to-5-day period. While not directly affecting fishing, wide variation in norms was reported in two States--North Carolina had the driest April, while South Carolina had the wettest June on record. •

Shrimp. Fishermen of the South Atlantic States had a disastrous year. Total landings were the lowest recorded by the Bureau since 1908. In addition to the apparent "crop failure" of the major species within each State, ex-vessel prices were low. Major factors in the price decline were the greatly increased landings at Gulf ports and record imports. In comparison with 1962, South Carolina suffered most with a decline of 66 percent in volume of landings and 75 percent in value. North Carolina landings declined 42 percent in volume, and 52 percent in value; and Georgia landings were down 37 percent, and value, 54 percent. Florida, East Coast fared best with a decline of only 13 percent and 32 percent in landings and value, respectively. Additional information concerning the South Atlantic shrimp fishery appears on pages 214 to 216.

Menhaden. An increase of over 67 million pounds in the North Carolina catch was a welcome improvement over the disastrously low landings during 1962. Florida, East Coast landings were nearly 9 million pounds less than those of 1962. Almost all of the menhaden were used to produce meal, oil, and solubles. The eight reduction plants in North Carolina were supplied by a fleet of 54 vessels, while the one plant in Florida was supplied by 3 vessels. Market conditions for menhaden meal, oil, and solubles were good throughout the year. The average price for fish meal and scrap was \$125 per ton--the same as the previous year. Most of the solubles were sold at an average of \$54 per ton--\$6 less than in 1962. Oil prices averaged 50 cents per gallon--an increase of about 18 cents over 1962. The oil yield at North Carolina plants was lower than usual because of a greater proportion of small fish.

Oysters. Landings were about 1 million pounds of meats (26 percent) more than during 1962. South Carolina continued to be the major producer, accounting for 79 percent of the total. Increased landings were also recorded at Georgia and Florida, East Coast ports. North Carolina catches continued on a downward trend and prompted the State Department of Conservation and Development to initiate a program of oyster shell planting to maintain this important fishery. While there were some market problems, overall demand was good, and most oyster shuckers found ready markets for their production. Quantities of oysters from the Gulf States were again trucked to the South Atlantic area for processing.

Blue crabs. Crab fishermen experienced an excellent year as evidenced by the record landings in every State except Georgia. Total landings of 50.9 million pounds surpassed by 6.0 million pounds the 1960 record. Production of picked crab meat--4.8 million pounds during 1963--was 722,000 pounds more than in 1962. Some of the landings were shipped to processing plants in the Chesapeake States. The excellent market demand for crab meat throughout the year afforded fishermen a ready market for their catches. Production of soft blue crabs, centered in North Carolina, continued to decline, with landings 15 percent less than in 1962.

Hard clams. The scarcity of shrimp in North Carolina and South Carolina waters prompted more fishermen to enter the clam fishery to maintain their income. The additional fishermen resulted in an increase of nearly 100,000 pounds (31 percent) of meats, compared with 1962. Catches from the offshore waters of North Carolina were very poor in volume and quality of meats.

Bay scallops. This species was landed only at North Carolina ports. Production for the State was 150,000 pounds of meats greater than in 1962. Impetus for the increased production was supplied through the creation of greater demand by more aggressive marketing and tighter quality controls.

Food finfish. Total landings of finfish for human consumption were 68.5 million pounds, with a dockside value of \$6.3 million--only a minor change from the previous year, when landings were 69.4 million pounds valued at \$6.5 million. Compared with 1962, there was a decline of only 1 percent in the total landings of 14 species which normally comprise over 90 percent of the edible finfish landings. Of these 14 species, landings of king whiting, gray sea trout, sea bass, shad, spot, and Spanish mackerel were considerably less than in 1962. Compensating in part for this decline were increases in croakers and flounders. Landings of flounders established a new record for the area.

Other fisheries. There were three rather unusual developments during the year--the previously mentioned discovery of swordfish concentrations off Oregon Inlet in North Carolina, an unprecedented run of bluefish off the coast of South Carolina during November, and quantities of mullet (Mugil cephalus) caught in shrimp trawls by vessels fishing Georgia waters during the autumn.

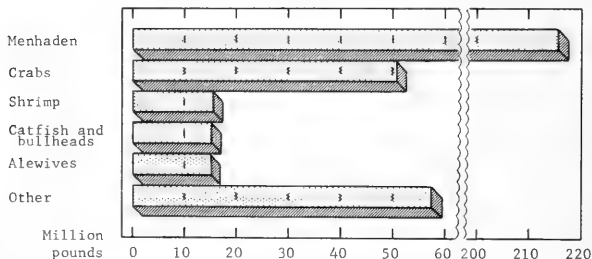
Research. A new 52-foot research vessel for the Bears Bluff Laboratory, Wadmalaw Island, S.C., was launched during September. In trial runs during December, the vessel, designed for use in estuarine and offshore programs, met all expectations. Of interest is the fact that the stem of the vessel was milled from a live oak tree growing in the woods near the laboratory. The Bureau of Commercial Fisheries and the various State agencies continued their research and service programs on the major fisheries of the South Atlantic States. Specific and detailed accomplishments by the Bureau are contained in Report of the Bureau of Commercial Fisheries, Calendar Year 1963, and Operations of the Bureau of Commercial Fisheries Under the Saltonstall-Kennedy Act, Fiscal Year 1963.

SOUTH ATLANTIC FISHERIES

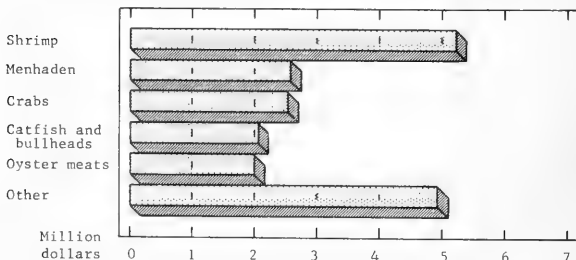
Other information. Condensed summary data on the operating units and catch of the South Atlantic section appearing on the following pages have been previously published in Current Fishery Statistics No. 3666. Seasonal variations in the catch of fish and shellfish in North Carolina, South Carolina, Georgia, and Florida can be ascertained from the 1963 monthly and annual landing bulletins issued for each of these States. Additional data on many aspects of the South Atlantic fisheries may be found in the daily, monthly, and annual reports published by the Hampton, Va., Fishery Market News Office of the Bureau.

Acknowledgments. The following organizations assisted the Bureau to collect the data appearing in this section: North Carolina Department of Conservation and Development, Division of Commercial Fisheries; South Carolina Wildlife Resources Department, Division of Commercial Fisheries; Georgia Game and Fish Commission, Coastal Fisheries Division; Florida State Board of Conservation; and Marine Laboratory, University of Miami.

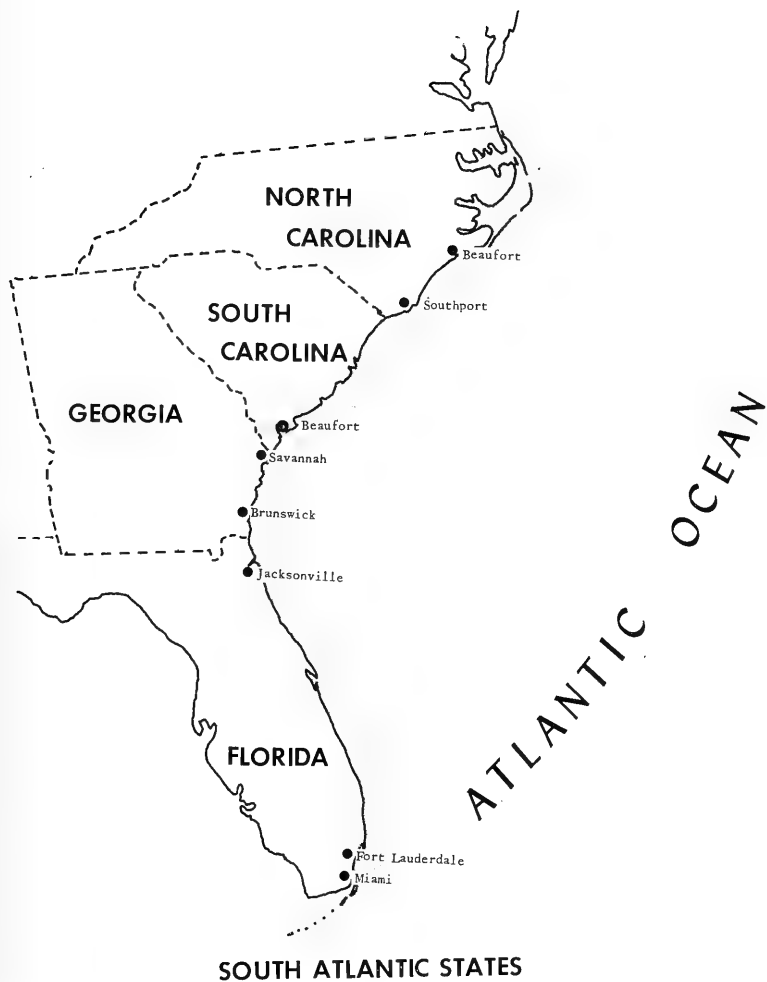
SOUTH ATLANTIC STATES CATCH, 1963



VALUE OF SOUTH ATLANTIC STATES CATCH, 1963



SOUTH ATLANTIC FISHERIES



SOUTH ATLANTIC FISHERIES

SECTIONAL SUMMARIES

SUMMARY OF CATCH, 1963

(MILLIONS OF POUNDS AND MILLIONS OF DOLLARS)

STATE	FISH		SHELLFISH, ETC.		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NORTH CAROLINA	233	4	24	3	257	7
SOUTH CAROLINA	7	1	15	2	22	3
GEORGIA	1	(1)	20	3	21	3
FLORIDA, EAST COAST	57	4	14	3	71	7
TOTAL	296	9	73	11	371	20

1/ LESS THAN \$500,000.

NOTE:--THE CATCH FOR THE INLAND LAKES OF FLORIDA IS INCLUDED WITH THE CATCH FOR THE EAST COAST OF FLORIDA. FOR THE PURPOSE OF THIS REPORT THE "EAST COAST OF FLORIDA" INCLUDES THE COASTAL COUNTIES FROM NASSAU TO DADE, INCLUSIVE.

SUMMARY OF OPERATING UNITS, 1963

ITEM	NORTH CAROLINA	SOUTH CAROLINA	GEORGIA	FLORIDA, EAST COAST	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	1,898	465	727	924	3,414
ON BOATS AND SHORE:					
REGULAR	2,502	823	445	1,447	5,217
CASUAL	1,402	669	711	527	3,309
TOTAL	5,802	1,957	1,883	2,698	11,940
VESSELS, MOTOR	475	222	363	393	1,157
GROSS TONNAGE	20,905	5,790	10,523	14,407	41,811
BOATS:					
MOTOR	2,267	960	854	1,610	5,711
OTHER	708	22	42	49	819
GEAR:					
HAUL SEINES:					
COMMON	62	15	4	11	92
LENGTH, YARDS	17,170	3,180	600	4,700	25,650
LONG	40	-	-	-	40
LENGTH, YARDS	57,650	-	-	-	57,650
PURSE SEINES:					
MENHADEN	54	-	-	3	57
LENGTH, YARDS	21,600	-	-	1,200	22,800
OTHER	2	-	-	-	2
LENGTH, YARDS	400	-	-	-	400
BAG NETS	20	-	-	-	20
YARDS AT MOUTH	500	-	-	-	500
OTTER TRAWLS:					
CRAB	234	27	78	-	337
YARDS AT MOUTH	3,603	491	1,137	-	5,204
FISH	101	-	-	-	101
YARDS AT MOUTH	2,448	-	-	-	2,448
SHRIMP	819	484	916	722	2,445
YARDS AT MOUTH	13,951	9,361	12,343	10,262	38,263
FOUND NETS, FISH	646	-	-	9	655
FYKE AND HOOP NETS, FISH	80	-	-	200	280
POTS AND TRAPS:					
CRAB:					
BLUE	23,500	9,275	8,900	12,815	54,490
OTHER	-	-	-	4,380	4,380
EEL	410	-	-	-	410
FISH	4,468	3,548	412	7,175	15,623
LOBSTER	-	-	-	20,240	20,240
TURTLE	25	-	-	-	25
GILL NETS:					
ANCHOR, SET OR STAKE	2,720	275	183	16	3,194
SQUARE YARDS	876,980	38,812	49,703	16,800	982,295
DRIFT:					
SHAD	186	106	312	15	619
SQUARE YARDS	51,200	14,196	158,525	17,600	241,521
OTHER	44	-	-	12	56
SQUARE YARDS	28,960	-	-	19,200	48,160
RUMAROUND	192	-	-	287	479
SQUARE YARDS	155,160	-	-	580,050	735,210
TRAWL NETS	-	-	-	5	5
SQUARE YARDS	-	-	-	6,950	6,950

SEE NOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

SOUTH ATLANTIC FISHERIES

193

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	NORTH CAROLINA	SOUTH CAROLINA	GEORGIA	FLORIDA, EAST COAST	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
GEAR - CONTINUED:					
LINES:					
HAND	524	20	30	636	1,210
HOOKS	548	40	60	982	1,630
TROLL	-	-	-	571	571
HOOKS	-	-	-	571	571
LONG OR SET WITH HOOKS	9	1	398	694	1,102
HOOKS	2,128	200	19,887	577,800	600,015
TROT WITH BAITS	374	108	3	25	510
BAITS	587,000	81,000	2,150	12,500	682,650
DIP NETS:					
COMMON	150	-	-	-	150
DROP	-	-	2,400	-	2,400
CYST NETS	-	4	4	9	17
SPEARS	123	7	-	5	135
DREDGES:					
CLAM	26	-	-	-	26
YARDS AT MOUTH	34	-	-	-	34
OYSTER, COMMON	171	-	-	-	171
YARDS AT MOUTH	231	-	-	-	231
SCALLOP	70	-	-	-	70
YARDS AT MOUTH	70	-	-	-	70
TONGS	80	-	-	11	91
GRABS	-	217	58	-	275
RAKES	260	42	-	-	302

NOTE:--THE OPERATING UNITS FOR THE INLAND LAKES OF FLORIDA ARE INCLUDED WITH THE DATA FOR THE EAST COAST OF FLORIDA.

CATCH BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	NORTH CAROLINA		SOUTH CAROLINA		GEORGIA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ALEWIVES	15,100	151	-	-	-	-
BLUEFISH	813	97	114	18	(1)	(1)
BOWFIN	(1)	(1)	-	-	(1)	(1)
BUTTERFISH	202	14	-	-	-	-
CABIO	17	1	-	-	-	-
CARP	166	5	-	-	2	(1)
CATFISH AND BULLHEADS	1,230	110	368	34	89	19
CROAKER	2,276	152	36	1	-	(1)
DRUM:						
BLACK	50	3	3	(1)	-	(1)
RED	71	5	-	-	-	-
EELS, COMMON	39	2	-	-	-	(1)
FLOUNDERS	2,674	443	125	30	22	3
GROUPEFS	(1)	(1)	-	-	(1)	(1)
GRUNTS	2	(1)	10	1	-	-
HARVESTFISH	20	2	-	-	-	-
HICKORY SHAD	292	9	4	(1)	1	(1)
KING MACKEREL	53	10	1	1	1	(1)
KING WHITING OR "KINGFISH"	1,071	111	246	32	125	11
MACKEREL	1	(1)	-	-	-	-
MENHADEN	190,214	2,326	-	-	-	-
MULLET	1,911	122	2,211	166	26	3
PIGFISH	82	5	-	-	-	-
POMPANO	11	3	130	55	-	-
SAND PERCH	26	1	-	-	-	-
SCUP OR PORGY	192	11	-	(1)	-	-
SEA BASS	739	77	265	40	2	(1)
SEA TROUT OR WEAKFISH:						
GRAY	1,761	134	-	(1)	(1)	(1)
SPOTTED	232	74	48	11	5	2
SHAD	693	168	120	33	331	88
SHARKS, UNCLASSIFIED	4	(1)	37	4	-	-
SHEEPSHEAD, SALT-WATER	8	1	3	(1)	(1)	(1)
SNAPPER:						
RED	2	-	(1)	(1)	-	1
VERMILION	-	-	10	1	-	-
SPADEFISH	10	1	-	-	-	-

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

SOUTH ATLANTIC FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	NORTH CAROLINA		SOUTH CAROLINA		GEORGIA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED						
SPANISH MACKEREL	135	20	8	1	1	(1)
SPOT	916	84	2,719	146	4	1
STRIPED BASS	736	115	-	-	1	(1)
STURGEON	43	9	53	8	3	1
SUCKERS	-	-	-	-	5	(1)
SWELLFISH	466	10	-	-	-	-
SWORDFISH	1	-	-	-	-	-
TILEFISH	(1)	(1)	-	-	-	-
WHITE PERCH	259	26	-	-	-	-
WHITING	1	(1)	-	-	-	-
YELLOW PERCH	43	3	-	-	-	-
UNCLASSIFIED, FOR BAIT, REDUCTION, AND ANIMAL FOOD.	10,403	76	554	7	204	4
TOTAL FISH	232,965	4,365	7,075	589	827	133
SHELLFISH, ETC.						
CRABS, BLUE:						
HARD	18,835	945	8,839	423	14,500	596
SOFT AND PEELER	83	38	-	-	-	-
TOTAL CRABS	18,918	983	8,839	423	14,500	596
SHRIMP.						
HARD	3,374	1,065	2,201	643	5,448	1,802
CLAMS, HARD, PUBLIC	332	130	73	25	-	-
OCTOPUS	1	(1)	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	307	149	-	-	-	-
FALL	309	166	-	-	-	-
PRIVATE:						
SPRING	32	17	2,394	973	166	58
FALL	46	25	1,433	583	70	24
TOTAL OYSTERS	694	357	3,827	1,556	236	82
SCALLOPS, BAY						
	321	122	-	-	-	-
SQUID	29	2	-	-	-	-
TERRAPIN	(1)	(1)	-	-	-	-
TURTLES, SNAPPER	18	3	-	-	-	-
TOTAL SHELLFISH, ETC.	23,687	2,662	14,940	2,647	20,184	2,480
GRAND TOTAL	256,652	7,047	22,015	3,236	21,011	2,613

SPECIES	FLORIDA, EAST COAST		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE
FISH				
ALEWIVES	23	1	15,123	152
AMBERJACK	6	(1)	6	(1)
BARRACUDA	(1)	(1)	(1)	(1)
BLUEFISH	1,362	114	2,289	229
BLUE RUNNER	25	1	25	1
BONITO	1	(1)	1	(1)
BOWFIN	-	-	(1)	(1)
BUTTERFISH	-	-	202	14
CABLO	6	1	23	2
CARP	-	-	168	5
CATFISH AND BULLHEADS	13,704	1,931	15,391	2,094
CREVALLE	77	2	77	2
CROAKER	114	17	2,427	170
DOLPHIN	4	1	4	1
DRUM:				
BLACK	116	9	170	12
RED	134	20	205	25
EELS, COMMON	-	-	40	2
FLOUNDERS	190	30	3,011	506
GROUPERS	200	21	200	21
GRUNTS	22	2	34	3
HARVESTFISH	-	-	20	2
HICKORY SHAD	-	-	294	9
HOGFISH	4	1	17	1
JEWFISH	17	1	17	1
KING MACKEREL	2,173	248	2,231	259
KING WHITING OR "KINGFISH"	1,146	95	2,588	249
MACKEREL	-	-	1	(1)

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

SOUTH ATLANTIC FISHERIES

195

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	FLORIDA, EAST COAST		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED				
MENHADEN	25,672	263 ¹	215,886	2,589
MOJARRA	151	11	151	11
MULLET	3,379	156	7,527	447
PERMIT	4	(1)	4	(1)
PIGFISH	3	(1)	85	5
POMPANO	183	120	324	178
SAND PERCH	-	-	26	1
SCUP OR PORGY	40	3	236	14
SEA BASS	63	6	1,069	123
SEA CATFISH	8	1	8	1
SEA TROUT OR WEAKFISH:				
GRAY	72	8	1,839	142
SPOTTED	801	192	1,086	279
SHAD	590	63	1,734	352
SHARKS, UNCLASSIFIED	-	-	41	4
SHEEPSHEAD, SALT-WATER	71	5	82	6
SNAPPER:				
MANGROVE	84	15	84	15
MUTTON	83	17	83	17
RED	485	151	489	153
VERMILION	8	2	18	3
YELLOWTAIL	103	24	103	24
SPADEFISH	-	-	10	1
SPANISH MACKEREL	2,123	193	2,267	214
SPOT	1,127	141	4,765	372
STRIPED BASS	-	-	737	115
STURGEON	-	-	99	18
SUCKERS	-	-	5	(1)
SWELLFISH	-	-	466	10
SWORDFISH	-	-	1	1
TITLEFISH	-	-	(1)	(1)
TRIGGERFISH	7	(1)	-	(1)
TRIPLETAIL	2	(1)	2	(1)
WARSAW	10	1	10	1
WHITE PERCH	-	-	259	26
WHITING	-	-	1	(1)
YELLOW PERCH	-	-	43	3
UNCLASSIFIED:				
FOR FOOD	243	16	243	16
BAIT, REDUCTION, AND ANIMAL FOOD	2,094	29	13,255	118
TOTAL FISH	56,730	3,912	297,597	9,019
SHELLFISH, ETC.				
CRABS:				
BLUE:				
HARD	8,595	490	50,769	2,454
SOFT AND PEELER	(1)	(1)	83	38
STONE	157	63	157	63
TOTAL CRABS	8,752	553	51,009	2,555
LOBSTERS, SPINY				
SHRIMP	815	328	815	328
CLAMS, HARD, PUBLIC	4,506	1,736	15,529	5,246
OCTOPUS	1	(1)	406	155
OYSTERS, MARKET:				
PUBLIC:				
SPRING	45	14	352	163
FALL	30	9	339	175
PRIVATE:				
SPRING	2	1	2,594	1,049
FALL	3	1	1,552	633
TOTAL OYSTERS	80	25	4,837	2,020
SCALLOPS, BAY				
SQUID	2	(1)	31	2
TERRAPIN	-	-	(1)	(1)
TURTLES:				
GREEN	1	(1)	1	(1)
SKAPPER	-	-	18	3
SOFT-SHELL	152	18	152	18
TOTAL SHELLFISH, ETC.	14,309	2,660	73,120	10,449
GRAND TOTAL	71,039	6,572	370,717	19,468

1/ LESS THAN 500 POUNDS OR \$500.

NOTE:--STATISTICS ON THE CATCH ARE SHOWN IN ROUND (LIVE) WEIGHT EXCEPT FOR SHELL MOLLUSKS. CLAMS AND OYSTERS ARE REPORTED IN WEIGHT OF TOTAL MEATS. SCALLOPS ARE REPORTED IN WEIGHT OF EDIBLE MEATS.

SOUTH ATLANTIC FISHERIES

CATCH OF CERTAIN SHELLFISH, 1963

(NUMBER AND BUSHELS)

SPECIES	NORTH CAROLINA		SOUTH CAROLINA		GEORGIA		
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	
CRABS:							
BLUE:							
HARD	NUMBER						
SOFT AND PEELER	DO	56,506,200	\$945,064	26,517,600	\$423,026	29,000,000	\$596,071
STONE	DO	250,200	37,530	-	-	-	-
CLAMS, HARD, PUBLIC, U.S. STD. BUSHEL		38,436	129,808	8,343	24,497	-	-
OYSTERS, MARKET:							
PUBLIC:							
SPRING	DO	60,472	149,061	-	-	-	-
FALL	DO	57,757	165,920	-	-	-	-
PRIVATE:							
SPRING	DO	6,307	16,910	736,677	973,431	45,273	57,995
FALL	DO	8,919	24,814	457,796	583,059	28,606	24,430
SCALLOPS, BAY,	DO	53,517	121,914	-	-	-	-

SPECIES	FLORIDA, EAST COAST		TOTAL		
	QUANTITY	VALUE	QUANTITY	VALUE	
CRABS:					
BLUE:					
HARD	NUMBER				
SOFT AND PEELER	DO	17,190,400	\$489,925	129,214,200	\$2,454,086
STONE	DO	800	86	281,000	37,616
CLAMS, HARD, PUBLIC, U.S. STD. BUSHEL		157,400	62,804	157,400	62,804
OYSTERS, MARKET:					
PUBLIC:					
SPRING	DO	10,318	13,620	70,790	162,681
FALL	DO	8,389	9,060	66,146	174,980
PRIVATE:					
SPRING	DO	545	720	788,802	1,049,056
FALL	DO	750	810	496,071	633,113
SCALLOPS, BAY,	DO	-	-	53,517	121,914

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

AVERAGE WEIGHTS OF CERTAIN SHELLFISH, 1963

SPECIES	NORTH CAROLINA	SOUTH CAROLINA	GEORGIA	FLORIDA, EAST COAST	
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	
CRABS:					
BLUE:					
HARD	NUMBER PER POUND				
SOFT AND PEELER	DO	3.00	3.00	2.00	2.00
STONE	DO	3.00	-	-	4.00
CLAMS, HARD, PUBLIC, LBS. MEATS PER U.S. STANDARD BUSHEL		-	-	-	1.00
OYSTERS, MARKET:					
PUBLIC:					
SPRING	DO	8.63	8.75	-	8.00
FALL	DO	5.06	-	-	4.40
PRIVATE:					
SPRING	DO	5.35	-	-	3.60
FALL	DO	5.01	3.25	3.66	4.40
PRIVATE:					
SPRING	DO	5.18	3.13	2.44	3.60
FALL	DO	6.00	-	-	-
SCALLOPS, BAY,	DO				

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

SOUTH ATLANTIC FISHERIES

197

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	NORTH CAROLINA		SOUTH CAROLINA	
	QUANTITY	VALUE	QUANTITY	VALUE
ALEWIVES:				
CANNED:				
FISH	(1)	(1)	-	-
ROE	8,700	\$119,200	-	-
SALTED	POUNDS	116,500	-	-
BLUEFISH FILLETS, FRESH				
AND FROZEN	DO	(1)	-	-
FLOUNDER:				
FILLETS, FRESH	DO	(1)	-	-
SPECIALTIES, FROZEN (BREADED	DO	(1)	-	-
AND STUFFED)	DO	(1)	-	-
MENHADEN:				
MEAL	TONS	19,772	-	-
OIL	1,000 POUNDS	15,328	-	-
SOLUBLES	TONS	7,707	-	-
MULLET, SALTED	POUNDS	(1)	-	-
SCUP, FILLETS, FRESH	DO	(1)	-	-
SEA BASS FILLETS, FRESH	DO	(1)	-	-
SEA TROUT FILLETS, FRESH AND				
FROZEN	DO	(1)	-	-
SHAD, CANNED	STANDARD CASES	(1)	-	-
SPANISH MACKEREL FILLETS, FRESH				
AND FROZEN	POUNDS	(1)	-	-
STRIPED BASS FILLETS, FRESH	DO	(1)	-	-
CRABS, BLUE:				
FRESH AND FROZEN:				
COOKED MEAT	DO	1,799,180	295,300	\$376,605
SPECIALTIES (DEVILED, CAKES,	DO	(1)	(1)	(1)
ETC.)	DO	(1)	(1)	(1)
CANNED:				
REGULAR MEAT	STANDARD CASES	(1)	(1)	(1)
SPECIALTIES (DEVILED)	DO	(1)	(1)	(1)
MEAL AND SCRAP	TONS	(1)	-	-
SHRIMP, FRESH AND FROZEN:				
RAW, HEADLESS	POUNDS	(1)	(1)	(1)
PEELED AND DEVEINED, RAW	DO	-	(1)	(1)
COOKED AND PEELED	DO	-	(1)	(1)
BREADED, RAW AND COOKED	DO	(1)	(1)	(1)
SPECIALTIES (CREOLE, COCKTAILS,				
STUFFED, ETC.)	DO	(1)	-	-
CLAMS, SHUCKED, FRESH	GALLONS	(1)	-	-
OYSTERS:				
SHUCKED, FRESH	DO	66,786	87,415	546,124
BREADED, FRESH AND FROZEN	POUNDS	(1)	(1)	(1)
CANNED:				
REGULAR	STANDARD CASES	-	(1)	(1)
SPECIALTIES (STEWES)	DO	-	(1)	(1)
SCALLOPS:				
BAY, SHUCKED, FRESH	GALLONS	(1)	-	-
BREADED, RAW AND COOKED	POUNDS	(1)	-	-
UNCLASSIFIED:				
FRESH AND FROZEN PACKAGED:				
FILLETS AND STEAKS, STICKS,				
PORTIONS, AND OTHER FISH				
AND SHELLFISH	DO	300,550	32,350	32,445
SHELLFISH, SHUCKED	GALLONS	20,400	-	-
CANNED	STANDARD CASES	25,309	83,496	1,393,291
CURED	POUNDS	225,000	-	-
INDUSTRIAL	-	258,562	-	-
TOTAL	-	7,433,716	-	2,350,465

ITEM	GEORGIA		FLORIDA, EAST COAST	
	QUANTITY	VALUE	QUANTITY	VALUE
BLUEFISH FILLETS, FRESH AND				
FROZEN	POUNDS	-	(1)	(1)
BUTTERFISH, SMOKED	DO	-	(1)	(1)
CHUBS, SMOKED	DO	-	(1)	(1)
FLOUNDER, SPECIALTIES, FROZEN				
(BREADED AND STUFFED)	DO	(1)	-	-
GROUPE FILLETS, FRESH AND				
FROZEN	DO	-	143,000	\$64,210
HALIBUT STEAKS, FROZEN	DO	-	(1)	(1)
KING MACKEREL, PASTE, CANNED	STANDARD CASES	-	(1)	(1)
KING WHITINGS:				
FILLETS, FROZEN	POUNDS	-	(1)	(1)
STEAKS, FRESH AND FROZEN	DO	-	(1)	(1)
SMOKED	DO	-	(1)	(1)
MARLIN, SMOKED	DO	-	(1)	(1)

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

SOUTH ATLANTIC FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	GEORGIA		FLORIDA, EAST COAST	
	QUANTITY	VALUE	QUANTITY	VALUE
MENHADEN:				
MEAL	TONS	-	(1)	(1)
OIL	1,000 POUNDS	-	(1)	(1)
SOLUBLES	TONS	-	(1)	(1)
MULLET, SMOKED	POUNDS	-	-	-
POMPANO FILLETS, FRESH AND FROZEN	DO	-	(1)	(1)
RED SNAPPER FILLETS, FRESH AND FROZEN	DO	-	237,940	\$166,824
SABLEFISH, SMOKED	DO	-	(1)	(1)
SALMON, SMOKED	DO	-	(1)	(1)
SEA TROUT FILLETS, FRESH AND FROZEN	DO	-	(1)	(1)
SPANISH MACKEREL FILLETS, FRESH AND FROZEN	DO	-	134,000	45,510
STURGEON, SMOKED	DO	-	(1)	(1)
WHITEFISH, SMOKED	DO	-	(1)	(1)
CRABS:				
BLUE:				
FRESH AND FROZEN:				
COOKED MEAT	DO	1,265,068	\$1,248,600	1,473,479
SPECIALTIES (DEVILED, CAKES, ETC.)	DO	(1)	(1)	(1)
MEAL AND SCRAP	TONS	(1)	(1)	(1)
STONE, COOKED CLAWS	POUNDS	-	(1)	(1)
LOBSTERS, SPINY:				
WHOLE, COOKED, FRESH AND FROZEN	POUNDS	-	1,120,080	608,547
TAILS, RAW, FRESH AND FROZEN	DO	-	420,622	57,332
SHRIMP, FRESH AND FROZEN:				
RAW, HEADLESS	DO	910,641	511,601	986,822
PEELED AND DEVEINED, RAW	DO	2,933,211	3,706,235	83,026
BREADED, RAW AND COOKED	DO	14,297,588	8,477,162	6,563,638
SPECIALTIES (CREOLE, COCKTAILS, STUFFED, ETC.)	DO	1,039,603	758,205	487,892
CLAMS, BREADED	DO	-	-	(1)
OYSTERS:				
SHUCKED, FRESH	GALLONS	24,022	133,410	(1)
BREADED, FRESH AND FROZEN	POUNDS	(1)	(1)	(1)
SHELL GRIT AND LIME	TONS	-	-	(1)
SCALLOPS, BREADED, RAW AND COOKED	POUNDS	740,085	401,512	(1)
UNCLASSIFIED:				
FRESH AND FROZEN PACKAGED: FILLETS AND STEAKS, STICKS, PORTIONS, AND OTHER FISH AND SHELLFISH	DO	7,537,157	2,826,058	1,775,426
SHELLFISH, SHUCKED	GALLONS	-	-	5,454
CANNED	STANDARD CASES	-	-	1,168
CURED	POUNDS	-	-	554,750
INDUSTRIAL	-	-	22,724	-
TOTAL	-	-	18,085,507	12,181,405

1/ INCLUDED WITH UNCLASSIFIED ITEMS. NOTE:--SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR A FOREIGN COUNTRY; THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE. CERTAIN ITEMS MAY BE SHOWN IN AN INTERMEDIATE AND ALSO IN A MORE ADVANCED STAGE OF PROCESSING.

SUMMARY OF MANUFACTURED PRODUCTS, 1963

(VALUE IN THOUSANDS OF DOLLARS)

ITEM	QUANTITY	VALUE
PACKAGED, FRESH AND FROZEN:		
NOT BREADED:		
FISH	1,000 POUNDS	916
SHELLFISH	DO	13,151
BREADED:		
FISH	DO	7,181
SHELLFISH	DO	21,933
SPECIALTIES (FISH AND SHELLFISH)	DO	3,241
CANNED FISH AND SHELLFISH	1,000 STANDARD CASES	119
CURED:		
SALTED	1,000 POUNDS	4,342
SMOKED	DO	555
INDUSTRIAL PRODUCTS	-	-
TOTAL	-	40,051

SOUTH ATLANTIC FISHERIES

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

STATE	VALUE
NORTH CAROLINA	7,434
SOUTH CAROLINA	2,350
GEORGIA	12,085
FLORIDA, EAST COAST	12,181
TOTAL	40,051

WHOLESALE AND MANUFACTURING, 1963

ITEM	NORTH CAROLINA	SOUTH CAROLINA	GEORGIA	FLORIDA, EAST COAST	TOTAL
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
WHOLESALE AND MANUFACTURING: ESTABLISHMENTS	165	67	52	131	415
PERSONS ENGAGED: AVERAGE FOR SEASON	2,664	871	2,560	1,322	7,617
AVERAGE FOR YEAR	974	579	1,845	1,184	4,582



SHUCKING OYSTERS

SOUTH ATLANTIC FISHERIES

NORTH CAROLINA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES		PURSE SEINES		BAG NETS	OTTER TRAWLS		
	COMMON	LONG	METACETH	OTHER		CRAB	FISH	SHRIMP
	NUMBER	NUMBER	NUMBER	NUMBER				
FISHERMEN:								
ON VESSELS	-	60	939	-	-	86	206	847
ON BOATS AND SHORE:								
REGULAR	119	161	-	-	20	215	50	498
CASUAL	243	-	-	12	-	43	-	4
TOTAL	362	221	939	12	20	344	256	1,349
VESSELS, MOTOR	-	20	54	-	-	43	76	383
GROSS TONNAGE	-	165	11,854	-	-	493	2,975	8,181
BOATS:								
MOTOR	36	60	106	4	20	191	25	319
OTHER	47	80	54	-	-	-	-	-
GEAR:								
NUMBER	62	40	54	2	20	234	101	819
LENGTH, YARDS	17,170	57,650	21,600	400	-	-	-	-
YARDS AT MOUTH	-	-	-	-	500	3,603	2,448	13,951

ITEM	POUND NETS, FISH	FYKE AND HOOP NETS, FISH	POTS AND TRAPS				GILL NETS	
			CRAB	EEL	FISH	TURTLE	ANCHOR, SET OR STAKE	DRIFT
							SHAD	
NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:								
ON VESSELS	-	-	-	-	65	-	23	-
ON BOATS AND SHORE:								
REGULAR	115	-	366	-	54	-	433	-
CASUAL	71	10	67	26	73	4	353	186
TOTAL	186	10	433	26	192	4	809	186
VESSELS, MOTOR	-	-	-	-	32	-	9	-
GROSS TONNAGE	-	-	-	-	481	-	70	-
BOATS:								
MOTOR	80	6	372	26	85	4	518	98
OTHER	-	-	-	-	43	-	100	88
GEAR:								
NUMBER	646	60	23,500	410	4,488	25	2,720	186
SQUARE YARDS	-	-	-	-	-	-	876,960	51,200

ITEM	GILL NETS - CONTINUED			LINES		DIP NETS, COMMON	SPEARS
	DRIFT-CONTINUED	RUNA-ROUND	HAND 1/	LONG OR SET WITH HOOKS	TROT WITH BAITS		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER		
FISHERMEN:							
ON VESSELS	2	-	6	5	-	-	-
ON BOATS AND SHORE:							
REGULAR	-	246	-	-	292	-	-
CASUAL	42	90	26	8	87	150	123
TOTAL	44	336	32	13	379	150	123
VESSELS, MOTOR	1	-	2	1	-	-	-
GROSS TONNAGE	21	-	167	19	-	-	-
BOATS:							
MOTOR	5	175	17	8	364	150	-
OTHER	37	31	-	-	10	-	123
GEAR:							
NUMBER	44	192	524	9	374	150	123
SQUARE YARDS	28,960	155,160	-	-	-	-	-
HOOKS OR BAITS	-	-	548	2,128	587,000	-	-

ITEM	DREDGES			TONGS	RAKES	BY HAND	TOTAL, EXCLUSIVE OF DUPLICATION
	CLAM	OYSTER, COMMON	SCALLOP				
	NUMBER	NUMBER	NUMBER				
FISHERMEN:							
ON VESSELS	5	24	-	-	-	-	1,898
ON BOATS AND SHORE:							
REGULAR	36	294	35	44	-	60	2,502
CASUAL	-	24	-	36	260	216	1,402
TOTAL	41	342	35	80	260	276	5,802
VESSELS, MOTOR	2	12	-	-	-	-	475
GROSS TONNAGE	75	102	-	-	-	-	20,905
BOATS:							
MOTOR	24	159	35	47	75	90	2,267
OTHER	-	-	-	33	185	186	708
GEAR:							
NUMBER	26	171	70	80	260	-	-
YARDS AT MOUTH	34	231	70	-	-	-	-

1/ APPROXIMATELY 400 LINES WERE FISHED FROM RIVER BANKS FOR SNAPPER TURTLES.

SOUTH ATLANTIC FISHERIES

201

NORTH CAROLINA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		BAG NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	301,200	\$3,012	-	-	-	-
BLUEFISH	527,400	61,680	-	-	-	-
BUTTERFISH	75,000	5,250	-	-	-	-
CABIO	13,400	938	-	-	-	-
CARP	14,800	444	-	-	-	-
CATFISH AND BULLHEADS	43,900	3,950	-	-	-	-
CROAKER	466,700	35,600	-	-	-	-
DRUM:						
BLACK	1,100	66	-	-	-	-
RED	69,700	4,707	-	-	-	-
FLOUNDERS	194,600	32,440	-	-	-	-
HARVESTFISH	14,200	1,136	-	-	-	-
HICKORY SHAD	7,700	231	-	-	-	-
KING MACKEREL	3,400	680	-	-	-	-
KING WHITING OR "KINGFISH"	134,700	13,370	-	-	-	-
MENHADEN	93,300	1,091	190,120,500	\$2,324,914	-	-
MULLET	1,135,600	66,711	-	-	-	-
PIGFISH	47,500	2,919	-	-	-	-
POMPANO	10,900	2,725	-	-	-	-
SEA TROUT OR WEAKFISH:						
GRAY	147,700	11,576	-	-	-	-
SPOTTED	159,300	50,512	-	-	-	-
SHAD	22,100	5,437	-	-	-	-
SHARKS, UNCLASSIFIED	2,500	225	-	-	-	-
SHEEPSHEAD, SALT-WATER	5,600	448	-	-	-	-
SPADEFISH	6,600	528	-	-	-	-
SPANISH MACKEREL	89,200	13,380	-	-	-	-
SPOT	705,400	65,297	-	-	-	-
STRIPED BASS	100,800	14,416	10,000	1,600	-	-
STURGEON	10,700	2,140	-	-	-	-
WHITE PERCH	15,200	1,520	-	-	-	-
YELLOW PERCH	2,300	138	-	-	-	-
SHRIMP	-	-	-	-	125,000	\$37,500
TURTLES, SNAPPER	1,100	198	-	-	-	-
TOTAL	4,423,400	402,765	190,130,500	2,326,514	125,000	37,500

SPECIES	OTTER TRAWLS		POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	12,941,200	\$129,412	11,600	\$118	-	-
BLUEFISH	4,000	\$400	40,000	4,600	-	-	-	-
BUTTERFISH	110,800	7,525	16,000	1,120	-	-	-	-
CABIO	-	-	1,500	105	-	-	-	-
CARP	-	-	52,600	1,584	75,600	2,274	20,400	\$612
CATFISH AND BULLHEADS	-	-	138,800	12,492	46,100	4,149	956,300	85,361
CROAKER	1,547,600	97,251	155,900	11,751	-	-	-	-
DRUM:								
BLACK	42,900	2,574	-	-	-	-	-	-
RED	1,500	105	-	-	-	-	-	-
EELS, COMMON	-	-	100	5	-	-	38,500	1,925
FLOUNDERS	2,276,600	373,452	66,800	10,438	-	-	-	-
GRUNTS	100	6	-	-	-	-	-	-
HARVESTFISH	-	-	6,200	496	-	-	-	-
HICKORY SHAD	-	-	133,000	3,990	-	-	-	-
KING WHITING OR "KINGFISH"	729,300	77,067	-	-	-	-	-	-
PIGFISH	29,500	1,770	2,500	150	-	-	-	-
SAND PERCH	26,100	783	-	-	-	-	-	-
SCUP OR PORGY	179,400	10,960	-	-	-	-	-	-
SEA BASS	525,900	55,032	-	-	-	-	155,000	16,325
SEA TROUT OR WEAKFISH:								
GRAY	1,411,300	106,149	40,000	3,200	-	-	-	-
SPOTTED	-	-	7,000	2,210	-	-	-	-
SHAD	-	-	396,700	95,520	-	-	-	-
SHARKS, UNCLASSIFIED	1,600	128	-	-	-	-	-	-
SHEEPSHEAD, SALT-WATER	2,000	160	-	-	-	-	-	-
SPADEFISH	3,300	260	-	-	-	-	-	-
SPANISH MACKEREL	-	-	13,900	2,085	-	-	-	-
SPOT	125,000	10,900	-	-	-	-	-	-
STRIPED BASS	-	-	180,400	28,864	-	-	-	-
STURGEON	1,300	260	17,600	3,520	-	-	-	-
SWELLFISH	466,000	10,015	-	-	-	-	-	-
TILEFISH	200	16	-	-	-	-	-	-
WHITE PERCH	-	-	137,900	14,190	-	-	-	-
WHITING	500	30	-	-	-	-	-	-
YELLOW PERCH	-	-	14,400	864	24,700	1,602	-	-
UNCLASSIFIED, FOR BAIT, REDUCTION, AND ANIMAL FOOD	10,403,000	78,363	-	-	-	-	-	-
CRABS, BLUE:								
HARD	3,525,000	141,750	-	-	-	-	11,755,300	614,716
SOFT AND PEELER	77,900	35,055	-	-	-	-	-	-
SHRIMP	3,248,900	1,027,331	-	-	-	-	-	-
OCTOPUS	-	-	-	-	-	-	500	75
SQUID	29,300	2,082	-	-	-	-	3,600	648
TURTLES, SNAPPER	-	-	-	-	-	-	-	-
TOTAL	24,769,400	2,039,424	14,362,700	326,796	158,400	8,143	12,929,600	719,662

SOUTH ATLANTIC FISHERIES

NORTH CAROLINA - CATCH BY GEAR, 1963 - Continued

SPECIES	GILL NETS					
	ANCHOR, SET OR STAKE		DRIFT		RUNAROUND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	1,798,900	\$17,989	43,000	\$430	3,500	\$35
BLUEFISH	112,200	13,879	-	-	123,100	15,423
BOWFIN	-	-	400	20	-	-
CABIO	2,100	147	-	-	-	-
CARP	1,600	54	200	6	-	-
CATFISH AND BULLHEADS	19,200	1,728	700	63	500	45
CROAKER	53,300	4,050	-	-	52,000	3,790
FLOUNDERS	10,300	2,036	-	-	5,000	1,000
HICKORY SHAD	142,800	4,284	8,900	267	-	-
KING MACKEREL	-	-	-	-	4,300	860
KING WHITING OR "KINGFISH"	144,300	14,570	-	-	58,000	5,800
MACKEREL	-	-	1,400	72	-	-
MULLET	375,000	26,781	8,000	560	392,400	28,569
PIGFISH	-	-	-	-	2,400	144
SEA TROUT OR WEAKFISH:						
GRAY	57,900	4,524	-	-	104,000	8,316
SPOTTED	23,600	7,456	1,500	480	39,500	12,640
SHAD	247,800	60,211	22,500	5,493	4,300	1,032
SPANISH MACKEREL	4,700	705	-	-	12,500	1,875
SPOT	38,400	3,470	-	-	46,700	4,354
STRIPED BASS	438,400	69,004	3,600	576	2,800	448
STURGEON	3,200	640	500	100	10,000	2,000
WHITE PERCH	104,400	10,610	1,000	100	800	80
YELLOW PERCH	1,900	114	-	-	-	-
TOTAL	3,580,200	242,252	91,700	8,167	861,800	86,411

SPECIES	LINES					
	HAND		LONG OR SET WITH HOOKS		TROT WITH BAITS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	6,000	\$840	-	-	-	-
CATFISH AND BULLHEADS	-	-	24,200	\$2,178	-	-
DRUM, BLACK	6,100	366	-	-	-	-
GROUPERS	400	24	-	-	-	-
GRUNTS	1,800	126	-	-	-	-
KING MACKEREL	44,900	8,980	-	-	-	-
KING WHITING OR "KINGFISH"	5,000	500	-	-	-	-
SCUP OR PORGY	12,300	738	-	-	-	-
SEA BASS	57,600	6,048	-	-	-	-
SEA TROUT OR WEAKFISH:						
SPOTTED	1,500	480	-	-	-	-
SNAPPER, RED	2,200	616	-	-	-	-
SPANISH MACKEREL	15,000	2,250	-	-	-	-
SWORDFISH	-	-	1,200	648	-	-
CRABS, BLUE, HARD	-	-	-	-	3,555,100	\$188,598
TURTLES, SNAPPER	12,900	2,322	-	-	-	-
TOTAL	165,700	23,290	25,400	2,826	3,555,100	188,598

SPECIES	DIP NETS		SPEARS		DREDGES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
	FLOUNDERS	-	-	120,400	\$23,620	-
CRABS, BLUE, SOFT AND PEELER	5,500	\$2,475	-	-	-	-
CLAMS, HARD, PUBLIC	-	-	-	-	67,900	\$26,862
OYSTERS, MARKET, PUBLIC:						
SPRING	-	-	-	-	71,300	49,910
FALL	-	-	-	-	93,100	65,170
SCALLOPS, BAY	156,100	59,274	-	-	150,000	56,940
TERRAPIN	100	30	-	-	-	-
TOTAL	161,700	61,779	120,400	23,620	382,300	198,882

SPECIES	TONGS		RAKES		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
	CLAMS, HARD, PUBLIC	5,000	\$1,956	258,800	\$100,990	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	50,000	32,296	-	-	185,900	\$66,855
FALL	75,300	48,732	-	-	140,600	52,018
PRIVATE:						
SPRING	20,300	11,571	-	-	11,300	5,339
FALL	29,200	16,644	-	-	17,000	8,170
SCALLOPS, BAY	-	-	15,000	5,700	-	-
TOTAL	179,800	111,199	273,800	106,690	354,800	132,382

SOUTH ATLANTIC FISHERIES

203

SOUTH CAROLINA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS		POTS AND TRAPS	
		CRAB	SHRIMP	CRAB	FISH
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:					
ON VESSELS	-	24	453	-	32
ON BOATS AND SHORE:					
REGULAR	-	30	212	158	64
CASUAL	372	-	-	-	-
TOTAL	372	54	665	158	96
VESSELS, MOTOR	-	12	221	-	11
GROSS TONNAGE	-	298	5,762	-	271
BOATS:					
MOTOR	3	15	106	140	57
OTHER	12	-	-	-	-
GEAR:					
NUMBER	15	27	484	9,275	3,548
LENGTH, YARDS	3,180	-	-	-	-
YARDS AT MOUTH	-	491	9,361	-	-

ITEM	GILL NETS		LINES		
	ANCHOR, SET OR STAKE	DRIFT, SHAD	HAND	LONG OR SET WITH HOOKS	TROT WITH BAITS
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	10	10	8	-	88
CASUAL	145	96	12	1	-
TOTAL	155	106	20	1	88
BOATS, MOTOR	155	106	10	1	80
GEAR:					
NUMBER	275	106	20	1	108
SQUARE YARDS	38,812	14,196	-	-	-
HOOKS OR BAITS	-	-	40	200	81,000

ITEM	CAST NETS	SPEARS	GRABS	RAKES	BY HAND	TOTAL, EXCLUSIVE, OF DUPLI- CATION
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:						
ON VESSELS	-	-	-	-	-	465
ON BOATS AND SHORE:						
REGULAR	-	-	197	12	98	823
CASUAL	4	7	20	30	13	669
TOTAL	4	7	217	42	111	1,957
VESSELS, MOTOR	-	-	-	-	-	222
GROSS TONNAGE	-	-	-	-	-	5,790
BOATS:						
MOTOR	4	4	207	34	103	980
OTHER	-	-	10	-	-	22
GEAR, NUMBER	4	7	217	42	-	-



SOUTH ATLANTIC FISHERIES

SOUTH CAROLINA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		OTTER TRAWLS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	112,000	\$17,920	1,900	\$244	-	-
CATFISH AND BULLHEADS	-	-	-	-	367,600	\$33,893
CROAKER	600	24	35,600	1,449	-	-
FLOUNDERS	-	-	98,600	25,022	-	-
KING WHITING OR "KINGFISH"	78,300	10,210	77,700	10,132	-	-
MULLET	2,211,300	165,707	-	-	-	-
POMPANO	119,500	50,548	10,300	4,357	-	-
SCUP OR PORGY	100	4	4,000	139	-	-
SEA BASS	-	-	-	-	232,700	34,612
SEA TROUT OR WEAKFISH:	-	-	-	-	-	-
GRAY	-	-	5,700	440	-	-
SPOTTED	42,800	9,788	3,000	686	-	-
SHAD	1,600	440	-	-	-	-
SHARKS, UNCLASSIFIED	14,300	1,430	14,300	1,430	-	-
SPOT	2,662,400	142,971	56,800	3,050	-	-
UNCLASSIFIED, FOR BAIT, REDUCTION, AND ANIMAL FOOD	501,200	6,516	52,800	666	-	-
CRABS, BLUE, HARD	-	-	998,800	39,202	6,333,100	312,755
SHRIMP	-	-	2,199,100	642,352	-	-
TOTAL	5,744,100	405,558	3,558,600	729,189	6,933,400	381,460

SPECIES	GILL NETS				LINES	
	ANCHOR, SET OR STAKE		DRIFT		HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
DRUM, BLACK	-	-	-	-	3,400	\$205
FLOUNDERS	-	-	-	-	1,000	210
GRUNTS	-	-	-	-	9,900	578
HICKORY SHAD	700	\$24	-	-	-	-
KING MACKEREL	-	-	-	-	4,000	600
KING WHITING OR "KINGFISH"	-	-	-	-	90,000	11,736
SEA BASS	-	-	-	-	31,900	4,772
SEA TROUT OR WEAKFISH, GRAY	-	-	-	-	400	16
SHAD	64,100	17,648	54,500	\$15,002	-	-
SHARKS, UNCLASSIFIED	-	-	-	-	8,000	800
SHEEPSHEAD, SALT-WATER	-	-	-	-	2,800	221
SNAPPER:	-	-	-	-	-	-
RED	-	-	-	-	300	66
VERMILION	-	-	-	-	10,000	1,200
SPANISH MACKEREL	-	-	-	-	8,300	1,091
STURGEON	52,600	8,121	-	-	-	-
TOTAL	117,400	25,793	54,500	15,002	170,000	21,495

SPECIES	LINES - CONTINUED				CAST NETS	
	LONG OR SET WITH HOOKS		TROT WITH BAITS			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CATFISH AND BULLHEADS	600	\$55	-	-	-	-
CRABS, BLUE, HARD	-	-	1,507,300	\$71,069	-	-
SHRIMP	-	-	-	-	1,600	\$448
TOTAL	600	55	1,507,300	71,069	1,600	448

SPECIES	SPEARS		TRABS		PAGES		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS	25,500	\$4,328	-	-	-	-	-	-
SEA TROUT OR WEAKFISH, SPOTTED	2,000	457	-	-	-	-	-	-
CLAMS, HARD, PUBLIC	-	-	-	-	73,000	\$24,497	-	-
OYSTERS, MARKET, PRIVATE:	-	-	-	-	-	-	-	-
SPRING	-	-	1,638,700	\$667,526	-	-	755,500	\$305,905
FALL	-	-	847,900	345,689	-	-	585,000	237,370
TOTAL	27,500	4,785	2,486,600	1,013,215	73,000	24,497	1,340,500	543,275

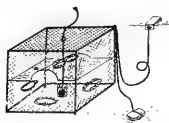
GEORGIA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS		POTS AND TRAPS	
		CRAB	SHRIMP	CRAB	FISH
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	60	727	-	-
ON BOATS AND SHORE:					
REGULAR	-	56	129	149	16
CASUAL	10	3	300	9	44
TOTAL	10	119	1,156	158	60
VESSELS, MOTOR	-	30	363	-	-
GROSS TONNAGE	-	793	10,523	-	-
BOATS, MOTOR	4	30	264	143	54
GEAR:					
NUMBER	4	78	918	8,900	412
LENGTH, YARDS	600	-	-	-	-
YARDS AT MOUTH	-	1,137	12,343	-	-

ITEM	GILL NETS		LINES		
	ANCHOR, SET OR STAKE	DRIFT, SHAD	HAND	LONG OR SET WITH HOOKS	TROT WITH BAITS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	25	135	-	16	2
CASUAL	163	228	28	66	-
TOTAL	188	363	28	82	2
BOATS:					
MOTOR	146	287	14	75	2
OTHER	-	10	-	-	-
GEAR:					
NUMBER	183	312	30	398	3
SQUARE YARDS	49,703	158,525	-	-	-
HOOKS OR BAITS	-	-	60	19,887	2,150

ITEM	DIP NETS, DROP	CAST NETS	GRABS	BY HAND	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	-	-	-	727
ON BOATS AND SHORE:					
REGULAR	12	-	48	49	445
CASUAL	20	4	10	14	711
TOTAL	32	4	58	63	1,893
VESSELS, MOTOR	-	-	-	-	363
GROSS TONNAGE	-	-	-	-	10,523
BOATS:					
MOTOR	32	4	26	29	854
OTHER	-	-	32	32	42
GEAR, NUMBER	2,400	4	58	-	-



SOUTH ATLANTIC FISHERIES

GEORGIA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		OTTER TRAWLS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	100	\$12	-	-
CATFISH AND BULLHEADS	-	-	-	-	45,500	\$10,010
CROAKER	-	-	700	84	-	-
DRUM, BLACK	-	-	1,400	168	-	-
EELS, COMMON	-	-	-	-	1,100	66
FLOUNDERS	6,700	\$1,340	15,200	1,520	-	-
KING WHITING OR "KINGFISH"	-	-	125,200	11,027	-	-
MULLET	400	40	19,900	1,990	-	-
SEA BASS	-	-	2,000	300	-	-
SEA TROUT OR WEAKFISH:						
GRAY	-	-	100	10	-	-
SPOTTED	4,200	1,470	-	-	-	-
SHEEPSHEAD, SALT-WATER	-	-	100	8	-	-
SPOT	-	-	4,100	316	-	-
UNCLASSIFIED FOR BAIT,	-	-	204,000	4,080	-	-
REDUCTION, AND ANIMAL FOOD	-	-	5,286,000	186,499	8,022,300	361,904
CRABS, BLUE, HARD	-	-	5,443,100	1,800,728	-	-
SHRIMP	-	-	-	-	-	-
TOTAL	11,300	2,850	11,101,900	2,006,742	8,068,900	371,980

SPECIES	GILL NETS				LINES	
	ANCHOR, SET OR STAKE		DRIFT		HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	-	-	100	\$6	-	-
CARP	-	-	2,000	100	-	-
GROUPERS	-	-	-	-	300	\$30
HICKORY SHAD	400	\$16	800	32	-	-
KING MACKEREL	-	-	-	-	1,300	65
MULLET	5,800	580	-	-	-	-
SEA TROUT OR WEAKFISH, SPOTTED	-	-	-	-	900	315
SHAD	136,800	35,944	194,500	51,534	1,700	425
SNAPPER, RED	-	-	-	-	900	270
SPANISH MACKEREL	-	-	-	-	300	45
STRIPED BASS	1,100	165	2,700	486	-	-
STURGEON	-	-	4,600	276	-	-
SUCKERS	-	-	-	-	-	-
TOTAL	144,100	36,705	204,700	52,434	5,400	1,150

SPECIES	LINES - CONTINUED				DIP NETS	
	LONG OR SET WITH HOOKS		TROT WITH BAITS			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CATFISH AND BULLHEADS	43,400	\$9,292	-	-	-	-
CRABS, BLUE, HARD	-	-	221,300	\$8,852	970,400	\$38,816
TOTAL	43,400	9,292	221,300	8,852	970,400	38,816

SPECIES	CAST NETS		GRABS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SHRIMP	4,300	\$1,401	-	-	-	-
OYSTERS, MARKET, PRIVATE:	-	-	64,000	\$22,400	101,700	\$35,595
SPRING	-	-	34,700	12,145	35,100	12,285
FALL	-	-	-	-	-	-
TOTAL	4,300	1,401	98,700	34,545	136,800	47,880



SHRIMP

SOUTH ATLANTIC FISHERIES FLORIDA, EAST COAST

207

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES, MENHADEN	OTTER TRAWLS, SHRIMP	POUND NETS	FYKE AND HOOP NETS, FISH	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:						
ON VESSELS	-	54	759	-	-	-
ON BOATS AND SHORE:						
REGULAR	45	-	24	6	-	11
CASUAL	10	-	30	-	-	-
TOTAL	55	54	813	6	-	11
VESSELS, MOTOR	-	3	350	-	-	-
GROSS TONNAGE	-	383	13,811	-	-	-
BOATS, MOTOR	13	6	47	4	-	11
GEAR:						
NUMBER	11	3	722	9	-	200
LENGTH, YARDS	4,700	1,200	-	-	-	-
YARDS AT MOUTH	-	-	10,262	-	-	-

ITEM	POTS AND TRAPS				GILL NETS		
	CRAB		FISH	LOBSTER, SPINY	ANCHOR, SET OR STAKE	DRIFT	
	BLUE	OTHER				SHAD	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	-	2	-	25	-	-	-
ON BOATS AND SHORE:							
REGULAR	121	14	186	83	20	26	2
CASUAL	14	-	-	8	-	-	-
TOTAL	135	16	186	116	20	28	-
VESSELS, MOTOR	-	1	-	10	-	-	-
GROSS TONNAGE	-	21	-	148	-	-	-
BOATS, MOTOR	135	14	186	50	16	15	-
GEAR:							
NUMBER	12,815	4,380	7,175	20,240	16	15	15
SQUARE YARDS	-	-	-	-	16,800	17,600	-

ITEM	GILL NETS—CONTINUED			LINES			
	DRIFT—CONTINUED	RUNAROUND	TRAMMEL NETS	HAND	TROLL	LONG OR SET WITH HOOKS	TROT WITH BAITS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	-	49	3	124	7	-	-
ON BOATS AND SHORE:							
REGULAR	22	325	6	190	172	536	10
CASUAL	-	48	-	322	145	87	15
TOTAL	22	422	9	636	324	603	25
VESSELS, MOTOR	-	19	2	49	3	-	-
GROSS TONNAGE	-	263	31	1,103	35	-	-
BOATS:							
MOTOR	12	219	3	348	234	603	25
OTHER	-	49	-	-	-	-	-
GEAR:							
NUMBER	12	287	5	636	571	694	25
SQUARE YARDS	19,200	580,050	6,950	-	571	577,800	12,500
HOOKS OR BAITS	-	-	-	982	-	-	-

ITEM	CAST NETS	SPEARS	TONGS	BY HAND		TOTAL, EXCLUSIVE OF DUPLICATION
				OYSTER	OTHER	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	-	-	-	-	-	924
ON BOATS AND SHORE:						
REGULAR	3	-	11	30	2	1,447
CASUAL	6	5	-	-	1	527
TOTAL	9	5	11	30	3	2,898
VESSELS, MOTOR	-	-	-	-	-	393
GROSS TONNAGE	-	-	-	-	-	14,407
BOATS:						
MOTOR	9	5	10	29	3	1,610
OTHER	-	-	-	-	-	49
GEAR, NUMBER	9	5	11	-	-	-

NOTE:--INCLUDES OPERATING UNITS FOR THE INLAND LAKES OF FLORIDA.

SOUTH ATLANTIC FISHERIES

FLORIDA, EAST COAST - CATCH BY GEAR, 1963

SPECIES	HALL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	22,700	\$454	-	-	-	-
AMBERJACK	200	7	-	-	-	-
BLUEFISH	42,500	3,570	-	-	400	\$34
CABIO	1,600	48	-	-	1,000	100
CREVALLE	72,300	11,062	-	-	-	-
CROAKER	-	-	-	-	-	-
DRUM:						
BLACK	79,100	5,853	-	-	3,200	237
RED	11,500	1,690	-	-	-	-
FLOUNDERS	4,900	774	-	-	178,100	29,140
KING WHITING OR "KINGFISH"	221,200	18,360	-	-	867,100	71,969
MENHADEN	-	-	25,254,300	\$252,543	-	-
MOJARRA	129,800	9,086	-	-	-	-
MULLET	800	37	-	-	-	-
POMPANO	600	393	-	-	-	-
SEA BASS	-	-	-	-	1,100	109
SEA CATFISH	900	54	-	-	-	-
SEA TROUT OR WEAFFISH:						
GRAY	14,100	1,622	-	-	2,900	334
SPOTTED	700	168	-	-	-	-
SHAD	239,000	25,573	-	-	-	-
SHEEPSHEAD, SALT-WATER	300	21	-	-	-	-
SPANISH MACKEREL	-	-	-	-	1,500	136
SPOT	87,800	10,975	-	-	1,200	150
TRIGGERFISH	500	32	-	-	500	32
TRIPLETAIL	1,000	52	-	-	-	-
UNCLASSIFIED:						
FOR FOOD	-	-	-	-	10,000	640
BAIT, REDUCTION, OR ANIMAL FOOD	232,200	4,875	1,535,400	16,980	265,100	5,567
CRABS, BLUE, HARD	-	-	-	-	528,600	30,130
SHRIMP	-	-	-	-	4,488,200	1,729,608
SQUID	-	-	-	-	2,400	360
TOTAL	1,163,700	94,706	26,789,700	269,523	6,351,300	1,867,546

SPECIES	POUND NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CATFISH AND BULLHEADS	223,900	\$31,868	167,800	\$23,995	3,213,100	\$454,150
CRABS:						
BLUE:						
HARD	-	-	-	-	7,726,600	440,415
SOFT AND PEELER	-	-	-	-	200	86
STONE	-	-	-	-	157,400	62,804
LOBSTERS, SPINY	-	-	-	-	814,600	327,469
TOTAL	223,900	31,868	167,800	23,995	11,911,900	1,284,924

SPECIES	GILL NETS					
	ANCHOR, SET OR STAKE		DRIFT		RUNAROUND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	25,200	\$2,117	1,201,000	\$100,883
BLUE RUNNER	-	-	-	-	1,500	63
CATFISH AND BULLHEADS	-	-	-	-	6,200	887
CREVALLE	-	-	-	-	13,100	393
CROAKER	-	-	-	-	23,900	3,656
DRUM:						
BLACK	-	-	-	-	21,200	1,570
RED	-	-	-	-	89,500	13,156
FLOUNDERS	-	-	-	-	4,000	633
KING MACKEREL	-	-	-	-	526,500	60,022
KING WHITING OR "KINGFISH"	-	-	-	-	37,700	3,129
MENHADEN	-	-	-	-	418,100	10,452
MOJARRA	-	-	-	-	12,100	847
MULLET:						
BLACK	-	-	-	-	3,310,700	152,294
SILVER	-	-	-	-	59,900	2,995
PIGFISH	-	-	-	-	2,500	250
POMPANO	-	-	-	-	143,400	94,071
SEA CATFISH	-	-	-	-	4,800	288
SEA TROUT:						
GRAY	1,000	\$115	2,000	230	40,500	4,661
SPOTTED	-	-	2,500	600	667,100	160,104
SHAD	186,900	19,998	164,000	17,548	-	-
SHEEPSHEAD, SALT-WATER	-	-	-	-	51,100	3,475

(CONTINUED ON NEXT PAGE)

SOUTH ATLANTIC FISHERIES

209

FLORIDA, EAST COAST - CATCH BY GEAR, 1963 - Continued

SPECIES	GILL NETS					
	ANCHOR, SET OR STAKE		DRIFT		RUNAROUND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SPANISH MACKEREL	-	-	40,000	\$3,640	2,030,400	\$184,767
SPOT	-	-	-	-	1,026,300	128,287
TRIGGERFISH	-	-	-	-	200	13
TRIPLETAIL	-	-	-	-	400	21
UNCLASSIFIED: FOR FOOD	-	-	-	-	173,700	11,214
BAIT, REDUCTION, OR ANIMAL FOOD	-	-	-	-	57,400	1,334
TOTAL	187,900	\$20,113	233,700	24,135	9,923,200	939,465

SPECIES	TRAMMEL NETS		LINES			
			HAND		TROLL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
AMBERJACK	-	-	5,600	\$195	-	-
BARRACUDA	-	-	300	9	-	-
BLUEFISH	-	-	51,600	4,336	41,800	\$3,512
BLUE RUNNER	-	-	22,900	962	500	21
BONITO	-	-	-	-	500	25
CABIO	-	-	4,700	470	800	80
CATFISH AND BULLHEADS	-	-	100	14	-	-
CREVALLE	-	-	62,300	1,869	-	-
CROAKER	500	\$76	17,000	2,600	-	-
DOLPHIN	-	-	-	-	3,700	518
DRUM:						
BLACK	500	37	11,500	850	-	-
RED	1,000	147	31,800	4,674	200	29
FLOUNDERS	-	-	1,600	253	-	-
GROUPERS	-	-	197,100	21,089	-	-
GRUNTS	-	-	20,300	1,542	-	-
HOGFISH	-	-	4,500	733	-	-
JEWFISH	-	-	16,700	1,169	-	-
KING MACKEREL	-	-	39,600	4,514	1,607,000	183,198
KING WHITING OR "KINGFISH"	-	-	20,200	1,676	-	-
MOJARRA	1,000	70	7,700	400	-	-
PERMIT	-	-	3,700	444	-	-
PIGFISH	-	-	800	80	-	-
POMPANO	31,900	20,926	7,300	4,790	-	-
SCUP	-	-	40,500	3,118	-	-
SEA BASS	-	-	62,300	6,168	-	-
SEA CATFISH	-	-	2,100	126	-	-
SEA TROUT OR WEAFFISH:						
GRAY	-	-	8,500	981	2,900	335
SPOTTED	2,500	600	113,000	27,120	15,300	3,672
SHEEPSHEAD, SALT-WATER	-	-	19,100	1,298	-	-
SNAPPER:						
MANGROVE	-	-	81,900	14,823	-	-
MUTTON	-	-	83,300	17,242	-	-
RED	-	-	485,200	150,896	-	-
VERMILION	-	-	7,700	1,725	-	-
YELLOWTAIL	-	-	102,700	24,443	-	-
SPANISH MACKEREL	-	-	22,200	2,021	29,300	2,667
SPOT	500	62	11,200	1,398	-	-
TRIGGERFISH	-	-	5,700	371	-	-
TRIPLETAIL	-	-	800	41	-	-
WARSAW	-	-	9,900	822	-	-
UNCLASSIFIED: FOR FOOD	-	-	58,300	3,772	-	-
BAIT, REDUCTION, OR ANIMAL FOOD	-	-	3,400	71	-	-
TOTAL	37,900	21,918	1,644,800	309,223	1,702,000	194,057

SPECIES	LINES - CONTINUED				CAST NETS	
	LONG OR SET WITH HOOKS		TROT WITH BAITS		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE		
CATFISH AND BULLHEADS	10,092,500	\$1,420,537	-	-	-	-
GROUPERS	3,000	321	-	-	-	-
GRUNTS	1,500	114	-	-	-	-
MOJARRA	-	-	-	-	500	\$35
MULLET, BLACK	-	-	-	-	7,500	345
SNAPPER, MANGROVE	2,000	362	-	-	-	-
UNCLASSIFIED, FOR FOOD	1,000	65	-	-	-	-
CRABS, BLUE, HARD	-	-	340,000	\$19,380	-	-
SHRIMP	-	-	-	-	18,100	6,791
TURTLES:						
GREEN	500	125	-	-	-	-
SOFT-SHELL	151,500	18,240	-	-	-	-
TOTAL	10,252,000	1,439,764	340,000	19,380	26,100	7,171

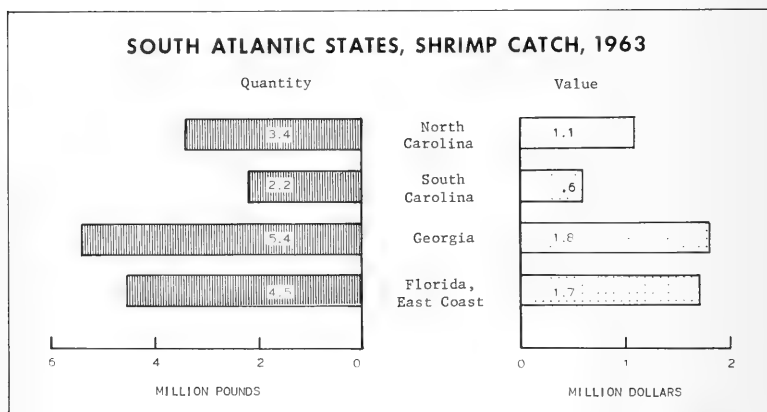
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SOUTH ATLANTIC FISHERIES

FLORIDA, EAST COAST - CATCH BY GEAR, 1963 - Continued

SPECIES	SPEARS		TONGS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
DRUM:						
BLACK	200	\$15	-	-	-	-
RED	200	29	-	-	-	-
FLOUNDERS	900	142	-	-	-	-
SEA TROUT OR WEAFFISH, SPOTTED.	200	48	-	-	-	-
CLAMS, HARD, PUBLIC	-	-	-	-	700	\$224
OYSTERS, MARKET; PUBLIC:						
SPRING	-	-	13,200	\$3,960	32,200	9,660
FALL	-	-	7,000	2,100	23,200	6,960
PRIVATE:						
SPRING	-	-	2,400	720	-	-
FALL	-	-	2,700	810	-	-
TOTAL	1,500	234	25,300	7,590	56,100	16,844

NOTE: -- INCLUDES THE CATCH FOR THE INLAND LAKES OF FLORIDA.



SOUTH ATLANTIC FISHERIES

211

SUPPLEMENTARY TABLES

FLORIDA - OPERATING UNITS BY DISTRICTS, 1963

ITEM	EAST COAST	WEST COAST	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER
FISHERMEN:			
ON VESSELS	924	3,478	4,152
ON BOATS AND SHORE:			
REGULAR	1,447	3,058	4,505
CASUAL	527	1,299	1,826
TOTAL	2,898	7,835	10,483
VESSELS, MOTOR	393	1,148	1,423
GROSS TONNAGE	14,407	45,542	54,886
BOATS:			
MOTOR	1,610	3,072	4,682
OTHER	49	224	273
GEAR:			
HAUL SEINES, COMMON	11	87	98
LENGTH, YARDS	4,700	72,380	77,080
PURSE SEINES:			
MENHADEN	3	-	3
LENGTH, YARDS	1,200	-	1,200
OTHER	-	4	4
LENGTH, YARDS	-	800	800
OTTER TRAWLS:			
CRAB	-	5	5
YARDS AT MOUTH	-	91	91
SHRIMP	722	1,726	2,235
YARDS AT MOUTH	10,262	26,393	33,585
POUND NETS, FISH	9	-	9
FYKE AND HOOP NETS, FISH	200	-	200
POTS AND TRAPS:			
CRAB:			
BLUE	12,815	31,530	44,345
OTHER	4,360	14,960	19,040
FISH	7,175	25	7,200
LOBSTER, SPINY	20,240	60,050	79,840
GILL NETS:			
ANCHOR, SET OR STAKE	16	12	28
SQUARE YARDS	16,800	8,920	25,720
DRIFT:			
SHAD	15	-	15
SQUARE YARDS	17,600	-	17,600
OTHER	12	11	23
SQUARE YARDS	19,200	34,000	53,200
RUNAROUND	267	1,089	1,370
SQUARE YARDS	580,050	1,602,597	2,146,347
TRAMMEL NETS	5	291	295
SQUARE YARDS	6,950	386,886	393,236
LINES:			
HAND	636	2,696	3,332
HOOKS	962	6,806	7,788
TROLL	571	965	1,536
HOOKS	571	965	1,536
LONG OR SET WITH HOOKS	694	35	729
HOOKS	577,800	1,800	579,600
TROT WITH BAITS	25	17	42
BAITS	12,500	10,600	23,100
DIP NETS:			
COMMON	-	17	17
DROP	-	219	219
CAST NETS	9	23	32
SPEARS	5	44	49
DREDGES	-	101	101
SCALLOP	-	106	106
YARDS AT MOUTH	-	-	-
TONGS:			
OYSTER	11	801	812
OTHER	-	2	2
HOOKS, SPONGE	-	69	69
DIVING OUTFITS	-	18	18

NOTE:--A TOTAL OF 454 FISHERMEN UTILIZING 454 MOTOR BOATS FISHED 5,755 FISH POTS AND TRAPS, 3 POUND NETS, AND 519 LONG OR SET LINES WITH 396,850 HOOKS, IN THE INLAND LAKES OF FLORIDA. THESE OPERATING UNITS ARE INCLUDED WITH THOSE OF THE EAST COAST OF FLORIDA.

SOUTH ATLANTIC FISHERIES

FLORIDA - CATCH BY DISTRICTS, 1963

SPECIES	EAST COAST		WEST COAST		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FISH						
ALEEVES	22,700	\$454	836,100	\$25,083	858,800	\$25,537
AMBERJACK	5,800	202	14,100	608	19,900	810
BALLYHO	-	-	81,600	12,240	81,600	12,240
BARRACUDA	300	9	1,700	34	2,000	43
BLUEFISH	1,362,500	114,452	889,100	77,385	2,251,600	191,807
BLUE RUNNER	24,900	1,046	1,494,600	29,892	1,519,500	30,938
EDDITO	500	25	1,200	48	1,700	73
CABIO	6,500	650	9,700	621	16,200	1,271
CATFISH AND BULLHEADS	13,703,600	1,931,451	66,200	11,519	13,769,800	1,942,970
CIGARFISH	-	-	389,400	24,921	389,400	24,921
CREVALLE	77,000	2,310	725,100	16,681	802,100	18,991
CROAKER	113,700	17,394	98,500	7,880	212,200	25,274
DOLPHIN	3,700	518	4,800	307	6,500	825
DRUM:						
BLACK	115,700	8,562	99,800	4,081	215,500	12,643
RED	134,200	19,225	968,000	110,353	1,102,200	130,078
FLOUNDERS	189,500	29,942	257,500	51,251	447,000	81,193
GROUPERS	200,100	21,410	6,578,700	651,293	6,778,800	672,703
GRUNTS	21,800	1,556	59,600	4,292	81,400	5,948
HOGFISH	4,500	733	16,400	2,346	20,900	3,079
JEWFISH	16,700	1,169	69,500	3,930	86,200	5,099
KING MACKEREL	2,173,700	247,734	2,819,900	295,777	4,993,600	543,511
KING WHITING OR "KINGFISH"	1,146,200	95,134	194,800	8,184	1,341,000	103,318
MENHADEN	25,672,400	262,995	44,500	1,780	25,716,900	264,775
MOJARRA	150,800	10,556	75,000	5,099	225,800	15,655
MULLET:						
BLACK	3,319,000	152,676	32,611,700	1,728,422	35,930,700	1,881,098
SILVER	59,900	2,995	664,700	39,220	724,600	42,215
PERMIT	3,700	444	13,700	1,413	17,400	1,857
PIGFISH	3,300	330	7,100	639	10,400	969
POKANO	183,200	120,180	592,600	410,075	775,800	530,255
SCUP OR PORGY	40,500	3,118	55,000	4,289	95,500	7,407
SEA BASS	63,400	6,277	-	-	63,400	6,277
SEA CATFISH	7,800	468	121,000	6,894	128,800	7,362
SEA TROUT OR WEAKFISH:						
GRAY	71,900	8,278	-	-	71,900	8,278
SPOTTED	801,300	192,312	2,571,400	601,708	3,372,700	794,020
WHITE	-	-	68,500	7,332	68,500	7,332
SHAD	589,900	63,119	-	-	589,900	63,119
SHEEPSHEAD, SALT-WATER	70,500	4,794	1,38,800	10,975	209,300	15,769
SNAPPER:						
MANGROVE	83,900	15,185	311,500	52,955	395,400	68,140
MUTTON	83,300	17,242	117,700	25,187	201,000	42,429
RED	485,200	150,896	5,917,800	1,562,299	6,403,000	1,713,195
VERMILION	7,700	1,725	68,200	10,778	75,900	12,503
YELLOWTAIL	102,700	24,443	729,000	153,090	831,700	177,533
SPANISH MACKEREL	2,123,400	193,231	5,404,800	491,833	7,528,200	685,064
SPOT	1,127,000	140,872	358,200	22,933	1,485,200	163,805
STURGEON	-	-	29,700	3,623	29,700	3,623
TENPOUNDER	-	-	1,191,900	27,412	1,191,900	27,412
TILEFISH	-	-	3,400	272	3,400	272
TRIGGERFISH	6,900	448	11,500	575	18,400	1,023
TRIPLETAIL	2,200	114	4,500	206	6,700	320
WARSAW	9,900	822	182,800	10,783	192,700	11,605
UNCLASSIFIED:						
FOR FOOD	243,000	15,691	1,082,100	72,134	1,325,100	87,825
BAIT, REDUCTION, AND ANIMAL FOOD	2,093,500	28,827	453,800	11,344	2,547,300	40,171
TOTAL FISH	56,729,300	3,912,614	68,500,200	6,601,966	125,229,500	10,514,580
SHELLFISH, ETC.						
CRABS:						
BLUE:						
HARD	8,595,200	489,925	13,148,400	644,273	21,743,600	1,134,198
SOFT AND PEELER	200	66	4,000	2,000	4,200	2,066
STONE	157,400	62,804	659,800	207,177	817,200	299,981
TOTAL CRABS	8,752,800	552,815	13,812,200	853,450	22,565,000	1,406,265

SEE NOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

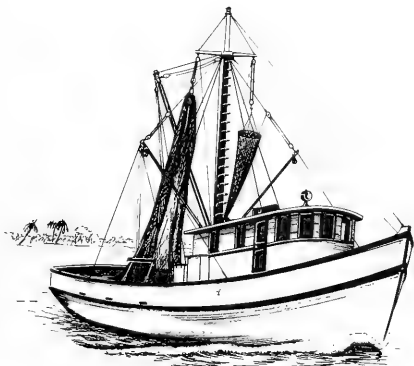
SOUTH ATLANTIC FISHERIES

213

FLORIDA - CATCH BY DISTRICTS, 1963 - Continued

SPECIES	EAST COAST		WEST COAST		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SHELLFISH, ETC.,-CONTINUED						
LOBSTERS, SPINY	814,600	\$327,469	2,770,600	\$1,080,534	3,585,200	\$1,408,003
SHRIMP	4,506,300	1,736,399	34,941,300	12,255,734	39,447,600	13,992,133
CLAMS, HARD,PUBLIC	700	224	7,400	2,331	8,100	2,555
OYSTERS, MARKET:						
PUBLIC:						
SPRING	45,400	13,620	2,452,900	701,529	2,498,300	715,149
FALL	30,200	9,060	1,696,000	485,055	1,726,200	494,115
PRIVATE:						
SPRING	2,400	720	85,600	24,482	88,000	25,202
FALL	2,700	810	47,600	13,614	50,300	14,424
TOTAL OYSTERS	80,700	24,210	4,282,100	1,224,680	4,362,800	1,248,890
SCALLOPS:						
BAY	-	-	227,800	58,772	227,800	58,772
CALICO	-	-	200	44	200	44
SQUID	2,400	360	26,000	2,001	28,400	2,361
TURTLES:						
GREEN	500	125	51,500	9,116	52,000	9,241
LOGGERHEAD	-	-	8,100	1,029	8,100	1,029
SOFT-SHELL	151,500	18,240	-	-	151,500	18,240
SPONGES:						
GRASS	-	-	2,000	5,160	2,000	5,160
SHEEPSWOL	-	-	41,800	361,733	41,800	361,733
YELLOW	-	-	11,400	20,368	11,400	20,368
TOTAL SHELLFISH, ETC.	14,309,500	2,659,842	56,182,400	15,874,952	70,491,900	18,534,794
GRAND TOTAL	71,038,800	6,572,456	124,682,600	22,476,918	195,721,400	29,049,374

NOTE:--THE CATCH OF 9,388,300 POUNDS OF CATFISH AND BULLHEADS (VALUED AT \$1,314,362) AND 122,900 POUNDS OF SOFT-SHELL TURTLES (VALUED AT \$14,800) TAKEN FROM THE INLAND LAKES IS INCLUDED WITH THE CATCH FOR THE EAST COAST OF FLORIDA. FOR THE PURPOSE OF THIS REPORT THE "EAST COAST OF FLORIDA" INCLUDES THE COASTAL COUNTIES FROM NASSAU TO DADE, INCLUSIVE, WHILE THE "WEST COAST OF FLORIDA" INCLUDES THOSE FROM MONROE TO ESCAMBA, INCLUSIVE.



SHRIMP TRAWLER

SOUTH ATLANTIC FISHERIES

SOUTH ATLANTIC SHRIMP FISHERY

Nineteen hundred and sixty-three was one of the poorest shrimp years on record for the South Atlantic States. Total landings of 9.8 million pounds, heads-off weight, were 6.7 million pounds less than in 1962 and were the lowest recorded since 1908. The dockside value (\$5.2 million) was \$6.0 million less than 1962 and the lowest value recorded since 1945.

Landings of all species in the commercial catches were substantially below the levels of the previous year. The significance of these changes are more apparent when viewed on an individual State basis, as different species normally predominate in the landings within each State.

In North Carolina, most of the 1.5-million-pound decline was due to a disastrous shortage of pink shrimp. Landings of this species were only slightly over one-fourth of those in 1962 and the lowest since the Bureau began collecting detailed shrimp statistics in 1957. While brown shrimp landings were nearly 1/2 million pounds less than in 1962, they were considerably better than the previous low production of 1958 and 1961. The shrimp season for inside waters opened on May 26, about 2 weeks later than in 1962. The quantity and size of shrimp taken during the opening weeks of the season were most disappointing. Inside waters were temporarily closed during the week of June 27 because the shrimp, in most waters, were not large enough for commercial use. The inside waters were reopened on July 17, but while the size of the shrimp had improved, the volume was far below normal. Catches from offshore waters were also much less than for many years. The average ex-vessel price was 51 cents per pound (heads-off weight)--11 cents per pound less than the 1962 average.

A great shortage of white shrimp in South Carolina waters was the major factor in decreased shrimp landings. Total landings of this species (184,000 pounds) were about one-tenth the poundage landed during 1962. The first substantial catches in South Carolina waters were made during the week of June 20 and were brown shrimp. Catches for the first 10 to 15 days compared favorably with those of 1962, but declined rapidly in July, with most vessels averaging less than one-half box (50 pounds, heads-off weight) per day's fishing. The lack of any quantity of white shrimp containing roe, normally mixed with brown shrimp catches during this summer period, caused industry members to be concerned over prospects for the fall run of white shrimp. This concern became a reality when white shrimp were found to be almost nonexistent in most South Carolina waters during the autumn. A decline of 17 cents per pound (heads-off) in the average ex-vessel price, compared with 1962, was an additional blow to the fishing segment of the shrimp industry.

Georgia experienced a situation similar to that of South Carolina. Catches of white shrimp, which were about one-third less than those of 1962, were the major factor in the decline. Adverse weather conditions during October, usually a peak production month for white shrimp, played an important part in decreased catches of this species. While landings of brown shrimp were 662,000 pounds less than in 1962, they were over three times greater than the record low of 1961. Sporadic fishing for royal red shrimp continued, but landings were only about one-half the quantity taken during 1962. Georgia fishermen experienced the sharpest decline in average ex-vessel price--52 cents per pound (heads-off) during 1963, compared with 71 cents during 1962.

Florida, East Coast fared better than the other South Atlantic States with a decline of only 13 percent in total shrimp production. White shrimp landings were 135,000 pounds less than in 1962. The average ex-vessel price was 60 cents per pound (heads-off)--16 cents less than the 1962 average.

SOUTH ATLANTIC FISHERIES

The quantities shown in the following tables are heads-off weight of the shrimp and are not directly comparable with the volume data published in the General Review, regional tables, or the Review of Certain Major Fisheries, which represent the round weight of the catch. The pounds of heads-off shrimp may be converted to heads-on (round) weight by multiplying brown by 1.61; pink, 1.60; white, 1.54; sea bobs, 1.53; and royal red, by 1.80.

Detailed information on 1963 landings of shrimp in the South Atlantic States, by months for each State, was published in Current Fishery Statistics No. 3520.

SUMMARY OF SHRIMP LANDINGS, 1963

SIZE	BROWN		PINK		WHITE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
15 - 20	306,622	\$202,172	50,672	\$34,456	206,667	\$136,122
21 - 25	377,985	243,883	27,717	17,185	842,402	571,395
26 - 30	820,308	499,895	40,282	23,153	954,740	603,049
31 - 40	1,917,212	984,079	66,507	34,633	1,350,048	714,001
41 - 50	992,401	407,726	90,320	39,343	805,466	367,939
51 - 57	274,511	91,146	44,180	15,513	427,125	171,089
68 AND OVER	60,210	15,459	26,784	6,925	133,634	43,265
TOTAL	4,749,249	2,444,360	346,462	171,208	4,720,082	2,606,860

SIZE	ROYAL RED		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
15 - 20	3,629	\$2,831	567,590	\$375,581
21 - 25	19,781	16,375	1,267,885	848,638
26 - 30	1,161	856	1,816,491	1,126,953
31 - 40	460	304	3,334,227	1,733,017
41 - 50	5,105	2,737	1,893,292	817,745
51 - 67	2,606	983	748,422	278,731
68 AND OVER	-	-	220,628	65,649
TOTAL	32,742	24,086	9,848,535	5,246,514

SOUTH ATLANTIC SHRIMP LANDINGS, BY SPECIES AND SIZE, 1963

SPECIES AND SIZE	NORTH CAROLINA		SOUTH CAROLINA		GEORGIA	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BROWN:						
15 - 20	306,355	\$201,977	-	-	-	-
21 - 25	213,448	129,319	32,023	\$21,911	60,902	\$43,036
26 - 30	226,321	128,635	169,989	101,993	253,103	165,090
31 - 40	513,721	253,860	577,373	275,978	609,834	339,463
41 - 50	383,259	148,532	300,619	118,815	216,349	95,344
51 - 67	89,420	27,189	101,500	33,865	34,160	11,529
68 AND OVER	18,812	4,138	9,500	2,375	1,254	455
TOTAL	1,751,336	893,650	1,191,204	554,937	1,175,602	655,917
PINK:						
15 - 20	50,672	34,456	-	-	-	-
21 - 25	27,717	17,185	-	-	-	-
26 - 30	40,282	23,153	-	-	-	-
31 - 40	66,507	34,633	-	-	-	-
41 - 50	90,320	39,343	-	-	-	-
51 - 67	44,180	15,513	-	-	-	-
68 AND OVER	26,784	6,925	-	-	-	-
TOTAL	346,462	171,208	-	-	-	-

SEE NOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

SOUTH ATLANTIC FISHERIES

SOUTH ATLANTIC SHRIMP LANDINGS, BY SPECIES AND SIZE,
1963 - Continued

SPECIES AND SIZE	NORTH CAROLINA		SOUTH CAROLINA		GEORGIA	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
WHITE:						
15 - 20	-	-	-	-	700	\$509
21 - 25	-	-	-	-	73,900	50,828
26 - 30	-	-	50,236	\$30,140	292,529	176,327
31 - 40	-	-	100,939	46,023	855,589	448,624
41 - 50	-	-	32,500	11,700	612,182	277,778
51 - 67	-	-	-	-	335,788	134,597
68 AND OVER	-	-	-	-	99,262	33,791
TOTAL	-	-	183,675	87,853	2,269,950	1,122,454
ROYAL RED:						
15 - 20	-	-	-	-	3,629	2,831
21 - 25	-	-	-	-	19,781	16,375
26 - 30	-	-	-	-	1,161	856
31 - 40	-	-	-	-	460	304
41 - 50	-	-	-	-	5,105	2,737
51 - 67	-	-	-	-	2,606	983
TOTAL	-	-	-	-	32,742	24,086
GRAND TOTAL	2,097,798	\$1,064,858	1,374,879	642,600	3,478,294	1,802,457

SPECIES AND SIZE	FLORIDA, EAST COAST		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
BROWN:				
15 - 20	267	\$195	306,622	\$202,172
21 - 25	71,612	49,617	377,985	243,883
26 - 30	170,895	104,177	820,308	499,895
31 - 40	216,284	114,778	1,917,212	984,079
41 - 50	91,974	44,035	992,401	407,726
51 - 67	49,431	18,563	274,511	91,146
68 AND OVER	30,644	8,491	60,210	15,459
TOTAL	631,107	339,856	4,749,249	2,444,360
PINK:				
15 - 20	-	-	50,672	34,456
21 - 25	-	-	27,717	17,185
26 - 30	-	-	40,282	23,153
31 - 40	-	-	66,507	34,633
41 - 50	-	-	90,320	39,343
51 - 67	-	-	44,180	15,513
68 AND OVER	-	-	26,784	6,925
TOTAL	-	-	346,462	171,208
WHITE:				
15 - 20	205,967	135,613	206,667	136,122
21 - 25	768,502	520,567	842,402	571,395
26 - 30	611,975	396,582	954,740	603,049
31 - 40	393,520	219,354	1,350,048	714,001
41 - 50	160,784	78,461	805,466	367,939
51 - 67	91,337	36,492	427,125	171,089
68 AND OVER	34,372	9,474	133,634	43,265
TOTAL	2,266,457	1,396,543	4,720,082	2,606,860
ROYAL RED:				
15 - 20	-	-	3,629	2,831
21 - 25	-	-	19,781	16,375
26 - 30	-	-	1,161	856
31 - 40	-	-	460	304
41 - 50	-	-	5,105	2,737
51 - 67	-	-	2,606	983
TOTAL	-	-	32,742	24,086
GRAND TOTAL	2,897,564	1,736,399	9,848,535	5,246,514

NOTE:--ALL WEIGHTS ARE ON HEADS-OFF BASIS. THE SIZE INDICATES THE NUMBER OF HEADS-OFF SHRIMP TO THE POUND. TO CONVERT TO HEADS-ON MULTIPLY BY 1.61 FOR BROWN, 1.60 FOR PINK, 1.54 FOR WHITE, 1.53 FOR SEA BOGS, AND 1.80 FOR ROYAL RED. THE AREAS LISTED REPRESENT THE STATES WHERE THE SHRIMP WERE LANDED REGARDLESS OF WHERE CAUGHT. THE NAMES OF THE SPECIES USED IN THESE TABLES ARE AS FOLLOWS: WHITE SHRIMP (MOSTLY *PENAEUS SETIFERUS*), BROWN SHRIMP (*PENAEUS AZTECUS*, AND IN SOME CASES *PENAEUS BRASILIENSIS*), PINK SHRIMP (*PENAEUS DUROSSII*), SEA BOGS (MOSTLY *XIPHOPENAEUS KROYERI*), AND ROYAL RED (*HYMENOPENAEUS ROBUSTUS*). THE VALUE REPORTED IS THE AMOUNT RECEIVED BY THE OWNERS OR OPERATORS OF THE VESSEL FOR THE FIRST SALL AT THE DOCK. ANY EXPENSES INVOLVED IN HANDLING OR PROCESSING ASHORE ARE NOT INCLUDED, EVEN THOUGH CHARGEABLE TO THE VESSEL. THE SIZE REPORTED GENERALLY IS THAT USED AS OF THE FIRST SALE. SIZE GRADING IN VARYING DEGREES OF UNIFORMITY MAY OR MAY NOT OCCUR AT OR PRIOR TO, THE TIME FIRST SALES ARE MADE. IF GRADING IS NOT DONE AT THIS TIME, THE SIZE REPORTED IS AN AVERAGE SIZE AND MAY INCLUDE SEVERAL SIZE CLASSIFICATIONS.

SOUTH ATLANTIC FISHERIES

217

SURVEY PROCEDURE IN THE SOUTH ATLANTIC STATES

Statistical programs in the South Atlantic States are under the general supervision of the Bureau's Regional Office in St. Petersburg Beach, Fla., and direct supervision of a Regional Supervisor stationed in New Orleans, La. Collection of data is carried out by Fishery Reporting Specialists trained in obtaining and reporting fishery statistical data. They are stationed in Beaufort, N.C.; Charleston, S.C.; Brunswick, Ga.; and Miami, Fla. Supervisory field personnel are also stationed in Beaufort, N.C. and Miami, Fla.

Catch Statistics: The collection of catch statistics is a joint venture of the Bureau of Commercial Fisheries and the States of North Carolina, South Carolina, Georgia, and Florida. Standard forms designed for the needs of each State, the Bureau, and industry are used to collect catch data in each State. Forms are mailed to dealers or buyers each month with a request that they be completed and returned by a specified date. The forms provide for reporting the pounds and value of the species purchased from fishermen, or caught by the producers' fleets. Forms not returned by the deadline date are picked up by Bureau or State employees. The data, which are tabulated for publication in monthly landings bulletins for the various States, show the volume of the catch of each species by county or district and the total value of each species.

When there are revisions in the monthly data already published, corrections are made in the cumulative totals in the current monthly bulletin. The revised figures for the individual months appear in the annual bulletin. Field reporting specialists interview fishermen and dealers to obtain annual information on the quantity of each species taken by the types of gear operated and the various bodies of water in which the catch was made. When the interviewing has been completed and the catch has been credited to the respective gears and water areas, an annual report is prepared on a specially designed form showing volume and value of the catch by species, gear, and area of capture. The forms are then forwarded to the Washington Office where the data are machine processed. The figures are reviewed in the Central office and by field personnel concerned with the survey. When all discrepancies have been reconciled, the data are published in a sectional summary in the Current Fishery Statistics series entitled "South Atlantic Fisheries" and, subsequently, in the Digest, "Fishery Statistics of the United States."

Data on the catch by water area for the South Atlantic States are not published. However, the information is machine processed and supplied to State and federal offices and laboratories in the area. Information on the catch by counties has not been published in the Digest since 1960. However, the data are prepared and copies of the tabulations are maintained in the Central office.

Operating Units: Field reporting specialists are supplied with a set of prepunched IBM vessel cards obtained from the Bureau of Customs. The cards are prepunched with the following information: name, official number, rig code, gross tonnage, length, and year built. The reporting specialist, through interviews, obtains data on the number of crew; and number, type, and quantity of gear utilized by the vessel during the year. The number and quantity of gear is the greatest quantity fished at one time. It does not include replacement gear aboard the vessel or ashore.

When the reporter has completed the entries on the vessel cards, they are forwarded to the Regional Supervisor who arranges for the punching and tabulating of the data. The tabulations are then forwarded to the reporter who prepares operating unit tables for the State. Data on the shore and boat fishery (those craft of less than 5 net tons and fishermen operating without benefit of craft along the shore) which have been assembled by the reporter by personal interview and from State records are entered on the State operating unit tables in much the same manner as for the vessel fishery. Lists of boat and shore fishermen are usually maintained in the files of the reporter.

When all reconciliation of the data has been accomplished in the Region, the operating unit tabulations are forwarded to the Washington office. If discrepancies are discovered, these are reconciled. Summary operating unit data are then published in a section CFS bulletin entitled "South Atlantic Fisheries." These data and detailed information on the operating units by gear are published in the annual Digest. Information on the operating units by counties is prepared but has not been published in the Digest since 1960. Copies of the tabulations are prepared each year and are on file in the Central office.

Processed Fishery Products: Information on the production of processed fishery products (canned, fresh and frozen packaged fish and shellfish, "cured" items, and industrial

SOUTH ATLANTIC FISHERIES

fishery products) is obtained from processors through the use of especially designed questionnaires. Data are obtained on the monthly production of fish meal, oil, and solubles, fish sticks, portions, and breaded shrimp and published currently during the year. Statistics on the production of other processed products are obtained annually.

Individual monthly and annual reports are forwarded to the Washington office for tabulation and publication of the data. Monthly data are published in bulletins entitled "Fish Meal and Oil" and "Fish Sticks, Fish Portions, and Breaded Shrimp." The latter is released quarterly. Annual data are released in bulletins entitled "Canned Fishery Products;" "Industrial Fishery Products" (fish meal, oil, and solubles, etc.); "Packaged Fishery Products" (fresh and frozen fillets and steaks); and "Manufactured Fishery Products." The latter report contains a summary of the data contained in the monthly and annual processed bulletins and also information on the annual production of packaged shellfish and cured fishery products.

The Fishery Market News office in Hampton, Va., covers part of the North Carolina area on a daily basis. Persons interested in current day-to-day trends should consult that office. The monthly landings bulletins represent the best available information on a monthly and seasonal basis and the Statistical Digest represents the most complete annual data available in Bureau records.

Annual statistical surveys of the fisheries of the South Atlantic States have been made for the following years:

Data for:	Title of Publication
1880	The Fisheries and Fishery Industries of the United States, Section II, Senate Document No. 124, 47th Congress, 1887
1887	Report of the Commissioner of Fisheries for 1888
1888	Report of the Commissioner of Fisheries for 1888
1889	Bulletin of the United States Fish Commission, 1891
1890	Bulletin of the United States Fish Commission, 1891
1897	Report of the Commissioner of Fisheries for the Year Ending June 30, 1889
1902	Report of the Commissioner of Fisheries for the Year Ending June 30, 1903
1908	Fisheries of the United States, 1908, Bureau of the Census
1918	Fishery Industries of the United States, 1920
1923	Fishery Industries of the United States, 1924
1927	Fishery Industries of the United States, 1928
1928	Fishery Industries of the United States, 1929
1929	Fishery Industries of the United States, 1930
1930	Fishery Industries of the United States, 1931
1931	Fishery Industries of the United States, 1932
1932	Fishery Industries of the United States, 1932
1934	Fishery Industries of the United States, 1935
1936	Fishery Industries of the United States, 1937
1937	Fishery Industries of the United States, 1938
1938	Fishery Industries of the United States, 1939
1939	Fishery Statistics of the United States, 1939
1940	Fishery Statistics of the United States, 1940
1945	Fishery Statistics of the United States, 1945
1950	Fishery Statistics of the United States, 1950
1951	Fishery Statistics of the United States, 1951
1952	Fishery Statistics of the United States, 1952
1953	Fishery Statistics of the United States, 1953
1954	Fishery Statistics of the United States, 1954
1955	Fishery Statistics of the United States, 1955
1956	Fishery Statistics of the United States, 1956
1957	Fishery Statistics of the United States, 1957
1958	Fishery Statistics of the United States, 1958
1959	Fishery Statistics of the United States, 1959
1960	Fishery Statistics of the United States, 1960
1961	Fishery Statistics of the United States, 1961
1962	Fishery Statistics of the United States, 1962
1963	Fishery Statistics of the United States, 1963

SECTION 6 - GULF FISHERIES

The 1963 commercial catch of fish and shellfish landed at ports of the Gulf States (West Coast of Florida, Alabama, Mississippi, Louisiana, and Texas) totaled nearly 1.4 billion pounds, with a dockside value of \$98.8 million. Compared with 1962, landings decreased 37.9 million pounds, while the value increased \$4.3 million. For the second consecutive year a new value record was established for the area. Industrial fish (menhaden and other species used for bait, reduction, and animal food) yielded landings 9 percent less than in 1962 and was responsible for the decrease in the total. Although the ex-vessel price for shrimp was substantially below that of the previous year, a 43-percent increase in the catch of this "money crop" accounted for the gain in value.

The decline in industrial fish landings was reflected in the total for the States where this fishery is concentrated; thus, Louisiana landings were down 2 percent; Texas, 3 percent; and Mississippi, 8 percent. West Coast of Florida landings were 4 percent more than in 1962, while Alabama registered a gain of 64 percent. The value of landings increased 48 percent in Alabama; 17 percent in Louisiana; and 8 percent in Mississippi. The value of Florida landings was 10 percent less than in 1962, while Texas showed little change.

Fishermen and Vessels. The number of fishermen (24,483) increased 1,271 over the previous year. There were increases of 676 fishermen aboard vessels and 595 employed in the boat and shore fisheries. There were 150 more vessels (craft of over 5 net tons) than in 1962. Accounting for the increase were newly constructed vessels and a greater than usual number of trawlers from the South Atlantic States, which migrated to Gulf waters as a result of the very poor shrimp season in those States. Bureau of Customs records indicate that 239 vessels were issued first documents as fishing craft in the Gulf area--about 25 percent going directly to fishing grounds off the coast of Central and South America. Most of these vessels were engaged in the shrimp fishery and landed catches at American-owned or-operated plants in Barbados, British Guiana, French Guiana, and Surinam; however, in addition, 8 purse seiners journeyed to Chile and Peru to fish anchovies for U.S.-operated reduction plants in those countries.

Processing. The upward trend in the value of processed fishery products continued, with the 1963 value of \$174 million surpassing that of the previous year by more than \$4 million and establishing a new record. The value of edible items was \$138 million in 1963. These items included shrimp products, accounting for 78 percent, and oysters as principal ingredient 8 percent. Industrial products (mainly menhaden meal, oil and solubles) accounted for 14 percent of the total value of manufactured products.

Weather. Fishing was curtailed a little more than usual during 1963 as a result of adverse weather. A severe freeze enveloped much of the coastal areas for extended periods during February. Quantities of choice fish (red drum, spotted sea trout, etc.) were stunned by the cold and floated to the surface where they were quickly gathered up by Texas and Louisiana fishermen.

Major fisheries which reach peak production during the summer were harassed by severe afternoon thundershowers throughout most of June and July. One hurricane (*Cindy*) swept along the Texas coast in mid-September; damage to gear and craft was very light, but some shore plant installations were damaged by high water. On the last day of the year, nearly the entire mid-Gulf coastal area (Alabama, Mississippi, and Louisiana) was covered with an unprecedented blanket of snow.

Labor. Processing plants of the Gulf States were closely scrutinized by the U.S. Department of Labor to ensure that all were complying with the new minimum wage standards. Members of the industry had mixed feelings on the matter--those utilizing both fresh and frozen seafoods in their processing, thus assuring a fairly constant source of supply, found little

GULF FISHERIES

difficulty in meeting the minimum standards. Those whose operations were dependent solely upon supplies of fresh seafoods had difficulty since the sporadic nature of landings made it difficult to establish a standard workday or workweek. A labor union began organizing activities among menhaden fishermen on vessels supplying the Sabine, Tex., and Cameron, La., processing plants, and plans were announced for extending the organizing activities to the remainder of the Gulf menhaden fleets.

Legislation. The Texas legislature enacted a bill that provided an additional shrimp season for inside waters, May 15 through July 15, with a daily possession limit of 300 pounds of heads-on shrimp for each boat per day. Included in the same bill was a minimum count size of 65 headless or 39 heads-on for all shrimp taken during the open fall season. Previously, the minimum size was 50 headless or 30 heads-on for brown or pink shrimp during the fall season. Not under the minimum count size requirements are seabobs or shrimp taken during the spring commercial season, taken for bait or landed graded. Another enactment of the Texas legislature of interest to the fishing industry was a bill that combined the Texas Game and Fish Commission and the State Parks Board to form a new agency "Texas Parks and Wildlife Department," which began operating in August.

Shrimp. Total landings, while not at record levels, were over 61 million pounds (heads-on weight) greater than in 1962. Substantial increases were recorded in each of the States. Louisiana (81 million pounds) regained its position as volume leader, with an increase of over 37 million pounds, while Alabama (8 million) and Texas (70 million) had gains of 4 and 14 million pounds, respectively. Mississippi landings were up over 3 million pounds; and Florida (West Coast), about 2.8 million pounds. A sharp decline in ex-vessel prices during the last half of the year partially offset the economic gain to fishermen and processors resulting from the increased catches. This is well illustrated by the fact that compared with 1962, Gulf landings of shrimp were up 43 percent, while the value rose only 5 percent. Crews of 80 to 90 Campeche shrimp trawlers stopped fishing for a short period during October and November in protest against steadily declining ex-vessel prices. The vessels left the distant Campeche grounds empty and returned to Florida ports, and no vessels sailed from Florida ports for about 1 week. The crews hoped that their demonstration would focus national attention on the fact that there had not been a drop in retail shrimp prices commensurate with the lower ex-vessel prices. A secondary purpose was to point out the need for Federal action to provide for tariffs or quotas on imported shrimp, since the crews considered the record volume of imports to be a major factor in ex-vessel price reductions.

Processing plants at Louisiana ports were unable to handle all the shrimp landed during the first few weeks of the spring season. In some instances, fishermen peddled their catches from door to door in nearby cities, and many individuals purchased shrimp at bargain prices directly from the boats.

Canning plants, which use the bulk of the smaller size shrimp, operated at full capacity during the spring. As the fall season progressed, with even greater landings, some cannery became apprehensive about the rapid growth of their inventories and curtailed operations for as long as 3 weeks. In an effort to stimulate sales of canned shrimp, the Gulf Shrimp Cannery Association, assisted by the Bureau of Commercial Fisheries, launched an intensive advertising campaign during October. Cannery were also faced with stiff competition from foreign countries in both domestic and foreign markets. At the close of the year, processors of raw headless, peeled and deveined, and breaded shrimp also were concerned over large cold storage inventories and rather little market demand. It is probable the apparent light demand resulted from the large supply of shrimp, since supplies were 17 percent greater than in 1962, the previous record year and consumption was at a high level.

Trading in shrimp futures began on November 11 at the Chicago Mercantile Exchange. All transactions were in units of 5,000 pounds of 15 to 20 count heads-off frozen brown shrimp meeting U.S. Department of the Interior Grade A standards. First trades were scheduled for delivery during January 1964.

Menhaden. While landings were 89 million pounds less than the 1962 record, prices for solubles and oil increased, and fishermen and processors had a good year. An important factor in the decreased landings was the unfavorable weather throughout most of June and July. Recurring afternoon thunder squalls dispersed menhaden schools, making large catches difficult. Prices for meal and scrap averaged \$120 per ton, about the same as the previous year; however, solubles sold at an average of \$59 per ton--\$9 per ton more than during 1962. Markets for oil, which were unstable at the beginning of the year, strengthened as the season progressed, and the average price was 46 cents per gallon--about 12 cents over the average 1962 price. A Louisiana firm announced development of a new type seine boat of bow and stern construction rather than the "double ender" of the past. The manufacturer claimed that, with the advent of power blocks, seine boats needed greater stability and this was achieved with the new design. More knotless nylon webbing was used in seines during the year. This type netting permits the use of larger seines, while adding little to the overall bulk or weight. The same Gulf firm that took delivery of several new seiners to be used in South American waters also assembled and shipped two complete processing plants, which were to be erected in Iquique, Chile, and Planchade, Peru.

Other Industrial Fish. Landings of fish, other than menhaden, for industrial use (bait, reduction, or animal food), amounting to 80.1 million pounds, were 16.8 million pounds less than in 1962. Some processors of pet food, the major users of these landings, replaced fish with chicken offal obtained from the vast broiler industry in nearby areas, and some imported fish was also used for pet food.

Oysters. Landings of 24 million pounds were 240,000 pounds of meats less than the record 1939 production. Compared with the previous year, this was a gain of over 5 million pounds. All States except Florida (West Coast) participated in this increase. Alabama, Mississippi, and Texas landings were more than double those of 1962, while Louisiana landings were up 14 percent. Most of the increase in Mississippi and Louisiana was used by canners and resulted in a pack of 313,000 standard cases--118,000 cases over the 1962 pack. Production of shucked oysters (1,454,000 gallons) was 19 percent greater than in 1962. Periods of weak market demand resulted in shuckers receiving an average of \$6.20 per gallon compared with \$6.32 the previous year.

Crabs. The blue crab fishery improved only slightly: total landings of 26.9 million pounds were only 612,000 pounds greater than those of 1962. This was the second consecutive year in which landings were substantially below the 35-million-pound level recorded for 1960 and 1961. The volume of catch within each of the States varied: landings on the West Coast of Florida, Alabama, and Mississippi, were greater than the previous year while those in Texas and Louisiana were 1.5 and 1.6 million pounds less, respectively, than in 1962. Since the number of fishermen, craft, and gear used was nearly the same as the previous year, and as there was good market demand for crabs, it appeared that the environment in these two States was not favorable for the crab populations. Otter trawls, used exclusively for taking crabs, were used for the first time in Florida waters by fishermen of the northwest coastal area. This venture was not particularly successful, and probably this type gear will not be used in the future. Production of fresh and frozen crab meat was 24 percent greater than in 1962, despite the fact that landings increased only 3 percent. Three factors explain this apparently paradoxical situation--more crabs were used for processing rather than live sales, there was a slight increase in the yield of meat in some areas, and Florida (West Coast) landings were supplemented with crabs shipped in from the South Atlantic area. The crab meat market was strong despite the increased production: the average price was \$1.15 per pound--a gain of 10 cents per pound over 1962.

GULF FISHERIES

Edible Finfish. There was little change in the total quantity of finfish landed for human consumption--92.8 million pounds during 1963 compared with 92.6 million pounds the previous year. Of the five species that normally account for over 75 percent of the volume and value of landings, only two were received in greater quantities than in 1962--red snapper increased 7 percent; and spotted sea trout, 5 percent. Species registering declines were: fresh-water catfish, down 3 percent; mullet, 1 percent; groupers, 4 percent; and spanish mackerel, 21 percent.

Compared with 1962, red snapper landings increased 796,000 pounds to about 12.7 million pounds--the highest, according to Bureau records since 1902, when 13.6 million pounds were landed. The snapper fleet continued to grow with 11 new vessels entering the fishery during 1963. Snapper fishermen became quite concerned over the number of vessels (American and foreign) fishing the Campeche grounds. They considered this to be the reason for a lower total catch that included a larger portion of small fish.

Activities of Foreign Vessels. Russian trawlers were present in the international waters off the Florida and Louisiana coasts during the year. Specific information on the volume of their catches and type of gear used is not available, but it is presumed that the fishing activity was primarily exploratory. The activities of Russian trawlers and some Cuban fishing craft prompted the Florida legislature to enact a law commonly known as the "Alien Fishery Law". The law prohibits the granting or issuing of licenses for commercial fishing in Florida territorial waters to any vessel owned in whole or part by any alien power which subscribes to the doctrine of Communism.

Research. Programs of both the Bureau and State conservation agencies, designed to provide a scientific basis for the sound management of fishery resources, were maintained at the same level as the previous year.

A research project of the Bureau's Branch of Exploratory Fishing and Gear Research commanded the immediate attention of the shrimp industry. The aim of the project is to develop an otter trawl with an electrical stimulus capable of harvesting burrowed shrimp during daylight. This shrimp research program progressed from laboratory and controlled field experiments to an actual field test which produced promising results during October.

An application of research findings occurred in Texas where the minimum size limit of oysters was reduced from 3-1/2 to 3 inches. Research by the Texas Parks and Wildlife Department showed that about 70 percent of the oysters of 3 inches and larger were lost because of the parasitic fungus, Dermocystidium marinum. Reduction of the size limit permitted fishermen to harvest oysters prior to the summer loss due to the disease.

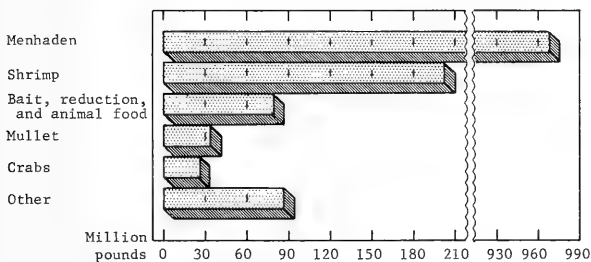
General. A massive fish kill took place in portions of the Mississippi River within the State of Louisiana during the autumn. The kill was much greater than that which had been noted during the same period in each of the 3 previous years. While the greatest mortality involved nearly all major fresh-water species of commercial importance, quantities of salt-water species, particularly menhaden, were also killed in many of the passes at the mouth of the river. The U.S. Public Health Service stated that its initial findings indicated the pesticide endrin was responsible for the kills. Commercial fishermen also reported similar kills of fresh-water species in many streams of the Atchafalaya basin. The widespread publicity given the fish kills had a disturbing influence on the sale of fish at the retail and wholesale level.

Other information. Condensed summary data on operating units and catch by States appearing on the following pages have been previously published in Current Fishery Statistics No. 3679. Data on the catch and operating units of the east coast of Florida and the entire State of

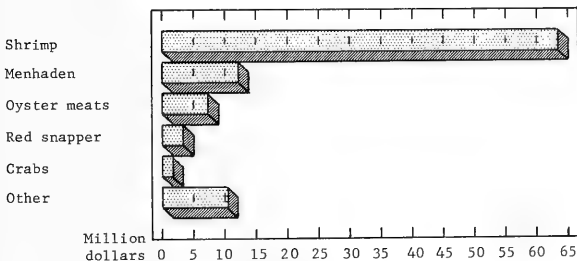
Florida may be found in Section 5 of this Digest. Seasonal variations in the catch of fish and shellfish in Florida, Alabama, Mississippi, Louisiana, and Texas can be ascertained from monthly landing bulletins issued currently for these States in cooperation with the fishery agencies of each State. Additional aspects of the Gulf fisheries may be found in daily, monthly, and annual reports published by the Bureau's Fishery Market News Service, Federal Building, 600 South Street, New Orleans, La., 70130. Specific and detailed accomplishments of the Bureau are contained in, Report of the Bureau of Commercial Fisheries, Calendar Year 1963, and Operations of the Bureau of Commercial Fisheries under the Saltonstall-Kennedy Act, Fiscal Year 1963.

Acknowledgments. The following organizations assisted the Bureau to collect the data appearing in this section: Florida State Board of Conservation; Marine Laboratory, University of Miami; Alabama Department of Conservation, Commercial Seafoods Division; Mississippi Marine Conservation Commission; Louisiana Wild Life and Fisheries Commission; and Texas Parks and Wildlife Department.

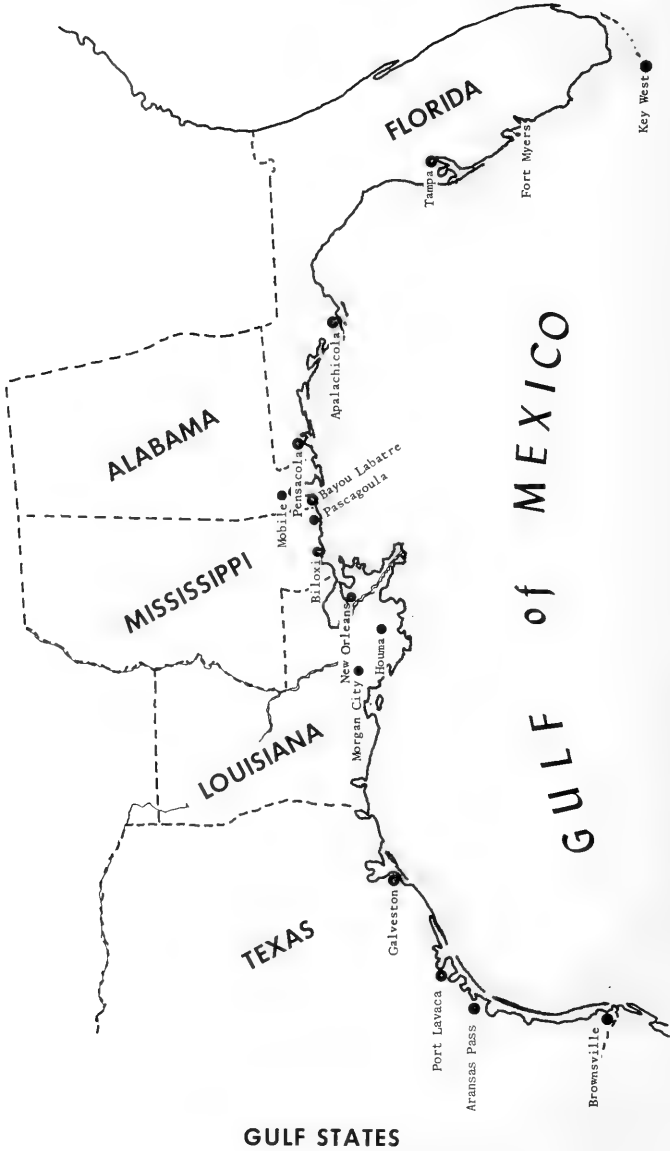
GULF STATES CATCH, 1963



VALUE OF GULF STATES CATCH, 1963



GULF FISHERIES



GULF STATES

GULF FISHERIES

225

SECTIONAL SUMMARIES SUMMARY OF CATCH, 1963

(MILLIONS OF POUNDS AND MILLIONS OF DOLLARS)

STATE	FISH		SHELLFISH, ETC.		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FLORIDA, WEST COAST.	69	7	56	15	125	22
ALABAMA.	5	1	10	3	15	4
MISSISSIPPI.	326	5	15	4	341	9
LOUISIANA.	650	10	102	24	752	34
TEXAS.	90	2	76	26	166	30
TOTAL.	1,140	25	259	74	1,399	99

NOTE:--FOR THE PURPOSE OF THIS REPORT THE "WEST COAST OF FLORIDA" INCLUDES THE COASTAL COUNTIES FROM MONROE TO ESCAMBAIA, INCLUSIVE.

SUMMARY OF OPERATING UNITS, 1963

ITEM	FLORIDA, WEST COAST	ALABAMA	MISSIS- SIPPI	LOUIS- IANA	TEXAS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	3,478	862	2,017	4,840	4,474	11,374
ON BOATS AND SHORE:						
REGULAR.	3,058	740	698	3,812	822	6,953
CASUAL.	1,299	189	406	1,553	709	4,156
TOTAL.	7,835	1,791	3,121	10,205	6,005	24,483
VESSELS, MOTOR	1,148	268	593	1,498	1,419	3,369
GROSS TONNAGE.	45,542	10,077	23,970	62,703	70,406	142,809
BOATS:						
MOTOR.	3,072	632	940	4,212	1,276	9,992
OTHER.	224	117	129	114	42	626
GEAR:						
HAUL SEINES, COMMON.	87	4	-	17	20	128
LENGTH, YARDS.	72,380	1,200	-	5,516	4,475	83,571
PURSE SEINES:						
MENHADEN.	-	-	16	48	8	72
LENGTH, YARDS.	-	-	8,995	20,905	4,000	33,900
OTHER.	4	-	-	-	-	4
LENGTH, YARDS.	800	-	-	-	-	800
OTTER TRAWLS:						
CRAB.	5	-	-	-	-	5
YARDS AT MOUTH.	91	-	-	-	-	91
FISH.	-	-	102	8	-	110
YARDS AT MOUTH.	-	-	1,967	132	-	2,119
SHRIMP AT MOUTH.	1,726	660	1,033	5,020	3,475	9,224
YARDS AT MOUTH.	26,393	9,500	14,816	67,369	47,752	125,914
FYKE AND HOOP NETS, FISH	-	476	-	12,336	10	12,822
POTS AND TRAPS:						
CRAB:						
BLUE.	31,530	5,900	1,870	3,010	9,668	51,978
OTHER.	14,960	-	-	-	-	14,960
CRAWFISH.	-	-	-	6,680	-	6,680
FISH.	25	250	-	-	-	275
LOBSTER, SPINY.	60,050	-	-	-	-	60,050
GILL NETS:						
ANCHOR, SET OR STAKE.	12	-	-	142	85	239
SQUARE YARDS.	8,920	-	-	58,408	51,700	119,028
DRIFT.	11	-	-	-	-	11
SQUARE YARDS.	34,000	-	-	-	-	34,000
RUNAROUND.	1,089	11	4	3	-	1,107
SQUARE YARDS.	1,602,597	5,800	2,400	1,350	-	1,612,147
TRAWL NETS.	291	122	38	110	83	644
SQUARE YARDS.	386,886	122,000	29,400	35,765	53,557	627,608
LINES:						
HAND.	2,696	204	181	1,388	786	5,020
HOOKS.	6,806	1,104	923	2,393	4,643	14,214
TROLL.	965	-	-	-	-	965
HOOKS.	965	-	-	-	-	965
LONG OR SET WITH HOOKS	35	5	-	1,923	134	2,097
HOOKS.	1,800	1,500	-	676,920	197,100	877,320
TROT WITH BAITS.	17	4	11	743	-	775
BAITS.	10,600	2,000	5,500	456,840	-	474,940

(CONTINUED ON NEXT PAGE)

GULF FISHERIES

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	FLORIDA, WEST COAST	ALABAMA	MISSIS- SIPPI	LOUIS- IANA	TEXAS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
GEAR - CONTINUED:						
LINES - CONTINUED:						
SNAG	-	50	-	-	-	50
HOOKS	-	15,000	-	-	-	15,000
DIP NETS:						
COMMON	17	-	-	30	15	62
DROP	219	-	-	22,792	-	23,011
CAST NETS	23	-	6	-	-	29
SPEARS	44	23	16	9	165	257
DREDGES:						
OYSTER, COMMON	-	10	452	752	241	1,341
YARDS AT MOUTH	-	11	547	865	241	1,532
SCALLOP	101	-	-	-	-	101
YARDS AT MOUTH	106	-	-	-	-	106
TONGS:						
OYSTER	801	666	648	473	46	2,526
OTHER	2	-	-	-	-	2
BRUSH TRAPS	-	-	-	43,160	-	43,160
GRABS, FROG	-	-	-	54	-	54
HOOKS, SPONGE	69	-	-	-	-	69
DIVING OUTFITS	18	-	-	-	-	18

CATCH BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	FLORIDA, WEST COAST		ALABAMA		MISSISSIPPI	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
ALEVINES	836	25	-	-	-	-
AMBERJACK	14	1	-	-	-	-
BALLYHOO	82	12	-	-	-	-
BARRACUDA	2	(1)	-	-	-	-
BLUEFISH	899	77	4	(1)	5	1
BLUE RUNNER	1,495	30	1	(1)	-	-
BONITO	1	(1)	-	-	-	-
BUFFALOFISH	-	-	64	7	-	-
CABIO	10	1	1	(1)	3	(1)
CATFISH AND BULLHEADS	66	12	44	11	-	-
CIGARFISH	389	25	-	-	-	-
CREVALLE	725	17	-	-	-	-
CROAKER	97	8	47	3	3	(1)
DOLPHIN	5	(1)	-	-	-	-
DRUM:						
BLACK	100	4	10	1	17	1
RED	968	110	20	3	59	8
FLOUNDERS	257	51	107	20	59	7
GROUPERS	6,579	651	295	42	271	30
GRUNTS	60	4	-	-	-	-
HOGFISH	16	2	-	-	-	-
JEWFISH	65	4	41	4	-	-
KING MACKEREL	2,817	296	-	-	-	-
KING WHITING OR "KINGFISH"	195	8	238	14	257	16
MENHADEN	44	2	-	-	250,429	3,276
MOJARRA	75	5	-	-	-	-
MULLET:						
BLACK	32,612	1,729	1,390	71	382	20
SILVER	665	39	-	-	-	-
PADDFISH	-	-	11	1	-	-
PERMIT	14	2	-	-	-	-
PILCHER	7	1	-	-	-	-
POMPANO	593	410	1	1	(1)	(1)
SCUP OR PORGY	55	4	-	-	-	-
SEA CATFISH	121	7	6	(1)	13	1
SEA TROUT OR WEAKFISH:						
SPOTTED	2,571	602	54	14	80	20
WHITE	68	7	78	4	68	4
SHEEPSHEAD:						
FRESH-WATER	-	-	15	2	-	-
SALT-WATER	139	11	14	1	30	2

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	FLORIDA, WEST COAST		ALABAMA		MISSISSIPPI	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED						
SNAPPER:						
MANGROVE	311	53	-	-	-	-
MUTTON	118	25	-	-	-	-
RED	5,918	1,562	2,315	653	1,886	471
VERMILION	68	11	-	-	-	-
YELLOWTAIL	729	153	-	-	-	-
SPANISH MACKEREL	5,405	492	39	4	1	(1)
SPOT	358	23	36	2	4	(1)
STURGEON	30	4	1	(1)	-	-
TENPOUNDER	1,192	(1) 27	-	-	-	-
TILEFISH	3	-	-	-	-	-
TRIGGERFISH	12	(1) 1	-	-	-	-
TRIPLETAIL	5	-	-	-	-	-
WARSAW	183	11	-	-	-	-
UNCLASSIFIED:						
FOR FOOD	1,082	72	-	-	-	-
BAIT, REDUCTION, AND ANIMAL FOOD	454	11	-	-	72,576	1,210
TOTAL FISH	68,500	6,602	4,832	868	326,143	5,067
SHELLFISH, ETC.						
CRABS:						
BLUE:						
HARD	13,148	644	1,297	75	1,112	64
SOFT AND PEELER	4	2	-	-	3	1
STONE	660	207	-	-	-	-
TOTAL CRABS	13,812	853	1,297	75	1,115	65
LOBSTERS, SPINY	2,771	1,081	-	-	-	-
SHRIMP	34,941	12,256	7,760	2,419	9,375	2,484
CLAMS, HARD, PUBLIC	7	2	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	2,453	792	361	133	3,903	738
FALL	1,696	485	528	189	359	119
PRIVATE:						
SPRING	86	24	92	25	68	13
FALL	48	14	14	5	350	105
TOTAL OYSTERS	4,283	1,225	995	352	4,680	975
SCALLOPS:						
BAY	228	59	-	-	-	-
CALICO	(1)	(1)	-	-	-	-
SQUID	26	2	4	(1)	-	-
TURTLES:						
GREEN	52	9	-	-	-	-
LOGGERHEAD	8	1	-	-	-	-
TOTAL TURTLES	60	10	-	-	-	-
SPONGES:						
GRASS	2	5	-	-	-	-
SHEEPSWOL	42	362	-	-	-	-
YELLOW	11	20	-	-	-	-
TOTAL SHELLFISH	56,183	15,875	10,056	2,846	15,170	3,524
GRAND TOTAL	124,683	22,477	14,888	3,714	341,313	8,591

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)



GULF FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	LOUISIANA		TEXAS		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
ALEWIVES	-	-	-	-	836	25
AMBERJACK	-	-	-	-	14	1
BALLYHOO	-	-	-	-	82	12
BARRACUDA	-	-	-	-	2	(1)
BLUEFISH	-	-	-	-	898	78
BLUE RUNNER	-	-	-	-	1,496	30
BONITO	-	-	-	-	1	(1)
BOWFIN	7	(1)	-	-	7	(1)
BUFFALOFISH	767	81	94	14	925	102
CABLO	7	(1)	16	2	39	3
CARP	24	1	17	2	41	3
CATFISH AND BULLHEADS	6,006	1,229	41	13	6,157	1,265
CIGARFISH	-	-	-	-	389	265
CREVALLE	-	-	-	-	725	17
CROAKER	25	2	(1)	(1)	172	13
DOLPHIN	-	-	-	-	5	(1)
DRUM:						
BLACK	344	22	1,363	107	1,834	135
RED	466	79	685	166	2,198	366
FLOUNDERS	162	26	276	69	861	173
GARFISH	528	28	85	4	613	32
GROUPERS	23	2	156	15	7,324	740
GRUNTS	-	-	-	-	60	4
HOGFISH	-	-	-	-	16	2
JEWFISH	8	1	8	1	122	10
KING MACKEREL	-	-	-	-	2,817	296
KING WHITING OR "KINGFISH"	372	19	147	8	1,209	65
MENHADEN	633,484	7,862	83,736	1,034	967,693	12,174
MOJARRA	-	-	-	-	75	5
MULLET:						
BLACK	19	1	9	(1)	34,412	1,821
SILVER	-	-	-	-	665	39
PADDFISH	6	1	-	-	17	2
PERMIT	-	-	-	-	14	2
PIGFISH	-	-	-	-	7	1
POMPANO	1	1	2	1	597	413
SAWFISH	4	(1)	-	-	4	(1)
SCUP OR PORGY	-	-	-	-	55	4
SEA CATFISH	59	3	53	4	252	15
SEA TROUT OR WEAKFISH:						
SPOTTED	380	88	1,190	302	4,275	1,026
WHITE	80	6	-	-	294	21
SHARKS, UNCLASSIFIED	4	(1)	-	-	4	(1)
SHEEPSHEAD:						
FRESH-WATER	343	31	2	(1)	360	33
SALT-WATER	177	13	120	11	480	38
SNAPPER:						
MANGROVE	-	-	-	-	311	53
MUTTON	-	-	-	-	118	25
RED	388	95	2,169	590	12,676	3,331
VERMILION	-	-	-	-	68	11
YELLOWTAIL	-	-	-	-	729	153
SPANISH MACKEREL	2	(1)	-	-	5,447	496
SPOT	7	1	-	-	405	26
STURGEON	-	-	-	-	31	4
TENPOUNDER	-	-	-	-	1,192	27
TILEFISH	-	-	-	-	3	(1)
TRIGGERFISH	-	-	-	-	12	1
TRIPLETAIL	3	(1)	-	-	8	(1)
WARSAW	5	(1)	39	4	227	15
UNCLASSIFIED:						
FOR FOOD	-	-	156	8	1,240	80
BAIT, REDUCTION, AND ANIMAL FOOD	6,971	87	108	5	80,109	1,313
TOTAL FISH	650,672	9,679	90,476	2,360	1,140,623	24,576

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)



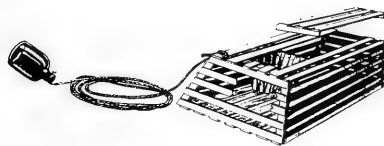
CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	LOUISIANA		TEXAS		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC.						
CRABS:						
BLUE:						
HARD	7,982	447	2,980	199	26,519	1,429
SOFT AND PEELER	329	164	2	(1)	338	167
STONE	-	-	-	-	660	207
TOTAL CRABS	8,311	611	2,982	199	27,517	1,803
CRAWFISH, FRESH-WATER	892	134	-	-	892	134
LOBSTERS, SPINY	-	-	-	-	2,771	1,081
SHRIMP	80,809	19,789	70,231	26,591	203,116	63,539
CLAMS, HARD, PUBLIC	-	-	-	-	7	2
OYSTERS, MARKET:						
PUBLIC:						
SPRING	2,415	751	1,550	524	10,682	2,848
FALL	382	147	990	354	3,955	1,294
PRIVATE:						
SPRING	6,418	1,929	57	22	6,721	2,013
FALL	2,348	894	21	13	2,781	1,031
TOTAL OYSTERS	11,563	3,721	2,618	913	24,139	7,186
SCALLOPS:						
BAY	-	-	-	-	228	59
CALICO	-	-	-	-	(1)	(1)
SQUID	6	1	37	4	73	7
TERRAPIN	1	(1)	-	-	1	(1)
TURTLES:						
GREEN	2	(1)	-	-	54	9
LOGGERHEAD	-	-	-	-	8	1
SNAPPER	22	4	-	-	22	4
TOTAL TURTLES	24	4	-	-	84	14
FROGS	6	2	-	-	6	2
SPONGES:						
GRASS	-	-	-	-	2	5
SHEEPSWOL	-	-	-	-	42	362
YELLOW	-	-	-	-	11	20
TOTAL SHELLFISH	101,612	24,262	75,958	27,707	258,889	74,214
GRAND TOTAL	752,284	33,941	166,344	30,067	1,399,512	98,790

1/ LESS THAN 500 POUNDS OR \$500.

NOTE:--STATISTICS ON THE CATCH ARE SHOWN IN ROUND (LIVE) WEIGHT EXCEPT FOR SHELL MOLLUSKS AND SPONGES. CLAMS AND OYSTERS ARE REPORTED IN WEIGHT OF TOTAL MEATS. SCALLOPS ARE REPORTED IN WEIGHT OF EDIBLE MEATS. SPONGES ARE REPORTED AS MARKETED WEIGHT.



