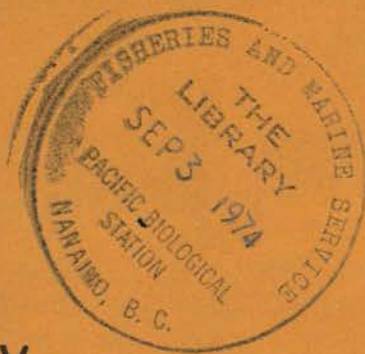


Biological Oceanographic
Observations in the
Eskimo Lakes, Arctic Canada
I. Zoobenthos Data
1971 - 1973

ARCHIVES
Pacific Biological
Station



by J. W. Wacasey

FISHERIES AND MARINE SERVICE
SERVICE DES PÊCHES ET DES SCIENCES DE LA MER

TECHNICAL REPORT No.
RAPPORT TECHNIQUE N°

475

1974



Environment
Canada

Environnement
Canada

Fisheries
and Marine
Service

Service des pêches
et des sciences
de la mer

Technical Reports

Technical Reports are research documents that are of sufficient importance to be preserved, but which for some reason are not appropriate for primary scientific publication. Inquiries concerning any particular Report should be directed to the issuing establishment.

Rapports Techniques

Les rapports techniques sont des documents de recherche qui revêtent une assez grande importance pour être conservés mais qui, pour une raison ou pour une autre, ne conviennent pas à une publication scientifique prioritaire. Pour toute demande de renseignements concernant un rapport particulier, il faut s'adresser au service responsable.

Department of the Environment
Fisheries and Marine Service
Research and Development Directorate

Ministère de l'Environnement
Service des Pêches et des Sciences de la mer
Direction de la Recherche et Développement

TECHNICAL REPORT No. 475

RAPPORT TECHNIQUE No. 475

(Numbers 1-456 in this series were issued
as Technical Reports of the Fisheries
Research Board of Canada. The series
name was changed with report number 457)

(Les numéros 1-456 dans cette série furent
utilisés comme Rapports Techniques de l'office
des recherches sur les pêcheries du Canada.

Le nom de la série fut changé avec le
rapport numéro 457)

Biological Oceanographic Observations in the Eskimo Lakes, Arctic Canada.

I. Zoobenthos Data, 1971-1973.

by J. W. WACASEY

Arctic Biological Station,
Fisheries and Marine Service,
Department of the Environment,
Ste. Anne de Bellevue, Que.

1974

Biological Oceanographic Observations in the Eskimo Lakes,
Arctic Canada. I. Zoobenthos Data, 1971-1973.
Fish. Mar. Ser. Res. Dev. Tech. Rep. 475: 69 pp.

Abstract

Data on benthic invertebrates were obtained from grab samples taken at 20 selected stations in the Eskimo Lakes, Arctic Canada, during 1971-1973. The results, which apply to individual stations, consist of collecting data, lists of species with their density and biomass, and related data determined from mechanical and chemical analyses of sediments.

Résumé

Les données sur les invertébrés benthiques ont été obtenues de vingt postes d'échantillonnages dans les lacs Esquimaux de l'Arctique Canadien, pour la période 1971-1973. Les résultats de postes individuels consistent de listes d'espèces, leur densité et biomasse, et d'analyses chimiques des sédiments.

Table of Contents	
	Page
Introduction	1
Methods	2
Zoobenthos	2
Sediment	3
Procedures for sediment analysis	4
References to sediment analysis	7
Acknowledgements	8
List of Tables	9
Map of Stations	12
Tables 1 - 34	13 - 69

INTRODUCTION

In 1971 the Biological Oceanography Section of the Arctic Biological Station initiated multidiscipline baseline studies in the Eskimo Lakes, N.W.T. A field camp was established at 69°34.8'N Lat., 131°17'W Long. to serve as a base of operation for collecting and processing samples periodically throughout the year, but utilized more extensively in July and August during the season of open water.

This report serves as a repository of the summarized data pertaining to the zoobenthos and the sediments from selected stations in the Eskimo Lakes. A total of twenty stations (507-525) were sampled by grab at least once, and three of the stations (508, 510, 515) were sampled several times within the period July, 1971 - August, 1973.

The Eskimo Lakes consist of a series of interconnecting lakes oriented along a northeast - southwest axis and forming the southern boundary of the Tuktoyaktuk Peninsula. The lakes have a narrow outlet into Liverpool Bay which communicates with the southern Beaufort Sea. There is an influx of marine water during the tidal periods producing an estuarine system with the salinity decreasing below 7‰ in the innermost lakes. The tides, as crudely determined at the field camp, are semidiurnal with a large-tide range that does not exceed one meter. The tides occur about 6 hours later than the tides at Tuktoyaktuk.

The lakes have an ice cover for about 7 months of the year, from mid-November to mid-June. The greatest thickness of ice over the period of sampling was 191 cm at Station 508, 18 May 1972.

METHODS

Zoobenthos

The 39 foot M.V. Salvelinus or a freight canoe was used for sampling in the open water season and winter sampling was accomplished from the surface of the ice by deploying collecting gear in holes that were drilled through the ice.

A "Petterson" dredge (Foerst, Chicago) was used to collect most of the samples. This grab has a volume of 5 liters and samples an area of about 0.065 m². Usually the grab penetrates 5-10 cm of substrate and collects 2 - 4 liters of sediment. A "Ponar" grab was used for sampling Station 508, 18 May 1972. The "Ponar" grab samples a smaller surface area (0.05 m²) than the "Petterson", but is similar to the "Petterson" in its operation. Each sample consisted of 4 - 6 grabs (0.25 - 0.39 m²). Grab contents were washed through a 0.5 mm screen and the retained invertebrates were preserved in formalin (1:9 ratio) for transporting to the Arctic Biological Station, where they were sorted into 70% ethyl alcohol and subsequently identified, counted and weighed.

Most specimens were identified to species, excepting the nemerteans, nematodes, and ectoprocts. Two or three species may be

represented in each of the above groups, but in the enumeration of species, they were counted as one species. In some cases (i.e. Haliclona, Tubularia) number of individuals were not determined; however, the presence of such colonial forms are indicated in the Tables by an "x". Biomass applies to the dry meat weight or organic weight of the species. Tubes and shells are excluded, but the carapace of crustaceans is included as part of the organic weight. The data are presented on a square meter basis and each item was multiplied by an appropriate factor for transforming the value from the sampled area to a square meter equivalent.

Data on algae, fish, and organic material (of terrestrial origin) are presented at the end of each table; however, these data are not included in the totals for the zoobenthos.

Sediment

Mechanical and/or chemical analyses of sediments were determined on samples collected in 1971-72. Usually, substrate samples were taken at the time samples of benthos were taken, cores excepted. In 1971 samples of substrate were taken with the "Petterson" dredge at Stations 507A, 508, 509, 510, and 511. Particle size analyses were made on dried portions of these samples and the data are presented on the Wentworth Scale.

In 1971 core samples were taken at Stations 508, 510 and 511, using a 150 lb. Alpine gravity sediment corer, Type 211, which takes

a core of sediment of 3.5 cm in diameter and up to 60 cm in length. Substrate samples were taken at all stations except 507A, 509 and 511 in August of 1972. Approximately one liter of sediment from each station was frozen and transported to the Arctic Biological Station. The chemical analysis of the cores taken in 1971 and the mechanical and chemical analyses of the sediments collected in 1972 were determined under the direction of Dr. A. F. MacKenzie of the Department of Renewable Resources, Macdonald College, McGill University.

The cores were in a partially dry state when processed, and only a minimum amount of information was obtained. Each core was sectioned into 5 cm sections, each section being analyzed separately. Portions of the frozen samples of 1972 were thawed as required and more complete chemical and mechanical analyses were made. Dr. MacKenzie and Mr. A. Stewart presented the results of the analyses in a report entitled Nutrient content of some marine sediments in the Canadian Arctic region, Department of Renewable Resources, McGill University, February, 1973.

The procedures listed below were taken from the above report. The results were also taken from the same report but are presented in a rearranged order (Tables 28-34). Where applicable, values are related to 1 g of oven-dried sediment (Tables 32-34).

Procedures for sediment analysis

1. pH was determined with a glass calomel electrode combination on suspensions of sample/water and sample/0.01M CaCl₂ in a 1:3 ratio.

2. Water content (wt/wt%) was determined by dividing the wet weight less dry weight by the dry weight and multiplying by 100. The value relates the amount of water in the sediment at the time it was received in the laboratory from the field.

3. Particle size analysis was made by the hydrometer method described by Day (4). Three fractions were recognized: particles greater than 0.05 mm, 0.05 mm - 0.002 mm particles, and particles less than 0.002 mm effective diameter.

In the present report values were transformed to the Wentworth Scale and are expressed as fractions of particles greater than 0.063 mm, 0.0039 - 0.063 mm, and particles less than 0.0039 mm.

4. Nitrogen was determined on the inorganic forms, total nitrogen, and organic nitrogen.

Inorganic forms of nitrogen were extracted with 1N KCl from freshly thawed samples by modification of the method described by Bremner (3). Nitrate, nitrite, and ammonia levels in the extracts were determined colorimetrically by the methods currently in use at the Macdonald Soil Test Laboratory.

Total nitrogen was determined by the semi-micro Kjeldahl procedure described by Bremner (2).

Organic nitrogen was to have been estimated as the difference between total nitrogen and inorganic nitrogen. Because of the low level of inorganic nitrogen the estimation of total nitrogen is a good approximation of organic nitrogen.

5. Organic carbon was determined by the Walkley-Black procedure as described by Allison (1).

6. Exchangeable and water soluble cations as potassium, magnesium, calcium, and manganese were extracted by the procedure described by Jackson (7) with a sample/extractant ratio of 1:10 and an extraction time of 15 minutes. K was determined by flame photometry and Mg, Ca, and Mn were determined by atomic absorption spectrophotometry.

Iron as Fe^{+2} and as $Fe^{+2} + Fe^{+3} +$ acid soluble Fe were extracted from freshly thawed samples, using the procedure above. Fe^{+2} was extracted with neutral ammonium acetate (8) and $Fe^{+2} + Fe^{+3} +$ acid soluble Fe were extracted with pH^3 ammonium acetate (9). In both cases the sample/extractant ratio was about 1:10 for 30 minutes.

7. Phosphorous was extracted using a modification of the procedure for available P (phosphorous soluble in dilute acid-fluoride) as described by Jackson (5). Phosphorous determination was made by the chlorostannous-reduced molybdophosphoric blue color method (6) adapted to automated analysis. The sample/extractant ratio was 1:10 with an extraction time of 1 minute.

8. Extractable cations as iron, manganese, and zinc were extracted from samples using 1N HCl with a sample/extractant ratio of 1:10 and an extraction time of 30 minutes. Concentrations in the extracts were determined by atomic absorption spectrophotometry.

Extractable copper was obtained by the EDTA extraction method as modified by ~~Markan~~ (10). Extracted Cu concentrations were determined

by atomic absorption spectrophotometry. The sample/extractant ratio was 1:10 with an extraction time of 30 minutes.

