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Bruce L. Wing and Nancy [illegible]

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NOAA Technical Report NMFS SSRF- 710

Midwater Invertebrates from the Southeastern Chukchi Sea: Species and Abundance in Catches Incidental to Midwater Trawling Survey of Fishes, September-October 1970

Bruce L. Wing and Nancy Barr

April 1977

U.S. DEPARTMENT OF COMMERCE
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Midwater Invertebrates from the Southeastern Chukchi Sea: Species and Abundance in Catches Incidental to Midwater Trawling Survey of Fishes, September-October 1970

BRUCE L. WING and NANCY BARR[1]

ABSTRACT

Midwater invertebrates were collected in the southeastern Chukchi Sea. A 1.8-m Isaacs-Kidd midwater trawl was used at 20 stations to collect 81 semiquantitative samples; a 3-m otter trawl was used at one station to collect two qualitative samples. Data tables list the species collected and their numbers, size range, and displacement volumes for the midwater trawl stations and a species list only for the otter trawl station. One hundred three species of invertebrates were identified from the midwater trawl samples, and 33 species were identified from the otter trawl samples. Amphipods were the most diverse group (40 species) and decapod shrimps the next most diverse (14 species). Numbers of species in a sample varied from 4 to 40 (mean 17). After removal of jellyfishes, the most important contributors in numbers and volume to the catches were euphausiids and mysids.

INTRODUCTION

The Western Beaufort Sea Ecological Cruises (WEBSEC) were a sequence of oceanographic cruises sponsored by the U.S. Coast Guard to assess the Alaskan arctic marine environment and biota before major industrial development. The Coast Guard enlisted the efforts of federal, state and university research groups for the program, and the National Marine Fisheries Service contributed to the first three cruises with studies of zooplankton, midwater invertebrates, and fishes.

The intent of the first cruise, WEBSEC-70, which took place during September and October 1970, was to examine the arctic coast from Barrow eastward to Barter Island. Extremely heavy ice conditions in mid-September 1970 prevented the Icebreaker *Glacier* from working in the Beaufort Sea; therefore, an alternative area, the southeastern Chukchi Sea between Point Lay and Cape Lisburne (Fig. 1) was surveyed between 25 September and 17 October. Preliminary results of physical, chemical, geological, and biological investigations for WEBSEC-70 were reported by Ingham et al. (1972); and reports were later published by Quast (1974) and Wing (1974).

This report presents data on the invertebrates taken in midwater trawls made to collect fishes from 25 September to 17 October 1970. The data are presented in tabular form and are not interpreted, although some apparent sampling anomalies are discussed. The tables provide a list of species found, numbers of individuals taken, and linear size range and displacement volume of the specimens of each species. These data are the first attempts to quantitatively assess macroplanktonic and micronektonic invertebrates in the southeastern Chukchi Sea.

METHODS

A 1.8-m Isaacs-Kidd midwater trawl was used to sample at 20 stations for a total of 81 tows (Fig. 1, Appendix Table 1). The trawl had a forward section of 38-mm bar mesh, a rear section of 6-mm bar mesh, and a cod end of 3-mm bar mesh. Cross-sectional areas were calculated to be 2.87 m^2 at the mouth, 1.55 m^2 at the beginning of the 6-mm mesh, and 0.13 m^2 at the beginning of the 3-mm mesh. The depth of tow was recorded by a bathykymograph attached to the bottom of the depressor. Tows were standardized for a length of 3.7 km at an estimated vessel speed of 4 knots. At least four tows were made at each of the 20 stations, two on one bearing and two on the reciprocal bearing. Trawling was generally done at night in areas relatively free of ice. The choice of sampling depths was dependent on water depths and on whether or not the samples were intended to be replicates or were to examine depth distributions (Quast 1974).

At one station (No. 8—Fig. 1) two trawls were made with a 3-m, 38-mm mesh otter trawl (shrimp try net) to collect bottom fishes and invertebrates.

Large scyphomedusans and most hydromedusans taken in the trawls were discarded in the field after the sizes and numbers of each species of scyphomedusan and the volumes of hydromedusans had been recorded. The other invertebrates were preserved in 5% Formalin.

In preparation for examining the invertebrates in the laboratory, formalin was washed from the samples and

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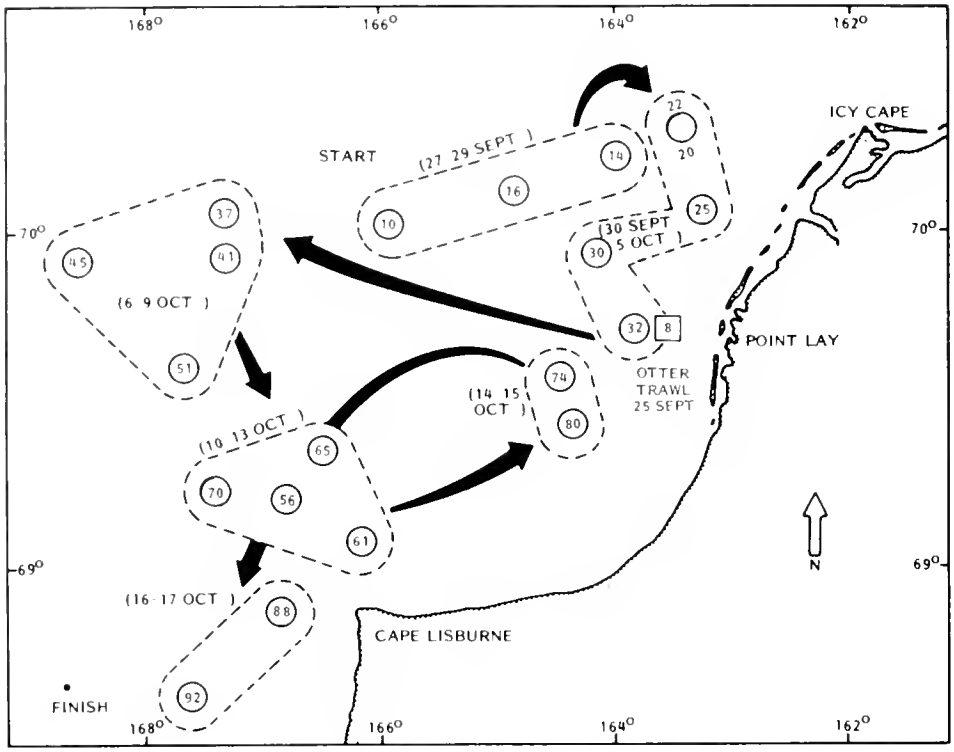

Figure 1.—Positions and sequence of trawling stations during WEBSEC-70. Circles indicate stations where Isaacs-Kidd midwater trawl was used; squares indicate otter trawl was used. (From Quast, 1972.)

they were stored in 40% isopropyl alcohol. Each sample was examined first in its entirety for rare species. For small samples, total counts were made for each species of invertebrate, and maximum and minimum size ranges were recorded. When large numbers of euphausiids or mysids were present, the collections were subsampled with a Folsom plankton splitter (McEwen et al. 1954). The subsamples always contained more than 500 individuals.

Identifications (to species when possible) were based on the following taxonomic references: Banner (1948a, 1948b, 1950, 1954); Barnard (1958, 1962a, 1962b, 1962c, 1964, 1973); Boden et al. (1955); Bowman (1973, 1960); Brodskii (1950); Coe (1904, 1905); Dawson (1971); Dunbar (1954); Gurjanova (1951); Holmquist (1959, 1965); Leung (1971); G. E. MacGinitie (1955); N. MacGinitie (1959); Naumov (1960); Rathbun (1904); Sars (1895, 1900); Shoemaker (1955); Vanhöffen (1906); and Zimmer (1926). Except for decapod shrimps, lengths are greatest body lengths to the nearest millimeter and do not include antennae, rostra, or tentacles. Decapod shrimp lengths are for the carapace (insertion of eye to dorsal posterior margin). Displacement volumes to the nearest 0.5 ml were taken on the drained lots of each species sorted from a sample. The volumes were measured with 10-, 25-, 100-, or 500-ml graduated cylinders. All sorting and measuring was done 1-4 yr after the specimens were collected; thus shrinkage due to preservation was stabilized. Displacement volumes were obtained only for samples processed in the last 4 mo of sorting.

RESULTS

The 81 samples from the 20 midwater trawl stations contained 103 specimens of invertebrates (Table 1). Amphipods had the greatest number of species (35) and decapod shrimps the second largest (14). The number of invertebrate species per sample ranged from 4 to 40 (mean, 17). The scyphomedusans and hydromedusans discarded in the field contributed most to the volume of the catches. In the preserved material, euphausiids and mysids were the most abundant invertebrates and the major contributors to the biomass (Appendix Table 2).

Thirty-three species of invertebrates were identified from the two samples taken by the 3-m otter trawl at station 8 (Table 2). The list of invertebrate species from station 8 plus the benthic invertebrates taken in the midwater trawl samples supplement the more extensive lists of benthic invertebrates from the southeastern Chukchi Sea given by McCauley (1964), Sparks and Pereyra (1966), and Naidu and Sharma (1972). Three species of gastropods, 4 bivalves, 2 mysids, 2 isopods, 12 amphipods, 9 decapod crustaceans, and 1 ascidian were collected by the otter trawl.

DISCUSSION

The three sizes of meshes in the Isaacs-Kidd midwater trawl used in the sampling were 3-mm cod end, 6-mm rear section, and 38-mm forward section. Some of the invertebrates captured were so small that many of them undoubtedly passed through the larger meshes. Al-

Table 1.—List of invertebrates collected with 1.8-m (6-foot) Isaacs-Kidd midwater trawl in the southeastern Chukchi Sea during WEBSEC-70, 25 September-17 October 1970.

PHYLUM CLASS Subclass Order *Genus species*	Stations where collected
COELENTERATA	
HYDROZOA	
Aglantha digitale (O. F. Müller)	All stations
Cuspidella mertensii (Brandt)	10, 14, 16, 20, 25, 30, 32, 37, 41, 45, 51, 56, 65, 70, 74, 80, 88
SCYPHOZOA	
Aurelia aurita (Linneaus)	10, 14, 16, 25, 30, 32, 37, 41, 45, 51, 56, 65, 70, 74, 80, 88, 92
Chrysaora melanaster Brandt	10, 16, 20, 22, 25, 30, 37, 41, 45, 51, 56, 61, 65, 70, 74, 80, 92
Cyanea capillata (Linneaus)	All stations
ANTHOZOA	
Stomphia sp.	16, 20, 30, 37, 41, 65, 80, 88, 92
RHYNCHOCOELA	
NEMERTINEA	
Cerebratulus sp. (? *herculeus* Coe)	88
MOLLUSCA	
GASTROPODA	
Clione limacina (Phipps)	All stations
Spiratella helicina (Phipps)	14
Margarites sp.	88
Natica clausa Broderip and Sowerby	88
Buccinum sp. (? *elatius* (Middendorf))	65
BIVALVIA	
Nucula tenuis (Montagu)	88
SIPUNCULOIDEA	
SIPUNCULOIDEA	
Phascolosoma sp.	80, 88
ECHIUROIDEA	
ECHIURIDA	
Echiurus echiurus alaskanus Fisher	10, 14, 30, 32
ANNELIDA	
CHAETOPODA	
Polychaeta	
Antinoe badia Theel	65, 70
A. sarsi Malmgren	70
Eusyllis (?) sp.	37
Nephtys paradoxa Malmgren	88
Glycinde sp.	37, 45
Lumbrineris fragilis (O. F. Müller)	61, 65
L. similabris (Treadwell)	65, 88
Axiothella (?) sp.	37, 88
Chone cincta Zachs	45

PHYLUM CLASS Subclass Order *Genus species*	Stations where collected
ARTHROPODA	
CRUSTACEA	
Copepoda	
Calanoida	
Calanus cristatus Krøyer	10, 56, 65, 70
C. finmarchicus (Gunnerus) *s.l.*	10, 51, 56, 65
Eucalanus bungii Giesbrecht	56
Malacostraca	
Mysidacea	
Mysis litoralis (Banner)	20, 22, 25, 30, 32, 37, 45, 51, 56, 61, 65, 70, 74, 80, 88, 92
M. oculata (Fabricius)	20, 25, 30, 32, 37, 45, 51, 56, 61, 65, 70, 74, 80, 88, 92
M. polaris Holmquist	10, 41
Acanthomysis pseudomacropsis (Tattersall)	16, 32, 51, 56, 61, 65, 70, 80, 88, 92
Acanthomysis sp.	45, 56, 61, 65, 70, 80
Neomysis rayii (Murdock)	10, 16, 20, 22, 25, 32, 41, 45, 51, 56, 61, 65, 70, 74, 80, 88, 92
Pseudomma truncatum Smith	88
Cumacea	
Diastylis glabra (C. Zimmer)	20, 30, 32, 61, 74, 80, 88, 92
D. (?) *lepechini* C. Zimmer	32, 61, 80
Eudorella emarginata (Krøyer)	88
Leucon nasica (Krøyer)	32, 70
Isopoda	
Dajidae	32, 45, 56, 80, 88
Amphipoda	
Hyperia galba (Montagu)	37, 45, 51, 56, 80, 88, 92
H. medusarum (Müller)	10, 14, 16, 20, 22, 30, 45, 56, 65, 70, 74, 80, 88, 92
Hyperoche medusarum (Krøyer)	56, 92
Parathemisto libellula (Lichtenstein)	10, 41, 51, 56, 61, 88
Acanthonotozoma serratum (Fabricius)	32, 56, 61, 88
Ampelisca macrocephala Lilljeborg	30, 32, 65, 74, 80, 88
Byblis gaimardii (Krøyer)	65, 70, 80
Atylus bruggeni (Gurjanova)	32, 61, 80
Apherusa glacialis (Hansen)	10, 14, 16, 20, 25
Protomedia stephensenii Shoemaker	30, 32, 65, 74, 80, 88
Rhachotropis aculeata (Lepechin)	32, 37, 61, 65, 70, 80, 88
R. oculata (Hansen)	30, 92
Gammaracanthus loricatus (Sabine)	37
Gammarus wilkitzkii Birula	10, 14, 20, 22, 25, 30, 37, 74, 80
G. zaddachi Sexton	14, 80
Maera loveni (Bruzelius)	56, 61, 70
M. sp. (? *danae* (Stimpson))	10
Melita formosa Murdoch	32, 61, 65, 70, 80, 88
M. sp. (? *desdichada* Barnard)	56, 61, 65, 70, 88

Table 1.—Continued.