Spiny lobster trap

GULF FISHERIES

CATCH OF CERTAIN SHELLFISH, 1963

(NUMBER AND BUSHELS)

SPECIES	FLORIDA, WEST COAST		ALABAMA		MISSISSIPPI		
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	
CRABS:							
BLUE:							
HARD	NUMBER	26,296,800	\$644,273	2,593,600	\$74,736	2,424,160	\$63,633
SOFT AND PEELER.	DO	16,000	2,000	-	-	6,100	466
STONE.	DO	659,800	207,177	-	-	-	-
CLAMS, HARD, PUBLIC.	U.S. STD. BUSHEL	874	2,331	-	-	-	-
OYSTERS, MARKET:							
PUBLIC:							
SPRING	DO	611,696	701,529	91,807	132,969	990,634	737,979
FALL	DO	538,413	485,055	123,054	189,035	88,182	119,385
PRIVATE:							
SPRING	DO	21,400	24,482	23,183	25,229	17,132	12,751
FALL	DO	15,355	13,614	3,310	5,324	85,995	105,000
SCALLOPS:							
BAY	DO	42,185	58,772	-	-	-	-
CALICO	DO	50	44	-	-	-	-
SPECIES	LOUISIANA		TEXAS		TOTAL		
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	
CRABS:							
BLUE:							
HARD	NUMBER	16,043,619	\$447,096	5,364,720	\$199,608	52,722,899	\$1,429,346
SOFT AND PEELER.	DO	966,378	164,350	4,320.	360	994,798	167,176
STONE.	DO	-	-	-	-	659,600	207,177
CLAMS, HARD,PUBLIC.	U.S. STD. BUSHEL	-	-	-	-	874	2,331
OYSTERS, MARKET:							
PUBLIC:							
SPRING	DO	485,020	750,695	382,741	524,507	2,561,698	2,647,699
FALL	DO	86,948	146,982	249,699	353,943	1,086,496	1,294,400
PRIVATE:							
SPRING	DO	1,315,266	1,928,902	14,564	22,117	1,391,545	2,013,481
FALL	DO	600,409	693,334	5,784	13,268	710,853	1,030,540
SCALLOPS:							
BAY	DO	-	-	-	-	42,185	58,772
CALICO	DO	-	-	-	-	50	44

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

AVERAGE WEIGHTS OF CERTAIN SHELLFISH, 1963

SPECIES	FLORIDA, WEST COAST	ALABAMA	MISSISSIPPI	LOUISIANA	TEXAS	
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	
CLAMS:						
BLUE:						
HARD	NUMBER PER POUND	2.00	2.00	2.16	2.01	1.80
SOFT AND PEELER.	DO	4.00	-	3.00	2.94	2.40
STONE.	DO	1.00	-	-	-	-
CLAMS, HARD, PUBLIC.	LBS. MEATS PER U.S. STD. BUSHEL	8.47	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	DO	4.01	3.93	3.94	4.98	4.05
FALL	DO	3.15	4.29	4.07	4.39	3.96
PRIVATE:						
SPRING	DO	4.00	3.99	3.94	4.88	3.90
FALL	DO	3.10	4.29	4.07	3.91	3.70
SCALLOPS:						
BAY	DO	5.40	-	-	-	-
CALICO	DO	4.00	-	-	-	-

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	FLORIDA, WEST COAST		ALABAMA		MISSISSIPPI	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
COD, FILLETS:						
FROZEN	POUNDS	(1)	-	-	-	-
BREADED	DO	(1)	-	-	-	-
GROUPEL, FRESH AND FROZEN:						
FILLETS	DO	376,618	\$181,978	(1)	(1)	-
STEAKS	DO	197,110	54,749	(1)	(1)	(1)
MENHADEN:						
MEAL AND SCRAP	TONS	-	-	-	25,121	\$3,027,079
OIL	1,000 POUNDS	-	-	-	29,578	1,705,634
SOLUBLES	TONS	-	-	-	12,055	727,646
MULLET:						
CANNED	STANDARD CASES	(1)	(1)	-	-	-
SALTED:						
FISH	POUNDS	401,500	40,150	-	-	-
ROE	DO	(1)	(1)	-	-	-
SMOKED	DO	(1)	(1)	-	-	-
SEA TROUT FILLETS, FROZEN	DO	(1)	(1)	-	-	-
SNAPPER, RED, FRESH AND FROZEN:						
FILLETS	DO	150,006	130,515	(1)	(1)	-
STEAKS	DO	(1)	(1)	(1)	(1)	-
SPANISH MACKEREL FILLETS, FRESH AND FROZEN	DO	757,534	246,242	-	-	-
CRABS:						
BLUE:						
COOKED MEAT, FRESH	DO	1,893,823	2,245,712	201,936	\$222,129	150,205
SPECIALTIES, FROZEN (CAKES, ROLLS, STUFFED, ETC.)	DO	17,158	11,684	(1)	(1)	(1)
CANNED, MEAT	STANDARD CASES	-	-	(1)	(1)	(1)
STONE, CLAWS, COOKED, FROZEN	POUNDS	30,674	26,431	-	-	-
BACK SHELLS, CLEANED AND POLISHED	-	-	(1)	-	-	-
MEAL AND SCRAP	TONS	(1)	(1)	-	-	-
LOBSTERS, SPINY, WHOLE COOKED, FROZEN	POUNDS	(1)	(1)	-	-	-
SHRIMP:						
FRESH AND FROZEN:						
RAW, HEADLESS	DO	5,982,592	4,913,818	1,517,967	1,080,591	(1)
PEELED (INCLUDING DEVEINED), RAW	DO	6,496,010	8,319,568	(1)	(1)	-
BREADED, RAW	DO	16,498,529	12,370,634	(1)	(1)	-
SPECIALTIES, FROZEN (BURGERS, STUFFED, GUMBO, ETC.)	DO	(1)	(1)	(1)	(1)	-
CANNED, MEAT	STANDARD CASES	(1)	(1)	(1)	(1)	199,499
CLAMS, HARD, SHUCKED, FRESH. CONCH CHOWDER, CANNED	STANDARD CASES	(1)	(1)	-	-	4,069,341
OYSTERS:						
SHUCKED, FRESH	GALLONS	387,448	2,245,934	193,456	1,309,376	101,322
BREADED, FROZEN	POUNDS	91,000	66,625	-	-	-
CANNED, MEAT	STANDARD CASES	-	-	(1)	(1)	139,494
SHELL LIME AND GRIT	TONS	-	-	(1)	(1)	1,646,583
SCALLOPS:						
SEA:						
SHUCKED, FROZEN	POUNDS	(1)	(1)	-	-	-
BREADED, FROZEN	DO	(1)	(1)	-	-	-
BAY:						
SHUCKED, FRESH	GALLONS	28,396	154,162	-	-	-
BREADED, FROZEN	DO	(1)	(1)	-	-	-
TURTLES: CANNED SPECIALTIES (CHOWDER, CONSOMME AND SOUP)	STANDARD CASES	(1)	(1)	-	-	-
UNCLASSIFIED PRODUCTS:						
FRESH AND FROZEN, PACKAGED, FISH FILLETS AND STEAKS, STICKS, PORTIONS, AND OTHER FISH AND SHELLFISH, CANNED	POUNDS	2,146,178	428,095	4,397,342	2,630,383	2,301,000
CURED	STANDARD CASES	1,671	22,280	25,255	639,824	2,626,923
INDUSTRIAL	DO	104,800	59,460	-	1,760,000	-
TOTAL	-	-	52,260	-	-	105,225
	-	-	-	-	-	26,198,706

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GULF FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM		LOUISIANA		TEXAS	
		QUANTITY	VALUE	QUANTITY	VALUE
CATFISH, BREADED, FROZEN,	POUNDS	(1)	(1)	-	-
FLOUNDER, FROZEN:					
FILLETS	DO	(1)	(1)	(1)	(1)
SPECIALTIES (STUFFED)	DO	(1)	(1)	(1)	(1)
MENHADEN:					
MEAL AND SCRAP.	TONS	66,166	\$7,992,696	(1)	(1)
O. L.	1,000 POUNDS	61,169	3,625,347	(1)	(1)
SOLUBLES,	TONS	25,390	1,485,076	(1)	(1)
SNAPPER, RED:					
FRESH AND FROZEN, FILLETS	POUNDS	(1)	(1)	(1)	(1)
SPECIALTIES, FROZEN (STUFFED)	DO	(1)	(1)	(1)	(1)
CRABS:					
BLUE:					
COOKED MEAT:					
FRESH	DO	343,566	372,013	330,400	\$341,863
FROZEN	DO	227,144	301,310	-	-
SPECIALTIES, FROZEN (CAKES, ROLLS, STUFFED, ETC.)	DO	153,396	108,242	(1)	(1)
CANNED:					
MEAT	STANDARD CASES	(1)	(1)	(1)	(1)
SPECIALTIES (BISQUE)	DO	(1)	(1)	(1)	(1)
KING, MEAT, FREEZE-DRIED,	POUNDS	-	-	(1)	(1)
BACK SHELLS, CLEANED AND POLISHED	-	-	-	-	(1)
CRAWFISH, SPECIALTIES:					
FROZEN (BISQUE)	DO	(1)	(1)	-	-
CANNED (BISQUE)	STANDARD CASES	(1)	(1)	-	-
SHRIMP:					
FRESH AND FROZEN:					
RAW, HEADLESS	POUNDS	25,845,819	17,478,414	28,797,420	21,275,783
PEELED (INCLUDING DEVEINED):					
RAW	DO	1,233,465	949,116	6,861,800	7,989,775
COOKED,	DO	1,393,214	2,465,426	-	-
BREADED, RAW,	DO	3,894,917	2,228,057	22,610,242	15,838,326
SPECIALTIES, FROZEN (BURGERS, STUFFED, GUMBO, ETC.)	DO	336,237	262,691	(1)	(1)
CANNED:					
MEAT	STANDARD CASES	716,844	12,757,839	36,287	675,784
SPECIALTIES (CREOLES, BISQUES, GUMBO, ETC.)	DO	(1)	(1)	(1)	(1)
FREEZE-DRIED,	POUNDS	-	-	(1)	(1)
SUN-DRIED	DO	454,146	379,667	-	-
MEAL AND SCRAP.	TONS	(1)	(1)	-	-
OYSTERS:					
SHUCKED, FRESH	GALLONS	550,678	3,389,378	221,010	1,410,666
SHUCKED, FROZEN	POUNDS	(1)	(1)	(1)	(1)
BREADED, FROZEN	DO	(1)	(1)	(1)	(1)
SPECIALTIES FROZEN (BURGERS, DRESSED AND STUFFED)	DO	15,116	10,550	-	-
CANNED:					
MEAT	STANDARD CASES	173,410	2,101,753	-	-
SPECIALTIES (SOUP)	DO	(1)	(1)	-	-
SHELL LIME AND GRIT	TONS	-	-	(1)	(1)
TURTLES:					
CANNED, SPECIALTIES (CHOWDER, CONSUME AND SOUP)	STANDARD CASES	(1)	(1)	-	-
UNCLASSIFIED PRODUCTS:					
FRESH AND FROZEN PACKAGED, FISH FILLETS AND STEAKS, STICKS, PORTIONS, AND OTHER FISH AND SHELLFISH	POUNDS	12,354	51,908	568,011	1,657,787
CANNED	STANDARD CASES	6,929	132,572	3,135	52,981
CURED	DO	3,090	2,210	-	-
INDUSTRIAL	-	-	13,057	-	3,420,010
TOTAL	-	-	56,127,322	-	52,662,975

1/ INCLUDED WITH UNCLASSIFIED ITEMS.

NOTE:--SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR A FOREIGN COUNTRY; THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE. CERTAIN ITEMS MAY BE SHOWN IN AN INTERMEDIATE AND ALSO IN A MORE ADVANCED STAGE OF PROCESSING.

SUMMARY OF MANUFACTURED PRODUCTS, 1963

(VALUE IN THOUSANDS OF DOLLARS)

ITEM	QUANTITY	VALUE
PACKAGED, FRESH AND FROZEN:		
NOT BREADED:		
FISH	1,000 POUNDS	
SHELLFISH	DO	
BREADED FISH AND SHELLFISH	DO	
SPECIALTIES (FISH AND SHELLFISH)	DO	
CANNED	1,000 STANDARD CASES	
CURED	1,000 POUNDS	
INDUSTRIAL	-	
TOTAL	-	174,201

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

STATE	VALUE
FLORIDA, WEST COAST	31,570
ALABAMA	7,642
MISSISSIPPI	26,199
LOUISIANA	56,127
TEXAS	52,663
TOTAL	174,201

WHOLESALE AND MANUFACTURING, 1963

ITEM	FLORIDA, WEST COAST	ALABAMA	MISSIS- SIPPI	LOUISIANA	TEXAS	TOTAL
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
WHOLESALE AND MANUFACTURING:						
ESTABLISHMENTS	342	55	60	202	150	809
PERSONS ENGAGED:						
AVERAGE FOR SEASON	3,776	1,055	1,891	5,958	5,607	18,287
AVERAGE FOR YEAR	2,914	684	1,199	2,717	2,932	10,446



GULF FISHERIES

FLORIDA, WEST COAST

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES	OTTER TRAWLS		POTS AND TRAPS		FISH
			CRAB	SHRIMP	CRAB		
					BLUE	OTHER	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	84	-	10	2,061	4	2	-
ON BOATS AND SHORE:							
REGULAR	221	8	-	203	194	65	2
CASUAL	43	-	-	18	24	15	-
TOTAL	348	8	10	2,282	222	82	2
VESSELS, MOTOR	12	-	5	647	2	1	-
GROSS TONNAGE	134	-	67	39,887	18	21	-
BOATS:							
MOTOR	62	4	-	127	202	65	1
OTHER	42	-	-	-	-	-	-
GEAR:							
NUMBER	67	4	5	1,726	31,530	14,960	25
LENGTH, YARDS	72,360	600	-	-	-	-	-
YARDS AT MOUTH	-	-	91	26,393	-	-	-

ITEM	POTS AND TRAPS-CONTINUED	GILL NETS			TRAMMEL NETS	LINES	
		LOBSTER, SPINY	ANCHOR, SET OR STAKE	DRIFT		RUN-ROUND	HAND	TROLL
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	44	-	3	157	23	1,218	40
ON BOATS AND SHORE:							
REGULAR	233	12	20	1,181	422	461	234
CASUAL	12	3	-	130	19	864	254
TOTAL	289	15	23	1,488	464	2,543	528
VESSELS, MOTOR	24	-	1	44	8	280	22
GROSS TONNAGE	261	-	9	563	85	6,897	249
BOATS:							
MOTOR	162	10	10	922	263	947	340
OTHER	-	-	-	145	-	-	-
GEAR:							
NUMBER	60,050	12	11	1,089	291	2,696	965
SQUARE YARDS	-	8,920	34,000	1,602,597	386,886	-	-
HOOKS OR BAITS	-	-	-	-	-	6,806	965

ITEM	LINES - CONTINUED		DIP NETS		CAST NETS	SPEARS	DREDGES, SCALLOP
	LONG OR SET WITH HOOKS	TROT WITH BAITS	COMMON	DROP			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	-	-	-	-	-	-	12
ON BOATS AND SHORE:							
REGULAR	8	19	6	7	12	35	42
CASUAL	3	-	11	33	11	9	10
TOTAL	11	19	17	40	23	44	64
VESSELS, MOTOR	-	-	-	-	-	-	5
GROSS TONNAGE	-	-	-	-	-	-	58
BOATS, MOTOR	11	17	17	17	23	44	35
GEAR:							
NUMBER	35	17	17	219	23	44	101
YARDS AT MOUTH	-	-	-	-	-	-	106
HOOKS OR BAITS	1,800	10,600	-	-	-	-	-

ITEM	TONGS		HOOKS, SPONGE	DIVING OUTFITS, SPONGE	BY HAND		TOTAL, EXCLUSIVE OF DUPLICATION
	OYSTER	OTHER			OYSTER	OTHER	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS	12	-	13	91	-	-	3,478
ON BOATS AND SHORE:							
REGULAR	752	1	71	18	24	6	3,058
CASUAL	37	1	30	-	9	-	1,299
TOTAL	801	2	114	109	33	6	7,835
VESSELS, MOTOR	6	-	3	15	-	-	1,148
GROSS TONNAGE	72	-	25	212	-	-	45,542
BOATS:							
MOTOR	623	2	29	3	27	4	3,072
OTHER	-	-	49	-	1	-	224
GEAR, NUMBER	801	2	69	18	-	-	-

GULF FISHERIES

235

FLORIDA, WEST COAST - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	252,500	\$7,575	-	-	-	-
BALLYHOO	-	-	81,600	\$12,240	-	-
BLUEFISH	217,900	18,959	-	-	-	-
BLUE RUNNER	917,500	18,350	-	-	-	-
CABIO	300	19	-	-	300	\$19
CIGARFISH	389,400	24,921	-	-	-	-
CREVALLE	329,100	7,569	-	-	-	-
CROAKER	31,500	2,520	-	-	10,300	824
DRUM:						
BLACK	22,700	930	-	-	-	-
RED	196,500	21,261	-	-	-	-
FLOUNDERS	74,000	14,727	-	-	71,600	14,249
GRUNTS	100	7	-	-	-	-
KING MACKEREL	19,700	2,067	-	-	-	-
KING WHITING OR "KINGFISH"	40,800	1,714	-	-	111,300	4,676
MENHADEN	35,300	1,412	-	-	-	-
MOJARRA	39,800	2,706	-	-	-	-
MULLET:						
BLACK	7,455,400	395,136	-	-	-	-
SILVER	19,300	1,140	-	-	-	-
PERMIT	2,000	206	-	-	-	-
PIGFISH	800	72	-	-	-	-
POMPANO	18,900	13,079	-	-	-	-
SEA CATFISH	41,800	2,383	-	-	23,100	1,317
SEA TROUT OR WEAKFISH:						
SPOTTED	307,700	72,000	-	-	-	-
WHITE	11,300	1,209	-	-	-	-
SHEEPSHEAD, SALT-WATER	57,500	4,545	-	-	-	-
SNAPPER, MANGROVE	500	85	-	-	-	-
SPANISH MACKEREL	204,600	18,618	-	-	-	-
SPOT	103,000	6,593	-	-	50,500	3,232
STURGEON	-	-	-	-	100	12
TENPOUNDER	818,200	18,818	-	-	-	-
TRIPLLETAIL	2,800	126	-	-	700	32
UNCLASSIFIED:						
FOR FOOD	248,800	16,607	-	-	16,100	1,059
BAIT, REDUCTION, OR ANIMAL FOOD	181,000	4,524	-	-	28,600	714
CRABS, BLUE, HARD	-	-	-	-	80,500	3,946
LOBSTERS, SPINY	-	-	-	-	12,500	4,875
SHRIMP	-	-	-	-	34,941,300	12,255,734
SQUID	-	-	-	-	26,000	2,001
TOTAL	12,030,700	679,880	81,600	12,240	35,372,900	12,292,690

SPECIES	POTS AND TRAPS		GILL NETS			
			ANCHOR, SET OR STAKE		DRIFT	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	-	-	29,000	\$2,523
BLUE RUNNER	8,000	\$160	-	-	1,000	20
CREVALLE	500	12	-	-	500	12
GROUPERS	2,000	198	-	-	-	-
MULLET, BLACK	-	-	-	-	1,000	53
SEA TROUT OR WEAKFISH, SPOTTED	-	-	-	-	9,000	2,106
SPANISH MACKEREL	-	-	-	-	325,000	29,575
STURGEON	-	-	27,100	\$3,306	-	-
UNCLASSIFIED, FOR FOOD	2,000	134	-	-	1,600	108
CRABS:						
BLUE:						
HARD	12,827,800	628,562	-	-	-	-
SOFT AND PEELER	4,000	2,000	-	-	-	-
STONE	659,800	207,177	-	-	-	-
LOBSTERS, SPINY	2,748,600	1,071,954	-	-	-	-
TURTLES:						
GREEN	-	-	20,000	3,540	-	-
LOGGERHEAD	-	-	4,100	521	-	-
TOTAL	16,252,700	1,910,197	51,200	7,367	367,100	34,397

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GULF FISHERIES

FLORIDA, WEST COAST - CATCH BY GEAR, 1963 - Continued

SPECIES	GILL NETS - CONTINUED				LINES	
	RUNAROUND		TRAMMEL NETS		HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	537,700	\$16,131	45,900	\$1,377	-	-
AMBERJACK	-	-	-	-	14,100	\$608
BARRACUDA	-	-	-	-	1,700	34
BLUEFISH	443,500	38,583	128,300	11,162	45,400	3,953
BLUE RUNNER	455,500	9,110	65,500	1,310	46,100	922
CABIO	100	6	-	-	9,000	577
CATFISH AND BULLHEADS	-	-	-	-	1,700	296
CREVALLE	287,400	6,611	33,000	760	70,000	1,611
CROAKER	42,800	3,424	11,800	944	2,100	168
DRUM:						
BLACK	38,100	1,558	19,300	789	19,700	804
RED	596,100	67,954	74,200	8,460	110,600	12,610
FLOUNDERS	25,800	5,138	18,200	3,622	16,600	3,306
GROUPERS	-	-	-	-	6,552,300	648,679
GRUNTS	-	-	-	-	59,500	4,285
HOGFISH	-	-	-	-	16,400	2,346
JEWFISH	-	-	-	-	65,500	3,930
KING MACKEREL	2,133,700	224,040	7,600	798	75,900	7,972
KING WHITING OR "KINGFISH"	33,100	1,391	8,700	366	900	37
MENHADEN	1,200	48	8,000	320	-	-
MOJARRA	30,700	2,088	300	20	4,200	285
MULLET:						
BLACK	23,482,400	1,244,567	1,656,500	87,796	-	-
SILVER	638,100	37,648	7,300	432	-	-
PERMIT	5,900	609	-	-	5,800	598
PIG FISH	3,700	333	1,200	108	1,400	126
POMPANO	55,000	38,056	516,200	357,210	2,500	1,730
SCUP	-	-	-	-	55,000	4,289
SEA CATFISH	42,100	2,398	9,400	535	3,600	204
SEA TROUT OR WEAKFISH:						
SPOTTED	1,529,100	357,811	433,200	101,370	251,400	58,828
WHITE	37,100	3,969	7,900	847	11,300	1,209
SHEEPSHEAD, SALT-WATER	46,500	3,677	6,100	642	26,700	2,111
SNAPPERS:						
MANGROVE	7,100	1,207	1,800	306	302,100	51,357
MUTTON	-	-	-	-	117,700	25,187
RED	-	-	-	-	5,916,300	1,561,903
VERMILION	-	-	-	-	68,200	10,778
YELLOWTAIL	-	-	-	-	729,000	153,090
SPANISH MACKEREL	4,518,400	411,174	61,600	5,604	65,700	5,976
SPOT	147,200	9,425	36,700	2,351	20,600	1,332
STURGEON	-	-	2,500	305	-	-
TENPOUNDER	102,900	2,366	253,500	5,630	17,200	396
TILEFISH	-	-	-	-	3,400	272
TRIGGERFISH	-	-	-	-	11,500	575
TRIPLETAIL	600	27	-	-	400	19
WARSAW	-	-	-	-	182,800	10,783
UNCLASSIFIED:						
FOR FOOD	561,500	37,421	23,600	1,570	224,500	14,968
BAIT, REDUCTION, OR ANIMAL FOOD	179,400	4,486	61,600	1,540	1,900	30
TURTLES:						
GREEN	31,500	5,576	-	-	-	-
LOGGERHEAD	4,000	508	-	-	-	-
TOTAL	36,018,200	2,537,340	3,501,900	596,374	15,130,200	2,598,184

SPECIES	LINES - CONTINUED					
	TROLL		LONG OR SET WITH HOOKS		TROT WITH BAITS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	25,000	\$2,175	-	-	-	-
BLUE RUNNER	1,000	20	-	-	-	-
BONITO	1,200	48	-	-	-	-
CATFISH AND BULLHEADS	-	-	64,500	\$11,223	-	-
CREVALLE	4,600	106	-	-	-	-
DOLPHIN	4,800	307	-	-	-	-
GROUPERS	-	-	24,400	2,416	-	-
KING MACKEREL	580,000	60,900	-	-	-	-
SEA CATFISH	-	-	1,000	57	-	-
SEA TROUT OR WEAKFISH:						
SPOTTED	41,000	9,593	-	-	-	-
WHITE	900	96	-	-	-	-
SNAPPER, RED	-	-	1,500	396	-	-
SPANISH MACKEREL	229,500	20,866	-	-	-	-
TENPOUNDER	100	2	-	-	-	-
UNCLASSIFIED, FOR FOOD	2,000	134	-	-	-	-
CRABS, BLUE, HARD	-	-	-	-	240,100	\$11,765
TOTAL	890,100	94,26	91,400	14,092	240,100	11,765

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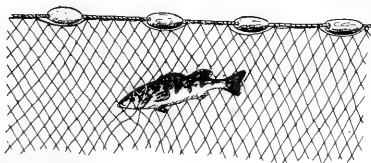
GULF FISHERIES

FLORIDA, WEST COAST - CATCH BY GEAR, 1963 - Continued

SPECIES	DIP NETS		CAST NETS		SPEARS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
DRUM, RED.	-	-	-	-	600	\$68
FLOUNDERS	-	-	-	-	51,300	10,209
MULLET, BLACK.	-	-	16,400	\$870	-	-
UNCLASSIFIED:						
FOR FOOD	-	-	2,000	133	-	-
BAIT, REDUCTION, OR						
ANIMAL FOOD	-	-	2,000	50	-	-
LOBSTERS, SPINY	9,300	\$3,627	-	-	-	-
TOTAL	9,300	3,627	20,400	1,053	51,900	10,277

SPECIES	DREDGES		TONGS		HOOKS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CLAMS, HARD, PUBLIC.	-	-	6,300	\$1,985	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	-	-	2,450,800	700,930	-	-
FALL	-	-	1,694,400	484,597	-	-
PRIVATE:						
SPRING	-	-	85,600	24,482	-	-
FALL	-	-	47,600	13,614	-	-
SCALLOPS:						
BAY	227,900	\$58,772	-	-	-	-
CALICO	200	44	-	-	-	-
SPONGES:						
GRASS	-	-	-	-	1,800	\$4,341
SHEEPSWOL	-	-	-	-	16,900	99,447
YELLOW	-	-	-	-	10,600	16,022
TOTAL	228,000	58,816	4,284,700	1,225,608	29,300	119,810

SPECIES	DIVING OUTFITS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE
LOBSTERS, SPINY	-	-	200	\$78
CLAMS, HARD, PUBLIC.	-	-	1,100	346
OYSTERS, MARKET, PUBLIC:				
SPRING	-	-	2,100	599
FALL	-	-	1,600	458
SPONGES:				
GRASS	200	\$819	-	-
SHEEPSWOL	24,900	262,286	-	-
YELLOW	800	4,346	-	-
TOTAL	25,900	267,451	5,000	1,481



GILL NET

GULF FISHERIES

ALABAMA
OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS, SHRIMP	FYKE AND HOOP NETS, FISH	POTS AND TRAPS	
				CRAB	FISH
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	659	-	-	-
ON BOATS AND SHORE:					
REGULAR	13	395	11	64	6
CASUAL	-	26	6	-	6
TOTAL	13	1,080	17	64	12
VESSELS, MOTOR	-	247	-	-	-
GROSS TONNAGE	-	8,977	-	-	-
BOATS:					
MOTOR	4	247	17	59	12
OTHER	2	-	-	-	-
GEAR:					
NUMBER	4	660	476	5,900	250
LENGTH, YARDS	1,200	-	-	-	-
YARDS AT MOUTH	-	9,500	-	-	-
ITEM	GILL NETS, RUNAROUND	TRAMMEL NETS	LINES		
			HAND	LONG OR SET WITH HOOKS	TROT WITH BAITS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	-	201	-	-
ON BOATS AND SHORE:					
REGULAR	9	122	6	4	4
CASUAL	2	-	18	1	-
TOTAL	11	122	225	5	4
VESSELS, MOTOR	-	-	22	-	-
GROSS TONNAGE	-	-	1,154	-	-
BOATS:					
MOTOR	9	67	24	5	4
OTHER	2	55	-	-	-
GEAR:					
NUMBER	11	122	204	5	4
SQUARE YARDS	5,600	122,000	-	-	-
HOOKS OR BAITS	-	-	1,104	1,500	2,000
ITEM	LINES- CONTINUED	SPEARS	DREDGES	TONGS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	SNAG				
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	-	12	-	862
ON BOATS AND SHORE:					
REGULAR	2	15	8	521	740
CASUAL	2	8	2	156	189
TOTAL	4	23	22	677	1,791
VESSELS, MOTOR	-	-	3	-	268
GROSS TONNAGE	-	-	93	-	10,077
BOATS:					
MOTOR	4	23	2	384	632
OTHER	-	-	-	60	117
GEAR:					
NUMBER	50	23	10	666	-
YARDS AT MOUTH	-	-	11	-	-
HOOKS OR BAITS	15,000	-	-	-	-



GULF FISHERIES

239

ALABAMA CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		OTTER TRAWLS		FYKE AND HOOP NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	1,800	\$150	-	-	-	-
BLUE RUNNER	500	29	-	-	-	-
BUFFALOFISH	-	-	-	-	63,500	\$6,643
CABIO	-	-	300	\$27	-	-
CROAKER	17,800	1,479	100	4	-	-
DRUM:						
BLACK	2,000	130	300	16	-	-
RED	2,600	394	400	68	-	-
FLOUNDERS	-	-	67,800	9,207	-	-
GROUPERS	-	-	1,000	92	-	-
JEWFISH	-	-	100	6	-	-
KING WHITING OR "KINGFISH"	-	-	237,800	13,665	-	-
MULLET	10,400	521	-	-	-	-
PADDOLEFISH	-	-	-	-	10,300	1,230
POMPANO	100	54	-	-	-	-
SEA CATFISH	-	-	4,500	222	-	-
SEA TROUT:						
SPOTTED	14,100	3,572	300	71	-	-
WHITE	-	-	77,900	4,109	-	-
SHEEPSHEAD:						
FRESH-WATER	-	-	-	-	14,800	1,945
SALT-WATER	-	-	2,800	187	-	-
SNAPPER, RED	-	-	11,900	1,785	-	-
SPANISH MACKEREL	17,500	1,586	300	30	-	-
SPOT	16,300	814	100	13	-	-
STURGEON	-	-	-	-	700	95
CRABS, BLUE, HARD	-	-	500	35	-	-
SHRIMP	-	-	7,760,000	2,419,219	-	-
SQUID	-	-	4,100	309	-	-
TOTAL	83,100	8,729	8,170,200	2,449,065	89,300	9,913

SPECIES	POTS AND TRAPS		GILL NETS, RUNAROUND		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	1,500	\$137	500	\$38
CATFISH AND BULLHEADS	41,900	\$10,481	-	-	-	-
CROAKER	-	-	-	-	28,700	1,669
DRUM:						
BLACK	-	-	-	-	7,900	493
RED	-	-	3,100	465	14,300	2,177
MULLET	-	-	-	-	1,379,200	70,278
PADDOLEFISH	900	106	-	-	-	-
SEA CATFISH	-	-	-	-	1,300	105
SEA TROUT, SPOTTED	-	-	4,100	1,030	31,900	8,046
SHEEPSHEAD, SALT-WATER	-	-	-	-	11,700	769
SPANISH MACKEREL	-	-	18,900	1,716	300	41
SPOT	-	-	-	-	19,200	939
STURGEON	-	-	300	47	-	-
CRABS, BLUE, HARD	1,292,600	74,495	-	-	-	-
TOTAL	1,335,400	85,082	27,900	3,395	1,495,000	84,555

SPECIES	LINES							
	HAND		LONG OR SET WITH HOOKS		TROT WITH BAITS		SNAG	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CABIO	500	\$32	-	-	-	-	-	-
CATFISH AND BULLHEADS	-	-	2,200	\$537	-	-	-	-
GROUPERS	294,500	42,175	-	-	-	-	-	-
JEWFISH	41,300	3,811	-	-	-	-	-	-
POMPANO	1,000	621	-	-	-	-	-	-
SEA TROUT, SPOTTED	3,100	817	-	-	-	-	-	-
SNAPPER, RED	2,303,000	661,637	-	-	-	-	-	-
SPANISH MACKEREL	2,000	176	-	-	-	-	400	\$56
STURGEON	-	-	-	-	-	-	-	-
CRABS, BLUE, HARD	-	-	-	-	3,700	\$206	-	-
TOTAL	2,645,400	709,269	2,200	537	3,700	206	400	56

SPECIES	SPEARS		DREDGES		TONGS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS	39,600	\$11,071	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	-	-	-	-	360,800	\$132,969
FALL	-	-	-	-	527,900	189,035
PRIVATE:						
SPRING	-	-	-	-	92,500	25,229
FALL	-	-	3,400	\$1,372	10,800	3,952
TOTAL	39,600	11,071	3,400	1,372	992,000	351,205

GULF FISHERIES

MISSISSIPPI

OPERATING UNITS BY GEAR, 1963

ITEM	PURSE SEINES, MENHADEN	OTTER TRAWLS		POTS AND TRAPS, CRAB	GILL NETS, RUNAROUND
		FISH	SHRIMP		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	282	194	1,157	-	-
ON BOATS AND SHORE:					
REGULAR	-	-	220	19	4
CASUAL	-	-	220	3	-
TOTAL	282	194	1,597	22	4
VESSELS, MOTOR	16	82	432	-	-
GROSS TONNAGE	4,998	3,204	15,025	-	-
BOATS, MOTOR	32	-	357	22	4
GEAR:					
NUMBER	16	102	1,033	1,870	4
LENGTH, YARDS	8,995	-	-	-	-
SQUARE YARDS	-	-	-	-	2,400
YARDS AT MOUTH	-	1,987	14,816	-	-

ITEM	TRAMMEL NETS	LINES		CAST NETS
		HAND	TROT WITH BAITS	
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	25	117	-	-
ON BOATS AND SHORE:				
REGULAR	29	-	9	-
CASUAL	6	75	2	6
TOTAL	60	192	11	6
VESSELS, MOTOR	8	13	-	-
GROSS TONNAGE	105	534	-	-
BOATS:				
MOTOR	36	69	11	-
OTHER	18	-	-	-
GEAR:				
NUMBER	38	181	11	6
SQUARE YARDS	29,400	-	-	-
HOOKS OR BAITS	-	923	5,500	-

ITEM	SPEARS	DREDGES, OYSTER, COMMON	TONGS, OYSTER	TOTAL, EXCLUSIVE OF DUPLI- CATION
				NUMBER
FISHERMEN:				
ON VESSELS	-	591	-	2,017
ON BOATS AND SHORE:				
REGULAR	-	40	488	698
CASUAL	16	20	160	406
TOTAL	16	651	648	3,121
VESSELS, MOTOR	-	196	-	593
GROSS TONNAGE	-	4,440	-	23,970
BOATS:				
MOTOR	-	30	522	940
OTHER	-	-	111	129
GEAR:				
NUMBER	16	452	648	-
YARDS AT MOUTH	-	547	-	-



GULF FISHERIES

241

MISSISSIPPI - CATCH BY GEAR, 1963

SPECIES	PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE
CROAKER	-	-	600	\$30
DRUM:				
BLACK	-	-	900	45
RED	-	-	400	20
FLOUNDERS	-	-	56,700	6,703
KING WHITING OR "KINGFISH"	-	-	256,300	16,049
MENHADEN	250,429,200	\$3,276,215	-	-
SEA CATFISH	-	-	11,700	568
SEA TROUT OR WEAKFISH, WHITE	-	-	66,400	3,649
SHEEPSHEAD, SALT-WATER	-	-	1,000	66
SNAPPER, RED	-	-	4,000	397
UNCLASSIFIED, FOR BAIT, REDUCTION, AND ANIMAL FOOD	-	-	72,576,600	1,210,320
SHRIMP	-	-	9,374,700	2,484,195
TOTAL	250,429,200	3,276,215	82,349,300	3,722,042

SPECIES	POTS AND TRAPS		GILL NETS, RUNAROUND		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUEFISH	-	-	4,000	\$400	600	\$60
CROAKER	-	-	-	-	2,000	111
DRUM:						
BLACK	-	-	-	-	16,000	1,213
RED	-	-	-	-	56,100	7,059
KING WHITING OR "KINGFISH"	-	-	-	-	300	28
MULLET, BLACK	-	-	3,700	185	375,000	19,202
POMPANO	-	-	-	-	300	86
SEA CATFISH	-	-	-	-	1,000	50
SEA TROUT OR WEAKFISH:						
SPOTTED	-	-	2,100	525	72,000	18,002
WHITE	-	-	-	-	1,400	84
SHEEPSHEAD, SALT-WATER	-	-	-	-	26,000	2,217
SPANISH MACKEREL	-	-	1,100	107	-	-
SPOT	-	-	-	-	4,400	257
CRABS: BLUE:						
HARD	1,029,300	\$59,426	-	-	-	-
SOFT AND PEELER	2,700	466	-	-	-	-
TOTAL	1,032,000	59,892	10,900	1,217	557,100	48,379

SPECIES	LINES				CAST NETS	
	HAND		TROT WITH BAITS			
	POUNDS	VALUE	POUNDS	VALUE		
CABIO	2,900	\$227	-	-	-	-
DRUM, RED	2,500	382	-	-	-	-
GROUPERS	271,400	29,859	-	-	-	-
MULLET, BLACK	-	-	-	-	3,500	\$174
SEA TROUT OR WEAKFISH:						
SPOTTED	6,200	1,547	-	-	-	-
WHITE	400	12	-	-	-	-
SHEEPSHEAD, SALT-WATER	700	58	-	-	-	-
SNAPPER, RED	1,661,600	471,000	-	-	-	-
SPANISH MACKEREL	400	44	-	-	-	-
CRABS, BLUE, HARD	-	-	82,700	\$4,207	-	-
TOTAL	2,166,300	503,129	82,700	4,207	3,500	174

SPECIES	SPEARS		DREDGES		TONGS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS	2,600	\$500	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	-	-	3,400,000	\$631,000	503,100	\$106,979
FALL	-	-	243,500	80,066	115,400	39,317
PRIVATE:						
SPRING	-	-	67,500	12,751	-	-
FALL	-	-	350,000	105,000	-	-
TOTAL	2,600	500	4,061,000	828,819	618,500	146,296

GULF FISHERIES

LOUISIANA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES, MENHADEN	OTTER TRAWLS		FYKE AND HOOP NETS, FISH
			FISH	SHRIMP	
			NUMBER	NUMBER	
FISHERMEN:					
ON VESSELS	-	879	12	3,380	-
ON BOATS AND SHORE:					
REGULAR	47	-	-	3,098	238
CASUAL	19	-	-	1,046	135
TOTAL	66	879	12	7,524	373
VESSELS, MOTOR	-	48	4	1,262	-
GROSS TONNAGE	-	11,454	178	47,599	-
BOATS:					
MOTOR	31	96	-	2,867	373
OTHER	13	-	-	-	-
GEAR:					
NUMBER	17	48	8	5,020	12,336
LENGTH, YARDS	5,516	20,905	-	67,389	-
YARDS AT MOUTH	-	-	132	-	-

ITEM	POTS AND TRAPS		GILL NETS		TRAMMEL NETS
	CRAB	CRAW- FISH	ANCHOR, SET OR STAKE	RUNAROUND	
	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:					
ON VESSELS	-	-	2	-	8
ON BOATS AND SHORE:					
REGULAR	21	83	102	6	127
CASUAL	12	35	52	-	34
TOTAL	33	118	156	6	169
VESSELS, MOTOR	-	-	1	-	3
GROSS TONNAGE	-	-	12	-	46
BOATS:					
MOTOR	33	118	141	3	104
OTHER	-	-	-	-	24
GEAR:					
NUMBER	3,010	6,680	142	3	110
SQUARE YARDS	-	-	58,408	1,350	35,765

ITEM	LINES			DIP NETS		SPEARS
	HAND	LONG OR SET WITH HOOKS	TROT WITH BAITS	COMMON	DROP	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:						
ON VESSELS	172	-	-	-	-	-
ON BOATS AND SHORE:						
REGULAR	37	800	587	30	265	-
CASUAL	90	389	122	-	59	9
TOTAL	299	1,189	709	30	344	9
VESSELS, MOTOR	30	-	-	-	-	-
GROSS TONNAGE	1,223	-	-	-	-	-
BOATS:						
MOTOR	81	1,183	664	15	296	-
OTHER	-	1	-	-	1	-
GEAR:						
NUMBER	1,388	1,923	743	30	22,792	9
HOOKS OR BAITS	2,393	676,920	456,840	-	-	-

ITEM	DREDGES, OYSTER, COMMON	TONGS, OYSTER	BRUSH TRAPS	GRABS	BY HAND	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
	FISHERMEN:					
ON VESSELS	513	-	-	-	-	4,840
ON BOATS AND SHORE:						
REGULAR	361	459	88	30	70	3,812
CASUAL	51	14	16	24	-	1,553
TOTAL	925	473	104	54	70	10,205
VESSELS, MOTOR	202	-	-	-	-	1,498
GROSS TONNAGE	3,695	-	-	-	-	62,703
BOATS:						
MOTOR	212	190	104	48	32	4,212
OTHER	-	58	-	6	11	114
GEAR:						
NUMBER	752	473	43,160	54	-	-
YARDS AT MOUTH	865	-	-	-	-	-

GULF FISHERIES

243

LOUISIANA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	300	\$12	-	-	-	-
BUFFALOFISH	61,000	6,100	-	-	-	-
CARP	1,100	44	-	-	-	-
CATFISH AND BULLHEADS	75,000	17,250	-	-	-	-
CROAKER	800	40	-	-	500	\$35
DRUM:						
BLACK	32,300	2,584	-	-	12,100	938
RED	59,700	11,940	-	-	400	72
FLOUNDERS	1,900	342	-	-	150,400	23,599
GARFISH	121,300	7,209	-	-	-	-
GROUPERS	-	-	-	-	4,800	177
JEWFISH	-	-	-	-	2,400	106
KING WHITING OR "KINGFISH"	3,200	160	-	-	335,600	17,726
MENHADEN	-	-	633,484,300	\$7,861,871	-	-
MULLET, BLACK	3,100	131	-	-	300	12
POMPANO	100	60	-	-	800	520
SAWFISH	500	25	-	-	3,800	162
SEA CATFISH	4,700	470	-	-	33,100	1,655
SEA TROUT OR WEAKFISH:						
SPOTTED	56,000	14,000	-	-	-	-
WHITE	8,200	480	-	-	33,200	1,660
SHARKS, UNCLASSIFIED	600	30	-	-	3,300	146
SHEEPSHEAD:						
FRESH-WATER	3,600	288	-	-	-	-
SALT-WATER	15,500	1,240	-	-	32,300	2,054
SNAPPER, RED	-	-	-	-	78,800	13,659
SPANISH MACKEREL	-	-	-	-	1,900	170
SPOT	1,200	60	-	-	5,300	385
TRIPLETAIL	-	-	-	-	2,200	120
UNCLASSIFIED, FOR BAIT, REDUCTION, AND ANIMAL FOOD	-	-	-	-	6,970,800	87,400
CRABS, BLUE, HARD	-	-	-	-	566,100	30,001
SHRIMP	-	-	-	-	80,797,400	19,786,826
SQUID	-	-	-	-	5,300	550
TURTLES, GREEN	-	-	-	-	2,200	223
TOTAL	450,100	62,465	633,484,300	7,861,871	89,065,200	19,968,206

SPECIES	FYKE AND HOOP NETS		POTS AND TRAPS		GILL NETS	
	POUNDS	VALUE	POUNDS	VALUE	ANCHOR, SET OR STAKE	
					POUNDS	VALUE
BOWFIN	6,900	\$276	-	-	-	-
BUFFALOFISH	334,500	34,520	-	-	313,100	\$34,952
CARP	14,300	706	-	-	9,000	513
CATFISH AND BULLHEADS	854,100	187,188	-	-	298,800	66,009
DRUM:						
BLACK	-	-	-	-	4,300	215
RED	6,000	1,080	-	-	6,900	1,602
GARFISH	2,800	168	-	-	279,900	14,102
PADDLEFISH	100	5	-	-	3,000	280
SHEEPSHEAD, FRESH-WATER	278,600	24,059	-	-	44,500	4,990
CRABS, BLUE, HARD	-	-	81,600	\$5,380	-	-
CRAWFISH, FRESH-WATER	-	-	860,300	129,288	-	-
TURTLES, SNAPPER	2,200	340	-	-	-	-
TOTAL	1,499,500	248,342	941,900	134,668	961,500	122,663

SPECIES	GILL NETS - CONTINUED		TRAMMEL NETS		LINES, HAND	
	RUNAROUND		POUNDS	VALUE	POUNDS	VALUE
	POUNDS	VALUE				
BUFFALOFISH	-	-	58,800	\$5,880	-	-
CABLO	-	-	-	-	6,800	\$345
CATFISH AND BULLHEADS	-	-	91,800	20,979	11,200	2,576
CROAKER	-	-	23,600	1,483	-	-
DRUM:						
BLACK	-	-	291,200	18,194	200	10
RED	-	-	383,800	63,039	2,600	442
FLOUNDERS	-	-	7,300	1,093	200	36
GARFISH	67,700	\$3,385	14,600	742	15,200	760
GROUPERS	-	-	-	-	18,600	1,863
JEWFISH	-	-	-	-	5,900	592
KING WHITING OR "KINGFISH"	-	-	9,900	495	2,000	100
MULLET, BLACK	-	-	15,500	572	-	-
POMPANO	-	-	-	-	200	130
SEA CATFISH	-	-	21,100	1,055	-	-
SEA TROUT OR WEAKFISH:						
SPOTTED	-	-	302,400	66,590	14,700	3,605
WHITE	-	-	32,900	3,691	3,100	180

(CONTINUED ON NEXT PAGE)

GULF FISHERIES

LOUISIANA - CATCH BY GEAR, 1963 - Continued

SPECIES	GILL NETS, CONTINUED		TRAMMEL NETS		LINES	
	RUNAROUND		POUNDS	VALUE	HAND	
	POUNDS	VALUE			POUNDS	VALUE
SHEEPSHEAD:						
FRESH-WATER	-	-	10,900	\$1,164	-	-
SALT-WATER	-	-	126,500	9,832	700	\$56
SNAPPER, RED	-	-	-	-	309,100	81,533
SPOT	-	-	1,000	50	-	-
TRIPLETAIL	-	-	600	30	-	-
WARSAW	-	-	-	-	5,000	480
TERRAPIN	-	-	-	-	700	140
TURTLES, SNAPPER	-	-	-	-	5,100	920
TOTAL	67,700	\$3,385	1,391,900	196,889	401,300	93,768

SPECIES	LINES - CONTINUED				DIP NETS	
	LONG OR SET WITH HOOKS		TROT WITH BAITS		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE		
CATFISH AND BULLHEADS	4,675,500	\$935,092	-	-	-	-
DRUM:						
BLACK	3,500	280	-	-	-	-
RED	2,400	500	-	-	1,800	\$360
GARFISH	26,400	1,320	-	-	-	-
KING WHITING OR "KINGFISH"	-	-	-	-	1,100	55
PADDFISH	3,100	275	-	-	-	-
SEA TROUT OR WEAKFISH:						
SPOTTED	2,400	600	-	-	4,900	1,225
WHITE	-	-	-	-	2,200	110
SHEEPSHEAD:						
FRESH-WATER	5,300	560	-	-	-	-
SALT-WATER	2,100	168	-	-	-	-
CRABS, BLUE:						
HARD	-	-	5,901,500	\$315,231	1,430,700	96,484
SOFT AND PEELER	-	-	64,000	32,000	213,100	106,550
CRAWFISH, FRESH-WATER	-	-	-	-	31,500	5,175
TURTLES, SNAPPER	14,800	2,544	-	-	-	-
TOTAL	4,735,500	941,339	5,965,500	347,231	1,685,300	209,959

SPECIES	SPEARS		DREDGES		TONGS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS	2,400	\$432	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	-	-	1,494,800	\$465,509	920,600	\$285,386
FALL	-	-	251,500	102,774	130,200	44,208
PRIVATE:						
SPRING	-	-	6,209,000	1,861,918	186,900	59,752
FALL	-	-	2,212,800	839,551	130,800	52,183
TOTAL	2,400	432	10,168,100	3,269,752	1,368,500	441,529

SPECIES	BRUSH TRAPS		GRABS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CRABS, BLUE, SOFT	31,600	\$25,800	-	-	-	-
SHRIMP	11,300	2,260	-	-	-	-
OYSTERS, MARKET:						
PRIVATE:						
SPRING	-	-	-	-	22,600	\$7,232
FALL	-	-	-	-	4,000	1,600
FROGS	-	-	5,800	\$1,966	-	-
TOTAL	62,900	28,060	5,800	1,966	26,600	8,832



GULF FISHERIES TEXAS

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	PURSE SEINES, MENHADEN	OTTER TRAWLS, SHRIMP	FYKE AND HOOP NETS, FISH	POTS, CRAB
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:					
ON VESSELS	-	168	3,824	-	-
ON BOATS AND SHORE:					
REGULAR	33	-	594	1	80
CASUAL	16	-	473	-	2
TOTAL	51	168	4,891	1	82
VESSELS, MOTOR	-	8	1,356	-	-
GROSS TONNAGE	-	1,329	67,327	-	-
BOATS:					
MOTOR	20	16	919	1	70
OTHER	-	8	-	-	-
GEAR:					
NUMBER	20	8	3,475	10	9,668
LENGTH, YARDS	4,475	4,000	-	-	-
YARDS AT MOUTH	-	-	47,752	-	-

ITEM	GILL NETS, ANCHOR, SET OR STAKE	TRAMMEL NETS	LINES		DIP NETS, COMMON
			HAND	LONG OR SET WITH HOOKS	
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:					
ON VESSELS	-	6	545	-	-
ON BOATS AND SHORE:					
REGULAR	93	97	10	117	10
CASUAL	16	1	241	17	5
TOTAL	109	104	796	134	15
VESSELS, MOTOR	-	3	119	-	-
GROSS TONNAGE	-	40	4,940	-	-
BOATS:					
MOTOR	85	83	212	134	15
OTHER	14	20	-	-	-
GEAR:					
NUMBER	85	83	786	134	15
SQUARE YARDS	51,700	53,557	-	-	-
HOOKS OR BAITS	-	-	4,643	197,100	-

ITEM	SPEARS	DREDGES, OYSTER, COMMON	TONGS, OYSTER	BY HAND, OYSTER	TOTAL, EXCLUSIVE OF DUPLI- CATION
					<u>NUMBER</u>
FISHERMEN:					
ON VESSELS	-	261	2	-	4,474
ON BOATS AND SHORE:					
REGULAR	48	379	44	11	822
CASUAL	117	-	-	10	709
TOTAL	165	640	46	21	6,005
VESSELS, MOTOR	-	65	1	-	1,419
GROSS TONNAGE	-	1,008	8	-	70,406
BOATS:					
MOTOR	20	176	44	21	1,276
OTHER	-	-	-	-	42
GEAR:					
NUMBER	165	241	46	-	-
YARDS AT MOUTH	-	241	-	-	-



GULF FISHERIES

TEXAS - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES		OTTER TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
DRUM:						
BLACK	21,600	\$1,128	-	-	11,200	\$475
RED	17,500	3,838	-	-	1,100	220
FLOUNDERS	-	-	-	-	158,600	39,632
GROUPERS	-	-	-	-	4,100	379
JEW FISH	-	-	-	-	300	30
KING WHITTING OR "KINGFISH"	-	-	-	-	146,900	7,700
MENHADEN	-	-	83,735,900	\$1,034,170	-	-
MULLET, BLACK	-	-	-	-	8,700	261
POMPANO	500	175	-	-	-	-
SEA CATFISH	2,900	145	-	-	28,100	2,087
SEA TROUT OR WEAKFISH,						
SPOTTED	148,900	38,997	-	-	200	50
SHEEPSHEAD, SALT-WATER	15,700	1,570	-	-	48,000	4,505
SNAPPER, RED	-	-	-	-	53,200	14,094
WARSAW	-	-	-	-	700	56
UNCLASSIFIED:						
FOR FOOD	1,300	90	-	-	150,500	7,525
BAIT, REDUCTION, AND						
ANIMAL FOOD	16,800	336	-	-	88,600	4,313
CRABS: BLUE, HARD	-	-	-	-	179,700	10,618
SHRIMP	-	-	-	-	70,231,400	26,591,493
SQUID	-	-	-	-	37,400	3,884
TOTAL	225,400	46,279	83,735,900	1,034,170	71,148,700	26,687,322

SPECIES	FYKE AND HOOP NETS		POTS AND TRAPS		GILL NETS, ANCHOR, SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	20,400	\$2,448	-	-	74,100	\$11,088
CARP	-	-	-	-	16,800	1,848
CATFISH AND BULLHEADS . . .	-	-	-	-	1,600	400
DRUM:						
BLACK	-	-	-	-	459,700	36,094
RED	-	-	-	-	4,600	1,081
FLOUNDERS	-	-	-	-	37,200	9,300
GARFISH	12,000	480	-	-	70,100	3,707
POMPANO	-	-	-	-	100	35
SEA CATFISH	-	-	-	-	4,100	328
SEA TROUT OR WEAKFISH,						
SPOTTED	-	-	-	-	105,800	26,450
SHEEPSHEAD, SALT-WATER	-	-	-	-	800	64
CRABS:						
BLUE, HARD	-	-	2,800,700	\$189,990	-	-
SOFT AND PEELER	-	-	1,600	360	-	-
TOTAL	32,400	2,928	2,802,500	189,350	774,900	90,395

SPECIES	TRAMMEL NETS		LINES			
	POUNDS	VALUE	HAND		LONG OR SET WITH HOOKS	
			POUNDS	VALUE	POUNDS	VALUE
CABIO	-	-	16,100	\$1,669	-	-
CATFISH AND BULLHEADS . . .	-	-	-	-	39,400	\$12,323
CROAKER	-	-	-	-	200	8
DRUM:						
BLACK	496,000	\$39,673	14,700	1,140	341,500	27,001
RED	183,300	42,908	24,600	5,815	451,300	111,280
FLOUNDERS	2,700	675	5,300	1,325	4,800	1,200
GARFISH	-	-	151,500	14,914	3,000	120
GROUPERS	-	-	7,500	714	-	-
JEW FISH	-	-	-	-	-	-
MULLET, BLACK	200	6	-	-	-	-
POMPANO	300	105	400	120	400	140
SEA CATFISH	9,500	751	800	55	8,000	640
SEA TROUT OR WEAKFISH,						
SPOTTED	501,400	125,359	51,200	12,921	365,800	93,599
SHEEPSHEAD:						
FRESH-WATER	-	-	-	-	1,900	185
SALT-WATER	25,200	2,022	5,400	496	24,800	1,984
SNAPPER, RED	-	-	2,115,500	576,346	-	-
WARSAW	-	-	37,900	3,498	-	-
UNCLASSIFIED:						
FOR FOOD	3,700	185	100	5	2,200	110
BAIT, REDUCTION, AND						
ANIMAL FOOD	2,500	75	-	-	-	-
TOTAL	1,224,800	211,759	2,433,000	619,018	1,243,300	248,590

(CONTINUED ON NEXT PAGE)

GULF FISHERIES

247

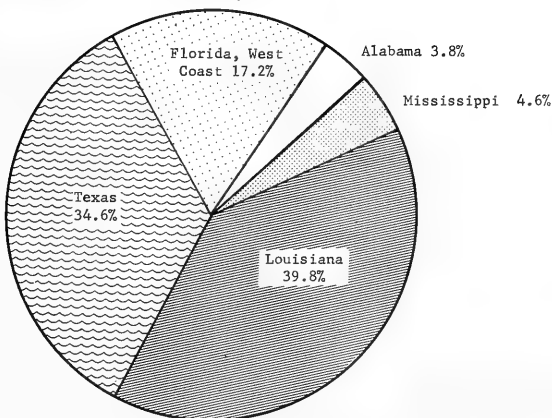
TEXAS - CATCH BY GEAR, 1963 - Continued

SPECIES	DIP NETS		SPEARS		DREDGES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
DRUM:						
BLACK	17,800	\$1,424	-	-	-	-
RED	3,200	736	-	-	-	-
FLOUNDERS	-	-	67,500	\$16,875	-	-
SEA TROUT OR WEAKFISH	-	-	-	-	-	-
SPOTTED	16,900	4,225	-	-	-	-
OYSTERS, MARKET:						
PUBLIC:						
SPRING	-	-	-	-	1,509,600	\$509,993
FALL	-	-	-	-	971,000	347,434
PRIVATE:						
SPRING	-	-	-	-	56,300	21,957
FALL	-	-	-	-	21,400	13,268
TOTAL	37,900	6,385	67,500	16,875	2,558,300	892,652

SPECIES	TONGS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE
OYSTERS, MARKET:				
PUBLIC:				
SPRING	25,800	\$8,328	14,700	\$5,186
FALL	10,800	3,404	7,800	3,105
PRIVATE, SPRING	-	-	500	160
TOTAL	36,600	11,732	23,000	9,451

GULF STATES SHRIMP CATCH, 1963

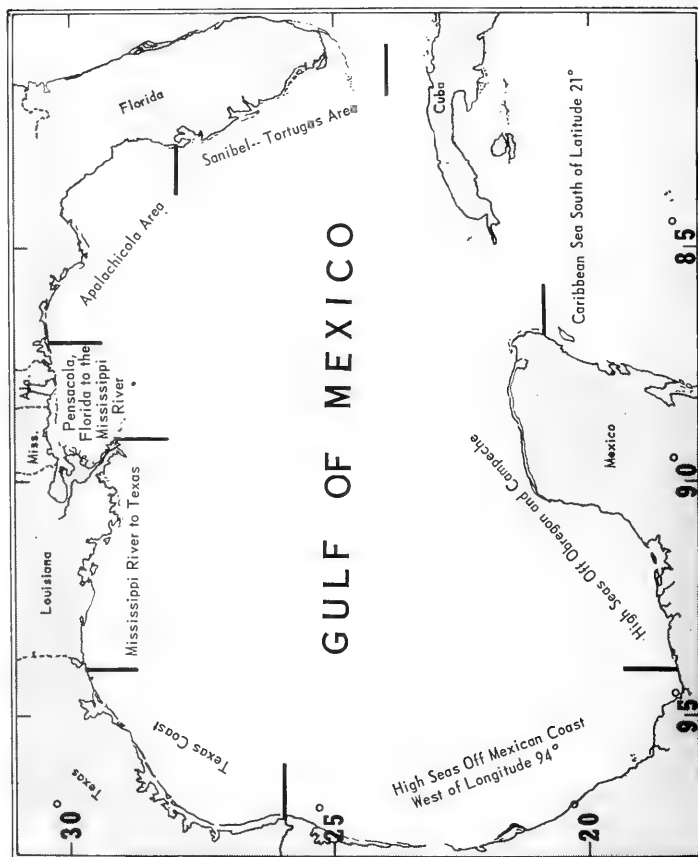
(Heads-on)



Total - 203,116,000 pounds

GULF FISHERIES

Chart depicting the major statistical areas used in reporting the shrimp catch by fishing craft on trips completed during 1963.



GULF SHRIMP FISHERY

Greater abundance of shrimp on all major fishing grounds of the northern Gulf in 1963 resulted in an increase of over 39 million pounds (heads-off weight) in total landings at Gulf ports compared with the previous year. Fishing grounds located between the Mississippi River and the Louisiana-Texas border were again the most productive, yielding 26 million pounds more than in 1962 and approximately 41 percent of the total 1963 Gulf landings. Other areas with increases over 1962 were Sanibel-Tortugas, up 1.8 million pounds; northwest Florida, up 1.1 million; Pensacola to Mississippi River, up 5.3 million; and the Texas coast, up 8.7 million pounds. There was a decrease of about 5.9 million pounds in catches from the high seas off foreign coasts. The abundance of shrimp in nearby waters precluded the necessity for fishing more distant grounds. In all northern Gulf areas except northwest Florida, the increased catches were accomplished by craft making fewer trips than during the previous year.

For the second successive year, an excellent run of white shrimp in Louisiana waters was a major factor in a change in the species composition of the Gulf landings. This species comprised 37 percent of the 1963 landings compared with 26 percent the previous year. Brown shrimp accounted for 43 percent of the landings--3 percent less than 1962--and pink shrimp, 19 percent compared with 25 percent during 1962. Seabobs and royal red shrimp accounted for 1 percent compared with 3 percent the previous year. There were no significant changes from 1962 in the count size (number of heads-off shrimp per pound) composition of landings--the smaller count sizes (31 and over) continued to predominate.

The ex-vessel value of landings did not increase in the same magnitude as the volume. The value of catches from the West Coast of Florida and Texas was less than that of the previous year despite increases in volume. Ex-vessel prices for smaller size shrimp (over 31 count) began a downward trend following an exceptional run of shrimp in the Tarpon springs-Cedar Keys area during April. Large catches of small shrimp in Louisiana inside waters after the opening of the season on May 15 accelerated the downward trend. Relatively large year-end inventories of canned and frozen small shrimp, which remained unsold at the close of 1962, also contributed to the price decline. The ex-vessel prices for large shrimp (under 25 count) remained at comparatively high levels with no appreciable weakening until July. The lowest prices for the year for these sizes were paid during October. At the close of the year, ex-vessel prices on all sizes were stable and on a general upward trend. The average annual ex-vessel price per pound (heads-off weight) was 49 cents, about 18 cents per pound less than the 1962 average. There was a decline of 16 cents in the average ex-vessel price for shrimp landed at West Coast of Florida, Mississippi, and Louisiana ports, a 17-cent decline in Texas, and a 20-cent-per-pound decline in Alabama.

The following tabulations include information on the species of shrimp taken in the Gulf by size; the number of fishing trips; and the catch by area, depth, and size. Catch figures represent the heads-off weight and, therefore, are not directly comparable with the heads-on (live weight) quantities published in the General Review, regional tables, or the Review of Certain Major Fisheries. The pounds of heads-off shrimp may be converted to heads-on weight by multiplying brown shrimp poundage by 1.61; white, 1.54; pink, 1.60; seabobs, 1.53; and royal red, 1.80.

Information on the landings and catch of shrimp in the Gulf area in the following tables has been previously published in Current Fishery Statistics No. 3520. Data on landings and value of shrimp by species and size for the South Atlantic States are included in Section 5 of this Digest.

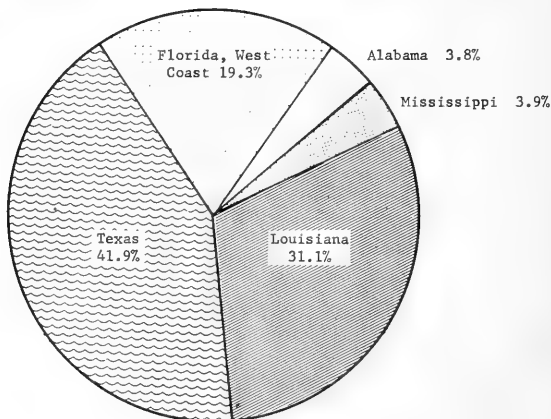
GULF FISHERIES

SUMMARY OF GULF SHRIMP LANDINGS, 1963

SIZE	BROWN		PINK		WHITE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
UNDER 15.	1,941,364	\$1,658,050	77,757	\$70,725	110,528	\$91,870
15 - 20	7,840,562	6,217,879	903,196	800,974	3,044,484	2,542,620
21 - 25	6,313,406	4,429,206	3,171,656	2,637,985	4,519,907	3,004,233
26 - 30	5,958,338	3,675,840	3,544,114	2,581,485	5,898,495	3,245,932
31 - 40	14,128,710	7,286,072	6,936,849	4,296,548	10,288,480	4,848,361
41 - 50	5,426,769	2,282,160	3,937,394	2,051,502	5,822,414	2,269,054
51 - 67	4,827,538	1,627,128	3,088,102	1,316,293	9,640,435	2,541,191
68 AND OVER	9,541,857	1,937,155	2,523,360	640,435	7,762,045	1,386,856
TOTAL	55,980,564	29,113,490	24,182,428	14,395,947	47,086,788	19,930,119

SIZE	SEA BOBS		ROYAL RED		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
UNDER 15.	-	-	300	\$156	2,129,949	\$1,820,801
15 - 20	-	-	-	-	11,788,262	9,561,473
21 - 25	-	-	-	-	14,004,969	10,071,424
26 - 30	-	-	1,665	1,144	15,402,612	9,504,401
31 - 40	-	-	4,280	2,341	31,358,319	16,433,322
41 - 50	-	-	-	-	15,188,577	6,602,716
51 - 67	-	-	-	-	17,556,075	5,484,612
68 AND OVER	1,149,867	\$94,290	-	-	20,977,129	4,058,738
TOTAL	1,149,867	94,290	6,245	3,641	128,405,692	63,537,487

VALUE OF THE GULF STATES SHRIMP CATCH, 1963



Total - \$63,537,000

GULF FISHERIES

251

GULF SHRIMP LANDINGS, BY SPECIES AND SIZE, 1963

SPECIES AND SIZE	FLORIDA, WEST COAST		ALABAMA		MISSISSIPPI	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BROWN:						
UNDER 15	-	-	14, 128	\$11, 830	60, 630	\$58, 719
15 - 20	31, 389	\$23, 971	344, 626	292, 485	119, 709	93, 917
21 - 25	27, 330	18, 941	303, 885	220, 024	108, 343	74, 690
26 - 30	22, 316	14, 906	309, 501	198, 072	353, 122	173, 855
31 - 40	93, 112	51, 710	654, 680	336, 387	993, 052	460, 298
41 - 50	37, 680	17, 933	628, 098	267, 754	1, 005, 191	407, 174
51 - 67	200, 240	77, 387	984, 641	351, 627	653, 044	299, 315
68 AND OVER	87, 126	30, 074	265, 807	78, 587	302, 757	88, 300
TOTAL	499, 193	234, 922	3, 515, 366	1, 756, 766	3, 775, 878	1, 656, 268
PINK:						
UNDER 15	568, 376	490, 103	-	-	1, 757	1, 663
15 - 20	2, 425, 802	1, 990, 236	41	37	7, 251	6, 193
26 - 30	2, 998, 250	2, 139, 941	1, 895	1, 257	18, 994	14, 153
31 - 40	5, 948, 617	3, 638, 701	747	407	54, 569	29, 178
41 - 50	3, 426, 096	1, 769, 583	5, 478	3, 032	75, 472	31, 336
51 - 67	2, 701, 691	1, 126, 354	34, 172	14, 257	2, 832	1, 085
68 AND OVER	2, 511, 711	639, 944	10, 949	4, 290	-	-
TOTAL	20, 580, 543	11, 790, 862	52, 982	23, 280	160, 875	83, 608
WHITE:						
UNDER 15	-	-	1, 728	1, 272	290	180
15 - 20	13, 024	10, 443	143, 738	101, 753	58, 374	39, 011
21 - 25	35, 437	23, 141	164, 508	99, 490	144, 151	78, 237
26 - 30	94, 637	51, 435	281, 354	150, 196	297, 447	138, 181
31 - 40	97, 759	47, 819	317, 794	145, 568	559, 641	235, 138
41 - 50	42, 948	16, 772	224, 913	87, 411	255, 830	92, 245
51 - 67	49, 094	13, 997	137, 855	44, 372	225, 646	68, 869
68 AND OVER	444, 493	65, 556	36, 893	9, 111	431, 372	62, 443
TOTAL	777, 392	229, 163	1, 308, 783	639, 173	1, 972, 751	744, 304
SEA BOBS:	7, 567	807	-	-	68	15
GRAND TOTAL	21, 864, 695	12, 255, 754	4, 877, 131	2, 419, 219	5, 909, 572	2, 484, 195

SPECIES AND SIZE	LOUISIANA		TEXAS		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BROWN:						
UNDER 15	174, 654	\$153, 782	1, 691, 952	\$1, 433, 719	1, 941, 364	\$1, 658, 050
15 - 20	831, 002	762, 490	6, 513, 856	5, 045, 016	7, 840, 582	6, 217, 879
21 - 25	777, 760	573, 419	5, 096, 088	5, 422, 132	6, 313, 406	4, 429, 209
26 - 30	790, 591	481, 412	4, 502, 808	2, 807, 595	5, 998, 336	3, 675, 840
31 - 40	3, 056, 514	1, 521, 905	9, 321, 322	4, 915, 772	14, 128, 710	7, 265, 072
41 - 50	1, 434, 098	603, 857	2, 323, 702	985, 442	5, 428, 769	2, 282, 160
51 - 67	1, 488, 983	460, 628	1, 301, 030	438, 171	4, 827, 538	1, 627, 128
68 AND OVER	6, 331, 008	1, 646, 829	555, 159	93, 365	9, 541, 857	1, 937, 155
TOTAL	16, 884, 210	6, 204, 322	31, 305, 917	19, 261, 212	55, 980, 564	29, 113, 490
PINK:						
UNDER 15	-	-	77, 757	70, 725	77, 757	70, 725
15 - 20	1, 530	1, 530	331, 533	307, 678	903, 196	800, 974
21 - 25	1, 720	1, 553	736, 842	639, 966	3, 171, 656	2, 637, 985
26 - 30	2, 020	1, 776	523, 255	424, 358	3, 544, 114	2, 581, 485
31 - 40	1, 750	1, 331	931, 166	626, 931	6, 936, 849	4, 296, 548
41 - 50	215	138	430, 133	247, 413	3, 937, 394	2, 051, 502
51 - 67	470	235	348, 937	174, 362	3, 088, 102	1, 316, 293
68 AND OVER	-	-	700	201	2, 523, 360	640, 435
TOTAL	7, 705	6, 563	3, 380, 323	2, 491, 634	24, 182, 428	14, 395, 947
WHITE:						
UNDER 15	84, 572	69, 869	23, 938	20, 549	110, 528	91, 870
15 - 20	1, 769, 685	1, 555, 242	1, 059, 663	836, 171	3, 044, 484	2, 542, 620
21 - 25	2, 630, 256	1, 831, 384	1, 545, 555	971, 981	4, 519, 907	3, 004, 233
26 - 30	3, 286, 752	1, 850, 979	1, 938, 305	1, 055, 141	5, 898, 495	3, 245, 932
31 - 40	6, 611, 813	3, 087, 363	2, 711, 473	1, 332, 273	10, 288, 480	4, 648, 361
41 - 50	4, 395, 875	1, 705, 744	902, 648	366, 882	5, 822, 414	2, 269, 054
51 - 67	8, 720, 164	2, 239, 207	507, 676	174, 746	9, 640, 435	2, 541, 191
68 AND OVER	6, 630, 020	1, 171, 743	219, 267	48, 005	7, 762, 045	1, 386, 858
TOTAL	34, 119, 137	13, 511, 731	8, 908, 725	4, 805, 748	47, 086, 788	19, 930, 119
SEA BOBS:	689, 594	63, 294	452, 638	30, 174	1, 149, 867	94, 290
ROYAL RED:						
UNDER 15	-	-	300	156	300	156
25 - 30	1, 040	669	625	475	1, 665	1, 144
31 - 40	558	257	3, 722	2, 094	4, 280	2, 341
TOTAL	1, 598	916	4, 647	2, 725	6, 245	3, 641
GRAND TOTAL	51, 702, 244	19, 786, 826	44, 052, 250	26, 591, 493	128, 405, 892	63, 537, 487

SEE NOTE ON PAGE 254.

GULF COAST SHRIMP CATCH BY AREA, DEPTH, AND SIZE, 1963

MAJOR WATER AREAS, DEPTH, AND SPECIES	TRIPS	SIZE (HEADS-OFF PER POUND)											TOTAL					
		UNDER 15		15 - 20		21 - 25		26 - 30		31 - 40		41 - 50		51 - 67		68 & OVER		
		NUMBR	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS		POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
SANIBEL AND TORTUGAS AREA 0 - 5 FATHOMS: PINK 6 - 20 FATHOMS: PINK 21 - 35 FATHOMS: PINK	-	-	132,989	691,183	915,198	2,490,762	2,180,354	1,940,999	1,000	520	2,137,341	2,137,341	1,620	1,620	10,494,826	1,916	159,608	
	-	-	21,403	42,972	22,331	37,476	22,896	10,614	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	
	-	-	154,392	734,155	937,529	2,534,858	2,204,250	1,951,613	2,139,257	10,656,054								
	TOTAL,	8,795.1																
APALACHICOLA AREA 0 - 5 FATHOMS: BROWN PINK 6 - 20 FATHOMS: SEA BOBS BROWN 1,025 WHITE	-	-	124	4,555	7,304	41,454	188,713	244,953	65,563	365,560	86,964	365,560	365,560	365,560	365,560	365,560	365,560	
	-	-	328	2,434	13,403	112,898	258,713	244,953	65,563	628,292	65,563	628,292	628,292	628,292	628,292	628,292	628,292	
	-	-	6,143	7,894	64,523	77,719	40,512	49,094	444,493	7,567	7,567	7,567	7,567	7,567	7,567	7,567	7,567	
	-	-	7,698	52,824	164,456	292,012	188,133	308,260	299,305	1,313,869	162	162	162	162	162	162	162	
TOTAL,	10,776.3																	
PENSACOLA TO MISSISSIPPI RIVER 0 - 5 FATHOMS: BROWN PINK SEA BOBS 6 - 20 FATHOMS: PINK WHITE 21 - 40 FATHOMS: BROWN PINK WHITE ROYAL RED	611	11,377	18,761	100,656	527,840	695,602	1,106,205	1,701	1,701	1,701	1,701	1,701	1,701	1,701	1,701	1,701		
	-	290	112,809	341,135	502,070	830,775	740,213	1,199,649	4,316,022	216	216	216	216	216	216	216		
	8,693	304,785	333,055	456,121	1,535,275	1,223,102	849,665	82,033	4,792,923	181,737	181,737	181,737	181,737	181,737	181,737	181,737		
	2,338	74,247	74,485	109,294	256,316	288,778	169,601	168,018	1,113,078	8,786	8,786	8,786	8,786	8,786	8,786	8,786		
54,027	101,593	31,212	21,447	16,452	4,561	5,013	1,235	235,540	2,897	2,897	2,897	2,897	2,897	2,897	2,897			
-	-	3,606	185	117	358	20	303	-	1,999	-	-	-	-	-	-	-		
TOTAL,	33,121.4																	
MISSISSIPPI RIVER TO TEXAS 0 - 5 FATHOMS: BROWN PINK WHITE SEA BOBS 6 - 20 FATHOMS: BROWN PINK WHITE SEA BOBS 21 - 45 FATHOMS: BROWN WHITE SEA BOBS	403	9,914	8,444	9,639	50,820	172,504	1,003,050	8,010,949	9,265,723	8,010,949	9,265,723	9,265,723	9,265,723	9,265,723	9,265,723	9,265,723		
	24,162	714,556	1,807,743	2,947,534	5,348,164	3,604,707	7,847,267	5,428,371	27,722,824	5,428,371	27,722,824	27,722,824	27,722,824	27,722,824	27,722,824	27,722,824		
	87,233	351,194	518,098	598,409	2,664,262	1,048,871	466,400	2,475,520	5,983,987	1,247,520	5,983,987	5,983,987	5,983,987	5,983,987	5,983,987	5,983,987		
	61,997	1,277,253	898,604	991,698	1,909,141	788,082	390,885	330,222	6,647,682	36,853	36,853	36,853	36,853	36,853	36,853	36,853		
99,851	586,011	453,770	269,703	239,358	33,452	8,385	1,690,937	1,019	25,142	1,019	25,142	25,142	25,142	25,142	25,142			
165	3,248	411	4,045	13,756	-	-	-	-	5,129	-	-	-	-	-	-	-		
TOTAL,	138,240.6																	
TEXAS COAST 0 - 5 FATHOMS: BROWN WHITE SEA BOBS 6 - 20 FATHOMS: BROWN PINK WHITE 21 - 45 FATHOMS: BROWN WHITE 216 - 245 FATHOMS: ROYAL RED	20	306	654	1,519	24,156	46,560	93,054	541,547	705,826	541,547	705,826	705,826	705,826	705,826	705,826	705,826		
	2,070	266,332	627,614	804,213	1,344,304	476,815	407,759	4,092,947	163,840	4,092,947	163,840	163,840	163,840	163,840	163,840	163,840		
	360,160	1,945,339	2,148,400	3,072,841	6,900,629	1,790,977	981,509	6,158	17,176,013	64,394	64,394	64,394	64,394	64,394	64,394	64,394		
	18,677	567,962	732,040	439,412	479,885	62,252	32,806	26,453	2,359,467	81	81	81	81	81	81	81		
444,952	3,483,236	1,954,431	693,625	984,221	169,420	33,051	30	7,982,936	50,639	30	30	30	30	30	30	30		
TOTAL,	50,021.6																	

(CONTINUED ON NEXT PAGE)

SEE NOTE AT END OF TABLE.

GULF COAST SHRIMP CATCH BY AREA, DEPTH, AND SIZE, 1963 - Continued

MAJOR WATER AREAS, DEPTHS, AND SPECIES	TRIPS	SIZE (HEADS-OFF PER POUND)											TOTAL			
		HEADS-OFF PER POUND														
		UNDER 15	15 - 20	21 - 25	26 - 30	31 - 40	41 - 50	51 - 67	68 & OVER	POUNDS	POUNDS	POUNDS				
OFF MEXICO WEST 94° LONGITUDE 0 - 5 FATHOMS: BROWN 6 - 20 FATHOMS: WHITE 21 - 45 FATHOMS: PINK PINK WHITE	NUMBER	920	1,160	945	480	1,670	220	-	-	-	-	-	-	-	5,395	
	POUNDS	390	1,005	1,423	1,674	1,138	177	-	-	-	-	-	-	-	5,849	
		31,354	60,279	48,121	30,914	85,279	39,613	-	-	-	-	-	-	-	310,956	
		320	1,462	3,592	5,016	7,151	1,293	-	-	-	-	-	-	-	31,707	
		785,405	893,429	695,329	600,624	860,434	184,411	-	-	-	-	-	-	-	3,807,051	
		88	88	443	178	642	248	-	-	-	-	-	-	-	2,662	
		05	255	-	-	-	-	-	-	-	-	-	-	-	235	
	TOTAL	2,019.9	956,226	749,853	405,903	955,504	225,902	-	-	-	-	-	-	-	4,155,209	
	OFF OREGON AND CAMPECHE 0 - 5 FATHOMS: PINK 6 - 20 FATHOMS: BROWN 21 - 40 FATHOMS: WHITE PINK WHITE	NUMBER	-	35	-	1,005	4,785	-	-	-	-	-	-	-	-	10,365
		POUNDS	16,356	28,927	36,694	31,916	67,644	43,652	-	-	-	-	-	-	-	278,729
		29,476	328,540	1,564,136	1,762,312	3,022,050	1,089,654	-	-	-	-	-	-	-	8,210,950	
		5	7,425	1,175	27,787	68,914	20,012	-	-	-	-	-	-	-	294,895	
		49,959	62,681	58,680	27,787	602,211	176,306	-	-	-	-	-	-	-	2,582,189	
		46,042	375,603	701,596	501,266	602,211	176,306	-	-	-	-	-	-	-	2,816	
		114	2,702	-	-	-	-	-	-	-	-	-	-	-	2,816	
TOTAL		1,433.6	805,960	2,422,281	2,324,236	3,785,604	1,334,401	-	-	-	-	-	-	-	11,388,576	
CARIBBEAN SEA SOUTH LATITUDE 21° NORTH 6 - 20 FATHOMS: BROWN PINK WHITE		NUMBER	-	-	-	-	-	-	-	-	-	-	-	-	-	44,887
		POUNDS	-	1,120	6,822	6,822	36,945	3,746	-	-	-	-	-	-	-	128,774
		-	2,829	54,675	67,524	67,524	1,735	-	-	-	-	-	-	-	19,058	
		-	12,111	5,212	1,735	-	-	-	-	-	-	-	-	-	192,719	
		34.1	16,060	66,709	106,204	3,746	-	-	-	-	-	-	-	-	192,719	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL	0.4	16,060	66,709	106,204	3,746	-	-	-	-	-	-	-	-	192,719	
	ATLANTIC OCEAN 6 - 10 FATHOMS: PINK 21 - 35 FATHOMS: WHITE PINK	NUMBER	-	263	1,332	35	13	-	-	-	-	-	-	-	-	11,995
POUNDS		-	263	1,332	35	262	-	-	-	-	-	-	-	-	1,912	
		-	-	-	-	857	-	-	-	-	-	-	-	-	3,414	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		44.0	263	1,332	35	1,152	1,073	-	-	-	-	-	-	-	7,458	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL		44.0	263	1,332	35	1,152	1,073	-	-	-	-	-	-	-	7,458	
UNCLASSIFIED GULF 246 - 250 FATHOMS: ROYAL RED	NUMBER	300	-	-	-	-	-	-	-	-	-	-	-	-	300	
	POUNDS	300	-	-	-	-	-	-	-	-	-	-	-	-	300	
		244,487.0	2,127,117	11,955,070	13,955,681	15,315,681	31,121,933	15,188,218	17,546,703	20,977,129	127,987,956	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL	0.4	300	-	-	-	-	-	-	-	-	-	-	-	300	
GRAND TOTAL	244,487.0	2,127,117	11,955,070	13,955,681	15,315,681	31,121,933	15,188,218	17,546,703	20,977,129	127,987,956	-	-	-	-		

NOTE: THESE DATA REPRESENT THE CATCHES OF VESSELS COMPLETING TRIPS DURING THE YEAR, REGARDLESS OF WHEN LANDINGS OCCURRED. CONSEQUENTLY, THE DATA ARE NOT REPRESENTATIVE OF THE YEAR IN WHICH THE CATCHES WERE MADE. A SINGLE TRIP IS SHOWN FOR EACH VOYAGE. ADDITIONAL TABULATIONS CONCERNING THE GULF OF MEXICO CATCH OF SHRIMP IN MORE DETAIL BY AREA, DEPTH, SIZE, AND FISHING EFFORT MAY BE OBTAINED UPON REQUEST FROM THE U. S. FISH AND WILDLIFE SERVICE, BUREAU OF COMMERCIAL FISHERIES, BRANCH OF FISHERY STATISTICS, WASHINGTON, D. C. 20240.

GULF FISHERIES

SOUTH ATLANTIC AND GULF COAST SHRIMP LANDINGS, 1963

SPECIES AND SIZE	SOUTH ATLANTIC		GULF		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BROWN:						
UNDER 15	-	-	1,941,364	\$1,658,050	1,941,364	\$1,658,050
15 - 20	306,622	\$202,172	7,840,582	6,217,879	8,147,204	6,420,051
21 - 25	377,985	243,883	6,313,406	4,429,206	6,691,391	4,473,089
26 - 30	820,308	499,895	5,959,338	3,675,840	6,778,646	4,175,735
31 - 40	1,917,212	984,079	14,128,710	7,286,072	16,045,922	8,270,151
41 - 50	992,401	407,726	5,428,769	2,282,160	6,421,170	2,699,886
51 - 67	274,511	91,146	4,827,538	1,627,128	5,102,049	1,716,274
68 AND OVER	60,210	15,459	9,541,857	1,937,155	9,602,067	1,952,614
TOTAL	4,749,249	2,444,360	55,980,564	29,113,490	60,729,813	31,557,850
PINK:						
UNDER 15	-	-	77,757	70,725	77,757	70,725
15 - 20	50,672	34,456	903,196	800,974	953,868	835,430
21 - 25	27,717	17,185	3,171,656	2,637,985	3,199,373	2,655,170
26 - 30	40,282	23,153	3,544,114	2,581,485	3,584,396	2,604,638
31 - 40	66,507	34,633	6,936,849	4,296,548	7,003,356	4,331,181
41 - 50	90,320	39,343	3,937,394	2,051,502	4,027,714	2,090,845
51 - 67	44,180	15,513	3,088,102	1,316,293	3,132,282	1,331,806
68 AND OVER	26,784	6,925	2,523,360	640,435	2,950,144	647,360
TOTAL	346,462	171,208	24,182,428	14,395,947	24,526,890	14,567,155
WHITE:						
UNDER 15	-	-	110,528	91,870	110,528	91,870
15 - 20	206,667	136,122	3,044,484	2,542,620	3,251,151	2,678,742
21 - 25	842,402	571,395	4,519,907	3,004,233	5,362,309	3,575,628
26 - 30	954,740	603,049	5,898,495	3,245,932	6,853,235	3,848,981
31 - 40	1,350,048	714,001	10,288,480	4,848,361	11,638,528	5,562,362
41 - 50	805,466	357,939	5,822,414	2,269,054	6,627,880	2,636,993
51 - 67	427,125	171,089	9,640,435	2,541,191	10,067,560	2,712,280
68 AND OVER	133,634	43,265	7,762,045	1,386,858	7,895,679	1,430,123
TOTAL	4,720,082	2,606,860	47,086,788	19,930,119	51,806,870	22,536,979
SEA BOBS	-	-	1,149,867	94,290	1,149,867	94,290
ROYAL RED:						
15 - 20	-	-	300	156	3,929	2,987
21 - 25	3,629	2,831	-	-	19,781	16,375
26 - 30	19,781	16,375	-	-	1,161	2,000
31 - 40	1,161	856	1,665	1,144	2,826	2,645
41 - 50	460	304	4,260	2,341	4,740	2,737
51 - 67	5,105	2,737	-	-	2,606	983
TOTAL	32,742	24,086	6,245	3,641	38,987	27,727
GRAND TOTAL	9,848,535	5,246,514	128,405,892	63,537,487	138,254,427	68,784,001

NOTE:--ALL WEIGHTS ARE ON HEADS-OFF BASIS. THE SIZE INDICATES THE NUMBER OF HEADS-OFF SHRIMP TO THE POUND. TO CONVERT TO HEADS-ON WEIGHT MULTIPLY BY 1.61 FOR BROWN, 1.60 FOR PINK, 1.54 FOR WHITE, 1.53 FOR SEA BOBS, AND 1.80 FOR ROYAL RED. THE AREAS LISTED REPRESENT THE STATES WHERE THE SHRIMP WERE LANDED REGARDLESS OF WHERE CAUGHT. THE NAMES OF THE SPECIES USED IN THESE TABLES ARE AS FOLLOWS: WHITE SHRIMP (MOSTLY *PENAEUS SETIFERUS*), BROWN SHRIMP (*PENAEUS AZTECUS*, AND IN SOME CASES *PENAEUS BRASILIENSIS*), PINK SHRIMP (*PENAEUS DUORARUM*), SEA BOBS (MOSTLY *XIPHOPENAEUS KROYERI*), AND ROYAL RED (*HYMENOPENAEUS ROBUSTUS*). THE VALUE REPORTED IS THE AMOUNT RECEIVED BY THE OWNERS OR OPERATORS OF THE VESSEL FOR THE FIRST SALE AT THE DOCK. ANY EXPENSES INVOLVED IN HANDLING OR PROCESSING ASHORE ARE NOT INCLUDED, EVEN THOUGH CHARGEABLE TO THE VESSEL. THE SIZE REPORTED GENERALLY IS THAT USED AS OF THE FIRST SALE. SIZE GRADING IN VARYING DEGREES OF UNIFORMITY MAY OR MAY NOT OCCUR AT, OR PRIOR TO, THE TIME THE FIRST SALES ARE MADE. IF GRADING IS NOT DONE AT THIS TIME, THE SIZE REPORTED IS AN AVERAGE SIZE AND MAY INCLUDE SEVERAL SIZE CLASSIFICATIONS.



SURVEY PROCEDURE IN THE GULF OF MEXICO

The statistical program in the Gulf States is under the general direction of the Bureau's Regional Office in St. Petersburg Beach, Fla., with direct supervision by a regional supervisor of statistics and market news in New Orleans, La. The program is prosecuted by field reporters stationed at Key West, Miami, Fort Myers, Tampa, and Apalachicola, Fla.; Bayou LaBatre, Ala.; Ocean Springs, Miss.; New Orleans, Galiano, Houma, and Morgan City, La.; and Port Arthur, Galveston, Freeport, Aransas Pass, Brownsville, and Port Isabel, Texas. These field reporters are specialists trained in obtaining and reporting fishery statistical data on a daily, monthly, and annual basis.

Statistics assembled by the Bureau on the fisheries of the Gulf States Coastal area include data on employment of fishermen, shoreworkers, fishing craft and gear, the volume and value of the catch, and the volume and value of processed fishery products. The data are assembled from all available sources including records maintained by State fishery agencies, fishermen, and fish wholesale dealers, buyers, and processors.

Catch. Cooperative programs of differing magnitudes have been established with the fishery agencies of each of the five Gulf States. Texas and Florida have State monthly reporting systems, whereby dealers and buyers are required to submit a monthly report on forms supplied by the State, listing the quantity of fish and shellfish by species purchased from fishermen. Field reporters of the Bureau of Commercial Fisheries assist in the collection and tabulation of data for publishing in monthly landing bulletins for these States. In Alabama, Mississippi, and Louisiana, tax records are utilized by Bureau employees in obtaining landing data on oysters. Certain catch records on fish landed in Louisiana are also obtained from records of that State. Data on receipts in the New Orleans French Market are collected by reporting specialists of the Bureau on a daily basis for use in the daily reports published by the Fishery Market News Service and are supplied the State of Louisiana at the end of each month. Information on all finfish, crab, and shrimp landings in Alabama and Mississippi is collected by Bureau employees.

Shortly after the close of each year, a revised tabulation is prepared listing the species catch by volume and value by county. Shrimp are excluded since they have been recorded on punch cards each month. Such revisions as are necessary in the daily or monthly data previously published are made in the annual tabulation. Fishermen and dealers are interviewed to determine the area of capture (water body) and the type of gear utilized for taking each species. When the interview is completed, the landings (or catches) totals are prorated to the proper waters and gear within each county, and catch statistics by waters and gear for each county are forwarded to the Washington office. The data are transferred to punch cards and machine processed. Detailed information on the shrimp catch, which had previously been entered on punch cards is now integrated with the figures for other species. Processed data are forwarded to field reporters for examination, auditing, and necessary revisions, after which they are returned to the Washington office for final review and publication.

Throughout the Gulf, shrimp data are obtained daily by Bureau reporting specialists and recorded on individual landing reports that list the name of the vessel and the volume and ex-vessel value of the catch by species, size, and area of capture. A schedule is prepared for each vessel for each trip. These are forwarded to the Washington office, about 2 weeks after the end of the month in which the landings occurred. The data are machine processed to provide the detailed statistical information required by those interested in the shrimp fishery.

During recent years, there has been a trend toward obtaining catch data on a monthly basis in sufficient detail to permit their direct use in the annual Statistical Digest. In the States of Alabama and Mississippi, data on the catch by gear, water, and species are ob-

tained on a monthly basis and entered on punch cards from which are prepared the monthly landing bulletins. The punch cards are then utilized to prepare the annual tabulations for publication in Fishery Statistics of the United States. Considerably more detail on the catch by waters and gear is available than is published in this report.

Operating units. Prepunched vessel cards containing the name of the vessel, the official number, rig code, gross tons, length, and year built are furnished field reporters each year. These cards are obtained from the Bureau of Customs and are checked out by field personnel. Reporters interview the vessel captains to obtain number of crew, and number, type, and quantity of gear utilized in each fishery. The number of crew reported is the greatest number of crewmen aboard the vessel for each gear operated at any one time. Number and quantity of gear are represented by the greatest amount of gear the craft utilized at one time. The data do not include gear ashore or carried aboard the vessel for replacement. Field reporters maintain a list of the fishing vessels obtained from the State records to ensure completeness in the operating unit survey. Machine tabulations of shrimp landings are utilized to obtain the vessels fishing this species during the year. A vessel is reported once for each type of gear fished in each State.

Data on crew and gear are recorded directly on the prepunched cards. (Data on all craft of less than 5 net tons are classified as shore and boat craft, and a single card is prepared for the total number of boats using each type of gear in each county). The field entries are punched and processed in the Region under contract by a service agency and the tabulations are returned to each reporter who prepares the State operating unit tables. After review by the Regional Supervisor, they are forwarded to the Washington Office.

Processing and Manufacturing. Data on the production of processed fishery and manufactured products are obtained from individual firms, on forms designed for the collection of these data. Much of the information on the pack of canned shrimp, oyster, and crab meat by can size and number of cases is obtained and published each week in the New Orleans Market News report. Subsequently, revisions are made, and a yearly annual total by firm is submitted to the Central Office for publication in the Canned Fishery Products bulletin. Information on the production of fish meal, oil, and solubles is obtained each month for publication in monthly Fish Meal and Oil bulletins and in the annual report, Industrial Fishery Products. Data on the monthly production of fish sticks and portions and breaded shrimp are collected quarterly for publication in Fish Sticks and Portions and Breaded Shrimp. Packaged fish and shellfish data are obtained on an annual basis from each firm, and summaries are published in the annual Packaged Fishery Products bulletin. A summary of the production of all processed fishery items, including shellfish, is contained in the Gulf States sectional annual bulletin.

Data on freezings and holdings of fishery products are collected monthly on a special form which is mailed at the end of the month to each cold storage warehouse in the Gulf States. After auditing, the completed reports are returned to the New Orleans office. The schedules are then mailed to the Washington Office where they are again reviewed before tabulation and publication in monthly and annual frozen fishery products bulletins.

General. A considerable quantity of current fishery data are available in the daily report issued by the New Orleans Fishery Market News Office. Persons interested in day-to-day fluctuations should consult these reports. Those interested in seasonal fluctuations should refer to the monthly landing bulletins. The Statistical Digest, Fishery Statistics of the United States contains the most complete annual data. Information on the catch by waters is tabulated and supplied to State and Federal laboratories along the Gulf Coast.

In 1963, commercial fishermen of the Pacific Coast States (Alaska, Washington, Oregon, and California) caught 1.1 billion pounds of fish and shellfish worth \$124 million. Landings were down 9 million pounds and sold for \$15 million less than in 1962. Species with the smaller catches were salmon, halibut, and sardines. Total value declined principally because of lower values of salmon, tuna, and halibut.

The Pacific Coast States accounted for 23 percent of the volume and 33 percent of the value of the total U.S. catch. While the area was second only to the Gulf States in quantity, it led all areas in value. Although California landings of 514 million pounds were the lowest since 1932, they were 46 percent of the Pacific Coast total. Alaska was next with 392 million pounds (35 percent), followed by Washington and Oregon with 150 and 61 million pounds, respectively, accounting for the remaining 19 percent. California was also the leader in value with \$49 million (40 percent of the Pacific Coast total). Alaska was a close second with a value of \$46 million (37 percent). Washington and Oregon, with \$21 and \$8 million, respectively, accounted for the remaining 23 percent.

Fishermen and vessels. In 1963, there were 33,612 fishermen on the Pacific Coast--1,015 more than in 1962. There were 4,791 vessels of 5 net tons or more--205 over 1962. Most of the increase was in the numbers of salmon purse seiners and trollers.

Processing. Processed fishery products on the Pacific Coast were worth \$325 million in 1963--down 32 million from 1962. California and Alaska had declines while Washington and Oregon had slight increases. The principal cause of the overall decline was that smaller packs of canned Alaska salmon and California tuna resulted in a lower total value.

High seas fishery. Fish taken on the high seas off the coast of foreign countries by Pacific Coast fishermen totaled 283 million pounds--25 percent of the total catch for the four States and 1.6 million pounds more than in 1962. This increase was accounted for principally by improved bottomfish catches off the Canadian coast. Searching the ocean from the Bering Sea to the waters off Peru, Pacific Coast fishermen continued to range farther for their catch than fishermen in any other areas. Also in 1963, Pacific Coast fishermen again entered the Atlantic Ocean to fish for tuna off the Middle Atlantic and New England coasts.

Tuna. Tuna was 27 percent of the volume and 30 percent of the value of all Pacific Coast fisheries in 1963. The catch of 297 million pounds was 3.5 million pounds more than in 1962. The value was only \$37.5 million compared with \$42.6 million in 1962--a decline despite a 14.8-million-pound increase in albacore, the more expensive species. Skipjack landings were up, while bluefin and yellowfin were down.

Unfavorable publicity from a few cans of contaminated tuna early in the year resulted in a temporary setback in the increase in consumption of canned tuna.

In general, tuna prices declined after the adverse publicity. At the beginning of the year, the price of yellowfin was \$290 per ton, and skipjack, \$250, but effective the latter part of April, after the unfavorable publicity of contaminated tuna, the price was reduced \$20 a ton for each species. During early May, there were further reductions--yellowfin dropped to \$250 and skipjack to \$210 a ton. Later in the month, prices again declined so that offers for yellowfin were down to \$240 and skipjack, \$200 a ton--the lowest ex-vessel price for tuna since the Office of Price Administration ceiling in 1945. For the remainder of the year, yellowfin prices fluctuated between \$240 and \$250 and skipjack, \$190 and \$207. Auctions, which had been discontinued since early 1960, were reestablished at San Diego in mid-October in an effort to boost prices. To counteract the decline, the industry accelerated canned tuna promotion.

PACIFIC COAST FISHERIES

Albacore fishing along the Pacific Coast was the most successful segment of the tuna fishery in 1963, and the catch of 60.8 million pounds was 14.8 million pounds greater than in the previous year. The California albacore season started on July 5 with ex-vessel prices of \$275 to \$300 a ton in contrast to \$400 a ton at the start of the 1962 season. By July 16, the price was stable at about \$300 a ton. On August 23, it advanced to \$325 a ton and remained at that level for the rest of the season. The 1963 average price of albacore was \$318 a ton--\$12 a ton less than in 1962 and \$38 a ton less than in 1961. In the Pacific northwest, albacore fishermen averaged \$309 a ton for their catch--\$26 a ton less than in the previous year. Sport fishermen made the first California catches, from large schools of albacore about 100 miles due west of San Diego. Fishermen were optimistic about an early season, but the fish remained scattered throughout July. Although catches were below normal at the outset, they increased considerably in all areas during August. At the end of the month, large schools were off the northern California coast. Vessels from Seattle, Wash., to San Diego, Calif., converged on the area, and individual trollers reported catches of up to 5 tons per day. Landings rose sharply in September to an alltime high for the month.

Albacore fishing in California continued good throughout most of October but fell off as the month ended, and only small landings were made during November and December. However, total landings were 48.7 million pounds--the third highest on record for the State. The ex-vessel price advanced from an opening of \$275 to \$325 per ton during August, and this price held during the remainder of the season.

Albacore landings in Oregon were 11.4 million pounds--up 2.4 million pounds over a year earlier. The fish were in good supply off Oregon during August, when fishermen's prices ranged from \$275 to \$300 per ton. Later in the season, plants on the Columbia River paid up to \$330 compared with a high of \$340 per ton in 1962.

Albacore again failed to appear in abundance north of the Columbia River. Washington landings were only 527,000 pounds--a slight increase over the poor 1962 season.

The bluefin fishery started well with the appearance of this tuna off San Clemente and Catalina Islands at the end of July. A sizeable run developed, and prospects appeared bright for an excellent season. By the end of July, good catches were being made by purse seiners off Guadalupe Island and Baja California. Seiners were returning to port after 3 to 5 days' fishing with capacity, or near capacity, loads. The regular San Pedro purse seining fleet, as well as several converted seiners, fished profitably during August and September. Several trips of over 100 tons were made in August, and a record bluefin trip of 245 tons was landed by the converted seiner, Constitution, during the month.

California bluefin landings of 30.4 million pounds (the third highest on record) were less than 1 million pounds below the peak landings of 1962. The value of the 1963 bluefin catch was considerably below that of 1962, with an ex-vessel price of \$230 per ton at the beginning of the season, compared with \$300 in 1962. The price was further reduced during the season to \$210 to \$220, compared with \$250 to \$280 during 1962.

Receipts of tuna for canning in California tuna plants--domestic catch, transshipments, and imports--totalled 182,600 tons--the lowest since 1952. The decrease was due to a 27,500-ton decline in imports.

The corporate structure of several tuna companies changed during the year. Early in 1963, it was announced that the H.J. Heinz Company, Pittsburgh, Pa., a major food packing concern, had acquired Star Kist Foods, Inc., a large tuna packer with plants in California, Puerto Rico, and American Samoa. In February, the Van Camp Seafood Company merged with the Ralston-Purina Company, packers of cereal products and animal food. In midyear, C.H.B. Foods of Pico Rivera, Calif., acquired the Franco-Italian Packing Company of Terminal Island.

PACIFIC COAST FISHERIES

Several large tuna vessels were added to the fleet in 1963. The San Juan, an 845-gross-ton converted military craft built in 1943, joined the fleet and made a record landing for a U.S. fishing craft when it unloaded 1,025 tons of tuna at San Pedro in the fall.

The 803-gross-ton Caribbean--the newest and most modern tuna purse seiner built during the year--had a number of innovations including a double crow's nest, aligned fore and aft, used by two mast men with ship's controls; an electric fuel pump for refueling the ship's helicopter, which is housed atop the wheelhouse; and air-conditioned quarters for the crew. This vessel operated primarily out of Puerto Rico for a West Coast firm; however, it did land one trip in California.

Salmon. During 1963, the total catch of salmon on the Pacific Coast was 294.2 million pounds valued at \$49 million. This was 26 percent of the total Pacific Coast volume of all fish and shellfish and 39 percent of the total value. Among the species of salmon, pinks were most important, with 156.6 million pounds (worth over \$18 million) landed in Alaska, Washington, and Oregon--53 percent of the total Pacific Coast salmon catch. The chinook catch was second in value--\$10.9 million--and the sockeye or red salmon, third--\$10.3 million. Alaska led the States with 223.1 million pounds (76 percent of the Pacific Coast salmon volume) and \$31.3 million (64 percent of the total value).

The 1963 salmon catch was below that of 1962--down 6 percent in volume and 13 percent in value. In Alaska, only kings and silvers were taken in larger quantity. The increase in king salmon was in Southeastern Alaska, where trollers landed almost 1 million pounds more than in the previous year. The catch of this species in Central and Western Alaska was less than in 1962. Chum salmon landings were down in all three regions of Alaska for a total decline of 21.9 million pounds.

The Alaska catch of pink salmon was 18.2 million pounds less than the 143.3 million pounds taken in 1962. Landings were lower in Central and Western Alaska but showed surprising strength in Southeastern Alaska, where the catch was 24.3 million pounds higher than in 1962.

The large Icy Strait pink salmon run of 1963 was notable for more than its volume. The fish were of fine quality, and the run was extended over a lengthy period. Both the fishermen and packers benefited, and considerable quantities of fish were transported to canneries in other districts. At the peak of the run, daily seiner catches of as many as 20,000 fish were common. Immediately preceding the onset of the big run, fishermen and cannery operators had a short price dispute that halted canning operations for a few days.

During the height of the Icy Strait pink salmon run, the Alaska Department of Fish and Game permitted fishing for 24 hours on alternate days. This move was designed, essentially, to allow time to process all fish while they were in prime condition and to provide an opportunity for effective distribution of escapement during the run.

Red salmon landings were lower in all areas of Alaska compared with the previous year. Bristol Bay, which depends almost entirely on red salmon, was declared a disaster area by the Governor. The 218,000-case-pack was the lowest since 1897--the beginning of salmon canning in Bristol Bay.

The disappointing run of red salmon in Bristol Bay in 1963 represented the first forecasting error in a decade or more of biological predictions on the species. Investigation failed to substantiate initial suspicion that Japanese operations on the high seas may have been responsible.

Silver salmon landings in Alaska were 17.6 million pounds in 1963--an increase of 2.3

PACIFIC COAST FISHERIES

million pounds over the previous year. The gain was spread over the Southeastern, Central, and Western regions.

From the Fraser River system, a catch of slightly more than 1 million sockeye salmon and 2 million pinks had been forecast for both United States and Canadian fishermen. As a result of a work stoppage by Canadian fishermen during the peak of the July sockeye run, however, United States fishermen were given additional fishing time to prevent overseeding of the spawning beds by the excellent run. Thus, United States fishermen caught over 1.3 million sockeyes in convention waters, compared with over 600,000 by Canadian fishermen. The catch could have been larger but United States fishermen were restricted to United States waters, and a considerable part of the run escaped through Canadian waters during the work stoppage.

During the October spawning period, sockeye suffered heavy losses from Columaris infection--some streams lost as much as 90 percent of the spawning run. The larger number of spawners and the abnormally warm water were suggested as possible factors in precipitating the epidemic.

The 1963 pink salmon catch in Washington was larger than expected. While the return of Fraser River pinks was somewhat less than had been forecast Puget Sound streams had surprisingly large runs. Another unexpected development was the extent to which pinks were taken in the troll fishery, which took about 3.0 million pounds more than in any recent year. The United States--Canadian pink salmon run was twice as large as expected. United States fishermen landed 4.3 million fish and the Canadians, 3.9 million.

Silver salmon landings in Washington and Oregon in 1963 decreased nearly 3 million pounds. The Oregon troll fishery catch, which was up 40 percent from 1962, was more than offset by the significantly smaller troll catch of Washington. The Columbia River silver salmon catch increased slightly, but the gill net catch in the Puget Sound and along the coast was less than half that of the previous year.

The 1963 landings of chinook salmon in Washington and Oregon increased slightly more than 1 million pounds over the previous year. The Columbia River catch of chinook was 4.8 million pounds, down 16 percent from the 5.7 million pounds captured in 1962. The chinook run in Puget Sound was one of the best. The Oregon troll fishery produced 1.6 million pounds of king (chinook) salmon--more than twice that of the previous year. Landings of troll king salmon in Washington also improved, totaling 2.9 million pounds compared with 2.4 million in 1962. Chum salmon production of 3.1 million pounds in Washington was slightly improved from the previous year, while the Oregon chum catch was negligible.

Total salmon and steelhead production by the Indian fisheries in Washington and Oregon was 5.7 million pounds worth \$1.2 million compared with 2.9 million pounds and nearly \$900,000 in 1962. In the Columbia River Indian fishery, considerable gear change was made in 1963, with numerous Indians changing from dip nets to set gill nets. Salmon and steelhead production by the Indian fishery of the Columbia River and its tributaries was over 690,000 pounds worth about \$160,000 compared with a 119,000-pound-catch in 1962, worth \$35,000.

The Puget Sound Indian fisheries also were more productive in 1963. The catch was 3.9 million pounds worth \$604,000 compared with 1.8 million pounds worth \$510,000 in 1962. Pink salmon accounted for the gain. The late fall and winter set net catch of silver and chum salmon was only half that of 1962.

The coastal Indian fishery in Washington also was productive; its salmon and steelhead catch was 1.1 million pounds worth \$404,000. The sockeye or blueback catch by coastal Indians was 341,000 pounds--more than four times that of 1962. The main sockeye run usually occurs in April or May when premium prices, sometimes as high as 75 cents a pound, are paid the Indians.

Fresh salmon prices in 1963 suffered from the 1962 carryover of frozen stocks. The long established Fishermen's Cooperative Association Exchange Board for troll salmon was abandoned in favor of "port prices," which apparently were set, to a great extent, by the larger buyers. These prices proved to be quite uniform and steady throughout the season. In Washington, trollers received about 67 cents a pound, dressed weight, for large red kings (chinook) and 30.5 cents for silvers compared with 74.6 and 35.1 cents during 1962.

Columbia River gill netters also took a cut in price, with chinooks averaging 32.6 cents a pound, round weight, compared with 38 cents in 1962.

Demand for Puget Sound sockeyes was strong following the shortage in Alaska, and seiners and gill netters averaged 33 cents a pound, round weight--about the same as in 1962. Anticipating the big pink run, Washington prices were scaled down, averaging about 12 cents a pound, round weight, compared with 20 cents in 1962.

Canned salmon was the leading processed fishery product in Washington and Oregon, with a pack of 639,000 standard cases worth \$21 million.

Halibut. Halibut landings by U.S. fishermen on the Pacific Coast in 1963 were 45,569,000 pounds (round weight) valued at \$6,883,000---down 15 percent in volume and 41 percent in value compared with 1962. The Alaska catch of 29.9 million pounds valued at \$4,161,000 was 66 percent of the total volume and 60 percent of the total value of the domestic Pacific Coast halibut catch.

Contributing to the reduced landings in Alaska were a price disagreement and lower ex-vessel prices, adverse weather, and fewer fish. Of these, the lower ex-vessel prices, with the corresponding reduced effort, were believed to be the major cause of the decline.

A change in the North Pacific Treaty, which became effective when ratified by Canada on May 9, 1963, permitted Japanese fishermen, for the first time, to take halibut in the eastern Bering Sea triangular area. The triangle is roughly outlined by a line drawn from longitude 170° W. to the Pribilof Islands, to Unimak Pass, to the Aleutian Chain, and along the Aleutian Islands to longitude 170° W. The triangular-area catch limit of 11 million pounds (dressed weight) set by the International North Pacific Fisheries Commission proved to be too optimistic, even with the considerable effort exerted by the Japanese. The catch totaled 10.5 million pounds, of which the Japanese took 3.9 million pounds. In May, when the grounds were officially opened to them, five Japanese longliners were in the triangle. These vessels landed only 38,000 pounds in the first 3 days of fishing, but by June, the Asian halibut fleet on the the Bering Sea grounds had grown to 6 freezing vessels and 75 fishing craft.

Area 2, from Willapa Bay to Cape Spencer, was closed on November 30, 1963, before the catch limit of 28 million pounds (dressed weight) set by the International Pacific Halibut Commission had been taken. A combination of factors was responsible for the reduced catch of 25.8 million pounds--down almost 3 million pounds from the 1962 level. Although halibut were less abundant, the limit could probably have been taken under more normal conditions. Weather, price disagreements, and more attractive fisheries in other areas combined to keep the Area 2 catch low. During the latter part of the season, sablefish were bringing from 2 to 3 cents a pound more than halibut, and many longliners left the halibut grounds and moved to the deeper sablefish grounds. A work stoppage by the Fishermen and Allied Workers Union in British Columbia restricted activity of the Canadian fleet late in the season. To further complicate matters, the worst weather in Area 2 in many years kept much of both the United States and Canadian fleets in port after the latter part of September. These factors, combined with ex-vessel prices well below those in 1962, diverted many of the smaller vessels, which make up a large portion of the Area 2 fleet, to the salmon and albacore fisheries, both of which were more productive during 1963.

PACIFIC COAST FISHERIES

Landings of halibut by the combined United States--Canadian fleets, in 1963, were 95 million pounds (round weight)--down 4.9 million pounds from the record 1962 catch. The decline was largely offset by the Japanese catch in the Bering Sea. For the first time, Canadian fishermen took the largest share of the United States--Canadian total--52 percent.

Halibut landings in Alaska by U.S. fishermen were 7 million pounds less than in 1962. Most of the decline was in Ketchikan. Both United States and Canadian landings were heavy at Central Alaska ports, where an effort was made to get as much of the Area 3B North halibut catch as possible before the area was opened to Japanese fishermen. Seattle halibut landings gained nearly 1 million pounds over 1962.

Early in the season, halibut moved slowly at the high price level set in 1962. The large carryover of frozen stocks from the 1962 catch eventually caused prices to decline sharply.

Mackerel. From the beginning of the year, mackerel--particularly jack--was plentiful in southern California waters, and nightly limits of 20 to 30 tons were imposed on the fleet. Mackerel canning operations were halted in early June and were not resumed until the middle of August. Meanwhile, the canneries were processing the backlog of tuna that had accumulated because of a price dispute. A catch limit of 20 to 30 tons per night remained in effect after resumption of fishing on August 1; however, bad weather and lack of sales curtailed fishing operations to some extent during the last 2 months of the year.

Sardines. The Pacific Coast catch of sardines in 1963, continuing a downward trend, declined to a record low for the past half century. Landings of 7.1 million pounds were only one-half of 1 percent of the record high landings of 1.5 billion pounds in 1936. The 1963 sardine season opened in central California on August 1, and in southern California on September 1. The bulk of the catch was taken incidental to the mackerel fishery, and very few loads of only sardines were landed. The canned pack of 57,000 cases was the lowest since the sardine fishery became prominent during World War I. Since anchovies seem to have replaced sardines in California waters, it has been suggested by members of the industry that an active anchovy fishery might help restore the sardines and also foster a new industry. The California Fish and Game Commission was petitioned to amend its law against reduction of fish to allow the reduction of a specified tonnage of anchovies on a trial basis, but this was not granted.

Crabs. Landings of crabs in the Pacific Coast States in 1963 were 103.8 million pounds worth \$11.9 million--an increase of 36 percent in volume and 28 percent in value compared with 1962. Alaska led all other States with 90.8 million pounds worth \$9.0 million--87 percent of the volume and 75 percent of the value.

In Alaska, king crabs continued to account for most of the crab landings. During the 5 years 1959-63, king crab landings have increased an average of nearly 50 percent each year. Landings were 79 million pounds in 1963--up 26 million pounds from 1962. Healthy market conditions, considerable growth in the size of the fishing fleet, improved crab pot design, and better knowledge of seasonal migrations have all contributed to the large increase in the catch. Following an upward trend in consumption, canned king crab production rose 37 percent and fresh and frozen production was up 65 percent.

Landings of Dungeness crabs in Alaska during the 1963 season were 12 million pounds--an increase of 3 million pounds (34 percent) compared with 1962. Due to reduced availability of Dungeness crabs along the Oregon and California coast, the Alaska crab industry experienced a strong demand for fresh and frozen crab meat. Prices offered for fresh crabs in the shell or fresh crab meat were so strong that canning was virtually suspended. An important development in the industry was the expanded use of air transportation for shipping crabs. Large quantities of live Dungeness crabs were flown from Metlakatla, near Ketchikan, to Honolulu, via Seattle. Air shipments of fresh cooked crab from Kodiak, Yakutat, and other coastal

points to Seattle also developed to a considerable degree. Despite record landings and good prices, there were reports that several crab fishing vessels were planning to abandon the fishery and convert to other forms of gear.

Crab production improved in Washington in 1963, totaling 6.7 million pounds--up 1.3 million pounds from the previous year. A sharp gain in Puget Sound crab catches accounted for most of the increase. However, the Coastal and Columbia River districts also had sizeable gains.

The ocean crab fishery was poor in Oregon. The catch was only 4.2 million pounds--down 1.6 million pounds from 1962. In previous years, the closed season for crabs in northern Oregon and Washington extended until January 1, but a new Oregon regulation permitted crab fishing along the Oregon coast during December 1963. To protect their fishing interests, Washington also permitted crabbers to operate during December.

Crabs were abundant off the Columbia River in December, and a large fleet of crab boats congregated there, taking more than one-half the 1963 Oregon-Columbia River crab landings. The Washington coastal crab price averaged 22.6 cents per pound in 1963--up 2.6 cents from 1962. A small quantity of rock crabs was taken in California.

In California, Dungeness crab landings were 1,952,000 pounds worth \$688,000. This was the lowest catch since 1937. Compared with 1962, the volume declined 39 percent and the value, 21 percent. Because of the scarcity of crabs, the average price for live crabs rose from 27 cents per pound in 1962 to 35 cents in 1963.

Oysters. In 1963, landings of oysters on the Pacific Coast were 9.8 million pounds of meats worth \$2.5 million--a decline of 9 percent in volume and 6 percent in value compared with the previous year. Washington led all other States in 1963 landings, with 8.1 million pounds worth \$2.1 million--a decline of 9 percent in volume and 2 percent in value.

The supply of oysters in Willapa Harbor was seriously affected by severe wind storms that damaged the oyster beds late in 1962. Also relatively few seed oysters had been planted during the previous 4 years. There have been no significant natural sets in Washington since 1958, and purchases of Japanese oyster seed have declined because of increasing costs and high mortality when the oysters are about 3 years old. A considerable amount of oyster seed was obtained from British Columbia during 1963.

Market demand for fresh oysters has been good, but Japanese canned oyster imports have cut deeply into the market for domestically canned oysters.

Foreign fishing activities. The Japanese fishing fleet operating in the general Alaska area in 1963 totaled over 340 vessels consisting of 22 factory ships, 252 catcher vessels, 21 whale killers, 3 stern trawlers, 3 fishery patrol vessels, 1 fishery training ship, and more than 40 support vessels such as tankers, refrigerated fish transports, and cargo supply ships. Including the salmon fleet, which operated west of the 175th parallel, the entire Japanese fishing strength in the Bering Sea and the Gulf of Alaska was estimated at about 730 vessels. The Japanese salmon fleet--11 factory ships, 369 catcher vessels, and 4 support vessels--entered the Bering Sea briefly in June and July, but did not fish farther east than longitude 180°.

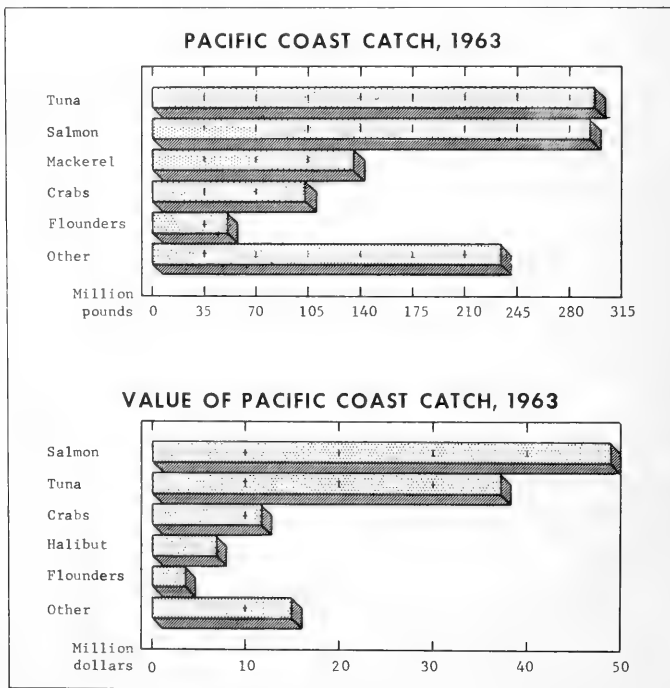
The Russian fishing fleet in the Bering Sea, North Pacific, and the Gulf of Alaska in 1963 had about 380 vessels. Those identified by type were 50 refrigerated fish transports or cargo vessels, 6 combination passenger-cargo vessels, 42 whale killer vessels, 19 large refrigerated stern trawlers, 20 medium refrigerated trawlers, 17 tankers, 4 research vessels, and 178 medium trawlers.

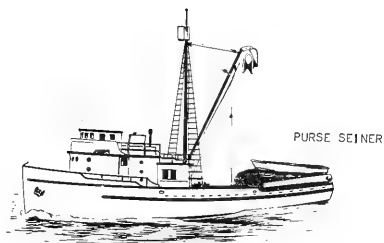
PACIFIC COAST FISHERIES

Whales. A total of 259 whales was taken by six catcher vessels operating from two whaling stations in the San Francisco Bay area and one in Oregon. This was an increase of 11 whales over the 1962 total. The production of whale meat, meal, and oil was 7.7 million pounds--down 2.1 million pounds from 1962. The value of whale products was \$544,000--a drop of \$162,000. The lower value was the result of taking a large number of the less valuable species, such as the sperm whale, which yields more oil and less meat. One of the processing firms installed a whale butchering machine called the "whale breaker", which breaks bones, shells, and cartilage, thus reducing butchering labor by 50 percent.

Other information. Condensed summary data on the operating units and catch by States for the Pacific coast fisheries appearing on the following pages have been previously published in Current Fishery Statistics No. 3694. Additional data on many aspects of the Pacific coast fisheries appear in daily, monthly, and annual reports published by the Bureau's Fishery Market News Service offices in San Pedro, Calif., and Seattle, Wash. Specific data on several of the major fisheries of the Pacific coast may be found in Section 12 of this publication.

Acknowledgments. The following organizations assisted the Bureau to collect the data appearing in this section: Alaska Department of Fish and Game, Washington Department of Fisheries, Oregon Fish Commission, and California Department of Fish and Game.



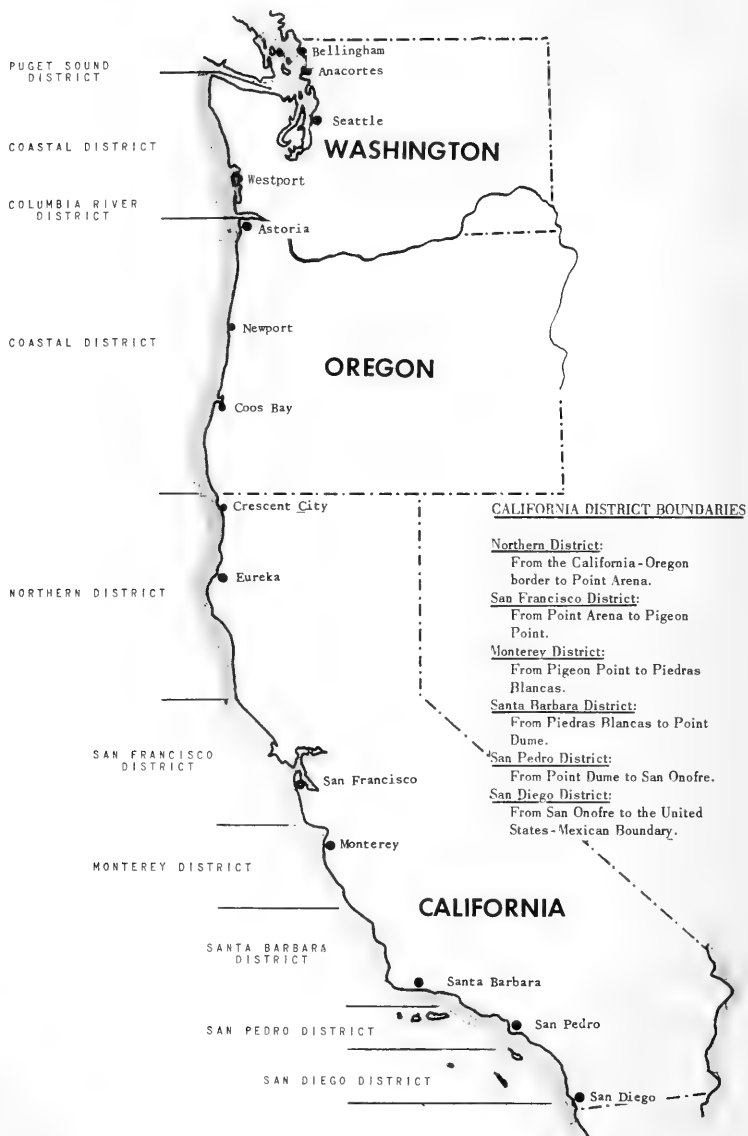


PACIFIC COAST STATES



PACIFIC COAST FISHERIES

PACIFIC COAST STATES - Continued



PACIFIC COAST FISHERIES

SECTIONAL SUMMARIES SUMMARY OF CATCH, 1963

(MILLIONS OF POUNDS AND MILLIONS OF DOLLARS)

STATE	FISH		SHELLFISH, ETC.	
	QUANTITY	VALUE	QUANTITY	VALUE
ALASKA	286	36	106	10
WASHINGTON	133	17	17	4
OREGON	54	7	7	1
CALIFORNIA	457	45	19	2
TOTAL	960	106	149	17

STATE	WHALE PRODUCTS		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE
ALASKA	-	-	392	46
WASHINGTON	-	-	150	21
OREGON	(1)	(1)	61	8
CALIFORNIA	8	1	514	49
TOTAL	8	1	1,117	124

1/ LESS THAN 500,000 POUNDS OR \$500,000.

SUMMARY OF OPERATING UNITS, 1963

ITEM	ALASKA	WASHINGTON	OREGON	CALIFORNIA	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	6,914	4,871	1,370	5,175	15,191
ON BOATS AND SHORE	10,100	4,694	1,337	2,388	16,421
TOTAL	17,014	9,565	2,707	7,563	33,612
VESSELS, MOTOR	2,286	1,423	631	1,484	4,791
GROSS TONNAGE	51,565	35,618	14,427	71,350	143,046
BOATS:					
MOTOR	7,970	2,918	1,003	1,731	13,269
OTHER	-	269	14	-	303
GEAR:					
HAUL SEINES	-	105	3	9	117
LENGTH, YARDS	-	8,225	300	2,000	10,525
PURSE SEINES AND LAMPARA NETS:					
ANCHOVY	-	-	-	23	23
LENGTH, YARDS	-	-	-	7,800	7,800
HERRING	8	7	-	-	15
LENGTH, YARDS	4,100	2,975	-	-	7,075
MACKEREL AND SARDINE	-	-	-	90	90
LENGTH, YARDS	-	-	-	42,800	42,800
SALMON	1,565	406	-	-	1,699
LENGTH, YARDS	620,000	216,945	-	-	705,445
SQUID	-	-	-	24	24
LENGTH, YARDS	-	-	-	8,000	8,000
TUNA	-	-	-	134	134
LENGTH, YARDS	-	-	-	97,460	97,460
OTHER	-	-	-	8	8
LENGTH, YARDS	-	-	-	2,450	2,450
BEAM TRAWLS, SHRIMP	15	3	-	19	37
YARDS AT MOUTH	180	23	-	133	336
OTTER TRAWLS:					
FISH	2	113	57	71	233
YARDS AT MOUTH	30	2,500	1,261	1,889	5,474
SHRIMP	10	5	27	16	49
YARDS AT MOUTH	151	95	513	233	862
BRUSH WEIRS	-	1	-	-	1
POUND NETS	-	2	-	-	2
FLOATING TRAPS	4	-	-	-	4

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	ALASKA	WASHINGTON	OREGON	CALIFORNIA	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
GEAR - CONTINUED:					
POTS AND TRAPS:					
CRAB:					
DUNGENESS	12,000	23,670	32,935	23,570	87,485
KING	16,000	-	-	-	16,000
CRAWFISH	-	40	560	-	600
FISH	-	-	-	100	100
LOBSTER, SPINY	-	-	-	12,730	12,730
OCTOPUS	-	175	-	100	275
SHRIMP	-	190	-	-	190
GILL NETS:					
ANCHOR, SET OR STAKE:					
SALMON	2,220	293	40	-	2,553
SQUARE YARDS	1,631,000	70,000	12,000	-	1,713,000
OTHER	-	4	142	-	146
SQUARE YARDS	-	4,000	56,800	-	60,800
DRIFT:					
BARRACUDA	-	-	-	19	19
SQUARE YARDS	-	-	-	53,700	53,700
SALMON	3,450	1,238	570	-	5,162
SQUARE YARDS	4,474,000	6,147,000	1,738,000	-	12,140,000
SEA BASS	-	-	-	110	110
SQUARE YARDS	-	-	-	317,400	317,400
OTHER	-	10	101	15	116
SQUARE YARDS	-	9,000	152,500	41,900	194,400
TRAMMEL NETS	-	-	-	8	8
SQUARE YARDS	-	-	-	44,000	44,000
LINES:					
HAND:					
ROCKFISHES	-	-	-	436	436
HOOKS	-	-	-	872	872
TUNA:					
ALBACORE	-	-	-	648	648
HOOKS	-	-	-	648	648
YELLOWFIN AND SKIPJACK	-	-	-	402	402
HOOKS	-	-	-	402	402
OTHER	-	32	-	338	370
HOOKS	-	64	-	676	740
TROLL:					
ALBACORE	-	878	3,962	8,604	11,734
HOOKS	-	878	3,962	8,604	11,734
SALMON	4,340	5,783	3,394	9,396	20,881
HOOKS	26,100	26,120	15,960	37,584	96,708
OTHER	-	78	42	1,116	1,236
HOOKS	-	156	84	1,116	1,356
LONG OR SET WITH HOOKS HOOKS	9,650	4,093	148	426	11,069
HOOKS	776,495	371,550	15,075	42,600	922,925
DIP NETS, COMMON	-	206	-	-	206
DIP, BRAIL, OR SCOOP NETS, REEF NETS	-	83	-	89	89
WHEELS	6	-	-	-	83
HARPOONS:					
SWORDFISH	-	-	-	18	18
WHALE	-	-	1	5	6
DREDGES:					
CLAM	-	4	-	-	4
YARDS AT MOUTH	-	4	-	-	4
OYSTER:					
COMMON	-	74	6	4	84
YARDS AT MOUTH	-	148	12	4	164
SUCTION	-	1	-	1	2
TONGS, OYSTER	-	-	-	30	30
SHOVELS	202	1,344	200	4	1,750
DIVING OUTFITS:					
ABALONE	-	-	-	129	129
CLAM	-	-	1	-	1

PACIFIC COAST FISHERIES

269

CATCH BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	ALASKA		WASHINGTON		OREGON	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
CARP	-	-	1,174	7	-	-
COD	-	-	6,302	347	67	3
DOLLY VARDEN TROUT	5	1	-	-	-	-
FLOUNDER:						
"SOLE"	-	-	12,220	911	15,932	922
UNCLASSIFIED	-	-	1,066	54	573	20
HAKE	-	-	400	8	-	-
HALIBUT	29,886	4,161	15,416	2,678	263	43
HERRING, SEA	31,216	468	6,972	160	16	6
LAKE TROUT	2	1	-	-	-	-
LINGCOD	-	-	3,099	178	558	27
OCEAN PERCH	-	-	15,567	809	8,011	363
PERCH	-	-	150	16	-	-
RATFISH	-	-	1,095	7	-	-
ROCKFISHES	91	6	8,028	410	5,162	230
SABLEFISH	1,360	126	2,744	377	551	53
SALMON:						
CHINOOK OR KING	9,161	3,127	6,410	2,447	4,768	1,714
CUM OR KETA	35,748	3,046	3,083	579	9	1
PINK	125,117	14,472	31,462	3,814	24	3
RED OR SOCKEYE	35,456	7,644	7,938	2,682	30	11
SILVER OR COHO	17,581	3,009	6,100	1,625	3,431	877
TOTAL SALMON	223,063	31,298	54,993	11,147	8,262	2,606
SEA BASS, WHITE	-	-	-	-	7	(2)
SHAD	-	-	193	9	1,310	95
SHARKS:						
GRAYFISH	-	-	867	4	-	-
SOUPFIN	-	-	2	(2)	2	(2)
TOTAL SHARKS	-	-	869	4	2	(2)
SKATES	-	-	482	6	246	6
SMELT:						
EULACHON	-	-	906	65	173	23
SURF OR SILVER	-	-	226	22	(2)	(2)
STEELHEAD TROUT	20	4	535	172	798	219
STRIPED BASS	-	-	-	-	69	10
STURGEON	-	-	211	26	190	25
SUCKERS	-	-	13	(2)	-	-
TOMCOD	-	-	5	(2)	-	-
TUNA, ALBACORE	-	-	527	85	11,400	1,757
WHITFISH	1	(2)	-	-	-	-
TOTAL FISH	285,644	36,065	133,193	17,498	53,590	6,408
SHELLFISH, ETC.						
CRAB:						
DUNGENESS	12,084	1,358	6,674	1,390	4,153	870
KING	78,740	7,607	-	-	-	-
TOTAL CRABS	90,824	8,965	6,674	1,390	4,153	870
CRAWFISH, FRESH-WATER	-	-	1	(2)	15	4
SHRIMP	15,127	605	1,002	105	3,028	263
CLAMS:						
HARD	-	-	365	182	-	-
RAZOR	144	52	223	110	10	5
MIXED	-	-	-	-	21	10
TOTAL CLAMS	144	52	608	292	31	15
OCTOPUS	-	-	74	9	(2)	(2)
OYSTERS, MARKET:						
PACIFIC	-	-	8,103	2,042	387	109
WESTERN	-	-	31	101	-	-
TOTAL OYSTERS	-	-	8,134	2,143	387	109

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	ALASKA		WASHINGTON		OREGON	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC. - CONTINUED						
SQUID	-	-	1	(2)	-	-
KELP (WITH HERRING EGGS) . .	199	16	-	-	-	-
TOTAL SHELLFISH, ETC. . .	106,294	9,638	16,494	3,939	7,614	1,261
WHALE PRODUCTS:						
MEAL	-	-	-	-	21	1
MEAT	-	-	-	-	97	6
OIL, WHALE	-	-	-	-	26	3
SOLUBLES	-	-	-	-	14	(2)
TOTAL WHALE PRODUCTS. . .	-	-	-	-	158	10
GRAND TOTAL	391,938	45,703	149,687	21,437	61,362	7,679

SPECIES	CALIFORNIA 1/		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE
FISH				
ANCHOVIES.	4,570	78	4,570	78
BARRACUDA.	379	62	379	62
BONITO	4,022	113	4,022	113
CABEZONE	3	(2)	3	(2)
CABRILLA	37	6	37	6
CARP	255	12	1,429	19
COD.	-	-	6,369	350
DOLLY VARDEN TROUT	-	-	5	1
FLOUNDERS:				
ARROWTOOTH HALIBUT	17	1	17	1
CALIFORNIA HALIBUT	3/1,120	3/ 244	1,120	244
SAND DABS.	556	37	556	37
"SOLE"	19,294	1,477	47,446	3,310
UNCLASSIFIED	3/ 521	3/ 30	2,160	104
FLYING FISH.	47	3	47	3
GROUPERS	234	51	234	51
HAKE	140	2	540	10
HALFMOON	0	2	9	2
HALIBUT.	4	1	45,569	6,883
HARDHEAD	148	30	148	30
HERRING, SEA	630	22	38,834	656
KING CROAKER	551	33	551	33
LAKE TROUT	-	-	2	293
LINGCOD.	1,133	88	4,790	293
MACKEREL:				
JACK	95,442	1,989	95,442	1,989
PACIFIC.	40,243	861	40,243	861
OCEAN PERCH.	-	-	23,578	1,172
OPALEYE.	4	1	4	1
PERCH.	173	25	323	41
POKPAHO.	58	18	58	18
RATFISH.	-	-	1,095	7
ROCKFISHES	11,747	682	26,030	1,328
SABLEFISH.	1,809	98	6,464	654
SALMON:				
CHINOOK OR KING.	6,840	3,623	27,179	10,911
CHUM OR KETA	-	-	38,840	3,626
PINK	-	-	156,603	18,289
RED OR SOCKEYE	-	-	43,424	10,337
SILVER OR COHO	1,019	337	28,131	5,846
TOTAL SALMON	7,859	3,960	294,177	49,011
SARDINE, PACIFIC	7,131	299	7,131	299
SCULPIN.	76	22	76	22
SEA BASS:				
BLACK.	304	48	304	48
WHITE.	891	242	898	242
SHAD	-	-	1,503	104
SHARKS:				
GRAYFISH	-	-	867	4
SOUPFIN.	-	-	4	(2)
UNCLASSIFIED	665	62	665	62
TOTAL SHARKS.	665	62	1,536	66

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

271

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	CALIFORNIA 1/		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE
FISH - CONTINUED				
SHEEPSHEAD	28	2	28	2
SKATES	217	3	945	15
SMELT:				
EULACHON	-	-	1,079	88
SURF OR SILVER	358	22	584	44
SPLITTAIL	5	1	5	1
STEELHEAD TROUT	-	-	1,353	395
STRIPED BASS	-	-	69	10
STURGEON	-	-	401	51
SUCKERS	-	-	13	(2)
SWORDFISH	98	58	98	58
TOMCOD	-	-	5	(2)
TUNA:				
ALBACORE	48,860	7,317	60,787	9,159
BLUEFIN	30,353	3,392	30,353	3,392
SKIPJACK	96,620	10,374	96,620	10,374
YELLOWFIN	109,583	14,530	109,583	14,530
TOTAL TUNA	285,416	35,613	297,343	37,455
TURBOT	97	6	97	6
WAHOO	22	7	22	7
WHITBAIT	148	11	148	11
WHITEFISH	-	-	1	(2)
YELLOWTAIL	70	7	70	7
UNCLASSIFIED:				
FOR FOOD	16	1	16	1
BAIT AND ANIMAL FOOD	1,034	21	1,034	21
TOTAL FISH	487,583	46,351	960,010	106,322
SHELLFISH, ETC.				
CRABS:				
DUNGENESS	1,952	688	24,863	4,306
KING	-	-	78,740	7,607
ROCK	241	22	241	22
TOTAL CRABS	2,193	710	103,844	11,935
CRAWFISH, FRESH-WATER	-	-	16	4
LOBSTERS, SPINY	584	381	584	381
SHRIMP	2,103	208	21,260	1,181
ABALONE	869	626	869	626
CLAMS:				
HARD	1	1	386	183
RAZOR	-	-	377	167
MIXED	-	-	21	10
TOTAL CLAMS	1	1	784	360
OCTOPUS	75	4	149	13
OYSTERS, MARKET:				
EASTERN	14	5	14	5
PACIFIC	1,256	226	9,746	2,377
WESTERN	-	-	31	101
TOTAL OYSTERS	1,270	231	9,791	2,483
SQUID	11,561	240	11,562	240
KELP (WITH HERRING EGGS)	-	-	199	16
TOTAL SHELLFISH, ETC.	18,656	2,401	149,058	17,239
WHALE PRODUCTS:				
MEAL	2,617	152	2,638	153
MEAT	2,787	236	2,884	242
OIL:				
SPERM	700	58	700	58
WHALE	1,403	88	1,429	91
SOLUBLES	-	-	14	(2)
TOTAL WHALE PRODUCTS	7,507	534	7,655	544
GRAND TOTAL	513,746	49,286	1,116,733	124,105

1/ INCLUDES THE CATCH TAKEN OFF LATIN AMERICA AND LANDED AT CALIFORNIA PORTS. 2/ LESS THAN 500 POUNDS OR \$500.
3/ SOME HALIBUT MAY BE INCLUDED WITH "CALIFORNIA HALIBUT" AND "UNCLASSIFIED FLOUNDERS."

NOTE:--ALASKA DATA INCLUDE THE CATCH OF HALIBUT, SABLEFISH, LINGCOD, AND ROCKFISHES LANDED BY U.S. VESSELS AT BRITISH COLUMBIA PORTS. STATISTICS ON THE CATCH ARE SHOWN IN ROUND (LIVE) WEIGHT, EXCEPT FOR SHELL MOLLUSKS. CLAMS AND OYSTERS ARE REPORTED IN WEIGHT OF TOTAL MEATS. ABALONE IS REPORTED IN WEIGHT OF EDIBLE MEAT.