The values of the determined substances are considered as levels of the substances that are in available forms to zoobenthos and phytobenthos; however, the significance and relationship of the substances to the biota have to be evaluated.

References to sediment analysis

1. Allison, L. G. 1965. Methods of Soil Analysis, part 2, American Society of Agronomy, Monograph 9, pp. 1372-1375.
2. Bremner, J. M. 1960. J. Agr. Sci. (55) pp. 11-51.
3. Bremner, J. M. 1965. Methods of Soil analysis, part 2, American Society of Agronomy, Monograph 9, pp. 1185.
4. Day, P. R. 1965. Methods of Soil Analysis, part 1, American Society of Agronomy, Monograph 9, pp. 562-566.
5. Jackson, M. L. 1958. Soil Chemical Analysis, pp. 154-156.
6. Ibid. pp. 144-146.
7. Ibid. pp. 82-109, 128-129.
8. Ibid. pp. 391-392.
9. Ibid. pp. 392.
10. Makhan, D. S. 1969. M.Sc. Thesis (McGill University).
11. Russell, E. W. 1961. Soil Conditions and Plant Growth. pp. 276-279.

ACKNOWLEDGEMENTS

I wish to extend my gratitude to scientists and technicians of the Biological Oceanography Section who have contributed in various ways with this project. Special mention should be made of E. G. Atkinson who was involved in most of the collecting and some of the processing, and to Linda Derick who contributed greatly to the processing of the samples as well as the data. A. A. Mohammed identified the amphipods and E. H. Grainger provided the temperature and salinity data. Appreciation is extended to I. Lubinsky of Winnipeg, Manitoba for identifying some of the pelecypods and to A. F. MacKenzie, McGill University, for processing the sediments.

List of Tables

- Table 1. Coordinates of stations sampled in the Eskimo Lakes, 1971-1973.
- Table 2. Collection data for stations sampled by grab in the Eskimo Lakes, 1971-1973.
- Table 3. Species of invertebrates collected by grab from all stations in the Eskimo Lakes, 1971-1973.
- Table 4. Number of species, density and biomass of invertebrates collected by grab from stations sampled in Eskimo Lakes, 1971-1973.
- Table 5. Density and biomass of invertebrates collected by grab from Station 507.
- Table 6. Density and biomass of invertebrates collected by grab from Station 507A.
- Table 7. Density of invertebrates collected by grab from Station 508, 1971-1972.
- Table 8. Biomass of invertebrates collected by grab from Station 508, 1971- 1972.
- Table 9. Density and biomass of invertebrates collected by grab from Station 509.
- Table 10. Density of invertebrates collected by grab from Station 510, 1971-1972.
- Table 11. Biomass of invertebrates collected by grab from Station 510, 1971-1972.
- Table 12. Density and biomass of invertebrates collected by grab from Station 511.
- Table 13. Density and biomass of invertebrates collected by grab from Station 512.

- Table 14. Density and biomass of invertebrates collected by grab from Station 513.
- Table 15. Density and biomass of invertebrates collected by grab from Station 514.
- Table 16. Density of invertebrates collected by grab from Station 515, 1972 - 1973.
- Table 17. Biomass of invertebrates collected by grab from Station 515, 1972 - 1973.
- Table 18. Density and biomass of invertebrates collected by grab from Station 516.
- Table 19. Density and biomass of invertebrates collected by grab from Station 517.
- Table 20. Density and biomass of invertebrates collected by grab from Station 518.
- Table 21. Density and biomass of invertebrates collected by grab from Station 519.
- Table 22. Density and biomass of invertebrates collected by grab from Station 520.
- Table 23. Density and biomass of invertebrates collected by grab from Station 521.
- Table 24. Density and biomass of invertebrates collected by grab from Station 522.
- Table 25. Density and biomass of invertebrates collected by grab from Station 523.
- Table 26. Density and biomass of invertebrates collected by grab from Station 524.

- Table 27. Density and biomass of invertebrates collected by grab from Station 525.
- Table 28. Particle size distribution (Wentworth Scale) of sediments collected by grab from Eskimo Lakes, 1971.
- Table 29. Water content, pH, and % organic carbon of sections of sediment cores collected from stations in Eskimo Lakes, 1971.
- Table 30. Water content and pH of sediments collected by grab from stations in Eskimo Lakes, 1972.
- Table 31. Particle size distribution of sediments (Wentworth Scale) collected by grab from stations in Eskimo Lakes, 1972.
- Table 32. Levels of nitrate, nitrite, ammonia and total nitrogen; organic carbon and carbon-nitrogen ratio of sediments collected by grab from stations in Eskimo Lakes, 1972.
- Table 33. Levels of potassium, calcium, magnesium, manganese, and zinc in sediments collected by grab from stations in Eskimo Lakes, 1972.
- Table 34. Levels of phosphorus, copper, and iron in sediments collected by grab from stations in Eskimo Lakes, 1972.

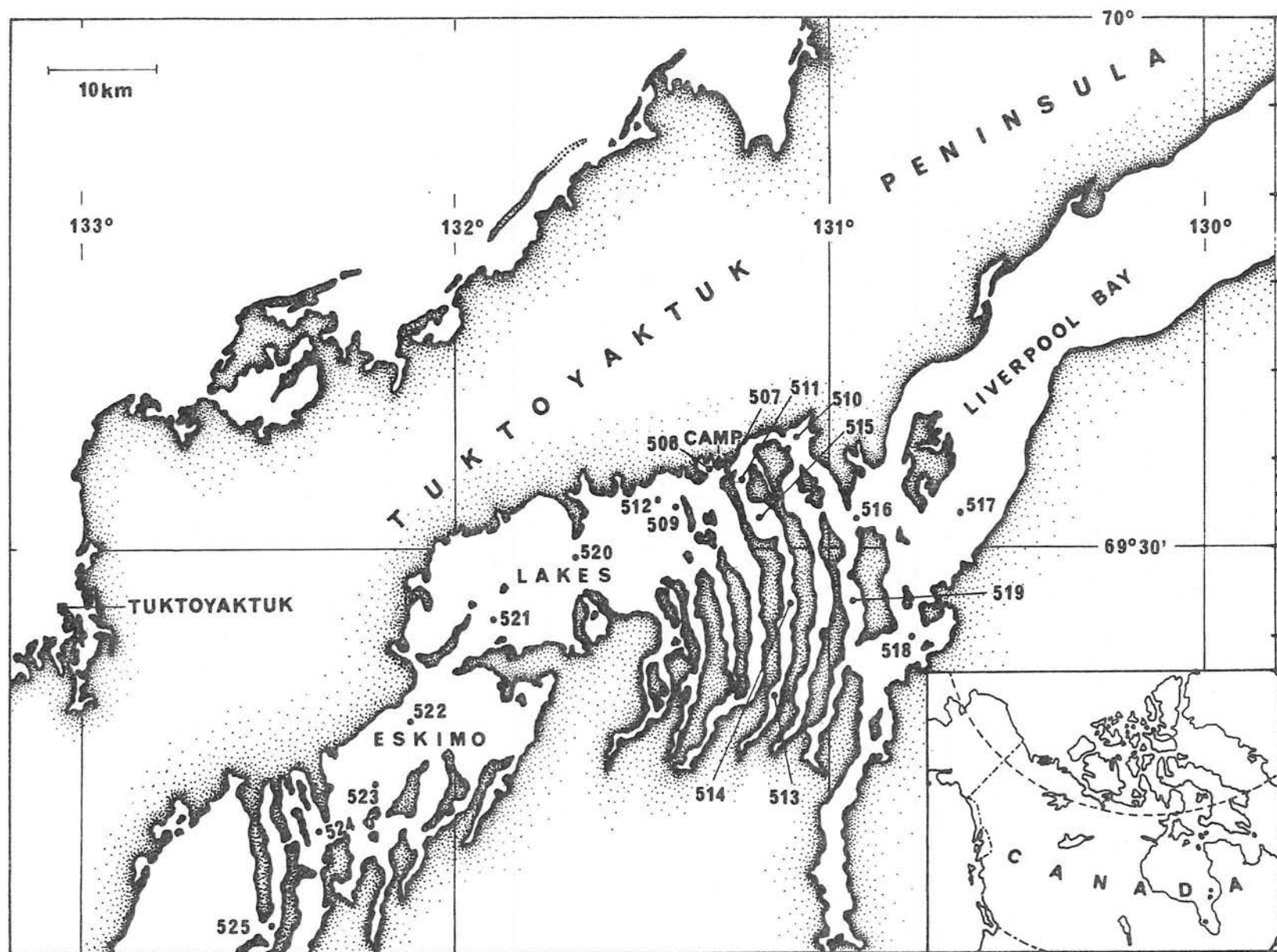


Fig. 1. Stations sampled in Eskimo Lakes, 1971-73. Station 507A, not shown, is located between Camp and Station 507.

Table 1. Coordinates of stations sampled in the Eskimo Lakes, 1971-1973.

Station Number	North Latitude	West Longitude
507	69°34.5'	131°15'
507A	69°34.7'	131°16'
508	69°34.8'	131°18'
509	69°32.5'	131°24'
510	69°36.5'	131°04'
511	69°33.8'	131°13'
512	69°33'	131°27'
513	69°22'	131°08'
514	69°27'	131°06'
515	69°32'	131°11'
516	69°32'	130°55'
517	69°32'	130°40'
518	69°25'	130°47'
519	69°27'	130°55'
520	69°30'	131°39'
521	69°26'	131°53'
522	69°20'	132°05'
523	69°17'	132°14'
524	69°14'	132°21'
525	69°09'	132°29'

Table 2. Collection data for stations sampled by grab in the Eskimo Lakes, 1971-73.

Station	Date	Time		Number of grabs	Sampled Area (m ²)	Depth (m)	Temp. (C)	Sal. (‰)
		(PST)	(GMT)					
507	9 Aug 72	1440	2240	5	0.325	25	7.5	13.45
507A	17 Aug 71	1435	2235	6	0.390	3	-	-
508	17 Aug 71	1530	2330	6	0.390	15	9.1	14.07
508	15 Dec 71	1400	2200	5	0.325	22	-1.0	14.44
508	18 May 72	1730	0130	6	0.300	23	-0.9	16.95
508	19 Jul 72	-	-	6	0.390	24	4.3	13.57
508	28 Aug 72	1115	1915	5	0.325	18	8.5	13.57
508	24 Nov 72	1200	2000	4	0.260	19	-0.8	14.74
509	17 Aug 71	1700	0100	6	0.390	72	2.3	-
510	25 Aug 71	1500	2300	6	0.390	55	8.6	14.55
510	19 Jul 72	-	-	6	0.390	62	5.4	13.15
510	28 Aug 72	1015	1815	5	0.325	58	8.9	13.72
511	25 Aug 71	1715	0115	6	0.390	16	-	-
512	9 Aug 72	1214	2014	5	0.325	29	4.5	14.36
513	12 Aug 72	1140	1940	5	0.325	25	0.0	16.75
514	12 Aug 72	1240	2040	5	0.325	43	0.0	17.79
515	12 Aug 72	1345	2145	5	0.325	43	-0.5	17.07
515	28 Jun 73	1635	0035	5	0.325	41	0.7	-
515	16 Aug 73	1030	1830	5	0.325	44	1.4	19.60
516	13 Aug 72	0940	1740	5	0.325	11	8.5	14.48
517	13 Aug 72	1035	1835	5	0.325	7	4.1	22.51
518	13 Aug 72	1145	1945	5	0.325	12	9.3	13.66
519	13 Aug 72	1320	2120	5	0.325	43	9.5	12.49
520	25 Aug 72	1315	2115	5	0.325	43	2.3	14.84
521	25 Aug 72	1520	2320	5	0.325	7	10.3	12.72
522	25 Aug 72	1720	0120	5	0.325	23	11.0	11.62
523	25 Aug 72	1855	0255	5	0.325	9	11.5	10.70
524	26 Aug 72	0615	1415	5	0.325	6	11.5	9.93
525	26 Aug 72	1020	1820	5	0.325	9	12.1	7.03

Table 3. Species of invertebrates collected by grab from all stations in the Eskimo Lakes, 1971-73.

