Raberi ii Ribbo in

# COMMERCIAL DEVIEW

SH 11 A4463X Fishes

## INDEX for 1947

-Volume 9-

FISH and WILDLIFE SERVICE United States Department of the Interior Washington, D.C.

JOHN L. FARLEY, DIRECTOR



### **COMMERCIAL FISHERIES REVIEW**



A review of developments and news of the fishery industries prepared in the BRANCH OF COMMERCIAL FISHERIES

A. W. Anderson, Editor

J. Pileggi, Associate Editor H. M. Bearse, Assistant Editor

Mailedfree to members of the fishery and allied industries. Address correspondence and requests to the: Director, Fish and Wildlife Service, U.S. Department of the Interior, Washington 25, D.C.

Publication of material from sources outside the Service is not an endorsement. The Service is not responsible for the accuracy of facts, views, or opinions contained in material from outside sources.

Although the contents of this publication have not been copyrighted and may be reprinted freely, reference to the source will be appreciated.

The printing of this publication has been approved by the Director of the Bureau of the Budget, August 2, 1955. (8/31/57)

This is an index of Volume 9, Numbers 1 through 12, issued in 1947.

The following issues or numbers of Volume 9 (1947) are still available.

A few copies of the following issues or numbers of Volume 9 (1947) are obtainable upon request from the Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, Washington 25, D. C.

March	(No. 3)	August	(No. 8)
April	(No. 4)	September	(No. 9)
May	(No. 5)	October	(No. 10)
June	(No. 6)	November	(No. 11)
July	(No. 7)	December	(No. 12)

Note: Please do not ask for a complete set of Volume 9 (12 issues) as the supply of those issues (i. e., January--No. 1 and February--No. 2) not listed is exhausted.

Requests will be filled as received until supplies are exhausted.



#### INDEX TO VOLUME 9 (NUMBERS 1-12 INCLUSIVE)--1947

Figure following abbreviation of month indicates page number.

Items originating or referring to a foreign country are subindexed under the specific country and are found in the general category of FOREIGN FISHERY TRADE and no attempt has been made to cross-index them by subject.

Items referring to a Federal agency are subindexed under the specific Federal agency and are found in the general category of FEDERAL LEGISLATION, ETC.

#### ABSTRACTS AND ANNOUNCEMENTS OF NEW PUBLICATIONS Fish dictionary; Dec. 21.

"Fishery Resources of the United States"; July 34.

DDT tests; Apr. 43.

#### AFRICA (see FOREIGN FISHERY TRADE)

AGAR, primary processing of; July 32.

AGAVE FIBERS, restrictions; Feb. 65.

Fisheries, 1945; Apr. 25. Fisheries hearings; Aug. 41, Nov. 12. Fisheries regulations; Feb. 63, May 61. Salmon pack; Aug. 38, Sept. 31, Oct. 25. Shrimp regulations; May 61, Aug. 56.

ANTI-THIAMINE and thiamine factor in fishery products, studies on the content of; Aug. 13.

ARKANSAS mussel shell industry; May 35.

#### ARMY, U.S.

Fish purchases; Jan. 39, Feb. 35, Oct. 37, May 34.

ASIA (see FOREIGN FISHERY TRADE)

#### AUSTRALIA (see FOREIGN FISHERY TRADE)

#### AUTHORS AND TITLES

ARCISZ, WILLIAM (and Leslie A. Sandholzer): Technological Study of the Ocean Quahog Fishery, A; June 1.

BUCKNER, CECILIA R. (and Leslie A. Sandholzer):

Bacteriological Studies of Oyster Conditioning; Jan. 7.

BUCHER, G. C. (and F. B. Sanford and D. T. Miyauchi):

Estimations of Extinction Ratios and Vitamin A Potency of 12 Reduction Plant Oils; July 15.

CANTILLO, M. (and M. Heerdt, Jr. and F. Hoyos):

New Type Thermocouple Seal for Tin Containers; May 10.

CARLSON, CARL B. :

S. S. Pacific Explorer" -- A Preliminary Description; Jan. 12.

CONHAM, KELSHAW (and F. Bruce Sanford): Relationship Between Body Length of Grayfish and Vitamin A in Liver; Sept. 1. GOLDBECK, C. G.:

Studies on the Content of Thiamine and Anti-Thiamine Factor in Fishery Products, Some; Aug. 13.

GOLDBECK, C. G. (and W. A. Martinek): Nutritive Value of Baked Croaker; Apr. 9.

#### HAMM, WILLIAM S.:

Observations on Fish Processing in Norway, Some; May 12.

(and Walter A. Rust):

Electrostatic Smoking of Sardines, The; Feb. 1.

HARTSHORNE, JEAN C .:

Bacterial Population of Brining Tanks in Fish Filleting Plants; Oct. 1. HEERDT, MARTIN, JR.:

Toughening of Frozen Crab Meat Can Be Retarded; Feb. 7.

(and F. Hoyos and M. Cantillo): New Type Thermocouple Seal for Tin

Containers; May 10.

HINSDALE, E. C .:

Arrivals of Fishery Products at Seattle, 1946; Apr. 1.

HOYOS, F. (and M. Heerdt, Jr. and M. Cantillo):

New Type Thermocouple Seal Tin Containers;

May 10. JACOBS, F. (and H. W. Nilson and W. A. Martinek):

Nutritive Value for Growth of Some Fish Proteins; July 1.

JONES, G. I.:

Ultraviolet Absorption Curves for Vitamin A Using Tungsten and Hydrogen Discharge Light Sources; Aug. 22. (and D. Miyauchi and F. B. Sanford):

Studies on Deterioration of Vitamin A in Fish Livers and Liver Oils. Part I - Loss of Vitamin A and Stability in Grayfish Livers in Storage; Feb. 11.

Studies on Deterioration of Vitamin A in Fish Livers and Liver Oils. Part III - Loss at  $37^{\circ}$  C, of Vitamin A from Liver Oil in Presence and Absence of Grayfish Liver Tissue; Apr. 5. KNAKE, BORIS O.:

Methods of Net Mending -- New England; Mar. 1. KRAYBILL, HERMAN F. (and Hugo W. Nilson): Chemical Studies of Lipoid Extracts from

Menhaden Fish Meal; Sept. 8. Feeding Studies with Lipoid Extracts from

Menhaden Fish Meal; Oct. 7. LANHAM, W. B., JR. (and H. W. Nilson): Studies on the Feeding Value of Fish Meals, Some; Aug. 1.