PACIFIC COAST FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM		ALASKA		WASHINGTON	
		QUANTITY	VALUE	QUANTITY	VALUE
CARP, MEAL AND SCRAP.	TONS	-	-	(1)	(1)
COD:					
FILLETS, FRESH AND FROZEN	POUNDS	-	-	1,920,576	\$454,371
STEAKS.	DO	-	-	(1)	(1)
LUTEFISK.	DO	-	-	(1)	(1)
FLOUNDER FILLETS, FRESH AND FROZEN.	DO	-	-	3,406,282	1,231,207
MALIBUT:					
FRESH AND FROZEN:					
FILLETS	DO	264,200	\$152,150	1,765,013	991,617
STEAKS.	DO	-	-	5,214,430	2,485,324
CHEEK, FROZEN.	DO	19,700	7,290	-	-
CANNED:					
REGULAR	STANDARD CASES	-	-	(1)	(1)
SMOKED.	DO	11	1,330	-	-
SMOKED.	POUNDS	-	-	227,500	65,850
HERRING, SEA:					
SALTED EGGS (WITH KELP)	DO	184,500	78,350	-	-
MEAL AND SCRAP.	TONS	2,229	289,100	430	55,000
OIL	THOUSAND POUNDS	4,433	222,390	(1)	(1)
LINGCOD, FILLETS, FRESH AND FROZEN.	POUNDS	-	-	907,821	216,060
OCEAN PERCH FILLETS, FRESH AND FROZEN	DO	-	-	4,624,706	1,055,386
ROCKFISH FILLETS, FRESH AND FROZEN.	DO	-	-	2,372,848	500,223
SABLEFISH:					
FROZEN, STEAKS.	DO	-	-	(1)	(1)
SALTED.	DO	-	-	15,600	6,400
SMOKED.	DO	900	230	121,612	49,718
SALMON:					
FRESH AND FROZEN:					
FILLETS	DO	-	-	(1)	(1)
STEAKS.	DO	-	-	796,114	579,359
CANNED:					
CHINOOK OR KING	STANDARD CASES	-	-	-	-
CHUM OR KETA.	DO	38,867	1,467,290	14,505	493,569
PINK.	DO	432,685	8,674,530	27,848	582,875
RED OR SOCKEYE.	DO	1,570,291	33,937,550	385,975	9,301,153
SILVER OR COHO.	DO	483,343	19,562,300	120,940	6,302,668
	DO	130,293	3,792,380	20,311	702,635
TOTAL CANNED SALMON	DO	2,655,479	67,434,050	569,579	17,382,900
EGGS FOR BAIT	DO	-	-	16,321	1,235,808
SMOKED.	DO	530	36,800	790	69,803
SPECIALTIES (ROE, SALTED LIVERS, ETC.)	DO	151	6,190	(1)	(1)
CURED:					
SALTED:					
MILD-CURED.	POUNDS	2,421,100	2,118,850	1,305,150	1,152,480
EGGS FOR FOOD AND BAIT.	DO	594,300	231,770	523,332	298,581
SPECIALTIES	DO	-	-	(1)	(1)
SMOKED.	DO	6,300	8,660	431,966	312,776
MEAL AND SCRAP.	TONS	-	-	(1)	(1)
OIL	THOUSAND POUNDS	-	-	529	31,516
SHAD, CANNED:					
FISH.	STANDARD CASES	-	-	(1)	(1)
ROE	DO	-	-	(1)	(1)
STURGEON:					
CANNED, SMOKED, AND SPECIALTIES	DO	-	-	308	18,364
SMOKED AND KIPPERED	POUNDS	-	-	2,300	2,270
SWORDFISH, STEAKS, FROZEN	DO	-	-	684,831	347,565
TUNA:					
CANNED, ALBACORE.	STANDARD CASES	-	-	3/407,085	3/4,229,642
TOTAL CANNED TUNA.	DO	-	-	3/407,085	3/4,229,642
SMOKED.	DO	-	-	(1)	(1)
CRABS:					
DUNGNESS:					
FRESH AND FROZEN:					
COOKED MEAT	POUNDS	2,730,900	1,674,760	1,176,889	1,595,644
SECTIONS.	DO	1,820,500	776,190	-	-
CANNED:					
MEAT.	STANDARD CASES	15,659	580,990	14,142	409,363
SPECIALTIES (SMOKED, SPREADS, ETC.)	DO	-	-	(1)	(1)
MEAL AND SCRAP.	TONS	-	-	(1)	(1)

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	ALASKA		WASHINGTON	
	QUANTITY	VALUE	QUANTITY	VALUE
CRABS - CONTINUED:				
KING:				
FRESH AND FROZEN:				
COOKED MEAT	POUNDS	10,549,300	-	-
SECTIONS AND LEGS	DO	860,600	-	-
CANNED	STANDARD CASES			
		255,890	(1)	(1)
SHRIMP:				
MEAT, RAW AND COOKED, FRESH AND FROZEN	POUNDS	2,881,400	-	-
CANNED:	STANDARD CASES			
MEAT		61,949	(1)	(1)
SPECIALTIES (COCKTAILS, SPREADS, ETC.)	DO	-	(1)	(1)
CLAMS:				
HARD (INCLUDING PISMO), CANNED:				
WHOLE AND MINCED	DO	-	1,238	\$26,600
CHOWDER AND JUICE	DO	-	14,851	74,349
SPECIALTIES, (IN THE SHELL)	DO	-	(1)	(1)
RAZOR (INCLUDING COCKLES IN ALASKA):				
SHUCKED FRESH AND FROZEN	GALLONS	-	4,262	37,750
CANNED:	STANDARD CASES			
WHOLE AND MINCED		6,014	661	14,524
SMOKED	DO	-	(1)	(1)
OYSTERS:				
SHUCKED, FRESH AND FROZEN:				
PACIFIC	GALLONS	-	778,752	3,041,597
WESTERN	DO	-	3,656	186,946
CANNED:	STANDARD CASES			
MEAT		-	73,568	1,079,833
SMOKED	DO	-	890	92,739
SPECIALTIES (STEMS, SOUP ETC.)	DO	-	167,750	2,334,623
SHELL, GRIT AND LIME	TONS	-	673	11,203
UNCLASSIFIED:				
FRESH AND FROZEN, PACKAGED:				
STICKS:				
RAW	POUNDS	-	(1)	(1)
COOKED	DO	-	(1)	(1)
PORTIONS:				
RAW	DO	-	80,402	32,079
COOKED	DO	-	(1)	(1)
FISH AND SHELLFISH	DO	-	755,771	294,981
CANNED:	STANDARD CASES			
FISH AND SHELLFISH		-	49,094	1,288,291
ANIMAL FOOD	DO	-	66,956	425,888
CURED	POUNDS	-	81,132	16,711
INDUSTRIAL	-	-	-	183,914
MISCELLANEOUS	-	-	-	123,584
TOTAL	-	-	-	43,834,343

ITEM	OREGON		CALIFORNIA	
	QUANTITY	VALUE	QUANTITY	VALUE
ANCHOVIES, CANNED	STANDARD CASES	-	(1)	(1)
BARRACUDA, SMOKED	POUNDS	-	3,670	\$2,647
BUTTERFISH, SMOKED	DO	-	(1)	(1)
COD:				
FILLETS, FRESH AND FROZEN, SPECIALTIES, FROZEN (FISH AND CHIPS)	POUNDS	25,081	(2)	(2)
SALTED	DO	-	(1)	(1)
SMOKED	DO	-	251,966	122,509
CHUBS, SMOKED	DO	-	(1)	(1)
FLOUNDER, FILLETS, FRESH AND FROZEN	DO	3,187,942	3,382,500	1,202,000
HAKE FILLETS, FROZEN	DO	-	(1)	(1)
HALIBUT:				
FRESH AND FROZEN:				
FILLETS	DO	(2)	1,504,373	815,784
STEAKS	DO	(2)	(2)	(2)
SPECIALTIES, FROZEN (FISH AND CHIPS)	DO	-	(1)	(1)
SMOKED	POUNDS	-	77,150	22,478

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	OREGON		CALIFORNIA	
	QUANTITY	VALUE	QUANTITY	VALUE
LINGCOD:				
FILLETS, FRESH AND FROZEN	POUNDS	190,862	75,000	\$21,750
SMOKED AND KIPPERED	DO	-	(1)	(1)
MACKEREL:				
CANNED:				
JACK	STANDARD			
PACIFIC	CASES	-	877,925	5,244,374
SMOKED	DO	-	397,527	2,359,055
OCEAN PERCH, FILLETS, FRESH AND	POUNDS		(1)	(1)
FROZEN	DO	2,369,937	589,522	(2)
ROCKFISH FILLETS, FRESH AND FROZEN	DO	1,278,410	296,871	1,619,000
SABLEFISH:				
FROZEN, FILLETS	DO	(1)	(1)	(1)
SMOKED	DO	(1)	(1)	(1)
SALMON:				
FRESH AND FROZEN:				
FILLETS	DO	(1)	(1)	-
STEAKS	DO	(2)	(2)	212,029
CANNED:				
CHINOOK OR KING	STANDARD			
CHUM OR KETA	CASES	43,471	2,027,283	(2)
PINK	DO	1,842	33,546	-
RED OR SOCKEYE	DO	216	5,992	-
SILVER OR COHO	DO	1,664	95,836	-
STEELHEAD	DO	14,952	657,107	-
	DO	7,654	326,085	-
TOTAL CANNED SALMON		69,799	3,145,849	-
SMOKED	DO	85	6,486	(2)
SPECIALTIES, (ROE, SALTED	DO	(1)	(1)	-
LIVERS, ETC.)				
CURED:				
SALTED, MILD-CURED	POUNDS	-	-	1,443,615
SMOKED	DO	(1)	(1)	1,065,987
OIL	THOUSAND	116	21,830	-
SARDINES, PACIFIC:				
CANNED	STANDARD			
SALTED	CASES	-	-	57,072
SEA BASS:	POUNDS	-	-	(1)
FILLETS, FROZEN	DO	-	-	(1)
STEAKS, FROZEN	DO	-	-	(1)
SMOKED	DO	-	-	(1)
SHAD:				
CANNED:				
FISH	STANDARD			
ROE	CASES	9,662	94,754	(1)
SMOKED	DO	2,010	137,878	(1)
SMOKED	POUNDS	(1)	(1)	(1)
SHARK:				
SMOKED	DO	-	-	(1)
OIL	THOUSAND	-	-	(1)
SMELT, SMOKED	POUNDS	(1)	(1)	(1)
STURGEON:				
FILLETS, FROZEN	DO	(1)	(1)	-
CANNED:				
SMOKED AND SPECIALTIES	STANDARD			
SMOKED AND KIPPERED	CASES	413	29,818	-
SMORFISH:	POUNDS	(1)	(1)	(1)
STEAKS, FROZEN	DO	-	-	(2)
SMOKED	DO	-	-	(1)
TUNA:				
CANNED:				
ALBACORE	STANDARD			
LIGHT MEAT	CASES	3/1,093,374	3/14,646,718	1,686,125
TONNO	DO	-	-	7,254,452
	DO	-	-	120,754
TOTAL CANNED TUNA		3/1,093,374	3/14,646,718	9,061,331
				108,848,969

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

275

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	OREGON		CALIFORNIA	
	QUANTITY	VALUE	QUANTITY	VALUE
TUNA - CONTINUED:				
CANNED - CONTINUED:				
SPECIALTIES (WITH NOODLES CREAMED, ETC.)	STANDARD CASES	-	35,909	\$417,815
SMOKED	DO	(1)	-	-
SMOKED AND KIPPERED	POUNDS	(1)	21,170	21,159
TUNALIKE FISH (BONITO AND YELLOWTAIL):				
FILLETS, FROZEN	DO	-	(1)	(1)
CANNED	STANDARD CASES	-	71,541	570,403
SMOKED	POUNDS	-	2,818	2,765
WAHOO, SMOKED	DO	-	(1)	(1)
WHITEFISH, SMOKED	DO	-	(1)	(1)
WHITING, SMOKED	DO	-	(1)	(1)
CRABS:				
DUNGENESS:				
FRESH AND FROZEN:				
COOKED MEAT	DO	642,552	\$878,482	278,895
SPECIALTIES (COCKTAILS)	DO	-	(1)	473,785
CANNED:				
MEAT	STANDARD CASES	(1)	(1)	-
SPECIALTIES (SMOKED, SPREADS, ETC.)	DO	55	5,023	-
MEAL AND SCRAP	TONS	(1)	-	-
LOBSTER, COCKTAILS, FROZEN	POUNDS	-	(1)	(1)
SHRIMP:				
FRESH AND FROZEN:				
RAW, HEADLESS	DO	-	(1)	(1)
MEAT, RAW AND COOKED	DO	352,803	382,092	813,681
BREADED	DO	-	-	4,505,417
SPECIALTIES (COCKTAILS)	DO	-	(1)	3,334,727
CANNED:				
MEAT	STANDARD CASES	(1)	(1)	-
SPECIALTIES (COCKTAILS, SPREADS, ETC.)	DO	(1)	(1)	-
SMOKED	POUNDS	(1)	(1)	-
MEAL AND SCRAP	TONS	(1)	(1)	-
ABALONE, FROZEN:				
STEAKS:				
NOT BREADED	POUNDS	-	-	420,101
BREADED	DO	-	-	(1)
SPECIALTIES	DO	-	-	(1)
CLAMS, RAZOR (INCLUDING COCKLES IN ALASKA):				
SHUCKED, FRESH AND FROZEN	GALLONS	8,770	77,562	-
CANNED:				
WHOLE AND MINCED	STANDARD CASES	-	-	-
SMOKED	DO	(1)	10,930	-
OYSTERS:				
SHUCKED, FRESH AND FROZEN:				
PACIFIC	GALLONS	105,530	411,692	145,278
WESTERN	DO	(1)	(1)	-
BREADED, FROZEN	POUNDS	-	-	50,396
CANNED:				
MEAT	STANDARD CASES	(1)	(1)	-
SPECIALTIES (STEWES, SOUP, ETC.)	DO	(1)	(1)	-
SHELL, GRIT, AND LIME	TONS	(1)	(1)	-
SCALLOPS, BREADED; COOKED AND RAW, FROZEN	POUNDS	-	-	339,158
SQUID, CANNED	STANDARD CASES	-	-	147,957
WHALE:				
MEAT, FROZEN (FOR ANIMAL FOOD)				
MEAL AND SCRAP	POUNDS	97,000	5,820	2,786,713
OIL:	TONS	10	1,384	1,308
SPERM	1000 POUNDS	-	-	700
OTHER	DO	26	2,860	1,403
SOLUBLES	TONS	7	428	-

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	OREGON		CALIFORNIA	
	QUANTITY	VALUE	QUANTITY	VALUE
UNCLASSIFIED:				
FRESH AND FROZEN PACKAGED FISH:				
STICKS:				
RAW	POUNDS	-	628,490	\$254,419
COOKED	DO	-	5,382,005	2,345,874
PORTIONS:				
RAW	DO	-	709,290	250,405
COOKED	DO	-	2,116,856	1,473,161
UNBREADED	DO	-	149,109	52,901
CAKES	DO	-	269,554	244,023
FISH AND SHELLFISH	DO	6,184	1,190,928	833,491
CANNED:				
FISH AND SHELLFISH	STANDARD CASES		(4)	(4)
ANIMAL FOOD	DO	15,290	313,717	12,728,779
CURED	POUNDS	227,601	1,371,785	424,166
INDUSTRIAL	-	-	756,573	4,031,423
MISCELLANEOUS	-	-	-	9,102,661
TOTAL	-	-	-	162,466,459

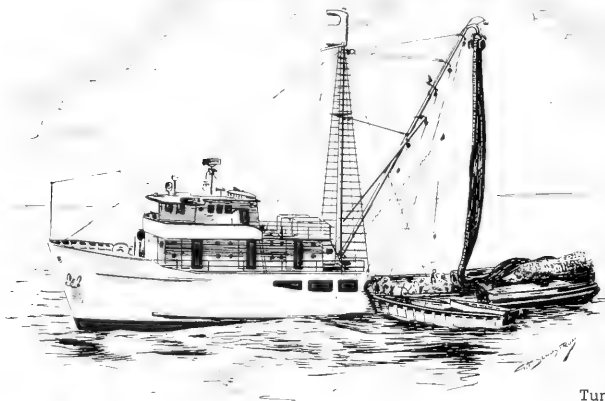
1/ INCLUDED WITH UNCLASSIFIED PRODUCTS.

2/ THE PRODUCTION OF CERTAIN ITEMS IN OREGON AND CALIFORNIA HAVE BEEN INCLUDED WITH THE WASHINGTON PRODUCTION.

3/ THE PACK OF LIGHT MEAT TUNA HAS BEEN INCLUDED WITH ALBACORE.

4/ INCLUDED WITH ANIMAL FOOD.

NOTE:--THIS TABLE WILL NOT ADD. INDIVIDUAL STATE TOTALS ARE CORRECT BUT SMALL QUANTITIES PRODUCED IN OREGON AND CALIFORNIA ARE INCLUDED IN THE PRODUCTION FOR WASHINGTON. SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR A FOREIGN COUNTRY; THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE.



Tuna purse seiner

SUMMARY OF OPERATING UNITS, 1963

(VALUE IN THOUSANDS OF DOLLARS)

ITEM	QUANTITY	VALUE
PACKAGED, FRESH AND FROZEN:		
NOT BREADED:		
FISH	1,000 POUNDS	36,136
SHELLFISH.	DO	31,802
BREADED:		
FISH	DO	9,810
SHELLFISH.	DO	4,914
SPECIALTIES.	DO	1,023
WHALE MEAT (FOR ANIMAL FOOD)	DO	2,884
CANNED	1,000 STANDARD CASES	18,033
CURED.	1,000 POUNDS	9,678
INDUSTRIAL	-	-
TOTAL	-	-
		325,535

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

ITEM	VALUE
ALASKA	94,682
WASHINGTON	43,834
OREGON	24,553
CALIFORNIA	162,466
TOTAL	325,535

WHOLESALE AND MANUFACTURING, 1963

ITEM	ALASKA	WASHINGTON	OREGON	CALIFORNIA	TOTAL
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
WHOLESALE AND MANUFACTURING:					
ESTABLISHMENTS	181	177	57	178	593
PERSONS ENGAGED:					
AVERAGE FOR SEASON.	7,907	4,099	1,994	9,737	23,737
AVERAGE FOR YEAR.	2,609	1,971	1,191	7,032	12,803



PACIFIC COAST FISHERIES

ALASKA FISHERIES

CATCH BY REGIONS, 1963

SPECIES	SOUTHEASTERN ALASKA		CENTRAL ALASKA	
	POUNDS	VALUE	POUNDS	VALUE
FISH				
HALIBUT 1/	21,986,200	\$3,136,270	7,900,200	\$1,024,720
HERRING.	31,213,700	468,200	2,500	40
ROCKFISHES 2/	66,300	6,190	2,200	150
SABLEFISH.	1,357,600	125,340	1,700	200
SALMON: 3/				
CHINOOK OR KING.	4,497,600	2,208,540	693,200	186,270
CHUM OR KETA.	12,649,600	1,174,960	18,766,000	1,556,590
PINK.	70,054,600	8,276,680	54,599,600	6,149,450
RED OR SOCKEYE.	3,905,800	1,074,350	13,751,000	3,220,740
SILVER OR COHO.	11,304,600	2,103,590	5,444,900	792,600
TOTAL SALMON.	102,412,400	14,844,120	93,254,700	11,905,850
TROUT:				
DOLLY VARDEN.	-	-	4,800	960
LAKE.	-	-	2,200	440
STEELHEAD.	19,700	3,940	-	-
WHITEFISH.	-	-	600	130
TOTAL FISH.	157,078,100	18,584,060	101,168,900	12,932,490
SHELLFISH, ETC.				
CLAM MEATS, RAZOR.	-	-	143,600	51,950
CRABS:				
DUNGENESS.	4,679,700	561,560	7,404,400	795,980
KING.	1,112,200	111,220	50,786,600	5,080,410
SHRIMP.	3,110,300	124,410	12,016,600	480,670
KELP (WITH HERRING EGGS)	199,100	15,920	-	-
TOTAL SHELLFISH, ETC.	9,101,300	813,110	70,617,900	6,409,010
GRAND TOTAL	166,179,400	19,397,170	171,786,800	19,341,500

SPECIES	WESTERN ALASKA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
FISH				
HALIBUT 1/	-	-	29,886,400	\$4,160,990
HERRING.	-	-	31,216,200	468,240
ROCKFISHES 2/	-	-	90,500	6,340
SABLEFISH.	-	-	1,359,500	125,540
SALMON: 3/				
CHINOOK OR KING.	3,969,800	\$731,830	9,160,600	3,126,640
CHUM OR KETA.	4,332,800	315,000	35,748,400	3,046,550
PINK.	463,200	46,250	125,117,400	14,472,390
RED OR SOCKEYE.	17,798,800	3,348,770	35,435,600	7,643,860
SILVER OR COHO.	831,500	106,430	17,581,200	3,008,820
TOTAL SALMON.	27,396,100	4,548,280	223,063,200	31,298,250
TROUT:				
DOLLY VARDEN.	-	-	4,800	960
LAKE.	-	-	2,200	440
STEELHEAD.	-	-	19,700	3,940
WHITEFISH.	-	-	600	130
TOTAL FISH.	27,396,100	4,548,280	285,643,100	36,064,830
SHELLFISH, ETC.				
CLAM MEATS, RAZOR.	-	-	143,600	51,950
CRABS:				
DUNGENESS.	-	-	12,084,100	1,357,540
KING.	26,841,500	2,415,730	78,740,300	7,607,360
SHRIMP.	-	-	15,126,900	605,080
KELP (WITH HERRING EGGS)	-	-	199,100	15,920
TOTAL SHELLFISH, ETC.	26,841,500	2,415,730	106,294,000	9,637,850
GRAND TOTAL	54,237,600	6,964,010	391,937,100	45,702,680

1/ INCLUDES THE VALUE OF HALIBUT LIVERS AND VISCERA AMOUNTING TO \$6,500.

2/ INCLUDES LINGCOD.

3/ THE ROUND WEIGHTS USED IN CATCH TABLES WERE OBTAINED BY MULTIPLYING NUMBER OF FISH BY THEIR AVERAGE WEIGHT.

NOTE:--THE ABOVE DATA INCLUDE CATCHES OF HALIBUT, SABLEFISH, LINGCOD, AND ROCKFISHES LANDED BY VESSELS OF U. S. REGISTRY IN BRITISH COLUMBIA PORTS. ROUND WEIGHTS OF FISH TAKEN BY HALIBUT VESSELS WERE OBTAINED BY MULTIPLYING REPORTED WEIGHTS, REPRESENTING POUNDAGE OF FISH EVISCERATED AND WITH HEADS-OFF, BY THE FOLLOWING FACTORS: HALIBUT 1.33, SABLEFISH AND ROCKFISHES 1.43.

PACIFIC COAST FISHERIES ALASKA

279

SUMMARY OF PRODUCTS AS PREPARED FOR MARKET, 1963

ITEM	SOUTHEASTERN ALASKA		CENTRAL ALASKA	
	POUNDS	VALUE	POUNDS	VALUE
HALIBUT	17,090,000	\$4,904,280	10,218,000	\$3,024,530
HERRING	13,021,000	676,810	-	-
ROCKFISHES	42,800	7,200	400	40
SABLEFISH	1,086,100	248,120	-	-
SALMON	71,142,300	34,855,240	56,493,700	29,611,210
TROUT:				
DOLLY VARDEN	-	-	3,600	1,570
LAKE	-	-	1,600	820
STEELHEAD	16,300	5,490	-	-
WHITEFISH	-	-	500	230
CLAMS, RAZOR	-	-	107,500	136,700
CRABS:				
DUNGENESS	1,415,000	1,309,620	3,441,800	1,722,320
KING	241,600	309,130	13,591,400	13,707,330
SHRIMP	606,700	635,810	3,203,900	3,527,470
KELP (WITH HERRING EGGS)	184,500	78,350	-	-
TOTAL	104,846,300	43,030,050	87,062,400	51,732,220

ITEM	WESTERN ALASKA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
HALIBUT	-	-	27,308,000	\$7,928,810
HERRING	-	-	13,021,000	676,810
ROCKFISHES	-	-	43,200	7,240
SABLEFISH	-	-	1,086,100	248,120
SALMON	15,978,600	\$11,521,350	143,614,600	75,987,800
TROUT:				
DOLLY VARDEN	-	-	3,600	1,570
LAKE	-	-	1,600	820
STEELHEAD	-	-	16,300	5,490
WHITEFISH	-	-	500	230
CLAMS, RAZOR	-	-	107,500	136,700
CRABS:				
DUNGENESS	-	-	4,856,800	3,031,940
KING	2,566,800	2,754,180	16,399,800	16,770,640
SHRIMP	-	-	3,810,600	4,163,280
KELP (WITH HERRING EGGS)	-	-	184,500	78,350
TOTAL	16,545,400	14,275,530	210,454,100	109,037,800

NOTE:--DATA ON PRODUCTS AS PREPARED FOR MARKET INCLUDE THE PRODUCTION OF CANADIAN-CAUGHT HALIBUT LANDED IN ALASKA. THE QUANTITY OF FISH LANDED BY HALIBUT CRAFT OF U.S. REGISTRY AT BRITISH COLUMBIA PORTS IS INCLUDED IN THE CATCH CREDITED TO SOUTHEASTERN ALASKA, BUT IS NOT INCLUDED IN DATA ON PRODUCTS AS PREPARED FOR MARKET.

PRODUCTS AS PREPARED FOR MARKET, 1963

ITEM	SOUTHEASTERN ALASKA		CENTRAL ALASKA		WESTERN ALASKA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FRESH								
ROCKFISHES, DRESSED	-	-	400	\$40	-	-	400	\$40
SALMON, DRESSED	-	-	8,500	4,400	2,000	\$970	10,500	5,370
CRABS:								
DUNGENESS:								
WHOLE	900	\$250	11,600	4,010	-	-	12,500	4,270
SECTIONS	27,100	6,780	-	-	-	-	27,100	6,780
MEAT	-	-	1,000	1,360	-	-	1,000	1,360
KING:								
WHOLE	100	30	2,200	830	-	-	2,300	860
SECTIONS	-	-	200,000	80,000	-	-	200,000	80,000
MEAT	-	-	700	930	-	-	700	930
SHRIMP, MEAT	-	-	300	340	-	-	300	340
TOTAL FRESH	28,100	7,070	224,700	91,910	2,000	970	254,800	99,950
FROZEN								
HALIBUT, DRESSED	16,818,800	4,761,030	10,115,100	3,000,510	-	-	26,933,900	7,761,540

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

PRODUCTS AS PREPARED FOR MARKET, 1963 - Continued

TYPE	SOUTHEASTERN ALASKA		CENTRAL ALASKA		WESTERN ALASKA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FROZEN - CONT'D.								
HALIBUT - CONT'D.								
FLETCHES . . .	222,200	\$131,170	42,000	\$20,980	-	-	264,200	\$152,150
CHEEKS . . .	19,700	7,290	-	-	-	-	19,700	7,290
LIVERS AND VISCERA . . .	28,800	3,460	60,900	3,040	-	-	89,700	6,500
HERRING, FOR BAIT . . .	4,129,000	169,320	-	-	-	-	4,129,000	169,320
ROCKFISHES, DRESSED . . .	42,800	7,200	-	-	-	-	42,800	7,200
SABLEFISH, DRESSED . . .	1,085,200	247,890	-	-	-	-	1,085,200	247,890
SALMON: DRESSED . . .	10,730,600	5,354,140	1,625,200	658,140	261,400	\$112,780	12,617,200	6,125,060
VISCERA . . .	456,400	21,450	14,100	420	-	-	470,500	21,870
TROUT:								
DOLLY VARDEN, DRESSED . . .	-	-	3,600	1,570	-	-	3,600	1,570
LAKE TROUT, DRESSED . . .	-	-	1,600	820	-	-	1,600	820
STEELHEAD, DRESSED . . .	15,300	4,610	-	-	-	-	15,300	4,610
WHITEFISH, DRESSED . . .	-	-	500	230	-	-	500	230
CLAMS . . .	-	-	17,300	4,000	-	-	17,300	4,000
CRABS:								
DUNGENESS:								
WHOLE . . .	143,900	62,320	1,766,800	610,450	-	-	1,930,700	672,770
SECTIONS . . .	510,600	256,380	1,282,600	513,030	-	-	1,793,400	769,410
MEAT . . .	602,700	754,610	184,000	241,750	-	-	786,700	996,360
KING:								
WHOLE . . .	4,200	2,180	3,525,000	1,657,000	-	-	3,529,200	1,859,180
SECTIONS . . .	-	-	660,600	348,380	-	-	660,600	348,380
MEAT . . .	234,400	301,700	4,215,900	4,409,540	2,566,800	2,754,180	7,017,100	7,465,420
SHRIMP:								
WHOLE . . .	30,300	11,720	-	-	-	-	30,300	11,720
MEAT . . .	337,200	338,720	2,513,600	2,764,930	-	-	2,850,800	3,103,650
TOTAL FROZEN	35,412,300	12,435,190	26,048,800	14,434,790	2,828,200	2,866,960	64,289,300	29,736,940
CURED								
KELP (WITH HERRING EGGS), SALTED . . .	184,500	78,350	-	-	-	-	184,500	78,350
SABLEFISH, SMOKED . . .	900	230	-	-	-	-	900	230
SALMON:								
MILD CURED . . .	1,276,000	1,233,900	46,000	41,250	799,600	634,990	2,121,600	1,910,140
PICKLED . . .	-	-	38,500	22,030	251,000	186,680	299,500	208,710
SMOKED OR KIPPERED . . .	1,800	2,230	3,500	5,550	-	-	5,300	7,780
EGGS, SALTED . . .	302,500	120,160	291,600	111,610	-	-	594,300	231,770
TROUT, STEEL-HEAD, SMOKED . . .	1,000	880	-	-	-	-	1,000	880
TOTAL CURED . . .	1,766,700	1,435,750	379,600	180,440	1,060,600	821,670	3,207,100	2,437,860
CANNED								
HALIBUT, SMOKED	500	1,330	-	-	-	-	500	1,330
SALMON:								
CHINOOK OR KING . . .	19,200	11,690	566,800	446,490	1,279,500	1,009,110	1,865,500	1,467,290
CHUM OR KETA . . .	7,160,400	3,079,550	11,088,300	4,542,510	2,520,200	1,052,470	20,768,900	8,674,530
PINK . . .	46,039,100	21,374,330	29,243,300	12,525,720	91,600	37,500	75,374,000	33,937,850
RED OR SOCKEYE . . .	2,496,700	2,017,280	10,218,400	9,223,430	10,465,400	8,321,590	23,200,500	19,562,300
SILVER OR COHO . . .	2,649,600	1,625,720	3,326,600	2,001,400	277,900	165,260	6,254,100	3,792,380
TOTAL . . .	58,365,000	28,108,570	54,443,400	28,739,550	14,654,600	10,585,930	127,463,000	67,434,050
SALMON, SMOKED:								
CHINOOK OR KING . . .	3,200	7,820	3,500	4,970	-	-	6,700	12,790
CHUM OR KETA . . .	3,800	3,990	1,400	1,940	-	-	5,200	5,930
RED OR SOCKEYE . . .	-	-	2,300	3,320	-	-	2,300	3,320
SILVER OR COHO . . .	3,000	2,980	8,300	11,840	-	-	11,300	14,820
TOTAL . . .	10,000	14,790	15,500	22,070	-	-	25,500	36,860

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

281

PRODUCTS AS PREPARED FOR MARKET, 1963 - Continued

ITEM	SOUTHEASTERN ALASKA		CENTRAL ALASKA		WESTERN ALASKA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CANNED—CONTINUED								
SALMON, EGGS . .	-	-	7,200	\$6,190	-	-	7,200	\$6,190
CLAMS, RAZOR . .	-	-	90,200	132,700	-	-	90,200	132,700
CRAB MEAT:								
DUNGNESS . . .	129,600	\$229,270	175,800	351,720	-	-	305,400	580,990
KING	2,900	5,220	4,987,000	7,010,650	-	-	4,989,900	7,015,870
SHRIMP	239,200	285,370	690,000	762,200	-	-	929,200	1,047,570
TOTAL CANNED	58,747,200	28,644,550	60,409,100	37,025,080	14,654,600	\$10,585,930	133,810,900	76,255,560
INDUSTRIAL PRODUCTS								
HERRING:								
MEAL	4,458,000	285,100	-	-	-	-	4,458,000	285,100
OIL	4,434,000	222,390	-	-	-	-	4,434,000	222,390
TOTAL INDUSTRIAL PRODUCTS . .	8,892,000	507,490	-	-	-	-	8,892,000	507,490
GRAND TOTAL	104,846,300	43,030,050	87,062,400	51,732,220	18,545,400	14,275,530	210,454,100	109,037,800

PRODUCTION OF CANNED PRODUCTS, 1963

(IN STANDARD CASES)

ITEM	SOUTHEASTERN ALASKA		CENTRAL ALASKA		WESTERN ALASKA		TOTAL	
	CASES	VALUE	CASES	VALUE	CASES	VALUE	CASES	VALUE
FISH								
HALIBUT, SMOKED . .	11	\$1,330	-	-	-	-	11	\$1,330
SALMON:								
CHINOOK OR KING . .	401	11,690	11,809	\$445,490	26,657	\$1,009,110	39,867	1,467,290
CHUM OR KETA . . .	149,175	3,079,550	231,006	4,542,510	52,504	1,052,470	432,685	8,674,530
PINK	959,148	21,374,330	609,234	12,525,720	1,909	37,500	1,570,291	33,937,550
RED OR SOCKEYE . .	52,014	2,017,280	212,884	9,223,430	218,445	8,321,590	483,343	19,562,300
SILVER OR COHO . .	55,199	1,625,720	69,304	2,001,400	5,790	165,260	130,293	3,792,380
TOTAL	1,215,937	28,108,570	1,134,237	26,739,550	305,305	10,585,930	2,655,479	67,434,550
SALMON, SMOKED:								
CHINOOK OR KING . .	67	7,820	72	4,970	-	-	139	12,790
CHUM OR KETA . . .	79	3,990	29	1,940	-	-	108	5,930
RED OR SOCKEYE . .	-	-	47	3,320	-	-	47	3,320
SILVER OR COHO . .	62	2,980	174	11,840	-	-	236	14,820
TOTAL	208	14,790	322	22,070	-	-	530	36,860
SALMON EGGS	-	-	151	6,190	-	-	151	6,190
SHELLFISH								
CLAMS, RAZOR . . .	-	-	6,014	132,700	-	-	6,014	132,700
CRAB MEAT:								
DUNGNESS	6,646	229,270	9,013	351,720	-	-	15,659	580,990
KING	147	5,220	255,743	7,010,650	-	-	255,890	7,015,870
SHRIMP	15,950	285,370	45,999	762,200	-	-	61,949	1,047,570
GRAND TOTAL	1,238,899	28,644,550	1,451,479	37,025,080	305,305	10,585,930	2,995,683	76,255,560

NOTE.—STANDARD CASES REPRESENT THE VARIOUS SIZE PACKS CONVERTED AS FOLLOWS: SALMON, 48 CANS, EACH CONTAINING 16 OUNCES; CLAMS, 48 CANS, EACH CONTAINING 5 OUNCES OF MEATS (DRAINED WEIGHT); CRAB MEAT, 48 CANS, EACH CONTAINING 6-1/2 OUNCES; AND SHRIMP, 48 CANS, EACH CONTAINING 5 OUNCES OF MEAT (DRAINED WEIGHT).

PRODUCTION OF INDUSTRIAL PRODUCTS, 1963

ITEM	SOUTHEASTERN ALASKA	
	QUANTITY	VALUE
HERRING:		
MEAL TONS	2,229	\$285,100
OIL POUNDS	4,434,000	222,390
TOTAL	-	507,490

NOTE.—PRODUCTION OF INDUSTRIAL PRODUCTS WAS CONFINED TO SOUTHEASTERN ALASKA.

PACIFIC COAST FISHERIES

SOUTHEASTERN REGION OF ALASKA

OPERATING UNITS BY GEAR, 1963

ITEM	PURSE SEINES 1/		BEAM TRAWLS, SHRIMP	OTTER TRAWLS, FISH	FLOATING TRAPS	POTS, CRAB	
	HERRING	SALMON				DUNGENESS	KING
	NUMBER	NUMBER				NUMBER	NUMBER
FISHERMEN: ON VESSELS	49	2,144	49	10	-	108	27
ON BOATS AND SHORE, REGULAR	-	15	-	-	8	46	20
TOTAL	49	2,159	49	10	8	154	47
VESSELS, MOTOR	6	465	15	2	-	35	9
GROSS TONNAGE	589	14,060	442	73	-	937	291
BOATS, MOTOR	6	475	-	-	-	23	10
GEAR: NUMBER	8	470	15	2	4	4,450	1,280
LENGTH, YARDS	4,100	229,000	-	-	-	-	-
SQUARE YARDS	-	-	160	30	-	-	-
HOOKS AT MOUTH	-	-	-	-	-	-	-

ITEM	GILL NETS, SALMON		LINES		BY HAND	TOTAL, EXCLUSIVE OF DUPLICATION
	ANCHOR, SET OR STAKE	DR FT	TROLL, SALMON	LONG OR SET AND HAND		
	NUMBER	NUMBER	NUMBER	NUMBER		
FISHERMEN: ON VESSELS	2	262	712	1,080	-	3,930
ON BOATS AND SHORE, REGULAR	200	300	670	200	75	1,350
TOTAL	202	562	1,382	1,280	75	5,280
VESSELS, MOTOR	1	135	511	249	-	1,279
GROSS TONNAGE	43	1,426	6,692	7,745	-	28,460
BOATS, MOTOR	169	250	569	100	25	1,530
GEAR: NUMBER	170	385	4,320	8,200	150	-
LENGTH, YARDS	22,000	192,000	-	-	-	-
SQUARE YARDS	89,000	1,155,000	-	-	-	-
HOOKS	-	-	26,000	668,000	-	-

1/ INCLUDES HAUL SEINES.

SOUTHEASTERN REGION OF ALASKA

CATCH BY GEAR, 1963

SPECIES	PURSE SEINES 1/		BEAM TRAWLS		OTTER TRAWLS		FLOATING TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
HERRING, SEA	31,213,700	\$469,200	-	-	-	-	-	-
ROCKFISHES 2/	-	-	-	-	30,500	\$2,140	-	-
SALMON:								
CHINOOK OR KING	74,300	11,970	-	-	-	-	-	-
CHUM OR KETA	9,912,300	928,180	-	-	-	-	18,800	\$1,720
PINK	56,038,300	7,833,200	-	-	-	-	363,800	37,340
RED OR SOCKEYE	2,297,000	634,490	-	-	-	-	19,800	6,250
SILVER OR COHO	2,693,200	255,720	-	-	-	-	14,900	1,320
TOTAL SALMON	81,015,100	9,663,560	-	-	-	-	417,300	46,630
TROUT, STEELHEAD	1,100	220	-	-	-	-	-	-
SHRIMP	-	-	3,110,300	\$124,410	-	-	-	-
TOTAL	112,229,900	10,131,980	3,110,300	124,410	30,500	2,140	417,300	46,630

SPECIES	POTS		GILL NETS			
	POUNDS	VALUE	ANCHOR, SET OR STAKE		DRIFT	
			POUNDS	VALUE	POUNDS	VALUE
SALMON:						
CHINOOK OR KING	-	-	14,200	\$5,100	98,400	\$34,830
CHUM OR KETA	-	-	131,200	8,890	2,533,600	226,510
PINK	-	-	319,600	20,110	2,861,300	315,290
RED OR SOCKEYE	-	-	300,500	63,920	1,276,400	366,180
SILVER OR COHO	-	-	1,357,600	122,890	1,063,800	151,930
TOTAL SALMON	-	-	2,123,300	220,910	7,833,500	1,094,740

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

283

SOUTHEASTERN REGION OF ALASKA

CATCH BY GEAR, 1963 - Continued

SPECIES	POTS		GILL NETS			
			ANCHOR, SET OR STAKE		DRIFT	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
TROUT, STEELHEAD.	-	-	-	-	18,600	\$3,720
CRABS:						
DUNGENESS	4,679,700	\$561,560	-	-	-	-
KING	1,112,200	111,220	-	-	-	-
TOTAL	5,791,900	672,780	2,123,300	\$220,910	7,852,100	1,098,460

SPECIES	LINES				BY HAND	
	TROLL		LONG OR SET AND HAND			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
HALIBUT	-	-	21,986,200	\$3,136,270	-	-
ROCKFISHES ^{2/}	-	-	57,800	4,050	-	-
SABLEFISH	-	-	1,357,800	125,340	-	-
SALMON:						
CHINOOK OR KING	4,310,700	\$2,156,640	-	-	-	-
CHUM OR KETA	53,700	9,660	-	-	-	-
PINK	471,600	70,740	-	-	-	-
RED OR SOCKEYE	12,100	3,510	-	-	-	-
SILVER OR COHO	6,175,100	1,577,730	-	-	-	-
TOTAL SALMON	11,023,200	3,818,280	-	-	-	-
KELP (WITH HERRING EGGS)	-	-	-	-	199,100	\$15,920
TOTAL	11,023,200	3,818,280	23,401,800	3,265,660	199,100	15,920

1/ INCLUDES HAUL SEINES.

2/ INCLUDES LINGCOD.

CENTRAL REGION OF ALASKA

OPERATING UNITS BY GEAR, 1963

ITEM	PURSE SEINES, SALMON ^{1/}	OTTER TRAWLS, SHRIMP	POTS		GILL NETS, SALMON ANCHOR, SET OR STAKE
			CRAB		
			DUNGENESS	KING	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	1,521	46	184	958	8
ON BOATS AND SHORE, REGULAR	1,600	-	82	54	1,000
TOTAL	3,121	46	266	1,012	1,008
VESSELS, MOTOR:					
GROSS TONNAGE	498	10	64	256	3
BOATS, MOTOR	7,409	775	1,506	13,352	52
GEAR:	1,642	-	41	27	677
NUMBER	1,070	10	8,000	13,000	680
LENGTH, YARDS	382,000	-	-	-	159,000
SQUARE YARDS	-	-	-	-	562,000
YARDS AT MOUTH	-	151	-	-	-

ITEM	GILL NETS, SALMON-CONTINUED	LINES		SHOVELS, CLAM	TOTAL, EXCLUSIVE OF DUPLICATION
		TROLL, SALMON	LONG OR SET AND HAND		
		DRIFT	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	377	23	499	-	3,075
ON BOATS AND SHORE, REGULAR	1,400	8	150	202	4,100
TOTAL	1,777	31	649	202	7,175
VESSELS, MOTOR:					
GROSS TONNAGE	188	13	100	-	932
BOATS, MOTOR	2,030	317	4,181	-	25,542
GEAR:	982	5	75	-	3,350
NUMBER	1,180	72	4,100	202	-
LENGTH, YARDS	354,000	-	-	-	-
SQUARE YARDS	1,537,000	-	-	-	-
HOOKS	-	430	333,000	-	-

1/ INCLUDES HAUL SEINES.

PACIFIC COAST FISHERIES

CENTRAL REGION OF ALASKA - CATCH BY GEAR, 1963

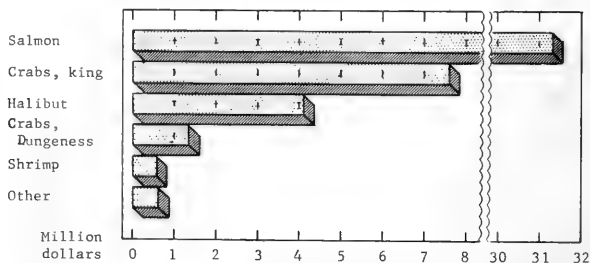
SPECIES	PURSE SEINES 1/		OTTER TRAWLS		POTS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
HERRING, SEA.	2,500	\$40	-	-	-	-
SALMON:						
CHINOOK OR KING	21,300	13,950	-	-	-	-
CHUM OR KETA.	15,228,700	1,266,870	-	-	-	-
PINK.	53,168,000	5,974,350	-	-	-	-
RED OR SOCKEYE.	5,083,500	1,028,560	-	-	-	-
SILVER OR COHO.	935,200	122,750	-	-	-	-
TOTAL SALMON.	74,436,700	8,406,490	-	-	-	-
CRABS:						
DUNGENESS	-	-	-	-	7,404,400	\$795,980
KING.	-	-	12,016,600	\$480,570	50,786,600	5,080,410
SHRIMP.	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-
TOTAL	74,439,200	8,406,530	12,016,600	480,670	58,191,000	5,876,390

SPECIES	GILL NETS				LINES	
	ANCHOR, SET OR STAKE		DRIFT		TROLL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SALMON:						
CHINOOK OR KING	331,700	\$85,600	310,900	\$72,060	29,300	\$14,660
CHUM OR KETA.	907,500	72,920	2,629,300	216,700	500	100
PINK.	1,390,400	170,060	37,200	4,430	4,000	600
RED OR SOCKEYE.	3,016,400	762,190	5,651,100	1,429,990	-	-
SILVER OR COHO.	1,086,800	146,270	3,268,600	484,360	154,300	39,420
TOTAL SALMON.	6,732,800	1,237,040	11,697,100	2,207,540	188,100	54,780
TROUT:						
DOLLY VARDEN.	-	-	4,800	960	-	-
LAKE TROUT.	-	-	2,200	440	-	-
WHITEFISH	-	-	600	130	-	-
TOTAL	-	-	7,600	1,530	-	-
TOTAL	6,732,800	1,237,040	11,904,700	2,209,070	188,100	54,780

SPECIES	LINES - CONTINUED		SHOVELS	
	LONG OR SET AND HAND			
	POUNDS	VALUE	POUNDS	VALUE
HALIBUT	7,900,200	\$1,024,720	-	-
ROCKFISHES 2/	2,200	150	-	-
SABLEFISH	1,700	200	-	-
CLAMS, RAZOR.	-	-	143,600	\$51,950
TOTAL	7,904,100	1,025,070	143,600	51,950

1/ INCLUDES HAUL SEINES.
2/ INCLUDES LINGCOD.

VALUE OF ALASKA CATCH, 1963



PACIFIC COAST FISHERIES

285

WESTERN REGION OF ALASKA OPERATING UNITS BY GEAR, 1963

ITEM	PURSE SEINES, 1/ SALMON	POTS, CRAB, KING	GILL NETS, SALMON		FISH WHEELS	TOTAL, EXCLUSIVE OF DUPLI- CATION
			ANCHOR, SET OR STAKE	DRIFT		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN: ON VESSELS	69	131	-	312	-	510
ON BOATS AND SHORE, REGULAR	50	14	1,500	3,200	6	4,670
TOTAL	119	145	1,500	3,512	6	5,180
VESSELS, MOTOR	20	25	-	156	7	200
GROSS TONNAGE	446	2,702	-	1,305	-	4,445
BOATS, MOTOR	52	7	1,370	1,729	-	3,100
GEAR:						
NUMBER	36	3,200	1,370	1,685	6	-
LENGTH, YARDS	14,000	-	205,000	510,000	-	-
SQUARE YARDS	-	-	980,000	1,782,000	-	-

1/ INCLUDES HAUL SEINES.

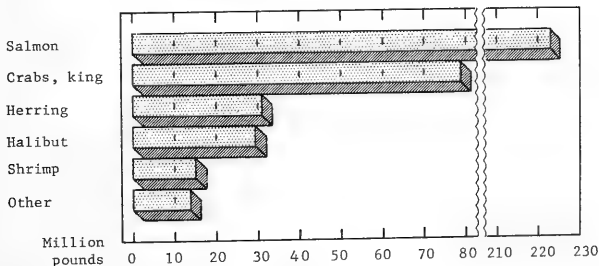
WESTERN REGION OF ALASKA - CATCH BY GEAR, 1963

SPECIES	PURSE SEINES 1/		POTS	
	POUNDS	VALUE	POUNDS	VALUE
SALMON:				
CHINOOK OR KING	400	\$100	-	-
CHUM OR KETA	311,900	21,770	-	-
PINK	311,500	31,800	-	-
RED OR SOCKEYE	92,300	18,040	-	-
SILVER OR COHO	1,500	190	-	-
TOTAL SALMON	717,600	71,900	-	-
CRABS, KING	-	-	26,841,500	\$2,415,730
TOTAL	717,600	71,900	26,841,500	2,415,730

SPECIES	GILL NETS				FISH WHEELS	
	ANCHOR, SET OR STAKE		DRIFT		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE		
SALMON:						
CHINOOK OR KING	2,212,600	\$36,240	1,739,000	\$342,480	17,600	\$3,010
CHUM OR KETA	1,799,200	106,470	2,221,700	186,760	-	-
PINK	149,000	14,210	2,700	240	-	-
RED OR SOCKEYE	2,568,000	487,790	15,118,500	2,842,940	-	-
SILVER OR COHO	478,300	63,720	351,700	42,520	-	-
TOTAL SALMON	7,227,100	1,058,430	19,433,600	3,414,940	17,600	3,010

1/ INCLUDES HAUL SEINES.

ALASKA CATCH, 1963



PACIFIC COAST FISHERIES ALASKA

NUMBER OF SALMON CAUGHT, BY REGIONS, 1963

SPECIES	SOUTHEASTERN ALASKA		CENTRAL ALASKA	
	NUMBER	VALUE	NUMBER	VALUE
CHINOOK OR KING	258,482	\$2,208,540	34,821	\$186,270
CHUM OR KETA	1,478,744	1,174,960	2,350,340	1,556,590
PINK	19,145,299	8,276,680	14,976,593	6,149,450
RED OR SOCKEYE	677,921	1,074,350	2,436,594	3,220,740
SILVER OR COHO	1,274,506	2,109,590	627,226	792,800
TOTAL	22,834,954	14,844,120	20,425,564	11,905,850

SPECIES	WESTERN ALASKA		TOTAL	
	NUMBER	VALUE	NUMBER	VALUE
CHINOOK OR KING	208,123	\$731,830	501,425	\$3,126,640
CHUM OR KETA	635,212	315,000	4,464,296	3,046,550
PINK	153,771	46,250	34,275,653	14,472,380
RED OR SOCKEYE	3,100,932	3,346,770	6,215,447	7,643,860
SILVER OR COHO	120,558	106,430	2,022,292	3,008,820
TOTAL	4,218,596	4,548,280	47,479,114	31,298,250

NOTE:--THE SALMON CATCH IS REPORTED IN NUMBERS OF FISH. THE ROUND WEIGHTS USED IN CATCH TABLES WERE OBTAINED BY MULTIPLYING NUMBER OF FISH BY THEIR AVERAGE WEIGHT.

AVERAGE WEIGHTS OF SALMON, BY REGIONS, 1963, 1962, AND 1961

SPECIES	1963			ALL REGIONS		
	SOUTHEASTERN	CENTRAL	WESTERN	1963	1962	1961
	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
CHINOOK OR KING	17.4	19.9	19.1	18.3	19.0	17.0
CHUM OR KETA	8.6	8.0	8.8	8.0	8.1	8.2
PINK	3.7	3.6	3.0	3.6	3.3	4.8
RED OR SOCKEYE	5.8	5.6	5.7	5.7	5.7	5.9
SILVER OR COHO	8.9	6.7	6.9	6.7	7.5	8.7

WHOLESALE AND MANUFACTURING, 1963

ITEM	SOUTHEASTERN ALASKA	CENTRAL ALASKA	WESTERN ALASKA	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER
WHOLESALE AND MANUFACTURING, PERSONS ENGAGED	2,332	3,535	2,107	7,907
ESTABLISHMENTS:				
HANDLING FRESH AND FROZEN FISH AND SHELLFISH	26	35	10	66
CURING FISH	25	19	15	59
CANNING FISH AND SHELLFISH	29	51	21	100
MANUFACTURING INDUSTRIAL PRODUCTS	1	-	-	1
TOTAL ESTABLISHMENTS, (EXCLUSIVE OF DUPLICATION)	54	89	43	181

PACIFIC COAST FISHERIES

287

WASHINGTON

CATCH BY DISTRICTS, 1963

SPECIES	PUGET SOUND		COASTAL		COLUMBIA RIVER	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FISH						
CARP	-	-	-	-	1,173,600	\$7,042
COD	6,300,000	\$346,500	1,900	\$98	-	-
FLOUNDERS:						
"SOLE"	11,988,600	891,758	231,100	19,188	-	-
"SOLE"	1,020,200	55,315	19,500	976	26,000	598
"OTHER"	399,900	8,019	-	-	-	-
HAKE	15,395,100	2,675,746	20,600	2,474	300	41
HALIBUT	6,971,900	160,352	-	-	-	-
HERRING, SEA	2,937,600	170,624	159,000	7,303	2,300	101
LINGCOD	15,565,100	809,387	1,900	82	-	-
OCEAN PERCH	149,900	15,756	-	-	-	-
PERCH	1,094,300	6,881	-	-	-	-
RATFISH	7,409,100	389,785	571,500	25,042	47,600	1,386
ROCKFISHES	2,728,200	375,550	17,900	1,289	-	-
SABLEFISH	-	-	-	-	-	-
SALMON:						
CHINOOK OR KING	2,733,900	963,140	2,208,800	972,797	1,467,700	511,383
CHUM OR KETA	2,930,600	546,749	245,600	31,154	6,300	814
PINK	30,318,600	3,666,420	1,141,800	147,360	1,100	138
RED OR SOCKEYE	7,577,700	2,508,236	341,400	167,286	19,200	6,597
SILVER OR COHO	3,076,100	817,819	1,937,200	525,781	1,086,300	281,187
TOTAL SALMON	46,536,900	8,502,364	5,875,000	1,844,378	2,580,600	800,119
SHAD	300	15	1,100	80	191,300	8,563
SHARKS:						
GRAYFISH	867,100	4,335	-	-	-	-
SOUPFIN	1,900	62	-	-	-	-
TOTAL SHARKS	869,000	4,397	-	-	-	-
SKATES	482,400	5,990	-	-	-	-
SMELT:						
EULACHON	2,300	1,397	-	-	904,000	63,279
SURF OR SILVER	155,900	17,300	70,200	4,846	-	-
STEELHEAD TROUT	102,400	35,800	257,100	89,979	175,900	46,405
STURGEON	9,600	1,085	124,600	13,072	77,200	12,119
SUCKERS	-	-	-	-	13,300	200
TOMCOD	4,800	92	-	-	-	-
TUNA, ALBACORE	35,700	5,458	185,400	27,776	305,800	51,684
TOTAL FISH	120,157,700	14,470,541	7,536,800	2,036,583	5,498,100	991,537
SHELLFISH						
CRABS, DUNGENESS 1/	1,529,300	235,508	4,675,600	1,057,478	469,500	96,724
CRAWFISH, FRESH-WATER	-	-	-	-	1,100	208
SHRIMP:						
BAY	46,000	23,678	-	-	-	-
OCEAN	-	-	956,100	81,269	-	-
CLAMS:						
HARD: 2/						
BUTTER	51,100	11,648	100	62	-	-
LITTLE NECK	214,400	107,194	-	-	-	-
MANILA	105,000	55,863	14,600	6,893	-	-
RAZOR 3/	-	-	223,200	110,026	-	-
TOTAL CLAMS	370,500	174,705	237,900	116,981	-	-
OCTOPUS	74,500	8,672	-	-	-	-
OYSTERS, MARKET: 4/						
PACIFIC	3,422,400	910,350	4,680,200	1,131,401	-	-
WESTERN	31,000	100,860	-	-	-	-
TOTAL OYSTERS	3,453,400	1,011,210	4,680,200	1,131,401	-	-
SQUID	600	45	-	-	-	-
TOTAL SHELLFISH	5,474,300	1,453,818	10,549,800	2,387,129	470,600	95,932
GRAND TOTAL	125,632,000	15,924,359	18,086,600	4,423,712	5,968,700	1,088,469

1/ BASED ON AN AVERAGE YIELD OF 22 POUNDS PER DOZEN IN THE PUGET SOUND DISTRICT AND 24 POUNDS PER DOZEN IN THE COASTAL AND COLUMBIA RIVER DISTRICTS.

2/ BASED ON A YIELD OF 25 PERCENT MEATS.

3/ BASED ON A YIELD OF 42 PERCENT MEATS.

4/ BASED ON A YIELD OF 10 PERCENT MEATS IN THE PUGET SOUND DISTRICT AND 12 PERCENT MEATS IN THE COASTAL DISTRICT.

PACIFIC COAST FISHERIES

 PUGET SOUND DISTRICT OF WASHINGTON
 OPERATING UNITS, 1963

ITEM	HAUL SEINES 1/	PURSE SEINES		BEAM TRAWLS	OTTER TRAWLS	BRUSH WEIRS
		HERRING	SALMON			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	33	52	2,763	5	398	-
ON BOATS AND SHORE	215	-	4	2	-	6
TOTAL	248	52	2,767	7	398	6
VESSELS, MOTOR	11	7	405	2	108	-
GROSS TONNAGE	103	266	15,463	35	5,268	-
BOATS:						
MOTOR	60	7	407	1	-	1
OTHER	25	-	-	-	-	-
GEAR:						
NUMBER	96	7	406	3	108	1
LENGTH, YARDS	7,325	2,475	216,945	-	-	-
YARDS AT MOUTH	-	-	-	23	2,368	-

ITEM	POUND NETS 2/	POTS			GILL NETS		DRIFT, SALMON
		CRAB	OCTOPUS	SHRIMP	ANCHOR SET OR STAKE		
					SALMON 2/	SHARK	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:							
ON VESSELS	-	46	-	1	-	-	267
ON BOATS AND SHORE	8	95	6	5	143	4	725
TOTAL	8	143	6	6	143	4	992
VESSELS, MOTOR	-	23	-	1	-	-	209
GROSS TONNAGE	-	514	-	10	-	-	2,287
BOATS:							
MOTOR	2	6	5	5	113	4	658
OTHER	-	1	-	-	30	-	3
GEAR:							
NUMBER	2	6,256	175	190	143	4	870
SQUARE YARDS	-	-	-	-	36,000	4,000	5,254,000

ITEM	HAND	LINES				DIP NETS	REEF NETS
		TROLL			LONG OR SET WITH HOOKS		
		SALMON	ALBACORE	LINGCOD			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:							
ON VESSELS	-	472	26	22	569	12	
ON BOATS AND SHORE	17	37	-	17	2	17	
TOTAL	17	642	26	39	571	29	
VESSELS, MOTOR	-	326	9	22	96	4	
GROSS TONNAGE	-	5,103	496	284	4,715	35	
BOATS:							
MOTOR	10	311	-	17	1	7	
OTHER	-	-	-	-	-	-	
GEAR:							
NUMBER	20	2,900	106	78	4,081	29	
HOOKS	40	13,170	106	156	365,550	-	

ITEM	CLAM	DREDGES		SHOVELS	BY HAND, OYSTER	TOTAL, EXCLUSIVE OF DUPLI- CATION
		OYSTER				
		COMMON	SUCTION			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:						
ON VESSELS	5	19	3	-	-	4,284
ON BOATS AND SHORE	4	6	-	266	150	2,305
TOTAL	9	27	3	268	150	6,590
VESSELS, MOTOR	2	7	1	-	-	1,095
GROSS TONNAGE	22	115	41	-	-	30,431
BOATS:						
MOTOR	2	4	-	-	35	1,647
OTHER	-	-	-	-	15	239
GEAR:						
NUMBER	4	22	1	268	-	-
YARDS AT MOUTH	4	44	-	-	-	-

1/ INCLUDES 20 HAUL SEINES OPERATED ON INDIAN RESERVATIONS.

2/ FISHED ONLY ON INDIAN RESERVATIONS

PACIFIC COAST FISHERIES

289

PUGET SOUND DISTRICT OF WASHINGTON - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES 1/		PURSE SEINES		BEAM TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS:						
"SOLE"	200	\$15	-	-	-	-
OTHER	600	313	-	-	-	-
HERRING, SEA.	284,500	56,900	6,552,400	\$75,252	-	-
LINGCOD	1,300	65	300	14	-	-
PERCH	139,400	14,631	-	-	-	-
ROCKFISHES.	7,100	356	-	-	-	-
SALMON:						
CHINOOK OR KING	46,800	12,390	647,400	149,899	-	-
CHUM OR KETA.	5,000	750	1,220,800	244,150	-	-
PINK.	1,475,400	177,042	19,915,400	2,389,843	-	-
RED OR SOCKEYE.	100	33	4,917,400	1,627,700	-	-
SILVER OR COHO.	29,400	7,047	600,700	147,164	-	-
SMELT:						
ELACHON.	2,300	1,397	-	-	-	-
SURF OR SILVER.	155,900	17,300	-	-	-	-
STURGEON.	100	12	-	-	-	-
SHRIMP, BAY	-	-	-	-	12,800	\$4,560
OCTOPUS	1,500	195	-	-	-	-
TOTAL.	2,149,600	288,446	33,854,400	4,633,022	12,800	4,560

SPECIES	OTTER TRAWLS		BRUSH WEIRS		POUND NETS 2/	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
COD	6,300,000	\$346,500	-	-	-	-
FLOUNDERS:						
"SOLE"	11,987,800	891,678	-	-	-	-
OTHER	1,019,600	52,002	-	-	-	-
HAKE.	399,900	8,019	-	-	-	-
HERRING, SEA.	-	-	20,000	\$3,993	-	-
LINGCOD	2,440,500	134,230	-	-	-	-
OCEAN PERCH	15,565,100	809,387	-	-	-	-
PERCH	10,500	1,125	-	-	-	-
RATFISH	1,094,800	6,881	-	-	-	-
ROCKFISHES.	7,291,600	379,166	-	-	-	-
SABLEFISH	578,300	60,875	-	-	-	-
SALMON:						
CHINOOK OR KING	-	-	-	-	48,800	\$15,131
CHUM OR KETA.	-	-	-	-	2,400	360
PINK.	-	-	-	-	475,300	57,030
RED OR SOCKEYE.	-	-	-	-	16,100	5,985
SILVER OR COHO.	-	-	-	-	60,600	15,144
SHAD.	300	15	-	-	-	-
SHARKS:						
GRAYFISH.	867,100	4,335	-	-	-	-
SOUPFIN 3/.	1,900	62	-	-	-	-
SKATES.	482,400	5,990	-	-	-	-
STURGEON.	9,300	1,051	-	-	-	-
TOMCOD.	4,800	92	-	-	-	-
OCTOPUS	45,600	4,922	-	-	-	-
SQUID	600	45	-	-	-	-
TOTAL.	48,100,100	2,706,375	20,000	3,993	605,200	93,650

SPECIES	POTS		GILL NETS			
			ANCHOR, SET OR STAKE			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
LINGCOD	-	-	-	-	4,400	\$221
ROCKFISHES.	-	-	-	-	2,400	120
SALMON:						
CHINOOK OR KING	-	-	330,400	\$84,245	-	-
CHUM OR KEAT.	-	-	412,300	57,720	-	-
PINK.	-	-	658,900	79,063	-	-
RED OR SOCKEYE.	-	-	1,900	620	-	-
SILVER OR COHO.	-	-	220,600	57,365	-	-
STEELHEAD TROUT 2/.	-	-	97,800	34,200	-	-
STURGEON.	-	-	100	11	-	-
CRABS, DUNGNESS 4/.	1,529,300	\$235,508	-	-	-	-
SHRIMP, BAY	33,200	19,118	-	-	-	-
OCTOPUS	26,700	3,469	-	-	-	-
TOTAL.	1,589,200	258,095	1,722,000	313,225	6,800	341

SEE FOOTNOTES AT END OF TABLE.

PACIFIC COAST FISHERIES

PUGET SOUND DISTRICT OF WASHINGTON

CATCH BY GEAR, 1963 - Continued

SPECIES	GILL NETS - CONTINUED				LINES	
	DRIFT, SALMON		HAND		TROLL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS, "SOLE"	-	-	-	-	100	\$10
HALIBUT	-	-	1,300	\$158	179,400	24,281
LINGCOD	-	-	23,500	2,135	442,000	32,976
ROCKFISHES	100	\$5	9,200	460	29,400	1,178
SABLEFISH	-	-	-	-	900	63
SALMON:						
CHINOOK OR KING	557,900	178,537	-	-	1,076,200	517,858
CHUM OR KETA	1,178,100	241,506	-	-	1,400	243
PINK	5,436,100	652,567	-	-	1,695,000	255,616
RED OR SOCKEYE	2,156,200	713,705	-	-	2,700	890
SILVER OR COHO	742,900	196,880	-	-	1,395,000	337,490
STEELHEAD, TROUT 2/	4,600	1,600	-	-	-	-
SURGEON	100	11	-	-	-	-
TUNA, ALBACORE	-	-	-	-	35,700	5,458
OCTOPUS	-	-	700	86	-	-
TOTAL	10,078,000	1,984,811	34,700	2,839	5,057,800	1,226,063

SPECIES	LINES - CONTINUED		LIP NETS		REEF NETS	
	LONG OR SET		POUNDS	VALUE	POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS, "SOLE"	500	\$55	-	-	-	-
HALIBUT	15,214,400	2,651,307	-	-	-	-
HERRING, SEA	-	-	115,000	\$24,207	-	-
LINGCOD	25,600	983	-	-	-	-
ROCKFISHES	69,300	2,470	-	-	-	-
SABLEFISH	2,147,000	314,612	-	-	-	-
SALMON:						
CHINOOK OR KING	-	-	-	-	26,400	\$6,080
CHUM OR KETA	-	-	-	-	10,600	2,020
PINK	-	-	-	-	460,500	55,259
RED OR SOCKEYE	-	-	-	-	481,300	159,303
SILVER OR COHO	-	-	-	-	26,900	6,728
TOTAL	17,456,800	2,969,427	115,000	24,207	1,005,700	229,390

SPECIES	DREDGES AND BY HAND ¹		SHOVELS	
	POUNDS	VALUE	POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE
CLAMS, HARD: 5/				
BUTTER	27,800	\$6,337	23,300	\$5,311
LITTLENECK	9,300	4,647	205,100	102,547
MANILA	-	-	105,000	55,863
OYSTERS, MARKET 6/				
PACIFIC	3,422,400	910,350	-	-
WESTERN	31,000	100,860	-	-
TOTAL	3,490,500	1,022,194	333,400	163,721

¹ THE SALMON CAUGHT BY HAUL SEINES WERE TAKEN ON INDIAN RESERVATIONS.

² FISHED ONLY ON INDIAN RESERVATIONS.

³ THE POUNDAGE SHOWN INCLUDES THE TOTAL VOLUME OF SHARKS CAUGHT. THE CARCASSES WERE DISCARDED AT SEA.

⁴ BASED ON AN AVERAGE OF 22 POUNDS PER DOZEN.

⁵ BASED ON A YIELD OF 25 PERCENT MEATS.

⁶ BASED ON A YIELD OF 10 PERCENT MEATS FOR PACIFIC OYSTERS AND 18 PERCENT FOR WESTERN OR NATIVE OYSTERS.

NOTE:--THE POUNDAGE AND VALUE OF THE CATCH SHOWN ABOVE INCLUDE THE FOLLOWING ITEMS: HALIBUT LIVERS, 241 POUNDS, VALUE \$84; LINGCOD LIVERS, 2,060 POUNDS, VALUE \$232; SABLEFISH LIVERS, 153 POUNDS, VALUE \$37; AND SOUPFIN SHARK LIVERS 233 POUNDS, VALUE \$62.

PACIFIC COAST FISHERIES

291

COASTAL DISTRICT OF WASHINGTON - OPERATING UNITS, 1963

ITEM	HAUL SEINES 1/	OTTER TRAWLS	
		FISH	SHRIMP
	NUMBER	NUMBER	NUMBER
FISHERMEN:			
ON VESSELS	-	21	15
ON BOATS AND SHORE	20	-	-
TOTAL	20	21	15
VESSELS, MOTOR	-	6	5
GROSS TONNAGE	-	274	192
BOATS:			
MOTOR	6	-	-
OTHER	2	-	-
GEAR:			
NUMBER	6	6	5
LENGTH, YARDS	600	-	-
YARDS AT MOUTH	-	135	95

ITEM	POTS, CRAB	GILL NETS		LINES
		ANCHOR, SET OR STAKE 1/	DRIFT	HAND
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	158	-	15	-
ON BOATS AND SHORE	45	135	220	6
TOTAL	203	135	235	6
VESSELS, MOTOR	63	-	11	-
GROSS TONNAGE	1,378	-	115	-
BOATS:				
MOTOR	25	110	202	3
OTHER	-	20	15	3
GEAR:				
NUMBER	15,540	130	228	12
SQUARE YARDS	-	29,000	464,250	-
HOOKS	-	-	-	24

ITEM	LINES - CONTINUED			DIP NETS 2/
	TROLL		LONG OR SET WITH HOOKS	
	SALMON	ALBACORE	STURGEON	
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	575	82	1	-
ON BOATS AND SHORE	280	2	5	21
TOTAL	855	84	6	21
VESSELS, MOTOR	387	43	1	-
GROSS TONNAGE	5,851	789	7	-
BOATS:				
MOTOR	237	1	3	5
OTHER	-	-	-	2
GEAR:				
NUMBER	3,072	422	12	21
HOOKS	14,580	422	6,000	-

ITEM	DREDGES, OYSTER	SHOVELS, CLAM	BY HAND, OYSTER	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	62	-	-	778
ON BOATS AND SHORE	8	1,076	160	1,944
TOTAL	70	1,076	160	2,722
VESSELS, MOTOR	22	-	-	455
GROSS TONNAGE	467	-	-	7,520
BOATS:				
MOTOR	4	-	-	587
OTHER	-	-	-	42
GEAR:				
NUMBER	52	1,076	-	-
YARDS AT MOUTH	104	-	-	-

1/ OPERATED ON INDIAN RESERVATIONS.

2/ INCLUDES 20 DIP NETS OPERATED ON INDIAN RESERVATIONS.

PACIFIC COAST FISHERIES

COASTAL DISTRICT OF WASHINGTON - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES 1/		OTTER TRAWLS		POTS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
COD	-	-	1,900	\$98	-	-
FLOUNDERs:						
"SOLE"	-	-	231,100	19,188	-	-
OTHER	-	-	19,500	976	-	-
LINGCOD	-	-	59,200	2,780	-	-
OCEAN PERCH	-	-	1,900	82	-	-
ROCKFISHES	-	-	439,500	19,768	-	-
SABLEFISH	-	-	17,900	1,289	-	-
SMELT, SURF OR SILVER	53,100	\$3,676	-	-	-	-
CRABS, DUNGENESS 2/	-	-	-	-	4,675,600	\$1,057,478
SHRIMP, OCEAN	-	-	956,100	81,269	-	-
TOTAL	53,100	3,676	1,727,100	125,450	4,675,600	1,057,478

SPECIES	GILL NETS				LINES	
	ANCHOR, SET OR STAKE 1/		DRIFT		HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
LINGCOD	-	-	-	-	3,100	\$128
ROCKFISHES	-	-	-	-	200	10
SALMON:						
CHINOOK OR KING	308,100	\$86,271	337,800	\$105,485	-	-
CHUM OR KETA	30,800	4,007	214,700	27,094	-	-
RED OR SOCKEYE	341,400	167,286	-	-	-	-
SILVER OR COHO	199,700	55,922	143,300	43,152	-	-
SHAD	1,100	80	-	-	-	-
STEELHEAD TROUT 1/	257,100	89,979	-	-	-	-
STURGEON	200	35	114,200	11,092	-	-
TOTAL	1,138,400	403,580	810,000	187,823	3,300	138

SPECIES	LINES - CONTINUED				DIP NETS 1/	
	TROLL		LONG OR SET WITH HOOKS		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE		
HALIBUT	20,600	\$2,474	-	-	-	-
LINGCOD	96,700	4,395	-	-	-	-
ROCKFISHES	131,800	5,264	-	-	-	-
SALMON:						
CHINOOK OR KING	1,562,900	780,041	-	-	-	-
CHUM OR KETA	300	53	-	-	-	-
PINK	1,141,800	147,360	-	-	-	-
SILVER OR COHO	1,594,200	426,707	-	-	-	-
SMELT, SURF OR SILVER	-	-	-	-	17,100	\$1,170
STURGEON	-	-	10,200	\$1,945	-	-
TUNA, ALBACORE	185,400	27,776	-	-	-	-
TOTAL	4,733,700	1,394,070	10,200	1,945	17,100	1,170

SPECIES	DREDGES AND BY HAND		SHOVELS	
	POUNDS	VALUE	POUNDS	VALUE
CLAMS:				
BUTTER 3/	-	-	100	\$62
MANILA 3/	-	-	14,600	6,893
RAZOR 4/	-	-	223,200	110,026
OYSTERS, MARKET, PACIFIC 5/	4,680,200	\$1,131,401	-	-
TOTAL	4,680,200	1,131,401	237,900	116,981

1/ FISHED ONLY ON INDIAN RESERVATIONS.
 2/ BASED ON AN AVERAGE OF 24 POUNDS PER DOZEN.
 3/ BASED ON A YIELD OF 25 PERCENT MEATS.
 4/ BASED ON A YIELD OF 42 PERCENT EDIBLE MEATS.
 5/ BASED ON A YIELD OF 12 PERCENT MEATS.



PACIFIC COAST FISHERIES

293

COLUMBIA RIVER DISTRICT OF WASHINGTON OPERATING UNITS, 1963

ITEM	HAUL SEINES	POTS		GILL NETS	
		CRAB	CRAWFISH	ANCHOR, SET OR STAKE 1/	DRIFT SALMON
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	34	-	-	-
ON BOATS AND SHORE	8	4	1	20	165
TOTAL	8	38	1	20	165
VESSELS, MOTOR	-	13	-	-	-
GROSS TONNAGE	-	219	-	-	-
BOATS:					
MOTOR	2	2	1	15	158
OTHER	1	-	-	5	-
GEAR:					
NUMBER	3	2,575	40	20	156
LENGTH, YARDS	300	-	-	-	-
SQUARE YARDS	-	-	-	5,000	482,000

ITEM	GILL NETS - CONTINUED	LINES		DIP NETS 2/	TOTAL, EXCLUSIVE OF DUPLICATION
	DRIFT	TROLL			
	SMELT	SALMON	ALBACORE		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	101	65	-	151
ON BOATS AND SHORE	10	207	6	156	529
TOTAL	10	310	71	156	680
VESSELS, MOTOR	-	73	36	-	91
GROSS TONNAGE	-	966	544	-	1,292
BOATS:					
MOTOR	10	174	4	39	361
OTHER	-	-	-	2	8
GEAR:					
NUMBER	10	1,055	360	156	-
SQUARE YARDS	9,000	-	-	-	-
HOOKS	-	4,530	360	-	-

1/ OPERATED BY INDIANS. 2/ INCLUDES 51 DIP NETS OPERATED BY INDIANS.

COLUMBIA RIVER DISTRICT OF WASHINGTON - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		POTS		GILL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CARP	1,173,600	\$7,042	-	-	-	-
SALMON:						
CHINOOK OR KING	-	-	-	-	313,000	\$70,427
RED OR SOCKEYE	-	-	-	-	13,900	4,641
SILVER OR COHO	-	-	-	-	100	22
SHAD	-	-	-	-	1,600	71
STEELHEAD TROUT	-	-	-	-	5,800	1,405
STURGEON	-	-	-	-	2,200	409
SUCKERS	13,300	200	-	-	-	-
CRABS, DUNGENESS 2/	-	-	469,500	\$96,724	-	-
CRAWFISH, FRESH-WATER	-	-	1,100	208	-	-
TOTAL	1,186,900	7,242	470,600	96,932	336,600	76,975

SPECIES	GILL NETS - CONTINUED		LINES, TROLL		DIP NETS	
	DRIFT		POUNDS	VALUE	POUNDS	VALUE
	POUNDS	VALUE				
FLOUNDERS	26,000	\$598	-	-	-	-
HALIBUT	-	-	300	\$41	-	-
LINGCOD	-	-	2,300	101	-	-
ROCKFISHES	-	-	47,800	1,386	-	-
SALMON:						
CHINOOK OR KING	889,000	324,486	212,300	100,185	53,400	\$16,285
CHUM OR KETA	6,300	814	-	-	-	-
PINK	-	-	1,100	138	-	-
RED OR SOCKEYE	5,300	1,956	-	-	-	-
SILVER OR COHO	94,100	22,573	991,500	258,460	600	132
SHAD	189,700	8,492	-	-	-	-
SMELT, EULACHON	49,200	4,923	-	-	654,800	58,356
STEELHEAD TROUT	169,900	44,966	-	-	200	34
STURGEON	74,900	11,696	100	14	-	-
TUNA, ALBACORE	-	-	305,800	51,684	-	-
TOTAL	1,504,400	420,504	1,561,200	412,009	909,000	74,807

1/ FISHED ONLY ON INDIAN RESERVATIONS. 2/ BASED ON AN AVERAGE OF 24 POUNDS PER DOZEN.

PACIFIC COAST FISHERIES

OREGON

CATCH BY DISTRICTS, 1963

SPECIES	COLUMBIA RIVER		COASTAL	
	POUNDS	VALUE	POUNDS	VALUE
FISH				
COD	67,200	\$3,359	-	-
FLOUNDERS:				
"SOLE"	9,804,400	578,731	6,127,900	\$343,607
OTHER	476,100	15,489	96,800	4,254
LINGCOD	106,200	17,102	157,100	25,761
HALIBUT	-	-	15,500	6,217
HERRING, SEA	-	-	157,400	7,235
LINGCOD	400,100	19,857	-	-
OCEAN PERCH	5,177,100	243,262	2,833,700	120,187
ROCKFISHES	3,356,100	155,487	1,806,200	74,734
SABLEFISH	211,200	15,909	340,200	36,605
SALMON:				
CHINOOK OR KING	3,334,500	1,108,441	1,433,200	605,665
CHUM OR KETA	9,000	1,172	-	-
PINK	3,900	513	19,800	2,579
RED OR SOCKEYE	30,200	10,538	-	-
SILVER OR COHO	939,700	229,218	2,491,300	647,750
TOTAL SALMON	4,317,300	1,349,882	3,944,300	1,255,994
SEA BASS, WHITE	-	-	7,100	285
SHAD	668,000	30,667	642,200	64,222
SHARKS, SOUPFIN	1,900	20	100	3
SKATES	11,100	277	235,200	5,880
SMELT:				
EULACHON	173,100	22,678	-	-
SILVER	-	-	400	100
STEELHEAD TROUT	797,700	219,380	-	-
STRIPED BASS	-	-	69,800	9,632
TURGEON	188,800	25,095	1,300	40
TUNA, ALBACORE	8,282,500	1,305,746	3,117,000	450,991
TOTAL FISH	34,038,800	4,002,943	19,551,200	2,405,747
SHELLFISH				
CRABS, DUNGENESS 1/	1,854,000	387,486	2,298,900	482,366
CRAWFISH, FRESH-WATER	15,000	4,000	-	-
SHRIMP, OCEAN	1,075,900	96,830	1,951,900	165,908
CLAMS:				
RAZOR 2/	-	-	9,900	4,708
MIXED 3/	-	-	20,800	9,735
OCTOPUS	-	-	400	36
OYSTERS, MARKET, PACIFIC 4/	-	-	387,000	108,700
TOTAL SHELLFISH	2,944,900	488,316	4,668,900	771,453
WHALE PRODUCTS:				
MEAL	20,500	1,384	-	-
MEAT	97,000	5,820	-	-
OIL	26,000	2,860	-	-
SOLUBLES	14,200	428	-	-
TOTAL WHALE PRODUCTS	157,700	10,492	-	-
GRAND TOTAL	37,141,400	4,501,751	24,220,100	3,177,200

1/ BASED ON AN AVERAGE OF 25 POUNDS PER DOZEN.

2/ BASED ON A YIELD OF 42 PERCENT MEATS.

3/ PRINCIPALLY EASTERN SOFT CLAMS. BASED ON A YIELD OF 21 PERCENT MEATS.

4/ BASED ON A YIELD OF 12 PERCENT MEATS.



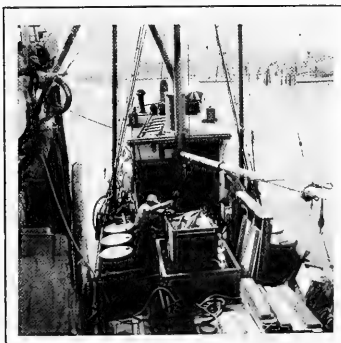
COLUMBIA RIVER DISTRICT OF OREGON - OPERATING UNITS, 1963

ITEM	OTTER TRAWLS		POTS	
	FISH	SHRIMP	CRAB	CRAWFISH
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:				
ON VESSELS,	132	36	97	-
ON BOATS AND SHORE,	-	-	31	15
TOTAL,	132	36	128	15
VESSELS, MOTOR,	35	10	43	-
GROSS TONNAGE,	1,878	590	770	-
BOATS, MOTOR,	-	-	16	14
GEAR:				
NUMBER,	35	10	10,475	560
YARDS AT MOUTH,	790	190	-	-

ITEM	GILL NETS			LINES	
	ANCHOR, SET OR STAKE ^{1/}	DRIFT		TROLL	
		SALMON	SMELT	SALMON	ALBACORE
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:					
ON VESSELS,	-	-	-	162	506
ON BOATS AND SHORE,	40	625	45	60	16
TOTAL,	40	625	45	222	522
VESSELS, MOTOR,	-	-	-	96	224
GROSS TONNAGE,	-	-	-	1,369	7,010
BOATS:					
MOTOR,	30	570	45	50	11
OTHER,	10	-	-	-	-
GEAR:					
NUMBER,	40	570	45	750	2,410
SQUARE YARDS,	12,000	1,739,000	40,500	-	-
HOOKS,	-	-	-	3,600	2,410

ITEM	LINES - CONTINUED			HARPOONS, WHALE	TOTAL, EXCLUSIVE OF DUPLI- CATION
	TROLL-CONT'D.	LONG OR SET			
		<u>LINGCOD</u>	<u>HALIBUT</u>	<u>STURGEON</u>	<u>NUMBER</u>	NUMBER
FISHERMEN:					
ON VESSELS,	2	12	-	3	743
ON BOATS AND SHORE,	1	-	4	-	756
TOTAL,	3	12	4	3	1,499
VESSELS, MOTOR,	2	3	-	1	322
GROSS TONNAGE,	22	70	-	96	9,225
BOATS:					
MOTOR,	1	-	2	-	665
OTHER,	-	-	-	-	10
GEAR:					
NUMBER,	6	65	6	1	-
HOOKS,	12	5,550	3,000	-	-

^{1/} OPERATED BY INDIANS.



UNLOADING ALBACORE TROLLER

PACIFIC COAST FISHERIES

COLUMBIA RIVER DISTRICT OF OREGON - CATCH BY GEAR, 1963

SPECIES	OTTER TRAWLS		POTS	
	POUNDS	VALUE	POUNDS	VALUE
COD	67,200	\$3,359	-	-
FLOUNDERS:				
"SOLE"	9,804,400	578,731	-	-
OTHER	235,300	10,674	-	-
LINGCOD	389,700	19,338	-	-
OCEAN PERCH	5,177,100	243,262	-	-
ROCKFISHES	3,326,800	154,119	-	-
SABLEFISH	176,000	11,652	-	-
SHARKS, SOUFFIN	1,900	20	-	-
SKATES	11,100	277	-	-
STURGEON	2,800	121	-	-
CRABS, DUNGENESE	-	-	1,854,000	\$387,486
CRAWFISH, FRESH-WATER	-	-	15,000	4,000
SHRIMP, OCEAN	1,075,900	96,830	-	-
TOTAL	20,266,200	1,118,583	1,869,000	391,466

SPECIES	GILL NETS			
	ANCHOR, SET OR STAKE 1/		DRIFT	
	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS, OTHER	-	-	240,800	\$4,815
SALMON:				
CHINOOK OR KING	230,700	\$47,296	2,913,800	973,197
CHUM OR KETA	-	-	9,000	1,172
RED OR SOCKEYE	15,500	5,113	14,700	5,425
SILVER OR COHO	300	71	406,500	89,847
SMAD	59,600	2,681	608,400	27,986
SMELT, EULACHON	-	-	173,100	22,678
STEELHEAD, TROUT	58,900	14,714	738,000	204,435
STURGEON	2,100	288	182,900	24,550
TOTAL	367,100	70,163	5,287,200	1,354,105

SPECIES	LINES				HARPOONS	
	TROLL		LONG OR SET		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE		
HALIBUT	1,400	\$167	104,800	\$16,935	-	-
LINGCOD	4,900	243	5,500	276	-	-
ROCKFISHES	19,000	655	10,300	513	-	-
SABLEFISH	-	-	35,200	4,057	-	-
SALMON:						
CHINOOK OR KING	190,000	87,948	-	-	-	-
PINK	3,900	513	-	-	-	-
SILVER OR COHO	532,900	139,300	-	-	-	-
STEELHEAD TROUT	800	231	-	-	-	-
STURGEON	-	-	1,000	136	-	-
TUNA, ALBACORE	8,282,500	1,305,748	-	-	-	-
WHALE PRODUCTS:						
MEAL	-	-	-	-	20,500	\$1,384
MEAT	-	-	-	-	97,000	5,620
OIL	-	-	-	-	26,000	2,860
SOLUBLES	-	-	-	-	14,200	428
TOTAL	9,035,400	1,535,005	156,800	21,917	157,700	10,492

1/ FISHED ONLY ON INDIAN RESERVATIONS.

NOTE:--THE FOLLOWING SPECIES LANDED IN THE COLUMBIA RIVER DISTRICT WERE CAUGHT OFF THE COAST: COD, "SOLE", HALIBUT, LINGCOD, OCEAN PERCH, ROCKFISHES, SHARKS, SKATES, TUNA, CRAB, SHRIMP, WHALES, THE OTTER TRAWL CATCH OF FLOUNDERS AND STURGEON, AND MOST OF THE TROLL CATCH OF SALMON.

PACIFIC COAST FISHERIES

297

COASTAL DISTRICT OF OREGON - OPERATING UNITS, 1963

ITEM	HAUL SEINES	OTTER TRAWLS	
		FISH	SHRIMP
	NUMBER	NUMBER	NUMBER
FISHERMEN:			
ON VESSELS	-	108	58
ON BOATS AND SHORE	9	-	-
TOTAL	9	108	58
VESSELS, MOTOR	-	31	19
GROSS TONNAGE	-	1,370	517
BOATS:			
MOTOR	3	-	-
OTHER	1	-	-
GEAR:			
NUMBER	3	31	19
LENGTH, YARDS	300	-	-
YARDS AT MOUTH	-	695	361

ITEM	POTS, CRAB	GILL NETS	
		ANCHOR, SET OR STAKE	DRIFT
	NUMBER	NUMBER	NUMBER
FISHERMEN:			
ON VESSELS	226	-	-
ON BOATS AND SHORE	53	36	59
TOTAL	279	36	59
VESSELS, MOTOR	99	-	-
GROSS TONNAGE	2,032	-	-
BOATS:			
MOTOR	35	31	56
OTHER	-	1	-
GEAR:			
NUMBER	23,900	142	56
SQUARE YARDS	-	56,800	112,000

ITEM	LINES			LONG OR SET WITH HOOKS
	SALMON	ALBACORE	LINGCOD	
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	601	391	11	15
ON BOATS AND SHORE	318	25	7	-
TOTAL	919	416	18	15
VESSELS, MOTOR	347	205	11	5
GROSS TONNAGE	5,172	3,677	173	83
BOATS, MOTOR	265	18	7	-
GEAR:				
NUMBER	3,044	2,087	36	97
HOOKS	14,320	2,087	72	8,525

ITEM	DREDGES, OYSTER, COMMON	SHOVELS	DIVING OUTFITS, CLAM	BY HAND, OYSTER	TOTAL, EXCLUSIVE OF DUPLICATION
FISHERMEN:					
ON VESSELS	5	-	-	-	905
ON BOATS AND SHORE	2	200	2	25	626
TOTAL	7	200	2	25	1,531
VESSELS, MOTOR	2	-	-	-	448
GROSS TONNAGE	26	-	-	-	6,112
BOATS:					
MOTOR	1	-	1	3	361
OTHER	-	-	-	2	4
GEAR:					
NUMBER	6	200	1	-	-
YARDS AT MOUTH	12	-	-	-	-

PACIFIC COAST FISHERIES

COASTAL DISTRICT OF OREGON - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		OTTER TRAWLS		POTS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS:						
"SOLE"	-	-	6,126,600	\$343,481	-	-
OTHER	-	-	96,800	4,254	-	-
HERRING, SEA	15,500	\$6,217	-	-	-	-
LINGCOD	-	-	126,900	5,711	-	-
OCEAN PERCH	-	-	2,833,700	120,187	-	-
ROCKFISHES	-	-	1,775,900	73,217	-	-
SABLEFISH	-	-	127,100	12,014	-	-
SHARKS, SOUFFIN	-	-	-	3	-	-
SKATES	-	-	235,200	5,880	-	-
SMELT, SURF OR SILVER	400	100	-	-	-	-
STURGEON	-	-	1,300	40	-	-
CRABS, DUNGENESS	-	-	-	-	2,298,900	\$482,366
SHRIMP, OCEAN	-	-	1,951,900	165,908	-	-
OCTOPUS	-	-	400	36	-	-
TOTAL	15,900	6,317	13,275,900	730,731	2,298,900	482,366

SPECIES	GILL NETS		LINES			
			TROLL		LONG OR SET	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS "SOLE"	-	-	100	\$9	1,200	\$117
HALIBUT	-	-	5,300	644	151,800	25,117
LINGCOD	-	-	28,100	1,405	2,400	119
ROCKFISHES	-	-	13,500	675	16,800	842
SABLEFISH	-	-	-	-	213,100	24,591
SALMON:						
CHINOOK OR KING	-	-	1,433,200	605,665	-	-
PINK	-	-	19,800	2,579	-	-
SILVER OR COHO	-	-	2,491,300	647,750	-	-
SEA BASS, WHITE	-	-	7,100	285	-	-
SHAD	642,200	\$64,222	-	-	-	-
STRIPED BASS	68,800	9,632	-	-	-	-
TUNA, ALBACORE	-	-	3,117,000	450,991	-	-
TOTAL	711,000	73,854	7,115,400	1,710,003	385,300	50,786

SPECIES	DREDGES AND BY HAND		SHOVELS		DIVING OUTFITS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CLAMS:						
RAZOR	-	-	9,900	\$4,708	-	-
MIXED	-	-	19,300	9,255	1,500	\$480
OYSTERS, MARKET, PACIFIC	387,000	\$108,700	-	-	-	-
TOTAL	387,000	108,700	29,200	13,963	1,500	480



PACIFIC COAST FISHERIES

299

CALIFORNIA

CALIFORNIA - CATCH BY DISTRICTS, 1963

SPECIES	NORTHERN		SAN FRANCISCO		MONTEREY	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ANCHOVIES	-	-	27,800	\$2,900	3,350,200	\$49,396
BONITO	-	-	-	-	1,200	66
CABEZONE	-	-	200	13	1,700	142
CARP	-	-	255,100	12,052	-	-
FLOUNDERS:						
ARROWTOOTH HALIBUT	13,400	\$667	3,900	143	-	-
CALIFORNIA HALIBUT	400	95	125,600	27,802	62,400	14,704
SAND DABS	112,800	9,224	310,500	20,960	130,400	6,847
"SOLE":						
DOVER	7,533,800	473,878	2,030,600	113,106	82,400	4,052
ENGLISH	1,486,200	117,707	1,902,800	148,612	390,500	29,675
PETRALE	1,845,000	214,389	922,400	119,171	233,600	29,763
REX	621,800	45,452	514,600	34,894	105,600	5,288
SAND	37,700	4,101	244,400	25,202	300	21
UNCLASSIFIED	600	26	300	18	23,900	2,342
OTHER	174,900	8,729	259,200	14,514	70,700	6,402
HAKE	-	-	71,700	1,083	68,000	1,143
HALIBUT	4,500	1,220	-	-	-	-
HARDHEAD	-	-	148,200	29,648	-	-
HERRING, SEA	4,400	221	377,000	3,393	248,600	18,071
KING CROAKER	-	-	11,900	650	49,800	3,452
LINGCOD	648,700	49,816	315,900	24,198	90,100	8,604
MACKEREL:						
JACK	-	-	1,000	29	1,652,200	38,514
PACIFIC	-	-	-	-	500	38
PERCH	84,900	11,552	32,300	3,587	13,300	1,679
POMPANO	-	-	-	-	24,600	8,607
ROCKFISHES	3,373,300	167,450	2,358,600	121,750	2,466,700	134,095
SABLEFISH	637,900	55,818	840,600	28,747	271,200	11,012
SALMON:						
CHINOOK OR KING	2,961,500	1,406,654	3,306,400	1,687,537	498,900	284,655
SILVER OR COHO	816,900	261,408	187,200	69,264	13,500	4,995
TOTAL SALMON	3,778,400	1,668,062	3,493,600	1,956,801	512,400	289,650
SARDINE, PACIFIC	-	-	-	-	1,340,200	63,794
SEA BASS, WHITE	-	-	25,700	8,936	3,900	1,324
SHARKS, UNCLASSIFIED	300	15	152,600	7,171	45,300	2,263
SKATES	3,800	132	113,400	1,340	96,500	1,283
SMELT	230,100	11,900	51,100	6,316	33,200	2,511
SPLITTAIL	-	-	5,400	1,163	-	-
SWORDFISH	-	-	-	-	11,800	6,334
TUNA:						
ALBACORE	6,689,600	916,481	3,424,500	474,634	5,840,800	803,108
BLUEFIN	-	-	88,000	9,900	-	-
SKIPJACK	-	-	212,000	21,332	-	-
YELLOWFIN	-	-	1,397,500	185,314	-	-
TOTAL TUNA	6,689,600	916,481	5,122,000	691,180	5,840,800	803,108
TURBOT	6,000	415	55,100	3,221	300	14
WHITEBIT	129,400	8,810	18,700	1,897	-	-
UNCLASSIFIED:						
FOR FOOD	100	5	100	13	1,600	45
BAIT AND ANIMAL FOOD	19,300	387	2,000	31	83,400	1,601
TOTAL FISH	27,437,300	3,766,552	19,794,500	3,410,541	17,317,300	1,545,840
SHELLFISH						
CRAB:						
DUNGENESS	730,000	242,369	1,210,300	441,525	8,800	3,670
ROCK	26,900	1,748	-	-	1,100	62
TOTAL CRABS	756,900	244,117	1,210,300	441,525	9,900	3,732
SHRIMP:						
BAY	-	-	1,200	368	-	-
OCEAN	1,887,900	181,239	205,000	20,578	8,400	5,868
TOTAL SHRIMP	1,887,900	181,239	206,200	20,946	8,400	5,868
ABALONE 1/	-	-	16,900	14,987	400	413
CLAMS, HARD 2/	900	600	-	-	-	-
OCTOPUS	8,500	392	50,800	2,156	13,200	1,434
OYSTERS, MARKET: 3/						
EASTERN	-	-	13,500	4,726	-	-
PACIFIC	942,400	169,634	172,200	31,001	4,000	709
TOTAL OYSTERS	942,400	169,634	185,700	35,727	4,000	709
SQUID	-	-	-	-	6,754,500	176,966
TOTAL SHELLFISH	3,596,600	595,982	1,669,900	515,351	6,790,400	189,122

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

CALIFORNIA - CATCH BY DISTRICTS, 1963 - Continued

SPECIES	NORTHERN		SAN FRANCISCO		MONTEREY	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
WHALE PRODUCTS						
MEAL	-	-	2,616,800	\$151,656	-	-
MEAT	-	-	2,786,700	235,671	-	-
OIL:						
SPERM	-	-	700,300	57,943	-	-
WHALE	-	-	1,402,900	87,613	-	-
TOTAL WHALE PRODUCTS	-	-	7,506,700	532,883	-	-
DISTRICT TOTAL	31,033,900	\$4,362,534	28,971,100	4,458,775	24,107,700	\$1,734,962
SPECIES	MARTIN BARBARA		SAN PEDRO		SAN DIEGO	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ANCHOVIES	11,400	\$933	1,171,000	\$24,356	-	-
BARRACUDA	37,500	5,852	315,600	51,404	25,700	\$4,762
BONITO	15,000	381	3,915,400	108,459	90,900	3,780
CABEZONE	900	50	-	-	-	-
CABRILLA	-	-	25,000	4,299	12,100	1,980
FLOUNDERS:						
CALIFORNIA HALIBUT	278,000	62,003	279,800	66,202	374,000	73,379
SAND DABS	400	8	500	101	1,200	251
"SOLE":						
DOVER	134,900	8,069	-	-	-	-
ENGLISH	474,300	32,964	700	43	-	-
PETRALE	316,800	37,069	100	13	-	-
REX	323,700	22,464	-	-	-	-
SAND	48,800	5,356	-	-	-	-
UNCLASSIFIED	4,900	288	700	98	13,000	2,855
OTHER:	16,500	857	-	-	-	-
FLYING FISH	-	-	46,600	3,436	-	-
GROUPERS	-	-	179,600	38,388	53,900	12,561
HALMOON	-	-	8,700	1,873	-	-
HERRING, SEA	100	7	-	-	-	-
KING CROAKER	4,100	134	482,100	27,991	3,200	368
LINGCOD	77,300	5,626	900	101	100	15
MACKEREL:						
JACK	7,021,300	128,490	86,767,800	1,822,113	-	-
PACIFIC	2,430,800	43,755	37,787,300	816,206	24,100	1,362
OPALEY	-	-	4,100	694	300	29
PERCH	27,400	6,064	15,000	2,598	-	-
POMPANO	900	171	32,600	8,716	100	11
ROCKFISHES	2,602,300	144,101	585,900	70,328	362,700	44,260
SABLEFISH	57,400	2,539	400	35	1,800	189
SALMON:						
CHINOOK OR KING	72,000	43,766	600	587	-	-
SILVER OR COHO	2,000	740	-	-	-	-
TOTAL SALMON	74,000	44,506	600	587	-	-
SARDINE, PACIFIC	400,200	20,532	5,390,600	214,553	-	-
SCULPIN	-	-	21,100	6,936	54,400	14,626
SEA BASS:						
BLACK	1,000	104	244,700	38,645	57,900	9,100
WHITE	71,100	20,587	645,500	177,176	145,000	33,832
SHARKS, UNCLASSIFIED	85,700	8,846	257,100	32,070	124,400	11,839
SHEEPSHEAD	100	4	4,600	357	23,300	1,929
SKAITES	2,300	118	118	68	-	-
SMILT	500	49	43,600	1,535	-	-
SWORDFISH	2,000	17,237	46,300	29,343	11,000	6,556
TUNA:						
ALBACORE	3,608,400	510,947	23,599,000	3,756,954	5,697,300	854,597
BLUEFIN	-	-	26,278,800	2,961,621	3,986,600	420,586
SKIPJACK	-	-	71,619,300	7,720,558	24,788,600	2,632,552
YELLOWFIN	-	-	63,129,400	11,014,640	25,056,300	3,329,978
TOTAL TUNA	3,608,400	510,947	204,626,500	25,453,773	59,528,800	7,237,713
TURBOT	35,000	1,896	400	29	-	-
WHAO	-	-	20,200	7,079	1,700	309
YELLOWTAIL	900	96	53,400	5,466	15,400	1,391
UNCLASSIFIED:						
FOR FOOD	500	38	11,600	818	2,500	152
BAIT AND ANIMAL FOOD	929,300	18,587	-	-	-	-
TOTAL FISH	19,120,700	1,149,780	342,989,200	29,015,909	60,927,500	7,463,249

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

CALIFORNIA - CATCH BY DISTRICTS, 1963 - Continued

SPECIES	SANTA BARBARA		SAN PEDRO		SAN DIEGO	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SHELLFISH						
CRAB:						
DUNGENSES	2,400	\$935	-	-	-	-
ROCK	100,400	7,150	107,900	\$12,743	4,300	\$139
TOTAL CRABS	102,800	8,085	107,900	12,743	4,300	139
LOBSTERS, SPINY	123,300	78,922	252,200	167,624	208,700	134,829
SHRIMP, OCEAN	200	38	-	-	-	-
ABALONE ^{1/}	560,500	432,660	247,800	158,813	43,200	18,841
OCTOPUS	1,800	112	300	54	-	-
OYSTERS, MARKET, PACIFIC ^{3/}	136,900	24,649	-	-	-	-
SQUID	674,200	8,024	4,131,900	55,367	300	9
TOTAL SHELLFISH	1,599,700	552,510	4,740,100	394,601	256,500	153,818
GRAND TOTAL	20,720,400	1,702,290	347,729,300	29,410,510	61,184,000	7,617,067

^{1/} BASED ON YIELDS OF 20 PERCENT MEATS.

^{2/} BASED ON YIELDS OF 24 PERCENT MEATS.

^{3/} BASED ON YIELDS OF 14 PERCENT MEATS.



VESSELS AT SAN PEDRO

PACIFIC COAST FISHERIES

CALIFORNIA - CATCH BY WATERS, 1963

SPECIES	OFF UNITED STATES		OFF LATIN AMERICA	
	POUNDS	VALUE	POUNDS	VALUE
ANCHOVIES	4,570,400	\$77,585	-	-
BARRACUDA	347,400	56,878	31,400	\$5,140
BONITO	4,013,500	112,434	9,000	252
CABEZONE	2,800	205	-	-
CABRILLA	-	-	37,100	6,279
CARP	255,100	12,052	-	-
FLOUNDERS:				
ARROWTOOTH HALIBUT	17,300	810	-	-
CALIFORNIA HALIBUT	855,100	186,366	265,300	57,819
SAND DABS	555,800	37,391	-	-
"SOLE":				
DOVER	9,781,700	599,105	-	-
ENGLISH	4,254,500	329,001	-	-
PETRALE	3,317,900	400,405	-	-
REX	1,565,700	105,098	-	-
SAND	331,200	34,680	-	-
UNCLASSIFIED	43,400	5,627	-	-
OTHER	521,300	30,502	-	-
FLYING FISH	46,600	3,436	-	-
GROUPERS	-	-	233,500	50,949
HAKE	139,700	2,226	-	-
HALFMOON	8,700	1,873	-	-
HALIBUT	4,500	1,224	-	-
HARDHEAD	148,200	29,648	-	-
HERRING, SEA	630,100	21,692	-	-
KING CROAKER	550,700	32,571	400	24
LINGCOD	1,132,500	88,321	500	39
MACKEREL:				
JACK	95,442,300	1,989,146	-	-
PACIFIC	40,241,900	861,344	800	17
OPAL EYE	4,400	723	-	-
PERCH	171,700	25,303	1,200	177
POMPANO	58,200	17,505	-	-
ROCKFISHES	11,534,400	669,500	215,100	12,484
SABLEFISH	1,809,300	98,340	-	-
SALMON:				
CHINOOK OR KING	6,839,600	3,623,199	-	-
SILVER OR COHO	1,019,600	336,407	-	-
SOBIE, PACIFIC	7,131,200	298,879	-	-
SCULPIN	75,200	21,476	300	86
SEA BASS:				
BLACK	14,000	2,206	289,600	45,643
WHITE	372,500	101,090	518,700	140,765
SHARKS, UNCLASSIFIED	605,300	56,633	60,100	5,623
SHEEPSHEAD	25,200	2,061	2,800	229
SKATES	216,600	2,961	-	-
SMELTS	358,500	22,311	-	-
SPLITTAIL	5,400	1,163	-	-
SWORDFISH	95,700	57,040	2,400	1,430
TUNA:				
ALBACORE	41,925,800	6,278,384	6,933,800	1,038,337
BLUEFIN	7,131,000	796,890	23,222,400	2,595,217
SKIPJACK	2,224,100	238,802	94,395,800	10,135,640
YELLOWFIN	60,300	7,999	109,522,900	14,521,933
TURBOT	90,800	5,575	-	-
WAHOO	-	-	21,900	7,388
WHITETAIL	148,100	10,707	-	-
YELLOWTAIL	25,400	2,534	44,300	4,419
UNCLASSIFIED:				
FOR FOOD	13,300	869	3,100	202
BAIT AND ANIMAL FOOD	1,034,000	20,606	-	-
CRAB:				
DUNGENESS	1,951,500	688,499	-	-
ROCK	240,600	21,842	-	-
LOBSTERS, SPINY	584,200	381,375	-	-
SHRIMP:				
BAY	1,200	368	-	-
OCEAN	2,101,500	207,723	-	-
ABALONE	868,800	623,734	-	-
CLAMS, HARD	300	600	-	-
OCTOPUS	74,600	4,158	-	-
OYSTERS, MARKET:				
EASTERN	13,500	4,726	-	-
PACIFIC	1,255,500	225,993	-	-
SQUID	11,560,900	240,366	-	-
WHALE PRODUCTS:				
MEAL	2,616,800	151,656	-	-
MEAT	2,786,700	235,671	-	-
OIL:				
SPERM	700,300	57,943	-	-
WHALE	1,402,900	87,613	-	-
TOTAL	277,934,000	20,656,046	235,812,400	28,630,092

PACIFIC COAST FISHERIES

303

NORTHERN DISTRICT OF CALIFORNIA - OPERATING UNITS, 1963

ITEM	HAUL SEINES, COMMON	BEAM TRAWLS, SHRIMP	OTTER TRAWLS	
			FISH	SHRIMP
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN: ON VESSELS	-	48	140	43
ON BOATS AND SHORE	6	2	-	-
TOTAL	6	50	140	43
VESSLS, MOTOR	-	14	38	13
GROSS TONNAGE	-	362	1,673	304
BOATS, MOTOR	3	1	-	-
GEAR: NUMBER	3	15	38	13
LENGTH, YARDS	600	-	-	-
YARDS AT MOUTH	-	105	1,026	188

ITEM	POTS, CRAB	LINES		
		HAND	TROLL	
			ALBACORE	SALMON
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN: ON VESSELS	239	4	645	971
ON BOATS AND SHORE	51	2	50	593
TOTAL	290	6	695	1,564
VESSLS, MOTOR	110	2	284	450
GROSS TONNAGE	1,850	34	6,138	7,694
BOATS, MOTOR	34	1	33	395
GEAR: NUMBER	12,010	5	2,853	5,070
HOOKS OR BAITS	-	12	2,853	20,280

ITEM	LINES - CONTINUED		DREDGES, OYSTER	
	TROLL-CONTINUED	LONG OR SET WITH HOOKS	COMMON	SUCTION
	OTHER			
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN: ON VESSELS	39	2	-	-
ON BOATS AND SHORE	38	2	4	3
TOTAL	77	4	4	3
VESSLS, MOTOR	18	1	-	-
GROSS TONNAGE	261	15	-	-
BOATS, MOTOR	25	1	2	1
GEAR: NUMBER	387	18	2	1
YARDS AT MOUTH	-	-	2	-
HOOKS OR BAITS	387	1,800	-	-

ITEM	TONGS, OYSTER	SHOVELS, CLAM	BY HAND, OYSTERS	TOTAL, EXCLUSIVE OF DUPLI- CATION
				NUMBER
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN: ON VESSELS	-	-	-	1,367
ON BOATS AND SHORE	10	4	10	635
TOTAL	10	4	10	2,002
VESSLS, MOTOR	-	-	-	595
GROSS TONNAGE	-	-	-	12,262
BOATS, MOTOR	10	2	10	423
GEAR, NUMBER	10	4	-	-

PACIFIC COAST FISHERIES

NORTHERN DISTRICT OF CALIFORNIA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		BEAM TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE
HERRING, SEA	4,400	\$221	-	-
PERCH,	64,900	11,552	-	-
SILVER,	230,100	11,900	-	-
WHITEBAIT,	129,400	8,810	-	-
SHRIMP, OCEAN,	-	-	150,400	\$14,438
TOTAL	448,800	32,483	150,400	14,438

SPECIES	OTTER TRAWLS		POTS	
	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS:				
ARROWTOOTH HALIBUT	13,400	\$667	-	-
CALIFORNIA HALIBUT	300	70	-	-
SAND DABS,	112,800	9,224	-	-
"SOLE":				
DOVER,	7,533,800	473,878	-	-
ENGLISH,	1,486,200	117,707	-	-
PETRALE,	1,845,000	214,389	-	-
REX,	621,800	45,452	-	-
SAND UNCLASSIFIED	37,700	4,101	-	-
OTHER,	174,900	8,729	-	-
HALIBUT,	100	20	-	-
LINGCOD,	490,700	37,176	-	-
ROCKFISHES	3,276,200	162,595	-	-
SABLEFISH,	574,300	50,094	-	-
SALMON, CHINOOK OR KING,	1,000	400	-	-
SHARKS, UNCLASSIFIED	300	15	-	-
SKATES,	3,800	132	-	-
TURBOT,	6,000	415	-	-
UNCLASSIFIED:				
FOR FOOD	100	5	-	-
BAIT AND ANIMAL FOOD	19,300	387	-	-
CRAB:				
DUNGENSEN,	300	100	729,700	\$242,269
ROCK,	-	-	26,900	1,748
SHRIMP, OCEAN,	1,737,500	166,801	-	-
OCTOPUS,	8,500	392	-	-
TOTAL	17,944,600	1,292,775	756,600	244,017

SPECIES	LINES		DREDGES	
	POUNDS	VALUE	POUNDS	VALUE
FLOUNDERS, CALIFORNIA HALIBUT,	100	\$25	-	-
HALIBUT,	4,400	1,200	-	-
LINGCOD,	158,000	12,640	-	-
ROCKFISHES	97,100	4,853	-	-
SABLEFISH,	63,600	5,724	-	-
SALMON:				
CHINOOK OR KING,	2,960,500	1,406,254	-	-
SILVER OR COHO,	816,900	261,408	-	-
TUNA, ALBACORE,	6,689,600	916,481	-	-
OYSTERS, PACIFIC	-	-	914,000	\$164,522
TOTAL	10,790,200	2,608,587	914,000	164,522

SPECIES	TONGS AND BY HAND		SHOVELS	
	POUNDS	VALUE	POUNDS	VALUE
CLAMS, HARD,	-	-	900	\$600
OYSTERS, PACIFIC	28,400	\$5,112	-	-
TOTAL	28,400	5,112	900	600

PACIFIC COAST FISHERIES

305

SAN FRANCISCO DISTRICT OF CALIFORNIA OPERATING UNITS, 1963

ITEM	HAUL SEINES, COMMON NUMBER	PURSE SEINES AND LAMPARA NETS			BEAM TRAWLS NUMBER
		ANCHOVY NUMBER	TUNA NUMBER	OTHER NUMBER	
FISHERMEN: ON VESSELS	7	7	26	3	24
ON BOATS AND SHORE	4	-	-	-	2
TOTAL	11	7	26	3	26
VESSELS, MOTOR	3	2	2	1	7
GROSS TONNAGE	32	23	1,167	17	163
BOATS, MOTOR	2	-	4	-	1
GEAR: NUMBER	5	2	2	1	8
LENGTH, YARDS	1,150	500	1,900	200	-
YARDS AT MOUTH	-	-	-	-	56

ITEM	OTTER TRAWLS		POTS		GILL NETS, DRIFT, SEA BASS NUMBER	LINES HAND
	FISH NUMBER	SHRIMP NUMBER	CRAB, DUNGENESS NUMBER	FISH NUMBER		ROCKFISH NUMBER
FISHERMEN: ON VESSELS	83	12	245	-	3	15
ON BOATS AND SHORE	2	-	110	4	4	2
TOTAL	85	12	355	4	7	17
VESSELS, MOTOR	21	3	116	-	1	7
GROSS TONNAGE	982	90	1,792	-	11	108
BOATS, MOTOR	1	-	73	2	2	1
GEAR: NUMBER	22	3	14,880	100	3	17
SQUARE YARDS	-	-	-	-	10,600	-
YARDS AT MOUTH	587	45	-	-	-	-

ITEM	LINES - CONTINUED					LONG OR SET WITH HOOKS NUMBER
	HAND - CONTINUED		TROLL			
	YELLOWFIN NUMBER	OTHER NUMBER	ALBACORE NUMBER	SALMON NUMBER	OTHER NUMBER	
FISHERMEN: ON VESSELS	11	5	481	982	10	6
ON BOATS AND SHORE	-	14	23	528	15	2
TOTAL	11	19	504	1,510	25	8
VESSELS, MOTOR	1	2	206	447	5	3
GROSS TONNAGE	199	31	4,657	7,697	66	33
BOATS, MOTOR	1	7	15	352	10	1
GEAR: NUMBER	9	19	1,989	4,794	135	38
HOOKS	9	38	1,989	19,176	135	3,800

ITEM	DIP, BRAIL OR SCOOP NETS NUMBER	HARPOONS, WHALE NUMBER	DREDGES, OYSTERS, COMMON NUMBER	TONGS, OYSTER NUMBER	DIVING OUTFITS, ABALONE NUMBER	TOTAL, EXCLUSIVE OF DUPLI- CATION NUMBER
	FISHERMEN: ON VESSELS	-	27	-	-	2	1,367
ON BOATS AND SHORE	2	-	4	8	10	591
TOTAL	2	27	4	8	12	1,958
VESSELS, MOTOR	-	5	-	-	1	573
GROSS TONNAGE	-	972	-	-	12	13,444
BOATS, MOTOR	1	-	2	8	5	395
GEAR: NUMBER	2	5	2	8	6	-
YARDS AT MOUTH	-	-	2	-	-	-

PACIFIC COAST FISHERIES

SAN FRANCISCO DISTRICT OF CALIFORNIA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES AND LAMPARA NETS		BEAM TRAWLS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ANCHOVIES	-	-	27,800	\$2,900	-	-
CARP	223,600	\$10,540	-	-	-	-
HARDHEAD	148,200	29,648	-	-	-	-
HERRING, SEA	177,000	1,593	193,000	1,737	-	-
PERCH	31,800	3,531	-	-	-	-
SMELT	17,000	2,101	34,100	4,215	-	-
TUNA:	-	-	-	-	-	-
BLUEFIN	-	-	68,000	9,900	-	-
SKIPJACK	-	-	190,300	19,162	-	-
YELLOWFIN	-	-	1,142,400	151,488	-	-
WHITBAIT	-	-	18,000	1,827	-	-
SHRIMP:	-	-	-	-	-	-
BAY	-	-	-	-	1,200	\$368
OCEAN	-	-	-	-	31,800	3,180
TOTAL	597,600	47,413	1,693,600	191,229	33,000	3,548

SPECIES	OTTER TRAWLS		POTS AND TRAPS		GILL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CARP	-	-	31,500	\$1,512	-	-
FLOUNDERS:	-	-	-	-	-	-
ARROWTOOTH HALIBUT	3,900	\$143	-	-	-	-
CALIFORNIA HALIBUT	120,000	26,520	-	-	5,000	\$1,105
SAND DABS	310,500	20,960	-	-	-	-
"SOLE":	-	-	-	-	-	-
DOVER	2,030,600	113,106	-	-	-	-
ENGLISH	1,902,600	148,612	-	-	-	-
PETRALE	922,400	119,171	-	-	-	-
REX	514,600	34,894	-	-	-	-
SAND	244,400	25,202	-	-	-	-
UNCLASSIFIED	100	6	-	-	-	-
OTHER	259,100	14,508	-	-	-	-
HAKE	71,700	1,083	-	-	-	-
KING CROAKER	11,800	645	-	-	100	5
LINGCOD	275,800	18,801	-	-	-	-
MACKEREL, JACK	800	23	-	-	200	6
PERCH	500	56	-	-	-	-
ROCKFISHES	2,258,600	116,550	-	-	-	-
SABLEFISH	840,200	28,733	-	-	-	-
SALMON, CHINOOK OR KING	200	112	-	-	-	-
SEA BASS, WHITE	-	-	-	-	25,700	8,936
SHARKS, UNCLASSIFIED	52,000	2,392	-	-	100,600	4,779
SKATES	113,400	1,340	-	-	-	-
TURBOT	55,000	3,215	-	-	-	-
UNCLASSIFIED:	-	-	-	-	-	-
FOR FOOD	100	13	-	-	-	-
BAIT AND ANIMAL FOOD	2,000	31	-	-	-	-
CRABS, DUNGENSESS	11,400	3,990	1,198,900	437,535	-	-
SHRIMP, OCEAN	173,200	17,398	-	-	-	-
OCTOPUS	49,200	2,096	-	-	1,600	70
TOTAL	10,224,300	699,600	1,230,400	439,047	133,200	14,901

SPECIES	LINES		DIP, BRAIL OR SCOOP NETS		HARPOONS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CABEZONE	200	\$13	-	-	-	-
FLOUNDERS:	-	-	-	-	-	-
CALIFORNIA HALIBUT	800	177	-	-	-	-
"SOLE", UNCLASSIFIED	200	12	-	-	-	-
OTHER	100	6	-	-	-	-
HERRING, SEA	-	-	7,000	\$63	-	-
LINGCOD	40,100	5,397	-	-	-	-
ROCKFISHES	100,000	5,200	-	-	-	-
SABLEFISH	400	14	-	-	-	-
SALMON:	-	-	-	-	-	-
CHINOOK OR KING	3,306,200	1,687,425	-	-	-	-
SILVER OR COHO	187,200	69,264	-	-	-	-
SPLITTAIL	5,400	1,163	-	-	-	-

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

307

SAN FRANCISCO DISTRICT OF CALIFORNIA

CATCH BY GEAR, 1963 - Continued

SPECIES	LINES		DIP, BRAIL OR SCOOP NETS		HARPOONS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
TUNA:						
ALBACORE	3,424,500	\$474,634	-	-	-	-
SKIPJACK	21,700	2,170	-	-	-	-
YELLOWFIN	255,100	33,826	-	-	-	-
TURBOT	100	6	-	-	-	-
WHITETAIL	-	-	700	\$70	-	-
WHALE PRODUCTS:						
MEAL	-	-	-	-	2,616,800	\$151,656
MEAT	-	-	-	-	2,786,700	235,671
OIL:						
SPERM	-	-	-	-	700,300	57,943
WHALE	-	-	-	-	1,402,900	87,613
TOTAL	7,342,000	2,479,307	7,700	133	7,506,700	532,863

SPECIES	DREDGES		TONGS		DIVING OUTFITS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ABALONE	-	-	-	-	16,900	\$14,987
OYSTERS, MARKET:						
EASTERN	-	-	13,500	\$4,726	-	-
PACIFIC	32,700	\$5,886	139,500	25,115	-	-
TOTAL	32,700	5,886	153,000	29,841	16,900	14,987



TUNA SEINER

PACIFIC COAST FISHERIES

MONTEREY DISTRICT OF CALIFORNIA, OPERATING UNITS, 1963

ITEM	HALL SEINES, COMMON	PURSE SEINES AND LAMPARA NETS			
		ANCHOVY	MACKEREL AND SARDINE	SQUID	OTHER
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	6	33	81	58	12
ON BOATS AND SHORE	-	18	6	15	-
TOTAL	6	51	87	73	12
VESSELS, MOTOR	2	5	15	12	2
GROSS TONNAGE	29	272	476	260	43
BOATS, MOTOR	-	8	5	5	-
GEAR:					
NUMBER	2	11	17	17	2
LENGTH, YARDS	500	3,750	6,150	5,400	650

ITEM	OTTER TRAWLS, FISH	POTS AND TRAPS			GILL NETS, DRIFT SEA BASS
		CRAB, DUNGNESS	LOBSTER, SPINY	OCTOPUS	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	23	6	-	9	-
ON BOATS AND SHORE	4	11	6	2	22
TOTAL	27	17	6	11	22
VESSELS, MOTOR	6	3	-	4	-
GROSS TONNAGE	228	44	-	56	-
BOATS, MOTOR	2	7	3	1	11
GEAR:					
NUMBER	8	690	195	100	11
SQUARE YARDS	-	-	-	-	27,500
YARDS AT MOUTH	202	-	-	-	-

ITEM	GILL NETS, DRIFT-CONT'D	TRAMMEL NETS	LINES		
			HAND		
	OTHER		ALBACORE	ROCKFISH	OTHER
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	-	3	72	16	6
ON BOATS AND SHORE	4	4	-	92	32
TOTAL	4	7	72	108	38
VESSELS, MOTOR	-	1	19	7	3
GROSS TONNAGE	-	16	524	100	36
BOATS, MOTOR	2	2	4	46	16
GEAR:					
NUMBER	2	3	72	108	38
SQUARE YARDS	5,000	16,500	-	-	-
HOOKS	-	-	72	216	76

ITEM	LINES - CONTINUED				DIP, BRAIL OR SCOOP NETS
	TROLL			LONG OR SET WITH HOOKS	
	SALMON	ALBACORE	OTHER		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	287	630	25	4	-
ON BOATS AND SHORE	254	111	23	8	10
TOTAL	541	741	48	12	10
VESSELS, MOTOR	129	263	11	2	-
GROSS TONNAGE	2,199	5,569	198	55	-
BOATS, MOTOR	169	74	15	4	5
GEAR:					
NUMBER	1,786	3,033	234	52	10
HOOKS	7,152	3,033	234	5,200	-

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

309

MONTEREY DISTRICT OF CALIFORNIA OPERATING UNITS, 1963 - Continued

ITEM	TONGS, OYSTER	DIVING OUTFITS, ABALONE	BY HAND, OYSTER	TOTAL, EXCLUSIVE OF DUPLI- CATION
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:				
ON VESSELS	-	2	-	910
ON BOATS AND SHORE	2	2	2	420
TOTAL	2	4	2	1,330
VESSELS, MOTOR	-	1	-	349
GROSS TONNAGE	-	12	-	7,507
BOATS, MOTOR	2	1	2	264
GEAR, NUMBER	2	2	-	-

MONTEREY DISTRICT OF CALIFORNIA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		PURSE SEINES AND LAMPARA NETS		OTTER TRAWLS	
	<u>POUNDS</u>	<u>VALUE</u>	<u>POUNDS</u>	<u>VALUE</u>	<u>POUNDS</u>	<u>VALUE</u>
ANCHOVIES	-	-	3,360,200	\$49,396	-	-
FLOUNDER:						
CALIFORNIA HALIBUT	-	-	-	-	1,200	\$283
SAND DABS	-	-	-	-	125,200	6,574
"SOLE":						
DOVER	-	-	-	-	82,400	4,052
ENGLISH	-	-	-	-	390,500	29,675
PETRALE	-	-	-	-	223,400	28,437
REX	-	-	-	-	105,600	5,266
SAND	-	-	-	-	300	21
UNCLASSIFIED	-	-	-	-	20,000	1,952
OTHER	-	-	-	-	60,400	5,372
HAKE	-	-	-	-	67,600	1,135
HERRING, SEA	90,000	\$6,541	80,000	5,816	-	-
KING CROAKER	-	-	26,800	1,858	1,000	69
LINGCOD	-	-	-	-	26,100	2,683
MACKEREL:						
JACK	-	-	1,648,800	38,434	800	19
PACIFIC	-	-	500	38	-	-
PERCH	1,600	203	-	-	700	88
POMPANO	-	-	20,000	6,997	-	-
ROCKFISHES	-	-	-	-	1,922,800	104,507
SABLEFISH	-	-	-	-	187,600	7,616
SARDINES, PACIFIC	-	-	1,340,200	63,794	-	-
SHARKS, UNCLASSIFIED	-	-	-	-	11,200	858
SKATES	-	-	-	-	71,000	952
SMELT	6,000	455	17,500	1,323	-	-
TURBOT	-	-	-	-	300	14
UNCLASSIFIED:						
FOR FOOD	-	-	-	-	1,100	30
BAIT AND ANIMAL FOOD	-	-	-	-	83,400	1,601
OCTOPUS	-	-	-	-	200	20
SQUID	-	-	6,750,000	176,850	-	-
TOTAL	97,600	7,199	13,244,000	344,506	3,384,800	200,946

(CONTINUED ON NEXT PAGE)

PACIFIC COAST FISHERIES

MONTEREY DISTRICT OF CALIFORNIA

CATCH BY GEAR, 1963 - Continued

SPECIES	POTS		GILL AND TRAMMEL NETS		LINES	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BONITO	-	-	-	-	1,200	\$66
CABEZONE	-	-	-	-	1,700	142
FLOUNDERS:						
CALIFORNIA HALIBUT	-	-	50,000	\$11,782	11,200	2,639
SAND DABS	-	-	-	-	5,200	273
"SOLE":						
PETRALE	-	-	-	-	10,200	1,326
UNCLASSIFIED	-	-	2,900	290	1,000	100
OTHER	-	-	5,300	530	5,000	500
HAKE	-	-	-	-	400	8
HERRING, SEA	-	-	60,000	4,362	-	-
KING CROAKER	-	-	22,000	1,525	-	-
LINGCOD	-	-	-	-	62,000	5,921
PERCH	-	-	8,500	1,073	-	-
POMPANO	-	-	-	-	4,600	1,610
ROCKFISHES	-	-	-	-	543,900	29,588
SABLEFISH	-	-	-	-	83,600	3,396
SALMON:						
CHINOOK OR KING	-	-	-	-	498,900	284,655
SILVER OR COHO	-	-	-	-	13,500	4,995
SEA BASS, WHITE	-	-	3,200	1,065	700	259
SHARKS, UNCLASSIFIED	-	-	34,100	1,705	-	-
SKATES	-	-	23,000	299	2,500	32
SWORDFISH	-	-	-	-	11,800	6,334
TUNA, ALBACORE	-	-	-	-	5,840,800	803,108
UNCLASSIFIED, FOR FOOD	-	-	500	15	-	-
CRABS:						
DUNGENESS	8,800	\$3,670	-	-	-	-
ROCK	1,100	62	-	-	-	-
SHRIMP, OCEAN	8,400	5,868	-	-	-	-
OCTOPUS	13,000	1,414	-	-	-	-
TOTAL	31,300	11,014	209,500	22,646	7,098,200	1,144,952

SPECIES	DIP, BRAIL OR SCOOP NETS		TONGS	
	POUNDS	VALUE	POUNDS	VALUE
HERRING, SEA	18,600	\$1,352	-	-
MACKEREL, JACK	2,600	61	-	-
PERCH	2,500	315	-	-
SMELT	9,700	733	-	-
OYSTERS, MARKET, PACIFIC	-	-	1,900	\$337
SQUID	4,500	116	-	-
TOTAL	37,900	2,577	1,900	337

SPECIES	DIVING OUTFITS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE
ABALONE	400	\$413	-	-
OYSTERS, MARKET, PACIFIC	-	-	2,100	\$372
TOTAL	400	413	2,100	372



PACIFIC COAST FISHERIES

311

SANTA BARBARA DISTRICT OF CALIFORNIA OPERATING UNITS, 1963

ITEM	PURSE SEINES AND LAMPARA NETS			OTTER TRAWLS, FISH	POTS AND TRAPS	
	ANCHOVY	MACKEREL AND SARDINE	SQUID		CRAB, DUNGENESS	LOBSTER, SPINY
	NUMBER	NUMBER	NUMBER		NUMBER	NUMBER
FISHERMEN:						
ON VESSELS	-	88	8	58	3	24
ON BOATS AND SHORE	3	-	-	2	5	42
TOTAL	3	88	8	60	8	66
VESSELS, MOTOR	-	12	2	15	1	10
GROSS TONNAGE	-	869	49	680	17	174
BOATS, MOTOR	1	8	-	1	3	21
GEAR:						
NUMBER	1	12	2	16	270	2,115
LENGTH, YARDS	250	5,950	800	-	-	-
YARDS AT MOUTH	-	-	-	425	-	-

ITEM	GILL NETS, DRIFT			TRAMMEL NETS	LINES	
	BARRACUDA	SEA BASS	OTHER		HAND	
	NUMBER	NUMBER	NUMBER		ALBACORE	ROCKFISH
FISHERMEN:						
ON VESSELS	9	23	3	-	119	43
ON BOATS AND SHORE	6	26	6	2	4	60
TOTAL	15	49	9	2	123	103
VESSELS, MOTOR	3	8	1	-	38	18
GROSS TONNAGE	50	140	17	-	826	267
BOATS, MOTOR	3	13	3	1	4	30
GEAR:						
NUMBER	6	21	4	1	121	103
SQUARE YARDS	18,200	60,500	11,000	5,500	-	-
HOOKS	-	-	-	-	121	206

ITEM	LINES - CONTINUED				LONG OR SET WITH HOOKS
	HAND-CONT'D.	TROLL			
	OTHER	SALMON	ALBACORE	OTHER	
FISHERMEN:					
ON VESSELS	-	70	480	12	2
ON BOATS AND SHORE	24	59	80	21	14
TOTAL	24	129	560	33	16
VESSELS, MOTOR	-	31	200	6	1
GROSS TONNAGE	-	570	4,412	81	13
BOATS, MOTOR	12	39	53	14	7
GEAR:					
NUMBER	24	420	2,277	180	66
HOOKS	48	1,680	2,277	180	6,600

ITEM	HARPOONS, SWORDFISH	TONGS, OYSTER	DIVING OUTFITS, ABALONE	BY HAND, OYSTER	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
	FISHERMEN:				
ON VESSELS	7	-	24	-	786
ON BOATS AND SHORE	6	10	131	10	411
TOTAL	13	10	155	10	1,197
VESSELS, MOTOR	3	-	9	-	283
GROSS TONNAGE	41	-	217	-	7,059
BOATS, MOTOR	3	10	87	10	241
GEAR, NUMBER	6	10	98	-	-

PACIFIC COAST FISHERIES

SANTA BARBARA DISTRICT OF CALIFORNIA - CATCH BY GEAR, 1963

SPECIES	PURSE SEINES AND LAMPARA NETS		OTTER TRAWLS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ANCHOVIES	11,400	\$933	-	-	-	-
BONITO	15,000	381	-	-	-	-
FLOUNDERS:						
CALIFORNIA HALIBUT	-	-	195,600	\$43,628	-	-
SAND DABS, "SOLE":			400	8	-	-
DOVER	-	-	134,900	8,069	-	-
ENGLISH	-	-	474,300	32,964	-	-
PETRALE	-	-	316,800	37,069	-	-
REX	-	-	323,700	22,464	-	-
SAND	-	-	48,800	5,356	-	-
UNCLASSIFIED	-	-	800	47	-	-
OTHER	-	-	16,400	852	-	-
HERRING, SEA	100	7	-	-	-	-
LINGCOD	-	-	60,800	4,425	-	-
MACKEREL:						
JACK	7,021,300	128,490	-	-	-	-
PACIFIC	2,430,600	43,755	-	-	-	-
PERCH	-	-	2,600	575	-	-
POMPANO	400	76	400	76	-	-
ROCKFISHES	-	-	2,395,900	132,112	-	-
SABLEFISH	-	-	57,400	2,539	-	-
SARDINE, PACIFIC	400,200	20,532	-	-	-	-
SEA BASS, WHITE	-	-	200	58	-	-
SHARKS, UNCLASSIFIED	-	-	5,400	560	-	-
SKATES	-	-	2,300	118	-	-
SMELT	500	49	-	-	-	-
TURBOT	-	-	32,500	1,760	-	-
UNCLASSIFIED, BAIT AND ANIMAL FOOD	-	-	929,300	18,587	-	-
CRABS:						
DUNGENESS	-	-	-	-	2,400	\$935
ROCK	-	-	-	-	100,400	7,150
LOBSTERS, SPINY	-	-	-	-	123,300	78,922
SHRIMP, OCEAN	-	-	200	38	-	-
OCTOPUS	-	-	1,800	112	-	-
SQUID	674,000	8,022	200	2	-	-
TOTAL	10,553,700	202,245	4,990,700	311,419	226,100	87,007

SPECIES	GILL AND TRAMMEL NETS		LINES		HARPOONS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BARRACUDA	36,000	\$5,618	1,500	\$234	-	-
CABEZONE	-	-	900	50	-	-
FLOUNDERS:						
CALIFORNIA HALIBUT	81,000	18,063	1,400	312	-	-
"SOLE", UNCLASSIFIED	2,000	118	2,100	123	-	-
OTHER	-	-	100	5	-	-
KING CROAKER	3,500	114	600	20	-	-
LINGCOD	-	-	16,500	1,201	-	-
PERCH	24,800	5,489	-	-	-	-
POMPANO	-	-	100	19	-	-
ROCKFISHES	-	-	216,400	11,989	-	-
SALMON:						
CHINOOK OR KING	-	-	72,000	43,766	-	-
SILVER OR COHO	-	-	2,000	740	-	-
SEA BASS:						
BLACK	-	-	1,000	104	-	-
WHITE	66,000	19,111	4,900	1,418	-	-
SHARKS, UNCLASSIFIED	76,000	7,892	4,300	446	-	-
SHEEPSHEAD	-	-	100	4	-	-
SWORDFISH	-	-	2,000	1,200	25,000	\$15,037
TUNA, ALBACORE	-	-	3,608,400	510,947	-	-
TURBOT	-	-	2,500	136	-	-
YELLOWTAIL	-	-	900	96	-	-
UNCLASSIFIED, FOR FOOD	500	36	-	-	-	-
TOTAL	289,800	56,443	3,937,700	572,810	25,000	15,037

SPECIES	TONGS AND BY HAND		DIVING OUTFITS	
	POUNDS	VALUE	POUNDS	VALUE
ABALONE	-	-	560,500	\$432,680
OYSTERS, MARKET, PACIFIC	136,900	\$24,649	-	-
TOTAL	136,900	24,649	560,500	432,680

SAN PEDRO DISTRICT OF CALIFORNIA - OPERATING UNITS, 1963

ITEM	PURSE SEINES AND LAMPARA NETS					
	ANCHOVY	MACKEREL AND SARDINE	SQUID	TUNA	OTHER	
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	
FISHERMEN:						
ON VESSELS	34	545	22	1,360	13	
ON BOATS AND SHORE	9	12	3	-	-	
TOTAL	43	557	25	1,359	13	
VESSELS, MOTOR	7	66	6	120	3	
GROSS TONNAGE	156	4,890	148	33,155	84	
BOATS, MOTOR	3	49	1	218	1	
GEAR:						
NUMBER	10	72	7	120	3	
LENGTH, YARDS	3,550	35,750	2,600	85,710	1,200	
ITEM	POTS, LOBSTER	GILL NETS, DRIFT			TRAMMEL NETS	
		BARRACUDA	SEA BASS	OTHER		
		<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>		<u>NUMBER</u>
FISHERMEN:						
ON VESSELS	48	12	94	88	4	
ON BOATS AND SHORE	136	18	70	4	6	
TOTAL	184	30	164	12	10	
VESSELS, MOTOR	19	4	33	3	1	
GROSS TONNAGE	349	82	553	56	8	
BOATS, MOTOR	68	9	35	2	3	
GEAR:						
NUMBER	5,870	13	68	5	4	
SQUARE YARDS	-	36,500	201,300	15,200	22,000	
ITEM	LINES					
	HAND				TROLL	
	ALBACORE	ROCKFISH	YELLOWFIN	OTHER	SALMON	ALBACORE
FISHERMEN:						
ON VESSELS	540	47	370	-	7	646
ON BOATS AND SHORE	20	70	6	102	3	89
TOTAL	560	117	376	171	10	735
VESSELS, MOTOR	163	19	65	23	3	261
GROSS TONNAGE	4,931	452	4,748	560	47	6,431
BOATS, MOTOR	29	35	33	51	2	59
GEAR:						
NUMBER	550	117	348	170	30	2,880
HOOKS	550	234	348	340	120	2,880
ITEM	LINES - CONTINUED					
	TROLL- CONTINUED	LONG OR SET WITH HOOKS	DIP, BRAIL OR SCOOP NETS	HARPOONS, SWORDFISH	DIVING OUTFITS, ABALONE	TOTAL EXCLUSIVE OF DUPLI- CATION
	OTHER					
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:						
ON VESSELS	13	23	50	14	15	2,844
ON BOATS AND SHORE	21	18	26	16	88	545
TOTAL	34	41	76	30	103	3,389
VESSELS, MOTOR	6	9	19	5	6	578
GROSS TONNAGE	107	201	413	104	184	47,367
BOATS, MOTOR	14	9	13	8	44	543
GEAR:						
NUMBER	180	162	75	13	51	-
HOOKS	180	16,200	-	-	-	-

PACIFIC COAST FISHERIES

SAN PEDRO DISTRICT OF CALIFORNIA - CATCH BY GEAR, 1963

SPECIES	PURSE SEINES AND LAMPARA NETS		POTS		GILL AND TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ANCHOVIES	1,171,000	\$24,356	-	-	-	-
BARRACUDA	-	-	-	-	284,000	\$46,256
BONITO	3,264,000	90,415	-	-	-	-
FLOUNDERS, CALIFORNIA HALIBUT .	-	-	-	-	94,800	22,431
FLYING FISH	11,600	856	-	-	28,000	2,064
HALF MOON	-	-	-	-	4,000	861
KING CROAKER	159,100	9,225	-	-	323,000	18,766
MACKEREL:						
JACK	86,766,700	1,822,090	-	-	-	-
PACIFIC	36,954,900	798,227	-	-	9,900	213
OPALEYE	1,100	187	-	-	-	-
PERCH	-	-	-	-	15,000	2,598
POMPANO	27,000	7,219	-	-	-	-
SARDINE, PACIFIC	5,390,800	214,553	-	-	-	-
SEA BASS:						
BLACK	-	-	-	-	100,000	15,790
WHITE	-	-	-	-	600,000	164,686
SHARKS, UNCLASSIFIED	-	-	-	-	232,000	28,930
SMELT	30,000	1,193	-	-	13,600	342
TUNA:						
ALBACORE	2,604,300	414,605	-	-	-	-
BLUEFIN	26,278,800	2,981,621	-	-	-	-
SKIPJACK	62,727,800	6,762,943	-	-	-	-
YELLOWFIN	75,454,300	9,997,690	-	-	-	-
YELLOWTAIL	40,000	4,093	-	-	-	-
UNCLASSIFIED, FOR FOOD	-	-	-	-	5,600	395
CRABS, ROCK	-	-	107,900	\$12,743	-	-
LOBSTERS, SPINY	-	-	252,200	167,624	-	-
OCTOPUS	-	-	-	-	300	54
SQUID	4,000,000	53,587	-	-	-	-
TOTAL	304,881,400	23,162,860	360,100	180,367	1,710,200	303,386

SPECIES	LINES		DIP, BRAIL OR SCOOPE NETS		HARPOONS		DIVING OUTFITS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BARRACUDA	31,600	\$5,148	-	-	-	-	-	-
BONITO	651,400	18,044	-	-	-	-	-	-
CABRILLA	25,000	4,299	-	-	-	-	-	-
FLOUNDERS:								
CALIFORNIA HALIBUT	185,000	43,771	-	-	-	-	-	-
SAND DABS	500	101	-	-	-	-	-	-
"SOLE":								
ENGLISH	700	43	-	-	-	-	-	-
PETRALE	100	13	-	-	-	-	-	-
UNCLASSIFIED	700	98	-	-	-	-	-	-
FLYING FISH	-	-	7,000	\$516	-	-	-	-
GROUPERS	179,600	38,388	-	-	-	-	-	-
HALFMOON	4,700	1,012	-	-	-	-	-	-
LINGCOD	900	101	-	-	-	-	-	-
MACKEREL:								
JACK	-	-	1,100	23	-	-	-	-
PACIFIC	11,000	238	811,500	17,528	-	-	-	-
OPALEYE	3,000	507	-	-	-	-	-	-
POMPANO	5,600	1,497	-	-	-	-	-	-
ROCKFISHES	585,900	70,328	-	-	-	-	-	-
SABLEFISH	400	35	-	-	-	-	-	-
SALMON, CHINOOK OR KING	800	587	-	-	-	-	-	-
SCULPIN	21,100	6,936	-	-	-	-	-	-
SEA BASS:								
BLACK	144,700	22,855	-	-	-	-	-	-
WHITE	45,500	12,490	-	-	-	-	-	-
SHARKS, UNCLASSIFIED	25,100	3,140	-	-	-	-	-	-
SHEEPSHEAD	4,600	357	-	-	-	-	-	-
SKATES	800	88	-	-	-	-	-	-
SWORDFISH	8,300	5,042	-	-	40,000	\$24,301	-	-
TUNA:								
ALBACORE	20,994,700	3,342,349	-	-	-	-	-	-
SKIPJACK	8,891,500	957,615	-	-	-	-	-	-
YELLOWFIN	7,675,100	1,016,950	-	-	-	-	-	-
TURBOT	400	29	-	-	-	-	-	-
WAHOO	20,200	7,079	-	-	-	-	-	-
YELLOWTAIL	13,400	1,373	-	-	-	-	-	-
UNCLASSIFIED, FOR FOOD	6,000	423	-	-	-	-	-	-
ABALONE	-	-	-	-	-	-	247,800	\$159,813
SQUID	-	-	131,900	1,780	-	-	-	-
TOTAL	39,538,300	5,560,936	951,500	19,847	40,000	24,301	247,800	159,813

PACIFIC COAST FISHERIES

315

SAN DIEGO DISTRICT OF CALIFORNIA - OPERATING UNITS, 1963

ITEM	PURSE SEINES AND LAMPARA NETS			
	MACKEREL AND SARDINE	SQUID	TUNA	OTHER
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:				
ON VESSELS	3	-	393	-
ON BOATS AND SHORE	-	3	-	6
TOTAL	3	3	393	6
VESSLS, MOTOR	1	-	32	-
GROSS TONNAGE	20	-	10,986	-
BOATS, MOTOR	-	1	63	2
GEAR:				
NUMBER	1	1	32	2
LENGTH, YARDS	400	250	25,500	400

ITEM	POTS, LOBSTER, SPINY	GILL NETS, DRIFT			LINES
		BARRACUDA	SEA BASS	OTHER	HAND
					ROCKFISH
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	10	-	31	3	15
ON BOATS AND SHORE	150	4	38	10	86
TOTAL	160	4	69	13	101
VESSLS, MOTOR	4	-	11	1	5
GROSS TONNAGE	174	-	180	21	200
BOATS, MOTOR	75	2	19	5	43
GEAR:					
NUMBER	5,200	2	30	6	101
SQUARE YARDS	-	5,000	85,400	15,700	-
HOOKS	-	-	-	-	202

ITEM	LINES - CONTINUED				
	HAND - CONTINUED			TROLL	
	ALBACORE	YELLOWFIN	OTHER	ALBACORE	OTHER
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	267	157	26	207	-
ON BOATS AND SHORE	24	10	58	68	3
TOTAL	291	167	84	275	3
VESSLS, MOTOR	80	24	11	87	-
GROSS TONNAGE	2,366	2,146	216	2,086	-
BOATS, MOTOR	22	17	29	45	2
GEAR:					
NUMBER	284	150	84	1,188	18
HOOKS	284	150	168	1,188	18

ITEM	LINES-CONT'D	DIP, BRAIL OR SCOOP NETS	HARPOONS, SWORDFISH	DIVING OUTFITS, ABALONE	TOTAL, EXCLUSIVE OF DUPLICATION
	LONG OR SET WITH HOOKS				
	NUMBER				
FISHERMEN:					
ON VESSELS	2	2	-	6	946
ON BOATS AND SHORE	22	-	4	38	352
TOTAL	24	2	4	44	1,298
VESSLS, MOTOR	1	1	-	2	203
GROSS TONNAGE	14	12	-	27	16,706
BOATS, MOTOR	11	-	2	19	265
GEAR:					
NUMBER	98	2	2	23	-
HOOKS	9,800	-	-	-	-

PACIFIC COAST FISHERIES

SAN DIEGO DISTRICT OF CALIFORNIA - CATCH BY GEAR, 1963

SPECIES	PURSE SEINES AND LAMPARA NETS		POTS		GILL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BARRACUDA	10,700	\$1,982	-	-	9,000	\$1,668
BONITO	90,900	3,780	-	-	-	-
FLOUNDERS, CALIFORNIA HALIBUT	-	-	-	-	124,000	24,329
KING CROAKER	-	-	-	-	3,200	368
MACKEREL, PACIFIC	20,000	1,130	-	-	-	-
SEA BASS:						
BLACK	-	-	-	-	7,900	1,240
WHITE	-	-	-	-	121,000	23,232
SHARKS, UNCLASSIFIED	-	-	-	-	104,000	9,897
TUNA:						
ALBACORE	137,300	20,597	-	-	-	-
BLUEFIN	3,986,600	420,586	-	-	-	-
SKIPJACK	21,867,900	2,322,374	-	-	-	-
YELLOWFIN	20,648,300	2,744,155	-	-	-	-
YELLOWTAIL	10,400	939	-	-	-	-
UNCLASSIFIED, FOR FOOD	-	-	-	-	-	-
CRABS, ROCK	-	-	4,300	\$139	2,000	121
LOBSTER, SPINY	-	-	208,700	134,829	-	-
SQUID	300	9	-	-	-	-
TOTAL	46,772,400	5,515,552	213,000	134,968	371,100	65,855

SPECIES	LINES		D.P., BRAIL OR SCOOP NETS	
	POUNDS	VALUE	POUNDS	VALUE
BARRACUDA	6,000	\$1,112	-	-
CABRILLA	12,100	1,980	-	-
FLOUNDERS:				
CALIFORNIA HALIBUT	250,000	49,050	-	-
SAND DABS	1,200	251	-	-
"SOLE", UNCLASSIFIED	13,000	2,855	-	-
GROUPERS	53,900	12,561	-	-
KING CROAKER	100	15	-	-
MACKEREL, PACIFIC	-	-	4,100	\$232
OPALEYE	300	29	-	-
POMPANO	100	11	-	-
ROCKFISHES	362,700	44,260	-	-
SABLEFISH	1,800	189	-	-
SCULPIN	54,400	14,626	-	-
SEA BASS:				
BLACK	50,000	7,860	-	-
WHITE	24,000	5,600	-	-
SHARKS, UNCLASSIFIED	20,400	1,942	-	-
SHEEPSHEAD	23,300	1,929	-	-
SWORDFISH	1,000	596	-	-
TUNA:				
ALBACORE	5,560,000	834,000	-	-
SKIPJACK	2,920,700	310,178	-	-
YELLOWFIN	4,408,000	585,823	-	-
WAMOO	1,700	309	-	-
YELLOWTAIL	5,000	452	-	-
UNCLASSIFIED, FOR FOOD	500	31	-	-
TOTAL	13,770,200	1,875,659	4,100	232

SPECIES	HARPOONS		DIVING OUTFITS	
	POUNDS	VALUE	POUNDS	VALUE
SWORDFISH	10,000	\$5,960	-	-
ABALONE	-	-	43,200	\$18,841
TOTAL	10,000	5,960	43,200	18,841



LANDINGS BY HALIBUT FLEET AT SEATTLE, WASHINGTON

Halibut landings at Seattle in 1963 totaled 10.5 million pounds valued at \$2.4 million. Compared with 1962, this was an increase of 538,000 pounds (5 percent) in volume but a decline of \$803,000 (25 percent) in value.