PHYLUM CLASS Subclass Order *Genus species*	Stations where collected
Pontoporeia femorata Krøyer)	30, 70
Priscilla sp. (? *armata* (Boeck))	20
Erichthonius tolli Bruggen	16, 80
Ischyrocerus latipes Krøyer	80
Anonyx lilljeborgi Boeck	32, 61
A. nugax (Phipps)	30, 61, 74, 80, 88
Hippomedon propinquus Sars	30, 32, 61, 70, 80
Pseudalibrotus glacialis Sars	10, 14, 16, 20, 25, 45, 74, 80
P. nansenii Sars	10, 14, 20, 22, 25, 37, 74, 80, 88
Tryphosa sp.	30
Acanthostepheia behringiensis (Lockington)	30, 32, 37, 74, 80
Monoculodes borealis Boeck	32, 45, 61, 65, 74, 80
M. sp. (? *diamesus* Gurjanova)	32
Paraphoxus milleri (Thorsteinson)	20, 22, 30, 32, 70, 74
Pleustes panopla (Krøyer)	32, 61
Syrrhoe crenulata Goes	30, 32, 65
Euphausiacea	
Thysanoessa inermis (Krøyer)	10, 16, 20, 22, 25, 30, 32, 37, 41, 45, 51, 56, 65, 70, 74, 80, 88, 92
T. longipes Brandt	45, 70, 74, 80, 88
T. raschii (M. Sars)	All stations
Decapoda	
Pandalus borealis Krøyer	41, 70
P. goniurus Stimpson	10, 14, 16, 30, 32, 37, 41, 45, 51, 57, 61, 65, 70, 74, 80, 88, 92
Pandalus sp.	10
Eualus fabricii (Krøyer)	32, 61, 65, 74, 80, 88

PHYLUM CLASS Subclass Order *Genus species*	Stations where collected
E. gaimardii (M. Edwards)	10, 16, 32, 45, 51, 56, 61, 65, 70, 74, 80, 88, 92
E. macilenta (Krøyer)	32, 41, 61, 65, 70
E. stoneyi (Rathbun)	10, 45, 56, 70, 88, 92
Eualus sp.	70, 74, 80, 88
Lebbeus groenlandicus (J. C. Fabricius)	61
Hippolytidae[a] unidentified	10, 74
Argis lar (Owen)	30, 32, 37, 56, 61, 65, 70, 74, 80, 92
A. crassa (Rathbun)	32, 61
Crangon communis Rathbun	32, 70
C. dalli Rathbun	56, 61, 88, 92
Crangon sp. (? *intermedia* Stimpson)	61
Sclerocrangon boreas (Phipps)	32
Chionoecetes opilio (O. Fabricius)	80
Brachyura (zoeae)[b]	10, 14, 16, 20, 22, 25, 37
Brachyura (megalopae)	All stations
Pagurus trigonocheirus (Stimpson)	88
Paguridea (zoeae)[c]	10, 14, 16, 20, 22, 25, 30, 32, 37, 41, 45, 51, 56, 61, 65, 70, 74, 88, 92
Paguridae (glaucothoe)[c]	10, 14, 16, 25, 30, 32, 37, 41, 45, 51, 56, 61, 65, 70, 74, 80, 88, 92
CHAETOGNATHA	
CHAETOGNATHA	
Sagitta elegans Verrill	10, 37, 51, 56, 65, 70, 74, 88, 92
ECHINODERMATA	
OPHIUROIDEA	88

[a]Family name. Parasitic on mysids.
[b]Family name.
[c]Tribe name. Within the brachyuran larvae, no attempt was made to separate species. Searches through selected samples yielded both *Chionocetes opilio* (O. Fabricius) and *Hyas coarctatus* Leach.
[d]Subtribe name. Within the paguridean, no attempt was made to distinguish between zoeae of Paguridae (family name) and Lithodidae (family name). Glaucothoe were all Paguridae.
[e]Genus and species undetermined.

Table 2.—Partial listing of invertebrates from otter trawl samples off Point Lay, Alaska.

CLASS Subclass *Genus species*	CLASS Subclass *Genus species*
GASTROPODA	*Protomedia fasciata* Krøyer
Buccinum scalariforme Möller	*Ischyrocerus latipes* Krøyer
Margaritopsis pribiloffensis (Dall)	*I. megalops* Sars
Dendronotus dalli Bergh	*Eruthonius difformis* M. Edwards
BIVALVIA	*E. tolli* Bruggen
Musculus discors (Linnaeus)	*Pleustes panopla* (Krøyer)
Yoldia scissurata Dall	*Rhacotropis aculeata* (Lepechin)
Serripes groenlandicus (Bruggen)	*Dulichia spinosissima* Krøyer
Mya truncata Linnaeus	Decapoda
MALACOSTRACA	*Pandalus goniurus* Stimpson
Mysidacea	*Eualus fabricii* (Krøyer)
Mysis oculata and/or *M. litoralis*	*E. gaimardii* (M. Edwards)
Neomysis rayii (Murdock)	*Lebbeus groenlandicus* (J. C. Fabricius)
Isopoda	*Spirontocaris phippsii* (Krøyer)
Tecticeps alaskensis Richardson	*Argis lar* (Owen)
Synidotea bicuspida (Owen)	*Sclerocrangon boreas* (Phipps)
Amphipoda	*Hyas coarctatus* Leach
Anonyx nugax (Phipps)	*Pagurus trigonocheirus* (Stimpson)
Tryphosa sp.	ASCIDIACEA
Acanthostepheia behringiensis (Lockington)	*Boltenia ovifera* (Linnaeus)
Paroediceros lynceus (M. Sars)	

though the resulting catches should be considered only as semiquantitative, they do provide indicators of the kinds and general quantities of midwater invertebrates present in the southeastern Chukchi Sea.

The terms mesoplankton, macroplankton, micronekton, and benthos may be applied to various grouping of invertebrates collected with the Isaacs-Kidd midwater trawl in the Chukchi Sea during WEBSEC-70. None of the terms are precisely defined, but they provide criteria for evaluation of catches by those who may wish to compare the species and quantities reported in Appendix Table 2 with other sets of data.

Mesoplankters are zooplankters quantitatively retained by a 0.2-mm mesh net and having a total body length less than 10 mm. Large mesoplankters are those with a body length greater than 1 mm. The midwater trawl used during WEBSEC-70 did not quantitatively retain large mesoplankters, as evidenced by the low frequency and small numbers of copepods *Calanus finmarchicus s.l.* and *Eucalanus bungii* and the chaetognath *Sagitta elegans* in the catches. These mesoplankters were widely distributed and abundant in plankton samples taken with a 0.57-mm mesh plankton net during the same cruise (Wing 1974).

Animals of the macroplankton and micronekton are large enough to be identified with the naked eye. There is no upper size limit and the lower size limit (5-10 mm long) is dependent on the taxa involved and the knowledge of the researcher. Animals of the micronekton are 10-100 mm long and can swim well enough to avoid standard 1-m plankton nets. Because the swimming ability of crustaceans, cephalopods, and fishes increases with size, macroplankton and micronekton are not precisely defined or clearly separable categories. Within the size range of macroplankton and micronekton, the midwater trawl used during WEBSEC-70 would collect quantitatively only the large scyphomedusans and the hydromedusan *Cuspidella mertensii*. Although herding occurs, much of the macroplankton and micronekton passes through the 6- and 38-mm meshes at the front of the net. Many of the hydromedusan *Aglantha digitale*, the euphausiids, and the mysids undoubtedly passed through the net, although these were the most abundant organisms in the catches (Appendix Table 2). The retention of macroplankton- and micronekton-sized medusans, amphipods, mysids, euphausiids, and shrimps by the midwater trawl used during WEBSEC-70 indicates that they were quite abundant and important in the trophic structure of the area but does not measure their abundance.

Many of the species collected by the midwater trawl in the Chukchi Sea are considered to be benthic animals, i.e., they live on (epibenthos), in (endobenthos), or just off (hyperbenthos) the bottom. Many of the benthic animals, especially polychaetes, mysids, cumaceans, gammarid amphipods, and shrimps, may leave the bottom at night and become part of the macroplankton and micronekton. Except for stations 8 and 14 (Table 1), all sampling was at night: consequently some benthic animals were well represented in the collection.

The shallowness of the area (22-54 m) sampled by WEBSEC-70 contributed to the occurrence of benthic animals in the midwater trawl catches. Benthic animals, which rise off bottom at night, are likely to contribute more to the macroplankton and micronekton in shallow waters than in deeper waters. Additionally, wave-induced turbulence and ice rafting may have placed in suspension some endobenthos (i.e., benthic snails, sipunculids, and echiuroids), which would not normally be off bottom. The net struck bottom only on station 88. Samples from that station contained two species of snails (*Margarites* sp. and *Natica clausa*), a clam (*Nucula*

tenuis), adult hermit crabs (*Pagurus* sp.), and brittle stars (Ophiuroidae) in addition to more usual planktonic species (Table 1, Appendix Table 2).

SUMMARY

One hundred three species of invertebrates were taken in Isaacs-Kidd midwater trawl samples from the southeastern Chukchi Sea during WEBSEC-70. Thirty-three species were taken by otter trawl. Numbers of invertebrate species in a midwater trawl sample varied from 4 to 40 (mean, 17). Amphipods were the most varied group (40 species) and shrimps the next most varied group (14 species).

After removal of hydroid and scyphozoan jellyfishes, euphausiids and mysids contributed the most to the biomass and numbers of the midwater invertebrates retained by the midwater trawl.

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Appendix Table 1.—Station data for WEBSEC-70 fish trawl stations (Quast 1972).

Station	Data and inclusive time (Bering Standard)		Approximate position		Depth of water (m)	Hauls		
			Lat. N	Long. W		No.	Type[1]	and depths (m)[2]
8	Sept. 25	(1115-1253)	69°45′	163°34′	26	2	B	26, 26
10	Sept. 27	(1917-2207)	70°04′	165°57′	44	4	R	11
14	Sept. 29	(0518-0817)	70°17′	165°02′	51	4	R	11
16	Sept. 29	(1721-2002)	70°16′	163°58′	53	4	R	11
20	Sept. 30	(1740-2025)	70°20′	163°24′	42	4	R	12
22	Oct. 1	(1734-2103)	70°20′	163°25′	35	4	R	12
25	Oct. 2	(1731-2036)	70°07′	163°14′	33	4	R	12
30	Oct. 4	(1756-2137)	69°58′	164°07′	31	5	M	2, 5, 10, 13, 19
32	Oct. 5	(1831-2104)	69°48′	163°49′	26	4	R	12
37	Oct. 6	(1727-1956)	70°07′	167°36′	49	4	R	12
41	Oct. 7	(1752-2014)	69°57′	167°31′	44	4	M	10, 10, 12, 22
45	Oct. 8	(1816-2058)	69°57′	168°38′	44	4	M	2, 9, 13, 20
51	Oct. 9	(1744-2024)	69°36′	167°36′	48	4	M	2, 7, 14, 20
56	Oct. 10	(1940-2229)	69°14′	166°53′	44	4	M	2, 9, 18, 23
61	Oct. 11	(1755-2015)	69°05′	166°13′	29	4	M	8, 13, 16, 23
65	Oct. 12	(1755-2016)	69°21′	166°45′	36	4	M	8, 13, 16, 22
70	Oct. 13	(1735-1958)	69°12′	167°38′	39	4	M	8, 13, 18, 22
74	Oct. 14	(1723-1946)	69°35′	164°29′	22	4	M	2, 8, 13, 18
80	Oct. 15	(1814-2055)	69°27′	164°43′	30	4	M	2, 8, 13, 22
88	Oct. 16	(1917-2205)	68°55′	166°47′	45	4	M	2, 11, 24, 40-45
92	Oct. 17	(1733-2014)	68°36′	167°41′	54	4	M	2, 13, 17, 33

Hauls approximately 30 min at depth; all hauls except those at station 8 were made with a 6-foot diameter Isaacs-Kidd trawl with 76-mm (stretched measurement) webbing and 13-mm liner. Hauls at station 8 were made on bottom with a shrimp try net, with 10-foot opening and 38-mm webbing. M = multidepth hauls with 6-foot Isaacs-Kidd trawl, B = shrimp try net on bottom, and R = replicated hauls at single depth with 6-foot Isaacs-Kidd trawl.

[2] Depth of footrope or depressor.

Appendix Table 2.—Catches of invertebrates by 1.8-m Isaacs-Kidd midwater trawl in the southeastern Chukchi Sea.

NOTES

Mysis litoralis and *Mysis oculata* both occur in the samples but were not tallied separately and therefore are listed as *Mysis oculata/litoralis*.

Size ranges are total body length exclusive of antennae, rostra and tentacles for most animals except carapace length of decapod shrimp and bell diameter of medusans.

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 10 DATE: SEP 27 1970
LATITUDE: 70 4 0 NORTH LONGITUDE: 165 57 0 WEST
HAUL: 1 DEPTH: 11 METERS TIME: 19:50

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	20.0
CUSPIDELLA MERTENSII	2	-- - --	--
CYANEA CAPILLATA	2	-- - --	10.0
ECHIURUS ECHIURUS ALASKANUS	1	-- - --	--
CLIONE LIMACINA	14	-- - --	--
SAGITTA ELEGANS	3	20.00- 24.00	--
CALANUS FINMARCHICUS S.L.	5	-- - --	--
NEOMYSIS RAYII	1	-- - 29.00	--
PARATHEMISTO LIBELLULA	2	14.00- 21.00	--
PSEUDALIBROTUS GLACIALIS	2	12.00- 14.00	--
PSEUDALIBROTUS NANSENI	8	8.00- 17.00	--
THYSANOESSA INERMIS	94	8.00- 20.00	4.0
THYSANOESSA RASCHII	490	7.00- 24.00	12.0
PANDALUS GONIURUS	147	2.00- 15.00	21.0
PANDALUS SP.	6	-- - 3.00	--
HIPPOLYTIDAE SP.	2	-- - 3.00	--
BRACHYURA - MEGALOPA	748	-- - --	10.0
PAGURIDEA ZOEA	127	-- - --	--
PAGURIDEA GLAUCOTHOE	5	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 10 DATE: SEP 27 1970
LATITUDE: 70 4 0 NORTH LONGITUDE: 165 57 0 WEST
HAUL: 2 DEPTH: 11 METERS TIME: 20:38

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CUSPIDELLA MERTENSII	6	-- - --	--
CHRYSAORA MELANASTER	8	150.00-300.00	--
CYANEA CAPILLATA	16	40.00-200.00	--
ECHIURUS ECHIURUS ALASKANUS	4	-- - --	--
CLIONE LIMACINA	6	-- - --	--
CALANUS FINMARCHICUS S.L.	1	-- - 4.00	--
NEOMYSIS RAYII	4	29.00- 35.00	--
HYPERIA MEDUSARUM	2	11.00- 18.00	--
GAMMARUS WILKITZKII	1	-- - 14.00	--
MAERA SP (? DANAE)	1	-- - 15.00	--
PSEUDALIBROTUS GLACIALIS	1	-- - 12.00	--
PSEUDALIBROTUS NANSENI	1	-- - 17.00	--
THYSANOESSA INERMIS	2260	10.00- 25.00	141.1
THYSANOESSA RASCHII	870	8.00- 25.00	35.3
PANDALUS GONIURUS	138	3.00- 14.50	42.5
EUALUS GAIMARDII	2	6.50- 7.00	0.5
BRACHYURA - MEGALOPA	370	-- - --	--
PAGURIDEA ZOEA	120	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 10 DATE: SEP 27 1970
LATITUDE: 70 4 0 NORTH LONGITUDE: 165 57 0 WEST
HAUL: 3 DEPTH: 11 METERS TIME: 21:25