Species	No.
ANNELIDA: Oligochaeta	1
<u>Peloscolex</u> sp.	
ANNELIDA: Polychaeta	29
<u>Aglaophamus malmgreni</u>	
<u>Ampharete acutifrons</u>	
<u>Ampharete vega</u>	
<u>Amphicteis sundevalli</u>	
<u>Antinoeliasarsi</u>	
<u>Aricidea</u> sp.	
<u>Capitella capitata</u>	
<u>Chaetozone</u> sp.	
<u>Chone</u> sp.	
<u>Ephesiella minuta</u>	
<u>Euchone papillosa</u>	
<u>Harmothoe imbricata</u>	
<u>Leiochone polaris</u>	
<u>Malacoceros fuliginosus</u>	
<u>Micronephthys minuta</u>	
<u>Nephtys longosetosa</u>	
<u>Nereimyra aphroditoides</u>	
<u>Nicolea</u> sp.	
<u>Orbinia</u> sp.	
<u>Polydora caeca</u>	
<u>Polydora quadrilobata</u>	
<u>Prionospio cirrifera</u>	
<u>Scoloplos armiger</u>	
<u>Spio filicornis</u>	
Spionid	
<u>Stauronereis caecus</u>	
<u>Terebellides stroemi</u>	
<u>Travisia forbesi</u>	
<u>Trochochaeta carica</u>	
ARTHROPODA: Amphipoda	21
<u>Aceroides latipes</u>	

Table 3. (cont'd.)

Species	No.
<u>Atylus carinatus</u>	
<u>Boeckosimus affinis</u>	
<u>Boeckosimus plautus</u>	
<u>Caprella</u> sp.	
<u>Corophium clarencense</u>	
<u>Dulichia porrecta</u>	
<u>Gammarus oceanicus</u>	
<u>Gammarus setosus</u>	
<u>Goesia depressa</u>	
<u>Halirages megalops</u>	
<u>Metopa bruzelii</u>	
<u>Monoculodes</u> sp.	
<u>Monoculopsis longicornis</u>	
<u>Onisimus glacialis</u>	
<u>Paroediceros lynceus</u>	
<u>Pontoporeia affinis</u>	
<u>Pontoporeia femorata</u>	
<u>Tryphosella schneideri</u>	
<u>Weyprechtia heuglini</u>	
<u>Weyprechtia pinguis</u>	
ARTHROPODA: Cirripedia	1
<u>Balanus crenatus</u>	
ARTHROPODA: Cumacea	4
<u>Brachydiastylis resima</u>	
<u>Diastylis sulcata</u>	
<u>Diastylis</u> sp.	
<u>Leucon pallidus</u>	
ARTHROPODA: Isopoda	1
<u>Mesidotea entomon</u>	
ASCHELMINTHES: Nematoda	1 ?
Nematodes	

Table 3. (cont'd.)

Species	No.
CHORDATA: Ascidiacea	1
<u>Rhizomolgula globularis</u>	
COELENTERATA: Hydrozoa	2
Hydroid	
<u>Tubularia regalis</u>	
ECTOPROCTA	2
Ectoproct a	
Ectoproct b	
MOLLUSCA: Gastropoda	7
<u>Amauropsis purpurea</u>	
<u>Cylichna occulta</u>	
<u>Cylichna</u> sp.	
Nudibranch	
<u>Oenopota arctica</u>	
<u>Oenopota</u> sp.	
<u>Retusa obtusa</u>	
MOLLUSCA: Pelecypoda	6
<u>Cyrtodaria kurriana</u>	
<u>Lyonsia arenosa</u>	
<u>Macoma balthica</u>	
<u>Montacuta maltzani</u>	
<u>Mytilus edulis</u>	
<u>Yoldiella intermedia</u>	
NEMERTINA	1 ?
Nemerteans	
PORIFERA	1
<u>Haliclona gracilis</u>	
PRIAPULIDA	2
<u>Halicryptus spinulosus</u>	
<u>Priapulus caudatus</u>	
TOTAL	80

Table 4. Number of species, density and biomass of invertebrates collected by grab from stations sampled in Eskimo Lakes, 1971-1973.

Station	Date	Number of species	Density (no. m ⁻²)	Biomass (g m ⁻²)
507	9 Aug 72	38	16434	141.61
507A	17 Aug 71	39	29922	6.69
508	17 Aug 71	37	12477	13.90
508	15 Dec 71	24	7791	5.35
508	18 May 72	19	4659	2.31
508	19 Jul 72	30	4195	2.56
508	28 Aug 72	28	10455	4.06
508	24 Nov 72	14	368	4.36
509	17 Aug 71	25	9712	3.37
510	25 Aug 71	32	9377	20.08
510	19 Jul 72	32	4407	5.50
510	28 Aug 72	29	6804	13.18
511	25 Aug 71	29	12735	4.19
512	9 Aug 72	26	2616	4.73
513	12 Aug 72	12	753	0.27
514	12 Aug 72	11	2322	0.96
515	12 Aug 72	16	2604	2.00
515	28 Jun 73	18	2298	1.48
515	16 Aug 73	20	2736	2.33
516	13 Aug 72	43	22662	297.08
517	13 Aug 72	32	9219	1.89
518	13 Aug 72	31	2118	2.61
519	13 Aug 72	27	1593	5.37
520	25 Aug 72	23	10581	7.58
521	25 Aug 72	23	12501	4.23
522	25 Aug 72	20	7149	3.54
523	25 Aug 72	17	4686	1.39
524	26 Aug 72	17	3513	1.37
525	26 Aug 72	19	7446	4.40

Table 5. Density and biomass of invertebrates collected by grab from Station 507.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Oligochaeta		
<u>Peloscolex</u> sp.	117	0.0036
ANNELIDA: Polychaeta		
<u>Antinoella sarsi</u>	6	0.0291
<u>Capitella capitata</u>	333	0.0735
<u>Chaetozone</u> sp.	507	0.0876
<u>Eteone longa</u>	21	0.0198
<u>Harmothoe imbricata</u>	33	0.1917
<u>Leiochone polaris</u>	111	0.2772
<u>Micronephthys minuta</u>	444	0.0621
<u>Nereimyra aphroditoides</u>	4422	2.1570
<u>Prionospio cirrifera</u>	1464	0.2310
<u>Spio filicornis</u>	3	0.0018
<u>Terebellides stroemi</u>	15	0.0111
Pieces of polychaetes	X	0.0288
ARTHROPODA: Amphipoda		
<u>Atylus carinatus</u>	123	0.3870
<u>Boeckosimus affinis</u>	3003	1.9911
<u>Boeckosimus plautus</u>	39	0.0351
<u>Corophium clarencense</u>	219	0.0180
<u>Dulichia porrecta</u>	12	0.0009
<u>Goesia depressa</u>	3	0.0001
<u>Metopa bruzelii</u>	9	0.0003
<u>Paroedicerus lynceus</u>	54	0.0756
<u>Pontoporeia femorata</u>	339	0.0951
<u>Tryphosella schneideri</u>	90	0.0318
<u>Weyprechtia pinguis</u>	9	0.0141
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	1368	0.1872
<u>Leucon pallidus</u>	3	0.0003

Table 5. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	396	0.0210
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	579	67.7733
COELENTERATA: Hydrozoa		
Hydroid	X	0.1110
Tubularia regalis	X	36.0543
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	27	0.0042
Nudibranch	3	0.0009
<u>Oenopota sp.</u>	42	0.0429
<u>Retusa obtusa</u>	6	0.0006
MOLLUSCA: Pelecypoda		
<u>Macoma balthica</u>	12	0.1002
<u>Mytilus edulis</u>	1779	12.9693
<u>Yoldiella intermedia</u>	774	3.2103
NEMERTINA		
Miscellaneous nemerteans	69	0.0705
PORIFERA		
<u>Haliclona gracilis</u>	X	15.2325
MISCELLANEOUS INVERTEBRATES		
	X	0.0051
TOTAL	16434	141.6070
Organic material	X	274.2000
Algae	X	3.1371
Fish	3	0.5301

Table 6. Density and biomass of invertebrates collected by grab from Station 507A.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Oligochaeta		
<u>Peloscolex</u> sp.	75.0	0.0040
ANNELIDA: Polychaeta		
<u>Ampharete</u> <u>vega</u>	5.0	0.0053
<u>Antinoella</u> <u>sarsi</u>	20.0	0.1835
<u>Aricidea</u> sp.	2.5	0.0005
<u>Capitella</u> <u>capitata</u>	5.0	0.0005
<u>Chaetozone</u> sp.	175.0	0.0180
<u>Eteone</u> <u>longa</u>	5.0	0.0050
<u>Harmothoe</u> <u>imbricata</u>	10.0	0.1083
<u>Micronephthys</u> <u>minuta</u>	90.0	0.0078
<u>Nereimyra</u> <u>aphroditoides</u>	9220.0	2.2750
<u>Nicolea</u> sp.	45.0	0.0598
<u>Polydora</u> <u>quadrilobata</u>	15.0	0.0023
<u>Prionospio</u> <u>cirrifera</u>	1510.0	0.3358
<u>Spio</u> <u>filicornis</u>	5.0	0.0045
<u>Terebellides</u> <u>stroemi</u>	5.0	0.0378
Pieces of polychaetes	X	0.0360
ARTHROPODA: Amphipoda		
<u>Atylus</u> <u>carinatus</u>	2.5	0.0003
<u>Boeckosimus</u> <u>affinis</u>	145.0	0.2245
<u>Boeckosimus</u> <u>plautus</u>	2.5	0.0001
<u>Corophium</u> <u>clarencense</u>	14810.0	1.6705
<u>Dulichia</u> <u>porrecta</u>	885.0	0.0558
<u>Halirages</u> <u>megalops</u>	17.5	0.0010
<u>Metopa</u> <u>bruzelii</u>	22.5	0.0005
<u>Monoculodes</u> sp.	2.5	0.0001
<u>Paroediceros</u> <u>lynceus</u>	37.5	0.0330

Table 6. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
<u>Pontoporeia femorata</u>	2222.5	0.7770
<u>Tryphosella schneideri</u>	27.5	0.0090
<u>Weyprechtia pinguis</u>	2.5	0.0083
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	12.5	0.0018
<u>Diastylis sulcata</u>	5.0	0.0008
<u>Leucon pallidus</u>	7.5	0.0005
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	295.0	0.0063
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	22.5	0.1988
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	10.0	0.0148
Nudibranch	157.5	0.0590
MOLLUSCA: Pelecypoda		
<u>Macoma balthica</u>	12.5	0.5078
<u>Mytilus edulis</u>	5.0	0.0005
<u>Yoldiella intermedia</u>	20.0	0.0025
NEMERTINA		
Miscellaneous nemerteans	7.5	0.0030
PRIAPULIDA		
<u>Priapulus caudatus</u>	2.5	0.0263
MISCELLANEOUS INVERTEBRATES	X	0.0036
TOTAL	29922.5	6.6899
Organic material	X	8.5910
Algae	X	3.3535

Table 7. Density of invertebrates (no. m⁻²) collected by grab from Station 508, 1971-72.