Landings of halibut from fishing grounds west of Cape Spencer (8.2 million pounds) were about the same as in the previous year, while those from south of Cape Spencer (2.3 million pounds) were up nearly 500,000 pounds. Landings of sablefish from grounds off Cape Spencer (1.3 million pounds) showed a small decline from 1962.

The following tables contain a summary of the landings of dressed halibut and sablefish at Seattle by the U.S. halibut fleet. These data are not directly comparable with the State and sectional tabulations, since the weights in those tables represent the round weight of fish landed.

LANDINGS BY THE HALIBUT FLEET AT SEATTLE, BY FISHING GROUNDS, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

FISHING GROUNDS	TRIPS	HALIBUT (DRESSED)						
		CHICKEN			MEDIUM		LARGE	
		NUMBER	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
WEST OF CAPE SPENCER . . .	129	102	19	5,023	1,174	2,613	618	
SOUTH OF CAPE SPENCER . . .	165	264	57	1,683	409	306	74	
TOTAL	294	366	76	6,706	1,583	2,919	692	

FISHING GROUNDS	HALIBUT (DRESSED) - CONTINUED				SABLEFISH		TOTAL	
	NO. 2 MEDIUM		NO. 2 LARGE		QUANTITY	VALUE	QUANTITY	VALUE
	QUANTITY	VALUE	QUANTITY	VALUE				
WEST OF CAPE SPENCER . . .	361	66	59	12	1	8,159	1,891	
SOUTH OF CAPE SPENCER . . .	68	14	6	1	1,285	271	826	
TOTAL	429	82	65	13	1,286	271	2,717	

1/ LESS THAN \$500.

SEE NOTE AT END OF NEXT TABLE.

LANDINGS BY THE HALIBUT FLEET AT SEATTLE, BY MONTHS, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

MONTHS	TRIPS	HALIBUT (DRESSED)						
		CHICKEN			MEDIUM		LARGE	
		NUMBER	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
APRIL	29	50	10	1,642	406	86	22	
MAY	42	65	12	1,463	343	608	146	
JUNE	38	76	15	989	241	591	144	
JULY	43	112	23	1,045	245	470	113	
AUGUST	54	45	8	1,040	220	800	163	
SEPTEMBER	38	33	6	294	72	83	20	
OCTOBER	40	5	1	197	46	248	56	
NOVEMBER	10	(1)	1	36	10	33	8	
TOTAL	294	386	76	6,706	1,583	2,919	692	

MONTHS	HALIBUT (DRESSED) - CONTINUED				SABLEFISH		TOTAL	
	NO. 2 MEDIUM		NO. 2 LARGE		QUANTITY	VALUE	QUANTITY	VALUE
	QUANTITY	VALUE	QUANTITY	VALUE				
APRIL	61	13	5	1	-	1,844	452	
MAY	62	12	7	1	14	2	2,219	
JUNE	65	13	9	2	17	3	1,747	
JULY	63	12	6	1	31	6	1,727	
AUGUST	110	19	15	3	220	44	2,230	
SEPTEMBER	15	3	1	(1)	515	107	941	
OCTOBER	51	9	17	4	402	90	920	
NOVEMBER	3	1	4	1	87	19	163	
TOTAL	430	82	64	13	1,286	271	11,791	

1/ LESS THAN 500 POUNDS OR \$500. NOTE:--THE 1963 PACIFIC HALIBUT FISHING SEASON OPENED ON MARCH 25 IN AREA 3B (NORTH) AND CLOSED ON OCTOBER 15. AREA 3B (SOUTH) OPENED TO HALIBUT FISHING ON APRIL 19 AND CLOSED ON OCTOBER 15. AREAS 1 AND 2 OPENED TO HALIBUT FISHING ON MAY 9 AND CLOSED ON NOVEMBER 30. AREA 3A OPENED TO HALIBUT FISHING ON MAY 9 AND CLOSED ON AUGUST 9.

PACIFIC COAST FISHERIES

WHALING

During the 1963 season, three whaling stations operated--the same as in 1962. The three companies were the Del Monte and the Golden Gate Fishing Companies of Richmond, Calif., and Bioproducts, Inc., of Warrenton, Oreg. The California stations operated the same five catcher vessels as in the previous year--Lynnann and Sioux City for the Golden Gate Fishing Company and Dennis Gayle, Donna Mae, and Allen Cody for the Del Monte Company. At the Oregon station, Tom and Al replaced the catcher boat used in 1962.

In 1963, the catch of whales was 259--11 more than in the previous year. The catch of 97 sei whales was 75 more than in 1962 and the largest number captured since the fishery was reactivated in 1956. Fifty-five humpback whales were taken in 1963--16 more than in the previous year but 18 less than the 1959-63 average of 73. The catch of 77 sperm whales was 17 more than in 1962 and 22 more than the 1959-63 average. The valuable fin whale fishery, however, declined from 124 taken in 1962 to 21 in 1963.

The open season remained the same--April 1 to November 30, inclusive, for sperm whales and April 16 to October 15, inclusive, for other whales.

The whale catch in 1963 was processed into 2.6 million pounds of meal, nearly 2.2 million pounds of oil, and 2.9 million pounds of meat (for use as canned or frozen animal food). In 1963, for the first time, there was a small production (14,000 pounds) of whale solubles. At the producer's level the value of all products was \$544,000. Compared with 1962, the volume declined 21 percent and the value, 23 percent.

WHALE CATCH, 1963

MONTH	BLUE	BOTTLE- NOSE	FIN	HUMP- BACK	KILLER	SEI	SPERM	TOTAL
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
APRIL	-	-	1	15	-	-	11	27
MAY	-	1	2	20	-	-	12	35
JUNE	-	1	4	9	-	9	2	25
JULY	1	-	7	2	1	55	4	70
AUGUST	-	-	1	3	-	19	13	36
SEPTEMBER	4	-	5	5	-	8	19	41
OCTOBER	1	-	1	1	-	6	16	25
TOTAL	6	2	21	55	1	97	77	259

NOTE:--THE OREGON FIRM TOOK 5 FIN WHALES.

WHALE PRODUCTS, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

ITEM	QUANTITY	VALUE
MEAL	2,638	153
MEAT	2,864	242
OIL:		
SPERM.	700	58
WHALE.	1,429	91
SOLUBLES	14	(1)
TOTAL	7,665	544

1/ LESS THAN \$500.

NOTE:--TO CONVERT POUNDS OF OIL TO GALLONS, DIVIDE BY 7.75.

FUR SEAL INDUSTRY OF THE PRIBILOF ISLANDS

Fur sealing operations on the Pribilof Islands produced 85,254 commercial sealskins during 1963--an increase of 7,339 skins above the 1962 harvest. The 42,278 take of male seals was below average as a result of lower abundance of the normally predominant 3-year-old class. Three-year-old seals normally outnumber 4-year-olds two to one, but in 1963, these two year-classes each comprised 45 percent of the total male harvest. The 48-3/4-inch maximum length was waived shortly after the season started, and all available males were taken that had not yet developed mature bull characteristics. This produced an additional 3,150 pelts beyond the previous size limit. The cropping of these larger animals revealed previously unknown extremes of size variation in the 4- and 5-year-age-groups; many bachelor seals over 49 inches long were found to be no older than those taken within the previously acceptable size range. Taking the larger sizes was justified by the biological surplus of idle bulls.

The kill of females for herd reduction purposes totaled 43,952 animals, of which 15,299 were immatures, whose pelts are dressed, dyed, machined and finished the same as males; while the remainder were mature cows, about half of which were suitable for an alternate process of close shearing. Only 976 female pelts were rejected because of poor quality. None were lost because of lack of manpower or plant capacity.

For the first time in history, Government employees supervised and performed the blubbering and curing of the skins. This was necessitated by cancellation of the 40-year-old processing contract of the Fouke Fur Company. While the rate of production was somewhat below that of previous years, workmanship of the largely inexperienced crew was judged by experts to be at least equal and often superior. As in previous years, killing and skinning was performed mostly by Pribilof residents and curing by native labor imported from Aleutian villages. The regular male sealing season extended from July 2 through August 5, while the special female killing season lasted from August 13 through September 12.

Seal pup mortality on the rookeries, an indicator of subsequent survival at sea, was checked in mid-August. Deaths on St. Paul Island were calculated to be 34,228, while St. George Island totaled 5,011. Both are well below the 1962 counts and indicate an improving trend in the subsequent return of 3-year-old seals.

One firm operating under a 2-year agreement was again active on St. Paul Island processing seal carcasses. An initial shipment of 150 tons of frozen seal meat and 11 tons of livers found a ready market as mink feed and for vitamin extraction, respectively. A second shipment was beset with many delays, and difficulty was experienced in marketing products that arrived in poor condition. Aside from this limited operation, seal carcasses were dumped on remote grounds as in the previous year.

CLASSES OF SEALS TAKEN ON THE PRIBILOF ISLANDS, BY AGE GROUP, 1963

ITEM	ST. PAUL ISLAND		ST. GEORGE ISLAND	
	MALE	FEMALE	MALE	FEMALE
		. . . . PERCENTAGE OF KILL		
BY AGE:				
2-YEAR-OLDS	2	1	5	2
3-YEAR-OLDS	47	6	42	10
4-YEAR-OLDS	46	17	48	23
5-YEAR-OLDS	5	20	5	10
6-YEAR-OLDS	-	9	-	4
7-YEAR-OLDS	-	4	-	33
8-YEAR-OLDS AND OLDER	-	43	-	-
TOTAL	100	100	100	100

NOTE: --PERCENTAGE OF MALE SEALS FOR SEASON JULY TO AUGUST 5. PERCENTAGE OF FEMALE SEALS FOR SEASON AUGUST 13 TO SEPTEMBER 12.

PACIFIC COAST FISHERIES

DISTRIBUTION OF TAKE OF SEALSKINS, 1963

The fur seal treaty specifies that Canada and Japan are to receive 15 percent of each of the skins taken on the Pribilof Islands. To insure an impartial selection of their respective 15 percent, Canada made a random choice of numbers 4, 10, and 14, while Japan selected numbers 3, 7, and 15 out of each series of 20 barrels of sealskins. This resulted in the following allocation of skins to the United States, Canada, and Japan:

ITEM	UNITED STATES	CANADA	JAPAN	TOTAL
	NUMBER	NUMBER	NUMBER	NUMBER
FROM ST. PAUL ISLAND:				
MALE SKINS	22,243	4,767	4,767	31,777
FEMALE SKINS	23,953	5,132	5,132	34,217
TOTAL SKINS	46,196	9,899	9,899	65,994
FROM ST. GEORGE ISLAND:				
MALE SKINS	7,361	1,575	1,575	10,501
FEMALE SKINS	7,131	1,314	1,314	8,759
TOTAL SKINS	13,462	2,889	2,889	19,260
FROM BOTH ISLANDS:				
MALE SKINS	29,594	6,342	6,342	42,276
FEMALE SKINS	30,064	6,446	6,446	42,976
GRAND TOTAL	59,678	12,788	12,788	85,254

As a result of taking oversize male pelts suitable for processing, it was necessary to reduce the standard packing count to 80 skins per barrel from the 85 used when only the smaller animals were taken. A total of 273 barrels of blubber was also salted and barreled for subsequent extraction of oil for tanning sealskins.

SALE OF SEALSKINS, 1963

Two public and four special sealskin auctions were held in Greenville, S. C., in 1963. A total of 61,965 skins was sold for the account of the U. S. Government. Gross receipts for the six auctions held during calendar year 1963 yielded \$6,005,835. The offerings consisted of 46,784 conventionally processed skins which yielded \$5,406,985 and 15,181 female skins which sold for \$598,850. The latter included 14,140 LAKODA sheared skins which brought \$585,022 and 1,041 natural sheared skins which yielded \$13,828. LAKODA skins averaged \$41.37 compared with \$115.57 for conventionally processed skins.

DISTRIBUTION OF PRIBILOF ISLANDS RECEIPTS, FISCAL YEAR, 1963

ITEM	AMOUNT
COST OF HANDLING, PROCESSING, DYEING AND DRESSING	\$1,749,709
COST OF ADMINISTRATION OF PRIBILOF ISLANDS	2,217,481
PAYMENT TO THE STATE OF ALASKA	589,300
NET RECEIPTS TO U.S. GOVERNMENT	252,557
TOTAL	4,609,047

NOTE:--FIGURES SHOWN IN THE ABOVE TABLE ARE COMPUTED ON A FISCAL YEAR BASIS. THOSE QUOTED IN THE PRECEDING NARRATIVE ARE ON A CALENDAR YEAR BASIS.

In 1963, United States and Canadian commercial fishermen in the five Great Lakes, Lake St. Clair, and the International Lakes of northern Minnesota produced 106 million pounds of fish--a decrease of more than 17 million pounds compared with 1962. Only three species showed an appreciable increase: alewives, up nearly 700,000 pounds; sheepshead, 1.0 million pounds; and yellow pike, 1.8 million pounds. Major decreases were noted for carp, 1.1 million pounds; chubs, 3.9; lake herring, 1.8; smelt, 8.2 million pounds; tullibee, 600,000 pounds; white bass, 700,000 pounds; and yellow perch, 3.7 million pounds.

Production in Canadian waters dropped almost 11 million pounds because of a 10-million-pound decline in Lake Erie, where smelt and yellow perch landings were down 8.6 and 2.9 million pounds, respectively. Canadian Lake Erie yellow pike catches of 1,875,000 pounds were 560 percent greater than in 1962. Of the four Great Lakes fished by Canadians, only Lake Ontario showed an increase in landings. In Lake Huron, the catch decreased 588,000 pounds, chiefly because of a decline in the chub production. Smaller catches of lake herring accounted for the Canadian decrease in Lake Superior landings.

The commercial catch in the U.S. waters of the Great Lakes and International Lakes was 59 million pounds--10 percent less than in 1962 and the lowest yield since 1913. The value of the U.S. catch decreased \$244,000 (4 percent) compared with 1962. The State of Michigan was the largest producer with 20.3 million pounds, followed by Wisconsin, 16.9; Ohio, 14.2; Minnesota, 5.3; and Pennsylvania, 1.4 million pounds. New York, Indiana, and Illinois accounted for the remainder. The lakes, in order of production, were: Michigan, 21.0; Erie, 17.2; Superior, 12.1; Huron, 5.2; International Lakes of Minnesota, 3.2; St. Clair, 1.0; and Ontario, 233,000 pounds.

Fishermen and vessels. In 1963, 2,704 fishermen, 396 vessels of 5 net tons and over, and 1,251 other craft were employed in the U.S. commercial fisheries of the Great Lakes. Compared with 1962, this was a decrease of 386 fishermen, 28 vessels, and 76 other craft. Fishermen on vessels averaged 101 man-days of fishing, while in 1962, the average was 106 days. Fishermen days of operation on vessels decreased from 124,323 in 1962 to 90,674 in 1963, while the number of vessel-days fished dropped from 42,905 to 38,373. Fishermen on boats and shore fished 80,314 man-days in 1963 and 86,552 man-days in 1962. Motor boat operations totaled 43,356 boat-days in 1963, compared with 46,519 in 1962.

Fishing effort. The total fishing effort by U.S. Great Lakes fishermen in 1963 was less than in 1962 for nearly all gears. Only three gears showed an increased use: 1-1/4- to 2-inch mesh gill net lifts increased 40,000 linear yards; 7-1/8- to 14-inch mesh gill net lifts increased 336,000 linear yards; and otter trawl operations increased 1,361 hours, even though only 14 vessels operated--2 less than in 1962. The total lifts for 2-1/8- to 3-7/8-inch mesh gill nets decreased 15.6 million linear yards compared with 1962. Other decreases noted were: 4- to 7-inch mesh gill nets, down 12.6 million linear yard-lifts; trap nets, down 15,799 lifts; set line hooks, down 2,383,000 hook-lifts; pound nets, down 2,045 lifts; fyke and hoop nets, down 693 lifts; and haul seines, down 518,000 linear yard-hauls.

Weather. A severe freeze in the Great Lakes area in February and March curtailed fishing. The Weather Bureau reported that Lakes Superior, Michigan, Huron, and Ontario were completely frozen over in February. This was the severest winter recorded in the area since 1936.

Species by lake. Alewives, chubs, and yellow perch landings accounted for 84 percent of the 1963 production from Lake Michigan. Catches of alewives (5.4 million pounds) and yellow perch, (4.9 million pounds) increased 14 and 20 percent, respectively, while chub landings (7.5 million pounds) decreased 33 percent. Total production for the lake was 2.5 million pounds less than in 1962.

GREAT LAKES FISHERIES

Lake Erie landings in 1963 were 2.4 million pounds less than the preceding year. Carp landings decreased 1.4 million pounds, and yellow perch, 1.7 million pounds, while sheepshead catches were up 603,000 pounds. U.S. fishermen caught 367,000 pounds more yellow pike in 1963 than in 1962, an increase of 85 percent; however, the total catch was only 800,000 pounds compared with an average of 3.6 million pounds during 1953-62. Production from Lake Huron decreased 674,000 pounds compared with 1962. Catches of whitefish, chubs, and suckers declined, while yellow perch landings increased.

Lake Superior landings decreased 477,000 pounds compared with 1962. While chub and smelt increased over 500,000 pounds each, lake herring production declined 1.4 million pounds. Smaller catches of tullibee accounted for the decrease in the landings from the International Lakes of Minnesota.

Lake Ontario landings of 233,000 pounds were the same as in 1962.

Sea lamprey control. During 1963, the catch of adult sea lampreys continued to be low at the 26 assessment barriers in streams along the south shore of Lake Superior. The number of spawning-run lamprey taken (11,117) was higher than the previous year, but was 83 percent less than in 1961. Twenty-six streams along the south shore of Lake Superior and 22 tributaries of Lake Michigan were treated with a selective lampricide. In addition, 187 streams were surveyed in the continuing surveillance of the treated and potential lamprey-producing streams.

Under the coordination of the Great Lakes Fishery Commission, the United States and Canada planted 2,310,748 fingerling and yearling lake trout in Lake Superior. Assessment of lake trout populations showed that the average size and abundance of this species were increasing.

Research. In the latter part of 1963, seven deaths occurred in Michigan, Tennessee, and Alabama from type E botulism poisoning, attributed to eating contaminated smoked whitefish and chubs. Because of the botulism poisonings, 1.6 million pounds of chubs for use as smoked fish for human consumption could not be sold and were held in freezers. Under section 4b of Public Law 88-309, "The Commercial Fisheries Research and Development Act of 1964", holders of these frozen chubs were paid to remove these fish from human food channels. The resulting publicity had a disastrous effect on the commercial fishing industry in the Great Lakes area. Smoked fish production virtually stopped, and consumer misunderstanding of the smoked fish warning released by the U.S. Food and Drug Administration (FDA) had a serious effect on fresh and frozen fish sales as well. A group of Bureau technologists met in Ann Arbor and prepared an immediate and long-range program to revive the industry. Studies were made to evaluate product quality as affected by interim processing guidelines provided by FDA and States concerned with the subject.

In 1963, four vessels of the Bureau of Commercial Fisheries operated on the Great Lakes, collecting data on environment, growth, distribution, abundance, and other factors that influence fish stocks and conducting exploratory and gear research.

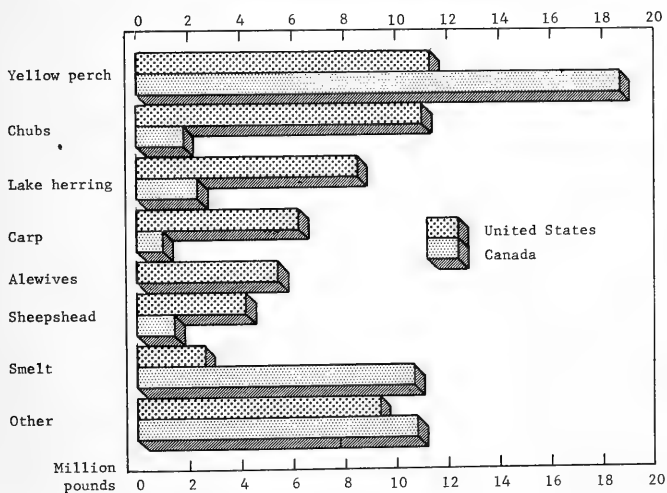
In October, a contract for \$1,308,830 was issued for construction of a new Bureau laboratory at Ann Arbor, Mich. When completed in 1965, the laboratory will house Bureau research operations and the supporting statistical unit.

Other information. Condensed summary data on the catch of the Great Lakes fisheries appearing on the following pages have been previously published in Current Fishery Statistics No. 3624. Seasonal variations in the catch of fish landed in Wisconsin, Michigan, and Ohio can be ascertained from monthly landings bulletins issued currently in cooperation with the fishery department of these States. Additional specific data on many aspects of the Great Lakes fisheries may be found in the daily, monthly, and annual reports published by the Bureau's Fishery Market News Service office in Chicago, Ill.

Acknowledgments. The following organizations assisted in collecting the data appearing in this section: Dominion Bureau of Statistics of Canada; Illinois Department of Conservation; Indiana Department of Conservation, Division of Fish and Game; Michigan Department of Conservation; Minnesota Department of Conservation; New York Conservation Department, Division of Fish and Game; Ohio Department of Natural Resources, Division of Wildlife, Section of Fish Management; Pennsylvania Fish Commission; and the Wisconsin Conservation Department.



UNITED STATES AND CANADIAN CATCH, 1963



GREAT LAKES FISHERIES

SUMMARY OF UNITED STATES AND CANADIAN CATCH, 1963

(THOUSANDS OF POUNDS)

SPECIES	LAKE ONTARIO			LAKE ERIE			LAKE ST. CLAIR
	UNITED STATES	CANADA	TOTAL	UNITED STATES	CANADA	TOTAL	CANADA
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
BLUE PIKE	(1)	(1)	(1)	(1)	(1)	(1)	-
BOWFIN	1	20	21	-	26	26	5
BUFFALOFISH	-	-	-	64	-	64	-
BULLHEADS	44	209	253	125	63	188	15
BURBOT	1	-	1	2	2	4	-
CARP	36	417	453	3,338	195	3,533	284
CATFISH	2	20	22	1,090	156	1,246	83
CHUBS	-	(1)	(1)	-	(1)	(1)	-
CISCO	5	-	5	1	-	1	-
CRAPPIE	1	-	1	-	-	-	-
EELS, COMMON	19	169	188	-	(1)	(1)	-
GARFISH	(1)	-	(1)	-	-	-	-
GIZZARD SHAD	-	-	-	5	-	5	-
GOLDFISH	-	-	-	172	-	172	-
LAKE HERRING	-	38	38	-	2	2	-
LAKE TROUT	-	1	1	-	(1)	(1)	-
MOONEYE OR GOLDBEY	-	-	-	1	-	1	-
PIKE OR PICKEREL	(1)	33	33	(1)	2	2	19
QUILLBACK	-	-	-	1	-	1	-
ROCK BASS	7	30	37	(1)	47	47	19
SAUGER	(1)	(1)	(1)	(1)	-	(1)	(1)
SHEEPSHEAD	(1)	23	23	4,127	1,412	5,539	17
SMELT	(1)	170	170	306	10,524	10,830	-
STURGEON	(1)	7	7	1	2	3	-
SUCKERS	11	43	54	224	57	281	13
SUNFISH	9	175	184	-	41	41	46
WHITE BASS	4	67	91	1,153	1,855	3,008	27
WHITEFISH:							
COMMON	32	354	386	6	11	17	-
MENOMINEE	-	(1)	(1)	-	(1)	(1)	-
WHITE PERCH	53	144	197	5,822	17,963	23,785	16
YELLOW PERCH	2	66	70	800	1,675	2,675	329
TOTAL	213	2,004	2,241	17,238	34,233	51,471	981

SPECIES	LAKE HURON			LAKE MICHIGAN	LAKE SUPERIOR		
	UNITED STATES	CANADA	TOTAL	UNITED STATES	UNITED STATES	CANADA	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
ALEWIVES	2	-	2	5,396	(1)	-	(1)
BOWFIN	1	-	1	(1)	-	-	(1)
BULLHEADS	6	(1)	6	43	(1)	-	(1)
BURBOT	(1)	1	1	4	10	3	13
CARP	1,647	90	1,737	1,277	-	(1)	(1)
CATFISH	172	22	194	2	-	(1)	(1)
CHUBS	1,975	1,773	3,748	7,460	1,588	81	1,669
CRAPPIE	2	-	2	-	(1)	-	(1)
GIZZARD SHAD	(1)	-	(1)	-	-	-	-
LAKE HERRING	17	9	26	41	8,419	2,319	10,738
LAKE TROUT	(1)	1	1	26	101	112	213
PIKE OR PICKEREL	22	46	68	33	1	2	3
QUILLBACK	4	-	4	-	-	-	-
ROCK BASS	9	-	9	(1)	(1)	-	(1)
SAUGER	(1)	1	1	(1)	(1)	63	63
SCULPIN	-	-	-	3	-	-	-
SHEEPSHEAD	25	37	62	(1)	-	-	-
SMELT	13	2	15	1,203	1,493	4	1,497
STURGEON	1	16	19	3	(1)	2	2
SUCKERS	509	135	644	299	53	25	78
SUNFISH	-	(1)	(1)	-	-	-	-
WHITE BASS	17	17	34	(1)	-	-	-
WHITEFISH:							
COMMON	113	511	624	285	442	161	603
MENOMINEE	6	8	14	13	15	11	26
YELLOW PERCH	507	562	1,069	4,672	2	16	18
YELLOW PIKE	158	353	511	61	1	167	168
TOTAL	5,206	3,587	8,793	21,021	12,125	2,966	15,091

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

325

SUMMARY OF UNITED STATES AND CANADIAN CATCH, 1963 - Continued

(THOUSANDS OF POUNDS)

SPECIES	TOTAL, GREAT LAKES			LAKE OF THE WOODS		
	UNITED STATES	CANADA	TOTAL	UNITED STATES	CANADA	TOTAL
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
ALEWIVES	5,398	-	5,398	-	-	-
BLUE PIKE	(1)	(1)	(1)	-	-	-
BOWFIN	2	51	53	-	-	-
BUFFALOFISH	64	-	64	-	-	-
BULLHEADS	218	287	505	-	160	172
BURBOT	17	6	23	342	292	634
CARP	6,298	986	7,284	-	-	-
CATFISH	1,266	281	1,547	-	-	-
CHUBS	11,023	1,854	12,877	-	-	-
CISCO	6	-	6	-	-	-
CRAPPIE	3	-	3	-	-	-
EELS, COMMON	19	169	188	-	-	-
GARFISH	(1)	-	(1)	-	-	-
GIZZARD SHAD	5	-	5	-	-	-
GOLDFISH	172	-	172	-	-	-
LAKE HERRING	8,477	2,368	10,845	-	-	-
LAKE TROUT	127	114	241	-	-	-
MOONEYE OR GOLDEYE	1	-	1	(1)	-	2
PIKE OR PICKEREL	56	102	158	74	342	416
QUILLBACK	5	-	5	-	-	-
ROCK BASS	16	97	113	(1)	-	57
SAUGER	(1)	64	64	85	44	129
SCULPIN	3	-	3	-	-	-
SHEEPSHEAD	4,152	1,489	5,641	-	-	-
SMELT	3,015	10,700	13,715	-	-	-
STURGEON	5	42	47	-	(1)	(1)
SUCKERS	1,096	368	1,464	249	444	693
SUNFISH	9	262	271	-	-	-
TULLIBEE	-	-	-	2,030	271	2,301
WHITE BASS	1,174	1,986	3,160	-	-	-
WHITEFISH:						
COMMON	878	1,037	1,915	-	64	64
MEMONINEE	34	19	53	-	-	-
WHITE PERCH	6	-	6	-	-	-
YELLOW PERCH	11,256	18,701	29,957	19	13	32
YELLOW PIKE	1,022	2,792	3,814	225	620	845
TOTAL	55,823	43,775	99,598	3,036	2,309	5,345

SPECIES	NAMAKAN LAKE			RAINY LAKE		
	UNITED STATES	CANADA	TOTAL	UNITED STATES	CANADA	TOTAL
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
BURBOT	3	2	5	39	94	133
PIKE OR PICKEREL	-	-	-	10	153	163
ROCK BASS	-	(1)	(1)	-	7	7
SAUGER	-	-	-	(1)	(1)	(1)
STURGEON	-	1	1	-	4	4
SUCKERS	5	14	19	23	306	329
SUNFISH	-	-	-	-	(1)	(1)
TULLIBEE	4	4	8	24	103	127
WHITEFISH, COMMON	10	4	14	12	29	41
YELLOW PERCH	-	-	-	(1)	3	3
YELLOW PIKE	-	4	4	17	117	134
TOTAL	22	29	51	125	816	941

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

SUMMARY OF UNITED STATES AND CANADIAN CATCH, 1963 - Continued

(THOUSANDS OF POUNDS)

SPECIES	TOTAL, INTERNATIONAL LAKES			GRAND TOTAL, ALL LAKES		
	UNITED STATES	CANADA	TOTAL	UNITED STATES	CANADA	TOTAL
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
ALEWIVES	-	-	-	5,398	-	5,398
BLUE PIKE	-	-	-	(1)	(1)	(1)
BOWFIN	-	-	-	2	51	53
BUFFALOFISH	-	-	-	64	-	64
BULLHEADS	12	160	172	230	447	677
BURBOT	394	388	772	401	394	795
CARP	-	(1)	(1)	6,298	986	7,284
CATFISH	-	-	-	1,266	261	1,547
CHUBS	-	-	-	11,023	1,854	12,877
CISCO	-	-	-	6	-	6
CRAPPIE	-	-	-	3	-	3
EELS, COMMON	-	-	-	19	169	188
GARFISH	-	-	-	(1)	-	(1)
GIZZARD SHAD	-	-	-	5	-	5
GOLDFISH	-	-	-	172	-	172
LAKE HERRING	-	-	-	8,477	2,368	10,845
LAKE TROUT	-	2	2	127	116	243
MOONEYE OR GOLDEYE	(1)	-	(1)	1	-	1
PIKE OR PICKEREL	(1) 84	495	579	140	597	737
QUILLBACK	(1)	-	(1)	5	-	5
ROCK BASS	-	64	64	16	161	177
SAUGER	85	44	129	85	108	193
SCULPIN	-	-	-	3	-	3
SHEEPSHEAD	-	-	-	4,152	1,489	5,641
SMELT	-	-	-	3,015	10,700	13,715
STURGEON	-	5	5	5	47	52
SUCKERS	277	764	1,041	1,373	1,132	2,505
SUNFISH	-	(1)	(1)	9	262	271
TULLIBEE	2,059	378	2,436	2,058	378	2,436
WHITE BASS	-	-	-	1,174	1,986	3,160
WHITEFISH:						
COMMON	22	97	119	900	1,134	2,034
MEMONINEE	-	-	-	34	19	53
WHITE PERCH	-	-	-	6	-	6
YELLOW PERCH	19	16	35	11,275	18,717	29,992
YELLOW PIKE	242	741	983	1,264	3,533	4,797
TOTAL	3,183	3,154	6,337	59,006	46,929	105,935

1/ LESS THAN 500 POUNDS.

NOTE:--IN CANADA THE CATCHES OF ALEWIVES AND GARFISH HAVE BEEN INCLUDED WITH BOWFIN AND THE CATCH OF CRAPPIES WITH ROCK BASS.



SUMMARY OF U. S. CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

STATE	TOTAL	
	<u>QUANTITY</u>	<u>VALUE</u>
NEW YORK	502	91
PENNSYLVANIA	1,412	105
OHIO	14,223	1,151
MICHIGAN	20,326	2,322
INDIANA	6	1
ILLINOIS	26	32
WISCONSIN	16,916	1,332
MINNESOTA	5,336	255
TOTAL	59,006	5,289

GREAT LAKES FISHERIES

327

SECTIONAL SUMMARIES

SUMMARY OF U.S. OPERATING UNITS AND FISHING EFFORT, BY LAKES, 1963

ITEM	LAKE ONTARIO	LAKE ERIE	LAKE HURON	LAKE MICHIGAN	LAKE SUPERIOR	LAKE OF THE WOODS, NAMAKAN LAKE, AND RAINY LAKE	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS:							
REGULAR	-	30	6	99	45	3	183
PART-TIME	3	113	72	153	101	3	431
CASUAL	-	61	70	100	67	-	280
ON BOATS AND SHORE:							
REGULAR	-	5	3	9	19	6	42
PART-TIME	-	140	97	124	129	48	538
CASUAL	68	295	178	426	247	16	1,230
TOTAL FISHERMEN	71	644	426	911	608	76	2,704
VESSELS, MOTOR:							
REGULAR	-	10	2	33	15	1	61
PART-TIME	1	50	36	75	50	1	206
CASUAL	-	26	33	47	32	-	129
TOTAL VESSELS	1	86	71	155	97	2	1,396
TOTAL GROSS TONNAGE	10	1,118	1,211	3,500	1,570	49	7,132
BOATS:							
MOTOR:							
REGULAR	-	1	1	3	8	2	15
PART-TIME	-	49	47	61	64	24	245
CASUAL	37	211	134	296	206	12	896
TOTAL MOTOR BOATS	37	261	182	360	278	38	1,156
OTHER:							
REGULAR	-	1	-	-	-	-	1
PART-TIME	-	20	1	-	-	-	21
CASUAL	3	36	18	15	1	-	73
TOTAL OTHER BOATS	3	57	19	15	1	-	95
DAYS OPERATED:							
FISHERMEN:							
ON VESSELS	465	19,180	9,922	38,862	21,459	786	90,674
ON BOATS AND SHORE	1,240	19,744	12,694	20,237	19,575	6,824	80,314
TOTAL FISHERMEN DAYS	1,705	38,924	22,616	59,099	41,034	7,610	170,988
CRAFT:							
VESSELS	155	7,908	4,786	16,090	9,172	262	38,373
BOATS, MOTOR	633	8,487	7,147	12,329	11,379	3,381	43,356
TOTAL CRAFT DAYS	788	16,395	11,933	28,419	20,551	3,643	81,729
FISHING EFFORT:							
LIFTS:							
POUND NETS	-	-	344	3,224	1,849	47	5,464
TRAP NETS	1,346	53,018	12,185	1,336	1,980	845	70,710
FYKE AND HOOP NETS	968	302	887	13,190	25	2,017	17,389
LIFTS PER 1,000 LINEAR YARDS:							
HAUL SEINES	4	3,390	270	104	1	-	3,769
GILL NETS:							
1-1/4 - 2 INCH MESH	1	-	23	249	198	-	471
2-1/8 - 3-7/8 INCH MESH	317	12,351	17,871	50,605	27,787	-	108,931
4 - 7 INCH MESH	487	1,962	914	4,869	6,505	2,897	17,634
7-1/8 - 14 INCH MESH	15	41	1,390	234	-	-	1,680
LIFTS PER 1,000 HOOKS,							
LINES, LONG OR SET	-	1,744	1,894	30	-	-	3,668
HOURS TRAWLED	-	839	-	9,250	-	1,312	11,401
DAYS FISHED:							
LINES, HAND	-	-	-	24	-	-	24
DIP NETS	-	29	-	-	-	-	29

1/ DOES NOT INCLUDE 4 VESSELS OPERATED IN LAKE WINNEBAGO.

NOTE: THE NUMBER OF DAYS INDICATES THAT FISHING OCCURRED, REGARDLESS OF THE AMOUNT OF TIME FISHED DURING A DAY. THE NUMBER OF FISHERMEN AND CRAFT OPERATING AS REGULAR, PART-TIME, AND CASUAL IS BASED ON DAYS OF OPERATION AS FOLLOWS: REGULAR--MORE THAN 161 DAYS, PART-TIME 54 TO 161 DAYS (INCLUSIVE), AND CASUAL--LESS THAN 54 DAYS.

GREAT LAKES FISHERIES

SUMMARY OF U. S. OPERATING UNITS AND FISHING EFFORT, BY STATES, 1963

ITEM	NEW YORK	PENNSYLVANIA	OHIO	MICHIGAN	INDIANA	ILLINOIS	WISCONSIN	MINNESOTA	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:									
ON VESSELS:									
REGULAR	-	12	18	69	-	3	78	3	183
PART-TIME	13	12	87	232	-	-	101	6	431
CASUAL	4	12	53	142	-	4	84	5	280
ON BOATS AND SHORE:									
REGULAR	-	-	5	15	-	3	3	16	42
PART-TIME	-	4	129	208	-	-	70	127	538
CASUAL	72	6	252	620	2	-	203	73	1,230
TOTAL FISHERMEN	89	48	544	1,286	2	10	539	230	2,704
VESSELS, MOTOR:									
REGULAR	-	4	6	23	-	1	26	1	61
PART-TIME	6	6	37	117	-	-	43	2	206
CASUAL	2	6	22	69	-	2	38	2	129
TOTAL VESSELS	8	16	65	209	-	3	113	5	1/ 396
TOTAL GROSS TONNAGE	103	212	855	3,834	-	83	2,385	93	7,132
BOATS:									
MOTOR:									
REGULAR	-	-	1	5	-	1	1	7	15
PART-TIME	-	2	45	101	-	-	34	63	245
CASUAL	41	7	184	475	2	-	120	67	696
TOTAL MOTOR BOATS	41	9	230	581	2	1	155	137	1,156
OTHER:									
REGULAR	-	-	1	-	-	-	-	-	1
PART-TIME	-	-	20	1	-	-	-	-	21
CASUAL	3	-	21	35	-	-	14	-	73
TOTAL OTHER BOATS	3	-	42	36	-	-	14	-	95
DAYS OPERATED:									
FISHERMEN:									
ON VESSELS	1,693	3,760	13,464	40,814	-	596	28,806	1,541	90,674
ON BOATS AND SHORE	1,335	408	18,323	31,492	51	582	11,086	17,037	80,314
TOTAL FISHERMEN DAYS	3,028	4,168	31,787	72,306	51	1,178	39,892	18,578	170,988
CRAFT:									
VESSELS	769	1,542	5,388	18,247	-	203	11,692	532	38,373
BOATS, MOTOR	728	240	7,714	18,577	51	194	6,787	9,065	43,556
TOTAL CRAFT DAYS	1,497	1,782	13,102	36,824	51	397	18,479	9,597	81,729
FISHING EFFORT:									
LIFTS:									
POUND NETS	-	-	-	3,671	-	-	1,549	244	5,464
TRAP NETS	1,346	42	50,301	18,176	-	-	-	845	70,710
FYKE AND HOOP NETS	968	-	151	1,063	-	-	13,190	2,017	17,389
LIFTS PER 1,000 LINEAR YARDS:									
HAUL SEINES	4	-	3,111	551	-	-	103	-	3,769
GILL NETS:									
1-1/4 - 2 INCH MESH	1	-	-	327	-	-	143	-	471
2 1/8 - 3 7/8 INCH MESH	1,846	6,742	4,080	58,886	13	1,080	32,307	3,977	108,931
4 - 7 INCH MESH	1,138	252	1,052	9,739	-	-	2,556	2,897	17,634
7-1/8 - 14 INCH MESH	44	-	12	1,443	-	-	181	-	1,680
LIFT PER 1,000 HOOKS,									
LINES, LONG OR SET	-	-	1,743	1,925	-	-	-	-	3,668
HOURS TRAWLED	-	839	-	2,014	-	-	7,236	1,312	11,401
DAYS FISHED:									
LINES, HAND	-	-	-	24	-	-	-	-	24
DIP NETS	-	-	29	-	-	-	-	-	29

1/ DOES NOT INCLUDE 4 VESSELS OPERATED IN LAKE WINNEBAGO.
SEE NOTE ON PAGE 327

GREAT LAKES FISHERIES

329

SUMMARY OF U.S. OPERATING UNITS AND FISHING EFFORT, BY STATES AND LAKES, 1963

ITEM	NEW YORK		PENN- SYLVANIA	OHIO	MICHIGAN			
	LAKE ONTARIO	LAKE ERIE	LAKE ERIE	LAKE ERIE	LAKE ERIE	LAKE HURON	LAKE MICHIGAN	LAKE SUPERIOR
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:								
ON VESSELS:								
REGULAR	-	-	12	18	-	6	24	39
PART-TIME	3	10	12	87	6	72	86	72
CASUAL	-	4	12	53	8	70	58	30
ON BOATS AND SHORE:								
REGULAR	-	-	-	5	-	3	3	9
PART-TIME	-	-	4	129	7	97	60	44
CASUAL	68	4	8	252	31	178	250	161
TOTAL FISHERMEN	71	18	48	544	52	426	481	355
VESSELS, MOTOR:								
REGULAR	-	-	4	6	-	2	8	13
PART-TIME	1	5	6	37	3	36	43	36
CASUAL	-	2	6	22	4	33	29	15
TOTAL VESSELS	1	7	16	65	7	71	80	64
TOTAL GROSS TONNAGE	10	93	212	855	83	1,211	1,768	1,038
BOATS:								
MOTOR:								
REGULAR	-	-	-	1	-	1	1	3
PART-TIME	-	-	2	45	2	47	30	22
CASUAL	37	4	7	184	16	134	193	132
TOTAL MOTOR BOATS	37	4	9	230	18	182	224	157
OTHER:								
REGULAR	-	-	-	1	-	-	-	-
PART-TIME	-	-	-	20	-	-	-	-
CASUAL	3	-	-	21	15	18	1	1
TOTAL OTHER BOATS	3	-	-	42	15	19	1	1
DAYS OPERATED:								
FISHERMEN:								
ON VESSELS	465	1,228	3,760	13,464	728	9,922	14,187	15,977
ON BOATS AND SHORE	1,240	95	408	18,323	918	12,694	9,486	8,394
TOTAL FISHERMEN DAYS	1,705	1,323	4,168	31,787	1,646	22,616	23,673	24,371
CRAFT:								
VESSELS	155	614	1,542	5,388	364	4,786	6,375	6,722
BOATS, MOTOR	633	95	240	7,714	438	7,147	5,903	5,089
TOTAL CRAFT DAYS	788	709	1,782	13,102	802	11,933	12,278	11,811
FISHING EFFORT:								
LIFTS:								
POUND NETS	-	-	-	-	-	344	2,461	866
TRAP NETS	1,346	-	42	50,301	2,675	12,165	1,336	1,980
FYKE AND HOOP NETS	968	-	-	151	151	867	-	25
LIFTS PER 1,000 LINEAR YARDS:								
HAUL SEINES	4	-	-	3,111	279	270	1	1
GILL NETS:								
1-1/4 - 2 INCH MESH	1	-	-	-	-	23	147	157
2-1/8 - 3-7/8 INCH MESH	317	1,529	6,742	4,080	-	17,871	22,323	18,692
4 - 7 INCH MESH	487	651	252	1,052	7	914	3,875	4,943
7-1/8 - 14 INCH MESH	15	29	-	12	-	1,390	53	-
LIFTS PER 1,000 HOOKS,								
LINES, LONG OR SET	-	-	-	1,743	1	1,894	30	-
HOURS TRAWLED	-	-	839	-	-	-	2,014	-
DAYS FISHED:								
LINES, HAND	-	-	-	-	-	-	24	-
DIP NETS	-	-	-	29	-	-	-	-

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

SUMMARY OF U. S. OPERATING UNITS AND FISHING EFFORT,
BY STATES AND LAKES, 1963 - Continued

ITEM	INDIANA	ILLINOIS	WISCONSIN		MINNESOTA	
	LAKE MICHIGAN	LAKE MICHIGAN	LAKE MICHIGAN	LAKE SUPERIOR	LAKE SUPERIOR	LAKE OF THE WOODS, NAMAKAN LAKE, AND RAINY LAKE
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS:						
REGULAR	-	3	72	6	-	3
PART-TIME	-	-	73	28	3	3
CASUAL	-	4	52	32	5	-
ON BOATS AND SHORE:						
REGULAR	-	3	3	-	10	6
PART-TIME	-	-	64	6	79	48
CASUAL	2	-	174	29	57	16
TOTAL FISHERMEN	2	10	438	101	154	76
VESSELS, MOTOR:						
REGULAR	-	1	24	2	-	1
PART-TIME	-	-	35	14	1	1
CASUAL	-	2	23	15	2	-
TOTAL VESSELS	-	3	82	31	3	2
TOTAL GROSS TONNAGE	-	83	1,874	511	44	49
BOATS:						
MOTOR:						
REGULAR	-	1	1	-	5	2
PART-TIME	-	-	31	3	39	24
CASUAL	2	-	101	19	55	12
TOTAL MOTOR BOATS	2	1	133	22	99	38
OTHER, CASUAL	-	-	14	-	-	-
TOTAL OTHER BOATS	-	-	14	-	-	-
DAYS OPERATED:						
FISHERMEN:						
ON VESSELS	-	596	24,079	4,727	755	786
ON BOATS AND SHORE	51	582	10,118	968	10,213	6,824
TOTAL FISHERMEN DAYS	51	1,178	34,197	5,695	10,963	7,610
CRAFT:						
VESSELS	-	203	9,512	2,180	270	262
BOATS, MOTOR	51	104	6,181	606	5,684	3,381
TOTAL CRAFT DAYS	51	397	15,693	2,786	5,954	3,643
FISHING EFFORT:						
LIFTS:						
POUND NETS	-	-	763	786	197	47
TRAP NETS	-	-	-	-	-	845
FYKE AND HOOP NETS	-	-	13,190	-	-	2,017
LIFTS PER 1,000 LINEAR YARDS:						
HAUL SEINES	-	-	103	-	-	-
GILL NETS:						
1-1/4 - 2 INCH MESH	-	-	102	41	-	-
1-1/8 - 3-7/8 INCH MESH	13	1,080	27,182	5,118	3,977	-
4 - 7 INCH MESH	-	-	994	1,562	-	2,897
7-1/8 - 14 INCH MESH	-	-	181	-	-	-
LIFTS PER 1,000 HOOKS, HOURS						
TRAWLED	-	-	7,236	-	-	1,312

GREAT LAKES FISHERIES

331

CATCH BY STATES, 1963

SPECIES	NEW YORK		PENNSYLVANIA		OHIO	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUE PIKE	(1)	\$12	(1)	\$26	200	\$92
BOWFIN	1,300	26	-	-	-	-
BUFFALOFISH	44,300	12,397	100	3	50,400	6,046
BULLHEADS	800	28	1,800	38	120,900	13,298
BURBOT	36,400	1,105	100	7	100	3
CARP	2,500	518	300	66	2,504,200	92,655
CATFISH	5,800	1,372	100	38	1,049,100	251,793
CISCO	1,100	216	-	-	500	192
CRAPPIE	18,700	4,669	-	-	-	-
EELS, COMMON	(1)	(1)	-	-	-	-
GARFISH	-	-	-	-	4,700	142
GIZZARD SHAD	-	-	-	-	172,400	5,172
GOLDFISH	-	-	-	-	700	14
MOONEYE OR GOLDEYE	100	10	-	-	-	-
PIKE OR PICKEREL	-	-	-	-	1,000	29
QUILLBACK	6,400	445	-	-	-	-
ROCK BASS	(1)	3	-	-	100	21
SAUGER	6,000	238	4,200	96	4,044,600	80,894
SHEEPSHEAD	300	21	306,100	9,377	300	37
SMELT	800	741	-	-	200	212
STURGEON	11,600	231	900	27	161,000	4,828
SUCKERS	8,800	1,140	-	-	-	-
SUNFISH	11,300	1,670	6,000	681	1,013,200	131,722
WHITE BASS	31,800	13,302	5,500	3,218	700	345
WHITEFISH, COMMON	5,700	398	-	-	-	-
YELLOW PERCH	198,500	17,343	1,062,400	85,255	4,523,500	351,890
YELLOW PIKE	109,800	35,212	24,300	6,256	575,200	201,325
TOTAL	502,000	91,097	1,411,800	105,088	14,223,200	1,150,700

SPECIES	MICHIGAN		INDIANA		ILLINOIS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	1,580,100	\$25,893	(1)	(1)	(1)	(1)
BOWFIN	1,400	45	-	-	-	-
BUFFALOFISH	13,900	1,390	-	-	-	-
BULLHEADS	10,500	1,280	-	-	-	-
BURBOT	3,300	89	-	-	-	-
CARP	2,506,600	143,959	-	-	-	-
CATFISH	212,500	57,415	-	-	-	-
CHUBS	4,890,600	897,897	-	-	24,300	\$3,397
CRAPPIE	2,300	565	-	-	-	-
GIZZARD SHAD	200	5	-	-	-	-
LAKE HERRING	6,195,500	343,230	-	-	300	36
LAKE TROUT	87,800	55,463	-	-	-	-
PIKE OR PICKEREL	28,900	5,660	-	-	-	-
QUILLBACK	3,700	103	-	-	-	-
ROCK BASS	9,500	1,778	-	-	-	-
SAUGER	200	20	-	-	-	-
SHEEPSHEAD	95,700	2,760	-	-	-	-
SMELT	1,139,400	44,078	-	-	42,300	4,652
STURGEON	4,100	3,671	-	-	-	-
SUCKERS	672,500	29,971	(1)	\$2	(1)	4
WHITE BASS	143,300	17,979	-	-	-	-
WHITEFISH:						
COMMON	712,100	373,692	-	-	-	-
MENOMINEE	29,700	6,912	-	-	-	-
YELLOW PERCH	1,672,400	185,951	5,700	689	218,500	24,035
YELLOW PIKE	308,500	122,853	-	-	-	-
TOTAL	20,325,700	2,322,660	5,700	691	285,400	32,124

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

CATCH BY STATES, 1963 - Continued

SPECIES	WISCONSIN		MINNESOTA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	3,818,300	\$76,366	-	-	5,398,400	\$102,259
BLUE PIKE	-	-	-	-	2,000	130
BOWFIN	100	2	-	-	200	74
BUFFALOFISH	-	-	(1)	\$1	64,300	7,437
BULLHEADS	41,600	4,985	12,400	600	229,600	32,763
BURBOT	10,100	496	384,700	6,198	400,800	6,852
CARP	1,250,600	37,520	-	-	6,297,600	275,246
CATFISH	1,600	442	-	-	1,265,000	310,234
CHUBS	5,952,300	653,128	155,600	1 ^c ,000	11,022,600	1,569,422
CISCO	-	-	-	-	6,400	1,602
CRAPPIE	(1)	(1)	-	-	3,400	781
EELS, COMMON	-	-	-	-	18,700	4,669
GARFISH	-	-	-	-	(1)	(1)
GIZZARD SHAD	-	-	-	-	4,900	147
GOLDFISH	-	-	-	-	172,400	5,172
LAKE HERRING	956,000	49,152	1,323,200	65,300	8,477,000	477,718
LAKE TROUT	39,400	23,479	-	-	127,200	76,942
MOONEYE OR GOLDEYE	-	-	100	1	800	15
PIKE OR PICKEREL	26,500	4,752	84,600	5,200	140,100	15,622
QUILLBACK	-	-	100	(1)	4,800	132
ROCK BASS	-	-	-	-	15,900	2,223
SAUGER	-	-	84,400	10,001	84,700	10,045
SCULPIN	3,300	66	-	-	3,300	66
SHEEPSHEAD	200	5	-	-	4,151,900	83,993
SMELT	653,500	15,575	673,500	13,000	3,015,500	86,740
STURGEON	-	-	-	-	5,100	4,624
SUCKERS	250,500	7,144	276,200	2,919	1,372,700	45,126
SUNFISH	-	-	-	-	8,600	1,140
TULLIBEE	-	-	2,057,700	60,321	2,057,700	60,321
WHITE BASS	200	27	-	-	1,174,000	152,079
WHITEFISH: COMMON	126,400	63,286	21,700	5,436	900,200	459,279
MEMORINEE	3,200	484	900	14	33,600	7,410
WHITE PERCH	-	-	-	-	5,700	398
YELLOW PERCH	3,573,900	393,147	19,700	1,520	11,274,600	1,069,820
YELLOW PIKE	4,400	1,774	241,700	48,842	1,263,900	416,262
TOTAL	16,916,200	1,331,830	5,336,500	254,553	59,006,500	5,288,743

1/ LESS THAN 50 POUNDS OR 50 CENTS.

CATCH BY LAKES AND STATES, 1963

SPECIES	LAKE ONTARIO		LAKE ERIE			
	NEW YORK		NEW YORK		PENNSYLVANIA	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUE PIKE	(1)	\$10	(1)	\$2	(1)	\$26
BOWFIN	1,300	26	-	-	-	-
BULLHEADS	44,300	12,396	(1)	1	100	3
BURBOT	500	24	(1)	4	1,600	38
CARP	35,200	1,055	200	20	100	7
CATFISH	2,100	420	400	98	300	66
CISCO	5,000	1,044	10	328	100	38
CRAPPIE	1,100	216	-	-	-	-
EELS, COMMON	18,700	4,669	-	-	-	-
GARFISH	(1)	(1)	-	-	-	-
PIKE OR PICKEREL	100	10	-	-	-	-
ROCK BASS	6,400	444	(1)	1	-	-
SAUGER	(1)	3	-	-	-	-
SHEEPSHEAD	(1)	1	6,000	237	4,200	96
SMELT	200	14	100	7	305,100	9,377
STURGEON	400	367	400	374	-	-
SUCKERS	11,000	220	600	11	900	27
SUNFISH	6,800	1,140	-	-	-	-

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

333

CATCH BY LAKES AND STATES, 1963 - Continued

SPECIES	LAKE ONTARIO		LAKE ERIE			
	NEW YORK		NEW YORK		PENNSYLVANIA	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
WHITE BASS	4,000	\$643	7,300	\$1,027	6,000	\$681
WHITEFISH, COMMON	31,700	13,280	100	22	5,500	3,218
WHITE PERCH	5,700	398	-	-	-	-
YELLOW PERCH	52,500	4,204	146,000	13,139	1,062,400	85,255
YELLOW PIKE	2,500	865	107,300	34,347	24,300	6,256
	232,800	41,479	269,200	49,618	1,411,800	105,088

SPECIES	LAKE ERIE - CONTINUED					
	OHIO		MICHIGAN		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUE PIKE	200	\$92	-	-	200	\$120
BUFFALOFISH	50,400	6,046	13,900	\$1,390	64,300	7,436
BULLHEADS	120,900	13,298	3,600	459	124,500	13,791
BURBOT	100	3	(1)	(1)	1,900	45
CARP	2,504,200	92,655	833,200	63,512	3,337,700	155,194
CATFISH	1,049,100	251,793	40,500	10,987	1,090,300	262,944
CISCO	500	192	-	-	1,400	558
GIZZARD SHAD	4,700	142	-	-	4,700	142
GOLDFISH	172,400	5,172	-	-	172,400	5,172
MOONEYE OR GOLDEYE	700	14	-	-	700	14
PIKE OR PICKEREL	-	-	100	7	100	7
QUILLBACK	1,000	29	-	-	1,000	29
ROCK BASS	-	-	(1)	(1)	1	1
SAUGER	100	21	-	-	100	21
SHEEPSHEAD	4,044,800	80,894	71,300	1,997	4,126,300	83,224
SMELT	300	37	-	-	306,500	9,421
STURGEON	200	212	100	48	700	634
SUCKERS	161,600	4,628	61,900	1,300	224,400	6,166
WHITE BASS	1,013,200	131,722	126,100	14,883	1,152,600	148,313
WHITEFISH, COMMON	700	345	-	-	6,300	3,585
YELLOW PERCH	4,523,300	361,880	89,700	6,996	5,821,600	467,270
YELLOW PIKE	575,200	201,325	93,100	32,379	799,900	274,307
TOTAL	14,223,200	1,150,700	1,333,500	133,988	17,237,700	1,439,394

SPECIES	LAKE HURON		LAKE MICHIGAN			
	MICHIGAN		MICHIGAN		INDIANA	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALENIVES	1,900	\$38	1,578,100	\$25,854	(1)	(1)
BOWFIN	1,400	46	-	-	-	-
BULLHEADS	5,800	732	1,100	59	-	-
BURBOT	(1)	2	-	(1)	-	-
CARP	1,646,800	79,652	26,600	795	-	-
CATFISH	172,000	46,428	-	(1)	-	-
CHUBS	1,974,600	420,583	2,329,200	384,302	-	-
CRAPPIE	2,300	565	-	-	-	-
GIZZARD SHAD	200	5	-	-	-	-
LAKE HERRING	16,600	2,919	23,600	1,769	-	-
LAKE TROUT	(1)	2	26,000	13,276	-	-
PIKE OR PICKEREL	22,300	4,675	6,400	962	-	-
QUILLBACK	3,700	103	-	-	-	-
ROCK BASS	9,200	1,764	(1)	(1)	-	-
SAUGER	100	14	-	-	-	-
SHEEPSHEAD	25,400	763	-	-	-	-
SMELT	12,800	640	925,500	29,235	-	-
STURGEON	900	778	3,100	2,820	-	-
SUCKERS	509,000	24,433	76,700	3,069	(1)	\$2
WHITE BASS	17,200	3,096	-	-	-	-
WHITEFISH:						
COMMON	112,800	63,164	242,700	128,661	-	-
MEMORINEE	5,900	1,926	11,600	3,256	-	-
YELLOW PERCH	507,100	65,924	1,074,200	112,794	5,700	669
YELLOW PIKE	156,400	66,521	56,400	23,692	-	-
TOTAL	5,206,400	784,773	6,382,200	730,544	5,700	691

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

CATCH BY LAKES AND STATES, 1963 - Continued

SPECIES	LAKE MICHIGAN - CONTINUED					
	ILLINOIS		WISCONSIN		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	3,818,300	\$76,366	5,396,400	\$102,220
BOWFIN	-	-	100	2	100	2
BULLHEADS	-	-	41,500	4,975	42,600	5,034
BURBOT	-	-	3,600	108	3,600	108
CARP	-	-	1,250,600	37,520	1,277,200	38,315
CATFISH	-	-	1,600	442	1,600	442
CHUBS	24,300	\$3,397	5,106,400	548,208	7,459,900	935,907
LAKE HERRING	300	36	16,900	2,028	40,800	3,833
LAKE TROUT	-	-	400	268	26,400	13,544
PIKE OR PICKEREL	-	-	26,100	4,700	32,500	5,662
ROCK BASS	-	-	-	-	(1)	(1)
SAUGER	-	-	-	-	(1)	(1)
SCULPIN	-	-	3,300	66	3,300	66
SHEEPSHEAD	-	-	200	5	200	5
SMELT	42,300	4,652	234,600	9,385	1,203,400	43,272
STURGEON	-	-	-	-	3,100	2,820
SUCKERS	(1)	4	222,400	6,302	299,100	9,377
WHITE BASS	-	-	200	27	200	27
WHITEFISH:	-	-	-	-	-	-
COMMON	-	-	42,200	21,892	284,900	150,553
MENOMINEE	-	-	1,800	404	13,400	3,660
YELLOW PERCH	216,500	24,035	3,573,600	393,096	4,872,000	530,614
YELLOW PIKE	-	-	4,200	1,680	60,600	25,372
TOTAL	285,400	32,124	14,348,000	1,107,474	21,021,300	1,870,833

SPECIES	LAKE SUPERIOR							
	MICHIGAN		WISCONSIN		MINNESOTA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	100	\$1	-	-	-	-	100	\$1
BULLHEADS	-	-	100	\$10	-	-	100	\$10
BURBOT	3,300	87	6,500	358	-	-	9,800	475
CHUBS	586,600	93,012	845,900	104,920	155,600	\$15,000	1,588,300	212,932
CRAPPIE	-	-	(1)	(1)	-	-	(1)	(1)
LAKE HERRING	6,155,300	338,542	941,100	47,124	1,323,200	85,300	8,419,600	470,966
LAKE TROUT	61,800	42,185	39,000	23,211	-	-	100,800	65,396
PIKE OR PICKEREL	100	16	400	52	-	-	500	68
ROCK BASS	300	14	-	-	-	-	300	14
SAUGER	100	6	-	-	-	-	100	6
SMELT	200,100	14,203	619,000	6,190	673,500	13,000	1,492,600	33,393
STURGEON	(1)	25	-	-	-	-	(1)	25
SUCKERS	24,900	1,169	28,100	842	200	2	53,200	2,013
WHITEFISH:	-	-	-	-	-	-	-	-
COMMON	356,600	181,867	85,200	41,394	-	-	442,800	223,261
MENOMINEE	12,200	1,730	1,400	80	900	14	14,500	1,824
YELLOW PERCH	1,400	237	300	51	-	-	1,700	288
YELLOW PIKE	600	261	200	94	-	-	800	355
TOTAL	7,403,600	673,355	2,568,200	224,356	2,153,400	113,316	12,125,200	1,011,027

SPECIES	LAKE OF THE WOODS		NAMAKAN LAKE		PAINY LAKE		TOTAL, ALL LAKES	
	MINNESOTA		MINNESOTA		MINNESOTA		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE		
ALEWIVES	-	-	-	-	-	-	5,398,400	\$102,259
BLUE PIKE	-	-	-	-	-	-	200	130
BOWFIN	-	-	-	-	-	-	2,800	74
BUFFALOFISH	(1)	-	-	-	-	-	64,300	7,437
BULLHEADS	12,400	600	-	-	-	-	229,800	32,763
BURBOT	342,200	5,698	3,600	\$46	39,900	\$454	400,800	6,852
CARP	-	-	-	-	-	-	6,297,900	275,246
CATFISH	-	-	-	-	-	-	1,265,000	310,234
CHUBS	-	-	-	-	-	-	11,022,800	1,569,422
CISCO	-	-	-	-	-	-	6,400	1,602
CRAPPIE	-	-	-	-	-	-	3,400	781
EELS, COMMON	-	-	-	-	-	-	18,700	4,669

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

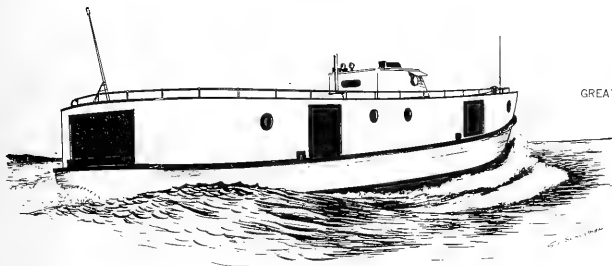
GREAT LAKES FISHERIES

335

CATCH BY LAKES AND STATES, 1963 - Continued

SPECIES	LAKE OF THE WOODS		NAMAKAN LAKE		RAINY LAKE		TOTAL, ALL LAKES	
	MINNESOTA		MINNESOTA		MINNESOTA		POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE		
GARFISH	-	-	-	-	-	-	(1)	(1)
GIZZARD SHAD.	-	-	-	-	-	-	4,900	\$147
GOLDFISH.	-	-	-	-	-	-	172,400	5,172
LAKE HERRING.	-	-	-	-	-	-	8,477,000	477,718
LAKE TROUT.	-	-	-	-	-	-	127,200	78,942
MOONEYE OR GOLDEYE.	100	\$1	-	-	-	-	800	15
PIKE OR PICKEREL.	74,300	4,600	-	-	10,300	\$600	140,100	15,622
QUILLBACK	100	(1)	-	-	-	-	4,800	132
ROCK BASS	-	-	-	-	-	-	15,900	2,223
SAUGER.	84,400	10,000	-	-	(1)	1	84,700	10,045
SCULPIN	-	-	-	-	-	-	3,300	66
SHEEPSHEAD.	-	-	-	-	-	-	4,151,900	83,993
SMELT	-	-	-	-	-	-	3,015,500	86,740
STURGEON.	-	-	-	-	-	-	5,100	4,624
SUCKERS	248,400	2,500	4,800	\$73	22,800	344	1,372,700	45,126
SUNFISH	-	-	-	-	-	-	8,800	1,140
TULLIBEE.	2,029,800	60,000	4,000	46	23,900	275	2,057,700	60,321
WHITE BASS.	-	-	-	-	-	-	1,174,000	152,079
WHITEFISH:								
COMMON.	(1)	(1)	9,600	2,436	12,100	3,000	900,200	459,279
MENOMINEE	-	-	-	-	-	-	33,800	7,410
WHITE PERCH.	19,500	1,500	-	-	200	20	11,274,600	1,059,820
YELLOW PERCH.	224,900	44,000	-	-	15,800	4,842	1,263,900	416,262
YELLOW PIKE	-	-	-	-	-	-	-	-
TOTAL.	3,035,100	129,100	22,000	2,601	125,000	9,536	59,006,500	5,288,743

1/ LESS THAN 50 POUNDS OR 50 CENTS.



GREAT LAKES TUG

GREAT LAKES FISHERIES

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	NEW YORK		PENNSYLVANIA		OHIO	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CHUBS, SMOKED.	POUNDS (1)	(1)	-	-	(1)	(1)
CISCO, SMOKED.	DO (1)	(1)	-	-	(1)	(1)
COD FILLETS, BREADED, FROZEN	DO -	-	-	-	(1)	(1)
EELS, SMOKED	DO (1)	(1)	-	-	(1)	(1)
HALIBUT, STEAKS, FROZEN	DO (1)	(1)	-	-	-	-
HERRING, LAKE:						
FILLETS, FRESH AND FROZEN.	DO -	-	(1)	(1)	(1)	(1)
SMOKED	DO -	-	(1)	(1)	(1)	(1)
HERRING, SEA, SALTED AND PICKLED	DO (1)	(1)	-	-	(1)	(1)
LAKE TROUT, FILLETS, FRESH AND FROZEN.	DO (1)	(1)	-	-	(1)	(1)
PIKE OR PICKEREL FILLETS, FRESH OR FROZEN	DO (1)	(1)	(1)	(1)	(1)	(1)
SABLEFISH, SMOKED.	DO (1)	(1)	-	-	(1)	(1)
SALMON:						
STEAKS, FROZEN	DO (1)	(1)	-	-	(1)	(1)
SMOKED	DO (1)	(1)	-	-	(1)	(1)
SAUGER FILLETS, FRESH AND FROZEN	DO (1)	(1)	-	-	412,300	\$362,506
SNAPPER, RED, FILLETS, FRESH OR FROZEN.	DO -	-	-	-	(1)	(1)
SWORDFISH, STEAKS, FROZEN	DO (1)	(1)	(1)	(1)	104,000	57,825
WHITE BASS FILLETS, FRESH AND FROZEN	DO (1)	(1)	(1)	(1)	-	-
WHITEFISH:						
FILLETS, FRESH AND FROZEN	DO (1)	(1)	-	-	77,450	63,174
SMOKED	DO (1)	(1)	(1)	(1)	(1)	(1)
WHITING, SMOKED.	DO (1)	(1)	(1)	(1)	-	-
YELLOW PERCH FILLETS:						
FRESH AND FROZEN	DO 110,170	\$44,763	125,000	\$62,270	1,399,700	570,235
BREADED, FROZEN	DO -	-	-	-	(1)	(1)
YELLOW PIKE, FILLETS, FRESH AND FROZEN.	DO 104,600	80,790	(1)	(1)	309,850	269,645
SHRIMP:						
COOKED, FRESH AND FROZEN	DO (1)	(1)	-	-	(1)	(1)
BREADED, FROZEN.	DO (1)	(1)	-	-	-	-
OYSTERS, BREADED, FROZEN	DO -	-	-	-	(1)	(1)
SCALLOPS, BREADED, FROZEN	DO (1)	(1)	-	-	-	-
UNCLASSIFIED:						
FROZEN, PACKAGED STICKS AND PORTIONS.	DO -	-	-	-	-	(2)
CANNED	STANDARD CASES -	-	-	-	-	(2)
MISCELLANEOUS.	-	430,900	-	22,317	-	11,904,603
TOTAL	-	556,453	-	84,587	-	13,227,988

ITEM	MICHIGAN		ILLINOIS	
	QUANTITY	VALUE	QUANTITY	VALUE
ANCHOVY PASTE, CANNED.	STANDARD CASES (1)	(1)	-	-
BUTTERFISH, SMOKED	POUNDS (1)	(1)	(1)	(1)
CARP, SMOKED	DO (1)	(1)	-	-
CHUBS, SMOKED	DO 582,000	\$254,300	1,279,400	\$669,120
EELS, SMOKED	DO -	-	(1)	(1)
HERRING, LAKE:				
FILLETS, FRESH AND FROZEN.	DO 39,150	10,288	-	-
SALTED	DO (1)	(1)	-	-
SMOKED	DO (1)	(1)	-	-
HERRING SEA, SALTED AND PICKLED.	DO (1)	(1)	6,353,101	2,738,441
LAKE TROUT:				
FILLETS, FRESH AND FROZEN.	DO 21,000	16,960	(1)	(1)
SMOKED	DO 53,000	35,900	17,600	16,310
MACKEREL, SALTED	DO -	-	(1)	(1)
OCEAN PERCH, BREADED, FROZEN	DO -	-	(1)	(1)
PIKE OR PICKEREL, FILLETS FRESH OR FROZEN.	DO (1)	(1)	-	-
SABLEFISH, SMOKED.	DO 159,000	85,500	330,000	177,800
SALMON, SMOKED	DO 327,000	290,200	519,250	591,000
SAUGER, FILLETS, FRESH AND FROZEN	DO 200,000	141,500	(1)	(1)
SNAPPER, RED, FILLETS, FRESH OR FROZEN.	DO -	-	-	-
STURGEON	DO (1)	(1)	(1)	(1)
WHITE BASS, FILLETS, FRESH OR FROZEN	DO (1)	(1)	-	-
WHITEFISH:				
FILLETS, FRESH AND FROZEN.	DO 109,089	67,416	96,902	61,019
SMOKED	DO 133,000	73,400	27,800	23,725

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MANUFACTURED FISHERY PRODUCTS, 1963 - Continued

ITEM	MICHIGAN		ILLINOIS	
	QUANTITY	VALUE	QUANTITY	VALUE
YELLOW PERCH FILLETS:				
FRESH AND FROZEN	POUNDS	1,328,720	66,963	\$42,590
BREADED FROZEN	DO	(1)	-	-
YELLOW PIKE, FILLETS:				
FRESH AND FROZEN	DO	544,330	141,264	112,058
BREADED, FROZEN	DO	393,892	(1)	(1)
SHRIMP, BREADED, FROZEN	DO	-	(1)	(1)
OYSTERS, BREADED, FROZEN	DO	-	(1)	(1)
SCALLOPS, BREADED, FROZEN	DO	-	(1)	(1)
UNCLASSIFIED:				
FROZEN, PACKAGED STICKS AND PORTIONS	DO	-	-	-
CANNED	STANDARD CASES	-	-	-
MISCELLANEOUS	-	(2)	-	(2)
TOTAL	-	2,020,130	-	682,632
TOTAL	-	3,900,358	-	5,114,895

ITEM	WISCONSIN		MINNESOTA	
	QUANTITY	VALUE	QUANTITY	VALUE
CHUBS, SMOKED	POUNDS	1,193,055	-	-
HERRING, LAKE:				
SALTED	DO	(1)	(1)	(1)
SMOKED	DO	71,000	-	-
HERRING, SEA, SALTED AND PICKLED	DO	(1)	(1)	(1)
LAKE TROUT:				
FILLETS, FRESH AND FROZEN	DO	17,650	-	-
SMOKED	DO	31,000	-	-
PIKE OR PICKEREL FILLETS, FRESH OR FROZEN	DO	(1)	-	-
SABLEFISH, SMOKED	DO	58,700	-	-
SALMON, SMOKED	DO	55,000	-	-
SAUGER FILLETS, FRESH AND FROZEN	DO	10,000	-	-
WHITEFISH:				
FILLETS, FRESH AND FROZEN	DO	85,870	-	-
CANNED CAVIAR	STANDARD CASES	(1)	-	-
SMOKED	POUNDS	65,720	-	-
YELLOW PERCH, FILLETS, FRESH AND FROZEN	DO	1,107,000	-	-
YELLOW PIKE, FILLETS, FRESH AND FROZEN	DO	25,240	-	-
UNCLASSIFIED:				
FROZEN, PACKAGED STICKS AND PORTIONS	DO	554,400	-	-
MISCELLANEOUS	-	1,462,740	-	\$99,095
TOTAL	-	2,951,490	-	99,095

1/ INCLUDED WITH UNCLASSIFIED ITEMS.

2/ INCLUDED WITH MISCELLANEOUS.

NOTE:--SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR FOREIGN COUNTRY. THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE. CERTAIN ITEMS ARE SHOWN IN AN INTERMEDIATE OR MORE ADVANCED STAGE OR PROCESSING.

WHOLESALE AND MANUFACTURING, 1963

ITEM	NEW YORK	PENN-SYLVANIA	OHIO	INDIANA	ILLINOIS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
WHOLESALE AND MANUFACTURING:					
ESTABLISHMENTS	28	6	53	7	44
PERSONS ENGAGED:					
AVERAGE FOR SEASON	205	30	516	21	914
AVERAGE FOR YEAR	113	20	315	12	805
WHOLESALE AND MANUFACTURING:					
ESTABLISHMENTS	66	11	47	-	262
PERSONS ENGAGED:					
AVERAGE FOR SEASON	716	173	602	-	3,177
AVERAGE FOR YEAR	471	40	329	-	2,105

GREAT LAKES FISHERIES

SUMMARY OF MANUFACTURED PRODUCTS, 1963

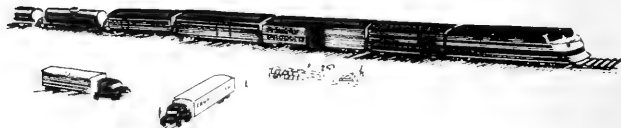
(VALUE IN THOUSANDS OF DOLLARS)

ITEM		QUANTITY	VALUE
FRESH AND FROZEN PACKAGED:			
NOT BREADED, FISH AND SHELLFISH FILLETS, STEAKS AND PORTIONS. . . .	1,000 POUNDS	7,366	4,100
BREADED.	DO	33,129	11,875
CANNED	STANDARD CASES	308	1,520
CURED.	1,000 POUNDS	18,075	8,440
TOTAL	-	-	25,935

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

STATE	VALUE
NEW YORK	556
PENNSYLVANIA	85
OHIO	13,228
MICHIGAN	3,900
ILLINOIS	5,115
MINNESOTA	99
WISCONSIN.	2,952
TOTAL	25,935



LAKE ONTARIO - OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	TRAP NETS	FYKE AND HOOP NETS	GILL NETS			
				1-1/4 - 2 INCH MESH	2-1/8 - 3-7/8 INCH MESH	4 - 7 INCH MESH	7-1/8 - 14 INCH MESH
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:							
ON VESSELS:							
PART-TIME	-	-	-	-	3	3	3
CASUAL	-	-	-	-	-	-	-
ON BOATS AND SHORE,							
CASUAL	6	36	24	1	5	-	1
TOTAL FISHERMEN	6	36	24	1	8	3	4
VESSELS, MOTOR:							
PART-TIME	-	-	-	-	1	1	-
CASUAL	-	-	-	-	-	-	-
TOTAL VESSELS	-	-	-	-	1	1	1
TOTAL GROSS TONNAGE	-	-	-	-	10	10	10
BOATS:							
MOTOR, CASUAL, TOTAL	3	18	12	1	5	-	1
OTHER, CASUAL, TOTAL	3	-	-	-	-	-	-
DAYS OPERATED:							
FISHERMEN:							
ON VESSELS	30	760	424	4	189	267	9
ON BOATS AND SHORE	-	-	-	-	21	-	1
TOTAL FISHERMEN DAYS	30	760	424	4	210	267	10
CRAFT:							
VESSELS	15	380	212	4	63	89	3
BOATS, MOTOR	-	-	-	-	21	-	1
TOTAL CRAFT DAYS	15	380	212	4	84	89	4
FISHING EFFORT:							
LIFTS	-	1,346	968	-	-	-	-
LIFTS PER 1,000 LINEAR YARDS	4	-	-	1	317	487	15

SEE NOTE ON PAGE 327.

LAKE ERIE - OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS, FISH	TRAP NETS	FYKE AND HOOP NETS
FISHERMEN:				
ON VESSELS:				
REGULAR	-	-	12	-
PART-TIME	-	7	75	-
CASUAL	5	-	32	-
ON BOATS AND SHORE:				
REGULAR	5	-	-	-
PART-TIME	81	-	6	-
CASUAL	97	-	23	6
TOTAL FISHERMEN	188	7	148	6
VESSELS, MOTOR:				
REGULAR	-	-	4	-
PART-TIME	-	3	34	-
CASUAL	1	-	16	-
TOTAL VESSELS	1	3	54	-
TOTAL GROSS TONNAGE	13	40	696	-

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

LAKE ERIE - OPERATING UNITS AND FISHING
EFFORT BY GEAR, 1963 - Continued

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS, FISH	TRAP NETS	FYKE AND HOOP NETS
	NUMBER	NUMBER	NUMBER	NUMBER
BOATS:				
MOTOR:				
REGULAR	1	-	-	-
PART-TIME	20	-	2	-
CASUAL	35	-	12	4
TOTAL MOTOR BOATS	56	-	14	4
OTHER:				
REGULAR	1	-	-	-
PART-TIME	20	-	-	-
CASUAL	36	-	-	-
TOTAL OTHER BOATS	57	-	-	-
DAYS OPERATED:				
FISHERMEN:				
ON VESSELS	265	532	10,079	-
ON BOATS AND SHORE	10,828	-	904	114
TOTAL FISHERMEN DAYS	11,093	532	10,983	114
CRAFT:				
VESSELS	53	226	4,336	-
BOATS, MOTOR	2,748	-	458	74
TOTAL CRAFT DAYS	2,801	226	4,794	74
FISHING EFFORT:				
LIFTS	-	-	53,018	302
LIFTS PER 1,000 LINEAR YARDS	3,390	-	-	-
HOURS TRAWLED	-	839	-	-

ITEM	GILL NETS			LINES, LONG OR SET WITH HOOKS	DIP NETS
	2-1/8 - 3-7/8 INCH MESH	4 - 7 INCH MESH	7-1/8 - 14 INCH MESH		
	NUMBER	NUMBER	NUMBER		
FISHERMEN:					
ON VESSELS:					
REGULAR	18	-	-	-	-
PART-TIME	34	2	-	-	-
CASUAL	40	49	-	-	-
ON BOATS AND SHORE:					
PART-TIME	10	-	-	45	-
CASUAL	24	35	3	151	5
TOTAL FISHERMEN	126	86	3	196	5
VESSELS, MOTOR:					
REGULAR	6	-	-	-	-
PART-TIME	14	1	-	-	-
CASUAL	18	21	-	-	-
TOTAL VESSELS	38	22	-	-	-
TOTAL GROSS TONNAGE	521	285	-	-	-
BOATS, MOTOR:					
PART-TIME	5	-	-	23	-
CASUAL	17	23	2	146	4
TOTAL MOTOR BOATS	22	23	2	169	4
DAYS OPERATED:					
FISHERMEN:					
ON VESSELS	7,445	859	-	-	-
ON BOATS AND SHORE	1,078	675	75	6,038	32
TOTAL FISHERMEN DAYS	8,523	1,534	75	6,038	32

(CONTINUED ON NEXT PAGE)

LAKE ERIE - OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963 - Continued

ITEM	GILL NETS			LINES, LONG OR SET WITH HOOKS	DIP NETS
	2-1/8 - 3-7/8 INCH MESH	4 - 7 INCH MESH	7-1/8 - 14 INCH MESH		
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
DAYS OPERATED - CONTINUED:					
CRAFT:					
VESSELS	2,903	390	-	-	-
BOATS, MOTOR.	616	420	56	4,086	29
TOTAL CRAFT DAYS.	3,519	810	56	4,086	29
FISHING EFFORT:					
LIFTS PER 1,000 LINEAR YARDS.	12,351	1,962	41	-	-
LIFTS PER 1,000 HOOKS	-	-	-	1,744	-
DAYS FISHED	-	-	-	-	29

SEE NOTE ON PAGE 327.

LAKE HURON - OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	POUND NETS	TRAP NETS	FYKE AND HOOP NETS
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:				
ON VESSELS:				
PART-TIME	-	2	12	-
CASUAL	-	-	40	-
ON BOATS AND SHORE:				
PART-TIME	3	2	12	2
CASUAL	41	10	68	11
TOTAL FISHERMEN	44	14	132	13
VESSELS, MOTOR:				
PART-TIME	-	-	6	-
CASUAL	-	1	20	-
TOTAL VESSELS	-	1	26	-
TOTAL GROSS TONNAGE	-	19	280	-
BOATS:				
MOTOR:				
PART-TIME	1	1	6	1
CASUAL	18	5	34	9
TOTAL MOTOR BOATS	19	6	40	10
OTHER:				
PART-TIME	1	-	-	-
CASUAL	18	-	-	-
TOTAL OTHER BOATS	19	-	-	-
DAYS OPERATED:				
FISHERMEN:				
ON VESSELS.	918	28	2,198	-
ON BOATS AND SHORE.	-	188	2,578	243
TOTAL FISHERMEN DAYS.	918	216	4,776	243
CRAFT:				
VESSELS	-	14	1,099	-
BOATS, MOTOR.	349	94	1,276	173
TOTAL CRAFT DAYS.	349	108	2,377	173

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

LAKE HURON - OPERATING UNITS AND
FISHING EFFORT BY GEAR, 1963 - Continued

ITEM	HAUL SEINES, COMMON	POUND NETS	TRAP NETS	FYKE AND HOOP NETS	
	NUMBER	NUMBER	NUMBER	NUMBER	
FISHING EFFORT:					
LIFTS	-	344	12,185	887	
LIFTS PER 1,000 LINEAR YARDS.	270	-	-	-	
ITEM	GILL NETS				LINES, LONG OR SET WITH HOOKS
	1-1/4 - 2 INCH MESH	2-1/8 - 3-7/8 INCH MESH	4 - 7 INCH MESH	7-1/8 - 14 INCH MESH	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS:					
REGULAR	-	6	-	-	-
PART-TIME	-	60	-	-	-
CASUAL	2	28	24	6	4
ON BOATS AND SHORE:					
REGULAR	-	-	-	3	-
PART-TIME	-	6	2	30	40
CASUAL	-	48	40	19	55
TOTAL FISHERMEN	2	148	66	58	99
VESSELS, MOTOR:					
REGULAR	-	2	-	-	-
PART-TIME	-	30	-	-	-
CASUAL	1	14	12	3	2
TOTAL VESSELS	1	46	12	3	2
TOTAL GROSS TONNAGE	14	949	178	24	39
BOATS, MOTOR:					
REGULAR	-	-	-	1	-
PART-TIME	-	3	1	15	20
CASUAL	-	45	29	15	45
TOTAL MOTOR BOATS	-	48	30	31	65
DAYS OPERATED:					
FISHERMEN:					
ON VESSELS	54	7,232	328	54	28
ON BOATS AND SHORE	-	1,104	596	2,557	4,510
TOTAL FISHERMEN DAYS	54	8,336	924	2,611	4,538
CRAFT:					
VESSELS	27	3,441	164	27	14
BOATS, MOTOR	-	645	406	1,338	2,664
TOTAL CRAFT DAYS	27	4,286	570	1,365	2,678
FISHING EFFORT:					
LIFTS PER 1,000 LINEAR YARDS.	23	17,871	914	1,390	-
LIFTS PER 1,000 HOURS	-	-	-	-	1,894

SEE NOTE ON PAGE 327.

GREAT LAKES FISHERIES

343

LAKE MICHIGAN - OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS, FISH	POUND NETS	TRAP NETS	FYKE AND HOOP NETS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS:					
REGULAR	-	9	-	-	3
PART-TIME	-	12	-	2	3
CASUAL	9	-	26	4	-
ON BOATS AND SHORE:					
PART-TIME	-	-	6	-	22
CASUAL	23	-	100	14	16
TOTAL FISHERMEN	32	21	136	20	44
VESSELS, MOTOR:					
REGULAR	-	3	-	-	1
PART-TIME	-	6	-	1	1
CASUAL	3	-	12	2	-
TOTAL VESSELS	3	9	12	3	2
TOTAL GROSS TONNAGE	47	236	195	42	36
BOATS:					
MOTOR:					
PART-TIME	-	-	4	-	11
CASUAL	12	-	47	7	8
TOTAL MOTOR BOATS	12	-	51	7	19
OTHER, CASUAL, TOTAL	15	-	-	-	-
DAYS OPERATED:					
FISHERMEN:					
ON VESSELS	123	3,582	581	244	579
ON BOATS AND SHORE	219	-	2,414	212	2,320
TOTAL FISHERMEN DAYS	342	3,582	2,995	456	2,899
CRAFT:					
VESSELS	41	1,410	270	122	193
BOATS, MOTOR	114	-	1,207	106	1,160
TOTAL CRAFT DAYS	155	1,410	1,477	228	1,353
FISHING EFFORT:					
LIFTS	-	-	3,224	1,336	13,190
LIFTS PER 1,000 LINEAR YARDS	104	-	-	-	-
HOURS TRAWLED	-	9,250	-	-	-

ITEM	GILL NETS				LINES	
	1-1/4 - 2 INCH MESH	2-1/8 - 3-7/8 INCH MESH	4 - 7- INCH MESH	7-1/8 - 14 INCH MESH	HAND	LONG OR SET WITH HOOKS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:						
ON VESSELS:						
REGULAR	-	87	-	-	-	-
PART-TIME	-	137	10	-	-	-
CASUAL	12	101	84	-	-	-
ON BOATS AND SHORE:						
REGULAR	-	9	-	-	-	-
PART-TIME	-	84	6	4	-	-
CASUAL	44	270	105	19	1	4
TOTAL FISHERMEN	56	688	205	23	1	4
VESSELS, MOTOR:						
REGULAR	-	29	-	-	-	-
PART-TIME	-	67	5	-	-	-
CASUAL	5	48	38	-	-	-
TOTAL VESSELS	5	144	43	-	-	-
TOTAL GROSS TONNAGE	79	3,241	871	-	-	-

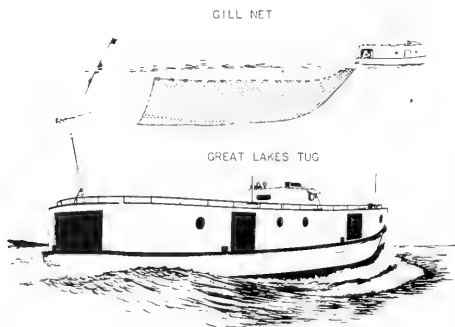
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GREAT LAKES FISHERIES

LAKE MICHIGAN - OPERATING UNITS AND
FISHING EFFORT BY GEAR, 1963 - Continued

ITEM	GILL NETS				LINES	
	1-1/4 - 2 INCH MESH	2-1/8 - 3-7/8 INCH MESH	4 - 7 INCH MESH	7-1/8 - 14 INCH MESH	HAND	LONG OR SET WITH HOOKS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
BOATS, MOTOR:						
REGULAR	-	3	-	-	-	-
PART-TIME	-	42	3	1	-	-
CASUAL	34	219	69	9	1	4
TOTAL MOTOR BOATS	34	264	72	10	1	4
DAYS OPERATED:						
FISHERMEN:						
ON VESSELS	147	31,971	1,635	-	-	-
ON BOATS AND SHORE	393	12,458	1,644	481	24	72
TOTAL FISHERMEN DAYS . . .	540	44,429	3,279	481	24	72
CRAFT:						
VESSELS	64	13,218	772	-	-	-
BOATS, MOTOR	348	7,786	1,197	315	24	72
TOTAL CRAFT DAYS	412	21,004	1,969	315	24	72
FISHING EFFORT:						
LIFTS PER 1,000 LINEAR YARDS	249	50,605	4,869	234	-	-
LIFTS PER 1,000 HOURS	-	-	-	-	-	30
DAYS FISHED	-	-	-	-	24	-

SEE NOTE ON PAGE 327.



GREAT LAKES FISHERIES

LAKE SUPERIOR - OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	POUND NETS	TRAP NETS	FYKE AND HOOP NETS	GILL NETS		
					1-1/4 - 2 INCH MESH	2-1/8 - 3-7/8 INCH MESH	4 - 7 INCH MESH
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN:							
ON VESSELS:							
REGULAR	-	-	-	-	42	3	
PART-TIME	-	2	2	-	87	22	
CASUAL	-	19	5	-	10	82	
ON BOATS AND SHORE:							
REGULAR	-	-	-	-	-	19	
PART-TIME	-	-	-	-	-	117	
CASUAL	2	32	16	2	16	169	
TOTAL FISHERMEN	2	53	23	2	26	498	
VESSELS, MOTOR:							
REGULAR	-	-	-	-	-	14	
PART-TIME	-	1	1	-	-	43	
CASUAL	-	9	2	-	4	31	
TOTAL VESSELS	-	10	3	-	4	88	
TOTAL GROSS TONNAGE	-	135	55	-	74	1,480	
BOATS:							
MOTOR:							
REGULAR	-	-	-	-	-	8	
PART-TIME	-	-	-	-	-	58	
CASUAL	1	17	8	1	10	152	
TOTAL MOTOR BOATS	1	17	8	1	10	218	
OTHER, CASUAL, TOTAL	1	-	-	-	-	-	
DAYS OPERATED:							
FISHERMEN:							
ON VESSELS	-	487	325	-	154	17,163	
ON BOATS AND SHORE	6	421	284	50	324	16,075	
TOTAL FISHERMEN DAYS	6	908	609	50	478	33,238	
CRAFT:							
VESSELS	-	238	157	-	64	7,247	
BOATS, MOTOR	3	217	142	25	268	9,154	
TOTAL CRAFT DAYS	3	455	299	25	332	16,401	
FISHING EFFORT:							
LIFTS	-	1,849	1,980	25	-	-	
LIFTS PER 1,000 LINEAR YARDS	1	-	-	-	198	27,787	
						6,505	

SEE NOTE ON PAGE 327.

LAKE OF THE WOODS, NAMAKAN LAKE, AND RAINY LAKE OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963

ITEM	OTTER TRAWLS, FISH	POUND NETS	TRAP NETS	FYKE AND HOOP NETS	GILL NETS, 4 - 7 INCH MESH
					NUMBER
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS:					
REGULAR	3	-	-	-	-
PART-TIME	3	-	-	-	-
ON BOATS AND SHORE:					
REGULAR	-	-	-	-	6
PART-TIME	-	2	2	4	40
CASUAL	-	2	2	4	8
TOTAL FISHERMEN	6	4	4	8	54

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

LAKE OF THE WOODS, NAMAKAN LAKE, AND RAINY LAKE OPERATING UNITS AND FISHING EFFORT BY GEAR, 1963 - Continued

ITEM	OTTER TRAWLS, FISH	POUND NETS	TRAP NETS	FYKE AND HOOP NETS	GILL NETS, 4 - 7 INCH MESH
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
VESSELS, MOTOR:					
REGULAR	1	-	-	-	-
PART-TIME	1	-	-	-	-
TOTAL VESSELS	2	-	-	-	-
TOTAL GROSS TONNAGE	49	-	-	-	-
BOATS, MOTOR:					
REGULAR	-	1	1	3	2
PART-TIME	-	1	1	1	19
CASUAL	-	-	-	-	0
TOTAL MOTOR BOATS	-	2	2	4	30
DAYS OPERATED:					
FISHERMEN:					
ON VESSELS	786	-	-	-	-
ON BOATS AND SHORE	-	94	262	482	5,966
TOTAL FISHERMEN DAYS	786	94	262	482	5,966
CRAFT:					
VESSELS	262	-	-	-	-
BOATS, MOTOR	-	47	141	241	2,952
TOTAL CRAFT DAYS	262	47	141	241	2,952
FISHING EFFORT:					
LIFTS	-	47	845	2,017	-
LIFTS PER 1,000 LINEAR YARDS	-	-	-	-	2,897
HOURS TRAWLED	1,312	-	-	-	-

SEE NOTE ON PAGE 327.



GREAT LAKES FISHERIES

347

CATCH BY LAKE, STATE, AND GEAR, 1963

SPECIES	LAKE ONTARIO							
	NEW YORK							
	HAUL SEINES		TRAP NETS		FYKE AND HOOP NETS		GILL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	1-1/4 - 2 INCH MESH	VALUE
BLUE PIKE	-	-	(1)	\$10	-	-	-	-
BOWFIN	100	\$2	1,200	24	(1)	(1)	-	-
BULLHEADS	1,600	452	37,500	10,527	5,000	\$1,386	-	-
BURBOT	-	-	800	24	-	-	-	-
CARP	4,000	119	32,100	963	100	3	-	-
CATFISH	-	-	2,100	420	-	-	-	-
CISCO	-	-	1,300	279	-	-	-	-
CRAPPIE	-	-	1,100	216	-	-	-	-
EELS	-	-	18,400	4,604	300	65	-	-
GARFISH	-	-	(1)	(1)	-	-	-	-
ROCK BASS	-	-	6,300	441	100	2	-	-
SAUGER	-	-	(1)	3	-	-	-	-
SHEEPSHEAD	-	-	(1)	1	-	-	-	-
SMELT	-	-	-	-	-	-	100	\$10
SUCKERS	200	4	10,500	210	300	6	-	-
SUNFISH	-	-	8,600	1,116	200	24	-	-
WHITE BASS	-	-	1,500	239	-	-	-	-
WHITEFISH, COMMON	-	-	200	45	-	-	-	-
YELLOW PERCH	200	16	5,400	375	-	-	-	-
YELLOW PIKE	(1)	(1)	12,300	984	200	16	-	-
			900	312	-	-	-	-
TOTAL	6,100	593	140,300	20,794	6,200	1,502	100	10

SPECIES	LAKE ONTARIO - CONTINUED							
	NEW YORK - CONTINUED							
	GILL NETS - CONTINUED							
	2-1/8 - 3-7/8 INCH MESH		4 - 7 INCH MESH		7-1/8 - 14 INCH MESH		TOTAL	
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
BLUE PIKE	-	-	-	-	-	(1)	\$10	
BOWFIN	-	-	-	-	-	1,300	26	
BULLHEADS	100	\$31	-	-	-	44,300	12,396	
BURBOT	-	-	-	-	-	800	24	
CARP	-	-	-	-	-	36,200	1,085	
CATFISH	-	-	-	-	-	2,100	420	
CISCO	400	74	3,300	\$691	-	5,000	1,044	
CRAPPIE	-	-	-	-	-	1,100	216	
EELS	-	-	-	-	-	18,700	4,669	
GARFISH	-	-	-	-	-	(1)	(1)	
PIKE OR PICKEREL	100	10	-	-	-	100	10	
ROCK BASS	(1)	1	-	-	-	6,400	444	
SAUGER	-	-	-	-	-	(1)	3	
SHEEPSHEAD	-	-	-	-	-	(1)	1	
SMELT	100	4	-	-	-	200	14	
STURGEON	-	-	-	-	400	400	367	
SUCKERS	(1)	(1)	-	-	-	11,000	220	
SUNFISH	-	-	-	-	-	8,800	1,140	
WHITE BASS	2,500	404	-	-	-	4,000	643	
WHITEFISH, COMMON	(1)	4	31,500	13,230	-	31,700	13,280	
YELLOW PERCH	100	7	-	-	-	5,700	396	
YELLOW PERCH	40,000	3,204	-	-	-	52,500	4,204	
YELLOW PIKE	1,600	553	-	-	-	2,500	865	
TOTAL	44,900	4,292	34,800	13,921	400	367	41,479	

SPECIES	LAKE ERIE							
	NEW YORK							
	GILL NETS							
	2-1/8 - 3 7/8 INCH MESH		4 - 7 INCH MESH		7-1/8 - 14 INCH MESH		TOTAL	
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
BLUE PIKE	(1)	-	(1)	\$2	-	-	(1)	\$2
BULLHEADS	(1)	-	(1)	-	-	(1)	1	
BURBOT	-	-	(1)	4	-	(1)	4	
CARP	200	20	(1)	(1)	-	200	20	
CATFISH	(1)	4	400	94	-	400	98	
CISCO	600	327	(1)	1	-	600	328	
ROCK BASS	(1)	1	-	-	-	(1)	1	
SHEEPSHEAD	1,600	62	4,400	175	-	6,000	237	
SMELT	100	7	-	-	-	100	7	
STURGEON	-	-	-	-	400	400	374	

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE ERIE - CONTINUED							
	NEW YORK - CONTINUED							
	GILL NETS - CONTINUED						TOTAL	
	2 1/8 - 3 7/8 INCH MESH		4 - 7 INCH MESH		7 1/8 - 14 INCH MESH			
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
SUCKERS	600	\$11	-	-	-	-	600	\$11
WHITE BASS	2,900	356	4,800	\$659	-	-	7,300	1,027
WHITEFISH, COMMON	(1)	7	100	15	-	-	100	22
YELLOW PERCH	140,500	12,640	5,500	499	-	-	146,000	13,139
YELLOW PIKE	31,100	9,940	70,200	24,407	-	-	107,300	34,347
TOTAL	177,400	23,378	91,400	25,866	400	\$374	269,200	49,618

SPECIES	LAKE ERIE - CONTINUED					
	PENNSYLVANIA					
	OTTER TRAWLS, FISH FOR HUMAN FOOD		SHALLOW TRAPS		GILL NETS	
					2-1/8 - 3-7/8 INCH MESH	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUE PIKE	-	-	(1)	(1)	(1)	\$26
BULLHEADS	-	-	-	-	100	3
BURBOT	-	-	-	-	200	5
CARP	-	-	100	\$7	-	-
CATFISH	-	-	100	22	100	22
CISCO	(1)	\$2	-	-	100	36
SHEEPSHEAD	1,200	23	(1)	(1)	2,700	65
SMELT	304,100	9,271	-	-	2,000	106
SUCKERS	-	-	100	2	600	19
WHITE BASS	100	18	100	2	4,500	513
WHITEFISH, COMMON	3,100	1,774	-	-	300	180
YELLOW PERCH	9,400	994	1,300	120	1,051,700	84,141
YELLOW PIKE	(1)	4	400	93	15,000	3,865
TOTAL	317,900	12,086	2,100	246	1,077,300	88,981

SPECIES	LAKE ERIE - CONTINUED					
	PENNSYLVANIA - CONTINUED				OHIO	
	GILL NETS - CONTINUED		TOTAL		HAUL SEINES	
	4 - 7 INCH MESH					
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUE PIKE	-	-	(1)	\$26	-	-
BUFFALOFISH	-	-	-	-	35,200	\$4,221
BULLHEADS	-	-	100	3	84,200	9,263
BURBOT	1,600	\$33	1,600	38	-	-
CARP	-	-	100	7	2,305,300	85,295
CATFISH	100	22	300	66	735,300	176,478
CISCO	-	-	100	38	-	-
GIZZARD SHAD	-	-	-	-	500	16
GOLDFISH	-	-	-	-	159,300	4,779
MOONEYE OR GOLDEYE	-	-	-	-	600	13
QUILLBACK	-	-	-	-	(1)	(1)
SHEEPSHEAD	300	8	4,200	96	2,702,900	55,258
SMELT	-	-	306,100	9,377	100	1
SUCKERS	200	6	300	27	26,300	849
WHITE BASS	1,300	148	6,000	681	243,600	31,669
WHITEFISH, COMMON	2,100	1,264	5,500	3,216	-	-
YELLOW PERCH	-	-	1,062,400	85,255	90,200	7,219
YELLOW PIKE	8,900	2,294	24,300	6,256	27,500	9,642
TOTAL	14,500	3,775	1,411,800	105,068	6,473,000	384,703

SPECIES	LAKE ERIE - CONTINUED							
	OHIO - CONTINUED							
	SHALLOW TRAPS		FYKE AND HOOP NETS		GILL NETS			
					2-1/8 - 3-7/8 INCH MESH		4 - 7 INCH MESH	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BLUE PIKE	100	\$36	-	-	100	\$54	-	-
BUFFALOFISH	15,000	1,802	100	\$14	-	-	(1)	\$3

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

349

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE ERIE - CONTINUED							
	OHIO - CONTINUED							
	SHALLOW TRAPS		FYKE AND HOOP NETS		GILL NETS			
	POUNDS	VALUE	POUNDS	VALUE	2-1/8 - 3-7/8 INCH MESH		POUNDS	VALUE
BULLHEADS	31,000	\$3,410	400	\$39	100	\$15	-	-
BURBOT	(1)	-	-	-	-	-	100	\$2
CARP	163,000	6,029	900	32	800	31	20,700	768
CATFISH	160,100	38,431	1,700	403	6,200	1,480	6,500	1,557
CISCO	200	74	-	-	200	77	100	41
GIZZARD SHAD	4,200	126	-	-	-	-	(1)	(1)
GOLDFISH	13,100	393	-	-	-	-	-	-
MOONEYE OR GOLDEYE	100	1	-	-	-	-	-	-
QUILLBACK	1,000	29	-	-	-	-	-	-
SAUGER	(1)	-	-	-	100	21	-	-
SHEEPSHEAD	1,239,600	24,791	4,900	99	16,400	328	16,300	326
SMELT	-	-	-	-	200	36	-	-
STURGEON	200	212	-	-	-	-	-	-
SUCKERS	124,900	3,746	1,800	54	3,300	100	2,600	78
WHITE BASS	699,100	90,879	18,800	2,438	19,200	2,491	32,500	4,245
WHITEFISH, COMMON	600	310	-	-	(1)	(1)	100	35
YELLOW PERCH	3,359,700	268,694	14,100	1,132	1,052,800	84,222	7,300	591
YELLOW PIKE	289,900	101,474	700	233	178,900	62,615	78,200	27,361
TOTAL	6,100,800	540,439	43,400	4,444	1,278,300	151,470	164,400	34,997

SPECIES	LAKE ERIE - CONTINUED							
	OHIO - CONTINUED							
	GILL NETS - CONTINUED						TOTAL	
	7-1/8 - 14 INCH MESH		LINES, LONG OR SET WITH HOOKS		DIP NETS		POUNDS	VALUE
BLUE PIKE	-	-	-	-	-	-	200	\$92
BUFFALOFISH	100	\$5	(1)	\$1	-	-	50,400	6,045
BULLHEADS	-	-	5,200	569	(1)	\$2	120,900	13,298
BURBOT	-	-	(1)	1	-	-	100	3
CARP	1,900	69	11,300	420	300	11	2,504,200	92,655
CATFISH	-	-	139,300	33,444	-	-	1,049,100	251,793
CISCO	-	-	-	-	-	-	500	192
GIZZARD SHAD	-	-	-	-	-	-	4,700	142
GOLDFISH	-	-	-	-	(1)	(1)	172,400	5,172
MOONEYE OR GOLDEYE	-	-	-	-	-	-	700	14
QUILLBACK	-	-	-	-	-	-	1,000	29
SAUGER	-	-	-	-	-	-	100	21
SHEEPSHEAD	-	-	4,600	92	100	(1)	4,044,800	80,894
SMELT	-	-	-	-	-	-	300	37
STURGEON	-	-	-	-	-	-	200	212
SUCKERS	-	-	(1)	(1)	100	1	161,000	4,626
WHITE BASS	-	-	(1)	(1)	(1)	(1)	1,013,200	131,722
WHITEFISH, COMMON	-	-	-	-	-	-	700	345
YELLOW PERCH	-	-	300	28	100	4	4,523,500	361,880
YELLOW PIKE	-	-	-	-	-	-	575,200	201,325
TOTAL	2,000	74	160,700	34,555	600	18	14,223,200	1,150,700

SPECIES	LAKE ERIE - CONTINUED					
	MICHIGAN					
	HAUL SEINES		TRAP NETS		FYKE AND HOOP NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	-	-	13,900	\$1,390	-	-
BULLHEADS	1,900	\$257	1,000	133	700	\$89
BURBOT	-	-	-	-	(1)	(1)
CARP	674,800	19,570	150,800	43,733	6,200	180
CATFISH	23,600	6,386	16,900	4,593	(1)	1
PIKE OR PICKEREL	-	-	100	7	-	-
ROCK BASS	-	-	-	-	(1)	(1)
SHEEPSHEAD	1,300	37	69,200	1,938	800	22
STURGEON	-	-	100	42	(1)	6
SUCKERS	-	-	61,800	1,297	-	-
WHITE BASS	2,600	311	122,700	14,476	800	96
WHITEFISH, COMMON	600	46	87,700	6,839	1,400	111
YELLOW PERCH	100	44	91,100	31,695	-	-
TOTAL	704,900	26,661	615,300	106,143	9,900	505

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE ERIE - CONTINUED					
	MICHIGAN - CONTINUED				TOTAL	
	GILL NETS, 4 - 7 INCH MESH		LINES, LONG OR SET WITH HOOKS			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	-	-	-	-	13,900	\$1,390
BULLHEADS	-	-	-	-	3,600	489
BURBOT	-	-	-	-	(1)	(1)
CARP	1,400	\$29	-	-	833,200	63,512
CATFISH	-	-	(1)	\$7	40,500	10,987
PIKE OR PICKEREL	-	-	-	-	100	7
ROCK BASS	-	-	-	-	(1)	(1)
SHEEPSHEAD	-	-	(1)	(1)	71,300	1,997
STURGEON	-	-	-	-	100	48
SUCKERS	100	3	(1)	(1)	61,900	1,300
WHITE BASS	-	-	-	-	126,100	14,883
YELLOW PERCH	-	-	-	-	89,700	6,996
YELLOW PIKE	1,900	640	-	-	93,100	32,379
TOTAL	3,400	672	(1)	7	1,333,500	133,988

SPECIES	LAKE HURON					
	MICHIGAN					
	HAUL SEINES		POUND NETS		TRAP NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	-	-	1,600	\$32
BOWFIN	400	\$15	-	-	900	30
BULLHEADS	300	34	-	-	3,300	418
CARP	586,600	29,742	-	-	147,300	7,216
CATFISH	11,700	3,160	-	-	52,400	14,165
CRAPPIE	-	-	-	-	2,200	854
GIZZARD SHAD	-	-	-	-	(1)	(1)
LAKE HERRING	-	-	-	-	1,300	220
LAKE TROUT	-	-	-	-	(1)	2
PIKE OR PICKEREL	1,200	243	-	-	14,700	3,080
QUILLBACK	-	-	-	-	3,600	102
ROCK BASS	-	-	-	-	5,800	1,112
SAUGER	-	-	-	-	(1)	(1)
SHEEPSHEAD	-	-	-	-	25,000	750
SMELT	-	-	11,900	\$594	-	-
STURGEON	100	63	-	-	800	715
SUCKERS	36,200	1,740	-	-	438,800	21,062
WHITE BASS	-	-	-	-	16,900	3,045
WHITEFISH:	-	-	-	-	-	-
COMMON	-	-	15,000	8,371	86,600	48,496
MENOMINEE	-	-	-	-	100	9
YELLOW PERCH	-	-	-	-	192,700	25,054
YELLOW PIKE	500	183	-	-	140,900	59,184
TOTAL	637,000	34,180	26,900	8,955	1,134,900	185,245

SPECIES	LAKE HURON - CONTINUED					
	MICHIGAN - CONTINUED					
	FYKE AND HOOP NETS		GILL NETS			
	POUNDS	VALUE	1-1/4 - 2 INCH MESH		2-1/8 - 3-7/8 INCH MESH	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	-	-	-	-	300	\$6
BOWFIN	100	\$1	-	-	-	-
BULLHEADS	2,200	278	-	-	-	-
BURBOT	(1)	2	-	-	-	-
CARP	5,400	265	-	-	300	13
CATFISH	500	124	-	-	100	23
CHUBS	-	-	-	-	1,974,600	420,583
CRAPPIE	100	11	-	-	-	-
LAKE HERRING	-	-	-	-	15,300	2,694
PIKE OR PICKEREL	1,200	241	-	-	700	156
QUILLBACK	100	1	-	-	-	-
ROCK BASS	3,200	610	-	-	-	-
SAUGER	-	-	-	-	100	14
SHEEPSHEAD	100	4	-	-	-	-
SMELT	-	-	-	-	800	42
SUCKERS	13,500	646	-	-	3,000	144
WHITEFISH:	-	-	-	-	-	-
COMMON	-	-	-	-	(1)	(1)
MENOMINEE	-	-	-	-	5,800	1,913
YELLOW PERCH	15,400	2,007	10,500	\$1,365	288,300	37,473
YELLOW PIKE	(1)	(1)	-	-	100	42
TOTAL	41,800	4,190	10,500	1,365	2,269,400	463,103

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

351

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE HURON - CONTINUED							
	MICHIGAN - CONTINUED							
	GILL NETS - CONTINUED				LINES, LONG OR SET WITH HOOKS		TOTAL	
	4 - 7 INCH MESH		7-1/8 - 14 INCH MESH					
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
ALEWIVES	-	-	-	-	(1)	(1)	1,900	\$38
BOWFIN	-	-	-	-	(1)	-	1,400	46
BULLHEADS	-	-	-	-	-	\$2	3,800	732
BURBOT	-	-	-	-	-	-	(1)	2
CARP	1,700	\$84	904,600	\$43,288	900	44	1,646,800	79,652
CATFISH	500	121	2,400	655	104,400	28,180	172,000	46,428
CHUBS	-	-	-	-	-	-	1,974,600	420,583
CRAPPIE	-	-	-	-	-	-	2,300	565
GIZZARD SHAD	-	-	200	5	-	-	200	5
LAKE HERRING	(1)	5	-	-	-	-	16,600	2,919
LAKE TROUT	-	-	-	-	-	-	(1)	2
PIKE OR PICKEREL	4,100	869	400	86	-	-	22,300	4,675
QUILLBACK	-	-	-	-	-	-	3,700	103
ROCK BASS	100	14	100	28	-	-	9,200	1,764
SAUGER	-	-	-	-	-	-	100	14
SHEEPSHEAD	200	7	(1)	(1)	100	2	25,400	763
SMELT	100	4	-	-	-	-	12,800	640
STURGEON	-	-	-	-	-	-	900	778
SUCKERS	15,600	750	1,900	91	-	-	509,000	24,433
WHITE BASS	300	51	-	-	-	-	17,200	3,096
WHITEFISH:								
COMMON	11,200	6,297	-	-	-	-	112,800	63,164
MENOMINEE	(1)	5	-	-	-	-	5,900	1,926
YELLOW PERCH	200	23	(1)	1	(1)	1	507,100	65,924
YELLOW PIKE	16,000	6,728	900	382	(1)	2	158,400	66,521
TOTAL	50,000	14,958	910,500	44,536	105,400	28,231	5,206,400	784,773

SPECIES	LAKE MICHIGAN							
	MICHIGAN							
	HAUL SEINES		OTTER TRAWLS				POUND NETS	
			FISH FOR ANIMAL FOOD		FISH FOR HUMAN FOOD			
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
ALEWIVES	-	-	545,900	\$10,372	-	-	1,031,000	\$15,464
CARP	4,000	\$120	-	-	-	-	(1)	(1)
CATFISH	-	-	-	-	-	-	(1)	(1)
CHUBS	-	-	453,000	9,060	76,000	\$15,200	100	20
LAKE HERRING	-	-	100	3	1,800	135	(1)	3
LAKE TROUT	-	-	-	-	(1)	(1)	(1)	-
PIKE OR PICKEREL	-	-	-	-	-	-	(1)	1
SMELT	-	-	58,500	585	800	32	837,200	27,626
STURGEON	-	-	-	-	-	-	200	164
WHITEFISH:								
COMMON	-	-	-	-	200	106	103,600	54,922
MENOMINEE	-	-	-	-	-	-	(1)	5
YELLOW PERCH	-	-	-	-	9,800	1,029	100	10
YELLOW PIKE	-	-	-	-	-	-	500	230
TOTAL	4,000	120	1,057,500	20,020	88,600	16,502	1,972,700	98,445

SPECIES	LAKE MICHIGAN - CONTINUED							
	MICHIGAN - CONTINUED							
	TRAP NETS		GILL NETS					
			1-1/4 - 2 INCH MESH		2-1/8 - 3-7/8 INCH MESH		4 - 7 INCH MESH	
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
ALEWIVES	-	-	300	\$5	800	\$12	100	\$1
BULLHEADS	-	-	-	-	1,100	\$59	-	-
BURBOT	-	-	-	-	(1)	(1)	-	-
CHUBS	100	\$2	-	-	1,800,100	360,022	4,300	128
CRAPPIE	-	-	-	-	20,900	1,568	(1)	3
LAKE HERRING	800	57	-	-	(1)	19	26,000	13,257
LAKE TROUT	-	-	-	-	800	123	3,200	486
PIKE OR PICKEREL	2,300	341	-	-	(1)	(1)	(1)	(1)
ROCK BASS	-	-	-	-	(1)	(1)	(1)	(1)
SAUGER	-	-	30,000	991	(1)	1	(1)	(1)
SMELT	-	-	-	-	-	-	-	-
STURGEON	200	204	-	-	-	-	-	-
SUCKERS	65,000	2,601	-	-	6,700	268	5,000	200

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE MICHIGAN - CONTINUED							
	MICHIGAN - CONTINUED							
	TRAP NETS		GILL NETS					
			1-1/4 - 2 INCH MESH		2-1/8 - 3-7/8 INCH MESH		4 - 7 INCH MESH	
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
WHITEFISH COMMON	34,900	\$18,523	-	-	100	\$54	103,900	\$55,056
MEMONINEE	-	-	-	-	11,600	3,291	-	-
YELLOW PERCH	18,100	1,905	700	\$74	1,044,900	109,713	-	-
YELLOW PIKE	16,300	7,685	-	-	100	20	36,100	15,168
TOTAL	139,700	31,318	31,000	1,070	2,887,100	475,110	178,600	84,299

SPECIES	LAKE MICHIGAN - CONTINUED							
	MICHIGAN - CONTINUED							
	GILL NETS - CONTINUED				LINES			
	7-1/8 - 14 INCH MESH		HAND		LONG OR SET WITH HOOKS		TOTAL	
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
ALEWIVES	-	-	-	-	-	-	1,578,100	\$25,854
BULLHEADS	-	-	-	-	-	-	1,100	59
BURBOT	-	-	-	-	(1)	-	(1)	-
CARP	18,200	\$545	-	-	-	-	26,600	795
CATFISH	-	-	-	-	(1)	-	(1)	-
CHUBS	-	-	-	-	-	-	2,329,200	334,302
LAKE HERRING	-	-	-	-	-	-	23,600	1,769
LAKE TROUT	-	-	-	-	-	-	26,000	13,276
PIKE OR PICKEREL	100	11	-	-	-	-	6,400	962
ROCK BASS	-	-	-	-	-	-	(1)	(1)
SAUGER	-	-	-	-	-	-	(1)	(1)
SMELT	-	-	-	-	-	-	926,500	29,235
STURGEON	1,600	1,483	-	-	1,100	\$969	3,100	2,820
SUCKERS	(1)	(1)	-	-	-	-	76,700	3,069
WHITEFISH COMMON	-	-	-	-	-	-	242,700	128,661
MEMONINEE	-	-	-	-	-	-	11,600	3,256
YELLOW PERCH	-	-	600	\$63	-	-	1,074,200	112,794
YELLOW PIKE	1,400	569	-	-	-	-	56,400	23,692
TOTAL	21,300	2,628	600	63	1,100	969	6,382,200	730,544

SPECIES	LAKE MICHIGAN - CONTINUED					
	INDIANA		ILLINOIS		WISCONSIN	
	GILL NETS		GILL NETS		HAUL SEINES	
	2-1/8 - 3-7/8 INCH MESH		2-1/8 - 3-7/8 INCH MESH		POUNDS	VALUE
ALEWIVES	(1)	(1)	-	-	-	-
CARP	-	-	-	-	1,008,400	\$30,251
CATFISH	-	-	-	-	1,200	324
CHUBS	-	-	24,300	\$3,397	-	-
LAKE HERRING	-	-	300	35	-	-
SMELT	-	-	42,300	4,652	-	-
SUCKERS	(1)	(1)	-	-	-	-
YELLOW PERCH	5,700	\$89	218,500	24,035	-	-
TOTAL	5,700	691	285,400	32,124	1,009,600	30,575

SPECIES	LAKE MICHIGAN - CONTINUED					
	WISCONSIN - CONTINUED					
	OTTER TRAWLS				POUND NETS	
	FISH FOR ANIMAL FOOD		FISH FOR HUMAN FOOD		POUNDS	VALUE
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
ALEWIVES	2,947,200	\$58,944	-	-	866,400	\$17,329
BURBOT	-	-	-	-	2,100	63
CHUBS	2,684,400	80,532	196,300	\$39,246	-	-
LAKE HERRING	-	-	800	96	300	34
LAKE TROUT	-	-	(1)	1	-	-
SCULPIN	3,300	66	-	-	-	-
SMELT	-	-	61,500	2,460	146,500	5,862
SUCKERS	-	-	-	-	10,100	403
WHITEFISH, COMMON	-	-	-	-	9,800	5,087
YELLOW PERCH	-	-	10,600	1,163	1,700	190
YELLOW PIKE	-	-	-	-	(1)	16
TOTAL	5,634,900	139,542	269,200	42,966	1,036,900	28,984

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

353

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE MICHIGAN - CONTINUED					
	WISCONSIN - CONTINUED					
	GILL NETS					
	FYKE AND HOOP NETS		1-1/4 - 2 INCH MESH		2-1/8 - 3-7/8 INCH MESH	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	(1)	(1)	-	-	4,500	\$90
BULLHEADS	41,500	\$4,972	-	-	100	3
BURBOT	1,300	39	-	-	(1)	(1)
CARP	43,000	1,292	-	-	100	3
CATFISH	400	118	-	-	-	-
CHUBS	-	-	-	-	2,225,700	428,422
LAKE HERRING	-	-	-	-	15,700	1,884
LAKE TROUT	-	-	-	-	400	263
PIKE OR PICKEREL	15,100	2,725	-	-	200	41
SHEEPSHEAD	200	5	-	-	-	-
SMELT	400	15	24,800	\$992	800	34
SUCKERS	135,500	5,422	-	-	3,200	127
WHITE BASS	200	27	-	-	-	-
WHITEFISH:						
COMMON	-	-	-	-	100	6
MENOMINEE	-	-	-	-	1,800	404
YELLOW PERCH	799,500	87,943	-	-	2,761,400	303,756
YELLOW PIKE	1,500	592	-	-	(1)	7
TOTAL	1,038,600	103,150	24,800	992	5,013,900	735,040

SPECIES	LAKE MICHIGAN - CONTINUED					
	WISCONSIN - CONTINUED					
	GILL NETS - CONTINUED					
	4 - 7 INCH MESH		7-1/8 - 14 INCH MESH		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ALEWIVES	200	\$3	-	-	3,618,300	\$76,366
BOWFIN	100	2	-	-	100	2
BULLHEADS	-	-	-	-	41,500	4,975
BURBOT	200	6	-	-	3,600	108
CARP	500	16	198,600	\$5,958	1,250,600	37,520
CATFISH	-	-	-	-	1,600	442
CHUBS	(1)	8	-	-	5,106,400	548,208
LAKE HERRING	100	14	-	-	16,900	2,028
LAKE TROUT	(1)	4	-	-	400	258
PIKE OR PICKEREL	10,800	1,924	-	-	26,100	4,700
SCUPPIN	-	-	-	-	3,300	66
SHEEPSHEAD	-	-	-	-	200	5
SMELT	600	22	-	-	234,600	9,385
SUCKERS	72,100	288	1,500	62	222,400	6,302
WHITE BASS	-	-	-	-	200	27
WHITEFISH:						
COMMON	32,300	16,799	-	-	42,200	21,892
MENOMINEE	-	-	-	-	1,800	404
YELLOW PERCH	400	44	-	-	3,573,600	393,096
YELLOW PIKE	2,700	1,065	-	-	4,200	1,680
TOTAL	120,000	20,205	200,100	6,020	14,348,000	1,107,474

SPECIES	LAKE SUPERIOR							
	MICHIGAN							
	HAUL SEINES		POUND NETS		TRAP NETS		FYKE AND HOOP NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
LAKE HERRING	-	-	100	\$6	(1)	\$2	-	-
PIKE OR PICKEREL	-	-	-	-	-	-	(1)	-
SALGER	-	-	-	-	-	-	100	\$3
SMELT	-	-	124,200	8,615	-	-	-	-
STURGEON	-	-	(1)	25	-	-	-	-
SUCKERS	-	-	4,400	208	5,300	249	100	2
WHITEFISH:								
COMMON	-	-	38,600	19,685	123,900	63,204	-	-
MENOMINEE	200	\$23	-	-	-	-	-	-
YELLOW PERCH	-	-	-	-	(1)	4	-	-
YELLOW PIKE	-	-	100	42	100	31	(1)	12
TOTAL	200	23	167,400	28,781	129,300	63,490	200	17

SEE FOOTNOTE AT END OF TABLE.

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GREAT LAKES FISHERIES

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE SUPERIOR - CONTINUED							
	MICHIGAN - CONTINUED							
	GILL NETS							
	1-1/4 - 2 INCH MESH		2-1/8 - 3-7/8 INCH MESH		4 - 7 INCH MESH		TOTAL	
POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	
ALEWIVES	-	-	100	\$1	-	-	100	\$1
BURBOT	-	-	2,100	54	1,200	\$33	3,300	87
CHUBS	-	-	586,800	93,012	-	-	586,800	93,012
LAKE HERRING	-	-	6,154,900	338,516	-	-	6,154,900	338,516
LAKE TROUT	-	-	(1)	1	61,800	42,184	61,800	42,185
PIKE OR PICKEREL	-	-	(1)	1	100	15	100	16
ROCK BASS	-	-	300	14	-	-	300	14
SAUGER	-	-	(1)	1	(1)	2	100	6
SMELT	71,300	\$5,062	4,500	320	100	6	200,100	14,203
STURGEON	-	-	-	-	-	-	(1)	25
SUCKERS	-	-	4,500	212	10,600	498	24,900	1,169
WHITEFISH:								
COMMON	-	-	100	63	194,000	98,915	356,600	181,867
MENOMINEE	-	-	12,000	1,705	(1)	2	12,200	1,730
YELLOW PERCH	-	-	1,300	226	100	7	1,400	237
YELLOW PIKE	-	-	(1)	5	400	171	600	261
TOTAL	71,300	5,062	6,766,600	434,131	268,600	141,851	7,403,600	673,355

SPECIES	LAKE SUPERIOR - CONTINUED							
	WISCONSIN							
	POUND NETS		GILL NETS					
			1-1/4 - 2 INCH MESH		2-1/8 - 3-7/8 INCH MESH			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BULLHEADS	100	\$10	-	-	-	-	-	-
BURBOT	1,100	68	-	-	-	-	2,900	\$174
CHUBS	(1)	2	-	-	-	-	845,500	104,869
CRAPPIE	(1)	(1)	-	-	-	-	-	-
LAKE HERRING	300	18	(1)	(1)	934,400	46,719	-	-
LAKE TROUT	-	-	-	-	300	20	-	-
PIKE OR PICKEREL	400	52	-	-	-	-	-	-
SMELT	614,300	6,143	4,500	\$45	-	-	-	-
SUCKERS	23,200	694	(1)	(1)	200	7	-	-
WHITEFISH:								
COMMON	28,300	13,606	-	-	(1)	11	-	-
MENOMINEE	100	2	-	-	1,100	65	-	-
YELLOW PERCH	300	51	-	-	-	-	-	-
YELLOW PIKE	200	94	-	-	-	-	-	-
TOTAL	668,300	20,740	4,500	45	1,784,400	151,865	-	-

SPECIES	LAKE SUPERIOR - CONTINUED							
	WISCONSIN - CONTINUED							
	GILL NETS - CONTINUED				TOTAL			
	4 - 7 INCH MESH							
	POUNDS	VALUE		POUNDS	VALUE		POUNDS	VALUE
BULLHEADS	-	-	-	100	\$10	-	-	-
BURBOT	2,500	\$146	-	6,500	388	-	-	-
CHUBS	400	49	-	845,900	104,920	-	-	-
CRAPPIE	-	-	-	(1)	(1)	-	-	-
LAKE HERRING	6,400	387	-	941,100	47,124	-	-	-
LAKE TROUT	38,700	23,191	-	39,000	23,211	-	-	-
PIKE OR PICKEREL	-	-	-	400	52	-	-	-
SMELT	200	2	-	619,000	6,190	-	-	-
SUCKERS	4,700	141	-	28,100	842	-	-	-
WHITEFISH:								
COMMON	57,900	27,777	-	86,200	41,394	-	-	-
MENOMINEE	200	13	-	1,400	80	-	-	-
YELLOW PERCH	-	-	-	300	31	-	-	-
YELLOW PIKE	-	-	-	200	94	-	-	-
TOTAL	111,000	51,706	-	2,568,200	224,356	-	-	-

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

GREAT LAKES FISHERIES

355

CATCH BY LAKE, STATE, AND GEAR, 1963 - Continued

SPECIES	LAKE SUPERIOR - CONTINUED					
	MINNESOTA					
	GILL NETS				TOTAL	
	POUND NETS		2-1/8 - 3-7/8 INCH MESH			
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CHUBS	-	-	155,600	\$15,000	155,600	\$15,000
LAKE HERRING	-	-	1,323,200	85,300	1,323,200	85,300
SMELT	673,400	\$12,997	100	3	673,500	13,000
SUCKERS	-	-	200	2	200	2
WHITEFISH, MENOMINEE	-	-	900	14	900	14
TOTAL	673,400	12,997	1,480,000	100,319	2,153,400	113,316

SPECIES	LAKE OF THE WOODS					
	MINNESOTA - CONTINUED					
	OTTER TRAWLS		TRAP NETS		FYKE AND HOOP NETS	
		POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	-	-	-	-	(1)	\$1
BULLHEADS	(1)	-	500	\$32	10,900	701
BURBOT	62,200	\$1,032	225,000	3,754	33,400	554
MOONEYE OR GOLDEYE	-	-	100	1	-	-
PIKE OR PICKEREL	-	-	11,300	699	3,300	204
QUILLBACK	100	(1)	-	-	-	-
SAUGER	30,000	3,554	14,800	1,755	2,200	263
SUCKERS	8,300	84	5,800	58	1,500	15
TULLIBEE	737,100	21,781	375,500	11,100	200	6
WHITEFISH, COMMON	-	-	(1)	(1)	(1)	(1)
YELLOW PERCH	8,400	646	2,000	154	2,600	200
YELLOW PIKE	6,100	1,196	27,700	5,429	3,200	627
TOTAL	852,200	28,293	662,700	22,982	57,300	2,571

SPECIES	LAKE OF THE WOODS - CONTINUED					
	MINNESOTA - CONTINUED					
	GILL NETS, 4 - 7 INCH MESH		TOTAL		GILL NETS, 4 - 7 INCH MESH	
		POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	(1)	-	(1)	\$1	-	-
BULLHEADS	1,000	\$67	12,400	800	-	-
BURBOT	21,600	358	342,200	5,698	3,600	\$46
MOONEYE OR GOLDEYE	(1)	(1)	100	1	-	-
PIKE OR PICKEREL	59,700	3,697	74,300	4,600	-	-
QUILLBACK	(1)	(1)	100	(1)	-	-
SAUGER	37,400	4,428	84,400	10,600	-	-
SUCKERS	232,800	2,343	248,400	2,500	4,800	73
TULLIBEE	917,000	27,113	2,029,800	60,000	4,000	46
WHITEFISH, COMMON	(1)	(1)	(1)	(1)	9,600	2,436
YELLOW PERCH	6,500	500	19,500	1,500	-	-
YELLOW PIKE	187,900	36,748	224,900	44,000	-	-
TOTAL	1,463,900	75,254	3,036,100	129,100	22,000	2,601

SPECIES	RAINY LAKE					
	MINNESOTA - CONTINUED					
	POUND NETS		GILL NETS, 4 - 7 INCH MESH		TOTAL	
		POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BURBOT	-	-	24,700	\$312	38,900	\$454
PIKE OR PICKEREL	-	-	10,300	600	10,300	600
SAUGER	-	-	(1)	1	-	-
SUCKERS	1,300	19	21,500	325	22,800	344
TULLIBEE	1,000	10	22,900	265	23,900	275
WHITEFISH, COMMON	(1)	(1)	12,100	3,000	12,100	3,000
YELLOW PERCH	(1)	(1)	200	20	200	20
YELLOW PIKE	-	-	16,800	4,842	16,800	4,842
TOTAL	16,500	171	108,500	9,365	125,000	9,536

1/ LESS THAN 50 POUNDS OR 50 CENTS.

