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ECOLOGICAL STUDIES IN THE BAYS AND OTHER WATERWAYS
NEAR LITTLE EGG INLET AND IN THE OCEAN IN THE VICINITY
OF THE PROPOSED SITE FOR THE ATLANTIC GENERATING STATION, NEW JERSEY

Progress Report for the Period January-December 1974

VOLUME TWO

EPIFAUNA

by

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MARINE ALGAE

by

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BENTHIC INVERTEBRATES

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PROTOPLANKTON

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August 1975

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INTRODUCTION

In September 1971, Ichthyological Associates, Inc. began an ecological study of ocean sites off Long Beach Island and Little Egg Inlet, New Jersey, for Public Service Electric and Gas Company. After 1 March 1972, sampling was restricted to the ocean in the vicinity of the proposed Site of the Atlantic Generating Station (AGS) and in the bays, rivers, and waterways from Manahawkin Causeway, Long Beach Island, to Atlantic City. The above areas are subsequently referred to as the study area. The vicinity of the Site is defined as an area from Holgate, Long Beach Island to off Brigantine Inlet and from the beach to approximately 6 miles from shore.

The AGS is to be located approximately 2.8 statute miles off the coastline (off Little Egg Inlet) at approximately $39^{\circ}-28'-20''$ N latitude and $74^{\circ}-15'-20''$ W longitude. Two 1150 MWe nuclear generating units will be placed on floating barges and protected by a large semicircular, rubble-mound breakwater. The area encompassed by the breakwater and plants is subsequently designated the Site.

The first objective of the study was to identify and describe the biota of the area both spatially and temporally. Subsequently, we attempted to determine if the Site was unique biologically, or if it supported particular concentrations of organisms. This has been done in part by comparing organisms found in a transect (inshore-offshore) across the Site with one both north and south of the Site. These two latter transects will later serve as control areas. A transect from

the Mullica River through Great Bay to Little Egg Inlet has also been sampled to determine utilization of adjacent estuaries and movements of organisms between estuaries and the inshore ocean.

Additional samples for zooplankton and ichthyoplankton were taken inshore off Brant Beach, approximately 10 miles north of the Site; approximately 8 miles offshore of Brant Beach; and about 8 miles offshore of Little Egg Inlet. These areas are referred to as north and offshore of the study area. These collections were taken to help determine the extent of estuarine influence in the vicinity of the Site.

Regular sampling during 1975 was reduced to a monitoring program for juvenile and adult fishes, ichthyoplankton, zooplankton, and benthos. Fishes and macroinvertebrates were also collected for behavioral studies at the Brigantine Experimental Laboratory.

This progress report mainly covers the period January through December, 1974. Volume one includes the results of the 1974 sampling program for fishes and a section on the laboratory design and experimental procedures utilized at the Brigantine Experimental Laboratory. Volume two contains data on epifauna, marine algae, benthic invertebrates, protozooplankton, and zooplankton. The section on protozooplankton discusses results from collections made from May 1972 to April 1973. Data from individual collections for all programs are given in the Appendix Tables at the end of each volume. Physicochemical data pertinent to all biological collections in 1974 are included on pages 14 to 17 in Volume one. Results of a quantitative vegetation study along Great Bay

Boulevard are included in Volume three. Ecological studies done previously in the area by Ichthyological Associates, Inc. and others are discussed in Thomas et al. (1972), Thomas and Milstein (1973), and Ichthyological Associates, Inc. (1974).

Data for many of the sections are summarized by month and by season. Seasonal classifications are based on water temperature and are as follows: winter (January-March), spring (April-June), summer (July-September), and fall (October-December).

SUMMARY

1. Biological studies were done in the vicinity of the proposed Atlantic Generating Station approximately 2.8 statute miles southeast of Little Egg Inlet.
2. Collections of fishes and invertebrates were taken in the Great Bay-Mullica River estuary; Little Egg and Beach Haven inlets; the ocean in the vicinity of the Site; and for plankton, in the ocean 10 nautical miles north of the Site and 8 nautical miles offshore.
3. The report mainly discusses and gives the results of the 1974 sampling programs; results for protoplankton are for studies conducted from May 1972 to April 1973.
4. A total of 73 species of epifauna was taken from substrate, trawl, clam dredge, and ponar grab samples in the vicinity of the Site.
 - a. Seasonal variation in species composition, species diversity, and biomass was evident from quarterly collections. In the first quarter, minimal colonization occurred; in the second quarter, density, diversity, and biomass were greatest; in the fourth quarter all parameters decreased.
 - b. Variation with depth was apparent from quarterly collections. In the second and fourth quarters, colonization and biomass were greatest near the bottom.
 - c. Hydroids and barnacles were the dominant colonizers in spring and summer on monthly retrieved cement panels. The numbers of barnacles and blue mussel spat were greatest in spring and early summer.

- d. Communities on the tower near the Site were sampled after approximately 1 year. Dominant forms included algae near the surface, the blue mussel at mid depth, and anemones near the bottom. Species diversity values were greatest for mid depth collections.
5. Collections were made in Great Bay and Absecon Inlet to obtain standing crop estimates of important macro-algae.
 - a. The most commonly occurring algae in Great Bay were (in descending order of abundance) Ulva lactuca, Agardhiella tenera, Gracilaria foliifera, and Ceramium rubrum.
 - b. The alga which occurred most commonly on an intertidal rock jetty on Brigantine at Absecon Inlet was Enteromorpha linza.
6. Over 300 taxa of macroinvertebrates were collected in the ocean, bays, and inlets by ponar, clam dredge, 25-ft trawl and substrate plates.
7. Seventy-two ponar samples from the ocean and 29 from the Inlet were analyzed.
 - a. The average yearly density (mean density of all collections at a station for the year) of macroinvertebrates at different stations in the ocean ranged from 265/m² to 8,245/m².
 - b. In the ocean, at stations greater than 30 ft in depth polychaetes (Capitellidae, Asabellides oculata, and Scolecoplepides viridis) dominated and at stations less than 30 ft in depth bivalves (northern dwarf tellin, Atlantic surf clam) dominated.
 - c. In the Inlet, the average yearly density at different stations ranged from 529/m² to 3,325/m². Bivalves were dominant, amphipods were common, and polychaetes were rare.

- d. Seasonal trends of major community components in the ocean and Inlet were similar. Bivalve spat were dominant in the spring. In the summer and fall, polychaetes were most numerous in the ocean, and amphipods were most numerous in the Inlet.
 - e. Seasonal trends of the weight and number of major community components (bivalves, polychaetes, amphipods, and echinoderms) were similar.
8. Eighty-one clam dredge collections from the ocean, 47 from the Inlet, and 11 from Little Sheepshead Creek were analyzed.
- a. In the ocean, the Atlantic surf clam ranked first; it composed 94% of the weight and 70% of the number of organisms taken. The Atlantic surf clam, horseshoe crab, lady crab, Atlantic moonsnail, rock crab, and sand dollar comprised 99.5% of the weight collected.
 - b. In the Inlet, the blue mussel, Atlantic surf clam, rock crab, and starfish made up 97.1% of the total weight.
 - c. In Little Sheepshead Creek, the hard clam, spider crab, and blood ark were the most common species taken.
 - d. Collections from the ocean and Inlet had a similar species composition. No significant differences were found between the stations for numbers of specimens of important species, except that the blue mussel was very abundant in the Inlet and sparse in the ocean.
9. In September, 45 samples were taken with a clam dredge to survey macroinvertebrate populations in the vicinity of the Site.

- a. The Atlantic surf clam and sand dollar comprised 92% of the number and 95% of the weight collected.
 - b. The Atlantic surf clam was most dense off Brigantine Inlet ($1.6/\text{m}^2$) and averaged $0.18/\text{m}^2$ over the whole survey area. The average density at stations less than 20 ft in depth was $0.51/\text{m}^2$.
 - c. The mean length of 1,133 Atlantic surf clam was 101 mm. The mean length for the area inside the 20 ft contour was 98 mm and the mean outside this contour was 127 mm.
 - d. The 10 most numerous species, in descending order of abundance, were the sand dollar, Atlantic surf clam, Atlantic moonsnail, smooth astarte, morrhua venus, rock crab, lady crab, long-armed hermit crab, New England nassa, and northern moonsnail.
10. Some 202 collections were taken with the 25-ft trawl in the vicinity of the Site and 44 were made in Great Bay and Little Egg Inlet.
- a. In the ocean, the 10 most abundant macroinvertebrates, by weight, were the horseshoe crab, rock crab, sand dollar, lady crab, starfish, Atlantic long-finned squid, sand shrimp, lion's mane jellyfish, blue crab, and spider crab.
 - b. Decapods constituted 67% of the total number and 35% of the total weight. The sand shrimp comprised 88% of the decapods collected.
 - c. In the Bay, the most abundant species, by weight, were blue mussel, boring sponge, rock crab, sand shrimp, blue crab, horseshoe crab, lady crab, red beard sponge, starfish, and hard clam.
 - d. In the ocean, the total n/coll. was greater at night than during the day. Most of this difference was accounted for by the sand shrimp.

11. Thirteen species of shellfish were taken commercially in the ocean and bays along the New Jersey coast in 1974. Their value, \$9.3 million, accounted for 50% of the value of commercial landings in New Jersey.
 - a. Atlantic County accounted for 19% of the dollar value of New Jersey shellfish landings.
 - b. The five most valuable species in New Jersey were the Atlantic surf clam, American lobster, hard clam, eastern oyster, and blue crab.
12. Aspects of the life history of the Atlantic surf clam are discussed.
 - a. Most Atlantic surf clam spat (0.5 to 24.4 mm) were taken in spring, particularly in May. They were common at all ocean stations and the average yearly density was $152/\text{m}^2$.
 - b. Small individuals of the Atlantic surf clam (15 to 99 mm) were collected from August through November. They were most abundant in August when the modal size class was 30-34 mm.
 - c. Commercial-sized Atlantic surf clam (> 100 mm) comprised 77% of the population on the Site transect and 58% in Little Egg Inlet. No seasonal trends in distribution were evident. Dense aggregations occurred near "G" buoy in the Inlet ($3.25/\text{m}^2$) and landward of the Site ($0.69/\text{m}^2$).
13. A total of 4,971 rock crab were collected with the trawl, lobster pot, ponar grab, and clam dredge and aspects of their life history are discussed.
 - a. There appeared to be an inshore-offshore migration of large individuals. The rock crab was most abundant in the ocean in

the summer and was most common in the bays and Inlet in the winter.

- b. The ratio of males to females was 2.1:1, but fluctuations occurred seasonally. Male specimens ranged from 4 to 138 mm and females ranged from 3 to 91 mm.
- c. Gravid females were most abundant in spring, and were collected in all months except July and August. They ranged from 22 to 77 mm.
- d. Rock crab zoea were most abundant at the Site in May and were collected from early April to early June. Megalopae were collected at the Site from early-to mid-June and in September. Juveniles (3 to 9 mm) were collected in June and July.

14. Proto plankton collected from May 1972 through April 1973 are discussed.

- a. Diatoms were most abundant in September (826,000 cells/l). Dominant species included Skeletonema costatum, Thalassiosira rotula, and T. condensata.
- b. A secondary peak in diatom abundance occurred in February (248,000 cells/l). Thalassiosira nondenskioldii was the dominant species and Rhizosolenia fragilissima and Skeletonema costatum were subdominants.
- c. Peaks in dinoflagellate abundance occurred in June and late August (239,710 and 384,390 cells/l, respectively). Several species of unidentified peridiniids were grouped together and were numerically dominant in June. In late August, two unidentified gymnodiniids and three Prorocentrum species were dominant.
- d. Small coccoid blue-greens were always abundant, and ranged in density from 170,000 cells/l in December 1972 to 859,700 cells/l in June 1973.

- e. Non-motile green algae ranged from 4,720 cells/l in May to 37,370 cells/l in early August.
 - f. Numbers of naked flagellates were lowest in April (23,400 cells/l) and highest during August (mean of 293,000 cells/l).
 - g. Tintinnids were the predominant ciliate group. Maximum abundance (15,000 cells/l) was in May and June.
15. Holoplankton and meroplankton were collected in surface, bottom, and oblique tows with a Clarke-Bumpus sampler (#20 nets).
- a. Copepods were dominant at the Site during 1974 except in May when meroplankton predominated.
 - b. In the bays, copepods predominated all collections, except for the May collection at Brigantine Bays station #1, when meroplankton predominated.
 - c. Oithona similis was the only copepod that was found throughout the year at the Site in densities above 1,000/m³.
 - d. Three general distribution patterns of copepods and other holoplankton were noted from ocean and bay collections:
 - 1. "Estuarine and marine" forms had similar densities at the Site and bay stations, but were less numerous or absent from stations north and offshore of the study area.
 - 2. "Euryhaline marine" forms were most abundant at ocean stations and usually showed little differences between these stations.
 - 3. "Stenohaline marine" forms were found in greatest densities north and offshore of the study area and were usually absent or rare at bay stations.

- e. Monthly copepod densities at the Site and at stations north and offshore of the study area were not significantly different.
 - f. Other holoplankters were more prevalent in the ocean than in the bays. Although densities were generally greater at the Brant Beach stations than at other ocean stations, these differences were not significant.
 - g. Bivalve larvae were generally the dominant meroplankton. Densities of bivalve larvae in the ocean usually exceeded those in the bay by a factor of from 2 to 10.
 - h. During night sampling at the Site in June, a maximum surface density ($150,426/m^3$) of gastropod larvae was found. Larvae of Melampus bidentatus, a snail restricted to the marshes, were dominant ($> 90\%$).
16. A total of 115 samples from the Site was examined for macrozooplankton. Thirty-eight samples from north and offshore of the Site were studied to determine whether the composition and density of macroplankters differed from those of the Site.
- a. At the Site, the number of estuarine species was greater than that of oceanic species in every month. However, densities of oceanic forms were greater than those of estuarine forms during the spring and fall.
 - b. Offshore of Little Egg Inlet, oceanic species outnumbered estuarine species during all seasons except summer. Densities of estuarine forms were always very low. Offshore of Brant Beach, estuarine species outnumbered oceanic forms only in July but their densities were very small.

- c. During the summer, the Site was an extension of the lower estuary where the spawning and development of many estuarine species, particularly crab and shrimp, took place.
- d. The arrow worm, Sagitta elegans, was the dominant macroplankter at the Site during the winter and early spring; maximum densities of 345/m³ (January) and 170/m³ (April) were taken in bottom tows.
- e. Zoeal stages of the sand shrimp, Crangon septemspinosa, were collected throughout most of the year at the Site and were most numerous in May (69/m³, bottom). They were generally less common at stations north and offshore of the study area.
- f. Zoeae of the grass shrimp, Palaemonetes spp., were common at the Site during the summer and were most abundant in July (265/m³, bottom), especially in daytime bottom tows.
- g. Crab larvae were collected at the Site from March through November and comprised most of the macrozooplankton taken from June through August. Densities of crab larvae were generally lower at stations north and offshore of the study area where larvae of hermit crabs, fiddler crabs, and mud crabs were sparse.
- h. Zoeae of the blue crab, Callinectes spp., were occasionally taken in June, July, and September at the Site. The maximum density of 21/m³ was taken in a surface collection at night in July. Megalopae were present from August through October at the Site and were most numerous (8/m³) in September.
- i. Zoeae and megalopae of the rock crab, Cancer irroratus, were collected at all ocean stations but were most common at the stations north and offshore of the study area.

EPIFAUNA

Martha M. McCullough

Introduction

The epifauna program was initiated to determine the species composition and biomass of fouling communities in the vicinity of the Site. Masonite panels were affixed to the weather tower 0.5 nautical miles SSW of the Site at three depths and removed monthly during 1973 (McCullough 1974).

In 1974, the program was designed to indicate variations in colonization with season, depth, and texture of concrete substrates. Epifauna living on a submerged leg of the weather tower were sampled to gain information pertaining to prolonged fouling on an epoxy-coated steel substrate.

Materials and Methods

Concrete Substrate

Quarterly Collections

On 2 January 1974 an array was deployed approximately 3.5 mi SE of Little Egg Inlet, 0.6 nautical miles seaward of the Site, in 45-50 ft of water. Cement test-blocks of 36 x 40 x 5 cm were affixed at 6, 17, and 40 ft below MLW (Fig. 1). The array was retrieved on 25 March, 24 June, 27 September, and 6 December. Two scrapings of equal area

were taken from the upper, lower, and side surfaces of each block. New test-blocks were affixed and the array redeployed.

The surface buoy marking the array's location was lost during the second quarter. It was relocated and moved when the second collection was taken on 24 June. A location 2.8 nautical miles SSE of Little Egg Inlet was chosen to facilitate more frequent checks of the array. It remained at this location until the end of 1974 when it was removed.

Monthly Collections

Concrete panels having a surface area of 570 cm^2 were made using wooden molds. The side of the panel at the open end of the mold was more irregular than the other side. Panels were weighed before deployment at surface, mid depth, and bottom.

The array was used from 23 April to 6 September. Duplicate panels were retrieved monthly and every two months. Upon retrieval the plates were placed in plastic bags. These were replaced by fresh panels. Because of disturbance of the surface panels due to waves and water turbulence, only mid depth and bottom collections were taken (Fig. 1).

Epoxy-coated Steel

During the first week of June 1973 an epoxy coated steel weather tower was installed near the Site. A year later on 5 June 1974, scrapings of epifauna were taken by divers from a leg of the tower. A three dimensional plexiglass "Submerged Epifauna Collection Shield"

was built to insure collection of the specimens after they were removed from the leg (Fig. 2). The biota were placed in a bag with 1-mm mesh netting. Two scrapings were taken at 15 and at 30 ft below MLW. Although the sampling was done after 2 consecutively calm days, surge near the ocean surface interfered with collections, and only one sample was taken from 5 ft below MLW.

Miscellaneous Collections

Epifauna was collected intermittently by clam dredge and 25-ft trawl. Subsamples were kept and analyzed in the laboratory.

Preservation of Samples and Analyses

Organisms were anesthetized with $MgCl_2$ on retrieval and after a few hours, were preserved with 20% formalin.

Identification, enumeration, and dry weight were determined in the laboratory. For samples scraped from concrete blocks and steel, dry weights were determined, by species, after drying at 100 C. The concrete panels were dried at 100 C and weighed. Organisms which separated from the panels were filtered from the preservative with a 1-mm mesh net, dried at 100 C, enumerated, and weighed. Any weights less than 0.001 g were noted by a plus.

Randomly selected sub-samples of the blue mussel, Mytilus edulis, from the tower were measured to the nearest mm. Organisms were sorted initially by visual examination. A binocular microscope was used to examine the hydroid and mussel fractions while searching for small,

associated organisms. Final identifications and counts were made by the use of a binocular or compound microscope. Species diversity values were calculated using Brillouin's index (Pielou 1966a). Values were calculated for all samples using the formula:

$$H = \frac{1}{N} \log \frac{N!}{N_1! N_2! \dots N_s!}$$

where H = species diversity, N = total number of specimens of the ith species, and S = number of species.

Results

Seventy-three species were collected at and in the vicinity of the Site during 1974 (Table 1). Species taken with gear used for sampling fishes or benthic invertebrates (Tables 2 and 3) were noted in the record as present.

Concrete

Quarterly Collections

The blocks located closest to the surface were always missing at the time of quarterly collection. All test substrates were missing from the array for the third quarter samples due to corrosion of the equipment.

Seasonal variation was evident in the collections taken quarterly from concrete substrates (Table 4-8). Minimal colonization occurred in the first quarter when water temperatures at the Site ranged from 1 to 7.2 C. Collections from the second quarter contained large numbers

of the barnacle, Balanus eburneus; hydroids, Tubularia crocea and Obelia flabellata; and the caprellid amphipod, Aeginina longicornis. Temperatures during the second quarter rose from 6 C to 21.5 C. Caprella equilibra, and the above two hydroids were present in the fourth quarter and a large number of blue mussel spat was present in all collections. Nudibranchs were noticeably more abundant during the fourth quarter.

Dry weights were greater during the second quarter than in the fourth quarter due to the presence of barnacles (Fig. 3). Second quarter weights adjusted to an average of $\text{g/m}^2/90$ days were 177.6 at middepth and 697.8 at the bottom, while those from the fourth quarter were 3.2 and 247, respectively.

Variation in colonization with depth was also apparent. In both the second and fourth quarters, it was greater near the bottom, and particularly for hydroids, blue mussel, and barnacles. Hydroids showed marked differences with depth. Obelia dominated collections at middepth and Tubularia dominated near the bottom. Dry weights reflected the heavier growth near the bottom.

Species diversity values were greater in the second quarter collections than in the fourth quarter (Tables 5-9). This appeared to be due to the overwhelming dominance of blue mussel in the fourth quarter.

Monthly Collections

Hydroids and barnacles were dominant colonizers on the cement panels deployed monthly from 23 April to 6 September (Tables 9-11).

Amphipod abundance appeared to increase when hydroids were abundant. Blue mussel and barnacle settlement was greatest from late spring to early summer. Among caprellid amphipods, Caprella equilibra gradually replaced Aeginina longicornis during the summer.

Weights were greater for bottom collections from April to July (Fig. 4), when barnacles and hydroids were most abundant. From July to August, the marked decrease in weight of bottom collections was attributed, in part, to the absence of barnacles. Encrusting bryozoans colonized the bottom plates at this time, but they were less abundant at middepth where hydroids and barnacles occupied much of the available space. Dry weights of collections at middepth showed a continued decline from April to September (Fig. 4).

Species diversity values (Tables 9-11) were largest for monthly collections taken from 23 May to 1 July. This may be due in part to the long period of exposure for these panels and the rising water temperatures. Colonization was greater on the rough surface of each panel (Tables 12 and 13).

Epoxy-coated Steel

The communities sampled on the tower near the Site were established during the preceding year. The area of maximum growth and largest species diversity was at middepth, where the blue mussel dominated (Table 14). The occurrence of algae on the tower leg near the surface of the water reduced the area of suitable substrate for epifauna. Middepth conditions were more suitable. Near the bottom, the anemone, Metridium senile, was dominant. Other species were located in the

narrow spaces between individual anemones. The latter were attached to dead barnacles and other debris which formed a layer on the tower. The bottom 1 to 2 ft of tower surface was bare.

Large blue mussel (>30 mm) were found exclusively at middepth (Fig 5). Generally smaller specimens were found near the surface. The small size of mussels from near the bottom was apparently due to the abundance of anemones. The normally expanded condition of Metridium may have reduced water circulation in the spaces where mussels were attached and interfered physically with their feeding.

Species diversity values were larger at middepth (0.78 and 0.81) than at the surface (0.22) or bottom (0.42 and 0.65) due to the abundance of both blue mussel and Jassa falcata (Table 14).

Miscellaneous Collections

Occasionally, hydroids, a bushy bryozoan, and associated organisms such as the blue mussel spat and polychaetes were found in trawl samples (Table 2). The branching hydroids, Obelia flabellata and Thuiaria argentea, and branching bryozoan, Amathia vidocivi, afforded sites for spat attachment. The polychaete, Autolytus cornutus, secretes a delicate tube which was found entwined with Obelia and Thuiaria stems. Amphipods and mysids were not effectively sampled by trawl. Trawl collections however, revealed the presence of species which were lacking or sparsely represented in the collections from artificial substrates (Table 15).

Epifauna found in some clam dredge samples were generally sessile (Table 3). Thuiaria, encrusting bryozoans (Schizoporella unicornis

and Electra hastingsae), blue mussel, and barnacles were found attached to shells. The polychaetes, Saballaria vulgaris and Hydroides dianthus, constructed their tubes on shells. Few motile organisms occurred.

On several occasions, epifauna were collected by chance. On 5 August, a peice of iron was taken in a trawl collection. Hydroids, bryozoans and barnacles were growing on it. One specimen of a shrimp, Hippolysmata wurdemanni was among the hydroids. Its northern range was noted previously as 38° N (Gosner 1971).

Scrapings taken on 3 September from a terry-cloth bedroom slipper found floating at the Site contained the goose barnacle, Lepas anatifera, and amphipod, Microprotipus raneyi. Neither were taken in any other epifauna samples. Caprella penantis and campanularid hydroid fragments were also present.

Discussion

Dry weights for epifauna collected on concrete indicated greatest growth from late May to early July (Figs. 6 and 7). The species diversity value was also larger then (Tables 5-11). Hydroid colonization occurred in varying degrees throughout the year (Tables 4-11). Fewest hydroids were collected during the first quarter. The occurrence of larger epifaunal organisms such as barnacles, mussels, and anemones seemed to be seasonal. Since barnacles settled in greatest numbers during the period of increased hydroid colonization (Tables 5, 6, 9, 10 and 11), solid substrata were equally available to both. The hydroids that were already established at the time of settling of blue mussel provided points of attachment for the spat. These spat were

numerous in the fourth quarter collections (Tables 7 and 8). Their large number reduced species diversity values.

Amphipod occurrence was often positively associated with hydroid abundance (Tables 5, 6, 9, 10, and 11). An exception was the large number of the amphipod, Jassa falcata, found in collections from the tower that were dominated by blue mussel (Table 14). Mussel byssus threads were dense in these collections and served as a habitat for amphipods.

Although they were not as numerous as crustaceans, polychaetes were more conspicuous in samples from the tower which were dominated by blue mussel and anemones (Table 14). The chief exception was Autolytus cornutus which attached its tubes to hydroid and bryozoan stems.

Hydroids and amphipods were more characteristic of initial epifaunal colonization than of established communities. The hydroids provided substrate for blue mussel which later became dominant. Its heavy settling toward the end of the year gave it a competitive advantage over other species in winter (Tables 7 and 8 and McCullough 1974). By the time competing organisms increased during spring and summer, the blue mussel was dominant.

MARINE ALGAE

Richard P. Smith

Introduction

Collections were made in Great Bay and Absecon Inlet to obtain estimates of the standing crop of dominant macroalgae in the study area. Samples from Great Bay contained benthic and subtidal algae. Algae collected from a rock jetty in Absecon Inlet included intertidal species found on hard substrates throughout the study area.

Materials and Methods

Benthic Algae

Samples were taken in March and April with a biological dredge. Stations sampled in Great Bay corresponded to trawl zones (see Fig. 13, Vol. I). Collections in June and July were taken with a 9-ft semiballoon trawl because the dredge damaged delicate algae. The trawl also covered a larger area and did not dig into soft substrates.

In each sampling zone a buoy was anchored adjacent to a permanent structure. A second buoy was located 50 yards away using a rangematic distance finder. The dredge or trawl was then hauled at a constant RPM along the 50-yard transect. Total bottom area covered by the trawl was approximately 127 m². Algae were preserved in 5% formalin, sorted, and weighed (gm/m²) in the lab.

Intertidal Algae

A 600-yard rock jetty, lying in a SE-NW direction at the south end of Brigantine was sampled at low tide from January through September.

The surf was rough along the jetty's north wall so the south wall, which bordered Absecon Inlet, was sampled.

Scrapings were taken from several 20-cm² grids which were randomly sited on the inshore one-third of the jetty. These were sorted and mean dry weights of species were recorded (gm/cm²). The rest of the jetty was examined visually and an estimate of major algal species was made.

Bay samples were recorded as wet weights because of their bulk; weights were obtained after blotting excess water from the algae.

Species collected for the first time in this study area were either dried and mounted on herbarium paper, or preserved in buffered 5% formalin (Table 16). Species were identified by using Dawson (1956) and Taylor (1957).

Results

Benthic Algae

The most abundant alga by percent area covered and by frequency of occurrence taken in Great Bay was Ulva lactuca. Ulva comprised 61% of the total weight of algae taken in June and 73% for July. From June to July, its weight more than tripled (Table 17).

Agardhiella tenera and Gracilaria foliifera both ranked second by weight. In June, these species were present only in zones 1010 and 1200 but in July, they were more widespread. Wet weights also increased in most zones from June to July (Table 17).

The third most common species was Ceramium rubrum. This red alga was present in zones 2200 and 1200 in June. The wet weight at zone 1200 was similar in June and July but was greater at zone 2200 in July (Table 17).

In July, more species were collected in most zones (Table 17). Large weight increases of Ulva and Gracilaria were recorded in zone 2200; this zone had the greatest percentage of algal weights for July (Table 17).

In Great Bay 58% of the algal species collected were Rhodophyta (red algae), 28% were Chlorophyta (green), and 14% were Phaeophyta (brown).

Intertidal Algae

The most abundant species found on the rock jetty in Absecon Inlet was Enteromorpha linza. This green alga was found throughout the sampling period at both intertidal and subtidal levels. It occurred most often in spring, and its greatest biomass was in June (Table 18).

Enteromorpha minima was second in abundance and density. It occurred most frequently and was most abundant in March (Table 18).

Bangia fuscopurpurea was found near the mean high water mark. It occurred most often in summer and had a maximum biomass in July.

Urospora penicilliformis was found near the mean low water mark. It was collected from March through May and was most common in April (Table 18).

The maximum biomass of Porphyra umbilicalis was in March. It grew in the same zones as Enteromorpha minima and Urospora penicilliformis. It was absent from May, June, and September collections (Table 18).

Enteromorpha minima and Enteromorpha linza were abundant on the offshore two-thirds of the jetty. Enteromorpha linza, the blue mussel (Mytilus edulis), and barnacle (Balanus balanoides) inhabited the lower intertidal regions.

Of all algae collected on the jetty, 67% of the weight was Chlorophyta, 22% was Rhodophyta, and 11% was Phaeophyta.

Discussion

Zonations of algae were distinct on the Absecon Inlet jetty but were less well defined on a gentle sloping shoreline in Great Bay.

Those algae found in the intertidal regions are subject to intermittent periods of dessication, rapid changes in salinity, seasonal and daily temperature changes, and wave turbulence which may result in stunted growth. For example, Enteromorpha linza collected from Great Bay in July measured approximately 24.0 cm while specimens collected from the jetty in the same month, measured approximately 2.0 cm. Those specimens of Porphyra umbilicalis from the bays were much larger than those exposed to wave turbulence on the jetty.

Interspecific competition may occur between Urospora penicilliformis, Enteromorpha minima, and Porphyra umbilicalis which occupy the same zone. Some seasonal differences in biomass between these species were noted (Table 18).

BENTHIC INVERTEBRATES

Elizabeth V. Garlo, Jeffrey J. Hondo, and Gerald J. Miller

Benthic Invertebrates were collected in Little Sheepshead Creek, Little Egg Inlet, and the vicinity of the Site in 1974 (Table 19). Collections taken at regular time intervals were made with a ponar grab, clam dredge, and 25-ft trawl. An intensive survey was conducted with the clam dredge in September.

PONAR GRAB

Introduction

Since February, 1972, quantitative samples have been collected with a ponar grab in the vicinity of the Site and cable route. The program was described in Thomas and Milstein (1973) and Garlo et al. (1974). The objectives were to determine the spatial and temporal distribution of infauna communities, the number of organisms per m^2 , and the dry weight of organisms per m^2 at selected stations.

In the ocean, the five stations which were sampled monthly (Fig. 8, Table 20) were located as follows: one north of the Site (zone 5143), one south of the Site (zone 5165), and three in an inshore-offshore transect from the 15-ft contour to the Site (zones 5158, 5152, and 5255). The five stations sampled quarterly were as follows: landward of Site (zone 5258), Site (zone 5254), the Ridge (zone 5252), and two stations landward of Brigantine ridge (zones 5180 and 5282).

In the Inlet, monthly samples were taken from a station east of Stake "96" (zone 1010 near "G" buoy), and quarterly samples were taken from stations near "F" buoy (zone 1010) and off Little Beach (zone 1020).

Materials and Methods

One drop of the ponar sampled an area of bottom substrate of 23 x 23 cm or 0.05 m^2 . Thirty pounds of extra weight was added to the ponar to facilitate its penetration into the substrate. The ponar was lowered by means of a davit and electric windlass. Each sample was put into calibrated buckets and the volume was recorded; samples smaller than 0.9 liters were usually discarded. The sample was poured into a removable 1-mm mesh nylon net set in a stainless steel frame, and was washed with running seawater. The screen and contents were then removed from the frame. Organisms were relaxed in 5% MgCl_2 and seawater for 1 to 5 hours. Samples were later fixed in 5% formalin for 24 to 72 hours, washed, and stored in 70% isopropanol and 5% glycerol. Rose bengal was added to samples to facilitate separation of organisms from the sediment. All organisms were identified and enumerated. Nomenclature usually followed that of Gosner (1971), Bousfield (1973), or Pettibone (1963).

Sediment samples were taken at each station by making an extra drop of the grab and removing a 500 cc subsample. They were washed in freshwater to remove salt and dried in an oven at a low temperature. Grain size analysis was performed on sediment samples from ocean stations using U. S. Standard Testing Sieves at $1/4 \phi$ intervals according to the procedures described by Folk (1968).

Dry weight was determined for preserved specimens from all samples taken at the Site (zone 5255) and east of Stake "96". The calcareous shells of molluscs were dissolved in 50% HCl. Each taxon was dried at 100 C until a constant weight was reached (approximately 16 hours), cooled in a desiccator, and weighed to 0.1 mg on a Mettler balance.

The species diversity for each collection was determined with Brillouin's index (Pielou 1966). Seasonal and yearly diversity values are averages of individual values.

The variability between successive drops of the ponar was examined. Replicate samples were taken at one station in the ocean (zone 5152) and one in the Inlet (zone 1010) in February, May, August, and November. Ten grabs were made while anchored at each station and the samples were preserved separately. Organisms from each grab were identified and enumerated. The observed cumulative percent species for each grab in the replicate series was calculated. The expected cumulative percent species was calculated by randomizing the observed values 3 times and taking the mean and standard deviation of the observed and random values.

A modification of the Kolmogorov-Smirnov test (Garlo et al. 1974) was used to set confidence limits on the entire cumulative frequency distribution. The Kolmogorov-Smirnov goodness of fit test (Sokal and Rohlf 1969) was used to test for differences between observed and expected cumulative frequency distributions and between expected frequency distributions by season.

Results

Sampling Variability

The observed values for the cumulative percent species curve and the expected values were plotted for each station by season (Figs. 9 and 10). A more detailed explanation of the method of calculating the cumulative frequency distribution can be found in Garlo et al. (1974).

Curves of the observed values for cumulative species from the replicate series began to level off after a 0.25 m^2 area of bottom substrate was sampled. No differences ($P \leq .05$) were found between the observed and expected relative frequency distributions and between expected relative frequencies by season at a station.

