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The distribution, abundance, diversity and productivity of the western Beaufort Sea benthos.

Andrew G. Carey, Jr., Principal Investigator
School of Oceanography
Oregon State University
Corvallis, Oregon 97331

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TABLE OF CONTENTS

Page

1. summary 1

II. Introduction
   A. General nature and scope of study 2
   B. Specific objectives 5
   c. Relevance to problems of petroleum development 7

III. Current state of knowledge 8

Iv. Study area 9

v. Sources, methods and rationale of data collection
   A. WEBSEC 10
   B. OCS-Coastal and Shelf 10
   c. Temporal Variability Study Methods 10
   D. Epontic ice algal community relationships with the benthic fauna and environment 11

VI. Results
   A. Depth Distribution 12
   B. Temporal Variability 33
   c. Zoogeography of western Beaufort Sea Polychaeta (Annelida) 41

VII. Discussion 124

VIII . Conclusions 125

IX. Summary of January-March Quarter (RU #6 & #6W) 126

X. Auxiliary Material 150

I. Summary of Objectives, Conclusions, and Implications with Respect to OCS Oil and Gas Development.

Extensive exploration and development for oil and gas on the Alaskan and Canadian continental shelf have the potential to significantly influence the marine environment of the Beaufort Sea. It is impossible with our present knowledge to accurately predict the consequences of petroleum development on the marine benthos.

The past and continuing goal of this project has been to acquire the knowledge of the ecology of benthic invertebrate faunas of the Beaufort Sea continental shelf necessary to evaluate the-consequences of offshore oil and gas development. The distribution and abundance of the fauna has been examined in detail with studies of the spatial and temporal variability of these. These data will provide a baseline against which future changes in the benthic environment and community structure can be evaluated. Of current importance are: (1) the definition of temporal changes in sublittoral community structure, (2) the determination of the life histories and secondary production estimates of dominant and ecologically important species, (3) the description of the benthic food web, and (4) the study of the ecology of benthic invertebrates important as prey organisms to the marine mammals, birds, and fishes. Now that broad ecological patterns of benthic invertebrates on the Beaufort Sea shelf are becoming fairly well known, it is imperative to define the dynamic processes maintaining temporal and spatial structure.

II. Introduction

A. General nature and scope of the study.

The present benthic ecological studies on the continental shelf include functional, process-oriented research that is built on a strong base of descriptive work on ecological patterns and their relationship to the environment. Seasonal changes in the numerical abundance and biomass of the large macro-infauna (>1.0 mm) are defined at stations across the shelf. The benthic food web and its relationship to bird, fish and mammalian predators and the relationships between the epontic ice algal community and the benthic community beneath are under investigation.

The species composition, distribution and abundance of the benthos are being defined in the southwestern Beaufort Sea. Species and station groupings are statistically analyzed and the relationships to the bottom environment and to the biological relationships explored. Dominant species are identified. These patterns provide an insight into the relative importance of various features of the environment in determining the distribution and abundance of the benthic invertebrate fauna. Abundance patterns provide data on potentially productive areas of the shelf that may support the large and important top predators. Biological and ecological information on important prey species are necessary for an understanding of the functioning of the oceanic food web.

The development of the research on the continental shelf benthic invertebrates has proceeded along a logical sequence. As very little was known about the fauna at the initiation of the exploration and developmental phases of the oil and gas fields on the Alaskan North Slope, the early research involved basic survey work on the 1971 and 1972 U.S. Coast Guard oceanographic cruises in the Beaufort Sea, WEBSEC-71 and WEBSEC-72. Initial processing and analysis of bottom grab and otter trawl samples and bottom photographs were sponsored by the Oceanographic Section of the National Science Foundation by a grant to the Principal Investigator.

When NOAA, under sponsorship of" BLM, started an environmental assessment research program around the continental shelves of Alaska, Oregon State University participated in the benthic program in the Beaufort Sea. A combination NSF and NOAA/BLM research program supported several approaches and phases of research. Detailed analysis of benthic communities and identification of the total polychaete worm fauna over a wide range of depths could be accomplished under the National Science Foundation's auspices. Further continental shelf survey sampling could be continued under the OCSEAP with the cooperation of the Coast Guard and their Beaufort Sea icebreaker program. With NOAA's interest and logistics support, seasonal sampling and study of temporal changes in the continental shelf communities could be accomplished for the first time.

During the first year of operation a major objective of Task Order #4 for RU #6 was to summarize the literature and unpublished data. The majority of this information came from the work-up of the samples and the analysis of the data already on hand at Oregon State University as a result of participation in the WEBSEC program. The objectives for Task Order #5 under the present research contract for RU #6 emphasize the delineation of the benthic food web and the description of the coastal benthos. Efforts to characterize the composition of the Beaufort Sea fauna to the species level are continuing as this is a critical step toward understanding the dynamics of the benthic ecosystem. Detailed studies on temporal changes in the continental shelf benthic communities continue.

The OCS research on benthic ecology has been directed toward defining the distribution and abundance of the sea floor organisms, estimating the natural range of spatial and temporal variability, determining the effects of the environment on the fauna, estimating various biological rates, and delimiting the food web interactions of the benthic invertebrates.

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The species composition, distribution and abundance of the benthos are being defined in the southwestern Beaufort Sea. Species and station groupings are statistically analyzed and the relationships to the bottom environment and to biological relationships explored. Dominant species are identified. These patterns provide an insight into the relative importance of various features of the environment in determining the distribution and abundance of the benthic invertebrate fauna. Abundance patterns provide data on potentially productive areas of the shelf that may support the large and important top predators. Biological and ecological information on important prey species are necessary for an understanding of the functioning of the oceanic food web.

It has come to the attention of NOAA/BLM-OCSEAP that further year-round information is needed on the oceanographic and ecological processes taking place in the coastal waters of the Beaufort Sea. As exploratory and probably production drilling will take place in lagoonal and coastal waters out to 20 meters depth, studies are planned in this region to determine if the winter-spring months are biologically quiescent or whether organisms may be active and/or vulnerable to the oil-related activities during the ice-covered months of the year.

The research being undertaken in cooperation with other scientists, is oriented toward the processes maintaining the coastal and lagoonal ecosystems in the Beaufrot Sea. Of particular interest is the source of carbon that fuels the heterotrophic organisms living within the system. In lower latitude oceanic waters most of the carbon fixed by photosynthesis is ultimately derived from the phytoplankton, but in coastal waters much of the organic material may be land-derived. Water acts as a three dimensional reservoir and transporter of living and non-living organic carbon. The carbon cycle is a complex one that involves a large extent on interacting organisms. The benthos as an ecological group depend to a large extent on detritus that falls down to them. In the ice-covered waters of the Arctic, the epontic diatoms on the undersurface of the sea ice is an added source of carbon to the system (Homer, 1976) , and in shoal waters benthic algae add to the primary production (Matheke and Homer, 1974). In the coastal Beaufort Sea and its bordering lagoons detrital peat from the coastal erosion may also add carbon.

The underice diatom bloom is known to exist in coastal waters in the Chukchi Sea off Barrow, AK (Homer and Alexander, 1972) and in the Eskimo Lakes, an estuarine inlet from the eastern Beaufort Sea (Grainger, 1975). Though its areal extent either in coastal waters or offshore over the continental shelf is now known , it has been suggested that these epontic diatoms could be an important energy source to the southern Beaufort Sea ecosystem (Clasby, et al. 1976) and

for the Chukchi Sea (Hameedi, 1978). The pennate diatoms may fall to the sea floor upon ice melt in June (Matheke and Homer, 1974). There are very few ice algae data from the Beaufort Sea and no direct measurements to determine if the epontic diatoms fall to the bottom during ice melt. It is not resolved whether the ice algae add to the phytoplankton population (Hameedi, 1978) or fall to the sea floor (Matheke and Homer, 1974).

Various organisms become associated with the ice-sea water interface as the diatom bloom progresses through the months of April, May and June (Homer, 1976). Nematode worms are most abundant but harpacticoid copepods, amphipods and polychaete larvae have been observed on the underice surface. A coastal amphipod Onisimus affinis, an important member of the demersal fish food chain, has been reported as migrating up to the epontic community presumably to feed (Percy, 1975].

The degree of linkage between the underice epontic community and the benthic community beneath is not known. There is no direct evidence that this "upside down benthic community" is important in the energetic of the bottom communities themselves (Homer, 1976; Hameedi, 1978). It has been hypothesized that the sinking of detritus and diatom cells from the epontic community could provide a sizeable downward organic input to the benthic communities and that the vertical migration of benthic fauna up to the ice undersurface could provide another significant and earlier source of energy-rich organics to certain faunal groups of the benthos.

The research pilot project (RU #6w) on the interactions of the benthic community and the underice epontic community should provide necessary background data for the design of detailed studies to prove whether direct fluxes of food materials and organisms exist between the two surfaces.

The scope of the proposed project has been narrowed in terms of research to be accomplished, but not in terms of the objectives or hypothesis to be tested. Funding constraints dictate a pilot project, but careful selection of indicator organisms and critical processes should provide estimates of the degree of interaction between the sea ice undersurface and the sediment surface below should be possible.

Harpacticoid copepods are known to be associated with both the epontic and the benthic communities. These are small crustaceans that are easy to quantitatively sample with small cores. Though some species of gammarid amphipods are critical in the benthic food web (Carey, 1978) , careful quantitative sampling of these larger organisms would require a substantial increase in the effort expended in this subproject. However, this epifaunal group will be qualitatively sampled by scoop net along the underice· surface, along the sediment surface and midway between the two substrates to determine if benthic species become associated with the epontic community in April through early June. If feasible upward and downward-oriented traps similar to stream insect emergent traps will be deployed to attempt the collection of vertically migrating fauna such as the gammarid species Onissimus affinis.

B.. Specific Objectives

Objective I - Beaufort Sea Macrofaunal and Megafaunal Benthic Food Web Studies Based on Icebreaker Cruises

1) The numerical density, biomass and gross taxonomic composition of the large benthic macro-infauna (>1.0 mm) will be obtained at three water column and integrated benthic food web stations in the lease area from samples collected during the *1978* USC(% NORTHWIND cruise to the western Beaufort Sea.

2) The identification of prey and predator species important in the benthic food web will be undertaken as far as possible for the selected 1978 stations.

3) The gastrointestinal tract contents of selected species of benthic invertebrates and demersal fishes (to be supplied by ADF and G and OSU) will be analyzed as far as possible to determine the food web links within the benthic communities and the ocean ecosystem.

4 The species composition, distribution and relative abundance of the macro-epifauna will be determined at three characteristic food web stations.

5 The distribution and abundance of primary benthic prey species (when identified) will be summarized for the Beaufort Sea *continental* shelf from extant processed samples and analyzed data plus the new data to be acquired from the 1978 summer field season samples,

6 The numerical density biomass and gross taxonomic structure of the large macro-infauna (>1.0 mm) at the 5 standard benthic seasonal stations will be obtained across the continental shelf on the Pitt Point Transect.

Justification

Food web studies are important 'because these feeding links are the routes by which energy, elements and pollutants are transferred from one trophic level to another. Such studies are necessary to identify the keystone species and important feeding areas on the Beaufort Sea continental shelf. Icebreakers are a suitable platform for integrated multidisciplinary research, and many parts of the coastal food web were studied during the 1978 curise. Efforts were made during the cruise to sample inshore of the 20 meter contour and in the lease area. Sampling will be coordinated as much as possible with the inshore efforts of Carter Broad (RU #356) on the R/V ALUMIAK. Efforts were made to include the outer edges of the oil and gas exploratory case area within the 20 meter contours.

Objective II - The life history, reproductive activity and yearly variability of selected benthic species at standard stations on the Pitt Point Transect.

1 The reproductive activity and population size structure of abundant species of bivalve molluscs, gammarid amphipods and polychaete worms will be determined as far as possible from the 1975-76 Smith-McIntyre grab samples on hand.

2 The yearly variability in numerical density and biomass of dominant species will be determined at the benthic Pitt Point stations.

Objective III

General: To determine the interrelationships between the underice epontic community and the underlying benthic community in the Boulder Patch and in Ste. Fansson Sound in the spring of 1979.

Specific: To determine the abundance and taxonomic composition by major group of the meiofauna and small macrofauna of the organisms on the under-surface of the sea ice and associated with the sediments below.

To determine the abundance and species composition of the harpacticoid copepods in the sediments and the undersurface of the sea ice.

To determine the downward flux of particles, e.g. fecal pellets, detritus, benthic diatoms from the undersurface of the ice to the sediment-water interface.

To determine if vagile benthic fauna, e.g. gammarid amphipods and harpacticoid copepods, undergo vertical migrations up to the productive epontic community in April and May and downward to the sediments upon ice break-up and melt in June.

Selected References

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c. Relevance to Problems Associated with Petroleum Developm

Extensive exploratory and production drilling for petroleum th an
and Canadian continental shelf has the potential to significantly in th
marine" benthic environment and its associated biota. It is impos th
present state of our knowledge of the benthos and the Arctic envi nm
accurately predict either the long or short term consequences of
development on the marine invertebrate benthos and the benthic fo
recently has descriptive baseline data on species distribution, c
and abundance become available with estimates of variability in s an ime

III. Current State of Knowledge

Since intensive sampling of the benthos of the southwestern Beaufort Sea beginning in 1971, ample collections have been made to define the broad ecological patterns of the bottom invertebrate organisms. These data have been submitted as part of the Final Report of NOAA/BLM-OCSEAP Contract No. 03-5-022-68, Task Order No. 4 submitted to NOAA by the Benthic Ecology Group at Oregon State University under Dr. Andrew G. Carey, Jr. in Quarterly and Annual Reports for Task Order No. 5 of RU #6, and in publications (Carey, Ruff, Castillo and Dickinson, 1974; Carey and Ruff, 1977; Montagna and Carey, 1978; Bilyard and Carey, unpublished M.S.) .

Temporal and spatial variability are also fairly well defined, but the processes involved in maintaining these are not known. In some areas the scoring of the sea floor by ice gouging appears to increase the patchiness of the large infauna (Carey et al., 1974 and Carey and Ruff, 1977). It is suggested that the temporal variability of the outer continental shelf communities are seasonal and caused by reproductive cycles, but no data are yet available to test this hypothesis (Carey, Ruff, and Montagna, unpublished M.S.).

Benthic invertebrates that are important as food sources of marine mammals and birds have been designated by other research groups (UR's 230, 232, 172 and 196), but the ecology of these particular prey species are not well known. Research has just been initiated on the benthic food web itself; its structure and rates are not known at the present time.

In summary, most of our information about the benthic invertebrates is descriptive in nature, and the studies of the processes that cause the described patterns are only just in the beginning stages.

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Bilyard, G.R. and A.G. Carey, Jr. Distributional patterns of western Beaufort Sea polychaetous annelids (unpublished M.S.).

Carey, A.G., Jr., R.E. Ruff, J.G. Castillo, and Dickinson. 1974. Benthic Ecology of the Western Beaufort Sea Continental Margin: Preliminary Results. In: The Coast and Shelf of the Beaufort Sea, J.C. Reed and J.E. Sater, Editors. Arctic Institute of North America, pp. 665-680.

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Montagna, P.A. and A.G. Carey, Jr. 1978. Distributional notes of Harpacticoida (Crustacea: Copepoda) collected from the Beaufort Sea (Arctic Ocean) Astarte 11: in press.

IV. Study Area

The Beaufort Sea is an integral part of the Arctic Ocean (Coachman and Aagaard, 1974). Normally the sea ice melts and is advected seaward during July and August in the southern fringe of the sea over the continental shelf. This is a response to regional wind stresses which are variable from year to year. For example, in some years the polar pack ice can remain adjacent to the coastline throughout the entire season. "The extent of ice cover during the sunlit summer months affects wind mixing of surface waters and the penetration of light into the water column. These factors affect the onset and intensity of phytoplankton production which is highly variable and of low magnitude (Homer, 1976; Clasby, Alexander and Homer, 1976). The keels of sea ice pressure ridges ploughing through the sediments cause significant disturbance of the benthic environment in water depths between 20 and 40 meters (Barnes and Reimnitz, 1974; Reimnitz and Barnes, 1974). They gouge the bottom as they are transported across the inner shelf by the Beaufort Sea gyral circulation and by wind stress.

Generally the bottom water masses of the southwestern Beaufort Sea are stable, and except for the shallow coastal zone, differ little in thermohaline characteristics throughout the year (coachman and Aagaard, 1974). However, the outer shelf region from Point Barrow to about 150°W is influenced by Bering-Chukchi water that is advected as a subsurface layer and moves around Point Barrow throughout the year in pulses controlled in part by atmospheric pressure gradients (Hufford et al., 1977). Coastal upwelling was observed in the Barter Island region on the shelf near 143°W during the summer of 1971 when the pack ice had moved relatively far offshore (Mountain, 1974).

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Mountain, D.G. 1974. Preliminary analysis of Beaufort shelf circulation in summer. In: J.C. Reed and J.E. Sater (Eds.) Proc. Sympos. Beaufort Sea Coast and Shelf Res. Arctic Institute of North America. pp. 27-42.

Reimnitz, E. and P.W. Barnes. 1974. Sea ice as a geologic agent on the Beaufort Sea shelf of Alaska. In: Proc. Sympos. Beaufort Sea coast and Shelf Res. Arctic Institute of North America. pp. 301-354.

V. Sources, Methods and Rationale of Data Collection

In general, two areas of continuing benthic ecological research are: (1) the extension of research into a food web project which is designed to elucidate the biological interactions within the benthos and between the benthic organisms and other portions of the ecosystem; and (2) the further accumulation of data from existing samples to provide a more complete understanding of the patterns of , distribution and abundance of benthic invertebrates across the continental shelf. This descriptive detailing will provide baseline data with more accurate estimates of natural spatial and temporal variability.

To date, the experimental design has included a description of the benthic macro-infaunal and mega-epifaunal communities based on the WEBSEC and OCS samples. Numerical densities, total biomass, and major taxonomic composition have all been examined. As the species within the taxonomic groups have been identified, statistical analysis have delimited species and station groupings, and these groups have been correlated with the environmental characteristics of the benthic boundary. Estimates of natural spatial variability have been of major concern, and the descriptive phases of the research have been extended through a twelve month period to provide estimates of temporal variability and to provide initial information of the life histories of the arctic invertebrates. The study of interactive pathways with other portions of the ecosystem through the food web is a logical extension of the current benthic research.

A. WEBSEC

A large series of Smith-McIntyre 0.1 m^2 grab samples were collected during the 1971 and 1972 WEBSEC cruises of the U.S. Coast Guard. These formed the basis for our initial survey of the large benthic infauna (>1.0 mm) and mega-epifauna (>1.3 cm). Five grab samples were collected per station. Details of methodology may be found in the 1977 Final Report for RU #6 Task Order #4, and in Carey and Ruff (1977). These samples form the source of much of the polychaete results reported here. Gordon R. Bilyard under support of the National Science Foundation and NOAA/BLM is analyzing these collections as part of his Ph.D. dissertation.

B. Ocs - Coastal and Shelf

Continued sampling of the benthos for the OCS program has added survey information critical to the description and understanding of species distributions and abundances and ecological patterns. A minimum of 5 quantitative grabs per station has been adherred to as a sampling strategy whenever possible.

The OCSEAP-sponsored foodweb cruise in the Beaufort Sea during the 1977 summer sampling season allowed the sampling of further stations in previously unsurveyed areas (Figure 1) on the continental shelf and continental slope. The coastal areas sampled from the R/V ALUMIAK are summarized in Figure 2 and Table 1.

c. Temporal Variability Study Methods

In October 1975 we inititate year-round sampling at standard stations across the southwestern Beaufort Sea continental shelf. Our major objectives were: (a) to determine the degree and timing of changes, if any, in the numerical abundance, biomass, and species composition of the benthic communities and (b) to determine the size distribution and reproductive activity of dominant species

V. C. Temporal Variability Study Methods (continued)

throughout the year. Five stations at 15 meter depth intervals from 25 to 100 meters were sampled on five occasions over a 13-month period off Pitt Point, Alaska: Sampling was accomplished from an icebreaker during the summer field season and with the aid of a helicopter during the remainder of the year. A minimum of five standard 0.1 m^2 Smith-McIntyre grab samples were taken at each station occupied.

Navigation was by DEW station radar, depth sounder, and sometimes aided by OMEGA during ice field trips and by satellite navigator, Loran-C and depth sounder on the summer cruise. New techniques and lighweight gear were developed for use of the grab through the ice on airborne trips. The basic station set-up consisted of a steel pipe tripod positioned over a 1.2 m square hole in the ice and a portable gasoline hydro winch hauling 3/16" cable rigged through blocks.

The collected sediment was initially washed through 0.42 and 1.0 mm sieves, and the larger infaunal organisms (>1.0 mm) were sorted into major taxonomic groups, counted and weighed (wet) in the laboratory. Numerical density is based on all taxa (>1.0 mm) except foraminiferans and nematodes. Wet-preserved weight includes soft-bodied organisms (>1.0 mm); for greater accuracy and fidelity shelled molluscs, ophiuroids and 5 large, rare specimens weighing more than 3.0 g each were excluded. Significance of seasonal difference (P) was determined by the Kruskal-Wallis one-way analysis by ranks: J.M. Elliot, Some Methods for the Statistical Analysis of Samples of Benthic Invertebrates. (Freshwater Biological Association, Scientific Publication No. 25, Ambleside, England 1971), p. 118. During the last quarter, the 0.5-1.0 mm fraction of the grab samples have been picked and rough sorted. This allows further analysis of temporal variability, particularly of the juvenile macro-faunal forms for definition of periods of recruitment of young into the benthic populations. (See Quarterly Report for detailed data summaries.)

D. Epontic ice algal community relationships with the benthic fauna and environment.

During the last quarter preliminary fieldwork was accomplished as the initial phase of a study of the interrelationships between the "benthic" community that develops on the undersurface of coastal sea ice and the benthic community below. Cores of sediments and ice were taken by divers, and vertical animal migration traps and particle collectors were also deployed. Further details on these techniques may be found in the Quarterly Report appended to this Annual Report.

VI. Results (A summary of earlier results and conclusions can be found in the expanded Quarterly Report for the period 1 October - 31 December 1978 for RU #6.)

A. Depth distribution and abundance of dominant pelecypod molluscs and polychaetous annelids across the western Beaufort Sea continental shelf.

There is clear evidence of depth zonation of species from the two major taxonomic groups, the bivalve molluscs and the polychaete worms (Figures 1-19. Specimens from these groups from the RU #6 Smith-McIntyre grab collections have almost entirely been identified to species. Detailed quantitative ecological grouping analyses have been undertaken for the polychaetes collected on WEBSEC-71 and 72 and several OCS icebreaker cruises (Bilyard and Carey, unpublished M.S.). Preliminary ecological analyses for the bivalves and the remaining polychaetes are in progress.

The preliminary distribution-abundance data are summarized for the Pingok Island and Barter Island transects for 12 dominant species of bivalves and 26 dominant species of polychaetes. The depths sampled range from 5 meters in the coastal environment to 100 meters at the edge of the continental shelf. Each station was sampled by 5 to 10 multiple grab samples from the 1976-78 summer seasons. The deeper stations were occupied by the USCGC GLACIER and the coastal ones by the R/V ALUMIAK. In the bar graphs (Figures 1 through 19) the abundance of each species is plotted for the 8 depths across the shelf on the two transects. Zeros are interpreted as absences, and a zero count in a depth zone of low faunal density is interpreted as being within the normal ecological range of that species. In the latter case, the depth range is inferred to extend over the whole depth range within which the species was collected. At the present stage of analysis only preliminary comments can be made about these data; and only two transects are summarized.

The bivalve molluscs are distributed across the entire shelf areas sampled (Figures 1-6). Most of the species are abundant on the inner half of the continental shelf. Some of the abrupt changes in average abundance per square meter may be directly or indirectly caused by "the effect of ice gouging and hydrographic and/or geologic characteristics of the shear zone. This zone of active ice deformation and pressure-ridging is at an average depth of 25 meters on the Beaufort Sea continental shelf. If these significant changes in distribution and abundance are caused by the ice gouging in the active shear zone, the effects could be caused by direct destruction as well as by indirect effects, e.g. increased turbidity of the water, increased localized erosion and deposition, etc.

Though some of the basic distributional patterns of individual species are similar for both transects, distinct differences are present in some molluscan distributional patterns between the two regions of the shelf. These are probably caused by differences in the environment, or perhaps to patchiness of the organisms, but in any case it is difficult to generalize from these data at the present time.

The polychaetous annelids are also distributed across the entire continental shelf in the areas sampled (Figures 7-19; Table 1) . These data also suggest some characteristic depth distribution-abundance patterns; some species are found on the inner shelf e.g. Marenzellaria wireni (Figure 7), some on the mid-shelf e.g. Cistenides hyperborea (Figure 13), and others on the outer shelf e.g. Lumbrineris minuta (Figure 16). Still other species e.g. Minuspio cirrifera (Figure 16) are distributed across the entire shelf, but may show large abundances nearshore. Bimodal patterns of distribution and abundance of some species, e.g. Micronephthys minuta (Figure 19) suggest again some direct and/or indirect effects of the ice-gouging phenomenon associated with the seasonal sea ice shear zone.

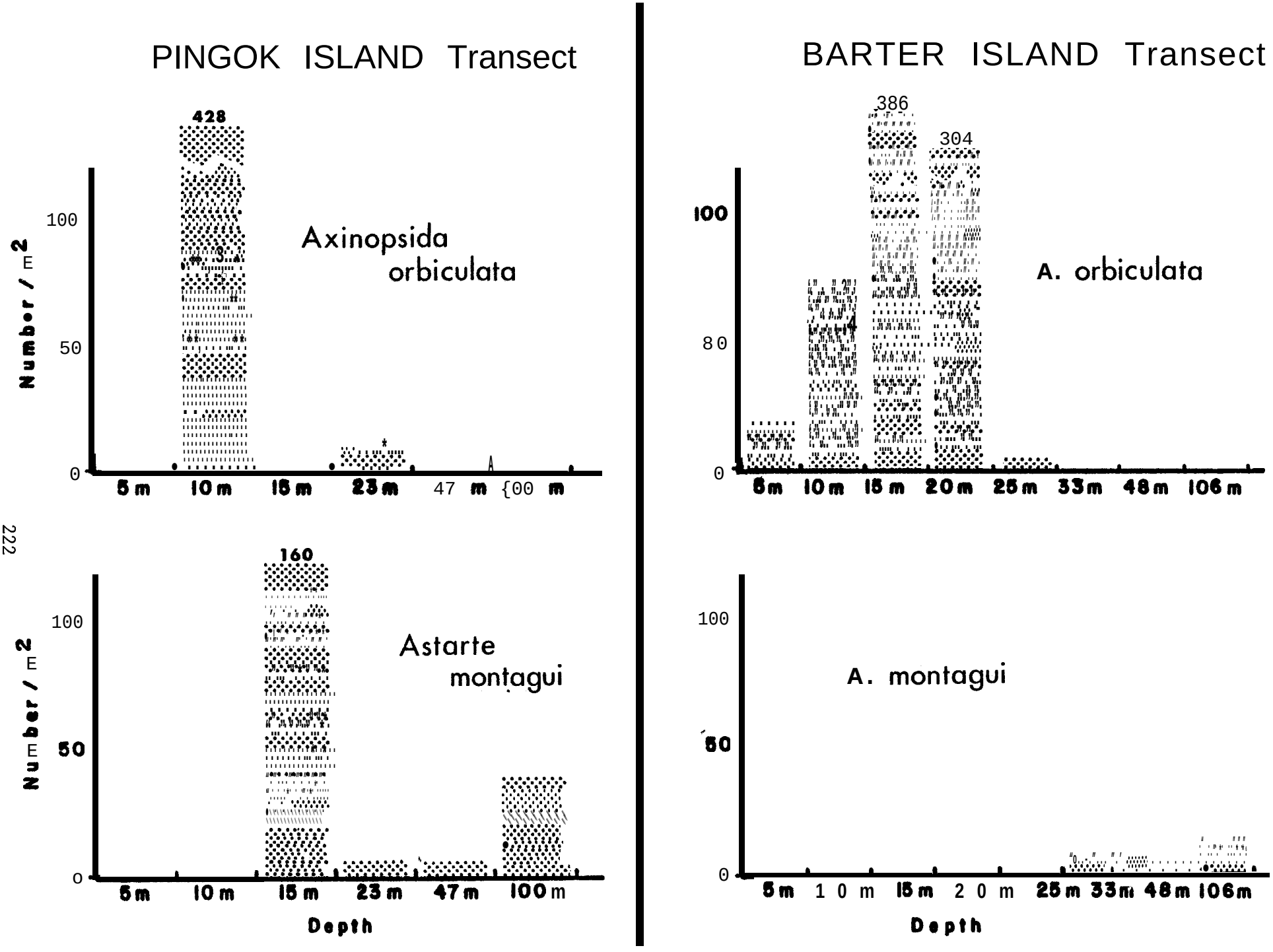


Figure 1. Bivalve mollusc distribution-abundance patterns across the Beaufort Sea shelf.

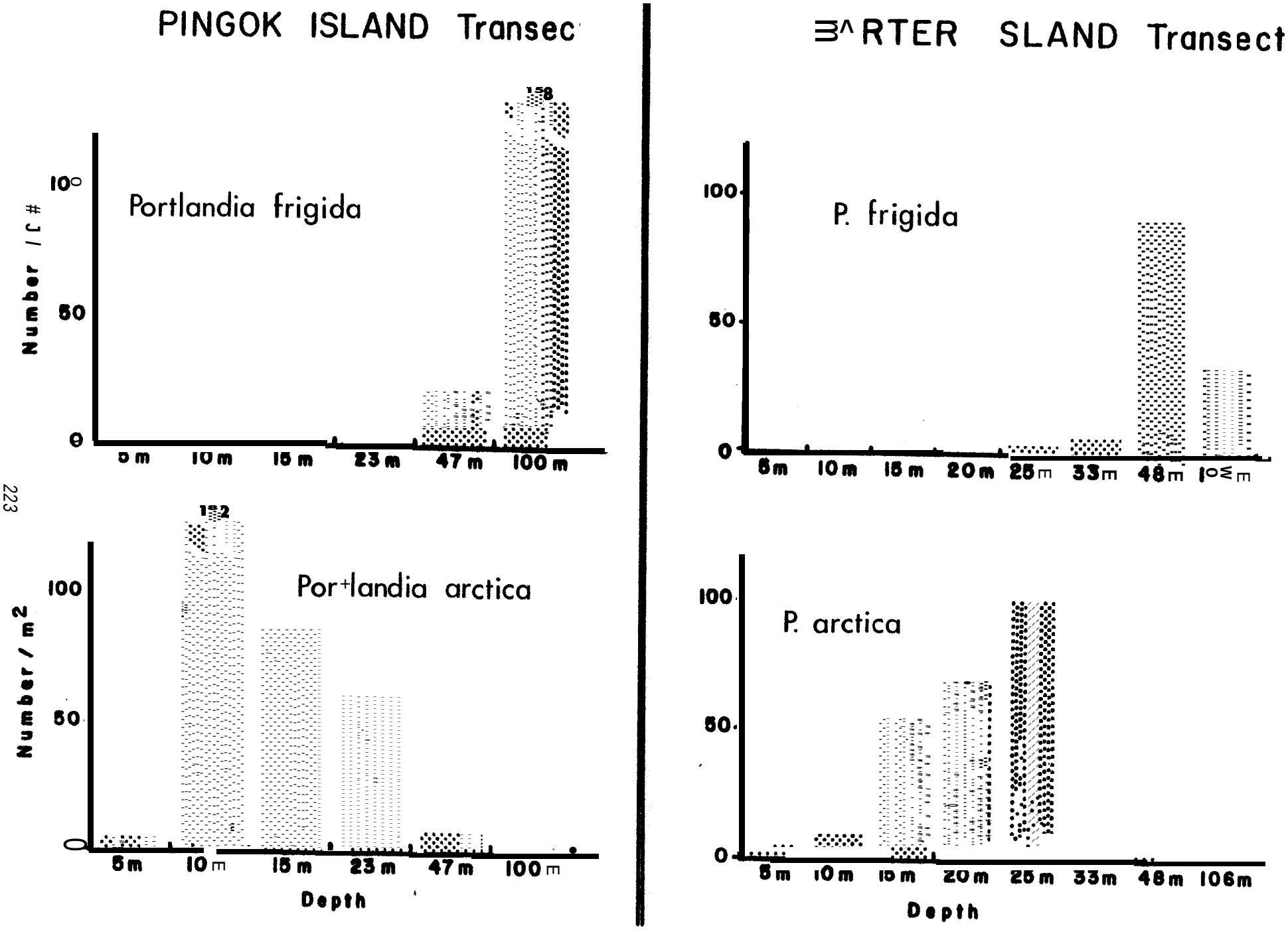


Figure 2. Bivalve mollusc distribution-abundance patterns across the Beaufort Sea shelf.

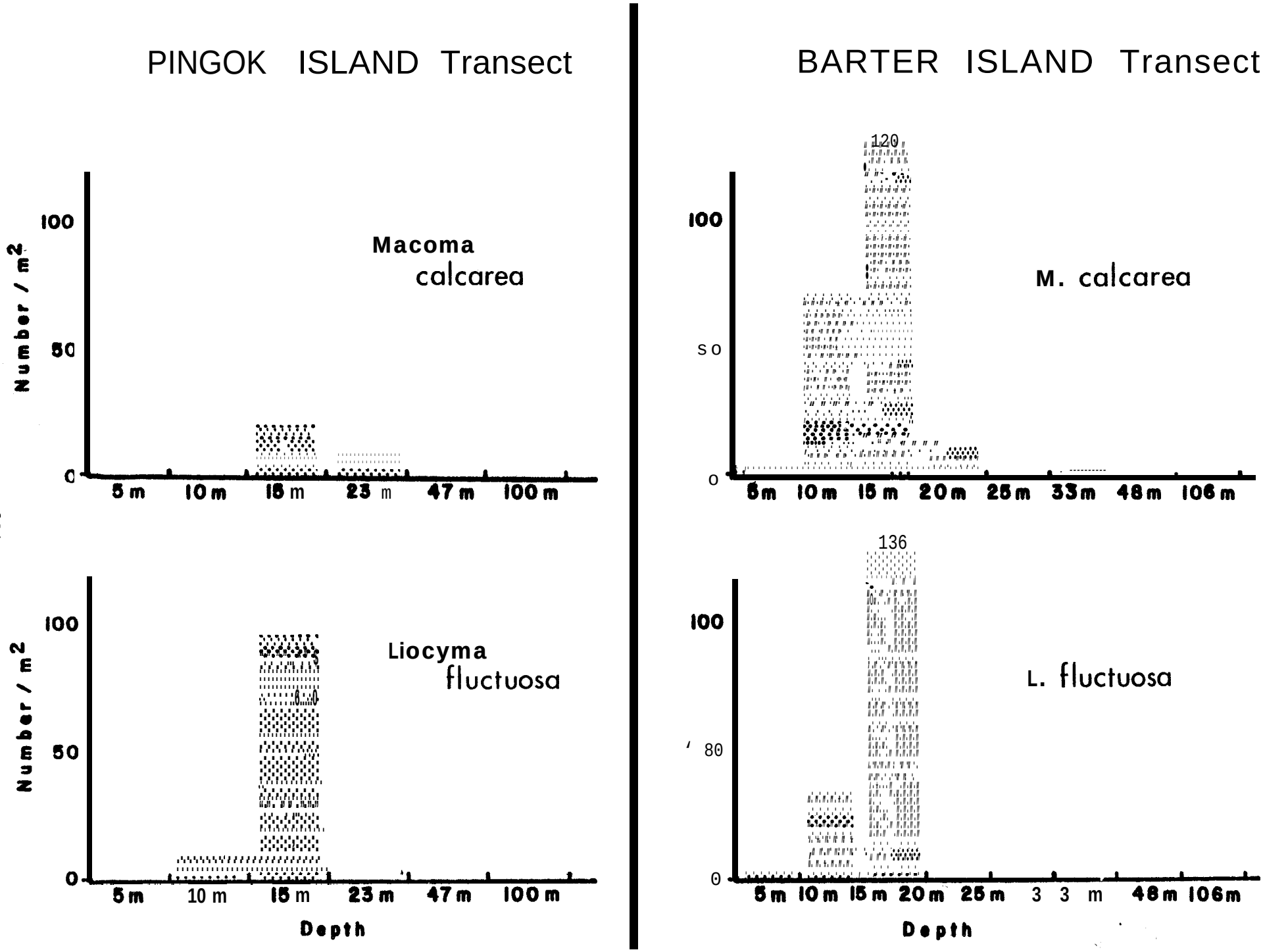


Figure 3. Bivalve mollusc distribution-abundance patterns across the Beaufort Sea shelf.