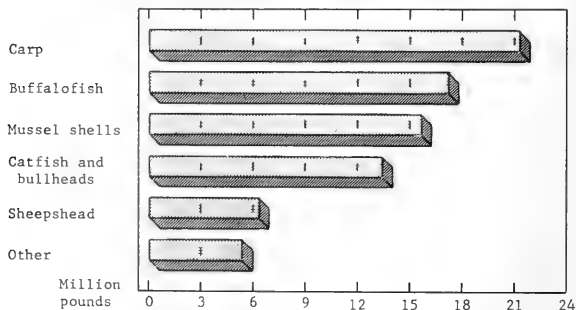
SECTION 9 - MISSISSIPPI RIVER FISHERIES

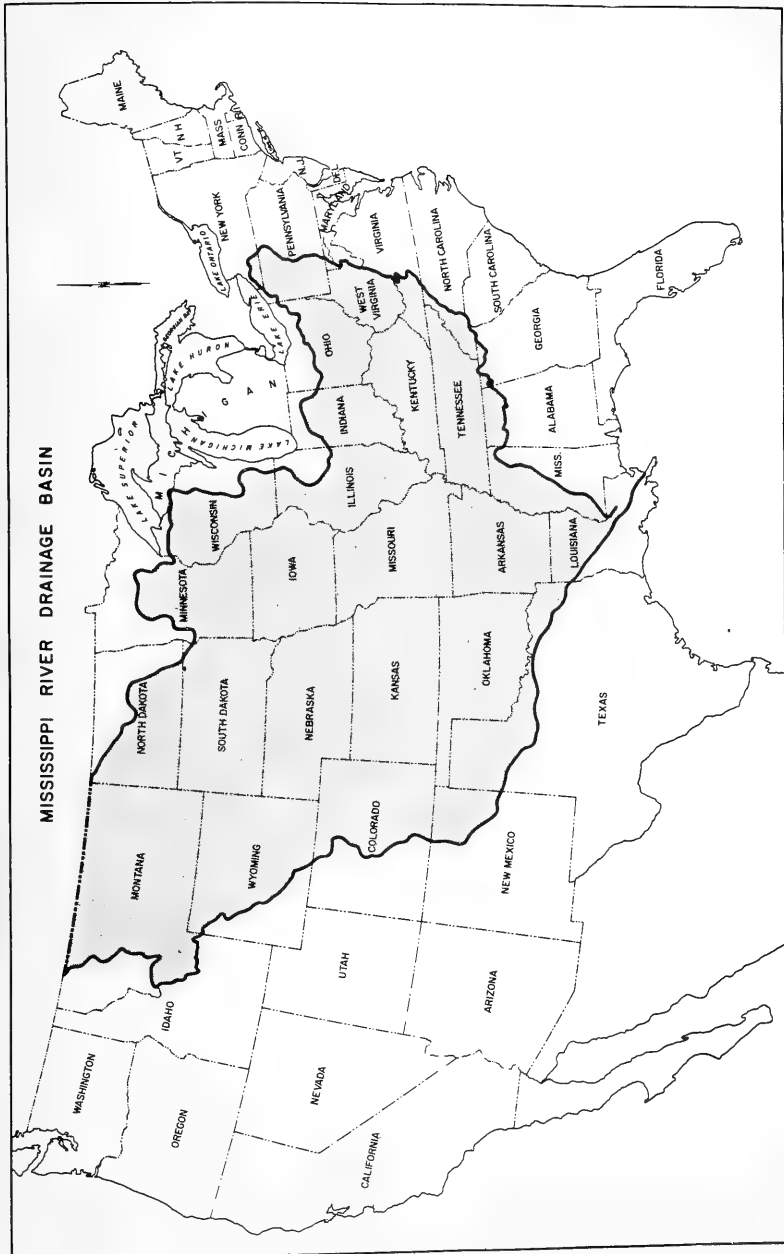
A complete survey of the Mississippi River and its tributaries was made for 1963. The commercial catch of fish and shellfish was 79.8 million pounds valued at \$7.4 million. Compared with 1962, this was an increase of 10.5 million pounds and \$878,000. Largely accountable for the increase in volume and value were greater landings of catfish and bullheads, sheepshead, and mussel shells--up 2.4, 3.2 and 4.8 million pounds, respectively. Buffalohead, carp, catfish and bullheads, and mussel shells accounted for 85 percent of the total volume and 87 percent of the total value. The Mississippi River and Tennessee River were the leading producing waters in 1963, accounting for 51 million pounds (64 percent) of the total catch.

Condensed summary data on the operating units and catch by States of the Mississippi River fisheries appearing on the following pages have been previously published in Current Fishery Statistics No. 3726.

The following organizations assisted in collecting the data appearing in this section: Alabama Department of Conservation, Division of Game and Fish; Arkansas Game and Fish Commission; Illinois Department of Conservation; Indiana Department of Conservation; Iowa State Conservation Commission; Kansas Forestry, Fish and Game Commission; Kentucky Department of Fish and Wildlife Resources; Louisiana Wild Life and Fisheries Commission; Minnesota Department of Conservation; Mississippi Game and Fish Commission; Missouri State Conservation Commission; Montana State Fish and Game Commission; Nebraska Game, Forestation and Parks Commission; North Dakota State Game and Fish Department; Oklahoma Game and Fish Department; South Dakota Department of Game, Fish and Parks; Tennessee Game and Fish Commission; Texas Game and Fish Commission; Wisconsin Conservation Department, Wyoming Game and Fish Commission; and the Tennessee Valley Authority, Fish and Game Branch.

MISSISSIPPI RIVER CATCH, 1963





MISSISSIPPI RIVER FISHERIES

SECTIONAL SUMMARIES
SUMMARY OF CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

STATE	FISH		SHELLFISH, ETC.		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ALABAMA	3,715	682	3,031	303	6,746	985
ARKANSAS	3,648	434	510	23	4,158	457
ILLINOIS	6,438	613	1,823	76	8,261	689
INDIANA	28	5	1,600	98	1,628	103
IOWA	2,438	173	-	-	2,438	173
KANSAS	44	12	-	-	44	12
KENTUCKY	2,110	379	1,860	113	3,970	492
LOUISIANA	6,929	960	1,449	294	8,378	1,254
MINNESOTA	9,422	631	-	(1)	9,423	631
MISSISSIPPI	2,961	323	4	2	2,965	325
MISSOURI	349	40	-	-	349	40
MONTANA	268	32	-	-	268	32
NEBRASKA	472	42	-	-	472	42
NORTH DAKOTA	263	21	-	-	263	21
OKLAHOMA	444	57	-	-	444	57
SOUTH DAKOTA	3,719	157	-	-	3,719	157
TENNESSEE	5,708	738	6,961	489	12,669	1,227
TEXAS	782	96	(1)	(1)	782	96
WISCONSIN	12,669	594	4	1	12,673	595
WYOMING	180	5	-	-	180	5
TOTAL	62,607	5,994	17,243	1,399	79,850	7,393

1/ LESS THAN 500 POUNDS OR \$500.

SUMMARY OF OPERATING UNITS, 1963

ITEM	ALABAMA	ARKANSAS	ILLINOIS	INDIANA	IOWA	KANSAS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:						
REGULAR	320	305	138	-	88	-
CASUAL	369	894	466	141	269	43
TOTAL	689	1,199	604	141	377	43
BOATS:						
MOTOR	688	1,074	484	67	373	34
OTHER	-	32	20	-	14	1
GEAR:						
HAUL SEINES, COMMON	-	29	39	-	20	2
LENGTH, YARDS	-	8,480	8,250	-	6,167	140
WEIRS	-	-	-	-	9	-
POUND NETS	-	-	-	-	12	-
FYKE AND HOOP NETS	105	5,862	5,761	201	2,337	114
POTS AND TRAPS, FISH	-	-	-	-	2,601	-
WIRE BASKETS	-	-	2,602	-	-	-
GILL NETS, ANCHOR, SET OR STAKE	445	694	109	-	272	1
SQUARE YARDS	118,370	141,720	10,382	-	20,133	210
TRAMMEL NETS	75	515	381	-	182	27
SQUARE YARDS	19,950	105,532	71,325	-	36,400	2,800
LINES:						
LONG OR SET WITH HOOKS	3,314	4,022	770	56	1,200	98
HOOKS	333,900	180,160	63,225	3,690	120,000	784
SNAG	843	488	14	-	-	-
HOOKS	403,000	188,400	5,800	-	-	-
DIP NETS, COMMON	-	29	-	-	-	-
CROWFOOT BARS	550	47	49	31	-	-
ITEM	KENTUCKY	LOUISIANA	MINNESOTA	MISSISSIPPI	MISSOURI	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN, ON BOATS AND SHORE:						
REGULAR	183	643	273	223	35	
CASUAL	687	910	308	381	208	
TOTAL	870	1,553	581	604	243	
BOATS:						
MOTOR	633	1,531	277	545	234	
OTHER	18	-	46	18	8	
GEAR:						
HAUL SEINES, COMMON	22	3	31	21	4	
LENGTH, YARDS	2,048	2,200	22,792	7,200	750	
WEIRS	-	-	40	-	-	
POUND NETS	-	-	25	-	-	
FYKE AND HOOP NETS	2,865	25,009	1,209	3,090	1,171	
POTS AND TRAPS:						
CRAWFISH	-	15,230	-	-	-	
SHRIMP	-	125	-	-	-	

(CONTINUED ON NEXT PAGE)

MISSISSIPPI RIVER FISHERIES

359

SUMMARY OF OPERATING UNITS, 1963 - Continued

ITEM	KENTUCKY	LOUISIANA	MINNESOTA	MISSISSIPPI	MISSOURI
GEAR - CONTINUED:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
GILL NETS, ANCHOR, SET					
OR STAKE	101	3,364	263	924	-
SQUARE YARDS	18,941	443,533	387,200	361,670	-
TRAMMEL NETS	263	1,258		215	189
SQUARE YARDS	47,130	134,185	-	69,400	35,715
LINES:					
HAND	-	12	-	-	-
HOOKS	-	12	-	-	-
LONG OR SET WITH HOOKS	1,387	3,164	63	1,364	141
HOOKS	100,753	306,186	15,723	328,925	13,759
SNAG	237			341	
HOOKS	99,169			474,500	
DIP NETS:					
COMMON	-	229	-	27	-
DROP	-	990	-	-	-
CROWFOOT BARS	204	-	-	-	-
GRABS, FROG	-	159	-	-	-

ITEM	MONTANA	NEBRASKA	NORTH DAKOTA	OKLAHOMA	SOUTH DAKOTA
FISHERMEN, ON BOATS AND SHORE:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
REGULAR	3	44	6	30	6
CASUAL	4	81	15	24	49
TOTAL	7	125	21	54	55
BOATS:					
MOTOR	7	114	4	54	17
OTHER	-	20	-	-	10
GEAR:					
HAUL SEINES, COMMON	-	23	1	-	7
LENGTH, YARDS	-	2,882	1,000	-	6,666
FYKE AND HOOP NETS	-	787	90	-	50
WIRE BASKETS	-	206	-	-	-
GILL NETS, ANCHOR, SET					
OR STAKE	28	-	12	148	22
SQUARE YARDS	5,300	-	1,700	78,900	16,000
TRAMMEL NETS	-	165	-	33	-
SQUARE YARDS	-	21,867	-	8,745	-

ITEM	TENNESSEE	TEXAS	WISCONSIN 1/	WYOMING	TOTAL
FISHERMEN, ON BOATS AND SHORE:	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
REGULAR	615	84	139	-	3,135
CASUAL	698	152	431	2	6,152
TOTAL	1,313	236	570	2	9,287
BOATS:					
MOTOR	1,297	208	416	2	8,059
OTHER	2	-	48	-	237
GEAR:					
HAUL SEINES, COMMON	1	-	46	1	250
LENGTH, YARDS	1,800	-	23,123	100	93,598
OTTER TRAWLS, FISH					
YARDS AT MOUTH	-	-	1	-	1
WEIRS	-	-	17	-	17
ROUND NETS	-	-	3	-	52
TRAP NETS	-	-	237	-	37
FYKE AND HOOP NETS	4,852	519	932	-	237
POTS AND TRAPS:					
CRAWFISH	-	-	-	-	15,230
FISH	-	-	1,111	-	3,712
SHRIMP	-	-	-	-	125
WIRE BASKETS	-	-	-	-	2,606
GILL NETS, ANCHOR, SET					
OR STAKE	206	449	129	-	7,167
SQUARE YARDS	53,073	87,120	50,630	-	1,794,882
TRAMMEL NETS	665	54	11	-	4,033
SQUARE YARDS	174,910	11,165	1,793	-	740,917
LINES:					
HAND	-	-	-	-	12
HOOKS	-	-	-	-	12
LONG OR SET WITH HOOKS	5,262	585	258	-	21,694
HOOKS	490,390	45,375	82,952	-	2,085,822
SNAG	1,611	-	-	-	3,534
HOOKS	805,500	-	-	-	1,976,369
DIP NETS:					
COMMON	2	-	-	-	267
DROP	-	-	-	-	990
CROWFOOT BARS	502	-	-	-	1,383
GRABS, FROG	-	-	-	-	159

1/ SEVEN VESSELS TOTALING 104 GROSS TONS EMPLOYING 16 FISHERMEN OPERATED IN LAKE WINNEBAGO. FOUR OF THESE VESSELS OPERATED ONLY IN LAKE WINNEBAGO, THE REMAINING 3 OPERATED ALSO IN THE GREAT LAKES.

MISSISSIPPI RIVER FISHERIES

CATCH BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	ALABAMA		ARKANSAS		ILLINOIS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
BOWFIN	-	-	3	(1)	4	(1)
BUFFALOFISH	564	56	2,345	250	2,170	198
CARP	486	19	468	18	2,638	133
CATFISH AND BULLHEADS	2,313	578	491	144	912	227
CRAPPIE	-	-	-	-	7	1
EELS, COMMON	-	-	-	-	(1)	(1)
GARFISH	-	-	133	6	4	(1)
PADDLEFISH	234	19	23	2	62	6
QUILLBACK	-	-	16	1	106	4
SHEEPSHEAD	118	10	152	11	498	39
STURGEON, SHOVELNOSE, ETC.	-	-	7	1	25	5
SUCKERS	-	-	10	1	12	(1)
TOTAL FISH	3,715	682	3,648	434	6,438	613
SHELLFISH, ETC.						
MUSSEL SHELLS	3,031	299	481	(1) ¹⁵	1,812	73
PEARLS AND SLUGS	-	4	-	-	-	1
TURTLES:						
BABY	-	-	2	7	-	-
SLIDER	-	-	9	(1)	-	-
SNAPPER	-	-	15	1	11	2
SOFT-SHELL	-	-	3	(1)	-	-
TOTAL SHELLFISH, ETC.	3,031	303	510	23	1,823	76
GRAND TOTAL	6,746	985	4,158	457	8,261	689
SPECIES	INDIANA		IOWA		KANSAS	
FISH	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
BUFFALOFISH	12	2	665	57	5	1
CARP	2	(1)	1,009	30	32	8
CATFISH AND BULLHEADS	11	3	393	72	5	2
PADDLEFISH	(1)	(1)	4	(1)	(1)	(1)
QUILLBACK	-	-	-	-	2	1
SHEEPSHEAD	2	(1)	316	12	(1)	(1)
STURGEON, SHOVELNOSE, ETC.	1	(1)	8	1	(1)	(1)
SUCKERS	(1)	(1)	43	1	-	-
TOTAL FISH	28	5	2,438	173	44	12
SHELLFISH						
MUSSEL SHELLS	1,600	96	-	-	-	-
PEARLS AND SLUGS	-	2	-	-	-	-
TOTAL SHELLFISH	1,600	98	-	-	-	-
GRAND TOTAL	1,628	103	2,438	173	44	12
SPECIES	KENTUCKY		LOUISIANA		MINNESOTA	
FISH	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
BOWFIN	-	-	52	2	10	(1)
BUFFALOFISH	440	53	2,720	317	730	(1)
BURBOT	-	-	-	-	10	(1)
CARP	356	18	185	7	5,170	166
CATFISH AND BULLHEADS	1,189	297	2,659	538	1,765	233
GARFISH	-	-	628	31	3	(1)
GIZZARD SHAD	-	-	-	-	1	(1)
HERRING, LAKE	-	-	-	-	1	(1)
MOONEYE	-	-	-	-	18	-
PADDLEFISH	52	6	28	1	-	2
PIKE OR PICKEREL	-	-	-	-	29	2
QUILLBACK	20	1	-	-	3	(1)
SHEEPSHEAD	25	3	657	64	665	31
STURGEON, SHOVELNOSE, ETC.	2	(1)	-	-	-	-
SUCKERS	26	1	-	-	90	2
TULLIBEE	-	-	-	-	1	(1)
WHITEFISH, COMMON	-	-	-	-	147	26
YELLOW PERCH	-	-	-	-	316	26
YELLOW PIKE	-	-	-	-	463	72
TOTAL FISH	2,110	379	6,929	960	9,422	631

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MISSISSIPPI RIVER FISHERIES

361

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	KENTUCKY		LOUISIANA		MINNESOTA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC.						
CRAWFISH	-	-	1,227	166	-	-
SHRIMP	-	-	5	2	-	-
MUSSEL SHELLS	1,860	108	-	-	-	-
PEARLS AND SLUGS	-	5	-	-	-	-
TURTLES:						
BABY	-	-	22	88	-	-
SNAPPER	-	-	141	17	1	(1)
FROGS	-	-	54	21	-	-
TOTAL SHELLFISH, ETC.	1,860	113	1,449	294	1	(1)
GRAND TOTAL	3,970	492	8,378	1,254	9,423	631

SPECIES	MISSISSIPPI		MISSOURI		MONTANA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
BOWFIN	2	(1)	-	-	-	-
BUFFALOFISH	1,790	171	127	18	218	27
CARP	479	18	121	6	2	(1)
CATFISH AND BULLHEADS	535	125	49	12	13	3
EELS, COMMON	-	-	(1)	(1)	-	-
GARFISH	69	4	-	-	-	-
PADDLEFISH	27	2	5	(1)	-	-
QUILLBACK	2	(1)	13	1	33	2
SHEEPSHEAD	50	3	25	2	1	(1)
STURGEON, SHOVELNOSE, ETC.	1	(1)	5	1	-	-
SUCKERS	6	(1)	4	(1)	1	(1)
TOTAL FISH	2,961	323	349	40	268	32
SHELLFISH, ETC.						
BABY	1	2	-	-	-	-
SNAPPER	2	(1)	-	-	-	-
SOFT-SHELL	1	(1)	-	-	-	-
TOTAL SHELLFISH, ETC.	4	2	-	-	-	-
GRAND TOTAL	2,965	325	349	40	268	32

SPECIES	NEBRASKA		NORTH DAKOTA		OKLAHOMA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
BUFFALOFISH	9	2	106	8	223	27
CARP	350	24	31	1	102	5
CATFISH AND BULLHEADS	71	15	141	12	49	15
PADDLEFISH	-	-	1	(1)	8	1
QUILLBACK	36	1	-	-	-	-
SHEEPSHEAD	4	(1)	-	-	38	4
STURGEON, SHOVELNOSE, ETC.	(1)	(1)	-	-	-	-
SUCKERS	-	-	4	(1)	-	-
WHITE BASS	-	-	-	-	24	5
YELLOW PERCH	2	(1)	(1)	(1)	-	-
TOTAL FISH	472	42	283	21	444	57
GRAND TOTAL	472	42	283	21	444	57

SPECIES	SOUTH DAKOTA		TENNESSEE		TEXAS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
BUFFALOFISH	1,642	115	1,744	140	595	66
CARP	1,520	15	1,058	23	53	2
CATFISH AND BULLHEADS	76	7	2,093	523	68	25
GARFISH	-	-	2	(1)	16	1
PADDLEFISH	-	-	281	34	-	-
QUILLBACK	-	-	427	13	7	(1)
SHEEPSHEAD	391	12	103	5	23	2
SUCKERS	30	1	-	-	(1)	(1)
WHITE BASS	60	7	-	-	-	-
TOTAL FISH	3,719	157	5,708	738	782	96

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

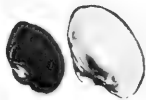
MISSISSIPPI RIVER FISHERIES

CATCH BY STATES, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	SOUTH DAKOTA		TENNESSEE		TEXAS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC.						
MUSSEL SHELLS	-	-	6,959	471	-	-
PEARLS AND SLUGS	-	-	-	15	-	-
TURTLES:						
BABY	-	-	1	3	-	-
SNAPPER	-	-	1	(1)	(1)	(1)
TOTAL SHELLFISH, ETC.	-	-	6,961	489	(1)	(1)
GRAND TOTAL	3,719	157	12,669	1,227	782	96
SPECIES	WISCONSIN		WYOMING		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
BOWFIN	11	(1)	-	-	82	2
BUFFALOFISH	1,201	126	-	-	17,306	1,705
BURBOT	39	3	-	-	49	3
CARP	7,246	251	180	5	21,488	749
CATFISH AND BULLHEADS	624	101	-	-	13,477	2,932
CRAPPIE	(1)	(1)	-	-	7	1
EELS, COMMON	12	(1)	-	-	(1)	(1)
GARFISH	-	-	-	-	867	42
GIZZARD SHAD	-	-	-	-	1	(1)
HERRING, LAKE	-	-	-	-	1	(1)
MOONEYE	15	(1)	-	-	33	2
PADDFISH	-	-	-	-	725	71
PIKE OR PICKEREL	-	-	-	-	29	2
QUILLBACK	12	(1)	-	-	577	24
SHEEPSHEAD	3,393	110	-	-	6,451	308
STURGEON, SHOVELNOSE, ETC.	4	1	-	-	53	9
SUCKERS	112	2	-	-	338	8
TULLIBEE	-	-	-	-	1	(1)
WHITE BASS	-	-	-	-	84	12
WHITEFISH, COMMON	-	-	-	-	147	26
YELLOW PERCH	-	-	-	-	318	25
YELLOW PIKE	-	-	-	-	463	72
TOTAL FISH	12,669	594	180	5	62,607	5,994
SHELLFISH, ETC.						
CRAWFISH	-	-	-	-	1,227	166
SHRIMP	-	-	-	-	5	2
MUSSEL SHELLS	-	-	-	-	15,743	1,062
PEARLS AND SLUGS	-	-	-	-	-	27
TURTLES:						
BABY	-	-	-	-	26	100
SLIDER	-	-	-	-	9	(1)
SNAPPER	4	1	-	-	175	21
SOFT-SHELL	-	-	-	-	4	(1)
FROGS	-	-	-	-	54	21
TOTAL SHELLFISH, ETC.	4	1	-	-	17,243	1,399
GRAND TOTAL	12,673	595	180	5	79,850	7,393

1/ LESS THAN 500 POUNDS OR \$500.



MUSSEL SHELLS

MISSISSIPPI RIVER FISHERIES

363

CATCH BY WATERS, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		ARKANSAS RIVER AREA		ATCHAFALAYA RIVER AREA		CROW RIVER AREA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH								
BOWFIN	30	1	1	(1)	13	(1)	-	-
BUFFALOFISH	7,414	740	985	104	894	100	3	(1)
BURBOT	45	3	-	-	-	-	-	-
CARP	15,362	543	261	10	40	2	361	11
CATFISH AND BULLHEADS	4,322	821	310	92	1,577	315	-	-
CRAPPIE	2	(1)	-	-	-	-	-	-
EELS, COMMON	(1)	(1)	-	-	-	-	-	-
GARFISH	191	9	36	2	355	18	-	-
GIZZARD SHAD	1	(1)	-	-	-	-	-	-
MOONEYE	15	(1)	-	-	-	-	-	-
PADDFISH	136	13	20	2	3	(1)	-	-
QUILLBACK	87	3	10	1	-	-	-	-
SHEEPSHEAD	1,954	111	109	10	385	39	17	1
STURGEON, SHOVELNOSE, ETC.	39	7	5	1	-	-	-	-
SUCKERS	215	5	4	(1)	-	-	-	-
TULLIBEE	1	(1)	-	-	-	-	-	-
WHITE BASS	-	-	22	4	-	-	-	-
YELLOW PERCH	13	1	-	-	-	-	-	-
TOTAL FISH	29,847	2,257	1,763	226	3,267	474	381	12
SHELLFISH, ETC.								
CRAWFISH	11	1	-	-	1,054	140	-	-
SHRIMP	5	2	-	-	-	-	-	-
MUSSEL SHELLS	46	1	435	14	-	-	-	-
TURTLES:								
BABY	5	19	-	-	12	48	-	-
SLIDER	9	(1)	-	-	-	-	-	-
SNAPPER	56	7	(1)	(1)	12	1	-	-
SOFT-SHELL	4	(1)	(1)	(1)	-	-	-	-
FROGS	8	3	-	-	15	6	-	-
TOTAL SHELLFISH, ETC.	144	33	436	14	1,093	195	-	-
GRAND TOTAL	29,991	2,290	2,199	240	4,360	669	381	12

SPECIES	CUMBERLAND RIVER AREA		ILLINOIS RIVER AREA		KAHASIA RIVER AREA		MINNESOTA RIVER AREA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH								
BOWFIN	-	-	1	(1)	-	-	-	-
BUFFALOFISH	94	10	986	75	8	1	39	3
CARP	176	8	1,072	45	41	5	1,129	11
CATFISH AND BULLHEADS	61	15	132	31	1	(1)	-	-
CRAPPIE	-	-	5	1	-	-	-	-
GARFISH	-	-	1	(1)	-	-	-	-
PADDFISH	30	3	(1)	(1)	-	-	-	-
QUILLBACK	2	(1)	3	(1)	(1)	(1)	-	-
SHEEPSHEAD	3	(1)	40	3	1	(1)	388	12
SUCKERS	1	(1)	-	-	-	-	31	7
WHITE BASS	-	-	-	-	-	-	60	1
TOTAL FISH	367	36	2,240	155	51	6	1,647	34
SHELLFISH, ETC.								
MUSSEL SHELLS	250	10	900	23	-	-	-	-
TURTLES, SNAPPER	-	-	4	1	-	-	-	-
TOTAL SHELLFISH, ETC.	250	10	904	24	-	-	-	-
GRAND TOTAL	617	46	3,144	179	51	6	1,647	34

SPECIES	MISSOURI RIVER AREA		OHIO RIVER AREA		RED RIVER AREA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
BOWFIN	-	-	-	-	34	1
BUFFALOFISH	1,956	152	274	33	2,079	246
CARP	745	36	230	12	227	10
CATFISH AND BULLHEADS	216	38	205	52	884	193
GARFISH	-	-	-	-	277	13
PADDFISH	3	(1)	16	2	21	1
QUILLBACK	37	3	6	1	1	(1)
SHEEPSHEAD	8	1	24	2	244	23
STURGEON, SHOVELNOSE, ETC.	1	(1)	3	(1)	-	-
SUCKERS	2	(1)	26	1	(1)	(1)
WHITE BASS	-	-	-	-	2	1
TOTAL FISH	2,968	230	784	103	3,769	490

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

MISSISSIPPI RIVER FISHERIES

CATCH BY WATERS, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	MISSOURI RIVER AREA		OHIO RIVER AREA		RED RIVER AREA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
SHELLFISH, ETC.						
CRAWFISH	-	-	-	-	162	25
MUSSEL SHELLS	-	-	112	2	-	-
TURTLES:						
BABY	-	-	-	-	9	33
SNAPPER	-	-	-	-	100	12
FROGS	-	-	-	-	31	12
TOTAL SHELLFISH, ETC..	-	-	112	2	302	82
GRAND TOTAL	2,968	230	896	105	4,071	572
SPECIES	ROCK RIVER AREA		ST. FRANCIS RIVER AREA		TENNESSEE RIVER AREA	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
FISH						
BUFFALOFISH	115	11	56	8	2,014	177
CARP	81	2	20	1	1,155	34
CATFISH AND BULLHEADS	-	-	1	(1)	5,224	1,306
GARFISH	(1)	(1)	-	-	2	(1)
PADDLEFISH	-	-	-	-	496	50
QUILLBACK	92	3	(1)	(1)	429	13
SHEEPSHEAD	-	-	1	(1)	210	15
SUCKERS	-	-	1	(1)	-	-
TOTAL FISH	288	16	79	9	9,530	1,595
SHELLFISH, ETC.						
MUSSEL SHELLS	-	-	-	-	11,600	868
PEARLS AND SLUGS	-	-	-	-	-	24
TURTLES, SNAPPER	-	-	-	-	1	(1)
TOTAL SHELLFISH, ETC..	-	-	-	-	11,601	892
GRAND TOTAL	288	16	79	9	21,131	2,487
SPECIES	WABASH RIVER AREA		OTHERS			
	QUANTITY	VALUE	WATERS DRAINING INTO CANADA		WATERS DRAINING INTO GULF OF MEXICO	
FISH			QUANTITY	VALUE	QUANTITY	VALUE
BOWFIN	(1)	(1)	3	(1)	-	-
BUFFALOFISH	20	2	18	2	351	39
BURBOT	-	-	4	(1)	-	-
CARP	32	2	502	16	34	1
CATFISH AND BULLHEADS	20	5	524	64	-	-
GARFISH	-	-	-	-	5	(1)
HERRING, LAKE	-	-	1	(1)	-	-
MOONEYE	-	-	16	2	-	-
PADDLEFISH	(1)	(1)	-	-	-	-
PIKE OR PICKEREL	-	-	29	2	-	-
QUILLBACK	4	(1)	-	-	-	(1)
SHEEPSHEAD	3	1	3,076	90	4	(1)
STURGEON, SHOVELNOSE, ETC..	1	-	-	-	-	-
SUCKERS	(1)	(1)	58	1	(1)	(1)
TULLIBEE	-	-	(1)	(1)	-	-
WHITEFISH, COMMON	-	-	147	26	-	-
YELLOW PERCH	-	-	305	25	-	-
YELLOW PIKE	-	-	463	72	-	-
TOTAL FISH	84	11	5,142	300	400	40
SHELLFISH, ETC.						
MUSSEL SHELLS	2,400	144	-	-	-	-
PEARLS AND SLUGS	-	3	-	-	-	-
TURTLES, SNAPPER	-	-	-	-	1	(1)
TOTAL SHELLFISH, ETC..	2,400	147	-	-	1	(1)
GRAND TOTAL	2,484	158	5,142	300	401	40

1/ LESS THAN 500 POUNDS OR \$500.

MISSISSIPPI RIVER FISHERIES

365

MANUFACTURED FISHERY PRODUCTS, 1963

ITEM	STATE	QUANTITY	VALUE
BUFFALOFISH, SMOKED	IOWA	POUNDS (1)	(1)
CARP, SMOKED,	IOWA, ILLINOIS, MINNESOTA, WISCONSIN	DO 131,600	\$39,273
CATFISH, SMOKED	IOWA	DO (1)	(1)
CODE:			
FILLETS, BREADED, FROZEN,	TENNESSEE	DO -	(2)
SMOKED,	NORTH DAKOTA	DO (1)	(1)
LUTEFISK,	MINNESOTA	DO -	(2)
FLOUNDER, SPECIALTIES, FROZEN (STUFFED),	TEXAS	DO -	(2)
HALIBUT, SMOKED	IOWA, NORTH DAKOTA, NEBRASKA	DO 24,500	16,785
HERRING, PICKLED,	MINNESOTA	DO 1,261,600	356,081
LAKE TROUT, SMOKED,	MINNESOTA	DO (1)	(1)
SALMON, SMOKED,	IOWA, NORTH DAKOTA, NEBRASKA	DO 43,500	45,340
PADDFEELISH, SMOKED,	IOWA, MINNESOTA	DO 17,550	10,335
STURGEON, SMOKED,	IOWA, ILLINOIS	DO 35,050	31,882
WHITEFISH, SMOKED	MINNESOTA, NORTH DAKOTA	DO (1)	(1)
WHITING, SMOKED	IOWA, NEBRASKA	DO 73,750	30,612
CRABS, DEVILED, FROZEN,	TEXAS	DO -	(2)
SHRIMP:			
PEELED AND DEVEINED, FROZEN	TEXAS	DO -	(2)
BREADED, FRESH AND FROZEN	TEXAS	DO 5,081,110	3,939,929
SPECIALTIES, FROZEN (STUFFED),	TEXAS, TENNESSEE	DO -	(2)
TURTLE SOUP, CANNED	OHIO	STANDARD CASES -	(2)
MUSSEL SHELL BUTTONS,	IOWA	GROSS 276,547	328,020
UNCLASSIFIED:			
PACKAGED FISH, FROZEN, STICKS AND PORTIONS	MISSOURI, KENTUCKY, ARIZONA	POUNDS -	(2)
SMOKED,	IOWA, NORTH DAKOTA, MINNESOTA	DO 39,000	26,324
ANIMAL FOOD, CANNED	NEBRASKA, KANSAS	STANDARD CASES 69,242	261,194
MISCELLANEOUS		-	4,513,251
TOTAL		-	9,601,226

1/ INCLUDED IN UNCLASSIFIED. 2/ INCLUDED IN MISCELLANEOUS.

NOTE:--SOME OF THE ABOVE PRODUCTS MAY HAVE BEEN MANUFACTURED FROM RAW PRODUCTS IMPORTED FROM ANOTHER STATE OR A FOREIGN COUNTRY, THEREFORE, THEY CANNOT BE CORRELATED DIRECTLY WITH THE CATCH WITHIN THE STATE. CERTAIN ITEMS MAY BE SHOWN IN AN INTERMEDIATE AND ALSO IN A MORE ADVANCED STAGE OF PROCESSING.

VALUE OF MANUFACTURED PRODUCTS, BY STATES, 1963

(THOUSANDS OF DOLLARS)

STATE	VALUE
IOWA	448
ILLINOIS AND KENTUCKY,	413
MINNESOTA,	555
WISCONSIN,	18
NEBRASKA, MISSOURI, NORTH DAKOTA, ARIZONA,	4,752
TENNESSEE, TEXAS, OHIO, AND KANSAS	3,415
TOTAL,	9,601

WHOLESALE AND MANUFACTURING, 1963

ITEM	ALABAMA	ARKANSAS	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY
WHOLESALE AND MANUFACTURING: ESTABLISHMENTS	NUMBER 17	NUMBER 48	NUMBER 49	NUMBER 12	NUMBER 32	NUMBER 6	NUMBER 21
PERSONS ENGAGED:							
AVERAGE FOR SEASON	92	65	144	86	570	44	132
AVERAGE FOR YEAR	84	64	129	78	220	44	132
ITEM	LOUISIANA	MINNESOTA	MISSISSIPPI	MISSOURI	NEBRASKA	NORTH DAKOTA	OHIO
WHOLESALE AND MANUFACTURING: ESTABLISHMENTS	NUMBER 22	NUMBER 15	NUMBER 22	NUMBER 36	NUMBER 6	NUMBER 2	NUMBER 1
PERSONS ENGAGED:							
AVERAGE FOR SEASON	134	147	36	239	47	16	9
AVERAGE FOR YEAR	103	109	36	224	33	12	2
ITEM	OKLAHOMA	SOUTH DAKOTA	TENNESSEE	TEXAS	WISCONSIN	ARIZONA	TOTAL
WHOLESALE AND MANUFACTURING: ESTABLISHMENTS	NUMBER 15	NUMBER 2	NUMBER 34	NUMBER 33	NUMBER 31	NUMBER 1	NUMBER 405
PERSONS ENGAGED:							
AVERAGE FOR SEASON	70	4	137	416	227	48	2,663
AVERAGE FOR YEAR	70	2	136	333	217	36	2,064

MISSISSIPPI RIVER FISHERIES

ALABAMA

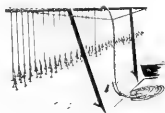
OPERATING UNITS BY GEAR, 1963

ITEM	FYKE AND HOOP NETS	GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS	LINES		CROWFOOT BARS	TOTAL, EXCLUSIVE OF DUPLI- CATION
				LONG OR SET WITH HOOKS	SNAG		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:							
REGULAR	17	34	22	171	87	125	320
CASUAL	18	14	15	193	51	150	369
TOTAL	35	48	37	364	138	275	689
BOATS, MOTOR	35	48	36	364	138	275	688
GEAR:							
NUMBER	105	445	75	3,314	643	550	-
SQUARE YARDS	-	118,370	19,950	-	-	-	-
HOOCS	-	-	-	333,900	403,000	-	-

ALABAMA - CATCH BY GEAR, 1963

SPECIES	FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	18,500	\$1,850	328,000	\$32,800	195,600	\$19,560
CARP	8,300	332	175,000	7,000	285,600	11,424
CATFISH AND BULLHEADS	19,500	4,875	35,000	8,750	26,000	6,500
PADDFISH	2,000	160	25,000	2,000	28,500	2,280
SHEEPSHEAD	7,500	600	67,000	5,360	21,500	1,720
TOTAL	55,800	7,817	630,000	55,910	557,200	41,484
SPECIES	LINES				TOTAL	
	LONG OR SET WITH HOOKS		SNAG		POUNDS	VALUE
BUFFALOFISH	15,000	\$1,500	7,000	700		
CARP	12,000	480	5,000	200		
CATFISH AND BULLHEADS	1,609,000	402,250	623,400	155,850		
PADDFISH	1,000	80	177,200	14,176		
SHEEPSHEAD	17,500	1,400	5,000	400		
TOTAL	1,654,500	404,110	817,600	171,326		
SPECIES	CROWFOOT BARS		TOTAL			
	POUNDS	VALUE	POUNDS	VALUE		
BUFFALOFISH	-	-	564,100	\$56,410		
CARP	-	-	485,900	19,436		
CATFISH AND BULLHEADS	-	-	2,312,900	578,225		
PADDFISH	-	-	233,700	18,696		
SHEEPSHEAD	-	-	118,500	9,480		
MUSSEL SHELLS	3,031,000	\$299,423	3,031,000	299,423		
PEARLS AND SLUGS	-	3,748	-	3,748		
TOTAL	3,031,000	303,171	6,746,100	985,418		

NOTE:--THE INLAND COMMERCIAL FISHERIES OF ALABAMA ARE CONFINED TO THE TENNESSEE RIVER AREA.



CROWFOOT BAR

MISSISSIPPI RIVER FISHERIES ARKANSAS

367

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES	FYKE AND HOOP NETS	GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS	LINES	
					LONG OR SET WITH HOOKS	LONG OR SET WITH HOOKS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:						
REGULAR	35	203	138	148	205	
CASUAL	34	363	137	74	488	
TOTAL	69	566	275	222	693	
BOATS:						
MOTOR	44	572	271	205	667	
OTHER	17	-	-	-	-	
GEAR:						
NUMBER	29	5,662	694	515	4,022	
LENGTH, YARDS	8,480	-	-	-	-	
SQUARE YARDS	-	-	141,720	105,532	-	
HOOKS	-	-	-	-	180,160	

ITEM	LINES - CONTINUED		DIP NETS, COMMON	CROWFOOT BARS	BY HAND	TOTAL, EXCLUSIVE OF DUPLI-CATION
	SNAG	SNAG				
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:						
REGULAR	71	13	-	-	50	305
CASUAL	65	16	47	-	-	694
TOTAL	136	29	47	50	1,199	
BOATS:						
MOTOR	134	19	47	-	-	1,074
OTHER	-	10	-	5	-	32
GEAR:						
NUMBER	488	29	47	-	-	-
HOOKS	188,400	-	-	-	-	-

ARKANSAS - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		GILL NETS, ANCHOR, SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
	BOWFIN	-	-	2,000	\$90	-
BUFFALOFISH	194,600	\$20,073	549,200	59,547	776,300	\$83,773
CARP	55,500	2,112	142,500	5,552	126,400	5,044
CATFISH AND BULLHEADS	4,400	1,299	56,100	16,554	14,200	4,241
GARFISH	17,700	628	16,400	897	31,100	1,491
PADDFISH	-	-	2,700	242	1,400	130
QUILLBACK	2,200	93	11,500	469	1,300	48
SHEEPSHEAD	7,900	573	44,100	3,176	26,700	1,885
STURGEON, SHOVELNOSE	-	-	2,700	288	-	-
SUCKERS	2,100	101	6,300	307	1,000	50
TURTLES:						
SLIDER	1,500	30	6,600	132	300	6
SNAPPER	-	-	6,400	635	300	30
SOFT-SHELL	-	-	1,900	186	500	50
TOTAL	285,900	25,109	850,400	88,075	979,500	96,748

SPECIES	TRAMMEL NETS		LINES			
	POUNDS	VALUE	LONG OR SET WITH HOOKS		SNAG	
			POUNDS	VALUE	POUNDS	VALUE
BOWFIN	-	-	600	\$26	-	-
BUFFALOFISH	801,500	\$83,900	15,500	1,666	7,500	\$781
CARP	121,800	4,553	16,000	623	5,500	200
CATFISH AND BULLHEADS	38,600	11,584	312,500	91,517	65,300	18,953
GARFISH	44,000	2,085	20,500	997	1,600	75
PADDFISH	5,700	509	-	-	13,000	1,190
QUILLBACK	400	20	200	10	700	28
SHEEPSHEAD	33,400	2,261	34,900	2,483	5,100	377
STURGEON, SHOVELNOSE	1,000	122	2,800	316	500	54
SUCKERS	800	37	-	-	-	-
TURTLES:						
SLIDER	500	10	-	-	400	8
SNAPPER	1,500	150	6,500	645	300	30
SOFT-SHELL	500	50	-	-	-	-
TOTAL	1,049,700	105,281	409,500	98,283	99,900	21,696

MISSISSIPPI RIVER FISHERIES

ARKANSAS - CATCH BY GEAR, 1963 - Continued

SPECIES	DIP NETS		CROWFOOT BARS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
MUSSEL SHELLS	-	-	458,500	\$14,502 ⁹⁸	23,000	\$360
PEARLS AND SLUGS	-	-	-	-	-	-
TURTLES, BABY	500	\$3,914	-	-	600	3,000
TOTAL	500	3,914	458,500	14,500	23,600	3,360

ARKANSAS - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		ARKANSAS RIVER AREA	
	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	700	\$31	500	\$15
BUFFALOFISH	1,193,500	125,011	880,500	91,484
CARP	213,400	8,536	189,000	6,319
CATFISH AND BULLHEADS	178,300	51,047	269,700	79,876
CARFISH	57,000	2,257	36,600	1,731
PADDLEFISH	10,300	956	11,900	1,043
QUILLBACK	6,500	260	9,600	388
SHEEPSHEAD	64,100	4,125	72,100	5,128
STURGEON, COMMON	2,300	230	4,700	550
SUCKERS	6,000	300	3,600	175
MUSSEL SHELLS	46,500	12	435,000	14,150
PEARLS AND SLUGS	-	-	-	98
TURTLES:				
BABY	1,500	6,914	-	-
SLIDER	9,300	187	-	-
SNAPPER	14,100	1,430	1,000	90
SOFT-SHELL	2,500	250	300	36
TOTAL	1,605,900	202,647	1,915,000	201,063

SPECIES	RED RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	1,400	\$70	2,600	\$116
BUFFALOFISH	270,600	33,245	2,344,600	249,740
CARP	65,300	3,229	467,700	18,084
CATFISH AND BULLHEADS	43,100	13,225	491,100	144,148
CARFISH	39,700	1,985	133,300	6,373
PADDLEFISH	500	60	22,800	2,071
QUILLBACK	-	-	16,300	668
SHEEPSHEAD	15,900	1,502	152,100	10,755
STURGEON, COMMON	-	-	7,000	760
SUCKERS	400	20	10,200	495
MUSSEL SHELLS	-	-	481,500	14,862
PEARLS AND SLUGS	-	-	-	98
TURTLES:				
BABY	-	-	1,500	6,914
SLIDER	-	-	9,300	186
SNAPPER	-	-	15,000	1,490
SOFT-SHELL	-	-	2,900	286
TOTAL	437,000	53,336	4,157,900	477,066

MISSISSIPPI RIVER FISHERIES

369

ILLINOIS

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS	POTS AND TRAPS, WIRE BASKETS	GILL NETS, ANCHOR, SET OR STAKE	TRAMMEL NETS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	28	100	74	17	96
CASUAL	40	249	126	24	154
TOTAL	68	349	200	41	250
BOATS:					
MOTOR	42	295	162	33	205
OTHER	15	2	11	-	2
GEAR:					
NUMBER	39	5,761	2,602	109	381
LENGTH, YARDS	8,250	-	-	-	-
SQUARE YARDS	-	-	-	10,382	71,325

ITEM	LINES		CROWFOOT BARS	BY HAND	TOTAL, EXCLUSIVE OF DUPLI- CATION
	LONG OR SET WITH HOOKS	SNAG			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	47	1	1	-	138
CASUAL	141	8	48	55	456
TOTAL	188	9	49	55	604
BOATS:					
MOTOR	154	8	49	-	484
OTHER	2	-	-	-	20
GEAR:					
NUMBER	770	14	49	-	-
HOOKS	63,225	5,800	-	-	-

ILLINOIS - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	600	\$22	1,700	\$188	-	-
BUFFALOFISH	134,500	11,584	1,006,200	92,737	-	-
CARP	323,200	14,800	1,397,800	71,359	4,400	\$237
CATFISH AND BULLHEADS	7,400	1,814	323,900	80,226	390,700	96,937
CRAPPIE	-	-	6,100	1,102	-	-
EELS, COMMON	-	-	100	15	300	49
GARFISH	500	20	1,800	80	-	-
PADDLEFISH	7,600	791	4,500	472	-	-
QUILLBACK	18,000	583	70,000	2,434	-	-
SHEEPSHEAD	47,600	3,682	390,700	30,371	1,600	129
STURGEON, SHOVELNOSE, ETC.	-	-	7,300	971	-	-
SUCKERS	-	-	11,100	426	-	-
TURTLES, SNAPPER	3,400	573	2,300	382	-	-
TOTAL	542,800	33,869	3,223,300	280,763	397,000	97,352

SPECIES	GILL NETS, ANCHOR, SET OR STAKE		TRAMMEL NETS		LINES	
	POUNDS	VALUE	POUNDS	VALUE	LONG OR SET WITH HOOKS	VALUE
BOWFIN	300	\$43	1,600	\$91	-	-
BUFFALOFISH	40,800	4,105	986,000	89,857	2,100	\$215
CARP	24,200	1,264	871,200	43,987	16,600	904
CATFISH AND BULLHEADS	300	75	30,700	7,732	158,300	39,632
CRAPPIE	-	-	1,200	224	-	-
GARFISH	300	14	1,800	75	100	4
PADDLEFISH	14,900	1,551	33,300	3,466	100	10
QUILLBACK	100	3	17,400	573	-	-
SHEEPSHEAD	400	31	42,300	3,310	14,800	1,170
STURGEON, SHOVELNOSE, ETC.	200	44	16,700	3,567	300	55
SUCKERS	-	-	600	25	-	-
TURTLES, SNAPPER	-	-	100	30	5,400	865
TOTAL	81,500	7,130	2,002,900	152,937	197,700	42,855

(CONTINUED ON NEXT PAGE)

MISSISSIPPI RIVER FISHERIES

ILLINOIS - CATCH BY GEAR, 1963 - Continued

SPECIES	LINES - CONTINUED		CROWFOOT BARS		BY HAND	
	SNAG		POUNDS	VALUE	POUNDS	VALUE
	POUNDS	VALUE				
BUFFALOFISH	200	\$21	-	-	-	-
CARP	200	10	-	-	-	-
CATFISH AND BULLHEADS	1,000	256	-	-	-	-
PADDLEFISH	1,800	198	-	-	-	-
SHEEPSHEAD	500	47	-	-	-	-
MUSSEL SHELLS	-	-	1,252,000	\$39,140	560,000	\$33,600
PEARLS AND SLUGS	-	-	-	240	-	560
TOTAL	3,700	532	1,252,000	39,380	560,000	34,160

ILLINOIS - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		ILLINOIS RIVER AREA		KAHASIA RIVER AREA		OHIO RIVER AREA	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	3,000	\$274	1,100	\$55	-	-	-	-
BUFFALOFISH	1,009,200	106,991	985,500	74,725	8,100	\$1,053	39,500	\$4,148
CARP	1,398,300	77,061	1,072,000	45,512	41,200	5,300	14,000	700
CATFISH AND BULLHEADS	713,300	179,338	131,700	30,154	800	248	51,200	13,107
CRAPPIE	2,200	374	5,100	952	-	-	-	-
EELS, COMMON	300	49	-	-	-	-	-	-
GARFISH	3,200	131	1,000	53	-	-	-	-
PADDLEFISH	58,900	6,131	400	48	-	-	2,400	264
QUILLBACK	6,400	374	2,500	175	400	72	500	25
SHEEPSHEAD	446,200	34,251	40,500	3,268	600	96	8,300	780
STURGEON, SHOVELNOSE, ETC.	18,500	4,026	-	-	-	-	1,700	181
SUCKERS	9,800	321	-	-	-	-	1,500	90
MUSSEL SHELLS	-	-	900,000	22,500	-	-	112,000	2,240
TURTLES, SNAPPER	7,200	1,160	4,000	670	-	-	-	-
TOTAL	3,676,500	410,501	3,143,800	178,112	51,100	6,769	231,100	21,535

SPECIES	ROCK RIVER AREA		WABASH RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	-	-	100	\$15	4,200	\$344
BUFFALOFISH	114,800	\$10,332	12,700	1,270	2,169,800	198,519
CARP	80,800	2,424	31,300	1,564	2,637,600	132,561
CATFISH AND BULLHEADS	-	-	15,300	3,825	912,300	226,672
CRAPPIE	-	-	-	-	7,300	1,325
EELS, COMMON	-	-	100	15	400	64
GARFISH	300	9	-	-	4,500	193
PADDLEFISH	-	-	300	45	62,000	6,488
QUILLBACK	91,800	2,752	3,900	195	105,500	3,593
SHEEPSHEAD	-	-	2,300	345	497,900	38,740
STURGEON, SHOVELNOSE, ETC.	-	-	4,300	430	24,500	4,637
SUCKERS	-	-	400	40	11,700	451
MUSSEL SHELLS	-	-	800,000	48,000	1,812,000	72,740
PEARLS AND SLUGS	-	-	-	800	-	800
TURTLES, SNAPPER	-	-	-	-	11,200	1,850
TOTAL	287,700	15,517	870,700	56,544	8,260,900	688,978

MISSISSIPPI RIVER FISHERIES

371

INDIANA

OPERATING UNITS BY GEAR, 1963

ITEM	FYKE AND HOOP NETS, FISH	LINES, LONG OR SET WITH HOOKS	CROWFOOT BARS	BY HAND	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE, CASUAL, TOTAL.	31	22	31	105	141
BOATS, MOTOR	31	22	31	-	67
GEAR:					
NUMBER	201	66	31	-	-
HOOKS.	-	3,690	-	-	-

INDIANA - CATCH BY GEAR, 1963

SPECIES	FYKE AND HOOP NETS		LINES, LONG OR SET WITH HOOKS	
	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH.	11,600	\$1,596	400	\$54
CARP	1,500	75	200	10
CATFISH AND BULLHEADS.	8,800	2,200	2,500	625
PADDLEFISH	200	24	-	-
SHEEPSHEAD	1,200	159	500	66
STURGEON, SHOVELNOSE, ETC.	400	60	100	15
SUCKERS.	200	10	-	-
TOTAL	23,900	4,124	3,700	770

SPECIES	CROWFOOT BARS		BY HAND	
	POUNDS	VALUE	POUNDS	VALUE
MUSSEL SHELLS.	412,000	\$24,720	1,188,000	\$71,280
PEARLS AND SLUGS	-	576	-	1,544
TOTAL	412,000	25,296	1,188,000	72,824

INDIANA - CATCH BY WATERS, 1963

SPECIES	OHIO RIVER AREA		WABASH RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH.	5,000	\$600	7,000	\$1,050	12,000	\$1,650
CARP	1,000	50	700	35	1,700	85
CATFISH AND BULLHEADS.	6,300	1,575	5,000	1,250	11,300	2,825
PADDLEFISH	200	24	-	-	200	24
SHEEPSHEAD	1,000	120	700	105	1,700	225
STURGEON, SHOVELNOSE, ETC.	-	-	500	75	500	75
SUCKERS.	200	10	-	-	200	10
MUSSEL SHELLS.	-	-	1,600,000	96,000	1,600,000	96,000
PEARLS AND SLUGS	-	-	-	2,120	-	2,120
TOTAL	13,700	2,379	1,613,900	100,635	1,627,600	103,014

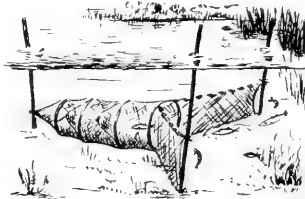
MISSISSIPPI RIVER FISHERIES

IOWA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	WEIRS	POUND NETS	FYKE AND HOOP NETS	POTS AND TRAPS, FISH
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	18	8	8	56	69
CASUAL	31	-	-	201	226
TOTAL	49	8	8	257	295
BOATS:					
MOTOR	17	-	4	257	295
OTHER	14	-	-	-	-
GEAR:					
NUMBER	20	9	12	2,337	2,601
LENGTH, YARDS	6,167	-	-	-	-

ITEM	GILL NETS, ANCHOR, SET OR STAKE	TRAMMEL NETS	LINES, LONG OR SET WITH HOOKS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	32	25	58	88
CASUAL	73	107	191	289
TOTAL	105	132	249	377
BOATS:				
MOTOR	101	132	249	373
OTHER	-	-	-	14
GEAR:				
NUMBER	272	182	1,200	-
SQUARE YARDS	20,133	36,400	-	-
HOOKS	-	-	120,000	-



FYKE NET

IOWA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		WEIRS		POUND NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	216,900	\$9,916	-	-	600	\$12
CARP	477,000	12,816	45,100	\$361	21,500	161
CATFISH AND BULLHEADS	19,000	3,542	-	-	-	-
PADDLEFISH	2,300	274	-	-	-	-
SHEEPSHEAD	72,400	2,553	-	-	-	-
STURGEON, SHOVELNOSE, ETC.	200	39	-	-	-	-
SUCKERS	6,300	112	-	-	-	-
TOTAL	794,100	24,252	45,100	361	22,100	173

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MISSISSIPPI RIVER FISHERIES

373

IOWA - CATCH BY GEAR, 1963 - Continued

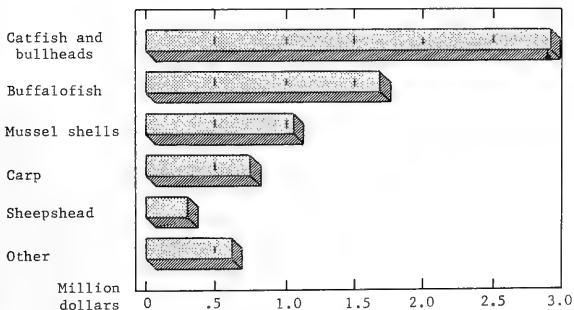
SPECIES	FYKE AND HOOP NETS		POTS AND TRAPS		GILL NETS, ANCHOR SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	338,400	\$35,532	100	\$9	69,900	\$7,312
CARP	255,300	8,934	29,100	1,020	116,400	3,960
CATFISH AND BULLHEADS	77,500	14,068	227,700	41,723	2,700	469
PADDFISH	590	62	-	-	500	55
SHEEPSHEAD	176,500	7,060	-	-	27,800	1,109
STURGEON, SHOVELNOSE, ETC.	4,300	659	-	-	2,300	354
SUCKERS	35,200	881	-	-	500	13
TOTAL	887,700	67,206	256,900	42,752	220,100	13,273

SPECIES	TRAMMEL NETS		LINES, LONG OR SET WITH HOOKS	
	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	37,600	\$3,954	1,100	\$115
CARP	56,300	1,971	8,200	288
CATFISH AND BULLHEADS	2,100	373	63,800	11,501
PADDFISH	700	83	-	-
SHEEPSHEAD	15,100	604	24,300	974
STURGEON, SHOVELNOSE, ETC.	1,300	201	400	56
SUCKERS	700	18	-	-
TOTAL	113,800	7,204	97,800	12,934

IOWA - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		MISSOURI RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	663,600	\$56,750	1,000	\$100	664,600	\$56,850
CARP	1,002,900	29,300	6,030	211	1,008,900	29,511
CATFISH AND BULLHEADS	390,900	71,310	1,900	356	392,800	71,676
PADDFISH	3,400	406	600	69	4,000	475
SHEEPSHEAD	315,800	12,287	300	13	316,100	12,300
STURGEON, SHOVELNOSE, ETC.	8,300	1,295	200	24	8,500	1,319
SUCKERS	42,200	1,011	500	13	42,700	1,024
TOTAL	2,427,100	172,359	10,500	796	2,437,600	173,155

VALUE OF MISSISSIPPI RIVER CATCH, 1963



MISSISSIPPI RIVER FISHERIES

KANSAS

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS	LINES, LONG OR SET WITH HOOKS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE, CASUAL	3	17	1	26	19	43
TOTAL	3	17	1	26	19	43
BOATS:						
MOTOR	3	17	1	23	19	34
OTHER	-	-	-	1	-	1
GEAR:						
NUMBER	2	114	1	27	98	-
LENGTH, YARDS	140	-	-	-	-	-
SQUARE YARDS	-	-	210	2,800	-	-
HOOKS	-	-	-	-	784	-

KANSAS - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	400	\$120	1,600	\$480	200	\$60
CARP	5,800	1,450	9,600	2,400	400	100
CATFISH AND BULLHEADS	400	200	1,400	700	-	-
QUILLBACK	-	-	1,300	390	300	90
TOTAL	6,600	1,770	13,900	3,970	900	250
SPECIES	TRAMMEL NETS		LINES, LONG OR SET WITH HOOKS		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	2,200	\$660	-	-	4,400	\$1,320
CARP	15,700	3,925	700	\$175	32,200	8,050
CATFISH AND BULLHEADS	1,500	750	1,400	700	4,700	2,350
PADDLEFISH	200	70	-	-	200	70
QUILLBACK	400	120	-	-	2,000	600
SHEEPSHEAD	100	25	-	-	100	25
STURGEON, SHOVELNOSE, ETC..	-	-	100	30	100	30
TOTAL	20,100	5,550	2,200	905	43,700	12,445

NOTE:--THE COMMERCIAL FISHERIES OF KANSAS ARE CONFINED TO THE MISSOURI RIVER AREA.

KENTUCKY

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	4	184	61	105
CASUAL	18	369	4	123
TOTAL	22	553	65	228
BOATS:				
MOTOR	18	373	31	140
OTHER	18	-	-	-
GEAR:				
NUMBER	22	2,665	101	263
LENGTH, YARDS	2,040	-	-	-
SQUARE YARDS	-	-	1,241	47,130

MISSISSIPPI RIVER FISHERIES

375

KENTUCKY - OPERATING UNITS BY GEAR, 1963 - Continued

ITEM	LINES		CROWFOOT BARS	TOTAL, EXCLUSIVE OF DUPLICATION
	LONG OR SET WITH HOOKS	SNAG		
	NUMBER	NUMBER		
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	149	26	-	183
CASUAL	342	57	102	687
TOTAL	491	83	102	670
BOATS:				
MOTOR	325	61	-	633
OTHER	-	-	-	18
GEAR:				
NUMBER	1,367	237	204	-
HOOKS	100,753	99,169	-	-

KENTUCKY - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	2,400	\$293	74,700	\$8,966	100	\$9	340,300	\$40,832
CARP	3,400	170	120,500	6,022	86,400	4,322	135,500	6,774
CATFISH AND BULLHEADS	3,700	920	369,100	92,292	29,100	7,283	6,600	1,645
PADDLEFISH	100	7	3,100	370	200	36	2,000	238
QUILLBACK	-	-	5,700	228	13,200	526	100	4
SHEEPSHEAD	-	-	17,900	1,788	-	-	1,100	108
STURGEON, SHOVELNOSE, ETC.	-	-	-	-	-	-	1,700	204
SUCKERS	-	-	21,300	851	2,300	93	2,300	94
TOTAL	9,600	1,390	612,300	110,517	131,300	12,269	489,600	49,899

SPECIES	LINES					
	LONG OR SET WITH HOOKS		SNAG		CROWFOOT BARS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	14,300	\$1,720	7,700	\$923	-	-
CARP	8,900	445	1,400	69	-	-
CATFISH AND BULLHEADS	462,200	115,551	318,300	79,573	-	-
PADDLEFISH	4,800	577	41,900	5,025	-	-
QUILLBACK	400	17	600	25	-	-
SHEEPSHEAD	5,800	579	-	-	-	-
STURGEON, SHOVELNOSE, ETC.	400	46	-	-	-	-
SUCKERS	100	1	-	-	-	-
MUSSEL SHELLS	-	-	-	-	1,860,000	\$108,450
PEARLS AND SLUGS	-	-	-	-	-	5,145
TOTAL	496,900	118,936	369,900	85,615	1,860,000	113,595

KENTUCKY - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		CUMBERLAND RIVER AREA		OHIO RIVER AREA	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	29,400	\$3,526	56,000	\$6,723	230,000	\$27,597
CARP	36,200	1,809	71,200	3,561	215,300	10,762
CATFISH AND BULLHEADS	5,600	1,396	6,200	1,539	147,200	36,631
PADDLEFISH	800	95	1,100	124	13,600	1,637
QUILLBACK	500	20	-	-	5,400	216
SHEEPSHEAD	100	16	-	-	14,800	1,470
STURGEON, SHOVELNOSE, ETC.	400	40	-	-	1,700	210
SUCKERS	400	17	1,100	44	24,500	978
TOTAL	73,400	6,920	135,600	11,991	652,500	79,701

SPECIES	TENNESSEE RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	124,100	\$14,897	439,500	\$52,743
CARP	33,400	1,670	356,100	17,602
CATFISH AND BULLHEADS	1,030,000	257,498	1,189,000	237,264
PADDLEFISH	36,600	4,396	32,100	6,263
QUILLBACK	14,100	564	20,000	800
SHEEPSHEAD	9,900	989	24,800	2,475
STURGEON, SHOVELNOSE, ETC.	-	-	2,100	250
SUCKERS	-	-	26,000	1,039
MUSSEL SHELLS	1,860,000	108,450	1,860,000	108,450
PEARLS AND SLUGS	-	5,145	-	5,145
TOTAL	3,108,100	393,609	3,969,600	492,221

MISSISSIPPI RIVER FISHERIES

LOUISIANA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	POTS AND TRAPS		GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS
			CRAWFISH	SHRIMP		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:						
REGULAR	9	625	92	-	552	316
CASUAL	-	550	342	5	410	175
TOTAL	9	1,175	434	5	962	491
BOATS, MOTOR	3	1,150	434	5	951	486
GEAR:						
NUMBER	3	25,000	15,230	125	3,364	1,258
LENGTH, YARDS	2,230	-	-	-	-	-
SQUARE YARDS	-	-	-	-	443,533	134,185

ITEM	LINES		DIP NETS		GRABS, FROG	TOTAL, EXCLUSIVE OF DUPLI- CATION
	HAND	LONG OR SET WITH HOOKS	COMMON	DROP		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:						
REGULAR	6	627	18	8	34	643
CASUAL	3	841	217	25	125	710
TOTAL	9	1,468	235	33	159	1,553
BOATS, MOTOR	12	1,461	207	-	159	1,531
GEAR:						
NUMBER	12	3,164	229	990	159	-
HOOKS	12	306,186	-	-	-	-

LOUISIANA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	3,400	\$140	10,600	\$496	-	-
BUFFALOFISH	58,500	6,644	1,031,100	114,836	-	-
CARP	6,300	189	57,100	2,186	-	-
CATFISH AND BULLHEADS	24,200	4,930	1,059,300	212,780	-	-
GARFISH	7,100	355	18,000	930	-	-
PADDFLEFISH	1,100	55	5,900	295	-	-
SHEEPSHEAD	16,100	1,386	236,400	23,362	-	-
CRAWFISH	-	-	-	-	1,054,600	\$141,363
SHRIMP	-	-	-	-	5,300	1,590
TURTLES, SNAPPER	17,200	2,064	25,700	3,084	-	-
TOTAL	133,900	15,763	2,410,100	357,939	1,069,900	142,953

SPECIES	GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS		LINES HAND	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	22,400	\$1,027	15,900	\$699	-	-
BUFFALOFISH	1,123,900	132,298	535,700	63,530	-	-
CARP	67,500	2,756	93,600	2,201	-	-
CATFISH AND BULLHEADS	567,300	114,785	242,000	47,110	-	-
GARFISH	294,100	14,705	104,500	5,225	-	-
PADDFLEFISH	7,000	350	5,000	250	-	-
SHEEPSHEAD	245,600	23,722	159,300	15,218	-	-
TURTLES, SNAPPER	23,600	2,632	11,200	1,344	5,100	\$612
TOTAL	2,351,400	292,446	1,122,200	137,557	5,100	612

SPECIES	LINES - CONTINUED LONG OR SET WITH HOOKS		DIP NETS		GRABS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CATFISH AND BULLHEADS	770,100	\$155,970	-	-	-	-
GARFISH	204,300	10,215	-	-	-	-
PADDFLEFISH	8,900	445	-	-	-	-
CRAWFISH	-	-	162,000	\$24,300	-	-
TURTLES:						
RABY	-	-	22,000	88,000	-	-
SNAPPER	58,600	7,032	-	-	53,700	\$20,720
FROGS	-	-	-	-	-	-
TOTAL	1,041,900	173,662	184,000	112,300	53,700	20,720

MISSISSIPPI RIVER FISHERIES

377

LOUISIANA - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		ATCHAFALAYA RIVER AREA	
	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	6,700	\$335	13,500	\$603
BUFFALOFISH	379,500	43,760	894,300	99,956
CARP	32,000	1,372	40,300	1,735
CATFISH AND BULLHEADS	338,700	69,430	1,576,700	315,340
GARFISH	46,600	2,340	355,100	17,755
PADDLEFISH	4,200	210	3,400	170
SHEEPSHEAD	64,700	5,814	384,600	38,460
CRAWFISH	10,900	1,308	1,053,700	140,055
SHRIMP	5,300	1,590	-	-
TURTLES:				
BABY	1,800	7,200	12,000	48,000
SNAPPER	28,500	3,420	12,300	1,476
FROGS	8,200	3,280	14,600	5,640
TOTAL	227,300	140,059	4,360,500	669,390

SPECIES	RED RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	32,100	\$1,424	52,300	\$2,362
BUFFALOFISH	1,446,400	173,568	2,720,200	317,284
CARP	112,200	4,225	184,500	7,332
CATFISH AND BULLHEADS	743,500	152,762	2,658,900	537,552
GARFISH	226,100	11,305	628,000	31,400
PADDLEFISH	20,300	1,015	27,900	1,395
SHEEPSHEAD	208,100	19,414	657,400	63,688
CRAWFISH	162,000	24,300	1,226,600	165,663
SHRIMP	-	-	5,300	1,590
TURTLES:				
BABY	8,200	32,800	22,000	88,000
SNAPPER	100,600	12,072	141,400	16,968
FROGS	30,900	11,600	53,700	20,720
TOTAL	3,090,400	444,505	8,378,200	1,253,954

MINNESOTA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	WEIRS	POUND NETS	FYKE AND HOOP NETS, FISH	GILL NETS, ANCHOR SET OR STAKE	LINES, LONG OR SET WITH HOOKS	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:							
REGULAR	110	45	5	86	165	10	273
CASUAL	137	7	14	113	102	53	308
TOTAL	247	52	19	199	267	63	581
BOATS:							
MOTOR	55	-	5	54	153	63	277
OTHER	43	-	-	3	-	-	46
GEAR:							
NUMBER	31	40	25	1,209	263	63	-
LENGTH, YARDS	21,792	-	-	-	-	-	-
SQUARE YARDS	-	-	-	-	387,200	-	-
HOOKS	-	-	-	-	-	15,723	-

MISSISSIPPI RIVER FISHERIES

MINNESOTA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		WEIRS		POUND NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	600	\$13	-	-	100	\$1
BUFFALOFISH	567,000	55,000	2,700	\$261	40,800	3,961
BURBOT	-	-	-	-	500	7
CARP	3,973,800	127,163	338,600	10,836	36,700	1,175
CATFISH AND BULLHEADS	615,500	80,068	24,700	3,209	-	-
GARFISH	2,600	40	-	-	100	1
GIZZARD SHAD	1,300	12	-	-	-	-
QUILLBACK	200	6	-	-	-	-
SHEEPSHEAD	528,200	27,993	-	-	-	-
SUCKERS	19,200	577	9,700	291	-	-
WHITEFISH	-	-	-	-	5,800	2,783
YELLOW PERCH	-	-	100	7	-	-
TURTLES, SNAPPER	200	20	-	-	-	-
TOTAL	5,708,600	290,892	375,800	14,604	84,000	7,928

SPECIES	FYKE NETS		GILL NETS, ANCHOR SET OR STAKE		LINES, LONG OR SET WITH HOOKS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	9,800	\$207	-	-	-	-
BUFFALOFISH	76,000	7,375	43,100	\$4,180	500	\$44
BURBOT	9,000	136	300	4	-	-
CARP	698,800	22,351	116,100	3,714	5,900	168
CATFISH AND BULLHEADS	1,095,100	142,370	5,400	1,209	24,400	5,903
HERRING, LAKE	-	-	1,000	68	-	-
MOONEYE	-	-	18,000	2,254	-	-
PIKE OR PICKEREL	-	-	28,600	2,230	-	-
QUILLBACK	-	-	2,300	94	200	7
SHEEPSHEAD	3,400	180	127,600	2,218	6,200	331
SUCKERS	7,900	235	52,900	841	300	10
TULLIBEE	1,000	29	100	3	-	-
WHITEFISH	-	-	140,900	23,294	-	-
YELLOW PERCH	11,400	1,269	304,800	24,803	-	-
YELLOW PIKE	-	-	463,100	71,603	-	-
TURTLES, SNAPPER	300	33	-	-	-	-
TOTAL	1,912,700	174,195	1,304,200	136,515	37,500	6,483

MINNESOTA - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		CROW RIVER AREA		WATERS DRAINING INTO CANADA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	7,200	\$151	-	-	3,300	\$70	10,500	\$221
BUFFALOFISH	715,500	69,407	3,300	\$318	11,300	1,096	730,100	70,821
BURBOT	6,100	91	-	-	3,700	56	9,800	147
CARP	4,331,200	139,558	361,300	11,562	447,400	14,317	5,169,900	165,437
CATFISH AND BULLHEADS	1,310,900	173,669	-	-	454,200	59,090	1,765,100	232,759
GARFISH	2,700	41	-	-	-	-	2,700	41
GIZZARD SHAD	1,300	12	-	-	-	-	1,300	12
HERRING, LAKE	-	-	-	-	1,000	68	1,000	68
MOONEYE	-	-	-	-	18,000	2,254	18,000	2,254
PIKE OR PICKEREL	-	-	-	-	28,600	2,230	28,600	2,230
QUILLBACK	2,700	107	-	-	-	-	2,700	107
SHEEPSHEAD	526,200	27,889	17,400	922	121,800	1,911	665,400	30,722
SUCKERS	36,000	1,082	-	-	54,000	872	90,000	1,954
TULLIBEE	1,000	29	-	-	100	3	1,100	32
WHITEFISH, COMMON	-	-	-	-	146,700	26,077	146,700	26,077
YELLOW PERCH	11,100	1,231	-	-	305,200	24,848	316,300	26,079
YELLOW PIKE	-	-	-	-	463,100	71,603	463,100	71,603
TURTLES, SNAPPER	500	53	-	-	-	-	500	53
TOTAL	6,982,400	413,320	332,000	12,802	2,058,400	204,495	9,422,800	630,617

MISSISSIPPI RIVER FISHERIES

379

MISSISSIPPI

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES		FYKE AND HOOP NETS, FISH		GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS	
	NUMBER		NUMBER		NUMBER		NUMBER	
FISHERMEN, ON BOATS AND SHORE:								
REGULAR	50		120		195		78	
CASUAL	15		220		174		18	
TOTAL	65		340		359		96	
BOATS:								
MOTOR	37		311		351		95	
OTHER	18		-		-		-	
GEAR:								
NUMBER	21		3,090		924		215	
LENGTH, YARDS	7,200		-		-		-	
SQUARE YARDS	-		-		361,670		69,400	

ITEM	LINES		DIP NETS, COMMON	TOTAL, EXCLUSIVE OF DUPLICATION
	LONG OR SET WITH HOOKS	SNAG		
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	194	75	17	223
CASUAL	250	60	10	361
TOTAL	444	135	27	604
BOATS:				
MOTOR	408	126	22	545
OTHER	-	-	-	18
GEAR:				
NUMBER	1,354	341	27	-
HOOKS	328,925	474,500	-	-

MISSISSIPPI - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	-	-	1,500	\$75	-	-	-	-
BUFFALOFISH	150,000	\$13,500	477,700	46,803	987,000	\$94,544	165,000	\$14,850
CARP	40,000	1,360	155,600	6,228	205,900	8,055	70,000	2,380
CATFISH AND BULLHEADS	4,000	833	45,500	11,058	75,000	17,482	18,500	3,853
GARFISH	8,500	425	5,000	250	18,500	925	10,000	500
PADDLEFISH	1,500	114	2,000	152	3,500	273	2,500	190
QUILLBACK	500	25	1,100	55	-	-	500	25
SHEEPSHEAD	2,000	96	14,800	724	18,000	873	6,900	331
STURGEON, SHOVELNOSES, ETC.	-	-	500	50	-	-	-	-
SUCKERS	1,000	48	3,700	178	-	-	1,200	58
TURTLES:								
SNAPPER	-	-	-	-	700	53	300	23
SOFT-SHELL	-	-	-	-	300	20	-	-
TOTAL	207,500	16,401	707,400	65,573	1,308,900	122,225	274,900	22,210

SPECIES	LINES				DIP NETS, COMMON		TOTAL	
	LONG OR SET WITH HOOKS		SNAG		POUNDS	VALUE	POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE				
BOWFIN	500	\$25	4,700	446	-	-	2,000	\$100
BUFFALOFISH	6,000	556	4,700	446	-	-	1,700,400	170,699
CARP	4,000	152	3,900	195	-	-	479,000	18,310
CATFISH AND BULLHEADS	292,300	68,902	99,500	23,174	-	-	534,800	125,302
GARFISH	15,000	750	12,000	600	-	-	69,000	3,450
PADDLEFISH	-	-	17,700	1,410	-	-	27,200	2,139
QUILLBACK	-	-	-	-	-	-	2,100	105
SHEEPSHEAD	8,000	385	500	24	-	-	50,200	2,433
STURGEON, SHOVELNOSE, ETC.	-	-	-	-	-	-	500	50
SUCKERS	-	-	-	-	-	-	5,900	284
TURTLES:								
BABY	-	-	-	-	600	\$2,220	600	2,220
SNAPPER	1,000	75	-	-	-	-	2,000	151
SOFT-SHELL	700	46	-	-	-	-	1,000	66
TOTAL	327,500	70,891	137,900	25,789	600	2,220	2,964,700	325,309

NOTE:--THE COMMERCIAL CATCH FOR MISSISSIPPI IS CONFINED TO THE MISSISSIPPI RIVER AND TRIBUTARIES.

MISSISSIPPI RIVER FISHERIES

MISSOURI

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	TRAMMEL NETS	LINES, LONG OR SET WITH HOOKS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	2	26	28	9	35
CASUAL	3	110	111	62	208
TOTAL	5	136	139	71	243
BOATS:					
MOTOR	4	132	137	68	234
OTHER	-	4	1	3	8
GEAR:					
NUMBER	4	1,171	189	141	-
LENGTH, YARDS	75 ^c	-	-	-	-
SQUARE YARDS	-	-	35,715	-	-
HOOKS	-	-	-	13,759	-

MISSOURI - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		TRAMMEL NETS		LINES, LONG OR SET WITH HOOKS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	200	\$28	35,700	\$4,998	90,200	\$12,628	600	\$84
CARP	400	20	57,400	2,870	60,700	3,035	2,600	130
CATFISH AND BULLHEADS	-	-	21,500	5,375	15,600	3,900	11,600	2,900
EELS, COMMON	-	-	-	-	-	-	300	48
PADDLEFISH	200	20	1,300	130	3,200	320	100	10
QUILLBACK	500	25 ^c	3,600	180	8,600	430	-	-
SHEEPSHEAD	-	-	14,600	1,460	8,900	890	1,800	180
STURGEON, SHOVELNOSE, ETC.	-	-	200	20	4,300	430	300	30
SUCKERS	-	-	3,000	150	1,400	70	-	-
TOTAL	1,300	93	137,300	15,183	192,900	21,703	17,300	3,382

MISSOURI - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		MISSOURI RIVER AREA		ST. FRANCIS RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	51,200	\$7,168	19,300	\$2,702	56,200	\$7,868	126,700	\$17,738
CARP	56,400	2,820	45,100	2,255	19,600	960	121,100	6,055
CATFISH AND BULLHEADS	32,300	8,075	15,600	3,900	800	-	48,700	12,175
EELS, COMMON	200	32	100	16	-	-	300	48
PADDLEFISH	3,400	340	1,400	140	-	-	4,800	480
QUILLBACK	11,400	570	1,200	60	100	5	12,700	635
SHEEPSHEAD	20,600	2,060	3,500	350	1,200	120	25,300	2,530
STURGEON, SHOVELNOSE, ETC.	4,500	450	300	30	-	-	4,800	480
SUCKERS	3,500	175 ^c	600	40	100	5	4,400	220
TOTAL	163,500	21,690	87,300	9,493	78,000	9,178	348,800	40,361

MONTANA

THE COMMERCIAL FISHERIES OF MONTANA, IN THE TRIBUTARIES OF THE MISSISSIPPI RIVER, ARE CONFINED TO THE MISSOURI RIVER AREA. THREE REGULAR AND FOUR CASUAL FISHERMEN, EMPLOYING SEVEN MOTOR BOATS, FISHED 28 ANCHOR, SET OR STAKE GILL NETS (5,300 SQUARE YARDS). THE CATCH CONSISTED OF BUFFALOFISH, 218,400 POUNDS, \$26,634; CARP, 2,400 POUNDS, \$61; CATFISH AND BULLHEADS, 12,700 POUNDS, \$3,192; QUILLBACK, 33,400 POUNDS, \$2,388; SHEEPSHEAD, 1,000 POUNDS, \$84; AND SUCKERS, 500 POUNDS, \$34.

MISSISSIPPI RIVER FISHERIES

381

NEBRASKA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	POTS AND TRAPS, WIRE BASKETS	TRAMMEL NETS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	19	44	16	25	44
CASUAL	12	64	16	76	81
TOTAL	31	108	32	101	125
BOATS:					
MOTOR	28	97	26	93	114
OTHER	20	-	-	-	20
GEAR:					
NUMBER	23	787	206	165	-
LENGTH, YARDS	2,882	-	-	-	-
SQUARE YARDS	-	-	-	21,867	-

NEBRASKA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		POTS AND TRAPS		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	600	\$102	3,600	\$820	1,400	\$318	4,000	\$774
CARP	200,700	6,127	104,000	9,293	10,600	2,322	35,400	6,300
CATFISH AND BULLHEADS	4,700	394	49,100	7,238	3,700	1,684	13,400	5,053
QUILLBACK	10,700	269	25,100	627	-	-	-	-
SHEEPSHEAD	700	22	3,000	89	-	-	-	-
STURGEON, SHOVELNOSE, ETC.	-	-	100	70	-	-	-	-
YELLOW PERCH	-	-	1,900	45	-	-	-	-
TOTAL	217,400	6,914	186,800	18,183	15,700	4,324	52,800	12,137

NEBRASKA - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		MISSOURI RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	-	-	9,600	\$2,014	9,600	\$2,014
CARP	252,900	\$7,641	87,800	16,401	350,700	24,042
CATFISH AND BULLHEADS	37,400	1,075	33,500	13,304	70,900	14,379
QUILLBACK	35,600	896	-	-	35,600	896
SHEEPSHEAD	3,700	111	-	-	3,700	111
STURGEON, SHOVELNOSE, ETC.	-	-	100	70	100	70
YELLOW PERCH	1,900	46	-	-	1,900	46
TOTAL	341,700	9,769	131,000	31,789	472,700	41,558



MISSISSIPPI RIVER FISHERIES

NORTH DAKOTA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	GILL NETS, ANCHOR SET OR STAKE	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	1	6	2	6
CASUAL	12	2	2	15
TOTAL	13	8	4	21
BOATS, MOTOR	-	4	2	4
GEAR:				
NUMBER	1	90	12	-
LENGTH, YARDS	1,000	-	-	-
SQUARE YARDS	-	-	1,700	-

NORTH DAKOTA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	4,300	\$291	53,600	\$3,650	48,700	\$3,314
CARP	30,200	1,181	-	-	500	15
CATFISH AND BULLHEADS	31,900	2,522	106,300	9,280	2,600	307
PADDLEFISH	-	-	100	11	800	96
SUCKERS	3,600	189	-	-	-	-
YELLOW PERCH	300	9	-	-	-	-
TOTAL	70,300	4,192	160,000	12,941	52,600	3,732

NORTH DAKOTA - CATCH BY WATERS, 1963

SPECIES	MISSOURI RIVER AREA		WATERS DRAINING INTO CANADA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	100,300	\$6,824	6,300	\$431	106,600	\$7,255
CARP	500	15	30,200	1,181	30,700	1,196
CATFISH AND BULLHEADS	72,200	6,917	68,600	5,192	140,800	12,109
PADDLEFISH	900	107	-	-	900	107
SUCKERS	-	-	3,600	189	3,600	189
YELLOW PERCH	-	-	300	9	300	9
TOTAL	173,900	13,863	109,000	7,002	282,900	20,865

OKLAHOMA

OPERATING UNITS BY GEAR, 1963

ITEM	GILL NETS, ANCHOR, SET OR STAKE	TRAMMEL NETS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:			
REGULAR	30	26	30
CASUAL	24	-	24
TOTAL	54	26	54
BOATS, MOTOR	54	26	54
GEAR:			
NUMBER	148	33	-
SQUARE YARDS	78,900	8,745	-

OKLAHOMA - CATCH BY GEAR, 1963

SPECIES	GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	179,300	\$21,516	43,100	\$5,172
CARP	84,000	4,200	18,300	915
CATFISH AND BULLHEADS	41,000	12,300	8,400	2,520
PADDLEFISH	5,000	500	2,600	260
SHEEPSHEAD	30,300	3,636	8,100	972
WHITE BASS	19,200	3,840	4,600	960
TOTAL	358,800	45,992	85,500	10,619

OKLAHOMA - CATCH BY WATERS, 1963

SPECIES	ARKANSAS RIVER AREA		RED RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	104,500	\$12,540	117,900	\$14,148	222,400	\$26,688
CARP	71,700	3,585	30,600	1,530	102,300	5,115
CATFISH AND BULLHEADS	40,400	12,120	9,000	2,700	49,400	14,820
PADDLEFISH	7,800	780	-	-	7,800	760
SHEEPSHEAD	36,700	4,404	1,700	204	38,400	4,608
WHITE BASS	21,600	4,320	2,400	480	24,000	4,800
TOTAL	282,700	37,749	161,600	19,062	444,300	56,811



MISSISSIPPI RIVER FISHERIES SOUTH DAKOTA

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	GILL NETS, ANCHOR SET OR STAKE	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	5	-	1	6
CASUAL	43	4	6	49
TOTAL	48	4	7	55
BOATS:				
MOTOR	15	2	2	17
OTHER	10	-	-	10
GEAR:				
NUMBER	7	50	22	-
LENGTH, YARDS	6,666	-	-	-
SQUARE YARDS	-	-	16,000	-

SOUTH DAKOTA - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	1,250,800	\$87,555	-	-	391,100	\$27,380
CARP	1,513,900	15,139	3,300	\$33	3,100	31
CATFISH AND BULLHEADS	2,200	197	61,500	5,536	12,000	1,675
SHEEPSHEAD	387,700	11,630	-	-	3,100	93
SUCKERS	30,600	613	-	-	300	5
WHITE BASS	59,600	6,560	-	-	-	-
TOTAL	3,244,800	121,694	64,800	5,571	409,600	29,184

SOUTH DAKOTA - CATCH BY WATERS, 1963

SPECIES	MINNESOTA RIVER AREA		MISSOURI RIVER AREA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	38,700	\$2,708	1,603,200	\$112,227	1,641,900	\$114,935
CARP	1,128,800	11,288	391,500	3,915	1,520,300	15,203
CATFISH AND BULLHEADS	-	-	75,700	7,410	75,700	7,410
SHEEPSHEAD	387,700	11,630	3,100	93	390,800	11,723
SUCKERS	30,600	613	300	5	30,900	618
WHITE BASS	59,600	6,560	-	-	59,600	6,560
TOTAL	1,645,400	32,799	2,073,800	123,650	3,719,200	156,449

MISSISSIPPI RIVER FISHERIES

395

TENNESSEE

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	FYKE AND HOOP NETS, FISH	GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS
	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:				
REGULAR	4	219	80	155
CASUAL	1	285	70	90
TOTAL	5	504	150	245
BOATS:				
MOTOR	2	500	150	245
OTHER	2	-	-	-
GEAR:				
NUMBER	1	4,852	206	665
LENGTH, YARDS	1,800	-	53,073	174,910
SQUARE YARDS	-	-	-	-

ITEM	LINES		DIP NETS, COMMON	CROWFOOT BARS	TOTAL, EXCLUSIVE OF DUPLICATION
	LONG OR SET WITH HOOKS	SNAG			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	225	125	1	208	615
CASUAL	406	175	1	49	696
TOTAL	631	300	2	257	1,313
BOATS:					
MOTOR	612	295	2	257	1,297
OTHER	-	-	-	-	2
GEAR:					
NUMBER	5,262	1,611	2	502	-
HOOKS	490,390	805,500	-	-	-

TENNESSEE - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	43,600	\$3,488	345,000	\$27,700	129,000	\$10,370	1,203,900	\$96,521
CARP	23,800	476	242,700	5,584	51,500	1,160	721,500	15,540
CATFISH AND BULLHEADS	4,300	1,075	239,500	59,875	18,700	4,675	322,800	80,700
GARFISH	-	-	200	6	700	21	700	21
PADDOLEFISH	-	-	6,400	768	18,900	2,268	42,600	5,112
QUILLBACK	6,100	183	42,500	1,285	11,000	333	367,800	11,043
SHEEPSHEAD	5,400	270	49,300	2,489	4,100	211	26,700	1,465
TURTLES, SNAPPER	-	-	-	-	-	-	600	60
TOTAL	83,200	5,492	925,600	97,707	233,900	19,038	2,688,600	210,462

SPECIES	LINES				DIP NETS, COMMON		CROWFOOT BARS	
	LONG OR SET WITH HOOKS		SNAG		POUNDS	VALUE	POUNDS	VALUE
	POUNDS	VALUE	POUNDS	VALUE				
BUFFALOFISH	12,800	\$1,034	9,700	\$786	-	-	-	-
CARP	10,500	270	7,500	210	-	-	-	-
CATFISH AND BULLHEADS	996,600	249,150	511,000	127,750	-	-	-	-
GARFISH	300	15	-	-	-	-	-	-
PADDOLEFISH	2,500	300	210,900	25,308	-	-	-	-
SHEEPSHEAD	13,200	696	2,600	139	-	-	-	-
MUSSEL SHELLS	-	-	-	-	-	-	6,959,000	\$470,565
PEARLS AND SLUGS	-	-	-	-	-	-	-	15,026
TURTLES:								
BABY	-	-	-	-	600	\$3,000	-	-
SNAPPER	300	30	-	-	-	-	-	-
TOTAL	1,036,400	251,495	741,700	154,193	600	3,000	6,959,000	485,591

MISSISSIPPI RIVER FISHERIES

TENNESSEE - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		CUMBERLAND RIVER AREA	
	<u>POUNDS</u>	<u>VALUE</u>	<u>POUNDS</u>	<u>VALUE</u>
BUFFALOFISH	380,400	\$30,432	37,900	\$3,411
CARP	317,300	6,346	104,500	4,160
CATFISH AND BULLHEADS	157,600	39,400	54,400	13,600
PADDLEFISH	27,500	3,300	28,300	3,396
QUILLBACK	9,900	297	2,200	88
SHEEPSHEAD	17,800	890	3,500	260
MUSSEL SHELLS	-	-	250,000	10,500
TURTLES, BABY	600	3,000	-	-
TOTAL	911,100	83,665	480,800	35,455

SPECIES	TENNESSEE RIVER AREA		TOTAL	
	<u>POUNDS</u>	<u>VALUE</u>	<u>POUNDS</u>	<u>VALUE</u>
BUFFALOFISH	1,325,700	\$106,056	1,744,000	\$139,899
CARP	635,700	12,714	1,057,500	23,240
CATFISH AND BULLHEADS	1,680,900	470,225	2,092,900	523,225
GARFISH	2,100	63	2,100	63
PADDLEFISH	225,500	27,060	281,300	33,756
QUILLBACK	415,300	12,459	427,400	12,644
SHEEPSHEAD	82,000	4,100	103,300	5,270
MUSSEL SHELLS	6,709,000	460,065	6,959,000	470,565
PEARLS AND SLUGS	-	15,026	-	15,026
TURTLES:				
BABY	-	-	600	3,000
SNAPPER	900	90	900	90
TOTAL	11,277,100	1,107,858	12,669,000	1,226,978

TEXAS

OPERATING UNITS BY GEAR, 1963

ITEM	FYKE AND HOOP NETS, FISH	GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS	LINES, LONG OR SET WITH HOOKS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	34	62	18	63	64
CASUAL	39	119	1	132	152
TOTAL	73	201	19	195	236
BOATS, MOTOR	73	173	19	170	208
GEAR:					
NUMBER	519	449	54	585	-
SQUARE YARDS	-	87,120	11,165	-	-
HOOKS	-	-	-	45,375	-

TEXAS - CATCH BY GEAR, 1963

SPECIES	FYKE AND HOOP NETS		GILL NETS, ANCHOR SET OR STAKE	
	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	83,900	\$9,229	465,800	\$53,438
CARP	15,200	608	32,000	1,260
CATFISH AND BULLHEADS	15,600	4,368	21,600	6,048
GARFISH	3,000	150	7,000	350
QUILLBACK	1,400	56	5,500	220
SHEEPSHEAD	8,500	850	4,600	460
SUCKERS	200	8	100	4
TURTLES, SNAPPER	-	-	500	50
TOTAL	127,800	15,269	557,100	61,850

SPECIES	TRAMMEL NETS		LINES, LONG OR SET WITH HOOKS	
	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	20,500	\$2,255	5,000	\$50
CARP	4,400	176	1,000	40
CATFISH AND BULLHEADS	4,000	1,120	46,800	13,104
GARFISH	1,100	55	4,400	220
SHEEPSHEAD	1,500	150	8,400	840
TOTAL	31,500	3,756	65,600	14,754

TEXAS - CATCH BY WATERS, 1963

SPECIES	RED RIVER AREA		WATERS DRAINING INTO GULF OF MEXICO		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BUFFALOFISH	244,000	\$26,840	351,200	\$38,632	595,200	\$65,472
CARP	19,100	764	33,500	1,340	52,600	2,104
CATFISH AND BULLHEADS	88,000	24,640	-	-	88,000	24,640
GARFISH	11,000	550	4,500	225	15,500	775
QUILLBACK	1,000	40	5,900	236	6,900	276
SHEEPSHEAD	18,700	1,870	4,300	430	23,000	2,300
SUCKERS	-	-	300	12	300	12
TURTLES, SNAPPER	-	-	500	50	500	50
TOTAL	381,800	54,704	400,200	40,925	782,000	95,629

MISSISSIPPI RIVER FISHERIES WISCONSIN

OPERATING UNITS BY GEAR, 1963

ITEM	HAUL SEINES, COMMON	OTTER TRAWLS, FISH 1/	WEIRS	TRAP NETS, FISH	FYKE AND HOOP NETS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	64	4	6	25	33
CASUAL	106	-	2	6	13
TOTAL	170	4	8	31	46
BOATS:					
MOTOR	68	1	-	13	30
OTHER	48	-	-	-	-
GEAR:					
NUMBER	46	1	3	237	932
LENGTH, YARDS	23,123	-	-	-	-
YARDS AT MOUTH	-	17	-	-	-

ITEM	POTS AND TRAPS, FISH	GILL NETS, ANCHOR SET OR STAKE	TRAMMEL NETS	LINES, LONG OR SET WITH HOOKS	TOTAL, EXCLUSIVE OF DUPLI- CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE:					
REGULAR	20	86	10	50	139
CASUAL	29	105	9	212	431
TOTAL	49	191	19	262	570
BOATS:					
MOTOR	35	120	11	257	416
OTHER	-	-	-	-	48
GEAR:					
NUMBER	1,111	120	11	258	-
SQUARE YARDS	-	50,630	1,793	-	-
HOOKS	-	-	-	82,952	-

1/ A TOTAL OF 7 VESSELS OPERATED IN LAKE WINNEBAGO. FOUR OF THESE VESSELS OPERATED ONLY IN LAKE WINNEBAGO, THE REMAINING 3 OPERATED ALSO IN THE GREAT LAKES.

WISCONSIN - CATCH BY GEAR, 1963

SPECIES	HAUL SEINES		OTTER TRAWLS		WEIRS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	4,700	\$84	-	-	-	-
BUFFALOFISH	586,200	62,758	-	-	190,500	\$20,955
BURBOT	24,700	1,729	200	\$16	-	-
CARP	5,623,900	190,099	17,400	522	228,700	6,861
CATFISH AND BULLHEADS	15,300	1,767	1,100	46	-	-
GARFISH	8,300	82	-	-	-	-
MOONEYE	14,500	419	-	-	-	-
QUILLBACK	2,100	65	-	-	-	-
SHEEPSHEAD	285,200	13,576	2,211,400	66,341	-	-
SUCKERS	48,500	1,061	200	4	600	11
TURTLES, SNAPPER	1,200	135	-	-	-	-
TOTAL	6,614,600	271,795	2,230,300	66,929	419,800	27,827

SPECIES	TRAP NETS		FYKE AND HOOP NETS		POTS AND TRAPS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWFIN	1,100	\$23	200	\$2	-	-
BUFFALOFISH	-	-	100,700	10,074	-	-
BURBOT	14,200	935	-	-	-	-
CARP	125,200	3,757	99,800	3,982	-	-
CATFISH AND BULLHEADS	110,500	4,410	109,200	20,751	113,400	\$21,537
EELS, COMMON	-	-	100	18	-	-
GARFISH	400	4	300	3	-	-
MOONEYE	-	-	200	5	-	-
QUILLBACK	100	2	5,500	165	-	-
SHEEPSHEAD	730,600	21,918	83,400	4,022	-	-
STURGEON, SHOVELNOSE, ETC.	400	57	200	41	-	-
SUCKERS	56,400	1,129	2,200	57	-	-
TURTLES, SNAPPER	100	?	500	56	-	-
TOTAL	1,039,000	32,313	402,300	39,176	113,400	21,537

(CONTINUED ON NEXT PAGE)

WISCONSIN - CATCH BY GEAR, 1963 - Continued

SPECIES	GILL NETS, ANCHOR SET OR STAKE		TRAMMEL NETS		LINES, LONG OR SET WITH HOOKS	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWF IN	800	\$16	-	-	4,000	\$40
BUFFALOFISH.	312,500	31,296	7,900	\$790	3,400	335
CARP	1,100,500	43,455	4,800	191	46,200	1,848
CATFISH AND BULLHEADS.	21,500	4,081	1,100	216	251,700	47,621
GARFISH.	2,600	26	300	3	100	1
MOONEYE.	700	16	-	-	-	-
QUILLBACK.	3,800	113	-	-	-	-
SHEEPSHEAD	35,500	1,714	3,200	162	43,700	2,184
STURGEON	-	-	-	-	3,500	500
SUCKERS.	600	15	2,400	72	700	22
TURTLES, SNAPPER	2,300	249	-	-	-	-
TOTAL	1,480,800	80,981	19,700	1,434	353,300	52,751

WISCONSIN - CATCH BY WATERS, 1963

SPECIES	MISSISSIPPI RIVER AND TRIBUTARIES		WATERS DRAINING INTO CANADA		TOTAL	
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BOWF IN	10,800	\$165	-	-	10,800	\$165
BUFFALOFISH.	1,201,200	126,208	-	-	1,201,200	126,208
BURBOT	38,800	2,719	300	\$21	39,100	2,740
CARP	7,222,400	249,993	24,100	722	7,246,500	250,715
CATFISH AND BULLHEADS.	622,300	100,577	1,500	61	623,800	100,638
EELS, COMMON	100	18	-	-	100	18
GARFISH.	12,000	119	-	-	12,000	119
MOONEYE.	15,300	434	100	2	15,400	440
QUILLBACK.	11,500	345	-	-	11,500	345
SHEEPSHEAD	444,500	21,462	2,948,500	88,455	3,393,000	109,917
STURGEON, SHOVELNOSE, ETC.	4,100	598	-	-	4,100	598
SUCKERS.	111,300	2,385	300	6	111,600	2,391
TURTLES, SNAPPER	4,100	449	-	-	4,100	449
TOTAL	9,698,400	505,476	2,974,800	89,267	12,673,200	594,743

WYOMING

THE COMMERCIAL FISHERIES OF WYOMING ARE CONFINED TO THE MISSOURI RIVER AREA. THE CATCH CONSISTED OF 180,000 POUNDS OF CARP, VALUED AT \$5,400. TWO CASUAL FISHERMEN EMPLOYING 2 MOTOR BOATS FISHED 1 HAUL SEINE WITH A TOTAL OF 100 YARDS.



CARP

MISSISSIPPI RIVER FISHERIES

GREAT LAKES AND MISSISSIPPI RIVER CATCH - BY STATES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

STATE	GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ALABAMA	-	-	6,746	985	6,746	985
ARKANSAS	-	-	4,156	457	4,156	457
ILLINOIS	285	32	8,261	689	8,546	721
INDIANA	6	1	1,626	103	1,634	104
IOWA	-	-	2,438	173	2,438	173
KANSAS	-	-	44	44	44	12
KENTUCKY	-	-	3,970	492	3,970	492
LOUISIANA	-	-	8,378	1,254	8,378	1,254
MICHIGAN	20,326	2,322	-	-	20,326	2,322
MINNESOTA	5,336	255	9,423	631	14,759	886
MISSISSIPPI	-	-	2,965	325	2,965	325
MISSOURI	-	-	349	40	349	40
MONTANA	-	-	268	32	268	32
NEW YORK	502	91	-	-	502	91
NEBRASKA	-	-	472	42	472	42
NORTH DAKOTA	-	-	283	21	283	21
OHIO	14,223	1,151	-	-	14,223	1,151
OKLAHOMA	-	-	444	57	444	57
PENNSYLVANIA	1,412	105	-	-	1,412	105
SOUTH DAKOTA	-	-	3,719	157	3,719	157
TENNESSEE	-	-	12,669	1,227	12,669	1,227
TEXAS	-	-	762	96	762	96
WISCONSIN	16,916	1,332	12,673	595	29,589	1,927
WYOMING	-	-	180	5	180	5
TOTAL	59,006	5,289	79,850	7,393	136,856	12,682

GREAT LAKES AND MISSISSIPPI RIVER CATCH - BY SPECIES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	GREAT LAKES		MISSISSIPPI RIVER AND TRIBUTARIES		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ALEWIVES	5,398	102	-	-	5,398	102
BLUE PIKE	(1)	(1)	-	-	(1)	(1)
BOWFIN	2	(1)	82	2	84	2
BUFFALOFISH	64	8	17,306	1,705	17,370	1,713
BURBOT	401	7	49	3	450	10
CARP	6,298	275	21,488	749	27,786	1,024
CATFISH AND BULLHEADS	1,496	343	13,477	2,932	14,973	3,275
CHUB	11,023	1,569	-	-	11,023	1,569
CISCO	6	2	-	-	6	2
CRAPPIE	3	1	7	1	10	2
EELS, COMMON	19	5	(1)	(1)	19	5
GARFISH	(1)	(1)	867	42	867	42
GIZZARD SHAD	5	(1)	1	(1)	6	(1)
GOLDFISH	172	5	-	-	172	5
HERRING, LAKE	8,477	479	-	(1)	8,478	479
LAKE TROUT	127	79	-	-	127	79
MOONEYE OR GOLDEYE	1	(1)	33	2	34	2
PADDLEFISH	-	(1)	725	71	725	71
PIKE OR PICKEREL	140	16	29	2	169	18
QUILLBACK	5	(1)	677	24	682	24
ROCK BASS	16	2	-	-	16	2
SAUGER	85	10	-	-	85	10
SCULPIN	3	(1)	-	-	3	(1)
SHEEPSHEAD	4,152	87	6,461	308	10,613	392
SMELT	3,015	84	-	-	3,015	87
STURGEON	5	5	53	9	58	14
SUCKERS	1,373	45	296	7	1,669	52
SUNFISH	9	1	-	-	9	1
TULLIBEE	2,058	60	1	(1)	2,059	60
WHITE BASS	1,174	152	126	13	1,300	165
WHITEFISH:						
COMMON	900	459	147	26	1,047	485
MENOMINEE	34	7	-	-	34	7
WHITE PERCH	6	(1)	-	-	6	(1)
YELLOW PERCH	11,275	1,070	318	26	11,593	1,096
YELLOW PIKE	1,264	416	463	72	1,727	488
CRAWFISH	-	-	1,227	166	1,227	166
SHRIMP	-	-	5	2	5	2
MUSSEL SHELLS	-	-	15,743	1,062	15,743	1,062
PEARLS AND SLUGS	-	-	-	27	-	27
TURTLES:						
BABY	-	-	26	100	26	100
SLIDER	-	-	9	(1)	9	(1)
SNAPPER	-	-	175	21	175	21
SOFT-SHELL	-	-	4	(1)	4	(1)
FROGS	-	-	54	21	54	21
TOTAL	59,006	5,289	79,850	7,393	136,856	12,682

1/ LESS THAN 500 POUNDS OR \$500.

NOTE:--INCLUDES THE CATCH FROM THE INTERNATIONAL LAKES OF NORTHERN MINNESOTA, THE ALABAMA RIVER, AND THE RED LAKE.

SECTION 10 - HAWAII FISHERIES

The 1963 landings of commercially caught fish and shellfish at ports in the State of Hawaii were 11.7 million pounds worth \$2.7 million to the fishermen. Compared with 1962 this catch was a decrease of 1.4 million pounds and \$140,700--due largely to reduced skipjack landings, which were 1.3 million pounds less. The catch of bigeye tuna decreased nearly 300,000 pounds and bigeye scad decreased almost 70,000 pounds. Species showing increases were striped marlin, dolphin, amberjack, pink snapper, and little tuna.

Since 1959, the Bureau's Biological Laboratory in Honolulu has used a temperature index to predict conditions in the ocean environment that affect the skipjack fishery. Early in the year, a prediction was released indicating that the availability of skipjack would be better than average. Although the annual catch per boat was above average, the total landings of skipjack were slightly less than had been predicted. The reduced landings were attributed to the occurrence of waters unfavorable to skipjack around the Islands during the fishing season.

Uncertainties in predicting the catch have been caused by lack of information on the processes and forces that produce the seasonal and long-term changes in the ocean environment near Hawaii. To overcome this deficiency, the Bureau of Commercial Fisheries has initiated the Trade Wind Zone Oceanographic Program. Seasonal and long-term changes in the distribution of temperature and salinity will be studied in terms of the currents, the processes of heating and cooling, and the evaporation and precipitation at the sea surface. The knowledge gained should permit more reliable prediction of fishing conditions in Hawaii. The Bureau's new research vessel, the Townsend Cromwell, is expected to devote most of her time to this important program.

Fishery products were landed at six of the eight islands that form the State of Hawaii. Oahu led the islands in landings with 8.7 million pounds, or nearly 75 percent of the total. The Island of Hawaii was next with 1.6 million pounds, followed by Maui with 1.2 million pounds. The remainder of the catch was landed at ports in the islands of Molokai, Kauai, and Lanai. Tuna (albacore, bigeye, bluefin, little, skipjack, and yellowfin) accounted for 81 percent of the quantity and 66 percent of the value of all fishery products landed in Hawaii. The 1963 catch was taken by 820 fishermen. Fishing craft operated during the year included 56 vessels of 5 net tons and over, 360 motor boats, and 23 other boats.

The data in this section were assembled and prepared for publication by the Bureau's area office, Honolulu, Hawaii, largely from information collected by the Hawaii Department of Land and Natural Resources, Division of Fish and Game.

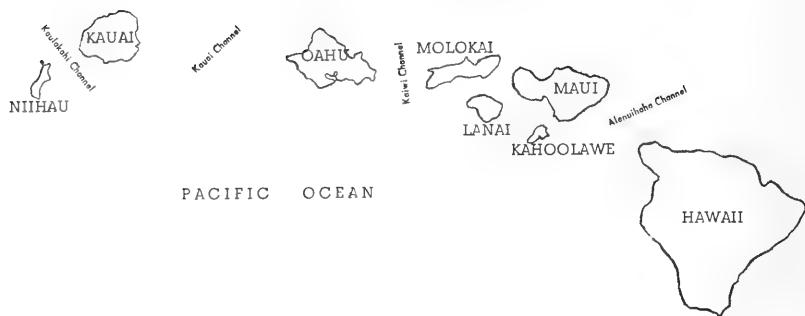
The following tables contain summarized and detailed information on the 1963 operating units and catch by islands of the State of Hawaii. Condensed summary data on the operating units and catch of Hawaii, appearing on the following pages, have been published previously in Current Fishery Statistics No. 3601.



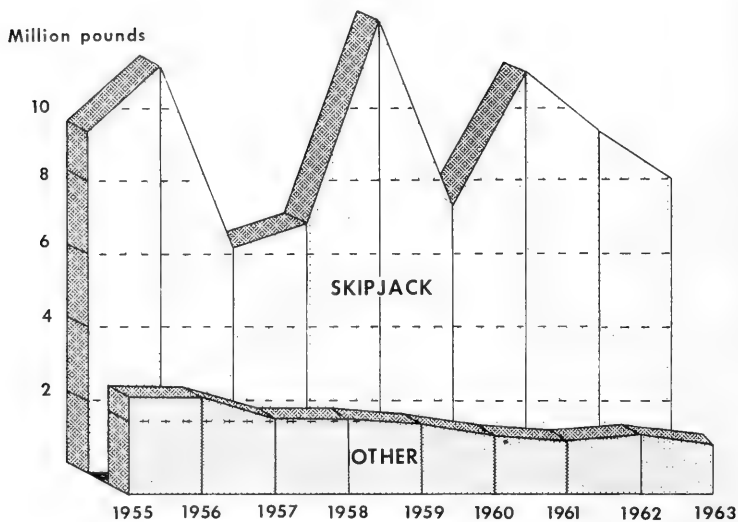
SKIPJACK TUNA

HAWAII FISHERIES

STATE OF HAWAII



HAWAII TUNA CATCH, 1955-63



HAWAII FISHERIES

393

SECTIONAL SUMMARIES SUMMARY OF CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

ISLAND	FISH		SHELLFISH, ETC.		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
HAWAII	1,633	365	11	8	1,644	373
MOLOKAI	13	7	2	5	15	12
OAHU	8,640	2,008	31	18	8,671	2,026
KAUAI	161	67	11	7	172	74
MAUI	1,212	184	5	5	1,217	189
LANA'I	16	5	(1)	(1)	16	5
TOTAL	11,675	2,636	60	43	11,735	2,679

1/ LESS THAN 500 POUNDS OR \$500.

SUMMARY OF OPERATING UNITS, 1963

ITEM	TOTAL
	NUMBER
FISHERMEN:	
ON VESSELS	266
ON BOATS AND SHORE	554
TOTAL	820
VESSELS, MOTOR	56
GROSS TONNAGE	1,728
BOATS:	
MOTOR	360
OTHER	23

NOTE: --DATA ARE NOT AVAILABLE ON THE NUMBER AND SIZE OF GEAR USED IN THE HAWAII FISHERIES. THERE ARE 16 FISHERY WHOLESALE AND MANUFACTURING ESTABLISHMENTS IN THE STATE OF HAWAII IN 1963. PEAK EMPLOYMENT IN THESE PLANTS TOTALED 324 PERSONS.

HAWAII - CATCH BY SPECIES, 1963

SPECIES	TOTAL		
ENGLISH	HAUAI IAN	POUNDS	VALUE
OCEAN CATCH:	FISH		
AMBERJACK	KAHALA	105,623	\$29,149
BARRACUDA	KAKU	2,245	584
BARRACUDA, JAPANESE	KALELA	7,570	2,919
BIGEYE, SCAD	AKULE	150,665	112,182
BONEFISH	OIO	25,283	6,501
CREVALLE:			
BLUE	OMILU	9,461	5,470
JACK	ULUA	87,208	33,862
DAMSELFISH	KUPIPI	3,891	1,453
DOLPHIN	MAHIMAH	127,233	52,002
EELS:			
CONGER	PUHI	3,501	460
MORAY	PUHI	2,606	162
GOATFISHES:			
	KURU	11,461	10,978
	MALU	1,934	1,179
	MOANO	13,768	8,208
	MOELUA	5,082	3,381
	WEKE	80,702	33,352
	WEKE-ULA	14,181	8,678
	OPELU	401,136	129,381
MACKEREL, JACK:			
MARLIN:			
BLACK	A'U	190,330	56,159
SAILFISH	A'U LEPE	5,865	933
SILVER	A'U	1,369	580
STRIPED	A'U	334,410	97,643
MILKFISH	AWA	6,904	2,598
MOUNTAIN BASS	AHOLEHOLE	1,946	1,379
MULLET	AMAAMA	16,385	12,474
PARROT FISH	UHU	2,204	736
RED BIGEYE	AWEOWEO	2,463	1,035
RUDDERFISH	NENUJE	2,294	1,012
RUNNER	LAI	293	82
SARDINE	MAKIAMA	402	165
SEA BASS, BLACK	HAPUUPUU	32,718	12,967
SNAPPER:			
GRAY	UKU	65,029	27,919
PINK	KALIKALI	24,325	11,767
PINK	OPAKAPAKA	121,118	57,249
RED	ULAUULA	28,066	21,236
RED	ULAUULA KOAE	53,919	49,825
SPOT	ATAWA	2,271	363
SQUIDFISH	UU	15,816	11,306

(CONTINUED ON NEXT PAGE)

HAWAII FISHERIES

HAWAII - CATCH BY SPECIES, 1963 - Continued

SPECIES		TOTAL	
ENGLISH	HAWAIIAN	POUNDS	VALUE
OCEAN CATCH - CONTINUED:			
SURGEON FISH:			
	KALA	39,239	\$3,668
	MAIKO	629	76
	PALANI	4,308	956
	PUALU	14,880	3,185
	ATU	21,680	3,879
SWORDFISH			
TANG:			
	CONVICT	6,430	2,965
	ORANGE SPOT	1,015	75
	TENPOUNDER	4,335	1,215
	THREADFIN	12,315	9,789
	TRIGGERFISH	1,241	348
TUNA:			
	ALBACORE	15,048	4,679
	BIGEYE AND BLUEFIN	948,253	501,726
	LITTLE	60,219	8,349
	SKIPJACK	8,099,341	1,089,820
	YELLOWFIN	384,858	153,185
	TOTAL TUNA	9,507,719	1,757,759
	WAHOO	29,633	5,473
	UNCLASSIFIED	27,458	9,031
	TOTAL FISH	11,633,779	2,605,752
SHELLFISH, ETC.			
CRABS:			
	KONA	17,655	10,560
	KUAHONU	2,287	1,425
	MOALA	798	254
	PAPA]	1,422	405
	SAMOAN	173	114
	OPIHI	4,010	8,755
LIMPET			
LOBSTERS:			
	SLIPPER	32	24
	SPINY	10,252	7,834
	OCTOPUS	7,649	4,252
	SEAWEED	4,738	1,729
	SHRIMP	492	1,459
	SQUID	5,246	1,601
	TREPANG (SEA CUCUMBER)	512	450
	TURTLES	380	75
	SEA URCHIN	7	2
	TOTAL SHELLFISH, ETC.	55,873	39,139
	TOTAL OCEAN CATCH	11,689,652	2,644,891
FISH			
POND CATCH: 1/			
	BARRACUDA	1,017	769
	BONEFISH	749	285
	CREVALLE, JACK	1,845	1,576
	GOATFISH	47	14
	MILKFISH	7,007	3,767
	MOUNTAIN BASS	2,373	937
	MULLET	23,092	21,674
	RUNNER	97	30
	SURGEON FISH	88	23
	TENPOUNDER	3,679	1,202
	THREADFIN	694	481
	UNCLASSIFIED	96	26
	TOTAL FISH	40,784	30,784
SHELLFISH, ETC.			
	CLAMS, HARD	1,165	2,133
CRABS:			
	KUAHONU	701	525
	MOALA	34	12
	PAPA]	1,641	509
	SAMOAN	632	475
	TURTLES	41	4
	TOTAL SHELLFISH, ETC.	4,234	3,658
	TOTAL POND CATCH	45,018	34,442
	GRAND TOTAL	11,734,670	2,679,333

1/ SALT-WATER.

NOTE:--STATISTICS ON THE CATCH ARE SHOWN IN ROUND (LIVE) WEIGHT EXCEPT FOR SHELL MOLLUSKS. THE WEIGHT OF MEATS FOR MOLLUSKS IS BASED ON A YIELD OF 25 PERCENT FOR HARD CLAMS AND 20 PERCENT FOR LIMPETS.

HAWAII - OPERATING UNITS BY ISLAND AND GEAR, 1963

ITEM	HAWAII					
	BAG NETS	POTS AND TRAPS	GILL NETS	LINES		
				HAND	POLE AND LINE	TROLL
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN: ON VESSELS.	-	-	-	-	30	1
ON BOATS AND SHORE.	2	2	4	77	7	18
TOTAL.	2	2	4	77	37	19
VESSELS, MOTOR.	-	-	-	-	3	1
GROSS TONNAGE.	-	-	-	-	121	9
BOATS, MOTOR.	2	2	3	58	3	15

ITEM	HAWAII - CONTINUED					
	LINES-CONTINUED	LIFT NETS	CAST NETS	BY HAND	POND 1/	TOTAL, EXCLUSIVE OF DUPLICATION
	LONG OR SET WITH HOOKS					
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN: ON VESSELS.	7	-	-	-	-	38
ON BOATS AND SHORE.	29	25	4	3	1	136
TOTAL.	36	25	4	3	1	174
VESSELS, MOTOR.	2	-	-	-	-	6
GROSS TONNAGE.	32	-	-	-	-	162
BOATS, MOTOR.	19	18	-	-	-	95

ITEM	MOLOKAI					
	HAUL SEINES	POTS AND TRAPS	GILL NETS	LINES		
				BY HAND	TROLL	LONG OR SET WITH HOOKS
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE.	1	1	34	1	4	2
BOATS, MOTOR.	-	-	9	1	5	2

ITEM	MOLOKAI - CONTINUED				
	SPEARS	BY HAND	POND 1/	UNCLASSIFIED	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN, ON BOATS AND SHORE.	4	2	4	3	47
BOATS: MOTOR.	1	1	-	1	16
OTHER.	-	-	-	-	1

ITEM	OAHU						
	HAUL SEINES	BAG NETS	POTS AND TRAPS	GILL NETS	LINES		
					HAND	POLE AND LINE	TROLL
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN: ON VESSELS.	2	10	-	6	-	110	4
ON BOATS AND SHORE.	3	-	24	58	86	6	15
TOTAL.	5	10	24	64	85	116	19
VESSELS, MOTOR.	1	2	-	2	-	12	4
GROSS TONNAGE.	17	52	-	52	-	562	93
BOATS: MOTOR.	2	1	18	39	67	14	13
OTHER.	-	-	-	4	-	-	-

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HAWAII FISHERIES

HAWAII - OPERATING UNITS BY ISLAND AND GEAR, 1963 - Continued

ITEM	OAHU - CONTINUED							TOTAL, EXCLUSIVE OF DUPLI- CATION
	LINES- CONTINUED	LIFT NETS	CAST NETS	SPEARS	BY HAND	POND 1/		
	LONG OR SET WITH HOOKS							
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN: ON VESSELS,	54	2	-	-	-	-	180	
ON BOATS AND SHORE,	56	15	3	2	1	7	216	
TOTAL,	112	17	3	2	1	7	396	
VESSELS, MOTOR,	26	1	-	-	-	-	45	
GROSS TONNAGE,	603	18	-	-	-	-	1,327	
BOATS: MOTOR,	49	11	2	1	-	2	159	
OTHER,	-	1	-	-	-	3	8	

ITEM	KAUAI								TOTAL, EXCLUSIVE OF DUPLI- CATION
	HAUL SEINES	BAG NETS	GILL NETS	LINES			LIFT NETS	CAST NETS	
				HAND	TROLL	LONG OR SET WITH HOOKS			
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN, ON BOATS AND SHORE,	4	4	23	4	15	23	3	3	52
BOATS: MOTOR,	4	-	6	3	15	20	4	-	32
OTHER,	-	4	10	1	2	1	-	2	14

ITEM	MAUI								
	HAUL SEINES	BAG NETS	POTS AND TRAPS	GILL NETS	LINES				
					HAND	POLE AND LINE	TROLL	LONG OR SET WITH HOOKS	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN: ON VESSELS,	-	-	-	-	-	48	-	-	-
ON BOATS AND SHORE,	4	9	1	9	3	7	7	29	
TOTAL,	4	9	1	9	3	48	7	29	
VESSELS, MOTOR,	-	-	-	-	-	5	-	-	
GROSS TONNAGE,	-	-	-	-	-	239	-	-	
BOATS, MOTOR,	3	3	1	5	2	6	8	25	

ITEM	MAUI - CONTINUED				LANAI				
	LIFT NETS	SPEARS	BY HAND	TOTAL, EXCLUSIVE OF DUPLI- CATION	GILL NETS	LINES		CAST NETS	TOTAL, EXCLUSIVE OF DUPLI- CATION
						HAND	TROLL		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
FISHERMEN: ON VESSELS,	-	-	-	48	-	-	-	-	-
ON BOATS AND SHORE,	14	3	8	81	6	12	12	2	22
TOTAL,	14	3	8	129	6	12	12	2	22
VESSELS, MOTOR,	-	-	-	5	-	-	-	-	-
GROSS TONNAGE,	-	-	-	239	-	-	-	-	-
BOATS, MOTOR,	9	1	-	51	-	7	10	-	7

1/ SEINES, MISCELLANEOUS NETS, AND BY HAND.

NOTE: --NUMBER AND QUANTITY OF GEAR NOT AVAILABLE. DATA ON OPERATING UNITS ARE NOT COMPLETE.

HAWAII FISHERIES

397

HAWAII - CATCH BY ISLANDS, 1963

SPECIES		HAWAII		MOLOKAI		OAHU	
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
OCEAN CATCH; FISH							
AMBERJACK	KAHALA	8,219	\$1,715	-	-	70,851	\$19,056
BARRACUDA	KAKU	306	59	20	\$1	1,268	316
BARRACUDA, JAPANESE	KAWALEA	5,381	2,072	-	-	1,648	688
BIGEYE SCAD	AKULE	27,222	18,835	659	454	61,935	54,050
BONEFISH	OIO	7,878	1,715	75	26	11,603	3,589
CREVALLE:							
BLUE	OMILU	6	2	-	-	8,971	5,169
JACK	ULUA	10,879	3,662	593	292	66,214	25,633
DAMSELFISH	KUPIPI	94	52	-	-	3,713	1,355
DOLPHIN	MAHIMAH	19,407	5,857	-	-	100,934	44,227
EELS:							
CONGER	FUHI	118	34	-	-	3,383	426
MORAY	FUHI	10	2	-	-	2,596	160
GOATFISHES:							
	KUMU	1,435	870	14	8	9,423	9,689
	MALU	-	-	-	-	1,934	1,179
	MOANO	2,234	1,286	-	-	11,346	6,824
	MOELUA	-	-	-	-	4	2
	WEKE	2,501	1,567	1,148	321	71,448	28,934
	WEKE-ULA	-	1,062	-	-	10,672	6,639
MACKEREL, JACK	OPELU	182,234	50,407	1,168	404	120,143	31,751
MARLIN:							
BLACK	A'U	51,654	9,313	-	-	138,676	46,846
SAILFISH	A'U LEPE	1,149	234	-	-	4,716	699
SILVER	A'U	192	96	-	-	1,177	484
STRIPED	A'U	48,130	12,667	-	-	285,951	84,919
MILKFISH	AWA	601	240	598	261	4,428	1,782
MOUNTAIN BASS	AMOLEHOLE	104	87	9	4	226	176
MULLET	AMAAMA	502	343	3,647	2,752	7,403	5,735
PARROT FISH	UHU	79	38	-	-	1,997	654
RED BIGEYE	AWOMEWO	1,533	663	-	-	429	176
RUDDERFISH	NEHUE	426	181	89	31	1,385	616
RUNNER	LA I	61	26	-	-	65	9
SARDINE	MAKAWA	-	-	-	-	402	165
SEA BASS, BLACK	HAPUUPU	737	340	-	-	28,525	11,554
SNAPPER:							
GRAY	UKU	2,928	1,079	-	-	50,462	21,357
PINK	KALIKALI	1,295	605	-	-	22,734	11,049
PINK	OPAKAPAKA	8,372	3,604	30	9	70,643	35,125
RED	ULAULA	2,907	1,806	-	-	22,508	17,979
RED	ULAULA KOAE	2,640	1,920	-	-	48,758	46,475
SPOT	A'AWA	1,599	244	-	-	599	104
SQUIRRELFISH	UU	5,181	3,418	451	331	7,686	6,276
SURGEON FISH:							
	KALA	-	-	140	40	38,474	3,495
	MAIKO	95	46	-	-	534	32
	PALANI	176	29	-	-	3,984	896
	PUALU	9	1	-	-	14,858	3,178
	A'U	1,356	198	-	-	20,324	3,681
SWORDFISH.							
TANG:							
CONVICT	MANINI	754	490	410	130	4,109	1,747
ORANGE SPOT	MAENAE	-	-	-	-	1,015	75
TENPOUNDER	AWAWA	-	-	-	-	4,328	1,213
THREADFIN	MOI	393	396	7	5	7,846	6,528
TRIGGERFISH	HUMUHUMU	686	135	-	-	527	205
TUNA:							
ALBACORE	ZHI PALAHA	1,659	645	-	-	13,389	4,034
BIGEYE AND BLUEFIN	AHI	211,706	100,260	-	-	735,719	401,171
LITTLE	KAWAKAWA	427	52	490	158	43,262	5,510
SKIPJACK	AKU	901,311	100,341	54	17	6,167,800	873,996
YELLOWFIN	AHI	97,985	32,656	-	-	260,844	114,427
TOTAL TUNA		1,213,088	233,954	544	175	7,221,014	1,399,138
WAHOO		10,839	1,585	157	8	10,668	1,684
UNCLASSIFIED		5,705	1,872	20	5	17,599	5,633
TOTAL FISH		1,632,177	364,434	9,779	5,227	8,602,536	1,979,773
SHELLFISH, ETC.							
CRABS:							
	KONA	3,166	1,768	-	-	8,013	5,412
	KUAHONU	-	-	-	-	2,184	1,372
	MOALA	-	-	-	-	798	254
	PAPA I	27	10	-	-	1,368	381
	SAMOAN	-	-	-	-	3	3
LIMPET	OPIHI	2,155	4,427	230	626	-	-
LOBSTERS:							
SLIPPER	ULAPAPAPA	-	-	-	-	32	24
SPINY	ULAPAPA	74	44	-	-	8,173	6,368

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HAWAII FISHERIES

HAWAII - CATCH BY ISLANDS, 1963 - Continued

SPECIES		HAWAII		MOLOKAI		OAHU	
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
SHELLFISH - CONTINUED							
OCEAN CATCH - CONTINUED:							
OCTOPUS	HEE	212	\$117	910	\$465	3,213	\$1,607
SEAWEED	LIMU	-	-	-	-	3,777	755
SHRIMP	OPAE	-	-	278	1,330	-	-
SQUID	MUHEE	4,979	1,653	-	-	5	3
TREPANG (SEA CUCUMBER)	. . . . .	-	-	-	-	512	450
TURTLES	HONU	-	-	-	-	156	15
SEA URCHIN	WANA	7	2	-	-	-	-
TOTAL SHELLFISH, ETC.		10,620	8,021	1,418	2,421	28,234	16,644
TOTAL OCEAN CATCH		1,642,797	372,455	11,197	7,648	8,630,770	1,996,417
POND CATCH 1/: FISH							
BARRACUDA	KAKU	-	-	67	20	950	749
BONEFISH	OIO	-	-	493	182	256	103
CREVALLE, JACK	ULUA	-	-	133	31	1,712	1,545
GOATFISH	WEKE	-	-	-	40	6,941	14
MILKFISH	AWA	-	-	66	-	47	3,727
MOUNTAIN BASS	AHOLEHOLE	-	-	157	157	2,216	780
MULLET	AMAAMA	-	-	1,783	1,648	21,309	20,026
RUNNER	LAI	-	-	29	11	68	19
SURGEON FISH	PJALU	-	-	-	-	88	23
TENPOUNDER	AWAAWA	-	-	-	-	3,679	1,202
THREADFIN	MOI	359	171	25	12	300	298
UNCLASSIFIED . . . . .	. . . . .	-	-	35	18	61	8
TOTAL FISH		369	171	2,788	2,119	37,627	28,494
SHELLFISH, ETC.							
CLAMS, HARD	OLEFE	-	-	1,185	2,133	-	-
CRABS:							
	KUAHONU	-	-	-	-	701	525
	MOALA	-	-	-	-	34	12
	PAPA I	-	-	-	-	1,641	509
	SAMOAN	-	-	-	-	632	475
	HONU	-	-	-	-	41	4
TOTAL SHELLFISH		-	-	1,185	2,133	3,049	1,525
TOTAL POND CATCH		369	171	3,973	4,252	40,676	30,019
GRAND TOTAL		1,643,166	372,626	15,170	11,900	8,671,446	2,026,436

SPECIES		KAUAI		MAUI		LANAI	
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
OCEAN CATCH: FISH							
AMBERJACK	KAHALA	22,277	\$7,503	3,993	\$758	283	\$117
BARRACUDA	KAKU	318	118	118	13	215	85
BARRACUDA, JAPANESE	KAWELEA	83	28	458	131	-	-
BIGEYE SCAD	AKULE	41,729	26,040	18,594	12,465	526	338
BONEFISH	OIO	2,476	477	3,092	656	159	38
CREVALLE:							
BLUE	OMILU	101	91	393	208	-	-
JACK	ULUA	2,267	756	6,524	3,112	731	407
DAMSEL FISH	KUPIPI	-	34	21	21	50	25
DOLPHIN	MAHIMAH I	1,456	404	5,208	1,440	228	74
GOATFISHES:							
	KUMU	26	17	563	394	-	-
	MOANO	60	30	148	68	-	-
	MOELUA	-	-	5,998	3,327	80	52
	WEKE	4,360	2,058	1,245	472	-	-
	WEKE-ULA	1,434	640	1,013	511	-	-
MACKEREL, JACK	OPELU	19,580	6,451	77,071	20,032	940	336
MARLIN, STRIPED	A'U	329	57	-	-	-	-
MILKFISH	AWA	-	-	1,277	315	-	-
MOUNTAIN BASS	AHOLEHOLE	852	597	755	515	-	-
MULLET	AMAAMA	4,585	3,471	248	172	-	-
PARROT FISH	UHU	43	17	85	27	-	-
RED BIGEYE	AKOHEO	136	54	356	138	9	4
RUDDER FISH	NENU	309	143	85	41	-	-
RUNNER	LAI	109	32	58	15	-	-
SEA BASS, BLACK	HAPUUPUU	1,241	435	2,105	567	110	70

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HAWAII FISHERIES

399

HAWAII - CATCH BY ISLANDS, 1963 - Continued

SPECIES		KAUAI		MAUI		LANAI	
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
FISH - CONTINUED							
OCEAN CATCH - CONTINUED:							
SNAPPER:							
GRAY	UKU	6,635	\$3,003	4,230	\$1,998	773	\$482
PINK	KALIKALI	203	78	93	35	-	-
PINK	OPAKAPAKA	312	103	41,499	18,279	262	129
RED	ULAULA	1,021	493	1,524	891	106	69
RED	ULAULA KOAE	-	-	2,490	1,410	31	20
SPOT	A'AWA	-	-	73	15	-	-
SQUID	UU	1,600	901	484	299	214	111
SURGEON FISH:							
	KALA	526	114	99	19	-	-
	PALANI	-	-	132	29	16	2
	PJALU	-	-	13	6	-	-
TANG, CONVICT	MANINI	892	450	185	108	80	40
TENPOUNDER	AWAAWA	-	-	7	2	-	-
THREADFIN	MOI	3,135	2,267	933	593	-	-
TRIGGERFISH	HUMUHUMU	28	7	-	-	-	-
TUNA:							
BIGYE AND BLUEFIN	AHI	800	285	28	10	-	-
LITTLE	KAWAKAWA	5,270	944	7,452	987	3,318	698
SKIPJACK	AKU	7,974	1,722	1,015,194	111,828	7,008	1,916
YELLOWFIN	AHI	22,042	5,708	3,987	394	-	-
TOTAL TUNA		36,086	8,659	1,026,661	113,219	10,326	2,614
WAHOO	ONO	6,277	1,491	1,325	358	367	147
UNCLASSIFIED		893	290	3,147	1,181	94	50
TOTAL FISH		161,381	67,268	1,212,306	183,840	15,600	5,210
SHELLFISH, ETC.							
CRABS:							
	KONA	5,836	2,992	850	388	-	-
	KUAHONU	-	5	96	48	-	-
	PAPA I	-	-	27	14	-	-
	SAMDAN	170	111	-	-	-	-
LIMPET	OPIHI	296	930	1,329	2,772	-	-
LOBSTERS, SPIRY	ULA	1,284	976	731	446	-	-
OCTOPUS	HEE	1,860	1,296	1,445	763	9	4
SEAWEED	LIMU	961	974	-	-	-	-
SHRIMP	OPAE	-	-	214	129	-	-
SQUID	MUHEE	252	145	-	-	-	-
TURTLES	HONU	-	-	224	60	-	-
TOTAL SHELLFISH		10,876	7,429	4,916	4,620	9	4
TOTAL OCEAN CATCH		172,057	74,697	1,217,222	188,460	15,609	5,214
GRAND TOTAL		172,057	74,697	1,217,222	188,460	15,609	5,214

1/ SALT-WATER.

NOTE:--THE WEIGHT OF MEATS FOR MOLLUSKS IS BASED ON A YIELD OF 25 PERCENT FOR HARD CLAMS AND 20 PERCENT FOR LIMPETS.