The area sampled at each regular station was 0.35 m^2 in the ocean and 0.25 m^2 in the Inlet. Confidence limits of the expected values at each station by season and for the year are given in Tables 21 to 23. In the ocean, the expected mean cumulative percent species was 87 ± 15 . The mean of the observed values was 87% and they ranged from 74% in winter to 93% in spring. In the Inlet, the expected mean cumulative percent species was 83 ± 26 . The mean of the observed values was 87% and they ranged from 71% in summer to 100% in winter.

Ninety-two samples taken in the ocean and Inlet in 1974 yielded 24,845 specimens. The species composition, weight (at selected stations), species diversity, and physicochemical parameters for each collection are given in Appendix Tables 1 to 6 and Tables 24 to 30. Seasonal summaries of monthly collections appear in Tables 31 to 36. Average yearly density (n/m^2) of the most abundant species is presented

in Table 37. The grain size classification of the sediment samples taken with each collection from the ocean is given in Table 38.

Ocean

In the ocean, 72 samples yielded 19,204 specimens. The average yearly density (number of specimens/m²) at individual stations ranged from 265 n/m² on the Ridge (zone 5252) to 8,245 n/m² landward of the Site (zone 5258) and for all stations was 1,600 n/m². Yearly average species diversity values ranged from 1.64 to 2.16.

Some 47% (906 n/m²) of the specimens were polychaetes, 27% (508 n/m²) were bivalves, 14% (267 n/m²) were amphipods, and less than 1% (1 n/m²) were echinoderms. The 10 most common taxa were Capitellidae (404 n/m²); northern dwarf tellin, Tellina agilis (329 n/m²); Asabellides oculata (202 n/m²); Protohaustorius deichmannae (156 n/m²); Atlantic surf clam, Spisula solidissima (152 n/m²); Scolecoplepides viridis (98 n/m²); Neomysis americana (63 n/m²); Gammarus lawrencianus (37 n/m²); Magelona rosea (32 n/m²); and Acanthohaustorius millsii (25 n/m²).

Seven of the ocean stations had an average yearly density of between 700 and 2,000 n/m²; average yearly diversity values ranged from 1.64 to 2.04.

At depths of less than 30 ft (zones 5158, 5152, and 5161), the bottom was generally fine to very fine sand with less than 4.5% silt. In these areas, bivalves were most abundant, polychaetes were common, and amphipods were sparse. At depths greater than 30 ft (zones 5258, 5255, 5254, and 5143), the bottom type was fine to coarse sand with 4.5 to 19% silt. Polychaetes were the dominant organisms at these stations, bivalves were common, and amphipods were sparse.

Samples from the Ridge (zone 5252) and near the Brigantine ridge (zone 5282) had an average yearly density of less than 500 n/m^2 . Yearly average species diversity was 2.00 and 2.16, respectively for the two stations. The bottom substrate ranged from medium to coarse sand with less than 1% silt. Densities of all species were low. Bivalves were most abundant at the Ridge and polychaetes were most common near the Brigantine ridge.

The station landward of the Site (zone 5258), which was located in a trough where the depth was usually greater than 30 ft, had the highest average density ($8,245 \text{ n/m}^2$). The average diversity for the year (1.66) was relatively low. The bottom substrate ranged from coarse to very fine sand with 3% silt. Polychaetes were dominant, bivalves were common, and amphipods were sparse.

Seasonally, the density of organisms on the Site transects was highest in the spring ($2,938 \text{ n/m}^2$). Bivalve spat comprised 41% of the specimens collected. In summer, the density ($1,865 \text{ n/m}^2$) was less due to a decline in bivalves but the number of polychaetes increased and comprised 42% of the specimens collected. In the fall, the density was lowest (668 n/m^2). It rose to 907 n/m^2 in the winter when bivalve spat comprised 43% of the specimens collected (Fig. 11).

Capitellid polychaetes ranked first in abundance at ocean stations and were found at all stations except zone 5282. They formed dense aggregations and had a yearly average of $4,064 \text{ n/m}^2$ at the station landward of the Site (zone 5258). The average density for the year for all stations was 406 n/m^2 . Maximum density occurred in September.

The northern dwarf tellin was second in abundance and was collected at all stations in the ocean. It formed a dense aggregation landward of the Site (zone 5258). Maximum densities of from 205 to 1,572 n/m^2 were observed in May or June at all stations.

Ampharetid polychaetes, Asabellides oculata, ranked third in abundance at ocean stations and were collected at all stations except the Ridge. They formed a dense aggregation landward of the Site and averaged 1,463 n/m^2 for the year. They were most abundant at all stations in May and June.

The amphipod, Protohaustorius deichmannae, ranked fourth in abundance and was found at all ocean stations. It was most abundant at the stations closest to the Inlet (zones 5161 and 5158). Peaks of abundance occurred in June, July, and February.

The Atlantic surf clam ranked fifth in abundance and was collected at all stations in the ocean. A dense aggregation occurred at the stations landward of the Site. The greatest densities occurred in May and ranged from 81 to 1,709 n/m^2 . A minor peak in abundance occurred from November through March.

Little Egg Inlet

In the Inlet, 29 samples taken at 3 stations yielded 5,641 specimens. The average yearly density of specimens ranged from 529 n/m^2 at the station off Little Beach (zone 1020) to 3,325 n/m^2 near "F" buoy (zone 1010). Average yearly diversity values ranged from 0.74 to 1.59.

Some 82% (4,626 n/m^2) of the specimens collected were bivalves, 14% (788 n/m^2) were amphipods, and 2% (85 n/m^2) were polychaetes. The

10 most common taxa were the blue mussel, Mytilus edulis ($4,353 \text{ n/m}^2$); Parahaustorius longimerus (328 n/m^2); Acanthohaustorius mills (226 n/m^2); northern dwarf tellin (160 n/m^2); Atlantic surf clam (106 n/m^2); Protohaustorius deichmannae (61 n/m^2); Magelona rosea (22 n/m^2); Neomysis americana (20 n/m^2); Gammarus lawrencianus (19 n/m^2); and Scolecoplepides viridis (11 n/m^2).

The density of organisms was highest in the spring ($5,772 \text{ n/m}^2$). Bivalve spat (primarily blue mussel) comprised 94% of the specimens collected. In summer, the total density was less (842 n/m^2) due to the disappearance of most blue mussel spat. Density was lowest in the fall when amphipods comprised 65% of the community sampled; density increased in the winter when bivalve spat comprised 73% of the total (Fig. 12).

Spat of the blue mussel ranked first in abundance in Inlet collections and they were collected at all stations. They were most abundant near "F" buoy on a rubble and sand bottom. Off Little Beach and east of Stake "96", blue mussel spat were usually collected on detached vegetation or hydroids. The highest densities of spat were collected in spring.

Parahaustorius longimerus ranked second in abundance and occurred at all stations in the Inlet. It was most abundant near "F" buoy and the highest densities (185 to 370 n/m^2) occurred in late summer and early fall.

Acanthohaustorius mills ranked third in abundance and occurred at all stations in the Inlet. The highest densities (117 - 227 n/m^2) occurred in summer.

The northern dwarf tellin ranked fourth in abundance and was taken at all stations in the Inlet. It was most abundant at the station east of Stake "96" where the sediment consisted of fine sand with a small percentage of silt. The largest densities (15 to 941 n/m²) occurred from May through August.

The Atlantic surf clam ranked fifth in abundance and was found at all stations. It was most abundant east of Stake "96". The largest densities (38 to 71 n/m²) occurred from May through August.

Biomass

Biomass (standing crop) estimations were made at the Site, zone 5255, and in the Inlet, zone 1010 (Tables 33 and 36). Trends exhibited by the weight and number of major community components (bivalves, polychaetes, amphipods, and echinoderms) were similar except in one case. In the winter, a small number of large sized polychaetes comprised most of the weight (Fig. 13).

At the Site, the average seasonal biomass ranged from 1.510 g/m² in the winter to 3.445 g/m² in the summer. The yearly average was 2.058 g/m². Polychaetes comprised 46% and bivalves comprised 12% of the yearly biomass. The 10 groups which comprised most of the weight were the New England nassa, Nassarius trivittatus; Nephtys bucera; northern moon snail, Polinices heros; Polychaeta fragments; northern dwarf tellin; rock crab, Cancer irroratus; Scolecoides viridis; Asabellides oculata; Pherusa affinis; and Lumbrineris fragilis.

In the Inlet, the average seasonal biomass ranged from 0.201 g/m² in the winter to 18.306 g/m² in the spring. The yearly average was

5.716 g/m². Bivalves comprised 83%, amphipods 2%, and polychaetes, 1% of the biomass (Fig. 12). The large increase in biomass in spring was due to a set of blue mussel. The seven groups which comprised most of the weight were the blue mussel; long-armed hermit crab, Pagurus longicarpus; unidentified fragments; sand shrimp, Crangon septemspinosus; Acanthohaustorius millsi; Diopatra cuprea; and rock crab.

Discussion

Specimens which are abundant in ponar collections are permanent residents whose numbers are not influenced by seasonal migration. Biomass and density are subject to seasonal changes due particularly to setting, recruitment, and mortality.

Stations ranged in depth from 13 to 42 ft in the ocean and from 5 to 25 ft in the Inlet. Stations in the Inlet were subject to more surge, greater tidal current velocity, and more shifts in substrate than stations in the ocean. The harsh conditions contributed to the generally lower densities and diversity values in the Inlet. The blue mussel dominated collections in the Inlet by weight and number.

Ocean stations were classified into two general groups according to species composition. Stations greater than 30 ft in depth which had a higher silt content than other stations were dominated by polychaetes (Capitellidae, Asabellides oculata, Scolecoides viridis). Stations less than 30 ft in depth which contained low percentages of silt were dominated by bivalves (northern dwarf tellin, Atlantic surf clam).

At all stations in the Inlet, bivalves (blue mussel) were dominant, amphipods were common, and polychaetes were rare.

Seasonal trends of the major community components both in the ocean and in the Inlet were similar. Bivalve spat (blue mussel, northern dwarf tellin, Atlantic surf clam) were dominant in spring. Their numbers declined in summer and fall but increased slightly in winter. In the summer and fall, polychaetes (*Capitellidae*, *Asabellides oculata*) were most numerous in the ocean and amphipods (*Parahaustorius longimerus*, *Acanthohaustorius millsii*) were most common in the Inlet.

CLAM DREDGE

Introduction

Since April, 1972, benthic infauna was collected with a clam dredge in the vicinity of the Site and cable route (Thomas and Milstein 1973, and Garlo et al. 1974). In 1974, the program included stations in the ocean, Little Egg Inlet, and Little Sheepshead Creek (Table 20). The major objectives were to determine the spatial and temporal distribution and the relative abundance and weight of benthic infauna.

Materials and Methods

The clam dredge consisted of a steel frame (3 x 2 x 1 ft) and a 3.5-ft long polypropylene bag which had a chain bottom. The largest mesh (1.5-inch) in the bag was at the codend and the smallest (3/4-inch) was on the top and sides of the bag. The dredge was towed in the direction of the prevailing wind or tide and dug approximately 4 to 6 inches

into the sediment. In the ocean the dredge was retrieved by means of a gantry and hydraulic winch. In the Inlet and Creek, it was retrieved by means of a davit and electric windlass.

Clam dredge collections were quantified by estimating the distance towed. Position at the beginning and end of selected 15-minute tows was determined by plotting sextant or mini-ranger readings on a chart. The mean distance towed was calculated from 23 hauls taken at regular stations in 1974. The average 15-minute tow taken in the ocean covered 184 m^2 ($\pm 41 \text{ m}^2$, $P \leq .05$). The distance towed during 5-minute hauls in Little Egg Inlet and Little Sheepshead Creek in 1973 was determined by dropping buoys at the start and finish of each haul. The distance between them was measured with a marked rope. The area covered at 3 stations in the Inlet was approximately 28 m^2 and at 2 stations in Little Sheepshead Creek it was approximately 17 m^2 .

In the field, abundant species such as the Atlantic surf clam, blue mussel, and sand dollar were counted, weighed (with a hand-held spring scale) to the nearest 0.1 kg, and released.

Small collections and subsamples of abundant species were returned to the laboratory. Selected specimens were relaxed in 10% MgCl_2 for 1 to 5 hours, fixed in 10% formalin for 24 to 72 hours, washed, and transferred to 40% isopropanol. Preserved specimens were identified, enumerated, and weighed. The wet weight was measured to the nearest gram with an Ohaus triple beam balance.

In the field and the lab, anterior-posterior length of the hard clam and surf clam, and carapace width of the rock crab were measured

to the nearest millimeter with a vernier caliper. The gonad condition of the Atlantic surf clam was estimated each month by macroscopic examination. A randomly selected subsample of 10 to 35 clams from one collection in the ocean and one in the Inlet was examined (Table 39). The sex and reproductive condition of all crabs were recorded. Nomenclature usually followed that of Gosner (1971).

The yearly total number per collection (n/coll.) of major invertebrate components (gastropods, bivalves, decapods, echinoderms, and the sum of all other species combined) was ranked and compared with the nonparametric Friedman's test (Tate and Clelland 1957). Differences between ocean stations, Inlet stations, and offshore and Inlet stations were compared.

Replicate hauls of a clam dredge were made by taking two successive tows over the same area in the vicinity of the Site and in Little Egg Inlet in 1974 (Table 40). Numbers of the Atlantic surf clam taken in 23 replicates were compared graphically and with the Wilcoxon signed rank test (Tate and Clelland 1957). The formula, $R_T = \frac{(R_1 - R_2)}{(R_1 + R_2)/2}$, was plotted versus $\log \frac{R_1 + R_2}{2}$ where, R_1 equals the number of clams in replicate 1, R_2 equals the number of clams in replicate 2, and $(R_1 + R_2)/2$ equals the average size of the haul. The linear regression equation was calculated with 15 pairs of data (zero values and outliers were deleted). An approximate relation between sample size and amount of variation between hauls in the same area was determined.

Results

Sampling Variability

The Wilcoxon test indicated that the variation between replicate hauls was random. The percent variation was greater in areas with low density (Fig. 14). In samples with less than 10 clams, 100% sampling variation occurred. In larger samples, with more than 100 clams, sampling variation was 25% or less.

Ocean

In 1974, 81 collections were taken in the vicinity of the Site (Fig. 8). They yielded 4,427 specimens of 41 taxa which weighed 485 kg. Species composition and physicochemical parameters for each collection are given in Appendix Tables 7 to 15. Seasonal summaries of monthly collections appear in Tables 41 to 49. The Atlantic surf clam ranked first and comprised 94% of the weight and 70% of the specimens. Other major species were the horseshoe crab, Limulus polyphemus (2% by weight, 0.2% by number) and the Atlantic moon snail, Polinices duplicata (2%, 7%). The remainder was accounted for by 38 taxa, each of which comprised less than 1% of the total weight.

Ocean stations were compared by ranking the major components of the collections. No significant difference ($P \leq .05$) between stations was found when comparing major components with Friedman's test. Ocean stations were also compared by ranking the total yearly density of the 7 most abundant species. No significant difference was found ($P \leq .05$) between stations.

The Atlantic surf clam ranked first by number and weight, and averaged 38 n/coll. (5.6 kg/coll.) for the year. It was most abundant at the Landward I station where it averaged 127 n/coll. (16.7 kg/coll.). At the stations north, south, and Landward II of the Site (Fig. 8) the surf clam was common and the yearly average ranged from 18 to 38 n/coll. At the Site and landward of Brigantine Ridge, the surf clam was sparse and averaged 2 to 3 n/coll.

The sand dollar ranked second by number, sixth by weight, and averaged 6 n/coll. (37 g/coll.) for the year. It occurred exclusively at the Brigantine II station (88 n/coll.) and at the Ridge (1 n/coll.).

The Atlantic moonsnail ranked third in abundance and weight and averaged 4 n/coll. (98 g/coll.) for the year. It ranged from 1 to 6 n/coll. at all ocean stations.

Little Egg Inlet

A total of 47 collections taken in the Inlet at four stations yielded 30,698 specimens of 35 taxa which weighed 425 kg. Species composition and physicochemical parameters for each collection are given in Appendix Tables 16 to 20. Seasonal summaries of monthly collections appear in Tables 50 to 54. The Atlantic surf clam ranked first and comprised 64% of the weight and 5% of the specimens. Other major species were the blue mussel (29% weight, 93% number); starfish, Asterias forbesii (3%, 0.5%); and rock crab (2%, 0.9%). The remainder was accounted for by 31 taxa, each of which comprised less than 1% of the total weight.

Significant differences were found between major components of Inlet stations. The most abundant species (Atlantic surf clam, blue mussel, rock crab, and starfish) at Inlet stations were compared by ranking their abundance each month at each station. A significant difference between stations was found for all species except the rock crab.

The blue mussel ranked first by number and was collected only at stations south of Stake "96" and near "F" buoy. South of Stake "96" it had a yearly average of 2,592 n/coll. (11.2 kg/coll.); near "F" buoy, it averaged 1 n/coll. (3 g/coll.).

The Atlantic surf clam ranked second in abundance and was collected at all stations. It was most abundant on a sandbar east of Stake "96" where it averaged 91 n/coll. (16.6 kg/coll.). At the other stations, it averaged from 1 to 9 n/coll. for the year.

The starfish ranked third in abundance and was collected at all stations. It was most abundant south of Stake "96" where its yearly average was 13 n/coll. At other stations, the yearly average ranged from less than 0.5 to 1 n/coll.

Ocean versus Inlet

Ocean and Inlet stations with sandy substrate were compared by ranking the densities of major components and of abundant species and no differences ($P \leq .05$) were found. Aggregations of blue mussels which occurred in the Inlet differed significantly from the fauna found on sandy substrates.

Little Sheepshead Creek

Eleven collections at the Little Sheepshead Creek station (zone 2210) yielded 420 specimens of 24 taxa which weighed 26 kg (Table 54). The hard clam (23 n/coll, 2.1 kg/coll.), spider crab (2 n/coll., 12.6 g/coll.), and blood ark, Anadara ovalis, (1 n/coll., 32 g/coll.) comprised 97% of the weight. This station yielded different species than were encountered in the Inlet or ocean.

Discussion

In the ocean, Atlantic surf clam, horseshoe crab, lady crab, Atlantic moonsnail, rock crab, and sand dollar comprised 99.5% of the weight collected. These and the following comprised 95.2% of the number collected: long-armed hermit crab, northern moonsnail, and the polychaete, Lumbrineris fragilis. Bottom sediments at all ocean stations were composed of sand with a small percentage of silt and were similar. Although no major differences between stations were detected, the Atlantic surf clam was most abundant at the Landward I station. The largest number of taxa (26) was collected at the Site and the smallest (12) was taken on the Ridge. An average of 55 n/coll. was taken from all stations in the ocean and 12 n/coll. was taken at the Site.

In the Inlet, the blue mussel, Atlantic surf clam, rock crab, and starfish comprised 97.1% of the total weight of specimens and 98.9% of the total number. The bottom sediment varied from station to station which in part, accounted for the difference between the densities of the major components and dominance by different species

at each station. The station south of Stake "96" had the highest percentage of silt and dense aggregations of the blue mussel were present there. Many Atlantic surf clam occurred east of Stake "96" where the bottom was primarily sand. The station south of Stake "96" had the most taxa (29), and that off Little Beach had the least (6). No significant differences were found between densities of major components at stations in the ocean and in the Inlet. However, in the Inlet, the blue mussel formed dense aggregations which did not occur in the ocean.

In Little Sheepshead Creek, the hard clam, spider crab, and blood ark were the most common species by weight. The most abundant species by number were the hard clam, polychaete (Hydroides dianthus), and the spider crab.

CLAM DREDGE SURVEY

Introduction

On September 13, 14, 15, 16, and 27, a total of 45 samples was taken with the clam dredge in the Inlet and the vicinity of the Site. Samples were taken on a rectangular grid, approximately 5 statute miles wide and 8 miles long (Fig. 15). The grid was centered on the Site and extended from Holgate on the north to Brigantine Inlet on the south and from "D" buoy in Little Egg Inlet to the 50 foot contour east of the Site. An effort was made to take samples at 1 mile intervals.

The objectives were to determine the distribution, density, biomass, and life history information of the Atlantic surf clam and associated species.

Materials and Methods

The clam dredge and methods for its use were described above. For the survey, two such dredges were bolted together to obtain two simultaneous replicate samples.

All samples were sorted in the field; everything was returned except small specimens of the Atlantic surf clam (less than 60 mm) and *morrhua* venus, Pitar morrhuana. Organisms were classified, enumerated, and weighed to the nearest 0.1 kg with a hand-held spring scale. All Atlantic surf clam were measured from small collections and a subsample of 150 individuals was measured from large collections. Measurements were made to the nearest mm with a vernier caliper.

A 500 cc sediment sample was taken with a ponar grab at each station. Grain size was estimated visually using a phi-size finder.

Results

The collections yielded 10,063 specimens of 27 taxa which weighed 517 kg (Appendix Table 21). The Atlantic surf clam (29% of the total number, 88% of the total weight) and the sand dollar (63%, 7%) were dominant.

The 10 most numerous species (99% of the specimens taken) were the sand dollar; Atlantic surf clam; Atlantic moonsnail; smooth astarte, Astarte castanea; *morrhua* venus; rock crab; lady crab, Ovalipes ocellatus; long-armed hermit crab; New England nassa; and northern moonsnail. Distribution maps were plotted for these 10 species

(Fig. 16 to 24), the total number of organisms taken (Fig. 25), and the sediment type (Fig. 26). The average density for all organisms was 0.66 n/m^2 (0.003 to 7.7 n/m^2). The area near the Site (stations 20, 21, and 22) exhibited low densities of 0.04 , 0.03 , and 0.003 n/m^2 .

The sand dollar was collected at depths from 20 feet to 37 feet; 86% were taken in depths greater than 40 feet. It was most dense at Station 23 (7.8 n/m^2) and was also common at Stations 28, 29, 30, 32, and 35. The average density was 0.38 n/m^2 . Low densities of 0.03 , 0.002 , and 0 n/m^2 were taken near the Site.

The Atlantic surf clam was collected at all depths; 94% were taken between 10 and 30 feet. It was most dense at station 1 (1.6 n/m^2) and was common at stations 3, 4, 9, 14, 2, 46, 48, and 49. The average density for all stations was 0.18 n/m^2 , but the average density for stations of depths less than 20 ft was 0.51 n/m^2 .

The mean length of 1,133 Atlantic surf clam was 101 mm and the mode was 102 mm (Table 55 and Fig. 27). At depths less than 20 ft, the mean was 98 mm and at depths greater than 20 ft, it was 127 mm. Clams of commercial size (greater than 100 mm) comprised 55% of those taken. Individuals less than 50 mm comprised 5% of the total. The remainder were in the 50-100 mm size range.

The Atlantic moonshell was collected at depths from 14 to 20 ft. It was most abundant at station 9 (0.25 n/m^2) and averaged 0.02 n/m^2 . It was sparse at the Site where densities were 0.003 , 0 , and 0 n/m^2 .

The smooth astarte was present at depths from 36 to 57 ft. Its highest density was encountered at 56 ft at station 39 (0.08 n/m^2).

Average density was 0.01 n/m^2 . It was absent from the Site.

The morrhua venus was collected at depths from 36 to 56 ft. It was most dense at station 24 (0.07 n/m^2) and averaged 0.004 n/m^2 . None were found near the Site.

The rock crab was present at depths from 23 to 56 ft. It was most dense at station 27 (0.06 n/m^2) and averaged 0.004 n/m^2 . None were taken near the Site.

The lady crab was collected at depths from 16 to 47 ft. It was most dense at station 47 (0.02 n/m^2) and averaged 0.01 n/m^2 . It was sparse at the Site (0.001 , 0 , and 0.003 n/m^2).

The long-armed hermit crab was collected at depths from 10 to 56 ft. It was most dense at station 9 (0.03 n/m^2) and averaged 0.01 n/m^2 . None were taken near the Site.

The New England nassa was present at depths from 18 to 56 ft. It was most dense at station 9 (0.07 n/m^2) and averaged 0.01 n/m^2 . None were collected near the Site.

The northern moonsnail was collected at depths from 14 to 50 ft. It was most dense at station 28 (0.05 n/m^2) and averaged 0.004 n/m^2 . Low densities of 0.001 , 0.002 , and 0 n/m^2 were found near the Site.

Discussion

Haskin and Merrill (1974) reported generally higher densities of surf clam in the Little Egg Inlet area than were observed in the present study. This may be because (1) their collections were taken with a commercial hydraulic dredge which digs deeper than a dry dredge and caused their estimates of density (n/m^2), weight (kg/m^2), and length (mean

length) to be greater than ours; (2) in some cases their tow distances may have been underestimated and therefore densities overestimated (personal communication, Harold Haskin); (3) the smaller mesh of the dry dredge facilitated collection of small clams not taken by them.

In September, low densities of organisms susceptible to collection with the clam dredge were found at the Site. No aggregations of Atlantic surf clam occurred in the immediate vicinity of the Site but high densities were found landward of the Site.

Populations of Atlantic surf clam of commercially harvestable size and density exist on the shoals bordering Beach Haven, Little Egg, and Brigantine inlets. These aggregations were from 10 to 100 times as dense at those outside the 20 ft contour. The mean length was smaller inside the 20 ft contour.

TRAWL

Introduction

Collections were made in the vicinity of the Site with a 25-ft semiballoon trawl since February 1972. In 1974, the program was expanded to include monthly collections in the Great Bay-Mullica River estuary; night collections; and simultaneous replicate tows. The objectives were to determine relative abundance, biomass, and temporal and spatial distributions of demersal fish and motile benthic invertebrates in the vicinity of the Site and in the estuary.

Materials and Methods

The gear, methods of collection, sampling stations, and lab techniques are presented in the section for the 25-ft trawl program in Volume I.

Large collections of some species (ie. lady crab, rock crab, sand dollar, Echinarachnius parma, and starfish) were counted, measured, sexed (where applicable), weighed, and released in the field. Subsamples were preserved for life history studies. In the field, weights were taken to the nearest 0.1 kg with a hand-held spring scale.

The sex and reproductive condition of all crabs were noted. The carapace widths of the rock crab and the blue crab, Callinectes sapidus, were measured to the nearest mm with a vernier caliper.

Most collections were preserved and invertebrates were identified, counted, and weighed in the lab. Wet weights were measured to the nearest gram using an Ohaus triple beam balance. Molluscan egg cases, Crepidula spp. , cnidarians (except Actiniaria and Cyanea capillata), ctenophores, and bryozoans were noted as present. Nomenclature usually followed that of Gosner (1971).

Species diversity of individual collections was calculated using the Shannon Weaver Index (Pielou 1966). Seasonal and monthly diversities are averages of individual values.

The Wilcoxon signed rank test (Tate and Clelland 1957) was used to test for differences between day and night hauls in the ocean.

Results

Ocean

In the vicinity of the Site in 1974, 187 collections were taken in the day and 15 were made at night (Appendix Table 22).

A total of 85,186 specimens (60 taxa), which weighed 471.8 kg was collected in the ocean (Tables 56 and 57). Species diversity of individual collections ranged from 0.08 to 2.12.

Decapods constituted 67% of the total number of specimens and 35% of the total weight. The sand shrimp comprised 88% of the decapods and accounted for 10% of the decapod weight. The rock crab accounted for 57% of the decapod weight and the lady crab comprised 20%; together they composed 7% of the decapod specimens.

Echinoderms were the second most abundant organisms in ocean trawl collections and accounted for 19% of the total number and 21% of the total weight. The most abundant were the sand dollar (71%) and starfish (29%).

The 10 most abundant species by weight in ocean trawl samples were the horseshoe crab, (33% of the total weight and 0.1% of the total number); rock crab (20%, 4%); sand dollar (15%, 1%); lady crab (7%, 1%); starfish (7%, 5%); Atlantic long-finned squid, Loligo pealei (5%, 9%); sand shrimp (4%, 59%); lion's mane jellyfish (0.2%, 0.1%); blue crab (0.2%, 0.1%); and the spider crab, Libinia emarginata (0.2%, 0.1%).

Of the 10 most numerous species in the ocean, the sand shrimp, sand dollar, rock crab, starfish, long-armed hermit crab, and New England nassa appeared every month (Table 58). The sand shrimp averaged 25 n/coll. for the year. Peaks in abundance occurred in February and July. The sand dollar averaged 56 n/coll. and was most abundant in the spring. Most were collected seaward of the Ridge (zones 5350 and 5450) but it was occasionally encountered inside the Brigantine ridge (zones 5280 and 5380). It averaged 117 n/f (number per collections in which it appeared). The starfish averaged 23 n/coll. and its density remained relatively stable throughout the year. The rock crab averaged 16 n/coll. for the year. Peaks in abundance were recorded in February and July. The long-armed hermit crab averaged 9 n/coll. for the year and was most abundant in the summer. The New England nassa averaged 1 n/coll.

The horseshoe crab, lady crab, and blue crab were present in the vicinity of the Site during most of the year. The horseshoe crab averaged less than 1 n/coll. for the year. It was most abundant in the spring and summer, and was absent in January and February. The lady crab was present in all seasons except winter. It averaged 6 n/coll. for the year and was most abundant in the summer and fall. The blue crab was not collected in the vicinity of the Site in January, March, May, and October. It averaged less than 1 n/coll. for the year and was most abundant in November.

The Atlantic long-finned squid was present in the ocean from May through December. It was most abundant in July and September and averaged 104 n/f.

The brown shrimp, Penaeus aztecus, was taken from August through November. It was most abundant in October, and averaged 2 n/f.

Great Bay-Mullica River estuary

A total of 44 collections was taken on a transect from the Mullica River through Great Bay to Little Egg Inlet (Fig. 8, Vol. I). Eleven were taken in each of the following areas: Little Egg Inlet (zone 1015), the intracoastal waterway in Great Bay (zone 1045), the inner portion of Great Bay (zone 1075), and the lower Mullica River (zone 1510). See Appendix Table 23.

A total of 120,892 specimens (59 taxa), which weighed 172.8 kg, was collected in the estuary (Tables 59 and 60). Species diversity ranged from 0.01 to 1.92.

The blue mussel comprised 50% of the total number and 44% of the total weight.

Decapods made up 49% of the total number and 44% of the total weight. Sand shrimp comprised 98% of the number and 36% of the weight of decapods taken. The rock crab and blue crab each accounted for 1% of the decapod number and together accounted for 52% of the decapod weight. The grass shrimp accounted for 1% of the decapod weight and 4% of the number.

The 10 most abundant species by weight were the blue mussel (27% of the total weight, 50% of the total number); boring sponge, Cliona sp. (16%, -); rock crab (16%, 0.1%); sand shrimp (16%, 45%); blue crab (7%, 0.1%); horseshoe crab (4%, 0.1%); lady crab (4%, 0.1%); redbear sponge, Microciona prolifera (2%, -); starfish (2%, 1%); and hard clam (1%, 0.1%). The blue mussel, sand shrimp, rock crab, starfish, and

blue crab which also ranked among the 10 most abundant species, by number were present throughout most of the year, and together comprised 87% of the biomass collected in the Bay in 1974 (Table 61).

The blue mussel was found in localized aggregations in association with the mud crab and starfish. These communities were present all year but were only encountered sporadically. The blue mussel averaged 30,348 n/f (the number per collection in which it occurred), the starfish 41 n/f, and the mud crab 13 n/f.

The sand shrimp, blue crab, and long-armed hermit crab were taken every month. The sand shrimp averaged 267 n/coll., the blue crab 2 n/coll., and the long-armed hermit crab 3 n/coll. The sand shrimp was most abundant in winter and the blue crab was most common in spring.

The rock crab (2 n/coll.), lady crab (1 n/coll.), and horseshoe crab (≤ 1 n/coll.) appeared in small numbers in the Bay. The rock crab was absent in May and the lady crab was absent in February and August. The horseshoe crab was present in five of the 11 months sampled.

The brief squid, Lolliguncula brevis, appeared from July through November and was most common in September; it averaged 16 n/f for these months.

Day/Night Comparison

Some 38 species were taken in day/night collections in the vicinity of the Site; eight species comprised most of the biomass and appeared in 10 or more replicate pairs. Total number, total weight, and individual numbers of New England nassa, Atlantic long-finned squid, sand shrimp, long-armed hermit crab, rock crab, lady crab, sand dollar, and starfish were compared in day/night paired samples (Table 62).

The total number of specimens per collection was significantly ($P \leq .05$) greater at night. Most of the day/night differences were due to a 100 fold increase in number of sand shrimp collected at night. The number of Atlantic long-finned squid collected during the day was 50 times greater than during the night. The rock crab was usually more numerous in the day, but the difference was not significant ($P \leq .05$). Total weight taken was usually greater at night but this difference was not significant.

Discussion

The macroinvertebrate community in the estuary and the vicinity of the Site changed seasonally and each area was utilized at different times of the year by different groups. Abundance of some species, such as the sand dollar and starfish, was primarily affected by success of spawning and settlement, and showed only small seasonal variation. Other species exhibited dramatic changes in abundance, particularly the decapods and squids which moved in and out of the estuary and offshore and inshore in distinct patterns.

The resident populations of the estuary and ocean were different. The sponges, Cliona sp. and M. prolifera, were found exclusively in the Bay and the sand dollar was found only in the ocean. Estuarine species such as the mud crab and blue crab were rarely found in the ocean and marine species such as the lady crab were rarely found in the estuary. A few residents such as the sand shrimp were ubiquitous.

The sand dollar, starfish, and blue mussel were present all year and exhibited little seasonal change in density. These species were

present in localized areas of suitable substrate. The sand dollar preferred coarse sand in the ocean; the blue mussel preferred wrecks in the ocean and channel banks and hard substrates in the Bay and Inlet.

In winter, diversity values were low in both the ocean (0.81) and estuary (0.74) when a few species dominated the communities in each area. Large rock crab migrated from offshore to the vicinity of the Site and Inlet and were present in densities as high as 108 n/f. Large sand shrimp were numerous in the nearshore ocean and in the lower Mullica River in densities as high as 547 n/f and 8,995 n/f, respectively.

In spring, the numbers of sand shrimp and rock crab were less and the diversity values increased to 1.10 in the ocean and to 1.06 in the estuary. The higher diversity also coincided with the appearance of species which had not been present in winter. The blue crab had high densities in the estuary (57 n/f); the horseshoe crab was taken about equally in the ocean (3.2 n/f) and estuary (4 n/f); and the lady crab was common in the vicinity of the Site (5 n/f) and Inlet (1 n/f). Adult Atlantic long-finned squid and squid eggs were first collected in the ocean in May.

In summer, the diversity in the ocean dropped to 0.94 and that in the estuary rose to 1.12. The drop in the ocean value was caused, in part, by large numbers (1,116 n/f) of juvenile sand shrimp. Juveniles of both the rock crab and Atlantic long-finned squid were common. The lady crab and long-armed hermit crab were abundant in the ocean at this time. The brown shrimp and gravid blue crab were present in the vicinity of the Site. The increase in the diversity in the estuary was partially due to the appearance of southern species such as the brief squid and the lesser blue crab, Callinectes similis.