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	14.1
CUSPIDELLA MERTENSII	4	-- - --	--
AURELIA AURITA	1	-- - 60.00	--
CYANEA CAPILLATA	8	60.00-220.00	--
ECHIURUS ECHIURUS ALASKANUS	3	-- - --	--
CLIONE LIMACINA	4	-- - --	--
NEOMYSIS RAYII	1	-- - 30.00	--
APHERUSA GLACIALIS	1	-- - 12.00	--
GAMMARUS WILKITZKII	3	20.00- 23.00	--
PSEUDALIBROTUS NANSENI	3	11.00- 20.00	--
THYSANOESSA INERMIS	1531	10.00- 22.00	--
THYSANOESSA RASCHII	747	10.00- 20.00	96.8
PANDALUS GONIURUS	152	3.00- 13.00	22.0
EUALUS GAIMARDII	1	-- - 6.00	--
EUALUS STONEYI	1	-- - 8.00	0.4
HIPPOLYTIDAE SP.	1	-- - 2.50	--
BRACHYURA - MEGALOPA	137	-- - --	--
PAGURIDEA ZOEA	100	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 10 DATE: SEP 27 1970
LATITUDE: 70 4 0 NORTH LONGITUDE: 165 57 0 WEST
HAUL: 4 DEPTH: 11 METERS TIME: 22:07

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	18.0
CUSPIDELLA MERTENSII	1	-- - --	--
AURELIA AURITA	1	-- - 60.00	--
CHRYSAORA MELANASTER	1	-- - 90.00	--
CYANEA CAPILLATA	9	40.00-180.00	--
ECHIURUS ECHIURUS ALASKANUS	17	-- - --	--
CLIONE LIMACINA	5	-- - --	--
SAGITTA ELEGANS	2	-- - --	--
CALANUS CRISTATUS	1	-- - 9.00	--
MYSIS POLARIS	1	-- - --	--
NEOMYSIS RAYII	2	31.00- 37.00	--
APHERUSA GLACIALIS	1	-- - 12.00	--
PSEUDALIBROTUS GLACIALIS	0	10.00- 19.00	--
PSEUDALIBROTUS NANSENI	3	-- - --	--
THYSANOESSA INERMIS	287	12.00- 26.00	--
THYSANOESSA RASCHII	213	9.00- 22.00	--
PANDALUS GONIURUS	207	3.00- 14.00	--
BRACHYURA - ZOEA	1	-- - --	--
BRACHYURA - MEGALOPA	130	-- - --	--
PAGURIDEA ZOEA	70	-- - --	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 14 DATE: SEP 29 1970
LATITUDE: 70 17 0 NORTH LONGITUDE: 165 2 0 WEST
HAUL: 1 DEPTH: 11 METERS TIME: 05:48

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	350.0
CUSPIDELLA MERTENSII	6	-- -120.00	--
AURELIA AURITA	1	-- - 60.00	--
CYANEA CAPILLATA	3	30.00-220.00	--
ECHIURUS ECHIURUS ALASKANUS	1	-- - --	--
CLIONE LIMACINA	1	-- - --	--
SPIRATELLA HELICINA	1	-- - --	--
HYPERIA MEDUSARUM	1	-- - 11.00	--
APHERUSA GLACIALIS	6	9.00- 10.00	--
GAMMARUS WILKITZKII	7	17.00- 36.00	1.5
GAMMARUS ZADDACHI	1	-- - 6.00	--
PSEUDALIBROTUS GLACIALIS	1	-- - 15.00	--
THYSANOESSA RASCHII	1	-- - 8.00	--
PANDALUS GONIURUS	1	-- - 11.00	0.8
BRACHYURA - ZOEA	9	-- - --	--
BRACHYURA - MEGALOPA	120	-- - --	--
PAGURIDEA ZOEA	45	-- - --	--
PAGURIDEA GLAUCOTHOE	2	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 14 DATE: SEP 29 1970
LATITUDE: 70 17 0 NORTH LONGITUDE: 165 2 0 WEST
HAUL: 2 DEPTH: 11 METERS TIME: 06:30

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	337.0
CUSPIDELLA MERTENSII	1	-- - 60.00	--
CYANEA CAPILLATA	2	80.00-120.00	--
CLIONE LIMACINA	1	-- - --	--
HYPERIA MEDUSARUM	1	-- - 19.00	--
PSEUDALIBROTUS NANSENI	3	16.00- 17.00	--
BRACHYURA - ZOEA	11	-- - --	--
BRACHYURA - MEGALOPA	39	-- - --	--
PAGURIDEA ZOEA	54	-- - --	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 14 DATE: SEP 29 1970
LATITUDE: 70 17 0 NORTH LONGITUDE: 165 2 0 WEST
HAUL: 3 DEPTH: 11 METERS TIME: 07:35

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	35.0
AURELIA AURITA	2	50.00- 80.00	--
CLIONE LIMACINA	5	-- - --	--
APHERUSA GLACIALIS	1	-- - 10.00	--
GAMMARUS ZADDACHI	1	-- - 27.00	--
PSEUDALIBROTUS GLACIALIS	1	-- - 13.00	--
PSEUDALIBROTUS NANSENI	1	-- - 19.00	--
BRACHYURA - ZOEA	22	-- - --	--
BRACHYURA - MEGALOPA	275	-- - --	3.6
PAGURIDEA ZOEA	118	-- - --	1.8
PAGURIDEA GLAUCOTHOE	18	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 14 DATE: SEP 29 1970
LATITUDE: 70 17 0 NORTH LONGITUDE: 165 2 0 WEST
HAUL: 4 DEPTH: 11 METERS TIME: 08:14

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	100.0
CUSPIDELLA MERTENSII	1	-- - 80.00	--
AURELIA AURITA	2	60.00- 70.00	--
CYANEA CAPILLATA	7	30.00-220.00	--
ECHIURUS ECHIURUS ALASKANUS	1	-- - --	--
CLIONE LIMACINA	1	-- - --	--
GAMMARUS WILKITZKII	1	-- - 24.00	--
THYSANOESSA RASCHII	1	-- - 8.00	--
BRACHYURA - ZOEA	22	-- - --	--
BRACHYURA - MEGALOPA	143	-- - --	2.3
PAGURIDEA ZOEA	454	-- - --	10.0
PAGURIDEA GLAUCOTHOE	21	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 16 DATE: SEP 29 1970
LATITUDE: 70 16 0 NORTH LONGITUDE: 163 58 0 WEST
HAUL: 1 DEPTH: 11 METERS TIME: 17:52

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	30.0
CUSPIDELLA MERTENSII	2	100.00-100.00	--
CHRYSAORA MELANASTER	2	120.00-120.00	--
CYANEA CAPILLATA	10	50.00- 90.00	--
CLIONE LIMACINA	7	-- - --	--
APHERUSA GLACIALIS	1	-- - 12.00	--
THYSANOESSA INERMIS	4	8.00- 21.00	--
THYSANOESSA RASCHII	31	8.00- 20.00	--
BRACHYURA - ZOEA	13	-- - --	--
BRACHYURA - MEGALOPA	220	-- - --	3.5
PAGURIDEA ZOEA	224	-- - --	5.0
PAGURIDEA GLAUCOTHOE	53	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 16 DATE: SEP 29 1970
LATITUDE: 70 16 0 NORTH LONGITUDE: 163 58 0 WEST
HAUL: 2 DEPTH: 12 METERS TIME: 18:29

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	200.0
CUSPIDELLA MERTENSII	2	100.00-100.00	--
CHRYSAORA MELANASTER	2	270.00-320.00	--
CYANEA CAPILLATA	16	70.00-200.00	--
STOMPHIA SP.	1	-- - --	--
NEOMYSIS RAYII	1	-- - 30.00	--
GAMMARUS WILKITZKII	1	-- - 35.00	--
THYSANOESSA RASCHII	1	-- - 20.00	--
BRACHYURA - MEGALOPA	3	-- - --	--
PAGURIDEA ZOEA	10	-- - --	--
PAGURIDEA GLAUCOTHOE	2	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 16 DATE: SEP 29 1970
LATITUDE: 70 16 0 NORTH LONGITUDE: 163 58 0 WEST
HAUL: 3 DEPTH: 12 METERS TIME: 19:14

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	150.0
CUSPIDELLA MERTENSII	1	-- -140.00	--
AURELIA AURITA	1	-- - 60.00	--
CHRYSAORA MELANASTER	3	230.00-270.00	--
CYANEA CAPILLATA	7	60.00-160.00	--
CLIONE LIMACINA	3	-- - --	--
NEOMYSIS RAYII	2	28.00- 30.00	--
HYPERIA MEDUSARUM	1	-- - 14.00	--
THYSANOESSA INERMIS	9	12.00- 21.00	--
THYSANOESSA RASCHII	9	16.00- 21.00	--
PANDALUS GONIURUS	1	-- - --	7.5
BRACHYURA - ZOEA	7	-- - --	--
BRACHYURA - MEGALOPA	17	-- - --	--
PAGURIDEA ZOEA	16	-- - --	--
PAGURIDEA GLAUCOTHOE	2	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 16 DATE: SEP 29 1970
LATITUDE: 70 16 0 NORTH LONGITUDE: 163 58 0 WEST
HAUL: 4 DEPTH: 11 METERS TIME: 20:02

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	2.0
CUSPIDELLA MERTENSII	2	-- -120.00	--
AURELIA AURITA	3	-- - 60.00	--
CHRYSAORA MELANASTER	2	160.00-200.00	--
CYANEA CAPILLATA	7	50.00-200.00	--
CLIONE LIMACINA	6	-- - --	--
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 15.00	--
NEOMYSIS RAYII	2	-- - 27.00	--
APHERUSA GLACIALIS	3	8.00- 10.00	--
ERICTHONIUS TOLLI	1	-- - 10.00	--
PSEUDALIBROTUS GLACIALIS	1	-- - 12.00	--
THYSANOESSA INERMIS	6	14.00- 17.00	--
THYSANOESSA RASCHII	29	8.00- 25.00	--
PANDALUS GONIURUS	2	7.00- 10.00	--
EUALUS GAIMARDII	1	-- - 9.00	--
BRACHYURA - ZOEA	41	-- - --	--
BRACHYURA - MEGALOPA	163	-- - --	--
PAGURIDEA ZOEA	189	-- - --	--
PAGURIDEA GLAUCOTHOE	11	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 20 DATE: SEP 30 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 24 0 WEST
HAUL: 1 DEPTH: 12 METERS TIME: 18:10

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	50.0
CUSPIDELLA MERTENSII	2	120.00-120.00	--
CHRYSAORA MELANASTER	5	220.00-225.00	--
CYANEA CAPILLATA	21	50.00-200.00	--
STOMPHIA SP.	1	-- - --	--
NEOMYSIS RAYII	6	26.00- 38.00	0.9
HYPERIA MEDUSARUM	1	-- - 19.00	0.4
GAMMARUS WILKITZKII	1	-- - 23.00	--
PSEUDALIBROTUS GLACIALIS	1	-- - 11.00	--
THYSANOESSA RASCHII	1	-- - 19.00	--
BRACHYURA - MEGALOPA	2	-- - --	--
PAGURIDEA ZOEA	1	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 20 DATE: SEP 30 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 24 0 WEST
HAUL: 2 DEPTH: 12 METERS TIME: 18:52

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	50.0
CUSPIDELLA MERTENSII	1	-- - --	--
CHRYSAORA MELANASTER	4	240.00-300.00	--
CYANEA CAPILLATA	8	70.00-200.00	--
CLIONE LIMACINA	10	-- - --	--
BRACHYURA - MEGALOPA	30	-- - --	--
PAGURIDEA ZOEA	20	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 20 DATE: SEP 30 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 24 0 WEST
HAUL: 3 DEPTH: 12 METERS TIME: 19:43

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	30.0
CHRYSAORA MELANASTER	4	240.00-280.00	--
CYANEA CAPILLATA	8	50.00-100.00	--
CLIONE LIMACINA	4	-- - --	--
BRACHYURA - MEGALOPA	5	-- - --	--
PAGURIDEA ZOEA	5	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 20 DATE: SEP 30 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 24 0 WEST
HAUL: 4 DEPTH: 12 METERS TIME: 20:25

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	30.0
CUSPIDELLA MERTENSII	1	-- - --	--
CHRYSAORA MELANASTER	3	250.00-390.00	--
CYANEA CAPILLATA	3	60.00- 90.00	--
CLIONE LIMACINA	4	-- - --	--
MYSIS OCULATA/LITORALIS	2	16.00- 25.00	--
NEOMYSIS RAYII	4	29.00- 45.00	--
DIASTYLIS GLABRA	1	-- - 18.00	--
APHERUSA GLACIALIS	2	10.00- 12.00	--
GAMMARUS WILKITZKII	1	-- - 23.00	--
PRISCILLINA SP (? ARMATA)	3	6.00- 7.00	--
PSEUDALIBROTUS NANSENI	3	13.00- 16.00	--
PARAPHOXUS MILLERI	9	7.00- 9.00	--
THYSANOESSA INERMIS	1	-- - 18.00	--
THYSANOESSA RASCHII	9	15.00- 23.00	--
PANDALUS GONIURUS	2	6.00- 7.00	--
BRACHYURA - MEGALOPA	34	-- - --	--
PAGURIDEA ZOEA	13	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 22 DATE: OCT 1 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 25 0 WEST
HAUL: 1 DEPTH: 11 METERS TIME: 18:04

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	150.0
CYANEA CAPILLATA	11	50.00-180.00	--
CLIONE LIMACINA	2	-- - --	--
NEOMYSIS RAYII	2	27.00- 30.00	--
PARAPHOXUS MILLERI	1	-- - 9.00	--
THYSANOESSA RASCHII	3	16.00- 17.00	--
BRACHYURA - MEGALOPA	4	-- - --	--
PAGURIDEA ZOEA	1	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 22 DATE: OCT 1 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 25 0 WEST
HAUL: 2 DEPTH: 11 METERS TIME: 18:48

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	150.0
CHRYSAORA MELANASTER	1	-- -320.00	--
CYANEA CAPILLATA	1	-- -110.00	--
CLIONE LIMACINA	3	-- - --	--
MYSIS OCULATA/LITORALIS	1	-- - 21.00	--
NEOMYSIS RAYII	1	-- - 28.00	--
THYSANOESSA INERMIS	3	19.00- 22.00	--
THYSANOESSA RASCHII	4	16.00- 17.00	--
BRACHYURA - MEGALOPA	5	-- - --	--
PAGURIDEA ZOEA	5	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 22 DATE: OCT 1 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 25 0 WEST
HAUL: 3 DEPTH: 11 METERS TIME: 20:20

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	100.0
CYANEA CAPILLATA	12	30.00-120.00	--
CLIONE LIMACINA	2	-- - --	--
NEOMYSIS RAYII	1	-- - 28.00	--
PSEUDALIBROTUS NANSENI	2	14.00- 15.00	--
THYSANOESSA INERMIS	2	-- - 21.00	--
THYSANOESSA RASCHII	3	7.00- 16.00	--
BRACHYURA - MEGALOPA	3	-- - --	--
PAGURIDEA ZOEA	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 22 DATE: OCT 1 1970
LATITUDE: 70 20 0 NORTH LONGITUDE: 163 25 0 WEST
HAUL: 4 DEPTH: 11 METERS TIME: 21:02

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	50.0
CHRYSAORA MELANASTER	1	-- -290.00	--
CYANEA CAPILLATA	5	40.00-200.00	--
CLIONE LIMACINA	2	-- - --	--
HYPERIA MEDUSARUM	1	-- - 14.00	--
GAMMARUS WILKITZKII	1	-- - 20.00	--
PARAPHOXUS MILLERI	1	-- - 7.00	--
THYSANOESSA INERMIS	2	-- - 20.00	--
THYSANOESSA RASCHII	3	15.00- 19.00	--
BRACHYURA - ZOEA	2	-- - --	--
BRACHYURA - MEGALOPA	2	-- - --	--
PAGURIDEA ZOEA	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 25 DATE: OCT 2 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 163 14 0 WEST
HAUL: 1 DEPTH: 12 METERS TIME: 18:01