HAWAII FISHERIES

HAWAII - CATCH BY GEAR, 1963

SPECIES		HAUL SEINES		BAG NETS	
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE
BARRACUDA, JAPANESE . . .	KAWELEA	270	\$87	-	-
BIGEYE SCAD	AKULE	-	-	83,169	\$56,291
BONEFISH	OIO	670	221	7,147	1,617
CREVALLE, JACK	ULUA	19	10	-	-
DAMSELFISH	KUPIPI	1,689	695	-	-
GOATFISHES:					
	KUMU	845	901	-	-
	MOANO	3	2	-	-
	WEKE	17,650	7,087	1,796	700
	WEKE-ULA	6	5	-	-
MILKFISH	AWA	4	2	1,105	314
MOUNTAIN BASS	AHOLEHOLE	57	49	453	317
MULLET	AMAAMA	12	10	-	-
ORANGE SPOT	NAENAE	658	26	-	-
PARROT FISH	UHU	871	193	-	-
RED BIGEYE	AWEOEWO	2	1	-	-
RUDDERFISH	NENU	588	201	230	94
SPOT	A'AWA	4	1	-	-
SQUIRRELFISH	UU	70	55	-	-
SURGEON FISH:					
	KALA	4,462	627	1,700	223
	MAIKO	530	32	-	-
	PALANI	776	153	-	-
	PUALU	5,331	1,034	630	86
TANG, CONVICT	MANINI	682	348	-	-
TENPOUNDER	AWAAWA	-	-	118	30
THREADFIN	MOI	1,416	1,263	5,332	4,199
TRIGGERFISH	HUMUHUMU	23	10	-	-
UNCLASSIFIED	ULA	78	43	25	11
LOBSTERS	HEE	4	3	-	-
OCTOPUS		6	6	-	-
TOTAL		36,726	13,065	101,705	63,682

SPECIES	POTS AND TRAPS	GILL NETS, ANCHOR, SET OR STAKE				LINES	
		POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
ENGLISH	HAWAIIAN						
AMBERJACK	KAHALA	994	\$316	-	-	4,238	\$970
BARRACUDA	KAKU	14	6	80	\$61	248	86
BARRACUDA, JAPANESE	KAWELEA	-	-	79	32	6,276	2,456
BIGEYE SCAD	AKULE	-	-	2,426	1,016	63,606	53,757
BONEFISH	OIO	22	19	649	197	9,625	2,245
CREVALLE:							
BLUE	OMILU	2,017	1,211	112	97	2,220	1,466
JACK	ULUA	5,495	2,759	618	530	11,924	5,341
DAMSELFISH	KUPIPI	1,240	326	483	211	327	170
DOLPHIN	MAHIMAH	44	27	-	-	38,087	12,954
EELS:							
CONGER	PUHI	3,351	423	52	7	66	24
MORAY	PUHI	2,547	143	-	-	45	11
GOATFISHES:							
	KUMU	7,756	7,998	894	662	1,633	1,056
	MALU	1,886	1,153	-	-	48	26
	MOANO	10,568	6,398	44	14	3,037	1,692
	MOELUA	-	-	-	-	1,110	624
	WEKE	26,724	10,919	9,811	4,181	4,546	2,650
	WEKE-ULA	2,910	1,742	-	-	5,548	3,141
MACKEREL, JACK	OPELU	-	-	-	-	212,612	79,851
MARLIN:							
BLACK	A'U	-	-	-	-	160	74
SAILFISH	A'U LEPE	-	-	-	-	65	13
STRIPED	A'U	-	-	-	-	1,303	322
MILKFISH	AWA	-	-	3,917	1,516	1,040	344
MOUNTAIN BASS	AHOLEHOLE	3	1	1,055	722	185	174
MULLET	AMAAMA	364	216	15,751	12,097	48	24
PARROT FISH	UHU	794	305	104	38	265	136
RED BIGEYE	AWEOEWO	127	48	337	127	1,709	766
RUDDERFISH	NENU	65	28	259	96	357	157
RUNNER	LAI	-	-	205	51	88	31
SARDINE	MIKI'AWA	-	-	-	-	364	159
SEA BASS, BLACK	HAPUUPUU	-	-	-	-	427	194
SNAPPER:							
GRAY	UKU	663	375	11	2	7,443	3,165
PINK	KALIKALI	54	19	-	-	733	346
	OPAKAPAKA	81	335	-	-	5,877	2,616
	ULAU'ULA	-	-	-	-	2,054	1,181
	ULAU'ULA KOAE	-	-	-	-	1,030	814
SPOT	A'AWA	107	18	25	7	1,823	291
SQUIRRELFISH	UU	2,371	1,882	656	329	12,399	8,800

(CONTINUED ON NEXT PAGE)

HAWAII FISHERIES

401

HAWAII - CATCH BY GEAR, 1963 - Continued

ENGLISH	SPECIES	POTS AND TRAPS		GILL NETS, ANCHOR, SET OR STAKE		LINES		
		POUNDS	VALUE	POUNDS	VALUE	POLE & LINE (AND HAND)	POUNDS	VALUE
SURGEONFISH:	HAWAIIAN							
	KALA	17,600	\$963	5,314	\$803	-	8	\$1
	MAIKO	4	1	57	25	-	-	-
	PALANI	3,211	746	38	9	-	126	13
	PUALU	3,041	645	55	10	-	109	19
TANG:								
CONVICT	MANINI	2,623	991	767	461	-	10	8
ORANGE SPOT	NAENAE	357	49	-	-	-	-	-
TENPOUNDER	AWAANA	-	-	233	39	-	2,446	737
THREADFIN	MOI	2	1	3,980	2,797	-	378	375
TRIGGERFISH	HUMUHUMU	464	183	9	2	-	725	153
TUNA:								
BIGEYE AND BLUEFIN	AHI	-	-	-	-	-	8,089	2,751
LITTLE	KAWAKAWA	-	-	-	-	-	42,155	4,952
SKIPJACK	AKU	-	-	-	-	-	8,087,300	1,086,971
YELLOWFIN	AHI	-	-	-	-	-	64,416	8,893
WAHOO	ONO	-	-	-	-	-	9,316	133
UNCLASSIFIED		2,414	924	2,859	1,205	-	9,316	2,485
CRABS:								
	KUAHONU	1,930	1,264	44	8	-	-	-
	MOALA	679	201	-	-	-	-	-
	PAPA I	-	-	15	6	-	-	-
LOBSTERS:								
SLIPPER	ULAPAPAPA	28	21	-	-	-	4	3
SPINY	ULA	4,543	3,486	5,573	4,246	-	6	5
OCTOPUS	HEE	1,702	904	128	81	-	435	21
SQUID	MUHEE	5	3	-	-	-	5,165	1,771
TURTLE	HONU	47	5	155	32	-	-	-
TOTAL		109,827	47,056	56,998	31,719	-	8,624,539	1,297,418

ENGLISH	SPECIES	LINES - CONTINUED				LIFT NETS	
		TROLL		LONG OR SET WITH HOOKS		POUNDS	VALUE
		POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
AMBERJACK	KAHALA	-	-	100,391	\$27,863	-	-
BARRACUDA	KAKU	168	\$11	1,735	420	-	-
BARRACUDA, JAPANESE	KAWELEA	-	-	678	312	-	-
BIGEYE SCAD	AKULE	-	-	1,185	91	-	-
BONEFISH	OIO	-	-	2,108	795	-	-
CREVALLE:							
BLUE	OMILU	-	-	5,112	2,696	-	-
JACK	ULUA	541	234	66,141	23,589	1,704	\$1,036
DOLPHIN	MAHIMAH I	6,080	856	83,022	38,165	-	-
EELS, MORAY	PUHI	-	-	14	8	-	-
GOATFISHES:							
	KUMU	-	-	241	301	-	-
	MOANO	-	-	99	80	-	-
	MOELUA	-	-	4,910	2,726	54	27
	WEKE	-	-	382	188	-	-
	WEKE-ULA	-	-	5,717	3,790	-	-
	OPELU	-	-	1,905	810	186,554	48,706
MACKEREL, JACK							
MARLIN:							
BLACK	A'U	21,429	2,426	168,741	53,659	-	-
SAILFISH	A'U LEPE	-	-	5,800	920	-	-
SILVER	A'U	-	-	1,369	580	-	-
STRIPED	A'U	611	88	332,496	97,233	-	-
MILKFISH	AWA	-	-	6	2	-	-
PARROT FISH	UHU	-	-	57	29	-	-
RED BIGEYE	AWEOEWO	-	-	198	93	-	-
RUDDERFISH	NENUE	-	-	2	1	-	-
SARDINE	MAK IAWA	-	-	38	6	-	-
SEA BASS, BLACK	HAPUUPUU	-	-	32,291	12,773	-	-
SNAPPER:							
GRAY	UKU	-	-	56,445	24,286	-	-
PINK	KALI KALI	-	-	23,515	11,387	-	-
PINK	OPAKAPAKA	-	-	114,390	54,298	-	-
RED	ULAULA	-	-	26,012	20,057	-	-
RED	ULAULA KOAE	-	-	52,889	49,011	-	-
SPOT	A'AWA	-	-	312	46	-	-
SQUIDRELFISH	UU	-	-	309	230	-	-
SURGEON FISH:							
	KALA	-	-	64	9	149	39
	PALANI	-	-	103	15	-	-
	PUALU	-	-	480	117	-	-
WORDFISH	A'U	-	-	21,680	3,879	-	-
THREADFIN	MOI	-	-	7	2	-	-
TUNA:							
ALBACORE	AHI-PALAHA	-	-	15,048	4,679	-	-
BIGEYE AND BLUEFIN	AHI	724	203	939,440	498,772	-	-
LITTLE	KAWAKAWA	6,807	1,129	11,257	2,268	-	-
SKIPJACK	AKU	8,480	1,915	3,561	934	-	-
YELLOWFIN	AHI	20,896	4,795	299,546	139,497	-	-

(CONTINUED ON NEXT PAGE)

HAWAII FISHERIES

HAWAII - CATCH BY GEAR, 1963 - Continued

SPECIES		LINES - CONTINUED				LIFT NETS	
		TROLL		LONG OR SET WITH HOOKS			
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
WAHOO	ONO	3,765	\$458	25,115	\$4,882	-	-
UNCLASSIFIED		639	65	11,367	3,651	-	-
CRABS:						17,865	\$10,560
	KONA	-	-	-	-	-	123
	KUAHONU	-	-	-	-	-	53
	MOALA	-	-	-	-	1,218	345
	PAPA	-	-	-	-	173	114
	SAMOAN	-	-	-	-	-	-
OCTOPUS	HEE	-	-	29	15	-	-
TOTAL		70,140	12,180	2,416,407	1,086,035	208,064	61,003
SPECIES		CAST NETS		SPEARS		BY HAND	
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
CREVALLE, JACK	ULUA	10	\$5	-	-	-	-
GOATFISH	WEKE	155	87	-	-	-	-
MOUNTAIN BASS	AHOLEHOLE	148	86	-	-	-	-
MULLET	AMAAMA	122	56	-	-	-	-
RUDDERFISH	NENUE	-	-	3	\$2	-	-
SURGEON FISH	PALANI	-	-	10	4	-	-
TANG, CONVICT	MANINI	1,402	699	-	-	-	-
THREADFIN	MOI	420	351	-	-	-	-
UNCLASSIFIED		86	49	-	-	-	-
LIMPET	OPIHI	-	-	-	-	4,010	\$8,755
LOBSTERS, SPINY	ULA	-	-	-	-	136	92
OCTOPUS	HEE	-	-	5,215	3,161	-	-
TREPANG (SEA CUCUMBER)		5	4	-	-	-	-
SEAWEED	LIMU	-	-	-	-	4,738	1,729
TOTAL		2,348	1,337	5,228	3,167	8,684	10,576
SPECIES		NETS, UNCLASSIFIED		OTHER GEAR		VARIOUS GEAR, FISH POND	
ENGLISH	HAWAIIAN	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
BARRACUDA	KAKU	-	-	-	-	1,017	\$769
BARRACUDA, JAPANESE	KAWALEA	67	\$32	-	-	-	-
BIGEYE SCAD	AKULE	275	157	-	-	-	-
BONEFISH	OIO	4,862	1,407	-	-	749	285
CREVALLE, JACK	ULUA	566	358	-	-	1,845	1,576
DAMSELFISH	KUPIPI	132	51	-	-	-	-
EELS, CONGER	PUHI	32	6	-	-	-	-
GOATFISHES:							
	KUMU	92	60	-	-	-	-
	MOANO	37	22	-	-	-	-
	MOILUA	6	4	-	-	-	-
	WEKE	19,638	7,540	-	-	47	14
MACKEREL, JACK	OPELU	55	14	-	-	-	-
MILKFISH	AWA	832	420	-	-	7,007	3,767
MOUNTAIN BASS	AHOLEHOLE	45	30	-	-	2,373	937
MULLET	AMAAMA	68	71	-	-	23,092	21,674
PARROT FISH	UHU	93	35	-	-	-	-
RUDDERFISH	NENUE	790	431	-	-	-	-
RUNNER	LAI	-	-	-	-	97	30
SNAPPER:							
	GRAY	267	91	-	-	-	-
	PINK	23	15	-	-	-	-
	SQUIDRELFISH	11	10	-	-	-	-
SURGEON FISH:							
	KALA	9,942	1,003	-	-	-	-
	MAIKO	38	20	-	-	-	-
	PALANI	44	16	-	-	-	-
	PUALU	5,233	1,274	-	-	88	23
TANG, CONVICT	MANINI	946	458	-	-	-	-
TENPOUNDER	AWAAWA	1,538	409	-	-	3,679	1,202
THREADFIN	MOI	778	601	-	-	694	481
UNCLASSIFIED	HEE	674	598	-	-	96	26
CLAMS, HARD	OLEPE	-	-	-	-	1,165	2,133
CRABS:							
	KUAHONU	-	-	75	\$30	701	525
	MOALA	-	-	-	-	34	12
	PAPA	12	4	177	50	1,641	509
	SAMOAN	-	-	-	-	632	475
OCTOPUS	HEE	133	63	1	1	-	-
SEA URCHIN	WANA	-	-	7	2	-	-
SHRIMP	OPAE	492	1,459	-	-	-	-
SQUID	MUHEE	-	-	76	27	-	-
TREPANG (SEA CUCUMBER)		336	308	171	138	-	-
TURTLE	HONU	-	-	178	38	41	4
TOTAL		48,079	17,167	685	286	45,018	34,442

NOTE:--THE WEIGHT OF MEATS FOR MOLLUSKS IS BASED ON A YIELD OF 25 PERCENT FOR HARD CLAMS AND 20 PERCENT FOR LIMPETS.

SECTION 11 - PUERTO RICO FISHERIES

The catch for Puerto Rico has not been shown previously in Fishery Statistics of the United States, and is not included in any of the U.S. catch tables.

The catch in 1963 totaled 46.3 million pounds valued at nearly \$5.7 million to fishermen. This consisted of tuna landings of 37.0 million pounds (\$3.7 million) and the other fisheries catch of 9.3 million pounds (nearly \$2.0 million). The following tables present available data on annual landings for the period 1953-63. The catch by local fishermen was reported by the Food and Agriculture Organization of the United Nations. Landings of tuna were obtained by the Bureau.

The catch by local fishermen, consisting principally of marine fish, increased from 5.3 million pounds in 1953 to about 9.3 million pounds in 1963. Fishermen utilized various gear, consisting principally of gill nets, haul seines, hooks (hand, troll and long or set lines), cast nets, fish pots, and weirs.

The tuna fisheries got underway with the establishment of a cannery in 1953. An additional cannery began operations in 1960 and by 1963, 4 plants were in operation. Tuna landings increased from nearly 2.7 million pounds in 1953 to 37.0 million pounds in 1963. Until 1962, the catch was taken entirely from the Pacific Ocean. The total U.S. catch of tuna landed in Puerto Rico in 1962 and 1963 included significant quantities from the Atlantic Ocean, 9 percent and 13 percent, respectively.

PUERTO RICO CATCH, 1953-63

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	TUNA							
	BLUEFIN		SKIPJACK		YELLOWFIN		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1953	-	-	(1)	(1)	(1)	(1)	2,704	(1)
1954	-	-	(1)	(1)	(1)	(1)	6,388	(1)
1955	-	-	(1)	(1)	(1)	(1)	9,549	(1)
1956	-	-	(1)	(1)	(1)	(1)	12,000	(1)
1957	-	-	(1)	(1)	(1)	(1)	18,393	(1)
1958	-	-	(1)	(1)	(1)	(1)	16,652	(1)
1959	-	-	(1)	(1)	(1)	(1)	22,090	(1)
1960	-	-	5,692	(1)	15,218	(1)	20,910	(1)
1961	-	-	10,392	(1)	20,638	(1)	31,030	(1)
1962	1,676	(1)	20,066	(1)	7,028	(1)	28,790	(1)
1963 3/	2,494	254	30,454	2,966	4,078	500	37,026	3,720

YEAR	FRESH-WATER FISH		UNCLASSIFIED FISH		CRUSTACEANS		MOLLUSKS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
	1953	441	(1)	4,409	(1)	441	(1)	(2)
1954	441	(1)	4,630	(1)	441	(1)	(2)	(1)
1955	441	(1)	4,630	(1)	661	(1)	(2)	(1)
1956	441	(1)	4,850	(1)	661	(1)	(2)	(1)
1957	441	(1)	4,850	(1)	661	(1)	(2)	(1)
1958	441	(1)	5,071	(1)	661	(1)	(2)	(1)
1959	441	(1)	5,291	(1)	661	(1)	(2)	(1)
1960	441	(1)	5,512	(1)	661	(1)	(2)	(1)
1961	441	(1)	5,952	(1)	661	(1)	(2)	(1)
1962	441	(1)	6,614	(1)	661	(1)	(2)	(1)
1963 3/	441	88	7,496	1,357	1,102	431	(2)	-

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

PUERTO RICO FISHERIES

PUERTO RICO CATCH, 1953-63 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	OTHER		TOTAL		GRAND TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1953.	(2)	(1)	5,291	(1)	7,995	(1)
1954.	(2)	(1)	5,512	(1)	11,900	(1)
1955.	(2)	(1)	5,732	(1)	15,261	(1)
1956.	(2)	(1)	5,952	(1)	17,952	(1)
1957.	(2)	(1)	5,952	(1)	24,345	(1)
1958.	(2)	(1)	6,173	(1)	22,825	(1)
1959.	(2)	(1)	6,393	(1)	28,463	(1)
1960.	(2)	(1)	6,834	(1)	27,744	(1)
1961.	220	(1)	7,274	(1)	38,324	(1)
1962.	(2)	(1)	7,716	(1)	36,506	(1)
1963 3/	220	66	9,259	1,942	46,265	5,662

1/ NOT AVAILABLE.

2/ LESS THAN 110,000 POUNDS OR NEGLIGIBLE.

3/ THERE WAS AN ADDITIONAL U.S. CATCH OF BLUEFIN (640,000 POUNDS) AND SKIPJACK (596,000 POUNDS) LANDED AT U.S. ATLANTIC COAST PORTS AND TRANSHIPPED TO PUERTO RICO.

NOTE:--DATA FROM YEARBOOK OF FISHERY STATISTICS (VARIOUS YEARS), FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. DATA PUBLISHED IN METRIC TONS -- CONVERTED TO POUNDS BY MULTIPLYING BY 2,204.6.



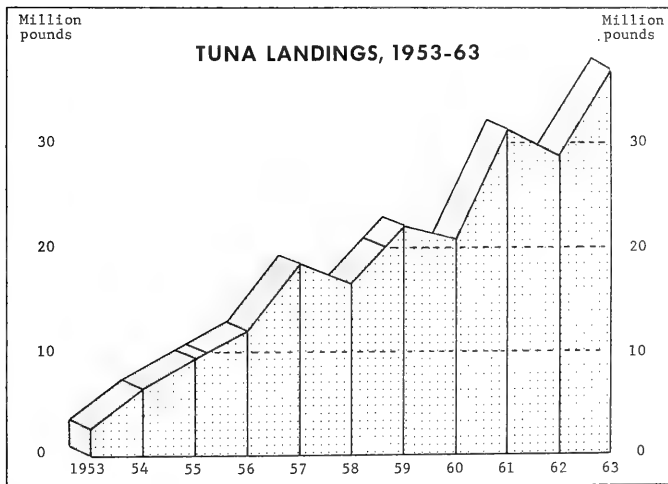
PUERTO RICO U. S. TUNA CATCH BY ATLANTIC AND PACIFIC OCEANS, 1953-63

(THOUSANDS OF POUNDS)

YEAR	BLUEFIN	SKIPJACK		YELLOWFIN	TOTAL		GRAND TOTAL
	ATLANTIC	ATLANTIC	PACIFIC	PACIFIC	ATLANTIC	PACIFIC	
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1953.	-	-	(1)	(1)	-	2,704	2,704
1954.	-	-	(1)	(1)	-	6,388	6,388
1955.	-	-	(1)	(1)	-	9,549	9,549
1956.	-	-	(1)	(1)	-	12,000	12,000
1957.	-	-	(1)	(1)	-	18,393	18,393
1958.	-	-	(1)	(1)	-	16,652	16,652
1959.	-	-	(1)	(1)	-	22,090	22,090
1960.	-	-	5,692	15,218	-	20,910	20,910
1961.	-	-	10,392	20,658	-	31,050	31,050
1962.	1,676	936	19,150	7,028	2,612	26,178	28,790
1963 2/	2,494	2,326	29,128	4,078	4,620	32,206	37,026

1/ NOT AVAILABLE.

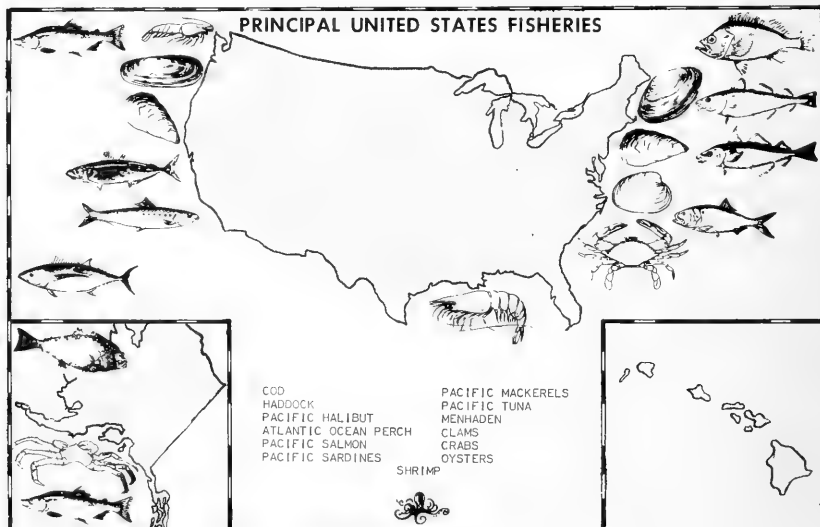
2/ THERE WAS AN ADDITIONAL CATCH OF BLUEFIN (640,000 POUNDS) AND SKIPJACK (596,000 POUNDS) LANDED AT U.S. ATLANTIC COAST PORTS AND TRANSHIPPED TO PUERTO RICO.



SECTION 12

REVIEW OF CERTAIN MAJOR FISHERIES

There are presented in this Section of the Digest complete data on the catch of certain major species of fish and shellfish taken on a commercial scale in the United States. Additional information is presented on the operating units engaged in the menhaden purse seine, salmon troll, the shrimp and fish otter trawl, and the tuna fisheries. Although the data on catch are included in the detailed catch tables of the various States, they have been repeated in individual fishery tables in this portion of the report to provide readers with a single source of catch data for cod, haddock, halibut, Pacific mackerel, jack mackerel, menhaden, Atlantic ocean perch, Pacific sardines, salmon, tuna, oysters, clams, crabs, and shrimp. Most of the above species are taken by several types of fishing gear. Because of this, the casual reader of the Digest often experiences difficulty in locating complete data on the catch of the species in individual State catch tables. The information contained in this Section includes the volume and value of the catch by individual types of gear and by States and districts.



U. S. COD FISHERY

During 1963, U. S. fishermen landed 48.5 million pounds of cod valued at \$3.5 million--a decrease of 1.5 million pounds but an increase of \$3,000, compared with the previous year.

Otter trawls accounted for 85 percent of the catch; lines, 12 percent; and gill nets, 2 percent. The remaining 1 percent was taken in pound nets, floating traps, pots and traps, and dredges.

Landings at Massachusetts ports (37 million pounds) accounted for 77 percent of the total catch. The State of Washington was second with 6.3 million pounds, followed by Maine, 2 million and New Jersey, 1 million pounds. The remaining catch was landed in eight other Atlantic and Pacific Coast States.

REVIEW OF CERTAIN MAJOR FISHERIES

407

SUMMARY OF COD CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	OTTER TRAWLS		POUND NETS		FLOATING TRAPS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	1,122	50	-	-	1	(1)
MASSACHUSETTS	32,884	2,344	2	(1)	1	(1)
RHODE ISLAND	406	38	-	-	33	3
CONNECTICUT	120	11	-	-	-	-
TOTAL	34,532	2,443	2	(1)	35	3
MIDDLE ATLANTIC:						
NEW YORK	350	55	-	-	-	-
NEW JERSEY	125	16	-	-	-	-
TOTAL	476	71	-	-	-	-
CHESAPEAKE:						
MARYLAND	3	(1)	-	-	-	-
VIRGINIA	(1)	(1)	-	-	-	-
TOTAL	3	(1)	-	-	-	-
PACIFIC:						
WASHINGTON	6,302	347	-	-	-	-
OREGON	67	3	-	-	-	-
TOTAL	6,369	350	-	-	-	-
GRAND TOTAL	41,380	2,864	2	(1)	35	3

AREA AND STATE	POTS AND TRAPS		GILL NETS		LINES	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	-	-	443	26	84	2
NEW HAMPSHIRE	-	-	-	-	45	3
MASSACHUSETTS	-	-	690	45	2,145	128
RHODE ISLAND	-	-	-	-	70	7
CONNECTICUT	-	-	-	-	16	2
TOTAL	-	-	1,133	71	2,360	142
MIDDLE ATLANTIC:						
NEW YORK	-	-	-	-	26	4
NEW JERSEY	(1)	(1)	-	-	2	(1)
TOTAL	(1)	(1)	-	-	28	4
GRAND TOTAL	(1)	(1)	1,133	71	2,388	146

AREA AND STATE	LINES - CONTINUED		DREDGES		TOTAL	
	LONG OR SET WITH HOOKS		QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	310	10	-	-	1,960	88
NEW HAMPSHIRE	30	2	-	-	75	5
MASSACHUSETTS	1,498	123	1	(1)	37,221	2,640
RHODE ISLAND	1	(1)	-	-	509	48
CONNECTICUT	-	-	-	-	136	13
TOTAL	1,838	135	1	(1)	39,901	2,794
MIDDLE ATLANTIC:						
NEW YORK	506	79	-	-	882	138
NEW JERSEY	978	127	-	-	1,105	143
DELAWARE	88	11	-	-	88	11
TOTAL	1,572	217	-	-	2,076	292
CHESAPEAKE:						
MARYLAND	147	15	-	-	150	15
VIRGINIA	50	5	-	-	50	5
TOTAL	197	20	-	-	200	20
PACIFIC:						
WASHINGTON	-	-	-	-	6,302	347
OREGON	-	-	-	-	67	3
TOTAL	-	-	-	-	6,369	350
GRAND TOTAL	3,607	372	1	(1)	48,546	3,456

1/ LESS THAN 500 POUNDS OR \$500.

REVIEW OF CERTAIN MAJOR FISHERIES

ATLANTIC COAST HADDOCK FISHERY

The 1963 commercial catch of haddock totaled nearly 124 million pounds valued at \$11.7 million. Compared with the previous year, this was a decrease of 10.3 million pounds, but an increase of \$792,000. The average price paid for haddock increased from 8.1 cents per pound in 1962 to 9.4 cents in 1963.

Haddock landings at Massachusetts ports, which accounted for 98 percent of the catch, totaled 120.9 million pounds--8 percent less than in the previous year. The catch by otter trawls was 98 percent of the landings, while the remaining 2 percent was taken by gill nets, lines, and dredges.

Almost 87 percent of the catch was taken from waters off New England--mainly on Georges South Channel and eastern Massachusetts banks. Waters off Nova Scotia yielded nearly all the remaining 13 percent.



SUMMARY OF HADDOCK CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	OTTER TRAWLS		GILL NETS		LINES	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	2,573	226	54	5	9	1
MASSACHUSETTS	116,160	11,166	121	10	550	43
RHODE ISLAND	21	2	-	-	-	-
CONNECTICUT	3	(1)	-	-	-	-
TOTAL	120,647	11,396	175	15	559	44
MIDDLE ATLANTIC:						
NEW YORK	8	13	-	-	-	-
NEW JERSEY	3	(1)	-	-	-	-
TOTAL	91	10	-	-	-	-
GRAND TOTAL	120,738	11,406	175	15	559	44

AREA AND STATE	LINES - CONTINUED		DREDGES		TOTAL	
	LONG OR SET WITH HOOKS		QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	151	13	-	-	2,677	245
NEW HAMPSHIRE	40	4	(1)	(1)	40	4
MASSACHUSETTS	2,109	223	-	-	120,940	11,444
RHODE ISLAND	-	-	-	-	21	2
CONNECTICUT	-	-	-	-	3	(1)
TOTAL	2,300	240	(1)	(1)	123,681	11,695
MIDDLE ATLANTIC:						
NEW YORK	-	-	-	-	66	10
NEW JERSEY	-	-	-	-	3	(1)
TOTAL	-	-	-	-	91	10
GRAND TOTAL	2,300	240	(1)	(1)	123,972	11,705

PACIFIC COAST HALIBUT FISHERY

Halibut landings by the combined United States and Canadian fleets in 1963 totaled 71.4 million pounds (landed weight)--3.7 million pounds less than the record catch taken the previous year. U. S. fishermen accounted for 34.3 million pounds (48 percent) of the total and received nearly \$7 million for their catch--\$4.7 million less than in 1962. The U. S. halibut fleet operating out of Pacific Coast ports numbered 319 vessels--10 less than in 1962. Canadian fishermen took a record 37.1 million pounds, 2.5 million pounds more than the previous year. Several large, new vessels were added to the Canadian fleet which contributed to the increase.

The catch limit of 28 million pounds set by the International Pacific Halibut Commission for Area 2 was unchanged from 1962. The catch limit for Area 3A, however, was increased to 34 million pounds, and a limit of 11 million pounds was set, for the first time, in Area 3B, North Triangle in the Bering Sea. There was no catch limit imposed in Area 1 and Area 3B outside the North Triangle. In Area 2, the scarcity of halibut soon caused several vessels to change to other fisheries. As a result, the catch was 2.2 million pounds under the established quota (for Area 2) despite extension of the season to November 30 (for a total of 205 days).

Data on the landings of halibut in the following tables represent the dressed weight of fish, i. e., the weight by which the quota is determined. The dressed weight of halibut can be converted to round weight by multiplying by 1.33. Halibut landed in Canada by vessels of U. S. registry is credited to Alaska.

SUMMARY OF U. S. HALIBUT FLEET OPERATING UNITS, 1963

ITEM	WASHINGTON AND OREGON FLEET	ALASKA FLEET	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER
REGULAR HALIBUT VESSELS:			
NUMBER	101	289	319
GROSS TONNAGE	4,829	9,084	10,281
CREW	588	1,235	1,393
SKATES OF LINES	4,214	8,969	9,945
REGULAR HALIBUT BOATS:			
NUMBER	-	41	41
CREW	-	72	72
SKATES OF LINES	-	250	250
BOATS PRIMARILY IN OTHER FISHERIES BUT LANDING SMALL FARES OF HALIBUT 1/2:			
NUMBER	-	61	61
CREW	-	92	92
SKATES OF LINES	-	305	305

1/ DOES NOT INCLUDE TROLLERS OR OTHER BOATS CATCHING HALIBUT INCIDENTAL TO OTHER FISHING OPERATIONS.

NOTE:--U. S. VESSELS LANDING HALIBUT AT PRINCE RUPERT, B. C., HAVE BEEN INCLUDED WITH THOSE LANDING IN ALASKA.

CATCH BY U. S. HALIBUT FLEET, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	LANDED IN						TOTAL	
	WASHINGTON AND OREGON		BRITISH COLUMBIA		ALASKA		QUANTITY	VALUE
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE		
HALIBUT	11,789	2,721	733	150	21,738	4,005	34,260	6,876
SABLEFISH	1,675	343	-	-	951	126	2,626	469
LINGCOD	23	1	-	-	17	1	40	2
ROCKFISHES	67	4	-	-	27	2	94	6
TOTAL	13,554	3,069	733	150	22,733	4,134	37,020	7,353

NOTE:--IN ADDITION THERE WERE APPROXIMATELY 30,000 POUNDS OF "NORTHERN" HALIBUT LANDED IN CALIFORNIA. MOST OF THIS CATCH WAS INCLUDED UNDER "CALIFORNIA HALIBUT" AND "UNCLASSIFIED FLOUNDERS". LANDINGS OF HALIBUT LIVERS AND VISCERA DURING 1963 TOTALED 89,941 POUNDS VALUED AT \$6,584. THE QUANTITIES SHOWN ABOVE REPRESENT DRESSED WEIGHT OF FISH. TO CONVERT TO ROUND WEIGHT, MULTIPLY THE WEIGHT OF HALIBUT BY 1.33 AND OTHER SPECIES BY 1.43.

REVIEW OF CERTAIN MAJOR FISHERIES

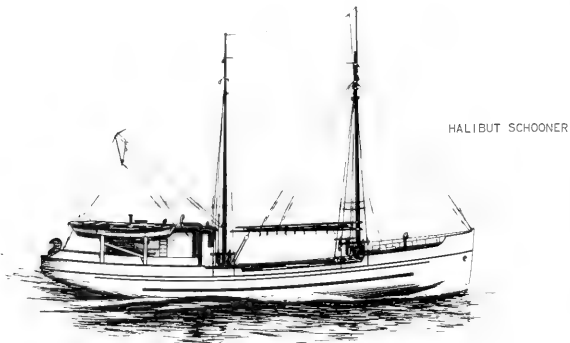
SUMMARY OF UNITED STATES AND CANADIAN HALIBUT CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

FLEET CLASSIFICATION	LANDED IN						TOTAL	
	WASHINGTON AND OREGON		BRITISH COLUMBIA		ALASKA		QUANTITY	VALUE
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE		
UNITED STATES FLEET 1/ . .	11,789	2,721	733	150	21,738	4,005	34,260	6,876
BRITISH COLUMBIA FLEET. .	4,292	984	25,810	5,694	7,031	1,273	37,133	7,951
TOTAL	16,081	3,705	26,543	5,844	28,769	5,278	71,393	14,827

1/ IN ADDITION THERE WERE APPROXIMATELY 30,000 POUNDS OF "NORTHERN" HALIBUT LANDED IN CALIFORNIA. MOST OF THIS CATCH WAS INCLUDED UNDER "CALIFORNIA HALIBUT" AND "UNCLASSIFIED FLOWNDERS".

NOTE:--HALIBUT STATISTICS IN THESE TABLES WERE COMPILED FROM DATA COLLECTED BY THE INTERNATIONAL PACIFIC HALIBUT COMMISSION. STATISTICS FOR OTHER SPECIES WERE FURNISHED BY THE STATES.



HALIBUT SCHOONER

ATLANTIC OCEAN PERCH FISHERY

The 1963 catch of Atlantic ocean perch was 108.3 million pounds valued at \$5.1 million--a decline of 15.7 million pounds (13 percent) and \$76,000 (2 percent) compared with 1962.

Maine and Massachusetts otter trawlers accounted for almost the entire catch, while only a negligible amount was taken by longlines. Maine landings of 64 million pounds valued at \$3 million accounted for 59 percent of the volume and 57 percent of the value.

Of the total catch, 51.3 million pounds (47 percent) were taken from the Nova Scotia banks. The Grand Bank was next with 26.7 million pounds (25 percent), followed by the New England coast, 19.6 million pounds (18 percent); and the Gulf of St. Lawrence, 10.7 million pounds (10 percent).

PACIFIC COAST SALMON FISHERY

The Pacific Coast salmon catch amounted to 294.2 million pounds, valued at \$49 million during 1963. The catch represented 26 percent of the volume and 39 percent of the value of the total Pacific Coast commercial catch. Pink salmon were landed in larger quantity than any other species of salmon, accounting for 156.6 million pounds. A surprising development was the extent to which this species was taken in the troll fishery, accounting for about 3 million pounds more than in any recent year. Of significant importance was the disappointing run of red salmon in Bristol Bay, and the unusually large run of pinks in the Puget Sound District of Washington and the Icy Straits of Alaska. A price disagreement among Canadian fishermen at a time when the sockeye run was in full swing on the Fraser River resulted in the United States fishermen being allotted an additional quantity of fish to prevent overseeding of the spawning grounds. Purse seines, the most important gear used in taking salmon, accounted for 183.5 million pounds (62 percent) of the total catch. Gill nets were next with 73.4 million pounds (25 percent). The remainder was taken by lines, floating traps, reef nets, pound nets, dip nets, haul seines, and fish wheels.



SUMMARY OF PACIFIC COAST SALMON TROLL LINE OPERATING UNITS, 1963

ITEM	ALASKA	WASHINGTON	OREGON	CALIFORNIA	TOTAL, EXCLUSIVE OF DUPLI- CATION
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>
FISHERMEN:					
ON VESSELS	714	868	668	1,652	3,277
ON BOATS AND SHORE . . .	678	579	378	1,437	3,023
TOTAL	1,392	1,447	1,046	3,089	6,300
VESSELS, MOTOR:					
5 - 9 TONS	168	162	90	119	489
10 - 19 TONS	278	309	217	424	1,048
20 - 29 TONS	55	93	62	148	274
30 - 39 TONS	6	33	9	48	80
40 - 49 TONS	4	2	5	13	23
50 - 59 TONS	-	1	1	2	4
60 - 69 TONS	-	1	1	-	2
70 - 79 TONS	-	-	-	1	1
100 - 109 TONS	-	-	-	1	1
260 - 269 TONS	-	-	-	1	1
TOTAL VESSELS	512	598	385	757	1,923
TOTAL GROSS TONNAGE	6,711	9,008	5,772	12,870	28,948
BOATS, MOTOR	574	485	315	957	2,290
GEAR:					
NUMBER OF LINES	4,340	5,783	3,394	9,396	20,881
HOOKS	26,100	26,120	15,960	37,584	96,708

REVIEW OF CERTAIN MAJOR FISHERIES

SALMON CATCH BY DISTRICT AND GEAR, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

GEAR AND SPECIES	ALASKA			
	SOUTHEASTERN	CENTRAL	WESTERN	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY
PURSE SEINES:				
CHINOOK OR KING	75	21	(1)	96
CHUM OR KETA	9,912	15,229	312	25,453
PINK	66,038	53,168	312	119,518
RED OR SOCKEYE	2,297	5,084	92	7,473
SILVER OR COHO	2,693	935	2	3,630
TOTAL	81,015	74,437	718	156,170
FLOATING TRAPS:				
CHUM OR KETA	19	-	-	19
PINK	363	-	-	363
RED OR SOCKEYE	20	-	-	20
SILVER OR COHO	15	-	-	15
TOTAL	417	-	-	417
GILL NETS, ANCHOR, SET OR STAKL:				
CHINOOK OR KING	14	332	2,213	2,559
CHUM OR KETA	131	908	1,799	2,838
PINK	320	1,390	149	1,859
RED OR SOCKEYE	301	3,016	2,588	5,905
SILVER OR COHO	1,356	1,067	478	2,923
TOTAL	2,124	6,733	7,227	16,084
GILL NETS, DRIFT:				
CHINOOK OR KING	98	311	1,739	2,148
CHUM OR KETA	2,533	2,629	2,222	7,384
PINK	2,861	37	3	2,901
RED OR SOCKEYE	1,277	5,651	15,116	22,046
SILVER OR COHO	1,064	3,269	352	4,685
TOTAL	7,833	11,897	19,434	39,164
LINES, TROLL:				
CHINOOK OR KING	4,311	30	-	4,341
CHUM OR KETA	54	(1)	-	54
PINK	472	4	-	476
RED OR SOCKEYE	12	-	-	12
SILVER OR COHO	6,174	154	-	6,328
TOTAL	11,023	198	-	11,211
WHEELS, CHINOOK OR KING, TOTAL	-	-	17	17
GRAND TOTAL	102,412	93,255	27,396	223,063

GEAR AND SPECIES	WASHINGTON							
	PUGET SOUND		WASHINGTON COAST		COLUMBIA RIVER		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
HAUL SEINES:								
CHINOOK OR KING	47	12	-	-	-	-	47	12
CHUM OR KETA	5	1	-	-	-	-	5	1
PINK	1,476	177	-	-	-	-	1,476	177
RED OR SOCKEYE	(1)	(1)	-	-	-	-	(1)	(1)
SILVER OR COHO	29	7	-	-	-	-	29	7
TOTAL	1,557	197	-	-	-	-	1,557	197
PURSE SEINES:								
CHINOOK OR KING	647	149	-	-	-	-	647	149
CHUM OR KETA	1,221	244	-	-	-	-	1,221	244
PINK	13,915	2,390	-	-	-	-	13,915	2,390
RED OR SOCKEYE	4,918	1,628	-	-	-	-	4,918	1,628
SILVER OR COHO	601	14	-	-	-	-	601	147
TOTAL	27,302	4,556	-	-	-	-	27,302	4,556

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

413

SALMON CATCH BY DISTRICT AND GEAR, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

GEAR AND SPECIES	WASHINGTON							
	PUGET SOUND		WASHINGTON COAST		COLUMBIA RIVER		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
POUND NETS:								
CHINOOK OR KING	49	15	-	-	-	-	49	15
CHUM OR KETA	2	1	-	-	-	-	2	1
PINK	475	57	-	-	-	-	475	57
RED OR SOCKEYE	16	6	-	-	-	-	16	6
SILVER OR COHO	61	15	-	-	-	-	61	15
TOTAL	605	94	-	-	-	-	605	94
GILL NETS:								
CHINOOK OR KING	888	263	646	193	1,202	395	2,736	851
CHUM OR KETA	1,591	299	246	31	6	1	1,843	331
PINK	6,097	732	-	-	-	-	6,097	732
RED OR SOCKEYE	2,158	714	341	167	19	6	2,516	887
SILVER OR COHO	964	254	343	99	94	23	1,401	376
TOTAL	11,698	2,262	1,576	490	1,321	425	14,595	3,177
LINES:								
CHINOOK OR KING	1,076	518	1,563	780	212	100	2,651	1,396
CHUM OR KETA	1	(1)	(1)	(1)	-	-	1	(1)
PINK	1,895	256	1,142	147	1	(1)	3,038	403
RED OR SOCKEYE	3	1	-	-	-	-	3	1
SILVER OR COHO	1,395	387	1,594	427	992	259	3,981	1,073
TOTAL	4,370	1,162	4,299	1,354	1,205	359	9,874	2,875
DIP NETS:								
CHINOOK OR KING	-	-	-	-	54	16	54	16
SILVER OR COHO	-	-	-	-	(1)	(1)	(1)	(1)
TOTAL	-	-	-	-	54	16	54	16
REEF NETS:								
CHINOOK OR KING	25	6	-	-	-	-	25	6
CHUM OR KETA	11	2	-	-	-	-	11	2
PINK	461	55	-	-	-	-	461	55
RED OR SOCKEYE	481	160	-	-	-	-	481	160
SILVER OR COHO	27	7	-	-	-	-	27	7
TOTAL	1,006	230	-	-	-	-	1,006	230
GRAND TOTAL	46,538	8,503	5,875	1,844	2,580	800	54,993	11,147

GEAR AND SPECIES	OREGON					
	COLUMBIA RIVER		OREGON COAST		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
GILL NETS:						
CHINOOK OR KING	3,145	1,020	-	-	3,145	1,020
CHUM OR KETA	9	1	-	-	9	1
RED OR SOCKEYE	30	11	-	-	30	11
SILVER OR COHO	407	90	-	-	407	90
TOTAL	3,591	1,122	-	-	3,591	1,122
LINES:						
CHINOOK OR KING	190	86	1,433	606	1,623	694
PINK	4	1	20	2	24	3
SILVER OR COHO	533	139	2,491	646	3,024	787
TOTAL	727	228	3,944	1,256	4,671	1,484
GRAND TOTAL	4,318	1,350	3,944	1,256	8,262	2,606

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SALMON CATCH BY DISTRICT AND GEAR, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

GEAR AND SPECIES	CALIFORNIA					
	NORTHERN		SAN FRANCISCO		MONTEREY	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
OTTER TRAWLS, CHINOOK OR KING	1	(1)	(1)	(1)	-	-
LINES:						
CHINOOK OR KING	2,961	1,406	3,306	1,888	499	285
SILVER OR COHO	817	262	187	69	13	5
TOTAL	3,778	1,668	3,493	1,957	512	290
GRAND TOTAL	3,779	1,668	3,493	1,957	512	290

GEAR AND SPECIES	CALIFORNIA - CONTINUED					
	SANTA BARBARA		SAN PEDRO		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
OTTER TRAWLS, CHINOOK OR KING	-	-	-	-	1	(1)
LINES:						
CHINOOK OR KING	72	43	1	1	6,839	3,623
SILVER OR COHO	2	1	-	-	1,019	337
TOTAL	74	44	1	1	7,858	3,960
GRAND TOTAL	74	44	1	1	7,859	3,960

1/ LESS THAN 500 POUNDS OR \$500.

NOTE:--IN ALASKA, THE CATCH TAKEN BY HAUL SEINES IS INCLUDED WITH THAT TAKEN BY PURSE SEINES.

SUMMARY OF SALMON CATCH BY DISTRICTS, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	ALASKA							
	SOUTHEASTERN		CENTRAL		WESTERN		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CHINOOK OR KING	4,498	2,209	694	186	3,969	732	9,161	3,127
CHUM OR KETA	12,649	1,175	18,766	1,556	4,333	315	35,748	3,046
PINK	70,054	8,277	54,599	6,149	464	46	125,117	14,472
RED OR SOCKEYE	3,907	1,074	13,751	3,221	17,793	3,349	35,456	7,644
SILVER OR COHO	11,304	2,110	5,445	793	832	106	17,581	3,009
TOTAL	102,412	14,845	93,255	11,905	27,396	4,546	223,063	31,298

SPECIES	WASHINGTON							
	PUGET SOUND		WASHINGTON COAST		COLUMBIA RIVER		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CHINOOK OR KING	2,734	963	2,209	973	1,467	511	6,410	2,447
CHUM OR KETA	2,831	547	246	31	6	1	3,083	579
PINK	30,319	3,666	1,142	146	1	(1)	31,462	3,814
RED OR SOCKEYE	7,576	2,506	341	167	19	7	7,938	2,682
SILVER OR COHO	3,076	816	1,937	526	1,067	281	6,100	1,625
TOTAL	46,536	8,502	5,875	1,848	2,580	800	54,993	11,147

SPECIES	OREGON					
	COLUMBIA RIVER		OREGON COAST		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CHINOOK OR KING	3,336	1,106	1,433	306	4,768	1,714
CHUM OR KETA	9	1	-	-	9	1
PINK	4	1	20	2	24	3
RED OR SOCKEYE	30	11	-	-	30	11
SILVER OR COHO	940	229	2,491	646	3,431	877
TOTAL	4,319	1,350	3,944	1,256	8,262	2,606

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

415

SUMMARY OF SALMON CATCH BY DISTRICTS, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	CALIFORNIA					
	NORTHERN		SAN FRANCISCO		MONTEREY	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CHINOOK OR KING	2,962	1,406	3,306	1,686	499	265
SILVER OR COHO	817	262	187	69	13	5
TOTAL	3,779	1,668	3,493	1,957	512	290

SPECIES	CALIFORNIA - CONTINUED					
	SANTA BARBARA		SAN PEDRO		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CHINOOK OR KING	72	43	1	1	6,840	3,623
SILVER OR COHO	2	1	-	-	1,019	337
TOTAL	74	44	1	1	7,859	3,960

1/ LESS THAN \$500.

SUMMARY OF SALMON CATCH BY GEAR, 1963

(THOUSANDS OF POUNDS)

STATE AND DISTRICT	HAUL SEINES	PURSE SEINES	OTTER TRAWLS	POUND NETS	FLOATING TRAPS	GILL NETS
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
ALASKA:						
SOUTHEASTERN	-	81,015	-	-	417	9,957
CENTRAL	-	74,437	-	-	-	18,630
WESTERN	-	718	-	-	-	26,661
TOTAL	-	156,170	-	-	417	55,248
WASHINGTON:						
PUGET SOUND	1,557	27,302	-	605	-	11,698
WASHINGTON COAST . .	-	-	-	-	-	1,576
COLUMBIA RIVER . . .	-	-	-	-	-	1,321
TOTAL	1,557	27,302	-	605	-	14,595
OREGON, COLUMBIA RIVER, TOTAL	-	-	-	-	-	3,591
CALIFORNIA:						
NORTHERN	-	-	1	-	-	-
SAN FRANCISCO	-	-	(1)	-	-	-
TOTAL	-	-	1	-	-	-
GRAND TOTAL	1,557	183,472	1	605	417	73,434

STATE AND DISTRICT	LINES	DIP NETS	REEF NETS	FISH WHEELS	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
ALASKA:					
SOUTHEASTERN	11,023	-	-	-	102,412
CENTRAL	189	-	-	-	93,255
WESTERN	-	-	-	17	27,396
TOTAL	11,211	-	-	17	223,063
WASHINGTON:					
PUGET SOUND	4,370	-	1,006	-	46,538
WASHINGTON COAST . .	4,299	-	-	-	5,875
COLUMBIA RIVER . . .	1,205	54	-	-	2,580
TOTAL	9,874	54	1,006	-	54,993

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF SALMON CATCH BY GEAR, 1963 - Continued

(THOUSANDS OF POUNDS)

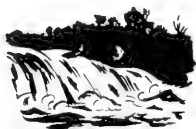
STATE AND DISTRICT	LINES	DIP NETS	REEF NETS	FISH WHEELS	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
OREGON:					
COLUMBIA RIVER	727	-	-	-	4,318
OREGON COAST	3,944	-	-	-	3,944
TOTAL	4,671	-	-	-	8,262
CALIFORNIA:					
NORTHERN	3,778	-	-	-	3,779
SAN FRANCISCO	3,493	-	-	-	3,493
MONTEREY	512	-	-	-	512
SANTA BARBARA	74	-	-	-	74
SAN PEDRO	1	-	-	-	1
TOTAL	7,858	-	-	-	7,859
GRAND TOTAL	33,614	54	1,006	17	294,177

1/ LESS THAN 500 POUNDS.

SUMMARY OF SALMON CATCH BY SPECIES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	QUANTITY	VALUE
CHINOOK OR KING	27,179	10,911
CHUM OR KETA	38,840	3,626
PINK	156,603	18,289
RED OR SOCKEYE	43,424	10,337
SILVER OR COHO	28,131	5,848
TOTAL	294,177	49,011



PACIFIC COAST SARDINE FISHERY

Landings of sardines at California ports in 1963 totaled over 7 million pounds--8.2 million pounds (54 percent) less than the previous year and the lowest catch since 1915. Few sardines appeared and it seemed possible that the constantly increasing number of anchovies had almost eliminated sardines in the competition for food.

The entire sardine catch was taken with purse seines. The San Pedro district accounted for 75 percent of the landings; Santa Barbara, 19 percent; and Monterey, 6 percent.

The 1963 sardine fishery opened August 1 in central California and September 1 in Southern California. As in 1961 and 1962, the State legislature extended the sardine fishing season 2 months to permit taking sardines in January and February.

REVIEW OF CERTAIN MAJOR FISHERIES

417

MACKEREL FISHERIES OF THE PACIFIC COAST

Landings of jack mackerel totaled 95.8 million pounds in 1963--an increase of 5.5 million pounds (6 percent) compared with the previous year, while those of Pacific mackerel amounted to 40.2 million pounds--a decline of 8.3 million pounds (17 percent). The combined mackerel catch (136 million pounds, valued at nearly \$3 million) was about 3 million pounds less than in the previous year; while there was little change in value. As in former years, most of the catch of jack mackerel (91 percent) and Pacific mackerel (94 percent) was landed in the San Pedro district of California. Purse seines and lampara nets were the principal gear used in this fishery. Mackerel were abundant during most of the year, and a much larger catch could have been made had there been a market for the fish.

SUMMARY OF JACK MACKEREL CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

STATE AND DISTRICT	PURSE SEINES AND LAMPARA NETS		OTTER TRAWLS		GILL AND TRAMMEL NETS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CALIFORNIA:						
SAN FRANCISCO	-	-	1	(2)	(2)	(2)
MONTEREY	1,649	38	1	(2)	-	-
SANTA BARBARA	7,021	129	-	-	-	-
SAN PEDRO	86,767	1,822	-	-	-	-
TOTAL	95,437	1,989	2	(2)	(2)	(2)
GRAND TOTAL	95,437	1,989	2	(2)	(2)	(2)

STATE AND DISTRICT	LINES		DIP, BRAIL OR SCOOP NETS 1/		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CALIFORNIA:						
SAN FRANCISCO	-	-	-	-	1	(2)
MONTEREY	-	-	2	(2)	1,652	38
SANTA BARBARA	-	-	1	(2)	7,021	129
SAN PEDRO	-	-	-	-	86,768	1,822
TOTAL	-	-	3	(2)	95,442	1,989
HAWAII	214	80	187	49	401	129
GRAND TOTAL	214	80	190	49	95,843	2,118

1/ INCLUDES THE CATCH BY LIFT NETS IN HAWAII.

2/ LESS THAN 500 POUNDS OR \$500.

SUMMARY OF PACIFIC MACKEREL CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

STATE AND DISTRICT	PURSE SEINES AND LAMPARA NETS		GILL AND TRAMMEL NETS	
	QUANTITY	VALUE	QUANTITY	VALUE
CALIFORNIA:				
MONTEREY	(1)	(1)	-	-
SANTA BARBARA	2,431	44	-	-
SAN PEDRO	36,955	798	10	(1)
SAN DIEGO	20	1	-	-
TOTAL	39,406	843	10	(1)

STATE AND DISTRICT	LINES		DIP, BRAIL OR SCOOP NETS		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CALIFORNIA:						
MONTEREY	-	-	-	-	(1)	(1)
SANTA BARBARA	-	-	-	-	2,431	44
SAN PEDRO	11	(1)	612	18	37,788	816
SAN DIEGO	-	-	4	(1)	24	1
TOTAL	11	(1)	616	18	40,243	861

1/ LESS THAN 500 POUNDS OR \$500.

REVIEW OF CERTAIN MAJOR FISHERIES

PACIFIC TUNA FISHERY

The 1963 domestic catch of tuna landed at Pacific Coast and Hawaii ports totaled 306.9 million pounds valued at \$39.2 million--an increase of 2 million pounds (1 percent) but a decline of \$5.4 million (12 percent) compared with the previous year. The reduced value of the 1963 tuna catch resulted principally from ex-vessel price disputes and from a general price decline which followed adverse publicity when a few cans of contaminated tuna were marketed early in the year.

Albacore landings of 60.8 million pounds, second only to the record catch of 1950, were nearly 15 million pounds more than in 1962. This gain, however, was offset by a yellowfin production (110 million pounds) which declined 14.5 million pounds and bluefin landings (31.3 million pounds) which were down 1.1 million pounds. Skipjack landings totaling 104.7 million pounds increased 2.6 million pounds over the previous year.

Conversion of the clipper fleet in California to purse seiners had almost been completed in 1963. Several new large tuna vessels were added to the fleet during the year, but most of these craft landed their catch in Puerto Rico. One of the vessels, the Nautilus, an 811-gross-ton converted military craft, landed 790 tons of tuna at San Pedro, Calif., in the fall of 1963, a record catch for one fishing trip.

SUMMARY OF PACIFIC COAST TUNA OPERATING UNITS, 1963

ITEM	PURSE SEINERS	LINES, HAND			TOTAL, EXCLUSIVE OF DUPLICATION
		ALBACORE BAIT BOATS	YELLOW-FIN 1/	ALBACORE TROLLERS	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
FISHERMEN:					
ON VESSELS	1,547	627	425	2,289	4,289
ON BOATS AND SHORE	-	46	30	467	534
TOTAL	1,547	675	455	2,756	4,823
VESSELS, MOTOR:					
5 - 9 TONS	-	1	1	96	96
10 - 19 TONS	1	75	15	461	487
20 - 29 TONS	-	46	13	248	267
30 - 39 TONS	1	39	10	121	134
40 - 49 TONS	1	16	11	44	53
50 - 59 TONS	2	5	4	20	27
60 - 69 TONS	2	4	3	11	15
70 - 79 TONS	3	1	1	5	9
80 - 89 TONS	4	2	1	3	9
90 - 99 TONS	6	2	3	1	10
100 - 109 TONS	2	-	1	1	4
110 - 119 TONS	5	-	-	1	6
120 - 129 TONS	5	-	-	1	6
130 - 139 TONS	3	-	-	1	4
140 - 149 TONS	1	-	-	-	1
150 - 159 TONS	2	-	-	-	2
160 - 169 TONS	2	-	3	-	5
170 - 179 TONS	1	-	-	-	1
180 - 189 TONS	3	-	1	-	4
190 - 199 TONS	5	-	6	-	11
200 - 209 TONS	-	-	1	-	1
210 - 219 TONS	2	-	-	-	2
220 - 229 TONS	1	-	-	-	1
230 - 239 TONS	4	-	-	-	4
250 - 259 TONS	3	-	-	-	3
260 - 269 TONS	3	-	-	-	3
270 - 279 TONS	3	-	1	-	4
290 - 299 TONS	2	-	-	-	2
300 - 309 TONS	1	-	-	-	1
310 - 319 TONS	4	-	-	-	4
320 - 329 TONS	2	-	-	-	2
330 - 339 TONS	2	-	-	-	2
340 - 349 TONS	3	-	-	-	3
350 - 359 TONS	7	-	-	-	7
360 - 369 TONS	4	-	-	-	4
370 - 379 TONS	10	-	1	-	10
380 - 389 TONS	3	-	-	-	3
390 - 399 TONS	2	-	-	-	2

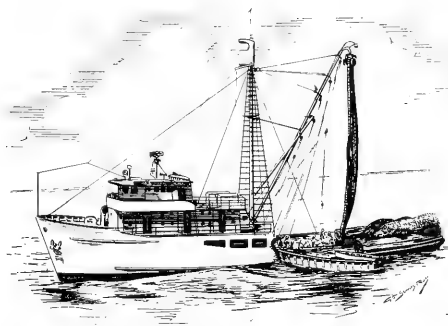
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SUMMARY OF PACIFIC COAST TUNA
OPERATING UNITS, 1963 - Continued

ITEM	PURSE SEINES	LINES, HAND			TOTAL, EXCLUSIVE OF DUPLICATION
		ALBACORE BAIT BOATS	YELLOWFIN ^{1/}	ALBACORE TROLLERS	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
VESSELS, MOTOR (GROSS TONS):					
400 - 409 TONS	1	-	-	-	1
410 - 419 TONS	2	-	-	-	2
420 - 429 TONS	2	-	-	-	2
430 - 439 TONS	3	1	1	-	4
440 - 449 TONS	4	-	-	-	4
450 - 459 TONS	2	-	-	-	2
460 - 469 TONS	2	-	-	-	2
470 - 479 TONS	3	-	-	-	3
480 - 489 TONS	3	-	-	-	3
490 - 499 TONS	1	-	-	-	1
500 - 509 TONS	1	-	-	-	1
510 - 519 TONS	1	-	-	-	1
520 - 529 TONS	1	-	-	-	1
530 - 539 TONS	1	-	-	-	1
540 - 549 TONS	1	-	-	-	1
550 - 559 TONS	1	-	-	-	1
TOTAL VESSELS	134	192	77	1,014	1,239
TOTAL GROSS TONNAGE	38,513	5,638	5,471	22,263	66,204
BOATS, MOTOR	246	55	46	312	633
GEAR:					
NUMBER	134	648	402	11,734	-
LENGTH, YARDS	97,460	-	-	-	-
HOOKS	-	648	402	11,734	-

^{1/} VESSELS OF 50 TONS OR MORE CAPACITY ARE CONSIDERED CLIPPER CRAFT.



TUNA PURSE SEINER

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF PACIFIC TUNA CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES, STATE, AND DISTRICT	PURSE SEINES		LINES		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
ALBACORE:						
WASHINGTON:						
PUGET SOUND	-	-	36	5	36	5
COASTAL	-	-	185	28	185	28
COLUMBIA RIVER	-	-	306	52	306	52
TOTAL	-	-	527	85	527	85
OREGON:						
COLUMBIA RIVER	-	-	8,283	1,306	8,283	1,306
COASTAL	-	-	3,117	451	3,117	451
TOTAL	-	-	11,400	1,757	11,400	1,757
CALIFORNIA:						
NORTHERN	-	-	6,690	916	6,690	916
SAN FRANCISCO	-	-	3,425	475	3,425	475
MONTEREY	-	-	5,841	803	5,841	803
SANTA BARBARA	-	-	3,608	511	3,608	511
SAN PEDRO	2,604	415	20,995	3,342	23,599	3,757
SAN DIEGO	137	21	5,560	634	5,697	855
TOTAL	2,741	436	46,119	6,881	48,860	7,317
HAWAII	-	-	15	5	15	5
GRAND TOTAL, ALBACORE	2,741	436	58,061	8,728	60,802	9,164
BLUEFIN:						
CALIFORNIA:						
SAN FRANCISCO	68	10	-	-	68	10
SAN PEDRO	26,279	2,962	-	-	26,279	2,962
SAN DIEGO	3,986	420	-	-	3,986	420
TOTAL	30,353	3,392	-	-	30,353	3,392
HAWAII 1/	-	-	948	502	948	502
GRAND TOTAL, BLUEFIN	30,353	3,392	948	502	31,301	3,894
LITTLE, HAWAII	-	-	60	8	60	8
SKIPJACK:						
CALIFORNIA:						
SAN FRANCISCO	190	19	22	2	212	21
SAN PEDRO	62,728	6,763	8,892	958	71,620	7,721
SAN DIEGO	21,668	2,322	2,920	310	24,788	2,632
TOTAL	84,786	9,104	11,834	1,270	96,620	10,374
HAWAII	-	-	8,100	1,090	8,100	1,090
GRAND TOTAL, SKIPJACK	84,786	9,104	19,934	2,360	104,720	11,464
YELLOWFIN:						
CALIFORNIA:						
SAN FRANCISCO	1,143	151	255	34	1,398	185
SAN PEDRO	75,454	9,998	7,675	1,017	83,129	11,015
SAN DIEGO	20,648	2,744	4,408	586	25,056	3,330
TOTAL	97,245	12,893	12,338	1,637	109,583	14,530
HAWAII	-	-	385	153	385	153
GRAND TOTAL, YELLOWFIN	97,245	12,893	12,723	1,790	109,968	14,683
GRAND TOTAL, ALL SPECIES	215,125	25,825	91,726	13,388	306,651	39,213

1/ INCLUDES THE CATCH OF BIGEYE TUNA.

REVIEW OF CERTAIN MAJOR FISHERIES

U. S. MENHADEN FISHERY

U. S. menhaden landings totaled 1.8 billion pounds in 1963--37 percent of the total U. S. production of all species. The catch declined 532 million pounds compared with the record 1962 landings.

Of the total, 53 percent was landed in the Gulf of Mexico; 21, in the Middle Atlantic States; 14, in the Chesapeake States; and 12 percent in the South Atlantic States. Less than 1/2 of 1 percent was taken in the New England States.

Purse seines accounted for 97 percent of the 1963 catch. The remainder was taken by pound nets, haul seines, gill nets, fyke and hoop nets, trammel nets, floating traps, and weirs.

During 1963, a total of 3,140 fishermen, 179 vessels, 362 motorboats, and 62 other boats engaged in the menhaden purse seine fishery.

SUMMARY OF MENHADEN PURSE SEINE VESSELS, BY TONNAGE GROUPS, 1963

GROSS TONNAGE	MIDDLE ATLANTIC				CHESAPEAKE		
	NEW YORK	NEW JERSEY	DELAWARE	TOTAL, EXCLUSIVE OF DUPLICATION	MARYLAND	VIRGINIA	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
20 - 29	-	-	-	-	-	1	1
110 - 119	-	1	-	-	-	-	-
120 - 129	-	-	-	-	1	2	2
140 - 149	-	-	1	1	-	4	4
150 - 159	-	1	-	1	-	3	3
160 - 169	-	-	1	1	-	1	1
170 - 179	-	4	1	5	-	-	-
180 - 189	1	2	1	4	-	2	2
190 - 199	-	16	15	30	-	8	8
220 - 229	4	-	-	4	-	1	1
230 - 239	1	-	-	1	-	1	1
240 - 249	-	-	1	1	-	2	2
250 - 259	-	-	-	-	-	3	3
260 - 269	-	-	-	-	-	4	4
280 - 289	-	3	-	3	-	1	1
290 - 299	1	-	-	1	-	1	1
300 - 309	2	-	-	2	-	-	-
310 - 319	1	-	1	2	-	-	-
320 - 329	-	-	-	-	-	1	1
370 - 379	-	-	-	-	-	1	1
390 - 399	-	-	-	-	-	1	1
530 - 539	-	-	-	-	-	1	1
540 - 549	-	-	-	-	-	1	1
TOTAL VESSELS	10	27	21	57	1	39	39
TOTAL GROSS TONNAGE	2,540	5,348	4,203	11,893	123	8,942	8,942

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF MENHADEN PURSE SEINE VESSELS,
BY TONNAGE GROUPS, 1963 - Continued

GROSS TONNAGE	SOUTH ATLANTIC			GULF				GRAND TOTAL, EXCLUSIVE OF DUPLICATION
	NORTH CAROLINA	FLORIDA, EAST COAST	TOTAL, EXCLUSIVE OF DUPLICATION	MISSISSIPPI	LOUISIANA	TEXAS	TOTAL, EXCLUSIVE OF DUPLICATION	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
20 - 29	-	-	-	-	-	-	-	1
40 - 49	1	-	1	-	-	-	-	1
50 - 59	2	-	2	-	-	-	-	2
60 - 69	2	-	2	-	-	-	-	2
70 - 79	1	-	1	-	-	-	-	1
90 - 99	-	-	-	-	1	-	1	1
100 - 109	-	-	-	-	2	-	2	2
110 - 119	1	1	2	-	1	-	1	3
120 - 129	-	1	1	-	1	-	1	4
130 - 139	-	-	-	-	-	1	1	1
140 - 149	1	1	2	-	4	1	5	11
150 - 159	1	-	1	-	-	-	-	4
160 - 169	-	-	-	-	2	2	6	6
170 - 179	1	-	1	1	5	-	7	11
180 - 189	2	-	2	2	1	4	7	13
190 - 199	15	-	15	3	8	-	11	44
210 - 219	-	-	-	2	3	-	3	3
220 - 229	3	-	3	1	3	-	4	9
230 - 239	2	-	2	4	1	-	4	6
240 - 249	4	-	4	-	3	-	1	7
250 - 259	6	-	6	-	3	-	3	9
260 - 269	4	-	4	1	2	-	3	9
280 - 289	1	-	1	-	-	-	-	3
290 - 299	2	-	2	1	-	-	1	3
300 - 309	-	-	-	-	1	-	1	3
310 - 319	2	-	2	-	1	-	1	3
320 - 329	1	-	1	-	-	-	-	1
370 - 379	-	-	-	-	-	-	-	1
390 - 399	-	-	-	-	-	-	-	1
410 - 419	-	-	-	-	1	-	1	1
460 - 469	-	-	-	-	1	-	1	1
470 - 479	-	-	-	3	2	-	5	5
480 - 489	-	-	-	-	2	-	2	2
530 - 539	1	-	1	-	-	-	-	1
540 - 549	1	-	1	-	-	-	-	1
600 - 609	-	-	-	1	-	-	1	1
610 - 619	-	-	-	1	-	-	1	1
640 - 649	-	-	-	-	1	-	1	1
TOTAL VESSELS	54	3	57	16	48	8	72	179
TOTAL GROSS TONNAGE	11,658	363	12,241	4,998	11,454	1,329	17,781	40,129

SUMMARY OF MENHADEN PURSE SEINE OPERATING UNITS, 1963

AREA AND STATE	VESSELS		BOATS		FISHERMEN	PURSE SEINES	
			MOTOR	OTHER			
	NUMBER	GROSS TONNAGE	NUMBER	NUMBER	NUMBER	NUMBER	LENGTH IN YARDS
MIDDLE ATLANTIC:							
NEW YORK	10	2,540	20	-	170	10	4,360
NEW JERSEY	27	5,348	54	-	459	27	10,540
DELAWARE	21	4,203	42	-	357	21	7,420
TOTAL, EXCLUSIVE OF DUPLICATION, . .	57	11,893	114	-	969	57	21,990
CHESAPEAKE:							
MARYLAND	1	123	1	-	9	1	375
VIRGINIA	39	8,942	82	-	631	39	14,510
TOTAL, EXCLUSIVE OF DUPLICATION, . .	39	8,942	82	-	631	39	14,510
SOUTH ATLANTIC:							
NORTH CAROLINA	54	11,858	108	54	939	54	21,600
FLORIDA, EAST COAST,	3	383	6	-	54	3	1,200
TOTAL, EXCLUSIVE OF DUPLICATION, . .	57	12,241	114	54	993	57	22,600
GULF:							
MISSISSIPPI,	16	4,998	32	-	282	16	8,995
LOUISIANA,	48	11,454	96	-	879	48	20,905
TEXAS,	8	1,329	16	8	168	8	4,000
TOTAL, EXCLUSIVE OF DUPLICATION, . .	72	17,781	144	8	1,329	72	33,900
GRAND TOTAL, EXCLUSIVE OF DUPLICATION	179	40,129	362	62	3,140	179	75,220

SUMMARY OF MENHADEN CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	HAUL SEINES		PURSE SEINES	
	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND, MASSACHUSETTS	-	-	324	4
MIDDLE ATLANTIC:				
NEW YORK	-	-	90,600	1,003
NEW JERSEY	-	-	166,148	2,031
DELAWARE	-	-	102,824	1,059
TOTAL,	-	-	359,572	4,093
CHESAPEAKE:				
MARYLAND	4	(1)	1,909	32
VIRGINIA	7,720	107	217,153	2,780
TOTAL,	7,724	107	219,062	2,812
SOUTH ATLANTIC:				
NORTH CAROLINA	93	1	190,121	2,325
FLORIDA, EAST COAST,	-	-	25,254	253
TOTAL,	93	1	215,375	2,578
GULF:				
FLORIDA, WEST COAST,	35	2	-	-
MISSISSIPPI,	-	-	250,429	3,276
LOUISIANA,	-	-	633,484	7,862
TEXAS,	-	-	83,736	1,034
TOTAL,	35	2	967,649	12,172
GRAND TOTAL,	7,852	110	1,761,982	21,659

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF MENHADEN CATCH, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	WEIRS		POUND NETS		FLOATING TRAPS			
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE		
NEW ENGLAND:								
MASSACHUSETTS	-	-	21	(1)	-	-		
RHODE ISLAND	-	-	-	-	3	(1)		
TOTAL	-	-	21	(1)	3	(1)		
MIDDLE ATLANTIC:								
NEW YORK	-	-	1,050	11	-	-		
NEW JERSEY	(1)	(1)	12,112	163	-	-		
TOTAL	(1)	(1)	13,162	174	-	-		
CHESAPEAKE:								
MARYLAND	-	-	1,361	22	-	-		
VIRGINIA	-	-	30,707	406	-	-		
TOTAL	-	-	32,068	428	-	-		
GRAND TOTAL	(1)	(1)	45,251	602	3	(1)		
AREA AND STATE	FYKE AND HOOP NETS		GILL NETS		TRAMMEL NETS		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:								
MASSACHUSETTS	-	-	-	-	-	-	345	4
RHODE ISLAND	-	-	-	-	-	-	3	(1)
CONNECTICUT	-	-	5	(1)	-	-	5	(1)
TOTAL	-	-	5	(1)	-	-	353	4
MIDDLE ATLANTIC:								
NEW YORK	-	-	-	-	-	-	91,650	1,014
NEW JERSEY	-	-	117	3	-	-	176,377	2,197
DELAWARE	-	-	-	-	-	-	102,624	1,059
TOTAL	-	-	117	3	-	-	372,851	4,270
CHESAPEAKE:								
MARYLAND	1	(1)	18	(1)	-	-	3,293	54
VIRGINIA	142	2	(1)	(1)	-	-	255,722	3,295
TOTAL	143	2	18	(1)	-	-	259,015	3,349
SOUTH ATLANTIC:								
NORTH CAROLINA	-	-	-	-	-	-	190,214	2,326
FLORIDA, EAST COAST.	-	-	418	10	-	-	25,672	263
TOTAL	-	-	418	10	-	-	215,886	2,589
GULF:								
FLORIDA, WEST COAST.	-	-	1	(1)	8	(1)	44	2
MISSISSIPPI	-	-	-	-	-	-	250,429	3,276
LOUISIANA	-	-	-	-	-	-	633,484	7,862
TEXAS	-	-	-	-	-	-	83,736	1,034
TOTAL	-	-	1	(1)	8	(1)	967,693	12,174
GRAND TOTAL	143	2	559	13	8	(1)	1,615,798	22,366

1/ LESS THAN 500 POUNDS OR \$500.

U. S. CLAM FISHERY

The 1963 clam fishery produced a record 63.4 million pounds of meats valued at \$14.2 million--an increase of 9.2 million pounds and \$2.4 million compared with 1962, the former record year. Surf clams, landed principally in New Jersey, accounted for 61 percent of the catch; hard clams, 23 percent; and soft clams, 15 percent. The remainder consisted of ocean quahogs, razor, and mixed clams. The Middle Atlantic led all other areas with 72 percent of catch. The Chesapeake area accounted for 15 percent, New England, 11 percent, and the South Atlantic, Gulf, Pacific states, and Hawaii, the remaining 2 percent.

Clam dredges took 49.5 million pounds (78 percent); tongs, 5.9 million (9 percent), and rakes 3.9 million (6 percent). The remainder of the catch was taken with hoes, forks, shovels, or gathered by hand.

In Section 14 of this Digest, under the heading "Conversion Factors", there is a table which gives the average State yield per U.S. standard bushel for the clams taken on the Atlantic and Gulf Coasts. Supplementary shellfish tables appear after the summary tables for each Atlantic and Gulf Regional section.

SUMMARY OF CLAM CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	HARD		OCEAN QUAHOG		RAZOR		SOFT	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:								
MAINE	2	2	-	-	-	-	1,832	786
MASSACHUSETTS	1,474	1,039	-	-	24	8	948	606
RHODE ISLAND	2,224	1,295	104	10	-	-	1	1
CONNECTICUT	287	126	-	-	-	-	-	-
TOTAL	3,987	2,462	104	10	24	8	2,781	1,393
MIDDLE ATLANTIC:								
NEW YORK	5,311	3,581	-	-	8	2	99	28
NEW JERSEY	1,584	635	-	-	-	-	15	6
DELAWARE	262	106	-	-	-	-	-	-
TOTAL	7,157	4,322	-	-	8	2	114	34
CHESAPEAKE:								
MARYLAND	489	265	-	-	-	-	6,859	1,499
VIRGINIA	2,096	1,012	-	-	-	-	-	-
TOTAL	2,585	1,277	-	-	-	-	6,859	1,499
SOUTH ATLANTIC:								
NORTH CAROLINA	332	130	-	-	-	-	-	-
SOUTH CAROLINA	73	25	-	-	-	-	-	-
FLORIDA, EAST COAST	1	(1)	-	-	-	-	-	-
TOTAL	406	155	-	-	-	-	-	-
GULF, FLORIDA, WEST COAST	7	2	-	-	-	-	-	-
PACIFIC:								
ALASKA	-	-	-	-	144	52	-	-
WASHINGTON	385	182	-	-	223	110	-	-
OREGON	-	-	-	-	10	5	-	-
CALIFORNIA	1	1	-	-	-	-	-	-
TOTAL	386	183	-	-	377	167	-	-
HAWAII	1	2	-	-	-	-	-	-
GRAND TOTAL	14,529	8,403	104	10	409	177	9,754	2,926

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF CLAM CATCH, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	SURF		MIXED		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	-	-	-	-	1,834	788
MASSACHUSETTS	-	-	-	-	2,446	1,653
RHODE ISLAND	-	-	-	-	2,329	1,306
CONNECTICUT	-	-	-	-	287	126
TOTAL	-	-	-	-	6,896	3,873
MIDDLE ATLANTIC:						
NEW YORK	974	91	-	-	6,392	3,702
NEW JERSEY	37,548	2,580	-	-	39,147	3,221
DELAWARE	-	-	-	-	262	106
TOTAL	38,522	2,671	-	-	45,801	7,029
CHESAPEAKE:						
MARYLAND	64	5	-	-	7,412	1,769
VIRGINIA	-	-	-	-	2,096	1,012
TOTAL	64	5	-	-	9,508	2,781
SOUTH ATLANTIC:						
NORTH CAROLINA	-	-	-	-	332	130
SOUTH CAROLINA	-	-	-	-	73	25
FLORIDA, EAST COAST	-	-	-	-	1	(1)
TOTAL	-	-	-	-	406	155
GULF, FLORIDA, WEST COAST	-	-	-	-	7	2
PACIFIC:						
ALASKA	-	-	-	-	144	52
WASHINGTON	-	-	-	-	608	292
OREGON	-	-	21	10	31	15
CALIFORNIA	-	-	-	-	1	1
TOTAL	-	-	21	10	784	360
HAWAII	-	-	-	-	1	2
GRAND TOTAL	38,586	2,676	21	10	63,403	14,202

1/ LESS THAN \$500.

SUMMARY OF CLAM CATCH BY GEAR, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

GEAR	HARD		OCEAN QUAHOG		RAZOR		SOFT	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
DREDGES	3,922	2,161	104	10	-	-	6,859	1,499
TONGS	5,909	3,414	-	-	-	-	-	-
RAKES	3,675	2,352	-	-	8	2	156	76
HOES	52	40	-	-	24	8	2,732	1,348
FORKS	-	-	-	-	-	-	-	-
SHOVELS	349	171	-	-	377	167	-	-
BY HAND	621	263	-	-	-	-	6	2
UNCLASSIFIED	1	2	-	-	-	-	-	-
TOTAL	14,529	8,403	104	10	409	177	9,754	2,926
GEAR	SURF		MIXED		TOTAL			
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE		
DREDGES	38,566	2,674	-	-	49,451	6,344		
TONGS	-	-	-	-	5,909	3,414		
RAKES	20	2	-	-	3,859	2,432		
HOES	-	-	-	-	2,808	1,396		
FORKS	-	-	-	-	-	-		
SHOVELS	-	-	19	9	745	347		
DIVING, OUTFITS	-	-	2	1	2	1		
BY HAND	-	-	-	-	627	265		
UNCLASSIFIED	-	-	-	-	1	2		
TOTAL	38,586	2,676	21	10	63,403	14,202		

U. S. CRAB FISHERY

The U. S. catch of crabs in 1963 totaled a record 252.3 million pounds valued at \$21.4 million--a gain of 18 million pounds (6 percent) and \$3 million (14 percent) compared with 1962.

The Pacific Coast States led in volume with 103.8 million pounds (41 percent) followed by the Chesapeake States with 66.1 million pounds (26 percent). The South Atlantic States accounted for 51 million pounds (20 percent) and the Gulf States, 27.5 million pounds (11 percent). The remainder was landed in the New England and Middle Atlantic States and Hawaii.

In 1963, landings of Alaska king crabs totaled a record 78.7 million pounds--26 million pounds more than in 1962. Hard and soft blue crab landings of 145.3 million pounds were 10 million pounds below the record 1962 catch. Dungeness crab landings (24.9 million pounds) were 1.5 million pounds greater than in 1962, but only 54 percent of the record 1948 catch of 45.8 million pounds.

In Section 14 under the heading "Conversion Factors", is a table which gives the average number of crabs per pound by species for each of the Atlantic and Gulf States. Supplementary shellfish tables are shown after the summary catch tables for the Atlantic and Gulf States.

SUMMARY OF CRAB CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	BLUE				DUNGENESS	
	HARD		SOFT AND PEELER		QUANTITY	VALUE
	QUANTITY	VALUE	QUANTITY	VALUE		
NEW ENGLAND, CONNECTICUT . . .	(1)	(1)	-	-	-	-
MIDDLE ATLANTIC:						
NEW JERSEY	861	105	33	7	-	-
DELAWARE	522	34	3	1	-	-
TOTAL	1,383	139	36	8	-	-
CHESAPEAKE:						
MARYLAND	16,934	1,151	2,108	753	-	-
VIRGINIA	46,138	2,546	949	329	-	-
TOTAL	63,072	3,697	3,057	1,082	-	-
SOUTH ATLANTIC:						
NORTH CAROLINA	18,835	945	83	38	-	-
SOUTH CAROLINA	8,839	423	-	-	-	-
GEORGIA	14,500	596	-	-	-	-
FLORIDA, EAST COAST	8,595	490	(1)	(1)	-	-
TOTAL	50,769	2,454	83	38	-	-
GULF:						
FLORIDA, WEST COAST	13,148	644	4	2	-	-
ALABAMA	1,297	75	-	-	-	-
MISSISSIPPI	1,112	64	3	1	-	-
LOUISIANA	7,982	447	329	164	-	-
TEXAS	2,960	199	2	(1)	-	-
TOTAL	26,519	1,429	338	167	-	-
PACIFIC COAST:						
ALASKA	-	-	-	-	12,084	1,358
WASHINGTON	-	-	-	-	6,574	1,390
OREGON	-	-	-	-	4,153	870
CALIFORNIA	-	-	-	-	1,952	688
TOTAL	-	-	-	-	24,863	4,306
GRAND TOTAL	141,743	7,719	3,514	1,295	24,863	4,306

SEE FOOTNOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF CRAB CATCH, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	GREEN		KING		ROCK	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	-	-	-	-	2,011	84
NEW HAMPSHIRE	45	2	-	-	25	1
MASSACHUSETTS	18	2	-	-	33	5
RHODE ISLAND	8	1	-	-	227	25
TOTAL	71	5	-	-	2,296	115
MIDDLE ATLANTIC, NEW JERSEY	-	-	-	-	23	1
PACIFIC COAST:						
ALASKA	-	-	78,740	7,607	-	-
CALIFORNIA	-	-	-	-	241	22
TOTAL	-	-	78,740	7,607	241	22
GRAND TOTAL	71	5	78,740	7,607	2,560	138
AREA AND STATE	STONE		OTHER		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	-	-	-	-	2,011	84
NEW HAMPSHIRE	-	-	-	-	70	3
MASSACHUSETTS	-	-	-	-	51	7
RHODE ISLAND	-	-	-	-	235	26
CONNECTICUT	-	-	-	-	(1)	(1)
TOTAL	-	-	-	-	2,367	120
MIDDLE ATLANTIC:						
NEW JERSEY	-	-	-	-	917	113
DELAWARE	-	-	-	-	525	35
TOTAL	-	-	-	-	1,442	148
CHESAPEAKE:						
MARYLAND	-	-	-	-	19,042	1,904
VIRGINIA	-	-	-	-	47,067	2,675
TOTAL	-	-	-	-	66,129	4,779
SOUTH ATLANTIC:						
NORTH CAROLINA	-	-	-	-	18,918	983
SOUTH CAROLINA	-	-	-	-	8,639	423
GEORGIA	-	-	-	-	14,500	596
FLORIDA, EAST COAST	157	63	-	-	6,752	553
TOTAL	157	63	-	-	51,009	2,555
GULF:						
FLORIDA, WEST COAST	660	207	-	-	13,812	853
ALABAMA	-	-	-	-	1,297	75
MISSISSIPPI	-	-	-	-	1,115	65
LOUISIANA	-	-	-	-	8,311	611
TEXAS	-	-	-	-	2,982	199
TOTAL	660	207	-	-	27,517	1,803
PACIFIC COAST:						
ALASKA	-	-	-	-	90,824	8,965
WASHINGTON	-	-	-	-	6,674	1,390
OREGON	-	-	-	-	4,153	870
CALIFORNIA	-	-	-	-	2,193	710
TOTAL	-	-	-	-	103,844	11,935
HAWAII	-	-	26	14	26	14
GRAND TOTAL	817	270	26	14	252,334	21,354

1/ LESS THAN 500 POUNDS OR \$500.

REVIEW OF CERTAIN MAJOR FISHERIES

429

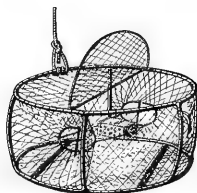
SUMMARY OF CRAB CATCH BY GEAR, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

GEAR	BLUE				DUNGNESS	
	HARD		SOFT AND PEELER			
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
OTTER TRAWLS	11,167	442	78	35	12	4
POUND NETS	155	8	500	152	-	-
POTS	88,770	4,912	482	179	24,851	4,302
LINES, TROT WITH BAITS	22,168	1,291	205	62	-	-
DIP NETS	2,434	137	287	131	-	-
SCRAPES	97	7	1,889	660	-	-
DREDGES	16,952	922	-	-	-	-
BRUSH TRAPS	-	-	51	26	-	-
BY HAND	-	-	22	10	-	-
TOTAL	141,743	7,719	3,514	1,295	24,863	4,306

GEAR	GREEN		KING		ROCK	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
OTTER TRAWLS	-	-	-	-	20	1
POTS	71	5	78,740	7,607	2,540	137
TOTAL	71	5	78,740	7,607	2,560	138

GEAR	STONE		OTHER		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
OTTER TRAWLS	-	-	-	-	11,277	482
POUND NETS	-	-	-	-	655	160
POTS	817	270	3	1	196,274	17,413
LINES, TROT WITH BAITS	-	-	-	-	22,373	1,373
DIP NETS	-	-	-	-	2,721	268
LIFT NETS	-	-	20	11	20	11
SCRAPES	-	-	-	-	1,986	657
DREDGES	-	-	-	-	16,952	922
BRUSH TRAPS	-	-	-	-	51	26
BY HAND	-	-	-	-	22	10
UNCLASSIFIED	-	-	3	2	3	2
TOTAL	817	270	26	14	252,334	21,354



DUNGNESS CRAB POT

REVIEW OF CERTAIN MAJOR FISHERIES

U. S. OYSTER FISHERY

The oyster fishery in 1963 produced 56.4 million pounds of meats valued at \$27.1 million--a gain of 2.4 million pounds (4 percent) but a decline of \$2 million (7 percent) compared with the previous year. The increased production occurred principally in the Gulf States, where the 24-million-pound catch was 5.3 million pounds more than in 1962. In 1963, the Chesapeake, Middle Atlantic, and Pacific areas showed a marked decrease in both volume and value of the oyster catch. The lower value occurred chiefly in the Chesapeake States, (\$13.7 million), and the Middle Atlantic States (\$1.2 million) which were \$2.2 and \$1.4 million respectively less than in 1962.

The Gulf States led in the production of oyster meats with a yield of 24 million pounds--41 percent of the total catch. The Chesapeake Bay area was second with 18.3 million pounds (31 percent), followed by the Pacific area with 9.8 million pounds (17 percent). The New England, Middle Atlantic, and South Atlantic States accounted for the remainder.

Dredges were used to take 38.4 million pounds (66 percent) of the oyster harvest, while tongs accounted for 15.5 million pounds (27 percent). The remainder of the catch was taken with grabs, rakes, and forks, or was gathered by hand.

In Section 14 of this Digest is a table which gives the volume of the bushel measures used for oysters in the various Atlantic and Gulf States and the average yield per bushel. Supplementary shellfish tables appear after the summary tables for each Atlantic and Gulf regional section.

ATLANTIC AND GULF COAST OYSTER PRODUCTION, 1952-63



SUMMARY OF OYSTER CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	DREDGES		TONGS		GRABS		RAKES	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:								
MAINE	2	10	-	-	-	-	-	-
MASSACHUSETTS	9	-	28	33	-	-	-	-
RHODE ISLAND	-	-	11	12	-	-	-	-
CONNECTICUT	393	462	2	1	-	-	-	-
TOTAL	404	474	41	46	-	-	-	-
MIDDLE ATLANTIC:								
NEW YORK	394	572	-	-	-	-	-	-
NEW JERSEY	449	482	67	76	-	-	-	-
DELAWARE	41	25	-	-	-	-	-	-
TOTAL	884	1,079	67	76	-	-	-	-
CHESAPEAKE:								
MARYLAND	2,627	2,117	5,129	3,501	-	-	-	-
VIRGINIA	8,089	6,218	2,344	1,827	-	-	84	65
TOTAL	10,716	8,335	7,473	5,328	-	-	84	65
SOUTH ATLANTIC:								
NORTH CAROLINA	164	115	175	109	-	-	-	-
SOUTH CAROLINA	-	-	-	-	2,487	1,013	-	-
GEORGIA	-	-	99	34	-	-	-	-
FLORIDA, EAST COAST	-	-	25	8	-	-	-	-
TOTAL	164	115	299	151	2,487	1,013	-	-
GULF:								
FLORIDA, WEST COAST	-	-	4,279	1,224	-	-	-	-
ALABAMA	3	1	992	351	-	-	-	-
MISSISSIPPI	4,061	829	619	146	-	-	-	-
LOUISIANA	10,168	3,270	1,368	442	-	-	-	-
TEXAS	2,558	892	37	12	-	-	-	-
TOTAL	16,790	4,992	7,295	2,175	-	-	-	-
PACIFIC:								
WASHINGTON:								
PACIFIC	8,103	2,042	-	-	-	-	-	-
WESTERN	31	101	-	-	-	-	-	-
TOTAL	8,134	2,143	-	-	-	-	-	-
OREGON, PACIFIC	387	109	-	-	-	-	-	-
CALIFORNIA:								
EASTERN	-	-	14	5	-	-	-	-
PACIFIC	947	171	307	55	-	-	-	-
TOTAL	947	171	321	60	-	-	-	-
TOTAL PACIFIC STATES	9,468	2,423	321	60	-	-	-	-
GRAND TOTAL	38,426	17,418	15,496	7,836	2,487	1,013	84	65

AREA AND STATE	FORKS		BY HAND		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	-	-	-	-	2	2
MASSACHUSETTS	7	13	-	-	44	56
RHODE ISLAND	-	-	-	-	11	12
CONNECTICUT	-	-	-	-	395	463
TOTAL	7	13	-	-	452	533
MIDDLE ATLANTIC:						
NEW YORK	-	-	-	-	394	572
NEW JERSEY	-	-	-	-	516	558
DELAWARE	-	-	-	-	41	25
TOTAL	-	-	-	-	951	1,155

SEE NOTE AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

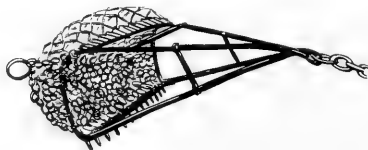
SUMMARY OF OYSTER CATCH, 1963 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	FORKS		BY HAND		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
CHESAPEAKE:						
MARYLAND	-	-	-	-	7,756	5,618
VIRGINIA	-	-	1	(1)	10,518	8,110
TOTAL	-	-	1	(1)	18,274	13,728
SOUTH ATLANTIC:						
NORTH CAROLINA	-	-	355	133	694	357
SOUTH CAROLINA	-	-	1,340	543	3,827	1,556
GEORGIA	-	-	137	48	236	82
FLORIDA, EAST COAST.	-	-	55	17	80	25
TOTAL	-	-	1,887	741	4,837	2,020
GULF:						
FLORIDA, WEST COAST.	-	-	4	1	4,283	1,225
ALABAMA	-	-	-	-	995	352
MISSISSIPPI	-	-	-	-	4,680	975
LOUISIANA	-	-	27	9	11,563	3,721
TEXAS	-	-	23	9	2,618	913
TOTAL	-	-	54	19	24,139	7,186
PACIFIC:						
WASHINGTON:						
PACIFIC	-	-	-	-	8,103	2,042
WESTERN	-	-	-	-	31	101
TOTAL	-	-	-	-	8,134	2,143
OREGON, PACIFIC	-	-	-	-	387	109
CALIFORNIA:						
EASTERN	-	-	-	-	14	5
PACIFIC	-	-	2	(1)	1,256	226
TOTAL	-	-	2	(1)	1,270	231
TOTAL PACIFIC STATES	-	-	2	(1)	9,791	2,483
GRAND TOTAL	7	13	1,944	760	58,444	27,105

1/ LESS THAN \$500

NOTE:--THE CATCH BY HAND IN WASHINGTON AND OREGON HAS BEEN INCLUDED WITH THE CATCH BY DREDGES. IN CALIFORNIA, IT HAS BEEN INCLUDED WITH TONGS.



OYSTER DREDGE

SUMMARY OF ATLANTIC AND GULF COAST OYSTER CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	PUBLIC		PRIVATE	
	<u>QUANTITY</u>	<u>VALUE</u>	<u>QUANTITY</u>	<u>VALUE</u>
NEW ENGLAND:				
MAINE	2	2	-	-
MASSACHUSETTS	18	24	26	32
RHODE ISLAND	11	12	-	-
CONNECTICUT	2	1	393	462
TOTAL	33	39	419	494
MIDDLE ATLANTIC:				
NEW YORK	-	-	394	572
NEW JERSEY	66	73	450	485
DELAWARE	-	-	41	25
TOTAL	66	73	885	1,082
CHESAPEAKE				
MARYLAND	6,408	4,521	1,348	1,097
VIRGINIA	1,993	1,558	8,525	6,552
TOTAL	8,401	6,079	9,873	7,649
SOUTH ATLANTIC:				
NORTH CAROLINA	616	315	78	42
SOUTH CAROLINA	-	-	3,827	1,556
GEORGIA	-	-	236	82
FLORIDA, EAST COAST	75	23	5	2
TOTAL	691	338	4,146	1,682
GULF:				
FLORIDA, WEST COAST	4,149	1,187	134	38
ALABAMA	889	322	106	30
MISSISSIPPI	4,262	857	418	118
LOUISIANA	2,797	898	8,766	2,823
TEXAS	2,540	878	78	35
TOTAL	14,637	4,142	9,502	3,044
GRAND TOTAL	23,828	10,671	24,825	13,951

SUMMARY OF OYSTER CATCH BY SPECIES, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

SPECIES	QUANTITY	VALUE
EASTERN:		
PUBLIC	23,828	10,671
PRIVATE ^{1/}	24,839	13,956
TOTAL	48,667	24,627
PACIFIC:		
WESTERN	9,746	2,377
WESTERN	31	101
GRAND TOTAL	58,444	27,105

^{1/} EASTERN, PRIVATE, INCLUDES 13,500 POUNDS OF OYSTERS, VALUED AT \$4,726 HARVESTED IN CALIFORNIA.

REVIEW OF CERTAIN MAJOR FISHERIES

U. S. SHRIMP FISHERY

U. S. shrimp landings in 1963 amounted to 240.5 million pounds valued at \$70 million-- a gain of 49.4 million pounds (26 percent) but a decline of more than \$3 million (4 percent) compared with the previous year. The increased production occurred chiefly in the Gulf States, where the 203-million-pound catch was 61.4 million pounds more than in 1962. In 1963, shrimp landings in the South Atlantic States (15.5 million pounds) and in the Pacific area (21.3 million pounds) were 10.5 and 1.6 million pounds less respectively, than in 1962. The price paid fishermen for the South Atlantic and Gulf catch averaged 31.5 cents per pound (heads-on weight)--11.3 cents less than in 1962.

The otter trawlfleet took 237 million pounds--99 percent of the catch. An additional 3.5 million pounds were taken by beam trawls, bag nets, pots and traps, cast nets, brush traps, and push nets.

In 1963, there were 16,528 fishermen employed on 3,553 vessels and 5,245 boats which operated in the U. S. shrimp otter trawl fishery. Texas led in the number of vessels (craft of 5 net tons and over) with 1,356, while Louisiana was first in boats with 2,867.

SUMMARY OF SHRIMP OTTER TRAWL VESSELS, BY TONNAGE GROUPS, 1963

GROSS TONNAGE	SOUTH ATLANTIC					TOTAL, EXCLUSIVE OF DUPLICATION
	NORTH CAROLINA	SOUTH CAROLINA	GEORGIA	FLORIDA, EAST COAST		
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
5 - 9	149	22	41	8		193
10 - 19	76	74	62	39		228
20 - 29	43	40	71	52		156
30 - 39	43	35	80	69		179
40 - 49	45	38	50	67		152
50 - 59	19	9	24	29		58
60 - 69	4	3	11	31		38
70 - 79	4	-	3	6		12
80 - 89	-	-	-	1		1
90 - 99	-	-	-	1		1
100 - 109	-	-	1	2		2
110 - 119	-	-	-	1		1
120 - 129	-	-	-	1		1
140 - 149	-	-	-	1		1
TOTAL VESSELS	393	221	363	350		1,023
TOTAL GROSS TONNAGE	8,181	5,762	10,523	13,611		28,501

GROSS TONNAGE	GULF					TOTAL, EXCLUSIVE OF DUPLICATION
	FLORIDA, WEST COAST	ALABAMA	MISSISSIPPI	LOUISIANA	TEXAS	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
5 - 9	23	6	8	56	18	94
10 - 19	66	50	75	252	137	463
20 - 29	57	40	112	187	88	343
30 - 39	155	40	93	197	160	396
40 - 49	166	47	64	200	199	396
50 - 59	71	30	33	138	173	262
60 - 69	237	24	30	158	367	516
70 - 79	57	7	11	55	131	168
80 - 89	10	2	3	12	29	37
90 - 99	2	-	1	4	6	10
100 - 109	2	1	2	1	4	6
110 - 119	1	-	-	1	1	1
130 - 139	-	-	-	1	1	1
140 - 149	-	-	-	-	1	1
160 - 169	-	-	-	-	1	1
TOTAL VESSELS	847	247	432	1,262	1,356	2,697
TOTAL GROSS TONNAGE	39,687	8,977	15,025	47,599	67,327	112,032

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF SHRIMP OTTER TRAWL VESSELS, BY TONNAGE GROUPS, 1963 - Continued

GROSS TONNAGE	SOUTH ATLANTIC AND GULF		PACIFIC					GRAND TOTAL, EXCLUSIVE OF DUPLICATION
	TOTAL, EXCLUSIVE OF DUPLICATION		ALASKA	WASHINGTON	OREGON	CALIFORNIA	TOTAL, EXCLUSIVE OF DUPLICATION	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	
5 - 9	286	-	-	-	-	-	-	286
10 - 19	688	1	-	-	2	3	5	693
20 - 29	475	-	-	-	12	11	16	491
30 - 39	508	-	-	2	4	1	6	514
40 - 49	481	-	-	3	4	1	8	489
50 - 59	297	1	-	-	1	-	2	299
60 - 69	535	1	-	-	1	-	2	538
70 - 79	172	2	-	-	1	-	3	175
80 - 89	37	2	-	-	-	-	2	39
90 - 99	11	-	-	-	1	-	1	12
100 - 109	6	2	-	-	1	-	3	9
110 - 119	2	1	-	-	-	-	1	3
120 - 129	1	-	-	-	-	-	-	1
130 - 139	1	-	-	-	-	-	-	1
140 - 149	2	-	-	-	-	-	-	2
160 - 169	1	-	-	-	-	-	-	1
TOTAL VESSELS	3,504	10	5	27	16	49	3,553	
TOTAL GROSS TONNAGE	131,139	775	192	1,028	394	2,168	133,307	

SUMMARY OF SHRIMP OTTER TRAWL OPERATING UNITS, 1963

AREA AND STATE	BOAT FISHERY				
	BOATS	FISHERMEN		OTTER TRAWLS	
		REGULAR	CASUAL	NUMBER	YARDS AT MOUTH
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
NEW ENGLAND, MAINE	28	28	2	28	532
SOUTH ATLANTIC:					
NORTH CAROLINA	319	498	4	319	4,680
SOUTH CAROLINA	106	212	-	106	1,955
GEORGIA	264	129	300	264	3,039
FLORIDA, EAST COAST	47	24	30	47	445
TOTAL, EXCLUSIVE OF DUPLICATION	736	863	334	736	10,119
GULF:					
FLORIDA, WEST COAST	127	203	18	127	1,734
ALABAMA	247	395	26	247	2,964
MISSISSIPPI	357	220	220	357	3,540
LOUISIANA	2,867	3,098	1,046	2,867	33,702
TEXAS	919	594	473	919	9,794
TOTAL, EXCLUSIVE OF DUPLICATION	4,481	4,443	1,783	4,481	51,169
SOUTH ATLANTIC AND GULF, TOTAL, EXCLUSIVE OF DUPLICATION	5,217	5,306	2,117	5,217	61,288
GRAND TOTAL, EXCLUSIVE OF DUPLICATION	5,245	5,334	2,119	5,245	61,820

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF SHRIMP OTTER TRAWL OPERATING UNITS, 1963 - Continued

AREA AND STATE	VESSEL FISHERY				
	VESSELS		FISHERMEN	OTTER TRAWLS	
	NUMBER	GROSS TONNAGE	NUMBER	NUMBER	YARDS AT MOUTH
SOUTH ATLANTIC:					
NORTH CAROLINA	383	8,181	847	500	9,271
SOUTH CAROLINA	221	5,762	453	378	7,406
GEORGIA	363	10,523	727	654	9,304
FLORIDA, EAST COAST	350	13,811	759	675	9,837
TOTAL, EXCLUSIVE OF DUPLICATION	1,023	28,501	2,171	1,709	28,144
GULF:					
FLORIDA, WEST COAST	847	39,887	2,061	1,599	24,659
ALABAMA	247	8,977	659	413	6,536
MISSISSIPPI	432	15,025	1,157	676	11,276
LOUISIANA	1,262	47,599	3,380	2,153	33,659
TEXAS	1,356	67,327	3,824	2,556	37,958
TOTAL, EXCLUSIVE OF DUPLICATION	2,697	112,032	7,252	4,743	74,745
SOUTH ATLANTIC AND GULF, TOTAL, EXCLUSIVE OF DUPLICATION	3,504	131,139	8,897	6,031	95,924
PACIFIC:					
ALASKA	10	775	46	10	151
WASHINGTON	5	192	15	5	95
OREGON	27	1,028	88	27	513
CALIFORNIA	16	394	55	16	233
TOTAL, EXCLUSIVE OF DUPLICATION	49	2,168	178	40	862
GRAND TOTAL, EXCLUSIVE OF DUPLICATION	3,553	133,307	9,075	6,080	96,786
	TOTAL (BOAT AND VESSEL FISHERY)				
AREA AND STATE	BOATS AND VESSELS	FISHERMEN	OTTER TRAWLS		
	NUMBER	NUMBER	NUMBER	YARDS AT MOUTH	
NEW ENGLAND, MAINE	28	30	28	532	
SOUTH ATLANTIC:					
NORTH CAROLINA	702	1,349	819	13,951	
SOUTH CAROLINA	327	665	484	9,361	
GEORGIA	627	1,156	918	12,343	
FLORIDA, EAST COAST	397	813	722	10,282	
TOTAL, EXCLUSIVE OF DUPLICATION	1,759	3,368	2,445	38,263	
GULF:					
FLORIDA, WEST COAST	974	2,282	1,726	26,393	
ALABAMA	494	1,080	660	9,500	
MISSISSIPPI	769	1,597	1,033	14,816	
LOUISIANA	4,121	7,524	5,020	67,389	
TEXAS	2,275	4,891	3,475	47,752	
TOTAL, EXCLUSIVE OF DUPLICATION	7,178	13,478	9,224	125,914	
SOUTH ATLANTIC AND GULF, TOTAL, EXCLUSIVE OF DUPLICATION	8,721	16,320	11,248	157,212	
PACIFIC:					
ALASKA	10	46	10	151	
WASHINGTON	5	15	5	95	
OREGON	27	88	27	513	
CALIFORNIA	16	55	16	233	
TOTAL, EXCLUSIVE OF DUPLICATION	49	178	49	862	
GRAND TOTAL, EXCLUSIVE OF DUPLICATION	8,798	16,528	11,325	158,606	

REVIEW OF CERTAIN MAJOR FISHERIES

437

SUMMARY OF SHRIMP CATCH, 1963

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

AREA AND STATE	BAG NETS		BEAM TRAWLS		OTTER TRAWLS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	-	-	-	-	538	64
MASSACHUSETTS	-	-	-	-	23	3
TOTAL	-	-	-	-	561	67
MIDDLE ATLANTIC, NEW JERSEY	-	-	6	6	-	-
SOUTH ATLANTIC:						
NORTH CAROLINA	125	38	-	-	3,249	1,027
SOUTH CAROLINA	-	-	-	-	2,199	642
GEORGIA	-	-	-	-	5,443	1,801
FLORIDA, EAST COAST	-	-	-	-	4,488	1,729
TOTAL	125	38	-	-	15,379	5,199
GULF:						
FLORIDA, WEST COAST	-	-	-	-	34,941	12,256
ALABAMA	-	-	-	-	7,760	2,419
MISSISSIPPI	-	-	-	-	9,375	2,484
LOUISIANA	-	-	-	-	80,798	19,787
TEXAS	-	-	-	-	70,231	26,591
TOTAL	-	-	-	-	203,105	63,537
PACIFIC:						
ALASKA	-	-	3,110	124	12,017	481
WASHINGTON	-	-	13	5	956	81
OREGON	-	-	-	-	3,028	263
CALIFORNIA	-	-	184	18	1,911	184
TOTAL	-	-	3,307	147	17,912	1,009
GRAND TOTAL	125	38	3,313	153	236,957	69,812

AREA AND STATE	POTS AND TRAPS		PUSH NETS		CAST NETS	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
MIDDLE ATLANTIC, NEW JERSEY	-	-	1	1	-	-
SOUTH ATLANTIC:						
SOUTH CAROLINA	-	-	-	-	2	1
GEORGIA	-	-	-	-	5	1
FLORIDA, EAST COAST	-	-	-	-	18	7
TOTAL	-	-	-	-	25	9
PACIFIC:						
WASHINGTON	33	19	-	-	-	-
CALIFORNIA	8	6	-	-	-	-
TOTAL	41	25	-	-	-	-
GRAND TOTAL	41	25	1	1	25	9

AREA AND STATE	BRUSH TRAPS		UNCLASSIFIED		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
NEW ENGLAND:						
MAINE	-	-	-	-	538	64
MASSACHUSETTS	-	-	-	-	23	3
TOTAL	-	-	-	-	561	67
MIDDLE ATLANTIC, NEW JERSEY	-	-	-	-	7	7
SOUTH ATLANTIC:						
NORTH CAROLINA	-	-	-	-	3,374	1,065
SOUTH CAROLINA	-	-	-	-	2,201	643
GEORGIA	-	-	-	-	5,448	1,802
FLORIDA, EAST COAST	-	-	-	-	4,506	1,736
TOTAL	-	-	-	-	15,529	5,246
GULF:						
FLORIDA, WEST COAST	-	-	-	-	34,941	12,256
ALABAMA	-	-	-	-	7,760	2,419
MISSISSIPPI	-	-	-	-	9,375	2,484
LOUISIANA	11	2	-	2	80,809	19,789
TEXAS	-	-	-	-	70,231	26,591
TOTAL	11	2	-	-	203,116	63,539
PACIFIC:						
ALASKA	-	-	-	-	15,127	605
WASHINGTON	-	-	-	-	1,002	105
OREGON	-	-	-	-	3,028	263
CALIFORNIA	-	-	-	-	2,103	208
TOTAL	-	-	-	-	21,260	1,181
HAWAII	-	-	(1)	2	(1)	2
GRAND TOTAL	11	2	(1)	2	240,473	70,042

1/ LESS THAN 500 POUNDS.

REVIEW OF CERTAIN MAJOR FISHERIES

U. S. FISH OTTER TRAWL FLEET

The following tables contain information on the U. S. fish otter trawl fleet. The data include detailed information on the operating units engaged in this fishery and a breakdown of vessels by area, State, and gross tonnage. In 1963, a total of 1,171 vessels of over 5 net tons and 129 motor boats operated in the fish otter trawl fleet. A total of 5,042 fishermen was employed on these craft. Two trawls were used by 24 of the vessels, bringing a total number of trawls credited to the fleet to 1,324.

SUMMARY OF FISH OTTER TRAWL VESSELS, BY TONNAGE GROUPS, 1963

GROSS TONNAGE	NEW ENGLAND				
	MAINE	MASSACHUSETTS	RHODE ISLAND	CONNEC-TICUT	TOTAL, EXCLUSIVE OF DUPLI-CATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
5 - 9	-	4	-	2	6
10 - 19	12	34	15	6	65
20 - 29	11	40	15	6	67
30 - 39	6	56	11	9	71
40 - 49	3	42	15	2	54
50 - 59	7	31	8	3	41
60 - 69	4	35	2	1	39
70 - 79	5	33	4	1	42
80 - 89	-	17	-	-	17
90 - 99	2	9	-	-	10
100 - 109	2	9	-	-	11
110 - 119	3	18	1	-	20
120 - 129	-	9	-	-	9
130 - 139	2	8	-	-	10
140 - 149	-	1	-	-	6
150 - 159	2	9	1	-	12
160 - 169	4	7	-	-	9
170 - 179	2	4	-	-	6
180 - 189	-	2	-	-	2
190 - 199	1	5	-	-	6
200 - 209	-	1	-	-	1
210 - 219	-	3	-	-	3
220 - 229	-	3	-	-	3
230 - 239	1	2	-	-	3
240 - 249	1	3	-	-	3
250 - 259	-	2	-	-	2
260 - 269	1	1	-	-	2
290 - 299	-	2	-	-	2
300 - 309	2	-	-	-	2
310 - 319	2	-	-	-	2
320 - 329	2	-	-	-	2
450 - 459	-	1	-	-	1
TOTAL VESSELS	76	395	72	30	530
TOTAL GROSS TONNAGE	7,075	29,026	2,738	927	37,290

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

439

SUMMARY OF FISH OTTER TRAWL VESSELS, BY TONNAGE GROUPS, 1963 - Continued

GROSS TONNAGE	MIDDLE ATLANTIC				CHESAPEAKE		
	NEW YORK	NEW JERSEY	DELAWARE	TOTAL, EXCLUSIVE OF DUPLICATION	MARYLAND	VIRGINIA	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
5 - 9	5	7	-	12	-	3	3
10 - 19	38	29	1	67	8	8	16
20 - 29	43	23	1	64	4	5	9
30 - 39	24	14	1	39	2	7	9
40 - 49	12	18	-	29	1	8	9
50 - 59	11	15	-	21	-	8	8
60 - 69	5	11	-	12	-	5	5
70 - 79	9	16	-	21	1	9	10
80 - 89	6	2	-	7	-	-	-
90 - 99	1	1	-	2	-	-	-
100 - 109	2	2	-	3	-	2	2
110 - 119	3	3	-	4	-	4	4
120 - 129	2	-	-	2	-	2	2
130 - 139	1	-	-	1	-	2	2
140 - 149	1	2	-	3	-	1	1
150 - 159	1	-	-	1	-	-	-
160 - 169	1	-	-	1	-	-	-
190 - 199	1	-	-	1	-	-	-
TOTAL VESSELS	166	143	3	290	16	64	80
TOTAL GROSS TONNAGE	6,771	6,141	78	11,601	407	3,601	4,008

GROSS TONNAGE	SOUTH ATLANTIC	GULF		
	NORTH CAROLINA, TOTAL, EXCLUSIVE OF DUPLICATION	MISSISSIPPI	LOUISIANA	TOTAL, EXCLUSIVE OF DUPLICATION
	NUMBER	NUMBER	NUMBER	NUMBER
5 - 9	6	-	-	-
10 - 19	6	8	-	8
20 - 29	13	24	-	24
30 - 39	13	23	1	24
40 - 49	21	9	2	11
50 - 59	9	6	1	7
60 - 69	4	5	-	5
70 - 79	2	4	-	4
80 - 89	-	1	-	1
100 - 109	-	1	-	1
120 - 129	2	-	-	-
150 - 159	-	1	-	1
TOTAL VESSELS	76	82	4	86
TOTAL GROSS TONNAGE	2,975	3,204	178	3,382

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF FISH OTTER TRAWL VESSELS,
BY TONNAGE GROUPS, 1963 - Continued

GROSS TONNAGE	PACIFIC					GREAT LAKES	GRAND TOTAL, EXCLUSIVE OF DUPLICATION
	ALASKA	WASHINGTON	OREGON	CALIFORNIA	TOTAL, EXCLUSIVE OF DUPLICATION	TOTAL, EXCLUSIVE OF DUPLICATION	
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
5 - 9	-	1	-	1	2	3	31
10 - 19	- 1	10	- 1	5	17	7	184
20 - 29	-	10	-	17	37	5	203
30 - 39	-	18	- 10	13	38	1	176
40 - 49	-	28	- 21	20	52	3	163
50 - 59	- 1	18	- 11	9	33	-	105
60 - 69	-	10	- 3	2	14	-	67
70 - 79	-	8	- 1	4	12	-	63
80 - 89	-	5	- 3	4	11	-	32
90 - 99	-	4	- 3	-	6	-	16
100 - 109	-	- 2	- 1	- 3	- 5	-	17
110 - 119	-	-	- 2	- 2	- 2	-	24
120 - 129	-	-	-	-	-	-	12
130 - 139	-	-	-	-	-	-	10
140 - 149	-	-	-	-	-	-	6
150 - 159	-	-	-	-	-	-	13
160 - 169	-	-	-	-	-	-	9
170 - 179	-	-	-	-	-	-	6
180 - 189	-	-	-	-	-	-	6
190 - 199	-	-	-	-	-	-	6
200 - 209	-	-	-	-	-	-	1
210 - 219	-	-	-	-	-	-	3
220 - 229	-	-	-	-	-	-	3
230 - 239	-	-	-	-	-	-	3
240 - 249	-	-	-	-	-	-	3
250 - 259	-	-	-	-	-	-	2
260 - 269	-	-	-	-	-	-	2
290 - 299	-	-	-	-	-	-	2
300 - 309	-	-	-	-	-	-	2
310 - 319	-	-	-	-	-	-	2
320 - 329	-	-	-	-	-	-	2
450 - 459	-	-	-	-	-	-	1
TOTAL VESSELS	2	114	66	60	229	19	1,171
TOTAL GROSS TONNAGE	73	5,562	3,248	3,563	10,641	397	61,205



FISH OTTER TRAWL

SUMMARY OF FISH OTTER TRAWL OPERATING UNITS, 1963

AREA AND STATE	BOAT FISHERY				
	BOATS	FISHERMEN		OTTER TRAWLS	
		REGULAR	CASUAL		
	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>YARDS AT MOUTH</u>
NEW ENGLAND:					
MAINE	43	49	20	43	860
MASSACHUSETTS	7	6	4	7	96
RHODE ISLAND	11	12	8	11	174
CONNECTICUT	22	10	21	22	332
TOTAL, EXCLUSIVE OF DUPLICATION	83	77	53	83	1,462
MIDDLE ATLANTIC:					
NEW YORK	6	8	4	6	100
NEW JERSEY	6	13	-	6	98
DELAWARE	1	2	-	1	19
TOTAL, EXCLUSIVE OF DUPLICATION	13	23	4	13	217
CHESAPEAKE:					
MARYLAND	2	4	-	2	47
VIRGINIA	1	2	-	1	10
TOTAL, EXCLUSIVE OF DUPLICATION	3	6	-	3	57
SOUTH ATLANTIC, NORTH CAROLINA					
	25	50	-	25	400
PACIFIC, CALIFORNIA					
	4	8	-	4	80
MISSISSIPPI RIVER AND TRIBUTARIES					
	1	4	-	1	17
GRAND TOTAL, EXCLU- SIVE OF DUPLICATION	129	168	57	129	2,233

AREA AND STATE	VESSEL FISHERY				
	VESSELS		FISHERMEN	OTTER TRAWLS	
	<u>NUMBER</u>	<u>GROSS TONNAGE</u>	<u>NUMBER</u>	<u>NUMBER</u>	<u>YARDS AT MOUTH</u>
NEW ENGLAND:					
MAINE	76	7,075	335	76	1,768
MASSACHUSETTS	395	29,026	2,461	395	10,660
RHODE ISLAND	72	2,738	253	72	1,862
CONNECTICUT	30	927	78	30	690
TOTAL, EXCLUSIVE OF DUPLICATION	530	37,290	2,928	530	13,920
MIDDLE ATLANTIC:					
NEW YORK	166	6,771	511	166	3,874
NEW JERSEY	143	6,141	471	143	3,552
DELAWARE	3	78	6	3	67
TOTAL, EXCLUSIVE OF DUPLICATION	290	11,601	892	290	6,893
CHESAPEAKE:					
MARYLAND	16	407	38	16	425
VIRGINIA	64	3,601	248	64	1,660
TOTAL, EXCLUSIVE OF DUPLICATION	80	4,008	286	80	2,085
SOUTH ATLANTIC, NORTH CAROLINA					
	76	2,975	206	76	2,048
GULF:					
MISSISSIPPI	82	3,204	104	102	1,987
LOUISIANA	4	178	12	8	132
TOTAL, EXCLUSIVE OF DUPLICATION	86	3,382	206	110	2,119

(CONTINUED ON NEXT PAGE)

REVIEW OF CERTAIN MAJOR FISHERIES

SUMMARY OF FISH OTTER TRAWL OPERATING UNITS, 1963 - Continued

AREA AND STATE	VESSEL FISHERY				
	VESSELS		FISHERMEN	OTTER TRAWLS	
	NUMBER	GROSS TONNAGE	NUMBER	NUMBER	YARDS AT MOUTH
PACIFIC:					
ALASKA	2	73	10	2	30
WASHINGTON	113	5,484	414	113	2,500
OREGON	57	2,709	206	57	1,281
CALIFORNIA	67	2,882	252	67	1,809
TOTAL, EXCLUSIVE OF DUPLICATION	229	10,641	844	229	5,394
GREAT LAKES AND MISSISSIPPI RIVER AND TRIBUTARIES, TOTAL, EXCLUSIVE OF DUPLICATION	19	389	48	19	420
GRAND TOTAL, EXCLUSIVE OF DUPLICATION	1,171	61,205	4,817	1,195	29,137

AREA AND STATE	TOTAL (BOAT AND VESSEL FISHERY)			
	BOATS AND VESSELS	FISHERMEN	OTTER TRAWLS	
	NUMBER	NUMBER	NUMBER	YARDS AT MOUTH
NEW ENGLAND:				
MAINE	119	404	119	2,628
MASSACHUSETTS	402	2,471	402	10,756
RHODE ISLAND	83	273	83	2,036
CONNECTICUT	52	109	52	1,022
TOTAL, EXCLUSIVE OF DUPLICATION	613	3,058	613	15,382
MIDDLE ATLANTIC:				
NEW YORK	172	523	172	3,974
NEW JERSEY	149	484	149	3,650
DELAWARE	4	8	4	86
TOTAL, EXCLUSIVE OF DUPLICATION	303	919	303	7,110
CHESAPEAKE:				
MARYLAND	18	42	18	472
VIRGINIA	65	250	65	1,670
TOTAL, EXCLUSIVE OF DUPLICATION	83	292	83	2,142
SOUTH ATLANTIC, NORTH CAROLINA	101	256	101	2,448
GULF:				
MISSISSIPPI	82	194	102	1,987
LOUISIANA	4	12	8	132
TOTAL, EXCLUSIVE OF DUPLICATION	86	206	110	2,119
PACIFIC:				
ALASKA	2	10	2	30
WASHINGTON	113	414	113	2,500
OREGON	57	206	57	1,281
CALIFORNIA	71	260	71	1,889
TOTAL, EXCLUSIVE OF DUPLICATION	233	852	233	5,474
GREAT LAKES AND MISSISSIPPI RIVER AND TRIBUTARIES, TOTAL, EXCLUSIVE OF DUPLICATION	20	52	20	437
GRAND TOTAL, EXCLUSIVE OF DUPLICATION	1,300	5,042	1,324	31,370

HISTORICAL FISHERY STATISTICS

Statistics of the fisheries of the United States are necessary for the best use of the Nation's aquatic resources. As series of data for extended periods of time are accumulated, the information becomes increasingly more valuable in indicating trends in the supply and utilization of fishery products. The extent to which these data are used is frequently dependent upon the ready availability of needed information to researchers, management officials, and members of the fishing industry.

Periodically, there are published in "Fishery Statistics of the United States" historical data for each State on the catch of important species. The most recent publication of these data was in Statistical Digest No. 43 entitled "Fishery Statistics of the United States, 1956."

The Bureau of Commercial Fisheries has in its files and in various Bureau reports or publications of other organizations a large volume of historical data. These statistics would be of considerable use to researchers and others interested in the fisheries. Unfortunately, few know of these records. To make the series readily available to researchers and others interested in the fisheries, a section entitled "Historical Fishery Statistics" has been published, since 1951, in "Fishery Statistics of the United States." The titles of the series published, and the identifying number of the Digest in which each appears, follow:

	Published in Statistical Digest <u>Number</u>	Revised and updated in Statistical Digest <u>Number</u>
Menhaden Fishery, 1873-1951	30	57
Oyster Fishery, 1880-1952	34	-
Pacific Sardine Fishery, 1915-53.	36	57
Atlantic Ocean Perch Fishery, 1930-54.	39	57
Pacific Herring Fishery, 1881-1955	41	-
United States Haddock Fishery, 1880-1956	43	-
United States Tuna Fishery, 1911-57.	44	<u>1/</u> 57
United States Atlantic Cod Fishery, 1893-1958	49	-
Fur Seal Industry of the Pribilof Islands, 1786-1959	51	-
Eastern Pacific Halibut Fishery, 1888-1960	53	-
California Mackerel Fisheries, 1889-1961	54	-
Atlantic Mackerel Fishery, 1804-1962	56	-
Commercial Fisheries of the Great Lakes, 1879-1963.	57	

The following pages include historical data on the Great Lakes Fishery followed by revised data as shown in the above table.

1/ Included is data only for the Pacific Coast States.

HISTORICAL FISHERY STATISTICS

COMMERCIAL FISHERIES OF THE GREAT LAKES, 1879-1963

By

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This report presents available catch data in a manner that provides an easy reference to information that heretofore has appeared in various publications. The U.S. catch of fourteen species is shown separately because of their abundance or economic importance to the fisheries. Data appearing in this report are for the five Great Lakes. Production from Lake St. Clair, the International lakes of northern Minnesota, and connecting waters are not shown. The data on catch were obtained from Commercial Fish Production in the Great Lakes, 1867-1960, Technical Report No. 3, (Baldwin and Saalfeld, 1962). The catch of species not listed in the publication, as well as production during 1961-63, were obtained from various reports and bulletins of the Bureau of Commercial Fisheries, and its predecessors. As the data have been rounded to the nearest thousand, the figures will not necessarily correspond to the total.

The accuracy of the early records is questionable as the production of various species frequently had not been separated, either by failure to classify part of the catch or through misidentification of some species. Tables 1 through 6 contain available data for those U.S. catches that were separated and are, to our best knowledge, landings of those species. Generally, when catches of two or more species were combined, their production was placed in the miscellaneous column along with the landings of incidental and unidentified species.

The first complete U.S. statistical survey of these fisheries was made in 1879, and subsequent canvasses were made intermittently until 1913, after which surveys were conducted each year. Biologists recognized the need for sound statistics on both the catch and the fishing effort expended to produce that catch. A reporting form was developed and the State of Michigan placed it in use in 1927. The remaining seven Great Lakes States and the Province of Ontario are now collecting statistics by the same method, and all data are treated by the same analytical procedure. (See Hile, 1962, for an account of the collection and analysis of these statistics.) State laws make it mandatory for fishermen to report their catch at the close of each month's fishing operations. All States except Minnesota turn these reports over to the Bureau's Branch of Fishery Statistics for compilation. Data on catch, value, employment, and operating units are released annually in a Bureau publication entitled Fishery Statistics of the United States. Beginning with the 1962 report, fishing effort data were included.

It is not the intent of this report to discuss the biological or economic conditions of these fisheries. However, a variety of conditions, such as supply, demand, and operational costs, have affected production.

References to fishes throughout the report are by common names. Most of these names conform with the approved list of the American Fisheries Society (1960) but a few are according to local or trade usage. The following list of common and scientific names is offered. If the names used in this paper differ from the Society's approved common name, the latter is given in parentheses.

HISTORICAL FISHERY STATISTICS

<u>Common name</u>	<u>Scientific name</u>
Alewife	<u>Alosa pseudoharengus</u>
Blue pike <u>1/</u>	<u>Stizostedion vitreum glaucum</u>
Bowfin	<u>Amia calva</u>
Buffalo	<u>Ictiobus spp.</u>
Bullhead	<u>Ictalurus spp.</u>
Burbot	<u>Lota lota</u>
Carp <u>1/, 2/</u>	<u>Cyprinus carpio</u>
Catfish (channel catfish) <u>1/</u>	<u>Ictalurus punctatus</u>
Chubs (deepwater ciscoes) <u>1/</u>	<u>Coregonus spp.</u>
Crappie	<u>Pomoxis spp.</u>
Eels (American eel)	<u>Anguilla rostrata</u>
Garfish (longnose gar)	<u>Lepisosteus osseus</u>
Gizzard shad	<u>Dorosoma cepedianum</u>
Goldfish	<u>Carassius auratus</u>
Lake herring (cisco) <u>1/</u>	<u>Coregonus artedii</u>
Lake trout <u>1/</u>	<u>Salvelinus namaycush</u>
Lake whitefish or common whitefish <u>1/</u>	<u>Coregonus clupeaformis</u>
Mooneye	<u>Hiodon tergisus</u>
Northern pike	<u>Esox lucius</u>
Quillback	<u>Carpiodes cyprinus</u>
Rock bass	<u>Ambloplites rupestris</u>
Round whitefish or menominee whitefish	<u>Prosopium cylindraceum</u>
Sauger <u>1/</u>	<u>Stizostedion canadense</u>
Sheepshead (freshwater drum) <u>1/</u>	<u>Aplodinotus grunniens</u>
Smelt (American smelt) <u>1/, 2/</u>	<u>Osmerus mordax</u>
Sturgeon (lake sturgeon)	<u>Acipenser fulvescens</u>
Suckers: <u>1/</u>	
Longnose	<u>Catostomus catostomus</u>
Redhorse	<u>Moxostoma spp.</u>
White	<u>Catostomus commersoni</u>
Sunfish	<u>Lepomis spp.</u>
White bass <u>1/</u>	<u>Roccus chrysops</u>
White perch	<u>Roccus americanus</u>
Yellow perch <u>1/</u>	<u>Perca flavescens</u>
Yellow pike (walleye) <u>1/</u>	<u>Stizostedion vitreum vitreum</u>

1/ Separate production data in this report are limited to these 14 major species.

2/ Species introduced into Great Lakes waters.

Note:--Common names do not agree with our Glossary--they are names used by researchers in the Great Lakes area.

General. The five Great Lakes and their connecting waters have a combined surface area of nearly 95,000 square miles and form the largest group of lakes in the world. The information below was prepared from data published in the Great Lakes Pilot by the U.S. Army, Corps of Engineers in 1963.

Lake	Maximum length	Maximum width	Maximum depth	Area		
				U.S.	Canada	Total
	<u>Miles</u>	<u>Miles</u>	<u>Feet</u>	<u>Square miles</u>	<u>Square miles</u>	<u>Square miles</u>
Superior	383	160	1,333	20,700	11,100	31,800
Michigan	321	118	923	22,400	---	22,400
Huron	247	101	750	9,100	13,900	23,000
Erie	241	57	210	4,980	4,930	9,910
Ontario	193	53	802	3,600	4,000	7,600
Total	---	---	---	60,780	33,930	94,710

HISTORICAL FISHERY STATISTICS

The abundant supply of fish played an important part in the settlement and development of the land areas that border these lakes. From the earliest settlements to about 1830, commercial fishing was confined almost exclusively to the Indians and employees of the Hudson Bay Company and the American and Northwest Fur Company (Bissel, 1887). An excellent review of the history and general conditions of these early fisheries can be found in two publications by Koelz (1926) and Van Oosten (1936).

From 1959-63, the Great Lakes fleet averaged 458 vessels (5 net tons and over), 1,109 smaller motor craft, and 220 nonmotor boats. Although some of the larger craft operate in the trap net, pound net, and trawl fisheries, most fished gill nets. Many fish stocks occur in the deeper regions of the lakes, and these vessels are ideally suited to make the necessary long runs to the fishing grounds and to weather the severe storms that develop. Operators of smaller craft (less than 5 net tons) also fish gill nets but of shorter lengths than carried by vessels. Generally these small craft fish in the shallow waters, but it is not uncommon to find some operating miles from shore. Many of these smaller boats also operate in the long-line and fyke net fisheries in bays and shallow water areas.

Craft usually return to port at the end of each day's fishing operation at which time fish are weighed, packed, and shipped; and crews perform various shore duties. Prior to the mid-1950's, when lake trout were plentiful, many of the larger operators employed shore crews for maintenance of gear. In the past 10 years, however, the poor economic condition of these fisheries has reduced the number of employees, especially those on shore. In periods of good fishing, a vessel employed three to five fishermen, but in recent years most of them operate with a crew of two or three. Many one-man operations are known.

Many changes, some bordering on disasters, have occurred in the Great Lakes fisheries. Among the major ones may be listed: the collapse of the lake herring fishery; and more recently, the whitefish, blue pike, sauger, and yellow pike or walleye fisheries in Lake Erie; the 1942-43 mortality that all but exterminated the smelt in Lakes Huron and Michigan; the recent great abundance of low value alewife in these lakes; and the consequences of the penetration of the sea lamprey into the three upper lakes. Other factors have changed and may have adversely affected the fisheries. Increase in the development of agricultural areas and timber cutting has resulted in soil erosion; use of fertilizers, insecticides and herbicides on farms; increases in human population; increased boat use; beach and channel improvements; and industrial and sewage wastes. All of these have played some role in the conditions that now exist in many of our fisheries. These events, rising costs, and an adverse market structure have brought the industry into severe economic distress.

Perhaps the greatest damage dealt the Great Lakes fisheries was the invasion of the sea lamprey. This parasite, shaped like an eel, is one of a primitive group of fishes. Instead of jaws it has a circular mouth containing horny teeth; this arrangement permits firm attachment to fish. It feeds on fish by rasping a hole in the flesh with the teeth on its tongue and sucks the blood and other body fluids. Fish normally die after one attack or become greatly weakened. The sea lamprey, an ocean inhabitant, became landlocked in Lake Ontario many years ago. Around 1921, the sea lamprey found its way into the other Great Lakes through the Welland Canal. It was never plentiful in Lake Erie where spawning conditions were not suitable (the sea lamprey spawns in cool-flowing water and builds its nest in rubble). They moved into Lakes Huron and Michigan and finally into Lake Superior, where the population became extremely plentiful. Lampreys destroyed stocks of lake trout in Lakes Huron and Michigan and did great damage in Lake Superior. The lake trout fishery which once yielded U. S. fishermen an annual catch valued at \$4.1 million was worth only \$79,000 in 1963. The reduction of the sea lamprey is being carried out by treatment of streams with a specific toxicant by the Bureau of Commercial Fisheries and the Fisheries Research Board of Canada under contract with the Great Lakes Fishery Commission. The probability of effective control of the sea lamprey by chemical treatment appears excellent. Rehabilitation of lake trout should follow reduction of lamprey stocks.

Landings of fish in the Great Lakes are small in comparison with most coastal fisheries; yet the lakes are the principal or only commercial source of fresh-water fishery products in the United States. Some Great Lakes species, such as lake trout, whitefish, and yellow pike are gourmet items that bring high prices. The value of the lake fisheries has been considerable until the recent declines of the choicer species. To give just one example, when the Pacific sardine fishery was at its height--annual catches in excess of a billion pounds--the landings of Great Lakes fish had a value equal to that of the sardines.

Development of the Fisheries. In nearly all lakes, the earliest fisheries were prosecuted by haul seines (in Lake Huron this gear did not become important until 1912.) Although seines were believed to be the initial gear in Lake Michigan, little is known of these early operations. The haul seine fishery was seasonal, usually carried on in the spring and fall when the fish entered shallower waters.

As more people moved into the Great Lakes area, there was increased demand for fishery products, and fishermen extended operations to the deeper waters. At this time, gill nets and then pound nets became popular; trap nets and longlines or setlines followed.

Dates for the first operation of each gear vary for the individual lakes. Haul seines were known to be used as early as 1807 in Lake Ontario, while in Lake Erie, the first records of this gear are for 1815. Gill nets were fished in Lake Huron in 1835. The pound net was used in Lake Huron in 1854, and in Lakes Michigan and Superior, records show this gear was in use in 1860. In Lake Michigan, the trap net appeared around 1885, and longlines or setlines were recorded in 1870.

At present, nine types of gear are fished commercially on the Great Lakes. In addition to the five gears mentioned above, fyke nets, trolling or handlines, dip nets, and trawls $\frac{1}{2}$, are also used. For purposes of analysis of catch and effort, gill nets are subdivided into four mesh size groups: 1- $\frac{1}{4}$ to 2 inches; 2- $\frac{1}{8}$ to 3 inches; 4 to 7 inches; and 7- $\frac{1}{8}$ to 14 inches. The gill net is highly selective, and each mesh size group is used for the capture of certain species. A 1- $\frac{1}{4}$ to 2 inch mesh net is used to catch bait fish for longline fishing and will also capture large quantities of smelt as they enter the shallow water in the spring. A size of 2- $\frac{1}{8}$ to 3 inches is used primarily for the capture of chubs, lake herring, and yellow perch. A 4 to 7 inch net is fished for lake trout, whitefish, yellow pike, and suckers. The larger 7- $\frac{1}{8}$ to 14 inch net is designed to catch carp and sturgeon.

The following list of gear, in descending order, is based on the number of fishermen employed in the Great Lakes fisheries: 2- $\frac{1}{8}$ to 3 inch mesh gill nets; 4- $\frac{1}{8}$ to 7 inch mesh gill nets; trap nets; longlines or setlines; haul seines; pound nets; 1- $\frac{1}{4}$ to 2 inch mesh gill nets; fyke and hoop nets; 7- $\frac{1}{8}$ to 14 inch mesh gill nets; otter trawls; dip nets; and trolling or handlines. This order changes in Lake Erie where haul seines, longlines or setlines, and trap nets are the predominant gears; but in other water areas gill nets are the principal method of fishing. Excepting employment in related industries (processing, canning, wholesaling, etc.), the Great Lakes fleet in 1959-63 provided employment for an average of 3,367 fishermen.

The entire roster of species taken in the early fisheries is not known. As the use of haul seines was widespread, however, it is assumed that the major portion of the catch consisted of those fish found in shallow water such as catfish and suckers (lake herring in Lake Superior). It is possible that some deep- and cold-water species were taken by this gear (a substantial lake trout and whitefish fishery existed in the Detroit River as early as 1885); but knowledge of these early fisheries does not allow further inferences to be made.

$\frac{1}{2}$ The otter trawl was introduced in 1958. New York, Michigan, Illinois, and Wisconsin have issued permits for the experimental use of this gear in Lakes Ontario and Michigan. In the State of Pennsylvania waters of Lake Erie, trawls are a licensed fishing gear.

HISTORICAL FISHERY STATISTICS

Sufficient data for later years are available to enable biologists to trace the abundance of fish stocks in relation to production and fishing pressure for entire lakes or specific areas. Within this period, production of the high-value fish has tended to decline, while the low-value fish have increased.

In the last 35 years, Federal and State research groups have made numerous investigations of these fisheries. It appears, however, that effective conservation of these fisheries requires more knowledge, especially in waters where low-priced species are overly abundant. It may be necessary, someday, to set quotas on production of certain species and to limit the number of fishermen.

United States and Canadian Production. The United States owns 64 percent of the water area in the Great Lakes and has outproduced Canada every year. The differences in the landings of the two countries, however, have been growing smaller, and in 1963 the U.S. production was only 13 million pounds more than landings in Canada. In 1962, Canadian landings were below the United States catch by only 8 million pounds. The catches from both countries were more nearly equal that year than for any other.

To demonstrate declines in landings for all lakes, data have been separated into three periods: early, 1879-1908; middle, 1914-28; and late, 1929-63. As complete U.S. data were not available for some lakes for early years, figures used for the fisheries are for the years 1879, 1885, 1889-90, 1893, 1897, 1899, 1903, 1908, and 1914-63. Figures for the following years are complete for only certain lakes (see individual lake tables): 1891-92, 1894-96, 1898, 1900-02, 1904-07, and 1911-13.

From 1879-1908, the United States accounted for 82 percent of the Great Lakes landings. This percentage dropped to 73 percent in 1914-28 and to 71 percent in 1929-63. The average annual landings in the United States during these periods were 102.3 million, 85.3 million, and 75.9 million pounds, respectively. Canada's average catch was 23.0 million, 31.9 million, and 31.1 million pounds, respectively, for the same periods. The total U.S. catch in 1963 was the lowest on record--55,823,000 pounds.

Lake Ontario. U.S. production in Lake Ontario (table 2) has always been small in comparison with landings in the other lakes. The presence of the parasitic sea lamprey in Lake Ontario may have reduced the stocks of the deep-water fishes. A relatively deep lake, maximum depth 802 feet, it contains lake trout and lake whitefish stocks; however, in recent years, the landings of these species have decreased.

Catches of blue pike, although never large compared with landings of this species in Lake Erie, accounted for at least 25 percent of the total annual lake catch during the period 1946-54 (as high as 70 percent in 1952). Since that time, landings have decreased and in 1963, less than 50 pounds were produced.

Although the reported U.S. catches were high during the early recorded history, mixed catches make it impossible to trace the trends of some species. We believe that large quantities of lake herring were landed during the early years.

The rise in U.S. production to 1,914,000 pounds in 1921 resulted from increased landings of chubs and lake herring (cisco). The catches of these species were mixed, but we believe that the bulk of this production was lake herring.

Total production has declined since the earliest recorded landings; catches since 1941 have exceeded 1/2 million pounds in only one year, 1952.

For the period records are available, Canada has outproduced the United States every year, except in 1879. Since 1929 to the present time, Canada has accounted for at least 69 percent of the total production of Lake Ontario, ranging from 69 percent in 1940 to 94 percent in 1956.

The 1879-1908 U.S. catches in Lake Ontario averaged slightly over 2 million pounds. Production in 1913-28 averaged 669,000 pounds; in the period 1929-63, landings averaged 491,000 pounds. The major portion of the present day U.S. production is landed at ports on Chaumont Bay, the extreme eastern end of Lake Ontario.

Lake Erie. In Lake Erie, a shallow warm-water lake, U.S. fishermen produced an average of 32.6 million pounds annually over a 59-year period (table 3). In the early fishery, blue pike, lake herring (cisco), saugers, yellow perch, and yellow pike were landed in large quantities. These species, considered to be choice, brought a high dollar return to the producer. As with any warm-water area, however, considerable quantities of carp, suckers, and sheepshead also were available although little used.

The lake herring has almost vanished from Lake Erie. In 1924, production exceeded 21 million pounds, yet in 1925, landings were only 2,817,000 pounds. In 1926, catches dropped to 1,449,000 pounds, rose to 2,350,000 pounds in 1927, and declined to 618,000 pounds in 1928. Landings remained at very low levels for the next 9 years, rose to about 3/4 million pounds in 1938-39; but from 1940-44 catches were very small. Production in 1945 increased to 2,765,000 pounds, jumped to 6,638,000 pounds in 1946; landings declined to 1,177,000 pounds in 1947; and since that year have decreased until in 1963 the yield was only 1,000 pounds.

Blue pike landings have declined drastically; in 1963 only 200 pounds were caught. Yellow perch, a consistently abundant species in all lakes except Lake Superior, is still produced in large amounts. The catch of yellow pike has dropped sharply in the last 5 years, and in 1962 reached an alltime low of 433,000 pounds. In 1963, the production of this species increased to 800,000 pounds, well below the landings during 1940-58. Production of whitefish has been sporadic. Catches of this species since 1879 have shown considerable decrease for 1 or more years and then have increased for a period. The lowest yield of whitefish occurred in 1962 when only 3,000 pounds were taken. The sauger, once an important commercial fish, has steadily decreased in production, and in the last 9 years landings have been insignificant.

As supplies of blue pike, lake herring, lake whitefish, saugers, and yellow pike dwindled, the total U.S. catch decreased until the lowest yield (17,238,000 pounds) was reported in 1963.

Although other species such as carp, sheepshead, suckers, and white bass are available, their production does not make up for the loss of the high-priced species as the market can absorb only limited amounts of these low-value fish.

In 1879-1908 U.S. catches averaged 46.0 million pounds; in 1914-28, 38.9 million pounds; and in 1929-63, 26.4 million pounds annually. From 1879-1953, the United States outproduced Canada; however, from 1954 to the present time, Canada's landings have accounted for the major portion of the total Lake Erie production.

Lake Huron. The total U.S. production in Lake Huron was fairly steady until 1939. Since that year, landings have been declining (table 4). The sea lamprey has brought the production of lake trout to an end and affected adversely the stocks of whitefish, suckers, and yellow pike. Lake herring have not reproduced successfully in recent years. The failure of these species has dealt the industry a severe blow. On the other hand, chubs, never landed in large quantities, are now produced at a high rate.

HISTORICAL FISHERY STATISTICS

The last good catches of whitefish were in 1947-48. In 1949, the take dropped to 530,000 pounds and it reached an alltime low of only 30,000 pounds in 1956. Since that year, it has increased slightly but never exceeded 500,000 pounds.

Since 1879, U.S. production has exceeded Canada's landings in all but 6 years--1890, 1892, and 1951-54. Total U.S. catches averaged 14.5 million pounds in 1879-1908; in 1912-28, 12.3 million pounds; and in 1929-63, 8.6 million pounds.

Lake Michigan. Lake Michigan (table 5) is the only Great Lake lying entirely within the boundaries of the United States. Four States--Michigan, Indiana, Illinois, and Wisconsin--control the lake's fisheries.

Here, the effect of the sea lamprey depredation was widespread and catastrophic. First hit were the lake trout. Landings dropped from 5,437,000 pounds in 1945 to 4,000 pounds in 1952. At the same time, the take of chubs increased to reach an alltime high of 12,659,000 pounds in 1960.

Unquestionably, other species were affected by the sea lamprey. Principal among them have been whitefish, suckers, and the large chubs. With the disappearance of the lake trout, small chubs (bloaters) increased in abundance. Changes in these waters appear to be following those of Lake Ontario where the sea lamprey has been known to exist for numerous years and where production is low. When it was no longer profitable to fish for lake trout and lake whitefish, fishermen turned their efforts to catching yellow perch and chubs.

The effect of the 1942-43 smelt mortality was relatively shortlived. The catch for 1944 was only 5,000 pounds, but by 1958 production rose to over 9 million pounds.

In 1879-1908, total landings averaged 35.1 million pounds; in 1911-28, 23.4 million pounds; and in the remaining 35 years, catches averaged 24.9 million pounds annually.

Lake Superior. Lake Superior produces only lake trout, lake whitefish, and lake herring in quantity (table 6). In recent years the catch of chubs and smelt has increased. This was the last lake invaded by the sea lamprey. As in Lakes Huron and Michigan, chub catches increased with the loss of lake trout production.

The yearly averages of the total U.S. catch for the periods 1879-1908, 1913-28, and 1929-63 were 7.8, 10.5, and 15.6 million pounds, respectively. This longterm increase is largely due to production of lake herring. Because the sea lamprey's heavy predation started much later than in Lakes Huron and Michigan, lake trout landings were fairly consistent until 1952. Some quantities of native lake trout remained in Lake Superior at the time the Bureau began its attempt to control the sea lamprey. Even though production of this species is low, now controlled by quota, biologists report that the abundance of lake trout is increasing.