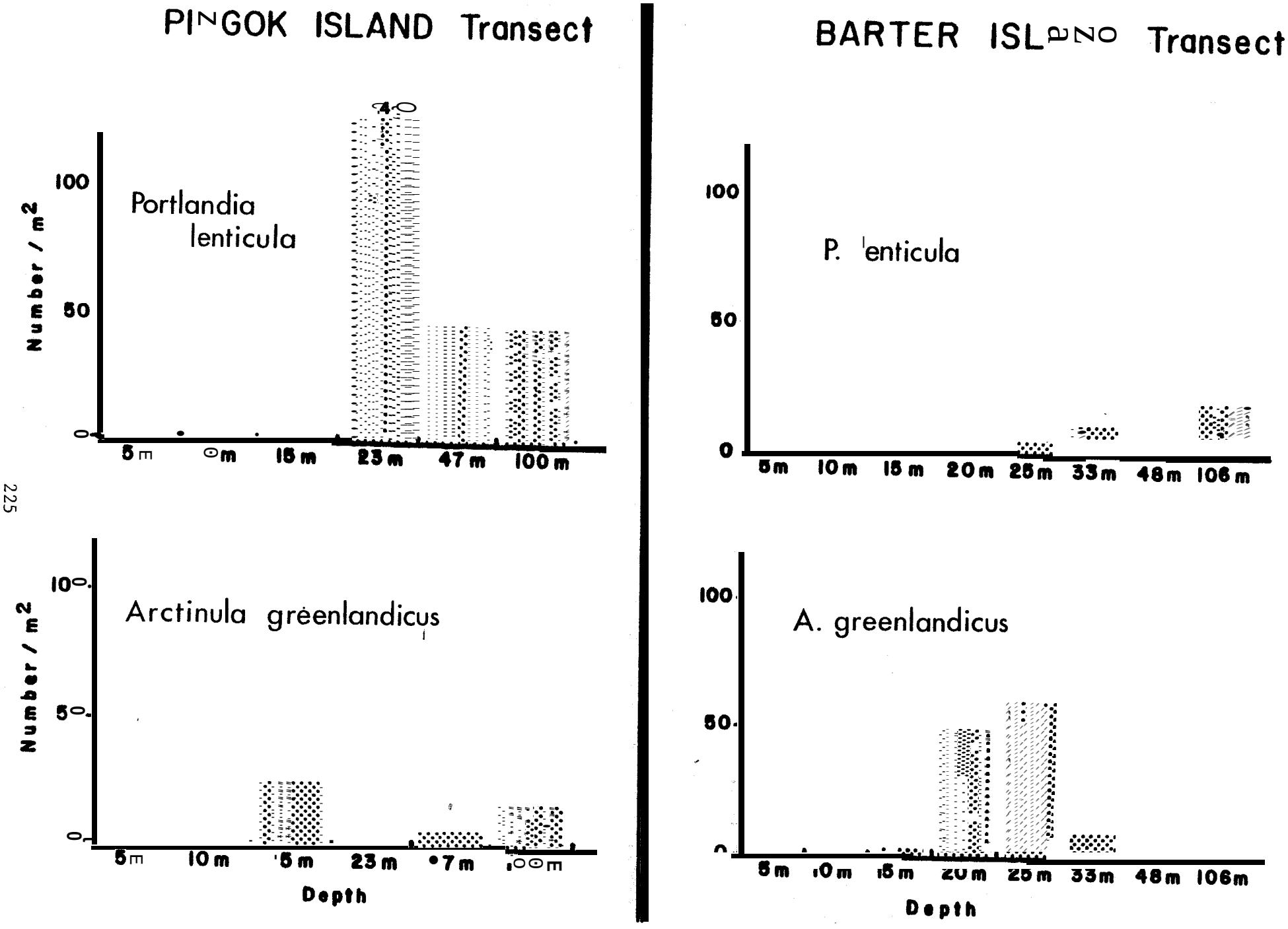


Figure 4. Bivalve mollusc distribution-abundance patterns across the Beaufort Sea shelf.

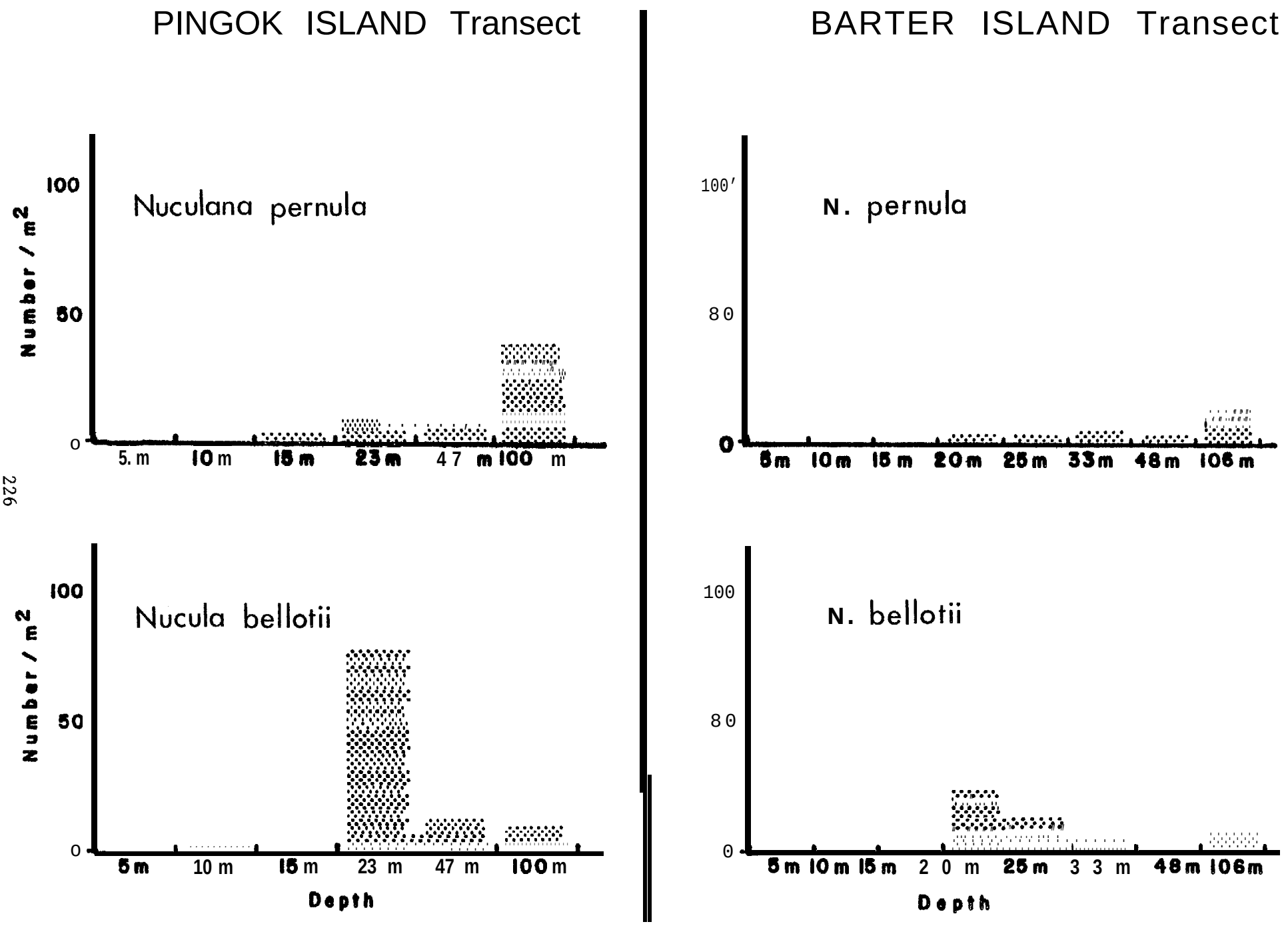


Figure 5. Bivalve mollusc distribution-abundance patterns across the Beaufort Sea shelf.

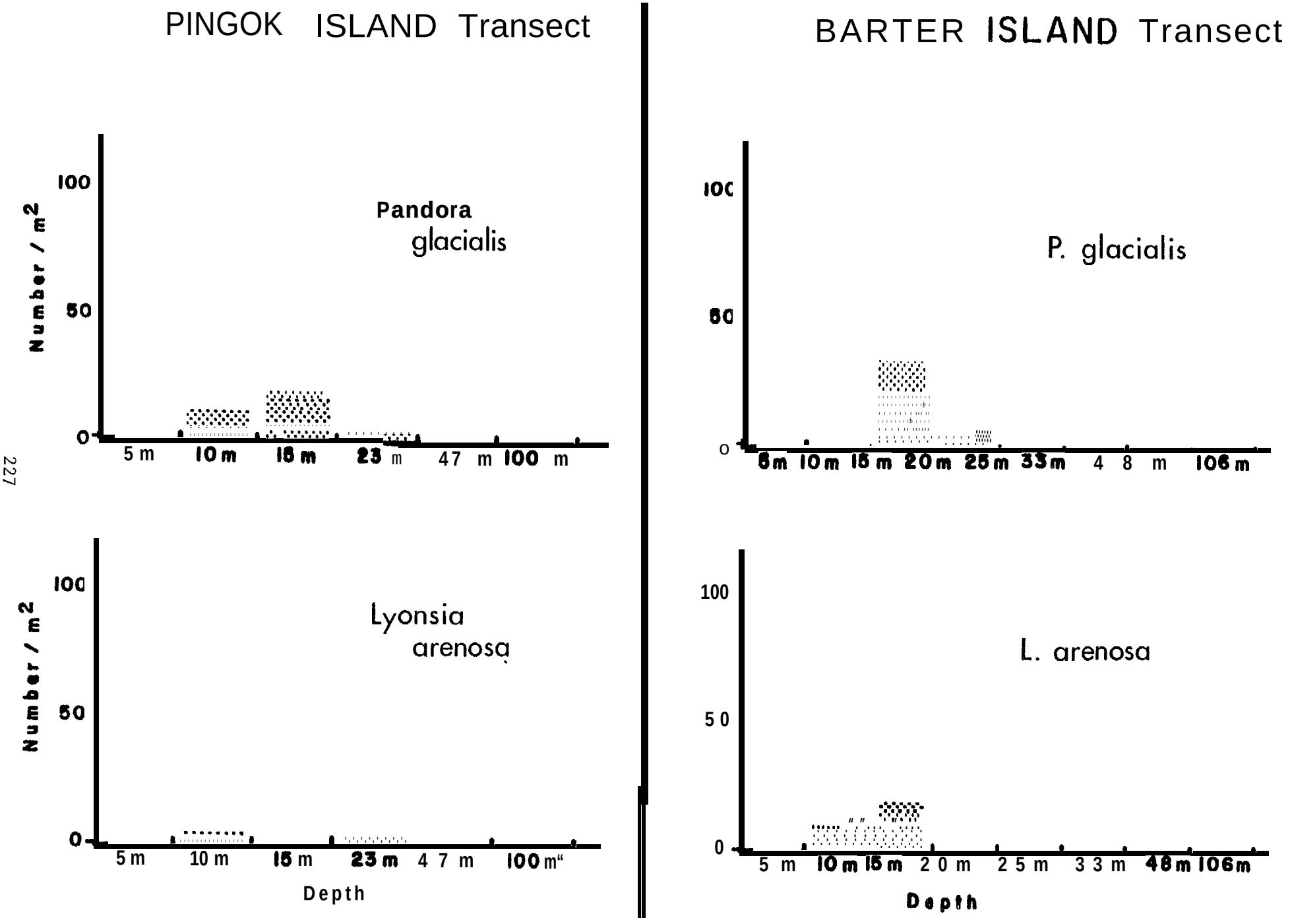


Figure 6. Bivalve mollusc distribution-abundance patterns across the Beaufort Sea shelf.