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	100.0
CHRYSAORA MELANASTER	1	-- -280.00	--
CYANEA CAPILLATA	1	-- - 80.00	--
CLIONE LIMACINA	1	-- - --	--
MYSIS OCULATA/LITORALIS	8	19.00- 30.00	--
NEOMYSIS RAYII	1	-- - 38.00	--
APHERUSA GLACIALIS	1	-- - 13.50	--
THYSANOESSA INERMIS	6	18.00- 23.00	--
THYSANOESSA RASCHII	3	20.00- 22.00	--
BRACHYURA - MEGALOPA	24	-- - --	--
PAGURIDEA ZOEA	12	-- - --	--
PAGURIDEA GLAUCOTHOE	5	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 2S DATE: OCT 2 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 163 14 0 WEST
HAUL: 2 DEPTH: 11 METERS TIME: 18:46

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	100.0
CYANEA CAPILLATA	4	30.00-200.00	--
CLIONE LIMACINA	1	-- - --	--
MYSIS OCULATA/LITORALIS	9	18.00- 33.00	1.4
APHERUSA GLACIALIS	2	-- - --	--
GAMMARUS WILKITZKII	1	-- - 17.00	--
PSEUDALIBROTUS NANSENI	1	-- - 18.00	--
THYSANOESSA INERMIS	4	16.00- 22.00	--
THYSANOESSA RASCHII	33	15.00- 22.00	1.4
BRACHYURA - ZOEA	13	-- - --	--
BRACHYURA - MEGALOPA	65	-- - --	--
PAGURIDEA ZOEA	23	-- - --	--
PAGURIDEA GLAUCOTHOE	11	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 2S DATE: OCT 2 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 163 14 0 WEST
HAUL: 3 DEPTH: 12 METERS TIME: 19:32

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	16.0
AURELIA AURITA	3	60.00-100.00	--
CHRYSAORA MELANASTER	2	160.00-220.00	--
CLIONE LIMACINA	11	-- - --	--
MYSIS OCULATA/LITORALIS	14	18.00- 27.00	--
APHERUSA GLACIALIS	1	-- - 9.00	--
PSEUDALIBROTUS NANSENI	1	-- - 14.00	--
THYSANOESSA INERMIS	2	20.00- 21.00	--
THYSANOESSA RASCHII	23	15.00- 25.00	--
BRACHYURA - ZOEA	30	-- - --	--
BRACHYURA - MEGALOPA	200	-- - --	--
PAGURIDEA ZOEA	37	-- - --	--
PAGURIDEA GLAUCOTHOE	18	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 2S DATE: OCT 2 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 163 14 0 WEST
HAUL: 4 DEPTH: 11 METERS TIME: 20:36

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	50.0
CUSPIDELLA MERTENSII	1	-- - --	--
CHRYSAORA MELANASTER	2	180.00-300.00	--
CYANEA CAPILLATA	6	40.00- 80.00	--
CLIONE LIMACINA	4	-- - --	--
MYSIS OCULATA/LITORALIS	5	21.00- 32.00	--
NEOMYSIS RAYII	1	-- - 37.00	--
APHERUSA GLACIALIS	1	-- - 10.00	--
THYSANOESSA INERMIS	11	17.00- 24.00	--
THYSANOESSA RASCHII	27	15.00- 19.00	--
BRACHYURA - MEGALOPA	110	-- - --	--
PAGURIDEA ZOEA	29	-- - --	--
PAGURIDEA GLAUCOTHOE	11	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 30 DATE: OCT 4 1970
LATITUDE: 69 58 0 NORTH LONGITUDE: 164 7 0 WEST
HAUL: 1 DEPTH: 2 METERS TIME: 18:25

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	15.0
CYANEA CAPILLATA	3	70.00-200.00	--
CLIONE LIMACINA	4	-- - --	--
HYPERIA MEDUSARUM	1	-- - --	--
HIPPOMEDON PROPINQUUS	31	15.00- 20.00	--
PARAPHOXUS MILLERI	180	8.00- 10.00	--
THYSANOESSA INERMIS	1	-- - 20.00	--
THYSANOESSA RASCHII	1	-- - 15.00	--
BRACHYURA - MEGALOPA	4	-- - --	--
PAGURIDEA ZOEA	28	-- - --	--
PAGURIDEA GLAUCOTHOE	2	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 30 DATE: OCT 4 1970
LATITUDE: 69 58 0 NORTH LONGITUDE: 164 7 0 WEST
HAUL: 2 DEPTH: 5 METERS TIME: 19:04

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	1.0
AURELIA AURITA	1	-- - 90.00	--
CHRYSAORA MELANASTER	2	190.00-330.00	--
CYANEA CAPILLATA	9	30.00-130.00	--
CLIONE LIMACINA	7	-- - --	--
MYSIS OCULATA/LITORALIS	17	17.00- 27.00	--
HIPPOMEDON PROPINQUUS	36	16.00- 19.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	1	-- - 37.00	--
PARAPHOXUS MILLERI	38	6.00- 9.00	--
THYSANOESSA INERMIS	17	15.00- 23.00	--
THYSANOESSA RASCHII	20	17.00- 20.00	--
BRACHYURA - MEGALOPA	15	-- - --	--
PAGURIDEA ZOEA	7	-- - --	--
PAGURIDEA GLAUCOTHOE	8	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 30 DATE: OCT 4 1970
LATITUDE: 69 58 0 NORTH LONGITUDE: 164 7 0 WEST
HAUL: 3 DEPTH: 10 METERS TIME: 20:09

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	5.0
CUSPIDELLA MERTENSII	3	120.00-120.00	--
AURELIA AURITA	2	-- - --	--
CHRYSAORA MELANASTER	1	-- -230.00	--
CYANEA CAPILLATA	10	45.00-160.00	--
STOMPHIA SP.	1	-- - --	--
CLIONE LIMACINA	2	-- - --	--
MYSIS OCULATA/LITORALIS	46	10.00- 29.00	3.0
DIASTYLIS GLABRA	12	8.00- 30.00	1.2
AMPELISCA MACROCEPHALA	1	-- - 32.00	0.5
GAMMARUS WILKITZKII	1	-- - 16.00	--
PARAPHOXUS MILLERI	5	7.00- 9.00	--
SYRRHOE CRENULATA	1	-- - 11.00	--
THYSANOESSA INERMIS	3	20.00- 21.00	--
THYSANOESSA RASCHII	4	8.00- 17.00	--
PANDALUS GONIURUS	2	4.00- 5.00	--
ARGIS LAR	2	-- - 3.50	--
BRACHYURA - MEGALOPA	13	-- - --	0.1
PAGURIDEA ZOEA	35	-- - --	0.6
PAGURIDEA GLAUCOTHOE	24	-- - --	0.8

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 30 DATE: OCT 4 1970
LATITUDE: 69 58 0 NORTH LONGITUDE: 164 7 0 WEST
HAUL: 4 DEPTH: 13 METERS TIME: 20:45

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	6.0
CUSPIDELLA MERTENSII	3	-- - --	--
AURELIA AURITA	1	-- - --	--
CHRYSAORA MELANASTER	6	130.00-360.00	--
CYANEA CAPILLATA	19	50.00-190.00	--
STOMPHIA SP.	2	-- - --	--
ECHIURUS ECHIURUS ALASKANUS	2	-- - --	--
CLIONE LIMACINA	1	-- - 5.00	--
MYSIS OCULATA/LITORALIS	28	17.00- 34.00	--
DIASTYLIS GLABRA	16	16.00- 31.00	1.8
HYPERIA MEDUSARUM	2	16.00- 18.00	--
PONTOPOREA FEMORATA	2	13.00- 16.00	--
ANONYX NUGAX	1	-- - 13.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	21	9.00- 40.00	--
THYSANOESSA INERMIS	1	-- - 10.00	--
THYSANOESSA RASCHII	13	8.00- 18.00	--
PANDALUS GONIURUS	2	3.00- 7.00	--
ARGIS LAR	2	-- - 3.00	--
BRACHYURA - MEGALOPA	64	-- - --	--
PAGURIDEA ZOEA	50	-- - --	--
PAGURIDEA GLAUCOTHOE	22	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 30 DATE: OCT 4 1970
LATITUDE: 69 58 0 NORTH LONGITUDE: 164 7 0 WEST
HAUL: 5 DEPTH: 19 METERS TIME: 21:37

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	2.0
CUSPIDELLA MERTENSII	3	-- - --	--
AURELIA AURITA	1	-- -120.00	--
CHRYSAORA MELANASTER	2	290.00- --	--
CYANEA CAPILLATA	13	30.00-170.00	--
ECHIURUS ECHIURUS ALASKANUS	1	-- - 28.00	--
MYSIS OCULATA/LITORALIS	27	17.00- 29.00	--
DIASTYLIS GLABRA	6	20.00- 28.00	--
PROTOMEDIA STEPHENSENI	2	8.00- 10.00	--
RHACMOTROPSIS OCULATA	1	-- - 11.00	--
TRYPHOSA SP.	1	-- - 7.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	1	-- - 30.00	--
PARAPHOXUS MILLERI	2	9.00- 10.00	--
THYSANOESSA INERMIS	1	-- - 17.00	--
THYSANOESSA RASCHII	6	7.00- 21.00	--
PANDALUS GONIURUS	2	-- - 7.00	--
ARGIS LAR	1	-- - 3.00	--
BRACHYURA - MEGALOPA	39	-- - --	--
PAGURIDEA ZOEA	33	-- - --	--
PAGURIDEA GLAUCOTHOE	14	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 32 DATE: OCT 5 1970
LATITUDE: 69 48 0 NORTH LONGITUDE: 163 49 0 WEST
HAUL: 1 DEPTH: 11 METERS TIME: 19:01

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	72.0
CUSPIDELLA MERTENSII	3	75.00-120.00	--
CYANEA CAPILLATA	5	50.00-150.00	--
MYSIS OCULATA/LITORALIS	1909	16.00- 33.00	133.0
NEOMYSIS RAYII	1	-- - 39.00	--
DIASTYLIS GLABRA	15	7.00- 28.00	0.3
DAJUS MYSIDIS	6	-- - --	--
ACANTHONOTOZOMA SERRATUM	1	-- - 7.00	--
AMPELISCA MACROCEPHALA	1	-- - 18.00	--
PROTOMEDIA STEPHENSENI	1	-- - 8.00	--
RHACHOTROPSIS ACULEATA	3	13.00- 27.00	0.8
ACANTHOSTEPHIA BEHRINGIENSIS	68	14.00- 38.00	8.4
MONOCULOIDES BOREALIS	5	10.00- 15.00	--
PARAPHOXUS MILLERI	3	-- - 8.00	--
SYRRHOE CRENULATA	2	10.00- 15.00	--
THYSANOESSA INERMIS	9	20.00- 21.00	0.9
PANDALUS GONIURUS	11	3.00- 15.00	14.2
EUALUS FABRICII	1	-- - --	4.0
EUALUS GAIMARDII	9	3.00- 7.00	1.2
ARGIS LAR	5	3.00- 18.00	5.2
HYAS COARCTATUS	151	-- - --	1.8
CHIONOECETES OPILIO	3	-- - --	--
BRACHYURA - MEGALOPA	8	-- - --	--
PAGURIDEA ZOEA	239	-- - --	5.6
PAGURIDEA GLAUCOTHOE	112	-- - --	3.3

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 32 DATE: OCT 5 1970
LATITUDE: 69 48 0 NORTH LONGITUDE: 163 49 0 WEST
HAUL: 2 DEPTH: 12 METERS TIME: 19:37

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	100.0
AURELIA AURITA	3	80.00-100.00	--
CHRYSAORA MELANASTER	4	60.00- 90.00	--
ECHIURUS ECHIURUS ALASKANUS	1	-- - 25.00	1.0
CLIONE LIMACINA	7	-- - --	--
MYSIS OCULATA/LITORALIS	700	20.00- 34.00	55.0
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 19.00	--
NEOMYSIS RAYII	5	16.00- 39.00	--
DIASTYLIS GLABRA	20	7.00- 27.00	0.3
AMPELISCA MACROCEPHALA	1	-- - 15.00	--
PROTOMEDIA STEPHENSENI	2	7.00- 9.00	--
RHACHOTROPSIS ACULEATA	5	13.00- 23.00	0.8
MELITA FORMOSA	1	-- - 16.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	78	11.00- 30.00	7.0
MONOCULOIDES BOREALIS	6	9.00- 11.00	--
PARAPHOXUS MILLERI	2	-- - 8.00	--
PLUESTES PANOPLA	1	-- - 17.00	--
SYRRHOE CRENULATA	2	12.00- 14.00	--
THYSANOESSA INERMIS	5	12.00- 24.00	0.3
THYSANOESSA RASCHII	2	-- - 13.00	--
PANDALUS GONIURUS	10	8.00- 14.00	11.0
EUALUS FABRICII	2	-- - 3.50	--
EUALUS GAIMARDII	4	5.00- 7.00	1.0
EUALUS MACILENTA	1	-- - 10.00	--
ARGIS LAR	9	3.00- 21.00	10.0
ARGIS CRASSA	1	-- - 10.50	1.2
BRACHYURA - MEGALOPA	100	-- - --	1.1
PAGURIDEA ZOEA	122	-- - --	2.8
PAGURIDEA GLAUCOTHOE	61	-- - --	1.6

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 32 DATE: OCT 5 1970
LATITUDE: 69 48 0 NORTH LONGITUDE: 163 49 0 WEST
HAUL: 3 DEPTH: 12 METERS TIME: 20:28

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	59.0
AURELIA AURITA	1	-- - --	--
CYANEA CAPILLATA	2	60.00-140.00	--
CLIONE LIMACINA	58	-- - --	--
MYSIS OCULATA/LITORALIS	976	17.00- 29.00	51.0
NEOMYSIS RAYII	5	28.00- 40.00	--
DIASTYLIS GLABRA	42	7.00- 30.00	1.5
DIASTYLIS SP (? LEPECHINI)	2	9.00- 13.00	--
LEUCON NASICA	1	-- - 13.00	--
AMPELISCA MACROCEPHALA	1	-- - 20.00	--
PROTOMEDIA STEPHENSENI	4	8.00- 11.00	--
RHACHOTROPSIS ACULEATA	2	23.00- 27.00	1.2
ANONYX LILLJEBORGI	1	-- - 10.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	40	13.00- 36.00	4.6
MONOCULOIDES BOREALIS	10	7.00- 11.00	--
MONOCULOIDES SP (? DIAMESUS)	2	8.00- 9.00	--
PLUESTES PANOPLA	2	-- - 14.00	--
THYSANOESSA RASCHII	5	9.00- 20.00	--
PANDALUS GONIURUS	11	6.50- 13.50	11.0
EUALUS GAIMARDII	5	-- - 6.00	1.2
ARGIS LAR	3	3.00- 13.00	11.0
CHANGON COMMUNIS	1	-- - 13.50	2.1
SCLEROCHANGON BOREAS	1	-- - 6.00	--
BRACHYURA - MEGALOPA	241	-- - --	5.0
PAGURIDEA ZOEA	104	-- - --	--
PAGURIDEA GLAUCOTHOE	74	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 32 DATE: OCT 5 1970
LATITUDE: 69 48 0 NORTH LONGITUDE: 163 49 0 WEST
HAUL: 4 DEPTH: 12 METERS TIME: 21:04