Species	17 Aug	15 Dec	18 May	19 Jul	28 Aug	24 Nov
ANNELIDA: Oligochaeta						
<u>Peloscolex</u> sp.	22.5					
ANNELIDA: Polychaeta						
<u>Antinoella sarsi</u>	17.5	3.0		5.0	3.0	
<u>Capitella capitata</u>	82.5	30.0		25.0	36.0	19.0
<u>Chaetozone</u> sp.	2210.0	1215.0		387.5	600.0	64.6
<u>Chone</u> sp.				5.0		
<u>Eteone longa</u>	7.5	6.0	6.6	2.5	3.0	
<u>Harmothoe imbricata</u>	7.5					11.4
<u>Leiochone polaris</u>	12.5	105.0	59.4	122.5	9.0	
<u>Malacoceros fuliginosus</u>			3.3		3.0	
<u>Micronephthys minuta</u>	1215.0	2463.0	128.7	835.0	1983.0	68.4
<u>Nereimyra aphroditoides</u>	1537.5	165.0		187.5	273.0	57.0
<u>Polydora caeca</u>	22.5		3.3			
<u>Polydora quadrilobata</u>		18.0		100.0	81.0	
<u>Prionospio cirrifera</u>	450.0	87.0		67.5	141.0	15.2
<u>Trochochaeta carica</u>		3.0		10.0		
Pieces of polychaetes	X	X		X	X	X
ARTHROPODA: Amphipoda						
<u>Aceroides latipes</u>	2.5			3.0		
<u>Atylus carinatus</u>	25.0					
<u>Boeckosimus affinis</u>	85.0		13.2	7.5	33.0	
<u>Boeckosimus plautus</u>	5.0			5.0	12.0	
<u>Gorophium clarencense</u>	177.5	120.0	6.6	40.0	282.0	
<u>Dulichia porrecta</u>	5.0				3.0	
<u>Grammarus oceanicus</u>				152.5		
<u>Goesia depressa</u>		3.0	3.3	7.5	48.0	
<u>Halirages megalops</u>	12.5					

Table 7. (cont'd.)

Species	17 Aug	15 Dec	18 May	19 Jul	28 Aug	24 Nov
<u>Onisimus glacialis</u>				5.0		
<u>Paroediceros lynceus</u>	40.0				3.0	
<u>Pontoporeia affinis</u>				2.5		
<u>Pontoporeia femorata</u>	30.0	27.0	6.6	10.0	36.0	26.6
<u>Tryphosella schneideri</u>	97.5	9.0	16.5	7.5	63.0	
<u>Weyprechtia pinguis</u>	2.5					
Pieces of amphipods	X			X	X	
ARTHROPODA: Cirripedia						
<u>Balanus crenatus</u>	290.0					
ARTHROPODA: Cumacea						
<u>Brachydiastylis resima</u>	4755.0	2754.0	3633.3	1915.0	6240.0	41.8
<u>Diastylis sulcata</u>	2.5		3.3		3.0	
<u>Diastylis</u> sp.	2.5	12.0	75.9	2.5	48.0	
<u>Leucon pallidus</u>	27.5	48.0	181.5	10.0	132.0	
Immature cumaceans		114.0				
ASCHELMINTHES: Nematoda						
Miscellaneous nematodes	30.0	12.0	3.3	7.5	3.0	22.8
CHORDATA: Ascidiacea						
<u>Rhizomolgula globularis</u>	795.0	390.0	36.3	57.5	66.0	
ECTOPROCTA						
Miscellaneous ectoprocts	X					
MOLLUSCA: Gastropoda						
<u>Cylichna occulta</u>	45.0	48.0	82.5	30.0	153.0	
<u>Oenopota arctica</u>	12.5					
<u>Retusa obtusa</u>	5.0	9.0	49.5	5.0	51.0	3.8
MOLLUSCA: Pelecypoda						
<u>Macoma balthica</u>						3.8
<u>Mytilus edulis</u>	100.0			2.5		19.0
<u>Yoldiella intermedia</u>	290.0	78.0	339.3	152.5	144.0	15.2

Table 7. (cont'd.)

Species	17 Aug	15 Dec	18 May	19 Jul	28 Aug	24 Nov
NEMERTINA						
Miscellaneous nemerteans	55.0	72.0		27.5		
PORIFERA						
<u>Haliclona gracilis</u>	X					X
MISCELLANEOUS INVERTEBRATES	X	X	X	X	X	X
TOTAL	12477.5	7791.0	4659.0	4195.0	10455.0	368.6
Organic material			X	X	X	X
Algae	X					X

Table 8. Biomass of invertebrates (g m^{-2}) collected by grab from Station 508, 1971-72.

Species	17 Aug	15 Dec	18 May	19 Jul	28 Aug	24 Nov
ANNELIDA: Oligochaeta						
<u>Peloscolex</u> sp.	0.0008					
ANNELIDA: Polychaeta						
<u>Antinoella sarsi</u>	0.0793	0.0006		0.0083	0.0843	
<u>Capitella capitata</u>	0.0170	0.0090		0.0060	0.0090	0.0080
<u>Chaetozone</u> sp.	0.1895	0.0933		0.0785	0.0573	0.0110
<u>Chone</u> sp.				0.0008		
<u>Eteone longa</u>	0.0035	0.0078	0.0013	0.0020	0.0039	
<u>Harmothoe imbricata</u>	0.0098					0.0072
<u>Leiochone polaris</u>	0.0150	0.2139	0.1218	0.1750	0.0096	
<u>Malacoceros fuliginosus</u>			0.0086		0.0219	
<u>Micronephthys minuta</u>	0.1040	0.1811	0.0102	0.1183	0.2433	0.0061
<u>Nereimyra aphroditoides</u>	0.5085	0.1074		0.1173	0.1896	0.0251
<u>Polydora caeca</u>	0.0003		0.0001			
<u>Polydora quadrilobata</u>		0.0048		0.0165	0.0273	
<u>Prionospio cirrifera</u>	0.0455	0.0177		0.0100	0.0165	0.0011
<u>Trochochaeta carica</u>		0.0001		0.0045		
Pieces of polychaetes	0.0030	0.0267		0.0025	0.0021	0.0049
ARTHROPODA: Amphipoda						
<u>Aceroides latipes</u>	0.0013				0.0009	
<u>Atylus carinatus</u>	0.0300					
<u>Boeckosimus affinis</u>	0.1328		0.0855	0.0345	0.1698	
<u>Boeckosimus plautus</u>	0.0051			0.0053	0.0108	
<u>Corophium clarencense</u>	0.0180	0.0018	0.0001	0.0013	0.0177	
<u>Dulichia porrecta</u>	0.0001				0.0001	
<u>Grammarus oceanicus</u>				0.0253		
<u>Goesia depressa</u>		0.0004	0.0006	0.0008	0.0120	
<u>Halirages megalops</u>	0.0005					

Table 8. (cont'd.)

Species	17 Aug	15 Dec	18 May	19 Jul	28 Aug	24 Nov
<u>Onisimus glacialis</u>				0.0004		
<u>Paroediceros lynceus</u>	0.0098				0.0186	
<u>Pontoporeia affinis</u>				0.0001		
<u>Pontoporeia fermorata</u>	0.0080	0.0045	0.0026	0.0013	0.0081	0.0296
<u>Tryphosella schneideri</u>	0.0208	0.0021	0.0076	0.0010	0.0279	
<u>Weyprechtia pinguis</u>	0.0001					
Pieces of amphipods	.0100			0.0001	0.0001	
ARTHROPODA: Cirripedia						
<u>Balanus crenatus</u>	1.3000					
ARTHROPODA: Cumacea						
<u>Brachydiastylis resima</u>	0.7120	0.7008	0.7230	0.4023	1.6134	0.0087
<u>Diastylis sulcata</u>	0.0005		0.0017		0.0039	
<u>Diastylis</u> sp.	0.0013	0.0045	0.0228	0.0018	0.0786	
<u>Leucon pallidus</u>	0.0018	0.0036	0.0086	0.0008	0.0105	
Immature cumaceans		0.0009				
ASCHELMINTHES: Nematoda						
Miscellaneous nematodes	0.0001	0.0001	0.0001	0.0025	0.0001	0.0001
CHORDATA: Ascidiacea						
<u>Rhizmolgula globularis</u>	1.2620	2.9664	0.2990	0.0878	0.3762	
ECTOPROCTA						
Miscellaneous ectoprocts	0.0280					
MOLLUSCA: Gastropoda						
<u>Cylichna occulta</u>	0.0175	0.0123	0.0139	0.0093	0.0474	
<u>Oenopota arctica</u>	0.0133					
<u>Retusa obtusa</u>	0.0043	0.0030	0.0053	0.0003	0.0069	0.0004
MOLLUSCA: Pelecypoda						
<u>Macoma balthica</u>						0.0001
<u>Mytilus edulis</u>	6.3880			0.0115	1.0241	
<u>Yoldiella intermedia</u>	1.4133	0.9624	0.9923	1.3610	0.9894	0.2356

Table 8. (cont'd.)