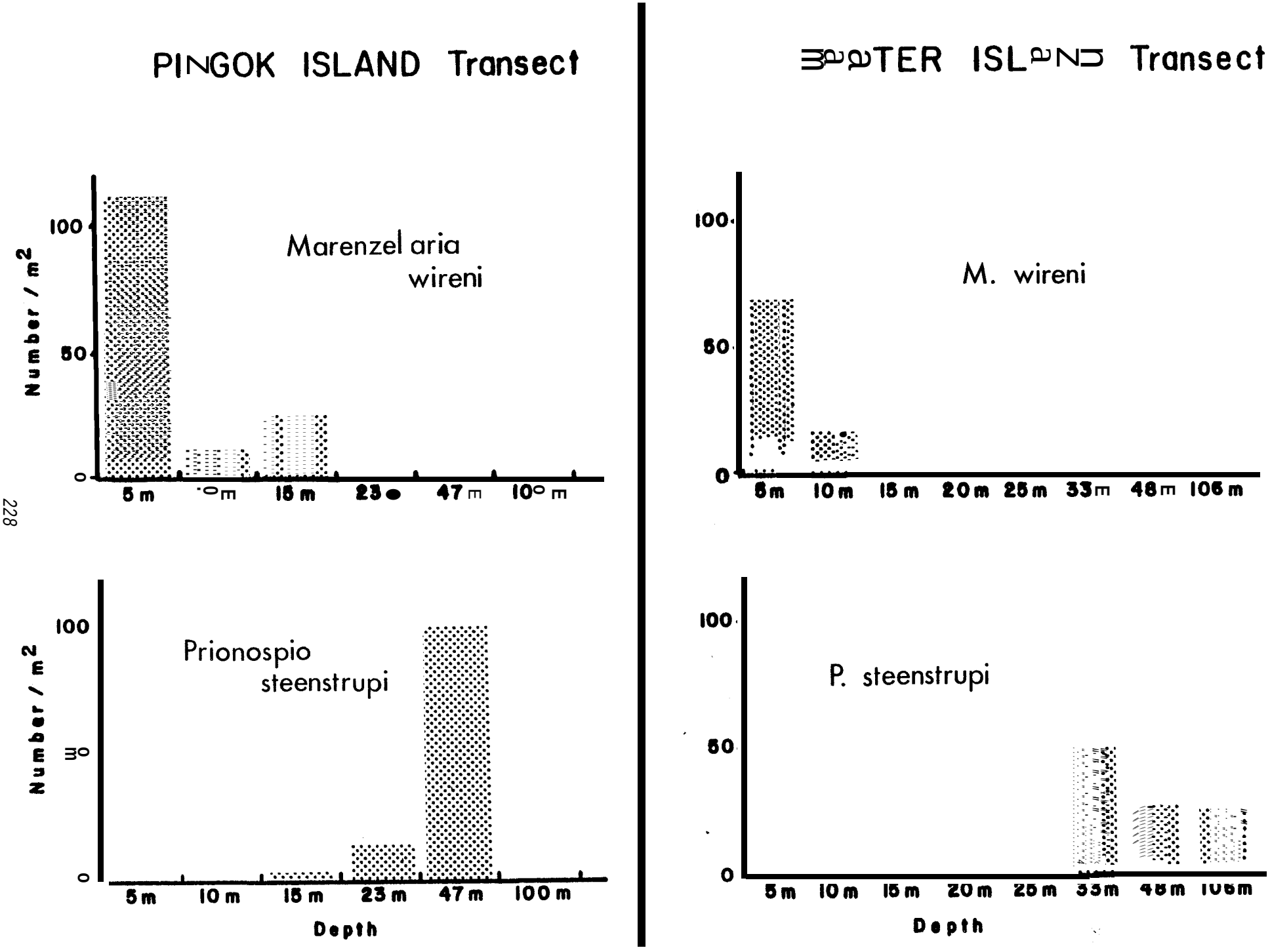


Figure 7. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

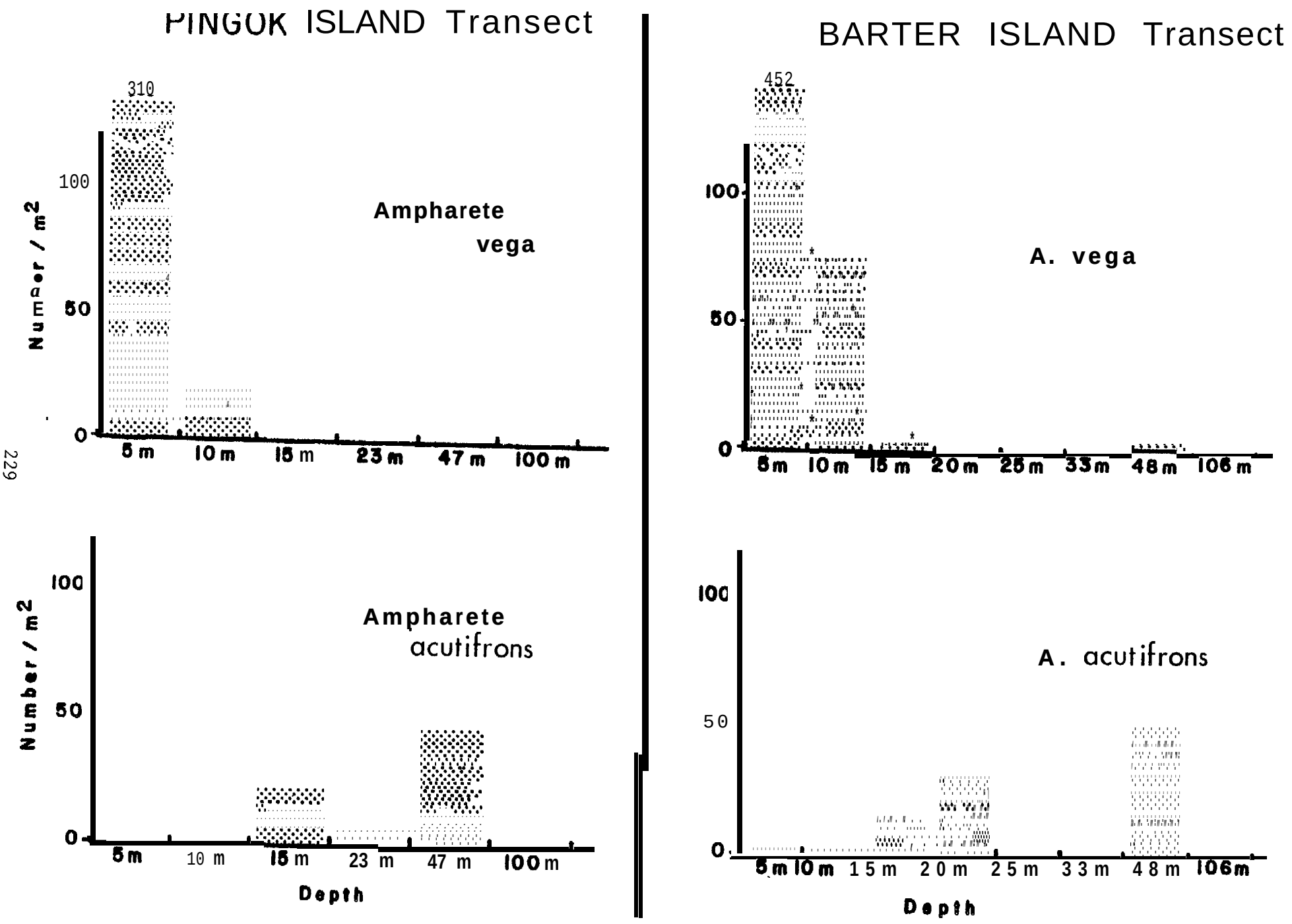


Figure 8. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

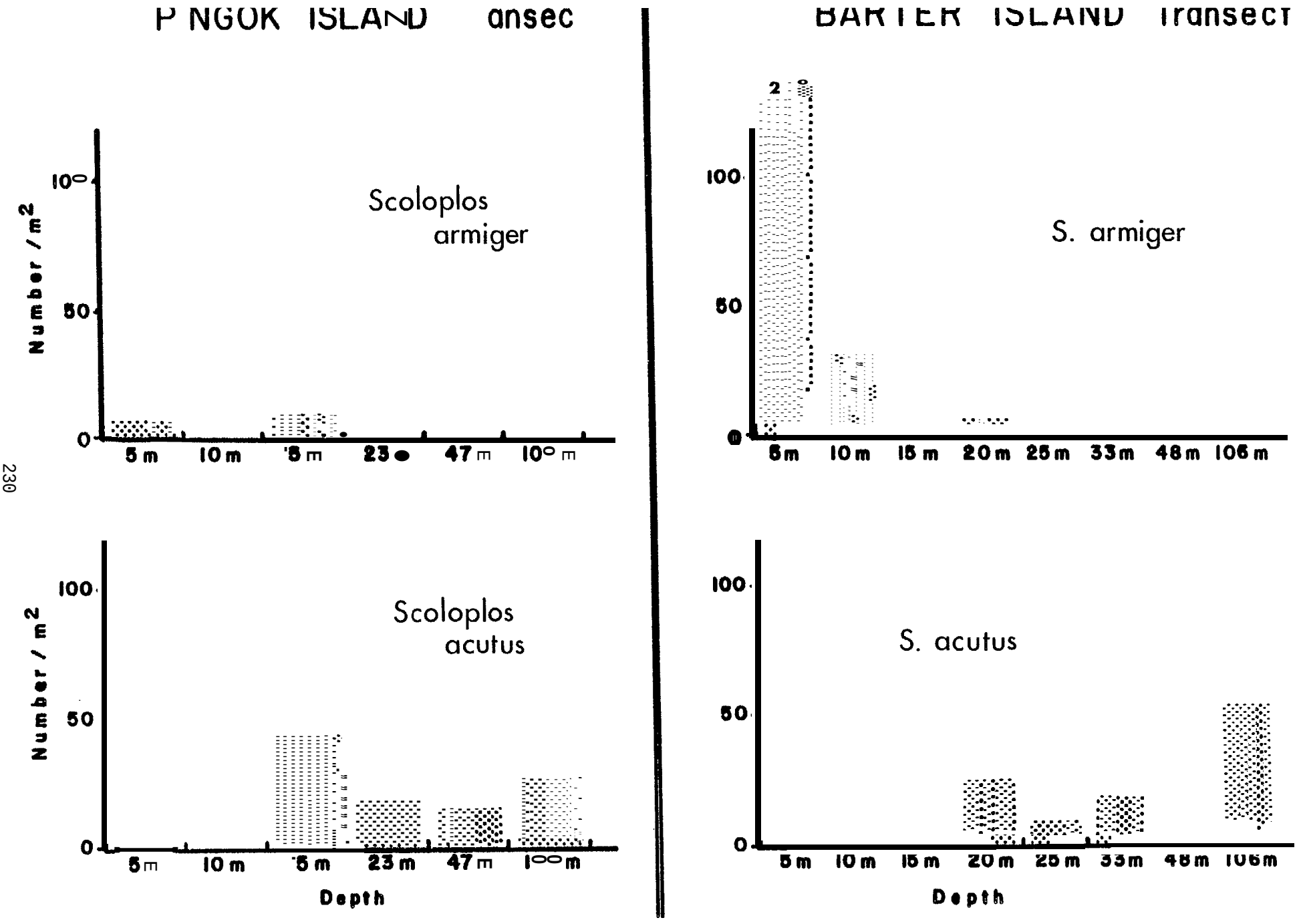


Figure 9. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

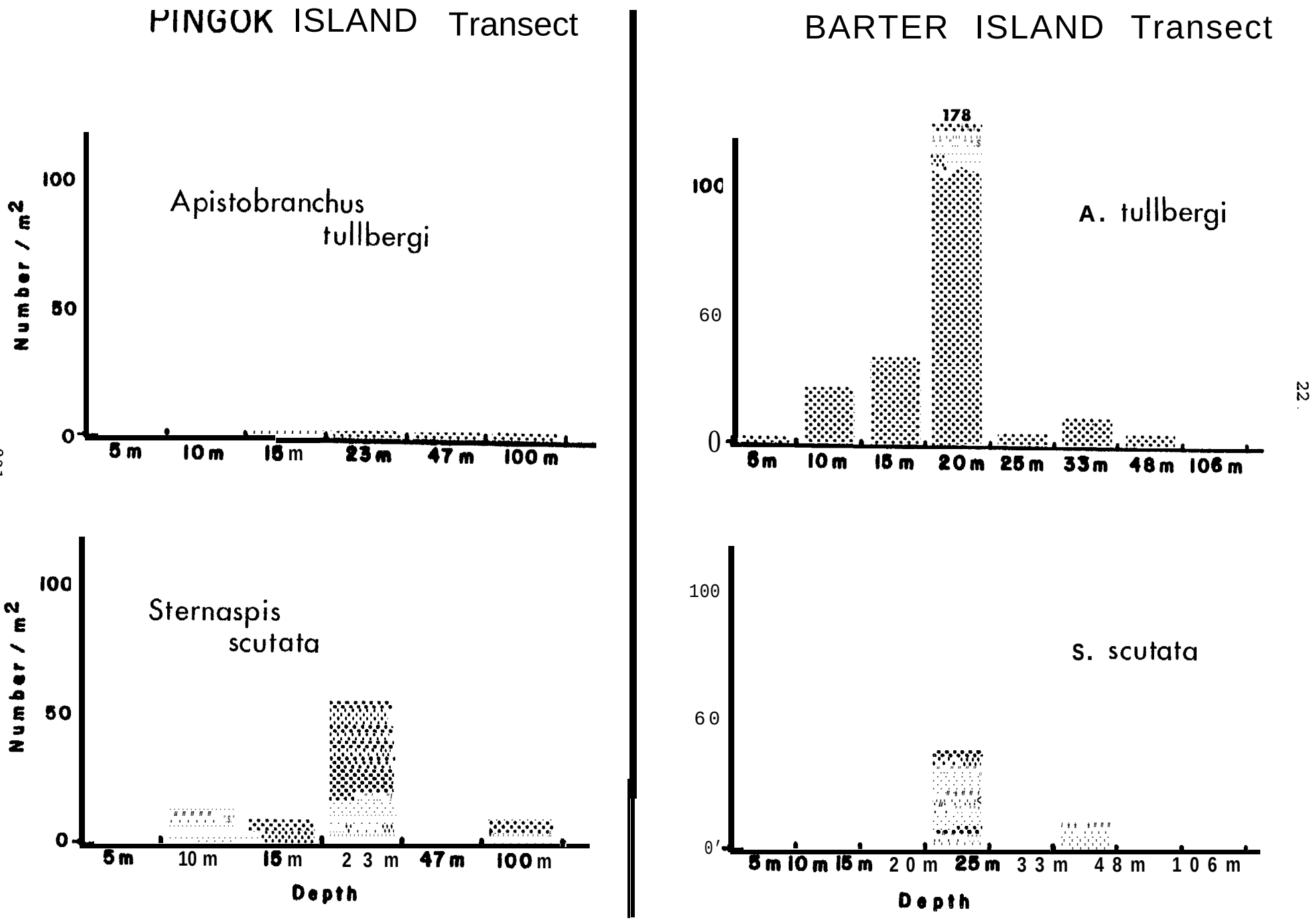


Figure 10. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

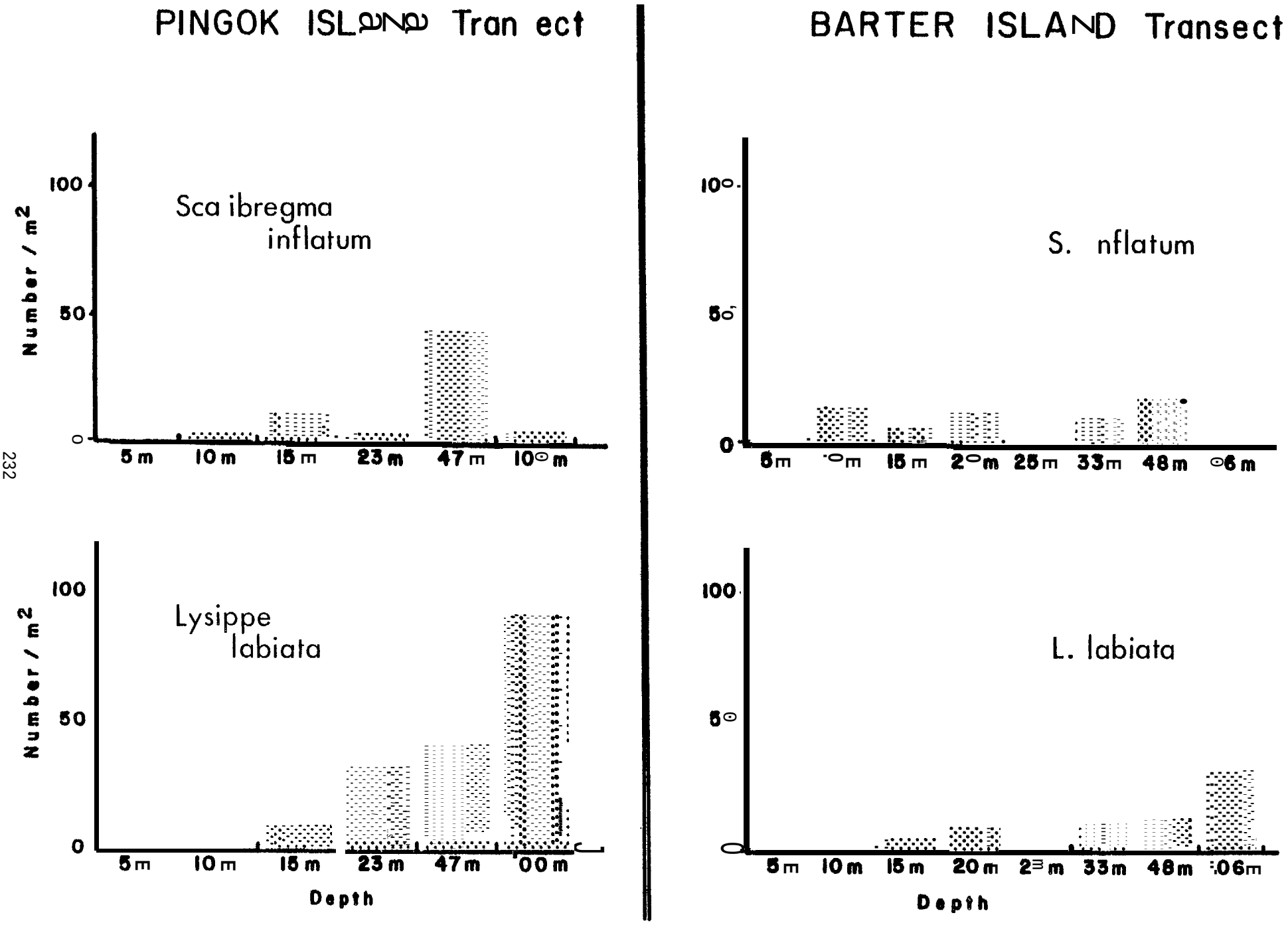


Figure 11. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

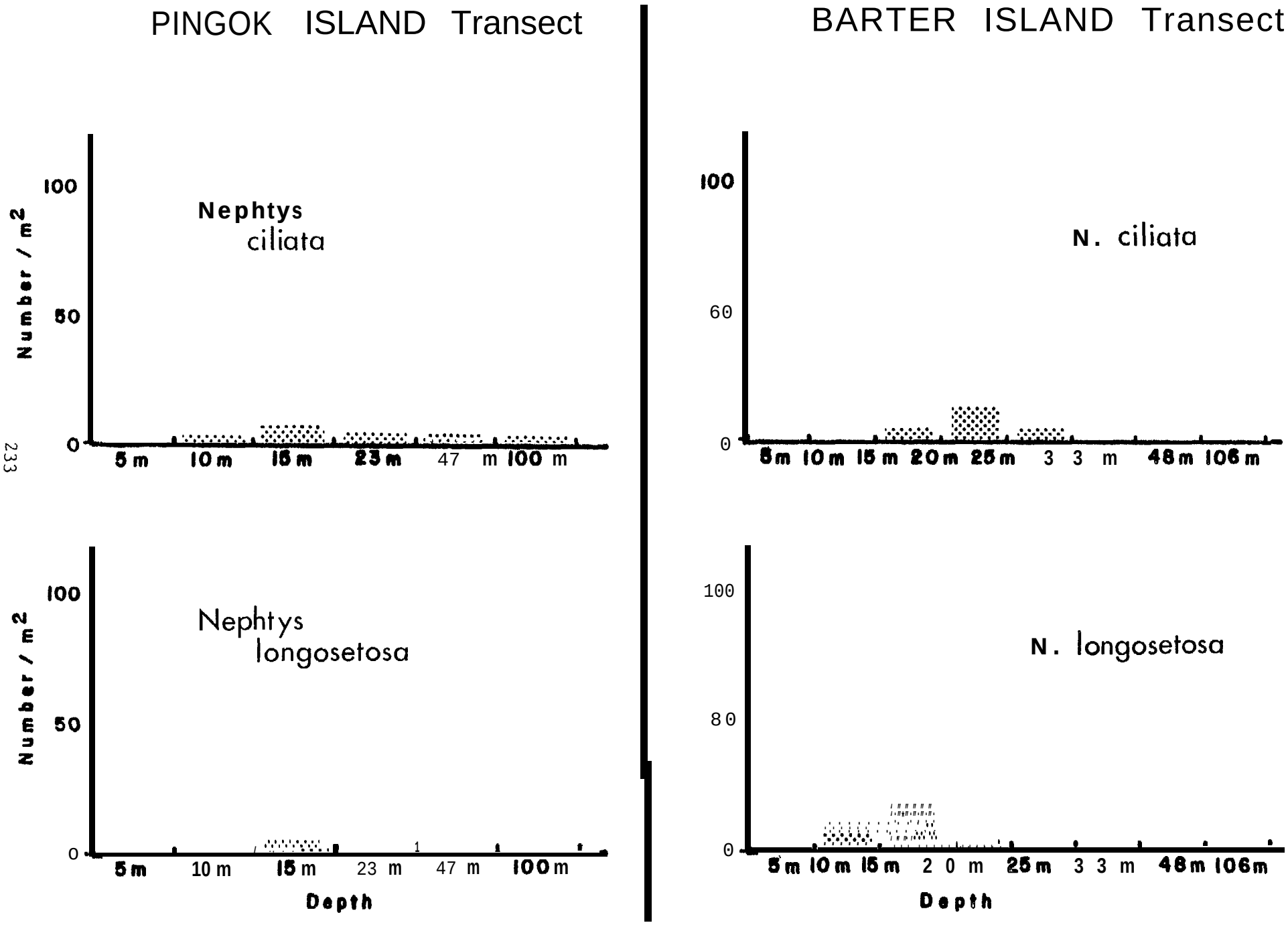


Figure 12. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

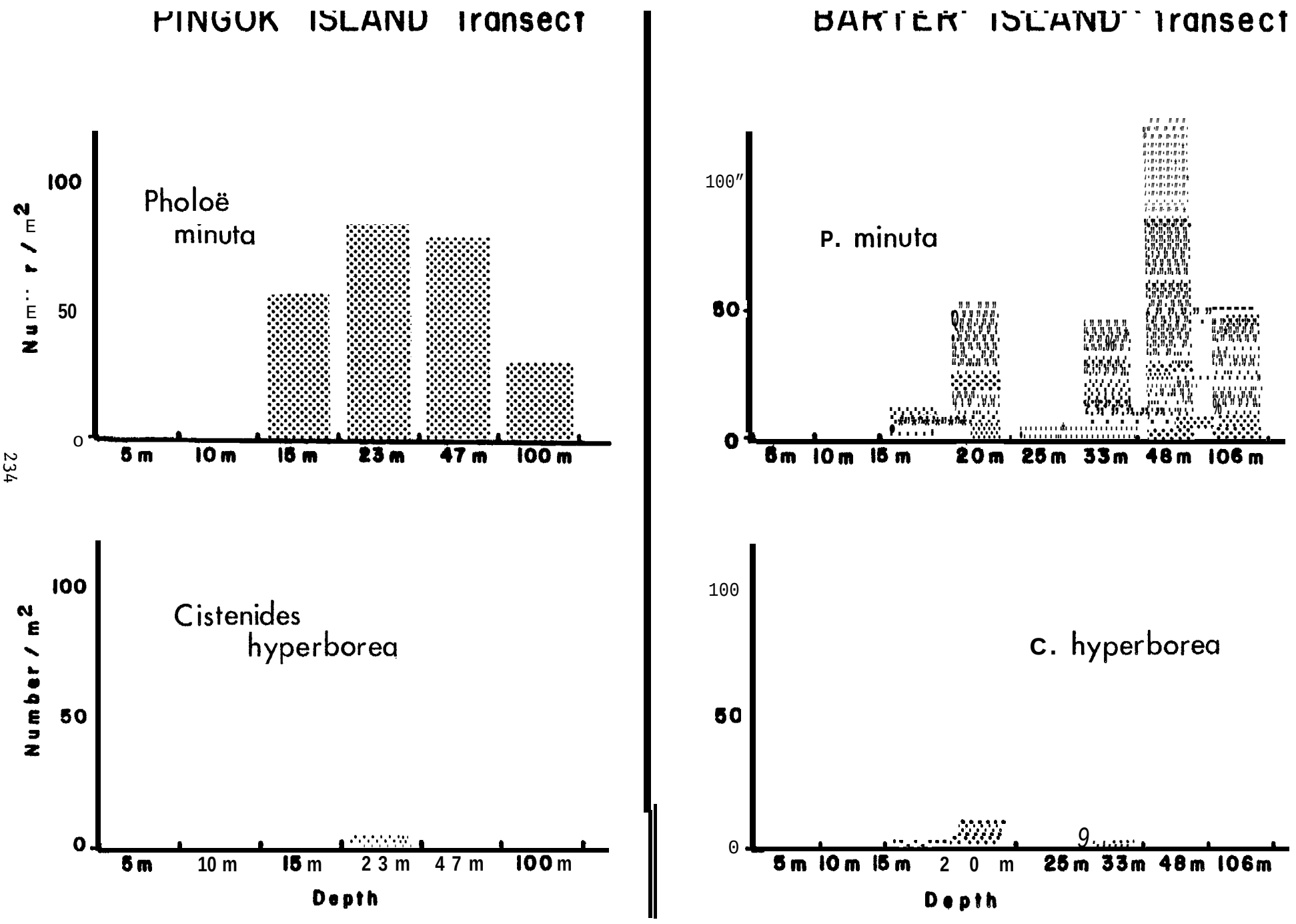


Figure 13. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

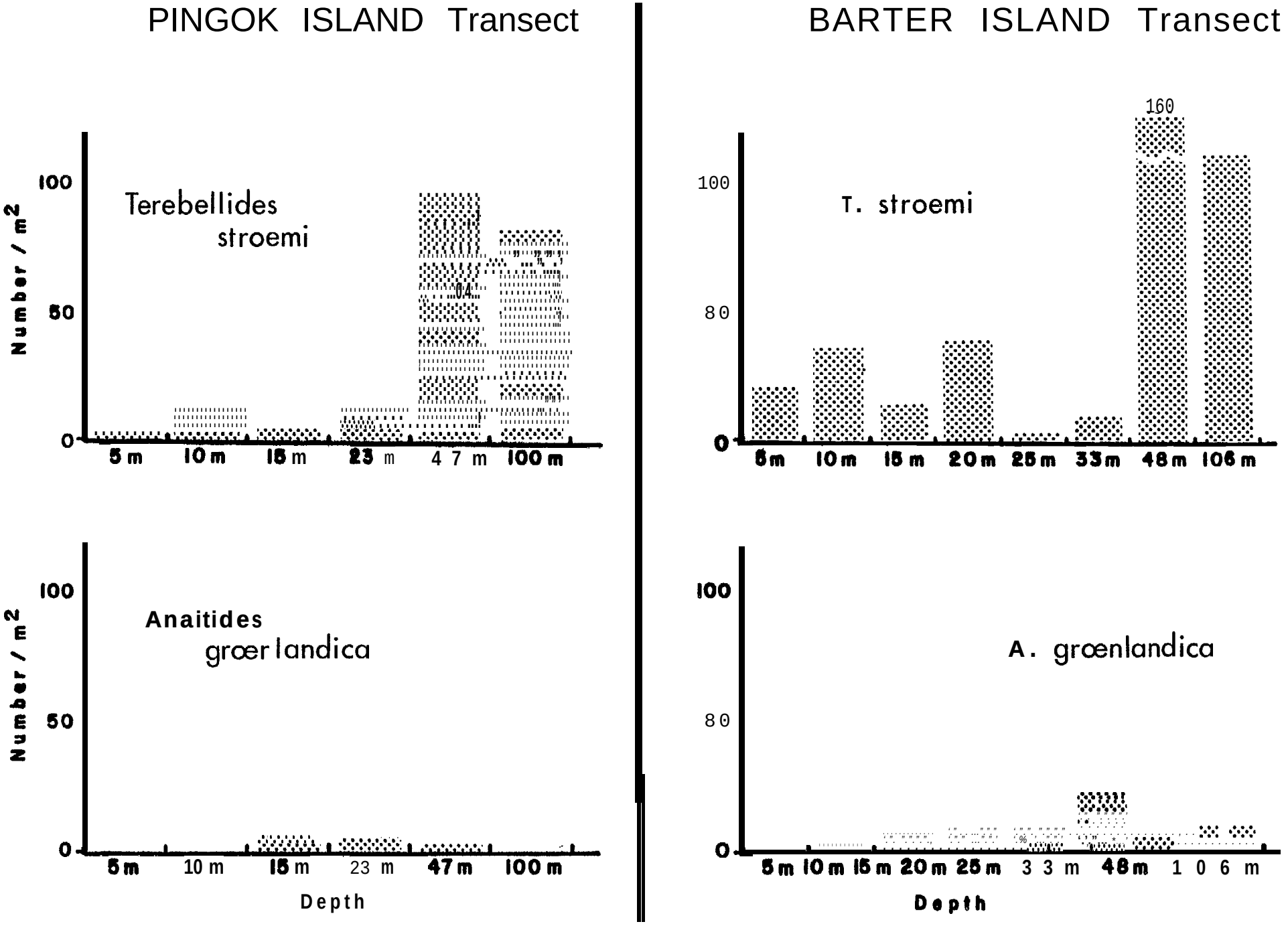


Figure 14. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

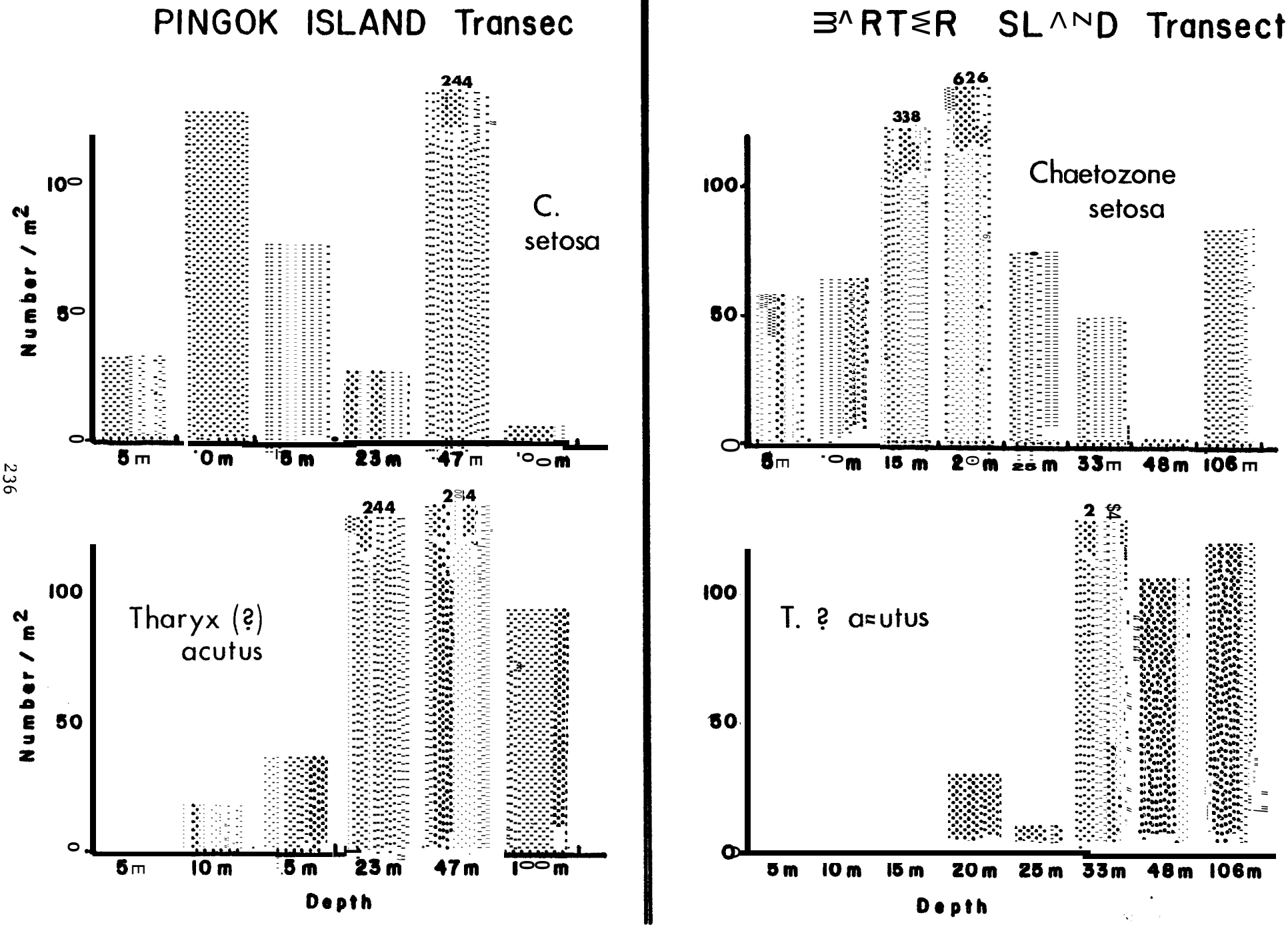


Figure 15. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

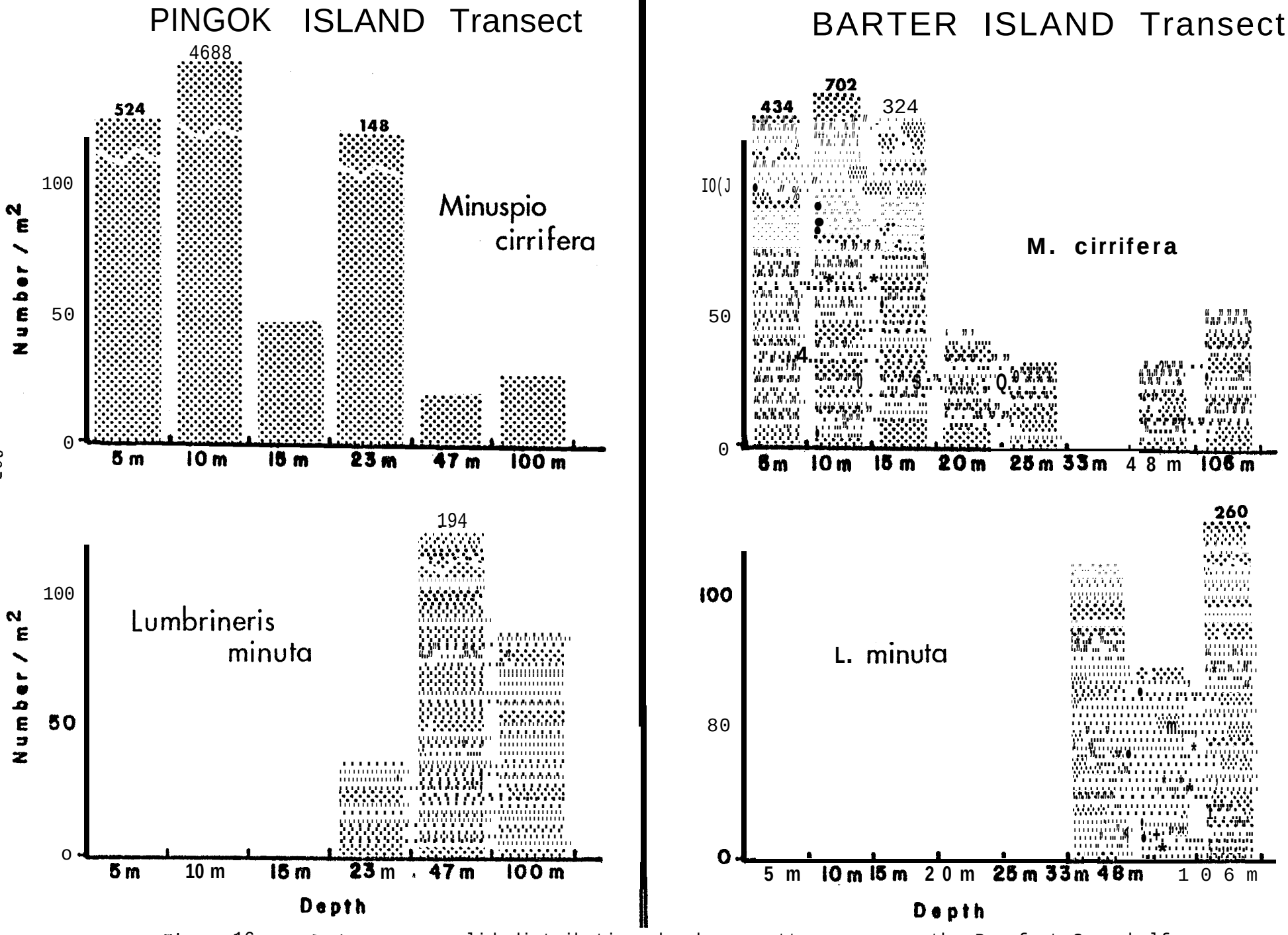


Figure 16. Polychaetous anne lid distribution-abundance patterns across the Beaufort Sea shelf.

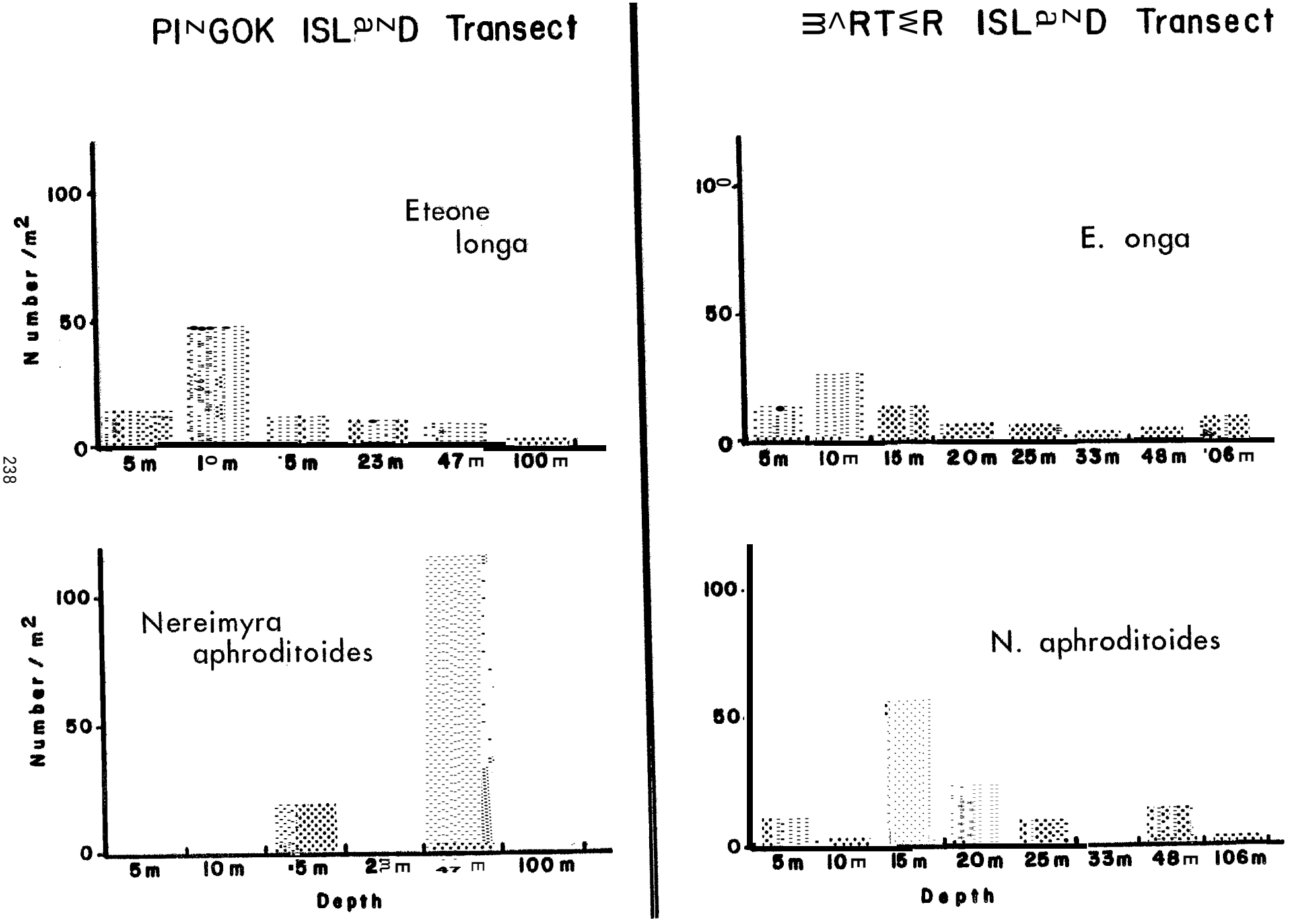


Figure 17. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

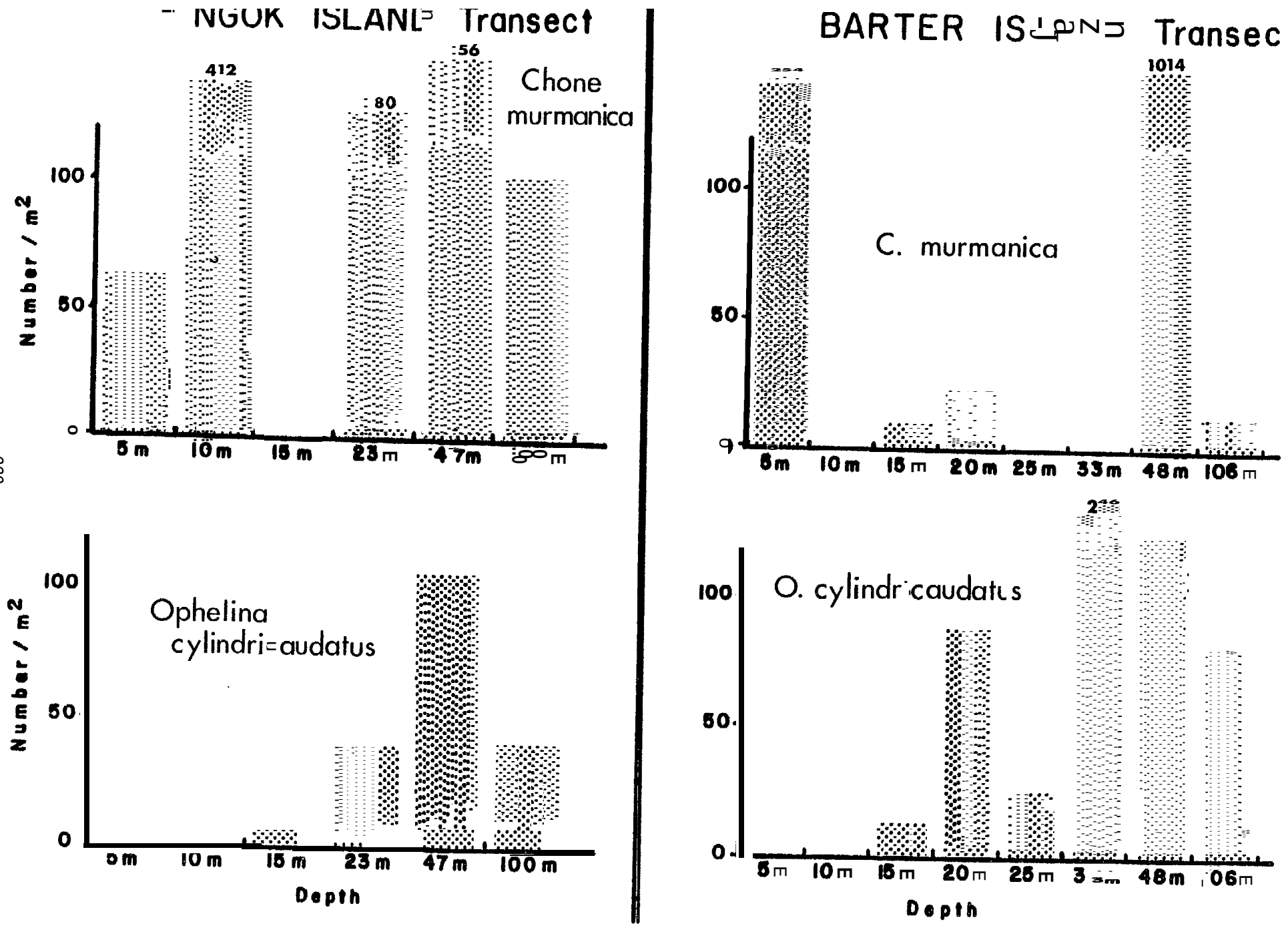


Figure 18. Polychaetous annelid ∃i ab ce patterns across the Beaufort Sea shelf.

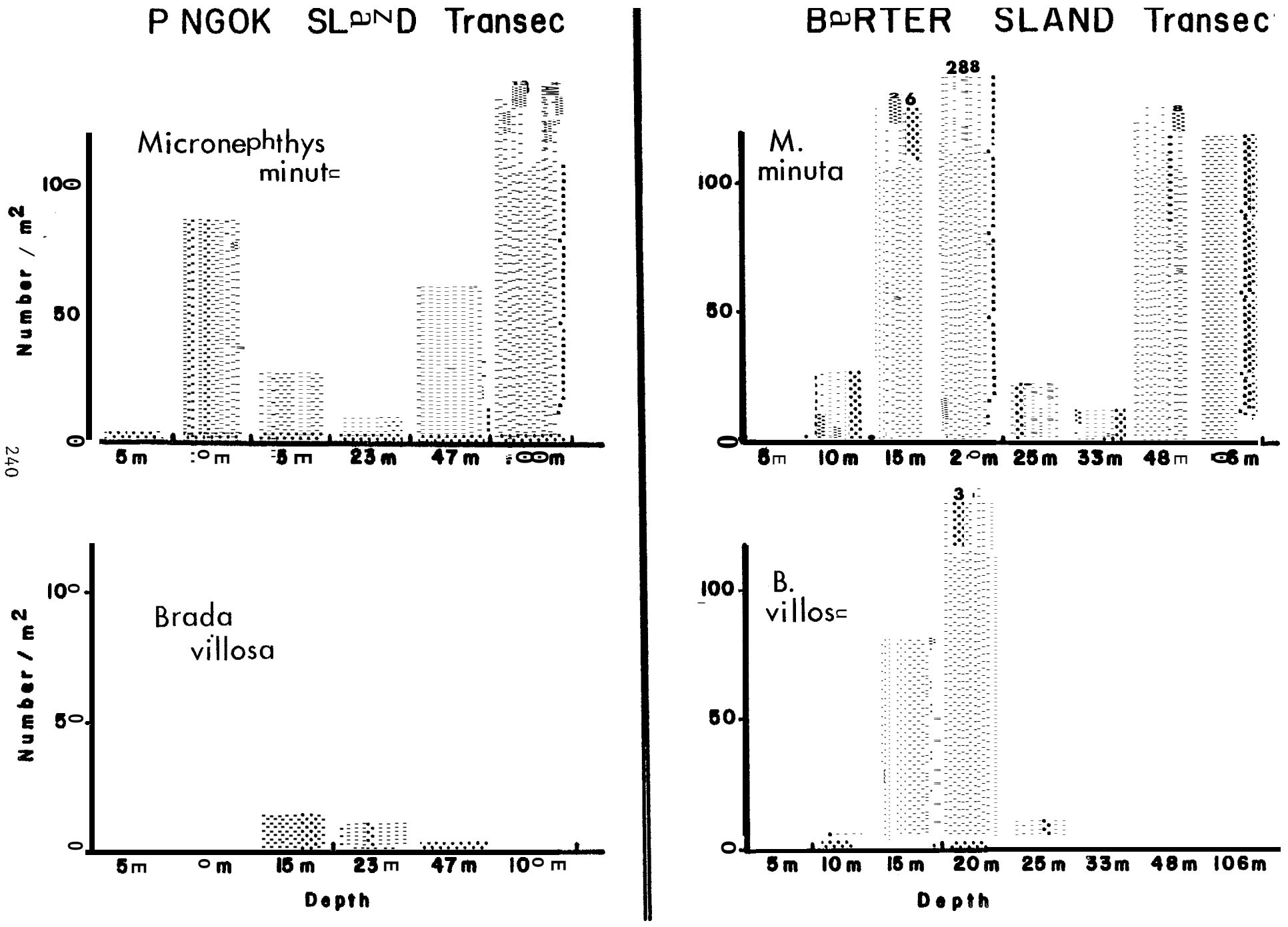


Figure 19. Polychaetous annelid distribution-abundance patterns across the Beaufort Sea shelf.

	PINGOK ISLAND TRANSECT						BARTER ISLAND TRANSECT							
	5m.	10m	15m	23m	47m	100m	5m	10m	15m	20m	25m	33m	48m	106m
Ampharetidae														
Ampharete vega	310	18					452	78	4				4	
Ampharete acutifrons			20	6	44		2	2	14	32		50		
Lysippe labiata			8"	32	40	92			4	8		10	12	30
Scalibregmidae														
Scalibregma inflatum		2	10	2	44	4		14	6	12		10	18	
Apistobranchidae														
Apistobranchus tullbergi			2	2	2	2	2	20	34	178	4	10	4	
Sternaspidae														
Sternaspis scutata		14	8	56		10				38		8		
Nephtyidae														
Nephtys ciliata		2	6	4	2	2			4	12	4			
Nephtys longosetosa			.4					10	16	2				
Micronephthys minuta	2	84	26	8	58	136		26	266	288	22	12	158	118
Flabelligeridae														
Brada villosa			14	10	2			6	80	312	10			
Sigalionidae														
Pholoe minuta			56	114	78	32			12	50	6	44	120	50
?ectinariidae														
Cistenides hyperborea				4					2	10		2		
Phyllodocidae														
Eteone longa	14	46	12	10	8	2	1	4	2	8	1	4	6	6
Anaitides groenlandica			6	4	2			4	8	8	8	,	2	2
Hesionidae														
Nereimyra aphroditoides			18		58		1	0	2	5	6	2	0	8
Trichobranchidae														
Terebellides stroemi	2	12	4	12	94	79	20	36	14	38	2	8	160	110
Cirratulidae														
Chaetozone setosa	32	128	76	26	244	6	56	64	338	626	72	52	?.	86
Tharyx (?)		18	34	244	284	94				32	14	292	108	118
Lumbrineridae														
Lumbrineris minuta				34	194	84						112	72	260
Spionidae														
Minuspio cirrifera	524	468S	46	148	18	28	434	702	324	42	32		32	52
Marenzellaria wireni	110	10	26				66	8						
Prionospio steenstrupi			2	14	98					2		48	26	24
Orbiniidae														
Scoloplos armiger	6		8				230	32		6				
Scoloplos acutus			42	18	16,	24			4	26	8	18		52
Sabellidae														
Chone murmanica	60	412		180	556	104	254		8	22			1014	12
ophe 1 iidae														
Ophelina cylindricaudatus			6	40	104	44			12	s6	28	246	128	82

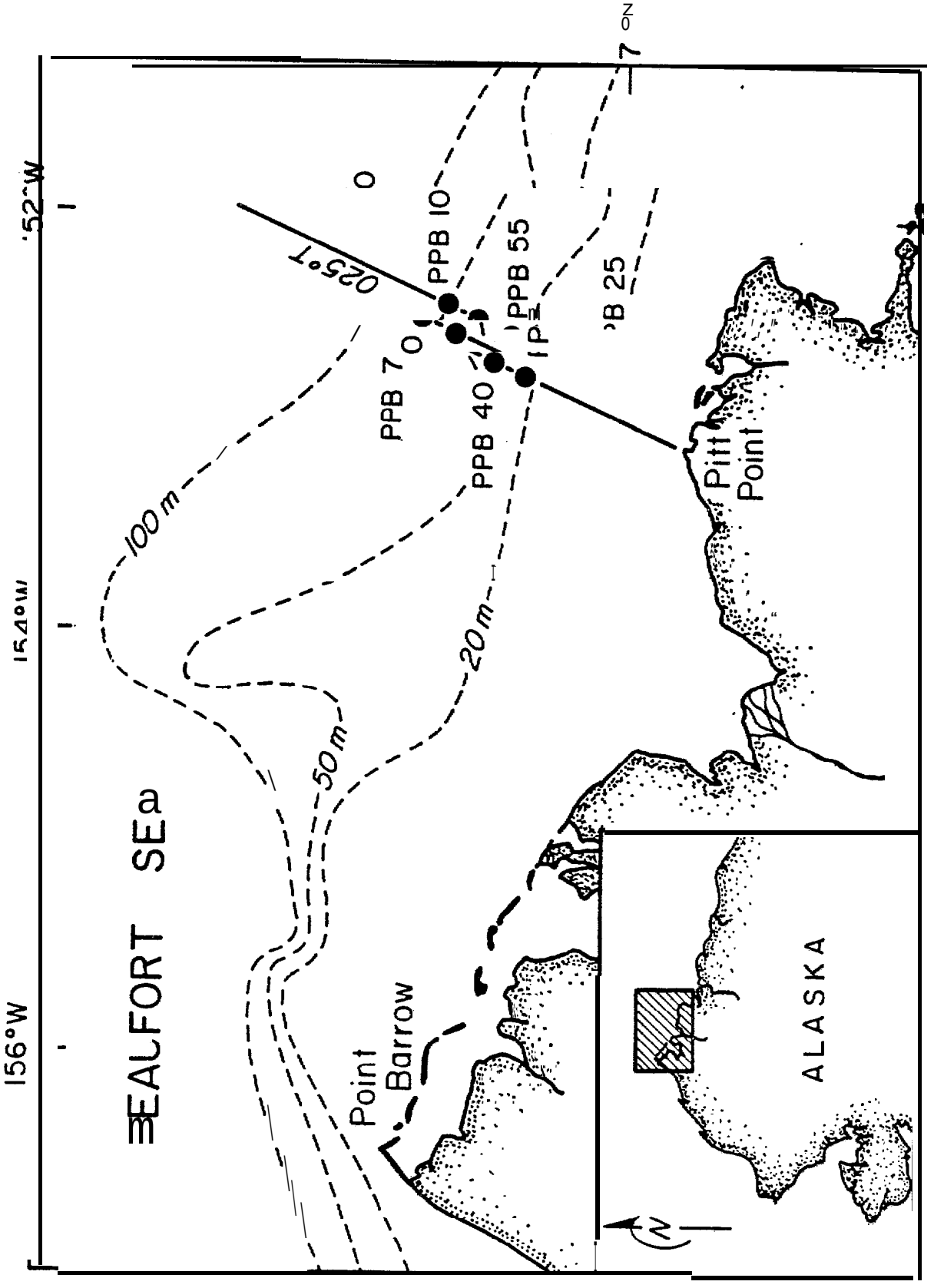
Table 1. Summary of the distribution-abundances for the dominant species of polychaete worms on two station transects across the western Beaufort Sea continental shelf. The data are expressed as numbers per square meter.

Additional data and further statistical analyses including error terms are necessary before regional conclusions can be drawn for the western Beaufort Sea continental shelf. As additional analysis and synthesis is undertaken some general conclusions about the distribution-abundance and species grouping patterns 'can be drawn for important prey species in the marine coastal and continental shelf food web.

B. Temporal variability of benthic infauna across the continental shelf on the OCS Station Transect - Pitt Point.

Further analysis of the macro-infaunal time series samples from the OCS Pitt Point Station Transect (Figure 20) has been undertaken. The small fraction (0.S-1.0 mm) of the Smith-McIntyre grab samples has now been completely picked, rough-sorted and quantified (See the appended Quarterly Report for the remaining detailed data Tables). These data now allow a closer examination of the recruitment process of young individuals to the benthic populations throughout the year. The preliminary mean data (Figure 21) demonstrate significant changes in faunal numerical density, particularly in the small macrofaunal fraction (0.5-1.00 mm) and at the edge of the continental shelf. At station PPB-100 at 100 meters depth, maximum numbers were found in August 1976, while maximum numbers of large macro-fauna (>1.0 mm) were found in May, 1976. It is evident that population changes in smaller-sized groups such as the nematode worms, the harpacticoid copepods and ostracods contribute most of the variability (Tables 2 - 7) that occurs season to season. It is difficult to determine the life history patterns of the macro-infauna at the stage of analysis. Analysis of the reproduction and recruitment of individual species populations will be necessary before more firm conclusions can be drawn concerning the causes of the temporal changes in the continental shelf infaunal communities.

Figure 20. Location chart illustrating the five seasonal stations sampled on the Pitt Point Transect.



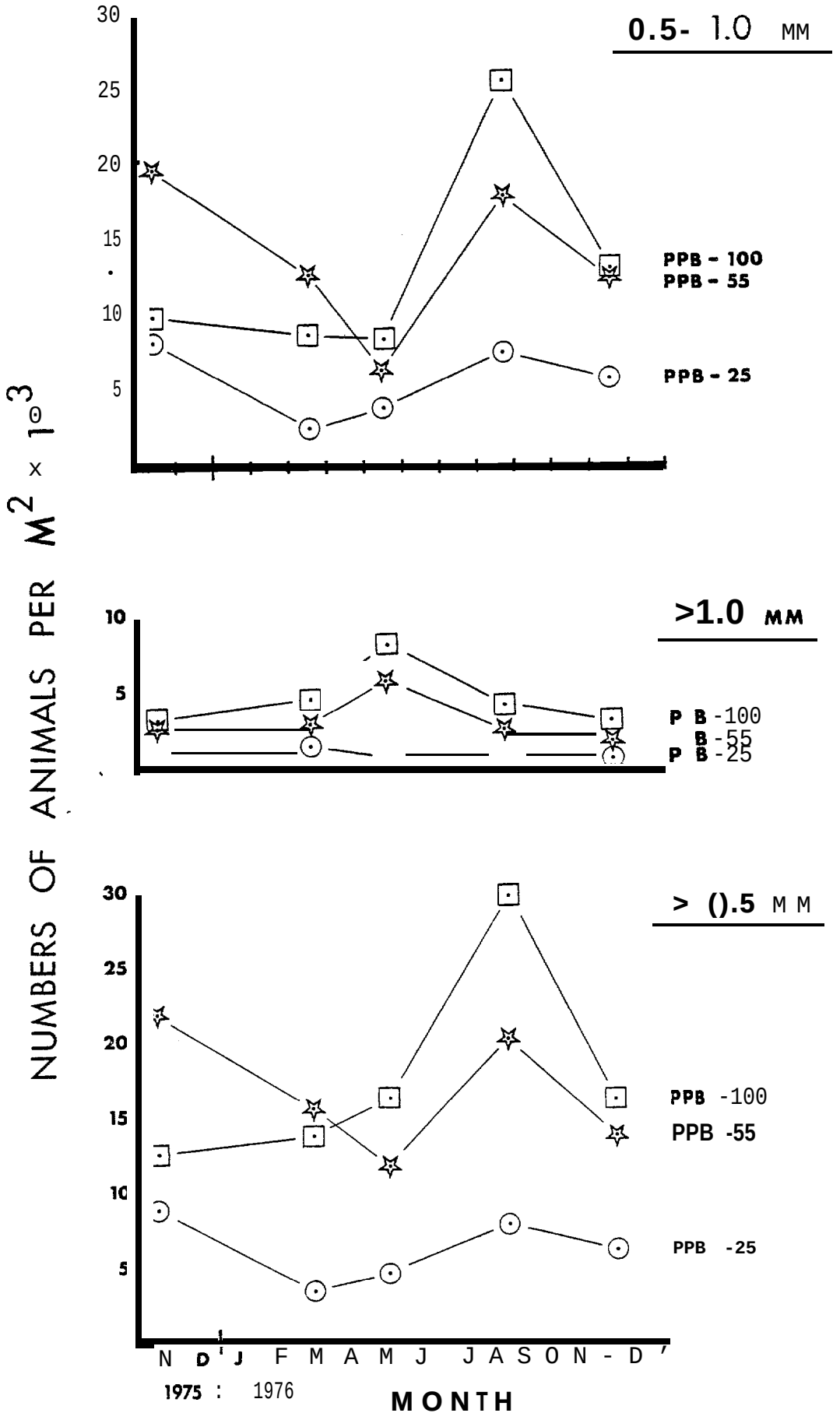


Figure 21. Mean data demonstrate ing significant changes in f aunal numerical density.

Table 2. Percent composition of dominant major taxa of the small macro-infauna (0.5-1.0 mm in size) at station PPB-25 during the period November 1975 through November 1976.

PPB-25	0.5-1.0 mm fraction				
	OCS-1 Nov 75	OCS-2 Mar 76	OCS-3 May 76	OCS-4 Aug 76	OCS-6 Nov 76
Nematoda	30.6%	19. 5%	14.5%	20.6%	42. 9%
Polychaeta	13.3%	41.0%	15.4%	29.5%	35.6%
Gammarid Amphipoda	3.5%	0.1%	2.1%	2.2%	1.7%
Ostracoda	31.9%	30.7%	50.3%	25.0%	6.7%
Harpacticoid Copepoda	12. 9%	3.5%	10.7%	14.8%	2.9%
Cumacea	0.2%	0.4%	0.2%	0.6%	0.8%
Pelecypoda	3.9%	1.2%	2.1%	2.5%	0.8%
Misc.	3.7%	3.6%	4.7%	4.8%	8.6%

Table 3. Percent composition of dominant major taxa of the small macro-fauna (0.5-1.0 mm in size) at station PPB-55 during the period November 1975 through November 1976.

PPB-55	0.5-1.0 mm fraction				
	OCS-1 Nov 75	OCS-2 Mar 76	OCS-3 May 76	OCS-4 Aug 76	OCS-6 Nov 76
Nematoda	13.6%	14. 0%	21.1%	31.6%	16.0%
Polychaeta	13.2%	9.5%	6.8%	15.2%	13.4%
Gammarid Amphipoda	7.0%	5.5%	13.8%	4.0%	3.3%
Ostracoda	47.9%	56. 9%	45.9%	33.4%	55.0%
Harpacticoid Copepoda	4.4%	2.6%	1.5%	3.6%	2.4%
Cumacea	1.2%	0.9%	1.7%	1.8%	1.0%
Pelecypoda	1.7%	2.1%	1.6%	2.7%	1.6%
Misc.	11.0%	8.5%	7,6%	7.7%	7.3%

Table 4. Percent composition of dominant major taxa of the small macro-infauna (0.5-1.0 mm in size) at station PPB-100 during the period November 1975 through November 1976.

PPB-100	0.5-1.0 mm fraction				
	OCS-1 Nov 75	OCS-2 Mar 76	OCS-3 May 76	OCS-4 Aug 76	OCS-6 Nov 76
Nematoda	54. 4%	13.9%	38.0%	45. 4%	25.0%
Polychaeta	14.3%	16.2%	12.9%	10.7%	16. 8%
Gammarid Amphipoda	3.7%	14.2%	10.1%	10.2%	15.6%
Ostracoda	10.6%	40. 9%	28.3%	21.2%	24.9%
Harpacticoid Copepoda	8.7%	1.4%	0.4%	2.4%	2.4%
Cumacea	0.5%	2.5%	1.6%	3.2%	5.8%
Pelecypoda	1.2%	1.6%	0.9%	1.7%	0.9%
Mist.	6.6%	9.3%	7.8%	5.2%	8.6%

Table 5. Percent composition of dominant major taxa of the large macro-infauna (>1.0 mm in size) at station PPB-25 during the period November 1975 through November 1976.

PPB-25	>1.0 mm fraction				
	OCS-1 Nov 75	OCS-2 Mar 76	OCS-3 May 76	OCS-4 Aug 76	OCS-6 Nov 76
Nematode	3.9%	1.6%	3.5%	2.5%	7.2%
Polychaeta	52.0%	79.9%	68.7%	61.0%	64.5%
Gammarid Amphipoda	5.9%	3.3%	5.4%	3.6%	10.0%
Ostracoda	1.3%	0.2%	2.6%	0.6%	4.6%
Harpacticoid Copepoda	0	0.3%	0.4%	0.4%	0
Cumacea	1.6%	0.5%	2.6%	1.1%	1.2%
Pelecypoda	30.1%	10.9%	7.2%	23.1%	5.6%
Mist.	5.2%	.3.3%	9.6%	7.7%	6.9%

Table 6. Percent composition of dominant major taxa of the large macro-infauna (>1.0 mm in size) at station PPB-55 during the period November 1975 through November 1976.

PPB-55	>1.0 mm fraction				
	OCS-1 Nov" 75	OCS-2 Mar 76	OCS-3 May 76	OCS-4 Aug 76	OCS-6 Nov 76
Nematoda	9.4%	6.9%	16.0%	17.1%	13.1%
Polychaeta	30.5%	24.5%	16.4%	42.1%	27.1%
Gammarid Amphipoda	22.6%	19.7%	16.9%	10. 7%	15.9%
Ostracoda	18.8%	26.3%	31.8%	11.0%	22.9%
Harpacticoid Copepoda	0.3%	0.6%	0.9%	0.6%	0.4%
Cumacea	3.6%	3.3%	3.4%	5.2%	2.8%
Pelecypoda	5.3%	7.0%	5.7%	4.0%	7.9%
Misc.	9.5%	11.7%	8.9%	9.3%	9.9%

Table 7. percent composition of dominant major taxa of the large macro-infauna (>1.0 mm in size) at station PPB-100 during the period November 1975 through November 1976.