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	49.0
CUSPIDELLA MERTENSII	1	-- - --	--
CYANEA CAPILLATA	5	40.00-200.00	--
CLIONE LIMACINA	11	-- - --	--
MYSIS OCULATA/LITORALIS	539	17.00- 32.00	--
NEOMYSIS RAYII	1	-- - 35.00	--
DIASTYLIS GLABRA	42	7.00- 25.00	--
DIASTYLIS SP (? LEPECHINI)	1	-- - 12.00	--
DAJUS MYSIDIS	7	-- - --	--
ATYLUS BRUGGENI	1	-- - 23.00	--
PROTOMEDIA STEPHENSENI	2	8.00- 9.00	--
RHACHOTROPSIS ACULEATA	3	25.00- 36.00	--
MELITA FORMOSA	1	-- - 32.00	--
HIPPOMEODN PROPINQUUS	1	-- - 20.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	13	15.00- 18.00	--
MONOCULOIDES BOREALIS	8	9.00- 11.00	--
PARAPHOXUS MILLERI	4	-- - 7.00	--
SYRRHOE CRENULATA	1	-- - 12.00	--
THYSANOESSA INERMIS	2	17.00- 23.00	--
THYSANOESSA RASCHII	7	8.00- 20.00	--
PANDALUS GONIURUS	12	3.00- 15.00	14.0
EUALUS GAIMARDII	4	6.00- 7.00	1.4
ARGIS LAR	3	3.00- 18.00	7.0
BRACHYURA - MEGALOPA	243	-- - --	--
PAGURIDEA ZOEA	102	-- - --	--
PAGURIDEA GLAUCOTHOE	63	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 37 DATE: OCT 6 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 1 DEPTH: 12 METERS TIME: 17:57

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	50.0
CUSPIDELLA MERTENSII	1	-- -120.00	--
AURELIA AURITA	1	-- - 60.00	--
CHRYSAORA MELANASTER	1	-- -300.00	--
CYANEA CAPILLATA	8	50.00-170.00	--
CLIONE LIMACINA	1	-- - --	--
DIASTYLIS GLABRA	1	-- - 7.00	--
RHACHOTROPSIS ACULEATA	1	-- - 25.00	--
GAMMARUS WILKITZKII	1	-- - 15.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	1	-- - --	--
THYSANOESSA INERMIS	8	15.00- 19.00	--
THYSANOESSA RASCHII	9	8.00- 20.00	--
ARGIS LAR	1	-- - 3.00	--
BRACHYURA - MEGALOPA	135	-- - --	--
PAGURIDEA ZOEA	4	-- - --	--
PAGURIDEA GLAUCOTHOE	9	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 37 DATE: OCT 6 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 2 DEPTH: 12 METERS TIME: 18:35

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	50.0
CUSPIDELLA MERTENSII	3	-- - --	--
AURELIA AURITA	1	-- - 60.00	--
CYANEA CAPILLATA	15	60.00-270.00	--
STOMPHIA SP.	2	-- - --	--
EUSYLLIS (?) SP.	1	-- - --	--
GLYCINDE SP.	1	-- - --	--
MYSIS OCULATA/LITORALIS	1	-- - 30.00	--
HYPERIA GALBA	1	-- - 10.00	--
RHACHOTROPSIS ACULEATA	1	-- - 20.00	--
THYSANOESSA INERMIS	1	-- - 19.00	--
THYSANOESSA RASCHII	3	8.00- 20.00	--
BRACHYURA - MEGALOPA	4	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 37 DATE: OCT 6 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 3 DEPTH: 12 METERS TIME: 19:15

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	30.0
CHRYSAORA MELANASTER	1	-- -300.00	--
CYANEA CAPILLATA	7	50.00-140.00	--
AXIOTHELLA (?)	1	-- - --	--
CLIONE LIMACINA	1	-- - --	--
PSEUDALIBROTUS NANSENI	2	12.00- 18.00	0.3
THYSANOESSA INERMIS	2	18.00- 21.00	--
THYSANOESSA RASCHII	10	16.00- 22.00	--
BRACHYURA - ZOEA	1	-- - --	--
BRACHYURA - MEGALOPA	29	-- - --	--
PAGURIDEA ZOEA	6	-- - --	--
PAGURIDEA GLAUCOTHOE	1	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 37 DATE: OCT 6 1970
LATITUDE: 70 7 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 4 DEPTH: 12 METERS TIME: 19:56

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	11.0
CUSPIDELLA MERTENSII	1	-- -120.00	--
CYANEA CAPILLATA	6	30.00-150.00	--
CLIONE LIMACINA	12	-- - --	--
SAGITTA ELEGANS	2	17.00- 19.00	--
MYSIS OCULATA/LITORALIS	1	-- - 27.00	--
RHACHOTROPSIS ACULEATA	1	-- - --	--
GAMMARUS WILKITZKII	1	-- - 37.00	--
PSEUDALIBROTUS NANSENI	1	-- - 17.00	--
THYSANOESSA INERMIS	12	10.00- 24.00	1.5
THYSANOESSA RASCHII	47	12.00- 20.00	0.5
PANDALUS GONIURUS	6	2.50- 11.00	1.4
BRACHYURA - ZOEA	2	-- - --	--
BRACHYURA - MEGALOPA	129	-- - --	--
PAGURIDEA ZOEA	24	-- - --	--
PAGURIDEA GLAUCOTHOE	2	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 41 DATE: OCT 7 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 167 31 0 WEST
HAUL: 1 DEPTH: 19 METERS TIME: 18:22

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	30.0
CUSPIDELLA MERTENSII	1	-- - --	--
CYANEA CAPILLATA	12	40.00-160.00	--
THYSANOESSA INERMIS	12	13.00- 22.00	0.9
THYSANOESSA RASCHII	28	7.00- 25.00	1.2
BRACHYURA - MEGALOPA	19	-- - --	--
PAGURIDEA ZOEA	14	-- - --	--
PAGURIDEA GLAUCOTHOE	5	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 41 DATE: OCT 7 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 167 31 0 WEST
HAUL: 2 DEPTH: 12 METERS TIME: 18:59

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	30.0
CUSPIDELLA MERTENSII	1	-- - --	--
CHRYSAORA MELANASTER	1	-- -250.00	--
CYANEA CAPILLATA	10	40.00-120.00	--
CLIONE LIMACINA	2	-- - --	--
MYSIS POLARIS	1	-- - 19.00	--
NEOMYSIS RAYII	1	-- - 33.00	--
THYSANOESSA INERMIS	18	13.00- 24.00	--
THYSANOESSA RASCHII	31	15.00- 23.00	--
PANDALUS GONIURUS	3	-- - 3.00	--
EUALUS MACILENTA	1	-- - 7.00	--
BRACHYURA - MEGALOPA	13	-- - --	--
PAGURIDEA ZOEA	14	-- - --	--
PAGURIDEA GLAUCOTHOE	4	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 41 DATE: OCT 7 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 167 31 0 WEST
HAUL: 3 DEPTH: 20 METERS TIME: 19:35

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	20.0
CUSPIDELLA MERTENSII	5	-- - --	--
AURELIA AURITA	1	-- - --	--
CHRYSAORA MELANASTER	2	220.00-220.00	--
CYANEA CAPILLATA	13	30.00-160.00	--
NEOMYSIS RAYII	3	26.00- 34.00	--
HYPERIA MEDUSARUM	3	9.00- 11.00	--
THYSANOESSA INERMIS	2	-- - 20.00	--
THYSANOESSA RASCHII	9	17.00- 23.00	--
PANDALUS BOREALIS	1	-- - 11.00	1.1
PANDALUS GONIURUS	10	4.00- 11.50	2.8
BRACHYURA - MEGALOPA	5	-- - --	--
PAGURIDEA ZOEA	4	-- - --	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 41 DATE: OCT 7 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 167 31 0 WEST
HAUL: 4 DEPTH: 10 METERS TIME: 20:14

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CUSPIDELLA MERTENSII	1	-- - --	--
CHRYSAORA MELANASTER	6	230.00-300.00	--
CYANEA CAPILLATA	13	40.00-320.00	--
STOMPHIA SP.	1	-- - --	--
CLIONE LIMACINA	1	-- - --	--
NEOMYSIS RAYII	1	-- - --	--
PARATHEMISTO LIBELLULA	1	-- - 18.00	--
THYSANOESSA INERMIS	2	15.00- 20.00	--
THYSANOESSA RASCHII	2	-- - 24.00	--
PAGURIDEA ZOEA	2	-- - --	--
PAGURIDEA GLAUCOTHOE	2	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 45 DATE: OCT 8 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 168 38 0 WEST
HAUL: 1 DEPTH: 13 METERS TIME: 18:46

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	220.0
CUSPIDELLA MERTENSII	4	100.00-200.00	--
AURELIA AURITA	1	-- - 60.00	--
CHRYSAORA MELANASTER	3	150.00-200.00	--
CYANEA CAPILLATA	20	70.00-160.00	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 45 DATE: OCT 8 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 168 38 0 WEST
HAUL: 2 DEPTH: 0 METERS TIME: 19:21

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	30.0
CYANEA CAPILLATA	3	90.00-170.00	--
CLIONE LIMACINA	8	-- - --	--
NEOMYSIS RAYII	1	-- - 33.00	--
HYPERIA GALBA	1	-- - 12.00	--
GAMMARACANTHUS LORICATUS	1	-- - 13.00	--
PSEUDALIBROTUS GLACIALIS	1	-- - 11.00	--
THYSANOESSA INERMIS	152	9.00- 23.00	8.2
THYSANOESSA LONGIPES	1	-- - 15.00	--
THYSANOESSA RASCHII	143	8.00- 21.00	3.4
EUALUS GAIMARDII	1	-- - 9.00	--
BRACHYURA - MEGALOPA	368	-- - --	--
PAGURIDEA ZOEA	14	-- - --	--
PAGURIDEA GLAUCOTHOE	1	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 45 DATE: OCT 8 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 168 38 0 WEST
HAUL: 3 DEPTH: 9 METERS TIME: 20:23

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	100.0
CUSPIDELLA MERTENSII	1	-- -140.00	--
AURELIA AURITA	2	260.00-300.00	--
CHRYSAORA MELANASTER	12	50.00-250.00	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 45 DATE: OCT 8 1970
LATITUDE: 69 57 0 NORTH LONGITUDE: 168 38 0 WEST
HAUL: 4 DEPTH: 18 METERS TIME: 20:58

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	150.0
CUSPIDELLA MERTENSII	8	100.00-150.00	--
CYANEA CAPILLATA	6	100.00-220.00	--
GLYCINDE SP.	1	-- - --	--
CHONE CINCTA (?)	1	-- - --	--
CLIONE LIMACINA	5	-- - --	--
MYSIS OCULATA/LITORALIS	8	20.00- 31.00	1.2
ACANTHOMYSIS SP.	1	-- - 25.00	--
NEOMYSIS RAYII	14	18.00- 39.00	2.6
DAJUS MYSIDIS	2	-- - --	--
HYPERIA GALBA	1	-- - 6.00	--
MONOCULOIDES BOREALIS	1	-- - 10.00	--
THYSANOESSA INERMIS	55	12.00- 25.00	4.0
THYSANOESSA RASCHII	428	8.00- 22.00	20.0
PANDALUS GONIURUS	39	2.00- 15.00	8.1
EUALUS GAIMARDII	3	5.00- 6.00	0.8
EUALUS STONEYI	9	5.00- 6.00	--
BRACHYURA - MEGALOPA	271	-- - --	--
PAGURIDEA ZOEA	69	-- - --	--
PAGURIDEA GLAUCOTHOE	174	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: S1 DATE: OCT 9 1970
LATITUDE: 69 36 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 1 DEPTH: 13 METERS TIME: 18:14

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	150.0
CUSPIDELLA MERTENSII	5	-- -180.00	--
AURELIA AURITA	1	-- - 50.00	--
CHRYSAORA MELANASTER	6	230.00-260.00	--
CYANEA CAPILLATA	12	60.00-140.00	--
MYSIS OCULATA/LITORALIS	9	27.00- 32.00	1.0
ACANTHOMYSIS PSEUDOMACROPSIS	2	16.00- 17.00	--
NEOMYSIS RAYII	5	25.00- 37.00	--
THYSANOESSA INERMIS	15	12.00- 20.00	0.8
THYSANOESSA RASCHII	73	7.00- 20.00	3.0
PANDALUS GONIURUS	13	3.00- 10.00	1.2
EUALUS GAIMAROII	1	-- - 9.50	0.4
BRACHYURA - MEGALOPA	1	-- - --	--
PAGURIDEA ZOEA	7	-- - --	--
PAGURIDEA GLAUCOTHOE	20	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: S1 DATE: OCT 9 1970
LATITUDE: 69 36 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 2 DEPTH: 2 METERS TIME: 18:48

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	10.0
CUSPIDELLA MERTENSII	2	180.00-180.00	--
AURELIA AURITA	1	-- -100.00	--
CYANEA CAPILLATA	5	40.00-220.00	--
CLIONE LIMACINA	1	-- - --	--
SAGITTA ELEGANS	1	-- - 20.00	--
MYSIS OCULATA/LITORALIS	19	20.00- 30.00	2.0
HYPERIA GALBA	1	-- - 10.00	--
PARATHEMISTO LIBELLULA	1	-- - 15.00	--
THYSANOESSA INERMIS	32	20.00- 23.00	3.2
THYSANOESSA RASCHII	24	9.00- 25.00	0.8
BRACHYURA - MEGALOPA	850	-- - --	--
PAGURIDEA ZOEA	5	-- - --	--
PAGURIDEA GLAUCOTHOE	21	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: S1 DATE: OCT 9 1970
LATITUDE: 69 36 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 3 DEPTH: 7 METERS TIME: 19:48

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	12.0
CUSPIDELLA MERTENSII	2	-- - --	--
CHRYSAORA MELANASTER	1	-- -340.00	--
CALANUS FINMARCHICUS S.L.	4	-- - --	--
MYSIS OCULATA/LITORALIS	15	25.00- 28.00	2.1
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 19.00	--
NEOMYSIS RAYII	8	32.00- 39.00	2.0
THYSANOESSA INERMIS	104	9.00- 29.00	45.0
THYSANOESSA RASCHII	662	9.00- 24.00	11.0
PANDALUS GONIURUS	5	-- - 3.00	--
BRACHYURA - MEGALOPA	312	-- - --	--
PAGURIDEA ZOEA	46	-- - --	--
PAGURIDEA GLAUCOTHOE	37	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 51 DATE: OCT 9 1970
LATITUDE: 69 36 0 NORTH LONGITUDE: 167 36 0 WEST
HAUL: 4 DEPTH: 20 METERS TIME: 20:24

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CUSPIDELLA MERTENSII	4	120.00-180.00	--
AURELIA AURITA	1	-- -100.00	--
CHRYSAORA MELANASTER	5	200.00-320.00	--
CYANEA CAPILLATA	22	30.00-180.00	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 56 DATE: OCT 10 1970
LATITUDE: 69 14 0 NORTH LONGITUDE: 166 53 0 WEST
HAUL: 1 DEPTH: 2 METERS TIME: 20:10