LEMON, J. M.:

Notes on Freezing Shrimp; Nov. 1.
MARTINEK, W. A. (and C. G. Goldbeck):
Nutritive Value of Baked Croaker; Apr. 9. (and H. W. Nilson and F. Jacobs):

Nutritive Value for Growth of Some Fish Proteins; July 1.

AUTHORS AND TITLES (cont.)

MIYAUCHI, D. (and F. B. Sanford):

Studies on Deterioration of Vitamin A in Fish Livers and Liver Oils. Part II -Loss of Vitamin A Potency and Stability in Frozen Grayfish Livers; May 7.

Studies on Methods of Extracting Vitamin A and Oil from Fishery Products. Part I - Vitamin A Potencies of Oils from Grayfish Livers Obtained by Extraction with Petroleum Ether and by Cooking with Water; Sept. 19.

Vitamin A Content of Fur Seal Oils; Nov. 5. (and G. I. Jones and F. B. Sanford);

Studies on Deterioration of Vitamin A in Fish Livers and Liver Oils. Part I - Loss of Vitamin A and Stability in Grayfish Livers in Storage; Feb. 11.

Studies on Deterioration of Vitamin A in Fish Liyers and Liver Oils. Part III - Loss at 37 °C. of Vitamin A from Liver Oil in Presence and Absence of Grayfish Liver Tissue; Apr. 5.

(and G. C. Bucher and F. B. Sanford):

Estimations of Extinction Ratios and Vitamin
A Potency of 12 Reduction Plant Oils;

July 15.

NILSON, HUGO W. (and Herman F. Kraybill): Chemical Studies of Lipoid Extracts from Menhaden Fish Meal; Sept. 8.

Feeding Studies with Lipoid Extracts from Menhaden Fish Meal; Oct. 7. (and W. B. Lanham, Jr.);

Studies on the Feeding Value of Fish Meals, Some; Aug. 1.

(and F. Jacobs and W. A. Martinek): Nutritive Value for Growth of Some Fish Proteins; July 1.

PISKUR, F. T.:

Preliminary Study of Correlation of pH and Quality of Shucked Pacific Oysters; June 22.

POTTINGER, SAMUEL R. (and J. F. Puncochar):

Shallower Storage Pens Improve Fish Quality; Feb. 5.

Suggestions for Handling Trawler-Caught Fish; Dec. 10.

PUNCOCHAR, JOSEPH F. (and S. R. Pottinger):

Shallower Storage Pens Improve Fish Quality; Feb. 5.

REARDON, C. M.:

Receipts of Fishery Products at Chicago, 1945; Jan. 18.

RUST, WALTER A. (and William S. Hamm): Electrostatic Smoking of Sardines, The; Feb. 1.

SANDHOLZER, LESLIE A. (and W. Arcisz): Technological Study of the Ocean Quahog Fishery, A; June 1. (and Cecilia R. Buckner):

Bacteriological Studies of Oyster Conditioning; Jan. 7.

(and C. E. Winter):

Mobile Laboratories for Fishery Technological Research; May 1. SANFORD, F. BRUCE (and Kelshaw Conham): (cont.)

Relationship Between Body Length of Grayfish and Vitamin A in Liver; Sept. 1. (and G. C. Bucher and D. T. Miyauchi):

Estimations of Extinction Ratios and Vitamin
A Potency of 12 Reduction Plant Oils;
July 15.

(and D. T. Miyauchi):

Vitamin A Content of Fur Seal Oils; Nov. 5.
Studies on Methods of Extracting Vitamin A
and Oil from Fishery Products. Part I
Vitamin A Potencies of Oils from Grayfish Livers Obtained by Extraction with
Petroleum Ether and by Cooking with
Water; Sept. 19.

Studies on Deterioration of Vitamin A in Fish Livers and Liver Oils. Part II - Loss of Vitamin A Potency and Stability in Frozen

Grayfish Livers; May 7.

(and D. Miyauchi and G. I. Jones): Studies on Deterioration of Vitamin A in Fish Livers and Liver Oils. Part I - Loss of Vitamin A and Stability in Grayfish Livers in Storage; Feb. 11.

Studies on Deterioration of Vitamin A in Fish Livers and Liver Oils. Part III - Loss at 37°C. of Vitamin A from Liver Oil in Presence and Absence of Grayfish Liver

Tissue; Apr. 5. SMITH, OSGOOD R.:

Location of Sardine Schools by Super-Sonic Echo-Ranging; Jan. 1.

STOLTING, W. H.:

Fluctuations in Fish Production in the U. S. and Alaska; July 8.

WHARTON, J.:

The Chesapeake Bay Crab Industry; Dec. 1. WINTER, C. E. (and L. A. Sandholzer): Mobile Laboratories for Fishery Technological Research; May 1.

BACTERIAL population of brining tanks in fish filleting plants; Oct. 1.

BACTERIOLOGICAL studies of oyster conditioning; Jan. 7.

BAHAMAS (see FOREIGN FISHERY TRADE)

BARBADOS (see FOREIGN FISHERY TRADE)

BELGIUM (see FOREIGN FISHERY TRADE)

BOOKS (see ABSTRACTS AND ANNOUNCE-MENTS...)

BRINING TANKS in fish filleting plants, bacterial population of; Oct. 1.

BULGARIA (see FOREIGN FISHERY TRADE)

BYPRODUCTS, Fishery (see FEDERAL LEGIS-LATION; FISH MEAL; FISH OIL; VITAMINS) Agar industry of North Carolina; July 32. Fats and oils: production of increased; Feb. 65.

CANNED AND CURED FISH TRADE (also see

FEDERAL LEGISLATION; FOREIGN

BYPRODUCTS, Fishery (see FEDERAL LEGISLATION; FISH MEAL; FISH OIL;

Salted fish allocation; Mar. 33.