PPB-100	>1.0 mm fraction				
	OCS-1 Nov 75	OCS-2 Mar 76	OCS-3 May 76	OCS-4 Aug 76	OCS-6 Nov 76
Nematode	34.7%	12.0%	34.5%	27.8%	15.3%
Polychaeta	28.1%	27.7%	19.2%	32.2%	24.2%
Gammarid Amphipoda	8.3%	18.8%	12.7%	16.6%	26.1%
Ostracoda	16. 8%	21.9%	19. 4%	8.7%	15.4%
Harpacticoid Copepoda	3.0%	0.6%	0.5%	0.5%	0.1%
Cumacea	2.3%	4.7%	3.6%	3.9%	6.5%
Pelecypoda	2.7%	3.2%	2.7%	3.7%	3.8%
Misc.	4.1%	11. 1%	7.4%	6.6%	8.6%

VI. Results (continued)

c. The zoogeography of western Beaufort Sea Polychaeta (Annelida).*

ABSTRACT

The western Beaufort Sea polychaete fauna may be divided into sublittoral end bathyal components. Sublittoral species occur at depths of less than 141 m, but may be stenobathic or eurybathic. Bathyal species are found exclusively below 358 m.

The youthful character of the sublittoral fauna, as evidenced by the dominance of Amphiboreal-arctic species, the near absence of endemic species, and the relatively low number of species in the sublittoral environment, is attributed to invasion of the sublittoral environment during interglacial intervals. The prevalence of endemic end Atlantic-boreoarctic species and the absence of Pacific-boreoarctic species within the bathyal fauna reflects the relative isolation of the bathyal and abyssal Arctic Ocean: some bathyal faunal exchange between the Atlantic and Arctic Oceans across the North Atlantic Transversal Ridge has been permitted since the Miocene, while the shallowness of the Bering Strait has prevented a similar exchange of Pacific and Arctic bathyal faunas since the Late Cretaceus. Isolation of the basin below 1098 m has been of sufficient duration (65 my.) for a strong endemic fauna to evolve.

*This section is extracted from the draft version of a manuscript by G.R. Bilyard and A.G. Carey, Jr. to be submitted to Sarsia within the next quarter.

1. INTRODUCTION

The zoogeography of high arctic regions has been investigated through the study of benthic polychaetes from the-western Beaufort Sea (Point Barrow to Demarcation Line). Holthe (1978) has shown that despite the tendency toward widespread geographic distribution and eurybathy within the group, the study of polychaetous annelids can significantly contribute to our understanding of marine zoogeography. The intent of-this discussion is to elucidate the zoogeographic relationships of the western Beaufort Sea polychaete fauna, and to interpret those relationships through consideration of the evolution of the Arctic Ocean basin and present and past attributes of the western Beaufort Sea marine environment. Comparisons with other groups of benthic invertebrates will be included in the discussion.

II. MATERIALS AND METHODS

The benthic invertebrates of the western Beaufort Sea (20-4200 m) were intensively sampled during the Western Beaufort Sea Ecological Cruises (1971-1972) and the Outer Continental Shelf Environmental Assessment Program Cruises (1975-1978). Samples collected at 58 stations across the continental shelf and slope (Fig. 1, Table 1) were selected for detailed analysis of the polychaete fauna. Included were 151 Smith-McIntyre grab samples (0.1 m2 Smith and McIntyre, 1954), 19 otter trawl samples (3.7 and 6.7 m headrope semi-balloon shrimp trawls lined with 1.3 cm stretch mesh), and 3 box core samples (0-25 m^2; Sandia-Hessler box corer, Model Mk-3).

Terminology consistent with that of Holthe (1978) has been used to group polychaete species by the similarity of their geographic distributions. Arctic species are defined as those species occurring north of 66.5°N latitude. Amphiboreal-arctic species are found in the arctic, boreal Pacific (Bering Sea and Sea of Okhotsk), and boreal Atlantic (Laborador Sea, Norwegian-Greenland Sea and the waters of Greenland, Iceland, and northern Europe). Pacific-boreo-arctic species inhabit arctic waters and the boreal waters of the Pacific, but do not occur in the boreal waters of the Atlantic. Atlantic-boreoarctic species inhabit arctic waters and the boreal waters of the Atlantic, but do not occur in the boreal waters of the Pacific.

Undescribed species, which have been given letter designations in the following discussion (e.g., Allis sp. A), are considered as Arctic species. Since some of these species may be collected in subarctic regions in the future, the level of endemism in the western Beaufort Sea polychaete fauna may be overestimated. Generic assignments for undescribed species follow Fauchald (1977).

III. RESULTS

The polychaete species encountered in this study may be divided into a sub-littoral fauna and a bathyal fauna. The sublittoral fauna includes 114 species with upper depth range limits of 20 to 140 m (Table 2). All degrees of stenobathy and eurybathy are exhibited by sublittoral species. Assigned to the bathyal fauna (Table 3) are 17 species with minimum depths of occurrence in excess of 358 m. One described sublittoral species (Barantolla americana) and four described bathyal species (Ephesiella macrocirrus, Sigambra tentaculata, Allis abranchiata, Aricidea tetrabranchia) have not been previously collected in arctic waters.

The absence of species with upper depth range limits of 141 to 358 m probably reflects sampling intensity (Table 1), rather than a gap in the occurrence of additional species with increasing depth, yet the assignment of species to the sublittoral or bathyal faunas may be justified by the substantial difference in the zoogeographic affinities of the two faunas. The sublittoral fauna (Table 3) is predominantly composed of Amphiboreal-arctic species (89 species, 77% of the fauna), the vast majority of which (78 species) also occur in temperate and.or tropical latitudes. Species with Arctic (4 described species; 7 undescribed species), Atlantic-boreoarctic (9 species), and Pacific-boreoarctic (6 species) distributions account for only 23% of the fauna. By contrast, a majority (9) of the bathyal species ('Table 3) are undescribed and probably endemic to the Arctic 'Ocean. Five bathyal species are Atlantic-boreoarctic, three are Amphiboreal-arctic, and none are Pacific-boreoarctic.

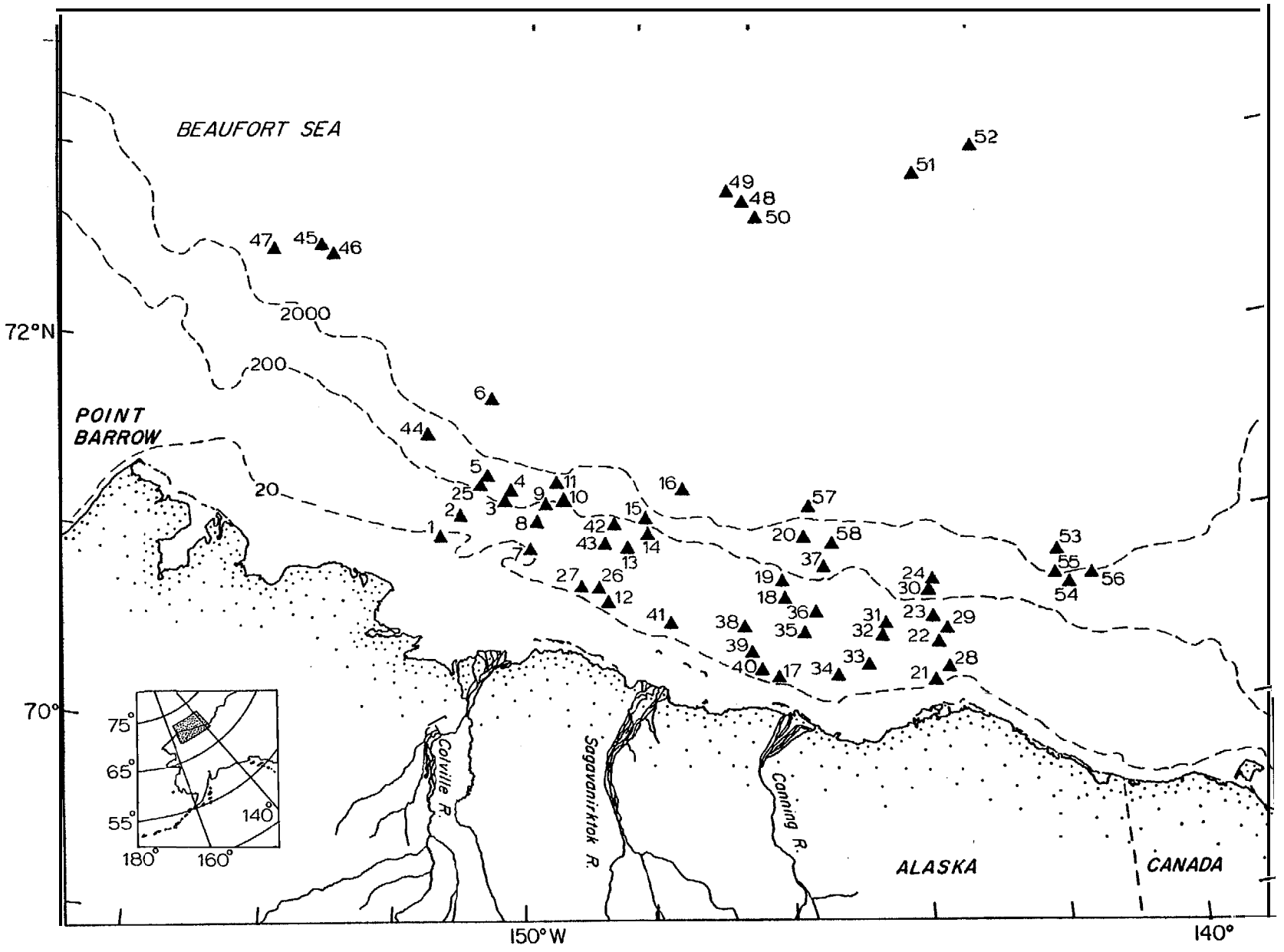


Fig. 1. Polychaete stations (1-58) in the western Beaufort Sea. Depth contours are in meters.

Table 1. Stations and samples selected for analysis of the polychaete fauna. SMG, Smith-McIntyre grab; OTB, otter trawl; BXC, box core.

Station number	Depth (meters)	Sampling gear	Number of samples
1	20-21	SMG	5
2	45	SMG	5
3	132-140	SMG	5
4	540-831	SMG	5
5	795-997	SMG	5
6	2139-2461	SMG	4
7	27-28	SMG	5
8	44-45	SMG	5
9	169-232	SMG	5
10	603-991	SMG	5
11	1618-1926	SMG	5
12	23-24	SMG	5
13	46-48	SMG	5
14	85-111	SMG	5
15	324-430	SMG	5
16	2295-3010	SMG	5
17	26-27	SMG	5
18	57-58	SMG	5
19	81-84	SMG	5
20	447-480	SMG	5
21	32-34	SMG	5
22	48	SMG	5
23	105-109	SMG	5
24	494-498	SMG	5
25	574-700	SMG	3
26	50	OTB	1"
27	31	OTB	1
28	28-37	OTB	2
29	51	OTB	1
30	464	OTB	1
31	71	OTB	1
32	41	OTB	1
33	27	OTB	1
34	30	OTB	1
35	50	OTB	1
36	79	OTB	1
37	357	OTB	1
38	48	OTB	1
39	34	OTB	1
40	27	OTB	1
41	29	OTB	1

Table 1 (continued).

Station number	Depth (meters)	Sampling gear	Number of samples
42	159	OTB	1
43	55	OTB	1
44	1643-1738	BXC	3
45	2470	SMG	1
46	2840	SMG	1
47	2650	SMG	1
48	3750-3841	SMG	3
49	3511-4200	SMG	5
50	3569-3570	SMG	2
51	3386	SMG	1
52	3475	SMG	1
53	1958-2086	SMG	4
54	997-1097	SMG	2
55	640-686	SMG	5
56	1025	SMG	1
57	2104	SMG	1
58	1144	SMG	2

Table 2. The sublittoral polychaete fauna. Species found in temperate and/or tropical latitudes are preceeded by an asterisk (*). Depth ranges within the study area are noted. Undescribed taxa are given letter designations.

Amphiboreal-arctic species	Depth range (m)
*Ophelina acuminata ØRSTED, 1843	21-41
*Dexiospira spirillum (LINNAEUS, 1758)	23-33
*Brada villosa (RATHKE, 1843)	23-47
*Sphaerodoropsis minuta (WEBSTER & BENEDICT, 1887)	24-48
*Harmothoe imbricata (LINNAEUS, 1767)	27
*Eunoe oerstedi (MALMGREN, 1865)	27-34
Melaenis loveni MALMGREN, 1865	27-34
Sabellides borealis SARS, 1856	27-44
*Nephtys paradoxa MALM, 1874	44-47
*Chone infundibuliformis KRÖYER, 1856	47
*Cirratulus cirratus (MÜLLER, 1776)	47-48
*Pherusa plumosa (MÜLLER, 1776)	48
*Typosyllis fasciata (MALMGREN, 1867)	48
*Schistomeringos caecus (WEBSTER & BENEDICT, 1884)	23-85
*Nicolea zostericola ØRSTED, 1S44	26-58
*Brada inhabilis (RATHKE, 1843)	27-57
*Polycirrus medusa GRUBE, 1855	47-83
*Leaena abranchiata MALMGREN, 1866	48-58
*Sphaerosyllis erinaceus (CLAPARÈDE, 1863)	48-58
Axionice flexuosa (GRUBE, 1860)	48-94
*Lagisca extenuata (GRUBE, 1840)	23-106
*Spirorbis granulates (LINNAEUS, 1767)	23-137
*Exogone naidina ØRSTED, 1845	28-105
*Nereis zonata MALMGREN, 1867	29-106
*Exogone dispar (WEBSTER, 1879)	32-105
*Polydora caulleryi MESNIL, 1897	33-140
*Gattyana cirrosa (PALLAS, 1766)	47-132
*Eucranta villosa MALMGREN, 1865	48-109
*Autolytus alexandri MALMGREN, 1867	48-132
*Trichobranchus glacialis (MALMGREN, 1866)	48-139
*Apistobranchus tullbergi (THÉEL, 1879)	20-1S9
*Lysippe labiata MALMGREN, 1866	21-169
*Ampharete arctica MALMGREN, 1866	45-169
*Cistenides hyperborea (MALMGREN, 1866)	20-232
*Praxillella praetermissa (MALMGREN, 1865)	23-204
*Proclea graffii (LANGERHANS, 1884)	23-232
*Artacama proboscidea MALMGREN, 1866	26-232
Laphania boecki MALMGREN, 1866	34-204
*Amphicteis gunneri (SARS, 1835)	47-357
Lanassa venusta MALM, 1874	48-324
*Chone duneri MALMGREN, 1867	21-496
*Lumbrineris fragilis (MÜLLER, 1776)	23-494
*Typosyllis cornuta (RATHKE, 1843)	23-498
*Euchone papillosa (SARS, 1851)	27-464

Table 2 (continued).

Amphiboreal-arctic species (continued)	Depth range (m)
Mysta barbata (MALMGREN, 1865)	44-498
Lanassa nordenskioldi MALMGREN, 1866	48-447
Nothria conchylega (SARS, 1835)	48-464
*Glyphanostomum pallescens (THÉEL, 1879)	48-496
*Anaitides groenlandica (ØRSTED, 1843)	20-540
*Pholoe minuta (FABRICIUS, 1780)	20-676
*Lumbrineris impatiens (CLAPARÈDE, 1868)	23-640
*Ampharete acutifrons (GRUBE, 1860)	24-640
*Melinna cristata (SARS, 1851)	32-640
*Prionospio steenstrupi MALMGREN, 1867	20-717
*Spiochaetopterus typicus SARS, 1856	44-717
*Eteone longs (FABRICIUS, 1780)	20-831
*Nephtys ciliata (MÜLLER, 1789)	20-831
*Barantolla americana HARTMAN, 1963	20-887
*Cossura longocirrata WEBSTER & BENEDICT, 1887	20-997
*Tauberia gracilis (TAUBER, 1879)	21-997
*Trochochaeta carica (BIRULA, 1897)	23-991
*Eteone flava (FABRICIUS, 1780)	21-1144
*Scalibregma inflatum RATHKE, 1843	21-1144
*Ophelina cylindricaudata (HANSEN, 1878)	20-1926
*Sternaspis fossor STIMPSON, 1854	20-1926
*Antinoella sarsi (MALMGREN, 1865)	23-1643
Diplocirrus longisetosus (MARENZELLER, 1890)	27-1926
*Laonice cirrata (SARS, 1851)	44-1738
*Orquadricuspis SARS, 1872	44-1926
Antinoella badia (THÉEL, 1879)	20-2204
*Capitella capitata (FABRICIUS, 1780)	21-2470
*Owenia fusiformis DELLE CHAIJE, 1841	48-2204
*Micronephthys minuta (THÉEL, 1879)	20-2560
*Chaetozone setosa MALMGREN, 1867	20-2650
*Heteromastus filiformis (CLAPARÈDE, 1864)	21-2560
*Sphaerodorum gracilis (RATHKE, 1843)	33-2650
*Minuspio cirrifera (WIRÉN, 1883)	20-3010
*Terebellides stroemi SARS, 1835	20-3386
*Maldane sarsi MALMGREN, 1865	32-3010
*Myriochele heeri MALMGREN, 1867	47-3010
*Allia nolani (WEBSTER & BENEDICT, 1887)	21-3511
*Aglaophamus malmgreni (THÉEL, 1879)	24-4200
*Nereimyra punctata (MÜLLER, 1776)	26-3750
*Anaitides citrina (MALMGREN, 1865)	58-71
*Mystides borealis THÉEL, 1879	84
Amage auricula MALMGREN, 1866	71-1025
*Eniro gracilis VERRILL, 1874	134-137
*Arcteobia anticostiensis (MCINTOSH, 1874)	137
*Petaloproctus tenuis (THÉEL, 1879)	140-676

Table 2 (continued) .

Arctic species	Depth range (m)
Genus A	23-45
Brada incrustata STØP-BOWITZ, 1948	27
Ampharete vega (WIREN, 1883)	21-58
Paraonis sp. A	21-494
Clymenura polaris (THÉEL, 1879)	20-759
Allis sp. A	21-831
Chone murmanica LUKASCH; 1910	20-991
Sphaerodoridium sp. A	47-991
Parheteromastus sp. A	23-2840
Sphaerodoropsis sp. B	81-923
Eclysippe sp. A	71-1025
Atlantic-boreoarctic species	
Lumbriclymene minor ARWIDSSON, 1907	35-48
Sphaerodoridium claparedii (GREEFF, 1866)	45
Autolytus fallax MALMGREN, 1867	26-58
*Polyphysia crassa (ØRSTED, 1843)	27-84
Notoproctus oculatus var. arctica ARWIDSSON, 1907	48-686
*Scoloplos acutus (VERRILL, 1873)	20-1926
Diplocirrus hirsutus (HANSEN, 1879)	33-1800
Jasmineira schaudinni AUGENER, 1912	57
Paranaitis wahlbergi (MALMGREN, 1865)	71
Pacific-boreoarctic species	
Brada nuda ANNENKOVA, 1922	47-57
Glycinde wireni ARWIDSSON, 1898	44-137
Magelona longicornis JOHNSON, 190i	45-134
Sphaerodoropsis biserialis (BERKELEY & BERKELEY, 1944)	47-1144
Aricidea ushakovi ZAKS, 1925	26-1618
Lumbrineris minuta THÉEL, 1879	23-4200

Table 3. The bathyal polychaete fauna. Species found in temperate and/or tropical latitudes are preceeded by an asterisk (*). Depth ranges within study area are noted. Undescribed taxa are given letter designations.

Arctic species	Depth range (m)
Sphaerodoropsis sp. A	359-887
Lumbrineris sp. B	447-659
Schistomeringos sp. A	447-686
Ophelina sp. A	640-3750
Genus B	644-2086
Tachytrypane sp. A	1958-2086
Lumbrineris sp. A	2104-2800
Cossura sp. A	2204-2840
Nicon sp. A	2400-2470
Atlantic-boreoarctic species	
*Ophelina abranchiata STØP-BOWITZ, 1948	447-2800
*Apomatus globifer THÉEL, 1879	464
*Ephesiella macrocirrus HARTNAN & FAUCHALD, 1971	494
*Allis abranchiata (HARTMAN, 1965)	640-3843
*Aricidea tetrabranchia HARTMAN & FAUCHALD, 1971	1958-2086
Amphiboreal-arctic species	
Branchiomma infarcta (KRÖYER, 1856)	464
*Sigambra tentaculata (TREADWELL, 1941)	447-3010
*Lumbrineris latreilli (AUDOUIN & MILNE-EDWARDS, 1833)	686-2086

IV. DISCUSSION

The sublittoral fauna

Zoogeographic affinities of the sublittoral polychaete fauna are not atypical within the Arctic Ocean basin. A polychaete fauna dominated by Amphiboreal-arctic species, but including some Pacific-boreoarctic and Atlantic-boreoarctic 'species was reported from the Canadian Archipelago (Grainger, 1954). Similarly, about half the species of western Beaufort Sea bivalve molluscs with upper depth ranges shallower than 356 m exhibit amphiboreal-Arctic distributions. The balance of the bivalve fauna includes Atlantic-boreoarctic (32%) and Pacific-boreoarctic (17%) species (Bernard, in press). A predominance of species with geographic distributions extending into the Atlantic and/or Pacific Oceans, coupled with a dearth of endemic species, has also been reported for isopod crustaceans (Menzies et al., 1973), sea stars (Grainger, 1966), bryozoans (Powell, 1968) , and a mixed collection of benthic invertebrates from the Point Barrow region (MacGinitie, 1955).

The absence of a strong endemic component and the consequent boreal character of the Arctic Ocean sublittoral fauna have been cited as evidence of a youthful fauna (Zenkevitch, 1963; Briggs, 1974; Knox and Lowry, 1977). Zoogeographic affinities of the western Beaufort Sea sublittoral polychaete fauna further substantiate the boreal character of the sublittoral fauna and are supportive of this hypothesis.

That the shallow water fauna appears to be depauperate in numbers of species has also been presented as evidence in s-pport of an immature fauna (Zenkevitch, 1963; Dunbar, 1968; Knox and Lowry, 1977). Knox and Lowry (1977) estimate that 300 species of polychaetes occur in the Arctic Ocean. By comparison, more than 650 species probably occur in the Antarctic region (Knox and Lowry, 1977) , more , than 750 species probably occur in the shallow waters off South Africa (Day, 1967), and about 550 species of polychaetes have been reported from depths of less than 200 m off southern California (Hartman, 1969a; Hartman, 1969b). The collection of 114 species of sublittoral polychaetes in the present study is, therefore, not inconsistent with the concept of a depauperate shallow water fauna.

Climatic changes during the Pliocene and Pleistocene are likely responsible for the youthful character of the sublittoral fauna (Zenkevitch, 1963; Dunbar, 1968) . The intervals of Northern Hemisphere glaciation which began at 3.0 m.y.B.P. and intensified to maximum severity about 0.4 m.y.B.P. (Berggren, 1972) generally persist about 90,000 years; interglacial intervals generally persist about 10,000 years (Broecker and van Donk, 1970). In the arctic glacial intervals were probably accompanied by seasonal pack ice from 2.43 m.y.B.P. to 0.7 my. B.P., and permanent pack ice thereafter (Herman and O'Neil, 1975) .

A conservative reconstruction of full glacial conditions in the arctic would include a sea-level drop of about 85 m (CLIMAP Project Members, 1976) , ice sheets over North America, Greenland, Iceland, Great Britain, Scandinavia, the Barents Sea, and the Kara Sea (Boulton and Rhodes, 1974; Hughes et al., 1977; Kvasov and Blazhchishin, 1978), and thick pack ice and/or floating ice shelves within the Arctic Ocean basin (Hughes et al., 1977). Thick permanent pack ice would have substantially decreased light transmission, and hence, primary productivity in the water column, while lowered sea-level and the presence of grounded ice sheets on most of the present continental shelves would have severely reduced the areal extent of the sublittoral environment.

Under such severe conditions, which are thought to have abated less than 10,000 years ago (Hughes et al., 1977), the elimination of many sublittoral species probably occurred (Bernard, in press). Loss of habitat and low nutrient supply were the probable agents of faunal extinction, as Dunbar (1968) has shown that low temperature alone is insufficient to preclude the existence of a rich marine fauna. Re-invasion of the sbulittoral environment by Atlantic and Pacific species during interglacial intervals would be consistent with the hypothesis of an immature sublittoral fauna, depauperate in the total number of species and in the number of endemic species.

The bathyal fauna

Different zoogeographic affinities of the fauna found exclusively below 300 or 400 m in the Arctic Ocean are not unique to the polychaetous annelids. Few endemic species of isopods are found on the continental shelf, but endemic and Atlantic-boreoarctic species are prevalent in the isopod fauna below 425 m (Menzies et al., 1973). Of the seven species of western Beaufort Sea bivalves with upper depth range limits in excess of 300 m, four are endemic and three have Atlantic-boreoarctic distributions (Bernard, in press). In addition, the bathyal ostracod fauna (Joy and Clark, 1977) and the total benthic invertebrate fauna in bathyal and abyssal depths off Siberia (Zenkevitch, 1963) are dominated by endemic and Atlantic-boreoarctic species. Conspicuously absent from the bathyal fauna of this and other studies (Zenkevitch, 1963; Menzies et al., 1973; Joy and Clark, 1977; Bernard, in press) is a Pacific-boreoarctic element.

The composition of the bathyal polychaete fauna clearly reflects the geological history of the Arctic Ocean basin. The absence of Pacific-boreoarctic polychaetes and other taxa is due to the effectiveness of the Bering Strait as a topographic barrier to faunal dispersion. After having been emergent since the Late Cretaceus, the Bering land bridge submerged briefly during the Middle and Late Miocene (Hopkins and Scholl, 1970). Subsidence to its present elevation at 3.5 m.y.B.P. during the Pliocene (Hopkins and Scholl, 1970) has permitted the exchange of shallow water species at a maximum depth of 70 m only during interglacial intervals. Hence, "no exchange of truly bathyal or abyssal species between the Arctic and Pacific Oceans has been possible for over 65 my.

Domination of the Arctic Ocean bathyal fauna by endemic and Atlantic-boreo-arctic species is well documented (Ekman, 1953; Zenkevitch, 1963; this study) , and understandable within an historical framework. Although the northward extension of the Mid-Atlantic Redge generated a deep-water connection between the Arctic Ocean end the Norwegian-Greenland Sea during the Oligocene (Talwani and Eldholm, 1977), the presence of the North Atlantic Transversal Ridge between Greenland, Iceland, and Great Britain prevented deep water faunal exchange. Submergence of that portion of the ridge between Iceland and the Faeroe Islands began in the Oligocene and was sufficient to permit substantial water exchange sometime during the Miocene (Schrader et al., 1976). An exchange of Arctic and Atlantic bathyal species was probably initiated at that time.

Because the North Atlantic Transversal Ridge has never been deeper than at present (average, 500-600 m; maximum, 1098 m), only those bathyal and abyssal bivalves which occur at 560 m or less are found in both the Arctic and Atlantic Ocean basins (Clarke, 1963). Similarly, of the eight described species of bathyal polychaetes found in this study, six occur at depths of less than 1,000 m in the Atlantic Ocean. The remaining two species (*Ephesiella macrocirrus*, 2000-2500 m; *Allis abranchiata*, 1500-2000 m) are known from only one study (Hartman, 1965).

The existence of many endemic bathyal and abyssal species is explained by geographic isolation. The Arctic Ocean has not been in contact with the Atlantic or Pacific Oceans at depths greater than 1098 m since possibly the Late Cretaceus (65 m.y.B.P.) and adequate time for speciation has elapsed.

By its presence the endemic fauna further reveals that the Arctic Ocean has not been anoxic in the recent past. If permanent ice cover on the Arctic Ocean and Norwegian-Greenland Sea during glacial intervals (CLIMPA Project Members, 1976) had prevented a flow of oxygenated water into the ARctic Ocean at depth, extinction of the bathyal and abyssal faunas would have ensued. The existant endemic fauna is too rich to have evolved since the end of the last glacial interval.

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VI. Results (continued)

D. Polychaeta (Annelida): Data Sheets

One hundred thirty-three species of polychaetes {Table) have been collected and identified from the continental shelf and slope of the western Beaufort Sea (20-4200 m). Species given letter designations in Table 1 (example: Eclysippe sp. A) are new to science and will be described at a later date in an appropriate journal. The assistance of Dr. Kristian Fauchald is gratefully acknowledged: the high degree of taxonomic accuracy achieved in this study would not have been possible without his help.

The following data include all samples of polychaetes which have been completely sorted and identified to the species level as of March 1, 1979. (Unidentified material was, in most cases, too damaged to permit identification.) The data given below were generated from samples collected during the Western Beaufort Sea Ecological Cruises of 1971 (WEBSEC-71) and 1972 (WEBSEC-72), and during the Outer Continental Shelf Environmental Assessment Program cruises of Summer, 1976 (OCS-4) and Summer, 1977 (OCS-7). Station designations (U.S.C.G., Oceanographic Report No. CG373-64, 1974) for stations occupied during the WEBSEC cruises are included on the data sheets: a WBS designation indicates the Western Beaufort Sea Ecological Cruise station number, while a CG designation indicates the Coast Guard station number.

Sampling gear included a Smith-McIntyre grab (SMG), a 1/4m^2 Hessler-Sandia box corer (BxC), and two otter trawls (OTB). Both otter trawls (3.7m and 6.7m headropes) were lined with 1.3cm stretch mesh. Only Smith-McIntyre grab data should be considered quantitative in the following data set, since the box corer over-penetrated the bottom sediments when deployed, and the area sampled by the otter trawls is difficult to quantify.

The Smith-McIntyre grab data collected during the WEBSEC-71 cruise, exclusive of Smith-McIntyre grabs 885, 886, and 887, formed the data base for the manuscript "Distributional Patterns of Western Beaufort Sea Polychaetous Annelids" which was submitted to the journal Marine Biology in January, 1979. A draft of this manuscript (by G.R. Bilyard and A.G. Carey, Jr.) was included as part of the Quarterly Report to NOAA-OCSEAP for the period 1 October - 31 December, 1978 (Contract No. 03-5-022-68, Research Unit #6).

Table

AMPHARETIDAE
- Amage auricula Malmgren, 1866
- Ampharete acutifrons (Grube, 1860)
- Ampharete arctica Malmgren, 1866
- Ampharete vega (Wirén, 1883)
- Amphicteis gunneri (Sars, 1835)
- Eclysippe sp. A
- Glyphanostomum pallescens (Théel, 1879)
- Lysippe labiata Malmgren 1866
- Melinna cristata (Sars, 1851)
- Sabellides borealis Sars, 1856
- Genus "A"

APISTOBRANCHIDAE
- Apistobranchus tullbergi (Théel, 1879)

CAPITELLIDAE
- Barantolla americana Hartman, 1963
- Capitella capitata (Fabricius, 1780)
- Heteromastus filiformis (Claparède, 1864)
- Parheteromastus sp. A
- Genus "B"

CHAETOPTERIDAE
- Spiochaetopterus typicus Sars, 1856

CIRRATULIDAE
- Chaetozone setosa Malmgren, 1867
- Cirratulus cirratus (Müller, 1776)
- Tharyx ? acutus Webster and Benedict, 1887

COSSURIDAE
- Cossura longocirrata Webster and Benedict, 1887
- Cossura sp. A

DORVILLEIDAE
- Schistomeringos caecus (Webster and Benedict, 1884)
- Schistomeringos sp. A

FLABELLIGERIDAE
- Brada incrustata Støp-Bowitz, 1948
- Brada inhabilis (Rathke, 1843)
- Brada nuda Annenkova, 1922
- Brada villosa (Rathke, 1843)
- Diplocirrus hirsutus (Hansen, 1879)
- Diplocirrus longisetosus (v. Marenzeller, 1890)
- Pherusa plumosa (Müller, 1776)

GONIADIDAE
- Glycinde wireni Arwidsson, 1899

HESIONIDAE
- Nereimyra aphroditoides (Fabricius, 1780)

LUMBRINERIDAE
- Lumbrineris fragilis (Müller, 1776)
- Lumbrineris impatiens (Claparède, 1868)
- Lumbrineris latreilli (Audouin and Milne-Edwards, 1833)
- Lumbrineris minuta Théel, 1879
- Lumbrineris sp. A
- Lumbrineris sp. B

MAGELONIDAE
- Magelona longicornis Johnson, 1901

MALDANIDAE
- Clymenura polaris (Théel, 1879)
- Lumbriclymene minor Arwidsson, 1907
- Maldane sarsi Malmgren, 1865
- Notoproctus oculatus var. arctica Arwidsson, 1907
- Petaloproctus tenuis (Théel, 1879)
- Praxillella praetermissa (Malmgren, 1865)

NEPHTYIDAE
- Aglaophamus malmgreni (Théel, 1879)
- Micronephthys minuta (Théel, 1879)
- Nephtys ciliata (Müller, 1776)
- Nephtys discors Ehlers, 1868
- Nephtys paradoxa Maim

NEREIDAE
- Nereis zonata Malmgren, 1867
- Nicon sp. A

ONUPHIDAE
- Nothria conchylega (Sars, 1835)
- Onuphis quadricuspis Sars, 1872)

OPHELIIDAE
- Ophelina abranchiata Støp-Bowitz, 1948
- Ophelina acuminata Oersted, 1843
- Ophelina cylindricaudatus (Hansen, 1879)
- Ophelina sp. A
- Tachytrypane sp. A

ORBINIIDAE
- Scoloplos acutus (Verrill, 1873)

OWENIIDAE
- Myriochele heeri Malmgren, 1867
- Owenia fusiformis delle Chiaje, 1841

PARAONIDAE
- Allis abranchiata (Hartman, 1965)
- Allis suecica (Elaison, 1920)
- Allis sp. A
- Aricidea tetrabranchia Hartman and Fauchald, 1971
- Aricidea ushakovi Zachs, 1925
- Paraonis sp. A
- Tauberia gracilis (Tauber, 1879)

PECTINARIIDAE
Cistenides hyperborea (Malmgren, 1865)

PHYLLODOCIDAE
Anaitides citrina (Malmgren, 1865)
Anaitides groenlandica (Oersted, 1843)
Eteone flava (Fabricius, 1780)
Eteone longs (Fabricius, 1780)
Mysta barbata (Malmgren, 1865)
Mystides borealis Théel, 1879
Paranaitis wahlbergi (Malmgren, 1865)

PILARGIIDAE
Sigambra tentaculata (Treadwell, 1941)

POLYNOIDAE
Antinoella badia (Théel, 1879)
Antinoella sarsi (Malmgren, 1865)
Arcteobia anticostiensis (McIntosh, 1874)
Enipo gracilis Verrill, 1874
Eucranta villosa Malmgren, 1865
Eunoe oerstedi (Malmgren, 1865)
GattYana cirrosa (Pallas, 1766)
Harmothoe imbricata (Linnaeus, 1767)
Lagisca extenuate (Grube, 1840)
Melaenis loveni Malmgren, 1865

SABELLIDAE
Branchiomma infarcta (Kröyer, 1856)
Chone duneri Malmgren, 1867
Chone infundibuliformis Kröyer, 1856
Chone murmanica Lukasch, 1910
Euchone papillosa (Sars, 1851)
Jasmineira schaudinni Augener, 1912

SCALIBREGMIDAE
Polyphysia crassa (Oersted, 1843)
Scalibregma inflatum Rathke, 1843

SERPULIDAE
Apomatus globifer Théel, 1879

SIGALIONIDAE
Pholoe minuta (Fabricius, 1780)

SPAERODORIDAE
Ephesiella macrocirrus Hartman and Fauchald, 1971
Sphaerodoridium claparedii (Greef, 1866)
Sphaerodoridium sp. A
Sphaerodoropsis biserialis (Berkeley and Berkeley, 1944)
Sphaerodoropsis minuta (Webster and Benedict, 1887)
Sphaerodoropsis sp. A
Sphaerodoropsis sp. C
Sphaerodorum gracilis (Rathke, 1843)

SPIONIDAE
- Laonice cirrata (Sars, 1851)
- Minuspio cirrifera (Wiren, 1883)
- Polydora caulleryi Mesnil, 1897
- Prionospio steenstrupi Malmgren, 1867

SPIRORBIDAE
- Dexiospira spirillum (Linnaeus, 1758)
- Spirorbis granulates (Linnaeus, 1767)

STERNASPIDAE
- Sternaspis fossor Stimpson, 1854

SYLLIDAE
- Autolytus alexandri Malmgren, 1867
- Autolytus fallax Malmgren, 1867
- Exogone dispar (Webster, 1879).
- Exogone naidina Oersted, 1845
- Sphaerosyllis erinaceus (Claparede, 1863)
- Typosyllis cornuta (Rathke, 1843)
- Typosyllis fasciata (Malmgren, 1867)

TEREBELLIDAE
- Artacama proboscidea Malmgren, 1866
- Axionice flexuosa (Grube, 1860)
- Lanassa nordenskioldi Malmgren, 1866
- Lanassa venusta Maim, 1874
- Laphania boecki Malmgren, 1866
- Leaena abranchiata Malmgren, 1866
- Nicolea zostericola Oersted, 1844
- Polycirrus medusa Grube, 1855
- Proclea graffi (Langerhans, 1844)

TRICHOBRANCHIDAE
- Terebellides stroemi Sars, 1835
- Trichobranchus glacialis (Malmgren, 1866)

TROCHOCHAETIDAE
- Trochochaeta carica (Birula, 1897)

SMG 829 Station WBS-1/CG-1
70°15.5'N 143°39.6'W
34m 19 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh 'aperture - 1.00mm