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	50	-- - --	--
CUSPIDELLA MERTENSII	1	-- -200.00	--
AURELIA AURITA	4	70.00-130.00	--
CYANEA CAPILLATA	4	50.00-160.00	--
CLIONE LIMACINA	16	-- - --	--
CALANUS FINMARCHICUS S.L.	1	-- - 2.00	--
MYSIS OCULATA/LITORALIS	194	19.00- 29.00	15.5
NEOMYSIS RAYII	19	33.00- 45.00	5.1
HYPERIA MEDUSARUM	2	1.00- 8.00	--
HYPEROCHE MEDUSARUM	1	-- - 7.00	--
THYSANOESSA INERMIS	5	18.00- 23.00	--
THYSANOESSA RASCHII	59	9.00- 27.00	2.6
BRACHYURA - MEGALOPA	9	-- - --	--
PAGURIDEA GLAUCOTHOE	21	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 56 DATE: OCT 10 1970
LATITUDE: 69 14 0 NORTH LONGITUDE: 166 53 0 WEST
HAUL: 2 DEPTH: 9 METERS TIME: 20:44

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	1.0
CUSPIDELLA MERTENSII	1	-- - --	--
AURELIA AURITA	1	-- -120.00	--
CHRYSAORA MELANASTER	2	200.00-450.00	--
CLIONE LIMACINA	1	-- - --	--
SAGITTA ELEGANS	41	17.00- 28.00	--
CALANUS CRISTATUS	1	-- - 11.00	--
MYSIS OCULATA/LITORALIS	63	20.00- 30.00	6.5
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 19.00	--
NEOMYSIS RAYII	14	29.00- 33.00	2.9
DAJUS MYSIDIS	1	-- - --	--
HYPERIA GALBA	2	-- - 3.00	--
PARATHEMISTO LIBELLULA	3	14.00- 17.00	--
THYSANOESSA INERMIS	1	-- - 20.00	--
THYSANOESSA RASCHII	21	12.00- 30.00	1.4
PANDALUS GONIURUS	23	3.50- 4.50	1.0
BRACHYURA - MEGALOPA	2	-- - --	--
PAGURIDEA ZOEA	19	-- - --	--
PAGURIDEA GLAUCOTHOE	8	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 56 DATE: OCT 10 1970
LATITUDE: 69 14 0 NORTH LONGITUDE: 166 53 0 WEST
HAUL: 3 DEPTH: 18 METERS TIME: 21:42

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	6	-- - --	--
CUSPIDELLA MERTENSII	1	-- -140.00	--
CHRYSAORA MELANASTER	8	210.00-320.00	--
CLIONE LIMACINA	6	10.00- 13.00	--
SAGITTA ELEGANS	18	14.00- 38.00	--
CALANUS CRISTATUS	1	-- - 9.00	--
MYSIS OCULATA/LITORALIS	16	19.00- 30.00	--
NEOMYSIS RAYII	5	31.00- 39.00	--
HYPERIA MEDUSARUM	1	-- - 12.00	--
HYPEROCHE MEDUSARUM	1	-- - 8.00	--
ACANTHONOTOZOMA SERRATUM	1	-- - 8.00	--
MAERA LOVENI	1	-- - 22.00	--
MELITA SP (? DESDICHADA)	1	-- - 13.00	--
THYSANOESSA RASCHII	3	10.00- 23.00	--
PANDALUS GONIURUS	21	3.00- 4.00	--
EUALUS GAIMARDII	1	-- - 5.00	--
EUALUS STONEYI	1	-- - 4.00	--
ARGIS LAR	29	3.00- 8.00	--
CRANGON DALLI	1	-- - 3.00	--
BRACHYURA - MEGALOPA	2	-- - 6.00	--
PAGURIDEA ZOEA	8	7.00- 9.00	--
PAGURIDEA GLAUCOTHOE	11	7.00- 8.00	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 56 DATE: OCT 10 1970
LATITUDE: 69 14 0 NORTH LONGITUDE: 166 53 0 WEST
HAUL: 4 DEPTH: 23 METERS TIME: 22:29

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	7.0
AURELIA AURITA	1	-- -100.00	--
CHRYSAORA MELANASTER	1	-- -300.00	--
LUMBRINEREIS FRAGILIS	1	-- - --	--
CLIONE LIMACINA	5	-- - --	--
SAGITTA ELEGANS	7	16.00- 28.00	--
EUCALANUS BUNGII	1	-- - 6.00	--
MYSIS OCULATA/LITORALIS	14	17.00- 32.00	--
ACANTHOMYSIS SP.	2	12.00- 13.00	--
NEOMYSIS RAYII	3	12.00- 38.00	--
MELITA SP (? DESDICHADA)	2	10.00- 11.00	--
THYSANOESSA INERMIS	3	20.00- 22.00	--
THYSANOESSA RASCHII	6	12.00- 20.00	--
PANDALUS GONIURUS	27	3.00- 4.00	--
EUALUS STONEYI	4	4.00- 5.00	--
ARGIS LAR	59	3.00- 14.00	--
BRACHYURA - MEGALOPA	6	-- - --	--
PAGURIDEA ZOEA	12	-- - --	--
PAGURIDEA GLAUCOTHOE	16	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 61 DATE: OCT 11 1970
LATITUDE: 69 5 0 NORTH LONGITUDE: 166 13 0 WEST
HAUL: 1 DEPTH: 13 METERS TIME: 18:25

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	4	-- - --	--
CHRYSAORA MELANASTER	3	250.00-300.00	--
CLIONE LIMACINA	2	-- - --	--
MYSIS OCULATA/LITORALIS	250	17.00- 33.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	5	12.00- 18.00	--
NEOMYSIS RAYII	33	10.00- 37.00	--
DIASTYLIS SP (? LEPECHINI)	2	11.00- 14.00	--
PARATHEMISTO LIBELLULA	1	-- - 15.00	--
ACANTHONOTOZOMA SERRATUM	1	-- - 12.00	--
ATYLUS BRUGGENI	2	19.00- 20.00	--
RHACHOTROPSIS ACULEATA	2	28.00- 29.00	--
MELITA FORMOSA	1	-- - 16.00	--
ANONYX LILLJEBORGI	1	-- - 12.00	--
THYSANOESSA RASCHII	2	17.00- 20.00	--
PANDALUS GONIURUS	364	3.00- 15.00	--
EUALUS FABRICII	1	-- - 7.00	--
EUALUS GAIMARDII	57	5.00- 9.00	--
EUALUS MACILENTA	1	-- - 7.00	--
LEBBEUS GROENLANDICUS	4	11.00- 12.00	--
ARGIS LAR	201	3.00- 17.00	--
CRANGON DALLI	2	9.00- 12.00	--
CRANGON SP. (? INTERMEDIA)	1	-- - 4.00	--
BRACHYURA - MEGALOPA	5	-- - --	--
PAGURIDEA ZOEA	30	-- - --	--
PAGURIDEA GLAUCOTHOE	16	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 61 DATE: OCT 11 1970
LATITUDE: 69 5 0 NORTH LONGITUDE: 166 13 0 WEST
HAUL: 2 DEPTH: 8 METERS TIME: 19:00

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CHRYSAORA MELANASTER	3	150.00-310.00	--
CYANEA CAPILLATA	1	-- -280.00	--
MYSIS OCULATA/LITORALIS	110	17.00- 27.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	5	16.00- 18.00	--
NEOMYSIS RAYII	217	10.00- 35.00	--
DIASTYLIS SP (? LEPECHINI)	1	-- - 8.00	--
PARATHEMISTO LIBELLULA	1	-- - 15.00	--
ATYLUS BRUGGENI	1	-- - 12.00	--
MAERA LOVENI	1	-- - 23.00	--
THYSANOESSA RASCHII	1	-- - 22.00	--
PANDALUS GONIURUS	953	3.00- 14.00	--
EUALUS GAIMARDII	1	-- - 7.00	--
LEBBEUS GROENLANDICUS	4	10.00- 12.00	--
ARGIS LAR	2	8.00- 10.00	--
ARGIS CRASSA	1	-- - 3.50	--
BRACHYURA - MEGALOPA	1	-- - --	--
PAGURIDEA ZOEA	56	-- - --	--
PAGURIDEA GLAUCOTHOE	30	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 61 DATE: OCT 11 1970
LATITUDE: 69 5 0 NORTH LONGITUDE: 166 13 0 WEST
HAUL: 3 DEPTH: 16 METERS TIME: 19:36

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CHRYSAORA MELANASTER	6	230.00-290.00	--
MYSIS OCULATA/LITORALIS	65	16.00- 20.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 16.00	--
ACANTHOMYSIS SP.	1	-- - 16.00	--
NEOMYSIS RAYII	85	27.00- 40.00	--
ACANTHONOTOZOMA SERRATUM	1	-- - 14.00	--
RHACHOTROPSIS ACULEATA	1	-- - 25.00	--
ANONYX NUGAX	1	-- - 22.00	--
HIPPOMEDON PROPINQUUS	1	-- - 15.00	--
MUNOCULOIDES BOREALIS	1	-- - 9.00	--
PLUESTES PANOPLA	1	-- - 20.00	--
PANDALUS GONIURUS	1104	3.00- 15.00	--
EUALUS FABRICII	4	5.00- 13.00	--
EUALUS GAIMARDII	65	4.00- 10.00	--
EUALUS MACILENTA	1	-- - 5.00	--
LEBBEUS GROENLANDICUS	11	9.00- 16.00	--
ARGIS LAR	91	4.00- 15.00	--
CHANGON DALLI	2	9.00- 10.00	--
PAGURIDEA ZOEA	8	-- - --	--
PAGURIDEA GLAUCOTHOE	4	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 61 DATE: OCT 11 1970
LATITUDE: 69 5 0 NORTH LONGITUDE: 166 13 0 WEST
HAUL: 4 DEPTH: 23 METERS TIME: 20:15

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CHRYSAORA MELANASTER	4	170.00-360.00	--
CLIONE LIMACINA	2	-- - --	--
MYSIS OCULATA/LITORALIS	14	19.00- 37.00	--
PSEUDOMMA TRUNCATUM	10	31.00- 38.00	--
MELITA SP (? DESDICHADA)	7	9.00- 12.00	--
THYSANOESSA RASCHII	1	-- - 15.00	--
PANDALUS GONIURUS	118	3.00- 15.00	--
EUALUS FABRICII	3	5.00- 8.00	--
EUALUS GAIMARDII	44	4.00- 10.00	--
LEBBEUS GROENLANDICUS	1	-- - 7.00	--
ARGIS LAR	56	4.00- 16.00	--
PAGURIDEA ZOEA	6	-- - --	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIOD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 65 DATE: OCT 12 1970
LATITUDE: 69 21 0 NORTH LONGITUDE: 166 45 0 WEST
HAUL: 1 DEPTH: 22 METERS TIME: 18:25

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	13.0
CUSPIDELLA MERTENSII	1	-- - --	--
AURELIA AURITA	1	-- -100.00	--
CHRYSAORA MELANASTER	5	100.00-240.00	--
CYANEA CAPILLATA	11	60.00-240.00	--
ANTINOE BADIA	2	-- - --	--
CLIONE LIMACINA	1	-- - 8.00	--
SAGITTA ELEGANS	3	18.00- 20.00	--
CALANUS FINMARCHICUS S.L.	3	3.00- 4.00	--
MYSIS OCULATA/LITORALIS	50	19.00- 31.00	--
NEOMYSIS RAYII	20	15.00- 36.00	--
HYPERIA MEDUSARUM	3	6.00- 12.00	--
AMPELISCA MACROCEPHALA	4	14.00- 16.00	--
BLYBIS GAIMARDII	5	12.00- 20.00	--
RHACHOTROPSIS ACULEATA	1	-- - 22.00	--
MELITA FORMOSA	2	25.00- 27.00	--
MELITA SP (? DESDICHADA)	1	-- - 14.00	--
MONOCULOIDES BOREALIS	1	-- - 9.00	--
THYSANOESSA INERMIS	14	17.00- 22.00	--
THYSANOESSA RASCHII	256	11.00- 21.00	--
PANDALUS GONIURUS	17	4.00- 15.00	--
EUALUS FABRICII	2	25.00- 28.00	--
EUALUS GAIMARDII	6	6.00- 10.00	--
ARGIS LAR	34	4.00- 21.00	--
BRACHYURA - MEGALOPA	3	-- - --	--
PAGURIDEA ZOEA	11	-- - --	--
PAGURIDEA GLAUCOTHOE	30	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIOD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 65 DATE: OCT 12 1970
LATITUDE: 69 21 0 NORTH LONGITUDE: 166 45 0 WEST
HAUL: 2 DEPTH: 16 METERS TIME: 19:02

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	8.0
CHRYSAORA MELANASTER	5	130.00-360.00	--
CYANEA CAPILLATA	3	70.00-160.00	--
STOMPHIA SP.	1	-- - --	--
LUMBRINEREIS SIMILABRIS	1	-- - --	--
SAGITTA ELEGANS	3	16.00- 17.00	--
CALANUS CRISTATUS	1	-- - 9.00	--
MYSIS OCULATA/LITORALIS	16	19.00- 30.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	2	-- - 19.00	--
ACANTHOMYSIS SP.	1	-- - 12.00	--
NEOMYSIS RAYII	22	13.00- 37.00	--
AMPELISCA MACROCEPHALA	1	-- - 11.00	--
MELITA SP (? DESDICHADA)	6	11.00- 14.00	--
MONOCULOIDES BOREALIS	1	-- - 10.00	--
SYRRHOE CRENULATA	1	-- - 13.00	--
THYSANOESSA INERMIS	16	20.00- 23.00	--
THYSANOESSA RASCHII	50	11.00- 23.00	--
PANDALUS GONIURUS	99	4.00- 18.00	--
EUALUS GAIMARDII	14	5.00- 11.00	--
ARGIS LAR	13	4.00- 12.00	--
BRACHYURA - MEGALOPA	4	-- - --	--
PAGURIDEA ZOEA	12	-- - --	--
PAGURIDEA GLAUCOTHOE	46	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 65 DATE: OCT 12 1970
LATITUDE: 69 21 0 NORTH LONGITUDE: 166 45 0 WEST
HAUL: 3 DEPTH: 13 METERS TIME: 19:40

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	10.0
CUSPIDELLA MERTENSII	1	-- - --	--
AURELIA AURITA	1	-- - 70.00	--
CHRYSAORA MELANASTER	6	170.00-380.00	--
CYANEA CAPILLATA	1	-- - 70.00	--
LUMBRINEREIS FRAGILIS	1	-- - --	--
CLIONE LIMACINA	3	-- - --	--
BUCCINIUM SP (? ELATIUS)	1	-- - --	--
SAGITTA ELEGANS	2	17.00- 19.00	--
CALANUS FINMARCHICUS S.L.	2	-- - 3.00	--
MYSIS OCULATA/LITORALIS	22	16.00- 29.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	6	15.00- 19.00	--
NEOMYSIS RAYII	121	11.00- 38.00	--
PROTOMEDIA STEPHENSENI	1	-- - 6.00	--
MELITA SP (? DESDICHADA)	1	-- - 12.00	--
THYSANOESSA INERMIS	8	18.00- 20.00	--
THYSANOESSA RASCHII	25	11.00- 16.00	--
PANDALUS GONIURUS	128	3.00- 16.00	--
EUALUS GAIMARDII	2	-- - 9.00	--
ARGIS LAR	2	-- - 3.00	--
BRACHYURA - MEGALOPA	3	-- - --	--
PAGURIDEA ZOEA	34	-- - --	--
PAGURIDEA GLAUCOTHOE	36	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 65 DATE: OCT 12 1970
LATITUDE: 69 21 0 NORTH LONGITUDE: 166 45 0 WEST
HAUL: 4 DEPTH: 8 METERS TIME: 20:16