In fall, diversity values in the ocean (1.22) and the estuary (1.40) were highest for the year. Sand shrimp and rock crab were of larger size but their numbers were lower. Adult rock crab began to move inshore and were common in the vicinity of the Site in late fall. The brief squid and lesser blue crab, which were only present in the Bay in summer, appeared in both the Bay and ocean in fall. The blue crab, horseshoe crab, lady crab, and Atlantic long-finned squid decreased in numbers in early fall and were absent from ocean and estuarine collections by December.

COMMERCIAL SHELLFISHERIES

Thirteen shellfishes were taken commercially in the ocean and bays along the New Jersey coast in 1974. Their value (\$9.3 million) accounted for 50% of the total commercial landings in New Jersey. The five most valuable shellfishes were the Atlantic surf clam, American lobster, hard clam, eastern oyster, and blue crab. These comprised 91% of the value of shellfish landings (Table 63). Shrimp were taken in 1972 and 1973 but were not landed in 1974.

Atlantic County landings accounted for 21% of the value of the New Jersey landings, an increase of 5% over the 1973 value. The Atlantic surf clam, American lobster, and hard clam comprised 97% of the value of the Atlantic County landings.

In 1974, 22.6 million lb of the Atlantic surf clam, with a dockside value of \$2.95 million, were landed in New Jersey; 28% of the catch was landed in Atlantic County. The Atlantic surf clam accounted for 36%

of the value of all commercial landings. The fishery in New Jersey was discussed previously by Thomas and Milstein 1973 and Garlo et al. 1974.

Some 1.2 million lb of American lobster valued at \$1.9 million were landed in New Jersey; 10% of this catch was landed in Atlantic County.

A total of 1.7 million lb of hard clam worth \$1.7 million was taken commercially from bays in New Jersey. The hard clam was the most valuable species landed in Atlantic County and those landed in Atlantic County comprised 45% of the value and nearly 50% of the weight of those landed in the State.

New Jersey landings of the eastern oyster totaled 1 million lb and were valued at \$1 million. None were landed in Atlantic County, although some (1%) were taken from lots in the Mullica River.

State landings of blue crab amounted to 2.9 million lb valued at \$724,000. Cape May County accounted for most commercial landings; only 5% were from Atlantic County.

Conch, sea scallop, rock crab, and squid landed in New Jersey were valued at \$797,896. They comprised 9% of the total value of shellfish taken; Atlantic County landings accounted for 3% of this total.

LIFE HISTORY STUDIES
The Atlantic Surf Clam

Introduction

Collections of the Atlantic surf clam began in February 1972 for the spat and in April 1972 for adults and juveniles. The spatial and temporal distribution, number per m^2 , monthly length-frequency distribution, and monthly reproductive condition were determined for samples taken in 1974.

Materials and Methods

The Atlantic surf clam was collected in the ocean and Inlet with the clam dredge and ponar grab. Anterior-posterior lengths of specimens less than 10 mm were measured to the nearest 0.1 mm with an ocular micrometer. Lengths of large specimens (greater than 10 mm) were measured to the nearest mm with a vernier caliper.

Gonad condition was estimated monthly by macroscopic examination of a random subsample of 10 to 35 clams (60-169 mm in length) from one collection in the ocean and one in the Inlet.

Results

Spat, which were collected with the ponar grab, ranged from 0.5 to 24.4 mm in size (Table 64). They ranked fifth by numerical abundance in ocean (8% of all specimens of all species) and Inlet (4%) collections. They ranked twelfth by weight (4% of total weight) at the Site and third (3%) in the Inlet (zone 1010).

Most spat were collected in spring and about half of those were collected in May when bottom water temperatures were 9.0 to 14.5 C. The modal size class was 1.0-1.4 mm in April and May, and was 3.5-3.9 mm in June. Spat were common in the summer, especially in July when the size distribution was bimodal (1.0-1.4 mm and 11.5-11.9 mm). Few spat were collected from August through October but density increased slightly in November and was high in the winter, particularly in January. Bottom water temperatures from November through March decreased from 14.0 to 2.0 C.

Spat were abundant at all ocean stations and averaged 152 n/m^2 for the year. Densities were highest at stations within 1.5 nautical miles of shore where they averaged 160 n/m^2 for the year. The station with the highest average abundance (465 n/m^2) was located just north of the Site (zone 5143).

Specimens of the Atlantic surf clam collected with the clam dredge ranged in size from 15 to 169 mm. They ranked first in numerical abundance in the ocean (70% of all specimens of all species) and second in the Inlet (5%). They ranked first by weight in the ocean (94% of the total weight) and Inlet (64%).

Small specimens of the surf clam (15 to 99 mm) and commercial sized surf clam (100 to 169 mm) were collected with a clam dredge. Small clams were most abundant in August when their modal size class was 30-34 mm. In September, small clams taken in the clam dredge survey were most common near shoals just off Little Egg and Brigantine inlets at depths between 12 and 18 feet. Some 94% of these were taken at depths less than 20 ft. Their modal size class was 25-29 mm

with a second mode at 30-34 mm. In November, the modal size class was 45-49 mm.

Small clams from the ocean (less than 60 mm) comprised 64% of those taken in August, 5% in September, 2% in October, and 48% in December. They comprised less than 2% of those collected during the rest of the year. The Landward II station (zone 5158) yielded the most.

Approximately 77% of the clams taken on the Site transects were of commercial size (100 mm or greater). In Little Egg Inlet, at the station east of Stake "96", 58% of the clams were commercial size. No seasonal changes in the abundance of commercial sized clams were evident (Tables 65 and 66).

The abundance of those clams collected with the clam dredge varied spatially. The densest aggregation was in Little Egg Inlet east of Stake "96" where the average yearly density was 3.25 n/m^2 . Another dense aggregation existed at the ocean station nearest shore (zone 5158) where the average yearly density was 0.69 n/m^2 . For survey stations inshore of the 20 ft depth contour the average density was 0.51 n/m^2 . Between the 20 and 50 ft contours it was 0.18 n/m^2 .

Gonadal condition of those clams collected in the ocean during April indicated that 90% were full (ripe) and 10% were partly spent. Most gonads were partly spent from June through September. In October, all clams appeared spent. From November through March, when bottom water temperatures decreased from 14.0 to 2.0 C, most of the gonads were refilling.

In the Inlet, 100% of the surf clam gonads were full in April. From May through August, most were partly spent and from September through January most were spent. In February and March, gonads were refilling. Evidence from gonad condition indicated that spawning occurred between mid-April and mid-May. It was difficult to detect the second spawn by gonad condition; however, the abundance of spat in late fall and winter indicated that a second spawn occurred.

Discussion

Commercial sized Atlantic surf clam showed no seasonal trends in abundance. About 77% of the specimens taken in the ocean were 100 mm or greater. Densities ranged from 0.69 to 0 n/m² in the ocean. In the Inlet (zone 1010 near "G" buoy), where densities reached 3.25 n/m², only 58% of the specimens were of commercial size.

Maturation of the gonads of clams collected in the ocean and Inlet appeared to be similar. In the present study, gonads appeared to be ripening at temperatures from 2 to 14 C. Ropes (1968) reported that a progressive development of gonads to a ripe state occurred prior to the first annual spawn during a period of warming of temperatures to 12 C.

The major spawn in the ocean and Inlet occurred between mid-April and mid-May. The largest density of spat was in May and a second peak in abundance occurred between November and March. Ropes (1968) reported that a major midyear spawn and a minor late year spawn occurred in New Jersey in 3 out of the 4 years he studied. He stated that the late year spawn was not always an annual event.

Some trends in spatial distribution of spat were evident. Very few settled in the Inlet although adult clams were abundant there. Most settled in the ocean within 1.5 nautical miles offshore.

Small specimens of the Atlantic surf clam (between 15 and 60 mm in length) were most abundant in August and November at the stations nearest shore. About 33% of the clams taken throughout the year at stations sampled monthly were less than 100 mm in length.

Rock Crab

Introduction

The rock crab was common throughout 1974 in the ocean and bays in the vicinity of Little Egg Inlet. Life history information for 1973 was briefly discussed by Garlo et al. (1974). The objectives of the present study were to determine its spatial and temporal distribution, abundance, size, migration, sex ratio, and time of molting.

Materials and Methods

The rock crab was taken by trawl, clam dredge, lobster pot, ponar grab, 0.5-m plankton net, 0.1-m² Bongo, and 12.5-cm Clarke-Bumpus plankton sampler. Collections were usually made at least once a month throughout the year. Few collections were made in December. No lobster pot samples were taken in September, November, or December.

Results

A total of 4,971 rock crab was collected in 1974. Most (83.5%) were taken in the ocean; some (16.5%) were collected in the bays and

Inlet (Table 67). Trawl collections captured 78.6%, lobster pot 12.1%, ponar grab 7.8%, and clam dredge 1.5% of those taken in the ocean (Table 68). In the bays and Inlet, trawl samples yielded 67.3% of those rock crab taken and clam dredge samples took 32.7% (Table 69).

Most were collected in the summer (42.6% of the total) and fewer were taken in the winter (21.6%), spring (19.5%), and fall (16.3%). Most collected in the ocean were taken in summer (48.2%) while most of those taken in the bays and Inlet were collected in winter (57.6%). The largest number per collection (n/coll.) taken by 25-ft trawl in the ocean was 28.7 n/coll. (summer) and in the bays and Inlet it was 31.0 n/coll. (winter).

Carapace width of 2,983 rock crab collected by 25-ft trawl was measured (Tables 70 and 71). The mean size from January through April was 78 mm for those collected in the ocean and 74 mm for those taken in the bays and Inlet. Mean size decreased to 21 mm (ocean) and 27 mm (bays and Inlet) from May through October and increased to 45 mm (ocean) and 66 mm (bays and Inlet) from November through December (Fig. 28).

The inshore-offshore migration of larger individuals was associated with seasonal changes in water temperatures. Mean bottom temperatures at the Site ranged from 4.6 C in January to 8.0 C in April, the period when the largest crabs were abundant. Small specimens were collected from May through October. Mean bottom temperatures were 12.1 C in May and 15.9 C in October. Mean temperatures ranged from 11.6 C in November to 6.0 C in December when larger crabs returned to the area.

The male-female ratio was 2,825:1,336 (2.1:1) for pooled data, from all stations sampled (Table 72). In the ocean, males dominated with a ratio of 7.3:1 in winter and 7.5:1 in spring. In summer and fall, the ratio was less than 2:1. In the bays and Inlet, males dominated with a ratio of 2.7:1 in winter and 5.1:1 in fall. In spring and summer, the ratio was less than 2:1. A ratio dominated by males was found for rock crab off the Virginia Coast by Shotton (1973).

The size range of males was 4-138 mm while females ranged from 3-91 mm. Shotton (1973) also found that males grew to a significantly larger size than females.

After copulation, sperm plugs (hard, rod-like crystalline bodies) extend into the vagina and protrude from the vulvae. They are an indication that mating has occurred (Terretta 1973). Females with sperm plugs ranged from 18 to 78 mm in size and were found throughout the year. Most plugged females appeared in the bays and Inlet in winter and spring, and in the ocean in summer and fall. Few were taken in spring when the number of gravid females was the largest.

Gravid females were collected in all months except July and August and were most common in spring. They ranged in size from 22 to 77 mm. Most gravid females were found in the bays and Inlet during winter and spring, and in the ocean during fall.

The rock crab was recorded as molting only if its shell was in a soft condition. Molting was most prevalent among juveniles in July, when they molted several times. Most adults molted in January.

Rock crab zoeae were present at the Site from early April to early June, and their maximum density was in May. Zoeae were collected 8.0 nautical miles off Little Egg Inlet from late March to early July (no sample was taken in April) with the greatest density in early June.

Rock crab megalopae were found at the Site from early to mid-June and in September. Megalopae were taken 8.0 nautical miles off Little Egg Inlet from early June to early August; the greatest density was in early June.

Juvenile rock crab (3-9 mm) appeared in the ocean in June and July. The modal size class was 5-9 mm in June, 10-14 mm in July, and 20-24 mm in August.

Discussion

The rock crab was a year-round resident in the study area. Larger individuals moved inshore from November through April during the period of cold water temperatures. Shotton (1973) hypothesized that the rock crab followed colder waters during seasonal inshore-offshore migrations along the Virginia coast. The rock crab is most abundant in the Chesapeake Bight at water temperatures from 4 to 8 C (Musick and McEachran 1972). For most of the year, at least twice as many males were collected as females.

A small plugged female (18 mm) and gravid female (22 mm) suggested that the rock crab reached sexual maturity early. The largest number of plugged females (25.9 mm, mean size) occurred in September. The mean size of females in September was 24.3 mm, which indicated

that the rock crab matures in its first year. Shotton (1973) collected a 28.2 mm ovigerous female and other ovigerous specimens less than 33 mm. It was found to be immature at a size less than 60 mm in the Gulf of Maine (Krouse 1972) and in the Gulf of St. Lawrence (Scarratt and Lowe 1972). In this study it matured earlier and grew faster than its northern counterparts.

PROTOPLANKTON

James H. Currie

Introduction

The major objective of the proto plankton study was to quantitatively determine the temporal distribution of the standing crop at the Site. At least one sample each month, from May 1972 through April 1973, was quantified. Monthly fluctuations in the abundance of the major groups throughout the year are discussed.

Materials and Methods

Descriptions of the study area, sampling program, and laboratory methods were presented by Currie (1974). Sampling extended through May 1974 in the bays and was terminated in October 1974 in the ocean. Samples collected during 1974 have not been analyzed.

All samples for analysis were concentrated by sedimentation in the original collection jars. The supernatant was removed by slow siphoning. Enumerations of proto plankters were carried out in both the Sedgwick-Rafter and Palmer-Maloney chambers, following the procedures outlined previously by Currie (1974). Small aliquots from 15-cm nannoplankton net (10- μ m mesh) samples were also examined qualitatively for the presence of large, rare proto plankters.

Results

The following results include only those obtained since the last progress report by Currie (1974).

The standing crop at the Site was determined for single collection dates in May, June, and July of 1972 and in February, March, and April of 1973. Six out of the seven major groups were generally present in all samples analyzed (Tables 73-78). Silicoflagellates were absent in May, and in March ciliates were absent. Total protoplankton density ranged from 327,040 cells/liter in July to 1,823,330 cells/liter in June.

Diatoms

From May through July, 1972, diatom density at the surface averaged only about 4,200 cells/liter. Densities were greater from February through April, 1973, with a peak of about 248,700 cells/liter in February. Thalassiosira nordenskioldii was dominant in February and March. Rhizosolenia fragilissima dominated in April and was subdominant in February. The number of species in the 6 month period was the lowest in May and June and the largest in February and April.

Dinoflagellates

Dinoflagellates were most abundant in May and June of 1972, with a peak of approximately 239,700 cells/liter in June. Densities during the remaining months were all under 3,000 cells/liter. The number of species was lowest in March and largest in June. Ceratium species, particularly C. minutum and C. bucephalum, dominated in June. Two

unidentified gymnodinians were together numerically most important at this time.

Other Protoplankters

Non-motile chlorophyte densities were moderately low from May to July 1972 and from February to April 1973, and averaged approximately 9,300 cells/liter. Blue-greens were always abundant; densities ranged from 198,200 cells/liter in July to 859,700 cells/liter in June. Naked flagellate densities ranged from 23,400 cells/liter in April to more than 131,000 cells/liter in June. Euglenoids were present in June and July 1972, and in April 1973. Silicoflagellate numbers were always low, and densities never exceeded 420 cells/liter. Tintinnids were the predominant ciliates and a peak abundance of approximately 15,000 cells/liter occurred in May and June.

Discussion

Protoplankton abundance at the Site from May 1972 through April 1973 is discussed below. Cell densities of the major groups enumerated in all surface collections which were analyzed to date are given in Table 79. Total protoplankton densities are also indicated.

Total protoplankton abundance reached a maximum of approximately 1.8 million cells/liter in June. Secondary peaks in abundance of about 1.4 to 1.5 million cells/liter also occurred in late August and late September, 1972.

As a group, diatoms exhibited maximum abundance in late September 1972 (over 826,000 cells/liter) and they comprised about 54% of the

total protoplankton standing crop. Dominant species included Skeletonema costatum, Thalassiosira rotulā, and T. condensata. Possible causes for this bloom of diatoms were discussed by Currie (1974).

A secondary peak in diatom abundance occurred in February 1973. Cell density totaled over 248,700 cells/liter and they comprised 25% of the total protoplankton abundance. Thalassiosira nordenskioldii was the dominant species and Rhizosolenia fragilissima and Skeletonema costatum were subdominants.

Thalassiosira species were reported by Sage and Herman (1972) to predominate during a late February bloom in Sandy Hook Bay. Studies by Riley (1967) and Riley and Conover (1967) in Long Island Sound extended over several years and indicated that the main diatom flowerings occurred between late January and mid-March. They reported that the dominant species in late-winter blooms were the diatoms Skeletonema costatum and Thalassiosira nordenskioldii. Both Skeletonema costatum and Rhizosolenia fragilissima were reported as dominants during a winter-spring bloom in Chesapeake Bay (Smayda 1973).

Light and temperature were the primary factors affecting the initiation of the winter bloom (Riley 1967). Experiments have shown that T. nordenskioldii may have a competitive advantage over S. costatum during periods of low temperatures (2-3 C) and lowered light intensities (Riley and Conover 1967, Smayda 1973). At the Site, T. nordenskioldii was dominant over S. castatum in February when the surface water temperature was 1.5 C.

According to Riley and Conover (1967) nutrients may also affect species succession and abundance. In the present study, surface nitrate

plus nitrite concentrations ($2.68 \mu\text{g}$ at N/l) in February were intermediate for the year as a whole, but the silicate value ($10.93 \mu\text{g}$ at Si/l) represented the maximum for the year (see Currie 1974). The presence of a very high silicate concentration suggested that the February sampling date was coincident with an early stage of the winter diatom bloom. The silicate concentration ($0.81 \mu\text{g}$ at Si/l) at the time of the mid-March collections was the lowest recorded for the year. Total diatom density at this time had declined to a relatively low level (22,500 cells/liter), indicating that the winter bloom period was completed.

Peaks in dinoflagellate abundance occurred in June and late August 1972 (239,710 and 384,390 cells/liter respectively). In June, they comprised about 13% of the total standing crop and in late August, more than 27%. Several unidentified peridiniids collectively were dominant in June. Ceratium minutum was a subdominant. In late August, dinoflagellate populations were dominated by two unidentified gymnodiniids and three species of Prorocentrum. Prorocentrum micans was dominant, and comprised approximately 48% of the total dinoflagellate standing crop. The other important species of Prorocentrum were P. scutellum and P. triangulatum.

Dinoflagellates have been reported as abundant during the summer in Chesapeake Bay, Long Island Sound, Raritan Bay, and the western part of Sandy Hook Bay (Kawamura 1966, Riley and Conover 1967, Smayda 1973). Ceratium minutum was reported by Martin (1929) to be "common in ocean plankton" in New Jersey. Prorocentrum micans was a late summer dominant in Raritan Bay and was prominent throughout the summer in Chesapeake Bay (see Smayda 1973). A discussion of some of the environmental

factors affecting dinoflagellate abundance in the present study was, presented by Currie (1974).

Among the other protoplankton groups, silicoflagellates were always rare. The maximum density was approximately 1,800 cells/liter in late August. Distephanus speculum and Ebria tripartita were the most prevalent species. Small coccoid blue-greens were always abundant, and ranged in density from 170,000 cells/liter in December 1972 to 859,700 cells/liter in June 1972. Non-motile green algae ranged from 4,720 cells/liter in May 1972 to 37,370 cells/liter in early August. None of these three groups exhibited any definite seasonal trends in abundance. Naked flagellate numbers were the lowest in April 1973 (23,400 cells/liter) and the highest during August 1972 (mean of 293,000 cells/liter); densities were higher during the warmer months. Ciliates were dominated in most instances by the tintinnids. Maximum abundance (more than 14,400 cells/liter) of the latter occurred during May and June, 1972.

ZOOPLANKTON

Phillip H. Sandine and Felicia A. Swiecicki

Introduction

Collections were taken throughout the year to determine the temporal and spatial distribution and species composition of zooplankton in the study area. Three stations north and offshore of the study area were sampled to evaluate the extent of the estuarine zone (as defined by Smith 1966) beyond Little Egg Inlet.

Materials and Methods

Six ocean stations and six bay stations were sampled in 1974 (Table 80). Three ocean stations, located 6 to 11 nautical miles north and offshore of the study area, were added in 1974.

Bay collections were taken monthly with a Clarke-Bumpus sampler (#20 net) from January through October. No collections were taken in November and December. Oblique tows, and occasionally an additional surface tow were taken at bay stations.

Collections in the ocean were taken as follows: (1) the Site was sampled once in January and December and twice monthly from February through November; (2) Landward of the Site and Seaward of the Ridge stations were sampled once in January and May through November, and twice monthly from February through April; (3) stations offshore and north of the study area were sampled monthly in March and May through November. Oblique tows were made with a Clarke-Bumpus sampler (#20

net) at all ocean stations. Tows were replicated routinely at the Site, but only occasionally at the other stations. Replicates were taken consecutively rather than simultaneously. Surface and bottom tows were also made at the Site.

Monthly night collections were taken at the Site in June, July, September, and October near or at a new moon. Surface, bottom, and oblique tows were taken at sunset and 2 and 4 hours afterward.

Early in the year the standard size Clarke-Bumpus plankton net (85 cm) was replaced with a longer one (130 cm) to reduce clogging. The longer net was of a cylindrical-cone design. Collections taken during April and May with both nets were compared and results were similar.

Immediately after collection, samples were preserved in 5% buffered formalin. In the laboratory, samples were concentrated to a volume of 50 to 350 ml. A 1-ml subsample was taken from a thoroughly mixed sample with a Stempel pipette and placed in a Sedgwick-Rafter chamber. A minimum of two subsamples was taken. Zooplankters were enumerated using a compound microscope. A zooplankter was classified as common if its density exceeded $1,000/\text{m}^3$ and abundant if it exceeded $10,000/\text{m}^3$.

Macrozooplankton was collected with 1.0-m and 0.5-m plankton nets and a 0.1-m^2 Bongo. All nets had a mesh size of 0.5-mm. From January through March, simultaneous surface (1.0-m net), midwater, and bottom tows (0.5-m nets) were taken twice a month at the Site. In March, replicate 3-step oblique tows (surface, midwater, and bottom) were made with a 0.5-m net at the station offshore of Little Egg Inlet. From April through November, oblique tows (0.1-m^2 Bongo) were taken

twice a month at the Site and once a month at the stations north and offshore of the study area. Surface and bottom tows (0.5-m net) were taken twice monthly at the Site. Night collections of macrozooplankton were also taken at the Site.

Immediately after collection macrozooplankton samples were preserved in 5% formalin. In the laboratory, the entire sample was examined grossly in a shallow tray. Macroforms were identified and total counts made except in samples where they were abundant. For enumeration of abundant forms, a 1/2 or 1/4 subsample was taken with a Folsom Plankton Splitter, subsampled with a 10-ml Stempel pipette, and enumerated microscopically. From 2 to 4 counts were made and averaged. A macrozooplankter was classified as common when its density exceeded $10/\text{m}^3$ and abundant if it exceeded $100/\text{m}^3$.

Zooplankters were identified to the lowest taxa possible and are listed in Table 81. Keys for many meroplankters (primarily larval forms) are inadequate or lacking. All densities are recorded as number per m^3 (n/m^3) and are from oblique collections unless stated otherwise.

Zooplankters were categorized as one of the following: (1) "estuarine and marine"; (2) "euryhaline marine" or: (3) "stenohaline marine". The classification is that of Jeffries (1967) and the terms are defined in the Glossary.

Friedman's test (Tate and Clelland 1957) was used to determine if zooplankton densities differed between stations ($P \leq .05$).

Results and Discussion

Clarke-Bumpus Collections

Data from bay and ocean collections made with a Clarke-Bumpus are presented in Appendix Tables 24 to 29 and Appendix Tables 30 to 35, respectively. Densities of zooplankton for ocean and bay collections are given in Tables 82 to 83. The average monthly densities of zooplankton at the Site are shown in Fig. 30.

Copepods

At the Site copepods (adults and copepodites) and copepod nauplii were the dominant forms collected during the year except in May when meroplankton predominated. Maximum densities of copepods ($77,471/\text{m}^3$) and copepod nauplii ($74,347/\text{m}^3$) were observed in early and mid-November, respectively. Harpacticoids were the dominant copepods during November (Appendix Table 31).

In the bays, copepods and copepod nauplii dominated all collections except for the May collection at Brigantine Bays #1 when meroplankton predominated (Table 83). The maximum average monthly density of copepods ($63,483/\text{m}^3$) was observed in July; Great Bay #3 had the greatest density ($136,373/\text{m}^3$). Acartia tonsa was the dominant species in July. The generally low densities of copepods in the bays in August apparently resulted from predation by the ctenophore, Mnemiopsis leidyi.

At ocean stations, densities of copepod nauplii dropped below that of copepods primarily during late summer and fall, a period

when two small species (Oithona brevicornis and Paracalanus crassirostris) were dominant (Fig. 30). Because the early naupliar stages of these forms can readily pass through a #20 net, naupliar values reported are more conservative for that period. The similar drop in nauplii values was observed in 1973. This pattern was not as obvious in the bays where the larger form, Acartia tonsa, was usually the summer/fall dominant.

The average yearly density of nauplii exceeded that of copepods at all stations except Mullica River #1 (M.R. #1) and offshore of Brant Beach (Table 83 and Fig. 30). These two locations may not be optimal for reproduction of the dominant copepod species found in this study.

Average monthly copepod densities showed no significant difference between the Site and stations north and offshore of the study area (n=8 collections) or between bay stations (n=10). Important differences at the species level are discussed below.

Acartia clausi, an "estuarine and marine" form, was taken in the bays from January through June (Table 84). It was generally absent at bay stations until October, except for a bottom collection at Little Egg Inlet in early July. At ocean stations, it was taken from February through July, with one additional occurrence in September (Table 84). Its maximum density for bay and ocean stations was $46,029/m^3$ (early April) and $2,276/m^3$ (late June), respectively.

Densities of A. clausi at the Site and landward of the Site were similar to those found at Little Egg Inlet. Seaward of the Site and north and offshore of the study area, densities were usually substantially

lower than those at the Site. A. clausi appeared in greater densities and for a longer period at the Site in 1974 than in 1973.

Acartia tonsa was found in the bays year-round, but at very low densities during winter months (Table 85). It was not taken at any ocean station from January through early April. Maximum density of this "estuarine and marine" species in the bays ($128,689/\text{m}^3$) occurred in July. Excluding the Inlet station, A. tonsa constituted 90% of the average copepod density in the bays during July. In the vicinity of the Site, densities were greatest ($15,000/\text{m}^3$) in late June and late September.

The density of A. tonsa decreased with distance from shore in the transect across the Site. At ocean stations north and offshore of the study area, densities did not exceed $3,000/\text{m}^3$, and it was never found offshore of Brant Beach.

Average monthly densities of A. tonsa at the Site exceeded $1,000/\text{m}^3$ two months earlier than in 1973. Maximum densities in 1973 and 1974 ($12,453/\text{m}^3$ and $5,725/\text{m}^3$) were noted in September.

Centropages hamatus, a "euryhaline marine" form which generally occurs within 20 miles of shore (Van Engel and Tan 1965), was common in the study area during spring and early summer (Table 86). It was absent from the Mullica River and scarce at the inner Bay stations (Great Bay #2 and Great Bay #3). It was taken at all ocean stations and was more abundant at the Site in 1974 than in 1973.

Centropages typicus, a "stenohaline marine" form, has not been a significant component of the zooplankton in this study to date. It was generally more abundant and occurred most frequently at the stations

north and offshore of the study area (Table 87). It was a dominant form off Delaware Bay (Deevey 1960) and in the New York Bight (National Marine Fisheries Service 1972).

Oithona brevicornis, an "estuarine and marine" form, was taken year-round in the ocean and bays; slightly higher densities were recorded from the bays (Table 88). Lowest densities coincided with minimum water temperatures. In both 1973 and 1974, maximum densities in the ocean were not obtained until after the breakdown of the thermocline during late summer. It was sparse at the station offshore of Brant Beach. Maximum density of this species ($10,220/\text{m}^3$) was substantially below that in 1973 ($62,518/\text{m}^3$).

Oithona similis, a "euryhaline marine" form, was the only species common at the Site throughout the year (Table 89). It was only occasionally common in the bays. Minimum densities in the bays and ocean were noted during the period of maximum water temperatures. Densities were greater in late fall of 1974 than in 1973 but were similar during other seasons.

Pseudodiaptomus coronatus, an "estuarine and marine" form, was collected at all stations except those offshore of the study area (Table 90). In the bays, its density exceeded $1,000/\text{m}^3$ at least once at all stations. In the ocean, it was usually common only at the Site and landward of the Site. It was generally uncommon at stations seaward of the Site and north of the study area. In 1974, it was common at the Site from June through September. In 1973, it was common only in November and it was generally absent the rest of the year.

Paracalanus crassirostris, an "estuarine and marine" form, was taken throughout the year. Ocean densities generally exceeded bay values although the maximum density ($28,647/\text{m}^3$) was obtained in Little Egg Inlet (Table 91). It was a dominant member of the copepod community from July through November. During 1973, it was dominant only in August and September.

Paracalanus parvus, a "euryhaline marine" form, occurred almost exclusively at ocean stations, and primarily in late summer and fall (Table 92). Maximum density was $7,565/\text{m}^3$ in 1974 and $1,180/\text{m}^3$ in 1973.

Of the above two species, P. parvus dominated in the New York Bight (National Marine Fisheries Service 1972) and P. crassirostris predominated in this study.

Pseudocalanus minutus, a "euryhaline marine" copepod, was a dominant form during winter and spring (Table 93). Its occurrence in the study area during the summer was dependent on the presence of a marked thermocline. With a warming of the water column, this species virtually disappeared. In early August, it was taken in oblique tows only at stations offshore of the study area, although it was present at the Site in a bottom collection. It was more abundant at the Site in 1974 than in 1973. It is a major copepod over the inner continental shelf off Chesapeake Bay (Van Engel and Tan 1965). In the New York Bight, it was found year-round and was considered the most important copepod for fish feeding on zooplankton (National Marine Fisheries Service 1972).

Temora longicornis, a "euryhaline marine" form, was taken in all months but was common from February through early August in the ocean and from March through May in the bays. It was rare or absent during the period of maximum water temperature. Its occurrence and distribution paralleled closely that of P. minutus (see Tables 93 and 94). Largest densities were found at stations north and offshore of the study area. However, Jeffries (1967) reported that it was more common in estuarine than in shelf waters.

Harpacticoids were collected throughout the year at all stations (Table 95). Their densities were fairly constant throughout the bays from April through October; maximum density was $5,100/\text{m}^3$ in May. In the ocean, they were uncommon through early August. From late September through November, densities at the Site usually exceeded $15,000/\text{m}^3$. Examination of day/night collections indicated no obvious vertical migration or stratification of these forms despite their generally benthic habit. In 1973, densities at the Site did not exceed $1,000/\text{m}^3$.

Other Holoplankton

Most organisms of the group "other holoplankters" were more prevalent in the ocean than in the bays. No significant difference in density was found between ocean stations, but densities were generally greater for the year at the Brant Beach stations (Fig. 31). Differences between bay stations were significant and greatest densities were at higher salinities (L. E. Inlet and L. E. H. #2). At the Site, they were most abundant in May, predominately Fritillaria sp., and from August through October, predominately Penilia avirostris and Oikopleura spp.

The dinoflagellate, Noctiluca scintillans, was dominant from late August to early November. It was more prevalent at the inshore stations; a maximum density ($102,857/m^3$) was observed at the Site in September (Table 96). It can be a causative agent of red tides (Fung and Trott 1973).

Four species of cladocerans were collected. Penilia avirostris, Podon polyphemoides and Evadne nordmanni predominated; Podon leuckarti occurred only occasionally and in low densities.

Only P. avirostris, a "euryhaline marine" form (Della Croce 1966), occurred in sufficient number and frequency to determine its distribution in the study area (Table 97). On 30 August, it was common at the Site and the seaward station but it was not found at the landward one. Collections that day were taken on an ebbing tide. It showed a similar pattern of occurrence and abundance in 1973 and 1974.

Podon polyphemoides was rare in 1974 but abundant in 1973. E. nordmanni occurred only occasionally in both years.

Oikopleura spp. (primarily O. dioica) were the most abundant appendicularians and occurred mainly from July through November. Appendicularians are primarily offshore inhabitants. Although O. dioica is tolerant of salinities as low as 12 ppt (Gosner 1971), it was scarce at bay stations. Largest densities were usually at ocean stations north and offshore of the study area (Table 98). Little difference occurred between densities at the Site in 1973 and 1974.

Meroplankton

Bivalve larvae were collected year-round in the study area. In the bays they were only occasionally common (Table 99). The low densities

in the bays appeared anomolous in view of the large populations of Mercenaria mercenaria, Modiolus demissus, Aequipecten irradians and Tellina spp. which were present. Carriker (1961) reported densities of up to $67,000/m^3$ of M. mercenaria larvae in Little Egg Harbor, although within 3 days, densities fell to below $100/m^3$ due to predation and tidal flushing.

Densities of bivalve larvae at the Site above $5,000/m^3$ were found mainly in May, October, and November (Table 99). In 1973, densities usually exceeded $5,000/m^3$ from June through October. The dominant form in May, July, and November 1973 was Ensis directus, Spisula solidissima, and Modiolus demissus, respectively (Table 100). Identification of bivalve larvae to species is difficult and has not been done yet for 1974 collections.

Gastropod larvae were most abundant from May through September. The maximum density in the bays ($37,660/m^3$) was noted in early July in the Mullica River. In the ocean, the maximum density ($10,074/m^3$) during daylight collections occurred in late July at the station landward of the Site. At night, a maximum surface density of $150,426/m^3$ was found at the Site in June. Larvae of the marsh snail, Melampus bidentatus, were dominant ($>90\%$), and it was one of the most abundant taxa taken in any collection during this study.

Polychaete larvae were collected year-round (Table 101). In the bays, they were common to abundant from April through early November. At ocean stations, greatest densities generally occurred in the vicinity of the Site. The larvae of Polydora sp. was usually dominant in spring and early summer. Large numbers of swarming "clam worms"

(epitokes of Nereis sp.) were observed during July and August.