POLYCHAETA

Allis suecica	27
Anaitides groenlandica	2
Barantolla americana	7
Chaetozone setosa	9
Cossura longocirrata	2
Diplocirrus hirsutus	1
Eteone longs	1
Exogone dispar	4
Heteromastus filiformis	12
Laphania boecki	1
Lumbriclymene minor	1
Lumbrineris minuta	18
Lysippe labiata	4
Maldane sarsi	34
Melaenis loveni	1
Melinna cristata	3
Micronephthys minuta	4
Nereis zonata	4
Ophelina cylindricaudatus	27
Paraonis sp. A	3
Pholoe minuta	7
Polydora caulleryi	1
Prionospio steenstrupi	4
Scalibregma inflatum	4
Scoloplos acutus	1
Tauberia gracilis	36
Tharyx ? acutus	38
Typosyllis cornuta	1
Genus "A" (Ampharetidae)	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	2
Cirratulidae	1
Maldanidae	13
Spionidae	1

SMG 830 Station WBS-1/CG-1
70°15.5'N 143°39.6'W
33m 19 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture - 1.00mm

POLYCHAETA

Allis suecica	17
Anaitides groenlandica	2
Antinoella badia	1
Apistobranchus tullbergi	1
Barantolla americana	1
Chaetozone setosa	7
Cossura longocirrata	3
Dexiospira spirillum	1
Diplocirrus hirsutus	2
Exogone naidina	2
Heteromastus filiformis	10
Lumbrineris fragilis	2
Lumbrineris minuta	18
Lysippe labiata	1
Maldane sarsi	63
Melinna cristata	1
Micronephthys minuta	1
Nereis zonata	2
Ophelina cylindricaudatus	34
Pholoe minuta	15
Polydora caulleryi	1
Prionospio steenstrupi	13
Scoloplos acutus	1
Sphaerodorum gracilis	4
Sternaspis fossor	1
Tauberia gracilis	15
Terebellides stroemi	2
Tharyx ? acutus	28

UNIDENTIFIED POLYCHAETA

Maldanidae	3
Phyllodocidae	1
Polynoidae	1

SMG 831 Station WBS-1/CG-1
70°15.5'N 143°39.6'W
33m 19 August 1971
R/V GLACIER WEBSEC-71
Sieve aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Anaitides groenlandica	2
Antinoella badia	2
Capitella capitata	4
Ophelina cylindricaudatus	4
Tharyx ? acutus	1
Trochochaeta carica	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Maldanidae	1

SMG 832 Station WBS-1/CG-1
70°15.5'N 143°39.6'W
32m 19 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture - 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	10
Antinoella sarsi	1
Apistobranchus tullbergi	2
Barantolla americana	1
Clymenura polaris	5
Cossura longocirrata	1
Exogone dispar	2
Heteromastus filiformis	5
Lumbrineris minuta	5
Maldane sarsi	7
Melinna cristata	1
Micronephthys minuta	1
Ophelina cylindricaudatus	40
Paraonis sp. A	1
Prionospio steenstrupi	6
Scalibregma inflatum	1
Scoloplos acutus	1
Sternaspis fossor	1
Tauberia gracilis	2
Terebellides stroemi	2
Tharyx ? acutus	64
Trochochaeta carica	1
Genus "A" (Ampharetidae)	4

UNIDENTIFIED POLYCHAETA

Ampharetidae	2
Maldanidae	9

SMG 833 Station WBS-1/CG-1
70°15.5'N 143°39.6'W
33m 19 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	19
Anaitides groenlandica	5
Apistobranchus tullbergi	2
Barantolla americana	9
Capitella capitata	4
Chaetozone setosa	10
Cistenides hyperborea	1
Cossura longocirrata	1
Heteromastus filiformis	8
Lumbrineris minuta	15
Maldane sarsi	44
Melinna cristata	2
Nereis zonata	1
Ophelina cylindricaudatus	18
Prionospio steenstrupi	1
Scoloplos acutus	6
Sphaerodorum gracilis	3
Sternaspis fossor	2
Tauberia gracilis	19
Tharyx ? acutus	15
Trochochaeta carica	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	2
Maldanidae	11
Terebellidae	1

SMG 834 Station WBS-2/CG-3
70"27'N 143°34'W
48m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	2
Ampharete acutifrons	5
Ampharete arctica	3
Ampharete vega	1
Amphicteis gunneri	1
Anaitides groenlandica	2
Apistobranchus tullbergi	1
Autolytus fallax	2
Clymenura polaris	5
Chone duneri	4
Chone murmanica	11
Cossura longocirrata	1
Diplocirrus longisetosus	2
Eteone longs	2
Eucranta villosa	1
Euchone p - a	1
Exogone dispar	11
Exogone naidina	3
Gattyana cirrosa	1
Glyphanostomum pallescens	1
Lagisca extenuata	4
Lanassa nordenskioldi	1
Laonice cirrata	1
Laphania boecki	6
Lumbrineris fragil is	1
Lumbrineris minuta	6
Melinna cristata	13
Micronephthys minuta	14
Myriochele heeri	1
Nereimyra aphroditoides	1
Nereis zonata	9
Nothria conchylega	2
Ophelina cylindricaudatus	11
Parheteromastus sp. A	2
Pholoe minuta	9
Pherusa plumosa	1
Prionospio steenstrupi	2
Scalibregma inflatum	6
Sphaerodoropsis minuta	1
Spirorbis granulates	7
Tauberia gracilis	1
Terebellides stroemi	15
Tharyx ? acutus	4
Typosyllis cornuta	4
Typosyllis fasciata	1

UNIDENTIFIED POLYCHAETA

Maldanidae	4
Terebellidae	1

SMG 835 Station WBS-2/CG-3
70°27'N 143°34'W
48m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allia suecica	4
Ampharete acutifrons	8
Ampharete arctica	4
Ampharete vega	1
Anaitides groenlandica	1
Antinoella sarsi	1
Apistobranchus tullbergi	1
Autolytus fallax	1
Chone duneri	2
Chone murmanica	141
Euchone papillosa	2
Eucranta villosa	2
Exogone dispar	22
Exogone naidina	3
Glyphanostomum pallescens	4
Heteromastus filiformis	6
Lagisca extenuata	3
Laonice cirrata	1
Laphania boecki	1
Lumbrineris minuta	5
Maldane sarsi	3
Melinna cristata	8
Micronephthys minuta	16
Myriochele heeri	2
Nereimyra aphroditoides	3
Nereis zonata	2
Nicolea zostericola	1
Notoproctus oculatus var. arctica	1
Ophelina cylindricaudatus	6
Owenia fusiformis	2
Pholoe minuta	12
Prionospio steenstrupi	4
Scalibregma inflatum	2
Sphaerodorum gracilis	6
Spirorbis granulates	1
Terebellides stroemi	15
Tharyx ? acutus	15
Typosyllis cornuta	2

uNIDENTIFIED POLYCHAETA

Maldanidae	9
Sabellidae	1
Terebellidae	2

SMG 386 Station WBS-2/CG-3
70°27 'N 143°34'W
48m 20 August 1971
R/VGLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	4
Ampharete acutifrons	7
Ampharete arctica	1
Amphicteis gunneri	1
Autolytus alexandri	1
Autolytus fallax	2
Chaetozone setosa	1
Chone duneri	2
Chone murmanica	146
Cirratulus cirratus	1
Clymenura polaris	1
Diplocirrus longisetosus	2
Exogone dispar	5
Exogone naidina	5
Heteromastus filiformis	9
Lagisca extenuata	3
Lanassa nordenskioldi	2
Laonice cirrata	2
Laphania boecki	1
Lumbrineris fragilis	2
Lumbrineris minuta	13
Lysippe labiata	3
Melinna cristata	5
Micronephthys minuta	17
Minuspio cirrifera	3
Myriochele heeri	4
Nereimyra aphroditoides	1
Nereis zonata	4
Nicolea zostericola	1
Nothria conchylega	1
' a cylindricaudatus	15
Parheteromastus sp. A	11
Pholoe minuta	21
Polycirrus medusa	1
Praxillella praetermissa	1
Prionospio steenstrupi	2
Scalibregma inflatum	1
Sphaerodorum gracilis	3
Terebellides stroemi	26
Tharyx ? acutus	8
Trichobranchus glacialis	1
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Maldanidae	7
Sabellidae	2
Terebellidae	2

SMG 837 Station WBS-2/CG-3
70°27'N 143°34'W
48m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture - 1.00mm

POLYCHAETA

Allis suecica	10
Ampharete acutifrons	4
Ampharete arctica	3
Antinoella badia	1
Antinoella sarsi	1
Autolytus alexandri	2
Autolytus fallax	3
Dexiospira spirillum	1
Eucranta villosa	1
Euchone papillosa	2
Exogone dispar	7
Exogone naidina	3
Heteromastus filiformis	3
Lanassa nordenskioldi	3
Lanassa venusta	4
Laonice cirrata	1
Laphania boecki	2
Lumbrineris minuta	4
Lysippe labiata	3
Maldane sarsi	2
Melinna cristata	14
Micronephthys minuta	22
Minuspio cirrifera	2
Myriochele heeri	3
Nereimyra aphroditoides	2
Nereis zonata	5
Nicolea zostericola	3
Ophelina cylindricaudatus	19
Parheteromastus sp. A	1
Pholoe minuta	8
Polycirrus medusa	1
Prionospio steenstrupi	5
Sphaerodorum gracilis	7
Sphaerosyllis erinaceus	2
Spirorbis granulates	1
Terebellides stroemi	12
Tharyx ? acutus	17
Trichobranchus glacialis	1
Typosyllis cornuta	3

UNIDENTIFIED POLYCHAETA

Maldanidae	12
Polynoidae	2
Sabellidae	3
Terebellidae	1

SMG 838 Station WBS-2/CG-3
70°27'N 143°34'W
48m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture - 1.00mm

POLYCHAETA

Allis suecica	5
Ampharete acutifrons	1
Ampharete arctica	2
Autolytus alexandri	1
Autolytus fallax	1
Axionice flexuosa	4
Brada nuda	2
Chaetozone setosa	1
Chone duneri	1
Chone murmanica	74
Clymenura polaris	1
Diplocirrus longisetosus	1
Exogone dispar	6
Lagisca extenuata	1
Lanassa nordenskioldi	2
Lanassa venusta	8
Laonice cirrata	1
Laphania boecki	1
Lumbrineris minuta	8
Maldane sarsi	5
Melinna cristata	11
Micronephthys minuta	10
Minuspio cirrifera	11
Nereis zonata	3
Nicolea zostericola	1
Notoproctus oculatus var. arctica	1
Ophelina cylindricaudatus	13
Parheteromastus sp. A	4
Pholoe minuta	10
Polycirrus medusa	2
Praxillella praetermissa	1
Spirorbis granulates	1
Terebellides stroemi	12
Tharyx ? acutus	10
Typosyllis cornuta	2
Typosyllis fasciata	1

UNIDENTIFIED POLYCHAETA

Maldanidae	3
Terebellidae	2

SMG 839 Station WBS-3/CG-5
70°34.6'N 143°38'W
106m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	8
Artacama proboscidea	1
Chaetozone setosa	6
Diplocirrus longisetosus	1
Euchone papillosa	1
Heteromastus filiformis	6
Laonice cirrata	3
Lumbrineris minuta	12
Lysippe labiata	2
Nereimyra aphroditoides	1
Nereis zonata	1
Ophelina cylindricaudatus	7
Sphaerodoropsis biserialis	4
Spiochaetopterus typicus	17
Terebellides stroemi	2
Tharyx ? acutus	13
Typosyllis cornuta	4

SMG 840 Station WBS-3/CG-5
70°34.6'N 143°38'W
106m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Chaetozone setosa	6
Chone murmanica	1
Diplocirrus longisetosus	3
Eucranta villosa	1
Heteromastus filiformis	8
Lagisca extenuata	2
Laonice cirrata	1
Lumbrineris minuta	13
Lysippe labiata	1
Minuspio cirrifera	2
Nereis zonata	1
Ophelina cylindricaudatus	15
Sphaerodorum gracilis	1
Spiochaetopterus typicus	14
Terebellides stroemi	5
Tharyx ? acutus	2
Typosyllis cornuta	6

SMG 841 Station WBS-3/CG-5
70°34.6'N 143°38'W
105m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Anaitides groenlandica	1
Chaetozone setosa	3
Eteone longs	1
Exogone dispar	1
Heteromastus filiformis	4
Lumbrineris minuta	30
Lysippe labiata	4
Maldane sarsi	7
Micronephthys minuta	1
Minuspio cirrifera	9
Ophelina cylindricaudatus	6
Pholoe minuta	1
Scoloplos acutus	2
Spiochaetopterus typicus	20
Tauberia gracilis	4
Terebellides stroemi	5
Tharyx ? acutus	15

UNIDENTIFIED POLYCHAETA

Polynoidae	1

SMG 842 Station WBS-3/CG-5
70°34.6'N 143°38'W
105m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	2
Allis sp. A	2
Anaitides groenlandica	2
Chaetozone setosa	14
Chone murmanica	5
Eteone longs	2
Exogone naidina	1
Heteromastus filiformis	5
Lagisca extenuata	3
Laonice cirrata	3
Lumbrineris minuta	37
Lysippe labiata	5
Maldane sarsi	2
Micronephthys minuta	18
Minuspio cirrifera	10
Myriochele heeri	1
Onuphis quadricuspis	1
Ophelina cylindricaudatus	10
Pholoe minuta	11
Prionospio steenstrupi	5
Scoloplos acutus	11
Spiochaetopterus typicus	33
Tauberia gracilis	31
Terebellides stroemi	15
Tharyx ? acutus	17
Typosyllis cornuta	1

SMG 843 Station WBS-3/CG-5
70°34.6'N 143°38'W
109m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	1
Allis sp. A	5
Anaitides groenlandica	1
Chaetozone setosa	14
Eteone longs	1
Eucranta villosa	2
Heteromastus filiformis	12
Laonice cirrata	1
Lumbrineris fragilis	1
Lumbrineris minuta	48
Lysippe labiata	3
Maldane sarsi	5
Micronephthys minuta	40
Minuspio cirrifera	5
Myriochele heeri	1
Ophelina cylindricaudatus	3
Pholoe minuta	13
Prionospio steenstrupi	7
Scoloplos acutus	13
Spiochaetopterus typicus	15
Tauberia gracilis	12
Terebellides stroemi	28
Tharyx ? acutus	12

SMG 844 Station WBS-4/CG-6
70°45.6'N 143°35.4'W
494m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	16
Barantolla americana	1
Chone duneri	2
Eteone longa	1
Heteromastus filiformis	2
Jasmineira schaudinni	1
Lumbrineris minuta	2
Lumbrineris sp. B	3
Maldane sarsi	63
Melinna cristata	2
Minuspio cirrifera	3
Nephtys ciliata	1
Onuphis quadricuspis	1
Paraonis sp. A	2
Terebellides stroemi	1
Tharyx ? acutus	1
Typosyllis cornuta	2

UNIDENTIFIED POLYCHAETA

Capitellidae	1

SMG 845 Station WBS-4/CG-6
70°45.6'N 143°35.4'W
494m 20 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	7
Amage auricula	3
Barantolla americana	3
Eclysippe sp. A	6
Ephesiella macrocirrus	1
Heteromastus filiformis	2
Laonice cirrata	1
Lumbrineris minuta	4
Lumbrineris sp. B	1
Maldane sarsi	52
Melinna cristata	4
Minuspio cirrifera	1
Onuphis quadricuspis	5
Owenia fusiformis	1
Schistomeringos sp. A	2
Sigambra tentaculata	3
Tharyx ? acutus	2

UNIDENTIFIED POLYCHAETA

Maldanidae	4

SMG 846 Station WBS-4/CG-6
70°45.6'N 143°35.4'W
494m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	9
Amage auricula	3
Barantolla americana	3
Chone duneri	2
Eclysippe sp. A	8
Eteone longs	1
Jasmineira schaudinni	1
Lumbrineris sp. B	5
Maldane sarsi	77
Melinna cristata	1
Minuspio cirrifera	1
Myriochele heeri	1
Schistomeringos sp. A	2
Sigambra tentaculata	1
Tharyx ? acutus	1
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA ,

Maldanidae	2

SMG 847 Station WBS-4/CG-6
70°45.6'N 143°35.4'W
496m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	16
Amage auricula	7
Aricidea ushakovi	2
Barantolla americana	1
Chone duneri	2
Eclysippe sp. A	17
Glyphanostomum pallescens	1
Jasmineira schaudinni	4
Lumbrineris minuta	5
Maldane sarsi	83
Melinna cristata	6
Minuspio cirrifera	7
Onuphis quadricuspis	1
Ophelina abranchiata	1
Schistomeringos sp. A	3
Sigambra tentaculata	2
Tauberia gracilis	1
Terebellides stroemi	2
Tharyx ? acutus	10

SMG 848 Station WBS-4/CG-6
70°45.6'N 143°35.4'W
498m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	17
Amage ' a	1
Barantolla americana	4
Eclysippe sp. A	4
Jasmineira schaudinni	3
Heteromastus filiformis	2
Laonice cirrata	1
Lumbrineris minuta	3
Lumbrineris sp. B	3
Maldane sarsi	71
Melinna cristata	5
Minuspio cirrifera	1
Myriochele heeri	4
Mysta barbata	1
Notoproctus oculatus var. arctica	2
Sigambra tentaculata	1
Tharyx ? acutus	8
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Capitellidae	1
Maldanidae	4

SMG 849 Station WBS-5/CG-7
71°00.5'N 145°35'W
480m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	8
Amage auricula	14
Aricidea ushakovi	2
Chone duneri	2
Eclysippe sp. A	2
Jasmineira schaudinni	3
Lumbrineris sp. B	2
Maldane sarsi	48
Melinna cristata	1
Minuspio cirrifera	1
Myriochele heeri	1
Onuphis quadricuspis	2
Ophelina abranchiata	5
Tharyx ? acutus	12
Trochochaeta carica	1
Typosyllis cornuta	3

UNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 850 Station WBS-5/CG-7
71°00.5'N 145°35'W
464m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Amage auricula	20
Ampharete acutifrons	1
Aricidea ushakovi	3
Barantolla americana	3
Eclysippe sp. A	7
Eteone longs	1
Euchone papillosa	1
Jasmineira schaudinni	2
Lumbrineris minuta	2
Lumbrineris sp. B	1
Maldane sarsi	71
Melinna cristata	1
Micronephthys minuta	1
Myriochele heeri	15
Notoproctus oculata var. arctica	1
Onuphis quadricuspis	34
Ophelina abranchiata	12
Tharyx ? acutus	15
Trochochaeta carica	1

UNIDENTIFIED POLYCHAETE

Maldanidae	7

SMG 851 Station WBS-5/CG-7
71°00.5'N 145°35'W
450m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	3
Amage auricula	5
Aricidea ushakovi	1
Barantolla americana	3
Eclysippe sp. A	1
Jasmineira schaudinni	3
Lumbrineris minuta	1
Lumbrineris sp. B	1
Maldane sarsi	74
Onuphis quadricuspis	9
Ophelina abranchiata	11
Tharyx ? acutus	7
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Maldanidae	2

SMG 852 Station WBS-5/CG-7
71°00.5'N 145°35'W
447m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	5
Amage auricula	8
Anaitides groenlandica	1
Aricidae ushakovi	1
Barantolla americana	4
Chone duneri	1
Eclysippe sp. A	3
Heteromastus filiformis	1
Jasmineira schaudinni	2
Lanassa nordenskioldi	1
Lumbrineris sp. B	2
Maldane sarsi	57
Onuphis quadricuspis	4
Ophelina abranchiata	6
Schistomeringos sp. A	1
Sigambra tentaculata	1
Tharyx ? acutus	18
Typosyllis cornuta	2

UNIDENTIFIED POLYCHAETA

Maldanidae	2

SMG 853 Station WBS-5/CG-7
71°00.5'N 145°35'W
476m 21 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allia suecica	6
Amage auricula	7
Aricidea ushakovi	2
Barantolla americana	4
Chone duneri	1
Eclysippe sp. A	5
Heteromastus filiformis	2
Jasmineira schaudinni	3
Lumbrineris sp. B	2
Maldane sarsi	51
Melinna cristata	1
Myriochele heeri	1
Onuphis quadricuspis	7
Ophelina abranchiata	14
Scoloplos acutus	1
Sigambra tentaculata	1
Sphaerodoropsis biserialis	1
Sternaspis fossor	1
Terebellides stroemi	2
Tharyx ? acutus	2
Typosyllis cornuta	2

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Maldanidae	5

SMG 854 Station WBS-6/CG-8
70°48.5'N 145°56.1'W
84m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	14
Ampharete arctica	1
Amphicteis gunneri	1
Capitella capitata	1
Chaetozone setosa	1
Chone duneri	1
Chone murmanica	12
Eteone longa	1
Glyphanostomum pallescens	5
Heteromastus filiformis	9
Laphania boecki	2
Lumbrineris minuta	6
Lysippe labiata	1
Maldane sarsi	3
Melinna cristata	1
Micronephthys minuta	1
Minuspio cirrifera	5
Myriochele heeri	14
Mystides borealis	1
Ophelina cylindricaudatus	13
Pholoe minuta	4
Prionospio steenstrupi	1
Scalibregma inflatum	1
Spiochaetopterus typicus	8
Terebellides stroemi	5
Tharyx ? acutus	12
Typosyllis cornuta	4

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Scalibregmidae	1
Spionidae	1
Terebellidae	1

SMG 855 Station WBS-6/CG-8
70°48.5'N 145°56.1'W
84m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	3
Ampharete arctica	1
Amphicteis gunneri	1
Chaetozone setosa	3
Chone murmanica	1
Heteromastus filiformis	9
Lumbrineris minuta	4
- -	1
Maldane sarsi	1
Minuspio cirrifera	2
Ophelina cylindricaudatus	11
Pholoe minuta	1
Spiochaetopterus typicus	10
Terebellides stremi	6
Tharyx ? acutus	3
Typosyllis cornuta	7

UNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 856 Station WBS-6/CG-8
70°48.5'N 145°56.1'W
84m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	3
Ampharete arctica	2
Anaitides groenlandica	1
Barantolla americana	2
Chone duneri	3
Chone murmanica	8
Exogone dispar	1
Exogone naidina	1
Heteromastus filiformis	16
Lagisca extenuata	1
Laonice cirrata	1
Lumbrineris minuta	8
Lysippe labiata	3
Maldane sarsi	4
Melinna cristata	1
Minuspio cirrifera	7
Myriochele heeri	17
Ophelina cylindricaudatus	11
Pholoe minuta	6
Polyphysia crassa	1
Sphaerodoridium sp. A	1
Sphaerodorum gracilis	1
Spiochaetopterus typicus	4
Terebellides stroemi	3
Tharyx ? acutus	18
Typosyllis cornuta	3

UNIDENTIFIED POLYCHAETA

Ampharetidae	1

SMG 857 Station WBS-6/CG-8
70°48.5'W 145°56.1'W
83m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	4
Antinoella sarsi	2
Chaetozone setosa	3
Chone murmanica	7
Eclysippe sp. A	2
Exogone dispar	1
Exogone naidina	1
Glyphanostomum pallescens	1
Heteromastus filiformis	7
Laphania boecki	1
Lumbrineris minuta	4
Lysippe labiata	5
Maldane sarsi	3
Minuspio cirrifera	4
Myriochele heeri	19
Ophelina cylindricaudatus	13
Pholoe minuta	4
Polycirrus medusa	1
Proclea graffii	1
Scalibregma inflatum	1
Sphaerodoropsis biserialis	1
Spiochaetopterus typicus	2
Terebellides stroemi	4
Tharyx ? acutus	1
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Maldanidae	2

SMG 858 Station WBS-7/CG-9
70°48.5'N 145°56.1'W
81m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	6
Anaitides groenlandica	1
Chaetozone setosa	2
Chone murmanica	17
Exogone naidina	1
Heteromastus filiformis	4
Lumbrineris minuta	9
Lysippe labiata	1
Maldane sarsi	3
'o cirrifera	1
Ophelina cylindricaudatus	8
Pholoe minuta	1
Prionospio steenstrupi	2
Sphaerodoropsis sp. B	1
Spiochaetopterus typicus	3
Terebellides stroemi	5
Tharyx ? acutus	9
Typosyllis cornuta	2

UNIDENTIFIED POLYCHAETA

Flabelligeridae	1,
Terebellidae	1

SMG 859 Station WBS-7/CG-9
70°44'N 145°52'W
57m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	6
Anaitides groenlandica	1
Antinoella sarsi	2
Barantolla americana	5
Chaetozone setosa	4
Chone duneri	1
Chone murmanica	2
Exogone dispar	1
Heteromastus filiformis	11
Lagisca extenuata	2
Lanassa venusta	1
Laphania boecki	1
Lysippe labiata	4
Lumbrineris minuta	17
Maldane sarsi	12
Melinna cristata	4
Micronephthys minuta	6
Minuspio cirrifera	1
Nephtys ciliata	1
Onuphis quadricuspis	1
Ophelina cylindricaudatus	15
Pholoe minuta	2
Polydora caulleryi	1
Prionospio steenstrupi	1
Scalibregma inflatum	2
Terebellides stroemi	3
Tharyx ? acutus	22
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 860 Station WBS-7/CG-9
70°44'N 145°52'W
58m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture - 1.00 mm

POLYCHAETA

Allis suecica	4
Ampharete acutifrons	9
Ampharete arctica	2
Ampharete vega	1
Anaitides citrina	1
Antinoella sarsi	2
Apistobranchus tullbergi	1
Autolytus fallax	2
Axionice flexuosa	1
Barantolla americana	4
Capitella capitata	1
Chaetozone setosa	8
Chone murmanica	39
Eteone longs	1
Euchone papillosa	1
Exogone dispar	3
Exogone naidina	6
Gattyana cirrosa	1
Heteromastus filiformis	26
Lagisca extenuata	3
Lanassa nordenskioldi	7
Lanassa venusta	1
Laphania boecki	1
Leaena abranchiata	2
Lumbrineris fragilis	1
Lumbrineris impatiens	1
Lumbrineris minuta	35
Lysippe labiata	6
Maldane sarsi	10
Micronephthys minuta	10
Minuspio cirrifera	2
Myriochele heeri	3
Nicolea zostericola	2
Onuphis quadricuspis	1
Ophelina cylindricaudatus	21
Parheteromastus sp. A	4
Pholoe minuta	6
Polycirrus medusa	3
Polydora c a - i	2
Polyphysia crassa	1
Prionospio steenstrupi	4
Scalibregma inflatum	1
Schistomeringos caecus	2
Sphaerosyllis erinaceus	1
Spiochaetopterus typicus	2
Terebellides stroemi	6
Tharyx ? acutus	28
Typosyllis cornuta	7

UNIDENTIFIED POLYCHAETA

Dorvilleidae	1
Maldanidae	4
Sabellidae	1
Terebellidae	2

SMG 861 Station WBS-7/CG-9
70°44'N 145°52'W
57m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve-mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	12
Ampharete acutifrons	1
Ampharete arctica	2
Ampharete vega	6
Antinoella sarsi	1
Apistobranchus tullbergi	1
Autolytus fallax	1
Barantolla americana	10
Brada nuda	2
Chaetozone setosa	16
Chone duneri	2
Chone murmanica	12
Diplocirrus longisetosus	3
Exogone dispar	5
Exogone naidina	3
Heteromastus filiformis	20
Jasmineira schaudinni	1
Lagisca extenuata	2
Laphania boecki	1
Lumbrineris fragilis	1
Lumbrineris minuta	38
Lysippe labiata	2
Maldane sarsi	9
Melinna cristata	2
Micronephthys minuta	5
Minuspio cirrifera	2
Myriochele heeri	2
Nereimyra aphroditoides	1
Ophelina cylindricaudatus	11
Paraonis sp. A	1
Parheteromastus sp. A	7
Pholoe minuta	10
Polydora caulleryi	1
Prionospio steenstrupi	4
Scalibregma inflatum	2
Spiochaetopterus typi cus	1
Spirorbis granulates	1
Terebellides stroemi	5
Tharyx ? acutus	24
Typosyllis cornuta	2

UNIDENTIFIED POLYCHAETA

Opheliidae (Travisia spp.)	6
Polynoidae	1

SMG 862 Station WBS-7/CG-9
70°44'N 145°52'W
57m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	6
Ampharete acutifrons	10
Ampharete arctica	3
Barantolla americana	4
Brada inhabilis	1
Capitella capitata	1
Chaetozone setosa	16
Chone duneri	3
Chone murmanica	15
Diplocirrus longisetosus	1
Eteone longs	1
Exogone dispar	2
Exogone naidina	6
Heteromastus filiformis	10
Lagisca extenuata	4
Lanassa nordenskioldi	1
Lumbrineris minuta	20
Lysippe labiata	3
Maldane sarsi	8
Melinna cristata	3
Micronephthys minuta	3
Minuspio cirrifera	2
Ophelina cylindricaudatus	20
Owenia fusiformis	3
Paraonis sp. A	3
Parheteromastus sp A	4
Pholoe minuta	8
Prionospio steenstrupi	2
Scalibregma inflatum	5
Spiochaetopterus typicus	1
Terebellides stroemi	10
Tharyx ? acutus	18
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Sabellidae	3
Terebellidae	3

SMG 863 Station WBS-7/CG-9
70°44'N 145°52'W
57m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	8
Ampharete acutifrons	3
Anaitides groenlandica	3
Autolytus fallax	1
Barantolla americana	3
Chaetozone setosa	9
Chone murmanica	13
Diplocirrus longisetosus	2
Heteromastus filiformis	20
Lanassa nordenskioldi	1
Lanassa venusta	1
Laphania boecki	1
Lumbrineris fragilis	2
Lumbrineris	16
Lysippe labiata	2
Maldane sarsi	2
Melinna cristata	1
Minuspio cirrifera	3
Nereis zonata	2
Ophelina cylindricaudatus	30
Parheteromastus sp. A	3
Pholoe minuta	3
Prionospio steenstrupi	4
Scalibregma inflatum	2
Terebellides stroemi	6
Tharyx ? acutus	6
Trochochaeta carica	1
Typosyllis cornuta	2

UNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 864 Station WBS-8/CG-12
70°18'N 146°05'W
27m 22 August 1971
R/v GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Anaitides groenlandica	3
Antinoella sarsi	1
Apistobranchus tullbergi	1
Capitella capitata	10
Chaetozone setosa	3
Chone murmanica	4
Clymenura polaris	1
Cossura longocirrata	5
Diplocirrus longisetosa	1
Eteone longs	3
Heteromastus filiformis	43
Micronephthys minuta	1
Nephtys ciliata	1
Nereimyra aphroditoides	2
Ophelina cylindricaudatus	17
Pholoe minutia	9
Prionospio steenstrupi	1
Scalibregma inflatum	2
Scoloplos acutus	1
Terebellides stroemi	1
Tharyx ? acutus	3

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Syllidae	1

SMG 865 Station WBS-8/CG-12
70°18'N 146°05'W
26m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	10
Allis sp. A	1
Anaitides groenlandica	3
Apistobranchus tullbergi	5
Artacama proboscidea	1
Brada villosa	1
Capitella capitata	20
Chaetozone setoas	28
Chone duneri	1
Chone murmanica	4
Cistenides hyperborea	1
Cossura longocirrata	5
Eteone longs	14
Heteromastus filiformis	45
Lumbrineris minuta	8
Micronephthys minuta	17
Nicolea zostericola	1
Ophelina cylindricaudatus	8
Pholoe minuta	5
Praxillella praetermissa	1
Prionospio steenstrupi	9
Scalibregma inflatum	3
Scoloplos acutus	4
Sternaspis fossor	5
Terebellides stroemi	6
Tharyx ? acutus	59

UNIDENTIFIED POLYCHAETA

Maldanidae	3
Terebellidae	1

SMG866 Station WBS-8/CG-12
70°18'N 146°05'W
26m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	1
Antinoella sarsi	1
Apistobranchus tullbergi	2
Capitella capitata	152
Chaetozone setoas	13
Chone murmanica	6
Cistenides hyperborea	1
Cossura longocirrata	14
Eteone longs	14
Heteromastus filiformis	82
Lumbrineris minuta	2
Micronephthys minuta	7
Minuspio cirrifera	12
Nereimyra aphroditoides	2
Ophelina cylindricaudatus	8
Parheteromastus sp. A	7
Pholoe minuta	1
Praxillella praetermissa	1
Prionospio steenstrupi	20
Scalibregma inflatum	1
Scoloplos acutus	8
Sternaspis fossor	1
Terebellides stroemi	3
Tharyx ? acutus	28

UNIDENTIFIED POLYCHAETA

Dorvilleidae	1
Maldanidae	1

SMG 867 WBS-8/CG-12
70°18'N 146°05'W
26m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Anaitides groenlandica	1
Antinoella sarsi	2
Apistobranchus tullbergi	34
Aricidea ushakovi	5
Artacama proboscidea	1
Capitella capitata	1
Chaetozone setosa	5
Chone murmanica	19
Clymenura polaris	3
Cossura longocirrata	4
Heteromastus filiformis	36
Micronephthys minuta	6
Minuspio cirrifera	1
Nereimyra aphroditoides	2
Nicolea zostericola	9
Ophelina cylindricaudatus	45
Parheteromastus sp. A	2
Pholoe minuta	4
Prionospio steenstrupi	15
Proclea graffii	3
Scalibregma inflatum	1
Schistomeringos caecus	4
Sphaerodoropsis minuta	1
Sternaspis fossor	4
Terebellides stroemi	3
Tharyx ? acutus	33
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Dorvilleidae	2
Maldanidae	2
Terebellidae	1

SMG 868 Station WBS-8/CG-12
70°18'N 146°05'W
26m 22 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Anaitides groenlandica	1
Ampharete vega	1
Autolytus fallax	1
Capitella capitata	1
Chaetozone setosa	2
Chone murmanica	3
Heteromastus filiformis	2
Nereimyra aphroditoides	5
Pholoe minuta	1
Prionospio steenstrupi	58
Scalibregma inflatum	1
Tharyx ? acutus	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	1

SMG 885 Station WBS-12/CG-19
71°00.0'N 147°04'W
700m 24 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	5
Aricidea ushakovi	1
Eteone longs	4
Laonice cirrata	13
Lumbrineris minuta	5
Maldane sarsi	9
Minuspio cirrifera	82
Ophelina cylindricaudatus	1
Scoloplos acutus	3
Sigambra tentaculata	1
Tharyx ? acutus	3

SMG 886 Station WBS-12/CG-19
71°00.0'N 147°04.0'W
574m 24 August 1971
R/V GLACIER WEBSEC-71
Sieve"mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	13
Amage auricula	1
Cossura longocirrata	2
Eclysippe sp. A	4
Eteone longs	1
Heteromastus filiformis	4
Laonice cirrata	2
Lumbrineris minuta	2
Maldane sarsi	102
Minuspio cirrifera	19
Myriochele heeri	73
Onuphis quadricuspis	2
Ophelina abranchiata	2
Parheteromastus sp. A	1
Scoloplos acutus	1
Sigambra tentaculata	1
Sternaspis fossor	1
Terebellides stroemi	2
Tharyx ? acutus	1

SMG-887 Station WBS-12/CG-19
71°00.0'N 147°04.0'W
633m 24 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	18
Aricidea ushakovi	1
Heteromastus filiformis	2
Lumbrineris minuta	2
Maldane sarsi	12
Minuspio cirrifera	34
Scoloplos acutus	5
Sigambra tentaculata	5
Tharyx ? acutus	2
Trochochaeta carica	1

SMG 888 Station WBS-13/CG-20
71°13.7'N 147°22.6'W
3010m 25 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Lumbrineris minuta	2
Maldane sarsi	1
Minuspio cirrifera	1
Myriochele heeri	1
Sigambra tentaculata	/
Tharyx ? acutus	1

SMG 889 Station WBS-13/CG-20
71°19'N 147°46.0'W
2295m 25 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Sigambra tentaculata
Tharyx ? acutus

SMG 890 Station WBS-13/CG-20
71°19.3'N 147°47.1'W
2377m 25 August 1971
R/V GLACIER WEBSEC_&L
Sieve mesh aperture = 1.00mm

POLYCHAETA

Lumbrineris sp. A
Ophelina abranchiata
Ophelina sp. A
Sigambra tentaculata
Tharyx ? acutus

SMG 891 Station WBS-13/CG-20
70°19.6'N 147°48.2'W
2560m 25 August 1971
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	3
Heteromastus filiformis	1
Lumbrineris minuta	2
Lumbrineris sp. A	1
Micronephthys minuta	1
Myriochele heeri	1
Ophelina abranchiata	4
Ophelina sp. A	2
Sigambra tentaculata	9
Tharyx ? acutus	7

SMG 892 Station WBS-13/CG-20
71°20'N 147°50'W
2800m 25 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Lumbrineris minuta	2
Ophelina abranchiata	1
Sigambra tentaculata	11
Tharyx ? acutus	5
Lumbrineris sp. A	2

SMG 913 Station WBS-19/CG-29
71°08.5'N 148°00.0'W
430m 29 August 1971
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allia sp. A	2
Barantolla americana	22
Capitella capitata	1
Chaetozone setosa	3
Eteone longs	2
Heteromastus filiformis	2
Laonice cirrata	14
Lumbrineris minuta	12
Maldane sarsi	234
Micronephthys minuta	1
Minuspio cirrifera	27
Nephtys ciliata	1
Nereimyra aphroditoides	1
Onuphis quadricuspis	4
Scoloplos acutus	18
Sphaerodoridium sp. A	1
Spiochaetopterus typicus	2
Sternaspis fossor	2
Tauberia gracilis	11
Tharyx ? acutus	2
Trochochaeta carica	3

UNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 914 Station WBS-19/CG-39
71°08.6'N 148°00.3'W
359m 29 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	1
Barantolla americana	10
Chaetozone setosa	2
Chone murmanica	2
Eteone longs	2
Heteromastus filiformis	6
Laonice cirrata	9
Lumbrineris mi.nuts	16
Maldane sarsi	109
Micronephthys minuta	3
Minuspio cirrifera	36
Onuphis quadricuspis	5
Prionospio steenstrupi	1
Scoloplos acutus	21
Sphaerodoropsis sp. A	1
Sternaspis fossor	2
Tauberia gracilis	8
Trochochaeta carica	3