Production by State. Complete data for all States are not available prior to 1935 (table 7). The States in order of total production generally have been Michigan, Ohio, Wisconsin, Minnesota, Pennsylvania, New York, Illinois, and Indiana. In the last 4 years, Wisconsin has occupied second place because of the large catches made in the otter trawl fishery.

That portion of Lake Michigan over which Indiana has control is not especially productive. Some Indiana fishermen purchase licenses from the State of Michigan and fish in that State's waters. These catches were reported by the State of Indiana from 1935-43. Beginning in 1944, catches made in Michigan waters by Indiana fishermen were added to production of the State of Michigan.

The production of Ohio, Michigan, and Wisconsin has accounted for at least 80 percent of the total U.S. Great Lakes landings from 1935-63 (as high as 93 percent in 1960 and 1961). Monthly landing bulletins for these three States are published by the Bureau.

It is evident that commercial fish landings in all States are decreasing. The average production for each State during the 29 years of record is: New York, 1.4 million; Pennsylvania, 2.3 million; Ohio, 21.3 million; Indiana, 0.2 million; Michigan, 25.7 million; Illinois, 1.3 million; Wisconsin, 18.5 million; and Minnesota, 4.2 million pounds. The average total U.S. catch during this period was 74.8 million pounds.

The data appearing in this report make it clear that the Great Lakes fisheries are in severe economic distress. The choice, high-value species have become scarce. Although the supply of low-value fish is large, the production of these species is limited by the demand, which is relatively light. No single factor brought about the conditions that now prevail.

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HISTORICAL FISHERY STATISTICS

TABLE 1.--UNITED STATES GREAT LAKES CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963

YEAR	BLUE PIKE		CARP		CATFISH		CHUBS		LAKE HERRING		LAKE TROUT		LAKE WHITEFISH		SAUGER		SHEEPSHEAD	
	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT	QUANTITY	UNIT
1879.	(1)		(1)		(1)		(3)		2,715,716		6,805		(1)		(1)		(1)	
1883.	(1)		(1)		(1)		(3)		2,462		12,597		(1)		(1)		(1)	
1890.	(1)		(1)		(1)		(3)		2,531,110		11,202		(1)		(1)		(1)	
1891.	(1)		(1)		(1)		(3)		2,499,959		12,689		(1)		(1)		(1)	
1893.	(1)		(1)		(1)		(3)		2,489,959		16,183		(1)		(1)		(1)	
1897.	4,901		(1)		(1)		(3)		2,469,140		12,948		(1)		(1)		(1)	
1899.	4,732	3,666	(1)		(1)		(3)		2,647,771		10,418		(1)		(1)		(1)	1,363
1903.	4,976	4,123	(1)		(1)		(3)		2,599,051		16,278		(1)		(1)		(1)	731
1908.	8,834	9,788	(1)		(1)		(3)		2,494,218		12,957		(1)		(1)		(1)	1,459
1914.	11,686	(1)	(1)		(1)		(3)		2,568,605		10,808		(1)		(1)		(1)	1,489
1915.	9,431	(1)	(1)		(1)		(3)		2,536,605		4,631		(1)		(1)		(1)	1,489
1916.	11,627	(1)	(1)		(1)		(3)		2,500,493		9,994		(1)		(1)		(1)	1,489
1917.	11,627	7,193	(1)		(1)		(3)		2,467,720		11,027		(1)		(1)		(1)	1,489
1918.	11,783	(1)	(1)		(1)		(3)		2,637,720		10,793		(1)		(1)		(1)	1,489
1919.	11,783	(1)	(1)		(1)		(3)		2,404,516		12,407		(1)		(1)		(1)	1,489
1920.	4,000	(1)	(1)		(1)		(3)		2,308,600		10,250		(1)		(1)		(1)	1,489
1921.	9,006	(1)	(1)		(1)		(3)		2,400,516		3,275		(1)		(1)		(1)	1,489
1922.	10,486	(1)	(1)		(1)		(3)		2,284,449		15,362		(1)		(1)		(1)	1,489
1923.	9,676	(1)	(1)		(1)		(3)		2,418,153		11,372		(1)		(1)		(1)	1,489
1924.	10,513	(1)	(1)		(1)		(3)		2,377,025		3,487		(1)		(1)		(1)	1,489
1925.	10,513	(1)	(1)		(1)		(3)		2,266,711		11,230		(1)		(1)		(1)	1,489
1926.	9,362	(1)	(1)		(1)		(3)		2,238,659		11,238		(1)		(1)		(1)	1,489
1927.	7,323	(1)	(1)		(1)		(3)		2,300,996		11,559		(1)		(1)		(1)	1,489
1928.	4,843	(1)	(1)		(1)		(3)		2,204,427		10,483		(1)		(1)		(1)	1,489
1929.	2,834	(1)	(1)		(1)		(3)		2,252,936		9,425		(1)		(1)		(1)	1,489
1930.	11,823	(1)	(1)		(1)		(3)		2,291,061		10,544		(1)		(1)		(1)	1,489
1931.	12,680	(1)	(1)		(1)		(3)		2,196,787		9,688		(1)		(1)		(1)	1,489
1932.	9,013	(1)	(1)		(1)		(3)		2,171,968		10,791		(1)		(1)		(1)	1,489
1933.	31,564	(1)	(1)		(1)		(3)		2,181,566		10,564		(1)		(1)		(1)	1,489
1934.	81,509	(1)	(1)		(1)		(3)		2,181,566		9,691		(1)		(1)		(1)	1,489
1935.	9,822	(1)	(1)		(1)		(3)		2,312,206		9,922		(1)		(1)		(1)	1,489
1936.	4,938	(1)	(1)		(1)		(3)		2,294,319		10,099		(1)		(1)		(1)	1,489
1937.	11,021	(1)	(1)		(1)		(3)		2,271,190		9,406		(1)		(1)		(1)	1,489
1938.	4,848	(1)	(1)		(1)		(3)		2,272,667		9,360		(1)		(1)		(1)	1,489
1939.	9,151	(1)	(1)		(1)		(3)		2,272,667		9,439		(1)		(1)		(1)	1,489
1940.	3,074	(1)	(1)		(1)		(3)		2,281,149		9,782		(1)		(1)		(1)	1,489
1941.	5,262	(1)	(1)		(1)		(3)		2,350,068		10,576		(1)		(1)		(1)	1,489
1942.	5,262	(1)	(1)		(1)		(3)		2,311,114		10,174		(1)		(1)		(1)	1,489
1943.	11,273	(1)	(1)		(1)		(3)		2,099,996		10,375		(1)		(1)		(1)	1,489
1944.	14,989	(1)	(1)		(1)		(3)		2,009,996		10,375		(1)		(1)		(1)	1,489
1945.	7,849	(1)	(1)		(1)		(3)		2,009,996		10,605		(1)		(1)		(1)	1,489
1946.	3,140	(1)	(1)		(1)		(3)		2,009,996		8,980		(1)		(1)		(1)	1,489
1947.	3,329	(1)	(1)		(1)		(3)		2,242,293		7,457		(1)		(1)		(1)	1,489
1948.	4,122	(1)	(1)		(1)		(3)		2,242,293		5,402		(1)		(1)		(1)	1,489
1949.	4,566	(1)	(1)		(1)		(3)		2,200,531		4,155		(1)		(1)		(1)	1,489
1950.	5,439	(1)	(1)		(1)		(3)		2,200,531		3,207		(1)		(1)		(1)	1,489
1951.	2,462	(1)	(1)		(1)		(3)		2,171,968		5,191		(1)		(1)		(1)	1,489
1952.	5,759	(1)	(1)		(1)		(3)		2,009,996		2,624		(1)		(1)		(1)	1,489
1953.	8,102	(1)	(1)		(1)		(3)		2,335,935		2,844		(1)		(1)		(1)	1,489
1954.	6,361	(1)	(1)		(1)		(3)		2,009,996		2,416		(1)		(1)		(1)	1,489
1955.	6,547	(1)	(1)		(1)		(3)		2,009,996		2,283		(1)		(1)		(1)	1,489
1956.	6,668	(1)	(1)		(1)		(3)		16,624		2,101		(1)		(1)		(1)	1,489
1957.	7,128	(1)	(1)		(1)		(3)		16,390		1,813		(1)		(1)		(1)	1,489
1958.	3,993	(1)	(1)		(1)		(3)		14,833		1,462		(1)		(1)		(1)	1,489
1959.	5,262	(1)	(1)		(1)		(3)		15,524		1,911		(1)		(1)		(1)	1,489
1960.	7,343	(1)	(1)		(1)		(3)		15,524		1,518		(1)		(1)		(1)	1,489
1961.	8,026	(1)	(1)		(1)		(3)		11,111		1,668		(1)		(1)		(1)	1,489
1962.	7,646	(1)	(1)		(1)		(3)		16,553		384		(1)		(1)		(1)	1,489
1963.	6,298	(1)	(1)		(1)		(3)		11,710		328		(1)		(1)		(1)	1,489
		(2)					(2)		10,058		1,002		(1)		(1)		(1)	1,489
							(2)		8,483		127		(1)		(1)		(1)	1,489

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

HISTORICAL FISHERY STATISTICS

TABLE 1.--UNITED STATES GREAT LAKES CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963 - Continued

YEAR	SMELT		SUCKERS		WHITE BASS		YELLOW PERCH		YELLOW PIKE (WALLEYE)		MISCELLANEOUS		TOTAL	
	QUANTITY	UNITED STATES AND CANADA	QUANTITY	UNITED STATES AND CANADA	QUANTITY	UNITED STATES AND CANADA	QUANTITY	UNITED STATES AND CANADA	QUANTITY	UNITED STATES AND CANADA	QUANTITY	UNITED STATES AND CANADA	QUANTITY	UNITED STATES AND CANADA
1879.	-	-	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	44,370	66,891	9,347	76,236
1885.	-	-	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	54,908	97,623	23,668	121,590
1889.	-	-	3,883	3,883	(1)	(1)	6,541	6,541	(1)	(1)	23,677	115,575	28,362	143,937
1890.	-	-	(1)	(1)	(1)	(1)	7,021	7,021	(1)	(1)	37,501	111,550	26,646	140,196
1893.	-	-	(1)	(1)	(2)	(2)	7,932	7,932	(1)	(1)	83,467	107,852	26,629	134,211
1897.	-	-	(1)	(1)	(1)	(1)	6,100	6,100	(1)	(1)	6,328	94,830	20,541	115,470
1899.	-	-	(1)	(1)	1,579	1,579	9,847	9,847	3,941	3,941	10,177	119,424	26,107	145,530
1900.	-	-	(1)	(1)	35	35	7,007	7,007	3,788	3,788	3,236	94,185	16,659	113,024
1901.	-	-	(1)	(1)	476	476	9,225	9,225	3,149	3,149	13,405	137,789	31,773	169,562
1915.	-	-	476	476	5,790	5,790	5,790	5,790	5,194	5,194	34,733	117,789	38,279	146,065
1916.	-	-	694	694	24,724	24,724	19,091	19,091	111,587	111,587	101,507	32,900	121,987	233,487
1917.	-	-	343	343	5,702	5,702	3,188	3,188	97,439	97,439	32,900	135,237	37,798	173,035
1918.	-	-	333	333	4,259	4,259	2,992	2,992	106,181	106,181	6,374	97,439	36,187	143,667
1919.	-	-	129	129	3,972	3,972	2,902	2,902	15,822	15,822	12,822	106,181	36,187	143,667
1920.	-	-	193	193	6,668	6,668	12,713	12,713	85,400	85,400	30,546	115,947	145,947	261,894
1921.	-	-	304	304	4,391	4,391	1,873	1,873	13,165	13,165	73,168	31,680	104,848	136,528
1922.	-	-	821	821	3,652	3,652	1,945	1,945	6,959	6,959	87,741	29,883	117,625	124,576
1923.	-	-	1,793	1,793	3,577	3,577	1,110	1,110	32,140	32,140	76,285	34,492	115,461	147,651
1924.	(1)	(1)	300	300	3,577	3,577	1,702	1,702	7,449	7,449	73,566	26,466	100,050	107,500
1925.	(1)	(1)	232	232	4,509	4,509	2,030	2,030	10,009	10,009	26,466	26,466	100,050	107,500
1926.	(1)	(1)	158	158	5,385	5,385	2,218	2,218	12,747	12,747	73,182	24,718	97,900	107,354
1927.	(1)	(1)	121	121	4,976	4,976	2,367	2,367	12,318	12,318	79,508	27,847	107,354	107,354
1928.	(1)	(1)	287	287	5,764	5,764	1,787	1,787	6,105	6,105	65,027	27,015	89,040	98,388
1929.	(1)	(1)	135	135	7,972	7,972	3,737	3,737	11,174	11,174	27,216	27,216	98,388	115,565
1930.	(1)	(1)	320	320	6,109	6,109	1,822	1,822	8,742	8,742	26,945	26,945	115,565	115,565
1931.	(1)	(1)	320	320	11,109	11,109	1,822	1,822	6,730	6,730	24,945	24,945	104,313	104,313
1932.	(1)	(1)	96	96	11,421	11,421	3,018	3,018	5,380	5,380	24,945	24,945	104,313	104,313
1933.	(1)	(1)	909	909	5,332	5,332	3,018	3,018	1,961	1,961	70,751	23,703	94,454	94,454
1934.	(1)	(1)	5,563	5,563	16,071	16,071	1,849	1,849	1,530	1,530	90,880	25,269	116,149	116,149
1935.	(1)	(1)	5,826	5,826	11,849	11,849	3,494	3,494	1,693	1,693	90,880	25,269	116,149	116,149
1936.	(1)	(1)	5,675	5,675	7,797	7,797	6,664	6,664	6,388	6,388	90,570	27,794	118,363	118,363
1937.	(1)	(1)	5,707	5,707	4,846	4,846	4,846	4,846	6,877	6,877	30,098	30,098	111,059	111,059
1938.	(1)	(1)	4,850	4,850	7,957	7,957	4,889	4,889	1,709	1,709	59,259	59,259	109,258	109,258
1939.	(1)	(1)	4,267	4,267	6,173	6,173	5,493	5,493	6,588	6,588	21,770	21,770	98,259	98,259
1940.	(1)	(1)	4,795	4,795	6,699	6,699	4,494	4,494	2,332	2,332	76,429	20,935	97,365	97,365
1941.	(1)	(1)	3,355	3,355	5,211	5,211	5,112	5,112	2,395	2,395	73,563	20,657	94,228	94,228
1942.	(1)	(1)	4,312	4,312	5,112	5,112	4,969	4,969	2,813	2,813	76,667	24,559	101,227	101,227
1943.	(1)	(1)	4,439	4,439	5,403	5,403	4,696	4,696	2,292	2,292	74,167	25,145	99,312	99,312
1944.	(1)	(1)	4,114	4,114	5,696	5,696	4,754	4,754	1,958	1,958	77,413	28,128	105,541	105,541
1945.	(1)	(1)	4,658	4,658	3,266	3,266	3,266	3,266	1,658	1,658	77,413	27,109	104,501	104,501
1946.	(1)	(1)	4,215	4,215	823	823	7,472	7,472	69,192	69,192	104,501	104,501	104,501	104,501
1947.	(1)	(1)	3,845	3,845	4,894	4,894	1,387	1,387	69,192	69,192	104,501	104,501	104,501	104,501
1948.	(1)	(1)	3,557	3,557	807	807	6,662	6,662	1,206	1,206	83,483	27,660	111,144	111,144
1949.	(1)	(1)	1,557	1,557	1,442	1,442	4,448	4,448	1,875	1,875	66,906	26,502	95,408	95,408
1950.	(1)	(1)	2,963	2,963	1,036	1,036	4,343	4,343	7,060	7,060	68,906	26,502	95,408	95,408
1951.	(1)	(1)	3,625	3,625	2,912	2,912	1,442	1,442	6,419	6,419	68,623	24,147	92,771	92,771
1952.	(1)	(1)	5,387	5,387	2,679	2,679	4,199	4,199	5,613	5,613	79,653	36,333	110,017	110,017
1953.	(1)	(1)	5,420	5,420	2,370	2,370	6,116	6,116	79,325	79,325	36,949	112,473	112,473	112,473
1954.	(1)	(1)	6,002	6,002	3,361	3,361	6,042	6,042	5,914	5,914	79,748	39,866	119,614	119,614
1955.	(1)	(1)	2,027	2,027	2,973	2,973	6,555	6,555	78,507	78,507	59,212	131,165	131,165	131,165
1956.	(1)	(1)	1,575	1,575	4,431	4,431	10,948	10,948	7,425	7,425	74,041	43,743	117,783	117,783
1957.	(1)	(1)	7,255	7,255	1,507	1,507	10,948	10,948	9,925	9,925	38,405	107,303	107,303	107,303
1958.	(1)	(1)	9,526	9,526	1,441	1,441	10,915	10,915	2,141	2,141	68,997	38,405	107,303	107,303
1959.	(1)	(1)	6,890	6,890	825	825	11,710	11,710	1,950	1,950	63,464	40,098	103,562	103,562
1960.	(1)	(1)	4,320	4,320	1,551	1,551	1,806	1,806	1,427	1,427	37,918	37,918	103,854	103,854
1961.	(1)	(1)	3,540	3,540	2,212	2,212	985	985	4,148	4,148	45,368	61,440	112,508	112,508
1962.	(1)	(1)	1,409	1,409	1,995	1,995	11,995	11,995	5,625	5,625	61,850	53,534	115,384	115,384
1963.	(1)	(1)	1,096	1,096	1,174	1,174	1,255	1,255	1,022	1,022	6,034	46,794	96,617	96,617

(1) NOT AVAILABLE. (2) LESS THAN 500 POUNDS. (3) CHUBS INCLUDED WITH LAKE HERRING.

NOTE: --PRODUCTION OF SAUGER AND WHITE BASS IS CONFINED TO THE CATCH IN LAKE ERIE DURING THE PERIOD 1865-1927.

TABLE 2.--UNITED STATES LAKE ONTARIO CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963

YEAR	THOUSANDS OF POUNDS								
	BLUE PIKE	CARP	CATFISH	CHUBS	LAKE HERRING	LAKE TROUT	LAKE WHITEFISH	SAUGER	SHEEPSHEAD
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1879	(1)		(1)	(3)	3/611	570	1,064	(1)	(1)
1885	(1)	(1)	(1)	(3)	3/404	21	91	(1)	(1)
1890	(1)	(1)	(1)	(3)	3/850	41	23	(1)	(1)
1893	(1)	(1)	(1)	(3)	3/599	6	149	(1)	(1)
1897	(1)	(1)	(1)	(3)	3/165	3	45	(1)	(1)
1899	49			(3)	3/87	15	162	(1)	(1)
1903	187			(3)	3/121	4	25	(1)	(1)
1908	61	5		(3)	3/35	16	16	(1)	(1)
1913	100	5		(3)	3/10	21	16	(1)	(1)
1914	39	1		(3)	3/159	29	21	(1)	(1)
1915	39	1		(3)	3/232	27	27	(1)	(1)
1916	50	1		(3)	3/188	14	38	(1)	(1)
1917	22	7		(3)	3/381	24	116	(1)	(1)
1918	50			(3)	3/206	22	101	(1)	(1)
1919	108	3		(3)	3/181	28	76	(1)	(1)
1920	35	35		(3)	3/144	44	44	(1)	(1)
1921	62	17		(3)	3/109	35	109	(1)	(1)
1922	137	32		(3)	3/571	34	106	(1)	(1)
1924	109	261		(3)	3/59	36	130	(1)	(1)
1925	109	21		(3)	3/394	45	134	(1)	(1)
1926	35	1		(3)	3/47	70	111	(1)	(1)
1927	22	18		(3)	3/192	61	179	(1)	(1)
1928	22	18		(3)	3/102	42	166	(1)	(1)
1929	14	24		(3)	3/342	43	116	(1)	(1)
1930	31	26		(3)	3/416	52	97	(1)	(1)
1931	81	53		(3)	3/189	14	67	(1)	(1)
1932	81	54		(3)	3/73	18	55	(1)	(1)
1933	227	6		(3)	3/42	12	40	(1)	(1)
1934	153	17		(3)	3/126	14	84	(1)	(1)
1935	136	24		(3)	3/167	7	41	(1)	(1)
1936	28	86		(3)	3/223	8	53	(1)	(1)
1937	60	86		(3)	3/124	13	57	(1)	(1)
1938	59	135		(3)	3/42	17	86	(1)	(1)
1939	192	117		(3)	3/109	14	101	(1)	(1)
1941	193	74		(3)	3/72	14	111	(1)	(1)
1942	96	94		(3)	3/74	3	60	(1)	(1)
1943	45	52		(3)	3/74	3	21	(1)	(1)
1944	45	65		(3)	3/58	3	26	(1)	(1)
1945	56	16		(3)	3/108	4	57	(1)	(1)
1946	77	105		(3)	3/78	1	33	(1)	(1)
1947	128	16		(3)	3/44	1	44	(1)	(1)
1948	209	16		(3)	3/17	1	8	(1)	(1)
1949	189	21		(3)	3/50	1	21	(1)	(1)
1950	49	3		(3)	3/46	2	8	(1)	(1)
1951	47	3		(3)	3/46	2	21	(1)	(1)
1952	252	10	11	39	3/2	-	2	(2)	(2)
1953	468	14	9	17	3/5	2	33	(2)	(2)
1954	60	13	1	1	3/3	3	23	(2)	(2)
1955	116	11	1	1	3/1	1	10	(2)	(2)
1956	30	10	1	1	3/2	2	12	(2)	(2)
1957	13	9	1	1	3/2	2	12	(2)	(2)
1958	12	10	1	1	3/2	2	11	(2)	(2)
1959	5	18	1	1	3/1	1	6	(2)	(2)
1960	5	22	2	2	3/5	5	20	(2)	(2)
1961	5	49	3	3	3/2	3	59	(2)	(2)
1962	(2)	39	2	2	3/1	1	27	(2)	(2)
1963	(2)	36	2	1	3/3	3	31	(2)	(2)

SEE FOOTNOTES AT END OF TABLE (CONTINUED ON NEXT PAGE)

HISTORICAL FISHERY STATISTICS

TABLE 2.--UNITED STATES LAKE ONTARIO CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963 - Continued

YEAR	SHELT	SUCKERS	WHITE BASS	YELLOW PERCH		YELLOW PIKE (WALLEYE)	MISCELLANEOUS	TOTAL	
				QUANTITY	QUANTITY			UNITED STATES	CANADA
1879.	-	(1)	(1)	(1)		(1)	1,995	3,640	6,878
1885.	-	(1)	(1)	(1)		(1)	1,862	2,895	5,604
1890.	-	74	65	65		(1)	2,019	3,446	7,535
1893.	-	279	359	359		(1)	2,533	4,669	7,598
1897.	-	48	131	131		(1)	3,670	3,670	4,598
1899.	-	53	169	169	5		921	2,753	3,674
1903.	-	264	397	397	10		2,310	2,761	5,071
1908.	-	128	122	122	8		1,073	2,682	3,754
1913.	-	9	35	35	54		817	3,199	4,016
1914.	-	16	9	9	4		208	3,153	3,361
1915.	-	21	9	9	5		596	4,524	5,120
1917.	-	17	4	4	5		27	3,444	5,177
1918.	-	13	5	5	5		55	5,253	5,597
1919.	-	20	50	50	12		5,600	6,228	6,464
1920.	-	40	3	3	8		99	5,504	5,567
1921.	-	17	330	330	9		544	4,968	5,318
1922.	-	20	10	10	23		914	4,577	6,491
1923.	-	8	56	56	95		965	4,352	6,491
1924.	-	20	10	10	36		1,388	4,767	6,155
1925.	-	94	9	9	36		993	4,875	5,868
1926.	-	40	9	9	29		1,044	4,446	5,496
1928.	-	66	34	34	22		1,118	4,250	5,368
1927.	-	62	39	39	19		768	698	4,905
1928.	-	71	45	45	20		228	4,429	4,429
1929.	-	62	36	36	11		854	3,477	4,330
1930.	-	51	50	50	225		948	5,610	4,357
1931.	-	39	16	16	228		621	4,021	4,703
1932.	-	39	24	24	11		1,232	2,932	4,164
1933.	-	23	35	35	165		527	2,750	3,477
1934.	-	47	1	1	134		527	2,551	3,078
1935.	-	51	51	51	200		717	2,231	2,948
1936.	-	38	80	80	25		770	2,723	3,493
1937.	-	49	55	55	174		601	3,126	3,727
1938.	-	129	58	58	4		618	3,330	3,948
1939.	-	34	33	33	176		990	4,759	5,758
1940.	-	52	40	40	6		1,356	3,255	4,611
1941.	-	19	40	40	175		597	3,126	3,724
1942.	-	59	23	23	93		325	2,468	2,813
1943.	-	45	32	32	3		395	2,311	2,707
1944.	-	33	28	28	94		400	2,637	3,037
1945.	-	29	36	36	130		492	2,338	2,830
1946.	-	14	34	34	125		384	2,059	2,442
1947.	-	23	25	25	142		364	2,042	2,431
1948.	-	29	16	16	143		350	2,006	2,357
1950.	-	26	3	3	93		189	2,219	2,408
1951.	-	22	10	10	116	(2)	498	2,410	2,908
1952.	-	19	9	9	116	(2)	668	2,281	2,950
1953.	-	7	4	4	54	(2)	196	2,059	2,256
1954.	-	15	4	4	111	(2)	311	1,914	2,225
1955.	-	6	1	1	124	2	133	1,875	2,008
1956.	-	9	21	21	143	1	160	2,807	3,614
1957.	-	18	6	6	171	(2)	200	1,967	2,203
1958.	-	14	4	4	145	2	263	2,068	2,361
1959.	-	12	8	8	138	1	226	2,051	2,277
1960.	-	19	8	8	137	1	258	1,958	2,216
1961.	-	16	9	9	137	1	351	2,109	2,460
1962.	-	16	23	23	99	14	233	1,748	1,981
1963.	-	11	52	52	90	2	233	2,008	2,241

1/ NOT AVAILABLE. 2/ LESS THAN 500 POUNDS. 3/ CHUBS INCLUDED WITH LAKE HERRING.

HISTORICAL FISHERY STATISTICS

TABLE 3.--UNITED STATES LAKE ERIE CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963
(THOUSANDS OF POUNDS)

YEAR	BLUE PIKE	CARP	CATFISH	LAKE HERRING	LAKE TROUT	LAKE WHITEFISH	SAUGER	SHEEPSHEAD	SMELT
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1879.	(1)		(1)	11,774	26	3,334	(1)	(1)	-
1885.	7,889	(1)	(1)	19,355	67	5,466	(1)	(1)	-
1889.	(1)	(1)	(1)	37,201	107	3,524	(1)	(1)	-
1890.	(1)	(1)	(1)	21,065	163	3,324	(1)	(1)	-
1897.	4,852	(1)	(1)	19,567	27	1,282	(1)	(1)	-
1899.	4,545	(1)	(1)	33,428	32	1,774	(1)	(1)	-
1903.	4,915	3,634	(1)	6,794	15	2,153	3,067	1,147	-
1906.	8,734	6,693	(1)	10,599	7	335	2,014	642	-
1914.	11,859	12,024	(1)	14,108	6	1,546	2,557	1,394	-
1915.	18,761	9,615	(1)	15,978	16	2,133	4,561	2,262	-
1916.	9,381	9,559	(1)	6,337	5	1,145	4,523	2,212	-
1917.	1,925	1,225	(1)	2,417	1	481	2,083	2,083	-
1918.	1,925	1,225	(1)	35,291	5	1,731	2,094	2,094	-
1919.	1,675	2,161	(1)	58,291	12	1,600	2,094	2,094	-
1920.	3,965	4,102	563	12,693	21	1,711	2,652	2,119	-
1921.	6,944	6,542	1,198	14,964	46	1,426	5,004	2,842	-
1922.	10,359	3,887	553	14,022	2	922	5,004	1,370	-
1923.	9,663	3,215	(1)	20,930	1	787	3,409	1,370	-
1924.	8,967	1,261	331	21,293	1	489	3,312	1,456	-
1925.	10,478	2,339	2,448	2,817	3	663	1,929	2,289	-
1926.	7,301	1,268	(1)	2,817	1	1,119	1,531	1,243	-
1927.	4,819	1,698	(1)	2,350	3	624	1,531	1,243	-
1928.	7,301	1,031	221	618	9	974	1,168	4,318	-
1929.	2,620	1,983	(1)	1,018	3	1,506	1,506	2,918	-
1930.	11,792	1,898	128	128	1	1,079	1,545	1,970	-
1931.	12,643	2,404	178	346	5	1,522	1,532	2,866	-
1932.	9,867	2,913	118	346	3	1,273	2,026	1,626	-
1933.	8,766	2,067	264	160	10	1,169	3,151	2,145	-
1934.	8,356	2,067	(1)	136	4	997	2,219	3,007	-
1935.	18,900	1,609	(1)	170	4	997	1,533	2,951	-
1936.	10,961	2,687	337	66	(2)	1,159	1,737	3,501	-
1937.	(2)	1,096	64	64	3	647	1,214	4,059	-
1938.	6,659	2,153	(1)	810	2	911	844	3,392	-
1939.	9,049	2,445	(1)	717	(2)	2,098	1,740	3,494	-
1940.	4,951	2,466	(1)	62	(2)	2,643	2,960	2,960	-
1941.	3,287	2,955	(1)	48	(2)	2,446	3,646	3,646	-
1942.	6,222	2,448	(1)	25	2	1,924	1,346	4,548	-
1943.	11,228	2,232	(1)	26	(2)	949	1,046	4,513	-
1944.	14,733	3,152	(1)	67	(2)	967	1,046	4,513	-
1945.	14,733	3,152	(1)	2,765	(2)	967	1,046	4,513	-
1946.	3,012	1,681	(1)	6,638	(2)	707	1,042	4,402	-
1947.	1,755	1,681	695	6,638	(2)	707	1,762	4,265	(2)
1948.	3,120	1,596	750	1,177	(2)	1,774	3,230	3,230	-
1949.	9,003	1,596	653	2,113	(2)	2,769	3,676	3,676	-
1950.	14,000	2,234	867	2,234	(2)	3,479	3,990	3,085	-
1951.	6,190	1,679	990	246	(2)	1,605	487	2,299	(2)
1952.	2,150	2,231	1,283	150	-	866	397	3,593	(1)
1953.	6,771	3,002	1,323	96	-	1,359	204	3,535	-
1954.	8,242	3,975	1,671	104	-	1,359	173	1,730	-
1955.	7,648	3,768	1,671	104	-	380	76	1,730	(2)
1956.	6,855	3,425	1,947	34	-	375	15	1,614	(2)
1957.	3,981	3,425	1,660	59	-	445	12	1,924	(2)
1958.	576	4,880	1,472	14	-	754	7	3,795	2
1959.	4,015	4,015	1,429	16	(2)	177	2	2,815	1
1960.	4,596	4,572	1,429	12	(2)	46	1	4,608	15
1961.	4,596	4,572	1,625	6	(2)	15	2	5,098	28
1962.	4,596	4,572	1,625	5	(2)	6	(2)	3,524	16
1963.	(2)	3,338	1,090	1	(2)	9	(2)	3,524	74
								4,126	306

SEE FOOTNOTES AT END OF TABLE. (CONTINUED ON NEXT PAGE)

HISTORICAL FISHERY STATISTICS

TABLE 3.---UNITED STATES LAKE ERIE CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963 - Continued

YEAR	UNITED STATES LAKE ERIE CATCH BY SPECIES (THOUSANDS OF POUNDS)					TOTAL CANADIAN CATCH		TOTAL CANADA AND CANADA	
	SUCKERS	WHITE BASS	YELLOW PERCH	YELLOW PIKE (WALLEYE)	MISCEL- LANEQUO	UNITED STATES QUANTITY	CANADA QUANTITY	UNITED STATES QUANTITY	CANADA QUANTITY
1879	(1)	(1)	(1)	(1)	13,953	29,087	1,560	30,647	
1885	(1)	(1)	1,601	2,705	10,802	51,457	7,666	59,142	
1889	1,072	(1)	3,830	1,869	16,059	63,553	9,626	73,169	
1893	(1)	(1)	2,595	1,82	43,136	13,648	9,44	53,648	
1897	(1)	(1)	3,253	1,529	15,967	31,126	8,112	39,238	
1899	1,628	1,579	3,340	1,645	11,035	35,954	8,654	44,607	
1903	877	33	3,340	1,947	2,514	58,912	10,063	68,975	
1908	1,810	222	1,756	2,733	2,215	23,937	5,403	29,340	
1914	1,350	478	2,039	1,867	1,437	42,466	10,746	53,212	
1915	994	594	1,835	1,937	1,437	54,144	17,130	71,274	
1917	1,124	333	1,835	1,835	1,937	59,773	16,940	76,713	
1918	1,058	300	2,032	1,835	41,195	53,818	12,622	66,436	
1919	1,058	300	2,032	1,835	2,264	51,479	19,489	70,968	
1919	1,129	303	1,668	1,820	1,148	45,760	11,711	57,471	
1919	953	193	2,775	600	1,105	35,165	14,127	49,293	
1920	1,061	504	1,259	890	1,105	32,232	16,612	48,844	
1921	1,420	841	2,192	1,038	764	46,717	16,409	63,126	
1922	991	821	1,926	2,265	506	40,898	17,685	58,583	
1923	1,086	300	1,137	1,137	946	44,377	17,772	62,149	
1924	1,941	864	1,020	1,020	227	50,273	16,976	67,249	
1925	1,622	132	2,945	1,273	1,937	28,097	8,767	36,864	
1926	1,045	136	1,212	1,212	1,952	23,795	10,767	34,562	
1927	1,142	121	2,748	1,364	1,364	23,795	10,767	34,562	
1928	1,319	286	4,275	1,314	478	19,762	10,294	30,056	
1929	1,293	155	6,043	934	480	18,646	29,905	48,551	
1930	2,024	484	4,341	1,869	687	29,584	12,680	42,264	
1931	1,416	418	2,644	2,644	821	34,800	13,807	48,606	
1932	253	1,062	2,024	2,024	743	33,761	12,733	46,494	
1933	1,521	876	9,741	1,420	1,420	35,950	10,531	46,481	
1934	1,034	685	1,345	1,345	945	30,287	14,220	44,507	
1935	1,066	739	9,216	1,764	615	30,287	14,220	44,507	
1936	946	664	2,637	1,764	615	36,749	11,963	48,702	
1937	1,103	435	1,750	3,060	1,469	26,925	14,664	41,590	
1938	1,756	727	5,187	3,135	969	27,619	14,501	42,120	
1939	1,008	712	4,767	4,767	969	28,663	14,263	42,927	
1940	714	469	3,870	3,870	1,148	22,944	9,767	32,711	
1941	688	579	2,910	2,910	1,420	22,063	8,990	31,053	
1942	698	698	2,910	2,910	1,420	22,063	8,990	31,053	
1943	576	460	3,222	3,222	1,610	27,115	14,493	41,608	
1944	1,168	860	3,466	3,466	2,237	28,637	15,295	43,932	
1945	426	883	5,319	5,319	1,613	26,631	16,949	43,580	
1946	432	821	2,685	6,219	914	29,121	16,925	46,046	
1947	568	497	1,797	3,914	848	19,818	12,334	32,152	
1948	498	498	2,640	4,021	694	26,502	14,926	41,428	
1949	907	690	2,659	3,314	692	34,249	19,093	53,342	
1950	630	538	2,506	5,662	429	23,822	13,193	37,015	
1951	538	1,036	2,506	5,662	429	23,822	13,193	37,015	
1952	697	1,738	5,147	5,147	471	25,351	17,417	42,768	
1953	352	1,317	3,418	6,162	438	27,347	23,369	50,716	
1954	361	4,835	5,219	5,219	453	26,340	26,912	53,252	
1955	256	3,298	5,795	5,795	465	26,796	30,285	57,080	
1956	269	2,931	6,130	6,130	543	30,744	44,662	75,406	
1957	328	1,424	5,035	442	442	29,706	37,105	66,811	
1958	244	1,424	3,618	1,171	238	22,435	30,591	52,926	
1959	240	816	1,618	1,171	315	21,258	29,219	50,477	
1960	1,779	6,394	1,171	805	424	19,563	35,698	55,261	
1961	330	1,292	7,548	805	530	19,660	44,464	64,124	
1962	261	1,390	5,822	800	372	17,238	34,233	51,471	
1963	224	1,153	5,822	800	372	17,238	34,233	51,471	

(1) NOT AVAILABLE. (2) LESS THAN 500 POUNDS. NOTE:--CHUBS DO NOT OCCUR IN LAKE ERIE.

HISTORICAL FISHERY STATISTICS

TABLE 4.--UNITED STATES LAKE HURON CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963
(THOUSANDS OF POUNDS)

YEAR	CARP	CATFISH	CHUBS	LAKC HERRING	LAKE TROUT	LAKE WHITEFISH	SAUCER	SHEEPSHEAD	SMELT
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1879		(1)	(3)	3,247	2,085	2,701	(1)		
1885	(1)	(1)	(3)	3,126	2,540	1,425	(1)		
1889	(1)	(1)	(3)	4,108	2,181	2,392	(1)		
1890	(1)	(1)	(3)	2,515	1,750	1,033	(1)		
1891	(1)	(1)	(3)	3,405	2,816	1,625	(1)		
1892	(1)	(1)	(3)	2,259	2,062	1,578	(1)		
1894	(1)	(1)	(3)	3,629	2,102	1,826	(1)		
1895	(1)	(1)	(3)	5,005	2,039	1,218	(1)		
1896	(1)	(1)	(3)	6,574	1,875	946	(2)		
1897	(1)	(1)	(3)	5,019	1,527	1,006	(2)		
1898	(1)	(1)	(3)	5,406	1,292	866	(2)		
1899	(1)	(1)	(3)	5,406	1,299	593	(1)		
1899	(1)	(1)	(3)	4,996	1,460	646	(1)		
1900	(1)	(1)	(3)	4,722	1,732	555	(1)		
1901	(1)	(1)	(3)	6,731	1,738	914	(1)		
1901	(1)	(1)	(3)	6,731	1,738	914	(1)		
1903		(1)	106	6,597	1,724	937	(1)		
1904		(1)	37	7,279	2,016	767	(1)		
1905	(1)	(1)	1,163	5,043	1,967	675	(1)		
1906	(1)	(1)	1,490	4,381	1,966	792	(1)		
1907	(1)	(1)	1,158	5,845	1,133	1,133	(1)		
1908		(1)	291	3,738	1,362	974	(1)		
1912		(1)	252	4,999	1,050	762	(1)		
1913		(1)	375	2,357	1,035	815	(1)		
1914		(1)	75	2,357	2,165	1,393	(1)		
1915		(1)	513	1,491	1,774	1,812	(1)		
1916		(1)	24	7,674	1,798	1,919	(1)		
1917		(1)	214	4,411	2,111	689	(1)		
1918		(1)	742	5,044	2,614	1,102	(1)		
1919		(1)	643	4,836	2,322	1,102	(1)		
1920		(1)	531	3,367	1,320	647	(1)		
1921		(1)	525	4,836	1,320	42	(1)		
1921		(1)	770	2,164	1,358	738	(1)		
1921		(1)	450	3,039	1,827	1,193	(1)		
1924		(1)	375	2,879	1,362	1,362	(1)		
1924		(1)	40	5,148	1,615	1,203	(1)		
1925		(1)	531	4,311	1,685	1,723	(1)		
1926		(1)	1,534	5,604	1,652	1,677	(1)		
1927		(1)	827	5,604	1,598	27	(1)		
1928		(1)	477	2,709	1,469	46	(1)		
1928		(1)	163	2,239	1,455	34	(1)		
1929		(1)	332	4,637	1,283	46	(1)		
1930		(1)	313	3,729	1,729	210	(1)		
1930		(1)	464	2,879	1,652	201	(1)		
1931		(1)	543	2,811	2,165	67	(1)		
1933		(1)	598	2,411	1,970	82	(1)		
1934		(1)	447	4,336	1,576	67	(1)		
1935		(1)	367	3,666	1,743	1,895	(1)		
1935		(1)	335	3,982	1,400	8	(1)		
1936		(1)	190	4,151	1,340	39	(1)		
1937		(1)	192	5,429	1,270	6	(1)		
1938		(1)	148	3,203	1,270	538	(1)		
1940		(1)	148	3,159	1,042	168	(1)		
1941		(1)	366	3,159	892	114	(1)		
1942		(1)	397	2,408	728	95	(1)		
1943		(1)	128	2,009	459	7	(1)		
1944		(1)	395	1,073	363	4	(1)		
1945		(1)	325	1,373	185	3	(1)		
1945		(1)	190	1,462	173	5	(1)		
1946		(1)	40	1,071	38	6	(1)		
1947		(1)	126	1,932	12	3	(1)		
1947		(1)	169	1,932	4	2	(1)		
1949		(1)	148	1,932	4	2	(1)		
1952		(1)	107	1,932	4	2	(1)		

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

HISTORICAL FISHERY STATISTICS

TABLE 4.--UNITED STATES LAKE HURON CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963 - Continued

YEAR	CARP		CATFISH		CHUBS		LAKE HERRING		LAKE TROUT		LAKE WHITEFISH		SAUGER		SHEEPSHEAD		SHELT	
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1950	1,181	162	83	1,748	114	(2)	(2)	1,748	114	(2)	(2)	1	5	116				
1951	1,677	114	227	1,379	143	(2)	(2)	1,379	143	(2)	(2)	1	1	218				
1952	1,637	303	63	1,792	168	(2)	(2)	1,792	168	(2)	(2)	1	4	227				
1953	1,421	258	98	1,228	258	(2)	(2)	1,228	258	(2)	(2)	1	7	211				
1954	1,432	258	98	1,228	258	(2)	(2)	1,228	258	(2)	(2)	1	12	161				
1955	1,373	355	317	1,368	317	(2)	(2)	1,368	317	(2)	(2)	1	26	239				
1956	1,218	338	301	1,211	301	(2)	(2)	1,211	301	(2)	(2)	1	26	239				
1957	1,309	271	68	1,309	271	(2)	(2)	1,309	271	(2)	(2)	1	24	91				
1958	2,212	286	286	1,343	48	(2)	(2)	1,343	48	(2)	(2)	1	23	101				
1959	1,304	330	33	2,151	33	(2)	(2)	2,151	33	(2)	(2)	1	49	70				
1960	1,333	277	2,936	1,333	45	(2)	(2)	1,333	45	(2)	(2)	1	52	78				
1961	1,437	240	68	1,437	240	(2)	(2)	1,437	240	(2)	(2)	1	32	32				
1962	1,476	172	1,973	1,476	17	(2)	(2)	1,476	17	(2)	(2)	1	28	29				
1963	1,647	172	1,973	1,647	17	(2)	(2)	1,647	17	(2)	(2)	1	28	13				

YEAR	SUCKERS		WHITE BASS		YELLOW PERCH		YELLOW PINE (WALLEYE)		MISCELLANEOUS		UNITED STATES		CANADA		TOTAL		UNITED STATES AND CANADA	
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1879	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2,172	1,205	4,197	11,402						
1885	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1,457	1,457	1,457	21,593						
1889	1,007	1,007	2,417	1,818	1,818	1,818	1,818	1,818	10,330	10,330	14,180	27,449						
1890	1,110	1,110	1,295	1,659	1,659	1,659	1,659	1,659	12,702	12,702	12,219	24,921						
1891	1,036	1,036	1,528	1,405	1,405	1,405	1,405	1,405	637	637	11,512	26,428						
1892	1,836	1,836	1,752	1,099	1,099	1,099	1,099	1,099	998	998	9,938	24,128						
1893	2,345	2,345	2,029	1,038	1,038	1,038	1,038	1,038	470	470	9,501	23,971						
1894	2,971	2,971	1,771	1,367	1,367	1,367	1,367	1,367	624	624	9,127	22,668						
1895	1,397	1,397	1,771	1,593	1,593	1,593	1,593	1,593	1,341	1,341	9,127	22,668						
1896	1,600	1,600	2,246	1,858	1,858	1,858	1,858	1,858	1,341	1,341	9,127	22,668						
1897	1,600	1,600	2,246	1,858	1,858	1,858	1,858	1,858	1,341	1,341	9,127	22,668						
1898	1,517	1,517	1,745	1,745	1,745	1,745	1,745	1,745	1,341	1,341	9,127	22,668						
1899	1,383	1,383	2,672	1,789	1,789	1,789	1,789	1,789	1,007	1,007	10,278	24,597						
1900	1,710	1,710	3,566	2,672	2,672	2,672	2,672	2,672	1,007	1,007	10,278	24,597						
1901	1,745	1,745	3,529	2,652	2,652	2,652	2,652	2,652	883	883	7,452	21,603						
1902	2,814	2,814	2,814	3,529	3,529	3,529	3,529	3,529	884	884	7,623	24,436						
1903	2,814	2,814	2,814	3,529	3,529	3,529	3,529	3,529	794	794	16,813	24,436						
1904	3,458	3,458	2,814	2,406	2,406	2,406	2,406	2,406	884	884	20,003	26,090						
1905	3,458	3,458	2,814	2,406	2,406	2,406	2,406	2,406	774	774	18,566	26,090						
1906	4,020	4,020	1,968	1,654	1,654	1,654	1,654	1,654	660	660	17,989	27,464						
1907	3,646	3,646	2,125	1,968	1,968	1,968	1,968	1,968	1,080	1,080	16,895	25,122						
1908	1,871	1,871	2,221	1,221	1,221	1,221	1,221	1,221	980	980	17,821	25,122						
1912	1,320	1,320	4,512	1,259	1,259	1,259	1,259	1,259	870	870	13,075	20,718						
1913	1,580	1,580	2,323	4,512	3,98	3,98	3,98	3,98	774	774	13,075	20,718						
1914	1,301	1,301	997	416	416	416	416	416	296	296	11,238	18,074						
1915	2,266	2,266	1,701	340	340	340	340	340	249	249	6,291	15,354						
1916	1,465	1,465	1,007	1,007	1,007	1,007	1,007	1,007	395	395	10,245	18,980						
1917	1,465	1,465	1,007	1,007	1,007	1,007	1,007	1,007	296	296	17,212	26,607						
1918	1,779	1,779	891	1,447	1,447	1,447	1,447	1,447	296	296	14,977	20,842						
1919	2,714	2,714	934	1,504	1,504	1,504	1,504	1,504	215	215	15,242	20,842						
1920	1,900	1,900	1,337	1,388	1,388	1,388	1,388	1,388	227	227	11,541	17,865						
1921	1,803	1,803	1,051	844	844	844	844	844	191	191	6,324	16,044						
1922	1,968	1,968	674	724	724	724	724	724	164	164	9,607	16,044						
1923	1,445	1,445	1,284	809	809	809	809	809	102	102	13,279	20,471						
											10,102	6,841						

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

HISTORICAL FISHERY STATISTICS

TABLE 4.--UNITED STATES LAKE HURON CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963 - Continued
(THOUSANDS OF POUNDS)

YEAR	SUCKERS QUANTITY	WHITE BASS QUANTITY	YELLOW PERCH QUANTITY	YELLOW PIKE (WALLEYE) QUANTITY	MISCELLANEOUS QUANTITY	TOTAL	
						UNITED STATES QUANTITY	CANADA QUANTITY
1924.	1,073		54	503	143	8,877	16,202
1925.	1,374	(1)	528	458	182	12,600	7,554
1926.	1,827	(1)	458	816	123	13,128	20,667
1927.	2,461		204	901	157	15,706	24,603
1928.	1,873	1	281	899	181	7,844	8,897
1929.	1,576		507	717	150	6,829	7,490
1930.	2,237		719	1,109	211	15,317	6,892
1931.	2,731		825	1,353	173	16,467	22,209
1932.	2,403		670	1,636	105	17,324	24,004
1933.	2,123		927	1,603	105	13,471	21,284
1934.	1,936	(2)	863	1,603	84	14,390	21,940
1935.	1,766	(2)	953	1,574	87	6,402	8,402
1936.	1,814	(2)	1,175	1,565	106	12,734	7,815
1937.	1,726		948	1,627	140	11,844	19,438
1938.	1,788		500	1,356	152	7,595	19,336
1939.	1,362	1	565	1,641	121	13,333	6,444
1940.	1,343		528	1,573	121	6,573	19,777
1941.	1,312		416	1,024	97	5,932	14,156
1942.	1,414	(2)	575	2,104	124	6,467	14,156
1943.	1,414	(2)	604	1,650	169	4,779	13,244
1944.	1,236	(2)	604	1,138	130	6,433	13,028
1945.	1,554	1	407	1,678	152	3,492	9,925
1946.	1,646	(2)	341	974	168	7,475	10,504
1947.	1,262	(2)	291	485	139	2,536	9,683
1948.	1,305	(2)	694	225	153	6,034	2,040
1949.	1,022	(2)	518	200	76	2,796	11,684
1950.	977	(2)	465	200	69	5,050	6,835
1951.	1,199	(2)	521	154	48	5,521	6,762
1952.	1,144	(2)	494	153	77	6,118	5,742
1953.	1,144	4	456	177	115	5,498	7,528
1954.	1,185	28	507	164	110	6,750	13,646
1955.	611	11	885	142	156	5,421	14,227
1956.	482	15	415	142	111	6,150	8,571
1957.	353	3	377	124	67	4,561	6,150
1958.	451	1	306	113	57	3,635	6,398
1959.	464	1	306	113	57	3,841	6,398
1960.	551	12	598	136	164	5,044	2,600
1961.	707	12	372	150	232	3,913	10,251
1962.	509	17	507	158	52	6,918	5,207
1963.	509	17	507	158	52	5,206	10,655
						8,587	6,793

/ NOT AVAILABLE. 2/ LESS THAN 500 POUNDS. 3/ CHUBS INCLUDED WITH LAKE HERRING. NOTE:--BLUE PIKE DO NOT OCCUR IN LAKE HURON.

HISTORICAL FISHERY STATISTICS

TABLE 5.--UNITED STATES LAKE MICHIGAN CATCH BY SPECIES, VARIOUS YEARS, 1879-1963

(THOUSANDS OF POUNDS)

YEAR	CARP QUANTITY	CATFISH QUANTITY	CHUBS QUANTITY	LAKE HERRING QUANTITY	LAKE TROUT QUANTITY	LAKE WHITEFISH QUANTITY	SAUGER QUANTITY	SHEEPSHEAD QUANTITY
1879.				3/3,050	2,659			(1)
1885.	(1)	(1)	(3)	3/3,312	6,431	(1)		(1)
1889.	(1)	(1)	(3)	3/9,569	5,980	5,524		(1)
1890.	(1)	(1)	(3)	6,082	8,364	(1)		(1)
1892.	(1)	(1)	(3)	3/10,205	6,437	2,856		(1)
1893.	(1)	(1)	(3)	3/20,085	8,526	(1)		(1)
1894.	(1)	(1)	(3)	3/22,254	7,553	(1)		(1)
1895.	(1)	(1)	(3)	3/22,254	7,543	(1)		(1)
1896.	(1)	(1)	(3)	3/23,863	7,020	2,000		(1)
1897.	(1)	(1)	(3)	3/23,814	7,823	3,345		(1)
1899.	(1)	(1)	(3)	22,283	5,266	1,770		55
1903.	535		1,331	15,351	8,943	2,404		42
1908.	483		2,191	8,631	3,288	3,288		87
1911.	(1)	(1)	2,561	9,752	1,430	(1)		(1)
1912.	(1)	(1)	2,820	8,184	6,561	(1)		(1)
1913.	(1)	(1)	3,846	7,872	6,835	(1)		(1)
1915.	(1)	(1)	2,912	10,456	7,704	1,460		(1)
1916.	(1)	(1)	1,786	7,137	5,990	1,630		(1)
1917.	247		3,742	11,325	6,904	2,623		(1)
1918.	(1)	(1)	5,763	8,330	5,810	2,346		(1)
1919.	(1)	(1)	4,927	5,777	6,984	1,489		18
1920.	(1)	(1)	2,306	5,061	9,977	(1)		16
1921.	(1)	(1)	1,246	2,675	1,749	1,351		6
1922.	749		1,257	3,160	1,740	1,505		9
1923.	(1)	(1)	1,237	3,100	6,170	(1)		7
1924.	(1)	(1)	2,273	3,625	7,224	1,397		5
1925.	(1)	(1)	3,640	4,323	6,894	1,652		12
1926.	(1)	(1)	3,740	3,284	6,530	1,875		20
1927.	(1)	(1)	4,765	5,642	5,699	2,591		2
1928.	608		3,782	3,033	4,819	3,526		2
1929.	631		4,398	5,225	6,394	4,969		3
1930.	631	3	1,008	5,951	6,394	3,669		17
1931.	284	2	3,123	5,432	5,432	4,675		17
1932.	284	5	3,123	2,943	5,470	3,836		14
1933.		5	4,032	4,009	5,212	2,574		14
1934.		3	6,237	6,415	4,957	2,183		10
1935.	1,320	(1)	5,794	5,425	4,873	1,697		12
1936.	1,486		5,674	4,796	4,763	1,026		11
1937.	1,925	23	5,579	5,500	4,868	1,073		6
1938.	1,873	10	3,465	5,600	5,600	1,931		6
1939.	1,979	22	1,668	2,675	6,266	955		14
1940.	1,979	49	1,630	2,675	6,266	955		23
1941.	2,057	39	1,703	1,703	6,787	1,301		52
1942.	1,745	67	1,753	1,426	6,484	1,341		23
1943.	1,511	96	2,214	1,932	6,860	1,407		82
1944.	1,217	62	2,607	1,393	6,498	1,753	(2)	133
1945.	1,832	(1)	4,221	4,030	5,437	1,688	(2)	139
1946.	1,273	91	4,523	5,300	5,300	2,856	(2)	177
1947.	1,082	26	5,920	6,020	1,197	5,247	(2)	178
1948.	1,082	27	6,778	6,020	1,342	5,247	(2)	57
1949.	1,361	22	9,211	7,492	54	2,361	(2)	41
1950.	1,146	10	10,301	8,574	11	1,214	(2)	24
1951.	1,135						(2)	22

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

HISTORICAL FISHERY STATISTICS

TABLE 5.--UNITED STATES LAKE MICHIGAN CATCH BY SPECIES, VARIOUS YEARS, 1879-1963 - Continued

YEAR	CARP	CATFISH	CHUBS	LAKE HERRING	LAKE TROUT	LAKE WHITEFISH	SAUGER	SHEEPSHEAD
1952.	1,106	9	11,098	9,691		1,770	(2)	18
1953.	1,547	5	10,558	9,725	(2)	1,075	(2)	10
1954.	1,347	5	10,895	6,087	(2)	769		16
1955.	1,856	9	10,913	5,731		376	1	6
1956.	1,851	9	10,913	5,385		57	(2)	2
1957.	2,041	5	10,546	2,026		25	(2)	3
1958.	1,958	(2)	9,583	968	(2)	49	(1)	(2)
1959.	1,937	2	7,796	233	(2)	31	(1)	3
1960.	1,416	(2)	12,659	233	(2)	124	(2)	7
1961.	1,842	(2)	12,133	177	(2)	295	(2)	2
1962.	1,276	(2)	11,445	16	(2)	285	(2)	(2)
1963.	1,277	2	7,460	41	(2)	283	(2)	1
YEAR	SMELT	SUCKERS	WHITE BASS	YELLOW PERCH	YELLOW PIKE (WALLEYE)	MISCELLANEOUS	TOTAL	
QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	
1879.	-	(1)	(1)	(1)	(1)	17,433	23,142	
1880.	-	252	(1)	(1)	(1)	13,490	23,485	
1881.	-	1,829	(1)	1,61	(1)	1,925	20,004	
1882.	-	1,601	(1)	2,645	(1)	5,893	28,030	
1893.	-	1,691	(1)	3,452	(1)	6,255	40,723	
1894.	-	(1)	(1)	6,515	(1)	3,603	42,728	
1895.	-	(1)	(1)	5,959	(1)	2,792	38,212	
1896.	-	(1)	(1)	6,364	(1)	3,727	47,004	
1897.	-	(1)	(1)	3,079	(1)	1,573	39,634	
1899.	1,119	(1)	(1)	3,234	284	1,059	37,547	
1900.	1,119	(1)	(1)	3,557	309	4,353	45,147	
1908.	2,602	(1)	(1)	2,072	214	1,027	47,353	
1911.	1,609	(1)	(1)	2,368	164	2,208	26,493	
1912.	(1)	(1)	(1)	1,65	164	3,359	24,814	
1913.	(1)	(1)	(1)	2,935	165	27,091	27,091	
1914.	(1)	(1)	(1)	2,731	225	5,696	28,201	
1915.	(1)	(1)	(1)	2,790	216	6,084	31,642	
1916.	(1)	(1)	(1)	2,263	275	2,895	31,642	
1917.	4,035	(1)	(1)	2,101	196	501	31,674	
1918.	(1)	(1)	(1)	2,460	103	1,032	31,674	
1919.	(1)	(1)	(1)	2,064	122	2,115	21,022	
1920.	(1)	(1)	(1)	2,105	116	2,515	19,999	
1921.	(1)	(1)	(1)	967	141	2,423	21,078	
1922.	(1)	536	(1)	873	64	2,087	19,394	
1923.	(1)	(1)	(1)	1,083	99	2,292	15,380	
1924.	(1)	(1)	(1)	1,512	118	2,591	18,316	
1925.	(1)	(1)	(1)	2,266	93	3,012	21,341	
1926.	(1)	(1)	(1)	2,151	82	2,687	20,494	
1927.	(1)	(1)	(1)	1,151	52	1,708	17,998	
1928.	(1)	(1)	(2)	1,379	53	1,653	17,998	
1929.	2,709	(1)	(1)	1,467	64	504	26,186	
1930.	2,281	(1)	(1)	1,885	64	486	26,962	
1931.	2,785	(1)	(1)	1,288	56	309	24,374	
1932.	2,224	(1)	(1)	955	56	247	19,305	
1933.	1,890	(2)	(2)	1,009	167	261	21,002	
1934.	1,031	2,206	(2)	1,276	161	253	26,055	
1935.	1,835	2,686	(1)	740	99	233	24,452	
1936.	1,202	2,686	(1)	2,368	116	184	24,476	

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

TABLE 5.--UNITED STATES LAKE MICHIGAN CATCH BY SPECIES, VARIOUS YEARS, 1879-1963 - Continued
(THOUSANDS OF POUNDS)

YEAR	SMELT QUANTITY	SUCKERS QUANTITY	WHITE BASS QUANTITY	YELLOW PERCH QUANTITY	YELLOW PIKE (WALLEYE) QUANTITY	MISCEL- LANEOUS QUANTITY	TOTAL UNITED STATES QUANTITY
1927		2,382	(2)	2,490	76	143	25,602
1928	1,428	1,858	3	2,204	50	199	24,101
1929	1,854	1,854	1	3,090	45	234	22,485
1930	4,209	2,017	3	2,576	43	160	22,601
1940	1,935	1,935	-	2,416	44	191	22,931
1941	3,353	2,251	(2)	2,648	31	229	21,413
1942	2,225	2,201	(2)	3,135	51	390	22,175
1943	5	2,273	(2)	1,485	172	652	22,652
1944	107	1,469	(2)	1,469	177	658	22,652
1945	267	1,895	2	1,473	237	430	22,362
1946	1,621	1,621	-	1,399	367	464	24,958
1947	786	1,606	-	1,513	636	357	27,023
1948	1,131	1,810	-	1,378	1,120	273	25,573
1949	1,540	1,810	-	1,484	1,349	210	27,078
1950	2,417	1,228	(2)	1,441	500	172	27,648
1951	3,399	744	(2)	2,357	301	232	32,061
1952	5,111	600	(2)	2,606	41	184	33,206
1953	5,191	650	-	2,690	509	217	30,291
1954	5,416	684	-	3,550	976	186	30,036
1955	5,416	684	-	3,320	801	101	30,798
1956	7,368	640	-	2,988	266	300	27,223
1957	7,024	641	-	3,441	217	1,422	27,771
1958	9,102	685	-	1,977	182	1,501	20,608
1959	6,004	612	-	3,285	118	2,430	24,311
1960	3,267	767	3	4,959	67	1,359	23,429
1961	2,152	494	(2)	4,059	87	2,805	23,429
1962	1,245	253	(2)	4,872	61	5,495	21,021
1963	1,203	299	(2)	4,872	61	5,495	21,021

1/ NOT AVAILABLE. 2/ LESS THAN 500 POUNDS. 3/ CHUBS INCLUDED WITH LAKE HERRING.
NOTE:--BLUE PIKE DO NOT OCCUR IN LAKE MICHIGAN.



HISTORICAL FISHERY STATISTICS

TABLE 6.--UNITED STATES LAKE SUPERIOR CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963
(THOUSANDS OF POUNDS)

YEAR	CARP	CATFISH	CHUBS	LAKE HERRING	LAKE TROUT	LAKE WHITEFISH	SAUGER	SMELT
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1879			3	34	1,465	2,257	1	
1885	1	1	3	365	3,469	4,866	1	
1889	1	1	3	365	3,469	4,866	1	
1890	1	1	3	365	3,469	4,866	1	
1891	1	1	3	365	3,469	4,866	1	
1897	1	1	3	(1)	4,342	3,213	1	
1898	1	1	3	694	3,794	1,438	1	
1899	1	1	3	1,515	3,625	1,132	1	
1903			3	6,751	5,592	1,335	1	
1906			3	5,310	2,903	942	1	
1913			3	6,878	2,366	113	1	
1914			3	7,625	1,575	569	1	
1915			3	7,625	1,575	569	1	
1916			3	5,317	2,178	175	1	
1917			3	7,194	1,963	257	1	
1918			3	8,344	2,326	327	1	
1919			3	6,418	3,463	240	1	
1920			3	6,418	2,016	221	1	
1921	(2)		3	6,484	2,175	285	1	
1922			3	3,736	3,319	1,111	1	
1923			3	5,521	1,446	521	1	
1924			3	9,005	2,591	236	1	
1925			3	9,005	2,655	247	1	
1926			3	9,346	2,280	260	1	
1927			3	11,506	3,051	328	(2)	
1928			3	9,496	2,962	286	2	
1929	3		3	13,288	2,804	166	9	
1930	1		3	11,937	2,489	252	4	
1931	1		3	7,563	2,993	474	1	
1932			3	7,385	2,493	46	6	
1933	5		3	13,935	2,493	520	(2)	
1934			3	13,588	3,374	488	2	
1935	1	(1)	3	12,112	3,476	512	1	(2)
1936	2		3	12,059	3,233	374	(2)	
1937			3	10,850	3,085	364	1	
1938			3	13,307	3,167	455	(2)	4
1939			3	17,117	2,744	497		
1940			3	17,117	2,677	932	1	
1941			3	14,846	2,677	932	2	(2)
1942			502	14,846	2,959	751	2	(2)
1943	434	(1)	3	13,574	3,053	732	2	1
1944	369		3	14,227	3,740	663	2	(2)
1945	285		3	14,045	3,740	663	2	(2)
1946	356		3	13,142	3,444	717	2	(2)
1947	149		3	10,808	3,444	915	2	(2)
1948	210	(2)	3	14,705	2,964	951	2	(2)
1949	163		3	13,204	2,964	1,201	2	(2)
1950	144		3	6,126	2,966	1,284	2	(2)
1951	75		3	10,426	2,966	1,284	2	(2)
1952	91		3	12,021	2,011	1,442	1	1
1953	69		3	10,439	2,638	351	2	45
1954	182		3	11,823	2,413	607	2	21
1955	154		3	10,134	2,256	1,005	2	25
1956	216		3	11,823	2,101	1,004	2	74
1957	266		3	10,478	1,813	917	2	118
1958	1,181	(2)	3	11,355	1,813	523	2	139
1959	1,258		3	10,216	1,060	309	2	601
1960	1,186		3	10,812	380	284	2	947
1961	1,186	(2)	3	11,457	323	343	2	1,340
1962	1,013	(2)	3	9,906	257	401	2	955
1963	1,588		3	8,419	101	443	2	1,493

(CONTINUED ON NEXT PAGE)

SEE FOOTNOTES AT END OF TABLE.

HISTORICAL FISHERY STATISTICS

TABLE 6.--UNITED STATES LAKE SUPERIOR CATCH BY SPECIES AND TOTAL CANADIAN CATCH, VARIOUS YEARS, 1879-1963 - Continued

YEAR	SUCKERS		YELLOW PERCH		YELLOW PIKE (THOUSANDS OF POUNDS)		MISCEL- LANEOUS		UNITED STATES		TOTAL CANADA		UNITED STATES AND CANADA	
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1879.	(1)				(1)	51	252		3,817		252		4,169	
1880.	(1)		(1)		(1)	441	3,826		7,826		1,642		10,469	
1881.	(1)		(1)		(1)	207	7,884		9,664		2,163		10,067	
1890.	(1)	28	(1)		(1)	91	1,943		6,116		8,059		10,214	
1893.	(1)	2	(1)		(1)	1,465	7,979		6,028		2,382		8,410	
1897.	(1)		(1)		(1)	102	6,028		3,005		9,340		16,399	
1899.	(1)	164			13	46	13,986		9,601		2,413		12,467	
1903.		283			32	59	9,601		12,475		2,896		15,497	
1908.					117	772	10,516		12,475		3,514		14,990	
1913.					62	537	9,543		9,511		3,217		12,760	
1915.					71	492	8,350		9,911		5,653		13,961	
1916.					30	647	11,553		11,553		7,734		19,287	
1917.		347			25	102	492		16,527		4,296		14,623	
1918.					19	45	386		9,056		2,410		12,622	
1919.					3	318	318		7,525		2,410		9,935	
1920.					10	30	35		9,569		2,410		11,979	
1921.					17	28	281		11,253		3,161		14,414	
1922.					16	30	281		10,369		2,488		12,857	
1923.					49	421	143		10,631		3,108		13,739	
1924.					2	23	4.3		17,620		3,988		21,608	
1925.					5	25	29		16,008		4,900		20,908	
1926.					2	19	87		16,012		4,509		20,521	
1927.					15	24	48		14,595		3,907		18,503	
1928.					12	33	48		20,672		3,319		23,991	
1929.					17	42	35		19,228		3,436		22,664	
1930.					10	22	35		18,372		3,347		21,719	
1931.					8	25	29		19,245		3,761		23,006	
1932.					6	19	87		16,725		3,812		20,537	
1933.					8	33	48		16,185		2,939		19,124	
1934.					6	36	36		17,730		3,371		21,101	
1941.					6	5	5		14,035		2,655		16,686	
1942.					6	3	3		15,465		3,127		18,592	
1943.					8	37	37		13,650		2,771		16,420	
1944.					4	12	16		15,885		2,890		18,775	
1945.					2	21	9		13,391		2,145		15,536	
1946.					4	21	36		13,565		2,797		16,361	
1948.					(2)	1	40		13,194		2,671		15,865	
1949.					5	2	52		13,194		3,850		18,006	
1950.					(2)	1	76		14,956		2,954		17,910	
1951.					3	1	18		12,602		2,147		14,749	
1952.					1	1	22		12,125		2,906		15,031	
1953.					3	2	25							
1954.					52	5	47							
1955.					54	2	22							
1956.					26	2	22							
1957.					48	2	22							
1958.					43	1	22							
1959.					50	1	22							
1960.					68	2	22							
1961.					47	5	22							
1962.					45	2	22							
1963.					53	2	25							

1/ NOT AVAILABLE. 2/ LESS THAN 500 POUNDS. 3/ CHUBS INCLUDED WITH LAKE HERRING. NOTE:--BLUE PIKE, SHEEPSHEAD, AND WHITE BASS DO NOT OCCUR IN LAKE SUPERIOR.

HISTORICAL FISHERY STATISTICS

TABLE 7.--UNITED STATES GREAT LAKES CATCH BY STATES, 1935-63

(THOUSANDS OF POUNDS)

YEAR	NEW YORK	PENNSYLVANIA	OHIO	MICHIGAN 1/	INDIANA 1/
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
1935	1,475	3,271	25,191	30,621	435
1936	1,290	3,899	31,083	28,972	544
1937	2,451	3,007	21,087	26,409	781
1938	2,377	2,674	22,040	26,682	763
1939	2,595	2,762	23,512	28,898	605
1940	1,970	2,295	18,996	26,044	524
1941	1,100	1,794	18,642	26,132	286
1942	897	1,901	20,338	26,279	139
1943	1,402	2,975	21,872	25,700	120
1944	2,023	2,685	23,371	22,111	49
1945	2,281	3,514	22,172	23,960	54
1946	2,640	3,665	21,774	24,159	33
1947	1,045	1,357	16,689	25,545	16
1948	1,309	2,534	21,796	30,136	24
1949	2,305	4,436	26,682	25,334	30
1950	574	2,236	20,225	23,153	34
1951	800	736	18,700	25,020	90
1952	1,265	2,112	21,247	29,232	21
1953	691	1,903	22,949	25,013	21
1954	1,214	2,232	23,435	27,231	21
1955	2,079	3,056	20,388	25,438	13
1956	1,347	2,135	25,085	24,636	8
1957	911	1,778	25,964	22,477	7
1958	653	1,010	19,419	25,487	6
1959	500	1,071	19,518	22,323	1
1960	589	1,015	18,011	25,021	16
1961	897	1,286	15,810	24,535	14
1962	680	2,150	15,225	22,121	6
1963	502	1,412	14,223	20,326	6

YEAR	ILLINOIS	WISCONSIN	MINNESOTA	TOTAL
	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>	<u>QUANTITY</u>
1935	1,300	16,330	8,390	87,011
1936	1,369	17,740	5,676	90,570
1937	1,462	17,757	6,047	81,001
1938	1,156	15,348	6,261	79,299
1939	1,259	16,082	7,007	82,720
1940	1,943	17,006	7,811	76,588
1941	1,555	18,719	6,202	76,429
1942	1,777	17,093	5,140	73,563
1943	1,909	17,028	5,659	76,567
1944	1,657	16,675	5,595	74,167
1945	1,621	19,044	4,768	77,413
1946	1,505	19,635	3,781	77,192
1947	1,832	18,615	3,162	68,261
1948	1,620	20,372	4,177	81,968
1949	1,497	18,606	4,395	83,483
1950	1,576	18,400	2,708	68,906
1951	1,050	19,731	2,497	68,623
1952	1,233	21,613	2,940	79,663
1953	1,323	20,528	2,897	75,525
1954	1,668	20,854	3,092	79,748
1955	1,521	20,196	2,516	75,207
1956	1,567	20,444	2,726	78,948
1957	1,160	18,480	3,262	74,041
1958	801	18,250	3,270	68,897
1959	245	16,833	2,973	63,454
1960	324	18,394	2,565	65,936
1961	340	21,925	2,334	67,140
1962	269	19,075	2,303	61,850
1963	285	16,916	2,153	55,823

1/ BEGINNING WITH 1944, THE CATCH BY INDIANA FISHERMEN IN MICHIGAN WATERS, IS INCLUDED WITH THE PRODUCTION FOR THE STATE OF MICHIGAN.

HISTORICAL FISHERY STATISTICS

ATLANTIC AND GULF COASTS MENHADEN FISHERY

The menhaden is taken in greater quantities than any fish occurring off the Atlantic and Gulf Coasts of the United States. The Indians are known to have used menhaden for fertilizer before the settlement of North America by the white man. Colonists soon recognized the value of the fish for this purpose and the use of whole fish for fertilizer was continued into the nineteenth century. The production of menhaden oil is reported to have been undertaken in Rhode Island in 1812 and in Maine about 1850. Rapid growth of an industry for producing both menhaden scrap and oil occurred between 1865 and 1875. In recent years menhaden have been landed in greater volume than any other fish taken by U. S. fishermen. The total catch since the establishment of the United States has exceeded 62 billion pounds, more than the production of any other species. Nearly the entire catch of menhaden is now used in the manufacture of meal and solubles used for animal feeding, and oil used in the manufacture of margarine and a wide variety of industrial products and processes.

Data on the catch of menhaden and on the production of menhaden products are available for most of the years following 1872. Since menhaden are landed at relatively few plants, the collection of data on the catch and production of menhaden products is relatively simple. It is therefore believed that the following data have a high degree of accuracy.

SUMMARY OF THE MENHADEN FISHERY, 1873-1963

YEAR	PLANTS	FISH RECEIVED	DRY SCRAP AND MEAL		ACIDULATED SCRAP	
	NUMBER	THOUSAND POUNDS	TONS	VALUE	TONS	VALUE
1873	62	266,459	-	-	36,299	(1)
1874	64	330,228	-	-	50,976	(1)
1875	60	377,429	-	-	53,625	(1)
1876	64	343,342	-	-	51,245	(1)
1877	56	393,720	5,700	(1)	49,744	(1)
1878	56	514,412	19,377	(1)	64,342	(1)
1879	60	426,833	29,563	(1)	37,496	(1)
1880	79	520,506	25,800	(1)	19,020	(1)
1881	97	304,309	25,027	(1)	7,592	(1)
1882	97	232,248	17,552	(1)	10,029	(1)
1883	78	411,019	34,216	(1)	10,920	(1)
1884	52	575,257	58,433	(1)	10,430	(1)
1885	50	321,074	33,910	(1)	7,225	(1)
1886	26	189,681	14,597	(1)	4,298	(1)
1887	28	223,488	17,262	(1)	5,368	(1)
1888	24	294,391	15,638	(1)	12,406	(1)
1889	29	372,064	24,359	(1)	25,859	(1)
1890	28	357,570	20,339	(1)	21,173	(1)
1891	27	237,943	12,608	(1)	15,069	(1)
1892	29	149,828	8,400	(1)	10,815	(1)
1893	33	245,492	13,150	(1)	15,465	(1)
1894	44	357,352	20,057	(1)	27,582	(1)
1895	42	309,370	18,682	(1)	21,965	(1)
1896	35	268,955	14,280	(1)	21,484	(1)
1897	41	391,483	18,430	(1)	34,372	(1)
1898	40	363,475	17,360	(1)	36,120	(1)
1899	(1)	(1)	(1)	(1)	(1)	(1)
1900	(1)	(1)	(1)	(1)	(1)	(1)
1901 2/	36	609,744	36,977	\$909,505	48,653	\$630,305
1902	(1)	(1)	(1)	(1)	(1)	(1)
1903	(1)	(1)	(1)	(1)	(1)	(1)
1904	(1)	(1)	(1)	(1)	(1)	(1)
1905	(1)	(1)	(1)	(1)	(1)	(1)
1906	(1)	(1)	(1)	(1)	(1)	(1)
1907	(1)	(1)	(1)	(1)	(1)	(1)
1908	(1)	(1)	(1)	(1)	(1)	(1)
1909	(1)	(1)	(1)	(1)	(1)	(1)
1910	(1)	(1)	(1)	(1)	(1)	(1)
1911	(1)	(1)	(1)	(1)	(1)	(1)
1912	48	3/711,435	50,885	1,532,994	37,635	605,171
1913	(1)	(1)	(1)	(1)	(1)	(1)

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HISTORICAL FISHERY STATISTICS

SUMMARY OF THE MENHADEN FISHERY, 1873-1963 - Continued

YEAR	PLANTS	FISH RECEIVED		DRY SCRAP AND MEAL		ACIDULATED SCRAP	
	NUMBER	THOUSAND POUNDS	TONS	VALUE	TONS	VALUE	
1914	(1)	(1)	(1)	(1)	(1)	(1)	
1915	(1)	(1)	(1)	(1)	(1)	(1)	
1916	(1)	(1)	(1)	(1)	(1)	(1)	
1917	(1)	306, 146	20, 625	(1)	16, 316	(1)	
1918	(1)	359, 292	16, 017	(1)	33, 187	(1)	
1919	(1)	438, 520	15, 103	(1)	47, 915	(1)	
1920	(1)	(1)	(1)	(1)	(1)	(1)	
1921	40	694, 132	37, 859	\$1, 380, 455	44, 804	\$905, 640	
1922	45	812, 342	67, 821	2, 665, 441	25, 755	556, 317	
1923	50	743, 895	43, 452	2, 029, 406	44, 935	1, 064, 870	
1924	45	344, 284	21, 008	996, 866	24, 409	495, 684	
1925	43	532, 118	30, 177	1, 519, 450	41, 463	1, 102, 051	
1926	41	382, 781	24, 265	1, 164, 396	23, 553	548, 204	
1927	39	392, 763	26, 417	1, 406, 915	19, 984	566, 590	
1928	34	362, 213	24, 681	1, 453, 651	20, 028	531, 238	
1929	37	442, 443	33, 041	1, 625, 694	23, 089	622, 544	
1930	33	409, 513	32, 418	1, 629, 471	15, 725	395, 295	
1931	27	236, 432	21, 093	701, 541	8, 771	136, 393	
1932	24	375, 479	36, 544	833, 689	6, 841	72, 892	
1933	30	357, 726	31, 453	962, 612	9, 481	173, 280	
1934	27	517, 403	37, 935	1, 247, 697	22, 051	381, 559	
1935	27	434, 386	30, 416	932, 665	29, 890	524, 870	
1936	29	516, 104	42, 411	1, 411, 710	23, 482	359, 615	
1937	32	529, 202	35, 801	1, 581, 219	31, 600	618, 104	
1938	32	517, 530	39, 274	1, 576, 520	21, 814	418, 936	
1939	33	574, 825	52, 950	2, 224, 920	15, 853	265, 850	
1940	30	634, 589	56, 249	2, 423, 229	15, 520	271, 533	
1941	29	775, 087	75, 316	4, 008, 355	11, 029	242, 792	
1942	30	482, 644	50, 504	3, 362, 279	2, 594	80, 520	
1943	25	615, 554	65, 357	4, 548, 025	1, 555	58, 857	
1944	27	685, 980	69, 170	4, 913, 224	2, 922	111, 104	
1945	24	759, 074	77, 451	5, 483, 377	1, 577	62, 200	
1946	25	916, 013	94, 522	6, 605, 116	2, 022	78, 475	
1947	31	948, 156	98, 602	10, 883, 852	6, 632	26, 863	
1948	31	1, 007, 889	104, 058	11, 560, 914	(4)	(4)	
1949	31	1, 072, 630	113, 393	17, 813, 339	(4)	(4)	
1950	35	1, 000, 498	103, 365	12, 864, 751	(4)	(4)	
1951	35	1, 103, 915	115, 464	13, 879, 523	(4)	(4)	
1952	40	1, 386, 281	114, 025	17, 847, 361	(4)	(4)	
1953	36	1, 683, 406	174, 752	21, 767, 205	-	-	
1954	34	1, 740, 600	183, 091	23, 783, 364	-	-	
1955	35	1, 848, 299	190, 628	25, 457, 512	-	-	
1956	38	2, 076, 588	210, 582	27, 439, 634	-	-	
1957	41	1, 681, 580	172, 388	21, 725, 888	-	-	
1958	38	1, 544, 683	158, 074	20, 698, 929	-	-	
1959	40	2, 193, 864	223, 893	26, 391, 987	-	-	
1960	38	1, 999, 036	218, 423	19, 201, 716	-	-	
1961	35	2, 290, 936	247, 551	25, 852, 498	-	-	
1962	33	2, 227, 316	239, 707	28, 249, 566	-	-	
1963	32	1, 787, 639	184, 205	22, 263, 320	-	-	

YEAR	OIL			SOLUBLES			TOTAL
	GALLONS	POUNDS	VALUE	TONS	POUNDS	VALUE	
1873	2, 214, 800	16, 611, 000	(1)	-	-	-	(1)
1874	3, 372, 847	25, 296, 352	(1)	-	-	-	(1)
1875	2, 681, 482	20, 111, 115	(1)	-	-	-	(1)
1876	2, 992, 000	22, 440, 000	(1)	-	-	-	(1)
1877	2, 426, 589	18, 199, 418	(1)	-	-	-	(1)
1878	3, 609, 233	28, 569, 248	(1)	-	-	-	(1)
1879	2, 238, 901	16, 941, 753	(1)	-	-	-	(1)
1880	2, 034, 940	15, 262, 050	(1)	-	-	-	(1)
1881	1, 265, 549	9, 499, 118	(1)	-	-	-	(1)
1882	2, 021, 316	15, 159, 870	(1)	-	-	-	(1)
1883	2, 166, 320	16, 247, 400	(1)	-	-	-	(1)
1884	3, 722, 927	27, 921, 952	(1)	-	-	-	(1)
1885	2, 346, 319	17, 597, 392	(1)	-	-	-	(1)
1886	1, 605, 544	13, 541, 586	(1)	-	-	-	(1)
1887	2, 273, 566	17, 051, 745	(1)	-	-	-	(1)
1888	2, 051, 128	15, 383, 460	(1)	-	-	-	(1)
1889	3, 327, 030	24, 952, 725	(1)	-	-	-	(1)
1890	2, 939, 217	22, 044, 128	(1)	-	-	-	(1)
1891	1, 946, 642	14, 599, 815	(1)	-	-	-	(1)
1892	1, 329, 644	9, 972, 330	(1)	-	-	-	(1)
1893	1, 269, 002	9, 517, 515	(1)	-	-	-	(1)
1894	1, 999, 506	14, 996, 295	(1)	-	-	-	(1)
1895	1, 767, 754	13, 286, 135	(1)	-	-	-	(1)
1896	1, 741, 530	13, 061, 475	(1)	-	-	-	(1)
1897	2, 147, 113	16, 103, 348	(1)	-	-	-	(1)

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HISTORICAL FISHERY STATISTICS

469

SUMMARY OF THE MENHADEN FISHERY, 1873-1963 - Continued

YEAR	OIL			SOLUBLES			TOTAL
	GALLONS	POUNDS	VALUE	TONS	POUNDS	VALUE	VALUE
1898	2,450,000	18,375,000	(1)	-	-	-	(1)
1899	(1)	(1)	(1)	-	-	-	(1)
1900	(1)	(1)	(1)	-	-	-	(1)
1901 ^{2/}	3,812,335	28,592,512	\$933,679	-	-	-	\$2,473,489
1902	(1)	(1)	(1)	-	-	-	(1)
1903	(1)	(1)	(1)	-	-	-	(1)
1904	(1)	(1)	(1)	-	-	-	(1)
1905	(1)	(1)	(1)	-	-	-	(1)
1906	3,004,050	22,530,375	(1)	-	-	-	(1)
1907	1,243,800	9,328,500	(1)	-	-	-	(1)
1908	3,096,850	23,226,375	(1)	-	-	-	(1)
1909	3,015,800	22,618,500	(1)	-	-	-	(1)
1910	3,778,600	29,339,500	(1)	-	-	-	(1)
1911	3,974,250	29,806,875	(1)	-	-	-	(1)
1912	6,651,203	49,884,022	1,551,990	-	-	-	(1)
1913	4,768,050	35,760,375	(1)	-	-	-	(1)
1914	3,563,650	26,727,375	(1)	-	-	-	(1)
1915	2,727,750	20,458,125	(1)	-	-	-	(1)
1916	4,011,500	30,086,250	(1)	-	-	-	(1)
1917	3,619,700	27,147,750	(1)	-	-	-	(1)
1918	3,943,100	29,573,250	(1)	-	-	-	(1)
1919	5,415,600	40,617,000	(1)	-	-	-	(1)
1920	5,842,300	43,817,250	(1)	-	-	-	(1)
1921	6,260,476	46,953,395	1,719,892	-	-	-	(1)
1922	7,102,677	53,270,075	2,904,833	-	-	-	4,005,987
1923	7,461,365	55,960,238	3,316,277	-	-	-	3,689,979
1924	3,923,905	29,429,268	1,817,626	-	-	-	3,440,265
1925	6,023,108	45,173,310	3,001,106	-	-	-	3,630,054
1926	3,942,821	29,571,158	1,729,160	-	-	-	2,673,720
1927	3,957,068	29,678,010	1,716,474	-	-	-	1,180,242
1928	3,585,569	26,891,768	1,455,376	-	-	-	1,586,862
1929	3,172,735	23,795,512	1,381,816	-	-	-	2,334,913
1930	3,191,265	23,934,468	646,954	-	-	-	2,635,892
1931	1,981,790	14,863,425	302,308	-	-	-	3,021,033
1932	2,997,098	22,478,235	273,486	-	-	-	3,655,656
1933	3,344,343	25,082,572	450,970	-	-	-	3,169,223
1934	3,612,364	27,092,730	705,657	-	-	-	4,114,794
1935	4,066,159	30,496,192	1,178,337	-	-	-	3,999,482
1936	4,880,879	36,606,592	1,249,708	-	-	-	7,080,588
1937	3,895,613	29,217,098	1,456,333	-	-	-	6,642,928
1938	4,189,129	31,418,468	1,173,667	-	-	-	8,478,421
1939	6,005,414	45,040,605	1,624,024	-	-	-	8,749,826
1940	5,774,671	43,310,032	1,304,720	-	-	-	11,202,127
1941	6,034,050	45,255,375	2,829,441	-	-	-	17,716,625
1942	5,128,760	38,465,700	3,200,129	-	-	-	22,336,212
1943	5,734,668	43,010,010	3,871,539	-	-	-	21,693,093
1944	6,067,111	45,503,332	3,725,498	-	-	-	21,220,849
1945	6,335,094	46,513,205	5,656,550	-	-	-	18,731,305
1946	9,786,648	73,189,860	9,033,032	-	-	-	23,650,677
1947	8,473,371	63,550,282	11,425,497	-	-	-	23,632,756
1948	8,763,939	65,729,542	10,132,179	-	-	-	34,166,073
1949	8,293,911	62,204,332	3,407,510	-	-	-	39,103,401
1950	10,209,958	76,574,685	5,866,554	-	-	-	42,044,608
1951	12,537,115	94,026,362	9,771,154	-	-	-	46,871,743
1952	12,888,646	96,664,845	5,785,395	-	-	-	36,807,576
1953	17,824,477	133,683,578	8,606,317	39,038	78,076,523	\$3,592,551	33,082,952
1954	18,641,433	139,810,748	9,755,020	56,274	112,547,095	5,564,717	41,908,342
1955	21,232,141	159,241,058	12,195,454	61,938	123,876,901	4,396,642	42,429,655
1956	22,428,082	168,210,615	14,092,275	72,852	145,704,750	5,339,834	46,871,743
1957	15,797,919	118,484,392	9,466,198	69,939	138,797,027	5,615,490	36,807,576
1958	17,064,818	127,986,135	9,434,108	72,471	144,941,679	6,252,986	36,386,023
1959	20,626,276	154,712,085	10,743,781	108,079	216,158,510	5,852,514	42,968,282
1960	24,453,736	183,403,020	11,582,027	65,850	131,700,000	2,299,209	33,082,952
1961	31,355,570	235,166,775	12,913,447	73,305	146,610,000	3,142,397	41,908,342
1962	31,015,855	232,618,912	10,059,839	85,200	170,400,000	4,120,050	42,429,655
1963	21,630,273	167,634,616	9,853,302	74,831	149,662,000	4,485,957	36,602,579

1/ DATA NOT AVAILABLE. 2/ DATA FOR CONNECTICUT ARE FOR 1900, WHILE THOSE FOR RHODE ISLAND, NEW YORK, DELAWARE, AND NORTH CAROLINA ARE FOR 1902. 3/ IN ADDITION 5,096,000 MISCELLANEOUS FISH WERE UTILIZED; THIS INCLUDES 180,000 IN CONNECTICUT AND NEW YORK, 4,900,000 IN MARYLAND AND VIRGINIA, 16,000 IN NORTH CAROLINA AND FLORIDA. 4/ A SMALL PRODUCTION OF ACIDULATED SCRAP HAS BEEN INCLUDED WITH DRY SCRAP AND MEAL.

NOTE:--THE FACTOR 7.75 HAS BEEN USED TO CONVERT GALLONS OF OIL TO POUNDS FOR 1963; 7.5 HAS BEEN USED FOR PRIOR YEARS.

SOURCES--DATA FOR 1873 TO 1898, AND 1901 ARE FROM "AQUATIC PRODUCTS IN ARTS AND INDUSTRIES," BY CHARLES H. STEVENSON, REPORT OF THE COMMISSIONER OF FISHERIES, 1902; FOR 1906 TO 1911, 1913, 1914, AND 1920 FROM INFORMATION ON FILE IN THE BUREAU'S BRANCH OF FISHERY STATISTICS, WHICH WAS SUPPLIED BY AN IMPORTANT MENHADEN PRODUCTS BROKER; FOR 1912, FROM "THE MENHADEN INDUSTRY OF THE ATLANTIC COAST," BY ROBERT LEON GREER, BUREAU OF FISHERIES DOCUMENT NO. 811; FOR 1915 TO 1919, FROM "CHEMICAL TECHNOLOGY AND ANALYSIS OF OILS, FATS AND WAXES," BY DR. J. LEWKOWITSCHE, M.A. F.I.C.A., SIXTH EDITION, VOL. 11; FOR 1921 TO 1938, "FISHERY INDUSTRIES OF THE UNITED STATES,"; FOR 1939 TO 1963, "FISHERY STATISTICS OF THE UNITED STATES,"; AND UNPUBLISHED BUREAU RECORDS.

FOR THE YEARS FOLLOWING 1920, INFORMATION COLLECTED IN THE SERVICE'S ANNUAL INDUSTRIAL FISHERIES SURVEYS HAS BEEN USED RATHER THAN THE SLIGHTLY MORE COMPLETE INFORMATION ASSEMBLED IN THE GENERAL CANNASS SURVEYS OF THE ATLANTIC AND GULF STATES SINCE RELATIVELY FOR COMPLETE GENERAL CANNASS SURVEYS WERE MADE FOR ALL AREAS DURING THIS PERIOD.

HISTORICAL FISHERY STATISTICS

PACIFIC SARDINE FISHERY, 1915-63

The Pacific sardine fishery is an outstanding example of a "boom" and "bust" industry. In less than 20 years these fish moved from a position of minor importance in the Pacific Coast fisheries to that of the leading species taken by United States fishermen, and then in an even shorter period, the catch dropped to less than 1 percent of peak production. Pacific sardines were first taken in large numbers during World War I to supply the expanding market for canned sardines. Adoption of the screw press in the 1920's permitted utilization of cannery waste and whole fish for processing of fish meal and oil. Rapid growth of the domestic and export markets for canned sardines, and the domestic market for fish meal and oil resulted in a large expansion of the sardine fishing fleet and in processing facilities.

The catch underwent phenomenal growth, increasing from only 4 million pounds in 1915 to 158 million pounds in 1918. By 1929, landings totaled 652 million pounds, and a peak of 1.5 billion pounds was reached in 1936. The decline in the great sardine fishery was even more spectacular than its rapid growth. After 1936, catches decreased sharply, and 1944 was the last year production exceeded a billion pounds. Production dropped to 256 million pounds in 1947, recovered somewhat in the next 4 years, and then in 1952 plunged to only 14 million pounds. In 1963, landings amounted to a little over 7 million pounds.

Early in its management program, the State of California had adopted a policy that fish landed in the State should be used for food. However, an exception was made in the case of sardines. Use of the fish for processing into meal and oil was more profitable than canning, and great pressure had been exerted to use whole fish for reduction. In an attempt to restrict the reduction of whole fish, it was originally required that 20 cases of sardines be canned from each ton landed. This requirement was reduced to 18, then 15, and finally to 13.5 cases per ton. The operation of reduction ships outside territorial waters off San Francisco Bay evaded this restriction, and the State was forced to adopt a system of "special permits" under which specified quantities of whole fish could be taken by permit holders for processing into meal and oil. Issuance of these permits was continued until the shortage of fish forced their discontinuance in 1953.

In the early years of the fishery, the entire catch was canned, and although taking of the fish for direct reduction increased rapidly in the 1920's, canning remained the principal use of sardines through 1931. In the following year, however, about two-thirds of the 312 million-pound catch was used for straight reduction. Use of whole fish for this purpose continued to increase, and in both 1934 and 1936, over 80 percent of the catch was used as whole fish for manufacture into meal and oil. Most of the catch continued to be used directly for reduction through 1944, and possibly 1945.

The catch in the San Francisco District increased to 789 million pounds in 1936--over half of the entire receipts of these fish in the Pacific Coast States. In this year receipts of sardines by reduction ships reached a peak of 508 million pounds. This District dominated the fishery until 1940, when Monterey moved into first place. In 1946, the fishery in the San Francisco District was almost a complete failure with receipts amounting to only 6.4 million pounds. Since that year, landings in this District have been insignificant, and in 1963 no landings were reported.

Monterey became an important sardine port in the early 1920's. Peak landings occurred in 1944, when receipts totaled over 500 million pounds. Following 1945, the catch dropped rapidly and amounted to less than 2,000 pounds in 1953. Since that date it climbed erratically to 1,300,200 pounds in 1963.

The San Pedro area had the most consistent landings of any of the California Districts. Receipts increased steadily from the inception of the fishery to a peak of 547 million pounds in 1950. However, the catch in the following year was less than half this amount, and the 1953 receipts were less than 8 million pounds.

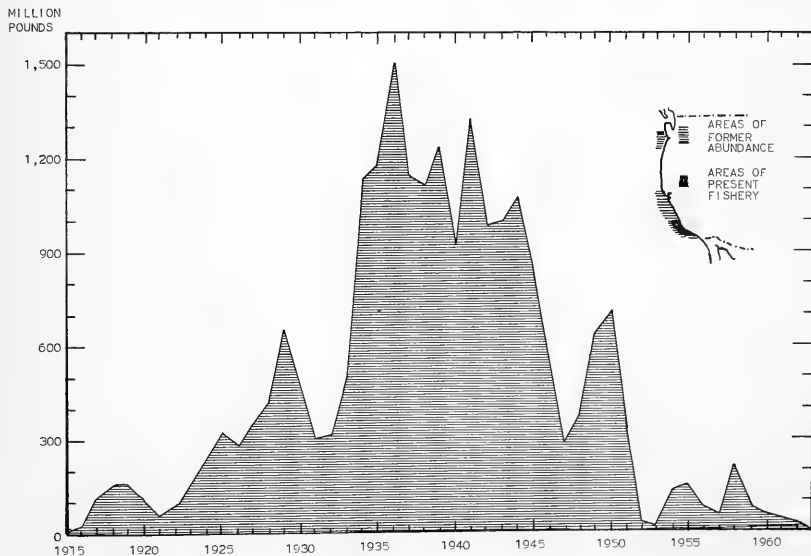
HISTORICAL FISHERY STATISTICS

In 1935, fishing for sardines was undertaken off the Oregon coast and a catch of over 52 million pounds was landed at coastal and Columbia River reduction plants. The Oregon fishery declined following 1935, and reduction operations were discontinued after 1943. In 1936, sardine reduction plants began operating on the Washington coast and the fishery reached a peak of 53 million pounds in 1938. Production declined rapidly following that year, and only insignificant quantities have been taken since 1947. None have been reported in either Washington or Oregon since 1951.

The canning of Pacific sardines has been the most important use of the fish with respect to value of the products produced, and in all but eight years, the value of the canned pack exceeded that for meal and oil. The pack of canned sardines first exceeded 1 million cases in 1923. Three years later it passed the 2 million mark, and by 1929 reached 3.8 million cases. Loss of the export market and the domestic depression caused canning to decline, and in 1932 less than 1 million cases were packed. Following that year, the pack increased rapidly and in 2 years--1941 and 1950--exceeded 5 million cases. After 1950, the canning declined sharply due to disappearance of the fish, and in 1963 only 121,000 cases were packed.

The major portion of the catch of Pacific sardines has been used to produce meal and oil since in addition to the whole fish used for reduction, the offal from canning operations, broken, crushed, and off-sized fish have likewise been used for this purpose. It is estimated that of the total catch of 21.8 billion pounds of sardines taken by United States fishermen during the years from 1915 to 1960, about 14 billion pounds of whole sardines, offal, etc., were made into meal and oil. Production of sardine meal reached a peak of 121,739 tons in 1936 and the record production of oil (26 million gallons) occurred in the same year.

CATCH OF PACIFIC SARDINE FISHERY, 1915-63



HISTORICAL FISHERY STATISTICS

SUMMARY OF PACIFIC SARDINE FISHERY, 1915-63

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	CALIFORNIA							
	NORTHERN DISTRICT		SAN FRANCISCO DISTRICT		MONTEREY DISTRICT		SANTA BARBARA DISTRICT	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1915.	-	-	31	1	4,029	20	1	(1)
1916.	-	-	-	-	10,649	(2)	-	-
1917.	-	-	3/1,478	(2)	41,125	(2)	-	-
1918.	-	-	3,776	(2)	66,250	(2)	-	-
1919.	-	-	3/1,452	(2)	86,300	(2)	-	-
1920.	-	-	3/1,221	(2)	77,000	(2)	-	-
1921.	-	-	3/1,832	(2)	32,500	(2)	-	-
1922.	(1)	(1)	170	3	44,679	894	(1)	(1)
1923.	(1)	(1)	340	1	86,061	344	1	-
1924.	(1)	(1)	1,091	16	117,529	823	-	-
1925.	-	-	464	9	124,756	786	-	-
1926.	-	-	7,057	48	155,162	822	-	-
1927.	(1)	(1)	18,742	117	173,956	877	-	-
1928.	-	-	26,966	145	221,568	1,221	-	-
1929.	-	-	41,092	216	323,381	1,788	-	-
1930.	-	-	48,469	196	259,098	1,178	-	-
1931.	-	-	50,661	166	153,432	618	-	-
1932.	(1)	(1)	29,358	74	168,284	422	-	-
1933.	-	-	62,214	196	254,312	784	-	-
1934.	-	-	367,801	1,359	478,928	1,775	-	-
1935.	-	-	433,481	1,725	376,151	1,484	-	-
1936.	-	-	789,056	3,856	402,943	1,941	-	-
1937.	-	-	435,550	2,727	279,194	1,694	-	-
1938.	-	-	446,631	2,501	311,386	1,755	-	-
1939.	-	-	491,843	2,708	429,600	2,374	-	-
1940.	-	-	231,359	1,204	363,115	1,930	-	-
1941.	1	(1)	395,325	3,291	522,805	3,940	-	-
1942.	(1)	(1)	210,688	2,325	332,491	3,589	-	-
1943.	-	-	244,636	2,708	439,702	4,893	-	-
1944.	1	(1)	284,494	3,135	500,066	5,575	-	-
1945.	-	-	185,200	2,056	316,980	3,562	-	-
1946.	-	-	6,401	149	71,742	1,155	-	-
1947.	-	-	626	17	36,773	916	-	-
1948.	7	1	230	6	95,514	3,161	-	-
1949.	15	1	33,879	578	262,376	4,565	-	-
1950.	1	(1)	26,443	461	41,685	784	95,024	1,416
1951.	-	-	165	3	1,757	53	74,973	1,567
1952.	-	-	-	-	24	-	2,610	113
1953.	-	-	(1)	(1)	1	(1)	973	54
1954.	-	-	-	-	12	1	24,433	951
1955.	-	-	-	-	937	22	39,732	675
1956.	-	-	-	-	1	(1)	15,446	294
1957.	-	-	-	-	32	1	23,978	934
1958.	-	-	-	-	16,794	509	47,110	1,083
1959.	-	-	-	-	29,685	598	5,526	137
1960.	-	-	-	-	3,003	65	15,231	425
1961.	-	-	-	-	1,110	34	8,582	242
1962.	-	-	(1)	(1)	2,592	82	2,175	78
1963.	-	-	-	-	1,340	64	400	20

CALIFORNIA - CONTINUED

YEAR	CALIFORNIA - CONTINUED						OREGON	
	SAN PEDRO DISTRICT		SAN DIEGO DISTRICT		TOTAL CALIFORNIA		COASTAL DISTRICT	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1915.	329	7	-	-	4,390	28	-	-
1916.	2,500	(2)	2,500	(2)	15,649	(2)	-	-
1917.	52,500	(2)	9,000	(2)	104,103	(2)	-	-
1918.	77,500	(2)	13,125	(2)	160,653	(2)	-	-
1919.	55,000	(2)	11,250	(2)	153,877	(2)	-	-
1920.	27,800	(2)	12,500	(2)	118,521	(2)	-	-
1921.	23,000	(2)	2,000	(2)	59,332	(2)	-	-
1922.	44,558	282	2,707	22	92,114	1,201	-	-
1923.	67,493	338	5,302	21	159,197	704	-	-
1924.	116,957	1,170	7,109	71	242,686	2,080	-	-
1925.	174,406	1,186	15,669	107	315,215	2,088	-	-
1926.	124,522	658	(4)	(4)	286,741	1,528	-	-
1927.	143,549	790	6,028	44	342,275	1,828	-	-
1928.	164,619	909	7,117	49	420,270	2,324	-	-
1929.	283,369	1,559	3,930	26	651,772	3,589	30	(1)
1930.	182,712	978	4,172	26	494,451	2,378	-	-
1931.	95,979	400	132	1	300,204	1,185	-	-
1932.	113,985	325	545	4	312,172	825	-	-
1933.	192,739	522	533	3	509,798	1,505	7	(1)
1934.	235,181	1,030	4,034	13	1,135,959	4,177	-	-
1935.	292,002	1,111	14,102	50	1,115,736	4,370	52,464	236
1936.	252,937	1,050	15,856	64	1,460,792	6,891	28,393	142
1937.	347,461	1,903	9,408	49	1,071,613	6,373	33,463	218
1938.	259,859	1,550	5,513	26	1,023,389	5,832	34,036	187
1939.	238,520	1,329	831	4	1,160,794	6,415	44,653	246
1940.	309,391	1,653	2,107	9	905,972	4,796	6,325	32
1941.	341,408	2,439	2,941	21	1,262,479	9,141	31,698	247

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HISTORICAL FISHERY STATISTICS

473

SUMMARY OF PACIFIC SARDINE FISHERY, 1915-63 - Continued

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	CALIFORNIA - CONTINUED						OREGON	
	SAN PEDRO DISTRICT		SAN DIEGO DISTRICT		TOTAL CALIFORNIA		COASTAL DISTRICT	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1942.	421,619	4,402	4,949	54	969,747	10,370	3,765	38
1943.	282,710	3,123	5,161	58	972,269	10,782	3,649	40
1944.	359,050	3,965	3,598	40	1,147,208	12,715	-	(2)
1945.	337,490	3,730	5,393	59	845,063	9,407	7	(2)
1946.	423,992	5,395	8,624	154	510,759	6,853	27	1
1947.	212,439	4,743	5,676	126	295,514	5,802	20	1
1948.	256,281	7,415	8,005	149	362,037	10,732	1	(1)
1949.	331,502	5,554	5,703	59	633,475	10,757	9	(1)
1950.	547,412	9,437	3,957	42	619,498	12,140	-	-
1951.	246,573	5,548	5,425	76	328,893	7,247	-	-
1952.	11,642	407	54	2	14,330	523	-	-
1953.	7,849	447	646	27	9,469	528	-	-
1954.	111,039	2,732	1,020	17	136,504	3,701	-	-
1955.	104,939	2,372	-	-	145,608	3,069	-	-
1956.	54,089	1,379	18	1	69,554	1,674	-	-
1957.	21,837	851	15	1	45,862	1,787	-	-
1958.	143,541	3,847	11	(1)	207,446	5,439	-	-
1959.	36,954	693	2	(1)	74,357	1,475	-	-
1960.	39,139	693	160	3	57,533	1,186	-	-
1961.	33,429	867	48	3	43,169	1,146	-	-
1962.	10,596	330	-	-	15,363	490	-	-
1963.	5,391	215	-	-	7,131	299	-	-

YEAR	OREGON - CONTINUED		WASHINGTON				TOTAL PACIFIC COAST STATES	
	COLUMBIA RIVER DISTRICT		PUGET SOUND DISTRICT		COASTAL DISTRICT		QUANTITY	VALUE
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE		
1915.	-	-	-	-	-	-	4,390	-
1916.	-	-	-	-	-	-	15,649	(2)
1917.	-	-	-	-	-	-	104,103	(2)
1918.	-	-	-	-	-	-	160,653	(2)
1919.	-	-	-	-	-	-	153,877	(2)
1920.	-	-	-	-	-	-	118,521	(2)
1921.	-	-	-	-	-	-	59,332	-
1922.	-	-	-	-	-	-	92,114	1,201
1923.	-	-	-	-	-	-	159,197	-
1924.	-	-	-	-	-	-	249,204	2,080
1925.	-	-	-	-	-	-	315,295	2,088
1926.	-	-	-	-	-	-	286,741	1,528
1927.	-	-	-	-	-	-	342,275	1,828
1928.	-	-	-	-	-	-	420,270	2,324
1929.	-	-	-	-	-	-	651,772	3,589
1930.	-	-	-	-	-	-	494,451	2,378
1931.	-	-	-	-	-	-	300,204	1,185
1932.	-	-	-	-	-	-	312,172	825
1933.	-	-	-	-	-	-	509,798	1,505
1934.	-	-	-	-	-	-	1,135,959	4,177
1935.	-	-	-	-	13	(1)	1,168,213	4,606
1936.	-	-	6	(1)	13,108	66	1,502,299	7,099
1937.	-	-	22	(1)	34,407	224	1,139,505	6,815
1938.	-	-	10	-	52,966	291	1,110,401	6,311
1939.	-	-	2	(1)	35,526	195	1,240,375	6,856
1940.	-	-	13	(1)	1,633	8	913,943	4,836
1941.	-	-	11	(1)	34,189	268	1,328,377	9,656
1942.	-	-	31	1	1,137	11	974,680	10,420
1943.	-	-	114	7	20,968	231	997,000	11,060
1944.	-	-	43	2	40	(2)	1,147,295	12,717
1945.	-	-	29	1	4,697	52	849,971	9,462
1946.	7,918	173	7	(1)	12,283	268	530,594	7,295
1947.	13,852	259	29	1	2,621	77	272,535	6,140
1948.	11,013	273	108	5	-	-	373,159	11,010
1949.	-	-	56	3	-	-	633,540	10,760
1950.	-	-	-	-	-	-	619,498	12,140
1951.	-	-	1	(2)	-	-	328,894	7,247
1952.	-	-	-	-	-	-	14,330	523
1953.	-	-	-	-	-	-	9,469	528
1954.	-	-	-	-	-	-	136,504	3,701
1955.	-	-	-	-	-	-	145,608	3,069
1956.	-	-	-	-	-	-	69,554	1,674
1957.	-	-	-	-	-	-	45,862	1,787
1958.	-	-	-	-	-	-	207,446	5,439
1959.	-	-	-	-	-	-	74,367	1,475
1960.	-	-	-	-	-	-	57,533	1,186
1961.	-	-	-	-	-	-	43,169	1,146
1962.	-	-	-	-	-	-	15,363	490
1963.	-	-	-	-	-	-	7,131	299

1/ LESS THAN 500 POUNDS OR \$500. 2/ DATA NOT AVAILABLE. 3/ DATA ARE PARTLY ESTIMATED. 4/ THE CATCH IN THE SAN DIEGO DISTRICT HAS BEEN INCLUDED WITH THAT FOR SAN PEDRO.

HISTORICAL FISHERY STATISTICS

PACIFIC SARDINES, CANNED AND INDUSTRIAL PRODUCTS, 1921-63

YEAR	CANNED		MEAL		OIL	
	1,000	1,000	1,000	1,000	1,000	1,000
	CASES	DOLLARS	TONS	DOLLARS	FOUNDS	DOLLARS
1921.	399	2,346	(1)	(1)	1,282	36
1922.	715	3,361	(1)	(1)	3,218	146
1923.	1,100	4,608	(1)	(1)	7,245	424
1924.	1,367	5,445	(1)	(1)	17,542	1,077
1925.	1,715	6,381	(1)	(1)	23,400	1,569
1926.	2,093	7,807	(1)	(1)	15,848	933
1927.	2,563	9,269	(1)	(1)	18,852	1,117
1928.	2,772	9,659	(1)	850	28,695	1,521
1929.	3,831	11,997	37	1,961	48,202	2,816
1930.	2,979	8,742	26	1,415	43,522	1,826
1931.	1,713	4,715	16	610	29,370	808
1932.	954	2,358	25	588	41,468	705
1933.	1,539	3,805	51	1,530	76,980	1,593
1934.	1,970	5,481	89	2,878	156,338	4,414
1935.	2,420	6,237	96	2,538	163,012	6,659
1936.	2,617	7,302	122	3,968	195,982	8,336
1937.	2,812	8,592	89	3,325	119,948	6,204
1938.	2,262	7,102	90	3,438	131,550	5,205
1939.	3,108	9,554	97	4,104	149,970	6,078
1940.	2,946	8,975	70	3,008	94,702	3,761
1941.	5,007	18,092	98	5,942	135,939	9,879
1942.	3,745	15,510	72	5,310	93,817	8,068
1943.	3,355	14,352	76	5,776	104,605	9,302
1944.	3,651	15,226	86	6,383	135,742	11,723
1945.	3,766	15,346	61	4,644	68,898	7,926
1946.	2,977	19,896	37	5,233	36,499	6,843
1947.	1,653	16,538	17	2,556	15,780	2,677
1948.	2,654	21,893	19	2,615	17,464	2,458
1949.	3,768	21,335	39	6,220	45,924	2,873
1950.	5,071	26,346	43	5,270	46,415	4,694
1951.	2,863	19,363	17	2,267	14,569	1,546
1952.	107	918	(2)	52	1157	11
1953.	64	653	(2)	19	98	6
1954.	1,338	9,818	7	843	5,669	421
1955.	1,415	10,014	7	969	6,733	522
1956.	755	5,734	3	370	2,530	181
1957.	498	4,721	1	183	656	55
1958.	2,223	16,497	11	1,390	5,556	427
1959.	755	5,999	3	324	1,409	92
1960.	616	4,659	4	316	1,201	78
1961.	419	3,664	3	257	646	36
1962.	137	1,300	1	73	161	10
1963.	57	685	(3)	(3)	(3)	(3)

1/ DATA NOT AVAILABLE.

2/ LESS THAN 500 TONS.

3/ NEGLIGIBLE.



SARDINE, PACIFIC

ATLANTIC OCEAN PERCH FISHERY, 1930-63

The ocean perch supports a fishery that has grown spectacularly in the 29 years since the inception of the fishery. Although long familiar to New England fishermen, they were practically unknown to the fish-eating public until 1934. In 1933 when only 257 thousand pounds were landed, the catch ranked one hundred and sixth in volume of production among United States fisheries. In 1951 the catch totaled 258 million pounds and ranked fifth. Only menhaden, salmon, tuna and Pacific sardine were taken in greater volume.

Prior to 1934, small catches of ocean perch made incidentally to the capture of other species were usually disregarded. In that year landings of haddock, the principal fish used for filleting, were down sharply and fishermen and dealers were searching for a fish suitable for filleting to augment the dwindling supplies of haddock. Ocean perch were available in large quantities and were found to yield attractive fillets of a rich and agreeable flavor suitable for shipping to inland markets. Demand for the fillets was developed, at first in the Midwest and later in other sections of the country, and landings increased from 257 thousand pounds in 1933 to nearly 67 million pounds in 1936 and to a peak of more than 258 million pounds in 1951. Since then the fishery has declined, except for occasional fluctuations, to 108 million pounds in 1963, the lowest since 1940.

In the early years of the fishery, most of the catch was landed at Boston, Mass. However, deliveries to Gloucester, Mass. grew rapidly, and in each year since 1938 it has been the largest landing port for these fish. In 1951 nearly 178 million pounds of ocean perch were landed at Gloucester. Portland and Rockland, Me. also became important ocean perch ports. Portland was the principal Maine port of landing until 1944 when Rockland moved into first place. In 1954, however, Portland landings once again exceeded those at Rockland.

Ocean perch is one of few commercial species giving birth to live young instead of eggs. Therefore the number of young spawned each year is comparatively low. The fish grow slowly at the rate of about an inch a year until around their eleventh year when they mature. Because of the few young and slow rate of growth, the rapid expansion of the ocean perch fleet and catch has resulted in a considerable decline in the yield from the nearby grounds as the accumulated stocks of older fish were caught. In order to supply the market, the fleet expanded operations to more distant grounds progressively and concentrated increasingly on smaller fish.

In the early years of the ocean perch fishery the entire catch was taken on grounds off the coast of New England and Nova Scotia. Most of the catch was taken off New England until about 1948 when the Nova Scotia banks began yielding the major portion of the production. In 1951 important catches were made in the Gulf of St. Lawrence and on the Grand Banks of Newfoundland. In both 1953 and 1954 the major portion of the catch for which area of capture is known, was taken from the Gulf of St. Lawrence and the Grand Bank of Newfoundland.

The entire catch of ocean perch is filleted, and most of the fillets are frozen. Some of the waste from filleting is processed into fish meal and the remainder is used as lobster bait. Practically the entire catch is taken with otter trawls.



HISTORICAL FISHERY STATISTICS

CATCH OF ATLANTIC OCEAN PERCH, BY YEAR AND PORT, 1930-63

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	MASSACHUSETTS					
	BOSTON		GLOUCESTER		NEW BEDFORD	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1930	88	2	21	(1)	(1)	(1)
1931	175	3	48	(1)	-	-
1932 2/	(2)	(2)	(2)	(2)	(2)	(2)
1933	221	2	34	(1)	-	-
1934	1,288	14	539	3	-	-
1935	14,144	150	2,896	53	-	-
1936	49,419	720	17,094	243	-	-
1937	41,175	641	17,023	246	-	-
1938	34,141	442	29,408	330	-	-
1939	29,319	459	44,424	568	-	-
1940	19,727	330	57,397	845	-	-
1941	24,783	573	99,877	2,008	-	-
1942	9,949	360	91,285	2,740	5	(1)
1943	5,087	249	83,992	3,399	-	-
1944	2,032	84	91,579	3,561	7	(1)
1945	1,377	55	102,037	3,957	15	1
1946	5,219	238	130,899	5,840	195	9
1947	10,526	478	95,357	4,200	498	14
1948	11,383	498	176,801	7,406	350	14
1949	12,113	498	169,281	7,304	80	3
1950	7,740	326	120,291	5,692	474	17
1951	6,598	335	177,694	8,829	47	2
1952	6,945	303	121,586	5,294	3,690	128
1953	4,920	201	88,329	3,408	4	(1)
1954	3,097	141	98,679	4,029	(1)	(1)
1955	3,040	133	86,249	3,327	12	(1)
1956	2,839	116	83,303	3,142	1	(1)
1957	3,819	168	65,389	2,525	-	-
1958	2,625	142	74,951	3,132	-	-
1959	3,280	172	58,197	2,377	-	-
1960	1,481	70	61,673	2,339	-	-
1961	700	40	53,991	2,132	15	(1)
1962	900	49	53,619	2,307	-	-
1963	1,146	67	43,239	2,144	(1)	(1)

YEAR	MAINE				OTHER MAINE AND MASSACHUSETTS PORTS		TOTAL	
	PORTLAND		ROCKLAND		QUANTITY	VALUE	QUANTITY	VALUE
	QUANTITY	VALUE	QUANTITY	VALUE				
1930	4	(1)	-	-	-	-	113	2
1931	10	(1)	-	-	-	-	233	3
1932 2/	(2)	(2)	(2)	(2)	(1)	(1)	120	1
1933	2	(1)	-	-	-	-	257	2
1934	14	(1)	-	-	-	-	1,841	19
1935	70	1	-	(1)	-	-	17,112	184
1936	79	1	-	-	-	-	66,592	964
1937	129	1	16	(1)	-	-	56,343	868
1938	1,155	13	4	(1)	-	-	64,708	785
1939	3,870	43	1,549	19	-	-	79,162	1,109
1940	6,657	81	1,235	15	-	-	85,016	1,271
1941	14,693	250	6,034	101	-	-	145,387	2,932
1942	13,913	366	12,241	269	673	19	128,066	3,754
1943	12,253	451	11,144	379	2,252	78	114,728	4,556
1944	10,470	378	12,459	433	3,632	125	120,179	4,581
1945	11,231	419	12,345	477	4,806	212	131,811	5,121
1946	20,892	821	15,944	641	4,968	169	178,117	7,718
1947	13,244	423	24,045	723	2,916	86	146,586	5,924
1948	19,942	683	25,359	914	4,257	115	238,092	9,630
1949	24,239	873	30,342	1,109	930	33	236,985	9,820
1950	37,184	1,447	38,950	1,549	3,154	106	207,793	9,137
1951	30,642	1,401	41,816	1,958	1,510	71	258,307	12,596
1952	28,009	1,212	28,941	1,250	3,644	152	192,715	8,339
1953	28,383	1,146	28,939	1,101	3,318	116	153,893	5,972
1954	43,916	1,798	34,884	1,375	872	32	181,448	7,375
1955	34,297	1,248	33,377	1,330	12	(1)	156,987	6,038
1956	33,903	1,239	31,027	1,224	40	1	151,113	5,722
1957	37,107	1,334	27,563	1,060	53	1	133,931	5,088
1958	32,990	1,354	38,028	1,647	50	1	148,644	6,276
1959	36,393	1,466	38,812	1,650	20	(1)	136,702	5,665
1960	37,585	1,429	40,626	1,179	68	3	141,433	5,420
1961	35,782	1,358	41,548	1,584	27	1	132,063	5,115
1962	30,741	1,307	38,702	1,559	12	(1)	123,974	5,222
1963	26,680	1,276	37,199	1,659	28	1	108,292	5,147

1/ LESS THAN 500 POUNDS OR \$500.

2/ DATA NOT AVAILABLE BY PORTS.

HISTORICAL FISHERY STATISTICS

477

CATCH OF ATLANTIC OCEAN PERCH, BY AREAS, 1935-63

(THOUSANDS OF POUNDS)

YEAR	NEW ENGLAND BANKS	NOVA SCOTIA BANKS	GRAND BANK OF NEW-FOUNDLAND	GULF OF ST. LAWRENCE	AREA NOT KNOWN ^{1/}	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1935	16,542	570	-	-	-	17,112
1936	50,967	15,625	-	-	-	66,592
1937	32,065	26,262	-	-	16	58,343
1938	45,231	19,473	-	-	4	64,708
1939	56,010	21,603	-	-	1,549	79,162
1940	58,056	25,725	-	-	1,235	85,016
1941	118,646	20,707	-	-	6,034	145,387
1942	110,752	4,385	-	-	12,919	128,056
1943	94,144	7,189	-	-	13,395	114,728
1944	96,290	7,798	-	-	16,091	120,179
1945	72,669	41,977	-	-	17,165	131,811
1946	82,953	75,016	-	-	20,148	178,117
1947	64,337	42,260	-	-	39,989	146,586
1948	76,361	112,580	110	-	49,041	238,092
1949	51,984	129,498	-	-	55,503	236,985
1950	46,618	81,367	326	-	79,282	207,793
1951	42,310	119,418	16,665	5,973	73,941	258,307
1952	28,794	57,569	34,305	7,893	60,468	189,029
1953	16,090	26,015	36,654	14,512	60,622	153,893
1954	12,576	35,640	22,896	30,665	79,671	181,448
1955	12,773	17,593	11,707	47,230	67,684	156,987
1956	15,927	28,879	11,924	29,416	64,967	151,113
1957	16,546	33,610	1,896	17,157	64,722	133,931
1958	13,035	54,660	2,419	6,911	71,619	148,644
1959	11,639	39,264	6,301	4,274	75,224	136,702
1960	8,537	50,493	3,916	229	78,258	141,433
1961	9,708	41,316	3,570	118	77,351	132,063
1962	10,928	42,165	1,288	149	69,453	123,983
1963	7,693	29,232	742	6,720	63,905	108,292

^{1/} CONSISTS PRINCIPALLY OF LANDINGS AT ROCKLAND, ME., DURING THE YEARS PRIOR TO 1947 AND AT ROCKLAND AND PORTLAND, ME., FOR THE YEARS FROM 1947 TO 1954, INCLUSIVE. DATA FOR 1958 INCLUDE LANDINGS AT ROCKLAND AND PORTLAND, ME., AND OFF LABRADOR. DATA WERE NOT COLLECTED ON THE AREA OF CAPTURE FOR THESE LANDINGS.



OCEAN PERCH

HISTORICAL FISHERY STATISTICS

CONVERSION OF PACIFIC COAST TUNA CLIPPERS TO PURSE SEINERS

The California skipjack and yellowfin tuna fisheries were, until recent years, largely a pole and line fishery. Vessels used in the early fishery were small flush-deck craft, with the wheelhouse forward and low freeboard aft. A bait tank was mounted on the stern, and fishing was carried out from the deck. As the size of the craft increased, the engine was moved forward and the house enlarged. Eventually, the pilothouse was constructed atop the main house. The size and range of the vessels increased, and the term "tuna clipper" became synonymous with fast far-ranging vessels highly successful in the pursuit of tuna. Although purse seining for tuna by medium-sized vessels on a seasonal basis had been practiced, and albacore were taken largely by trollers, the pole and line method dominated the fishery until 1959.

From its early history, the U.S. tuna fishery experienced a steady rise, reaching a peak in 1950, but since then, economic difficulties in the industry have led to a decline in the number of vessels and the catch.

Early attempts at conversion to purse seine were largely unsuccessful; however, in the fall of 1957, the large steel tuna clipper, Sun King, converted to a purse seine, and for the first time, used a powerblock and a nylon net. This first conversion of a vessel to the present method of purse seining had a tremendous impact on tuna fishing throughout the world. While details of the conversion of the Sun King are not available, the modifications consist essentially of removing bait tanks, circulation pumps, fishing racks, and certain piping. The success of the Sun King was immediate, and other vessels began to convert to purse seining, using the powerblock and nylon net. The use of the nylon net was most important because cotton nets deteriorate rapidly in tropical waters.

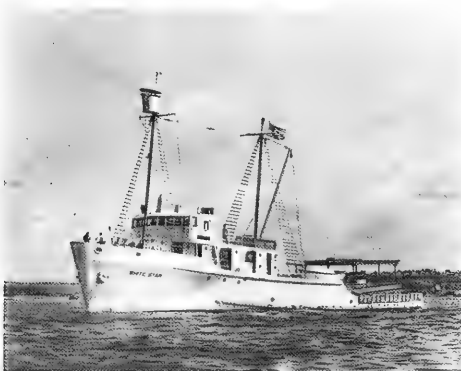
Conversion of bait craft to purse seines continued during 1958, and by 1959 the California clipper fleet was undergoing the most radical modification in the history of the fishery, involving wholesale conversion of clippers to purse seines. By the end of 1959, 15 active converted tuna seiners were operating, 20 were in various stages of conversion, and 23 were planned for conversion as soon as space became available in the shipyards. The wholesale modification of the clipper fleet to purse seiners continued through 1960, with conversions completed for 52 such vessels during that year. By the end of 1960, the active fleet had 67 large converted tuna seiners, with a total fish capacity of 17,442 tons, and 7 vessels were in various stages of conversion. It appeared that the only drawback to complete conversion in 1960 was that the shipyards could not handle the entire fleet.

During 1961, there were 21 large tuna clipper bait boats converted to purse seiners. Two surplus military craft of 550 tons and 800 tons, respectively, were modified and equipped with purse seine gear, and one purse seiner, the Royal Pacific, of 450-gross ton capacity, was completed and joined the fleet. These 24 vessels, with an estimated capacity of 6,400 tons, increased the large purse seine fleet to 90, with an estimated capacity of 24,125 tons. At the end of the year, 22 vessels of the converted purse seine fleet were fishing out of foreign ports and Puerto Rico. The once mighty pole and line clipper fleet had only 37 vessels. (Clipper bait boats are limited to craft having a carrying capacity of 50 or more tons.) Of the remaining bait fishing vessels, four, with a total capacity of 870 tons, were inactive; three were fishing outside continental United States; and two were being converted to tuna purse seiners.

The year 1962 marked the end of large-scale conversions from clippers to seiners, with only one vessel making the change. The clipper fleet had about disappeared as a source of vessels for conversion to seiners; however, the use of other craft increased the number and capacity of the fleet. For example, the Day Island was converted in 1962 from an Army mine-layer to a purse seiner. The vessel was reported to have a capacity of 1,000 tons of frozen tuna. By 1963, the conversion of clipper bait boats to purse seiners had been almost completed and, again, only one vessel was converted from the clipper fleet to purse seining. During 1963, other additions to the fleet consisted of one converted military craft and a newly

HISTORICAL FISHERY STATISTICS

constructed vessel, the Caribbean, with a carrying capacity of 760 tons, scheduled to fish out of Puerto Rico. At the end of the year, the California-owned converted tuna purse seine fleet totaled 92 vessels converted from tuna bait boats, 10 from surplus military craft, and 3 newly constructed large tuna purse seiners--a total fleet of 105 seiners, with a carrying capacity of 35,380 tons. Conversely, the tuna bait boat fleet (of over 50 tons capacity) had shrunk to 20 vessels, with a total tuna capacity of 2,505 tons. Historical data on Pacific Coast tuna appear in the following tables.



THE ABOVE PHOTOGRAPH IS OF A TUNA CLIPPER BEFORE CONVERSION TO A PURSE SEINER.



THE SAME VESSEL AFTER CONVERSION TO A PURSE SEINER.

NOTE:--THE ABOVE PHOTOGRAPHS ARE COURTESY OF VAN CAMP SEA FOOD COMPANY, TERMINAL ISLAND, CALIFORNIA.

HISTORICAL FISHERY STATISTICS

TUNA CATCH BY SPECIES, PACIFIC COAST STATES, 1911-63

(THOUSANDS OF POUNDS AND THOUSANDS OF DOLLARS)

YEAR	ALBACORE		BLUEFIN		SKIPJACK		YELLOWFIN		TOTAL	
	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
1911	1/ 850	5	-	-	-	-	-	-	1/ 850	5
1912	1/ 3,400	20	-	-	-	-	-	-	1/ 3,400	20
1913	1/ 6,500	53	-	-	-	-	-	-	1/ 6,500	53
1914	1/ 18,470	222	-	-	-	-	-	-	1/ 18,470	222
1915	21,074	316	-	-	-	-	-	-	21,074	316
1916	22,899	2/ 800	3/ 20,540	3/ 700	(3)	(3)	(3)	(3)	43,439	1,500
1917	30,556	2/ 1,222	1,150	25	420	11	-	-	32,126	1,258
1918	7,265	400	6,240	218	3,024	91	-	-	16,529	709
1919	13,631	845	14,991	(4)	6,897	241	348	(4)	35,867	(4)
1920	18,877	1,982	10,530	(4)	7,957	378	1,965	(4)	39,329	(4)
1921	15,277	1,222	2,032	(4)	1,139	25	1,238	(4)	19,686	(4)
1922	13,232	1,151	2,838	(4)	11,862	270	7,337	(4)	35,269	(4)
1923	12,515	1,627	3,301	(4)	11,463	298	10,837	(4)	38,116	(4)
1924	17,695	1,829	3,241	(4)	3,781	179	3,063	(4)	27,780	(4)
1925	22,207	2,333	3,804	(4)	14,235	752	13,238	(4)	53,484	(4)
1926	2,469	2/ 222	6,527	(4)	20,995	873	12,565	591	42,556	(4)
1927	4,579	517	4,898	312	33,807	1,261	25,934	1,304	69,218	3,394
1928	283	42	13,701	823	15,815	562	32,251	1,774	62,050	3,201
1929	269	40	7,527	490	26,998	1,081	37,399	2,200	72,193	3,811
1930	286	24	21,921	1,238	20,486	790	56,654	3,396	99,347	5,448
1931	37	3	3,534	169	16,507	504	36,580	1,979	56,658	2,655
1932	620	31	1,071	51	21,637	751	35,923	1,505	60,251	2,338
1933	2	(5)	560	29	16,687	613	51,076	2,275	68,225	2,917
1934	121	9	18,358	846	14,830	594	60,913	3,053	94,222	4,502
1935	2,448	200	25,173	1,145	17,197	688	72,252	3,620	117,070	5,653
1936	984	91	18,925	922	26,992	1,191	78,353	4,139	125,294	6,343
1937	3,520	287	12,694	725	47,104	2,319	91,523	3,458	154,841	8,789
1938	17,726	966	17,728	983	22,654	1,133	78,318	4,705	136,426	7,787
1939	18,922	1,009	11,836	602	30,121	1,300	110,418	5,912	171,297	8,823
1940	14,502	995	19,970	1,117	56,550	2,743	113,760	6,707	204,882	11,563
1941	11,932	1,123	9,519	581	25,586	1,362	76,702	4,851	123,399	8,506
1942	23,540	4,566	12,845	1,159	38,735	3,335	41,467	3,836	116,587	12,896
1943	37,518	6,104	10,178	967	28,894	2,583	49,262	4,881	125,852	14,535
1944	52,795	8,666	20,344	1,939	30,037	2,694	63,144	6,259	166,320	19,568
1945	39,483	7,697	20,594	1,984	33,348	2,982	67,448	6,718	180,873	21,381
1946	24,142	4,784	22,032	2,246	41,088	4,253	127,247	14,614	214,509	25,927
1947	26,844	6,780	20,838	3,321	52,749	7,628	153,510	23,919	253,941	41,648
1948	6/ 49,493	14,659	6,529	1,096	60,554	9,534	199,427	33,406	316,003	58,695
1949	54,794	10,039	4,389	713	80,512	11,923	190,540	30,999	330,239	53,674
1950	7/ 72,453	13,899	2,762	426	126,786	18,131	187,894	29,823	389,891	61,219
1951	34,491	5,403	3,862	604	116,599	16,655	161,481	24,961	316,433	47,623
1952	52,558	9,146	4,577	733	84,844	10,908	178,819	29,275	320,798	49,062
1953	34,700	6,920	9,773	1,550	122,978	16,943	133,340	21,313	300,791	46,726
1954	26,998	5,426	21,025	3,553	153,756	23,345	119,402	20,575	321,181	52,899
1955	29,738	4,826	13,609	1,941	102,807	13,799	123,208	18,869	269,362	39,435
1956	41,339	7,082	12,626	1,650	123,717	14,189	150,923	20,369	328,604	43,290
1957	46,659	6,732	20,315	2,417	90,821	9,991	137,240	18,194	295,035	37,334
1958	38,445	7,897	30,719	4,029	123,372	14,239	123,727	16,727	316,263	42,892
1959	46,284	8,631	15,194	1,876	98,482	10,424	108,370	14,069	266,330	35,000
1960	40,202	5,939	11,952	1,456	46,304	4,791	189,337	23,566	287,765	35,752
1961	32,830	5,863	20,883	2,708	65,403	7,219	191,854	24,439	310,970	40,226
1962	45,938	7,602	31,200	4,368	92,721	11,922	124,021	18,752	293,860	42,644
1963	60,787	9,159	30,353	3,392	96,620	10,374	109,583	14,530	297,343	37,455

1/ ESTIMATED ON THE BASIS OF PACK AS REPORTED BY TUNA CANNERS.

2/ ESTIMATED.

3/ THE CATCH OF SKIPJACK AND YELLOWFIN HAS BEEN INCLUDED WITH THAT OF BLUEFIN.

4/ DATA NOT AVAILABLE.

5/ LESS THAN \$500.

6/ INCLUDES 132,000 POUNDS, VALUED AT \$32,000 LANDED IN ALASKA.

7/ INCLUDES 39,000 POUNDS, VALUED AT \$4,000 LANDED IN ALASKA.

NOTE:--HAWAII LANDINGS OF TUNA ARE NOT INCLUDED IN THIS TABLE. DATA FROM 1911 TO 1923 BASED ON STATISTICS PUBLISHED BY THE BUREAU OF FISHERIES, THE CALIFORNIA BUREAU OF MARINE FISHERIES (FISH BULLETIN NO. 74), AND THE U. S. TARIFF COMMISSION IN THEIR REPORT TO THE U. S. SENATE ON TUNA FISH, REPORT NO 109, SECOND SERIES.

HISTORICAL FISHERY STATISTICS

481

TUNA CATCH BY SPECIES AND GEAR,

PACIFIC COAST STATES, 1936-63

(THOUSANDS OF POUNDS)

YEAR	ALBACORE				BLUEFIN			
	SEINES	LINES	OTHER	TOTAL	SEINES	LINES	OTHER	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1936	33	951	-	984	18,422	503	-	18,925
1937	87	3,433	(1)	3,520	12,521	173	(1)	12,694
1938	14	17,712	(1)	17,726	17,248	480	(1)	17,728
1939	169	18,753	(1)	18,922	11,678	157	-	11,836
1940	157	14,345	-	14,502	19,904	60	1	19,970
1941	7	11,923	- 2	11,932	9,107	411	1	9,519
1942	10	23,530	-	23,540	12,820	24	1	12,845
1943	8	37,510	-	37,518	10,154	24	(1)	10,178
1944	9	52,773	- 13	52,795	20,319	25	(1)	20,344
1945	5	39,478	-	39,483	20,441	150	3	20,594
1946	53	24,059	-	24,142	21,944	88	(1)	22,032
1947	41	26,803	-	26,844	20,706	132	-	20,838
1948	32	2/49,461	-	2/49,493	6,519	10	-	6,529
1949	215	54,579	-	54,794	4,307	82	-	4,389
1950	8	3/72,445	-	3/72,453	2,722	40	-	2,762
1951	12	34,479	-	34,491	3,858	4	-	3,862
1952	7	52,551	-	52,558	4,575	2	-	4,577
1953	1	34,699	-	34,700	9,754	19	-	9,773
1954	-	26,998	-	26,998	21,008	17	-	21,025
1955	-	29,738	-	29,738	13,679	130	-	13,809
1956	-	41,338	-	41,338	12,626	-	-	12,626
1957	36	46,623	-	46,659	20,315	-	-	20,315
1958	-	38,445	-	38,445	30,667	52	-	30,719
1959	2	46,282	-	46,284	15,194	-	-	15,194
1960	30	40,172	-	40,202	11,952	-	-	11,952
1961	2,000	30,830	-	32,830	20,883	-	-	20,883
1962	732	45,206	-	45,938	31,200	-	-	31,200
1963	2,741	55,046	-	60,787	30,353	-	-	30,353

YEAR	SKIPJACK				YELLOWFIN			
	SEINES	LINES	OTHER	TOTAL	SEINES	LINES	OTHER	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1936	2,268	24,724	-	26,992	5,002	73,351	-	78,353
1937	6,523	40,581	-	47,104	9,247	82,276	-	91,523
1938	1,442	21,212	-	22,654	4,013	74,305	-	78,318
1939	6,169	23,952	-	30,121	19,344	91,074	-	110,418
1940	13,098	43,552	-	56,650	15,237	98,523	-	113,760
1941	1,802	23,794	-	25,596	5,431	71,271	-	76,702
1942	1,258	37,477	-	38,735	4,257	37,210	-	41,457
1943	1,123	27,771	-	28,894	6,912	43,350	-	49,262
1944	3,730	26,307	-	30,037	10,105	53,039	-	63,144
1945	4,240	29,108	-	33,348	18,175	69,273	(1)	87,448
1946	9,656	31,422	(1)	41,088	27,978	99,269	-	127,247
1947	8,284	44,465	-	52,749	29,414	124,096	-	153,510
1948	5,935	54,619	-	60,554	39,939	159,488	-	199,427
1949	4,155	76,357	-	80,512	26,543	164,001	-	190,544
1950	11,875	114,911	-	126,786	39,679	148,211	-	187,890
1951	12,854	103,745	-	116,599	14,530	145,951	-	161,481
1952	10,764	74,080	-	84,844	30,748	148,071	-	178,819
1953	11,654	111,324	-	122,978	37,440	95,900	-	133,340
1954	18,664	135,092	-	153,756	22,089	97,313	-	119,402
1955	13,760	89,047	-	102,807	29,325	93,883	-	123,208
1956	6,973	116,744	-	123,717	40,105	110,818	-	150,923
1957	6,290	84,531	-	90,821	35,230	104,010	-	137,240
1958	11,658	111,714	-	123,372	34,449	89,278	-	123,727
1959	10,918	87,564	-	98,482	51,304	57,065	-	108,370
1960	18,284	28,020	-	46,304	143,873	45,434	-	189,307
1961	46,436	18,967	-	65,403	164,995	26,859	-	191,854
1962	79,006	13,715	-	92,721	105,473	18,548	-	124,021
1963	84,786	11,834	-	96,620	97,245	12,338	-	109,583

1/ LESS THAN 500 POUNDS.
 2/ INCLUDES 132,000 POUNDS LANDED IN ALASKA.
 3/ INCLUDES 39,000 POUNDS LANDED IN ALASKA.