FISHERY TRADE) VITAMINS) (cont.) Sardine, Maine, canning season changed; Fish meal(s): feeding value of \_\_\_\_\_, studies on; Aug. 1. Apr. 30. Shrimp: menhaden: lipoid extracts feeding studies; Oct. 7. canned; May 61. lipoid extracts from \_\_\_\_, chemical studies of; Sept. 8.
Liver oils, fish, potency of Japanese; Dec. 22. fill of container reduction denied; Aug. 57. pack, Gulf; Jan. 33, Feb. 30, Mar. 30, Apr. 26, May 32, June 36, July 30, Aug. 38, Oct. 26.
Tuna pack, California; Jan. 34, Feb. 31,
Mar. 31, Apr. 27, May 32, June 36, Meal and oil production; Jan. 35, Feb. 32, Mar. 32, Apr. 28, May 33, June 37, July 31, Aug. 40, Sept. 33, Oct. 28. July 30, Aug. 39, Sept. 31, Oct. 26. Nutritive value for growth of some fish proteins; July 1, CANNED FISH (see CANNED AND CURED FISH Thiamine and anti-thiamine factor in fishery products, studies on the content of; Aug. 13. TRADE) Import controls removed: Apr. 42. Vitamin A: extracting vitamin A and oil from fishery Set-aside terminated; Mar. 55. Supply of ; July 35. products, studies on methods of. Part I - Vitamin A potencies of oils from CATCH (for area catches, refer to specific area) grayfish livers obtained by extraction Fishery , 1946; Feb. 28. with petroleum ether and by cooking United States and Alaska fish with water; Sept. 19, fluctuations in the; July 8. fish liver and liver oils, studies on deterioration in. CHESAPEAKE BAY AREA (also see FRESH AND Part I - Potencies of oils from grayfish FROZEN FISH) livers obtained by extraction with petro-Crab industry of : Dec. 1. leum ether and by cooking with water; Sept. 19. Part II - Loss of potency and stability in frozen grayfish livers; May 7. Part III - Loss at 37° C. from liver oil in CHICAGO (also see FRESH AND FROZEN FISH) Fishery products receipts at \_\_\_\_\_, 1945; Jan. 18. presence and absence of grayfish liver tissue; Apr. 5. CHINA (see FOREIGN FISHERY TRADE) fur-seal oils, content of ; Nov. 5. potency for 12 reduction-plant oils, estima-CLAM (see SPECIES) tions of extinction ratios and; July 15, procedures for analysis of \_\_\_ in fishery COLD-STORAGE HOLDINGS (see FRESH AND byproducts; Jan. 40. FROZEN FISH) stocks and production; Jan. 36, Feb. 32, Mar. 32, Apr. 28. COMMODITIES in short supply; Mar. 55. ultraviolet absorption curves using tungsten and hydrogen discharge light sources; CONSERVATION Aug. 22. Program; Apr. 31. Zones; Aug. 41. CALIFORNIA (see FRESH AND FROZEN FISH) CONTAINERS, tin, new type thermocouple seal CAN(s) (also see CONTAINERS, TIN) for; May 10. Sizes of \_\_\_\_; Mar. 55. COSTA RICA (see FOREIGN FISHERY TRADE) CANADA (see FOREIGN FISHERY TRADE) DDT tests; Apr. 43. CANNED AND CURED FISH TRADE (also see FEDERAL LEDISLATION: FOREIGN ECONOMIC COOPERATION Committee, FISHERY TRADE) European; Oct. 36. Canned fish, sale of; July 35. Mackerel pack, California; Jan. 34, Feb. 31, ECUADOR (see FOREIGN FISHERY TRADE) Mar. 31, Apr. 27, May 32, June 36, July 30, Aug. 39, Sept. 31, Oct. 26. ELECTRONICS, Super-sonic echo-ranging, Oysters, canned; Feb. 66, May 61. location of sardine schools by; Jan. 1. ; Nov. 25. proposed changes for Pilchard pack, California; Jan. 33, Feb. 30, ELECTROSTATIC SMOKING of sardines; Jan. 1. Mar. 30, Apr. 26, Oct. 25. Processing of fish in Norway, observations on; EVALUATION of fisheries in determining benefits and losses from engineering projects; May 12, May 34. Salmon pack, Alaska; Aug. 38, Sept. 31, Oct. 25.

EXPORTS (see IMPORTS, FEDERAL LEGISLATION)

Fish and fish products ; Feb. 66.

EXTRACTION of Vitamin A and oil from fishery products, studies on methods of; Apr. 5, May 7, Sept. 19.

FARM FISH PONDS; June 43.

FEDERAL LEGISLATION, DECISIONS, ORDERS, ETC.

Agriculture, Department of: byproducts, increased production of; Feb. 65. canned fish:

import controls removed; Apr. 42 set-aside terminated; Mar. 55. farm fish ponds; June 43. fats and oils; Jan. 59, Feb. 65. fish purchases by U. S.; Jan. 47, Feb. 41, Apr. 31, June 44, Oct. 38, Nov. 19,

Dec. 23. import controls; Jan. 59, Apr. 42, Aug. 56. short supply commodities; Mar. 55. WFO-63 Appendix A Revised; Aug. 56.

Army, Department of: purchases of fish by Army Quartermaster Market Centers; Jan. 39, Feb. 35, May

34, Oct. 37.
Civilian Production Administration;
agave fibers; Feb. 65.

can sizes; Mar. 55. cordage fibers, hard; Mar. 55.

fibers; Apr. 42. manila for fish nets; Apr. 42. nets; Apr. 42.

tin; Mar. 56. tin plate; Jan. 60.

Commerce, Department of (also see Agricul-

ture); exportation of fish and fish products; Feb. 66. Federal Trade Commission;

rosefish fillets, advertising and selling as

"perch"; Feb. 65. Fish and Wildlife Service:

Alaska:

hearing announced; Aug. 41. Bower, Ward T., retires; Apr. 29. fisheries regulations; Feb. 63, May 61.

shrimp closed seasons; Aug. 56. shrimp regulations; May 61. sockeye salmon fishery act of 1947,

enforcement of; Oct. 42. Food and Drug Administration:

canned oysters, proposed changes for; Nov. 25, Feb. 66.

canned oysters and shrimp; May 61.

canned shrimp, reduction in fill of container denied; Aug. 57. import requirements of the U. S. Food, Drug,

import requirements of the U. S. Food, Dru and Cosmetics Act; Aug. 51.