UNIDENTIFIED POLYCHAETA

Maldanidae	6

SMG 915 Station WBS-19/CG-29
71°08.7'N 148°00.4'W
355m 29 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	1
Allis sp. A	12
Antinoella badia	1
Barantolla americana	4
Capitella capitata	1
Chaetozone setosa	3
Chone murmanica	1
Diplocirrus hirsutus	1
Eteone longs	2
Laonice cirrata	1
Lumbrineris minuta	8
Micronephthys minuta	4
Minuspio cirrifera	26
Onuphis quadricuspis	4
' a cylindricaudatus	1
Pholoe minuta	1
Scoloplos acutus	13
Sphaerodoridium sp. A	1
Sternaspis fossor	4
Tauberia gracilis	56
Terebellides stroemi	2

uNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 916 Station WBS-19/CG-29
71°08.9'N 148°00.8'W
335m 29 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	6
Antinoella badia	1
Barantolla americana	6
Chaetozone setosa	12
Chone murmanica	1
Cossura longocirrata	1
Eteone longa	2
Heteromastus filiformis	5
Laonice cirrata	9
Lumbrineris minuta	23
Melinna cristata	1
Micronephthys minuta	8
Minuspio cirrifera	12
Nephtys ciliata	1
Onuphis quadricuspis	2
Ophelina cylindricaudatus	24
Pholoe minuta	2
Prionospio steenstrupi	1
Scoloplos acutus	38
Sternaspis fossor	3
Tharyx ? acutus	9

UNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 917 Station WBS-19/CG-29
71°09'N 148°01.0'W
324m 29 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Antinoella badia	1
Barantolla americana	4
Chaetozone setosa	9
Eteone longs	5
Heteromastus filiformis	2
Laonice cirrata	6
Lanassa venusta	1
Lumbrineris minuta	12
Maldane sarsi	2
Micronephthys minuta	23
Minuspio cirrifera	3
Nephtys ciliata	3
Onuphis quadricuspis	2
Ophelina cylindricaudatus	12
Pholoe minuta	2
Prionospio steenstrupi	1
Scoloplos acutus	61
Spiochaetopterus typicus	4
Sternaspis fossor	2
Tauberia gracilis	37
Tharyx ? acutus	19

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Maldanidae	2

SMG 919 Station WBS-20/CG-30
71°06'N 147°57'W
85m 30 August 1973.
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	4
Chaetozone setosa	1
Chone murmanica	22
Exogone naidina	2
Gattyana cirrosa	1
Glyphanostomum pallescens	1
Laonice cirrata	1
Lumbrineris minuta	8
Lysippe labiata	3
Melinna cristata	1
Micronephthys minuta	11
Minuspio cirrifera	2
Myriochele heeri	7
Ophelina cylindricaudatus	4
paraonis sp. A	1
Parheteromastus sp. A	1
Pholoe minuta	8
Polydora caulleryi	1
Scalibregma inflatum	1
Schistomeringos caecus	1
Sphaerodoropsis biserialis	1
Spiochaetopterus typicus	17
Tauberia gracilis	1
'ides stroemi	14
Tharyx ? acutus	8

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Sabellidae	10
Terebellidae	1

SMG 918 Station WBS-20/CG-30
71°06'N 147°57'W
94m 30 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allia suecica	4
Ampharete arctica	1
Antinoella sarsi	1
Apistobranchus tullbergi	2
Axionice flexuosa	1
Barantolla americana	3
Chone murmanica	11
Clymenura polaris	6
Cossura longocirrata	14
Exogone naidina	1
Heteromastus filiformis	5
Lanassa venusta	1
cirrata	27
Laphania boecki	1
Lumbrineris minuta	13
Lysippe labiata	27
Maldane SarSi	8
Micronephthys minuta	27
Minuspio cirrifera	8
Myriochele heeri	1
Onuphis quadricuspis	1
Ophelina cylindricaudatus	9
Parheteromastus sp. A	2
Pholoe minuta	6
Scalibregma inflatum	1
Scoloplos acutus	5
Spiochaetopterus typicus	19
Sternaspis fossor	3
Tauberia gracilis	20
'ides stroemi	14
Tharyx ? acutus	23
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Sabellidae	2

SMG 920 Station WBS-20/CG-30
71°06'N 147°57'W "
100m 30 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture ' 1.00mm

POLYCHAETA

Chaetozone setosa	2
Chone murmanica	13
Clymenura polaris	1
Eteone longa	1
Glyphanostomum pallescens	2
Heteromastus filiformis	1
Lagisca extenuata	1
Lumbrineris fragilis	1
Lumbrineris impatiens	2
Lumbrineris minuta	4
Lysippe labiata	1
Maldane sarsi	3
Micronephthys minuta	4
Minuspio cirrifera	2
Myriochele heeri	1
Ophelina cylindricaudatus	4
Scoloplos acutus	1
Spiochaetopterus typicus	12
Terebellides stroemi	3
Tharyx ? acutus	5
Trochochaeta carica	1
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Sabellidae

SMG 921 Station WBS-20/CG-30
71°06'N 147°57'W
106m 30 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Ampharete arctica	1
Chone murmanica	6
Clymenura polaris	3
Euchone papillosa	1
Heteromastus filiformis	1
Lagisca extenuata	3
Laphania boecki	3
Lumbrineris minuta	5
Lysippe labiata	6
Maldane sarsi	4
Micronephthys minuta	11
Minuspio cirrifera	1
Nephtys ciliata	1
Ophelina cylindricaudatus	4
Parheteromastus sp. A	1
Pholoe minuta	1
Scoloplos acutus	2
Sphaerodorum gracilis	2
Spiochaetopterus typicus	7
Terebellides stroemi	3
Tharyx ? acutus	4

UNIDENTIFIED POLYCHAETA

Sabellidae 3

SMG 922 Station WBS-20/CG-30
71 °06'N 147°57'W
111m 30 August 1971
RV GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	2
Antinoella sarsi	1
Apistobranchus tullbergi ,	1
Barantolla americana	3
Clymenura polaris	2
Lumbrineris minuta	12
Lysippe labiata	9
Maldane sarsi	5
Micronephthys minuta	15
Minuspio cirrifera	1
Ophelina cylindricaudatus	1
Parheteroxnastus sp. A	3
Pholoe minuta	1
Scoloplos acutus	4
Spiochaetopterus typicus	34
Sternaspis fossor	2
Tauberia gracilis	1
Terebellides stroemi	5
Tharyx ? acutus	7

UNIDENTIFIED POLYCHAETA

Maldanidae	2

SMG 933 Station WBS-23/CG-44
71°01'N 148°22.7'W
48m 31 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	18
Ampharete arctica	5
Autolytus fallax	1
Barantolla americana	6
Chaetozone setosa	41
Chone murmanica	28
Eteone longs	1
Exogone naidina	5
Gattyana cirrosa	2
Heteromastus filiformis	13
Lagisca extenuata	1
Laphania boecki	1
Lanassa venusta	1
Leaena abranchiata	1
Lumbrineris fragilis	3
Lumbrineris minuta	14
Lysippe labiata	5
Maldane sarsi	1
Minuspio cirrifera	3
Nereimyra aphroditoides	25
Nereis Zonata	10
Ophelina cylindricaudatus	7
Paraonis sp. A	2
Parheteromastus sp. A	8
Pholoe minuta	3
Prionospio steenstrupi	2
Scalibregma inflatum	9
Scoloplos acutus	3
Spirorbis granulates	2
Terebellides stroemi	8
Tharyx ? acutus	27
Typosyllis cornuta	3

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Sabellidae	26
Spionidae	1
Terebellidae	1

SMG 934 Station WBS-23/CG-44
71 °01'N 148°22.7'W
46. 5m 31 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allia suecica	20
Antinoella sarsi	1
Autolytus fallax	1
Barantolla americana	9
Chaetozone setosa	26
Chone duneri	1
Chone murmanica	56
Clymenura polaris	4
Diplocirrus longisetosus	1
Eteone longa	2
Exogone naidina	4
Heteromastus filiformis	11
Laonice cirrata	2
Laphania boecki	2
Lumbrineris minuta	27
Lysippe labiata	4
Maldane sarsi	5
Micronephthys minuta	8
Minuspio cirrifera	2
Nereimyra aphroditoides	1
Onuphis quadri cuspis	3
' a cylindricaudatus	9
Paraonis sp. A	1
Parheteromastus sp. A	12
Pholoe minuta	9
Polydora caulleryi	1
Prionospio steenstrupi	13
Scalibregma inflatum	5
Scoloplos acutus	4
Tauberia g-s	2
Terebellides stroemi	10
Tharyx ? acutus	38

UNIDENTIFIED POLYCHAETA

Maldanidae	4
Sabellidae	5
Terebellidae	4

SMG 935 Station WBS-23/CG-44
71°01.0'N 148°22.7'W
47m 31 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	22
Ampharete acutifrons	4
Ampharete arctica	1
Antinoella sarsi	1
Apistobranchus tullbergi	1
Autolytus fallax	1
Barantolla americana	4
Chaetozone setosa	31
Chone duneri	1
Chone murmanica	85
Diplocirrus h-irsutus	1
Diplocirrus longisetosus	1
Exogone naidina	13
Heteromastus filiformis	1
Lagisca extenuata	1
Laphania boecki	3
Lumbrineris fragilis	3
Lumbrineris minuta	26
Lysippe labiata	10
Micronephthys minuta	14
Nephtys ciliata	1
Nephtys paradoxa	1
Nereimyra aphroditoides	7
Nereis zonata	1
Ophelina acuminata	1
Ophelina cylindricaudatus	14
Paraonis sp. A	1
Parheteromastus sp. A	3
Pholoe minuta	14
Polycirrus medusa	3
Prionospio steenstrupi	19
Scalibregma inflatum	1
Schistomeringos caecus	1
Scoloplos acutus	1
Sphaerodoropsis biserialis	1
Terebellides stroemi	8
Tharyx ? acutus	29
Typosyllis cornuta	6

UNIDENTIFIED POLYCHAETA

Maldanidae	2
Sabellidae	17

SMG 936 Station WBS-23/CG-44
71°01.0'N 148°22.7'W
47m 31 August 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	10
Ampharete acutifrons	9
Ampharete arctica	1
Amphicteis gunneri	1
Anaitides groenlandica	1
Antinoella sarsi	1
Barantolla americana	4
Brada nuda	1
Chaetozone setosa	6
Chone duneri	1
Chone murmanica	63
Exogone naidina	3
' a - l iformis	1
Lagisca extenuata	2
c i r r a t a	2
Laphania boecki	4
Lumbrineris fragilis	1
Lumbrineris minuta	7
Lysippe labiata	1
Maldane sarsi	2
Melinna cristata	1
'o cirrifera	1
Micronephthys minuta	8
Nereimyra aphroditoides	17
Nereis Zonata	14
Ophelina cylindr icaudatus	8
Parheteromastus sp. A	1
Pholoe minuta	1
Prionospio steenstrupi	4
Scalibregma inflatum	4
Spirorbis granulates	6
Terebellides stroemi	6
Tharyx ? acutus	17

UNIDENTIFIED POLYCHAETA

Maldanidae	2
Sabellidae	17

SMG 937 Station WBS-23/CG-44
71°01.0'N 148°22.7'W
47m 31 August 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	14
Ampharete acutifrons	9
Ampharete arctica	1
Amphicteis gunneri	3
Antinoella sarsi	3
Artacama proboscidea	1
' s fallax	2
Barantolla americana	4
Brada villosa	1
Chaetozone setosa	18
Chone duneri	1
Chone infundibuliformis	1
Chone murmanica	46
Cirratulus cirratus	2
Eteone longs	1
Exogone naidina	5
Gattyana cirrosa	1
Heteromastus filiformis	9
Lagisca extenuata	1
c i r r a t a	3
Laphania boecki	1
Lumbrineris fragilis	1
Lumbrineris minuta	23
Maldane sarsi	3
Melinna cristata	1
Micronephthys minuta	7
Minuspio cirrifera	3
Myriochele heeri	1
Nereimyra aphroditoides	8
Ophelina cylindricaudatus	14
Paraonis sp. A	2
Parheteromastus sp. A	6
Pholoe minuta	12
Polycirrus medusa	1
Polydora caulleryi	1
Praxillella praetermissa	1
Prionospio steenstrupi	11
Scalibregma inflatum	3
Sphaerodoridium sp. A	1
Spirorbis granulates	2
Terebellides stroemi	15
Tharyx ? acutus	31
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Maldanidae	2
Sabellidae	34
Terebellidae	2

SMG 943 Station WBS-26/CG-57
71 °21.0'N 149°26.2'W
1926m 4 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Capitella capitata	1
Diplocirrus longisetosus	1
Lumbrineris mi.nuts	5
Minuspio cirrifera	26
Onuphis quadricuspis	1
Ophelina abranchiata	1
Ophelina cylindricaudatus	1
Scoloplos acutus	2
Sigambra tentaculata	9
Sternaspis fossor	1

SMG 944 Station WBS-26/CG-57
71°21.1'N 149°28.8'W
1729m 4 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Lumbrineris minuta	7
Minuspio cirrifera	5
Ophelina abranchiata	5
Sigambra tentaculata	10
Terebellides stroemi	3

SMG 945 Station WBS-26/CG-57
71°21.2'N 149°30.4'W
1618m 4 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aricidea ushakovi	1
Heteromastus filiformis	2
Lumbrineris minuta	22
Minuspio cirrifera	23
Ophelina abranchiata	2
Sigambra tentaculata	23
Terebellides stroemi	5

UNIDENTIFIED POLYCHAETA

Ampharetidae	1

SMG 946 Station WBS-26/CG-57
71°21.3'N 149°32.2'W
1800m 4 September 1971
R\V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	4
Capitella capitata	5
Diplocirrus hirsutus	1
Lumbrineris minuta	10
Minuspio cirrifera	.35
Ophelina cylindricaudatus	1
Sigambra tentaculata	10

SMG 947 Station WBS-26/CG-57
71°21.5'N 149°37.0'W
1622m 4 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	10
Laonice cirrata	1
Lumbrineris minuta	9
Minuspio cirrifera	63
Owenia fusiformis	17
Sigambra tentaculata	11
Terebellides stroemi	2

UNIDENTIFIED POLYCHAETA

Maldanidae	5

SMG 948 Station WBS-27/CG-58
71°15.2'N 149°28.8'W
991m 5 September 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	9
Aricidea ushakovi	1
Capitella capitata	1
Chone murmanica	3
Heteromastus filiformis	1
Laonice cirrata	11
Lumbrineris minuta	1
Maldane sarsi	7
Minuspio cirrifera	143
Ophelina cylindricaudatus	2
Owenia fusiformis	2
Scoloplos acutus	12
Sigambra tentaculata	1
Sphaerodoridium sp. A	1
Sphaerodorum gracilis	1
Tharyx ? acutus	1
Trochochaeta carica	2

UNIDENTIFIED POLYCHAETA

Sphaerodoridae	1

SMG 949 Station WBS-27/CG-58
71°14.5'N 149°24.3'W
494m 5 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	1
Anaitides groenlandica	1
Antinoella badia	1
Barantolla americana	11
Chaetozone setosa	18
Chone murmanica	2
Cossura longocirrata	1
Laonice cirrata	10
Lumbrineris fragilis	2
Lumbrineris minuta	6
Maldane sarsi	171
Minuspio cirrifera	38
Onuphis quadricuspis	9
Owenia fusiformis	1
Prionospio steenstrupi	1
Sphaerodoridium sp. A	1
Sphaerodoropsis sp. A	1
Sternaspis fossor	5
Tauberia gracilis	1
Trochochaeta carica	7

UNIDENTIFIED POLYCHAETA

Maldanidae

SMG 950 Station WBS-27/CG-58
71°14.3'N 149°23.0'W
695m 5 September 1971
R/V GLACIER WEBSEC-71
Sieve-mesh aperture = 1.00mm

POLYCHAETA

Capitella capitata	3
Chaetozone setosa	8
Chone murmanica	3
Cossura longocirrata	2
Eteone longs	1
Laonice cirrata	3
Lumbrineris minuta	6
Maldane sarsi	13
Micronephthys minuta	1
Minuspio cirrifera	464
Ophelina cylindricaudatus	2
Owenia fusiformis	3
Scoloplos acutus	3
Sphaerodoridium sp. A	4
Sphaerodoropsis sp. B	2
Tauberia gracilis	5

UNIDENTIFIED POLYCHAETA

Maldanidae	18

SMG 951 Station WBS-27/CG-58
71°14.2'N 149°22.3'W
717m 5 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	5
Antinoella badia	1
Barantolla americana	7
Capitella capitata	2
Chaetozone setosa	2
Chone murmanica	1
Cossura longocirrata	7
Eteone longs	1
Laonice cirrata	5
Lumbrineris minuta	7
Maldane sarsi	20
Micronephthys minuta	3
Minuspio cirrifera	252
Owenia fusiformis	3
Prionospio steenstrupi	1
Sphaerodoridium sp. A	1
Spiochaetopterus typicus	1
Tauberia gracilis	9

UNIDENTIFIED POLYCHAETA

Maldanidae	13

SMG 952 Station WBS-27/CG-58
71°14.1'N 149°21.7'W
603m 5 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	2
Barantolla americana	2
Capitella capitata	2
Chaetozone setosa	5
Chone murmanica	4
Cossura longocirrata	5
Eteone longs	3
Laonice cirrata	16
Lumbrineris fragilis	1
Lumbrineris minuta	2
Maldane sarsi	17
Micronephthys minuta	4
Minuspio cirrifera	124
Ophelina cylindricaudatus	1
Owenia fusiformis	1
Scoloplos acutus	4
Sigambra tentaculata	1
Sphaerodoropsis sp. B	1
Spiochaetopterus typicus	2
Tauberia gracilis	11

UNIDENTIFIED POLYCHAETA

Maldanidae	2

SMG 963 Station WBS-30/CG-63
70°43.0'N 149°00.0'W
24m 7 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis sp. A	2
Ampharete acutifrons	3
Anaitides groenlandica	1
Brada villosa	4
Chaetozone setosa	4
Chone murmanica	17
Cistenides hyperborea	1
Clymenura polaris	1
Cossura longocirrata	1
Eteone longs	1
Heteromastus filiformis	32
Lumbrineris minuta	3
Lysippe labiata	3
Micronephthys minuta	2
Nephtys ciliata	1
Ophelina cylindricaudatus	13
Parheteromastus sp. A	1
Pholoe minuta	13
Prionospio steenstrupi	5
Proclea graffii	2
Scoloplos acutus	5
Sternaspis fossor	1
Terebellides stroemi	3
Tharyx ? acutus	22
Genus "A" (Ampharetidae	4

UNIDENTIFIED POLYCHAETA

Sabellidae	1

SMG 964 Station WBS-30/CG-63
70°43.0'N 149°00.0'W
24m 7 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Capitella capitata	13
Chaetozone setosa	2
Chone murmanica	7
Lumbrineris minuta	1
Minuspio cirrifera	64
Scalibregma inflatum	1
Sphaerodoropsis minuta	1

SMG 965 Station WBS-30\CG-63
70°43.0'W 143°00.0'W
23m 7 September 1971
R/'V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	7
Antinoella sarsi	2
Apistobranchus tullbergi	1
Brada villosa	1
Capitella capitata	156
Chaetozone setosa	6
Chone murmanica	49
Cistenides hyperborea	1
Clymenura polaris	6
Cossura longocirrata	12
Eteone flava	1
Eteone longs	3
Heteromastus filiformis	11
Lumbrineris minuta	12
Lysippe labiata	13
Micronephthys minuta	2
Minuspio cirrifera	4
Nephtys ciliata	1
Ophelina cylindricaudatus	1
Parheteromastus sp. A	7
Pholoe minuta	37
Praxillella praetermissa	6
Prionospio steenstrupi	2
Proclea graffii	1
Schistomeringos caecus	2
Scoloplos acutus	4
Sternaspis fossor	27
Terebellides stroemi	2
Tharyx ? acutus	78
Typosyllis cornuta	1
Genus "A" (Ampharetidae)	18

UNIDENTIFIED POLYCHAETA

Ampharetidae	4
Dorvilleidae	1
Maldanidae	1

SMG 966 Station WBS-30/CG-63
70°43.0'N 149°00.0'W
23m 7 September 1971
R/V GLACIER WEBSEC-71.
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	2
Antinoella sarsi	1
Chaetozone setosa	1
Chone duneri	1
Chone murmanica	10
Clymenura polaris	1
Cossura longocirrata	1
Eteone longs	1
Lagisca extenuata	1
Lumbrineris minuta	1
Minuspio cirrifera	2
Ophelina cylindricaudatus	3
Parheteromastus sp. A	3
Pholoe minuta	2
Proclea graffii	1
Terebellides stroemi	1
Tharyx ? acutus	1
Trochochaeta carica	1
Genus "A" (Ampharetidae)	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Maldanidae	1

SMG 967 Station WBS-30/CG-63
70°43.0'N 149°00.0'W
23m 7 September 1971
R\V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	3
Anaitides groenlandica	1
Antinoella sarsi	1
Capitella capitata	5
Chone murmanica	7
Cossura longocirrata	7
Dexiospira spirillum	1
Eteone flava	1
Heteromastus filiformis	10
Lumbrineris fragilis	4
Lumbrineris impatiens	4
Minuspio cirrifera	4
Ophelina cylindricaudatus	3
Parheteromastus sp. A	1
Pholoe minuta	5
Schistomeringos caecus	1
Spirorbis granulates	4
Tharyx ? acutus	21

UNIDENTIFIED POLYCHAETA

Dorvilleidae	1
Spionidae	1

SMG 968 Station WBS-33/CG-71
71°04.1'N 151°22.3'W
2 0m 9 September
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Anaitides groenlandica	1
Antinoella badia	1
Apistobranchus tullbergi	1
Chaetozone setosa	1
Chone murmanica	18
Cistenides hyperborea	1
Clymenura polaris	1
Cossura longocirrata	13
Eteone longs	2
Micronephthys minuta	12
Minuspio cirrifera	3
Nephtys ciliata	1
Ophelina cylindricaudatus	24
Pholoe minuta	6
Prionospio steenstrupi	6
Scoloplos acutus	1
Sternaspis fossor	1
Terebellides stroemi	1

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Sphaerodoridae	1
Spionidae	2

SMG 969 Station WBS-33/CG-71
71°04.1'N 151°22.2'W
21m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	2
Anaitides groenlandica	1
Barantolla americana	1
Capitella capitata	2
Chone duneri	1
Cossura longocirrata	2
Eteone flava	1
Eteone longs	1
Heteromastus filiformis	1
Micronephthys minuta	10
Minuspio cirrifera	4
Nephtys ciliata	1
Ophelina cylindricaudatus	8
Ophelina acuminata	1
Paraonis sp. A	1
Pholoe minuta	3
Prionospio steenstrupi	2
Scalibregma inflatum	3
Scoloplos acutus	1

SMG 970 Station WBS-33/CG-71
71°04.1'N 151°22.1'W
21m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allia sp. A	1
Ampharete vega	1
Chaetozone setosa	1
Cistenides hyperborea	17
Cossura longocirrata	7
Eteone longs	1
Heteromastus filiformis	1
Micronephthys mi.nuts	21
Minuspio cirrifera	3
Nephtys ciliata	1
Ophelina acuminata	1
Ophelina cylindricaudatus	12
Pholoe minuta	9
Scalibregma inflatum	1
Sternaspis fossor	1
Tauberia gracilis	1
Terebellides stroemi	1

SMG 971 Station WBS-33/CG-71
71°04.1'N 151°21.6'W
21m 9 September 1971
R/V GLACIER, WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Allis sp. A	2
Apistobranchus tullbergi	2
Capitella capitata	2
Chone murmanica	1
Cistenides hyperborea	1
Cossura longocirrata	3
Micronephthys minuta	12
Minuspio cirrifera	2
Nephtys ciliata	2
Ophelina cylindricaudatus	11
Pholoe minuta	2
Prionospio steenstrupi	2
Scalibregma inflatum	1
Scoloplos acutus	2
Sternaspis fossor	2
Terebellides stroemi	2
Tharyx ? acutus	2

SMG 972 Station WBS-33/CG-71
71°04.1'N 151°21.5'W
21m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allia sp. A	1
Apistobranchus fullbergi	1
Capitella capitata	1
Chaetozone setosa	1
Clymenura polaris	1
Cossura longocirrata	5
Heteromastus filiformis	1
Lysippe labiata	1
Micronephthys minuta	8
Ophelina acuminata	1
Pholoe minuta	3
Prionospio steenstrupi	1
Scoloplos acutus	4
Sternaspis fossor	3
Tauberia gracilis	4
Terebellides stroemi	3
Tharyx ? acutus	3

UNIDENTIFIED POLYCHAETA

Maldanidae	4
Spionidae	1

SMG 973 Station WBS-34/CG-72
7I"10.1'N 151°08.9'W
45m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	2
Autolytus fallax	1
Barantolla americana	2
Chaetozone setosa	5
Chone murmanica	9
Clymenura polaris	2
Eteone longs	1
Heteromastus filiformis	7
Lumbrineris impatiens	3
Lumbrineris minuta	25
Lysippe labiata	4
Maldane sarsi	10
Micronephthys minuta	18
Nephtys ciliata	1
Ophelina cylindricaudatus	3
Onuphis quadricuspis	5
Parheteromastus sp. A	1
Pholoe minuta	1
Polydora caulleryi	4
Praxillella praetermissa	1
Prionospio steenstrupi	8
Proclea graffii	2
Scalibregma inflatum	4
Scoloplos acutus	7
Sphaerodoridium claparedii	1
Tauberia gracilis	10
Terebellides stroemi	5
Tharyx ? acutus	14
Typosyllis fasciata	1
Genus "A" (Ampharetidae)	5

uNIDENTIFIED POLYCHAETA

Maldanidae	1
Polynoidae	1

SMG 974 Station WBS-34/CG-72
71°10.0'N 151°09.0'W
45m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Anaitides groenlandica	1
Barantolla americana	5
Chaetozone setosa	7
Chone murmanica	11
Cistenides hyperborea	1
Cossura longocirrata	1
Heteromastus filiformis	5
Laphania boecki	3
Lumbrineris impatiens	9
Lumbrineris minuta	25
Lysippe labiata	4
Maldane sarsi	12
Micronephthys minuta	12
Minuspio cirrifera	1
Ophelina cylindricaudatus	1
Paraonis sp. A	1
Pholoe minuta	1
Prionospio steenstrupi	7
Proclea graffii	2
Schistomeringos caecus	1
Scoloplos acutus	15
Sternaspis fossor	1
Tauberia gracilis	6
Terebellides stroemi	7
Tharyx ? acutus	35
Typosyllis cornuta	2
Genus "A" (Ampharetidae)	7

UNIDENTIFIED POLYCHAETA

Maldanidae	2
Spionidae	1

SMG 975 Station WBS-34/CG-72
71°09.9'N 151°09.1'W
45m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	4
Allis sp. A	1
Anaitides groenlandica	1
Antinoella sarsi	1
Autolytus fallax	2
Barantolla americana	9
Capitella capitata	1
Chaetozone setosa	9
Chone murmanica	3
Cossura longocirrata	1
Eteone longa	1
Exogone dispar	3
Heteromastus filiformis	5
Laphania boecki	1
Lumbrineris fragilis	1
Lumbrineris impatiens	5
Lumbrineris minuta	14
Lysippe labiata	2
Magelone longicornis	1
Maldane sarsi	11
Micronephthys minuta	20
Minuspio cirrifera	1
Onuphis quadricuspis	8
Ophelina cylindricaudatus	4
Paraonis sp. A	1
Pholoe minuta	3
Prionospio steenstrupi	6
Proclea graffii	1
Schistomeringos caecus	1
Scoloplos acutus	7
Spiochaetopterus typicus	2
Sternaspis fossor	2
Tauberia gracilis	10
Tharyx ? acutus	43
Terebellides stroemi	4
Genus "A" (Ampharetidae)	5

UNIDENTIFIED POLYCHAETA

Lumbrineridae	1
Maldanidae	2

SMG 976 Station WBS-34/CG-72
71°09.9'N 151°09.3'W
45m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	2
Antinoella sarsi	1
Barantolla americana	7
Chaetozone setosa	5
Chone murmanica	5
Clymenura Polaris	7
Cossura longocirrata	1
Diplocirrus longisetosus	2
Euchone papillosa	1
Exogone naidina	1
Lumbrineris fragilis	1
Lumbrineris impatiens	3
Lumbrineris minuta	16
Lysippe labiata	9
Maldane sarsi	8
Micronephthys minuta	7
Onuphis quadricuspis	13
Ophelina cylindricaudatus	1
Pholoe minuta	1
Polydora caulleryi	2
Prionospio steenstrupi	6
Proclea graffii	4
Scalibregma inflatum	1
Scoloplos acutus	9
Tauberia gracilis	11
Terebellides stroemi	1
Tharyx ? acutus	30
Genus "A" (Ampharetidae)	9

UNIDENTIFIED POLYCHAETA

Maldanidae	2

SMG 977 Station WBS-34/CG-72
71°09.8'N 151°09.4'W
45m 9 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Ampharete acutifrons	1
Antinoella badia	1
Capitella capitata	1
Chaetozone setosa	9
Chone murmanica	3
Cossura longocirrata	3
Eteone flava	1
Euchone papillosa	1
Lagisca extenuata	1
Lumbrineris fragilis	1
Lumbrineris impatiens	5
Lumbrineris minuta	15
Lys ippe labiata	4
Maldane sarsi	6
Micronephthys minuta	26
Nephtys ciliata	1
Onuphis quadricuspis	4
Ophelina cylindricaudatus	1
Pholoe minuta	1
Polydora caulleryi	1
Prionospio steenstrupi	8
Scalibregma inflatum	1
Scoloplos acutus	21
Spiochaetopterus typicus	1
Sternaspis fossor	1
Tauberia gracilis	8
Terebellides stroemi	12
Tharyx ? acutus	51
Typosyllis cornuta	9
Genus "A" (Ampharetidae)	4

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Sphaerodoridae	1

SMG 983 Station WBS-36\CG-75
71°14.8'N 150°27.6'W
132m 10 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	5
Ampharete acutifrons	4
Antinoella sarsi	1
Autolytus alexandri	1
Barantolla americana	4
Chaetozone setosa	14
Chone murmanica	10
Clymenura polaris	1
Cossura longocirrata	1
Diplocirrus hirsutus	1
Diplocirrus longisetosus	1
Eteone longs	4
Gattyana cirrosa	1
Heteromastus filiformis	3
Laphania boecki	1
Laonice cirrata	1
Lumbrineris impatiens	1
Lumbrineris minuta	32
Lysippe labiata	37
Micronephthys minuta	49
Myriochele heeri	14
Paraonis sp. A	1
Parheteromastus sp. A	1
Pholoe minuta	6
Proclea graffii	1
Scoloplos acutus	7
Spiochaetopterus typic-us	28
Sternaspis fossor	1
Terebellides stroemi	7
Tharyx ? acutus	32
Trochochaeta carica	3
Typosyllis cornuta	2

UNIDENTIFIED POLYCHAETA

Maldanidae	10
Opheliidae (Travisia sp.)	1

SMG 984 Station WBS-36/CG-75
71°14.8'N 150°27.6'W
134m 10 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	4
Ampharete acutifrons	1
Barantolla americana	3
Chaetozone setosa	9
Chone murmanica	3
Enipo gracilis	2
Glycinde wireni	1
Heteromastus filiformis	1
Lumbrineris impatiens	3
Lumbrineris minuta	18
Lysippe labiata	29
Magelona longicornis	1
Maldane sarsi	3
Melinna cristata	1
Micronephthys minuta	15
Myriochele heeri	12
Nephtys ciliata	1
Onuphis quadricuspis	1
Owenia fusiformis	1
Pholoe minuta	8
Scoloplos acutus	7
Spiochaetopterus typicus	24
Tauberia gracilis	1
Terebellides stroemi	4
Tharyx ? acutus	32
Typosyllis cornuta	5

UNIDENTIFIED POLYCHAETA

Maldanidae	5
Opheliidae (Travisia sp.)	1
Spionidae	1

SMG 985 Station WBS-36/CG-75
71°14.8'N 150°27.6'W
137m 10 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Allis sp. A	2
Ampharete acutifrons	2
Anaitides groenlandica	1
Arcteobia anticostiensis	1
Barantolla americana	6
Chaetozone setosa	18
Diplocirrus longisetosus	1
Enipo gracilis	2
Eteone longa	2
Euchone papillosa	4
Glycinde wireni	1
Heteromastus filiformis	8
Lumbrineris impatiens	1
Lumbrineris minuta	40
Lysippe labiata	41
Maldane sarsi	1
Melinna cristata	2
Micronephthys minuta	24
Myriochele heeri	12
Nephtys ciliata	1
Nothria conchylega	2
Onuphis quadricuspis	15
Parheteromastus sp. A	2
Pholoe minuta	10
Scalibregma inflatum	1
Scoloplos acutus	3
Spiochaetopterus typicus	31
Spirorbis granulates	1
Tauberia gracilis	1
Terebellides stroemi	3
Tharyx ? acutus	39
Typosyllis cornuta	4

UNIDENTIFIED POLYCHAETA

Maldanidae	12
Opheliidae (Travisia sp.)	1
Spionidae	1
Terebellidae	1

SMG 986 Station WBS-36/CG-75
71°14.8'N 150°27.6'W
139m 10 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	1
Ampharete acutifrons	3
Ampharete arctica	1
Anaitides groenlandica	1
Antinoella sarsi	1
Chaetozone setosa	21
Cossura longocirrata	3
Eteone longs	1
Euchone papillosa	6
Heteromastus filiformis	1
Lumbrineris impatiens	1
Lumbrineris minuta	36
Lysippe labiata	23
Maldane sarsi	2
Melinna cristata	1
Micronephthys minuta	12
Minuspio cirrifera	1
Myriochele heeri	13
Nephtys ciliata	2
Nothria conchylega	1
Onuphis quadricuspis	7
Parheteromastus sp. A	1
Pholoe minuta	7
Proclea graffii	2
Scoloplos acutus	2
Sphaerodorum gracilis	1
Spiochaetopterus typicus	21
Tauberia gracilis	2
Terebellides stroemi	2
Tharyx ? acutus	35
Trichobranchus glacialis	1
Typosyllis cornuta	5

UNIDENTIFIED POLYCHAETA

Maldanidae	5
Opheliidae	2

SMG 987 Station WBS-36/CG-75
71°14.8'N 150°27.6'W
140m 10 September 1971
n/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Ampharete acutifrons	1
Barantolla americana	4
Chaetozone setosa	9
Cistenides hyperborea	2
Cossura longocirrata	1
Eteone longs	2
Euchone papillosa	8
Glycinde wireni	1
Heteromastus filiformis	1
Laphania boecki	1
Lumbrineris impatiens	2
Lumbrineris minuta	36
Lysippe labiata	56
Maldane SarSi	1
Melinna cristata	1
Micronephthys minuta	21
Myriochele heeri	2
Nephtys ciliata	1
Nothria conchylega	3
Onuphis quadricuspis	3
Ophelina cylindricaudatus	1
Owenia fusiformis	4
paraonis SP. A	1
Petaloproctus tenuis	1
Pholoe minuta	6
Polydora caulleryi	1
Scalibregma inflatum	1
Scoloplos acutus	3
Sphaerodorum gracilis	1
Spiochaetopterus typicus	19
Tauberia gracilis	1
Terebellides stroemi	3
Tharyx ? acutus	34
Typosyllis cornuta	1

UNIDENTIFIED POLYCHAETA

Maldanidae	9
Opheliidae (Travisia sp.)	2

SMG 994 Station WBS-38/CG-78
70°58.1'N 149°59.1'W
28m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Ampharete acutifrons	1
Antinoella sarsi	3
Brada villosa	1
Capitella capitata	19
Chone murmanica	14
Eteone longs	2
Exogone naidina	1
Micronephthys minuta	7
Minuspio cirrifera	40
Nereimyra aphroditoides	3
Ophelina cylindricaudatus	4
Pholoe minuta	1
Scalibregma inflatum	1
Tharyx ? acutus	9
Trochochaeta carica	1

UNIDENTIFIED POLYCHAETA

Dorvilleidae	1

SMG 993 Station WBS-38/CG-78
70°58.1'N 149°59.1'W
28m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Anaitides groenlandica	2
Antinoella sarsi	3
Brada villosa	1
Capitella capitata	2
Chone murmanica	3
Micronephthys minuta	1
Minuspio cirrifera	24
Nereimyra aphroditoides	3
Ophelina cylindricaudatus	1
Pholoe minuta	5
Scalibregma inflatum	1
Tharyx ? acutus	2

UNIDENTIFIED POLYCHAETA

Terebellidae	1

SMG 995 Station WBS-38/CG-78
70°58.1'N 149°59.1'W
28m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis sp. A	10
Anaitides groenlandica	3
Antinoella sarsi	2
Barantolla americana	5
Capitella capitata	16
Chaetozone setosa	2
Chone murmanica	24
Cossura longocirrata	51
Eteone longs	2
Heteromastus filiformis	2
Lumbrineris minuta	1
Minuspio cirrifera	63
Nereimyra aphroditoides	3
Ophelina acuminata	1
Pholoe minuta	3
Scalibregma inflatum	1
Scoloplos acutus	1
Sternaspis fossor	1
Tauberia gracilis	8
Tharyx ? acutus	25
Genus "A" (Ampharetidae)	1

UNIDENTIFIED POLYCHAETA

Dorvilleidae	1

SMG 996 Station WBS-38/CG-78
71°58.0'N 149°59.1'W
27m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Anaitides groenlandica	1
Antinoella sarsi	1
Capitella capitata	8
Chaetozone setosa	2
Chone murmanica	5
Nereimyra aphroditoides	1
Scalibregma inflatum	1
Tharyx ? acutus	2

SMG 997 Station WBS-38/CG-78
70°50.8'N 149°59.1'W
27m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Capitella capitata	4
Chaetozone setosa	2
Chone murmanica	8
Tharyx ? acutus	1