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	50	-- - --	7.0
CUSPIDELLA MERTENSII	1	-- - --	--
CHRYSAORA MELANASTER	5	200.00-400.00	--
CYANEA CAPILLATA	3	80.00-160.00	--
CLIONE LIMACINA	5	-- - --	--
MYSIS OCULATA/LITORALIS	8	15.00- 27.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	5	16.00- 17.00	--
NEOMYSIS RAYII	26	30.00- 36.00	--
THYSANOESSA INERMIS	7	19.00- 23.00	--
THYSANOESSA RASCHII	22	11.00- 22.00	--
PANDALUS GONIURUS	14	3.00- 13.00	--
EUALUS MACILENTA	1	-- - 8.00	--
ARGIS LAR	2	-- - 4.00	--
BRACHYURA - MEGALOPA	1	-- - --	--
PAGURIDEA ZOEA	19	-- - --	--
PAGURIDEA GLAUCOTHOE	16	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 70 DATE: OCT 13 1970
LATITUDE: 69 12 0 NORTH LONGITUDE: 167 38 0 WEST
HAUL: 1 DEPTH: 22 METERS TIME: 18:05

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	8.0
CUSPIDELLA MERTENSII	2	90.00- 90.00	--
CHRYSAORA MELANASTER	12	130.00-460.00	--
CYANEA CAPILLATA	4	50.00- 80.00	--
SAGITTA ELEGANS	4	15.00- 29.00	--
MYSIS OCULATA/LITORALIS	3	21.00- 26.00	--
HYPERIA MEDUSARUM	1	-- - 16.00	--
BLYBIS GAIMARDII	3	14.00- 15.00	--
MELITA FORMOSA	7	13.00- 25.00	--
MELITA SP (? DESDICHADA)	17	11.00- 14.00	--
THYSANOESSA INERMIS	15	19.00- 21.00	--
THYSANOESSA RASCHII	53	13.00- 21.00	--
PANDALUS GONIURUS	11	3.00- 17.00	--
EUALUS GAIMARDII	11	2.00- 11.00	--
ARGIS LAR	15	4.00- 23.00	--
PAGURIDEA ZOEA	5	-- - --	--
PAGURIDEA GLAUCOTHOE	9	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 70 DATE: OCT 13 1970
LATITUDE: 69 12 0 NORTH LONGITUDE: 167 38 0 WEST
HAUL: 2 DEPTH: 18 METERS TIME: 18:31

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	5.0
CUSPIDELLA MERTENSII	1	-- - --	--
AURELIA AURITA	3	70.00-100.00	--
CHRYSAORA MELANASTER	6	140.00-350.00	--
CLIONE LIMACINA	1	-- - 15.00	--
SAGITTA ELEGANS	5	16.00- 29.00	--
CALANUS CRISTATUS	1	-- - 8.00	--
MYSIS OCULATA/LITORALIS	2	22.00- 28.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 16.00	--
ACANTHOMYSIS SP.	1	-- - 11.00	--
NEOMYSIS RAYII	3	33.00- 36.00	--
LEUCON NASICA	1	-- - 10.00	--
HYPERIA GALBA	4	9.00- 12.00	--
BLYBIS GAIMARDII	2	11.00- 14.00	--
RHACHOTROPSIS ACULEATA	8	23.00- 32.00	--
MAERA LOVENI	2	25.00- 26.00	--
MELITA FORMOSA	1	-- - 22.00	--
MELITA SP (? DESDICHADA)	49	10.00- 14.00	--
PONTOPOREA FEMORATA	1	-- - 10.00	--
HIPPOMEDON PROPINQUUS	1	-- - 15.00	--
THYSANOESSA INERMIS	20	21.00- 23.00	--
THYSANOESSA LONGIPES	1	-- - 13.00	--
THYSANOESSA RASCHII	75	10.00- 23.00	--
PANDALUS BOREALIS	1	-- - 16.00	--
PANDALUS GONIURUS	26	3.00- 15.00	--
EUALUS GAIMARDII	9	5.00- 11.00	--
EUALUS MACILENTA	2	9.00- 10.00	--
EUALUS STONEYI	1	-- - 5.00	--
ARGIS LAR	17	3.00- 16.00	--
CRANGON COMMUNIS	1	-- - 5.00	--
BRACHYURA - MEGALOPA	3	-- - --	--
PAGURIDEA ZOEA	10	-- - --	--
PAGURIDEA GLAUCOTHOE	5	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 70 DATE: OCT 13 1970
LATITUDE: 69 12 0 NORTH LONGITUDE: 167 38 0 WEST
HAUL: 3 DEPTH: 13 METERS TIME: 19:21

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	10.0
CUSPIDELLA MERTENSII	1	-- - --	--
AURELIA AURITA	2	60.00- 70.00	--
CHRYSAORA MELANASTER	12	170.00-360.00	--
CYANEA CAPILLATA	2	70.00-140.00	--
ANTINOE SARSI	1	-- - --	--
CLIONE LIMACINA	8	-- - --	--
SAGITTA ELEGANS	20	16.00- 26.00	--
CALANUS CRISTATUS	1	-- - 9.00	--
MYSIS OCULATA/LITORALIS	2	28.00- 30.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - --	--
NEOMYSIS RAYII	2	32.00- 33.00	--
LEUCON NASICA	1	-- - 10.00	--
HYPERIA MEDUSARUM	1	-- - 10.00	--
MELITA SP (? DESDICHADA)	8	11.00- 14.00	--
PUNTOPOREA FEMORATA	1	-- - 8.00	--
THYSANOESSA INERMIS	6	20.00- 22.00	--
THYSANOESSA RASCHII	20	10.00- 22.00	--
PANDALUS BOREALIS	1	-- - 12.00	--
PANDALUS GONIURUS	58	3.00- 16.00	--
EUALUS GAIMARDII	25	5.00- 10.00	--
EUALUS MACILENTA	20	5.00- 9.00	--
ARGIS LAR	11	4.00- 5.00	--
CRANGON COMMUNIS	1	-- - 6.00	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 70 DATE: OCT 13 1970
LATITUDE: 69 12 0 NORTH LONGITUDE: 167 38 0 WEST
HAUL: 4 DEPTH: 8 METERS TIME: 19:58

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CUSPIDELLA MERTENSII	2	140.00-140.00	--
CHRYSAORA MELANASTER	14	100.00-270.00	--
ANTINOE BADIA	1	-- - --	--
CLIONE LIMACINA	13	-- - --	--
SAGITTA ELEGANS	4	20.00- 25.00	--
CALANUS CRISTATUS	3	8.00- 9.00	--
MYSIS OCULATA/LITORALIS	3	21.00- 23.00	--
NEOMYSIS RAYII	37	13.00- 36.00	--
EUDORELLA EMARGINATA	1	-- - --	--
LEUCON NASICA	1	-- - 9.00	--
THYSANOESSA INERMIS	22	12.00- 24.00	--
THYSANOESSA RASCHII	37	10.00- 22.00	--
PANDALUS GONIURUS	27	3.00- 17.00	--
EUALUS GAIMARDII	8	7.00- 11.00	--
EUALUS MACILENTA	9	4.00- 10.00	--
ARGIS LAR	2	4.00- 4.00	--
BRACHYURA - MEGALOPA	6	-- - --	--
PAGURIDEA ZOEA	15	-- - --	--
PAGURIDEA GLAUCOTHOE	10	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 74 DATE: OCT 14 1970
LATITUDE: 69 35 0 NORTH LONGITUDE: 164 29 0 WEST
HAUL: 1 DEPTH: 8 METERS TIME: 17:53

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	3.0
CUSPIDELLA MERTENSII	1	-- -140.00	--
AURELIA AURITA	1	-- - --	--
CHRYSAORA MELANASTER	2	230.00-260.00	--
CYANEA CAPILLATA	12	30.00-200.00	--
CLIONE LIMACINA	1	-- - --	--
SAGITTA ELEGANS	2	-- - 26.00	--
MYSIS OCULATA/LITORALIS	115	16.00- 30.00	--
NEOMYSIS RAYII	3	25.00- 35.00	--
PROTOMEDIA STEPHENSENI	1	-- - 9.00	--
PSEUDALIBROTUS GLACIALIS	2	5.50- 12.00	--
PSEUDALIBROTUS NANSENI	1	-- - 7.00	--
PARAPHOXUS MILLERI	1	-- - 9.00	--
THYSANOESSA INERMIS	18	14.00- 21.00	--
THYSANOESSA LONGIPES	3	13.00- 15.00	--
THYSANOESSA RASCHII	10	6.00- 24.00	--
EUALUS SP.	1	-- - 2.00	--
BRACHYURA - MEGALOPA	2	-- - --	--
PAGURIDEA GLAUCOTHOE	1	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 74 DATE: OCT 14 1970
LATITUDE: 69 35 0 NORTH LONGITUDE: 164 29 0 WEST
HAUL: 2 DEPTH: 2 METERS TIME: 18:27

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	3.0
CUSPIDELLA MERTENSII	1	-- -120.00	--
AURELIA AURITA	2	30.00-110.00	--
CYANEA CAPILLATA	6	20.00-100.00	--
CLIONE LIMACINA	2	-- - --	--
MYSIS OCULATA/LITORALIS	18	16.00- 28.00	--
NEOMYSIS RAYII	2	23.00- 28.00	--
DIASTYLIS GLABRA	13	7.00- 8.00	--
PSEUDALIBROTUS GLACIALIS	1	-- - 13.00	--
PARAPHOXUS MILLERI	7	8.00- 9.00	--
THYSANOESSA INERMIS	42	15.00- 23.00	--
THYSANOESSA RASCHII	42	8.00- 21.00	--
HIPPOLYTIDAE SP.	1	-- - --	--
PAGURIDEA ZOEA	1	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 74 DATE: OCT 14 1970
LATITUDE: 69 35 0 NORTH LONGITUDE: 164 29 0 WEST
HAUL: 3 DEPTH: 13 METERS TIME: 19:11

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	0.5
CUSPIDELLA MERTENSII	1	-- -140.00	--
AURELIA AURITA	2	70.00-120.00	--
CHRYSAORA MELANASTER	1	-- -170.00	--
CYANEA CAPILLATA	18	25.00-230.00	--
MYSIS OCULATA/LITORALIS	79	17.00- 31.00	--
NEOMYSIS RAYII	2	27.00- 34.00	--
DIASTYLIS GLABRA	3	-- - 7.00	--
HYPERIA MEDUSARUM	2	15.00- 18.00	--
GAMMARUS WILKITZKII	1	-- - 32.00	--
PARAPHOXUS MILLERI	1	-- - 9.00	--
THYSANOESSA INERMIS	3	10.00- 19.00	--
THYSANOESSA RASCHII	1	-- - 15.00	--
PANDALUS GONIURUS	5	7.00- 14.00	--
EUALUS FABRICII	1	-- - 5.00	--
EUALUS GAIMARDII	3	5.00- 8.00	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 74 DATE: OCT 14 1970
LATITUDE: 69 35 0 NORTH LONGITUDE: 164 29 0 WEST
HAUL: 4 DEPTH: 18 METERS TIME: 19:46

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CUSPIDELLA MERTENSII	4	120.00-160.00	--
AURELIA AURITA	2	100.00-100.00	--
CHRYSAORA MELANASTER	2	300.00-370.00	--
CYANEA CAPILLATA	17	30.00-240.00	--
MYSIS OCULATA/LITORALIS	694	14.00- 33.00	--
NEOMYSIS RAYII	5	25.00- 37.00	--
DIASTYLIS GLABRA	17	19.00- 29.00	1.9
AMPELISCA MACROCEPHALA	1	-- - 29.00	--
PROTOMEDIA STEPHENSENI	1	-- - 9.00	--
ANONYX NUGAX	3	30.00- 35.00	--
PSEUDALIBROTUS GLACIALIS	3	12.00- 15.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	2	10.00- 19.00	--
MONOCULOIDES BOREALIS	8	10.00- 11.00	--
THYSANOESSA INERMIS	12	19.00- 23.00	--
THYSANOESSA LONGIPES	1	-- - 15.00	--
THYSANOESSA RASCHII	6	14.00- 19.00	--
PANDALUS GONIURUS	28	6.00- 14.00	--
EUALUS GAIMARDII	19	5.00- 11.00	--
ARGIS LAR	2	8.00- 13.00	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 80 DATE: OCT 15 1970
LATITUDE: 69 27 0 NORTH LONGITUDE: 164 43 0 WEST
HAUL: 1 DEPTH: 11 METERS TIME: 18:44

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	4.0
AURELIA AURITA	2	100.00-120.00	--
CHRYSAORA MELANASTER	1	-- -300.00	--
CYANEA CAPILLATA	25	20.00-200.00	--
STOMPHIA SP.	3	-- - --	--
MYSIS OCULATA/LITORALIS	85	18.00- 31.00	--
NEOMYSIS RAYII	2	25.00- 27.00	--
DIASTYLIS GLABRA	2	26.00- 27.00	--
HYPERIA MEDUSARUM	1	-- - 12.00	--
GAMMARUS WILKITZKII	1	-- - 25.00	--
PSEUDALIBROTUS NANSENI	2	15.00- 18.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	1	-- - 29.00	--
THYSANOESSA INERMIS	25	15.00- 20.00	--
THYSANOESSA RASCHII	31	5.00- 20.00	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 80 DATE: OCT 15 1970
LATITUDE: 69 27 0 NORTH LONGITUDE: 164 43 0 WEST
HAUL: 2 DEPTH: 2 METERS TIME: 19:16

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	20	-- - --	--
AURELIA AURITA	2	30.00- 50.00	--
CHRYSAORA MELANASTER	2	280.00-300.00	--
CYANEA CAPILLATA	3	70.00-240.00	--
STOMPHIA SP.	6	-- - --	--
CLIONE LIMACINA	2	-- - --	--
MYSIS OCULATA/LITORALIS	210	12.00- 28.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 16.00	--
NEOMYSIS RAYII	11	23.00- 37.00	--
DIASTYLIS GLABRA	7	27.00- 28.00	--
HYPERIA MEDUSARUM	1	-- - 16.00	--
HIPPOMEDON PROPINQUUS	1	-- - 20.00	--
PSEUDALIBROTUS GLACIALIS	3	12.00- 13.00	--
THYSANOESSA INERMIS	230	10.00- 24.00	--
THYSANOESSA RASCHII	350	8.00- 24.00	--
BRACHYURA - MEGALOPA	1	-- - --	--
PAGURIDEA GLAUCOTHOE	1	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 80 DATE: OCT 15 1970
LATITUDE: 69 27 0 NORTH LONGITUDE: 164 43 0 WEST
HAUL: 3 DEPTH: 13 METERS TIME: 20:18