Species	17 Aug	15 Dec	18 May	19 Jul	28 Aug	24 Nov
NEMERTINA						
Miscellaneous nemertens	0.0160	0.0210		0.0733		
PORIFERA						
<u>Haliclona gracilis</u>	1.5295					3.0001
MISCELLANEOUS INVERTEBRATES	0.0033	0.0003	0.0009	0.0015	0.0009	0.0001
TOTAL	13.8964	5.3535	2.3060	2.5619	4.0581	4.3622
Organic material			20.8065	5.2225	3.1770	24.1110
Algae	6.8398					11.7724

Table 9. Density and biomass of invertebrates collected by grab
from Station 509.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Antinoella sarsi</u>	17.5	0.0408
<u>Capitella capitata</u>	20.0	0.0025
<u>Chaetozone</u> sp.	1925.0	0.1208
<u>Leiochone polaris</u>	5.0	0.0018
<u>Micronephthys minuta</u>	277.5	0.0373
<u>Nereimyra aphroditodes</u>	1622.5	0.3605
<u>Prionospio cirrifera</u>	2845.0	0.1283
<u>Stauronereis caecus</u>	20.0	0.0005
<u>Trochochaeta carica</u>	10.0	0.0025
Pieces of polychaetes	X	0.0050
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	2.5	0.0145
<u>Boeckosimus plautus</u>	7.5	0.0028
<u>Corophium clarencense</u>	77.5	0.0033
<u>Dulichia porrecta</u>	5.0	0.0005
<u>Pontoporeia femorata</u>	10.0	0.0005
<u>Tryphosella schneideri</u>	15.0	0.0015
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	42.5	0.0053
<u>Leucon pallidus</u>	2.5	0.0001
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	10.0	0.0010
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	42.5	0.0585
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	22.5	0.0155

Table 9. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
Oenopota sp.	27.5	0.0213
MOLLUSCA: Pelecypoda		
<u>Mytilus edulis</u>	12.5	0.0033
<u>Yoldiella intermedia</u>	2662.5	2.0293
NEMERTINA		
Miscellaneous nemerteans	20.0	0.3820
PRIAPULIDA		
<u>Priapulus caudatus</u>	10.0	0.1118
MISCELLANEOUS INVERTEBRATES	X	0.0153
TOTAL	9712.5	3.3665
Organic material	X	34.9250

Table 10. Density of invertebrates collected by grab from Station 510, 1971-72.

Species	25 Aug (no. m ⁻²)	19 Jul (no. m ⁻²)	28 Aug (no. m ⁻²)
ANNELIDA: Polychaeta			
<u>Amphicteis sundevalli</u>			3.0
<u>Antinoella sarsi</u>	25.0	7.5	12.0
<u>Capitella capitata</u>	35.0	82.5	39.0
<u>Chaetozone sp.</u>	295.0	635.0	144.0
<u>Chone sp.</u>	15.0	7.5	
<u>Eteone longa</u>	5.0	20.0	15.0
<u>Leiochone polaris</u>	127.5	230.0	153.0
<u>Micronephthys minuta</u>	1660.0	655.0	1335.0
<u>Nereimyra aphroditoides</u>	545.0	430.0	303.0
<u>Polydora quadrilobata</u>	2.5		
<u>Prionospio cirrifera</u>	122.5	72.5	60.0
<u>Terebellides stroemi</u>		2.5	
<u>Trochochaeta carica</u>	230.0	152.5	45.0
Pieces of polychaetes	X	X	X
ARTHROPODA: Amphipoda			
<u>Atylus carinatus</u>	37.5	20.0	33.0
<u>Boeckosimus affinis</u>	7.5	15.0	15.0
<u>Boeckosimus plautus</u>	25.0	10.0	30.0
<u>Corophium clarencense</u>	70.0	50.0	93.0
<u>Dulichia porrecta</u>	17.5		15.0
<u>Gammarus oceanicus</u>		257.5	
<u>Gammarus setosus</u>		2.5	
<u>Goesia depressa</u>	7.5	5.0	
<u>Monoculodes sp.</u>			6.0
<u>Paroediceros lynceus</u>	5.0		9.0
<u>Pontoporeia femorata</u>	5.0		
<u>Tryphosella schneideri</u>	90.0	5.0	48.0

Table 10. (cont'd.)

Species	25 Aug (no. m ⁻²)	19 Jul (no. m ⁻²)	28 Aug (no. m ⁻²)
ARTHROPODA: Cumacea			
<u>Brachydiastylis resima</u>	3577.5	1112.5	2400.0
<u>Diastylis sulcata</u>	2.5	2.5	
<u>Diastylis</u> sp.	60.0		96.0
<u>Leucon pallidus</u>	320.0	30.0	759.0
ASCHELIMINTHES: Nematoda			
Miscellaneous nematodes	135.0	50.0	21.0
CHORDATA: Ascidiacea			
<u>Rhizomolgula globularis</u>	927.5	270.0	378.0
MOLLUSCA: Gastropoda			
<u>Amauroopsis purpurea</u>	17.5	12.5	15.0
<u>Cylichna occulta</u>	142.5	30.0	60.0
Nudibranch		2.5	
<u>Oenopota</u> sp.		7.5	
<u>Retusa obtusa</u>	72.5		33.0
MOLLUSCA: Pelecypoda			
<u>Mytilus edulis</u>	5.0	22.5	6.0
<u>Yoldiella intermedia</u>	707.5	177.5	600.0
NEMERTINA			
Miscellaneous nemerteans	82.5	30.0	78.0
PORIFERA			
<u>Haliclona gracilis</u>		X	
MISCELLANEOUS INVERTEBRATES	X	X	X
TOTAL	9377.5	4407.5	6804.0
Organic material		X	X

Table 11. Biomass of invertebrates collected by grab from Station 510, 1971-72.

Species	25 Aug (g m ⁻²)	19 Jul (g m ⁻²)	28 Aug (g m ⁻²)
ANNELIDA: Polychaeta			
<u>Amphicteis sundevalli</u>			0.0447
<u>Antinoella sarsi</u>	0.1112	0.1128	0.1068
<u>Capitella capitata</u>	0.0085	0.0118	0.0099
<u>Chaetozone sp.</u>	0.0362	0.1205	0.0141
<u>Chone sp.</u>	0.0007	0.0008	
<u>Eteone longa</u>	0.0025	0.0153	0.0084
<u>Leiochone polaris</u>	0.2400	0.4178	0.3369
<u>Micronephthys minuta</u>	0.2170	0.0925	0.2001
<u>Nereimyra aphroditoides</u>	0.4127	0.3170	0.1992
<u>Polydora quadrilobata</u>	0.0005		
<u>Prionospio cirrifera</u>	0.0125	0.0098	0.0051
<u>Terebellides stroemi</u>		0.0003	
<u>Trochochaeta carica</u>	0.2478	0.0740	0.0264
Pieces of polychaetes	0.0200	0.0175	0.0117
ARTHROPODA: Amphipoda			
<u>Atylus carinatus</u>	0.1068	0.0650	0.2007
<u>Boeckosimus affinis</u>	0.0118	0.0565	0.0324
<u>Boeckosimus plautus</u>	0.0045	0.0150	0.0237
<u>Corophium clarencense</u>	0.0053	0.0033	0.0063
<u>Dulichia porrecta</u>	0.0005		0.0003
<u>Gammarus oceanicus</u>		0.0460	
<u>Gammarus setosus</u>		0.0170	
<u>Goesia depressa</u>	0.0015	0.0040	
<u>Monoculodes sp.</u>			0.0002
<u>Paroediceros lynceus</u>	0.0003		0.0138
<u>Pontoporeia femorata</u>	0.0001		
<u>Tryphosella schneideri</u>	0.0175	0.0033	0.0093

Table 11. (cont'd.)

Species	25 Aug (g m ⁻²)	19 Jul (g m ⁻²)	28 Aug (g m ⁻²)
ARTHROPODA: Cumacea			
<u>Brachydiastylis resima</u>	0.5868	0.1648	0.3048
<u>Diastylis sulcata</u>	0.0043	0.0023	
<u>Diastylis</u> sp.	0.0678		0.0378
<u>Leucon pallidus</u>	0.0180	0.0018	0.0564
ASCHELMINTHES: Nematoda			
Miscellaneous nematodes	0.0045	0.0018	0.0012
CHORDATA: Ascidiacea			
<u>Rhizomolgula globularis</u>	13.3540	2.3998	6.6171
MOLLUSCA: Gastropoda			
<u>Amauropsis purpurea</u>	0.0043	0.2038	0.0129
<u>Cylichna occulta</u>	0.0555	0.0118	0.0387
Nudibranch		0.0043	
<u>Oenopota</u> sp.		0.0040	
<u>Retusa obtusa</u>	0.0078		0.0060
MOLLUSCA: Pelecypoda			
<u>Mytilus edulis</u>	0.0068	0.0020	0.0003
<u>Yoldiella intermedia</u>	4.3823	1.0550	4.7172
NEMERTINA			
Miscellaneous nemerteans	0.1260	0.1783	0.1332
PORIFERA			
<u>Haliclona gracilis</u>		0.0650	
MISCELLANEOUS INVERTEBRATES			
	0.0013	0.0033	0.0003
TOTAL	20.0773	5.4982	13.1759
Organic material		12.5900	9.2163

Table 12. Density and biomass of invertebrates collected by grab from Station 511.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Antinoella sarsi</u>	17.5	0.0318
<u>Capitella capitata</u>	17.5	0.0018
<u>Chaetozone sp.</u>	190.0	0.0120
<u>Chone sp.</u>	17.5	0.0018
<u>Eteone longa</u>	10.0	0.0050
<u>Micronephthys minuta</u>	1395.0	0.1570
<u>Nereimyra aphroditoides</u>	420.0	0.1355
<u>Prionospio cirrifera</u>	372.5	0.0265
<u>Trochochaeta carica</u>	47.5	0.0118
Pieces of polychaetes	X	0.0033
ARTHROPODA: Amphipoda		
<u>Atylus carinatus</u>	5.0	0.0045
<u>Boeckosimus affinis</u>	140.0	0.0678
<u>Boeckosimus plautus</u>	10.0	0.0035
<u>Corophium clarencense</u>	340.0	0.0220
<u>Dulichia porrecta</u>	5.0	0.0002
<u>Goesia depressa</u>	87.5	0.0308
<u>Paroediceros lynceus</u>	5.0	0.0010
<u>Pontoporeia femorata</u>	12.5	0.0005
<u>Tryphosella schneideri</u>	85.0	0.0123
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	8340.0	1.5053
<u>Diastylis sp.</u>	85.0	0.0868
<u>Leucon pallidus</u>	10.0	0.0010
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	75.0	0.0018
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	175.0	0.8523

Table 12. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	132.5	0.0265
<u>Oenopota</u> sp.	17.5	0.0108
<u>Retusa obtusa</u>	5.0	0.0040
MOLLUSCA: Pelecypoda		
<u>Mytilus edulis</u>	10.0	0.0780
<u>Yoldiella intermedia</u>	685.0	1.0590
NEMERTINA		
Miscellaneous nemerteans	22.5	0.0338
MISCELLANEOUS INVERTEBRATES	X	0.0001
TOTAL	12735.0	4.1885
Organic material	X	2.5128