Interior, Department of (also see Fish and Wildlife Service): national resources and foreign aid; Oct. 33.

Interstate Commerce Commission: freight and express rates; Jan. 60. freight rate decision; Oct. 42.

Labor, Department of:

seafood and fishery exemptions; Aug. 58.

FEDERAL LEGISLATION, DECISIONS, ORDERS, ETC. (cont.)

State, Department of: fisheries consultant; Nov. 17. fishery staff increased; Oct. 37

Treasury, Department of:

vessels, measurement of; Dec. 37. War Assets Administration:

surplus property; Mar. 56. DDT tests; Apr. 43.

FIBERS; Apr. 42. Agave; Feb. 65. Cordage; Mar. 55 Manila for fish nets; Apr. 42.

FILLETS (see GROUNDFISH)

FILLETING plants, bacterial population of brining tanks in; Oct. 1.

FILMS (see MOTION PICTURE)

FISH (see Specific common species name under SPECIES)

FISH MEAL (see BYPRODUCTS; MEAL)

FISH OIL (see BYPRODUCTS; OIL)

FISH PRODUCTION fluctuations in the U. S. and Alaska; July 8.

FISH PROCESSING in Norway, some observations on; May 12.

FISHERIES SURVEY(S):

Fish processors ; Dec. 22. Saskatchewan: Nov. 15.

FISHERMEN, protection of; Jan. 42.

FLORIDA fish production; Feb. 17.

FOOD AND AGRICULTURE ORGANIZATION

Fats and oils review; Aug. 42. Fisheries division; Jan. 38.

Fisheries official speaks in Newfoundland; Mar. 34.

Program for 1948; June 41.

Regional councils for the study of the sea; May 37.

United States sends fishery advisors to conference; Sept. 34.

World food proposals, preparatory commission report on; Feb. 37.

FOREIGN FISHERY TRADE

Asia, southeast, fisheries conference; Apr. 33. Australia pearl shell, beche-de-mer and trochus industry; Mar. 40.

Bahamas, sponge industry; Apr. 35.

Barbados fisheries; Sept. 38.

Belgium: areas fished; June 49. canned fish; June 49. consumption of fish; June 49. fishing fleet; June 50.

groundfish; June 49. production; June 46. FOREIGN FISHERY TRADE (cont.) Bulgaria, state-autonomous fisheries enterprise; Dec. 25. Canada: British Columbia reaction to tariff treaty; cold storage; Jan. 49, Feb. 44, Mar. 40, Apr. 36. filleting plant; Feb. 44. fillets, smoked, marketing of; Feb. 45. fishing industry makes adjustments; Aug. 53. freezing and storing; Jan. 49, Feb. 44, Mar. 40. herring production; Feb. 45. import restrictions; Nov. 12. inspection and grading; Dec. 26. landings below last year; Sept. 39. landings up in 1946; Mar. 40. Nova Scotia fisheries; Apr. 41 port privileges extended to U. S. fishing vessels; Nov. 20. provincial fisheries dept. report, 1945; Jan. 43. salmon pack in British Columbia; Aug. 54. Saskatchewan fisheries survey; Nov. 15. tuna fishing in British Columbia; Aug. 54. China, Dairen area fisheries; Apr. 36. Costa Rica: fisheries; May 44. sharks; May 45. tuna; May 44. turtles; May 45. Ecuador: motherships permitted; May 45. vessels; May 45. ASDIC used to detect fish; Jan. 49. cold storage; May 46. detection of fish; Jan. 49. filleting plant at St. Pierre and Miquelon proposed; July 39. fish industry on St. Pierre and Miquelon; May 46. fresh and frozen fish trade; May 46. Greenland, five-year fisheries plan; Jan. 50. deep-sea fishing importance to food program; Mar. 41. fish supply; Feb. 49. fisheries; June 52. vessels, fishing: construction costs; Feb. 48. construction program; Feb. 47. economic operations; Feb. 47. returned by United former German States; Dec. 27. restricted radius of operation; Feb. 49. Gold Coast fishery research program; Sept. 38. Hawaii, fishing industry development planned; Oct. 35. Iceland: economic developments; Apr. 37. freezing plants and equipment; June 55. herring industry; Feb. 49. inspection and handling of fish for export; minimum fish price guarantee law; Mar. 42.

fish marketing; Apr. 30.

```
FOREIGN FISHERY TRADE (cont.)
 India: (cont.)
  fishing industry, efforts to improve; Apr. 38.
   production and marketing of fishery products
      planned; Mar. 45.
 Ireland:
  fisheries: Feb. 50.
  herring oil and meal; Jan. 51.
   agar-agar, manufacture of; Dec. 28.
  businessmen may employ Japanese agents;
      Dec. 28.
  economy; Oct. 36.
   fish budget; May 35.
  fisheries; Feb. 50, July 39.
  fishing licenses; Sept. 40.
  oils, liver, potency of; Dec. 22.
  oysters, seed; Sept. 40.
  production; June 60.
   remittances to
                        permitted; Dec. 28.
  SCAP opens foreign trade office in New York;
       Dec. 28.
   whale blubber for textiles; Dec. 31.
 Korea, U. S. Commercial Company in; Mar. 47.
 Lebanon sponge fishery; Apr. 39.
 Mexico:
   abalone regulation, new; May 47.
   canned fish duty; Dec. 32.
   danger to fishing in Laguna Madre; Nov. 22.
   fishermen, organization of; Nov. 22.
   fishery notes; Nov. 20.
   fishing permits, cancellation of; Nov. 20.
   fishing regulations; Nov. 20.
   Guayman shrimp industry; Sept. 43.
   import duties; July 40.
   marine wealth development; Nov. 22.
   patrol fleet expansion; Nov. 22.
   shrimp:
    fishing and shark livers; June 60.
    industry; Feb. 51.
    production; Mar. 48.
   tariff for fishing in
                             waters; July 40.
   tariffs defined; Sept. 41.
 Netherlands:
   fisheries; Feb. 51.
   fish preserving industry; Mar. 48.
   government controls; Feb. 51.
   oyster industry; Jan. 52.
   preservation of fish; Mar. 48.
 Newfoundland:
   canned fish; May 52.
   cod fishery prospects for 1947; May 53.
   cod sales, foreign exchange for; Nov. 23.
   economic information, summary of current;
       May 47.
   FAO fisheries official speaks in ____:
       Mar. 34.
   filleting; Feb. 52.
   filleting and freezing fish, regulations for;
       Feb. 52, July 41.
   fisheries; Mar. 49.
   fisheries, 1946 review; May 48.
   fisheries board, notice of; Apr. 39.
   fishery salt; May 52.
   freezing; Feb. 52.
   fresh and frozen fish; Mar. 49.
   Geneva tariff negotiations reaction in
       Dec. 33.
   herring; May 50.
```