HISTORICAL FISHERY STATISTICS

TUNA CATCH BY SPECIES AND AREA OF CAPTURE, PACIFIC COAST STATES, 1911-63

(THOUSANDS OF POUNDS)

YEAR	ALBACORE		BLUEFIN		SKIPJACK		YELLOWFIN		TOTAL		
	OFF PACIFIC COAST STATES	OFF LATIN AMERICA	OFF PACIFIC COAST STATES	OFF LATIN AMERICA	OFF PACIFIC COAST STATES	OFF LATIN AMERICA	OFF PACIFIC COAST STATES	OFF LATIN AMERICA	OFF PACIFIC COAST STATES	OFF LATIN AMERICA	TOTAL
	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1911	2/ 850	-	-	-	-	-	-	-	2/ 850	-	2/ 850
1912	2/ 3,400	-	-	-	-	-	-	-	2/ 3,400	-	2/ 3,400
1913	2/ 6,600	-	-	-	-	-	-	-	2/ 6,600	-	2/ 6,600
1914	2/ 18,470	-	-	-	-	-	-	-	2/ 18,470	-	2/ 18,470
1915	21,074	-	-	-	-	-	-	-	21,074	-	21,074
1916	22,899	-	3/20,540	-	(3)	-	(3)	-	43,439	-	43,439
1917	30,556	-	1,150	-	420	-	-	-	32,126	-	32,126
1918	7,263	2	6,240	-	3,024	-	-	-	16,527	2	16,529
1919	13,551	80	14,991	-	6,882	15	348	-	35,772	95	35,867
1920	18,877	-	10,530	-	7,939	18	1,465	500	38,811	518	39,329
1921	15,275	-	1,972	60	1,139	(4)	1,188	50	19,574	112	19,686
1922	13,232	-	2,811	27	10,117	1,745	1,177	5,160	27,337	7,932	35,269
1923	12,488	27	3,218	83	4,579	6,884	194	10,643	20,479	17,637	38,116
1924	17,480	415	3,241	-	1,356	2,425	619	2,444	22,496	5,284	27,780
1925	21,685	522	3,804	-	8,768	5,467	2,923	10,315	37,180	16,304	53,484
1926	2,469	(4)	6,527	-	14,261	6,734	2,695	9,870	25,952	16,604	42,556
1927	4,455	124	4,898	(4)	5,804	28,003	595	25,339	15,752	53,666	69,218
1928	283	-	13,701	-	4,263	11,552	83	32,168	18,330	43,720	62,050
1929	269	(4)	7,477	50	8,032	18,966	199	37,200	15,977	56,216	72,193
1930	286	-	15,599	6,322	3,015	17,471	36	56,618	18,936	80,411	99,347
1931	37	-	2,358	1,176	11,966	4,541	155	36,425	14,162	56,658	70,816
1932	620	-	460	511	21,262	375	165	36,758	1,620	38,631	60,251
1933	2	-	324	236	(4)	16,687	7	51,069	333	67,992	68,325
1934	121	-	18,292	66	-	14,830	19	60,894	18,432	75,790	94,222
1935	2,387	61	18,496	6,677	1,908	15,289	529	71,723	23,320	101,237	117,070
1936	984	-	13,809	5,116	8,457	18,535	767	77,586	24,017	101,237	125,254
1937	3,520	-	10,822	1,872	1,884	45,220	188	91,335	16,414	138,427	154,841
1938	17,696	30	16,512	1,216	3	22,651	11	78,307	34,222	102,204	136,426
1939	18,918	4	9,319	2,177	2,739	27,402	457	109,961	31,413	139,884	171,297
1940	14,501	-	18,850	1,120	2,985	53,665	238	113,522	36,574	169,308	204,882
1941	11,932	-	8,848	671	4,215	21,371	2	76,700	24,997	98,742	123,739
1942	20,916	2,624	10,332	2,513	218	38,517	1	41,466	31,467	85,120	116,587
1943	28,019	9,499	7,664	2,514	18	28,876	2	49,260	35,703	90,149	125,852
1944	43,020	9,775	16,084	4,260	4	30,033	(4)	63,144	59,108	107,212	166,320
1945	27,221	12,262	14,139	6,455	93	33,255	5	87,443	41,458	139,415	180,873
1946	15,180	8,962	15,529	6,503	1,747	39,341	33	127,214	32,489	182,020	214,509
1947	21,032	5,762	14,756	6,082	893	51,856	3	153,507	36,734	217,207	253,941
1948	5/23,567	25,926	1,694	4,835	319	60,235	(4)	199,427	25,580	290,423	316,003
1949	31,217	23,577	2,266	2,123	27	80,485	10	190,534	33,520	296,719	330,239
1950	5/48,877	23,576	32	2,730	2,281	124,505	6,520	181,370	57,710	332,181	389,891
1951	16,859	17,622	837	3,025	706	115,893	1,235	160,246	19,647	296,785	316,433
1952	25,860	26,698	907	3,670	109	84,735	381	178,438	27,257	293,541	320,798
1953	14,209	20,491	3,904	5,869	669	122,309	1,254	132,086	20,036	280,755	300,791
1954	15,180	11,818	5,648	15,377	14	153,742	-	119,402	20,842	300,339	321,181
1955	10,048	19,690	2,670	10,939	970	101,837	916	122,292	14,604	254,758	269,362
1956	20,274	21,064	2,612	10,014	3,565	120,152	1,642	149,281	28,093	300,511	328,604
1957	25,747	20,912	10,486	9,829	676	90,145	355	133,885	37,264	257,771	295,035
1958	37,720	725	15,280	15,439	3,016	120,356	727	123,000	56,743	259,520	316,263
1959	46,284	-	13,025	2,169	1,382	97,100	82	108,288	60,773	207,557	268,330
1960	37,215	2,987	4,339	7,614	24	46,280	10	189,296	41,588	246,177	287,765
1961	24,445	8,385	13,763	7,120	-	65,402	-	191,854	38,209	272,761	310,970
1962	41,362	6,576	17,004	14,160	-	92,721	(4)	124,021	58,402	235,478	293,880
1963	53,653	4,934	7,131	23,222	2,224	94,396	60	109,523	63,268	234,075	297,343

1/ INCLUDES THE CATCH TAKEN OFF BRITISH COLUMBIA.

2/ ESTIMATED ON THE BASIS OF PACK AS REPORTED BY TUNA CANNERS.

3/ THE CATCH OF SKIPJACK AND YELLOWFIN HAS BEEN INCLUDED WITH THAT OF BLUEFIN.

4/ LESS THAN 500 POUNDS.

5/ INCLUDES A CATCH OF 132,000 POUNDS LANDED IN ALASKA.

6/ INCLUDES A CATCH OF 39,000 POUNDS LANDED IN ALASKA.

NOTE:--DATA FROM 1911 TO 1923 BASED ON STATISTICS PUBLISHED BY THE BUREAU OF FISHERIES, THE CALIFORNIA BUREAU OF MARINE FISHERIES (FISH BULLETIN NO. 74), AND THE U. S. TARIFF COMMISSION IN THEIR REPORT TO THE U. S. SENATE ON TUNA FISH, REPORT NO. 109, SECOND SERIES.

SECTION 14

STATISTICAL SURVEY PROCEDURE

This is another in a series of annual reports containing detailed statistics, analytic textual reviews, and graphic presentations on the commercial fisheries of the United States. Included are data on the quantity and value of the commercial yield of fishery products by States, sections, and gear; and the number of persons and operating units engaged in the fisheries. In the Great Lakes and Mississippi River Sections, the catch is also tabulated by water bodies. The publication contains data on the volume and value of processed fishery products, freezings and cold storage holdings, foreign trade, and other related information. The report has been prepared and published by the Bureau of Commercial Fisheries, Fish and Wildlife Service, U. S. Department of the Interior, and is a continuation of a series inaugurated by its predecessor organizations in the Department of Interior, Commerce, Commerce and Labor, and the U. S. Fish Commission.

In order that those who use the statistical data contained in this and previous reports may be informed as to the source of the figures and methods for their collection, it has been deemed advisable to outline, in moderate detail, the survey procedure followed. This procedure has been developed over many years, and changes in methods have been made at times when such changes have appeared to work toward general improvement. While the surveys in different sections are not made in the same manner, owing to varying facilities and records, an attempt has been made to make the data collected by various methods comparable with respect to the same year as well as over a period of years. Throughout the entire plan, it has been the intention to coordinate State and federal fishery statistical work so that there will be as little duplication of effort as possible.

SECTIONAL SURVEYS

Statistical surveys of the fisheries and fishery industries of the various sections of the United States occupy by far the greatest part of the time of the personnel of the Branch of Statistics. At frequent intervals, field representatives visit the individual fishing localities of the various States to collect statistics on the volume and value of the catch of fish and shellfish, employ-

ment in the fisheries, quantity of fishing gear, number and classification of fishing craft, and the volume and value of processed fishery products. The various phases of these surveys are discussed in detail in the sections following.

History -- The first comprehensive statistical study of the fisheries and fishery industries of the United States was made for the year 1880 by George Brown Goode, Assistant Director of the U. S. National Museum, and associates, with the cooperation of the Commissioner of Fisheries and the Superintendent of the Tenth Census. Data for specific fisheries, or restricted sections for years prior to 1880, also were collected in the early survey and recorded in Mr. Goode's reports. The survey for 1880, however, did not include the Mississippi River and its tributaries. Periodic general surveys of a limited number of States or limited areas of the United States were made for the years from 1880 to 1907 and from 1909 to 1928. The first complete statistical canvass of the entire United States was made for 1908 by the Bureau of the Census. The next general survey of the entire United States was not made until 1931, although complete data for all sections, excluding the Mississippi River and its tributaries, were collected for 1929 and 1930. Complete data on the catch and operating units for these same sections were also collected for 1932. In the latter survey, however, lack of sufficient funds prohibited collection of data on the wholesale and manufacturing operations except those data collected as a part of the canned fishery products and byproducts survey. Various sections were surveyed during the years from 1933 to 1949, inclusive. A complete survey of all sections of the country was made for 1950. Since 1951, all of the coastal areas have been canvassed annually, and catch records have been obtained for the Lakes section. Complete operating unit and catch data have been obtained for all areas since 1954, except that only a partial survey of the Mississippi River and its tributaries was made for 1961. Data on the wholesale and manufacturing industries were collected in all of the surveys from 1933 to 1940, inclusive. In the years from 1941 to 1949, inclusive, and in 1951, lack of experienced personnel and budgetary limitations precluded the collection of data on wholesale and manufacturing firms except for those data collected as part of the canned fishery products, industrial products, and packaged fish surveys.

STATISTICAL SURVEY PROCEDURE

The chart on page 485 indicates the years for which surveys have been made in the various sections. Figures for recent years are available from the Bureau in bulletin form, but data for the earlier years are available only in the Fish Commission and Bureau of Fisheries printed reports. These reports are on file in the Department of the Interior library and in many public libraries.

Since the surveys of the fisheries have varied in completeness, three legends have been used for the years shown in the chart to indicate whether complete, partial, or no surveys were conducted in the individual regions. The designation "complete survey" has been used to indicate that basic operating unit and catch data were obtained and that complete information was collected on employment in wholesale and manufacturing establishments and on the production of manufactured fishery products. The legend "partial survey" usually indicates that operating unit and catch statistics were collected, but that no information was obtained on employment in wholesale and manufacturing establishments and that only partial data were obtained on the production of manufactured fishery products. In some instances the designation "partial survey" is used for regions in which only catch statistics were collected. The legend "no survey" indicates that a general canvass was not conducted to obtain operating unit, catch, employment in wholesale and manufacturing plants, and complete manufactured products data. Although the chart indicates that in certain regions no surveys were conducted, some information may be available on the landings at certain important ports. Likewise, information on the catch of certain species, such as menhaden, may be available as a result of data collected in connection with the annual canned fish and byproducts survey. Data on the annual production of canned fishery products and byproducts have been collected for all regions since 1921, while information has been obtained on the production of packaged fish for 1926 and annually since 1928.

A bibliography listing the various surveys made since 1880 and the publications in which the results were published appeared in Statistical Digest No. 43, "Fishery Statistics of the United States, 1956." A list of the statistical bulletins in the Current Fishery Statistics series published during 1963 may be found in Section 17 of this Digest.

Field Personnel--The statistics contained in this volume have been collected by a group of trained fishery reporting specialists of the Bureau.

Period Covered--These specialists are assigned to field stations, generally in the principal port within their field, and travel from that station in conducting their various surveys. Most of the reporting agents collect statistics on landings for the current year, and assemble final operating unit, catch, and processed products data for the previous year. It is usually 3 to 10 months after the end of the calendar year for which they are collecting data before the final figures for the digest are available. The data are tabulated and prepared for publication before the end of the year. The figures are collected and published on a calendar year basis. Prior to 1930, statistics on the catch of oysters in the Atlantic and Gulf States were collected for the oyster season; that is, from September to April, inclusive. Since 1930, they have been collected on a calendar year basis.

Scope--The coastal statistical surveys include canvasses of the commercial fisheries of the oceans, bays, and coastal rivers as far inland as commercial fishing is important. This usually coincides with the range of commercial fishing for anadromous species. Statistics on the fisheries of the Mississippi River include those of the Mississippi River proper as well as all of its tributaries wherein commercial fishing for either fish, crustaceans, or mollusks is carried on. Statistics on the fisheries of the Great Lakes cover canvasses of the fisheries in the lakes proper, adjacent bays, the International Lakes of northern Minnesota, and rivers which sustain a commercial fishery having outlets into these waters. Statistics on the fisheries of Florida include the commercial fisheries in Lake Okeechobee and other inland lakes. Surveys for statistics of the wholesale and processing fishery industries cover plants located in the coastal, river, and lake areas adjacent to the waters mentioned above.

Methods of Collection--There are several methods used in the collection of fishery statistics, each of which has been carefully

STATISTICAL SURVEY PROCEDURE

SURVEYS OF THE FISHERIES OF THE UNITED STATES

AREA:	1880	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	1900	'01	'02	
NEW ENGLAND	Complete																							
MIDDLE ATLANTIC																								
CHESAPEAKE	Complete																							
SOUTH ATLANTIC																								
GULF	Complete																							
ALASKA																								
WASH., ORE., CALIF.	Complete																							
GREAT LAKES																								
MISSISSIPPI RIVER																								

AREA:	1903	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	
NEW ENGLAND						Complete																		
MIDDLE ATLANTIC						Complete																		
CHESAPEAKE						Complete																		Complete
SOUTH ATLANTIC																								
GULF																								
ALASKA																								
WASH., ORE., CALIF.																								
GREAT LAKES																								
MISSISSIPPI RIVER																								

AREA:	1926	'27	'28	'29	'30	'31	'32	'33	'34	'35	'36	'37	'38	'39	'40	'41	'42	'43	'44	'45	'46	'47	'48	
NEW ENGLAND																								
MIDDLE ATLANTIC																								
CHESAPEAKE																								
SOUTH ATLANTIC																								
GULF																								
ALASKA																								
WASH., ORE., CALIF.																								
GREAT LAKES																								
MISSISSIPPI RIVER																								
HAWAII																								

AREA:	1949	'50	'51	'52	'53	'54	'55	'56	'57	'58	'59	'60	'61	'62	'63
NEW ENGLAND															
MIDDLE ATLANTIC															
CHESAPEAKE															
SOUTH ATLANTIC															
GULF															
ALASKA															
WASH., ORE., CALIF.															
GREAT LAKES															
MISSISSIPPI RIVER															
HAWAII															



COMPLETE SURVEY



PARTIAL SURVEY



NO SURVEY

STATISTICAL SURVEY PROCEDURE

studied to obtain the best results with available personnel and funds. In the preparation of operating unit data, the field personnel are supplied with a deck of prepunched vessel cards obtained from the Bureau of Customs. These cards indicate the name, official number, rig code, gross tonnage, length, and year built. Field personnel enter the number of crewmen, and number and type of gear used by the vessel. These data are obtained by interview. Data on the craft of less than 5 net tons are obtained from State conservation agencies and by contact with firms purchasing fish or shellfish from fishermen. The data thus obtained are machine processed to ensure accuracy.

Data on over 96 percent of the catch are available from summaries of monthly landings bulletins and other current records assembled by the Bureau or the various States. If complete catch data are not available from central sources, wholesale dealers and manufacturers of fishery products are visited, and data are obtained from them on their purchases of fish and shellfish. It is impossible for the few Bureau representatives available for this work to interview each fisherman in a given locality. However, the more important areas and a sufficient number of areas of lesser importance are visited to obtain reliable information on production, the number of fishing craft engaged, the quantity of gear operated, catch by gear and waters, and the number of persons employed as fishermen.

The Bureau's role with regard to fishery statistics is principally that of coordinating the collection of information, assembling, analyzing, publishing, and disseminating fishery data. The collection of basic operating unit and catch statistics is primarily a State function. The State fishery agencies in a number of States have developed relatively complete statistical systems which greatly facilitate the Bureau's surveys in these States. In such instances, the Bureau conducts only such surveys as may be necessary to make the data comparable with those of other States.

The Bureau obtains from the records of the State fishery agencies most of the catch statistics for the fisheries of the Great Lakes, the northern Mississippi River area, and the International Lakes of northern Minnesota. To obtain data on the number of fishermen, boats, vessels, and gear, the Bureau conducts such personal surveys among the fishermen as may be necessary

to supplement the State records.

Bureau statistical personnel are stationed at Seattle, Wash. and San Pedro, Calif. for the purpose of surveying the fisheries of Washington, Oregon, and California. They obtain from the records of the State fishery departments figures on the volume of the catch and operating units. The value of the catch is derived from State and dealers' records. In Washington and Oregon, data for operating units in the offshore fisheries are obtained from the records of various fishery organizations as well as from records of the State fishery agencies. Statistics of the wholesale fishery industry for this section are obtained largely by personal interviews.

In many States, the Bureau and the fishery agency of the respective States cooperate in the collection and publication of current monthly and annual data on the catch. These data form the basis of the annual catch figures published in this report for the following States: Maine, Massachusetts, Rhode Island, New York, New Jersey, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, California, Ohio, Michigan, and Wisconsin.

In the administration of the Alaska fisheries, the State requires that copies of all receipts for fish and shellfish purchases from fishermen be furnished to the Alaska Department of Fish and Game. The data on these tickets are compiled and made available to the Bureau. The summary data, by districts, are reproduced in this report.

Statistics on the volume of the catch of fish in the Great Lakes States usually are shown in weights as landed, which may be in the round or drawn condition. Statistics on the volume of the catch of fish taken in the remainder of the United States are usually shown in round weight.

The figures in the tables for shellfish represent the weight of the meats in the cases of univalve and bivalve mollusks, and the round weight of crustaceans and such cephalopods as squid and octopus.

Shore and Vessel Fisheries--In general, statistics of the shore fisheries, as collected by the Bureau's representatives, include

data on the number of casual and regular fishermen; number of motor and other fishing boats (craft of less than 5 net tons capacity are called "boats"); type and quantity of gear used; and the volume, value, and method of capture of each species for each locality or group of localities. This method is not followed in some sections where the availability of data collected by the State fishery agencies obviates the necessity of detailed locality surveys.

Statistics of the vessel fisheries include data on the number in the crew; rig of vessels; gross tonnage; kind and quantity of gear used; and volume, value, and method of capture of each species. Craft having a capacity of 5 net tons or over are called "vessels." As in the shore fisheries, the availability of figures collected by State fishery agencies may eliminate the necessity of Bureau agents collecting these data for individual vessels. Information on the year vessels were built was assembled for 1961.

Statistics on the quantity of gear operated indicate the maximum number of units fished at any one time during the year. Gear carried in reserve for replacement is not reported.

All persons engaged in commercial fishing operations are included as fishermen. In most areas, fishermen not on vessels have been divided into "regular" and "casual". Regular fishermen are defined as those who receive more than one-half their annual income from fishing, whereas casual fishermen are those who receive less than one-half their annual compensation from fishing. It has not been possible to separate regular from casual fishermen on the Pacific Coast.

Since 1942, the catch of fish and shellfish has been credited to the port at which it was landed. Prior to the survey for that year, it was the practice of the Bureau to credit the entire catch of a vessel to the principal port at which fish or shellfish were unloaded, regardless of the actual point of landing. This policy was discontinued since it quite often resulted in inconsistencies by crediting catches of some species to areas far removed from localities in which they are commonly taken. An outstanding example of this is the southern trawl fishery conducted off the New Jersey, Maryland, Virginia, and North Carolina coasts. Some fishing vessels from New England operate in this fishery for 6 to 10 weeks during the winter season. Prior to the survey for 1942, the catch of these vessels, consisting principally of fish common to Middle Atlantic waters,

was credited to Massachusetts. Under the present system, this catch is credited to the Middle Atlantic ports where it is landed.

Since 1949 on the Pacific Coast and 1951 for the remainder of the country, craft, fishermen, and gear have been reported for each State in which they fished. A total exclusive of duplication is shown for each section and for the United States as a whole. Prior to the surveys for 1949, each craft on the Pacific Coast was credited to its home port unless it did not fish from that port during the year. In that case, it was credited to the locality where it landed the greatest portion of its catch. Prior to the survey for 1951, each craft on the Atlantic and Gulf Coasts and interior waters was credited to the port where it landed the greatest portion of its catch during the year. This system was changed to provide more accurate data on the total number of craft operating in a given State. With the increased mobility of the fishing fleet in recent years, the number of vessels fishing in more than one State has increased greatly.

Beginning with data for 1951, the reporting of units of gear was standardized so that nets or lines made up of small units for ease in handling, but fastened together in fishing, were counted as a single unit rather than as a number of smaller units. Prior to 1951, the small units were sometimes counted as individual pieces of gear even though they were combined for fishing. This rule does not apply to halibut longlines or setlines on the Pacific Coast. In this fishery, each skate of gear is counted as one line, even though fastened together in fishing, because the International Pacific Halibut Commission uses a skate of gear as a unit in its studies of fishing intensity.

Beginning with 1962, only summary data have been shown on the number of fishing gear operated in the Great Lakes and the International Lakes of northern Minnesota. These data appear in the General Review section of the Digest in the table "Summary of Operating Units." In detailed operating unit tables for these lakes, the number and size of gear have been replaced by information on the fishing effort expended in the operation of each gear.

Publication of Data--Statistics on employment in the fisheries, craft and gear engaged, quantity and value of catch, and certain data on industries related to the fisheries are summarized according to geographic divisions and published in bulletin form as soon as possible after the completion of each survey. Later, the figures, in more detail, are included in the

STATISTICAL SURVEY PROCEDURE

annual statistical report of the Bureau entitled "Fishery Statistics of the United States."

Data on the operating units (fishermen, fishing craft, and gear) and catch by counties for the Atlantic and Gulf States have been included in these annual statistical reports for the years from 1928 to 1938 except for 1932. These data have also been published in the digests for the years 1945, 1950, 1955, and 1960. County data were collected for the State in which surveys were conducted during the years since 1938, except for Maryland. Between 1942 and 1959, only operating unit data by counties have been obtained for Maryland. Complete data were obtained for 1960. County data assembled for the years since 1938, which were not published in the Digest, are on file in the Washington office of the Bureau.

LOCAL AND SPECIAL SURVEYS

Landings at Certain Massachusetts Ports -- Detailed statistics are collected on the landings of aquatic products by individual fishing craft at Boston, Gloucester, New Bedford, Plymouth, Provincetown, and other Cape Cod ports. Bureau representatives are stationed at the principal ports. They obtain figures on the quantity and value of fish landed daily by fishing craft, the dates of departure and arrival of the craft, the gear used in their capture, the grounds from which the fish were taken, and other related information. The Bureau's Division of Biological Research and Branch of Market News cooperate in the collection of these data.

Statistics on landings at the above ports are released monthly and annually in bulletin form, and summary data are published in the annual statistical digest. Products of American fisheries received duty free at Boston and Gloucester from the treaty coasts of Newfoundland, Magdalen Islands, and Labrador have not been included in the landings at these ports since 1938. Data on the landings at Boston and Gloucester have been collected annually since 1893. Information on landings at New Bedford has been collected annually since 1938; and at Plymouth, Provincetown, and other Cape Cod ports, since 1945.

Shad and Alewife Fisheries -- Owing to the importance of the Hudson and Potomac

Rivers in the production of shad, surveys for statistics on the catch, value of the catch, and operating units are made annually. On the Potomac River, similar statistics are also obtained for the alewife fishery. Much of the data required for these surveys is available from the States fishery agencies.

Annual data on the shad and alewife fisheries are not published separately in bulletin form. However, a summary is published in the annual statistical digest.

Statistics on the Hudson River shad fishery are available for 1896, 1897, 1898, 1901, 1904, 1910, and continuously since 1915. Data for the Potomac River shad fishery are available for 1896, 1901, 1904, 1909, 1915, from 1919 to 1942, inclusive, and continuously since 1944. Statistics on the Potomac River alewife fishery are available for 1896, 1909, 1915, from 1919 to 1942, inclusive, and continuously since 1944.

Pacific Halibut Fishery -- Statistics on the Pacific halibut fishery are obtained primarily from the International Pacific Halibut Commission. Beginning with data for 1956, the fleet classification of halibut craft was revised and vessels were credited in operating unit tables to each district in which they landed fish; the only exception being that U.S. vessels landing at Prince Rupert, British Columbia, are credited to Southeastern Alaska. Duplication of halibut craft which operated in more than one district has been eliminated in regional and national totals. The catch by the halibut fleet is credited to the port of landing except that fish landed by U.S. halibut craft in British Columbia is credited to Southeastern Alaska. Halibut statistics are also included in the monthly and annual summaries published by the Seattle Fishery Market News Office. Statistics on the landings of halibut at Pacific Coast ports have been collected since 1925.

South Atlantic and Gulf of Mexico Shrimp Fishery -- Detailed statistics on the quantity and value of shrimp, by variety and size, landed at South Atlantic and Gulf ports, have been collected for the Gulf area since 1956 and the South Atlantic since 1957. Since 1956, Bureau personnel have also obtained daily information on the number of fishing trips, area and

depth fished, and time spent in fishing by craft landing at U.S. ports in the Gulf of Mexico. The Branch of Market News, the Bureau's Branch of Marine Fisheries of the Division of Biological Research, and various fishery agencies of the southern States cooperate in the collection of these data.

Detailed monthly and annual summaries of the statistics on shrimp catch and landings are published in bulletin form and are summarized in the annual statistical digests.

Hawaiian Fisheries-- The common and scientific names of the species of fish and shellfish landed in Hawaii are not included in Section 15 of this report.

Historical Fishery Statistics-- The Bureau of Commercial Fisheries has in its files and in various Bureau reports or publications of other organizations a large volume of historical data on fisheries. Beginning with the 1951 Digest, a section entitled "Historical Fishery Statistics," which includes complete historical information on selected species, has been carried. There is published each year a listing of the titles of the series of data appearing in earlier editions.

Review of Certain Major Fisheries-- Beginning with 1942, tabulations containing complete data on the catch of certain major species have been included in a section of the Digest entitled "Review of Certain Major Fisheries." Although the data are included in the detailed catch tables of the various States, they are consolidated in this section to provide a single source of data for cod, haddock, halibut, Pacific mackerel, jack mackerel, menhaden, Atlantic ocean perch, Pacific sardines, salmon, tuna, oysters, clams, crabs, and shrimp. Data on operating units in the following fisheries have likewise been consolidated in this section: halibut, salmon troll line, Pacific Coast tuna, menhaden purse seine, fish and shrimp otter trawl.

Canned Fishery Products and Industrial Products-- Since 1921, the Bureau has made annual sectional surveys for statistics on canned and industrial fishery products. These surveys are started the first week in January of each year for statistics on the production in the preceding year. So far as possible, the Bureau obtains by mail statistics on the annual production of each domestic canned and industrial fishery products plant. If it is impossible to obtain the information by mail, the report is secured by a Bureau representative. Included in the data obtained are statistics on the yield and value of the canned products by type of commodity, can size, and area of production. Data on industrial products are obtained by commodity and area of production. The value shown for canned and industrial products is the gross amount received by the packer at the production point. No deductions are made for commissions or expenses.

Annual statistical bulletins are issued on this trade, and detailed data are published in the statistical Digest. Prior to 1921, canned and industrial products data were not collected for the entire country. However, data on the production of these products were usually obtained for the areas in which general canvass surveys were conducted.

Fish Meal and Oil-- Data are collected monthly on the domestic production of fish meal, body oil, fish solubles, and homogenized condensed fish. This information is released monthly and annually in the Bureau's Current Fishery Statistics series of bulletins.

Packaged Fish Trade-- Statistics on the annual production and value of fish packaged in the United States, excluding the States of Alaska and Hawaii, are obtained in conjunction with the canned and industrial fishery products survey. These data are released annually in bulletin form and in the annual statistical digest. Statistics on the production of packaged fish are available for 1926 and annually since 1928, except that no data were collected in California for the years 1941 to 1946, inclusive.

Fish Sticks and Portions-- Quarterly information is collected and published on

STATISTICAL SURVEY PROCEDURE

the production and value of cooked and raw fish sticks and breaded, cooked, and raw fish portions, and unbreaded fish portions. The data are released in the Bureau's Current Fishery Statistics series of bulletins.

Cold-Storage Holdings of Fish--Information on the monthly freezings and holdings of fishery products is obtained from cold storage warehouses by mail and by Bureau employees. Data are also obtained on the holdings of certain cured fish. Bulletins showing these statistics are issued monthly and annually.

Detailed cold-storage statistics also are published in the Bureau's annual statistical digest. Information regarding cold-storage holdings of fishery products has been published since 1917, while data on the quantity of fish frozen have been released for the years from 1920 to 1925, inclusive, and continuously since 1928.

Foreign Fishery Trade--Statistics on foreign fishery trade are obtained from compilations made by the Bureau of the Census, Department of Commerce. Statistics on all known imported or exported fishery products have been assembled and published annually since 1926 in the Bureau's statistical digest. For earlier years, figures are available in the reports of the Bureau of the Census, Bureau of Foreign and Domestic Commerce, the Bureau of Statistics, the Department of Commerce and Labor, or the Treasury Department.

PRACTICES AND TERMS

Certain practices and terms used in this report are explained below.

Operating Units--Operating units include persons employed in the fisheries, and craft and gear engaged in the fisheries.

Vessel--A craft having a capacity of 5 net tons or over.

Boat--A craft having a capacity of less than 5 net tons.

Days Absent--In computing "days absent" for vessels landing fares at certain Mas-

sachusetts ports, the day of arrival, but not the day of departure, is included; thus, a vessel leaving port on the 8th of the month and returning on the 15th of the month will be credited with 7 days absence. Prior to 1944, "days absent" included both the day of departure and the day of arrival.

Days Fished--In computing "days fished" for fishing craft landing shrimp at Gulf of Mexico ports, the total number of hours spent in fishing effort has been divided by 24.

Fish--The term "fish" as used in this report includes all species belonging to the class Pisces.

Shellfish, etc.--A shellfish is an aquatic invertebrate animal having a shell, such as a mollusk or crustacean. However, in order to reduce the classifications appearing in the catch tables, all items not properly listed as "Fish" or "Whale Products" have been included under "Shellfish, etc." Accordingly, turtles, frogs, sponges, seaweed, and worms are included under this classification.

Whale Products--Since data are not available on the poundage of whales taken, statistics appearing in catch tables on the yield of these mammals represent the weight of products produced such as meal, sperm oil, whale oil, etc. The values shown represent the amount received by the manufacturer for the products.

Incidental Catch--The term "incidental catch" refers to the catch of certain species by a type of gear which ordinarily does not capture such species.

Percentages--Percentages are usually shown as whole numbers. Fractions of percents are dropped if less than five-tenths, and the percentage is raised to the next higher integer if the fraction is greater than five-tenths. If the fraction is exactly five-tenths, odd integers are raised to the next even figure while even integers remain unchanged.

Converting--Many of the figures shown in the summary tables published herewith have been converted to thousands of pounds or thousands of dollars. In making these conversions the sum of the items in a table is raised or low-

ered to the nearest thousand in accordance with standard statistical procedures. The individual items are adjusted to conform to the total thus obtained.

Confidential Data-- The statistical data collected by the Bureau are confidential, and unless specific authorization is given, are not released in a manner that would divulge private enterprise.

CONVERSION FACTORS

It is the policy of the Bureau to show detailed catch figures of all products in pounds for the sake of uniformity and for purposes of comparison. This represents little difficulty in the case of fish, since in very rare instances are fish reported in units of measure other than pounds. For shellfish, however, the units of measure may be bushels, sacks, barrels, numbers, gallons of meats, etc. So many units make standardization difficult, and when combined with the wide variation in the requirements or definitions of some of these units in the various states, the problem becomes even more complex.

All univalve and bivalve mollusks (except fresh-water mussel shells) are reported in pounds

of meats in the detailed catch tables presented in this report. In addition, there are included supplementary tables for most of the sections, which give data on the production in bushels. These supplementary tables also give the production in number of certain other shellfish, such as crabs. There also is included in the General Review section of this report a table containing data on the shell weight of univalve and bivalve mollusks taken.

Oysters-- Probably the greatest problem in the presentation of fishery statistics in uniform units of measure is in the case of oysters. Usually the production of oysters on the Atlantic and Gulf Coasts is reported to Bureau personnel in bushels. Prior to the data obtained for the year 1930, bushels were converted to pounds of meats on the basis of a uniform yield of 7 pounds of meats to the bushel. However, it was found that there was considerable variation in the yield of oysters per bushel particularly in southern states where the yield has ranged as low as half the conversion factor used prior to 1930. There follows a table which gives the measures used for oysters in the various States and the average yields per bushel. The statistical tables in this report are based on these average yields.



STATISTICAL SURVEY PROCEDURE

COASTLINE OF THE UNITED STATES

Graphic measurements on lengths of coastline and tidal shoreline of the United States have been made from time to time by the U.S. Coast and Geodetic Survey on maps of various scales and in units of various lengths. The three types of measurement are explained in the following paragraphs.

GENERAL COASTLINE.--The figures under this heading are lengths of the general outline of the seacoast. The measurements were made with a unit measure of 30 minutes of latitude on charts as near the scale of 1:1,200,000 as possible. The shoreline of bays and sounds is included to a point where such waters narrow to the width of the unit measure, and the distance across at such point is included.

TIDAL SHORELINE, GENERAL.--Measurements under this heading were made with a unit measure of 3 statute miles on charts of 1:200,000 and 1:400,000 scale when available. The shoreline of bays, sounds, and other bodies of water is included to a point where such waters narrow to a width of 3 statute miles, and the distance across at such point is included.

TIDAL SHORELINE, DETAILED.--The figures under this heading were obtained in 1939-40 with a recording measure on the largest scale maps and charts then available. Shoreline of bays, sounds, and other bodies of water is included to the head of tidewater, or to a point where such waters narrow to a width of 100 feet.

LENGTH OF COASTLINE

LOCALITY	LENGTHS IN STATUTE MILES			LOCALITY	LENGTHS IN STATUTE MILES		
	GENERAL COASTLINE	TIDAL SHORELINE, GENERAL	TIDAL SHORELINE, DETAILED		GENERAL COASTLINE	TIDAL SHORELINE, GENERAL	TIDAL SHORELINE, DETAILED
NEW ENGLAND:				GULF:			
MAINE	226	676	3,476	FLORIDA, WEST COAST	770	1,658	5,095
NEW HAMPSHIRE	13	14	131	ALABAMA	53	199	607
MASSACHUSETTS	192	453	1,519	MISSISSIPPI	44	155	359
RHODE ISLAND	40	156	364	LOUISIANA	397	985	7,721
CONNECTICUT	-	96	616	TEXAS	367	1,100	3,359
TOTAL NEW ENGLAND	473	1,395	6,130	TOTAL GULF COAST	1,631	4,097	17,141
MIDDLE ATLANTIC:				PACIFIC:			
NEW YORK	127	470	1,850	ALASKA	6,640	15,132	33,904
NEW JERSEY	130	398	1,792	WASHINGTON	157	908	3,026
PENNSYLVANIA	-	-	89	OREGON	296	312	1,410
DELAWARE	26	79	381	CALIFORNIA	840	1,190	3,427
TOTAL MIDDLE ATLANTIC	285	947	4,112	TOTAL PACIFIC COAST	7,933	17,542	41,767
CHESAPEAKE:				HAWAII	750	900	1,052
MARYLAND	31	452	3,190	TOTAL UNITED STATES	12,383	28,909	88,633
VIRGINIA	112	567	3,315	U.S. TERRITORIES,			
TOTAL CHESAPEAKE	143	1,019	6,505	POSSESSIONS, ETC.:			
SOUTH ATLANTIC:				BAKER ISLAND	3	3	3
NORTH CAROLINA	301	1,030	3,375	CHRISTMAS ISLAND	80	90	188
SOUTH CAROLINA	187	758	2,876	GUAM ISLANDS	78	84	110
GEORGIA	100	603	2,344	HOWLAND ISLAND	4	4	4
FLORIDA, EAST COAST	580	618	3,331	JARVIS ISLAND	5	5	5
TOTAL SOUTH ATLANTIC	1,168	3,009	11,926	JOHNSTON ISLAND	3	3	3
TOTAL ATLANTIC COAST	2,069	6,370	26,673	NAVASSA ISLAND	5	5	16
				PALMYRA ISLAND	20	20	126
				PANAMA CANAL ZONE	9	9	700
				PUERTO RICO	311	362	126
				SAMOA ISLANDS	76	91	6
				SWAN ISLANDS	6	6	175
				VIRGIN ISLANDS	117	126	20
				WAKE ISLAND	12	12	

SOURCE:--U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

STATISTICAL SURVEY PROCEDURE

493

INLAND WATER AREAS BY STATES

Available information on the inland water surface area by States is listed below. These data include lakes, reservoirs and ponds having 40 acres or more of area; streams, sloughs, estuaries, and canals one-eighth of a statute mile or more in width; deeply indented embayments and sounds, and other coastal waters behind or sheltered by headlands or islands separated by less than 1 nautical mile of water; and islands having less than 40 acres of area; does not include water surface of the oceans, bays, the Gulf of Mexico, Long Island Sound, Puget Sound, and the Straits of Juan de Fuca and Georgia.

Most of the inland waters are fresh water. There is no specific criterion for distinguishing between fresh water and saline water. The saline lakes are mainly in the Great Basin (nearly all of Nevada, the western half of Utah, and parts of Oregon, California, Idaho, and Wyoming,) which has no outlet to the ocean. In addition much of the water near the coast may range from fresh to salty, depending upon the geography of the area and to fluctuations in the tide.

INLAND WATER AREA BY STATES AND SQUARE MILES

STATES	SQUARE MILES	STATES	SQUARE MILES
		<u>INLAND - CONTINUED</u>	
<u>COASTAL</u>		<u>INLAND - CONTINUED</u>	
NEW ENGLAND:		EAST NORTH CENTRAL - CONTINUED:	
MAINE	2,203	ILLINOIS:	
NEW HAMPSHIRE	290	LAKE MICHIGAN	1,526
MASSACHUSETTS	390	OTHER	470
RHODE ISLAND	156	MICHIGAN:	
CONNECTICUT	110	LAKE SUPERIOR, MICHIGAN, HURON,	
TOTAL NEW ENGLAND	3,149	AND ERIE	39,459
MIDDLE ATLANTIC:		OTHER	1,313
NEW YORK:		WISCONSIN:	
LAKE ONTARIO AND ERIE	3,627	LAKE MICHIGAN AND SUPERIOR	10,062
OTHER	1,637	OTHER	1,449
NEW JERSEY	315	TOTAL EAST NORTH CENTRAL	57,653
PENNSYLVANIA:		WEST NORTH CENTRAL:	
LAKE ERIE	735	MINNESOTA:	
OTHER	326	LAKE SUPERIOR	2,212
DELAWARE	79	OTHER	4,059
TOTAL MIDDLE ATLANTIC	6,719	IOWA	258
CHESAPEAKE:		MISSOURI	548
MARYLAND	703	NORTH DAKOTA	1,208
DISTRICT OF COLUMBIA	8	SOUTH DAKOTA	669
VIRGINIA	977	NEBRASKA	615
TOTAL CHESAPEAKE	1,688	KANSAS	216
SOUTH ATLANTIC AND GULF:		TOTAL WEST NORTH CENTRAL	9,785
NORTH CAROLINA	3,645	EAST SOUTH CENTRAL:	
SOUTH CAROLINA	783	WEST VIRGINIA	102
GEORGIA	602	KENTUCKY	532
FLORIDA	4,308	TENNESSEE	482
ALABAMA	549	TOTAL EAST SOUTH CENTRAL	1,116
MISSISSIPPI	493	WEST SOUTH CENTRAL:	
LOUISIANA	3,417	ARKANSAS	605
TEXAS	4,499	OKLAHOMA	1,032
TOTAL SOUTH ATLANTIC AND GULF	18,296	TOTAL WEST SOUTH CENTRAL	1,637
PACIFIC:		MONTANA MOUNTAIN:	
ALASKA	15,335	MONTANA	1,402
WASHINGTON	1,483	IDAHO	849
OREGON	733	WYOMING	503
CALIFORNIA	2,120	COLORADO	363
HAWAII	9	NEW MEXICO	156
TOTAL PACIFIC	19,680	ARIZONA	334
<u>INLAND</u>		UTAH	2,577
EAST NORTH CENTRAL:		NEVADA	752
VERMONT	333	TOTAL MONTANA MOUNTAIN	6,936
OHIO:		TOTAL:	
LAKE ERIE	3,457	GREAT LAKES	60,306
OTHER	250	OTHER	66,353
INDIANA:		GRAND TOTAL	126,659
LAKE MICHIGAN	228		
OTHER	106		

STATISTICAL SURVEY PROCEDURE

MEASURES AND YIELDS OF OYSTERS

STATE	CAPACITY OF STATE BUSHEL	VARIATION FROM U. S. STANDARD BUSHEL		YIELD OF MARKET OYSTERS, 1963	
		CUBIC INCHES	PERCENT	STATE BUSHEL	U. S. STANDARD BUSHEL
	CUBIC INCHES	CUBIC INCHES	PERCENT	POUNDS OF MEATS	POUNDS OF MEATS
MAINE	2,150.4	-	-	7.50	7.50
MASSACHUSETTS	2,150.4	-	-	6.50	6.50
RHODE ISLAND	2,150.4	-	-	7.00	7.00
CONNECTICUT	2,150.4	-	-	7.70	7.70
NEW YORK	2,150.4	-	-	7.50	7.50
NEW JERSEY	2,257.3	+ 106.9	+ 5.0	7.89	7.51
DELAWARE	2,257.3	+ 106.9	+ 5.0	6.96	6.63
MARYLAND	2,600.7	+ 650.3	+ 30.2	6.21	4.77
VIRGINIA	3,003.9	+ 853.5	+ 39.7	5.88	4.21
NORTH CAROLINA	2,601.9	+ 651.5	+ 30.3	6.78	5.20
SOUTH CAROLINA	4,071.5	+ 1,921.1	+ 89.3	6.06	3.20
GEORGIA	5,343.9	+ 3,193.5	+ 148.5	7.93	3.19
FLORIDA, EAST COAST	3,214.1	+ 1,063.7	+ 49.5	5.90	4.00
FLORIDA, WEST COAST	3,214.1	+ 1,063.7	+ 49.5	5.40	3.61
ALABAMA	2,626.2	+ 675.8	+ 31.4	5.41	4.12
MISSISSIPPI	2,626.2	+ 675.8	+ 31.4	5.20	3.96
LOUISIANA	2,148.4	- 2.0	- 0.1	4.65	4.65
TEXAS	2,700.0	+ 549.6	+ 25.6	5.04	4.01

NOTE:--THE CAPACITY OF A U. S. STANDARD BUSHEL IS 2,150.4 CUBIC INCHES.

AVERAGE YIELDS OF CERTAIN MOLLUSKS, 1963

(POUNDS OF MEATS PER U. S. STANDARD BUSHEL)

STATE	CLAMS						CONCHS	MUSSELS, SEA	PERI-WINKLES AND COCKLES	SCALLOPS		
	HARD		OCEAN QUAHOG	RAZOR	SOFT	SURF				BAY	CALI-CO	SEA
	PUBLIC	PRIVATE										
MAINE	11.00	-	-	-	15.00	-	-	15.00	16.00	-	-	6.00
MASSACHUSETTS	11.00	11.00	-	16.00	13.00	-	15.00	10.00	-	6.00	-	6.00
RHODE ISLAND	12.00	-	10.00	-	13.00	-	15.00	10.00	-	6.00	-	-
CONNECTICUT	12.00	12.00	-	-	-	-	15.00	-	-	6.20	-	-
NEW YORK	12.00	12.00	-	16.00	16.00	17.00	15.00	10.00	-	6.00	-	6.00
NEW JERSEY	10.00	10.00	-	-	12.00	17.00	20.00	-	-	6.50	-	6.00
DELAWARE	8.00	8.00	-	-	-	-	20.00	-	-	-	-	-
MARYLAND	8.00	-	-	-	12.00	17.00	20.00	-	-	-	-	-
VIRGINIA	8.00	8.00	-	-	-	-	20.00	-	-	-	-	6.00
NORTH CAROLINA	8.63	-	-	-	-	-	-	-	-	6.00	-	-
SOUTH CAROLINA	8.75	-	-	-	-	-	-	-	-	-	-	-
FLORIDA, EAST COAST	8.00	-	-	-	-	-	-	-	-	-	-	-
FLORIDA, WEST COAST	8.47	-	-	-	-	-	-	-	-	5.40	4.00	-

AVERAGE NUMBER OF CRABS PER POUND, 1963

STATE	BLUE		GREEN	ROCK	STONE	HORSESHOE
	HARD	SOFT AND PEELER				
	NUMBER	NUMBER				
MAINE	-	-	-	3.00	-	-
NEW HAMPSHIRE	-	-	14.29	3.00	-	-
MASSACHUSETTS	-	-	14.29	3.00	-	-
RHODE ISLAND	-	-	13.79	4.00	-	-
CONNECTICUT	2.40	-	-	-	-	-
NEW JERSEY	2.40	3.44	-	3.00	-	4.00
DELAWARE	2.40	3.00	-	-	-	-
MARYLAND	2.40	4.00	-	-	-	-
VIRGINIA	2.99	5.99	-	-	-	-
NORTH CAROLINA	3.00	3.00	-	-	-	-
SOUTH CAROLINA	3.00	-	-	-	-	-
GEORGIA	2.00	-	-	-	-	-
FLORIDA, EAST COAST	2.00	4.00	-	-	1.00	-
FLORIDA, WEST COAST	2.00	4.00	-	-	1.00	-
ALABAMA	2.00	-	-	-	-	-
MISSISSIPPI	2.16	3.00	-	-	-	-
LOUISIANA	2.01	2.94	-	-	-	-
TEXAS	1.80	2.40	-	-	-	-

STATISTICAL SURVEY PROCEDURE

495

RECOVERY OF SHRIMP PRODUCTS AND FACTORS FOR CONVERTING THEM TO HEADS-ON WEIGHT

ITEM	SOUTH ATLANTIC AND GULF CATCH		PACIFIC AND NORTH ATLANTIC CATCH	
	PERCENT RECOVERY FROM HEADS-ON WEIGHT	TO CONVERT TO HEADS-ON WEIGHT, MULTIPLY BY:	PERCENT RECOVERY FROM HEADS-ON WEIGHT	TO CONVERT TO HEADS-ON WEIGHT, MULTIPLY BY:
HEADLESS:				
BROWN (PENAEUS AZTECUS)	62.1	1.61	-	-
PINK (PENAEUS DUORARUM)	62.5	1.60	-	-
WHITE (PENAEUS SETIFERUS)	64.9	1.54	-	-
ROYAL RED (HYMENOPENAEUS ROBUSTUS)	55.6	1.60	-	-
SEA BOBS (XIPHOPENAEUS KROYERI)	65.4	1.53	-	-
OTHER (MOSTLY PANDULUS SPECIES)	-	-	57.0	1.75
ALL SPECIES (WEIGHTED AVERAGE)	62.9	1.59	57.0	1.75
PEELED FANTAIL, RAW 1/	50.0	2.00	-	-
PEELED, RAW 1/	49.0	2.04	28.0	3.57
PEELED, COOKED 1/	31.9	3.13	-	-
BREADED, RAW (INCLUDING FANTAIL) 1/	100.0	1.00	-	-
DRIED 1/	13.0	7.69	-	-
CANNED 1/	31.2	3.21	16.0	6.25

1/ AVERAGE FOR ALL SPECIES.

NOTE:--EFFECTIVE IN 1962, THE CONVERSION FACTORS LISTED ABOVE BECAME THE BRANCH OF STATISTICS' FACTORS FOR CONVERTING VARIOUS SHRIMP PRODUCTS TO HEADS-ON (ROUND) WEIGHT.

RECOVERY OF PROCESSED SHRIMP PRODUCTS AND FACTORS FOR CONVERTING THEM TO WEIGHT OF RAW BASIC PRODUCT, SOUTH ATLANTIC AND GULF STATES

BASIC PRODUCT, RAW	PROCESSED PRODUCT						
	HEADLESS RAW	PEELED FANTAIL RAW	PEELED RAW	PEELED COOKED	BREADED RAW	CANNED	DRIED
HEADS-ON (ROUND)	62.0%	50.0%	49.0%	31.9%	100.0%	31.2%	13.0%
FACTOR	1.59	2.00	2.04	3.13	1.00	3.21	7.69
HEADLESS	100.0%	79.6%	77.9%	50.7%	159.0%	49.6%	20.7%
FACTOR	1.00	1.26	1.28	1.97	0.63	2.02	4.83
PEELED	-	-	100.0%	65.1%	204.1%	63.7%	26.5%
FACTOR	-	-	1.00	1.54	0.49	1.57	3.77

SEE NOTE BELOW FOLLOWING TABLE.

RECOVERY OF PROCESSED SHRIMP PRODUCTS AND FACTORS FOR CONVERTING THEM TO WEIGHT OF RAW BASIC PRODUCT, PACIFIC AND NORTH ATLANTIC STATES

BASIC PRODUCT, RAW	PROCESSED PRODUCT		
	HEADLESS RAW	PEELED RAW	CANNED
HEADS-ON (ROUND)	57.0%	28.0%	16.0%
FACTOR	1.75	3.57	6.25
HEADLESS	100.0%	49.1%	28.1%
FACTOR	1.00	2.04	3.56
PEELED	-	100.0%	57.1%
FACTOR	-	1.00	1.75

NOTE:--THE QUANTITY OF PROCESSED PRODUCT MULTIPLIED BY THE FACTOR LISTED YIELDS THE WEIGHT OF BASIC PRODUCT REQUIRED TO PRODUCE THE PROCESSED PRODUCT.

OTHER CONVERSION FACTORS

ITEM	WHEN REPORTED AS	TO CONVERT TO:	MULTIPLY BY
OYSTERS	GALLONS OF SHUCKED MEATS	POUNDS OF SHUCKED MEATS	8.75
CLAMS	"	"	8.75
SCALLOPS	"	"	8.75
OILS, FISH AND WHALE	GALLONS	POUNDS	7.75
CRAB MEAT:			
BLUE	POUNDS	LIVE WEIGHT	7.14
DUNGENESS	"	"	4.17

SECTION 15 - GLOSSARY

In order to prevent misunderstanding in the use of common names employed in the tables and discussions, the following list of common and scientific names is given for fish, shellfish, and other aquatic products taken by United States fishermen.

Common names as shown in Bureau reports	Other common names	Scientific names
FISH		
Alewives	{ Branch herring, big-eyed herring, river herring	<i>Alosa pseudoharengus</i>
Amberjack	} Blueback, glut herring, shad herring	<i>Alosa aestivalis</i>
Anchovies	} Jack	<i>Seriola</i> species
Angelfish	}	<i>Engraulis mordax</i> (Pacific)
Anglerfish	}	{ <i>Pomacanthus</i> species
Ballyhoo	}	{ <i>Angelichthys</i> species
Barracuda	} Goosefish, allmouth, headfish, monkfish, bellyfish	<i>Lophius americanus</i>
Bluefish	} Balao	<i>Hemiramphus brasiliensis</i>
Blue pike	} Tailor, skipjack	<i>Sphyræna</i> species
Blue runner	} Pike perch, hard pike, blue pickerel (Canada)	<i>Pomatomus saltatrix</i>
Bonito	} Runner, hardtail, crevalle	<i>Stizostedion vitreum glaucum</i>
Bowfin	}	<i>Caranx crysos</i>
Brown trout	} Fresh-water dogfish, grindle	{ <i>Sarda sarda</i> (Atlantic)
Buffalofish	} Winter carp	{ <i>Sarda chiliensis</i> (Pacific)
Burbot	} Lawyer, ling	<i>Amia calva</i>
Butterfish	}	<i>Salmo trutta</i>
Cabezone	} Marbled sculpin	<i>Ictiobus</i> species
Cabo	} Black bonito, cobia, ling, lemonfish	<i>Lota lota</i>
Cabrilla	} Rock bass	<i>Poronotus triacanthus</i>
Carp	} German carp, summer carp	<i>Scorpaenichthys marmoratus</i>
Catfish and bullheads ..	}	<i>Rachycentron canadus</i>
Chubs	} Longjaw, bluefin, blackfin (United States), tullibee (Canada)	<i>Epinephelus analogus</i> (Pacific)
Cigarfish	} Scad	<i>Cyprinus carpio</i>
Cisco	} Herring (Canada)	{ <i>Ictalurus</i> species
Cod	} Codfish	{ <i>Pyloodictis olivaris</i>
Crappie	} White crappie, calico bass	All <i>Leucichthys</i> except <i>artedi</i>
Crevalle	} Black crappie	(Great Lakes)
Croaker	} Common jack, jackfish	<i>Decapterus punctatus</i>
Cunner	} Crocus, hardhead	<i>Leucichthys artedi</i> (Lake Erie only)
Cutlassfish	} Chogset, blue perch, bergall	{ <i>Gadus morhua</i> (Atlantic)
Cusk	} Silver eel	{ <i>Gadus macrocephalus</i> (Pacific)
Dolly Varden trout	} Salmon trout, bull trout	<i>Pomoxis annularis</i>
Dolphin	}	<i>Pomoxis nigromaculatus</i>
Drum:	} Oyster cracker, oyster drum, sea drum	<i>Caranx hippos</i>
Black	} Channel bass, redfish, spotted bass	<i>Micropogon undulatus</i>
Red	}	<i>Tautoglabrus adspersus</i>
		<i>Trichiurus lepturus</i>
		<i>Brosme brosme</i>
		<i>Salvelinus malma</i>
		<i>Corphaena hippurus</i>
		<i>Pogonias cromis</i>
		<i>Sciaenops ocellata</i>

(Continued on next page)

Common names as shown in Bureau reports	Other common names	Scientific names
FISH - Continued		
Eel:		
Common .....	.....	<i>Anguilla rostrata</i>
Conger .....	.....	<i>Conger oceanicus</i>
Flounders:		
Atlantic and Gulf Coasts:		
Gray sole .....	.....	<i>Glyptocephalus cynoglossus</i>
Lemon sole	(weighing over 3-1/2 pounds each)	
Blackback	{ Winter flounder (weighing under 3-1/2 pounds each)	} <i>Pseudopleuronectes americanus</i>
Yellowtail	Dab	<i>Limanda ferruginea</i>
Dab	Sea dab	<i>Hippoglossoides platessoides</i>
Fluke	Summer flounder, gulf flounder, flounder..	<i>Paralichthys</i> species
Pacific Coast:		
Arrowtooth halibut .....	.....	<i>Atheresthes stomias</i>
California halibut .....	.....	<i>Paralichthys californicus</i>
Sand dabs .....	.....	<i>Citharichthys sordidus</i>
"Sole":		
Dover .....	.....	<i>Microstomus pacificus</i>
English .....	.....	<i>Parophrys vetulus</i>
Petrale .....	.....	<i>Eopsetta jordani</i>
Rex .....	.....	<i>Glyptocephalus zachirus</i>
Sand .....	.....	<i>Psettichthys melanostictus</i>
Unclassified		
Flying fish .....	.....	Pleuronectidae and Bothidae <i>Cypselurus</i> species
Garfish	Gar, sea gar	<i>Lepisosteus</i> species
Gizzard shad	Nanny shad, mud shad, winter shad	<i>Dorosoma cepedianum</i>
Goldfish	Sand perch, gold perch	<i>Carassius auratus</i>
Groupers	"Sea bass"	{ <i>Epinephelus</i> species <i>Mycteroperca</i> species
Grunts	Margate fish, sailors' choice	<i>Haemulon</i> species
Haddock .....	.....	<i>Melanogrammus aeglefinus</i>
Hake:		
Red	Squirrel hake, ling, black hake, mud hake	<i>Urophycis chuss</i> (Atlantic)
White	Hake	<i>Urophycis tenuis</i> (Atlantic)
Pacific	Merluccio	<i>Merluccius productus</i> (Pacific)
Halfmoon	Rudder fish	<i>Medialuna californiensis</i>
Halibut .....	.....	{ <i>Hippoglossus hippoglossus</i> (Atlantic) <i>Hippoglossus stenolepis</i> (Pacific)
Hardhead	Sacramento rockfish	<i>Orthodon microlepidotus</i> (Pacific)
Harvestfish	{ Starfish, dollarfish, pappyfish, butterfish (N.C.)	} <i>Peprilus paru</i>
Herring:		
Lake	Herring	{ <i>Leucichthys artedi</i> (Great Lakes except Erie)
Sea .....	.....	<i>Clupea harengus</i> (Atlantic)
Thread .....	.....	<i>Clupea pallasii</i> (Pacific)
.....	.....	<i>Opisthonema oglinum</i>

(Continued on next page)

GLOSSARY

Common names as shown in Bureau reports	Other common names	Scientific names
FISH - Continued		
Hickory shad	Tailor shad, skip, autumnal herring.....	<i>Alosa mediocris</i>
Hogchoker.....		<i>Trinectes maculatus</i>
Hogfish	Capitaine, perro perro	<i>Lachnolaimus maximus</i>
Jack mackerel	Horse mackerel	<i>Trachurus symmetricus</i>
Jewfish		<i>Promicrops itaiara</i>
King croaker.....	Kingfish, white croaker.....	<i>Genyonemus lineatus</i>
King mackerel	Cero, kingfish	} <i>Scomberomorus cavalla</i>
King whiting or "kingfish"	Whiting, sea mink, ground mullet.....	} <i>Scomberomorus regalis</i>
Lake trout.....		<i>Menticirrhus</i> species
Lamprey		<i>Salvelinus namaycush</i>
Launce	Sand eel, lant, sand launce	} <i>Petromyzon marinus</i> (Atlantic)
Lingcod.....	Cultus cod, blue cod, buffalo cod, ling	} <i>Lampetra tridentata</i> (Pacific)
Boston mackerel.....		<i>Ammodytes americanus</i>
Pacific mackerel.....		<i>Ophiodon elongatus</i>
Menhaden	Mossbunker, pogy, fatback	<i>Scomber scombrus</i> (Atlantic)
Minnows		<i>Scomber japonicus</i>
Mojarra	Sand perch, sand bream.....	<i>Brevoortia</i> species
Mooneye	Goldeye, toothed herring.....	Cyprinidae
Mullet	Jumping mullet, striped mullet, silver mullet	Gerridae
Muttonfish	Mutton snapper.....	<i>Hiodon</i> species
Ocean perch:		<i>Mugil</i> species
Atlantic	Rosefish, redfish, red perch.....	<i>Lutjanus analis</i>
Pacific		<i>Sebastes marinus</i>
Ocean pout.....	Eelpout, sea pout	<i>Sebastes alutus</i>
Opaleye.....		<i>Macrozoarces americanus</i>
Paddlefish	Spoonbill cat.....	<i>Cirella nigricans</i>
Perch.....	Surffish.....	<i>Polyodon spathula</i>
Permit		Embiotocidae (Pacific)
Pigfish	Hogfish (N.C.)	<i>Trachinotus godei</i>
Pike or pickerel	Great Lakes pike	<i>Orthopristis chrysopterus</i>
Pinfish.....	Bream, salt-water bream	<i>Esox</i> species
Pollock	Boston bluefish	<i>Lagodon rhomboides</i>
Pompano		<i>Pollachius virens</i> (Atlantic)
Quillback	Spearfish or skimpfish	} <i>Trachinotus</i> species (Atlantic)
Ratfish.....		} <i>Palometa similima</i> (Pacific)
Rock bass	Redeye, goggle-eye, groupers, sand bass ..	<i>Carpiodes</i> species
Rockfishes	Rock cod, snapper	<i>Hydrologus colliei</i>
Sablefish.....	Black cod.....	} <i>Ambloplites rupestris</i> (fresh-water)
Salmon:		} <i>Paralabrax nebulifer</i> (Pacific)
Atlantic.....		<i>Sebastes</i> species (Pacific)
Pacific:		<i>Anoplopoma fimbria</i>
Chinook or king.....	Tye, spring.....	<i>Salmo salar</i> (Atlantic)
Chum or keta.....	Fall, dog	<i>Oncorhynchus tshawytscha</i>
Pink	Humpback	<i>Oncorhynchus keta</i>
Red or sockeye.....	Blueback	<i>Oncorhynchus gorbuscha</i>
Silver or coho.....		<i>Oncorhynchus nerka</i>
		<i>Oncorhynchus kisutch</i>

(Continued on next page)

Common names as shown in Bureau reports	Other common names	Scientific names
FISH - Continued		
Sand perch	Yellowtail, silver perch	<i>Bairdiella chrysur</i>
Sardine (Pacific).....	Pilchard	<i>Sardinops caerulea</i> (Pacific)
Sauger	Sand pike	<i>Stizostedion canadense</i>
Saury	Mackerel-pike.....	<i>Cololabis saira</i>
Sawfish .....	.....	<i>Pristis pectinatus</i>
Sculpin	Scorpionfish.....	<i>Myoxocephalus</i> species
Scup or porgy.....	Porgee, paugy, fair maid.....	<i>Calamus</i> and <i>Stenotomus</i> species
Sea bass:		
Black	Black jewfish (Pacific).....	<i>Stereolepis gigas</i>
White	Blackfish (Atlantic).....	<i>Centropristes striatus</i>
Sea catfish.....	Gafftopsail	<i>Cynoscion nobilis</i> (Pacific)
Sea robin .....	.....	<i>Bagre marinus</i>
Sea trout or weakfish:		
Gray	Gray trout, squeteague	<i>Cynoscion regalis</i>
Spotted	Spotted trout, speckled trout.....	<i>Cynoscion nebulosus</i>
White	White trout, sand trout.....	<i>Cynoscion arenarius</i>
Shad	American shad, white shad	<i>Alosa sapidissima</i>
Sharks:		
Grayfin	Dogfish, spiny and smooth dog.....	<i>Squalus</i> and <i>Mustelus</i> species
Soupfin .....	.....	<i>Galeorhinus zyopterus</i>
Other .....	.....	<i>Carcharodon</i> , <i>Carcharias</i> , <i>Sphryna</i> , <i>Prionace</i> and <i>Lamna</i> species
Sheepshead:		
Fresh-water	Fresh-water drum, gaspergou, gou.....	<i>Aplodinotus grunniens</i>
Salt-water	California redbfish, fathead.....	<i>Archosargus</i> species (Atlantic)
Sierra .....	.....	<i>Pimelometapon pulcher</i> (Pacific)
Silversides	Spearing	<i>Scomberomorus sierra</i> (Pacific)
Skates	Ray, rajafish	<i>Menidia</i> species
.....	.....	<i>Raja</i> species
Smelt .....	.....	<i>Osmerus mordax</i> (Atlantic and Great Lakes), <i>Atherinidae</i> and <i>Osmeridae</i> (Pacific)
.....	Eulachon.....	<i>Thaleichthys pacificus</i>
Snapper:		
Mangrove	Gray snapper	<i>Lutjanus griseus</i>
Red .....	.....	<i>Lutjanus blackfordii</i>
Vermilion .....	.....	<i>Rhomboplites</i> species
Yellowtail .....	.....	<i>Ocyurus chrysurus</i>
Snook	Robalo, sergeantfish, pike.....	<i>Centropomus undecimalis</i>
Spadefish	Angelfish	<i>Chaetodipterus faber</i>
Spanish mackerel.....	Mackerel.....	<i>Scomberomorus maculatus</i>
Spanish sardine .....	.....	<i>Sardinella anchovia</i>
Splittail .....	.....	<i>Pogonichthys macrolepidotus</i>
Spot	Lafayette, goody	<i>Leiostomus xanthurus</i>
Steelhead trout.....	Salmon trout.....	<i>Salmo gairdneri</i>

(Continued on next page)

GLOSSARY

Common names as shown in Bureau reports	Other common names	Scientific names
FISH - Continued		
Striped bass.....	Rockfish, rock.....	<i>Roccus saxatilis</i>
Sturgeon:		
Common.....		<i>Acipenser</i> species
Shovelnose.....		<i>Scaphirhynchus platyrhynchus</i>
Suckers.....	Fresh-water mullet, redfin, bayfish.....	<i>Catostomus</i> species
Sunfish.....	Bream, perch, bluegill.....	<i>Lepomis</i> species
Swallowfish.....	Puffer, swell toad, globefish, blowfish.....	<i>Sphaeroides maculatus</i>
Swordfish.....		<i>Xiphias gladius</i>
Tautog.....	Blackfish, oysterfish.....	<i>Tautoga onitis</i>
Tenpounder.....	Big-eyed herring, ladyfish.....	<i>Elops saurus</i>
Thimble-eyed mackerel.	Chub mackerel, bullseye mackerel.....	<i>Pneumatophorus colias</i>
Tilefish.....		<i>Lopholatilus chamaeleonticeps</i>
Tomcod.....	Frost fish.....	{ <i>Microgadus tomcod</i> (Atlantic)
		{ <i>Microgadus proximus</i> (Pacific)
Triggerfish.....		<i>Balistes</i> species
Tripletail.....	Sunfish (N.C.), blackfish.....	<i>Lobotes surinamensis</i>
Tullibee.....	(See chubs).....	
Tuna:		
Albacore.....	Longfin tuna.....	<i>Thunnus alalunga</i>
Bluefin.....	Horse mackerel.....	<i>Thunnus thynnus</i>
Little.....	Bonito, albacore, false albacore.....	<i>Euthynnus alletteratus</i>
Skipjack.....	Striped tuna.....	<i>Katsuwonus pelamis</i>
Yellowfin.....		<i>Thunnus albacares</i>
Turbot.....		Pleuronectidae (Pacific)
Wahoo.....		<i>Acanthocybium solandri</i>
Warsaw.....	Black Jewfish.....	<i>Garrupa nigrita</i>
Whitebait.....	Silversides.....	{ <i>Menidia beryllina</i> (Atlantic)
		{ Small fry of several species (Pacific)
White bass.....	White lake bass.....	<i>Roccus chrysops</i>
Whitefish:		
Common.....		<i>Coregonus clupeaformis</i>
Menominee.....		<i>Prosopium quadrilaterale</i>
White perch.....		<i>Morone americana</i>
Whiting.....	Silver hake.....	<i>Merluccius bilinearis</i>
Wolffish.....	Ocean catfish (New England).....	<i>Anarhichas lupus</i>
Yellow bass.....	Bar fish.....	<i>Roccus mississippiensis</i>
Yellow perch.....	Ringed perch, perch.....	<i>Perca flavescens</i>
Yellow pike.....	Wall-eyed pike, pike perch, dore (Canadian).....	<i>Stizostedion vitreum vitreum</i>
Yellowtail.....	(For Atlantic, see snapper, yellowtail).....	<i>Seriola dorsalis</i> (Pacific)
CRUSTACEANS		
Crabs:		
Blue:		
Hard.....	Hard-shell crab.....	{ <i>Callinectes sapidus</i>
Soft and peeler.....	Soft-shell crab.....	{ <i>Cancer magister</i>
Dungeness.....		<i>Paralithodes camtschatica</i>
King.....	Alaska king crab.....	

(Continued on next page)

GLOSSARY

501

Common names as shown in Bureau reports	Other common names	Scientific names
CRUSTACEANS - Continued		
Crabs: - Continued		
Rock.....	.....	{ <i>Cancer irroratus</i> (New England) <i>Cancer</i> species (California)
Stone.....	.....		Menippe mercenaria
Crawfish:		
Fresh-water.....	Crayfish.....	{ <i>Cambarus</i> species (Atlantic) <i>Astacus</i> species (Pacific)
Salt-water.....	(See lobsters, spiny).....	
Horseshoe crab.....	King crab.....	<i>Limulus</i> species
Lobsters:		
Northern.....	.....	<i>Homarus americanus</i> (Atlantic)
Spiny.....	Sea crawfish, rock lobster.....	{ <i>Panulirus argus</i> (Atlantic) <i>Panulirus interruptus</i> (Pacific)
.....	
Shrimp.....	Prawn.....	.....
MOLLUSKS		
Abalone.....	.....	<i>Haliotis</i> species
Clams:		
Cockle.....	.....	<i>Cardium corbis</i> (Pacific)
Hard.....	{ Butter..... Little neck..... Round clam, cherrystone, quahog, little neck...	<i>Saxidomus nuttalli</i> (Pacific)
		<i>Protothaca staminea</i> (Pacific)
		<i>Venus mercenaria</i> , <i>Mercenaria mercenaria</i>
Ocean quahog.....	.....	<i>Arctica islandica</i>
Razor.....	.....	{ <i>Ensis</i> species (Atlantic) <i>Siliqua patula</i> (Pacific)
Soft.....	Soft-shell clam, sand clam, nannynose, maninose		Mya arenaria
Surf.....	Skimmer.....	<i>Spisula solidissima</i>
Conchs.....	.....	<i>Strombus</i> species
Mussels:		
Sea.....	.....	{ <i>Mytilus californianus</i> (Pacific) <i>Mytilus edulis</i> (Atlantic)
Fresh-water:	.....		Unionidae
Mussel shells.....	.....	.....
Pearls and slugs.....	.....	.....
Octopus.....	Devilfish.....	<i>Paroctopus appollyon</i>
Oysters:		
Eastern.....	Cove.....	<i>Crassostrea virginica</i>
Pacific.....	Japanese.....	<i>Crassostrea gigas</i>
Western.....	Olympia, native.....	<i>Ostræa lurida</i>
Periwinkles or cockles.....	.....	<i>Littorina</i> species
Scallops:		
Bay.....	.....	{ <i>Pecten</i> species (Atlantic) <i>Pecten caurinus</i> (Pacific)
Sea.....	.....		Placopecten magellanicus

(Continued on next page)

GLOSSARY

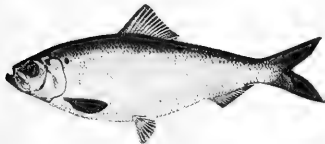
Common names as shown in Bureau reports	Other Common names	Scientific names
MOLLUSKS - Continued		
Squid.....	Inkfish, bone squid, taw tau.....	{ <i>Loligo opalescens</i> (Pacific) <i>Loligo pealii</i> (Atlantic)
OTHER		
Sea urchins.....	Sea eggs.....	<i>Strongylocentrotus drobachiensis</i>
Terrapin.....	Diamond-back terrapin.....	<i>Malaclemys</i> species
Turtles:	(Young of fresh-water species)
Baby.....	<i>Chelonia mydas</i>
Green.....	<i>Caretta</i> species
Loggerhead.....	<i>Pseudemys</i> species
Sliders.....	{ <i>Chelydra serpentina</i> <i>Macrochelys temnickii</i>
Snapper.....	Hard-shell, alligator turtle.....	<i>Amyda</i> species
Soft-shell.....	<i>Rana</i> species
Frogs.....	<i>Chondrus crispus</i>
Irish moss.....	<i>Macrocystis</i> species
Kelp.....
Sponges:
Glove.....	<i>Hippiospongia conalculata</i>
Grass.....	<i>Spongia graminea</i>
Sheepswool.....	Wool.....	<i>Hippiospongia lachne</i>
Yellow.....	<i>Spongia barbara</i>
Whales:
Blue.....	<i>Balaenoptera musculus</i>
Bottlenose.....	<i>Berardius bairdi</i>
Fin.....	<i>Balaenoptera physalus</i>
Humpback.....	<i>Megaptera</i> species
Sei.....	<i>Balaenoptera borealis</i>
Sperm.....	<i>Physeter catodon</i>
Bloodworms.....	Glyceridae
Sandworms.....	<i>Nereis</i> species



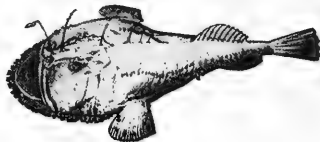
SECTION 16 - PICTORIAL SECTION

As many of the readers of this publication may not be familiar with all of the species of fish and shellfish, etc., taken commercially in the United States, illustrations of many of the various species are included in the following pages. The descriptive material appearing with each species includes the areas in which commercial landings are made in the United States and does not constitute the extreme limits in which they occur. Similarly, the gear listed for each species do not represent the only types of apparatus by which these species are obtained, but represent those types which are normally used in their capture. The gear do not necessarily appear in the order of their importance. Illustrations of species landed in Hawaii are not included in this section.

For more detailed information on the nomenclature of the fishery products listed below, the reader is referred to Section 15 of this publication entitled, "Glossary."



ALEWIFE
 RANGE - FLORIDA TO NEW ENGLAND
 GEAR - POUND NETS, GILL NETS, WEIRS,
 DIP NETS, HAUL SEINES, FLOATING TRAPS,
 FYKE NETS



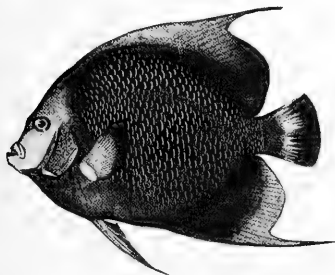
ANGLERFISH
 RANGE - NEW JERSEY TO MASSACHUSETTS
 GEAR - OTTER TRAWLS, POUND NETS



AMBERJACK
 RANGE - FLORIDA
 GEAR - HANDLINES, TROLL LINES



ANCHOVY
 RANGE - CALIFORNIA TO WASHINGTON
 GEAR - PURSE SEINES AND HAUL SEINES



ANGELFISH
 RANGE - FLORIDA
 GEAR - HAUL SEINES

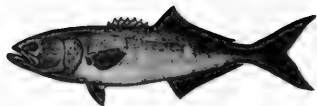


BARRACUDA (ATLANTIC)
 RANGE - FLORIDA
 GEAR - TROLL LINES, HANDLINES



BARRACUDA (PACIFIC)
 RANGE - CALIFORNIA
 GEAR - PURSE SEINES, LONGLINES, HANDLINES,
 TROLL LINES, GILL AND TRAMMEL NETS

PICTORIAL SECTION



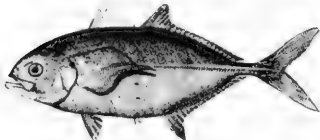
BLUEFISH

RANGE - GULF OF MEXICO TO NEW ENGLAND
 GEAR - HAUL SEINES, GILL NETS, POUND NETS,
 TROLL LINES, PURSE SEINES



BURBOT

RANGE - GREAT LAKES
 GEAR - GILL NETS, FYKE NETS, POUND
 NETS, TRAP NETS



BLUE RUNNER OR HARDTAIL

RANGE - GULF OF MEXICO
 GEAR - HAUL SEINES, GILL NETS, POTS



BUTTERFISH

RANGE - FLORIDA TO NEW ENGLAND
 GEAR - POUND NETS, HAUL SEINES, OTTER TRAWLS



BONITO (ATLANTIC)

RANGE - NORTH CAROLINA TO MASSACHUSETTS
 GEAR - POUND NETS, TROLL LINES, GILL NETS



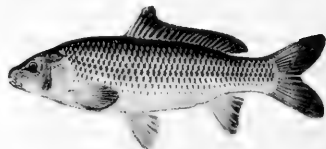
CABIO

RANGE - FLORIDA TO VIRGINIA
 GEAR - HANDLINES, POUND NETS



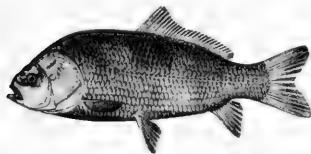
BOWFIN

RANGE - FRESH-WATER
 GEAR - HAUL SEINES, TRAP NETS, FYKE NETS



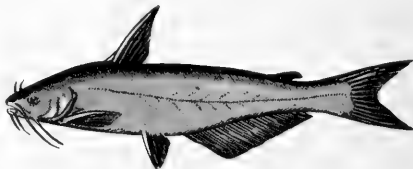
CARP

RANGE - FRESH-WATER
 GEAR - HAUL SEINES, GILL NETS, TRAP NETS,
 FYKE NETS, POUND NETS, TROT LINES



BUFFALOFISH

RANGE - FRESH-WATER
 GEAR - HAUL SEINES, FYKE NETS, TRAMMEL
 NETS, TROT LINES



CATFISH

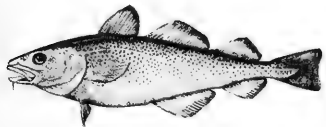
RANGE - FRESH-WATER
 GEAR - HAUL SEINES, TROT LINES, POUND
 NETS, POTS, FYKE NETS



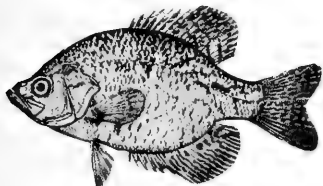
CHUB
 RANGE - GREAT LAKES
 GEAR - GILL NETS



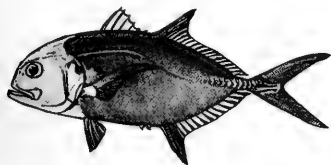
CIGARFISH
 RANGE - FLORIDA
 GEAR - HAUL SEINES



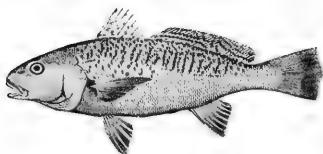
COD
 RANGE - VIRGINIA TO MAINE, WASHINGTON,
 AND ALASKA
 GEAR - OTTER TRAWLS, LONGLINES, GILL NETS



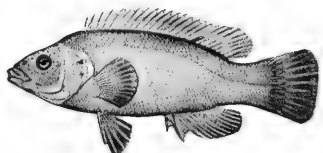
CRAPPIE
 RANGE - FRESH-WATER LAKES
 GEAR - HAUL SEINES, LINES, POTS



CREVALLE
 RANGE - SOUTH ATLANTIC AND GULF STATES
 GEAR - HAUL SEINES, GILL NETS, LINES



CROAKER
 RANGE - GULF OF MEXICO TO NEW YORK
 GEAR - POUND NETS, OTTER TRAWLS, HAUL SEINES;
 GILL NETS



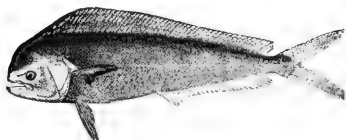
CUNNER
 RANGE - NEW ENGLAND
 GEAR - OTTER TRAWLS, HANDLINES



CUSK
 RANGE - NEW ENGLAND
 GEAR - OTTER TRAWLS, LONGLINES

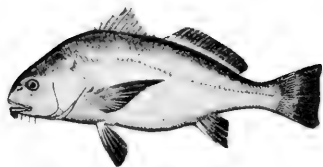


DOLLY VARDEN TROUT
 RANGE - PACIFIC
 GEAR - POUND NETS, GILL NETS, LINES

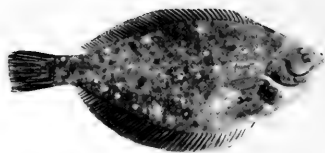


DOLPHIN
 RANGE - FLORIDA TO NORTH CAROLINA
 GEAR - TROLL LINES

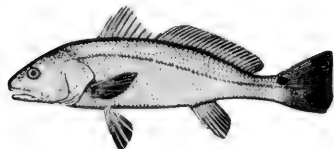
PICTORIAL SECTION



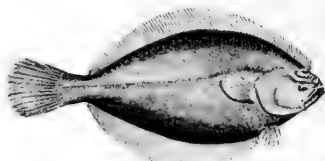
DRUM, BLACK
 RANGE - TEXAS TO NORTH CAROLINA
 GEAR - HAUL SEINES, POUND NETS, LINES



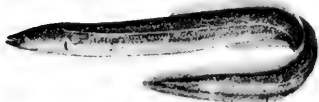
LEMON SOLE
 RANGE - NEW YORK TO MAINE
 GEAR - OTTER TRAWLS



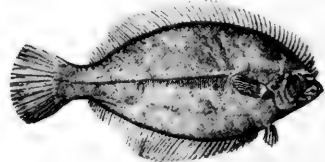
DRUM, RED
 RANGE - TEXAS - MARYLAND
 GEAR - POUND NETS, HAUL SEINES, GILL NETS,
 LINES



DAB
 RANGE - MASSACHUSETTS TO NOVA SCOTIA
 GEAR - OTTER TRAWLS, LONGLINES



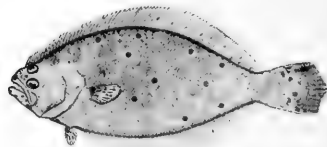
EEL, COMMON
 RANGE - FLORIDA TO NEW ENGLAND AND IN
 MISSISSIPPI RIVER, LAKE ONTARIO
 GEAR - POTS, SPEARS, POUND NETS



BLACKBACK OR WINTER FLOUNDER
 RANGE - NORTH CAROLINA TO MAINE
 GEAR - OTTER TRAWLS, POUND NETS, FYKE NETS,
 SPEARS, LINES



EEL, CONGER
 RANGE - FLORIDA TO NEW ENGLAND
 GEAR - OTTER TRAWLS



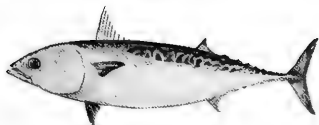
FLUKE
 RANGE - TEXAS TO MASSACHUSETTS
 GEAR - OTTER TRAWL, SPEARS, LINES



GRAY SOLE
 RANGE - MASSACHUSETTS TO MAINE
 GEAR - OTTER TRAWLS



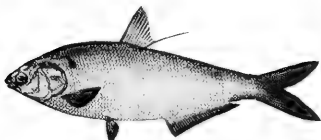
FLYING FISH
 RANGE - PACIFIC AND ATLANTIC OCEANS
 GEAR - GILL NETS



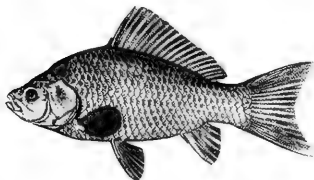
FRIGATE MACKEREL
 RANGE - MIDDLE ATLANTIC
 GEAR - POUND NETS



GARFISH
 RANGE - FRESH-WATER
 GEAR - HAUL SEINES, LINES



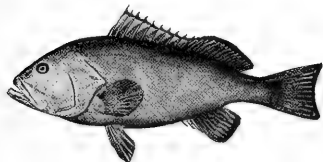
GIZZARD SHAD
 RANGE - NORTH CAROLINA TO MARYLAND,
 GREAT LAKES
 GEAR - HAUL SEINES, POUND NETS, GILL NETS



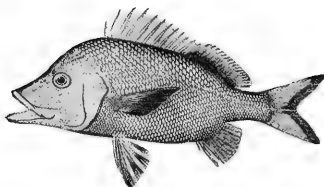
GOLDFISH
 RANGE - LAKES AND RIVERS
 GEAR - HAUL SEINES, TRAP NETS, FYKE NETS



GRAYFISH
 RANGE - PACIFIC
 GEAR - LONGLINES, OTTER TRAWLS, GILL NETS



GROUPEE
 RANGE - TEXAS TO SOUTH CAROLINA
 GEAR - HANDLINES, POTS



GRUNT
 RANGE - FLORIDA
 GEAR - POTS, GILL NETS, LINES



HADDOCK
 RANGE - NEW ENGLAND STATES
 GEAR - OTTER TRAWLS, GILL NETS, LONGLINES



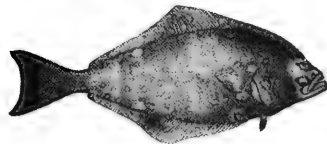
HAKE, RED
 RANGE - CHESAPEAKE BAY TO NEW ENGLAND
 GEAR - GILL NETS, OTTER TRAWLS, LONGLINES



HAKE, WHITE
 RANGE - CHESAPEAKE BAY TO NEW ENGLAND
 GEAR - GILL NETS, OTTER TRAWLS, LONGLINES

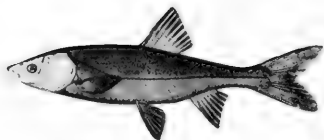


HAKE (PACIFIC)
 RANGE - PACIFIC
 GEAR - OTTER TRAWLS

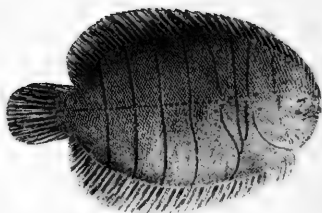


HALIBUT
 RANGE - PACIFIC COAST - NEW ENGLAND
 GEAR - LONGLINES, OTTER TRAWLS

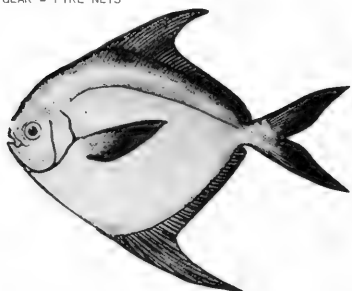
PICTORIAL SECTION



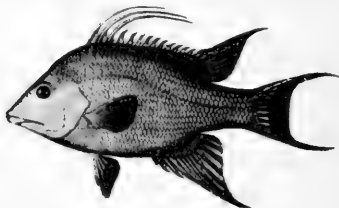
HARDHEAD
 RANGE - CALIFORNIA
 GEAR - FYKE NETS



HOGCHOKER
 RANGE - CHESAPEAKE BAY
 GEAR - POUND NETS, HAUL SEINES



HARVESTFISH OR "STARFISH"
 RANGE - NORTH CAROLINA TO CHESAPEAKE BAY
 GEAR - HAUL SEINES, POUND NETS



HOGFISH
 RANGE - FLORIDA
 GEAR - LINES



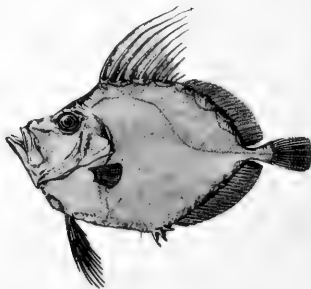
HERRING, LAKE
 RANGE - GREAT LAKES
 GEAR - GILL NETS, HAUL SEINES, POUND NETS,
 TRAP NETS



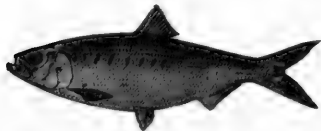
JEWFISH
 RANGE - FLORIDA
 GEAR - HANDLINES



HERRING, SEA
 RANGE - NEW JERSEY TO NEW ENGLAND, PACIFIC
 COAST STATES AND ALASKA
 GEAR - PURSE SEINES, WEIRS, FLOATING TRAPS,
 STOP SEINES



JOHN DORY
 RANGE - MIDDLE ATLANTIC STATES
 GEAR - OTTER TRAWLS



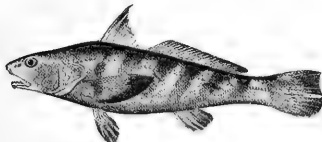
HICKORY SHAD
 RANGE - FLORIDA TO RHODE ISLAND
 GEAR - POUND NETS, HAUL SEINES, GILL NETS
 FLOATING TRAPS



KING MACKEREL
 RANGE - TEXAS TO NEW YORK
 GEAR - TROLL LINES, GILL NETS, HANDLINES



MACKEREL, ATLANTIC
 RANGE - CHESAPEAKE BAY TO MAINE
 GEAR - PURSE SEINES, GILL NETS, POUND NETS,
 FLOATING TRAPS



KING WHITING
 RANGE - TEXAS TO MASSACHUSETTS
 GEAR - OTTER TRAWLS, HAUL SEINES, POUND NETS



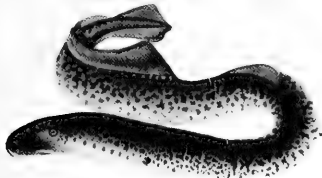
MACKEREL, JACK
 RANGE - CALIFORNIA
 GEAR - LINES, SEINES, LAMPARA NETS



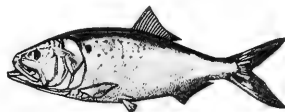
LAKE TROUT
 RANGE - GREAT LAKES
 GEAR - GILL NETS, LINES, POUND NETS (TRAP NETS)



MACKEREL, PACIFIC
 RANGE - CALIFORNIA
 GEAR - LINES, SEINES, LAMPARA NETS



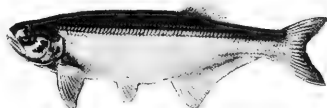
LAMPREY
 RANGE - FRESH-WATER
 GEAR - POTS, FYKE NETS



MENHADEN
 RANGE - GULF OF MEXICO TO NEW ENGLAND
 GEAR - PURSE SEINES, POUND NETS



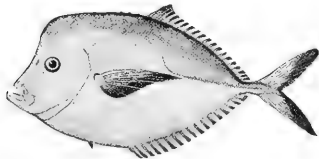
LAUNCE
 RANGE - NEW ENGLAND
 GEAR - HAUL SEINES



MOONEYE
 RANGE - GREAT LAKES
 GEAR - HAUL SEINES

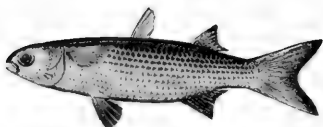


LINGCOD
 RANGE - CALIFORNIA TO ALASKA
 GEAR - OTTER TRAWLS, LONGLINES, HANDLINES

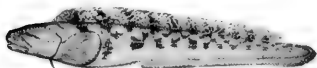


MOONFISH
 RANGE - FLORIDA
 GEAR - HANDLINES, HAUL SEINES

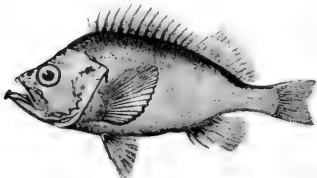
PICTORIAL SECTION



MULLET
 RANGE - TEXAS TO NEW JERSEY
 GEAR - GILL NETS, HAUL SEINES, POUND NETS,
 CAST NETS



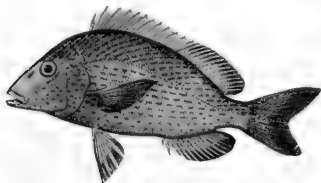
OCEAN POUT
 RANGE - NEW ENGLAND
 GEAR - OTTER TRAWLS



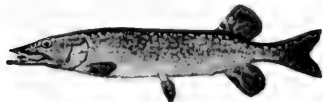
OCEAN PERCH
 RANGE - NEW ENGLAND
 GEAR - OTTER TRAWLS



PADDFISH
 RANGE - GULF OF MEXICO, MISSISSIPPI RIVER
 GEAR - HAUL SEINES, TROT LINES



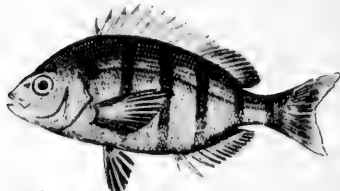
PIGFISH
 RANGE - FLORIDA
 GEAR - POTS, HANDLINES, GILL NETS



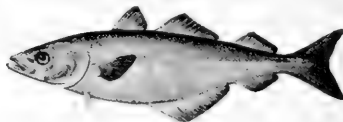
PIKE OR PICKEREL
 RANGE - FRESH-WATER
 GEAR - TRAP NETS, FYKE NETS, GILL NETS,
 POUND NETS, HANDLINES



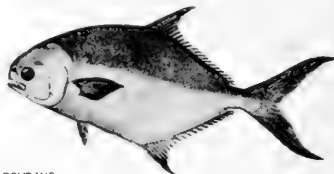
SARDINE, PACIFIC (PILCHARD)
 RANGE - CALIFORNIA TO WASHINGTON
 GEAR - PURSE SEINES, LAMPARA AND RING NETS,
 GILL NETS



PINFISH
 RANGE - FLORIDA TO NORTH CAROLINA
 GEAR - HAUL SEINES, GILL NETS



POLLOCK
 RANGE - MIDDLE ATLANTIC AND NEW ENGLAND STATES
 GEAR - LONGLINES, FLOATING TRAPS, POUND NETS,
 OTTER TRAWLS, GILL NETS



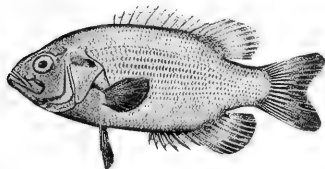
POMPANO
 RANGE - TEXAS TO NORTH CAROLINA
 GEAR - TRAMMEL NETS, HAUL SEINES, GILL NETS,
 HANDLINES



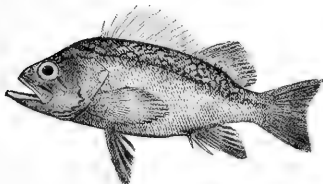
QUILLBACK
 RANGE - FRESH-WATER
 GEAR - HAUL SEINES, TROT LINES, FYKE NETS



RATFISH
 RANGE - WASHINGTON TO ALASKA
 GEAR - BEAM TRAWLS, LONG LINES



ROCK BASS
 RANGE - GREAT LAKES
 GEAR - TRAP NETS, FYKE NETS, HAUL SEINES,
 GILL NETS



ROCKFISH
 RANGE - CALIFORNIA TO ALASKA
 GEAR - LINES, OTTER TRAWLS, PARANZELLA NETS,
 GILL NETS



RUDDERFISH
 RANGE - CALIFORNIA
 GEAR - LAMPARA AND RING NETS



SABLEFISH
 RANGE - PACIFIC COAST STATES AND ALASKA
 GEAR - LONG LINES, OTTER TRAWLS



SALMON, CHINOOK OR KING
 RANGE - CALIFORNIA TO ALASKA
 GEAR - POUND NETS, PURSE SEINES, GILL NETS,
 HAUL SEINES, TROLL LINES, REEF NETS



SALMON, CHUM OR KETA
 RANGE - OREGON TO ALASKA
 GEAR - POUND NETS, PURSE SEINES, GILL NETS,
 HAUL SEINES, REEF NETS



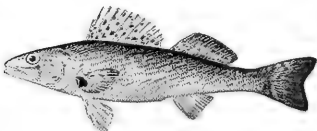
SALMON, PINK
 RANGE - WASHINGTON TO ALASKA
 GEAR - PURSE SEINES, POUND NETS, GILL NETS,
 REEF NETS



SALMON, RED OR SOCKEYE
 RANGE - OREGON TO ALASKA
 GEAR - GILL NETS, PURSE SEINES, POUND NETS,
 REEF NETS

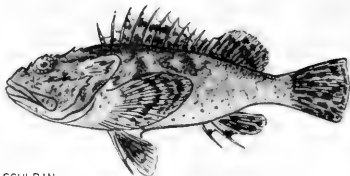


SALMON, SILVER OR COHO
 RANGE - CALIFORNIA TO ALASKA
 GEAR - HAUL SEINES, PURSE SEINES, GILL NETS,
 TROLL LINES, POUND NETS, REEF NETS

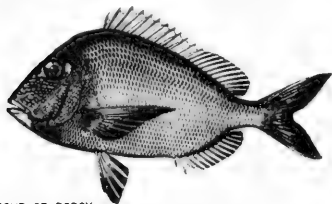


SAUGER
 RANGE - GREAT LAKES
 GEAR - GILL NETS, HAUL SEINES, TRAP NETS,
 FYKE NETS

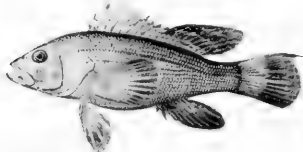
PICTORIAL SECTION



SCULPIN
 RANGE - PACIFIC COAST STATES AND ALASKA
 GEAR - LINES, GILL NETS, POTS



SCUP OR PORGY
 RANGE - FLORIDA TO NEW ENGLAND
 GEAR - OTTER TRAWLS, POUND NETS



SEA BASS
 RANGE - FLORIDA TO NEW ENGLAND
 GEAR - OTTER TRAWLS, HANDLINES, POTS



SEA CATFISH
 RANGE - TEXAS TO CHESAPEAKE BAY
 GEAR - OTTER TRAWLS, HAUL SEINES, HANDLINES



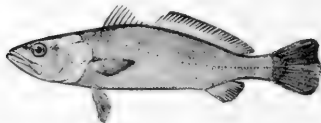
SEA ROBIN
 RANGE - CHESAPEAKE BAY TO NEW ENGLAND
 GEAR - POUND NETS, OTTER TRAWLS



SEA TROUT OR WEAKFISH, GRAY
 RANGE - FLORIDA TO MASSACHUSETTS
 GEAR - OTTER TRAWLS, POUND NETS, PURSE SEINES,
 GILL NETS, HAUL SEINES



SEA TROUT OR WEAKFISH, SPOTTED
 RANGE - MARYLAND TO TEXAS
 GEAR - GILL NETS, TRammel NETS, HAUL SEINES,
 POUND NETS, OTTER TRAWLS, HANDLINES



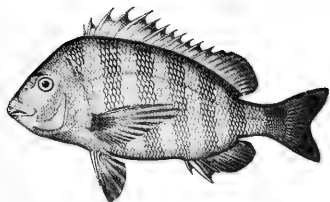
SEA TROUT OR WEAKFISH, WHITE
 RANGE - GULF OF MEXICO
 GEAR - GILL NETS, HAUL SEINES, HANDLINES



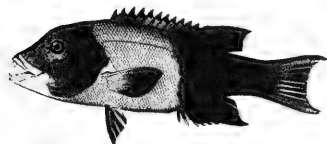
SHAD
 RANGE - FLORIDA TO NEW ENGLAND
 GEAR - GILL NETS, POUND NETS, FYKE NETS,
 HAUL SEINES



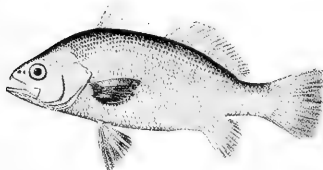
SHARK
 RANGE - ATLANTIC COAST, GULF, PACIFIC COAST STATES
 GEAR - LONGLINES, GILL NETS, OTTER TRAWLS



SHEEPSHEAD
 RANGE - TEXAS TO CHESAPEAKE BAY
 GEAR - HANDLINES, POTS



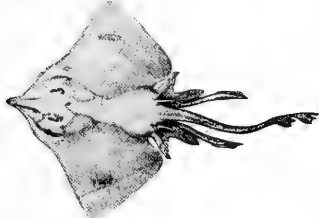
SHEEPSHEAD, CALIFORNIA
 RANGE - CALIFORNIA
 GEAR - LONGLINES, TRAMMEL NETS



SAND PERCH
 RANGE - TEXAS TO NEW YORK
 GEAR - HAUL SEINES, GILL NETS, POUND NETS



SILVERSIDES
 RANGE - NEW YORK
 GEAR - HAUL SEINES, OTTER TRAWLS



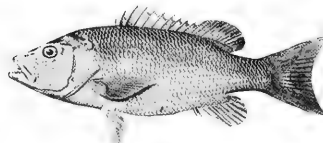
SKATE
 RANGE - PACIFIC COAST, CHESAPEAKE BAY TO NEW ENGLAND
 GEAR - LINES, OTTER TRAWLS, POUND NETS, HAUL SEINES



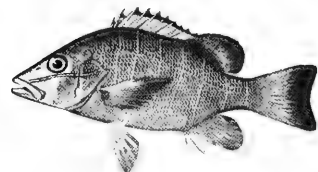
SKIPPER
 RANGE - VIRGINIA TO NOVA SCOTIA
 GEAR - POUND NETS, WEIRS



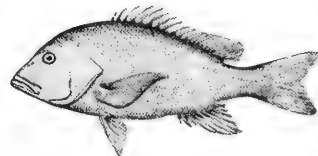
SMELT
 RANGE - NEW YORK TO MAINE, PACIFIC OCEAN,
 GREAT LAKES
 GEAR - POUND NETS, DIP NETS, GILL NETS, HAUL SEINES



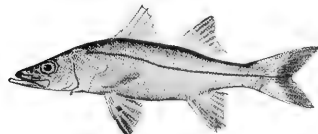
SNAPPER, MANGROVE
 RANGE - FLORIDA
 GEAR - HANDLINES, GILL NETS



SNAPPER, LANE
 RANGE - FLORIDA
 GEAR - HANDLINES

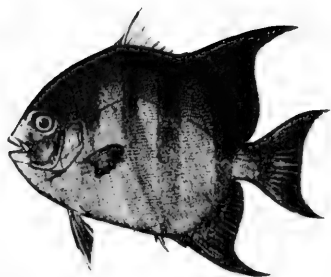


SNAPPER, RED
 RANGE - TEXAS TO FLORIDA
 GEAR - HANDLINES



SNOOK
 RANGE - TEXAS TO FLORIDA
 GEAR - GILL NETS, HANDLINES, HAUL SEINES

PICTORIAL SECTION



SPADEFISH
 RANGE - FLORIDA
 GEAR - GILL NETS, TRAMMEL NETS



SPANISH MACKEREL
 RANGE - TEXAS TO VIRGINIA
 GEAR - GILL NETS, LINES, HAUL SEINES



SPOT
 RANGE - GULF OF MEXICO TO MIDDLE ATLANTIC STATES
 GEAR - HAUL SEINES, GILL NETS, POUND NETS,
 OTTER TRAWLS



SQUAWFISH
 RANGE - CALIFORNIA
 GEAR - FYKE NETS, GILL NETS



STEELHEAD TROUT
 RANGE - OREGON TO ALASKA
 GEAR - HAUL SEINES, POUND NETS, GILL NETS,
 LINES, DIP NETS



STRIPED BASS
 RANGE - NORTH CAROLINA TO NEW ENGLAND, CALIFORNIA
 TO OREGON
 GEAR - HAUL SEINES, GILL NETS, POUND NETS,
 HANDLINES, FYKE NETS



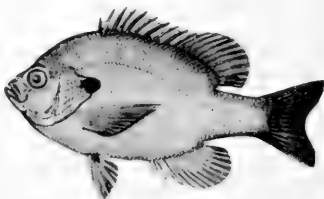
STURGEON
 RANGE - COASTAL AND RIVER AREAS
 GEAR - GILL NETS, LINES



STURGEON, SHOVELNOSE
 RANGE - FRESH-WATER
 GEAR - HAUL SEINES, LINES, POUND NETS



SUCKER
 RANGE - FRESH-WATER
 GEAR - POUND NETS, FYKE NETS, GILL NETS,
 HAUL SEINES, TRAP NETS



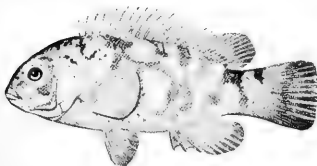
SUNFISH
 RANGE - FRESH-WATER
 GEAR - POTS, SEINES, TRAP NETS



SWELLFISH
 RANGE - CHESAPEAKE BAY TO MIDDLE ATLANTIC
 GEAR - POUND NETS, HAUL SEINES, OTTER TRAWLS



SWORDFISH
 RANGE - NEW ENGLAND AND CALIFORNIA
 GEAR - HARPOONS



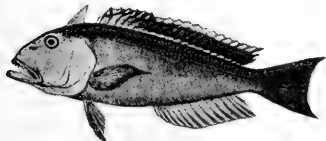
TAUTOG
 RANGE - CHESAPEAKE BAY TO NEW ENGLAND
 GEAR - POUND NETS, HANDLINES, POTS



TENPOUNDER
 RANGE - FLORIDA
 GEAR - HAUL SEINES



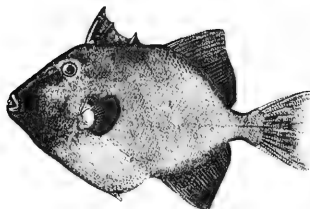
THIMBLE-EYED MACKEREL
 RANGE - CHESAPEAKE BAY TO NEW ENGLAND
 GEAR - POUND NETS, PURSE SEINES, OTTER TRAWLS



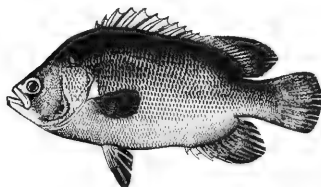
TILEFISH
 RANGE - MIDDLE ATLANTIC AND NEW ENGLAND STATES
 GEAR - LONGLINES, REEF NETS, OTTER TRAWLS



TOMCOD
 RANGE - PACIFIC COAST, MIDDLE ATLANTIC AND
 NEW ENGLAND STATES
 GEAR - OTTER TRAWLS, DIP NETS



TRIGGERFISH
 RANGE - FLORIDA
 GEAR - HANDLINES



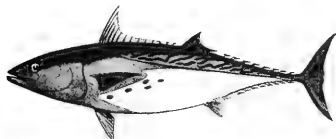
TRIPLETAIL
 RANGE - FLORIDA
 GEAR - HAUL SEINES, GILL NETS, LINES



TUNA, ALBACORE
 RANGE - PACIFIC COAST
 GEAR - LINES



TUNA, BLUEFIN
 RANGE - CALIFORNIA, NEW JERSEY TO MAINE
 GEAR - PURSE SEINES, LAMPARA NETS, TROLL LINES,
 POUND NETS, HARPOONS



TUNA, LITTLE
 RANGE - MASSACHUSETTS TO TEXAS
 GEAR - POUND NETS, TROLL LINES, OTTER TRAWLS

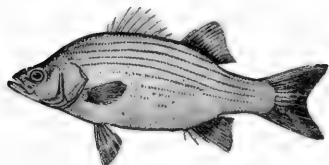
PICTORIAL SECTION



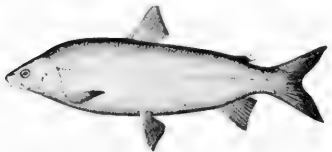
TUNA, SKIPJACK
 RANGE - CALIFORNIA
 GEAR - LINES AND PURSE SEINES



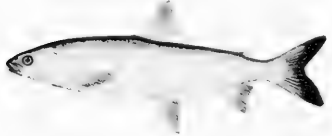
TUNA, YELLOWFIN
 RANGE - PACIFIC
 GEAR - LINES AND PURSE SEINES



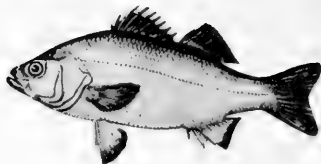
WHITE BASS
 RANGE - GREAT LAKES
 GEAR - TRAP NETS, FYKE NETS, HAUL SEINES,
 POUND NETS



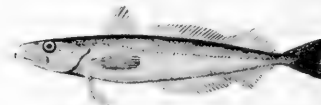
WHITEFISH, COMMON
 RANGE - GREAT LAKES
 GEAR - GILL NETS, POUND NETS, TRAP NETS



WHITEFISH, MENOMINEE
 RANGE - ALASKA, GREAT LAKES
 GEAR - GILL NETS, HAUL SEINES, TRAP NETS,
 POUND NETS



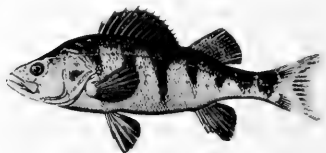
WHITE PERCH
 RANGE - NORTH CAROLINA TO MAINE
 GEAR - POUND NETS, FYKE NETS, HAUL SEINES



WHITING
 RANGE - VIRGINIA TO MAINE
 GEAR - OTTER TRAWLS, POUND NETS



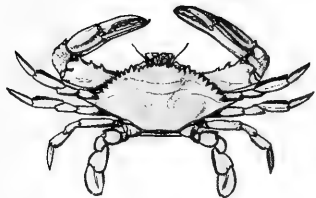
WOLFFISH
 RANGE - MASSACHUSETTS AND MAINE
 GEAR - OTTER TRAWLS, LONGLINES



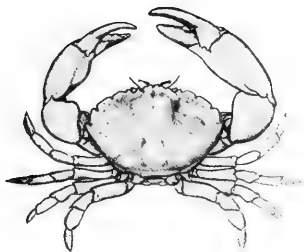
YELLOW PERCH
 RANGE - GREAT LAKES, OTHER LAKES
 GEAR - GILL NETS, TRAP NETS, POUND NETS,
 FYKE NETS



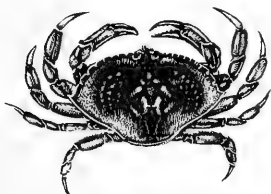
YELLOW PIKE
 RANGE - GREAT LAKES
 GEAR - POUND NETS, FYKE NETS, GILL NETS,
 TRAP NETS



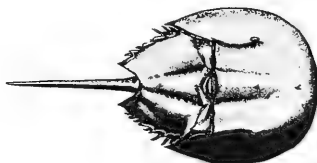
BLUE CRAB
 RANGE - TEXAS TO RHODE ISLAND
 GEAR - TROT LINES, POTS, FYKE NETS, DIP NETS,
 SCRAPES, DREDGES



STONE CRAB
 RANGE - FLORIDA
 GEAR - DIP NETS, CRAB POTS



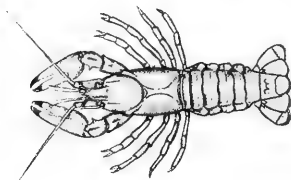
DUNGENESS CRAB
 RANGE - PACIFIC COAST STATES AND ALASKA
 GEAR - TRAPS



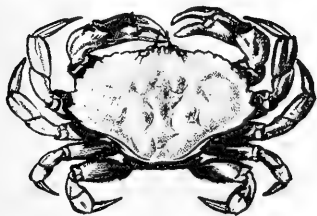
HORSESHOE CRAB
 RANGE - MARYLAND TO NEW YORK
 GEAR - POUND NETS, WEIRS, BY HAND



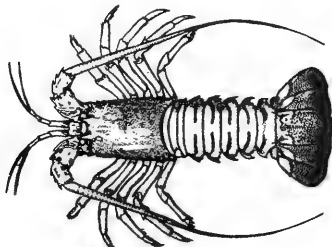
KING CRAB
 RANGE - ALASKA
 GEAR - OTTER TRAWLS



FRESH-WATER CRAWFISH
 RANGE - RIVERS AND LAKES
 GEAR - POTS

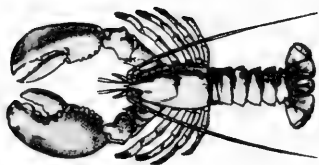


ROCK CRAB
 RANGE - NEW ENGLAND
 GEAR - POTS



SPINY LOBSTER
 RANGE - CALIFORNIA AND FLORIDA
 GEAR - DIP NETS, POTS, HOOKS

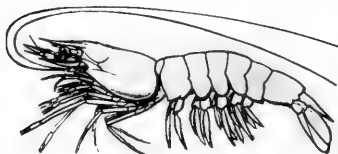
PICTORIAL SECTION



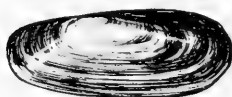
LOBSTER, NORTHERN
 RANGE - VIRGINIA TO MAINE
 GEAR - POTS, OTTER TRAWLS



HARD CLAM
 RANGE - FLORIDA TO MAINE
 GEAR - HOES, DREDGES, TONGS, RAKES, BY HAND



SHRIMP
 RANGE - TEXAS TO NORTH CAROLINA, MAINE,
 CALIFORNIA, WASHINGTON, AND ALASKA
 GEAR - SHRIMP TRAWLS



RAZOR CLAM, PACIFIC
 RANGE - OREGON, WASHINGTON AND ALASKA
 GEAR - SHOVELS



BUTTER CLAM
 RANGE - PACIFIC COAST
 GEAR - SHOVELS



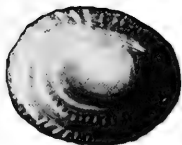
SOFT CLAM
 RANGE - MIDDLE ATLANTIC TO NEW ENGLAND,
 PACIFIC COAST STATES
 GEAR - FORKS, HOES, RAKES, DREDGES



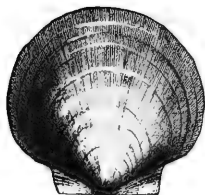
LITTLE NECK CLAM
 RANGE - PACIFIC COAST
 GEAR - SHOVELS



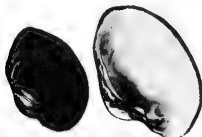
CONCH
 RANGE - FLORIDA TO MAINE
 GEAR - OTTER TRAWLS, DREDGES, POTS, AND BY HAND



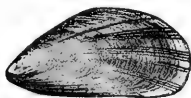
LIMPET
 RANGE - NEW YORK AND NEW ENGLAND
 GEAR - DREDGES



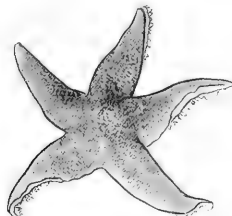
SEA SCALLOP
 RANGE - NEW JERSEY TO MAINE
 GEAR - DREDGES, OTTER TRAWLS



FRESH-WATER MUSSEL
 RANGE - FRESH-WATER STREAMS
 GEAR - CROWFOOT BARS, PICKS, HAND



SEA MUSSEL
 RANGE - NORTH CAROLINA TO MAINE
 GEAR - DREDGES, TONGS, RAKES, HAND



STARFISH
 RANGE - ATLANTIC AND PACIFIC COAST
 GEAR - HOOKS, SCRAPES, "MOPS"



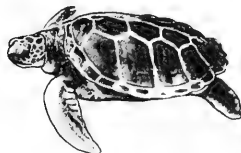
OYSTER
 RANGE - TEXAS TO MASSACHUSETTS, PACIFIC COAST
 GEAR - TONGS, DREDGES, RAKES, BY HAND



TERRAPIN
 RANGE - TEXAS TO NEW JERSEY
 GEAR - HAUL SEINES, BY HAND

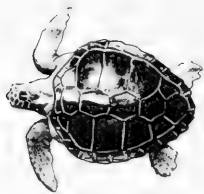


BAY SCALLOP
 RANGE - FLORIDA TO MASSACHUSETTS, WASHINGTON
 GEAR - DREDGES, SCRAPES, PUSH NETS, TONGS, RAKES,
 DIP NETS



GREEN TURTLE
 RANGE - FLORIDA
 GEAR - GILL NETS

PICTORIAL SECTION



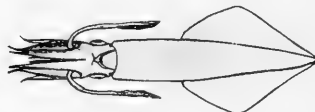
LOGGERHEAD TURTLE
 RANGE - FLORIDA TO NEW JERSEY
 GEAR - GILL NETS



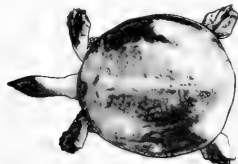
FROG
 RANGE - FRESH-WATER, MARSHES, POND
 GEAR - SPEARS, GRABS



HAWKSBILL TURTLE
 RANGE - GULF OF MEXICO, AND ATLANTIC COAST
 TO NEW YORK
 GEAR - BY HAND, POUND NETS



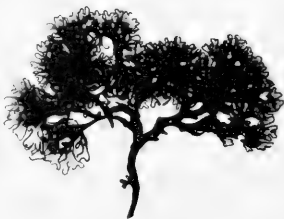
SQUID
 RANGE - VIRGINIA TO MAINE, CALIFORNIA AND
 WASHINGTON
 GEAR - LAMPARA NETS, GILL NETS, OTTER TRAWLS,
 POUND NETS



SOFT-SHELL TURTLE
 RANGE - LAKES AND RIVERS
 GEAR - HAUL SEINES, FYKE NETS, POTS



SPONGE
 RANGE - FLORIDA
 GEAR - HOOKS, DIVING OUTFITS



IRISH MOSS
 RANGE - NEW ENGLAND
 GEAR - RAKES

SECTION 17 - STATISTICAL PUBLICATIONS

521

THE FOLLOWING LIST OF PUBLICATIONS INCLUDES ALL REPORTS ISSUED IN THE CURRENT FISHERY STATISTICS SERIES DURING 1963.

C. F. S. NO.	TITLE	C. F. S. NO.	TITLE
3060	FROZEN FISH REPORT, NOVEMBER, 1962	3136	NEW JERSEY LANDINGS, JANUARY, 1963
3061	SOUTH CAROLINA LANDINGS, OCTOBER, 1962	3137	VIRGINIA LANDINGS, DECEMBER, 1962
3062	MICHIGAN LANDINGS, AUGUST, 1962	3138	NEW YORK LANDINGS, ANNUAL, 1962
3063	FLORIDA LANDINGS, OCTOBER, 1962	3139	NEW JERSEY LANDINGS, ANNUAL, 1962
3064	MASSACHUSETTS LANDINGS, JULY, 1962	3140	FROZEN FISHERY PRODUCTS, FEBRUARY, 1963
3065	TEXAS LANDINGS, SEPTEMBER, 1962	3141	PACKAGED FISHERY PRODUCTS, ANNUAL, 1962
3066	MICHIGAN LANDINGS, SEPTEMBER, 1962	3142	UNITED STATES FISHERIES, ANNUAL, 1961
3067	WISCONSIN LANDINGS, OCTOBER, 1962	3143	NEW YORK LANDINGS, JANUARY, 1963
3068	VIRGINIA LANDINGS, OCTOBER, 1962	3144	CANNED FISHERY PRODUCTS, ANNUAL, 1962
3069	CALIFORNIA LANDINGS, SEPTEMBER, 1962	3145	MISSISSIPPI LANDINGS, JANUARY, 1963
3070	OHIO LANDINGS, SEPTEMBER, 1962	3146	MAINE LANDINGS, JANUARY, 1963
3071	NEW YORK LANDINGS, OCTOBER, 1962	3147	RHODE ISLAND LANDINGS, JANUARY, 1963
3072	MISSISSIPPI LANDINGS, OCTOBER, 1962	3148	SHRIMP LANDINGS, AUGUST, 1962
3073	SHRIMP LANDINGS, JULY, 1962	3149	LOUISIANA LANDINGS, JANUARY, 1963
3074	TEXAS LANDINGS, OCTOBER, 1962	3150	ADVANCE REPORT ON THE FISHERIES OF THE UNITED STATES, ANNUAL, 1962
3075	NEW JERSEY LANDINGS, NOVEMBER, 1962	3151	MASSACHUSETTS LANDINGS, NOVEMBER, 1962
3076	LOUISIANA LANDINGS, OCTOBER, 1962	3152	GEORGIA LANDINGS, FEBRUARY, 1963
3077	RHODE ISLAND LANDINGS, OCTOBER, 1962	3153	VIRGINIA LANDINGS, ANNUAL, 1962
3078	MAINE LANDINGS, OCTOBER, 1962	3154	VIRGINIA LANDINGS, JANUARY, 1963
3079	ALABAMA LANDINGS, OCTOBER, 1962	3155	SOUTH CAROLINA LANDINGS, FEBRUARY, 1963
3080	FROZEN FISH REPORT, DECEMBER, 1962	3156	NORTH CAROLINA LANDINGS, FEBRUARY, 1963
3081	NORTH CAROLINA LANDINGS, NOVEMBER, 1962	3157	INDUSTRIAL FISHERY PRODUCTS, ANNUAL, 1962
3082	FLORIDA LANDINGS, NOVEMBER, 1962	3158	FLORIDA LANDINGS, FEBRUARY, 1963
3083	OHIO LANDINGS, OCTOBER, 1962	3159	NORTH CAROLINA LANDINGS, ANNUAL, 1962
3084	FISH MEAL AND OIL, NOVEMBER, 1962	3160	FROZEN FISHERY PRODUCTS, MARCH, 1963
3085	SOUTH CAROLINA LANDINGS, NOVEMBER, 1962	3161	MAINE LANDINGS, FEBRUARY, 1963
3086	GEORGIA LANDINGS, NOVEMBER, 1962	3162	CALIFORNIA LANDINGS, DECEMBER, 1962
3087	MICHIGAN LANDINGS, OCTOBER, 1962	3163	MASSACHUSETTS LANDINGS, DECEMBER, 1962
3088	WISCONSIN LANDINGS, NOVEMBER, 1962	3164	MAINE LANDINGS, BY COUNTIES, ANNUAL, 1962
3089	LOUISIANA LANDINGS, NOVEMBER, 1962	3165	CALIFORNIA LANDINGS, JANUARY, 1963
3090	OHIO LANDINGS, NOVEMBER, 1962	3166	MARYLAND LANDINGS, FEBRUARY, 1963
3091	MARYLAND LANDINGS, NOVEMBER, 1962	3167	NEW YORK LANDINGS, FEBRUARY, 1963
3092	MISSISSIPPI LANDINGS, NOVEMBER, 1962	3168	MAINE LANDINGS, BY MONTHS, ANNUAL, 1962
3093	MANUFACTURED FISHERY PRODUCTS, ANNUAL, 1961	3169	NEW JERSEY LANDINGS, FEBRUARY, 1963
3094	MASSACHUSETTS LANDINGS, AUGUST, 1962	3170	ALABAMA LANDINGS, JANUARY, 1963
3095	NEW YORK LANDINGS, NOVEMBER, 1962	3171	FISH MEAL AND OIL, FEBRUARY, 1963
3096	FISH STICKS AND PORTIONS, OCTOBER-DECEMBER, 1962	3172	WISCONSIN LANDINGS, FEBRUARY, 1963
3097	CALIFORNIA LANDINGS, OCTOBER, 1962	3173	LOUISIANA LANDINGS, FEBRUARY, 1963
3098	MAINE LANDINGS, NOVEMBER, 1962	3174	RHODE ISLAND LANDINGS, ANNUAL, 1962
3099	ALABAMA LANDINGS, NOVEMBER, 1962	3175	MICHIGAN LANDINGS, JANUARY, 1963
3100	FROZEN FISHERY PRODUCTS, JANUARY, 1963	3176	SHRIMP LANDINGS, SEPTEMBER, 1963
3101	VIRGINIA LANDINGS, NOVEMBER, 1962	3177	RHODE ISLAND LANDINGS, FEBRUARY, 1963
3102	FROZEN FISHERY PRODUCTS, ANNUAL, 1962	3178	FISH STICKS AND PORTIONS, JANUARY-MARCH, 1963
3103	LOUISIANA LANDINGS, DECEMBER, 1962	3179	VIRGINIA LANDINGS, FEBRUARY, 1963
3104	RHODE ISLAND LANDINGS, NOVEMBER, 1962	3180	SOUTH CAROLINA LANDINGS, ANNUAL, 1962
3105	NEW JERSEY LANDINGS, DECEMBER, 1962	3181	MISSISSIPPI LANDINGS, FEBRUARY, 1963
3106	NEW YORK LANDINGS, DECEMBER, 1962	3182	FISH MEAL AND OIL, ANNUAL, 1962
3107	CALIFORNIA LANDINGS, NOVEMBER, 1962	3183	GREAT LAKES FISHERIES, ANNUAL, 1961
3108	FISH MEAL AND OIL, DECEMBER, 1962	3184	GEORGIA LANDINGS, MARCH, 1963
3109	FLORIDA LANDINGS, DECEMBER, 1962	3185	IMPORTS AND EXPORTS OF FISHERY PRODUCTS, ANNUAL, 1962
3110	MARYLAND LANDINGS, DECEMBER, 1962	3186	FISH MEAL AND OIL, MARCH, 1963
3111	MICHIGAN LANDINGS, NOVEMBER, 1962	3187	NORTH CAROLINA LANDINGS, MARCH, 1963
3112	OHIO LANDINGS, DECEMBER, 1962	3188	SOUTH CAROLINA LANDINGS, MARCH, 1963
3113	WISCONSIN LANDINGS, DECEMBER, 1962	3189	FLORIDA LANDINGS, MARCH, 1963
3114	GEORGIA LANDINGS, DECEMBER, 1962	3190	FROZEN FISHERY PRODUCTS, APRIL, 1963
3115	NORTH CAROLINA LANDINGS, DECEMBER, 1962	3191	WISCONSIN LANDINGS, ANNUAL, 1962
3116	SOUTH CAROLINA LANDINGS, DECEMBER, 1962	3192	CALIFORNIA LANDINGS, FEBRUARY, 1963
3117	ALABAMA LANDINGS, DECEMBER, 1962	3193	MICHIGAN LANDINGS, FEBRUARY, 1963
3118	MASSACHUSETTS LANDINGS, SEPTEMBER, 1962	3194	MARYLAND LANDINGS, MARCH, 1963
3119	MISSISSIPPI LANDINGS, DECEMBER, 1962	3195	LOUISIANA LANDINGS, MARCH, 1963
3120	RHODE ISLAND LANDINGS, DECEMBER, 1962	3196	OHIO LANDINGS, MARCH, 1963
3121	MASSACHUSETTS LANDINGS, OCTOBER, 1962	3197	SHRIMP LANDINGS, OCTOBER, 1962
3122	PACIFIC COAST FISHERIES, ANNUAL, 1961	3198	VIRGINIA LANDINGS, MARCH, 1963
3123	TEXAS LANDINGS, NOVEMBER, 1962	3199	NEW YORK LANDINGS, MARCH, 1963
3124	FISH STICKS AND PORTIONS, ANNUAL, 1962	3200	FISHERIES OF THE UNITED STATES, ANNUAL, 1962
3125	TEXAS LANDINGS, DECEMBER, 1962	3201	MISSISSIPPI LANDINGS, MARCH, 1963
3126	MAINE LANDINGS, DECEMBER, 1962	3202	WISCONSIN LANDINGS, MARCH, 1963
3127	MARYLAND LANDINGS, JANUARY, 1963	3203	TEXAS LANDINGS, JANUARY, 1963
3128	HAWAII FISHERIES, ANNUAL, 1961	3204	TEXAS LANDINGS, FEBRUARY, 1963
3129	FLORIDA LANDINGS, JANUARY, 1963	3205	MAINE LANDINGS, MARCH, 1963
3130	WISCONSIN LANDINGS, JANUARY, 1963	3206	CALIFORNIA LANDINGS, MARCH, 1963
3131	GEORGIA LANDINGS, JANUARY, 1963	3207	SOUTH CAROLINA LANDINGS, APRIL, 1963
3132	NORTH CAROLINA LANDINGS, JANUARY, 1963	3208	NORTH CAROLINA LANDINGS, APRIL, 1963
3133	MICHIGAN LANDINGS, DECEMBER, 1962	3209	GEORGIA LANDINGS, APRIL, 1963
3134	FISH MEAL AND OIL, JANUARY, 1963		
3135	SOUTH CAROLINA LANDINGS, JANUARY, 1963		

(CONTINUED ON NEXT PAGE)

C. F. S. NO.	TITLE	C. F. S. NO.	TITLE
3210	NEW JERSEY LANDINGS, MARCH, 1963	3291	MIDDLE ATLANTIC FISHERIES, ANNUAL, 1962
3211	NEW JERSEY LANDINGS, APRIL, 1963	3292	CALIFORNIA LANDINGS, JUNE, 1963
3212	RHODE ISLAND LANDINGS, MARCH, 1963	3293	RHODE ISLAND LANDINGS, JUNE, 1963
3213	WISCONSIN LANDINGS, APRIL, 1963	3294	HAWAII FISHERIES, ANNUAL, 1962
3214	SHRIMP LANDINGS, NOVEMBER, 1962	3295	ALABAMA LANDINGS, JUNE, 1963
3215	FLORIDA LANDINGS, APRIL, 1963	3296	FLORIDA LANDINGS, JULY, 1963
3216	FISH MEAL AND OIL, APRIL, 1963	3297	MAINE LANDINGS, JULY, 1963
3217	NEW YORK LANDINGS, APRIL, 1963	3298	OHIO LANDINGS, JUNE, 1963
3218	VIRGINIA LANDINGS, APRIL, 1963	3299	GULF COAST SHRIMP DATA, APRIL, 1963
3219	OHIO LANDINGS, APRIL, 1963	3300	ALABAMA LANDINGS, JULY, 1963
3220	FROZEN FISHERY PRODUCTS, MAY, 1963	3301	NEW YORK LANDINGS, JULY, 1963
3221	SHRIMP LANDINGS, DECEMBER, 1962	3302	MARYLAND LANDINGS, JULY, 1963
3222	MISSISSIPPI LANDINGS, APRIL, 1963	3303	VIRGINIA LANDINGS, JUNE, 1963
3223	LOUISIANA LANDINGS, APRIL, 1963	3304	LOUISIANA LANDINGS, ANNUAL, 1962
3224	MARYLAND LANDINGS, APRIL, 1963	3305	FISH MEAL AND OIL, JULY, 1963
3225	MAINE LANDINGS, APRIL, 1963	3306	SHRIMP LANDINGS, MAY, 1963
3226	ALABAMA LANDINGS, FEBRUARY, 1963	3307	GULF COAST SHRIMP DATA, MAY, 1963
3227	ALABAMA LANDINGS, MARCH, 1963	3308	TEXAS LANDINGS, MARCH, 1963
3228	MASSACHUSETTS LANDINGS, BY PORTS, ANNUAL, 1962	3309	TEXAS LANDINGS, ANNUAL, 1962
3229	MASSACHUSETTS LANDINGS, BY GEAR AND SUBAREA, ANNUAL, 1962	3310	GEORGIA LANDINGS, AUGUST, 1963
3230	NORTH CAROLINA LANDINGS, MAY, 1963	3311	OHIO LANDINGS, JULY, 1963
3231	NEW JERSEY LANDINGS, MAY, 1963	3312	WISCONSIN LANDINGS, JULY, 1963
3232	CALIFORNIA LANDINGS, APRIL, 1963	3313	LOUISIANA LANDINGS, JULY, 1963
3233	RHODE ISLAND LANDINGS, APRIL, 1963	3314	NORTH CAROLINA LANDINGS, AUGUST, 1963
3234	FISH MEAL AND OIL, MAY, 1963	3315	VIRGINIA LANDINGS, JULY, 1963
3235	MICHIGAN LANDINGS, MARCH, 1963	3316	SOUTH ATLANTIC FISHERIES, ANNUAL, 1962
3236	FLORIDA LANDINGS, ANNUAL, 1962	3317	SOUTH CAROLINA LANDINGS, AUGUST, 1963
3237	SOUTH CAROLINA LANDINGS, MAY, 1963	3318	FLORIDA LANDINGS, AUGUST, 1963
3238	MICHIGAN LANDINGS, APRIL, 1963	3319	SHRIMP LANDINGS, JUNE, 1963
3239	ALABAMA LANDINGS, ANNUAL, 1962	3320	FROZEN FISHERY PRODUCTS, SEPTEMBER, 1963
3240	FROZEN FISHERY PRODUCTS, JUNE, 1963	3321	MICHIGAN LANDINGS, JUNE, 1963
3241	FLORIDA LANDINGS, MAY, 1963	3322	RHODE ISLAND LANDINGS, JULY, 1963
3242	GEORGIA LANDINGS, MAY, 1963	3323	MISSISSIPPI LANDINGS, JULY, 1963
3243	WISCONSIN LANDINGS, MAY, 1963	3324	NEW JERSEY LANDINGS, AUGUST, 1963
3244	MARYLAND LANDINGS, ANNUAL, 1962	3325	GREAT LAKES FISHERIES, ANNUAL, 1962
3245	VIRGINIA LANDINGS, MAY, 1963	3326	FISH MEAL AND OIL, AUGUST, 1963
3246	LOUISIANA LANDINGS, MAY, 1963	3327	NEW YORK LANDINGS, AUGUST, 1963
3247	SHRIMP LANDINGS, ANNUAL, 1962	3328	CALIFORNIA LANDINGS, JULY, 1963
3248	NEW YORK LANDINGS, MAY, 1963	3329	GULF COAST SHRIMP DATA, JUNE, 1963
3249	MARYLAND LANDINGS, MAY, 1963	3330	WISCONSIN LANDINGS, AUGUST, 1963
3250	FISH STICKS AND PORTIONS, APRIL-JUNE, 1963	3331	NEW ENGLAND FISHERIES, ANNUAL, 1962
3251	NEW JERSEY LANDINGS, JUNE, 1963	3332	FISH STICKS AND PORTIONS, JULY-SEPTEMBER, 1963
3252	MAINE LANDINGS, JUNE, 1963	3333	MARYLAND LANDINGS, AUGUST, 1963
3253	MISSISSIPPI LANDINGS, MAY, 1963	3334	VIRGINIA LANDINGS, AUGUST, 1963
3254	CALIFORNIA LANDINGS, MAY, 1963	3335	LOUISIANA LANDINGS, AUGUST, 1963
3255	RHODE ISLAND LANDINGS, MAY, 1963	3336	GEORGIA LANDINGS, SEPTEMBER, 1963
3256	MASSACHUSETTS LANDINGS, JANUARY, 1963	3337	NORTH CAROLINA LANDINGS, SEPTEMBER, 1963
3257	MASSACHUSETTS LANDINGS, FEBRUARY, 1963	3338	MICHIGAN LANDINGS, JULY, 1963
3258	MASSACHUSETTS LANDINGS, MARCH, 1963	3339	MISSISSIPPI LANDINGS, AUGUST, 1963
3259	MASSACHUSETTS LANDINGS, APRIL, 1963	3340	FROZEN FISHERY PRODUCTS, OCTOBER, 1963
3260	FROZEN FISHERY PRODUCTS, JULY, 1963	3341	SOUTH CAROLINA LANDINGS, SEPTEMBER, 1963
3261	SHRIMP LANDINGS, JANUARY, 1963	3342	TEXAS LANDINGS, APRIL, 1963
3262	SHRIMP LANDINGS, FEBRUARY, 1963	3343	TEXAS LANDINGS, MAY, 1963
3263	SHRIMP LANDINGS, MARCH, 1963	3344	TEXAS LANDINGS, JUNE, 1963
3264	SHRIMP LANDINGS, APRIL, 1963	3345	TEXAS LANDINGS, JULY, 1963
3265	FISH MEAL AND OIL, JUNE, 1963	3346	TEXAS LANDINGS, AUGUST, 1963
3266	FLORIDA LANDINGS, JUNE, 1963	3347	RHODE ISLAND LANDINGS, AUGUST, 1963
3267	MAINE LANDINGS, JUNE, 1963	3348	MAINE LANDINGS, AUGUST, 1963
3268	OHIO LANDINGS, MAY, 1963	3349	FISH MEAL AND OIL, SEPTEMBER, 1963
3269	NORTH CAROLINA LANDINGS, JUNE, 1963	3350	FLORIDA LANDINGS, SEPTEMBER, 1963
3270	SOUTH CAROLINA LANDINGS, JUNE, 1963	3351	MICHIGAN LANDINGS, AUGUST, 1963
3271	GEORGIA LANDINGS, JUNE, 1963	3352	GULF COAST SHRIMP DATA, JULY, 1963
3272	ALABAMA LANDINGS, APRIL, 1963	3353	CHESAPEAKE FISHERIES, ANNUAL, 1962
3273	ALABAMA LANDINGS, MAY, 1963	3354	MARYLAND LANDINGS, SEPTEMBER, 1963
3274	MARYLAND LANDINGS, JUNE, 1963	3355	OHIO LANDINGS, AUGUST, 1963
3275	MICHIGAN LANDINGS, MAY, 1963	3356	WISCONSIN LANDINGS, SEPTEMBER, 1963
3276	NEW YORK LANDINGS, JUNE, 1963	3357	NEW YORK LANDINGS, SEPTEMBER, 1963
3277	WISCONSIN LANDINGS, JUNE, 1963	3358	GULF COAST SHRIMP DATA, ANNUAL, 1962
3278	LOUISIANA LANDINGS, JUNE, 1963	3359	ALABAMA LANDINGS, AUGUST, 1963
3279	MISSISSIPPI LANDINGS, ANNUAL, 1962	3360	MASSACHUSETTS LANDINGS, MAY, 1963
3280	FROZEN FISHERY PRODUCTS, AUGUST, 1963	3361	NORTH CAROLINA LANDINGS, OCTOBER, 1963
3281	GULF COAST SHRIMP DATA, JANUARY, 1963	3362	CALIFORNIA LANDINGS, AUGUST, 1963
3282	MISSISSIPPI LANDINGS, JUNE, 1963	3363	ALABAMA LANDINGS, SEPTEMBER, 1963
3283	WASHINGTON LANDINGS, ANNUAL, 1962	3364	SHRIMP LANDINGS, JULY, 1963
3284	GULF COAST SHRIMP DATA, FEBRUARY, 1963	3365	GEORGIA LANDINGS, OCTOBER, 1963
3285	GULF COAST SHRIMP DATA, MARCH, 1963	3366	SOUTH CAROLINA LANDINGS, OCTOBER, 1963
3286	OREGON LANDINGS, ANNUAL, 1962	3367	MAINE LANDINGS, SEPTEMBER, 1963
3287	GEORGIA LANDINGS, JULY, 1963	3368	RHODE ISLAND LANDINGS, SEPTEMBER, 1963
3288	NEW JERSEY LANDINGS, JULY, 1963	3369	VIRGINIA LANDINGS, SEPTEMBER, 1963
3289	NORTH CAROLINA LANDINGS, JULY, 1963	3370	FROZEN FISHERY PRODUCTS, NOVEMBER, 1963
3290	SOUTH CAROLINA LANDINGS, JULY, 1963	3371	FLORIDA LANDINGS, OCTOBER, 1963

Created in 1849 the Department of the Interior—a department of conservation—is concerned with the management, conservation, and development of the Nation's water, fish, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.

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