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CUSPIDELLA MERTENSII	4	120.00-120.00	--
AURELIA AURITA	1	-- - 60.00	--
CHRYSAORA MELANASTER	5	230.00-460.00	--
CYANEA CAPILLATA	11	30.00-200.00	--
STOMPHIA SP.	1	-- - --	--
CLIONE LIMACINA	3	-- - --	--
MYSIS OCULATA/LITORALIS	750	-- - --	49.0
NEOMYSIS RAYII	2	-- - 25.00	--
DIASTYLIS GLABRA	1	-- - --	--
DAJUS MYSIDIS	7	-- - --	--
HYPEROCHE MEDUSARUM	1	-- - 8.00	--
AMPELISCA MACROCEPHALA	7	24.00- 30.00	3.5
PROTOMEDIA STEPHENSENI	1	-- - 8.00	--
GAMMARUS WILKITZKII	1	-- - --	--
PSEUDALIBROTUS GLACIALIS	2	11.00- 13.00	--
PSEUDALIBROTUS NANSENI	1	-- - 15.00	--
THYSANOESSA INERMIS	7	17.00- 27.00	--
THYSANOESSA RASCHII	15	10.00- 16.00	--
PANDALUS GONIURUS	4	8.00- 13.00	3.5
EUALUS GAIMARDII	3	6.00- 8.00	1.3
EUALUS SP.	1	-- - 2.50	--
ARGIS LAR	1	-- - 12.00	1.8
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 80 DATE: OCT 15 1970
LATITUDE: 69 27 0 NORTH LONGITUDE: 164 43 0 WEST
HAUL: 4 DEPTH: 22 METERS TIME: 20:55

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
CUSPIDELLA MERTENSII	8	90.00-140.00	--
AURELIA AURITA	3	60.00-100.00	--
CHRYSAORA MELANASTER	1	-- -150.00	--
CYANEA CAPILLATA	51	50.00-240.00	--
STOMPHIA SP.	22	-- - --	8.0
PHASCOLOSOMA	2	-- - --	--
MYSIS OCULATA/LITORALIS	842	21.00- 42.00	90.0
ACANTHOMYSIS PSEUDOMACROPSIS	1	-- - 18.00	--
NEOMYSIS RAYII	1	-- - 33.00	--
DIASTYLIS GLABRA	97	11.00- 32.00	--
DIASTYLIS SP (? LEPECHINI)	1	-- - 12.00	--
HYPERIA GALBA	1	-- - 5.00	--
HYPERIA MEDUSARUM	4	10.00- 20.00	0.8
AMPELISCA MACROCEPHALA	42	28.00- 32.00	14.0
BLYBIS GAIMARDII	1	-- - 22.00	--
ATYLUS BRUGGENI	1	-- - 14.00	--
PROTOMEDIA STEPHENSENI	9	7.00- 12.00	--
RHACHOTROPSIS ACULEATA	2	20.00- 25.00	1.0
GAMMARUS ZADDACHI	1	-- - 15.00	--
MELITA FORMOSA	1	-- - 15.00	--
ERICTHONIUS TOLLI	2	10.00- 12.00	--
ISCHYROCERUS LATIPES	1	-- - 12.00	--
ANONYX NUGAX	66	8.00- 35.00	50.0
PSEUDALIBROTUS GLACIALIS	2	11.00- 12.00	--
PSEUDALIBROTUS NANSENI	1	-- - 15.00	--
ACANTHOSTEPHIA BEHRINGIENSIS	15	15.00- 40.00	10.0
MONOCULOIDES BOREALIS	5	10.00- 11.00	--
THYSANOESSA INERMIS	10	18.00- 24.00	0.5
THYSANOESSA LONGIPES	5	15.00- 17.00	--
PANDALUS GONIURUS	44	7.00- 16.50	27.0
EUALUS FABRICII	1	-- - 9.00	1.0
EUALUS GAIMARDII	139	4.50- 10.50	57.0
ARGIS LAR	138	3.00- 20.00	126.0
CHIONOECETES OPILIO	1	-- - 25.00	--
BRACHYURA - ZOEA	2	-- - --	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 88 DATE: OCT 16 1970
LATITUDE: 68 55 0 NORTH LONGITUDE: 166 47 0 WEST
HAUL: 1 DEPTH: 11 METERS TIME: 19:47

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AURELIA AURITA	1	-- -100.00	--
CYANEA CAPILLATA	1	-- -150.00	--
STOMPHIA SP.	1	-- - --	--
MYSIS OCULATA/LITORALIS	1870	20.00- 40.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	35	7.00- 18.00	0.7
NEOMYSIS RAYII	122	10.00- 37.00	17.0
DIASTYLIS GLABRA	27	10.00- 30.00	3.6
DAJUS MYSIDIS	12	-- - --	--
HYPERIA MEDUSARUM	1	-- - 15.00	0.2
AMPELISCA MACROCEPHALA	1	-- - 26.00	--
ANONYX NUGAX	8	15.00- 35.00	6.0
PSEUDALIBROTUS NANSENI	1	-- - 17.00	--
THYSANOESSA INERMIS	301	16.00- 26.00	28.0
THYSANOESSA RASCHII	210	9.00- 28.00	9.0
PANDALUS GONIURUS	18	2.50- 9.00	1.8
EUALUS GAIMARDII	4	5.00- 8.00	1.0
ARGIS LAR	3	4.00- 9.00	1.1
BRACHYURA - MEGALOPA	5	-- - --	--
PAGURIDEA ZOEA	14	-- - --	--
PAGURIDEA GLAUCOTHOE	79	-- - --	1.8

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 88 DATE: OCT 16 1970
LATITUDE: 68 55 0 NORTH LONGITUDE: 166 47 0 WEST
HAUL: 2 DEPTH: 2 METERS TIME: 20:22

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	20	-- - --	--
AURELIA AURITA	1	-- - 60.00	--
CYANEA CAPILLATA	1	-- -100.00	--
CLIONE LIMACINA	1	-- - --	--
MYSIS OCULATA/LITORALIS	1533	17.00- 30.00	100.0
ACANTHOMYSIS PSEUDOMACROPSIS	12	9.00- 17.00	--
NEOMYSIS RAYII	30	11.00- 32.00	--
DIASTYLIS GLABRA	1	-- - 25.00	--
DAJUS MYSIDIS	1	-- - --	--
ANONYX NUGAX	2	-- - 35.00	1.8
THYSANOESSA INERMIS	19	16.00- 20.00	0.8
THYSANOESSA RASCHII	30	8.00- 18.00	1.9
PANDALUS GONIURUS	1	-- - 9.00	--
EUALUS SP.	1	-- - --	--
BRACHYURA - MEGALOPA	3	-- - --	--
PAGURIDEA ZOEA	1	-- - --	--
PAGURIDEA GLAUCOTHOE	12	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 88 DATE: OCT 16 1970
LATITUDE: 68 55 0 NORTH LONGITUDE: 166 47 0 WEST
HAUL: 3 DEPTH: 24 METERS TIME: 21:25

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	14.0
CUSPIDELLA MERTENSII	1	-- -140.00	--
AURELIA AURITA	2	50.00-140.00	--
CYANEA CAPILLATA	3	30.00-170.00	--
CLIONE LIMACINA	3	-- - --	--
MYSIS OCULATA/LITORALIS	242	17.00- 33.00	20.0
ACANTHOMYSIS PSEUDOMACROPSIS	11	17.00- 19.00	0.2
ACANTHOMYSIS SP.	2	10.00- 14.00	--
NEOMYSIS RAYII	238	9.00- 40.00	58.0
PSEUDOMMA TRUNCATUM	1	-- - 9.00	--
DAJUS MYSIDIS	20	-- - --	--
PARATHEMISTO LIBELLULA	1	-- - 15.00	--
RHACHOTROPSIS ACULEATA	2	15.00- 24.00	0.4
MELITA SP (? DESOICHAOA)	7	13.00- 15.00	--
THYSANOESSA INERMIS	24	19.00- 21.00	2.3
THYSANOESSA LONGIPES	1	-- - 16.00	--
THYSANOESSA RASCHII	30	9.00- 20.00	1.2
PANDALUS GONIURUS	16	3.00- 11.50	4.8
EUALUS GAIMARDII	58	6.00- 9.00	14.0
EUALUS STONEYI	2	-- - 5.00	--
EUALUS SP.	2	-- - 2.00	--
ARGIS LAR	3	4.00- 4.50	--
BRACHYURA - MEGALOPA	9	-- - --	--
PAGURIDEA ZOEA	150	-- - --	--
PAGURIDEA GLAUCOTHOE	113	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 88 DATE: OCT 16 1970
LATITUDE: 68 55 0 NORTH LONGITUDE: 166 47 0 WEST
HAUL: 4 DEPTH: 40 METERS TIME: 22:05

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	336.0
CUSPIDELLA MERTENSII	1	-- -140.00	--
AURELIA AURITA	1	-- - 80.00	--
CYANEA CAPILLATA	23	60.00-230.00	--
NEPTHYS PARADOXA (?)	2	-- - --	--
PHASCOLOSOMA	1	-- - --	--
LUMBRINEREIS SIMILABRIS	1	-- - --	--
AXIOTHELLA (?)	1	-- - --	--
MARGARITES SP.	1	-- - --	--
NATICA CLAUSA	1	-- - --	--
NUCULA TENUIS	1	-- - --	--
OPHIURDIDEA	1	-- - --	--
SAGITTA ELEGANS	1	-- - --	--
MYSIS OCULATA/LITORALIS	442	12.00- 37.00	50.0
ACANTHOMYSIS PSEUDOMACROPSIS	4	-- - --	--
ACANTHOMYSIS SP.	5	9.00- 15.00	--
NEOMYSIS RAYII	91	8.00- 38.00	20.0
PSEUDOMMA TRUNCATUM	1	-- - 9.00	--
EUDORELLA EMARGINATA	1	-- - 10.50	--
DAJUS MYSIDIS	4	-- - --	--
HYPERIA GALBA	1	-- - 14.00	--
HYPERIA MEDUSARUM	2	10.00- 18.00	--
ACANTHONOTOZOMA SERRATUM	1	-- - 7.00	--
PROTOMEDIA STEPHENSENI	2	7.00- 7.00	--
RHACHOTROPSIS ACULEATA	1	-- - 15.00	--
MELITA FORMOSA	4	12.00- 23.00	--
MELITA SP (? DESDICHADA)	7	10.00- 14.00	--
ANONYX NUGAX	2	14.00- 26.00	--
MONOCULOIDES BOREALIS	2	8.00- 9.00	--
THYSANOESSA INERMIS	5	22.00- 23.00	--
THYSANOESSA RASCHII	11	8.50- 22.00	--
PANDALUS GONIURUS	8	8.00- 14.00	9.0
EUALUS FABRICII	9	3.00- 7.00	0.6
EUALUS GAIMARDII	20	5.00- 9.00	7.0
EUALUS STONEYI	1	-- - 5.00	--
ARGIS LAR	70	3.00- 17.00	23.0
CRANGON DALLI	1	-- - 6.50	0.2
PAGURUS TRIGONOCHEIRUS	2	-- - --	--
PAGURIDEA ZOEA	70	-- - --	1.9
PAGURIDEA GLAUCOTHOE	104	-- - --	3.0

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 92 DATE: OCT 17 1970
LATITUDE: 68 36 0 NORTH LONGITUDE: 167 41 0 WEST
HAUL: 1 DEPTH: 13 METERS TIME: 18:03

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	50.0
CHRYSAORA MELANASTER	5	240.00-400.00	--
CYANEA CAPILLATA	1	-- -200.00	--
STOMPHIA SP.	2	-- - --	--
MYSIS OCULATA/LITORALIS	2	17.00- 30.00	--
NEOMYSIS RAYII	5	33.00- 34.00	--
DIASTYLIS GLABRA	1	-- - 16.00	--
THYSANOESSA RASCHII	5	10.00- 22.00	--
PANDALUS GONIURUS	2	8.00- 9.00	1.0

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 92 DATE: OCT 17 1970
LATITUDE: 68 36 0 NORTH LONGITUDE: 167 41 0 WEST
HAUL: 2 DEPTH: 2 METERS TIME: 18:37

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	6.0
AURELIA AURITA	2	110.00- --	--
CHRYSAORA MELANASTER	2	170.00-240.00	--
CYANEA CAPILLATA	3	50.00-160.00	--
CLIONE LIMACINA	7	-- - --	--
SAGITTA ELEGANS	2	12.00- 30.00	--
MYSIS OCULATA/LITORALIS	16	17.00- 26.00	--
ACANTHOMYSIS PSEUDOMACROPSIS	4	10.00- 17.00	--
NEOMYSIS RAYII	2	-- - 33.00	--
HYPERIA MEDUSARUM	1	-- - 16.00	--
HYPEROCHE MEDUSARUM	1	-- - 9.00	--
THYSANOESSA INERMIS	24	10.00- 25.00	--
THYSANOESSA RASCHII	331	14.00- 19.00	--
AHGIS LAR	1	-- - 4.00	--
PAGURIDEA ZOEA	4	-- - --	--
PAGURIDEA GLAUCOTHOE	5	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 92 DATE: OCT 17 1970
LATITUDE: 68 36 0 NORTH LONGITUDE: 167 41 0 WEST
HAUL: 3 DEPTH: 33 METERS TIME: 19:35

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	0	-- - --	102.0
AURELIA AURITA	1	-- - --	--
CHRYSAORA MELANASTER	6	160.00-470.00	--
CLIONE LIMACINA	3	-- - --	--
SAGITTA ELEGANS	1	-- - 22.00	--
MYSIS OCULATA/LITORALIS	1	-- - 24.00	--
NEOMYSIS RAYII	5	30.00- 36.00	1.4
HYPERIA GALBA	1	-- - 9.00	--
RHACHOTROPSIS OCULATA	1	-- - 13.00	--
THYSANOESSA RASCHII	6	12.00- 20.00	--
PANDALUS GONIURUS	1	-- - 4.00	--
EUALUS GAIMARDII	12	5.00- 10.00	6.0
EUALUS STONEYI	4	4.00- 6.00	0.3
AHGIS LAR	14	4.00- 16.00	6.0
CRANGON DALLI	1	-- - 6.00	--
BRACHYURA - MEGALOPA	2	-- - --	--
PAGURIDEA ZOEA	2	-- - --	--
PAGURIDEA GLAUCOTHOE	3	-- - --	--

CATCHES OF INVERTEBRATES BY 1.8 METER ISAACS-KIDD MID WATER TRAWL
IN THE SOUTHEASTERN CHUKCHI SEA
NUMBER, SIZE-RANGE, AND DISPLACEMENT VOLUME FOR EACH HALF-HOUR TOW

STATION: 92 DATE: OCT 17 1970
LATITUDE: 68 36 0 NORTH LONGITUDE: 167 41 0 WEST
HAUL: 4 DEPTH: 17 METERS TIME: 20:14

SPECIES IDENTIFICATION	NBR. INDIVIDUALS PER SAMPLE	SIZE RANGE (MM)	VOLUME (CC)
AGLANTHA DIGITALE	3	-- - --	--
CHRYSAORA MELANASTER	5	260.00-420.00	--
CYANEA CAPILLATA	2	90.00- 90.00	--
MYSIS OCULATA/LITORALIS	1	-- - 20.00	--
NEOMYSIS RAYII	4	33.00- 45.00	1.2
THYSANOESSA INERMIS	1	-- - 20.00	--
THYSANOESSA RASCHII	4	12.00- 18.00	--
PANDALUS GONIURUS	3	9.00- 11.00	2.6
EUALUS GAIMARDII	1	-- - 5.00	--
PAGURIDEA GLAUCOTHOE	1	-- - --	--

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