FOREIGN FISHERY TRADE (cont.) Newfoundland (cont.) lobsters; May 52. marine engines; May 52. meal and oil; May 54. oils, fish, marketing of; May 59. salt cod: exports: May 49. fisheries outlook; Mar. 49. fishing on the Grand Banks; May 49. prices; May 49. fisheries; Mar. 49. production; May 48. salted fish marketing system continued; Apr. 39. sealing; May 52. squid; May 52, subsidiary fisheries; May 54. Nicaragua fishing regulations; Dec. 34. Norway: fats and oil; Mar. 53. fisheries; Feb. 54, Oct. 41. fisheries observations; Mar. 51. fishery notes; Dec. 35. fish processing observations; May 12. German trawlers; Nov. 24. herring reduction; Aug. 55. production; June 60. whale and herring oil production; Jan. 53, Mar. 53. whaling; Feb. 55, Peru: continental shelf sovereignty asserted; Sept. 44. fishing industry, importance of; Jan. 54. Philippines: fisheries, rehabilitation of; Feb. 41. sponge industry; Mar. 54. U. S. Fish and Wildlife Service vessels depart for ; July 34. Spain fisheries; Feb. 55. Uganda, fisheries research laboratory in; May 43. Union of South Africa fishing industry research institute report; Oct. 40. U. S. S. R. (Union of Soviet Socialist Republics) fishery programs; Feb. 55. United Kingdom: Indian Ocean fishery expedition; Dec. 27.

#### FRANCE (see FOREIGN FISHERY TRADE)

Venezuela, U. S. aids fish industry of; Nov. 18.

FREEZING shrimp, notes on; Nov. 1.

whaling activities; Apr. 37.

FREIGHT RATE(S):

Express and ; Jan. 60.

ICC decision; Oct. 42.

FRESH AND FROZEN FISH
Alaska fisheries, 1945; Apr. 25.
Chesapeake Bay area:
production of fish and shellfish; Jan. 27,
Feb. 24, Mar. 24, Apr. 18, May 18,
May 24, June 29, July 22.
Great Lakes, Chicago:
cold-storage holdings; Jan. 29, Feb. 27,
Mar. 27, Apr. 22, May 28, June 32,

July 28, Aug. 36, Sept. 27, Oct. 24, fishery products receipts at Chicago, 1945; Jan. 18. receipts; Jan. 29, Feb. 26, Mar. 26, Apr. 21, May 27, June 31, July 27, Aug. 35, Sept. 28, Oct. 23. Gulf States: cold-storage holdings; Jan. 28, Feb. 26, Mar. 25, Apr. 20, May 26, June 30, July 24, Aug. 32, Sept. 25, Oct. 21. production of fish and shell fish. In 28

FRESH AND FROZEN FISH (cont.)

July 24, Aug. 32, Sept. 25, Oct. 21.
production of fish and shellfish; Jan. 28,
Feb. 25, Mar. 25, Apr. 20, May 26,
June 30, July 23, Aug. 31, Sept. 25,
Oct. 20.

shrimp pack; Jan. 33, Feb. 30, Mar. 30, Apr. 26, May 32, June 36, July 30, Aug. 38, Oct. 26.

Middle Åtlantic, New York City: cold-storage holdings; Jan. 26, Feb. 24, Mar. 23, Apr. 18, May 24, July 21, Aug. 31, Sept. 24, Oct. 19.

receipts; Jan. 26, Feb. 23, Mar. 23, Apr. 17, May 23, June 28, July 21, Aug. 31, Sept. 24, Oct. 19.

New England: cold-storage holdings; Jan. 25, Mar. 22, July 20, Aug. 30, Sept. 23, Oct. 18. landings; Jan. 25, Feb. 23, Mar. 22, Apr. 17, May 23, July 20, Sept. 23.

Maine: landings; Mar. 22, Apr. 17, May 23, June 28, July 20, Aug. 30, Sept. 23, Oct 18

sardine canning season changed; Apr. 30. Massachusetts landings; Mar. 22, Apr. 17, May 23, July 20, Sept. 23, Oct. 18. Northwest Pacific:

cold-storage holdings; Jan. 30, Mar. 28, Apr. 23, May 29, June 34, July 26, Aug. 34, Sept. 26, Oct. 22.

Seattle receipts; Jan. 30, Mar. 27, Apr. 22, May 29, June 33, July 25, Aug. 33, Sept. 25, Oct. 21.

Pacific Coast:

California: catch, 1944; Apr. 25.

cold-storage holdings; Jan. 31, Mar. 29, Apr. 24, May 30, June 35, July 25.

landings; Jan. 31, Feb. 27, Mar. 28,
Apr. 23, May 30, June 34, July 24,
Aug. 33.

mackerel pack; Jan. 34, Feb. 31, Mar. 30, Apr. 27, May 32, June 36, July 30, Aug. 39, Sept. 31, Oct. 26.

pilchard (sardine) pack; Jan. 33, Feb. 30, Mar. 30, Apr. 26, Oct. 25. tuna pack; Jan. 34, Feb. 31, Mar. 31,

Apr. 27, May 32, June 36, July 30, Aug. 39, Sept. 31, Oct. 26.

cold-storage holdings; Jan. 27, Feb. 24, Mar. 25, Apr. 19, May 25, June 29, July 22.

shad season, 1947; May 18. shrimp production; Jan. 27, Feb. 25, Mar. 24, Apr. 19, May 25, June 29, July 23.