Echinoderm larvae were found only in ocean and inlet samples; maximum densities occurred in early July ($4,266/\text{m}^3$) in 1973 and in late August ($2,717/\text{m}^3$) in 1974. Densities of post-larval starfish taken in ponar collections in July were approximately $400/\text{m}^2$ in 1973 and $15/\text{m}^2$ in 1974.

Macrozooplankton

A total of 115 samples was examined from the Site in 1974 (Appendix Table 36). From three additional stations located north and offshore of the study area, 38 samples were examined (Appendix Tables 37 to 39).

Hydromedusae

A total of 14 species of hydromedusae was identified. Liriope sp. was the most abundant form at the Site, and was found from August through November. The highest density ($356/\text{m}^3$) was taken in a bottom tow in October. At stations north and offshore of the study area it was common ($10\text{--}100/\text{m}^3$) only during fall, but was less numerous there than at the Site. Obelia spp. were present ($<10/\text{m}^3$) during the first half of 1974 and were most common in March. Rathkea octopunctata, a small anthomedusae, occurred from January through July at the Site; it was most numerous ($38/\text{m}^3$) in May. Other winter-spring species included Margelopsis gibbesi, Sarsia spp., and Podocoryne sp.. Species collected in the summer and fall were Bougainvillia spp., Phialidium sp., Aequorea sp., Blackfordia sp., and Amphinema sp..

Chaetognaths

Arrow worms were collected throughout the year at ocean stations. Sagitta elegans, a cold water species, was common from January through July especially in daytime bottom collections at the Site. It was the dominant macroplankter during the winter and early spring when maximum densities of $345/\text{m}^3$ (January) and $170/\text{m}^3$ (April) were taken in bottom tows. Offshore of Brant Beach, it was common in March and from May through November (no collections were taken in January, February, April, and December); maximum densities were observed in September ($92/\text{m}^3$) and October ($71/\text{m}^3$) (Table 102). Its disappearance from the Site in July and the increase in densities offshore in September and October may indicate that S. elegans leaves the nearshore areas during the summer. Bigelow and Sears (1939) reported a similar distribution outside of Delaware Bay during the summer.

Sagitta enflata, a warm water species, occurred from August through November at all ocean stations. It was most numerous ($34/\text{m}^3$) offshore of Little Egg Inlet in November. Another warm water species, S. serratodentata, was taken offshore of Brant Beach in August.

Sagitta tenuis was present in October and November at both offshore stations. It had not previously been reported north of Delaware Bay (Grant 1963).

Tunicates

Doliolids and salps are considered open ocean forms, although appreciable numbers may be found in coastal waters (Gosner 1971). A

doliolid, Doliolum nationalis, was most abundant from August through October at the two offshore stations. The greatest concentration ($178/\text{m}^3$) was taken offshore of Brant Beach in October. A salp, Thalia democratica, was abundant in August at all ocean stations except the Site and was found at densities of up to $416/\text{m}^3$ offshore of Brant Beach.

Mysids

Neomysis americana was taken in small numbers throughout the year at the Site; however, one bottom collection in July yielded $1,546/\text{m}^3$. At stations north and offshore of the study area, it was present in March and from May through September. Day/night samples showed that it was most numerous in bottom collections during the day. Two to four hours after sunset, large numbers were collected in surface waters (Table 103).

Mysidopsis bigelowi, a warm water mysid, was occasionally found in the spring and fall at ocean stations. The greatest density ($44/\text{m}^3$) was taken in a night bottom collection from the Site in October.

Shrimp Larvae

Zoeal stages of the sand shrimp, Crangon septemspinosa, were collected throughout most of the year at ocean stations. At the Site, larvae were common in late spring; the greatest density ($69/\text{m}^3$) was taken in May in a bottom tow. During August and early September, 1974, larvae were absent (Table 104). During this period in 1973, a maximum density of $312/\text{m}^3$ (bottom) was collected. However, the bottom water temperature at the time of collection was considerably colder than

usual. Larvae were common at the station off Brant Beach in June ($20/\text{m}^3$) and at the two offshore stations in July ($22/\text{m}^3$, $27/\text{m}^3$).

Zoeae of the grass shrimp, Palaemonetes spp., were common at the Site from June through September and were most abundant ($265/\text{m}^3$, bottom) in July. They were scarce north and offshore of the study area. During the day, zoeae were more numerous in bottom tows (93% of those taken) than at the surface. At night, zoeae were more evenly distributed throughout the water column and in general, were caught in greater densities than during the day (Table 105).

Zoeae of three species of mud shrimp were occasionally taken in the ocean. Upogebia sp. zoeae were present from June through September at the Site but were absent from the offshore stations. Zoeae of Naushonia crangonoides were present at the Site in June and offshore of Little Egg Inlet in July. Callinassa sp. zoeae were present off Brant Beach in August and at the Site in September.

Zoeal stages of Lucifer faxoni, an oceanic shrimp, were present from August through October at ocean stations.

Crab Larvae

Crab larvae occurred at the Site from March through November and comprised most of the macrozooplankton from June through August. During the day, they were most numerous in bottom samples, but after dark they were concentrated near the surface. Densities were generally lower at the stations north and offshore of the study area; here the larvae of hermit crabs, fiddler crabs, and mud crabs were sparse (Table 106).

Zoeae of the rock crab, Cancer irroratus, were taken at the Site from March through June and reached a maximum density of $8/m^3$ in early May. Megalopae were collected in June, July, and September. At the stations north and offshore of the study area, zoeae were collected from March through July but were most common ($19-33/m^3$) in June. Megalopae were taken throughout the summer but were most numerous ($11-18/m^3$) in June (Table 107).

Zoeae of the blue crab, Callinectes sp., were occasionally taken in June, July, and September at the Site. During the day, zoeae were taken throughout the water column, but at night all were taken at the surface. The maximum density of $21/m^3$ was taken at night in July. Megalopae were present from August through October at the Site and were most common ($8/m^3$) in September. At stations north and offshore of the study area, zoeae and megalopae were also present from June through October; megalopae were more numerous than at the Site (Table 108). Tagatz (1968, cited by Sandifer 1972) concluded that development after the second zoeal stage takes place offshore and the larvae return inshore as megalopae.

Zoeae of the lady crab, Ovalipes ocellatus, were taken from June through October at all ocean stations. They were most common ($32/m^3$) at the Site in July and August (Table 109).

Zoeae of the spider crab, Libinia spp., were collected from June through October but were most common ($97/m^3$ night, bottom) in July. They were usually more numerous in bottom tows. Megalopae were found in July, August, and October. At the stations north and offshore of the study area, larvae were scarce (Table 110).

Mud crab (Xanthidae) zoeae were taken at the Site from June through October. The greatest density ($38/\text{m}^3$) occurred in August. At the stations north and offshore of the study area, larvae were either scarce or absent (Table 111).

Fiddler crab larvae, Uca spp., were taken from June through August at the Site. The greatest density ($218/\text{m}^3$) was collected in a surface tow at night in July. They were scarce at the stations north and offshore of the study area (Table 112).

Zoeae of Dissodactylus mellitae, a crab commensal with the sand dollar, were collected in June and July at the Site. Zoeae of Pinnixa sp. (commensal with tube worms) were present from June through September and were most numerous in bottom tows. Larvae of another commensal, Pinnotheres sp., were noted in August from collections at the Site and north of the study area.

Hermit crab larvae, Pagurus spp., were collected from May through October and were the most abundant macroplankton species by number and frequency of occurrence at the Site. Concentrations of larvae up to $580/\text{m}^3$ were taken in bottom tows in July. During the day, 99% of the zoeae were collected near the bottom. Two hours after dark, most zoeae (74%) were taken in surface collections. Glaucothoe were present in July and August at the Site. At the stations north and offshore of the study area, hermit crab larvae were generally scarce (Table 113).

Zoeae of the mole crab, Emerita talpoida, were present from June through November at the Site and were most common in bottom samples. The highest density ($171/\text{m}^3$) occurred in September in a night sample; however, densities were usually less than $5/\text{m}^3$. Larvae were also scarce at the other ocean stations (Table 114).

Occurrence and peak abundance of selected macroplankters collected at the Site are summarized in Table 115.

Other Forms

Young specimens (< 12 mm) of squid (Loliginidae) were collected from June through October at ocean stations. They were most numerous in September and October at the two stations offshore of the study area where the greatest density was $0.85/\text{m}^3$.

Recently-hatched young of the horseshoe crab, Limulus polyphemus, were found only at the Site and only in July.

Pseudozoeae of a stomatopod, Squilla sp., were taken during the fall at ocean stations.

Hyperiid amphipods (Hyperia galba, Hyperoides longipes, and Parathimisto gaudichaudi) were collected during the fall at ocean stations (Table 115). They are oceanic and some are parasitic on jellyfish. In October, they were most common ($88/\text{m}^3$) offshore of Brant Beach. Other amphipods collected commonly included Gammarus annulatus, Cerapus tubularis, Microprotopus raneyi, Unciola irrorata, and Corophium tuberculatum.

Late stages of polychaete larvae were collected throughout the year but were most common ($68/\text{m}^3$) in bottom samples in October. The pelagic polychaete, Tomopteris helgolandica, appeared at irregular intervals throughout the year. It was most numerous in August, 8 miles offshore of Little Egg Inlet.

Three species of pteropods and the heteropod, Pterotrachea sp., were found only north and offshore of the study area in the fall. They are primarily warm water, oceanic forms.

Siphonophores are also warm water, oceanic forms and were present in the fall at all ocean stations.

The ctenophore, Beroe ovata, was present during the fall at all ocean stations and was most numerous at the Site ($3/m^3$) in September.

Vertical Migration

Diurnal migration of zooplankton generally showed the same pattern in 1974 as in 1973. Zooplankton concentrations were generally greatest near the bottom from February through August and meroplankton usually exhibited the most pronounced daytime vertical stratification. In the other months, daytime stratification did not generally occur.

As in 1973, zooplankton densities from oblique tows usually exceeded the average densities of the surface and bottom values, indicating that most forms concentrated at some intermediate depth.

Distribution of Zooplankton

Holoplankton

Three general distribution patterns of copepods and other holoplankton were observed in ocean and bay collections. First, densities of "estuarine and marine" forms were similar at the Site and bay stations; these forms were less numerous or absent from stations north and offshore of the study area (Tables 84, 85, 88, 90, and 91). Second, "euryhaline and marine" forms were more abundant at ocean stations and densities were similar between these stations (Tables 86, 89, 92, 93, and 94). However, there was a trend for the cold water forms to show greater densities in early

summer at the stations north and offshore of the study area (Tables 89, 93 and 94). Third, "stenohaline marine" forms were taken in greatest densities north and offshore of the study area and were usually absent or rare at bay stations (Tables 87, 97, and 98). These data are shown for copepods in Fig. 32.

Meroplankton

Densities of bivalve larvae in the ocean usually exceeded those in the bay by a factor of from 2 to 10 times (Table 99). Because early larval stages of many estuarine bivalves are either distributed throughout the water column or concentrated in surface waters (Carriker 1961, Thorson 1950), they are subject to tidal flushing and thereby contribute to the meroplankton found in the inshore ocean. Data from 1973 showed that the larvae of estuarine bivalves were at times common at the Site (Table 100). No significant difference in densities of bivalve larvae was found between ocean stations, but the yearly average for these forms was lowest off Brant Beach. Species density differences might have been found between stations if all the larvae had been identified.

Gastropod larvae occasionally were abundant in the bays and in the vicinity of the Site. On 20 June and 22 July, they were common to abundant at the Site and landward of the Site, but were present only occasionally or were absent seaward of the Ridge. During night sampling at the Site on 20 June, surface densities of gastropod larvae ranged from almost 0 at sunset to $150,426/\text{m}^3$ later at night and on 22 July, from 5,104 to $39,205/\text{m}^3$. Oblique tows and bottom collections showed little or no increase in density from sunset to later at night (Table 116).

Early larval stages of the marsh snail, Melampus bidentatus, were dominant (>90%) in these collections, indicating rapid tidal flushing from the marshes.

Organisms classified as gastropod larvae were common at the two offshore stations on two different dates. This may be due to counts of small, shelled pteropods which were not separated from gastropod larvae. Data on larger-sized pteropods from Bongo collections showed that these forms occurred only north and offshore of the study area.

Carriker (1967) stated that variations in the rate of tidal exchange may be the most critical factor in the retention of larvae within an estuary. He found that the tidal exchange of Little Egg Harbor varied from 20 to 47%; when the exchange rate was high, many hard clam larvae were lost from the bay. Tidal flushing may be responsible for the low densities of some meroplanktonic forms found in the bays during the present study.

Larvae which have been flushed from an estuary may return or be replaced. The benthic populations of some estuaries are dependent upon the transport of larvae from another estuary (Ayers 1956).

Macrozooplankton

Forty-six species of macrozooplankton were classified as either estuarine or oceanic (Table 117). Estuarine species included "estuarine and marine" and "euryhaline marine" forms; "stenohaline marine" species were classified as "oceanic". The two groups were expressed as a percentage of the total density for each collection taken monthly at the four ocean stations (Fig. 33). The number of oceanic and estuarine species

present in every month was also determined for these stations (Fig. 34).

At the Site, the number of estuarine species exceeded that of oceanic species in every month. However, densities (n/m^3) of oceanic forms were greater than those of estuarine forms during the spring and fall. In the spring, Sagitta elegans and the larvae of Cancer irroratus were the most abundant oceanic forms. Estuarine species comprised most of the macroplankton in June (97%), July (100%), and August (66%) when crab and shrimp larvae were abundant. In late summer and early fall, warm water, oceanic forms such as siphonophores, arrow worms (Sagitta enflata), and hydromedusae (Liriope sp.) predominated.

Estuarine species which were present at the Site but scarce or absent at other ocean stations included larvae of Palaemonetes spp., Callinassa sp., Naushonia crangonoides, Emerita talpoida, Pagurus spp., Uca spp., Libinia spp., Limulus polyphemus, and xanthid crabs.

At the inshore station off Brant Beach, the number of estuarine species also exceeded oceanic species except in October and November. However, densities of oceanic forms were greater than those of estuarine species in every month but July when shrimp and crab larvae were common.

The two stations offshore of the study area were oceanic in character. Offshore of Little Egg Inlet, oceanic species outnumbered estuarine species except during July, August, and September. Densities of estuarine forms were low (<17% of the total number collected) in every month but July when they comprised 45% of the zooplankton. Offshore of Brant Beach, estuarine species outnumbered oceanic forms only in July but their densities were negligible.

Oceanic species present at the two offshore stations which were scarce or absent at the Site included pteropods, heteropods, Doliolum nationalis, Thalia democratica, Tomopteris helgolandica, and Hyperiidean amphipods.

These data indicate that during the summer, the Site is an area where the spawning and development of many estuarine species, particularly crab and shrimp, occurs. The large number of species yet small densities of estuarine forms present at the offshore stations during the summer, indicate that most arrive offshore as strays. Most of the macroplankton there is composed of oceanic species.

GLOSSARY

Abbreviations

f - frequency of occurrence; the number of times a species occurred in collections

n/b - number of fish caught by sport fishermen per boat

n/coll. - number of specimens per collection

n/f - number of specimens per collection in which the species occurred

n/h - number of fish caught per angler hour

n/t - number of fish caught per angler trip

Adults - those individuals that are sexually mature

Catch frequency - the percentage of collections in which a species was taken (frequency of occurrence/number of collections)

Charter boat - a boat and captain hired by a party of fishermen, usually on a daily basis

Demersal - refers to fishes found on or near the bottom

Epitokes - sexually ripe, free swimming form of the atokes of some polychaete families

Estuarine and Marine - zooplankters which propagate in estuarine and coastal (inner) neritic waters

Euryhaline marine - zooplankters which are found in estuaries but whose maintenance there is dependent on a continuous supply from the ocean

Glaucothoe - post-larval stage of hermit crabs (Paguridae)

Infauna - invertebrates which burrow into the bottom substrate

Juvenile - a stage in the life of a fish which starts when the body form first approximates that of the adult and terminates with attainment of sexual maturity

Macroinvertebrate - an invertebrate which is retained in a 1-mm mesh net

Neritic - water over the continental shelf

North and offshore of the study area - inshore off Brant Beach, approximately 10 miles north of the Site; approximately 8 miles offshore of Brant Beach; and about 8 miles offshore of Little Egg Inlet.

Notochord length - the distance "from the anterior edge of the head or tip of the snout to the tip of the notochord" (Smith and Fahay 1970)

Outlier - a value that is anomalously far from the regression line

Ovigerous - egg bearing, gravid

Pelagic - fishes which are distributed in the water column; inhabiting the open ocean

Phi (ϕ) - a geological term which indicates particle size; the negative log of the grain size in mm

Phi size finder - a block of plastic inlaid with samples of sand in 1/2 ϕ intervals from 0.0 to 4.0 ϕ

Private boat - boats which are owned by individual fishermen

Seasonal classifications - these are based on water temperature and are as follows: winter (January-March), spring (April-June), summer (July-September), and fall (October-December).

Semidemersal - fishes found near the bottom and occasionally higher in the water column

Site - the area encompassed by the breakwater and plants (39°28'20" N latitude and 74°15'20" W longitude)

Stenohaline - zooplankters which characterize open (outer) neritic waters; they occur only infrequently near the mouths of estuaries

Study area - an area which includes the ocean in the vicinity of the proposed Site of the Atlantic Generating Station (AGS) and in the bays, rivers, and waterways from Manahawkin Causeway, Long Beach Island, to Atlantic City.

U-Drive boat - boat rented by a party of fishermen from a local marina

Vicinity of the Site - an area of the ocean from Holgate, Long Beach
Island to off Brigantine Inlet and from the beach
to approximately 6 miles from shore

Warp - rope or line used to tow a net

Young - fishes which are young-of-the-year (0+ year class)

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Table 1. Species list of epi-flora and fauna collected in the vicinity of the Site during 1974.

ALGAE

Chlorophyta

Enteromorpha intestinalisEnteromorpha linzaEnteromorpha plumosa

Phaeophyta

Illea sp.Scytosiphon sp.

Rhodophyta

Gracilaria sp.

FAUNA

Porifera - sponge

Poecilosclerida

Microciona prolifera

Cnidaria

Hydrozoa - hydroids

Tubularia croceaObelia flabellataThuiaria argentea

Anthozoa - anemones

Metridium senile

Platyhelminthes - flat worms

Stylochus ellipticus

Nemertea

Bryozoa

Ctenostomata

Alcyonidium polyommAnguinella palmataAmathia vidovici

Cyclostomata

Tubulipora sp.

Cheilostomata

Electra hastingiaeMembraniopora tenuisSchizoporella unicornis

Mollusca

Gastropoda

Crepidula planaPolinices heroesMitrella lunata

Nudibranchia

Acanthodoris pilosaDendronotus frondosusDoto coronataTergipes despectusCratena pilataNudibranchia I

Table 1. (cont.)

Bivalvia	<u>Mytilus edulis</u>
	<u>Anomia simplex</u>
	<u>Turtonia minuta</u>
	<u>Cerastoderma pinnulatum</u>
	<u>Tellina agilis</u>
Annelida	
Polychaeta - bristle worm	
	Phyllodoceidae
	<u>Paranaitis sp.</u>
	<u>Phyllodoce maculata</u>
	<u>Eulalia viridis</u>
	<u>Antinoella sarsi</u>
	<u>Autolytus cornutus</u>
	<u>Nereis succinea</u>
	<u>Polydora ligni</u>
	<u>Sabellaria vulgaris</u>
	Cirratulidae
	<u>Asabellides oculata</u>
	<u>Pherusa affinis</u>
	Sabellidae
	<u>Hydroides dianthus</u>
Arthropoda	
Crustacea	
Harpacticoida I	
Cirripedia	
	<u>Lepas anatifera</u>
	<u>Balanus eburneus</u>
	<u>Balanus improvisus</u>
Isopoda	
	<u>Edotea triloba</u>
Amphipoda	
Gammaridea	
	<u>Batea catharinensis</u>
	<u>Calliopius laeviusculus</u>
	<u>Cerapus tubularis</u>
	<u>Corophium tuberculatum</u>
	<u>Enchthonius brasiliensis</u>
	<u>Uniciola irrorata</u>
	<u>Gammarus lawrencianus</u>
	<u>Elasmopus levis</u>
	<u>Jassa falcata</u>
	<u>Microtopus raneyi</u>
	<u>Prosocephalus holbolli</u>
	<u>Pleusymtes glaber</u>
	<u>Pontogeneia inermis</u>
	<u>Parametopella cypris</u>
	<u>Proboloidea holmesi</u>
	<u>Stenothoe minuta</u>

Table 1. (cont.)

	Caprellidea
	<u>Aeginina longicornis</u>
	<u>Caprella equilibra</u>
	<u>Caprella penantis</u>
	Mysidacea
	Neomysis americana
	Decapoda
	<u>Hippolysmata wurdemanni</u>
	<u>Crangon septemspinosa</u>
	<u>Libinia emarginata</u>
	<u>Cancer irroratus</u>
Insecta	
	Chironimidae
Echinodermata	
	<u>Asterias forbesii</u>
Chordata	
	<u>Molgula manhattensis</u>

Table 2. Epifauna taken in occasional 25-ft trawl samples during 1974.

Collection Number	Date	Species
CBM-74-023	11 February	Obelia flabellata Amathia vidovici
FJM-74-056	21 February	Amathia vidovici Mytilus edulis
CBM-74-025	21 February	Obelia flabellata
CBM-74-051	19 March	Obelia flabellata Thuiaria argentea
CBM-74-056	19 March	Obelia flabellata Mytilus edulis Autolytus cornutus
CBM-74-060	2 April	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus Asabellides oculata Asterias forbesii
CBM-74-061	2 April	Obelia flabellata Thuiaria argentea Amathia vidovici Mytilus edulis Autolytus cornutus
CBM-74-062	2 April	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus
CBM-74-063	2 April	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus
FJM-74-080	2 April	Obelia flabellata Mytilus edulis
CBM-74-067	15 April	Obelia flabellata Amathia vidovici Mytilus edulis
CBM-74-070	15 April	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus
CBM-74-087	2 May	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus

Table 2. (cont.)

Collection Number	Date	Species
CBM-74-088	2 May	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus
CBM-74-090	2 May	Obelia flabellata Mytilus edulis Autolytus cornutus
RCB-74-070	20 May	Thuiaria argentea Anguinella palmata Nassarius egg cases Autolytus cornutus Neomysis americana
CBM-74-106	29 May	Obelia flabellata Nassarius egg cases Mytilus edulis Autolytus cornutus Aeginina longicornis Neomysis americana
CBM-74-109	11 June	Obelia flabellata Thuiaria argentea Nassarius egg cases Mytilus edulis Autolytus cornutus Aeginina longicornis Neomysis americana Asterias forbesii
CBM-74-122	25 June	Amathia vidovici
CBM-74-123	25 June	Thuiaria argentea Amathia vidovici
RPS-74-076	1 July	Amathia vidovici
CBM-74-132	8 July	Thuiaria argentea Amathia vidovici Neomysis americana
CBM-74-133	8 July	Amathia vidovici Neomysis americana
CBM-74-137	8 July	Amathia vidovici Asabellides oculata
RPS-74-099	5 August	Microciona prolifera Amathia vidovici Asabellides oculata Milita nitida Mogula manhattanensis

Table 2. (cont.)

Collection Number	Date	Species
RCB-74-120	4 September	Schizoporella unicornis
RCB-74-122	4 September	Microciona prolifera Anguinella palmata Amathia vidovici Melita mitida Elasmopus levis
DAH-74-059	16 September	Amathia vidovici Cerapus tubularis
CBM-74-177	1 October	Amathia vidovici
CBM-74-178	1 October	Amathia vidovici

Table 3. Epifauna taken in occasional clam dredge samples in the vicinity of the Site during 1974.

Collection Number	Date	Species
JJH-74-001	2 January	Thuiaria argentea Mytilus edulis Elasmopus levis Caprella peanatis
EVG-74-026	14 February	Thuiaria argentea Mytilus edulis Caprella peanatis
JJH-74-037	17 April	Schizoporella unicornis Electra hastingsae Mytilus edulis
JJH-74-040	17 April	Schizoporella unicornis Balanus spat
JJH-74-047	14 May	Thuiaria argentea Electra hastingsae Mytilus edulis
JJH-74-051	14 May	Schizoporella unicornis Electra hastingsae Unciola irrorata Balanus improvisus Mytilus edulis Sabellaria vulgaris Hydroides dianthus
JJH-74-060	6 June	Thuiaria argentea Mytilus edulis Caprella penantis
FAS-74-010	3 July	Thuiaria argentea Mytilus edulis

Table 4. Number and weight (g) with number and weight/m² of macroinvertebrate epifauna colonizing cement substrata 0.5 nautical mile seaward of Site during the 1st quarter of 1974.

Collection number	M ³ -74-007		M ³ -74-008	
Date	2 January - 25 March		2 January - 25 March	
Days of Exposure	82		82	
Depth	17		40	
Area (cm ²)	3852		3722	
	n	n/m ²	n	n/m ²
<i>Tubularia crocea</i>	Traces	-	Traces	-
<i>Mytilus edulis</i>	-	-	1	2.6
<i>Harpacticoida</i>	1	2.9	-	-
<i>Antinoella sarsi</i>	-	-	1	2.6
Total	1	2.9	2	5.2

Table 5. Number and dry weight (g) with number/m² and dry weight/m² of macroinvertebrate epifauna colonizing cement substrata at 17 ft below MLW 0.5 nautical mile seaward of the Site during the 2nd quarter of 1974.

Collection number	M ³ -74-041				M ³ -74-042				M ³ -74-045				M ³ -74-046			
Date	25 March - 24 June				25 March - 24 June				25 March - 24 June				25 March - 24 June			
Days of Exposure	90				90				90				90			
Area (cm ²)	700				700				700				700			
	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²
<i>Obelia flabellata</i>	-	6	-	85.7	-	8.7	-	124.3	-	6.2	-	88.6	-	3.5	-	50.0
<i>Meridium senile</i>	10	0.012	142.9	0.18	3	0.009	42.9	0.14	-	-	-	-	-	-	-	-
<i>Doto coronata</i>	1	-	14.3	-	-	-	-	-	-	-	-	-	1	-	14.3	-
<i>Mytilus edulis</i>	420	2.0	6001.8	28.58	343	1.0	4901.5	14.3	-	-	-	-	-	-	-	-
<i>Eulalia viridis</i>	-	-	-	-	1	-	14.3	-	27	0.048	385.8	0.68	20	0.067	285.8	0.96
<i>Antinoella sarsi</i>	3	0.011	42.9	0.16	-	-	-	-	-	-	-	-	-	-	-	-
<i>Autolytus cornutus</i>	50	0.001	714.5	0.02	56	-	800.2	-	-	-	-	-	-	-	-	-
<i>Polydora ligni</i>	1	-	14.3	-	-	-	-	-	259	0.022	3701.1	0.31	50	0.004	714.5	0.05
<i>Harpacticoida</i>	1	-	14.3	-	3	-	42.9	-	-	-	-	-	-	-	-	-
<i>Balanus eburneus</i>	255	12.5	3644	178.63	148	9.5	2114.9	135.8	1	-	14.3	-	-	-	-	-
<i>Edotea triloba</i>	2	0.003	28.6	0.05	-	-	-	-	26	0.824	371.5	11.78	26	1.162	371.5	16.6
<i>Cerapus tubularis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gammarus lawrencianus</i>	1	+	14.3	0.01	-	-	-	-	1	-	14.3	-	-	-	-	-
<i>Jassa falcata</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pontogeneia inermis</i>	1	-	14.3	-	1	-	14.3	-	1	0.005	14.3	0.01	-	-	-	-
<i>Stenothoe minuta</i>	-	-	-	-	4	-	57.2	-	1	0.004	14.3	0.01	-	-	-	-
<i>Parametopella cypris</i>	-	-	-	-	1	-	14.3	-	-	-	-	-	-	-	-	-
<i>Aeginina longicornis</i>	308	0.17	4401.3	2.37	687	0.314	9817.2	4.5	-	-	-	-	-	-	-	-
<i>Cancer irroratus</i>	8	0.052	114.5	0.75	7	0.058	100	0.83	2085	0.612	29794.7	8.74	757	0.191	10817.5	2.73
<i>Asterias forbesii</i>	1	-	14.3	-	-	-	-	-	2	0.005	28.6	0.08	3	0.027	42.9	0.39
Debris	-	2.0	-	28.58	-	0.7	-	10.0	-	-	-	-	-	-	-	-
Total	1062	22.949	15176.1	325.03	1254	20.28	17919.7	289.87	2403	0.368	-	5.26	-	0.58	-	8.26
Species Diversity	1.34				1.15				0.48	8.088	34338.9	115.47	857	5.531	12246.5	78.99

Table 5. (cont.)

Collection number	M ³ -74-043				M ³ -74-044			
Date	25 March - 24 June				25 March - 24 June			
Days of Exposure	90				90			
Area (cm ²)	412.5				412.5			
	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²
Obelia flabellata	-	Abundant	-	-	-	2.0	-	48.48
Metridium senile	-	-	-	-	1	0.002	24.2	0.05
Mytilus edulis	43	-	1042.3	-	22	0.175	533.3	4.24
Antinoella sarsi	-	-	-	-	1	0.009	24.2	0.23
Autolytus cornutus	3	-	72.7	-	10	+	242.4	0.01
Harpacticoida	-	-	-	-	3	-	72.7	-
Balanus eburneus	53	-	1284.7	-	14	0.586	339.4	14.21
Aeginina longicornis	87	-	2108.9	-	196	0.094	4751.0	2.28
Cancer irroratus	3	-	72.7	-	2	0.006	48.5	0.15
Debris	-	-	-	-	-	0.375	-	9.09
Total	189	-	4581.3	-	249	3.247	6035.7	78.74
Species Diversity	1.14				0.78			

Table 6. Number and dry weight (g) with number/m² and dry weight/m² of macroinvertebrate epifauna colonizing cement substrata 40 ft below MLW (3.5 ft above the bottom) 0.5 nautical mile seaward of the Site during the 2nd quarter.

Collection number	M ³ -74-047				M ³ -74-048				M ³ -74-049				M ³ -74-050			
Date	25 March - 24 June				25 March - 24 June				25 March - 24 June				25 March - 24 June			
Days of Exposure	90				90				90				90			
Area (cm ²)	700				700				412.5				412.5			
	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²
<i>Tubularia crocea</i>	-	17.0	-	242.9	-	12.75	-	182.2	-	7.0	-	169.7	-	5.2	-	126.0
<i>Obelia flabellata</i>	-	-	-	-	-	0.5	-	7.1	-	0.750	-	18.2	-	1.5	-	36.4
<i>Nemertea</i>	-	-	-	-	1	0.001	14.3	0.02	-	-	-	-	-	-	-	-
<i>Polinices heroes</i>	1	0.013	14.3	0.2	-	-	-	-	-	-	-	-	-	-	-	-
<i>Mitrella lunata</i>	1	0.004	14.3	0.06	-	-	-	-	-	-	-	-	-	-	-	-
<i>Mytilus edulis</i>	3038	2.5	43413.0	35.7	2303	3.0	32909.9	42.9	1248	1.8	30251.5	43.6	1704	1.8	41305	43.6
<i>Cerastoderma pinnum</i>	2	0.023	28.6	0.33	3	0.004	42.9	0.05	-	-	-	-	-	-	-	-
<i>Tellina</i> sp.	1	0.001	14.3	0.02	1	+	14.3	0.01	-	-	-	-	1	0.002	24.2	0.03
<i>Nudibranchia</i> I	31	0.184	443.0	2.6	22	0.066	314.4	0.9	-	-	-	-	-	-	-	-
<i>Phyllodoce maculata</i>	-	-	-	-	3	0.001	42.9	0.01	1	-	24.2	-	-	-	-	-
<i>Eulalia viridis</i>	3	-	42.9	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Antinoella sarsi</i>	39	0.194	557.3	2.8	29	0.133	414.4	1.9	9	0.058	218.2	1.4	6	0.019	145.4	0.47
<i>Autolytus cornutus</i>	-	-	-	-	10	-	142.9	-	2	-	48.5	-	16	0.001	387.8	0.01
<i>Polydora ligni</i>	12	0.004	171.5	0.06	30	0.003	428.7	0.05	-	-	-	-	-	-	-	-
<i>Pherusa affinis</i>	4	0.005	57.16	0.07	4	0.003	57.2	0.04	-	-	-	-	-	-	-	-
<i>Balanus eburneus</i>	709	15.0	10131.6	214.4	2789	27.8	39854.8	397.3	1871	19.0	45353.0	460.6	957	6.0	23197.7	145.4
<i>Gammarus lawrencianus</i>	2	0.008	28.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Jassa falcata</i>	-	-	-	-	2	0.002	28.6	0.03	-	-	-	-	-	-	-	-
<i>Phoxocephalus holbolli</i>	1	-	14.3	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenothoe minuta</i>	1	0.001	14.3	0.01	-	-	-	-	1	-	24.2	-	1	+	24.2	0.01
<i>Parametopella cypris</i>	5	0.002	71.5	0.03	3	0.001	42.9	0.01	-	-	-	-	-	-	-	-
<i>Aeginina longicornis</i>	128	0.200	1829.1	2.9	65	0.099	928.9	1.4	277	0.279	6714.5	6.77	1535	0.559	37208.4	13.56
<i>Caprella penantis</i>	-	-	-	-	-	-	-	-	2	0.002	48.5	0.04	-	-	-	-
<i>Cancer irroratus</i>	27	0.152	385.8	2.2	17	0.051	242.9	0.7	7	0.014	169.7	0.33	7	0.033	169.7	0.8
<i>Asterias forbesii</i>	1	0.002	14.3	0.02	2	0.007	28.6	0.1	-	-	-	-	1	0.002	24.2	0.05
Debris	-	19.0	-	271.5	-	13.3	-	190.1	-	3.3	-	80.0	-	1.8	-	43.6
Total	4006	54.293	57245.7	775.9	5284	57.721	75508.6	824.8	3418	32.203	82852.3	780.6	4228	16.916	102486.6	409.9
Species Diversity	0.79				0.89				0.94				0.11			

Table 7. Number and dry weight (g) with number/m² and dry weight/m² of macroinvertebrate epifauna colonizing cement substrata at 15 ft below MLW at the Site during the 4th quarter of 1974.