SMG 1003 Station WBS-40/CG-82
71°08.3'N 149°47.7'W
45m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	7
Ampharete acutifrons	4
Autolytus fallax	2
Barantolla americana	11
Capitella capitata	9
Chaetozone setosa	12
Chone murmanica	5
Cistenides hyperborea	1
Clymenura polaris	5
Cossura longocirrata	1
Diplocirrus hirsutus	1
Diplocirrus longisetosus	1
Eteone longs	1
Exogone naidina	8
Glycinde wireni	1
Laonice cirrata	1
Heteromastus filiformis	6
Lumbrineris fragilis	1
Lumbrineris impatiens	2
Lumbrineris minuta	17
Lysippe labiata	3
Magelona longicornis	1
Maldane sarsi	18
Micronephthys minuta	38
Myriochele heeri	1
Mysta barbata	1
Nephtys ciliata	1
Nereimyra aphrodi,toides	1
Nicolea zostericola	1
Onuphis quadricuspis	3
Paraonis sp. A	3
Pholoe minuta	5
Polydora caulleryi	2
Prionospio steenstrupi	11
Proclea graffii	3
Scalibregma inflatum	1
Scoloplos acutus	14
Spiochaetopterus typicus	1
Tauberia gracilis	12
Terebellides stroemi	5
Tharyx ? acutus	31
Genus "A" (Ampharetidae)	1

Unidentified Polychaeta

Maldanidae	2
Terebellidae	1

SMG 1004 Station WBS-40/CG-82
71°08.3'N 149°47.7'W
45m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Ampharete acutifrons	5
Ampharete arctica	1
Barantolla americana	5
Chaetozone setosa	8
Chone duneri	1
Chone murmanica	8
Cistenides hyperborea	1
Cossura longocirrata	38
Diplocirrus hirsutus	1
Eteone flava	1
Eteone longs	2
Exogone naidina	3
Heteromastus filiformis	5
Lumbrineris minuta	17
Lysippe labiata	5
Maldane sarsi	11
Micronephthys minuta	69
Nereimyra aphroditoides	2
Nephtys ciliata	2
Onuphis quadricuspis	4
Paraonis sp. A	1
Parheteromastus sp. A	4
Pholoe minuta	15
Polydora caulleryi	2
Prionsopio steenstrupi	16
Proclea graffii	1
Scalibregma inflatum	2
Schistomeringos caecus	2
Scoloplos acutus	22
Tauberia gracilis	32
Terebellides stroemi	12
Tharyx ? acutus	87
Trochochaeta carica	1
Typosyllis cornuta	1
Genus "A" (Ampharetidae)	2

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Opheliidae (Travisia sp.)	1
Terebellidae	1

SMG 1005 Station WBS-40/CG-82
71°08.3'N 149°47.7'W
44m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	13
Ampharete acutifrons	10
Antinoella sarsi	2
Apistobranchus tullbergi	1
Autolytus fallax	1
Barantolla americana	4
Brada villosa	2
Capitella capitata	1
Chaetozone setosa	6
Clymenura polaris	3
Chone duneri	1
Chone murmanica	5
Cossura longocirrata	2
Diplocirrus hirsutus	1
Eteone longs	2
Heteromastus filiformis	12
Laonice cirrata	1
Lumbrineris minuta	16
Lysippe labiata	10
Maldane sarsi	15
Micronephthys minuta	31
Myriochele heeri	1
Mysta barbata	1
Nephtys ciliata	1
Nereimyra aphroditoides	1
Onuphis quadricuspis	2
Paraonis sp. A	4
Parheteromastus sp. A	1
Pholoe minuta	4
Polydora caulleryi	4
Prionospio steenstrupi	11
Proclea graffii	2
Scoloplos acutus	22
Tauberia gracilis	15
Terebellides stroemi	6
Tharyx ? acutus	37
Trochochaeta carica	2
Genus "A" (Ampharetidae)	4

UNIDENTIFIED POLYCHAETA

Maldanidae	3

SMG 1006 Station WBS-40/CG-82
71°08.3'N 149°47.7'W
44m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	9
Ampharete acutifrons	10
Anaitides groenlandica	3
Barantolla americana	9
Chaetozone setosa	7
Chone duneri	3
Chone murmanica	3
Clymenura polaris	2
Eteone longs	4
Exogone naidina	1
Heteromastus filiformis	6
Lumbrineris minuta	20
Lysippe labiata	2
Maldane sarsi	12
Micronephthys minuta	24
Mysta barbata	1
Nephtys ciliate	1
Onuphis quadricuspis	6
Paraonis sp. A	3
Parheteromastus sp. A	5
Pholoe minuta	5
Polydora caulleryi	1
Prionospio steenstrupi	8
Proclea graffii	1
Scalibregma inflatum	2
Scoloplos acutus	12
Spiochaetopterus typicus	1
Tauberia gracilis	12
Terebellides stroemi	8
Tharyx ? acutus	33
Trochochaeta carica	3
Typosyllis cornuta	1
Genus "A" (Ampharetidae)	1

UNIDENTIFIED POLYCHAETA

Maldanidae	3
Spionidae	1
Terebellidae	1

SMG 1007 Station WBS-40/CG-82
71°08.3'N 149°47.7'W
44m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Ampharete acutifrons	1
Barantolla americana	7
Capitalla capitata	2
Chaetozone setosa	7
Chone murmanica	5
Euchone papillosa	1
Glycinde wireni	1
Heteromastus filiformis	4
Laphania boecki	1
Lumbrineris minuta	9
Lysippe labiata	4
Maldane sarsi	17
Micronephthys minuta	23
Mysta barbata	1
Nereimyra aphroditoides	4
Nephtys ciliata	2
Nephtys paradoxa	1
Onuphis quadricuspis	2
Paraonis sp. A	3
Parheteromastus sp. A	3
Pholoe minuta	3
Polydora caulleryi	6
Prionospio steenstrupi	10
Proclea graffii	2
Sabellides borealis	2
Scalibregma inflatum	1
Scoloplos acutus	19
Sphaerodorum gracilis	1
Tauberia gracilis	5
Terebellides stroemi	6
Tharyx ? acutus	24
Trochochaeta carica	2
Genus "A" (Ampharetidae)	1

UNIDENTIFIED POLYCHAETA

Maldanidae	2
Spionidae	1

SMG 1008 Station WBS-41/CG-83
71°12.2'N 149°44.8'W
169m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve"mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	7
Ampharete arctica	1
Anaitides groenlandica	1
Antinoella badia	1
Antinoella sarsi	1
Artacama proboscidea	1
Barantolla americana	3
Chaetozone setosa	5
Heteromastus filiformis	1
Laphania boecki	1
Lumbrineris minuta	22
Lysippe labiata	4
Micronephthys minuta	29
Nereimyra aphroditoides	1
Onuphis quadricuspis	1
Owenia fusiformis	2
Prionospio steenstrupi	5
Scoloplos acutus	20
Sphaerodoridium sp. A	1
Spiochaetopterus typicus	5
Tauberia gracilis	6
Terebellides stroemi	5
Tharyx ? acutus	77

UNIDENTIFIED POLYCHAETA

Chaetopteridae	1

SMG 1009 Station WBS-41/CG-83
71°12.2'N 149°44.8'W
189m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	19
Antinoella sarsi	1
Apistobranchus tullbergi	1
Artacama proboscidea	1
Barantolla americana	3
Chaetozone setosa	11
Cossura longocirrata	4
Eteone longs	3
Laphania boecki	1
Lumbrineris minuta	13
Lysippe labiata	5
Maldane sarsi	1
Micronephthys minuta	44
Nephtys ciliata	1
Nereimyra aphroditoides	1
Prionospio steenstrupi	8
Procela graffii	2
Scoloplos acutus	27
Spiochaetopterus typicus	1
Tauberia gracilis	12
Terebellides stroemi	2
Tharyx ? acutus	47

UNIDENTIFIED POLYCHAETA

Maldanidae	2

SMG 1010 Station WBS-41/CG-83
71°12.2'N 149°44.8'W
204m 11 September 1971
R/V GLACIER WEBSEC-71
Seive mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	54
Barantolla americana	1
Chaetozone setosa	18
Cossura longocirrata	72
Eteone longs	3
Heteromastus filiformis	1
Laphania boecki	2
Lumbrineris minuta	13
Lysippe labiata	3
Micronephthys minuta	125
Myriochele heeri	1
Nephtys ciliata	5
Onuphis quadricuspis	1
Praxillella praetermissa	1
Prionospio steenstrupi	17
Scoloplos acutus	46
Sternaspis fossor	2
Tauberia gracilis	42
Terebellides stroemi	3
Tharyx ? acutus	94

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Spionidae	1

SMG 1011 Station WBS-41/CG-83
71°12.2'N 149°44.8'W
216m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	56
Anaitides groenlandica	1
Artacama proboscidea	2
Barantolla americana	1
Chaetozone setosa	21
Cossura longocirrata	4
Eteone longs	4
Heteromastus filiformis	1
Lumbrineris minuta	21
Lysippe labiata	7
Micronephthys minuta	63
Nephtys ciliata	7
Onuphis quadricuspis	2
Prionospio steenstrupi	18
Proclea graffii	8
Scoloplos acutus	41
Sphaerodoridium sp. A	1
Spiochaetopterus typicus	5
Tauberia gracilis	27
Terebellides stroemi	8
Tharyx ? acutus	86

UNIDENTIFIED POLYCHAETA

Maldanidae	3

SMG 1012 Station WBS-41/CG-83
71°12.2'N 149°44.8'W
232m 11 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	32
Antinoella sarsi	2
Artacama proboscidea	1
Barantolla americana	3
Chaetozone setosa	31
hyperborea	1
Cossura longocirrata	20
Eteone longs	8
Heteromastus filiformis	1
Lumbrineris minuta	29
Lysippe labiata	6
Maldane sarsi	2
Micronephthys minuta	41
Minuspio cirrifera	1
Myriochele heeri	3
Nephtys ciliata	2
Prionospio steenstrupi	8
Proclea graffii	5
Scoloplos acutus	46
Tauberia gracilis	36
Terebellides stroemi	4
Tharyx ? acutus	103

UNIDENTIFIED POLYCHAETA

Chaetopteridae
Dorvilleidae
Terebellidae

SMG 1013 Station WBS-42/CG-84
71°18.3'N 150°21.6'W
540m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	1
Anaitides groenlandica	1
Barantolla americana	8
Capitella capitata	1
Chaetozone setosa	2
Chone murmanica	1
Cossura longocirrata	8
Eteone longa	1
Laonice cirrata	7
Lumbrineris minuta	14
Maldane sarsi	47
Micronephthys minuta	1
Munispio cirrifera	221
Ophelina cylindricaudatus	4
Owenia fusiformis	16
Scoloplos acutus	10
Sphaerodoridium sp. A	4
Sphaerodoropsis sp. B	4
Spiochaetopterus typicus	3
Tauberia gracilis	7

UNIDENTIFIED POLYCHAETA

Maldanidae	4

SMG 1014 Station WBS-42/CG-84
71°17.9'N 150°20.9'W
678m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve "mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	2
Barantolla americana	4
Chaetozone setosa	3
Eteone longs	1
Laonice cirrata	6
Lumbrineris minuta	11
Maldane sarsi	50
Minuspio cirrifera	139
Ophelina cylindricaudatus	1
Scoloplos acutus	6
Sphaerodoridium sp. A	1
Sphaerodoropsis sp. B	1
Spiochaetopterus typicus	2
Tauberia gracilis	10

UNIDENTIFIED POLYCHAETA

Maldanidae	4

SMG 1015 Station WBS-42/CG-84
71°17.5'N 150°20.0'W
676m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allia sp. A	2
Barantolla americana	9
Capitella capitata	1
Chaetozone setosa	4
Chone murmanica	5
Cossura longocirrata	9
Eteone longs	3
Laonice cirrata	13
Lumbrineris minuta	19
Maldane sarsi	231
Micronephthys minuta	1
Minuspio cirrifera	116
Onuphis quadricuspis	3
Owenia fusiformis	433
Petaloproctus tenuis	2
Pholoe minuta	2
Prionospio steenstrupi	1
Scoloplos acutus	6
Sphaerodoridium sp. A	4
Sphaerodoropsis sp. B	3
Spiochaetopterus typicus	2
Tauberia gracilis	10
Trochochaeta carica	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Maldanidae	10

SMG 1016 Station WBS-42/CG-84
71°17.3'N 150°19.5'W
759m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis sp. A	3
Barantolla americana	2
Capitella capitata	2
Chaetozone setosa	1
Chone murmanica	3
Clymenura polaris	1
Eteone longs	1
Heteromastus filiformis	1
Laonice cirrata	2
Lumbrineris minuta	21
Maldane sarsi	40
Minuspio cirrifera	245
Ophelina cylindricaudatus	1
Owenia fusiformis	50
Scoloplos acutus	8
Sphaerodoridium sp. A	2
Sphaerodoropsis sp. B	4
Tauberia gracilis	3

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Opheliidae (Travisia sp.)	1

SMG 1017 Station WBS-42/CG-84
71°16.8'N 150°18.5'W
831m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture - 1.00mm

POLYCHAETA

Allis sp. A	6
Antinoella sarsi	1
Barantolla americana	1
Capitella capitata	17
Chaetozone setosa	1
Chone murmanica	9
Cossura longocirrata	12
Eteone longs	3
Laonice cirrata	4
Lumbrineris minuta	10
Maldane sarsi	22
Micronephthys minuta	1
Minuspio cirrifera	131
Nephtys ciliata	1
Ophelina cylindricaudatus	2
Owenia fusiformis	51
Scoloplos acutus	7
Sphaerodoridium sp. A	4
Sphaerodoropsis sp. B	1
Tauberia gracilis	5

UNIDENTIFIED POLYCHAETA

Maldanidae	14
Opheliidae (Travisia sp.)	

SMG 1018 Station WBS-43/CG-85
71°22.0'N 150°38.0'W
821m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	1
Capitella capitata	3
Chaetozone setosa	1
Chone murmanica	1
Cossura longocirrata	1
Eteone longs	1
Laonice cirrata	4
Minuspio cirrifera	124
Owenia fusiformis	26
Scoloplos acutus	2
Sigambra tentaculata	1
Tauberia gracilis	24
Terebellides stroemi	1

UNIDENTIFIED POLYCHAETA

Maldanidae	4

SMG 1019 Station WBS-43/CG-85
71°22.0'N 150°38.0'W
795m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	3
Barantolla americana	1
Laonice cirrata	6
Lumbrineris minuta	3
Maldane sarsi	21
Minuspio cirrifera	72
Ophelina cylindricaudatus	1
Sigambra tentaculata	5

UNIDENTIFIED POLYCHAETA

Maldanidae

SMG 1020 Station WBS-43/CG-85
71°22.0'N 150°38.0'W
887m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis suecica	7
Antinoella sarsi	2
Barantolla americana	2
Chaetozone setosa	1
Heteromastus filiformis	1
Laonice cirrata	5
Lumbrineris minuta	7
Maldane sarsi	6
Minuspio cirrifera	85
Ophelina cylindricaudatus	1
Owenia fusiformis	10.
Scoloplos acutus	6
Sphaerodoropsis sp. A	1
Tauberia gracilis	1

UNIDENTIFIED POLYCHAETA

Maldanidae	1

SMG 1021 Station WBS-43/CG-85
71°22.0'N 150°38.0'W
923m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Allis suecica	3
Capitella capitata	6
Laonice cirrata	6
Lumbrineris minuta	6
Maldane sarsi	6
Minuspio cirrifera	109
Ophelina cylindricaudatus	1
Owenia fusiformis	16
Scoloplos acutus	5
Sigambra tentaculata	1
Sphaerodoropsis sp. B	1

UNIDENTIFIED POLYCHAETA

Maldanidae	5

SMG 1022 Station WBS-43/CG-85
71°22.0'N 150°38.0'W
997m 12 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture - 1.00mm

POLYCHAETA

Allis suecica	3
Capitella capitata	3
Cossura longocirrata	1
Laonice cirrata	7
Lumbrineris minuta	3
Maldane sarsi	11
Micronephthys minuta	1
Minuspio cirrifera	311
Ophelina cylindricaudatus	3
Owenia fusiformis	4
Scoloplos acutus	2
Tauberia gracilis	11

UNIDENTIFIED POLYCHAETA

Maldanidae	4

SMG 1023 Station WBS-44/CG-86
71°45.1'N 150°35.0'W
2139m 14 September 1971
R\V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Lumbrineris minuta	7
Minuspio cirrifera	1
Ophelina abranchiata	1
Owenia fusiformis	1
Sigambra tentaculata	3
Tharyx ? acutus	7

SMG 1024 Station WBS-44/CG-86
71°46.0'N 150°35.0'W
2204m 14 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Antinoella badia	1
Cossura sp. A	2
Lumbrineris minuta	4
Ophelina sp. A	1
Owenia fusiformis	1
Sigambra tentaculata	2
Tharyx ? acutus	20

UNIDENTIFIED POLYCHAETA

Terebellidae	1

SMG 1025 Station WBS-44/CG-86
71°46.8'N 150°35.0'W
2461m 14 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Lumbrineris minuta	7
Minuspio cirrifera	1
Ophelina abranchiata	1
Ophelina sp. A	1
Sigambra tentaculata	11
Tharyx ? acutus	11

SMG 1026 Station WBS-44/CG-86
71°47.4'N 150°35.0'W
2400m 14 September 1971
R/V GLACIER WEBSEC-71
Sieve mesh aperture = 1.00mm

POLYCHAETA

Aglaophamus malmgreni	1
Capitella capitata	1
Cossura sp. A	5
Heteromastus filiformis	1
Lumbrineris minuta	9
Nicon sp. A	1
Ophelina abranchiata	1
Ophelina sp. A	6
Sigambra tentaculata	30
Tharyx ? acutus	24

SMG 1530
72°23.7'N 154°37.2'W
2470m 9 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	3
Capitella capitata	1
Lumbrineris minuta	4
Lumbrineris sp. A	3
Myriochele heeri	5
Nicon sp. A	1
Ophelina abranciata	7
Ophelina sp. A	4
Sigambra tentaculata	3
Terebellides stroemi	1
Tharyx ? acutus	15

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Maldanidae	1
Oligochaeta	2

SMG 1539
72°21.5'N 153°37'W
2840m 10 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Cossura sp. A	1
Parheteromastus sp. A	1

SMG 1540
72°21.2'N 153°45.2'W
2650m 10 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42

POLYCHAETA

Aglaophamus malmgreni	1
Chaetozone setosa	2
Myriochele heeri	1
Ophelina sp. A	1
Sphaerodorum gracilis	1
Terebellides stroemi	1
Tharyx ? acutus	1

SMG 1599
72°53.5'N 146°31'W
3750m 20 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Nereimyra aphroditoides	1
Ophelina sp. A	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	2
Spionidae	2

SMG 1600
72°53.8'N 146°27'W
3841m 20 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Lumbrineris minuta	1
Tharyx ? acutus	3

UNIDENTIFIED POLYCHAETA

Ampharetidae	3
Orbiniidae	1
Spionidae	1
Terebellidae	1

SMG 1601
72°56'N 146°34'W
3511m 20 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis suecica	1

UNIDENTIFIED POLYCHAETA

Spionidae	1
Terebellidae	1

SMG 1602
72°58'N 146°29'W
3576m 20 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis abranchiata	2
Tharyx ? acutus	2

UNIDENTIFIED POLYCHAETA

Ampharetidae	2
Spionidae	1
Terebellidae	1

SMG 1603
72°55.8'N 146°36'W
3843m 21 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis abranchiata	1
Tharyx ? acutus	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Spionidae	1

SMG 1604
72 °56.5'N 146°30'W
4200m 21 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni
Lumbrineris minuta
Tharyx ? acutus

UNIDENTIFIED POLYCHAETA

Ampharetidae
Spionidae

SMG 1605
72°49'N 146°25'W
3566m 21 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Ophelina sp. A
Tharyx ? acutus

UNIDENTIFIED POLYCHAETA

Ampharetidae

SMG 1606
72°48'N 146°24'W
3569m 22 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Tharyx ? acutus

UNIDENTIFIED POLYCHAETA

Spionidae

SMG 1607
72°46.5'N 146°23'W
3570m 22 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis abranchiata	1
Ophelina sp. A	1
Tharyx ? acutus	.2

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Spionidae	2

SMG 1608
72°42'N 143°40'W
3336m 22 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	1
Lumbrineris minuta	2
Ophelina sp. A	1
Terebellides stroemi	1

UNIDENTIFIED POLYCHAETA

Ampharetidae	3
Orbiniidae	1

SMG 1609
72°55'N 142°05'W
3475m 23 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	1
Aricidea tetrabranchia	3

UNIDENTIFIED POLYCHAETA

Ampharetidae	1

SMG 1610
70°51'N 141°36.8'W
1958m 24 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis abranchiata	6
Aricidea tetrabranchia	5
Chaetozone setosa	26
Ophelina sp. A	1
Tachytrypane sp. A	2
Genus "B" (Capitellidae)	3

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Spionidae	2
Family unknown	1
Oligochaeta	3

SMG 1611
70°51'N 141°41'W
1976m 24 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aricidea tetrabranchia	4
Chaetozone setosa	1
Ophelina sp. A	1

UNIDENTIFIED POLYCHAETE

Family unknown	5

SMG 1612
70°52.8'N 141°46'W
2048m 24 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aricidea tetrabranchia	2
Chaetozone setosa	13
Terebellides stroemi	1
Genus "B" (Capitellidae) .	4

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Ampharetidae	2
Sabellidae	1
Spionidae	5
Terebellidae	1
Oligochaeta	6

SMG 1613
70°52.8'N 141°46.5'W
2086m 24 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	1
Aricidea tetrabranchia	8
Chaetozone setosa	22
Lumbrineris latreilli	1
Ophelina sp. A	3
Sigambra tentaculata	1
Tachytrypane sp. A	2
Terebellides stroemi	1
Genus "B" (Capitellidae)	6

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Ampharetidae	2
Spionidae	7
Family unknown	2
Oligochaeta	3

SMG 1614
70°40'N 141°35.5'W
1097m 24 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Allis abranchiata	11
Allis suecida	1
Aricidea ushakovi	1
Chaetozone setosa	48
Lumbrineris minuta	5
Maldane sarsi	3
Minuspio cirrifera	10
abranchiata	4
Sigambra tentaculata	2
Sphaerodoropsis biserialis	3
Terebellides stroemi	4
Genus "B" (Capitellidae)	1

UNIDENTIFIED POLYCHAETA

Spionidae	2

SMG 1615
70°40.5'N 141°38'W
997m 25 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	3
Allis abranchiata	13
Aricidea ushakovi	2
Chaetozone setosa	36
Lumbrineris minuta	5
Minuspio cirrifera	5
Myriochele heeri	2
Scalibregma inflatum	1
Sigambra tentaculata	2
Terebellides stroemi	6
Genus "B" (Capitellidae)	1

UNIDENTIFIED POLYCHAETA

Maldanidae	6

SMG 1616
70°40.6'N 141°41.1'W
686m 25 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Allia abranchiata	12
Amage auricula	1
Aricidea ushakovi	1.
Chaetozone setosa	11
Eclysippe sp. A	32
Lumbrineris latreilli	2
Lumbrineris minuta	1
Maldane sarsi	9
Minuspio cirrifera	14
Myriochele heeri	20
Nereimyra aphroditoides	3
Notoproctus oculatus var. arctica	4
Schistomeringos sp. A	2
Sigambra tentaculata	1
Sphaerodoropsis biserialis	2
Terebellides stroemi	3
Genus "B" (Capitellidae)	3

UNIDENTIFIED POLYCHAETA

Ampharetidae	1
Terebellidae	1

SMG 1617
70°42'N 141°41.1'W
640m 25 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	2
Allis abranchiata	7
Allis suecica	3
Amage auricula	2
Ampharete acutifrons	1
Aricidea ushakovi	2
Chaetozone setosa	2
Eclysippe sp. A	15
Eteone flava	2
Heteromastus filiformis	1
Laonice cirrata	1
Lumbrineris impatiens	1
Maldane sarsi	14
Melinna cristata	1
Minuspio cirrifera	15
Myriochele heeri	2
Nereimyra aphroditoides	2
Ophelina sp. A	1
Scalibregma inflatum	1
Schistomeringos sp. A	4
Sigambra tentaculata	4
Sphaerodoropsis biserialis	2
Terebellides stroemi	1
Tharyx ? acutus	28

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Maldanidae	3
Terebellidae	5
Oligochaeta	2

SMG 1618
70°42.5'N 141°38.5'W
644m 25 August 1977
R/V GLACIER OCS-7
Sieve "mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	1
Allis suecica	14
Amage auricula	2
Chaetozone setosa	11
Eclysippe sp. A	15
Eteone flava	1
Heteromastus filiformis	2
Jasmineira schaudinni	1
Laonice cirrata	3
Lumbrineris minuta	1
Lumbrineris sp. B	1
Maldane sarsi	16
Minuspio cirrifera	12
Myriochele heeri	2
Nereimyra aphroditoides	4
Ophelina abranchiata	5
Scalibregma inflatum	1
Schistomeringos sp. A	3
Sigambra tentaculata	6
Sphaerodoropsis biserialis	2
Sphaerodorum gracilis	1
Terebellides stroemi	3
Tharyx ? acutus	46
Genus "B" (Capitellidae)	2

UNIDENTIFIED POLYCHAETA

Maldanidae	1
Terebellidae	1

SMG 1619
70°40.6'N 141°43'W
659m 25 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	5
Allis suecica	3
Aricidea ushakovi	1
Eclysippe sp. A	11
Eteone flava	1
Heteromastus filiformis	1
Laonice cirrata	1
Lumbrineris minuta	2
Lumbrineris sp. B	2
Maldane sarsi	6
Minuspio cirrifera	20
Myriochele heeri	1
Nereimyra aphroditoides	1
Ophelina abranchiata	2
Scalibregma inflatum	1
Schistomeringos sp. A	3
Sigambra tentaculata	2
Sphaerodoropsis biserialis	2
Sphaerodorum gracilis	1
Terebellides stroemi	1
Tharyx ? acutus	26
Genus "B" (Capitellidae)	1

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Maldanidae	1
Oligochaeta	1

MG 1620
70°42.8'N 141°39.5'W
659m 25 August 1977
R/V GLACIER OCS-7
Sieve "mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	3
Allis abranchiata	3
Allis suecica	16
Antinoella sarsi	1
Aricidea ushakovi	1
Chaetozone setosa	2
Eclysippe sp. A	13
Jasmineira schaudinni	1
Laonice cirrata	1
Maldane sarsi	38
Minuspio cirrifera	23
Nereimyra aphroditoides	2
Ophelina abranchiata	3
Ophelina cylindricaudatus	1
Schistomeringos sp. A	3
Sigambra tentaculata	2
Sphaerodoropsis biserialis	3
Terebellides stroemi	4
Tharyx ? acutus	46

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Chaetopteridae	7
Mandanidae	1
Oligochaeta	1

SMG 1622
70°41'N 141°27'W
1025m 25 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42Imn

POLYCHAETA

Aglaophamus malmgreni	1
Amage auricula	1
Allis abranchiata	13
Aricidea ushakovi	2
Chaetozone setosa	1
Eclysippe sp. A	43
Lumbrineris latreilli	2
Lumbrineris minuta	5
Minuspio cirrifera	4
Myriochele heeri	2
Nereimyra aphroditoides	3
Sigambra tentaculata	19
Terebellides stroemi	2
Tharyx ? acutus	25
Genus "B" (Capitellidae)	3

UNIDENTIFIED POLYCHAETA

Maldanidae	5

SMG 1661
71°12'N 145°35'W
2104m 30 August 1977
R/V GLACIER (CS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	15
Chaetozone setosa	1
Lumbrineris minuta	2
Lumbrineris sp. A	2
Minuspio cirrifera	1
Myriochele heeri	4
Ophelina sp. A	1
Sigambra tentaculata	41
Tharyx ? acutus	14

UNIDENTIFIED POLYCHAETA AND OLIGOCHAETA

Lumbrineridae
Spionidae
Family unknown
Oligochaeta

SMG 1663
71°05'N 146°33'W
1144m 31 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allia suecica	8
Chaetozone setosa	1
Laonice cirrata	21
Maldane sarsi	5
Minuspio cirrifera	28
Ophelina cylindricaudatus	1
Scalibregma inflatum	2
Sigambra tentaculata	2
Sphaerodoropsis biserialis	1
Tharyx ? acutus	1

SMG 1664
71°05'N 146°33'W
1144m 31 August 1977
R/V GLACIER OCS-7
Sieve mesh aperture = .42mm

POLYCHAETA

Allis abranchiata	2
Allis suecica	4
Aricidea ushakovi	2
Eteone flava	1
Lumbrineris minuta	7
Minuspio cirrifera	7
Myriochele heeri	11
Sigambra tentaculata	16

UNIDENTIFIED POLYCHAETA

Serpulidae	1
Terebellidae	1

OTB 419 Station WBS-31/CG-64
70°43'N 149°02'W
50m 6 September 1971
R/V GLACIER WEBSEC-71

POLYCHAETA

Aglaophamus malmgreni	2
Cistenides hyperborea	16
Euchone papillosa	1

OTB 420 Station WBS-32/CG-66
70°43'N 149°06'W
31m 7 September 1971
R/V GLACIER WEBSEC-71

POLYCHAETA

Cistenides hyperborea	1
Lumbrineris fragilis	14

OTB 445 Station WBS-1/CG-1
70°14.1'N 143°23.5'W
37m 4 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Cistenides hyperborea	1
Sabellides borealis	1

OTB 446 Station WBS-1/CG-1
70°14.1'N 143°23.5'W
28m 4 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Euchone papillosa	2

OTB 447 Station WBS-2/CG-2
70°22.9'N 143°30.1'W
51m 4 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Gattyana cirrosa	2
Lagisca extenuata	1

OTB 449 Station WBS-3/CG-4
70°43.1'N 143°42.8'W
464m 5 August 1972
R/VGLACIER WEBSEC-72

POLYCHAETA

Apomatus globifer	11
Branchiomma infarcta	1
Maldane sarsi	13
Nothria conchylega	8

OTB 450 Station WBS-5/CG-9
70°34.8'N 144°23.1'W
71m 7 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Aglaophamus malmgreni	8
Amage auricula	4
Ampharete acutifrons	1
Ampharete arctica	2
Amphicteis gunneri	14
Anaitides citrina	4
Anaitides groenlandica	4
Axionice flexuosa	3
Eclysippe sp. A	3
Glyphanostomum pallescens	9
Lumbrineris fragilis	15
Melinna cristata	8
Nereis zonata	9
Nothria conchylega	15
Paranaitis wahlbergi	2
Polyphysia crassa	1
Scalibregma inflatum	1

UNIDENTIFIED POLYCHAETA

Opheliidae (Travisia spp.)	1

OTB 452 Station WBS-6/CG-10
70 °20'N 144 °40'W
41m 7 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Bradia inhabilis	1

OTB 453 Station WBS-7/CG-11
70°10.9'N 144°30.5'W "
27m 8 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Antinoella sarsi	2
Brada incrustata	1
Brada inhabilis	1
Brada villosa	2
Euchone papillosa	1
Eunoe oerstedi	1
Harmothoe imbricata	2
Melaenis loveni	6
Polyphysia crassa	1
Sabellides borealis	9
Scalibregma inflatum	5

OTB 454 Station WBS-8/CG-12
70°18.7'N 145°13'W
30m 8 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Nereis zonata	1
Polyphysia crassa	1

OTB 455 Station WBS-9/CG-15
70°33'N 145°40'W
50m 9 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Axionice flexuosa	4
Brada inhabilis	3
Nereis zonata	1
Nicolea zostericola	1
Nothria conchylega	1

OTB 456 Station WBS-10/CG-16
70°40.8'N 145°24.9'W
79m 9 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Nereis zonata	1
Nothria conchylega	8

OTB 457 Station WBS-11/CG-17
70°51.5'N 145°17'W
57m 9 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Amphicteis gunneri	2

OTB 459 Station WBS-13/CG-24
70°35.1'N 146°35.3'W
48m 13 August 1972
R\V GLACIER WEBSEC-72

POLYCHAETA

Aglaophamus malmgreni	3

OTB 460 Station WBS-14/CG-25
70°20'N 146°28'W
34m 14 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Aglaophamus malmgreni	5
Anaitides groenlandica	2
Cistenides hyperborea	3
Euchone papillosa	12
Eunoe oerstedi	2
Polyphysia crassa	1

OTB 461 Station WBS-15/CG-26
70°21.7'N 146°32.7'W
27m 14 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Cistenides hyperborea	5
Euchone papillosa	1

OTB 463 Station WBS-17/CG-28
70°31.5'N 147°32'W
29m 15 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Cistenides hyperborea	22
Melaenis loveni	1
Nereis zonata	2

OTB 466 Station WBS-21/CG-36
71°11.6'N 148°32.1'W
159m 18 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Nereis zonata	5

OTB 467 Station WBS-22/CG-37
71°05.7'N 148°41'W
55m 19 August 1972
R/V GLACIER WEBSEC-72

POLYCHAETA

Aglaophamus malmgreni	4
Amphicteis gunneri	3
Anaitides groenlandica	1
Nephtys ciliata	1
Nereis zonata	6
Onuphis quadrucuspis	1
Typosyllis cornuta	1

BxC 048
71°44'N 151°45'W
1738m 29 August 1976
R/V GLACIER OCS-4
Sieve mesh aperture = .42mm

POLYCHAETA

Capitella capitata	2
Heteromastus filiformis	8
Laonice cirrata	1
Minuspio cirrifera	45
Myriochele heeri	22
Sigambra tentaculata	4

UNIDENTIFIED POLYCHAETA

Maldanidae	1

BxC 049
71°43.6'N 151°46.5'W
1643m 29 August 1976
R/V GLACIER OCS-4
Sieve mesh aperture = .42mm

POLYCHAETA

Antinoella sarsi	1
Capitella capitata	1
Heteromastus filiformis	10
Laonice cirrata	4
Lumbrineris minuta	3
Minuspio cirrifera	21
Myriochele heeri	11

UNIDENTIFIED POLYCHAETA

Maldanidae	3

BxC 050
71°43.6'N 151°46.5'W
1659m 29 August 1976
R/V GLACIER OCS-4
Sieve mesh aperture = .42mm

POLYCHAETA

Aglaophamus malmgreni	1
Capitella capitata	6
Heteromastus filiformis	10
Laonice cirrata	3
Lumbrineris minuta	2
Minuspio cirrifera	145
Myriochele heeri	16
Sigambra tentaculata	7

UNIDENTIFIED POLYCHAETA

Flabelligeridae	1
Maldanidae	3

VII. Discussion

From the data accumulated during the past year, it is evident that there are seasonal, offshore-onshore, and geographic patterns in the structure of the Southwestern Beaufort Sea benthic infaunal communities.

Perhaps the most significant and surprising finding is the seasonality observed in the outer continental shelf communities. The abundant fauna appears to have a significant increase in numerical abundance in May (>1.0 mm in size) and in August for the smaller macro-infauna (0.5-1.0 mm in size). At the present stage of analysis, it is difficult to determine the underlying causes for these trends. Species population size structure and abundance data are necessary for the small fauna (e.g. harpacticoid copepods and nematode worms) and for the large macrofauna {e.g. polychaete worms and gammarid amphipods). The population size structure of dominant species should be defined throughout the year to determine patterns of life history in the southwestern Beaufort Sea continental shelf. It is evident that at the three stations on the inner, mid and outer shelf, there are some major differences in reproduction and community structure.

The implications to be derived from these results describing a biologically active fauna in an arctic region with low primary production are intriguing. These results imply a more productive Beaufort Sea ecosystem then previously thought. The average results point to the need for detailed life history studies of the most abundant species now on hand. Further field research to describe these seasonal changes in more detail and to measure usable carbon inputs to the ecosystem are also called for. Ice algae production and tundra peat detritus inputs are potential sources that should be defined throughout the year; these inputs are likely to *vary* at varying distances from the coastline.

The abundance patterns of the larger benthic infauna (>1.0 mm) in the coastal zone demonstrate a nearshore maximum in numerical density with an intermediate low and an offshore maximum. Hypotheses for processes that maintain these patterns are suggested by the bimodality of numerical density and correlations with environmental features. The abundance peak nearshore may be caused by inputs of detrital peat from coastal erosion and river run-off, while that near the edge of the shelf may be the region where the lower current energies allow oceanic detritus and fine sedimentary particles to settle out. The abundance low is strongly correlated with the sea ice shear zone region. It is not known how long-lasting the destructive effects of ice scour are; it is possible that such scours would 'cake a long time to recover previous sedimentary cover and characteristics owing to the low sedimentation rates on the arctic Alaskan shelf. It is also evident from the distribution-abundance patterns of the dominant bivalve and polychaete species across the shelf that species are adapted to live in narrow to broad environmental ranges. Some live on the inner shelf, some on the mid-shelf and some at the shelf edge. Others can be distributed across the entire shelf from 5 to 100 meters depth.

Preliminary analysis of the distribution and abundance of polychaete species indicate that the eastern and western regions of the research area are different ecologically. The numbers of species and number of specimens at each station along the 3 transects summarized to date demonstrate a striking similarity between *the 2* eastern transects and the contrast in pattern of the transect off Cape Halkett. Previous research (Carey 1977 Final Rpt. T.O. #4) has shown the uniqueness of the Barter Island area. The zoogeographic analyses indicate that the continental shelf fauna is relatively young and depauperate in species and ubiquitous in distribution. The deep fauna contains more endemic species and ones that have North Atlantic affinities.

VIII. Conclusions

1. The benthic communities (>0.5 mm in size) on the outer continental shelf undergo seasonal changes in numerical density and biomass. (Reasonably Firm)

2. The benthic infauna (>1.0 nun) are at maximum abundance nearshore and on the outer shelf with a minimum at 15-25 meters depth. (Reasonably Firm)

3. Gammarid amphipod species are influenced by depth; an inner, middle, and outer shelf fauna can be distinguished across the continental shelf off Pitt Point. (Reasonably Firm)

4. Polychaete worms are more abundant nearshore near the Barter Island *region,* and offshore to the west near Cape Halkett. (Reasonably Firm)

5. Environmental features most influencing the benthic invertebrate communities on the Beaufort Sea continental shelf include sediment type, depth, nearshore salinity, river and lagoon detritus export, organic inputs, ice gouging, and predation. (Preliminary)

6. The small benthic macro-infauna (0.5-1.0 mm) form a major portion of the infaunal community across the Beaufort Sea continental shelf on the OCS Pitt Point Transect station line.