#### FRESH AND FROZEN FISH (cont.) United States: cold-storage freezings and holdings; Jan. 32, Feb. 29, Mar. 29, Apr. 25, May 31, June 35, July 28, Aug. 37, Sept. 29, Oct. 24. fishery production in 1946; Feb. 28. fishing ports in 1946, leading; Feb. 39. halibut season on Pacific coast, 1947; Mar. 34. FROZEN PRODUCTS Crab meat toughening can be retarded; Feb. 7. FUR SEAL (see SEALS, FUR) GATT, Presidential proclamation on U. S. participation in; Dec. 37. GEAR (see NETS or specific type of gear) GERMANY (see FOREIGN FISHERY TRADE) GRAYFISH (see SPECIES) GREAT BRITAIN (see UNITED KINGDOM) GREAT LAKES (see FRESH AND FROZEN FISH) GREENLAND (see FOREIGN FISHERY TRADE) GROUNDFISH (see SPECIES) GULF STATES (see FRESH AND FROZEN FISH) HALIBUT (see SPECIES) ICELAND (see FOREIGN FISHERY TRADE) Canadian restrictions: Nov. 12,

IMPORT(S) Canned fish controls removed; Apr. 42.
Controls; Jan. 59, Apr. 42, Aug. 56.
Groundfish fillet

Mar. 40, Apr. 33, May 43, June 46,
July 39, Aug. 53, Sept. 38, Oct. 40.
Groundfish Groundfish Groundfish Groundfish Groundfish Groundfish quota; June 43, Dec. 21. Requirements of the U. S. Food, Drug, and Cosmetics Act; Aug. 51. Tariff Commission studies; May 36.
Trawl netting ; Feb. 39.
U. S. Food, Drug, and Cosmetics Act, requirements of the; Aug. 51.

INDIA (see FOREIGN FISHERY TRADE) IRELAND (see FOREIGN FISHERY TRADE) JAPAN (see FOREIGN FISHERY TRADE)

KOREA (see FOREIGN FISHERY TRADE)

LAROR. Seafood and fishery exemptions; Aug. 58,

LANDINGS (see FRESH AND FROZEN FISH: CATCH)

LEBANON (see FOREIGN FISHERY TRADE)

```
LIVER(S)
```

Extracting vitamin A and oil from fishery products; Sept. 19. Gravfish relationship between body length and Vitamin A in; Sept. 1. Vitamin A potencies of liver oils obtained by extraction with petroleum ether and by cooking with water; Sept. 19. Japanese oils, potency of; Dec. 22. Vitamin A: deterioration in fish liver and liver oils. studies on; Feb. 11, Apr. 5, May 7. loss at 37° C. from liver oil in presence and abserce of grayfish liver tissue; Apr. 5. loss of and stability in grayfish livers in storage; Feb. 11. potency and stability loss of in frozen

MACKEREL (see SPECIES)

MAINE (see FRESH AND FROZEN FISH)

#### MARYLAND

Conservation program; Apr. 31. Fishery statistics; Apr. 31. Oyster prices decrease; Feb. 16.

grayfish livers; May 7.

MASSACHUSETTS (see FRESH AND FROZEN FISH)

MEAL(S)

Feeding value of fish , studies on the; Aug. 1. Menhaden: lipoid extracts feeding studies; Oct. 7. lipoid extracts from \_\_\_\_\_, chemical studies

MEAL AND OIL

Production; Jan. 35, Feb. 32, Mar. 32, Apr. 28, May 33, June 37, July 31, Aug. 40, Sept. 33, Oct. 28.

MENHADEN (see SPECIES)

of: Sept. 8.

MEXICO (see FOREIGN FISHERY TRADE)

MOBILE LABORATORIES, fishery technological research in; May 1.

MOTION PICTURE

Retailing fish \_\_\_\_\_; Oct. 31.

MUSSELS (see SPECIES)

NET(S)

Manila for fish ; Apr. 42. Mending \_\_\_\_ , methods of; Mar. 1.

NETHERLANDS (see FOREIGN FISHERY TRADE)

NETTING for trawls, imports of; Feb. 39.

NEW ENGLAND (see FRESH AND FROZEN FISH)

PONDS

Farm fish \_\_\_\_ ; June 43.