Collection number	M ³ -74-100				M ³ -74-101				M ³ -74-102			
Date	27 Sept. - 6 Dec.				27 Sept. - 6 Dec.				27 Sept. - 6 Dec.			
Days of Exposure	70				70				70			
Area (cm ²)	700				700				1400			
	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²
<i>Obelia flabellata</i>	-	0.030	-	0.4	-	Moderate	-	-	-	0.325	-	2.32
<i>Tergipes despectus</i>	22	0.002	314.4	0.02	14	-	200.1	-	4	+	28.6	-
<i>Nudibranchia I</i>	-	-	-	-	1	-	14.3	-	-	-	-	-
<i>Mytilus edulis</i>	952	-	13604.1	-	1137	-	16247.7	-	1049	0.249	7489.9	1.78
<i>Harpacticoida</i>	-	-	-	-	2	-	28.6	-	3	+	21.4	-
<i>Corophium tuberculatum</i>	2	+	28.6	.001	6	-	85.7	-	7	+	50.0	-
<i>Jassa falcata</i>	24	0.007	343.0	0.10	320	-	4572.8	-	60	0.012	428.4	0.09
<i>Stenothoe minuta</i>	-	-	-	-	39	-	557.3	-	14	0.001	100.0	0.01
<i>Parametopella cypris</i>	-	-	-	-	4	-	57.2	-	6	+	42.8	-
<i>Stenothoidae</i>	-	-	-	-	1	-	14.3	-	-	-	-	-
<i>Caprella equilibra</i>	228	-	3258.1	-	630	-	9002.7	-	81	0.043	578.3	0.31
Total	1228	.039	17548.1	.521	2154	-	30780.4	-	1224	0.630	8739.4	4.51
Species Diversity	0.66				1.12				0.59			

Table 8. Number and dry weight (g) with number/m² and dry weight/m² of macroinvertebrate epifauna colonizing cement substrata 28 ft below MLW (3.5 ft above the bottom) at the Site during the 4th quarter of 1974.

Collection number	M ³ -74-103				M ³ -74-104				M ³ -74-106				M ³ -74-107			
Date	27 September - 6 December				27 September - 6 December				27 September - 6 December				27 September - 6 December			
Days of exposure	70				70				70				70			
Area (cm ²)	700				700				700				700			
	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²	n	g	n/m ²	g/m ²
<i>Tubularia crocea</i> ¹	-	14.8 ^a	-	211.5	-	abundant	-	-	-	moderate	-	-	-	11.0 ^a	-	157.2
<i>Tergipes despectus</i>	-	-	-	-	-	-	-	-	1	-	14.3	-	-	-	-	-
<i>Nudibranchia I</i>	226	0.666	3229.5	9.5	262	-	3744.0	-	24	-	343.0	-	36	0.060	514.4	0.861
<i>Mitrella lunata</i>	-	-	-	-	-	-	-	-	-	-	-	-	5	0.005	71.5	0.071
<i>Mytilus edulis</i>	73101	-	1044613.2	-	68232	-	975035.3	-	50165	-	716857.9	-	37610	-	537446.9	-
<i>Turtonia minuta</i>	-	-	-	-	-	-	-	-	3	-	42.9	-	5	+	71.5	0.005
<i>Eulalia viridis</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	+	14.3	0.003
<i>Antinoella sarsi</i>	-	-	-	-	-	-	-	-	1	-	14.3	-	4	+	57.2	0.007
<i>Autolytus cornutus</i>	-	-	-	-	1	-	14.3	-	-	-	-	-	-	-	-	-
<i>Nereis succinea</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	+	28.6	0.002
<i>Asabellides oculata</i>	-	-	-	-	-	-	-	-	1	-	14.3	-	3	+	42.9	0.002
<i>Harpacticoida</i>	-	-	-	-	20	-	285.8	-	-	-	-	-	2	+	28.6	+
<i>Balanus eburneus</i>	7	0.053	100.0	0.752	8	-	114.3	-	2	-	28.6	-	3	0.008	42.9	0.109
<i>Edotea triloba</i>	6	0.003	85.7	0.038	-	-	-	-	143	-	2043.5	-	385	0.216	5501.7	3.09
<i>Batea catherinensis</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	0.002	14.3	0.029
<i>Cerapus tubularis</i>	1	+	14.3	0.006	5	-	71.4	-	12	-	171.5	-	12	0.002	171.5	0.025
<i>Corophium tuberculatum</i>	21	0.004	300.1	0.052	21	-	300.1	-	19	-	271.5	-	21	0.003	300.1	0.042
<i>Erichthonius brasiliensis</i>	9	0.001	128.6	0.021	15	-	214.4	-	11	-	157.2	-	24	0.001	343.0	0.011
<i>Unciola irrorata</i>	-	-	-	-	-	-	-	-	2	-	28.6	-	-	-	-	-
<i>Elasmopus levis</i>	17	0.008	242.9	0.109	9	-	128.6	-	-	-	-	-	3	0.001	42.9	0.018
<i>Jassa falcata</i>	12	0.004	171.5	0.063	9	-	128.6	-	-	-	-	-	11	0.003	157.2	0.037
<i>Parametopella cypris</i>	5	+	71.5	0.004	5	-	71.4	-	1	-	14.3	-	18	0.006	257.2	0.092
<i>Stenothoe minuta</i>	113	0.049	1614.8	0.701	162	-	2315.0	-	24	-	343.0	-	60	0.006	857.4	0.092
<i>Caprella equilibra</i>	694	0.494	9917.3	7.064	755	-	10789.0	-	460	-	6573.4	-	447	0.235	6387.6	3.364
<i>Libinia emarginata</i>	-	-	-	-	1	-	14.3	-	-	-	-	-	-	-	-	-
<i>Cancer irroratus</i>	1	0.002	14.3	0.0257	-	-	-	-	-	-	-	-	1	+	14.3	0.004
Total number	74213	16.084	1060508.7	229.8357	69505	-	993226.5	-	50869	-	726918.3	-	38654	11.546	552365.9	165.064
Species Diversity	0.10				0.11				0.09				0.16			

¹ *Tubularia* - in all collections: Moderately-heavily dense, but grazed-few hydranths in relation to number of stalks.

Table 8. (cont.)

Collection number	M ⁸ -74-105			
Date	27 September - 6 December			
Days of exposure	70			
Area (cm ²)	1237.5			
	n	g	n/m ²	g/m ²
<i>Tubularia crocea</i>	-	22.0*	-	177.76
<i>Doto coronata</i>	3	0.001	24.24	0.005
<i>Tergipes despectus</i>	4	0.001	32.32	0.006
<i>Nudibranchia I</i>	67	0.189	541.36	1.529
<i>Mytilus edulis</i>	109200	-	882336.	-
<i>Turtonia minuta</i>	4	0.003	32.32	0.020
<i>Autolytus cornutus</i>	1	-	8.1	-
<i>Balanus eourneus</i>	3	0.039	24.24	0.313
<i>Edotea triloba</i>	48	0.029	387.84	0.237
<i>Cerapus tubularis</i>	1	+	8.1	-
<i>Corophium tuberculatum</i>	50	0.011	404.0	0.091
<i>Erichthonius brasiliensis</i>	43	0.010	347.44	0.077
<i>Elasmopus levis</i>	3	0.002	24.24	0.020
<i>Jassa falcata</i>	26	0.011	210.1	0.091
<i>Parametopella cypria</i>	16	0.002	129.28	0.014
<i>Stenothoe minuta</i>	35	0.017	282.8	0.135
<i>Caprella equilibra</i>	132	0.140	1066.56	1.131
Total number	109636	22.455	885858.88	181.429
Species Diversity	0.03			

Table 9. Number and number/m² of discrete macroinvertebrates with percent coverage of colonial organisms and total dry weight on cement test panels (570 cm²) at middepth at the Site approximately 2.3 nautical miles SSE of Little Egg Inlet during 1974.

Date	23 April - 23 May								23 May - 1 July							
Days of exposure	30								39							
Collection number	M ³ -74-021	M ³ -74-022	M ³ -74-023	M ³ -74-024									M ³ -74-057	M ³ -74-058	M ³ -74-059	M ³ -74-060
Colonial organisms (% coverage)																
Tubularia crocea	-	-	trace	-									trace	trace	-	trace
Obelia flabellata	37 L-M*	25 L	5 L	15 L									17 L	33 L-M	75 L-M	85 L
Anguinella palmata	-	-	-	-									scattered	traces	trace	-
Electra hastingiae	-	-	-	-									0.5	-	-	-
	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Discrete organisms																
Metridium senile	-	-	-	-	-	-	-	-	-	-	1	17.5	-	-	-	-
Stylochus ellipticus	-	-	-	-	-	-	-	-	1	17.5	1	17.5	-	-	-	-
Tergipes despectus	1	17.5	-	-	-	-	-	-	42	736.7	23	403.4	202	3543.1	205	3595.7
Mytilus edulis	26	456.0	16	260.8	318	5577.7	686	12032.4	1	17.5	1	17.5	12	210.5	10	175.4
Autolytus cornutus	-	-	-	-	-	-	-	-	39	684.1	32	561.3	8	140.3	6	105.2
Polydora ligni	2	35.1	-	-	2	35.1	15	263.1	14	245.6	-	-	8	140.3	2	35.1
Harpacticoida	140	2455.6	62	1087.5	129	2262.7	106	1859.2	2	35.1	2	35.1	-	-	-	-
Balanus eburneus	33	578.8	70	1227.8	11	192.9	7	122.8	146	2560.8	161	2823.9	37	649	57	999.8
Edotea triloba	-	-	-	-	-	-	-	-	-	-	-	-	3	52.6	5	87.7
Cerapus tubularis	-	-	-	-	-	-	-	-	1	17.5	-	-	2	35.1	-	-
Erichthonius brasiliensis	-	-	-	-	-	-	-	-	-	-	1	17.5	-	-	-	-
Gammarus lawrencianus	-	-	-	-	-	-	-	-	-	-	1	17.5	-	-	-	-
Jassa falcata	2	35.1	1	17.5	2	35.1	1	17.5	3	52.6	-	-	2	35.1	7	122.8
Parametopella cypris	4	70.2	3	52.6	-	-	-	-	120	2104.8	32	561.3	596	10453.8	243	4262.2
Stenothoe minuta	-	-	-	-	-	-	-	-	6	105.2	8	140.3	-	-	2	35.1
Aeginina longicornis	2	35.1	1	17.5	-	-	-	-	-	-	-	-	3	52.6	2	35.1
Caprella penantis	-	-	-	-	-	-	-	-	261	4577.9	148	2595.9	99	1736.5	138	2420.5
Cancer irroratus	-	-	-	-	-	-	-	-	-	-	1	17.5	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	1	17.5	-	-	3	52.6	2	35.1
	-	-	-	-	-	-	-	-	4	70.2	1	17.5	5	87.7	2	35.1
Total number	210	3683.4	153	2663.7	462	8103.5	817	14330.2	641	11243.0	412	7226.2	980	17189.2	681	11944.8
Total dry weight (g)	27.5	482.4	-	-	25.0	438.5	-	-	8.5	149.1	-	-	20.0	350.8	-	-
Species Diversity	1.00	-	1.05	-	0.73	-	0.54	-	1.57	-	1.43	1.20	-	1.50	-	-

Table 9. (cont.)

Date	2 July - 5 August								5 August - 6 September	
Days of exposure	34		34		34		34		32	
Collection number	M ³ -74-076		M ³ -74-077		M ³ -74-078		M ³ -74-079		M ³ -74-088	
Colonial organisms (% coverage)										
Tubularia crocea	80	L-H	70	M	50	M-H	60	M-H	25	L-M
Obelia flabellata	-		12	M	40	M	35	M	-	
Alcyonidium polyomm	-		-		4		-		3	
Anguinella palmata	-		2		-		-		-	
Electra hastingiae	0.5		-		trace		0.3		-	
Membranipora tenuis	-		-		1		1		-	
	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Discrete organisms										
Metridium senile	4	70.2	1	17.5	-	-	-	-	-	-
Crepidula plana	2	35.1	-	-	-	-	4	70.2	4	70.2
Mitrella lunata	1	17.5	-	-	-	-	-	-	2	35.1
Acanthodoris pilosa	-	-	-	-	1	17.5	-	-	-	-
Cretena pilata	14	245.6	12	210.5	-	-	1	17.5	-	-
Nudibranchia I	53	929.6	51	894.5	20	350.8	20	350.8	8	140.3
Turtonia minuta	-	-	-	-	4	70.2	-	-	-	-
Tellina sp.	4	70.2	2	35.1	-	-	-	-	-	-
Phyllodoceidae	-	-	-	-	1	17.5	-	-	-	-
Antinoella sarsi	-	-	-	-	-	-	-	-	1	17.5
Antolytus cornutus	-	-	-	-	-	-	-	-	8	140.3
Polydora ligni	-	-	-	-	1	17.5	-	-	8	140.3
Sabellaria vulgaris	-	-	-	-	-	-	-	-	47	824.4
Harpacticoida	1	17.5	-	-	-	-	5	87.7	-	-
Balanus eburneus	4	70.2	1	17.5	1	17.5	3	52.6	-	-
Edotea triloba	-	-	1	17.5	4	70.2	7	122.8	-	-
Batea catharinensis	-	-	-	-	-	-	1	17.5	-	-
Cerapus tubularis	19	333.3	15	263.1	156	2736.2	162	2841.5	16	280.6
Corophium tuberculatum	1	17.5	5	87.7	6	105.2	1	17.5	24	421.0
Erichthonius brasiliensis	3	52.6	5	87.7	1	17.5	5	87.7	16	280.6
Jassa falcata	9	157.9	8	140.3	12	210.5	6	105.2	40	701.6
Parametopella cypris	124	2175.0	41	719.1	188	3297.5	180	3157.2	16	280.6
Stenothoe minuta	35	613.9	21	368.3	27	473.6	17	298.2	40	701.6
Stenothoidae	17	298.2	8	140.3	-	-	-	-	-	-
Aeginina longicornis	151	2648.5	11	192.9	8	140.3	9	157.9	56	982.2
Caprella equilibra	-	-	81	1420.7	639	11208.1	444	7787.8	8792	154211.7
Libinia emarginata	5	87.7	11	192.9	8	140.3	-	-	-	-
Cancer irroratus	15	263.1	11	192.9	11	192.9	13	228.0	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	105	1841.7
Total number	462	8103.6	285	4998.5	1087	19065.8	878	15400.1	9183	161069.8
Total dry weight (g)	-	-	4.38	76.8	-	-	9.85	172.8	3.94	69.1
Species Diversity	1.91		2.13		1.30		1.42		0.27	

*L - light, scarce
M - moderate
H - heavy, dense

Table 10. Number and number/m² of discrete macroinvertebrates with percent coverage of colonial organisms and total dry weight on cement test panels (570 cm²) at middepth at the Site approximately 2.3 nautical miles SSE of Little Egg Inlet during 1974.

Date	23 April - 1 July								2 July - 6 September	
Days of exposure	69								66	
Collection number	M ³ -74-061		M ³ -74-062		M ³ -74-063		M ³ -74-064		M ³ -74-089	
Colonial organisms (% coverage)										
Tubularia crocea	18 H		8 L		0.5 L		0.5 L		65 M-H	
Obelia flabellata	65 M		85 M-H		100 M		80 M		-	
Anguinella palmata	-		-		-		trace		-	
Alcyonidium polyoum	-		-		-		-		4	
Membranipora tenuis	-		-		-		-		3	
Electra hastingsae	1		-		0.5		2.0		1	
	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Discrete organisms										
Metridium senile	20	350.8	5	87.7	8	140.3	9	157.9	9	157.9
Stylocheus ellipticus	2	35.1	-	-	-	-	-	-	-	-
Crepidula plana	-	-	-	-	-	-	-	-	5	87.7
Mitrella lunata	-	-	-	-	-	-	-	-	3	52.6
Acanthodoris pilosa	-	-	-	-	4	70.2	1	17.5	-	-
Dendronotus frondosus	-	-	-	-	1	17.5	-	-	-	-
Doto coronata	-	-	-	-	1	17.5	-	-	-	-
Nudibranchia I	-	-	-	-	-	-	-	-	18	315.7
Tergipes despectus	2	35.1	13	228.0	8	140.3	1	17.5	-	-
Mytilus edulis	37	649.0	44	771.8	76	1333.0	58	1017.3	1	17.5
Paranaitis sp.	-	-	-	-	-	-	2	35.1	-	-
Eulalia viridis	1	17.5	-	-	-	-	-	-	-	-
Antinoella sarsi	-	-	1	17.5	7	122.8	3	52.6	1	17.5
Autolytus cornutus	64	1122.6	70	1227.8	93	1631.2	9	157.9	8	140.3
Nereis succinea	-	-	2	35.1	-	-	1	17.5	-	-
Polydora ligni	10	175.4	15	263.1	6	105.2	7	122.8	-	-
Sabellaria vulgaris	-	-	-	-	-	-	-	-	37	649.0
Hydroides dianthus	-	-	-	-	-	-	-	-	4	70.2
Harpacticoida	4	70.2	10	175.4	1	17.5	-	-	-	-
Balanus eburneus	128	2245.1	147	2578.4	50	877.0	76	1333.0	4	70.2
Edotea triloba	1	17.5	-	-	1	17.5	7	122.8	-	-
Calliopius laeviusculus	-	-	-	-	-	-	1	17.5	-	-
Corophium tuberculatum	-	-	-	-	-	-	-	-	51	894.5
Cerapus tubularis	13	228.0	10	175.4	9	157.9	5	87.7	17	298.2
Erichthonius brasiliensis	4	70.2	-	-	-	-	-	-	22	385.9
Gammarus lawrencianus	2	35.1	2	35.1	6	105.2	-	-	-	-
Jassa falcata	203	3560.6	85	1490.9	407	7138.8	76	1333.0	8	140.3
Pleusymtes glaber	2	35.1	-	-	-	-	-	-	-	-
Pontogeneia inermis	-	-	-	-	2	35.1	-	-	-	-
Stenothoe minuta	-	-	1	17.5	20	350.8	-	-	86	1508.4
Parametopella cypris	430	7542.2	45	789.3	3	52.6	21	368.3	29	508.7
Stenothoidae	-	-	-	-	-	-	-	-	16	280.6
Aeginina longicornis	867	15207.2	424	7437.0	272	4770.9	174	3052.0	24	421.0
Caprella equilibra	-	-	-	-	-	-	-	-	6655	116728.7
Cancer irroratus	5	87.7	5	87.7	2	35.1	5	87.7	-	-
Asterias forbesii	12	210.5	22	385.9	10	175.4	8	140.3	78	1368.1
Total number	1807	31694.9	901	15803.6	987	17311.8	465	8138.4	7076	124113.0
Total dry weight (g)	43.5	763.0	86.5	1517.2	-	-	37.5	657.8	8.6	150.8
Species Diversity	1.53		1.75		1.69		1.86		0.36	

* L - light, scarce
M - moderate
H - heavy, dense

Table 11. Number and number/m² of discrete macroinvertebrates with percent coverage of colonial organisms and total dry weight on cement test panels (570 cm²) near the bottom at the Site.

Date	23 April - 23 May						23 May - 1 July				2 July - 5 August			
Days of exposure	30		30		30		39		39		34		34	
Collection	M ³ -74-025		M ³ -74-026		M ³ -74-027		M ³ -74-067		M ³ -74-068		M ³ -74-080		M ³ -74-081	
Colonial organisms														
Tubularia crocea	-	-	-	-	-	-	0.5 L	-	2 L	-	2 L	-	trace	-
Obelia flabellata	33 L	-	15 L	-	3 L	-	18 L	-	5 L	-	-	-	-	-
Alcyonidium polyoum	-	-	-	-	0.2	-	-	-	1	-	45	5	95	-
Electra hastingiae	-	-	-	-	-	-	-	-	-	-	3	0.3	2	-
Membranopora tenuis	-	-	-	-	-	-	-	-	-	-	-	trace	-	-
	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Discrete organisms														
Acanthodoris pilosa	-	-	-	-	-	-	-	-	-	-	7	122.8	-	9
Tergipes despectus	4	70.2	2	35.0	-	-	2	35.0	1	17.5	-	-	-	-
Mytilus edulis	260	4560.4	60	1052.4	260	4560.4	5	87.7	17	298.2	-	-	-	-
Paranaitis sp.	-	-	-	-	-	-	-	-	1	17.5	-	-	-	-
Antinoella sarsi	1	17.5	-	-	2	35.0	-	-	1	17.5	-	-	-	-
Autolytus cornutus	36	631.4	7	122.8	30	526.2	2	35.0	5	87.7	-	-	-	-
Polydora ligni	1	17.5	1	17.5	-	-	24	421.0	5	87.7	2	35.0	-	3
Sabellaria vulgaris	-	-	-	-	-	-	-	-	-	-	-	1	17.5	1
Harpacticoida	5	87.7	1	17.5	2	35.0	1	17.5	-	-	-	-	-	-
Balanus eburneus	1561	27379.9	340	5963.6	38	666.5	142	2490.7	81	1420.7	-	-	-	-
Cerapus tubularis	-	-	-	-	-	-	-	-	-	-	4	70.2	4	8
Corophium tuberculatum	1	17.5	-	-	-	-	7	122.8	7	122.8	24	421.0	7	22
Erichthonius brasiliensis	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Gammarus lawrencianus	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Jassa falcata	4	70.2	-	-	1	17.5	5	87.7	4	70.2	2	35.0	-	15
Stenothoe minuta	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Parametopella cypris	37	649.0	5	87.7	-	-	33	578.8	10	175.4	320	5612.8	-	277
Proboloides holmesii	13	228.0	1	17.5	-	-	-	-	-	-	-	-	-	-
Aeginina longicornis	72	1262.9	16	280.6	-	-	90	1578.6	9	157.9	1	17.5	-	3
Caprella equilibra	-	-	-	-	-	-	-	-	-	-	9	157.9	1	12
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Cancer irroratus	-	-	-	-	-	-	-	-	1	17.5	1	17.5	-	-
Asterias forbesii	-	-	-	-	1	17.5	5	87.7	3	52.6	-	-	-	-
Total number	1995	34992.2	433	7594.6	334	5858.1	316	5542.6	145	2543.3	370	6489.8	13	228.0
Total dry weight (g)	31.05	544.62	-	-	25.5	447.27	47.01	824.56	34.56	606.18	-	-	0.1	1.75
Species Diversity	0.80		0.74		0.73		1.45		1.50		0.57		0.83	0.97

Table 11. (cont.)

Date	23 April - 1 July			
Days of exposure	69		69	
Collection number	M ³ -74-065		M ³ -74-066	
<hr/>				
Colonial organisms (% coverage)				
Obelia flabellata	100 L-M		50 M	
Tubulipora sp.	-		0.5	
Electra hastingsae	5		1	
	n	n/m ²	n	n/m ²
Discrete organisms				
Tergipes despectus	-	-	1	17.5
Nudibranchia I	2	35.0	-	-
Paranaitis sp.	-	-	1	17.5
Antinoella sarsi	4	70.2	3	52.6
Autolytus cornutus	36	631.4	25	438.5
Polydora ligni	6	105.2	5	87.7
Harpacticoida	5	87.7	6	105.2
Cerapus tubularis	29	508.7	16	280.6
Corophium tuberculatum	4	70.2	5	87.7
Erichthonius brasiliensis	2	35.0	-	-
Gammarus lawrencianus	4	70.2	1	17.5
Jassa falcata	19	333.3	17	298.2
Parametopella cypris	-	-	5	87.7
Aeginina longicornis	599	10506.5	275	4823.5
Cancer irroratus	9	157.9	6	105.2
Asterias forbesii	2	35.0	5	87.7
Total number	1178	20662.1	952	16698.1
Total dry weight (g)	54.61	957.86	32.58	571.45
Species Diversity	3.10		4.36	

* L - light, scarce
M - moderate
H - heavy, dense

Table 12. Percent of hydroid coverage on irregular and smooth surfaces of the same cement test panels moored at the Site in 1974.

Collection No.	Depth	Days of Exposure	Date	Species	Irregular	Smooth
M ³ -74-021	mid	30	4/23-5/23	O ^a	40 L-M ^b	23 L-M
" " -022	"	"	"	O	25 L	25 L
" " -023	"	"	"	O	2 L	7 L
" " -024	"	"	"	O	25 L-M	5 L
" " -057	"	39	5/23-7/1	O	30 L	3 L
" " -058	"	"	"	O	75 L	-
" " -059	"	"	"	O	100 L-M	50 L-M
" " -060	"	"	"	O	100 L-M	70 L-M
" " -061	"	69	4/23-7/1	T	15 H	20 H
				O	85 M	40 M
" " -062	"	"	"	T	5 L	10 L
				O	95 H	75 M-H
" " -063	"	"	"	T	1 L	-
				O	99 M	25 L
" " -064	"	"	"	T	1 M	-
				O	98 M-H	60 M
" " -076	"	34	7/2-8/5	T	95 M-H	70 L-M
" " -077	"	"	"	T	95 M-H	50 M
				O	-	25 M
" " -078	"	"	"	T	60 M-H	45 H
				O	30 M-H	50 M
" " -079	"	"	"	T	25 M-H	90 H
				O	70 M	7 L-M
" " -088	"	32	8/5-9/6	T	40 M	10 M
" " -089	"	66	7/2-9/6	T	40 M-H	90 M-H
" " -025	bottom	30	4/23-5/23	O	40 L	25 L
" " -026	"	"	"	O	20 L-M	10 L
" " -027	"	"	"	O	5 L	trace
" " -067	"	39	5/23-7/1	T	-	1 L
				O	20 L-M	15 L
" " -068	"	"	"	T	trace	3 L
				O	5 L	5 L
" " -065	"	69	4/23-7/1	O	100 L-H	100 L-M
" " -066	"	"	"	O	75 M	25 L-M
" " -080	"	34	7/2-8/5	T	3 L	3 L
" " -081	"	"	"	T	trace	-
" " -082	"	"	"	T	trace	trace

a O = Obelia flabellata

T = Tubularia crocea

b L = light

M = moderate

H = heavy

Table 13. Barnacle colonization on irregular and smooth surfaces of the same cement test panels moored at the Site in 1974.

Collection No.	Depth	Days of Exposure	Date	Irregular	Smooth
M ³ -74-021	mid	30	4/23-5/23	38	5
" " -022	"	"	"	50	20
" " -023	"	"	"	4	6
" " -024	"	"	"	5	1
" " -057	"	39	5/23-7/1	130	16
" " -058	"	"	"	157	4
" " -059	"	"	"	27	10
" " -060	"	"	"	30	26
" " -061	"	69	4/23-7/1	87	41
" " -062	"	"	"	122	25
" " -063	"	"	"	33	17
" " -064	"	"	"	59	17
" " -076	"	34	7/2-8/5	2	2
" " -077	"	"	"	1	-
" " -078	"	"	"	-	1
" " -079	"	"	"	3	-
" " -089	"	66	7/2-9/6	2	2
" " -025	bottom	30	4/23-5/23	1503	58
" " -026	"	"	"	336	4
" " -027	"	"	"	37	1
" " -028	"	"	"	-	-
" " -065	"	69	4/23-7/1	365	13
" " -066	"	"	"	507	24
" " -067	"	"	"	134	8
" " -068	"	"	"	76	5

Table 14. Number, number/m², weight (g), and weight/m² of epifauna after 1 year of colonization on the epoxy-coated steel instrumentation tower approximately 2.3 nautical miles S S E of Little Egg Inlet.

Collection number	MMM-74-034				MMM-74-035				MMM-74-036		MMM-74-037		MMM-74-038			
Date	5 June 1974				5 June 1974				5 June 1974		5 June 1974		5 June 1974			
Depth below MLW (feet)	4				15				15		31		31			
Area (cm ²)	650				240				630		625.5		625.5			
	n	n/m ²	g	g/m ²	n	n/m ²	g	g/m ²	n	n/m ²	n	n/m ²	n	n/m ²	g	g/m ²
Algae																
Enteromorpha intestinalis	-	-	0.015	0.2	-	-	-	-	-	-	-	-	-	-	-	-
Enteromorpha linza	-	-	2.0	30.8	-	-	-	-	present	-	-	-	-	-	-	-
Enteromorpha plumosa	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-
Ilea sp.	-	-	0.066	1.0	-	-	-	-	-	-	-	-	-	-	-	-
Scytosiphon sp.	-	-	0.124	1.9	-	-	-	-	-	-	-	-	-	-	-	-
Gracilaria sp.	-	-	0.002	0.03	-	-	-	-	-	-	-	-	-	-	-	-
Invertebrates																
Metridium senile	-	-	-	-	12	499.9	0.5	20.8	39	618.9	183	2926.2	73	1167.3	36.	576
Membranipora tenuis	-	-	-	-	-	-	-	-	-	-	on barnacle shell		-	-	-	-
Tergipes despectus	-	-	-	-	-	-	-	-	3	47.6	-	-	-	-	-	-
Mytilus edulis	421	6475	50.5	776.7	3038	126563.1	317.0	13206.2	2479	39341.7	1434	22944	808	12919.9	11.3	180.7
Anomia simplex	-	-	-	-	-	-	-	-	1	15.9	-	-	-	-	-	-
Tellina agilis	-	-	-	-	-	-	-	-	1	15.9	-	-	-	-	-	-
Bivalvia	3	46.1	0.001	0.01	-	-	-	-	-	-	-	-	-	-	-	-
Eulalia viridis	1	15.4	+	0	-	-	-	-	1	15.9	-	-	-	-	-	-
Antinoella sarsi	-	-	-	-	22	916.5	0.203	8.5	9	142.8	-	-	3	48.0	-	-
Autolytus cornutus	-	-	-	-	-	-	-	-	1	15.9	-	-	-	-	-	-
Nereis succinea	1	15.4	0.010	0.2	1	41.7	0.031	1.3	-	-	-	-	-	-	-	-
Polydora ligni	-	-	-	-	1	41.7	0.020	0.8	7	111.1	-	-	-	-	-	-
Sabellaria vulgaris	-	-	-	-	-	-	-	-	-	-	3	48.0	3	48.0	.003	0.05
Cirratulidae	-	-	-	-	-	-	-	-	-	-	1	16.0	7	111.9	.002	0.04
Pherusa affinis	-	-	-	-	-	-	-	-	1	15.9	-	-	-	-	-	-
Sabellidae	-	-	-	-	-	-	-	-	-	-	1	16.0	-	-	-	-
Balanus eburneus	19	292.2	0.414	6.4	19	791.5	1.270	52.9	186	2951.8	48	767.5	1	16.0	-	-
Corophium tuberculatum	-	-	-	-	-	-	-	-	-	-	-	-	2	32.0	+	0
Jassa falcata	11230	172717.4	.984	15.1	2403	100109.0	2.5	104.2	5300	84111.0	26	415.7	3	48.0	.003	0.05
Stenothoe minuta	-	-	-	-	3	125.0	0.017	0.7	36	571.3	-	-	-	-	-	-
Caprella equilibra	47	722.9	0.025	.4	29	1208.1	0.035	1.5	25	396.8	36	575.6	2	32	.001	.02
Crangon septemspinosa	14	215.3	0.109	1.7	fragment		-	-	-	-	-	-	-	-	-	-
Chironimidae	30	461.4	0.008	0.1	-	-	-	-	-	-	-	-	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	1	16.0	-	-	-	-
Debris	-	-	5.8	89.2	-	-	23.0	958.2	-	-	-	-	-	-	12.3	197.5
Total	11766	180961.1	60.058	923.73	5529	230338.2	344.576	14355.1	8090	128388.3	1733	27710.7	902	14423.1	59.609	962.5
Species Diversity	0.22				0.78				0.81		0.65		0.42			

Table 15. Epifauna taken in occasional 25-ft trawl samples from different locations in the vicinity of the Site during 1974.

Location	Date	Species
Seaward of ridge	2 April	<i>Obelia flabellata</i>
		<i>Thuiaria argentea</i>
		<i>Amathia vidovici</i>
		<i>Mytilus edulis</i>
		<i>Autolytus cornutus</i>
	2 May	<i>Obelia flabellata</i>
		<i>Thuiaria argentea</i>
		<i>Mytilus edulis</i>
		<i>Autolytus cornutus</i>
	8 July	<i>Amathia vidovici</i>
		<i>Neomysis americana</i>
	1 October	<i>Amathia vidovici</i>
Landward of ridge	21 February	<i>Obelia flabellata</i>
	2 April	<i>Obelia flabellata</i>
		<i>Thuiaria argentea</i>
		<i>Mytilus edulis</i>
		<i>Autolytus cornutus</i>
		<i>Asabellides oculata</i>
		<i>Asterias forbesii</i>
	15 April	<i>Obelia flabellata</i>
		<i>Amathia vidovici</i>
		<i>Mytilus edulis</i>
	2 May	<i>Obelia flabellata</i>
		<i>Thuiaria argentea</i>
		<i>Mytilus edulis</i>
		<i>Autolytus cornutus</i>
	8 July	<i>Amathia vidovici</i>
		<i>Asabellides oculata</i>
	1 October	<i>Amathia vidovici</i>
Approximately 4.5 S.E. of Little Egg Inlet	19 March	<i>Obelia flabellata</i>
		<i>Thuiaria argentea</i>
	2 April	<i>Obelia flabellata</i>
		<i>Thuiaria argentea</i>
		<i>Mytilus edulis</i>
	11 June	<i>Autolytus cornutus</i>
		<i>Aeginina longicornis</i>

Table 15. (cont.)

	8 July	Thuiaria argentea Amathia vidovici Neomysis americana
2.3 nautical miles off Holgate	2 April	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus
	2 May	Obelia flabellata Mytilus edulis Autolytus cornutus
Approximately 1 nautical mile S.E. Brigantine Inlet	19 March	Obelia flabellata Mytilus edulis Autolytus cornutus
	16 September	Amathia vidovici Cerapus tubularis
Approximately 4 nautical miles S.E. Brigantine Inlet	15 April	Obelia flabellata Thuiaria argentea Mytilus edulis Autolytus cornutus
	29 May	Obelia flabellata Nassarius egg cases

Table 16. Marine algae collected in the study area for 1974.

Division I : Chlorophyta (Green Algae)	
(1)	<u>Enteromorpha prolifera</u>
(2)	<u>Urospora penicilliformis</u>
Division II : Phaeophyta (Brown Algae)	
(1)	<u>Punctaria plantaginea</u>
* (2)	<u>Chorda filum</u>
* (3)	<u>Sargassum filipendula</u> (?)
Division III : Rhodophyta (Red Algae)	
* (1)	<u>Lomentaria baileyana</u>
(2)	<u>Ceramium diaphanum</u> (?)
(3)	<u>Grinnellia americana</u>
(4)	<u>Polysiphonia</u>
	(a) denudata
	(b) harveyi

* Algal species collected while on seine or trawl trips in the study area.