IX. Summary of January-March Quarter (RU #6 and #6W)

A. Field Trip Activities

1. Field trip schedule
   a. Dates: (1) 8-15 Mar. 1979: (2) 24 Mar-2 Apr. 1979: cancelled
   b. Name of vessel
   c* Aircraft: helicopter
   d. NOAA
2. Scientific Party
   a. Andrew G. Carey, Jr.: 8-15 Mar. 1979
      School of Oceanography
      Oregon State University
      Corvallis, Oregon 97331
   b. Kenneth Dunten and divers: 8-15 Mar. 1979
      Department of Zoology
      Western Washington State University
      Bellingham, Washington
   c. Bryan Mathews and divers: cancelled because of bad weather
      Institute of Marine Science
      University of Alaska
      Fairbanks, Alaska 99701
3. Methods

Ix. Summary of January-March Quarter (RU #6 and #6W) (continued)

3a. Field Sampling (NOAA-OCSEAP Boulder Patch Ice Community-Benthos)

1. Priorities - a) ice cores
   b) sediment cores - fauna
   c) sediment traps (5-day deployment preferred)
   d) vertical migration traps (5-day deployment preferred)
      1. large
      2. small
   e) handnet sweeps (2 each)
      1. ice-water interface
      2. sediment-water interface
   f) sediment cores - environmental data
   g) water samples - environmental data

2. Schedule (to be changed as necessary)
   a) First OSU Benthos dive day
      1. ice cores (20) ,
      2. deployment of traps
         a. sediment traps (2 frames)
            (caps left on the 8 cylinders)
         b. small migration trap
            (Upper and lower corks left inserted)
         c. . large migration trap
            (upper and lower corks left inserted)
      3. sediment cores - fauna collected as possible
      4. removal of caps and corks on traps

   b) Second OSU Benthos dive day (4 intervening days)
      1. cap and cork traps
      2. sediment cores - fauna (20 or remainder).
      3. sediment core - environment
      4. water samples - environment
         a. ice-water interface
         b. bottom water
      5. thermometer readings
         a. ice-water interface
         b. bottom water
      6. handnet sweeps
         a. ice-water interface (2)
         b. sediment-water interface (2)
      7. retrieval of traps
         a. small vertical migration trap
         b. large vertical migration trap
         c. sediment traps (2 frames)

3. Preparation for fieldwork

a. Ice cores
   1. Check cores for cleanliness and for clarity of numerical markings.
   2. Put 20 cores (+ extras) plus 40 no. 8 rubber corks (+ extras) plus 40 red plastic core caps (+ extras) in field box.
   3. Fill out field sheets as far as possible.

b. Sediment cores
   1. Check cores for cleanliness and for clarity of numerical markings.
   2. Put 20 50cc syringe core tubes (+ extras) plus 40 no. 5 rubber corks plus plastic electrical tape into field box.
   3. Fill out field sheets as far as possible.
   4. Check on availability of core extruders and sample jars.

c. Sediment traps
   1. Check on cleanliness of cylinders and caps and on tightness of cylinder parts and the quadruped frame.
   2. Obtain 5 plastic 2-1/2 collapsible carboys of sea water.
   3. Filter approximately 10 gallons of sea water and fill cylinders to top. Use Nuclepore and pre-filter (see processing for set-up).
   4. Cap plus securely seat rubber cork in vent hole.
   5. Make sure salt blocks are available.

d. Vertical migration traps (LVMT+SVMT)
   1. Check that all pieces of traps are present and assembled for field. The taped jar trap units should be clean and should not have been used for formaldehyde.
   2. Check bridle and float length-height and adjust to ambient field conditions.
   3. Fill trap jar units with filtered sea water and place corks securely in mouth of funnels.

e. Miscellaneous
   1. Check general supplies for fieldwork.
   2. Fully brief divers and outline the next day's diving program.
   3. Place collectors outside early enough before helo flight so water inside cools down.

4. Sampling

a. Ice cores (ICB) - 20

1. *20 3.5* cm diameter plastic core tubes plus 40 rubber corks (no. 8's) in diver carry bag.
2. A diver or divers should scout area for appropriate soft ice to sample. The undersurface of the ice should be soft, but thin enough so that the tube penetrates soft ice completely to hard ice above.
3. Divers to work in pairs with *one* pushing open core tubes through soft ice on undersurface of sea ice. The 2nd diver should hand an open core tube to the 1st diver, then corks, and finally should take corked core tube and place in carrying bag. A new open tube should be handed to 1st diver for a repeat of the operation.
4. Coring
   a. Each open core tube should be pushed slowly through soft ice and should be seated firmly at soft ice-hard ice interface.
   b. A cork should be firmly pushed into lower open end of tube.
   c. The top end of the tube should be temporarily closed with a heavy duty small spatula (on a thong) or a gloved hand. It may be necessary to dig ice away from side of table to do this.
   d. The tube is removed from ice and a cork pushed solidly into the top open end.
   e. The filled core tubes should be placed in a carry bag for return to the surface.
   f. Observations should be made about the ice, associated animals, environment in general and the quality of the coring. These should be reported to the biologist.
   g. The ice cores Should be taken at random in an appropriate soft ice environment on the undersurface of the sea ice
5. The 20 ice cores should be taken the first Benthos Dive Day but can be split between the two days.

b. Sediment cores - fauna (SCB's)

1. 20 50-cc plastic syringe core tubes plus 40 rubber corks (no. 5's) in diver carry bag.
2. A diver or divers should scout area for appropriate soft sediment to sample. Patches of mud are present in the Boulder Patch near boulders and in depressions.
3. Divers should work in pairs in a similar fashion to the ice coring. One diver should push open core tube into sediment, and the 2nd diver should hand him corks, and finally take the corked tube from the 1st diver and place in plastic rack. (TUBES SHOULD REMAIN UPRIGHT)
4. Coring
   a. Open small sediment core tube should be firmly pushed into sediment with heel of diver's hand. Penetration is difficult in these sediments, but should be at least 3 cm.
   b. A cork should be firmly pushed into open upper end of tube.
   c. The lower end of the core tube should be temporarily but carefully closed with the heavy duty small spatula (on a thong on a wrist) . It may be necessary to remove some sediment from side of tube to push spatula flat underneath coring tube.
   d. A cork should be firmly placed in lower open end of core tube.

e. The corked sample tube should be carefully stored vertically in plastic core bute rack sitting on the sediment surface. It should be carried carefully back to dive hole in vertical position.

f. Observations should be made about sediments, sediment distribution, associated large animals and should be reported to the biologist upon return to surface.

g. The sediment cores should be taken at random within the softer sediment patches.

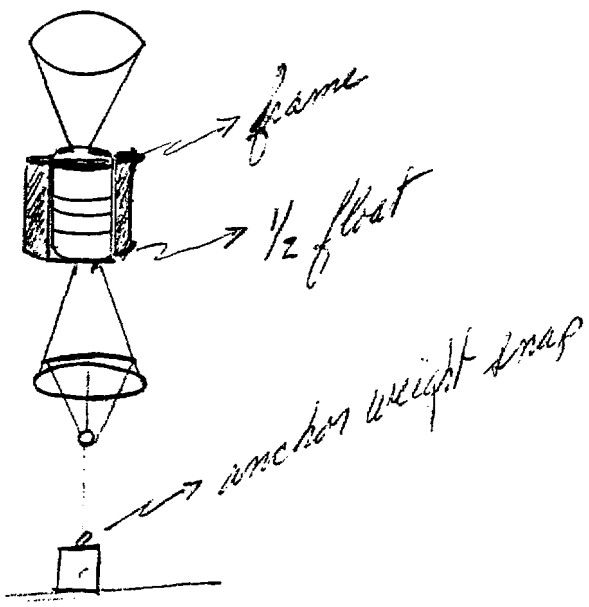
5. These samples should not be allowed to freeze.

a. Sediment Traps (STB)

1. The 2 bottom racks with 4 capped cylindrical particle traps each should be transported to the dive site as complete units. Each one will be filled with nuclepore-filtered water.
2. The divers should have scouted the area and planned to locate these and the vertical migration traps in a location typical of the site with soft ice but away from all the coring (and current meter servicing activities) .
3. The sediment trap frames can be transported one at a time with the bridle; 1 (perhaps 2) small buoys will be needed for flotation.
4. The traps should be placed about 10 feet apart and left with caps on until the end of the day's diving.
5. The bridle can be left clipped to one frame for retrieval.
6. The floats should be returned to the dive hut for attachment to the vertical migration trap anchor weights to facilitate transporting to the trap area.
7. These samples should not be allowed to freeze.

d. Vertical Migration Traps (VMTB)

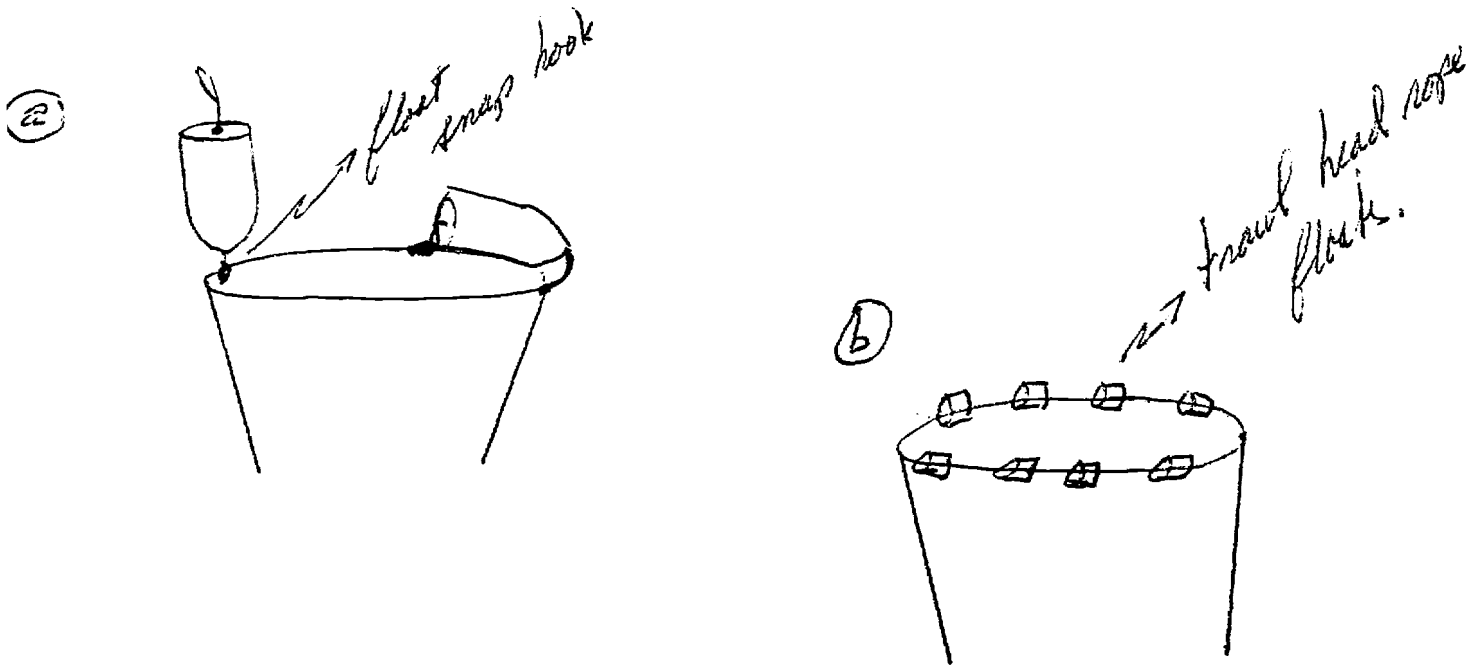
1. The 2 Vertical Migration Traps should be transported to the dive site as assembled units and each trap chamber filled with water. Corks should' be seated firmly into the funnel throats. The Large Vertical Migration Trap (LVMTB) should be lashed together for transport with the trap chambers and funnels stabilized by appropriate lines.
2. These VMT's should be located under typical soft underice environmental conditions and near the sediment traps in an undisturbed area.
3. Deployment
   a. Small vertical migration trap.
      (1) The Small VMT (SVMT) should be deployed first for practice. Its anchor should be heavier than the thick-walled aluminum pipe section and may need a float for buoyant transport to location.



(2) The flotation on the unit is self-contained.
(3) The trap should be rigged to be oriented halfway between the ice undersurface and the sediment surface.

b. Large Vertical Migration Trap (LVMT)

(1) The anchor weight should be located first; 3-4 buoys should be snapped on for ease in diver handling.
(2) The trap unit should be carried to the study site by 'a diver. A contrasting polypropylene line should be used to temporarily lash the two l-meter rings together for ease in handling.
(3) The trap should be placed in proper orientation, the lashing removed, and the anchor snapped onto lower bridle. One float at a time should be" unsnapped from the anchor weight and should be snapped onto the upper l-meter ring. Two floats on the ring at 180° to one another are adequate for flotation.
(4) The corks protecting the trap chambers should be carefully kept in place during deployment and until any suspended sediment settles or is moved away by currents.
(5) The lower bridle, the floats and the next extensions should be adjusted if necessary and made true so that the unit is oriented correctly.
(6) If the height between the underice surface and the sediment is less than necessary for the present trap rig, the floats should be repositioned around the upper ring in horizontal position (a) or the small trawl head rope floats should be placed on the upper net lashing for flotation with less vertical height.
(7) These samples should not be allowed to freeze.



e. Handnets (2)
   1. Two separate sweeps with the two nets should be made of the underice surface. The nets should be used to just scrape the ice surface so it doesn't rapidly clog with slush ice. Preferably tracklines several meters long should be made to maximize animal collection. If necessary, hunt out individual larger animals, e.g. amphipods, mysids, fishes, and polychaetes.
   2. Two separate sweeps with the two nets should be made at the sediment-water interface. Just the very surface sediment should be allowed to enter net. Tracklines at least several meters long should be made, but hunting of individual specimens may be necessary.
   3. When sampling with a net is completed the bag (0.5 mm NYTEX mesh) should be folded back over the stainless steel rod frame to prevent animal excapement.
   4. These samples cannot be frozen.

f. Sediment cores - environmental
   1. 3 large cores (3.5 cm diameter) should be taken of the sediments in the areas previously sampled for particle size and organic analyses.
   2. The coring procedure should be the same as with the small faunal sediment cores.

g. Water samples
   1. A salinity bottle should be filled at the ice-water interface and at the water-sediment interface.
   2. These cannot be frozen.
   3. An in situ salinometer should be used for a continuous profile when an instrument is available.

h. Water temperatures
   1. Thermometer readings should be made at the ice-water interface and at the water-sediment interface.
   2. A continuous profile should be made and readings recorded every meter of water depth when an appropriate instrument is available.

5. Sample Processing

a. Field
   1. Ice cores
      a. Cap with red plastic caps upon retrieval to surface.
      b. Note condition of cores and ice within each numbered core tube.
      c. Note diver observations about ice conditions, coring success and problems.
      d. These samples should not be allowed to freeze solid.
   2. Sediment cores
      a. Tape corks on core tubes
      b. Note diver observations of cores and sediment sampled, including patchiness.
         NOTE : Core tubes should be kept upright.
      c. These samples should not be allowed to freeze.
   3. Sediment traps
      a. The caps should be checked upon retrieval for firm seating and to ensure that the corks are firmly in place.
      b. The quadruped frames and collectors should be transported to the Laboratory as an assembled unit for protection of the samples.
      c. These samples should not be allowed to freeze:
   4. Vertical migration traps
      a. Upon retrieval, corks should be immediately checked for firm seating.
      b. The upper and lower chambers should alternately be preserved and capped securely.
      c. New jars should then be used for each deployment and should be firmly taped together with duct tape. (The formalin may have effect on the later trapping efficiency of the units.)
      d. The trap jar units should be removed from the VMT's and placed in field box for transport to the laboratory.
      3. These samples should not be allowed to freeze.
   5. Handnet samples
      a. Upon retrieval by the divers the handnets should be washed down and the samples washed out into sample jars.
      b. Samples to be preserved with neutralized 10% formal-in.
      c. These samples should not be allowed to freeze.

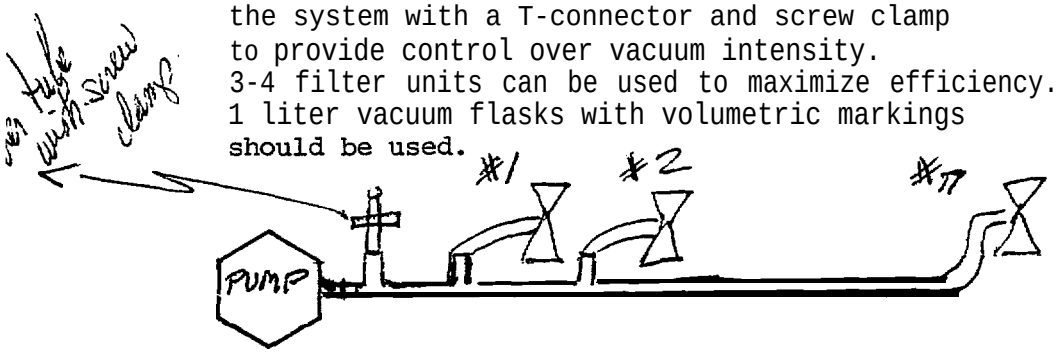
b. Laboratory
   1. Ice Cores (ICB)
      a. ICB's should be allowed to melt and then should be concentrated through 63 µm small diameter sieve.
      b. The screen should be carefully flushed and backwashes into sample jar with filtered seawater from wash bottle.
      c. Preserve sample with buffered formalin to make 10% concentration.
      d. Double label - inside plus outside.
      e. Complete field sheets.
      f. Screen should be rinsed in freshwater between samples.
      g. Cores should be rinsed in fresh water before storage.
   2. Sediment Cores (SCB)
      a. Any pertinent observations on sediment and core samples should be made.
      b. SCB's should be extruded in 1 cm increments into sample jars (2 oz.). Rinse of extruder into last jar with wash bottle.
      c. The overlying water should be decanted off and preserved in separate jar before extruding sediment.
      d. Preserve sample with buffered formalin to make 10% concentration.

e. Double label - inside and outside jar.
f. SCB's should be washed and cleaned in fresh water before storage.

3. Vertical migration traps
   a. Carefully transfer contents of trap jar units to storage jars.
   b. Double label - inside and outside.
   c. Add any further pertinent notes to field sheets.
   d. TWO new jar units should be taped together for the next deployment.

c. Sediment Traps - Benthos (STB)

1. The STB cylinders should remain undisturbed in the laboratory for 2 hours to allow particles to settle.
2. Set up filtration units and vacuum pump with a protective plastic sheet hood over the sink area. A vacuum bypass should be build into the system with a T-connector and screw clamp to provide control over vacuum intensity. 3-4 filter units can be used to maximize efficiency. 1 liter vacuum flasks with volumetric markings should be used.



3. After the initial period for particle settling in the cylinders, carefully siphon off upper 36 cm's or so of water down to about 10 cm's. Filter upper water through nuclepore filter(s) and freeze in labeled jar with dividing plastic circles.
a. Filter remaining water and particles through nuclepore filter in 100 ml aliquots. Gently mix sample before each sample transfer to equalize particle concentrations. NB - Each filter should be a collection from a measured volume of water; they should be equal if possible.
5. The filtration volume, rate, number of filter units, etc. maY have to be adjusted to best suit the sample conditions. This will be true when glass fiber filters are added to the procedure for OCS-11.
6. The filters should remain frozen at Prudhoe Bay and during transport to OSU. Dry ice (snow) and insulated box can be ordered from NARL [Charlotte Schneider, Stockroom].

B. Laboratory Analysis

1. Scientific Personnel

a. Andrew G. Carey, Jr. Principal Investigator
Associate Professor
Responsibilities: coordination, evaluation, analysis, and reporting

b. James Keniston Research Assistant (part-time)
Responsibilities: data management, statistical analysis

c. Paul Montagna Research Assistant
Responsibilities: sample processing, biomass measurements, harpacticoid copepod and crustacean systematic, and field collection

d. R. Eugene Ruff Research Assistant
Responsibilities: species list compilation, sample processing, reference museum curation, polychaete systematic, field collection, and laboratory management

e. Paul Scott Research Assistant
Responsibilities: sample processing, data summary, molluscan systematic and sample collection.

2. Methods: laboratory analyses

a. Ice epontic community and benthic community - Boulder Patch, Stefannson Sound.

1. New separation techniques have been tested to separate the smaller fauna, including the indicator group of meiofaunal organisms, Harpacticoid Copepoda. A suspension of colloidal silica (LUDOX) is used with centrifugal forces to separate the fauna from the sedimentary debris. The technique has proven to be effective and efficient.

2. Identification of the indicator organisms, Harpacticoida Copepoda, by Paul Montagna continues on schedule.

b. The small macro-infauna *(0.5-1.0 mm* in size)

1. Standard picking techniques under the dissecting microscope have been utilized to pick and sort this fraction of samples collected from the OCS Pitt Point Station Transect Line and other pertinent areas.

3. Sample localities

a. Stefannson Sound Boulder Patch
b. OCS lease area - Beaufort *Sea*
c. *OCS* Transect Line - Pitt Point (PPB).

B. Laboratory Analysis (continued)

4. Data collected and analyzed

a. The small macro-fauna (0.5-1.0 mm in size) have been picked and sorted to major taxonomic category from 60 PPB seasonal samples (Tables 8-20).

b. Pelecypod molluscs (Bivalvia)
The pelecypods in all samples sorted to date have been identified by Paul Scott with the aid of Frank Bernard of the Fisheries Research Board of Canada, Nanaimo.

c. Harpacticoid Copepoda
Identifications continue by Paul Montagna.

d. Polychaeta
Identifications of the coastal (5-25 meters depth) continue by R.E. Ruff.

Table 8 : Total infaunal densities per 1 m^2 on the Pitt Point seasonal transect line.

		PPB-25	PPB-55	PPB-100
OCS-1 Nov. 75	1.00 mm	700	2,470	2,700
	0.50 mm	8,000	19,300	9,630
	Total	8,700	21,770	12,330
OCS-2 Mar. 76	1.00 mm	1,200	2,900	4,460
	0.50 mm	2,260	12,400	8,620
	Total	3,460	15,300	13,080
OCS-3 May 76	1.00 mm	540	5,720	8,000
	0.50 mm	3,820	6,110	8,100
	Total	4,360	11,830	16,100
OCS-4 Jul. 76	1.00 mm	754	2,250	4,400
	0.50 mm	7,100	17,700	25,200
	Total	7,854	19,950	29,600
OCS-6 NoV. 76	1.00 mm	500	1,690	3,150
	0.50 mm	5,510	12,100	12,800
	Total	6,010	13,790	15,950

Table 9: Animal densities for PPB-25 (OCS-1) 0.50 mm fraction, collected 26 October 1975. Each sample is a 0.1 m^2 Smith-McIntyre grab..

Phylum :	Class:	Order	Grab Number 1082S	1083S	1084S	1085S	1087S	Total m^2	% of Fauna
Nematoda			247	231	324	206	214	2444	30.6
Nemertinea			2	2	1	1	1	14	0.2
Kinoryncha			1	1	8	3	1	28	0.4
Annelida:	Polychaeta		109	159	135	83	44	1060	13.3
Sipunculida							2	4	0.1
Arthropods:	Crustacea:	Amphipoda	73	14	8	16	27	276	3.5
		Harpacticoida	198	72	87	61	97	1030	12.9
		Isopoda	8	1	1			20	0.3
		Ostracoda	461	302	314	93	107	2554	31.9
		Tanaidacea	35	8	4	22	32	202	2.5
		Cumacea	5	4				18	0.2
Mollusca:	Pelecypoda		57	30	31	3	36	314	3.9
	Gastropoda		2	2	9	2	1	32	0.4
TOTAL			1198	826	922	490	562	7996	100.0

Table 10: Animal densities for PPB-25 (OCS-2) 0.50 mm fraction, collected 12 March 1976. Each sample is from a 0.1 m2 Smith-McIntyre grab.

Phylum :	Class:	Order	Grab Number 1099s	1100s	1101s	1106s	1107s	Total m^2	% of Fauna
Nematoda			55	18	2	78	67	440	19.5
Nemertinea			5	1	–	4	-	20	0.9
Annelida:	Polychaeta		143	108	51	66	95	926	41.0
Arthropods:	Crustacea:	Amphipoda		1	-			2	0.1
		Harpacticoida	35	3			2	80	3.5
		Isopoda	6	-			1	14	0.6
		Ostracoda	254	38	11	24	20	694	30.7
		Tanaidacea	8	2	1	-	2	26	1.2
		Cumacea	4	-				8	0.4
Mollusca:	Pelecypoda		8	–		6	-	28	1.2
	Gastropod		7	2	-		2	22	1.0
TOTAL			525	173	65	178	189	2260	100.0

Table 11: Animal densities for PPB-25 (OCS-4) 0.50 mm fraction, collected 1 September 1976. Each sample is from a 0.1 m^2 Smith-McIntyre grab.

Phylum :	Class:	Order	Grab Number 1360S	1361S	1362S	1363S	1364S	Total m^2	% of Fauna
Porifera				1				2	<0.1
Nematoda			147	74	205	66	240	1464	20.6
Nemertinea			4	1	3	2	4	28	0.4
Annelida:	Polychaeta		235	245	.227	172	169	2096	29.5
Sipunculida				1	1			4	0.1
Echiuroidea							1	2	<0.1
Arthropods:	Crustacea:	Amphipoda	8	18	28	12	13	158	2.2
		Harpacticoida	142	68	99	73	142	1048	14.8
		Isopoda	5	2	12	2	2	46	0.6
		Ostracoda	164	158	209	197	159	1774	25.0
		Tanaidacea	19	5	47	9	4	168	2.4
		Cumacea	5		10	3	3	42	0.6
	Arachnida:	Acarina		1				2	<0.1
Mollusca:	Pelecypoda		11	17	32	11	17	176	2.5
	Gastropoda		15	3	9	1	7	70	1.0
Echinodermata:	Holothuroidea			1	9		1	22	0.3
TOTAL			755	595	891	548	762	7102	100.0

Table 12: Animal densities for PPB-25 (OCS-6) 0.50 mm fraction, collected 11 November 1976. Each sample is from a 0.1 m^2 Smith-McIntyre grab.

Phylum :	Class:	Order	Grab Number 1500s	1501s	1502S	1503s	1504s	Total m^2	% of Fauna
Cnidaria:	Anthozoa			1	1			4	0.1
Nematoda			363	244	184	104	288	2366	42.9
Nemertina			4	2	5	1		24	0.4
Kinoryncha						1		2	<0.1
Annelida:	Polychaeta		285	181	206	159	151	1964	35.6
Sipunculida				1				2	<0.1
Arthropoda:	Crustacea:	Amphipoda	21	6	7	9	4	94	1.7
		Harpacticoida	32	18	19	6	5	160	2.9
		Isopoda	9	2	5	2	1	38	0.7
		Ostracoda	55	43	38	20	29	370	6.7
		Tanaidacea	54	18	40	17	19	296	5.4
		Cumacea	15	4	1	2		44	0.8
Mollusca:	Pelecypoda		8	4	3	4	2	42	0.8
	Gastropoda		8	8	9	11	16	104	1.9
Hemichordata				2				4	0.1
TOTAL			854	534	518	336	515	5514	100.0

Table 13: Animal densities for PPB-55 (OCS-1) 0.50 mm fraction, collected 28 October 1975. Each sample is 1/4 of a 0.1 m2 Smith-McIntyre grab.

Phylum:	Class:	Order	Grab Number 1088A	1089A	1090A	1091A	1092A	Total m^2	% of Fauna
Nematoda			106	27	78	65	52	2624	13.6
Nemertinea			6	2	7	5	2	176	0.9
Kinoryncha						2		16	0.1
Annelida:	Polychaeta		96	19	. 82	67	53	2536	13.2
Sipunculida			1			4		40	0.2
Arthropoda:	Crustacea:	Amphipoda	70	14	27	38	20	1352	7.0
		Harpacticoida	44	12	22	28	13	848	4.4
		Isopoda	4	3	6	2		120	0.6
		Ostracoda	294	114	306	257	181	9216	47.9
		Tanaidacea	59	11	49	49	10	1424	7.4
		Cumacea	12	2	6	5	5	240	1.2
	Arachnida:	Acarina	1				4	40	0.2
Mollusca:	Pelecypoda		17		7	10	8	336	1.7
	Gastropoda		6		1	1	2	80	0,4
Echinodermata:	Ophiuroidea		4					32	0.2
	Holothuroidea						8	64	0.3
Hemichordata						1		8	<0.1
TOTAL			720	204	591	534	358	19256	100.0

Table 14: Animal densities for PPB-55 (OCS-2) 0.50 mm fraction, collected 18 March 1976. Each sample is 1/4 of a 0.1 m2 Smith-McIntyre grab.

Phylum :	Class:	Order	Grab Number 1121A	1123A	1126A	1128A	1130A	Total m^2	% of Fauna
Porifera					1			8	0.1
Nematoda			70	71	21	10	45	1736	14.0
Nemertinea			2	1	2		1	48	0.4
Kinoryncha							1	8	0.1
Annelida:	Polychaeta		42	23	45	10	27	1176	9.5
Sipunculida				4	1	1	1	56	0.5
Arthropoda:	Crustacea:	Amphipoda	42	19	19		5	680	5.5
		Harpacticoida	12	9	6	1	12	320	2.6
		Isopoda	4	1				40	0.3
		Ostracoda	224	262	245	9	139	7032	56.9
		Tanaidacea	23	42	17	2	18	816	6.6
		Cumacea	8	1	4		1	112	0.9
	Arachnida:	Acarina	1		3		1	40	0.3
Mollusca:	Pelecypoda		20	8	1		3	256	2.1
	Gastropoda		2					16	0.1
Echinodermata:	Holothuroidea				1			8	0.1
Hemichordata							2	16	0.1
TOTAL			450	441	366	33	256	12368	100.0

Table 15: Animal densities for PPB-55 (OCS-4) 0.50 mm fraction, collected 31 August 1976. Each sample is 1/4 of a 0.1 m2 Smith-McIntyre grab.

Phylum :	Class:	Order	Grab Number 1330A	1335A	1336A	1340A	1341A	Total m2	% of Fauna
Nematoda			141	152	63	180	161	5576	31.6
Nemertinea			3	1	2	2	3	88	0.5
Kinoryncha			1	-		1		16	0.1
Annelida:	Polychaeta		79	74	52	80	50	2680	15.2
Sipunculida			4	6	1	3	1	120	0.7
Echiuroidea						9		72	0.4
Arthropods:	Crustacea:	Amphipoda	15	24	20	13	17	712	4.0
		Harpacticoida	13	10	10	21	25	632	3.6
		Isopoda	5	6	8	4	4	216	1.2
		Ostracoda	134	123	159	187	135	5904	33"4
		Tanaidacea	17	19	11	22	21	720	4.1
		Cumacea	12	11	4	4	9	320	1.8
Mollusca:	Pelecypoda		16	7	7	15	14	472	2.7
	Gastropod		1	4		3	1	72	0.4
Echinodermata:	Ophiuroidea		1			1		16	0.1
	Holothuroidea						1	8	<0.1
Hemichordata			2	1				24	0.1
Chordata:	Ascidacea			1				8	<0.1
TOTAL			444	439	337	545	442	17656	100.0

Table 16: Animal densities for PPB-55 (OCS-6) 0.50 mm fractions, collected 4 November 1976. Each sample is from a 0.1 m^2 Smith-McIntyre grab.

Grab Number Sample Size			1495A 1/4	1496A 1/4	1497A 1/4	1498A 1/4	1499s who le	Total m^2	% of Fauna
Phylum :.	Class:	Order							
Cnidaria:	Anthozoa			1			1	10	0.1
Nematoda			66	74	43	106	104	1965	16.0
Nemertinea			2	1	1	2	1	35	0.3
Kinoryncha							1	5	<0.1
Annelida:	Polychaeta		57	64	56	64	85	1630	13.4
Sipunculida			1	2				15	0.1
Arthropods:	Crustacea:	Amphipoda	24	36		8	12	400	3.3
		Harpacticoida	10	13	7	15	14	295	2.4
		Isopoda	2	2		1		25	0.2
		Ostracoda	389	297	83	254	313	6680	55.0
		Tanaidacea	13	17	6	22	23	405	3.3
		Cumacea	5	6	2	5	7	125	1.0
Arthropods:	Arachnida:	Acarina	4	7	4			75	0.6
Mollusca:	Pelecypoda		11	16	5	5	2	195	1.6
	Gastropoda		8	12	10	8	16	270	2.2
Hemichordata					1			5	<0.1
TOTAL			592	548	218	490	579	12135	100.0

Table 17: Animal densities for PPB-100 (OCS-1) 0.50 mm fraction, collected 30 October 1975. Each sample is from a 0.1 m^2 Smith-McIntyre grab.

Grab Number Sample Size			1093A 1/4	1094s Whole	1095A 1/4	1096A 1/4	1097s Whole	Total m2	% of Fauna
Phylum: .	Class:	Order							
Nematoda			282	170	182	134	58	5240	54.4
Nemertinea			2	2	3	2	1	62	0.6
Annelida:	Polychaeta		59	69	36	54	23	1376	14.3
Arthropods:	Crustacea:	Amphipoda	26	14	2	11	8	356	3.7
		Harpacticoida	77	30	7	10	11	834	8.7
		Isopoda	9	6	4	15		236	2.5
		Ostracoda	60	54	21	30	12	1020	10.6
		Tanaidacea	16	11	3	8		238	2.5
		Cumacea	2	2		4		52	0.5
		Nebaliacea		1				2	<0.1
	Arachnida:	Acarina	1					8	0.1
Mollusca:	Pelecypoda		2	12	2	8		120	1.2
	Gastropoda		2	3		1		30	0.3
	Aplacophora				1			8	0.1
Echinodermata:	Ophiuroidea		2					16	0.2
Hemichordata			1	1	2	1		34	0.4
TOTAL			541	375	263	278	113	9632	100.0

Table 18: Animal densities for PPB-100 (OCS-2) 0.50 mm fraction, collected 19 March 1976. Each sample is 1/4 of a 0.1 m2 Smith-McIntyre grab.

Phylum :	Class:	Order	Grab Number 1131A	1133A	1134A	1139A	1140A	Total m^2	% of Fauna
Cnidaría:	Anthozoa					2	-	16	0.2
Nematoda			42	70	2	19	17	1200	13.9
Nemertinea			1	1	-			16	0.2
Annelida:	Polychaeta		33	40	10	48	44	1400	16.2
Sipunculida			1	1	-	4	1	56	0.6
Arthropods:	Crustacea:	Amphipoda	30	48	2	57	16	1224	14.2
		Harpacticoida	7	4	1	1	2	120	1.4
		Isopoda	13	14	-	10	4	328	3.8
		Ostracoda	86	89	35	138	93	3528	40.9
		Tanaidacea	12	21	-	10	2	360	4.2
		Cumacea	6	4	2	13	2	216	2.5
Mollusca:	Pelecypoda		3	2	5	6	1	136	1.6
	Gastropod		1	1	-			16	0.2
TOTAL			235	295	57	308	182	8616	100.0

Table 19: Animal densities for PPB-100 (OCS-4) 0.50 mm fraction, collected 30 August 1976. Each sample is 1/4 of a 0.1 m2 Smith-McIntyre grab.

Phylum :	Class:	Order	Grab Number 1318A	1319A	1320A	1322A	1323A	Total m^2	% of Fauna
Porifera					1	1		16	0.1
Cnidaria:	Anthozoa		1	3	3	2	2	88	0.3
Nematoda			216	366	165	362	323	11456	45.4
Nemertinea			3	6	. 4	5	1	152	0.6
Annelida:	Polychaeta		72	98	33	64	70	2696	10.7
Sipunculida			1	1		1	1	32	0.1
Echiuroidea			1					8	<0.1
Arthropoda:	Crustacea:	Amphipoda	71	81	49	59	62	2576	10.2
		Harpacticoida	10	27	6	20	13	608	2.4
		Isopoda	12	·?	1	5	4	232	0.9
		Ostracoda	121	108	139	94	206	5344	21.2
		Tanaidacea	4	21	6	8	23	496	2.0
		Cumacea	20	28	16	7	29	800	3.2
	Arachnida:	Acarina		2	1	3	3	72	0.3
Mollusca:	Pelecypoda		9	12	20	6	8	440	1.7
	Gastropoda		1				2	24	0.1
	Aplacophora					1	2	24	0.1
Brachiopoda							1	8	<0.1
Echinodermata:	Ophiuroidea		1	2	1			32	0.1
	Holothuroidea			6		4	2	96	0.4
Hemichordata						1		8	<0.1
TOTAL			543	768	445	643	752	25208	100.0

Table 20: Animal densities for PPI3-100 (OCS-6) 0.50 mm fraction collected 3 November 1976. Each sample is 1/4 of a 0.1 m2 Smith-McIntyre grab.

Phylum:	Class:	Order	1490A	1491A	1492A	1493A	Total m2	% of Fauna
Porifera			1		--		10	0.1
Nematoda			64	74	102	81	3210	25.0
Nemertinea			2	1	1		40	0.3
Annelida:	Polychaeta		42	62	64	47	2150	16.8
Sipunculida			1	2	3		60	0.5
Arthropoda:	Crustacea:	Amphipoda	42	48	74	36	2000	15.6
		Harpacticoida	4	6	14	7	310	2.4
		Isopoda	3	6	13	3	250	1.9
		Ostracoda	88	86	94	52	3200	24.9
		Tanaidacea	7	4	14	3	280	2.2
		Cumacea	12	35	22	6	750	5.8
	Pycnogonida					1	10	0.1
	Arachnida:	Acarina		1	2		30	0.2
Mollusca:	Pelecypoda		4	1	4	2	110	0.9
	Gastropoda		8	11	11	9	390	3.0
	Aplacophora					1	10	0.1
Echinodermata:	Ophiuroidea			1		1	20	0.2
TOTAL			278	338	418	249	12830	100.0

x. Auxiliary Material

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See Reference Lists at end of each report section.

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