Table 13. Density and biomass of invertebrates collected by grab from Station 512.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Antinoella sarsi</u>	3	0.0018
<u>Capitella capitata</u>	30	0.0027
<u>Chaetozone</u> sp.	450	0.0636
<u>Eteone longa</u>	9	0.0039
<u>Leiochone polaris</u>	6	0.0141
<u>Microphthys minuta</u>	276	0.0372
<u>Nereimyra aphroditoides</u>	333	0.1620
<u>Prionospio cirrifera</u>	378	0.0549
<u>Terebellides stroemi</u>	21	0.0081
<u>Trochochaeta carica</u>	12	0.0063
Pieces of polychaetes	X	0.0111
ARTHROPODA: Amphipoda		
<u>Atylus carinatus</u>	12	0.0573
<u>Boeckosimus affinis</u>	108	0.2706
<u>Corophium clarencense</u>	24	0.0018
<u>Dulichia porrecta</u>	6	0.0012
<u>Paroedicerus lynceus</u>	3	0.0006
<u>Pontoporeia femorata</u>	6	0.0012
<u>Tryphosella schneideri</u>	3	0.0003
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	96	0.0174
<u>Diastylis</u> sp.	18	0.0168
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	24	0.0003
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	201	2.6190

Table 13. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	30	0.0069
<u>Oenopota sp.</u>	6	0.0075
MOLLUSCA: Pelecypoda		
<u>Mytilus edulis</u>	18	0.4995
<u>Yoldiella intermedia</u>	501	0.6549
NEMERTINA		
Miscellaneous nemerteans	42	0.2067
MISCELLANEOUS INVERTEBRATES	X	0.0009
TOTAL	2616	4.7286
Organic material	X	3.1182

Table 14. Density and biomass of invertebrates collected by grab from Station 513.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Capitella capitata</u>	12	0.0033
<u>Chaetozone sp.</u>	51	0.0057
<u>Micronephthys minuta</u>	69	0.0123
<u>Nereimyra aphroditoides</u>	129	0.0363
<u>Prionospio cirrifera</u>	372	0.0534
<u>Terebellides stroemi</u>	3	0.0321
ARTHROPODA: Amphipoda		
<u>Boeckosimus plautus</u>	3	0.0018
<u>Pontoporeia femorata</u>	3	0.0015
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	6	0.0051
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	27	0.0075
MOLLUSCA: Pelecypoda		
<u>Yoldiella intermedia</u>	57	0.0339
NEMERTINA		
Miscellaneous nemerteans	21	0.0741
MISCELLANEOUS INVERTEBRATES	X	0.0003
TOTAL	753	0.2673
Organic material	X	2.4132

Table 15. Density and biomass of invertebrates collected by grab from Station 514.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Antinoella sarsi</u>	3	0.0036
<u>Chaetozone</u> sp.	195	0.0252
<u>Eteone longa</u>	3	0.0018
<u>Micronephthys minuta</u>	138	0.0207
<u>Nereimyra aphroditoides</u>	585	0.1311
<u>Prionospio cirrifera</u>	1281	0.1764
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	30	0.0318
COELENTERATA: Hydrozoa		
Hydroid	3	0.0021
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	30	0.0069
MOLLUSCA: Pelecypoda		
<u>Yoldiella intermedia</u>	33	0.3813
NEMERTINA		
Miscellaneous nemerteans	21	0.1758
TOTAL	2322	0.9567
Organic material	X	1.6773

Table 16. Density of invertebrates collected by grab from Station 515, 1972 - 1973.

Species	12 Aug (no. m ⁻²)	28 Jun (no. m ⁻²)	16 Aug (no. m ⁻²)
ANNELIDA: Polychaeta			
<u>Aglaophamus malmgreni</u>		3	6
<u>Antinoella sarsi</u>	3		3
<u>Chaetozone</u> sp.	219	477	153
<u>Euchone papillosa</u>	15	18	48
<u>Leiochone polaris</u>	3		6
<u>Micronephthys minuta</u>	351	315	723
<u>Nereimyra aphroditoides</u>	159	39	27
<u>Prionospio cirrifera</u>	489	771	444
<u>Stauronereis caecus</u>		33	3
<u>Trochochaeta carica</u>	102	129	258
Pieces of polychaetes			X
ARTHROPODA: Amphipoda			
<u>Aceroides latipes</u>		3	3
<u>Boeckosimus affinis</u>			3
<u>Corophium clarencense</u>	6		3
<u>Dulichia porrecta</u>		3	
<u>Gammarus oceanicus</u>		69	
<u>Monoculodes</u> sp.		3	
<u>Onisimus glacialis</u>		6	
<u>Pontoporeia affinis</u>		18	
<u>Tryphosella schneideri</u>	3		
ARTHROPODA: Cirripedia			
<u>Balanus crenatus</u>			3
ARTHROPODA: Cumacea			
<u>Brachydiastylis resima</u>			9
CHORDATA: Ascidiacea			
<u>Rhizomolgula globularis</u>	9		9

Table 16. (cont'd.)

Species	12 Aug (no. m ⁻²)	28 Jun (no. m ⁻²)	16 Aug (no. m ⁻²)
COELENTERATA: Hydrozoa			
<u>Tubularia regalis</u>			3
MOLLUSCA: Gastropoda			
<u>Cylichna occulta</u>	75		
<u>Cylichna</u> sp.			3
Nudibranch	3		
<u>Oenopota arctica</u>			12
<u>Oenopota</u> sp.	24		
Miscellaneous gastropods		3	
MOLLUSCA: Pelecypoda			
<u>Mytilus edulis</u>		15	
<u>Yoldiella intermedia</u>	1122	381	1017
NEMERTINA			
Miscellaneous nemerteans	21	12	
MISCELLANEOUS INVERTEBRATES	X		
TOTAL	2604	2298	2736
Organic material	X		
Fish larvae		90	

Table 17. Biomass of invertebrates collected by grab from Station 515, 1972 - 1973.

Species	12 Aug (g m ⁻²)	28 Jun (g m ⁻²)	16 Aug (g m ⁻²)
ANNELIDA: Polychaeta			
<u>Aglaophamus malmgreni</u>		0.7185	0.1095
<u>Antinoella sarsi</u>	0.0015		0.0015
<u>Chaetozone</u> sp.	0.0261	0.0426	0.0102
<u>Euchone papillosa</u>	0.0417	0.0324	0.0813
<u>Leiochone polaris</u>	0.0018		0.0048
<u>Micronephthys minuta</u>	0.0714	0.0435	0.0864
<u>Nereimyra aphroditoides</u>	0.0399	0.0090	0.0024
<u>Prionospio cirrifera</u>	0.0450	0.0705	0.0210
<u>Stauronereis caecus</u>		0.0015	0.0001
<u>Trochochaeta carica</u>	0.0429	0.0681	0.0813
Pieces of polychaetes			0.0036
ARTHROPODA: Amphipoda			
<u>Aceroides latipes</u>		0.0006	0.0006
<u>Boeckosimus affinis</u>			0.0066
<u>Corophium clarencense</u>	0.0001		0.0003
<u>Dulichia porrecta</u>		0.0001	
<u>Gammarus oceanicus</u>		0.0018	
<u>Monoculodes</u> sp.		0.0001	
<u>Onisimus glacialis</u>		0.0035	
<u>Pontoporeia affinis</u>		0.0004	
<u>Tryphosella schneideri</u>	0.0006		
ARTHROPODA: Cirripedia			
<u>Balanus crenatus</u>			0.0138
ARTHROPODA: Cumacea			
<u>Brachydiastylis resima</u>			0.0027
CHORDATA: Ascidiacea			
<u>Rhizomolgula globularis</u>	0.0141		0.0243

Table 17. (cont'd.)

Species	12 Aug (g m ⁻²)	28 Jun (g m ⁻²)	16 Aug (g m ⁻²)
COELENTERATA: Hydrozoa			
<u>Tubularia regalis</u>			0.0021
MOLLUSCA: Gastropoda			
<u>Cylichna occulta</u>	0.0075		
<u>Cylichna</u> sp.			0.0078
Nudibranch	0.0018		
<u>Oenopota arctica</u>			0.0228
<u>Oenopota</u> sp.	0.0234		
Miscellaneous gastropods		0.0021	
MOLLUSCA: Pelecypoda			
<u>Mytilus edulis</u>		0.0111	
<u>Yoldiella intermedia</u>	1.5954	0.4362	1.8513
NEMERTINA			
Miscellaneous nemerteans	0.0849	0.0357	
MISCELLANEOUS INVERTEBRATES	0.0018		
TOTAL	1.9999	1.4777	2.3344
Organic material	0.5841		
Fish larvae		0.0168	

Table 18. Density and biomass of invertebrates collected by grab from Station 516.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Oligochaeta		
<u>Pelosclex</u> sp.	153	0.0039
ANNELIDA: Polychaeta		
<u>Capitella</u> <u>capitata</u>	180	0.0516
<u>Chaetozone</u> sp.	45	0.0072
<u>Eteone</u> <u>longa</u>	9	0.0066
<u>Harmothoe</u> <u>imbricata</u>	351	1.2681
<u>Micronephthys</u> <u>minuta</u>	15	0.0015
<u>Nereimyra</u> <u>aphroditoides</u>	4338	2.1297
<u>Nicolea</u> sp.	42	0.0615
<u>Polydora</u> <u>caeca</u>	27	0.0030
<u>Prionospio</u> <u>cirrifera</u>	147	0.0375
<u>Spio</u> <u>filicornis</u>	12	0.0048
<u>Terebellides</u> <u>stroemi</u>	18	0.0585
Pieces of polychaetes	X	0.0141
ARTHROPODA: Amphipoda		
<u>Atylus</u> <u>carinatus</u>	15	0.0207
<u>Boeckosimus</u> <u>affinis</u>	2895	3.1098
<u>Boeckosimus</u> <u>plautus</u>	15	0.0090
<u>Caprella</u> sp.	3	0.0001
<u>Corophium</u> <u>clarencense</u>	66	0.0048
<u>Dulicia</u> <u>porrecta</u>	63	0.0027
<u>Gammarus</u> <u>oceanicus</u>	27	0.0093
<u>Gammarus</u> <u>setosus</u>	18	0.1602
<u>Halirages</u> <u>megalops</u>	18	0.0006
<u>Metopa</u> <u>bruzellii</u>	1008	0.0237

Table 18. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
<u>Monoculodes</u> sp.	3	0.0001
<u>Paroediceros lynceus</u>	6	0.0006
<u>Pontoporeia femorata</u>	24	0.0057
<u>Tryphosella schneideri</u>	24	0.0138
<u>Weyprechtia heuglini</u>	6	0.0084
<u>Weyprechtia pinguis</u>	21	0.0441
ARTHROPODA: Cirripedia		
<u>Balanus crenatus</u>	2952	21.18
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	48	0.0096
<u>Diastylis sulcata</u>	21	0.0282
ARTHROPODA: Isopoda		
<u>Mesidotea entomon</u>	33	0.0579
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	3519	0.2154
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	2058	139.4124
COELENTERATA: Hydrozoa		
<u>Tubularia regalis</u>	X	50.5395
ECTOPROCTA:		
Ectoproct a	X	2.1411
Ectoproct b	X	0.2928
MOLLUSCA: Gastropoda		
Nudibranch	18	0.0537
MOLLUSCA: Pelecypoda		
<u>Mytilus edulis</u>	4410	53.9022