NEW YORK CITY (see FRESH AND FROZEN NEWFOUNDLAND (see FOREIGN FISHERY TRADE) NICARAGUA (see FOREIGN FISHERY TRADE) NORTHWEST PACIFIC (see FRESH AND FROZEN FISH) NORWAY (See FOREIGN FISHERY TRADE) NUTRITION Croaker, baked, nutritive value of; Apr. 9. Fish meals, feeding value of, studies on; Fish proteins, nutritive value for growth of some; July 1. OILS(S) (also see MEAL AND OIL; MEAL) Extracting vitamin A and oil from fishery products, studies on methods of; Sept. 19. Fats production; Jan. 59, Feb. 65. Fats situation; Nov. 13. Fats and ; Jan. 59, Feb. 65, Aug. 42. Fur seal , vitamin A content of; Nov. 5 Fur seal , vitamin A content of; Nov. 5. Japanese liver , potency of Doc 20 Studies on deterioration of vitamin A in fish liver and liver . Part III. Loss at 37° C. of vitamin A from liver presence and absence of grayfish liver tissue; Apr. 5. Potency of fish liver in Japan; Dec. 22. Vitamin A content of fur seal ; Nov. 5. Vitamin A: deterioration of in fish livers and liver oils; Apr. 5, May 7.
loss at 37° C. of \_\_\_\_\_ from liver oils in presence and absence of grayfish liver tissue; Apr. 5. potency and extinction ratios of 12 reduction plant oils, estimations of; July 15. potency and stability loss in frozen grayfish livers; May 7. potencies of grayfish-liver oils obtained by extraction with petroleum ether and by cooking with water; Sept. 19. OYSTER (see SPECIES) PACIFIC COAST (also see FRESH AND FROZEN FISH) Catch, 1944; Apr. 25, "PACIFIC EXPLORER," S. S. -- preliminary description; Jan. 12. PENS. STORAGE Shallower \_\_\_\_ improve fish quality; Feb. 5. PERU (see FOREIGN FISHERY TRADE) PHILIPPINES (see FOREIGN FISHERY TRADE) PILCHARD (see SPECIES)

```
PORTS
 Leading fishing in 1946; Feb. 39.
PRESERVATION
 Crab meat, frozen, toughening of can be retarded; Feb. 7.
 Norwegian fish , observations on;
    May 12.
 Shrimp, notes on freezing of; Nov. 1.
PRICES
 Oyster
               , Maryland, decrease; Feb. 16.
 Wholesale and retail ; Jan. 48, Feb. 42, Mar. 38, Apr. 32, May 42, June 45, July 37, Aug. 51, Sept. 36, Oct. 38, Nov. 19, Dec. 23.
PROCESSORS, fish, survey of; Dec. 22.
PROCLAMATION, PRESIDENTIAL
 Tariffs and Trade; Dec. 37.
PRODUCTION fluctuations in the U.S. and
   Alaska; July 8.
PROTEIN(S) (also see NUTRITION)
           , nutritive value for growth of some:
 Fish
     July 1
QUAHOG FISHERY, OCEAN, technological
   study of the; June 1.
QUALITY
 Fish
             improved with shallower storage
    pens; Feb. 5.
 Trawler-caught fish, suggestions for handling;
     Dec. 10.
RECIPES, FISH
 Fillets, oven-fried; Dec. 20.
 Halibut steak, baked; July 19.
 Oysters on the half-shell; Oct. 27.
 Salad, fish; Mar. 60.
 Salmon steaks, boiled; Sept. 30.
 Smoked fish, broiled; Feb. 4.
 Whitefish, planked; Aug. 29.
REFRIGERATION car, iceless, tested by
   U. S. Dept. of Agriculture; May 36.
RETAIL (see PRICES)
RETAILING fish, motion picture on; Oct. 31.
ROSEFISH (see SPECIES)
RUSSIA (see U. S. S. R.)
SCIENCE and technology mission in U. S.
    London Embassy; Nov. 15.
SALMON (also see SPECIES)
 Enforcement of sockeye fishery act of
     1947; Oct. 42.
SALTED FISH allocation: Mar. 33.
SARDINE (see SPECIES)
```

```
SEAL(S), FUR
    North Pacific; June 38.
  Black Douglas" begins
 Oil, vitamin A content of; Nov. 5.
 Tagging of 20,000 pups; Nov. 16. Take in 1947 announced; Aug. 49.
SEATTLE (also see FRESH AND FROZEN FISH)
 Fishery products arrivals, 1946; Apr. 1.
SHAD (see SPECIES)
SHARK (see SPECIES)
SHRIMP (see SPECIES)
SMOKING
 Electrostatic sardines; Feb. 1.
SOUTH AFRICA (see UNION OF SOUTH AFRICA)
SOUTH ATLANTIC (see FRESH AND FROZEN
   FISH)
SPAIN (see FOREIGN FISHERY TRADE)
SPECIES (also see FEDERAL LEGISLATION;
   FOREIGN FISHERY TRADE; CANNED AND
   CURED FISH; FRESH AND FROZEN FISH)
  ocean quahog fishery, technological study of
      the: June 1.
        meat, frozen, toughening of can be
      retarded; Feb. 7.
  Chesapeake Bay industry; Dec. 1.
 Croaker:
              , nutritive value of; Apr. 9.
  haked
 Grayfish:
  liver, relationship between body length of
  and vitamin A in; Sept. 1.
liver tissue, loss at 37° C. of vitamin A
      from liver oil in presence and absence
      of; Apr. 5.
  livers, frozen, loss of vitamin A potency
      and stability in; May 7.
  livers in storage, loss of vitamin A and
      stability in; Feb. 11.
  livers, vitamin A potencies of oils obtained
      by extraction with petroleum ether and
      by cooking with water from; Sept. 19.
 Groundfish fillet(s):
  import quota; June 43, Dec. 21.
  imports; Jan. 49, Feb. 44, Mar. 40, Apr. 33,
      May 43, June 46, July 39, Aug. 53,
Sept. 38, Oct. 40.
 Halibut, Pacific Coast season, 1947; Mar. 34,
     June 39, Aug. 50.
  size regulations for ; Dec. 22.
 Mackerel:
  pack, California; Jan. 34, Feb. 31, Mar. 31,
      Apr. 27, May 32, June 36, July 30, Aug. 39, Sept. 31, Oct. 26.
 Menhaden:
  meal.
    chemical studies of lipoid extracts from
            ; Sept. 8.
    feeding studies with lipoid extracts from ; Oct. 7.
```

```
SPECIES (cont.)
 Mussel, fresh-water, shell industry of
     Arkansas; May 35.
 Oyster(s):
   bacteriological studies of conditioning ;
      Jan. 7.
   canned; Feb. 66, May 61, Nov. 25.
       ryland , decrease in prices of;
Feb. 16.
   Maryland
                  , shucked, preliminary
   Pacific
       study of correlation of pH and quality of;
       June 22.
 Pilchard (sardine), pack, California; Jan. 33,
Feb. 30, Mar. 30, Apr. 26, Oct. 25.
Rosefish, "perch," advertising and selling
           as; Feb. 65.
   pack, Alaska; Aug. 38, Sept. 31, Oct. 25.
   sockeye Oct. 42. fishery act, enforcement of;
   waste products; Aug. 50.
 Sardine(s) (also see Pilchard):
   Maine canning season changed; Apr. 30.
   scouting for from Navy blimp; Jan. 45. size regulations for ; Dec. 22.
   smoking, electrostatic; Feb. 1.
   super-sonic echo-ranging location of
       Jan. 1.
  Shad, season, 1947; May 18.
  Shark, biology of soupfin ; Jan. 47.
 Shrimp:
                   sizes; Sept. 35.
   Alabama
   Alaska:
     closed seasons; Aug. 56.
     regulations; May 61.
   canned:
    fill-of-container reduction denied; Aug. 57.
   freezing ____, notes on; Nov. 1. industry of Carolinas and Georgia; May 18.
   pack, Gulf; Jan. 33, Feb. 30, Mar. 30,
       Apr. 26, May 32, June 36, July 30,
Aug. 38, Oct. 26.
   plant inspection fees raised; May 61.
   production, South Atlantic; Jan. 27, Feb. 25,
       Mar. 24, Apr. 19, May 25, June 29,
       July 23.
  Tuna pack, California; Jan. 34, Feb. 31,
     Mar. 31, Apr. 27, May 32, June 36, July 30, Aug. 39, Sept. 31, Oct. 26.
  Whale:
   steaks; Mar. 37.
                        meat for human food;
   utilization of
       Mar. 37.
STOCKS (see COLD-STORAGE HOLDINGS)
SURPLUS PROPERTY; Mar. 56.
```

TECHNOLOGICAL FISHERY RESEARCH Boston, Mass., laboratory; Jan. 22, Feb. 21, Mar. 18, Apr. 14, May 20, June 25, July 18, Aug. 27, Sept. 21, Oct. 16, Nov. 9.