Table 17. Benthic marine algae collected in Great Bay with a 9-ft semiballoon trawl for 1974.

June 26, 1974						July 23, 1974				
Air Temperature °C	15.5	17.5	18.0	19.5	19.0	23.0	23.0	23.2	24.0	24.0
Water Temperature (bottom) °C	18.0	18.0	18.0	19.0	18.8	22.0	22.8	23.0	23.8	23.0
Tide	Flood 1	Flood 1	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2	Ebb 1
Depth (feet)	13.0	11.0	10.0	9.0	13.0	10.0	10.0	9.0	9.0	13.0
Salinity (bottom) o/oo	28.5	28.0	28.5	27.5	28.5	30.0	29.0	28.5	28.0	29.5
Dissolved Oxygen (bottom) ppm	6.7	6.9	6.3	8.0	7.0	6.6	6.4	5.8	6.0	5.4
Secchi Disc (feet)	4.5	5.0	3.0	4.0	5.0	7.5	5.5	6.0	7.0	7.0
Zone	1010	2200	2220	1065	1200	1010	2200	2220	1065	1200

Algal Species Collected	WET WEIGHTS (gm/m ²)					C	C/B	WET WEIGHTS (gm/m ²)					C	C/B
Ulva lactuca	0.14	0.09	0.05	0.64	0.76	1.68	61%	0.38	3.10	0.19	0.38	2.76	6.81	73%
Enteromorpha linza	-	-	-	-	-	-	-	present	-	-	-	-	-	-
Enteromorpha prolifera	-	-	-	-	-	-	-	present	present	-	-	-	-	-
Cladophora glaucescens	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Punctaria plantaginea	-	-	-	-	-	-	-	-	present	-	-	-	-	-
Fucus vesiculosus	-	-	-	-	0.03	0.03	1%	present	-	-	-	-	-	-
Agardhiella tenera	0.02	-	-	-	0.75	0.77	28%	-	0.27	-	0.39	0.08	0.74	8%
Gracilaria foliifera	0.01	-	-	-	0.23	0.24	9%	0.01	0.68	present	0.68	0.16	1.53	16%
Champia parvula	0.01	-	-	-	-	0.01	-	present	-	-	-	-	-	-
Lomentaria baileyana	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Ceramium diaphanum	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Ceramium rubrum	-	0.01	-	present	0.02	0.03	1%	present	0.05	0.03	0.01	0.02	0.11	1%
Polysiphonia denudata	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Polysiphonia harveyi	present	-	-	0.01	present	0.01	-	present	0.10	-	-	-	0.10	1%
Total species	5	2	1	3	6			8	7	3	8	4		
A	0.18	0.10	0.05	0.65	1.79			0.39	4.20	0.22	1.46	3.02		
B	2.77	2.77	2.77	2.77	2.77			9.29	9.29	9.29	9.29	9.29		
A/B	6%	4%	2%	23%	65%			4%	45%	2%	16%	33%		

A = Total weights of all algal species in each Zone.

B = Total weights of all algal species in all Zones.

C = Total weights of individual algal species in all Zones.

Present indicates algal weights were negligible (<0.01 gm/m²)

Table 18. Intertidal marine algae collected on Absecon Inlet Jetty (Brigantine side) within 20 cm² quadrates in 1974.

	JANUARY	MARCH	APRIL	MAY	JUNE	JULY	SEPTEMBER
Air Temperature C	4.0	9.0	14.0	21.0	18.8	25.0	23.5
Water Temperature C	5.0	6.5	10.0	17.5	19.5	24.5	23.0
Dissolved Oxygen ppm	9.5	12.1	9.5	7.6	7.8	9.0	7.8
Salinity (ppt)	24.5	29.0	30.0	28.0	30.0	30.0	26.5
ALGAL SPECIES	MEAN DRY WEIGHTS (gm/cm ²)						
Ulothrix flacca	-	0.19	-	-	-	-	-
Enteromorpha compressa	0.22	-	-	-	-	-	-
Enteromorpha linza	0.04	0.07	0.18	0.62	0.64	0.26	0.10
Enteromorpha minima	-	0.42	0.06	0.20	0.15	0.23	0.01
Enteromorpha sp.	-	0.15	-	-	-	-	-
Urospora penicilliformis	-	present	0.09	0.02	-	-	-
Scytosiphon lomentaria	-	-	0.21	-	-	-	-
Bangia fuscopurpurea	-	0.06	0.02	0.02	0.07	0.24	0.06
Porphyra umbilicalis	0.07	0.10	0.06	-	-	0.03	-
Total species	3	7	6	4	3	4	3
Total weight	0.33	0.99	0.62	0.86	0.86	0.76	0.17

present indicates weights less than 0.01 gm/cm².

Table 19. Macroinvertebrates taken in the ocean and bays in the vicinity of Little Egg Inlet, New Jersey, from 1 January 1972 to 31 December 1974.

MACROINVERTEBRATE SPECIES LIST

PHYLUM PORIFERA

Class Demospongiae

Order Haplosclerida

Family Halicionidae

Haliclona sp.

Order Poecilosclerida

Family Microcionidae

Microciona prolifera - redbear sponge

Order Hadromerida

Family Clionidae

Cliona celata - boring sponge

Cliona sp.

PHYLUM CNIDARIA

Class Hydrozoa - hydroid

Order Athecata

Family Tubulariidae

Tubularia crocea - pink-hearted hydroid

Family Margelopsidae

Margelopsis gibbesi

Family Hydractiniidae

Hydractinia echinata - spiny polymorphic hydroid

Family Bougainvilliidae

Calyptospadix cerulea

Order Thecata

Family Campanularidae

Obelia commisuralis

Obelia flabellata

Obelia sp.

Family Campanulinidae

Lovenella sp.

Family Aequoreidae

Aequorea sp.

Family Sertularidae

Thuiaria argentea - squirrel's tail hydroid

Thuiaria sp.

Order Trachymedusae

Family Geryonidae

Liriope sp.

Class Scyphozoa - jellyfish

Order Semaestomeae

Family Cyanidae

Cyanea capillata - lion's mane

Class Anthozoa

Order Actiniaria - sea anemone

Tribe Athenaria

Athenaria "C"

Family Haloclavidae

Haloclava producta

Tribe Thenaria

Family Sagartidae

Actinothoe modesta

Family Metridiidae

Metridium senile

Table 19. (cont.)

Order Scleractinia	
PHYLUM CTENOPHORA - comb jellies	<u>Astrangia danae</u> - star coral
Class Tentaculata	
Order Cydippida	Family Pleurobranchiidae
	<u>Pleurobranchia pileus</u>
Order Lobata	Family Mnemiidae
	<u>Mnemiopsis leidyi</u>
Class Nuda	
Order Beroida	Family Beroidae
	<u>Beroe</u> sp.
PHYLUM PLATYHELMINTHES - flatworms	
Order Tricladida	Family Bdellouridae
	<u>Bdelloura</u> sp.
Order Polycladida	Family Stylochidae
	<u>Stylochus ellipticus</u>
	<u>Stylochus zebra</u>
	Family Leptoplanidae
	<u>Euplana gracilis</u>
PHYLUM NEMERTEA - ribbon worms	
Class Anopla	
Order Heteronemertea	Family Lineidae
	<u>Zygeupolia rubens</u>
	<u>Cerebratulus lacteus</u>
Class Enopla	
Order Hoplonemertea	Family Amphiporidae
	<u>Zygonemertes virescens</u>
PHYLUM ASCHELMINTHES	
Class Gephyrea	
Class Nematoda - round worms	
PHYLUM CHAETOGNATHA - Arrow worms	<u>Sagitta elegans</u>
	<u>Sagitta enflata</u>
	<u>Sagitta</u> sp.
PHYLUM BRYOZOA	
Class Gymnolaemata	
Order Ctenostomata	Family Alcyonidiidae
	<u>Alcyonidium polyomm</u>
	Family Nolellidae
	<u>Anguinella palmata</u>
	Family Triticellidae
	<u>Triticella elongata</u>
	Family Vesicularidae
	<u>Bowerbankia gracilis</u>
	<u>Amathia vidovici</u>
Order Cyclostomata	Family Tubuliporidae
	<u>Tubulipora</u> sp.

Table 19. (cont.)

Order Cheilostomata	
Suborder Anasca	
	Family Electridae
	<u>Electra hastingsae</u>
	Family Membraniporidae
	<u>Membranipora tenuis</u>
Suborder Ascophora	
	Family Schizoporellidae
	<u>Schizoporella unicornis</u>
PHYLUM MOLLUSCA	
Class Gastropoda	
Subclass Prosobranchia	
Order Mesogastropoda	
	Family Lacunidae
	<u>Lacuna vineta</u> - northern lacuna
	Family Littorinidae
	<u>Littorina littorea</u> - European periwinkle
	Family Cerithiidae
	<u>Bittium alternatum</u> - alternate bittium
	Family Calytraeidae
	<u>Crepidula fornicata</u> - Atlantic slipper shell
	<u>Crepidula plana</u> - Eastern white slipper shell
	<u>Crepidula convexa</u> - convex slipper shell
	Family Naticidae
	<u>Polinices duplicata</u> - Atlantic moon snail
	<u>Polinices heros</u> - northern moon snail
Order Neogastropoda	
	Family Muricidae
	<u>Urosalpinx cinereus</u> - Atlantic oyster drill
	Family Columbelloidae
	<u>Anachis translirata</u> - well-ribbed dove shell
	<u>Mitrella lunata</u> - lunar dove shell
	Family Melongenidae
	<u>Busycon carica</u> - knobbed whelk
	<u>Busycon canaliculatum</u> - channeled whelk
	Family Nassariidae
	<u>Nassarius trivittatus</u> - New England nassa
	<u>Ilyanassa obsoleta</u> - Eastern mud nassa (mud snail)
Subclass Opisthobranchia	
Order Cephalaspidea	
	Family Retusidae
	<u>Retusa canaliculata</u>
	Family Atyidae
	<u>Haminoea solitaria</u> - Eastern paper bubble
Order Tectibranchiata	
	Family Pyramidellidae (family of uncertain status)
	<u>Turbonilla interrupta</u>
	<u>Turbonilla</u> sp.
Order Nudibranchia	
Suborder Doridacea	
	Family Lamellidorididae
	<u>Acanthodoris pilosa</u>
	<u>Onchidorus fusca</u>
Suborder Dendronotacea	
	Family Dendronotidae
	<u>Dendronotus frondosus</u>

Table 19. (cont.)

	Family Dotonidae
	<u>Doto coronata</u> - crowned sea slug
Suborder Aeolidacea	Family Cuthonidae
	<u>Terigipes despectus</u>
	Family Facelinidae
	<u>Facelina bostoniensis</u>
	Family Cratenidae
	<u>Cratena pilata</u>
	Family Aeolidiidae
	<u>Aeolidia papillosa</u>
Subclass Pulmonata	
Order Bassommatophora	
	Family Ellobiidae
	<u>Melampus bidentatus</u> (family of uncertain status)
Class Bivalvia	
Subclass Prionodesmata	
Order Protobranchia	
	Family Solemyacidae
	<u>Solemya velum</u> - common awning clam
	Family Nuculidae
	<u>Nucula proxima</u> - nut clam
	<u>Nucula atacellana</u> - cancellate nut clam
	Family Nuculanidae
	<u>Yoldia limatula</u> - file yoldia
Subclass Pteriomorphia	
Order Prionodontida	
	Family Arcidae
	<u>Anadara ovalis</u> - blood ark
	Family Mytilidae
	<u>Mytilus edulis</u> - blue mussel
	<u>Modiolus demissus</u> - Atlantic ribbed mussel
	Family Ostreidae
	<u>Crassostrea virginica</u> - Eastern oyster
	Family Pectinidae
	<u>Aequipecten irradians</u> - bay scallop
	<u>Placopecten magellanicus</u> - deep sea scallop
	Family Anomiidae
	<u>Anomia simplex</u> - Atlantic jingle
Subclass Telodesmata	
Order Heterodontida	
	Family Astartidae
	<u>Astarte castanea</u> - smooth astarte
	Family Turtoniidae
	<u>Turtonia minuta</u>
	Family Cardiidae
	<u>Cerastoderma pinnulatum</u> - northern dwarf cockle
	Family Veneridae
	<u>Mercenaria mercenaria</u> - northern quahog, hard clam
	<u>Gemma gemma</u> - amethyst gem clam
	<u>Pitar morrhuana</u> - morrhua venus
	Family Petricolidae
	<u>Petricola pholadiformis</u> - false angel wing

Table 19. (cont.)

	Family Mactridae
	<u>Spisula solidissima</u> - Atlantic surf clam
	<u>Mulinia lateralis</u> - little surf clam
	Family Tellinidae
	<u>Tellina versicolor</u> - DeKays' dwarf tellin
	<u>Tellina agilis</u> - northern dwarf tellin
	<u>Tellina</u> sp.
	Family Donacidae
	<u>Donax fossor</u> - fossor donax
	Family Solecurtidae
	<u>Tagelus plebeius</u> - stout tagelus
	Family Solenidae
	<u>Ensis directus</u> - Atlantic jackknife clam
	<u>Siliqua costata</u> - Atlantic razor clam
	Family Myidae
	<u>Mya arenaria</u> - soft-shell clam
	Family Pholadidae
	<u>Barnea truncata</u> - fallen angel wing
	<u>Zirfaea crispata</u> - great piddock
	Family Teredinidae
	<u>Teredo navalis</u>
	Family Lyonsiidae
	<u>Lyonsia hyalina</u> - glassy lyonsia
Class Cephalopoda	
Subclass Coleoidea	
Order Teuthidida	
	Family Loliginidae
	<u>Loligo pealei</u> - Atlantic long-finned squid
	<u>Lolliguncula brevis</u> - brief squid
PHYLUM ANNELIDA	
Class Polychaeta - bristle worm	
Order Phyllodocida	
	Family Phyllodocidae
	<u>Phyllodoce maculata</u>
	<u>Phyllodoce arenae</u>
	<u>Paranaitis speciosa</u>
	<u>Paranaitis kosteriensis</u>
	<u>Mystides borealis</u>
	<u>Eteone heteropoda</u>
	<u>Eteone</u> sp.
	<u>Eumida sanguinea</u>
	<u>Eulalia viridis</u>
	Family Polynoidae
	<u>Antinoella sarsi</u>
	<u>Lepidonotus squamatus</u>
	<u>Lepidonotus sublevis</u>
	<u>Harmothoe</u> sp.
	Family Sigalionidae
	<u>Sigalion arenicola</u>
	<u>Phloe minuta</u>
	<u>Sthenelais boa</u>
	<u>Sthenelais limicola</u>
	<u>Leandra tetragona</u>
Superfamily Glycerae (includes Glyceridae and Goniadidae)	
Family Glyceridae	
	<u>Glycera capitata</u>
	<u>Glycera americana</u>
	<u>Glycera dibranchiata</u>

Table 19. (cont.)

Order Capitellida

Family Goniadidae

Goniada norvegicaGoniadella gracilisGlycinde solitaria

Family Nephtyidae

Nephtys bucceraNephtys incisaNephtys picta

Family Syllidae

Autolytus cornutusAutolytus sp.Parapionosyllis longicirrataSyllis gracilis

Family Hesionidae

Microphthalmus szcelkowi

Family Nereidae

Nereis arenaceodontaNereis succinea

Family Capitellidae

Capitella sp.Heteromastus filiformis

Family Maldanidae

Clymenella torquataMaldanopsis elongata

Family Opheliidae

Ophelia denticulata

Order Spionida

Family Spionidae

Spio setosaScolecopides viridisStreblospio benedictiScolecopsis squamataPygospio elegansPrionospio sp.Polydora ligniPolydora websteriPolydora ciliataPolydora socialisSpiophanes bombyxDispio uncinata

Family Paraonidae

Paraonis fulgensAricidea jeffreysii

Family Chaetopteridae

Family Sabellariidae

Sabellaria vulgaris

Order Eunicida

Family Onuphidae

Onuphis opalinaDiopatra cuprea

Family Eunicidae

Marphysa sanguinea

Family Lumbrineridae

Lumbrineris acutaLumbrineris fragilisLumbrineris tenuis

Table 19. (cont.)

	Family Arbellidae
	<u>Arbella</u> <u>iricolor</u>
	<u>Notocirrus</u> <u>spiniferus</u>
	<u>Drilonereis</u> <u>longa</u>
	<u>Drilonereis</u> <u>magna</u>
Order Magelonida	
	Family Magelonidae
	<u>Magelona</u> <u>rosea</u>
Order Ariciida	
	Family Orbiniidae
	<u>Orbinia</u> <u>swani</u>
	<u>Scoloplos</u> <u>robustus</u>
	<u>Scoloplos</u> <u>fragilis</u>
	<u>Scoloplos</u> <u>acutus</u>
Order Cirratulida	
	Family Cirratulidae
	<u>Cirratulus</u> <u>grandis</u>
	<u>Tharyx</u> <u>acutus</u>
Order Terebellida	
	Family Pectinariidae
	<u>Pectinaria</u> <u>gouldi</u>
	Family Ampharetidae
	<u>Asabellides</u> <u>oculata</u>
	<u>Hypaniola</u> <u>grayi</u>
	Family Terebellidae
	<u>Amphitrite</u> <u>ornata</u>
	<u>Pista</u> <u>sp.</u>
Order Flabelligerida	
	Family Flabelligeridae
	<u>Pherusa</u> <u>affinis</u>
Order Sabellidae	
	Family Sabellidae
	<u>Sabella</u> <u>microphthalma</u>
	Family Serpulidae
	<u>Hydroides</u> <u>dianthus</u>
	<u>Branchellion</u> <u>ravenelli</u>
	<u>Myzobdella</u> <u>sp.</u>
Class Oligochaeta - aquatic earthworms	
Class Hirudinea - leeches	
PHYLUM SIPUNCULA	
PHYLUM ARTHROPODA	
Subphyllum Pycnogonida	
Class Pantopoda	
Subphyllum Chelicerata	
Class Merostomata	
Order Xiphosurida	
Subphyllum Mandibulata	
Class Crustacea	
Subclass Ostracoda	
Subclass Copepoda	
Order Calanoida	
Order Caligoida	
Order Harpacticoida	
	Family Phoxichilididae
	<u>Anoplodactylus</u> <u>lentus</u> - sea spider
	Family Limulidae
	<u>Limulus</u> <u>polyphemus</u> - horseshoe crab

Table 19. (cont.)

Subclass Cirripedia

Order Thoracica

Suborder Lepadomorpha

Family Lepadidae - gooseneck barnacles

Lepas anatifera

Suborder Balanomorpha - acorn barnacles

Family Balanidae

Balanus balanoides - rock barnacleBalanus eburneusBalanus sp.

Subclass Malacostraca

Superorder Hoplocarida

Order Stomatopoda - mantis shrimp

Family Squillidae

Squilla empusa

Family Lysiosquillidae

Nannosquilla grayi

Superorder Peracarida

Order Cumacea

Family Bodotriidae

Cyclaspis variansLeptocuma minor

Family Leuconidae

Leucon americanus

Family Diastylidae

Diastylus politaOxyurostylis smithi

Order Tanaidacea

Family Paratanaidae

Leptognatha caecaLeptochelia savignyi

Order Isopoda

Suborder Anthuridea

Family Anthuridae

Cyathura polita

Suborder Flabellifera

Family Cirolanidae

Cirolana concharumCirolana polita

Family Cymothoidae

Olincera praegustatorLironeca ovalis

Family Limnoriidae

Limnoria lignorum

Suborder Valvifera

Family Idoteidae

Chirodotea coecaChiridotea tuftsiChiridotea nigrescensIdotea metallicaIdotea balticaEdotea trilobaEtrichsonella filiformis

Family Bopyridae

Probopyrus pandalicola

Table 19. (cont.)

Order Amphipoda (families are listed alphabetically)

Suborder Hyperidea

Suborder Gammaridae

Family Ampeliscidae

Ampelisca abditaAmpelisca verrilli

Family Amphithoidae

Amphithoe longimana

Family Aoridae

Microdeutopus gryllotalpaMicrodeutopus sp.

Family Bateidae

Batea catharinensis

Family Calliopidae

Calliopius laeviusculus

Family Corophiidae

Corophium tuberculatumCerapus tubularisErichthonius rubicornisErichthonius brasiliensisUnciola irrorataUnciola serrataUnciola dissimilisUnciola obliqua

Family Gammaridae

Gammarus oceanicusGammarus mucronatusGammarus lawrencianusGammarus annulatusElasmopus levisMelita nitida

Family Haustoriidae

Amphiporeia virginianaBathyporeia quoddyensisProtohaustorius deichmannaeProtohaustorius wigleyiParahaustorius longimerusParahaustorius holmesiParahaustorius attenuatusAcanthohauastorius intermediusAcanthohauastorius millsiAcanthohauastorius shoemakeriHauastorius canadensisNeohauastorius schmitziNeohauastorius biarticulatus

Family Hyalidae

Hyale plumosa

Family Ischyroceridae

Jassa falcata

Family Lysianassidae

Anonyx sarsiLysianopsis albaOrchomeneis pinguisPsammonyx nobilis

Family Oedicerotidae

Monoculodes edwardsiSynchelidium americanum

Table 19. (cont.)

	Family Photidae
	<u>Microprotopus raneyi</u>
	Family Phoxocephalidae
	<u>Trichophoxus epistomus</u>
	<u>Paraphoxus spinosus</u>
	<u>Proxocephalus holbolli</u>
	Family Pleustidae
	<u>Pleusymtes glaber</u>
	Family Pontogeneiidae
	<u>Pontogeneia inermis</u>
	Family Stenothoidae
	<u>Stenothoe minuta</u>
	<u>Parametopella cypris</u>
	<u>Proboloides holmesi</u>
Order Caprellidea	
	Family Caprellidae
	<u>Aeginina longicornis</u>
	<u>Caprella equilibra</u>
	<u>Caprella penantis</u>
	<u>Caprella unica</u>
Order Mysidacea	
	<u>Mysidopsis bigelowi</u>
	<u>Neomysis americana</u>
	<u>Heteromysis formosa</u>
Superorder Eucarida	
Order Decapoda	
Suborder Natantia	
Infraorder Penaeidea	
	Family Penaeidae
	<u>Penaeus setiferus</u> - white shrimp
	<u>Penaeus aztecus</u> - brown shrimp
Infraorder Caridea	
	Family Palaemonidae - grass shrimp
	<u>Palaemonetes vulgaris</u>
	<u>Palaemonetes pugio</u>
	Family Hippolytidae
	<u>Hippolyte pleuracantha</u>
	<u>Hippolysmata wurdemanni</u>
	Family Pandalidae
	<u>Dichelopandalus leptocerus</u>
	Family Crangonidae
	<u>Crangon septemspinosa</u> - sand shrimp
Suborder Reptania	
Infraorder Astacidea	
	Family Nephropsidae
	<u>Homarus americanus</u> - American lobster
Infraorder Anomura	
	Superfamily Thalassinoidea
	Family Upogebiidae
	<u>Upogebia affinis</u> - mud shrimp
	Superfamily Paguroidea
	Family Paguridae - hermit crab
	<u>Pagurus acadianus</u>
	<u>Pagurus longicarpus</u> - long-armed hermit crab
	<u>Pagurus pollicaris</u> - big hermit crab
	Superfamily Hippoidea
	Family Hippidae
	<u>Emerita talpoida</u> - mole crab

Table 19. (cont.)

Infraorder Brachyura	
	Family Majidae
	<u>Libinia emarginata</u> - spider crab
	<u>Libinia dubia</u> - spider crab
	Family Cancridae
	<u>Cancer irroratus</u> - rock crab
	<u>Cancer borealis</u> - northern rock crab, jonah crab
	Family Portunidae
	<u>Carcinus maenas</u> - green crab
	<u>Ovalipes ocellatus</u> - lady crab
	<u>Portunus gibbesi</u>
	<u>Portunus spinimanus</u>
	<u>Callinectes sapidus</u> - blue crab
	<u>Callinectes similis</u> - lesser blue crab
	<u>Arenaeus cribrarius</u> - speckled crab
	<u>Cronius ruber</u>
	Family Xanthidae
	<u>Panopeus herbstii</u>
	<u>Neopanope texana</u>
	<u>Eurypanopeus depressus</u> - flat mud crab
	<u>Rhithropanopeus harrisi</u>
	Family Pinnotheridae
	<u>Dissodactylus mellitae</u>
	Family Ocypodidae
	<u>Uca minax</u>
	<u>Uca pugnax</u> - fiddler crab
PHYLUM ECHINODERMATA	
Class Holothuroidea	
Order Apoda	
	Family Synaptidae
	<u>Leptosynapta inhaerens</u> - cucumber
Class Echinoidea	
Order Arbacioida	
	Family Arbaciidae
	<u>Arbacia punctulata</u> - purple sea urchin
Order Clypeasteroida	
	Family Echinarachnidae
	<u>Echinarachnius parma</u> - sand dollar
Class Stellerioida	
Subclass Asteroidea	
Order Forcipulatida	
	Family Asteriidae
	<u>Asterias forbesii</u> - starfish
	<u>Asterias vulgaris</u> - northern starfish
PHYLUM HEMICHORDATA	
	Family Harrimaniidae
	<u>Saccoglossus kowalevskii</u> - acorn worm
PHYLUM CHORDATA	
Class Ascidiacea	
Order Enterogona	
Suborder Phlebobranchia	
	Family Perophoridae
	<u>Perophora viridis</u> - green bead
Order Pleurogona	
Suborder Stolidobranchiata	
	Family Molgulidae
	<u>Molgula manhattensis</u> - sea grape

Table 19. (cont.)

MISCELLANEOUS LIFE STAGES

Hydrozoa: embryonated eggs
Scyphozoa: strobila
Polinices sp.: eggs
Busycon canaliculatum: egg case
Busycon sp.: egg case
Nassarius trivittatus: eggs
Loliginidae: eggs
Mytilus edulis: spat
Decapoda: larvae
Palaemonetes sp.: zoea
Caridea: larvae, mysis

Crangon septemspinosus: mysis
Emerita talpoida: zoea
Anomura: zoea
Xanthidae: zoea
Cancer irroratus: zoea, subadult
Callinectes sapidus: zoea, megalopa
Pinnixa sp.: zoea
Brachyura: zoea
Crustacea: zoea
Asterias forbesii: brachiolaria

Table 20. Location and sampling frequency of benthic invertebrate stations sampled with the ponar grab and clam dredge in 1974.

OCEAN

Landward I (zone 5158) - monthly

1.7 nautical miles E of Little Egg Inlet; depth is 13-20 ft; bottom substrate is fine to very fine sand with 2% silt.

Landward II (zone 5152) - monthly

2.0 nautical miles E of Little Egg Inlet; depth is 20-27 ft; bottom substrate is medium to very fine sand with 4% silt.

Landward of Site (zone 5258) - quarterly

2.3 nautical miles SE of Little Egg Inlet; depth is 29-38 ft; bottom substrate is coarse to very fine sand with 3% silt; sampled with ponar grab.

Site (zone 5255) - monthly

2.5 nautical miles SE of Little Egg Inlet; depth is 32-38 ft; bottom substrate is coarse sand to silt with silt percentages from 0.04 to 19.

Site Area (zone 5254) - quarterly

2.6 nautical miles SE of Little Egg Inlet; depth is 35-40 ft; bottom substrate is coarse to very fine sand with 1.5% silt; sampled with ponar grab.

Ridge (zone 5252) - quarterly

2.7 nautical miles SE of Little Egg Inlet; depth is 24-27 ft; bottom substrate is coarse to medium sand with no silt.

South of Site (zone 5161) - monthly

1.8 nautical miles SE of Little Egg Inlet; depth is 15-29 ft; bottom substrate is fine to very fine sand with 3.5% silt.

North of Site (zone 5143) - monthly

2.5 nautical miles NE of Little Egg Inlet; depth is 20-34 ft; bottom substrate is fine to very fine sand with 4.5% silt.

Brigantine I (zone 5180) - quarterly

2.4 nautical miles SE of Brigantine Inlet; depth is 22-27 ft; bottom substrate is fine to very fine sand with 4% silt.

Brigantine II (zone 5282) - quarterly

2.8 nautical miles SE of Brigantine Inlet; depth is 34-42 ft; bottom substrate is medium sand with 0.09% silt.

INLET

Off Little Beach (zone 1020) - monthly

0.75 nautical mile from NW tip of Little Beach Island in Little Egg Inlet; depth is 10-11 ft; bottom substrate is coarse to medium sand with little or no silt.

Table 20. (cont.)

"F" Buoy (zone 1010) - monthly

50 yards NE of BWMO(A) "F" buoy in Little Egg Inlet; depth is 15-25 ft; bottom substrate is sand, shell hash, and rubble.

East of Stake "96" (zone 1010) - monthly

300 yards E of F1 R "96" in Little Egg Inlet; depth is 5-10 ft; bottom substrate is fine sand with small percentages of silt.

South of Stake "96" (zone 1010) - monthly

400 yards S of F1 R "96" in Little Egg Inlet; depth is 15-25 ft; bottom substrate is silt and clay with some fine sand; sampled with clam dredge.

Stake "96" (zone 1010) - monthly

Just N of F1 R "96" in Little Egg Inlet; depth is 7-12 ft; bottom substrate is silt and clay with some fine sand ; sampled with ponar grab.

CREEK

Little Sheepshead Creek (zone 2210) - monthly.

1.8 nautical miles from Marshelder Channel E of Bridge (Great Bay Blvd.) in Little Sheepshead Creek; depth is 12-15 ft; bottom substrate is silt, clay, and fine sand with large amounts of detritus.

Table 21. Cumulative number of species taken in successive drops of the 0.05 m² ponar bottom grab taken 2.0 nautical miles E (zone 5152) of Little Egg Inlet, New Jersey in 1974.

	Chronological Order			Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
F	0.05	3.0	15.78	0.05	2.5	15.78	0.05	1.5	21.05	0.05	1.5	21.05	0.05	18.42	3.04
E	0.10	5.5	36.84	0.10	5.5	31.56	0.10	4.5	36.84	0.10	4.0	31.58	0.10	34.21	3.04
B	0.15	8.0	47.37	0.15	8.5	47.37	0.15	7.0	47.37	0.15	6.5	42.11	0.15	46.06	2.63
R	0.20	10.0	52.63	0.20	10.0	57.89	0.20	9.5	57.89	0.20	9.0	57.89	0.20	56.58	2.63
U	0.25	13.0	63.16	0.25	12.0	63.16	0.25	11.5	63.16	0.25	11.5	68.42	0.25	64.48	2.63
A	0.30	14.5	73.68	0.30	14.5	63.16	0.30	13.5	73.68	0.30	14.0	68.42	0.30	69.74	5.04
R	0.35	17.0	73.68	0.35	17.0	73.68	0.35	16.0	84.21	0.35	16.0	78.95	0.35	77.63	5.04
Y	0.40	19.5	84.21	0.40	19.0	78.95	0.40	18.5	84.21	0.40	18.0	84.21	0.40	82.90	2.63
	0.45	22.0	94.74	0.45	21.5	89.47	0.45	21.0	94.74	0.45	21.0	89.47	0.45	92.11	3.04
	0.50	24.0	100.00	0.50	24.0	100.00	0.50	24.0	100.00	0.50	24.0	100.00	0.50	100.00	0.00
Total Sp. Coll. = 14				Total Sp. Coll. = 14			Total Sp. Coll. = 14			Total Sp. Coll. = 14			Total Sp. Coll. = 14		
	Chronological Order			Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
M	0.05	1.0	57.14	0.05	1.5	50.00	0.05	1.0	39.28	0.05	1.0	64.28	0.05	52.68	10.66
	0.10	2.0	64.28	0.10	2.5	67.85	0.10	2.0	64.28	0.10	2.0	71.42	0.10	66.96	3.42
A	0.15	3.0	75.00	0.15	3.5	75.00	0.15	4.0	78.57	0.15	3.0	78.57	0.15	76.78	2.06
Y	0.20	4.0	78.57	0.20	4.5	78.57	0.20	5.0	78.57	0.20	5.0	78.57	0.20	78.57	0.00
	0.25	5.0	85.71	0.25	5.5	85.71	0.25	6.0	78.57	0.25	6.0	85.71	0.25	83.93	3.57
	0.30	6.0	92.85	0.30	7.5	85.71	0.30	7.0	82.14	0.30	7.0	85.71	0.30	86.60	4.49
	0.35	7.0	92.85	0.35	8.5	96.42	0.35	8.0	89.28	0.35	8.0	89.28	0.35	91.96	3.42
	0.40	9.0	96.42	0.40	9.5	100.00	0.40	9.5	92.85	0.40	9.5	92.85	0.40	95.53	3.42
	0.45	10.5	96.42	0.45	10.5	100.00	0.45	10.5	96.42	0.45	10.5	100.00	0.45	98.21	2.07
	0.50	11.5	100.00	0.50	11.5	100.00	0.50	11.5	100.00	0.50	11.5	100.00	0.50	100.00	0.00
Total Sp. Coll. = 28				Total Sp. Coll. = 28			Total Sp. Coll. = 28			Total Sp. Coll. = 28			Total Sp. Coll. = 28		
	Chronological Order			Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
A	0.05	1.0	53.33	0.05	1.0	23.33	0.05	1.0	23.33	0.05	1.0	53.33	0.05	38.33	17.32
U	0.10	2.5	63.33	0.10	2.0	56.67	0.10	2.0	46.67	0.10	2.0	53.33	0.10	55.00	6.94
G	0.15	3.5	73.33	0.15	3.0	76.67	0.15	3.0	70.00	0.15	3.0	60.00	0.15	70.00	7.20
U	0.20	4.5	73.33	0.20	4.5	76.67	0.20	4.5	73.33	0.20	4.5	63.33	0.20	71.67	5.78
S	0.25	5.5	86.67	0.25	5.5	76.67	0.25	6.0	73.33	0.25	5.5	70.00	0.25	76.67	7.20
T	0.30	7.0	90.00	0.30	6.5	80.00	0.30	7.0	80.00	0.30	6.5	83.33	0.30	83.33	4.71
	0.35	8.0	90.00	0.35	7.5	90.00	0.35	8.0	90.00	0.35	7.5	90.00	0.35	90.00	0.00
	0.40	9.0	93.33	0.40	8.5	93.33	0.40	9.0	93.33	0.40	8.5	93.33	0.40	93.33	0.00
	0.45	10.0	96.67	0.45	9.5	96.67	0.45	10.0	96.67	0.45	9.5	96.67	0.45	96.67	0.00
	0.50	11.0	100.00	0.50	11.0	100.00	0.50	11.0	100.00	0.50	11.0	100.00	0.50	100.00	0.00
Total Sp. Coll. = 30				Total Sp. Coll. = 30			Total Sp. Coll. = 30			Total Sp. Coll. = 30			Total Sp. Coll. = 30		
	Chronological Order			Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
N	0.05	1.0	29.72	0.05	1.0	40.54	0.05	1.0	43.24	0.05	1.0	40.54	0.05	37.83	7.15
O	0.10	2.0	51.35	0.10	2.0	45.94	0.10	2.0	64.86	0.10	2.0	51.35	0.10	53.38	8.07
V	0.15	3.0	62.16	0.15	3.0	54.05	0.15	3.0	75.67	0.15	3.0	56.75	0.15	62.16	9.62
E	0.20	4.0	67.56	0.20	4.0	67.56	0.20	4.0	78.37	0.20	4.0	75.67	0.20	72.29	5.57
M	0.25	5.0	70.27	0.25	5.0	78.37	0.25	5.0	81.08	0.25	5.0	81.08	0.25	77.70	5.12
B	0.30	6.0	81.08	0.30	6.0	83.78	0.30	6.0	86.48	0.30	6.0	83.78	0.30	83.78	2.20
E	0.35	7.0	91.89	0.35	7.0	83.78	0.35	7.0	89.18	0.35	7.0	91.89	0.35	89.19	3.82
R	0.40	8.0	97.29	0.40	8.0	86.48	0.40	8.0	91.89	0.40	8.0	91.89	0.40	91.89	4.41
	0.45	9.0	100.00	0.45	9.0	94.59	0.45	9.0	97.29	0.45	9.0	94.59	0.45	96.62	2.59
	0.50	10.0	100.00	0.50	10.0	100.00	0.50	10.0	100.00	0.50	10.0	100.00	0.50	100.00	0.00
Total Sp. Coll. = 37				Total Sp. Coll. = 37			Total Sp. Coll. = 37			Total Sp. Coll. = 37			Total Sp. Coll. = 37		

Table 22. Cumulative number of species taken in successive drops of the 0.05 m² ponar bottom grab taken approximately 300 yards E of F1 "96" (zone 1010) in Little Egg Inlet, New Jersey in 1974.