Table 18. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
<u>Yoldiella intermedia</u>	3	0.0108
NEMERTINA		
Miscellaneous nemerteans	45	0.0237
PORIFERA		
<u>Haliclona gracilis</u>	X	22.0767
PRIAPULIDA		
<u>Priapulus caudatus</u>	6	0.0693
MISCELLANEOUS INVERTEBRATES	X	0.0009
TOTAL	22662	297.0758
Organic material	X	12.7629
Algae	X	18.0411

Table 19. Density and biomass of invertebrates collected by grab from Station 517.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Oligochaeta		
<u>Peloscolex</u> sp.	9	0.0001
ANNELIDA: Polychaeta		
<u>Ampharete</u> <u>vega</u>	12	0.0057
<u>Capitella</u> <u>capitata</u>	3	0.0006
<u>Chaetozone</u> sp.	126	0.0525
<u>Chone</u> sp.	3	0.0003
<u>Ephesiella</u> <u>minuta</u>	15	0.0018
<u>Eteone</u> <u>longa</u>	30	0.0156
<u>Malacoceros</u> <u>fuliginosus</u>	6	0.0243
<u>Micronephthys</u> <u>minuta</u>	6	0.0012
<u>Nephtys</u> <u>longosetosa</u>	3	0.2541
<u>Nereimyra</u> <u>aphroditoides</u>	12	0.0021
<u>Orbinia</u> sp.	12	0.0018
<u>Prionospio</u> <u>cirrifera</u>	33	0.0063
<u>Scoloplos</u> <u>armiger</u>	6	0.0078
Spionid	42	0.0048
<u>Travisia</u> <u>forbesi</u>	51	0.4770
ARTHROPODA: Amphipoda		
<u>Boeckosimus</u> <u>affinis</u>	6	0.0012
<u>Dulicia</u> <u>porrecta</u>	3	0.0001
<u>Metopa</u> <u>bruzellii</u>	3	0.0001
<u>Monoculopsis</u> <u>longicornis</u>	9	0.0002
<u>Weyprechtia</u> <u>pinguis</u>	3	0.0001
ARTHROPODA: Cumacea		
<u>Diastylis</u> <u>sulcata</u>	6	0.0009

Table 19. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	24	0.0009
COELENTERATA: Hydrozoa		
<u>Tubularia regalis</u>	X	0.3363
MOLLUSCA: Gastropoda		
<u>Amauropsis purpurea</u>	18	0.0195
<u>Cylichna occulta</u>	9	0.0009
MOLLUSCA: Pelecypoda		
<u>Lyonsia arenosa</u>	3	0.0003
<u>Montacuta maltzani</u>	8718	0.3855
<u>Mytilus edulis</u>	3	0.0024
<u>Yoldiella intermedia</u>	24	0.2208
NEMERTINA		
Miscellaneous nemerteans	21	0.0369
PORIFERA		
<u>Haliclona gracilis</u>	X	0.0090
MISCELLANEOUS INVERTEBRATES	X	0.0159
TOTAL	9219	1.8870
Organic material	X	2.0568

Table 20. Density and biomass of invertebrates collected by grab from Station 518.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Oligochaeta		
<u>Peloscolex</u> sp.	30	0.0024
ANNELIDA: Polychaeta		
<u>Ampharete acutifrons</u>	30	0.0060
<u>Ampharete vega</u>	3	0.0024
<u>Antinoella sarsi</u>	6	0.0036
<u>Capitella capitata</u>	9	0.0018
<u>Chaetozone</u> sp.	12	0.0012
<u>Eteone longa</u>	9	0.0033
<u>Leiochone polaris</u>	264	0.3108
<u>Micronephthys minuta</u>	309	0.0468
<u>Nereimyra aphroditoides</u>	105	0.0393
<u>Nicolea</u> sp.	156	0.2037
<u>Orbinia</u> sp.	3	0.0006
<u>Polydora quadrilobata</u>	15	0.0012
<u>Prionospio cirrifera</u>	3	0.0001
<u>Terebellides stroemi</u>	99	0.2412
<u>Trochochaeta carica</u>	51	0.0192
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	90	0.0882
<u>Boeckosimus plautus</u>	18	0.0105
<u>Dulichia porrecta</u>	3	0.0001
<u>Tryphosella schneideri</u>	45	0.0099
Pieces of amphipods	X	0.0001
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	78	0.0090
<u>Diastylis sulcata</u>	114	0.0189

Table 20. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
<u>Leucon pallidus</u>	156	0.0114
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	192	0.0099
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	27	0.1272
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	3	0.0072
<u>Oenopota</u> sp.	3	0.0135
MOLLUSCA: Pelecypoda		
<u>Yoldiella intermedia</u>	219	1.2249
NEMERTINA		
Miscellaneous nemerteans	63	0.1974
PORIFERA		
<u>Haliclona gracilis</u>	X	0.0012
PRIAPULIDA		
<u>Halicryptus spinulosus</u>	3	0.0006
MISCELLANEOUS INVERTEBRATES	X	0.0001
TOTAL	2118	2.6137
Organic material	X	40.5300

Table 21. Density and biomass of invertebrates collected by grab from Station 519.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Antinoella sarsi</u>	6	0.0174
<u>Capitella capitata</u>	12	0.0207
<u>Chaetozone</u> sp.	18	0.0114
<u>Leiochone polaris</u>	39	0.0678
<u>Malacoceros fuliginosus</u>	30	0.1170
<u>Micronephthys minuta</u>	492	0.0873
<u>Nereimyra aphroditoides</u>	12	0.0156
<u>Prionospio cirrifera</u>	3	0.0012
<u>Terebellides stroemi</u>	285	2.0634
<u>Trochochaeta carica</u>	21	0.0147
Pieces of polychaetes	X	0.0258
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	3	0.0090
<u>Boeckosimus plautus</u>	6	0.0039
<u>Corophium clarencense</u>	3	0.0001
<u>Goesia depressa</u>	3	0.0009
<u>Pontoporeia femorata</u>	6	0.0048
<u>Tryphosella schneideri</u>	6	0.0009
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	792	0.2034
<u>Leucon pallidus</u>	6	0.0002
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	27	0.0027
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	6	0.0024

Table 21. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	6	0.0039
<u>Oenopota sp.</u>	3	0.0504
<u>Retusa obtusa</u>	3	0.0009
MOLLUSCA: Pelecypoda		
<u>Macoma balthica</u>	3	0.0030
<u>Yoldiella intermedia</u>	78	2.5386
NEMERTINA		
Miscellaneous nemerteans	9	0.0528
PORIFERA		
<u>Haliclona gracilis</u>	X	0.0510
MISCELLANEOUS INVERTEBRATES	X	0.0003
TOTAL	1593	5.3715
Organic material	X	8.7555
Algae	X	5.0799

Table 22. Density and biomass of invertebrates collected by grab from Station 520.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Antinoella sarsi</u>	9	0.0030
<u>Capitella capitata</u>	3	0.0001
<u>Chaetozone sp.</u>	441	0.0318
<u>Eteone longa</u>	15	0.0039
<u>Micronephthys minuta</u>	372	0.0348
<u>Nereimyra aphroditoides</u>	681	0.1062
<u>Prionospio cirrifera</u>	651	0.0528
<u>Trochochaeta carica</u>	3	0.0021
Pieces of polychaetes	X	0.0027
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	12	0.0852
<u>Boeckosimus plautus</u>	12	0.0144
<u>Corophium clarencense</u>	57	0.0036
<u>Dulichia porrecta</u>	3	0.0001
<u>Paroediceros lynceus</u>	6	0.0027
<u>Pontoporeia femorata</u>	6	0.0009
<u>Tryphosella schneideri</u>	12	0.0015
ARTHROPODA: Cumacea		
<u>Brachydiastylis resima</u>	3	0.0003
<u>Diastylis sp.</u>	27	0.0036
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	21	0.0018
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	234	0.0552

Table 22. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	102	0.0123
<u>Oenopota</u> sp.	24	0.0168
MOLLUSCA: Pelecypoda		
<u>Yoldiella intermedia</u>	7848	7.0500
NEMERTINA		
Miscellaneous nemerteans	39	0.0930
MISCELLANEOUS INVERTEBRATES	X	0.0033
TOTAL	10581	7.5821
Organic material	X	1.6572

Table 23. Density and biomass of invertebrates collected by grab from Station 521.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Ampharete vega</u>	3	0.0027
<u>Antinoella sarsi</u>	39	0.0828
<u>Capitella capitata</u>	39	0.0039
<u>Chaetozone</u> sp.	1290	0.0762
<u>Eteone longa</u>	27	0.0306
<u>Micronephthys minuta</u>	3900	0.3453
<u>Nereimyra aphroditoides</u>	2649	0.7008
<u>Prionospio cirrifera</u>	777	0.0744
<u>Terebellides stroemi</u>	435	1.4667
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	90	0.0939
<u>Boeckosimus plautus</u>	9	0.0012
<u>Corophium clarencense</u>	2457	0.1509
<u>Dulichia porrecta</u>	360	0.0105
<u>Pontoporeia femorata</u>	39	0.0033
<u>Tryphosella schneideri</u>	36	0.0075
ARTHROPODA: Cumacea		
<u>Diastylis sulcata</u>	3	0.0006
<u>Diastylis</u> sp.	3	0.0078
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	6	0.0001
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	138	0.0573
<u>Oenopota</u> sp.	66	0.0480

Table 23. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
MOLLUSCA: Pelecypoda		
<u>Yoldiella intermedia</u>	39	0.2955
NEMERTINA		
Miscellaneous nemerteans	81	0.6294
PRIAPULIDA		
<u>Halicryptus spinulosus</u>	15	0.1332
MISCELLANEOUS INVERTEBRATES	X	0.0090
TOTAL	12501	4.2316
Organic material	X	5.6016
Algae	X	1.1853

Table 24. Density and biomass of invertebrates collected by grab from Station 522.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Ampharete vega</u>	12	0.0024
<u>Antinoella sarsi</u>	30	0.0336
<u>Capitella capitata</u>	51	0.0057
<u>Chaetozone sp.</u>	1212	0.0825
<u>Micronephthys minuta</u>	1377	0.1452
<u>Nereimyra aphroditoides</u>	99	0.0336
<u>Prionospio cirrifera</u>	66	0.0045
<u>Terebellides stroemi</u>	345	0.3945
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	24	0.0330
<u>Corophium clarencense</u>	24	0.0006
<u>Monoculodes sp.</u>	3	0.0001
<u>Pontoporeia femorata</u>	6	0.0009
<u>Tryphosella schneideri</u>	6	0.0009
ARTHROPODA: Cumacea		
<u>Diastylis sp.</u>	6	0.0001
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	2829	1.0782
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	162	0.0543
MOLLUSCA: Pelecypoda		
<u>Macoma balthica</u>	9	0.0420
<u>Yoldiella intermedia</u>	849	1.3773
NEMERTINA		
Miscellaneous nemerteans	21	0.1350
PRIAPULIDA		
<u>Halicryptus spinulosus</u>	18	0.1107

Table 24. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
MISCELLANEOUS INVERTEBRATES	X	0.0003
TOTAL	7149	3.5354
Organic material	X	0.6837