College Park, Md., laboratory; Jan. 22, Feb. 21, Mar. 18, Apr. 14, May 19, June 25, July 18, Aug. 27, Sept. 21, Oct. 16, Nov. 10, Dec. 19. DDT tests; Apr. 43.

Ketchikan, Alaska, laboratory; Jan. 23, Feb. 22, Mar. 18, Apr. 15, May 21,

TECHNOLOGICAL FISHERY RESEARCH (cont.) June 26, July 18, Aug. 28, Sept. 22, Oct. 16, Nov. 9, Dec. 20.  Mayaguez, P. R., laboratory; Feb. 20, Mar. 20, May 21, June 25, July 19, Aug. 28.  Mobile laboratories for ; May 1.  Seattle, Washington, laboratory; Jan. 23, Feb. 20, Mar. 20, Apr. 15, May 21, June 27, July 19, Aug. 28, Sept. 21, Oct. 17, Nov. 11, Dec. 19.  TENNESSEE VALLEY AUTHORITY lakes, catch increases in; Oct. 34.  THIAMINE and anti-thiamine factor in fishery products, studies on the content of; Aug. 13.  TIN; Mar. 56.  TINPLATE; Jan. 60.  TRANSPORTATION (see FREIGHT; REFRIGERA- TION)  TRAWLER(S) Storage pens, improve fish quality with shallower; Feb. 5. Handling Dec. 10.  TUNA (see SPECIES)  UGANDA (see FOREIGN FISHERY TRADE)  U. S. S. R. (see FOREIGN FISHERY TRADE)  UNION OF SOUTH AFRICA (see FOREIGN FISHERY TRADE)  UNITED KINGDOM (see FOREIGN FISHERY TRADE)  UNITED KINGDOM (see FOREIGN FISHERY TRADE)	UNITED STATES (cont.)  Fish supplies; Sept. 35, Nov. 14.  Fishery advisors to FAO conference, sends; Sept. 34.  Fishery resources; July 34.  National resources and foreign aid; Oct. 33.  VENEZUELA (see FOREIGN FISHERY TRADE)  VESSELS  Additions to the fleet of U. S. fishing; Jan. 37, Feb. 35, Mar. 33, May 34, June 28, July 32, Aug. 41, Sept. 34, Oct. 29, Nov. 12, Dec. 21.  Measurement of ; Dec. 37.  Surplus marine materials and; Apr. 30  VITAMIN A  Deterioration in fish livers and liver oils, studies on; Feb. 11, Apr. 5, May 7.  Estimations of extinction ratios and potency of 12 reduction plant oils; July 15.  Extracting methods for and oil from fishery products, studies on; Sept. 19.  Fur-seal oils, content of; Nov. 5.  Grayfish liver(s):  loss of vitamin A and stability in storage; Feb. 11.  relationship between body length and vitamin A in ; Sept. 1.  vitamin A potencies of oils from obtained by extraction with petroleum ether and by cooking with water; Sept. 19.  Procedures for the analysis of in fishery byproducts; Jan. 40.  Stocks and production of ; Jan. 36, Feb. 32, Mar. 32, Apr. 28, May 33.  Synthetic ; Oct. 32.  Ultraviolet absorption curves for using
ORGANIZATION)	sources; Aug. 22.
UNITED STATES Fish production in the, fluctuations in;	WHALING

WHALING

Conference; Jan. 44.

WHOLESALE (see PRICES)



Editorial Assistant -- Ruth V. Keefe

July 8.
Fish purchases by Jan. 47, Feb. 41, Apr. 31, June 44, Oct. 38, Nov. 19, Dec. 23.

Illustrator -- Gustaf T. Sundstrom

Compositor -- Camille P. Elias

#### GUIDES TO HANDLING FROZEN FOODS

Proper handling is the decisive factor in developing and retaining a volume-getting frozen food department, reports the November 25 <u>Quick Frozen Foods</u> (Retail Pocket Edition). Next to the consumer, the retailer is the most important factor in the expansion of frozen foods because he is next to the consumer. Consumers, in ever-increasing numbers, want and buy frozen foods-but only where they know that quality is assured. Packers lavish care on their frozen foods to assure quality. But results of this care are dissipated if the products are permitted to deteriorate in the store--sales and customers are lost.

Frozen foods are profit-making foods. They win customers and make sales. It pays to take care of them. Here are 10 guides to the proper store handling of frozen foods--10 direction signs to the successful winning of customers and making of sales.



 Nothing invigorates you like sunshine and fresh outdoor air, but they're death to frozen foods. Get that delivery off the sidewalk fast!



 Give customers maximum choice, Keep cabinets well-stocked at all times. Remember, the bigger the display, the bigger it sells.



 Rush the delivery to zero storage. Don't give it a chance to thaw. Frozen foods which defrost and are refrozen lose taste appeal and customers.



 Be a good housekeeper. Keep cabinets tidy. Work over them often. Customers buy only what they can see--let them see what you have.



 Frozenfoods suffer damage when permitted to stand on the floor. Protect quality--get them off the floor and into the cabinet fast!



 The plateline is the defrosting line; stock nothing above it. And keep packages back from the glass front to let the cold air circulate.



 Don't leave anything in long enough to become frost-covered. Rofate stocks. Always take out old packages and place them on top of the new!



 Frozen foods become incurably ill above zero temperature. Keepthat destructive fever down. Check cabinet temperature every morning and every night.



 Customers won't buy torn, crushed, or frost-covered packages. So take your choice--either you'll get rid of them or they'll get rid of your customers.



Stocks don't sell in the backroom.
 Order in just what you need between deliveries and a small reserve of fast-movers to avoid out-of-stocks.