Chronological Order				Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
F	0.05	1.0	9.09	0.05	1.0	63.64	0.05	1.0	9.09	0.05	1.0	27.27	0.05	27.27	25.72
E	0.10	2.0	36.36	0.10	2.5	63.64	0.10	2.0	63.64	0.10	2.0	81.82	0.10	61.37	18.74
B	0.15	3.5	72.73	0.15	3.5	63.64	0.15	3.0	72.73	0.15	3.0	81.82	0.15	72.73	7.42
R	0.20	4.5	100.00	0.20	4.5	100.00	0.20	4.0	81.82	0.20	4.0	81.82	0.20	90.91	10.50
U	0.25	5.5	100.00	0.25	5.5	100.00	0.25	5.0	81.82	0.25	5.0	81.82	0.25	94.32	8.33
A	0.30	6.5	100.00	0.30	6.5	100.00	0.30	6.0	100.00	0.30	6.0	90.91	0.30	97.73	4.55
R	0.35	7.5	100.00	0.35	7.5	100.00	0.35	7.5	100.00	0.35	7.0	90.91	0.35	97.73	4.55
Y	0.40	8.5	100.00	0.40	8.5	100.00	0.40	8.5	100.00	0.40	8.0	90.91	0.40	97.73	4.55
	0.45	9.5	100.00	0.45	9.5	100.00	0.45	9.5	100.00	0.45	9.5	100.00	0.45	100.00	0.00
	0.50	10.5	100.00	0.50	10.5	100.00	0.50	10.5	100.00	0.50	10.5	100.00	0.50	100.00	0.00
Total Sp. Coll. = 11				Total Sp. Coll. = 11			Total Sp. Coll. = 11			Total Sp. Coll. = 11			Total Sp. Coll. = 11		
Chronological Order				Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
M	0.05	2.0	41.67	0.05	3.0	20.83	0.05	1.5	37.50	0.05	3.0	20.83	0.05	30.21	10.96
	0.10	4.0	82.50	0.10	5.0	54.17	0.10	2.5	37.50	0.10	4.0	29.17	0.10	45.84	15.21
A	0.15	6.5	79.17	0.15	7.0	62.50	0.15	5.0	50.00	0.15	6.0	54.17	0.15	61.46	12.90
Y	0.20	9.0	91.67	0.20	8.5	75.00	0.20	7.0	70.83	0.20	8.5	62.50	0.20	75.00	12.27
	0.25	10.5	95.83	0.25	10.5	75.00	0.25	10.0	70.83	0.25	10.5	62.50	0.25	76.04	14.18
	0.30	12.5	95.83	0.30	11.5	75.00	0.30	12.0	75.00	0.30	12.0	66.67	0.30	78.13	12.44
	0.35	14.5	100.00	0.35	14.0	79.17	0.35	14.0	91.67	0.35	14.0	70.83	0.35	85.12	12.96
	0.40	17.5	100.00	0.40	15.5	83.33	0.40	16.0	91.67	0.40	16.0	87.50	0.40	90.63	7.12
	0.45	18.5	100.00	0.45	17.5	95.83	0.45	18.5	95.83	0.45	17.5	95.83	0.45	96.87	2.09
	0.50	20.0	100.00	0.50	20.0	100.00	0.50	20.0	100.00	0.50	20.0	100.00	0.50	100.00	0.00
Total Sp. Coll. = 24				Total Sp. Coll. = 24			Total Sp. Coll. = 24			Total Sp. Coll. = 24			Total Sp. Coll. = 24		
Chronological Order				Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
A	0.05	2.5	29.41	0.05	3.0	35.29	0.05	4.5	41.18	0.05	2.0	17.65	0.05	30.88	10.05
U	0.10	5.5	41.18	0.10	5.5	47.06	0.10	8.5	76.47	0.10	5.0	41.18	0.10	51.47	16.89
G	0.15	7.5	41.18	0.15	7.5	52.94	0.15	11.5	88.24	0.15	7.0	41.18	0.15	55.89	22.27
U	0.20	10.5	58.82	0.20	11.5	76.47	0.20	13.5	88.24	0.20	11.5	52.94	0.20	69.12	16.20
S	0.25	15.0	70.59	0.25	14.5	88.24	0.25	15.5	88.24	0.25	16.0	70.59	0.25	79.42	10.19
T	0.30	18.0	70.59	0.30	17.5	88.24	0.30	18.0	88.24	0.30	19.0	82.35	0.30	82.36	8.32
	0.35	22.5	70.59	0.35	22.0	94.12	0.35	22.5	88.24	0.35	21.5	82.35	0.35	83.09	8.58
	0.40	26.5	88.24	0.40	26.5	100.00	0.40	25.5	94.12	0.40	24.5	82.35	0.40	91.18	7.59
	0.45	29.5	100.00	0.45	29.5	100.00	0.45	28.5	94.12	0.45	27.5	88.24	0.45	95.59	5.63
	0.50	31.5	100.00	0.50	31.5	100.00	0.50	31.5	100.00	0.50	31.5	100.00	0.50	100.00	0.00
Total Sp. Coll. = 17				Total Sp. Coll. = 17			Total Sp. Coll. = 17			Total Sp. Coll. = 17			Total Sp. Coll. = 17		
Chronological Order				Random Order A			Random Order B			Random Order C			Total		
	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Vol. (qt)	Cum.	Area (m ²)	Cum. %	Cum. %
	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sampled	% Sp.	Sampled	Sp. X	Sp. S
N	0.05	2.5	44.44	0.05	2.5	44.44	0.05	2.0	38.89	0.05	2.5	33.33	0.05	40.28	5.32
O	0.10	4.0	61.11	0.10	4.0	61.11	0.10	4.5	61.11	0.10	5.0	56.56	0.10	59.97	2.28
V	0.15	6.0	72.22	0.15	6.0	61.11	0.15	6.0	61.11	0.15	6.5	72.22	0.15	63.32	5.71
E	0.20	8.5	83.33	0.20	8.0	77.78	0.20	8.0	72.22	0.20	8.5	77.78	0.20	77.78	4.54
M	0.25	10.5	83.33	0.25	9.5	77.78	0.25	10.0	72.22	0.25	10.5	94.44	0.25	81.94	9.49
B	0.30	12.5	100.00	0.30	11.5	77.78	0.30	11.5	77.78	0.30	12.5	100.00	0.30	88.89	12.83
E	0.35	14.5	100.00	0.35	13.0	77.78	0.35	14.0	83.33	0.35	14.0	100.00	0.35	90.28	11.45
R	0.40	16.5	100.00	0.40	15.0	94.44	0.40	16.0	100.00	0.40	16.0	100.00	0.40	98.61	2.78
	0.45	17.5	100.00	0.45	17.5	100.00	0.45	17.5	100.00	0.45	17.5	100.00	0.45	100.00	0.00
Total Sp. Coll. = 18				Total Sp. Coll. = 18			Total Sp. Coll. = 18			Total Sp. Coll. = 18			Total Sp. Coll. = 18		

Table 23. Confidence limits ($\bar{X} \pm \text{C.I.}$) for the expected cumulative % species of benthic invertebrates as determined from 10 successive drops of the ponar grab taken in the Ocean (zone 5152) and Inlet (zone 1010) in 1974.

Zone Number	Date Sampled	Area Sampled (m ²)	Observed Cum. % Sp.	Expected Cum. % Sp.	S _{max}	C. I.	$\bar{X} \pm \text{C.I.}$
5152	13 February 1974	0.35	73.68	77.63	5.04	± 6.85	84.48 to 70.78
5152	23 May 1974	0.35	92.85	91.96	10.66	± 14.48	100.00 to 77.48
5152	29 August 1974	0.35	90.00	90.00	17.32	± 23.53	100.00 to 66.47
5152	15 November 1974	0.35	91.89	89.19	9.62	± 13.07	100.00 to 78.82
5152	YEARLY MEANS	0.35	87.11	87.20	10.66	± 14.48	100.00 to 72.72
1010	19 February 1974	0.25	100.00	94.32	25.72	± 34.94	100.00 to 59.38
1010	21 May 1974	0.25	95.83	76.04	15.21	± 20.66	96.70 to 55.38
1010	15 August 1974	0.25	70.59	79.42	22.27	± 30.25	100.00 to 49.17
1010	13 November 1974	0.25	83.33	81.94	12.83	± 17.43	99.37 to 64.60
1010	YEARLY MEANS	0.25	87.44	82.93	19.01	± 25.83	100.00 to 57.10

Table 24. Number of macroinvertebrates taken with a ponar grab in zone 5258 approximately 2.3 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	5258	5258	5258	5258	5258							
Depth (feet),	29	34	38	33	29-38							
Coll. No.	EVG-74-013	EVG-74-055	EVG-74-071	EVG-74-106								
Date	25 January	26 April	15 July	11 October								
Hour	1155	1140	1105	1110	Total							
Tide	Ebb 1	Ebb 1	Flood 1	Flood 1								
Air Temp. (C)	7.0	12.5	28.0	18.0	7.0-28.0							
Temp. (C), surface	5.0	9.5	24.5	16.5	5.0-24.5							
bottom	5.0	9.5	22.0	16.0	5.0-22.0							
Sal. (ppt), surface	29.0	30.5	29.5	30.5	29.0-30.5							
bottom	30.0	30.5	30.0	30.5	30.0-30.5							
Oxygen (ppm), surface	10.8	9.6	7.1	7.1	7.1-10.8							
bottom	10.4	9.4	5.5	7.3	5.5-10.4							
Secchi (feet)	8.5	4.0	13.0	6.0	4.0-13.0							
Sediment ^a	MS + FS	CS	FS + VFS	MS	VFS-CS							
Embryonated hydrozoa eggs ^e	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f ^d	Rank
Margelopsis gibbesi ^e	present	-	sparse	-	-	-	-	-	present	-	-	-
Hydractinia echinata ^e	-	-	-	-	-	-	-	-	present	-	1	-
Athenaria "C"	-	-	-	-	present	-	present	-	present	-	2	-
Cerebratulus lacteus	-	-	-	-	49	132.3	-	-	49	33.1	1	-
Nemertea	4	10.8	-	-	-	-	2	5.4	2	1.4	1	-
Nematoda ^e	abundant	-	sparse	-	71	191.7	fragments	-	75	50.6	3	-
Sagitta sp.	-	-	4	10.8	rare	-	sparse	-	present	-	4	-
Chaetognatha	1	2.7	-	-	-	-	-	-	4	2.7	1	-
Turbomilla sp.	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Polinices heros	-	-	-	-	3	8.1	-	-	1	0.7	1	-
Polinices sp. egg case	-	-	-	-	present	-	-	-	3	2.0	1	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	present	-	1	-
Nassarius trivittatus egg case	-	-	-	-	-	-	1	2.7	1	0.7	1	-
Nudibranchia	-	-	2	5.4	present	-	-	-	present	-	1	-
Nucula proxima	-	-	3	8.1	-	-	-	-	2	1.4	1	-
Yoldia limatula	-	-	2	5.4	20	54.0	-	-	23	15.5	2	-
Spisula solidissima	8	21.6	41	110.7	9	24.3	-	-	11	7.4	1	-
Mulinia lateralis	-	-	-	-	-	-	28	75.6	77	52.0	10	-
Tellina agilis	20	54.0	226	610.3	1	2.7	-	-	1	0.7	1	-
Ensis directus	16	43.2	6	16.2	2176	5876.3	142	383.5	2564	1731.0	4	2
Siliqua costata	41	110.7	3	8.1	-	-	-	-	22	14.9	2	-
Bivalvia	-	-	1	2.7	-	-	-	-	44	29.7	2	-
Phyllodoce sp.	-	-	2	5.4	-	-	-	-	1	0.7	1	-
Paranaitis speciosa	1	2.7	-	-	-	-	-	-	2	1.4	1	-
									1	0.7	1	-

Table 24. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Sigalion arenicola</i>	2	5.4	-	-	-	-	7	18.9	9	6.1	2	-
<i>Sthenelais limicola</i>	-	-	3	8.1	-	-	-	-	3	2.0	1	-
<i>Glycera capitata</i>	1	2.7	-	-	-	-	-	-	1	0.7	1	-
<i>Glycera americana</i>	1	2.7	2	5.4	2	5.4	-	-	5	3.4	3	-
<i>Glycera dibranchiata</i>	-	-	2	5.4	-	-	-	-	2	1.4	1	-
<i>Goniadella gracilis</i>	-	-	-	-	2	5.4	-	-	2	1.4	1	-
<i>Nephtys bucera</i>	9	24.3	20	54.0	-	-	11	29.7	40	27.0	3	-
<i>Nephtys picta</i>	-	-	1	2.7	-	-	1	2.7	2	1.4	2	-
<i>Nereis succinea</i>	-	-	-	-	1	2.7	-	-	1	0.7	1	-
Capitellidae	19	51.3	4434	11974.1	1566	4229.0	1	2.7	6020	4064.3	4	1
<i>Spio setosa</i>	-	-	-	-	2	5.4	-	-	2	1.4	1	-
<i>Scolecoplepides viridis</i>	-	-	6	16.2	-	-	21	56.7	27	18.2	2	-
<i>Streblospio benedicti</i>	7	18.9	-	-	2	5.4	-	-	9	6.1	2	-
<i>Polydora ligni</i>	-	-	-	-	3	8.1	-	-	3	2.0	1	-
<i>Dispio uncinata</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Spionidae	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Aricidea jeffreysii</i>	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Lumbrineris fragilis</i>	2	5.4	3	8.1	-	-	-	-	5	3.4	2	-
<i>Lumbrineris</i> sp.	-	-	-	-	2	5.4	-	-	2	1.4	1	-
<i>Notocirrus spiniferus</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Driloneris longa</i>	-	-	-	-	6	16.2	-	-	6	4.1	1	-
<i>Driloneris magna</i>	-	-	-	-	2	5.4	-	-	2	1.4	1	-
Arabellidae	-	-	-	-	fragments	-	-	-	present	-	1	-
<i>Scoloplos robustus</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Magelona rosea</i>	2	5.4	-	-	-	-	34	91.8	36	24.3	2	-
<i>Tharyx acutus</i>	9	24.3	-	-	90	243.0	6	16.2	105	70.9	3	7
Cirratulidae	-	-	5	13.5	-	-	-	-	5	3.4	1	-
<i>Asabellides oculata</i>	3	8.1	247	667.0	1917	5176.9	-	-	2167	1463.0	3	3
<i>Pherusa affinis</i>	-	-	2	5.4	42	113.4	-	-	44	29.7	2	-
Polychaeta	fragments	-	fragments	-	fragments	-	fragments	-	present	-	4	-
Hirudinea	-	-	2	5.4	-	-	-	-	2	1.4	1	-
Calanoida	-	-	14	37.8	2	5.4	-	-	16	10.8	2	-
<i>Leptocuma minor</i>	1	2.7	-	-	-	-	1	2.7	2	1.4	2	-
<i>Leucon americanus</i>	8	21.6	4	10.8	-	-	-	-	12	8.1	2	-
<i>Oxyurostylis smithi</i>	6	16.2	-	-	-	-	1	2.7	7	4.7	2	-
<i>Leptognatha caeca</i>	1	2.7	-	-	-	-	-	-	1	0.7	1	-
<i>Chiridotea tuftsi</i>	1	2.7	-	-	-	-	7	18.9	8	5.4	2	-
<i>Edotea triloba</i>	109	294.4	18	48.6	-	-	-	-	127	85.7	2	6
Hyperideae	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Corophium tuberculatum</i>	-	-	-	-	3	8.1	-	-	3	2.0	1	-
<i>Cerapus tubularis</i>	-	-	-	-	-	-	1	2.7	1	0.7	1	-

Table 24. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Unicola irrorata</i>	-	-	-	-	104	280.9	-	-	104	70.2	1	8
<i>Gammarus</i> sp.	-	-	-	-	2	5.4	-	-	2	1.4	1	-
<i>Protohaustorius deichmannae</i>	4	10.8	-	-	2	5.4	6	16.2	12	8.1	3	-
<i>Protohaustorius wigleyi</i>	1	2.7	-	-	-	-	28	75.6	29	19.6	2	-
<i>Parahaustorius attenuatus</i>	2	5.4	-	-	-	-	-	-	2	1.4	1	-
<i>Acanthohastorius millsi</i>	1	2.7	-	-	-	-	26	70.2	27	18.2	2	-
<i>Monoculodes edwardsi</i>	2	5.4	-	-	-	-	2	5.4	4	2.7	2	-
<i>Trichophoxus epistomus</i>	-	-	-	-	-	-	21	56.7	21	14.2	1	-
<i>Mysidopsis bigelowi</i>	-	-	12	32.4	-	-	71	191.7	83	56.0	2	9
<i>Neomysis americana</i>	10	27.0	36	97	136	367.3	13	35.1	195	131.7	4	4
<i>Heteromysis formosa</i>	-	-	-	-	1	2.7	-	-	1	0.7	1	-
<i>Crangon septemspinosa</i>	1	2.7	-	-	4	10.8	-	-	5	3.4	2	-
<i>Crangon septemspinosa mysis</i>	-	-	-	-	10	27.0	-	-	10	6.8	1	-
<i>Pagurus longicarpus</i>	-	-	-	-	1	2.7	1	2.7	2	1.4	2	-
<i>Cancer irroratus</i> sub-adult	-	-	-	-	144	388.9	-	-	144	97.2	1	5
<i>Cancer irroratus megalopa</i>	-	-	-	-	1	2.7	-	-	1	0.7	1	-
<i>Pinnixa</i> sp. zoea	-	-	-	-	-	-	1	2.7	1	0.7	1	-
No. Bivalvia	85	229.5	282	761.5	2206	5957.3	170	459.1	2743	1851.9	-	-
No. Polychaeta	56	151.2	4730	12773.4	3637	9821.8	83	224.1	8506	5742.6	-	-
No. Amphipoda	10	27.0	0	0.0	111	299.8	84	226.8	205	138.4	-	-
No. Echinodermata	-	0.0	0	0.0	0	0.0	0	0.0	0	0.0	-	-
No. Taxa	30	-	31	-	31	-	27	-	74	-	-	-
No. Specimens	293	791.3	5105	13786.1	6376	17218.5	436	1177.4	12212	8244.7	-	-
Diversity Index	2.23	-	0.63	-	1.57	-	2.22	-	1.66	-	-	-

a See Table 164 for grain size classification.

b Number of specimens collected from 7 drops of the ponar grab

c Average number of specimens per m².

d Number of collections in which species appeared.

e Not included in totals.

Table 25. Number of macroinvertebrates taken with a ponar grab approximately 2.6 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	5254	5254	5254	5254	5254							
Depth (feet)	35	40	38	38	35-40							
Coll. No.	EVG-74-023	JJH-74-057	JJH-74-093	JJH-73-154								
Date	13 February	23 May	29 August	15 November	Total							
Hour	1245	1030	1135	1200								
Tide	Flood 2	Ebb 1	Ebb 2	Ebb 2								
Air Temp. (C)	8.0	20.0	28.0	8.0	8.0-28.0							
Temp. (C), surface	3.0	15.0	24.0	10.5	3.0-24.0							
bottom	3.0	11.0	21.0	10.5	3.0-21.0							
Sal. (ppt), surface	29.0	30.0	30.0	30.0	29.0-30.0							
bottom	31.0	31.0	30.5	30.5	30.5-31.0							
Oxygen (ppm), surface	12.0	7.4	8.2	8.7	7.4-12.0							
bottom	11.3	7.6	7.6	8.7	7.6-11.3							
Secchi (feet)	6.5	7.0	11.0	4.5	4.5-11.0							
Sediment ^a	CS	MS	FS + VFS	FS	VFS-CS							
	n ^p	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f ^d	Rank
Hydractinia echinata ^e	-	-	present	-	-	-	-	-	present	-	1	-
Nemertea	-	-	6	16.2	5	13.5	1	2.7	12	8.1	3	-
Nematoda ^e	abundant	-	abundant	-	-	-	sparse	-	present	-	3	-
Chaetognatha	-	-	2	5.4	-	-	-	-	2	1.4	1	-
Crepidula plana	-	-	20	54.0	2	5.4	-	-	22	14.9	2	-
Polinices heros	1	2.7	-	-	2	5.4	-	-	3	2.0	2	-
Nassarius trivittatus	-	-	-	-	1	2.7	2	5.4	3	2.0	2	-
Acanthodoris pilosa	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Facelina bostoniensis	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Nucula proxima	-	-	5	13.5	1	2.7	-	-	6	4.1	2	-
Petricola pholadiformis	-	-	66	178.2	-	-	-	-	66	44.6	1	8
Spisula solidissima	9	24.3	12	32.4	10	27.0	48	129.6	79	53.3	4	6
Tellina agilis	-	-	193	521.2	106	286.3	44	118.8	343	231.6	3	2
Tellina sp.	-	-	-	-	-	-	1	2.7	1	0.7	1	-
Ensis directus	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Siliqua costata	1	2.7	-	-	-	-	-	-	1	0.1	1	-
Bivalvia	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Phyllodoce arenae	-	-	-	-	5	13.5	1	2.7	6	4.1	2	-
Eumida sanguinea	-	-	15	40.5	-	-	-	-	15	10.1	1	-
Antinoella sarsi	-	-	71	191.7	-	-	-	-	71	47.9	1	7
Sthenelais boa	-	-	-	-	-	-	3	8.1	3	2.0	1	-
Sthenelais limicola	-	-	2	5.4	1	2.7	-	-	3	2.0	2	-
Glycera capitata	15	40.5	1	2.7	-	-	-	-	16	10.8	2	-
Glycera americana	-	-	-	-	fragments	-	-	-	present	-	1	-
Glycera dibranchiata	-	-	-	-	-	-	1	2.7	1	0.7	1	-
Goniadella gracilis	20	54.0	-	-	-	-	1	2.7	21	14.2	2	-
Nephtys bucera	5	13.5	-	-	22	59.4	5	13.5	32	21.6	3	-
Nephtys picta	-	-	-	-	3	8.1	32	86.4	35	23.6	2	-
Autolytus sp.	-	-	5	13.5	-	-	-	-	5	3.4	1	-
Parapionosyllis longicirrata	2	5.4	-	-	-	-	-	-	2	1.4	1	-

Table 25. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Nereis succinea</i>	-	-	14	37.8	-	-	-	-	14	9.5	1	-
Capitellidae	-	-	1	2.7	-	-	-	-	2	1.4	2	-
<i>Spio setosa</i>	-	-	7	18.9	-	-	1	2.7	7	4.7	1	-
<i>Scolecopides viridis</i>	-	-	426	1150.4	5	13.5	11	29.7	442	298.4	3	1
<i>Streblospio benedicti</i>	-	-	5	13.5	-	-	1	2.7	6	4.1	2	-
<i>Polydora ligni</i>	-	-	9	24.3	-	-	-	-	9	6.1	1	-
Spionidae	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Aricidea jeffreysii</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Aricidea</i> sp.	-	-	-	-	1	2.7	-	-	1	0.7	1	-
<i>Diopatra cuprea</i>	-	-	5	13.5	-	-	-	-	5	3.4	1	-
<i>Lumbrineris fragilis</i>	-	-	2	5.4	-	-	-	-	2	1.4	1	-
<i>Magelona rosea</i>	-	-	-	-	161	434.8	55	148.5	216	145.8	2	3
<i>Scoloplos robustus</i>	-	-	-	-	-	-	5	13.5	5	3.4	1	-
<i>Tharyx acutus</i>	-	-	2	5.4	3	8.1	9	24.3	14	9.5	3	-
<i>Asabellides oculata</i>	-	-	178	480.7	-	-	-	-	178	120.2	1	5
Ampharetidae	-	-	-	-	-	-	4	10.8	4	2.7	1	-
<i>Pista</i> sp.	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Pherusa affinis</i>	-	-	2	5.4	-	-	-	-	2	1.4	1	-
Polychaeta A	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Polychaeta B	2	5.4	-	-	-	-	-	-	2	1.4	1	-
Polychaeta	-	-	-	-	1	2.7	1	2.7	2	1.4	2	-
Polychaeta	-	-	fragments	-	fragments	-	fragments	-	present	-	3	-
Copepoda	-	-	-	-	-	-	2	5.4	2	1.4	1	-
<i>Oxyurostylis smithi</i>	-	-	11	29.7	5	13.5	10	27.0	26	17.6	3	-
<i>Leptognathia caeca</i>	1	2.7	-	-	1	2.7	-	-	2	1.4	2	-
<i>Edotea triloba</i>	-	-	9	24.3	-	-	6	16.2	15	10.1	2	-
<i>Corophium tuberculatum</i>	-	-	37	99.9	-	-	-	-	37	25.0	1	10
<i>Unciola irrorata</i>	-	-	6	16.2	1	2.7	1	2.7	8	5.4	3	-
<i>Protohaustorius deichmannae</i>	-	-	-	-	172	464.5	31	83.7	203	137.1	2	4
<i>Parahaustorius holmesi</i>	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Acanthohaustorius millsi</i>	-	-	-	-	27	72.9	1	2.7	28	18.9	2	-
<i>Monoculodes edwardsi</i>	28	75.6	-	-	-	-	1	2.7	29	19.6	2	-
<i>Mysidopsis bigelowi</i>	-	-	-	-	10	27.0	11	29.7	21	14.2	2	-
<i>Neomysis americana</i>	2	5.4	36	97.2	4	10.8	3	8.1	45	30.4	4	9
<i>Crangon septemspinosa</i>	-	-	4	10.8	-	-	-	-	4	2.7	1	-
<i>Pagurus longicarpus</i>	-	-	27	72.9	7	18.9	-	-	34	23.0	2	-
<i>Pagurus</i> sp.	-	-	fragments	-	-	-	-	-	present	-	1	-
<i>Pagurus pollicaris</i>	-	-	15	40.5	-	-	-	-	15	10.1	1	-
<i>Pagurus</i> sp. zoea	-	-	-	-	1	2.7	-	-	1	0.7	1	-
<i>Cancer irrorata</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Ovalipes ocellatus</i>	-	-	-	-	1	2.7	1	2.7	2	1.4	2	-
<i>Neopanope texana</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Xanthidae zoea	-	-	-	-	1	2.7	-	-	1	0.7	1	-
Decapoda	fragments	-	-	-	-	-	-	-	1	0.7	1	-
<i>Asterias forbesii</i>	-	-	10	27.0	1	2.7	-	-	present	-	1	-
Unidentified fragments	-	-	present	-	-	-	-	-	11	7.4	2	-
									present	-	1	-

Table 25. (cont.)

No. Bivalvia	10	27.0	278	750.7	117	316.0	93	251.1	498	336.2	-	-
No. Polychaeta	45	121.5	748	2020.0	202	545.5	130	351.1	1125	759.5	-	-
No. Amphipoda	28	75.6	43	116.1	200	540.1	35	94.5	306	206.6	-	-
No. Echinodermata	0	0.0	10	27.0	1	2.7	0	0.0	11	7.4	-	-
No. Taxa	12	-	41	-	28	-	30	-	69	-	-	-
No. Specimens	87	234.9	1213	3275.7	560	1512.3	294	794.0	2154	1454.2	-	-
Diversity Index	1.69	-	2.24	-	1.86	-	2.38	-	2.04	-	-	-

a See Table 164 for grain size classification

b Number of specimens collected for a season from 7 drops of the ponar grab.

c Average number of specimens per m².

d Number of collections in which species appeared.

e Not included in totals.

Table 26. Number of macroinvertebrates taken with a ponar grab in zone 5252 approximately 2.7 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	5252	5252	5252	5252	5252							
Depth (feet)	25	25	29	28	25-29							
Coll. No.	EVG-74-014	EVG-74-054	EVG-74-073	EVG-74-105								
Date	25 January	26 April	15 July	11 October	Total							
Hour	1320	1230	1207	1210								
Tide	Ebb 2	Ebb 1	Flood 1	Flood 1								
Air Temp. (C)	7.0	11.5	28.0	17.5	7.0-28.0							
Temp. (C), surface	5.0	10.0	23.5	16.0	5.0-23.5							
bottom	5.0	9.0	23.5	16.0	5.0-23.5							
Sal. (ppt), surface	30.0	30.0	29.5	30.5	29.5-30.5							
bottom	30.0	31.0	29.5	30.5	29.5-31.0							
Oxygen (ppm), surface	10.6	9.6	8.0	7.2	7.2-10.6							
bottom	10.4	9.2	7.8	7.2	7.2-10.4							
Secchi (feet)	13.5	5.0	29.0	7.0	5.0-29.0							
Sediment ^a	MS	CS	CS	CS + MS	MS-CS							
	n ^b	n/m ² c	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	fd	Rank
Embryonated hydrozoa eggs ^e	-	-	present	-	present	-	-	-	present	-	2	-
Bdelloura sp.	8	21.6	-	-	-	-	-	-	8	5.4	1	10.5
Nemertea	2	5.4	3	8.1	fragments	-	-	-	5	3.4	3	-
Nematoda ^e	sparse	-	common	-	-	-	rare	-	present	-	3	-
Sagitta sp.	-	-	1	2.7	-	-	1	2.7	2	1.4	2	-
Electra hastingsae ^e	present	-	present	-	-	-	-	-	present	-	2	-
Polinices heros	1	2.7	4	10.8	-	-	1	2.7	6	4.1	3	-
Nassarius trivittatus	-	-	-	-	-	-	1	2.7	1	0.7	1	-
Mytilus edulis spat ^e	rare	-	-	-	-	-	-	-	present	-	1	-
Asarte castanea	-	-	-	-	2	5.4	-	-	2	1.4	1	-
Spisula solidissima	17	45.9	-	-	6	16.2	3	8.1	26	17.6	3	5
Tellina agilis	2	5.4	2	5.4	2	5.4	1	2.7	7	4.7	4	-
Bivalvia	fragments	-	-	-	-	-	-	-	present	-	1	-
Sigalion arenicola	-	-	1	2.7	9	24.3	1	2.7	11	7.4	3	9
Nephtys bucera	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Glycera capitata	16	43.2	10	27.0	68	183.6	1	2.7	95	64.1	4	1
Glycera americana	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Goniadella gracilis	-	-	-	-	14	37.8	-	-	14	9.5	1	8
Nephtys bucera	-	-	11	29.7	8	21.6	4	10.8	23	15.5	3	7
Syllidae	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Ophelia denticulata	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Capitellidae	-	-	8	21.6	-	-	-	-	1	0.7	1	-
Scolecopelides viridis	-	-	-	-	-	-	-	-	8	5.4	1	10.5
Scolecopsis squamata	-	-	-	-	-	-	2	5.4	2	1.4	2	-
Spionidae	1	2.7	-	-	2	5.4	1	2.7	3	2.0	3	-
									1	0.7	1	-

Table 26. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Lumbrineris fragilis</i>	1	2.7	-	-	-	-	-	-	1	0.7	1	-
<i>Polychaeta</i>	-	-	fragments	-	fragments	-	fragments	-	present	-	3	-
<i>Calanoida</i>	-	-	1	2.7	2	5.4	-	-	3	2.0	2	-
<i>Leptocuma minor</i>	-	-	-	-	2	5.4	-	-	2	1.4	1	-
<i>Oxyurostylis smithi</i>	-	-	-	-	-	-	2	5.4	2	1.4	1	-
<i>Leptognatha caeca</i>	-	-	-	-	2	5.4	-	-	2	1.4	1	-
<i>Leptochelia savignyi</i>	-	-	3	8.1	-	-	-	-	3	2.0	1	-
<i>Cirolana concharum</i>	-	-	1	2.7	23	62.1	1	2.7	25	16.9	3	6
<i>Edotea triloba</i>	2	5.4	-	-	-	-	-	-	2	1.4	1	-
<i>Gammarus</i> sp.	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Amphiporeia virginana</i>	-	-	1	2.7	5	13.5	-	-	6	4.1	2	-
<i>Protohaustorius deichmannae</i>	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Protohaustorius wigleyi</i>	-	-	-	-	2	5.4	2	5.4	4	2.7	2	-
<i>Parahaustorius holmesi</i>	-	-	-	-	1	2.7	1	-	2	1.4	2	-
<i>Acanthohaustorius shoemakeri</i>	-	-	1	2.7	1	2.7	-	-	2	1.4	2	-
<i>Monoculodes edwardsi</i>	33	89.1	-	-	-	-	-	-	33	22.3	1	4
<i>Trichophoxus epistomus</i>	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Mysidopsis bigelowi</i>	1	2.7	-	-	-	-	-	-	1	0.7	1	-
<i>Neomysis americana</i>	1	2.7	3	8.1	41	110.7	1	2.7	46	31.1	4	2
<i>Crangon septemspinosa</i>	1	2.7	-	-	1	2.7	-	-	2	1.4	2	-
<i>Echinarachnius parma</i>	1	2.7	-	-	-	-	-	-	1	0.7	1	-
<i>Perophora viridis</i>	-	-	34	91.8	-	-	-	-	34	23.0	1	3
No. Bivalvia	19	51.3	2	5.4	10	27.0	4	10.8	35	23.6	-	-
No. Polychaeta	22	59.4	22	59.4	101	272.8	9	24.3	154	104.0	-	-
No. Amphipoda	33	89.1	3	8.1	9	24.3	5	13.5	50	33.8	-	-
No. Echinodermata	1	2.7	0	0.0	0	0.0	0	0.0	1	0.7	-	-
No. Taxa	18	-	16	-	18	-	17	-	41	-	-	-
No. Specimens	91	245.7	85	229.5	191	515.8	25	67.5	392	264.7	-	-
Diversity Index	1.77	-	1.82	-	1.90	-	2.04	-	1.88	-	-	-

a See Table 164 for grain size classification.

b Number of specimens collected from 7 drops of the Ponar grab

c Average number of specimens per m².

d Number of collections in which species appeared.

e Not included in totals.