Table 25. Density and biomass of invertebrates collected by grab from Station 523.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Ampharete vega</u>	3	0.0015
<u>Antinoella sarsi</u>	33	0.0156
<u>Capitella capitata</u>	3	0.0003
<u>Chaetozone sp.</u>	309	0.0300
<u>Micronephthys minuta</u>	2523	0.4077
<u>Nereimyra aphroditoides</u>	78	0.0285
<u>Prionospio cirrifera</u>	879	0.1137
<u>Terebellides stroemi</u>	315	0.1230
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	63	0.0144
<u>Corophium clarencense</u>	99	0.0075
<u>Pontoporeia femorata</u>	75	0.0414
<u>Tryphosella schneideri</u>	27	0.0084
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	6	0.0006
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	114	0.0279
<u>Oenopota sp.</u>	6	0.0177
MOLLUSCA: Pelecypoda		
<u>Yoldiella intermedia</u>	135	0.2838
NEMERTINA		
Miscellaneous nemerteans	18	0.2667
MISCELLANEOUS INVERTEBRATES		
	X	0.0003
TOTAL	4686	1.3890
Organic material	X	0.5901

Table 26. Density and biomass of invertebrates collected by grab from Station 524.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Ampharete vega</u>	51	0.0129
<u>Antinoella sarsi</u>	135	0.1185
<u>Chaetozone sp.</u>	456	0.0330
<u>Eteone longa</u>	6	0.0030
<u>Micronephthys minuta</u>	1200	0.2688
<u>Nereimyra aphroditoides</u>	249	0.0570
<u>Prionospio cirrifera</u>	660	0.0534
<u>Terebellides stroemi</u>	120	0.0645
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	12	0.0237
<u>Pontoporeia femorata</u>	90	0.0666
<u>Tryphosella schneideri</u>	18	0.0027
MOLLUSCA: Gastropoda		
<u>Cylichna occulta</u>	51	0.0426
<u>Oenopota sp.</u>	21	0.0246
MOLLUSCA: Pelecypoda		
<u>Macoma balthica</u>	267	0.3897
<u>Mytilus edulis</u>	3	0.0231
<u>Yoldiella intermedia</u>	162	0.1317
PRIAPULIDA		
<u>Halicryptus spinulosus</u>	12	0.0543
MISCELLANEOUS INVERTEBRATES	X	0.0006
TOTAL	3513	1.3707
Organic material	X	0.8769
Algae	X	0.7116

Table 27. Density and biomass of invertebrates collected by grab from Station 525.

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
ANNELIDA: Polychaeta		
<u>Ampharete vega</u>	1158	0.3450
<u>Chaetozone sp.</u>	321	0.0213
<u>Eteone longa</u>	6	0.0003
<u>Malacoceros fuliginosus</u>	24	0.0171
<u>Micronephthys minuta</u>	1593	0.1470
<u>Nereimyra aphroditoides</u>	6	0.0003
<u>Prionospio cirrifera</u>	177	0.0138
ARTHROPODA: Amphipoda		
<u>Boeckosimus affinis</u>	225	0.1653
<u>Monoculodes sp.</u>	3	0.0001
<u>Pontoporeia femorata</u>	723	0.0672
ARTHROPODA: Cumacea		
<u>Diastylis sulcata</u>	1146	0.2919
ARTHROPODA: Isopoda		
<u>Mesidotea entomon</u>	21	0.0921
ASCHELMINTHES: Nematoda		
Miscellaneous nematodes	3	0.0001
CHORDATA: Ascidiacea		
<u>Rhizomolgula globularis</u>	270	0.4431
MOLLUSCA: Pelecypoda		
<u>Cyrtodaria kurriana</u>	6	0.0735
<u>Macoma balthica</u>	1110	1.9014
<u>Mytilus edulis</u>	345	0.1530
<u>Yoldiella intermedia</u>	240	0.5226
NEMERTINA		
Miscellaneous nemerteans	69	0.1353

Table 27. (cont'd.)

Species	Density (no. m ⁻²)	Biomass (g m ⁻²)
MISCELLANEOUS INVERTEBRATES	X	0.0051
TOTAL	7446	4.3955
Organic material	X	55.4100

Table 28. Particle size distribution (Wentworth Scale) of sediments collected by grab from Eskimo Lakes, 1971.

Station	Date	Water Depth (m)	Sand (% > 0.063mm)	Silt-Clay (% < 0.063mm)
507A	17 Aug	3	79	21
508	17 Aug	15	35	65
509	17 Aug	72	26	74
510	25 Aug	55	40	60
511	25 Aug	16	11	89

Table 29. Water content, pH, and % Organic C of sections of sediment cores collected from stations in Eskimo Lakes, 1971.

Station	Date	Water Depth (m)	Length of Sections (cm)	Water Content (wt/wt.%)	pH 0.01M CaCl ₂ Suspension	Organic C (%)
508	26 Aug	15	0-5	32	6.8	2.0
			5-15	38	6.9	1.3
			15-30	36	7.3	1.3
510	25 Aug	55	0-5	7	7.0	0.8
			5-15	36	7.2	1.3
			15-30	28	7.2	1.1
511	25 Aug	16	0-5	13	7.2	2.0
			5-15	18	6.8	1.1

Table 30. Water content and pH of sediments collected by grab from stations in Eskimo Lakes, 1972.

Station	Date	Water depth (m)	Water content (wt./wt.%)	pH	
				0.01 CaCl ₂ Suspension	Aqueous Suspension
507	9 Aug	25	50.0	7.3	7.8
508	18 May	23	dry	6.9	7.1
508	19 Jul	24	131.0	7.2	7.4
510	19 Jul	62	49.0	7.1	7.6
512	9 Aug	29	88.5	7.1	7.4
513	12 Aug	25	153.0	7.1	7.3
514	12 Aug	43	122.0	7.0	7.3
515	12 Aug	43	161.0	7.0	7.3
516	13 Aug	11	165.0	7.0	7.2
517	13 Aug	7	29.5	7.2	7.8
518	13 Aug	12	87.0	6.9	7.2
519	13 Aug	43	190.0	7.1	7.3
520	25 Aug	43	97.8	7.1	7.5
521	25 Aug	7	71.7	6.8	7.2
522	25 Aug	23	114.0	6.8	7.1
523	25 Aug	9	122.0	6.8	7.1
524	26 Aug	6	85.8	6.8	6.8
525	26 Aug	9	68.5	6.9	7.1

Table 31. Particle size distribution of sediments (Wentworth Scale)
collected by grab from stations in Eskimo Lakes, 1972.

Station	Water depth (m)	Sand (% > 0.063)	Silt (% > 0.0039)	Clay (% < 0.0039)
507	25	66	18	16
508 May	23	13	33	54
508 Jul	24	14	30	56
510	62	48	24	28
512	29	46	23	31
513	25	5	35	60
514	43	39	22	39
515	43	5	30	65
516	11	16	25	59
517	7	93	6	1
518	12	8	28	64
519	43	4	30	66
520	43	12	32	56
521	7	31	32	37
522	23	2	20	78
523	9	5	30	65
524	6	1	21	78
525	9	30	39	31

Table 32. Levels of nitrate, nitrite, ammonia, and total nitrogen; organic carbon and carbon-nitrogen ratio of sediments collected by grab from stations in Eskimo Lakes, 1972.

Station	NO ₃ -N (ug/g)	NO ₂ -N (ug/g)	NH ₄ -N (ug/g)	Total N (mg/g)	Organic C (%)	C/N Ratio
507	2.7	< 0.5	44	0.73	0.8	11.0
508 May	-	-	-	-	2.4	-
508 Jul	4.2	< 0.5	70	1.61	1.8	11.2
510	2.2	< 0.5	46	0.88	0.2	2.3
512	2.1	< 0.5	25	1.30	1.3	10.0
513	2.5	< 0.5	32	1.51	1.5	9.9
514	1.9	< 0.5	59	1.56	1.9	12.2
515	1.2	< 0.5	31	1.77	1.9	10.7
516	0.5	< 0.5	41	2.26	2.5	11.1
517	0.5	< 0.5	29	0.18	0.0	-
518	0.5	< 0.5	33	1.29	1.6	12.4
519	0.5	< 0.5	75	2.07	2.7	13.0
520	1.4	< 0.5	46	1.80	1.6	8.9
521	0.9	< 0.5	75	1.39	2.0	14.4
522	1.7	< 0.5	48	1.90	2.0	10.5
523	1.4	< 0.5	30	1.37	1.4	10.2
524	1.2	< 0.5	69	1.47	2.0	13.6
525	1.0	< 0.5	49	1.34	2.2	16.4

Table 33. Levels of potassium, calcium, magnesium, manganese, and zinc in sediments collected by grab from stations in Eskimo Lakes, 1972.

Station	Ammonium Acetate Extractable				Acid Extractable	
	K (ug/g)	Ca (ug/g)	Mg (ug/g)	Mn (ug/g)	Mn (ug/g)	Zn (ug/g)
507	400	880	1000	157.0	581	20
508 May	1050	1430	2420	1150.0	7320	54
508 Jul	790	600	1100	526.0	2300	46
510	555	1050	1800	78.1	460	31
512	440	1300	1100	57.2	218	40
513	880	530	1900	230.0	1390	43
514	880	880	1500	726.0	4390	65
515	1100	940	1500	557.0	5320	47
516	1000	1400	1300	56.7	363	52
517	260	2500	350	21.5	206	19
518	400	880	1200	77.6	460	45
519	1300	1400	2300	569.0	2260	53
520	810	1100	2400	236.0	2110	50
521	570	770	2300	12.1	85	41
522	970	1150	2600	278.0	1130	44
523	690	825	2400	49.5	194	39
524	835	935	2400	17.6	73	36
525	365	990	1900	18.7	97	30

Table 34. Levels of phosphorous, copper and iron in sediments collected by grab from stations in Eskimo Lakes, 1972.

	P (ug/g)	Cu (ug/g)	Exchangeable + Water soluble Fe ⁺² (ug/g)	Exchangeable + Water soluble Fe ⁺² +Fe ⁺³ + Acid soluble Fe (ug/g)	HCl Extractable Fe (ug/g)
507	95	8.3	<10.0	355	4390
508 May	132	19.0	-	-	14600
508 Jul	138	19.0	<10.0	1150	12000
510	80	8.8	<10.0	245	6600
512	209	8.8	<10.0	65	3900
513	158	17.0	<10.0	895	8650
514	114	19.0	<10.0	1650	16370
515	123	20.0	<10.0	175	12000
516	150	13.0	21.5	2010	17300
517	44	4.4	<10.0	4.4	1630
518	143	15.0	<10.0	30	10800
519	125	18.0	<10.0	1010	17700
520	136	16.0	<10.0	580	12800
521	144	10.0	<10.0	265	3390
522	156	15.0	<10.0	1370	1080
523	185	12.0	<10.0	670	3590
524	169	9.4	<10.0	275	3990
525	169	8.3	14.8	2390	4390