Table 27. Number of macroinvertebrates taken with a ponar grab approximately 2.4 nautical miles SE of Brigantine Inlet, New Jersey in 1974.

Zone	5180	5180	5180	5180						
Depth (feet)	24	23	26	23-26						
Coll. No.	EVG-74-044	JJH-74-082	EVG-74-098							
Date	25 March	14 June	23 September	Total						
Hour	0930	1340	1210							
Tide	Ebb 1	Flood 2	Flood 2							
Air Temp. (C)	1.0	25.0	18.5	1.0-25.0						
Temp. (C), surface	5.0	21.0	20.0	5.0-21.0						
bottom	5.0	20.0	20.0	5.0-20.0						
Sal. (ppt), surface	29.0	29.5	30.5	29.0-30.5						
bottom	29.0	29.5	30.5	29.0-30.5						
Oxygen (ppm), surface	9.9	7.2	7.0	7.0-9.9						
bottom	9.7	7.7	6.8	6.8-9.7						
Secchi (feet)	5.0	10.0	3.5	3.5-10.0						
Sediment ^a	FS	FS + VFS	FS	VFS-FS						
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	f ^d	Rank
Margelopsis gibbesi ^e	rare	-	-	-	-	-	present	-	1	-
Cerebratulus lacteus	-	-	-	-	-	-	-	-	1	-
Nemertea	2	5.4	7	18.9	2	5.4	2	1.8	1	-
Nematoda ^e	-	-	-	-	3	8.1	12	10.8	3	10.5
Sagitta sp.	7	18.9	-	-	1	2.7	1	0.9	1	-
Turbonilla interrupta	1	2.7	-	-	-	-	7	6.3	1	-
Spisula solidissima	51	137.7	254	685.9	9	24.3	10	9.0	2	-
Mulinia lateralis	-	-	-	-	17	45.9	322	289.9	3	1
Tellina agilis	5	13.5	76	205.2	2	5.4	2	1.8	1	-
Siliqua costata	4	10.8	1	2.7	15	40.5	96	86.4	3	3
Phyllodoce arenae	-	-	-	-	-	-	5	4.5	2	-
Sthenelais boa	1	2.7	-	-	2	5.4	2	1.8	1	-
Nephtys buccera	5	13.5	8	21.6	-	-	1	0.9	1	-
Nephtys picta	-	-	2	5.4	7	18.9	20	18.0	3	9
Caprellidae	-	-	-	-	6	16.2	8	7.2	2	-
Scolecocolepides viridis	2	5.4	20	54.0	21	56.7	21	18.9	1	8
Scolecopsis squamata	-	-	1	2.7	12	32.4	34	30.6	3	5
Onuphis opalina	-	-	-	-	-	-	1	0.9	1	-
Magelona rosea	-	-	-	-	1	2.7	1	0.9	1	-
Scoloplos sp.	-	-	4	10.8	8	21.6	12	10.8	2	10.5
Asabellides oculata	7	18.9	3	8.1	3	8.1	6	5.4	2	-
Pherusa affinis	-	-	84	226.8	-	-	91	81.9	2	4
Polychaeta	-	-	1	2.7	-	-	1	0.9	1	-
			fragments	-	fragments	-	present	-	2	-

Table 27. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
Hirudinea	1	2.7	-	-	-	-	1	0.9	1	-
Calanoida	25	67.5	-	-	-	-	25	22.5	1	6
Oxyurostylis smithi	2	5.4	2	5.4	-	-	4	3.6	2	-
Leptognatha caeca	-	-	1	2.7	-	-	1	0.9	1	-
Edotea triloba	2	5.4	4	10.8	1	2.7	7	6.3	3	-
Corophium tuberculatum	-	-	1	2.7	-	-	1	0.9	1	-
Protohaustorius deichmannae	11	29.7	83	224.1	11	29.7	105	94.5	3	2
Monoculodes edwardsi	-	-	2	5.4	2	5.4	4	3.6	2	-
Microprotopus raneyi	-	-	2	5.4	-	-	2	1.8	1	-
Mysidopsis bigelowi	1	2.7	1	2.7	3	8.1	5	4.5	3	-
Neomysis americana	5	13.5	8	21.6	11	29.7	24	21.6	3	7
Crangon septemspinosa (sub-adult)	-	-	-	-	1	2.7	1	0.9	1	-
Emerita talpoida zoea	-	-	-	-	1	2.7	1	0.9	1	-
Pagurus longicarpus	1	2.7	-	-	-	-	1	0.9	1	-
Pagurus longicarpus (sub-adult)	-	-	-	-	1	2.7	1	0.9	1	-
Cancer irroratus	-	-	7	18.9	fragments	-	7	6.3	2	-
Cancer irroratus megalopa	-	-	1	2.7	-	-	1	0.9	1	-
Brachyura zoea	-	-	2	5.4	-	-	2	1.8	1	-
Asterias forbesi	-	-	1	2.7	-	-	1	0.9	1	-
Unidentified fragments ^e	present	-	-	-	-	-	present	-	1	-
No. Bivalvia	60	162.0	331	893.9	34	91.8	425	382.6	-	-
No. Polychaeta	15	40.5	123	332.2	60	162.0	198	178.2	-	-
No. Amphipoda	11	29.7	88	237.6	13	35.1	112	100.8	-	-
No. Echinodermata	0	0.0	1	2.7	0	0.0	1	0.9	-	-
No. Taxa	18	-	25	-	23	-	40	-	-	-
No. Specimens	133	359.2	576	1555.5	140	378.1	849	764.2	-	-
Diversity Index	1.92	-	1.75	-	2.48	-	2.05	-	-	-

a See Table 164 for grain size classification.

b Number of specimens collected from 7 drops of the ponar grab.

c Average number of specimens per m².

d Number of collections in which species appeared.

e Not included in totals.

Table 28. Number of macroinvertebrates taken with a ponar grab approximately 2.8 nautical miles SE of Brigantine Inlet, New Jersey in 1974.

Zone	5282	5282	5282	5282	5282							
Depth (feet)	36	32	33	37	32-37							
Coll. No.	EVG-74-043	JJH-74-081	EVG-74-097	EVG-74-116								
Date	25 March	14 June	25 September	11 December								
Hour	1000	1300	1145	1415	Total							
Tide	Ebb 1	Flood 2	Flood 2	Flood 2								
Air Temp. (C)	0.0	25.0	19.5	8.0	0.0-25.0							
Temp. (C), surface	5.0	21.0	-	6.5	5.0-21.0							
bottom	4.5	20.0	20.0	7.0	4.5-20.0							
Salinity (ppt), surface	30.0	29.5	30.5	31.0	29.5-31.0							
bottom	29.5	29.5	30.0	31.0	29.5-31.0							
Oxygen (ppm), surface	10.8	8.2	-	9.2	8.2-10.8							
bottom	10.9	9.0	7.5	9.4	7.5-10.9							
Secchi (feet)	8.0	11.0	4.5	5.0	4.5-11.0							
Sediment ^a	MS/MS	MS	MS	MS	MS							
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f ^d	Rank
Hydractinia echinata	-	-	present	-	-	-	-	-	present	-	1	-
Bdelloura sp.	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Platyhelminthes	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Nemertea	3	8.1	2	5.4	-	-	1	2.7	6	4.1	3	-
Nematoda	abundant	-	abundant	-	-	-	sparse	-	present	-	3	-
Sagitta sp.	21	56.7	-	-	-	-	2	5.4	2.3	15.5	2	7.5
Nassarius trivittatus	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Spisula solidissima	11	29.7	3	8.1	3	8.1	3	8.1	20	13.5	4	9
Tellina agilis	21	56.7	29	78.3	24	64.8	12	32.4	86	58.1	4	2
Paranaitis kosteriensis	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Sigalion arenicola	-	-	3	8.1	2	5.4	-	-	5	3.4	2	-
Sigalionidae	2	5.4	-	-	-	-	-	-	2	1.4	1	-
Glycera americana	-	-	-	-	-	-	1	2.7	1	0.7	1	-
Goniadella gracilis	1	2.7	50	135.0	-	-	-	-	51	34.4	2	3
Nephtys bucera	13	35.1	13	35.1	1	2.7	6	16.2	33	22.3	4	6
Nephtys picta	-	-	-	-	-	-	2	5.4	2	1.4	1	-
Nephtys sp.	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Ophelia denticulata	4	10.8	-	-	1	2.7	-	-	5	3.4	2	-
Ophelia sp.	-	-	1	2.7	-	-	-	-	1	0.7	1	-
Scolecopelides viridis	-	-	1	2.7	12	32.4	1	2.7	14	9.5	3	-
Scolecopsis squamata	-	-	36	97.2	2	5.4	2	5.4	40	27.0	3	5
Paraonidae	-	-	-	-	fragments	-	-	-	fragments	-	1	-
Onuphis opalina	-	-	-	-	2	5.4	-	-	2	1.4	1	-
Magelona rosea	1	2.7	-	-	9	24.3	-	-	10	6.8	2	-
Tharyx acutus	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Cirratulidae	-	-	-	-	-	-	1	2.7	1	0.7	1	-
Asabellides oculata	-	-	6	16.2	-	-	-	-	6	4.1	1	-
Ampharetidae	1	2.7	-	-	-	-	-	-	1	0.7	1	-
Pherusa affinis	-	-	2	5.4	-	-	-	-	2	1.4	2	-
Polychaeta	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	4	-
Calanoida	13	35.1	-	-	-	-	-	-	13	8.8	13	-

Table 28. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Leptocuma minor</i>	1	2.7	5	13.5	-	-	2	5.4	8	5.4	3	-
<i>Oxyurostylis smithi</i>	-	-	4	10.8	-	-	6	16.2	10	6.8	2	-
<i>Leptognatha coeca</i>	1	2.7	-	-	-	-	1	2.7	2	1.4	2	-
<i>Cirolana concharum</i>	2	5.4	10	27.0	1	2.7	-	-	13	8.8	3	-
<i>Chiridotea tuftsi</i>	-	-	-	-	2	5.4	-	-	2	1.4	1	-
<i>Edotea triloba</i>	1	2.7	10	27.0	-	-	1	2.7	12	8.1	3	-
<i>Corphium tuberculatum</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Protohaustorius deichmannae</i>	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Protohaustorius wigleyi</i>	10	27.0	1	2.7	52	140.4	29	78.3	92	62.1	4	1
<i>Parahaustorius longimerus</i>	-	-	-	-	1	2.7	-	-	1	0.7	1	-
<i>Parahaustorius holmesi</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Parahaustorius attenuatus</i>	-	-	-	-	8	21.6	-	-	8	5.4	8	-
<i>Acanthohaustorius millsi</i>	-	-	-	-	8	21.6	15	40.5	23	15.5	2	7.5
<i>Jassa falcata</i>	-	-	-	-	-	-	1	2.7	1	0.7	1	-
<i>Monoculodes edwardsi</i>	2	5.4	1	2.7	1	2.7	-	-	4	2.7	3	-
<i>Microprotopus raneyi</i>	-	-	1	2.7	-	-	-	-	1	0.7	1	-
<i>Trichophoxus epistomus</i>	2	5.4	-	-	3	8.1	-	-	5	3.4	2	-
<i>Mysidopsis bigelowi</i>	-	-	-	-	5	13.5	-	-	5	3.4	1	-
<i>Neomysis americana</i>	2	5.4	11	29.7	33	89.1	1	2.7	47	31.7	4	4
<i>Mysidacea</i>	-	-	-	-	1	2.7	-	-	1	0.7	1	-
<i>Crangon septemspinosa</i>	-	-	2	5.4	-	-	-	-	2	1.4	1	-
<i>Pagurus longicarpus</i>	-	-	3	8.1	-	-	-	-	3	2.0	1	-
<i>Emertia talpoida zoea</i>	-	-	-	-	1	2.7	-	-	1	0.7	1	-
<i>Cancer irroratus</i>	-	-	15	40.5	fragment	-	-	-	15	10.1	2	10
<i>Cancer irroratus megalopa</i>	-	-	2	5.4	-	-	-	-	2	1.4	1	-
No. Bivalvia	32	86.4	32	86.4	27	72.9	15	40.5	106	71.6		
No. Polychaeta	23	62.1	114	307.9	29	78.3	13	35.1	179	120.8		
No. Amphipoda	14	37.8	5	13.5	73	197.1	46	124.2	138	93.2		
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
No. Taxa	23	-	26	-	21	-	19	-	52	-		
No. Specimens	116	313.3	215	580.6	172	464.5	88	237.6	591	399.0		

a See Table 164 for grain size classification.

b Number of specimens collected for a season from 7 drops of the ponar grab.

c Average number of specimens per m²

d Number of collections in which species appeared.

Table 29. Number of macroinvertebrates taken with a ponar grab approximately 0.75 nautical miles from NW tip of Little Beach Island in Little Egg Inlet, New Jersey in 1974.

Zone	1020	1020	1020	1020	1020							
Depth (feet)	10	10	10	10	1020							
Coll. No.	JJH-74-023	JJH-74-049	9	10	9-10							
Date	19 February	21 May	15 August	EVG-74-108								
Hour	0950	0950	0920	13 November	Total							
Tide	Ebb 1	Ebb 1	Ebb 2	1025								
Air Temp. (C)	5.0	27.0	21.5	Ebb 1								
Temp. (C), surface	2.0	17.0	23.0	14.0	5.0-27.0							
bottom	2.0	16.0	23.0	10.5	2.0-23.0							
Sal. (ppt), surface	25.0	30.0	28.0	10.5	2.0-23.0							
bottom	26.0	30.0	28.0	28.0	25.0-30.0							
Oxygen (ppm), surface	11.4	7.6	27.0	28.0	26.0-30.0							
bottom	11.4	7.8	10.1	9.0	7.6-11.4							
Secchi (feet)	3.0	2.0	10.2	9.0	7.8-11.4							
			2.5	3.5	2.0-3.5							
Obelia flabellata	n ^a	n/m ^{2b}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f ^c	Rank
Hydrozoa	-	-	-	-	-	-	present	-	present	-	1	-
Embryonated Hydrozoa eggs	present	-	-	-	present	-	-	-	present	-	1	-
Thuiaria argentea	-	-	present	-	-	-	-	-	present	-	1	-
Nemertea	-	-	-	-	-	-	-	-	present	-	1	-
Nematoda	-	-	-	-	fragments	-	2	7.6	2	1.9	2	-
Amathia vidovici	-	-	-	-	-	-	rare	-	present	-	1	-
Electra hastingiae	present	-	-	-	present	-	-	-	present	-	1	-
Crepidula convexa	-	-	1	3.8	-	-	-	-	present	-	1	-
Nassarius trivittatus egg case	-	-	present	-	-	-	-	-	1	0.9	1	-
Mytilus edulis	-	-	130	491.0	-	-	-	-	present	-	1	-
Spisula solidissima	2	7.6	7	26.5	10	37.8	5	18.9	130	122.9	1	1
Tellina agilis	-	-	10	37.8	27	102.1	9	34.0	24	22.7	4	6
Bivalvia	-	-	4	15.1	-	-	-	-	46	43.5	3	4
Antinoella sarsi	-	-	1	3.8	-	-	-	-	4	3.8	1	-
Syllidae	-	-	-	-	-	-	-	-	1	0.9	1	-
Ophelia denticulata	-	-	-	-	1	3.8	-	-	1	0.9	1	-
Scolecopsis squamata	-	-	1	3.8	1	3.8	11	41.6	11	10.4	1	8
Paraonis fulgens	-	-	-	-	3	11.3	1	3.8	3	2.8	3	-
Magelona rosea	-	-	-	-	-	-	-	-	3	2.8	1	-
Scoloplos fragilis	-	-	-	-	-	-	2	7.6	2	1.9	1	-
Scoloplos sp.	-	-	1	3.8	1	3.8	-	-	1	0.9	1	-
Polychaeta	-	-	-	-	3	11.3	4	-	8	7.6	3	9
					fragments	-	fragments	-	present	-	2	-

Table 29. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Leptocuma minor</i>	-	-	-	-	2	7.6	-	-	2	1.9	1	-
<i>Oxyurostylis smithi</i>	-	-	1	3.8	4	15.1	1	3.8	6	5.7	3	10
<i>Chiridotea coeca</i>	-	-	1	3.8	-	-	-	-	1	0.9	1	-
<i>Idotea baltica</i>	-	-	1	3.8	3	11.3	-	-	4	3.8	2	-
<i>Edotea triloba</i>	-	-	4	15.1	1	3.8	-	-	5	4.7	2	-
<i>Ampelisca abdita</i>	-	-	-	-	2	7.6	-	-	2	1.9	1	-
<i>Corophium tuberculatum</i>	-	-	-	-	1	3.8	-	-	1	0.9	1	-
<i>Cerapus tubularis</i>	-	-	-	-	4	15.1	-	-	4	3.8	1	-
<i>Gammarus mucronatus</i>	-	-	1	3.8	-	-	-	-	1	0.9	1	-
<i>Gammarus lawrencianus</i>	-	-	19	71.8	1	3.8	-	-	20	18.9	2	7
<i>Elasmpus levis</i>	-	-	1	3.8	-	-	-	-	1	0.9	1	-
<i>Melita nitida</i>	-	-	-	-	1	3.8	-	-	1	0.9	1	-
<i>Bathyporeia quaddyensis</i>	-	-	2	7.6	2	7.6	1	3.8	5	4.7	3	-
<i>Protohaustorius deichmannae</i>	-	-	-	-	4	15.1	1	3.8	5	4.6	2	-
<i>Parahaustorius longimerus</i>	-	-	12	45.4	98	370.5	10	37.8	120	113.4	3	2
<i>Parahaustorius halmesi</i>	3	11.3	-	-	1	3.8	-	-	4	3.8	2	-
<i>Acanthohaustorius intermedius</i>	2	7.6	7	26.5	15	56.7	16	60.5	40	37.8	4	5
<i>Acanthohaustorius milsi</i>	-	-	5	18.9	60	226.8	20	75.6	85	80.3	3	3
<i>Lysianopsis alba</i>	-	-	-	-	-	-	1	3.8	1	0.9	1	-
<i>Monoculodes edwardsi</i>	-	-	-	-	4	15.1	-	-	4	3.8	1	-
<i>Aeginina longicornis</i>	-	-	1	3.8	-	-	-	-	1	0.9	1	-
<i>Caprella penantis</i>	-	-	-	-	1	3.8	-	-	1	0.9	1	-
<i>Caprella</i> sp.	-	-	-	-	1	3.8	-	-	1	0.9	1	-
<i>Neomysis americana</i>	2	7.6	2	7.6	-	-	-	-	4	3.8	2	-
<i>Crangon septemspinosa</i>	-	-	1	3.8	-	-	-	-	1	0.9	1	-
<i>Pagurus longicarpus</i>	-	-	3	11.3	-	-	-	-	3	2.8	1	-
No. Bivalvia	2	7.6	151	570.9	37	139.9	14	52.9	204	192.8	-	-
No. Polychaeta	0	0.0	3	11.3	9	34.0	18	68.1	30	28.4	-	-
No. Amphipoda	5	18.9	48	181.5	193	729.7	49	185.3	295	278.8	-	-
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	-	-
No. Taxa	4	-	23	-	26	-	14	-	40	-	-	-
No. Specimens	9	34.0	216	816.6	251	949.0	84	317.6	560	529.3	-	-
Diversity Index	0.99	-	1.56	-	1.87	-	1.95	-	1.59	-	-	-

a Number of specimens collected for a season from 5 drops of the ponar grab.

b Average number of specimens per m².

c Number of collections in which species appeared.

Table 30. Number of macroinvertebrates taken with a ponar grab approximately 50 yards NE of "F" buoy in Little Egg Inlet, New Jersey in 1974.

Zone	1010	1010	1010	1010	1010							
Depth (feet)	18	15	15	15	15-18							
Coll. No.	JJH-74-022	JJH-74-048	EVG-74-082	EVG-74-107								
Date	19 February	21 May	15 August	13 November	Total							
Hour	0915	0905	0850	1000								
Tide	Ebb 1	Ebb 1	Ebb 2	Ebb 1								
Air Temp (C)	5.0	23.0	21.5	13.0	5.0-23.0							
Temp. (C), surface	3.0	12.4	21.5	11.0	3.0-21.5							
bottom	2.5	14.0	21.5	11.0	2.5-21.5							
Sal. (ppt), surface	28.0	30.0	30.0	29.5	28.0-30.0							
bottom	28.0	30.0	30.0	29.5	28.0-30.0							
Oxygen (ppm), surface	11.0	8.1	9.5	8.9	8.1-11.0							
bottom	11.0	7.8	10.7	8.6	7.8-11.0							
Secchi (feet)	3.0	3.8	3.5	2.5	2.5-3.8							
Margelopsis gibbesi ^d	n ^a	n/m ² ^b	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f ^c	Rank
Lovenella sp. ^e	-	-	present	-	rare	-	-	-	present	-	1	-
Nemertea	-	-	1	3.8	-	-	-	-	present	-	1	-
Polinices heros	-	-	2	7.6	4	15.1	-	-	5	4.7	2	9
Mytilus edulis	300	1134.2	2846	10759.9	-	-	-	-	2	1.9	1	-
Spisula solidissima	fragment	-	14	52.9	1	3.8	-	-	3147	2974.5	3	1
Tellina agilis	-	-	4	15.1	4	15.1	1	3.8	19	18.0	3	5
Donax fossor	-	-	4	15.1	1	3.8	-	-	5	4.7	2	9
Nephtys bucera	1	3.8	-	-	-	-	-	-	4	3.8	1	-
Ophelia denticulata	1	3.8	-	-	-	-	-	-	1	0.9	1	-
Scolecopsis squamata	-	-	1	3.8	-	-	-	-	1	0.9	1	-
Magelona rosea	-	-	-	-	-	-	-	-	1	0.9	1	-
Scoloplos sp.	-	-	1	3.8	-	-	2	7.6	2	1.9	1	-
Polychaeta	-	-	fragments	-	-	-	-	-	1	0.9	1	-
Leptognatha caeca	-	-	2	7.6	fragments	-	-	-	present	-	2	-
Leptocuma minor	-	-	4	15.1	-	-	-	-	2	1.9	1	-
Oxyurostylis smithi	-	-	1	3.8	-	-	-	-	4	3.8	1	-
Chiridotea nigrescens	-	-	8	30.2	1	3.8	1	3.8	3	2.8	3	-
Edotea triloba	1	3.8	-	-	-	-	-	-	8	7.6	1	7
Bathyporeia quoddyensis	-	-	3	11.3	1	3.8	-	-	2	1.9	2	-
Protohaustorius deichmannae	-	-	1	3.8	47	177.7	-	-	50	47.3	2	4
Parahaustorius longimerus	38	143.7	21	79.4	-	-	-	-	1	0.9	1	-
Acanthohaustorius intermedius	1	3.8	-	-	78	294.9	23	87.0	160	151.2	4	2
Acanthohaustorius millsi	18	68.1	24	90.7	2	7.6	-	-	3	2.8	2	-
Synchelidium americanum	-	-	-	-	33	124.8	1	3.8	76	71.8	4	3
Mysidopsis bigelowi	1	3.8	-	-	2	7.6	-	-	2	1.9	1	-
Neomysis americana	6	22.7	1	3.8	-	-	-	-	1	0.9	1	-
Crangon septemspinosus	-	-	-	-	3	11.3	-	-	10	9.5	3	6
Natantia	-	-	-	-	2	7.6	-	-	2	1.9	1	-
Pagurus longicarpus	-	-	-	-	1	3.8	-	-	1	0.9	1	-
No. Bivalvia	300	1134.2	2868	10843.1	5	18.9	-	-	5	4.7	1	9
No. Polychaeta	2	7.6	2	7.6	6	22.7	1	3.8	3175	3000.9	-	-
No. Amphipoda	57	215.5	49	185.3	0	0.0	2	7.6	6	5.7	-	-
No. Echinodermata	0	0.0	0	0.0	162	612.5	24	90.7	292	276.0	-	-
No. Taxa	9	-	17	-	0	0.0	0	0.0	0	0.0	-	-
No. Specimens	367	1387.5	2938	11107.8	0	-	5	-	27	-	-	-
Diversity Index	0.66	-	0.20	-	14	-	28	105.9	3518	3325.1	-	-
					1.53	-	0.56	-	0.74	-	-	-

a Number of specimens collected for a season from 5 drops of the ponar grab.

b Average number of specimens per m².

c Number of collections in which species appeared.

d Not included in totals.

Table 31. Number of macroinvertebrates taken by season with a ponar grab approximately 1.7 nautical miles E of Little Egg Inlet, New Jersey in 1974.*

	WINTER		SPRING		SUMMER		FALL		TOTAL			
Zone	5158		5158		5158		5158		5158			
Depth (feet)	14-20		11-18		10-20		13-14		10-20			
Air Temp. (C)	-1.0-6.0		12.0-21.0		18.0-28.0		5.0-17.0		-1.0-28.0			
Temp. (C), surface	2.5-5.0		9.2-21.0		20.0-24.0		5.0-16.0		2.5-24.0			
Temp. (C), bottom	3.0-5.0		9.2-21.0		19.0-24.5		5.0-16.0		3.0-21.0			
Salinity (ppt), surface	28.0-29.5		28.0-30.0		29.0-30.0		30.0-30.5		28.0-30.5			
Salinity (ppt), bottom	30.0-30.5		28.0-30.5		29.0-30.5		30.0-30.5		28.0-30.5			
Oxygen (ppm), surface	9.5-11.7		6.4-9.2		4.8-7.2		7.8-9.0		4.8-11.7			
Oxygen (ppm), bottom	10.2-11.1		6.7-9.0		4.8-7.2		7.6-9.2		4.8-11.1			
Secchi (feet)	5.0-9.5		2.5-10.0		3.0-7.0		2.5-5.0		2.5-10.0			
Sediment ^a	VFS-FS		VFS-FS		VFS-FS		VFS-FS		VFS-FS			
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f ^d	Rank
Margelopsis gibbesi	present	-	present	-	-	-	-	-	-	-	3	-
Nemertea	6	5.4	7	63	35	31.5	1	0.9	49	11.0	11	-
Nematoda	-	-	present	-	-	-	-	-	present	-	1	-
Sagitta sp.	17	15.3	57	51.3	-	-	3	2.7	77	17.3	3	-
Crepidula plana	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Polinices duplicata	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Polinices heros	-	-	2	1.8	1	0.9	-	-	3	0.7	3	-
Mitrella lunata	-	-	5	4.5	-	-	-	-	5	1.1	1	-
Nassarius trivittatus	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Nassarius trivittatus eggs	-	-	present	-	present	-	-	-	present	-	2	-
Turbonilla interrupta	-	-	3	2.7	-	-	7	6.3	10	2.3	2	-
Turbonilla sp.	3	2.7	-	-	-	-	1	0.9	4	0.9	2	-
Mytilus edulis spat	present	-	present	-	-	-	-	-	present	-	2	-
Spisula solidissima	223	200.7	643	578.8	39	35.1	13	11.7	918	206.6	12	4
Mulinia lateralis	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Tellina agilis	82	73.8	709	638.2	147	132.3	7	6.3	945	212.7	11	3
Donax fossor	106	95.4	-	-	1	0.9	17	15.3	124	27.9	4	9
Ensis directus	1	0.9	9	8.1	-	-	-	-	10	2.3	3	-
Siliqua costata	21	18.9	12	10.8	fragments	-	-	-	33	7.4	6	-
Phylodoce arenae	-	-	-	-	2	1.8	1	0.9	3	0.7	2	-
Mystides borealis	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Antinoella sarsi	-	-	5	4.5	-	-	-	-	5	1.1	1	-
Sthenelais limicola	2	1.8	-	-	-	-	-	-	2	0.5	1	-
Sthenelais boa	-	-	6	5.4	-	-	-	-	6	1.4	2	-
Glycera capitata	2	1.8	1	0.9	-	-	-	-	3	0.7	2	-
Goniadella gracilis	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Glycinide solitaria	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Nephtys buccera	8	7.2	9	8.1	23	20.7	1	0.9	41	9.2	10	-
Nephtys picta	2	1.8	-	-	3	2.7	-	-	5	1.1	3	-
Autolytus sp.	-	-	11	9.9	-	-	-	-	11	2.5	1	-
Capitellidae	4	3.6	15	13.5	74	66.6	4	3.6	97	21.8	8	-
Scolecoides viridis	1	0.9	46	41.4	35	31.5	30	27.0	112	25.2	9	10
Streblospio benedicti	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Scolecopsis squamata	1	0.9	1	0.9	1	0.9	17	15.3	20	4.5	5	-
Prionospio sp.	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Polydora ligni	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Polydora sp.	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Dispio uncinata	-	-	11	9.9	2	1.8	-	-	13	2.9	3	-
Spionidae	7	6.3	-	-	-	-	1	0.9	8	1.8	3	-
Onuphis opalina	-	-	-	-	-	-	5	4.5	5	1.1	2	-
Diopatra cuprea	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Onuphidae	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Magelona rosea	10	9.0	16	14.4	35	31.5	148	133.2	209	47.0	10	8
Orbinia sp.	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Scoloplos fragilis	-	-	-	-	2	1.8	-	-	2	0.5	1	-
Scoloplos sp.	7	6.3	23	20.7	6	5.4	-	-	36	8.1	11	-
Tharyx acutus	-	-	-	-	12	10.8	-	-	12	2.7	2	-

Table 31. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
Asabellides oculata	-	-	4	3.6	2	1.8	1	0.9	7	1.6	3	-
Ampharetidae	28	25.2	230	207.0	-	-	-	-	258	58.1	3	6
Polychaeta	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	10	-
Calanoida	32	28.8	38	34.2	6	5.4	-	-	76	17.1	5	-
Leptocuma minor	2	1.8	6	5.4	-	-	-	-	8	1.8	3	-
Oxyurostylis smithi	5	4.5	6	5.4	5	4.5	3	2.7	19	4.3	6	-
Chiridotea tuftsi	-	-	14	12.6	3	2.7	4	3.6	21	4.7	7	-
Edotea triloba	4	3.6	98	88.2	1	0.9	1	0.9	104	23.4	7	-
Calliopius laeviusculus	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Corophium tuberculatum	-	-	6	5.4	-	-	-	-	6	1.4	3	-
Cerapus tubularis	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Gammarus lawrencianus	-	-	1578	1420.5	-	-	-	-	1578	355.1	1	2
Gammarus annulatus	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Amphiporeia virginiana	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Bathyporeia quoddyensis	22	19.8	2	1.8	-	-	1	0.9	25	5.6	5	-
Protohaustorius deichmannae	772	694.9	989	890.3	446	401.5	148	133.2	2355	530.0	12	1
Parahaustorius longimerus	33	29.7	1	0.9	-	-	12	10.8	46	10.4	3	-
Parahaustorius holmesi	-	-	1	0.9	1	0.9	-	-	2	0.5	2	-
Parahaustorius attenuatus	10	9.0	8	7.2	-	-	-	-	18	4.1	2	-
Acanthohaustorius millsi	87	78.3	241	216.9	148	133.2	30	27.0	506	113.9	11	5
Jassa falcata	-	-	-	-	1	0.9	1	0.9	2	0.5	2	-
Psammonyx nobilis	10	9.0	1	0.9	-	-	-	-	11	2.5	4	-
Monoculodes edwardsi	1	0.9	6	5.4	10	9.0	-	-	17	3.8	5	-
Trichophoxus epistomus	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Microprotopus raneyi	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Gammaridae, immature	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Caprella penantis	-	-	3	2.7	-	-	-	-	3	0.7	1	-
Caprellidae	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Mysidopsis bigelowi	-	-	20	18.0	19	17.1	-	-	39	8.8	3	-
Neomysis americana	4	3.6	86	77.4	139	125.1	1	0.9	230	51.8	6	7
Mysidacea	-	-	-	-	fragments	-	-	-	present	-	1	-
Crangon septemspinosa	2	1.8	1	0.9	2	1.8	-	-	5	1.1	3	-
Crangon septemspinosa mysis stage	-	-	8	7.2	2	1.8	-	-	10	2.3	4	-
Pagurus longicarpus	-	-	-	-	7	6.3	-	-	7	1.6	2	-
Pagurus sp. zoea	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Anomura	-	-	-	-	2	1.8	-	-	2	0.5	1	-
Cancer irroratus	-	-	3	2.7	5	4.5	-	-	8	1.8	2	-
Cancer irroratus megalopa	-	-	10	9.0	-	-	-	-	10	2.3	1	-
Callinectes sapidus megalopa	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Xanthidae zoea	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Fragment	-	-	present	-	-	-	-	-	present	-	1	-
Scomber scombrus eggs	-	-	present	-	-	-	-	-	present	-	1	-
No. Bivalvia	433	389.8	1373	1235.9	188	169.2	37	33.3	2031	457.1		
No. Polychaeta	72	64.8	381	343.0	203	182.7	209	188.1	865	194.7		
No. Amphipoda	935	841.7	2838	2554.7	608	547.3	192	172.8	4573	1029.1		
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
No. Taxa	32	-	52	-	47	-	28	-	81	-		
No. Specimens	1515	1363.8	4959	4463.9	1231	1108.1	461	415.0	8166	1837.7		
Diversity Index ^e	1.50		1.57		1.86		1.65		1.64			

* Seasonal totals are given for winter (January - March), spring (April - June), summer (July - September), and fall (October - December).

a See Table 164 for grain size analysis.

b Number of specimens collected from 21 drops of the ponar grab. Yearly total represents 84 drops.

c Average number of specimens per m².

d Number of collections in which species appeared.

e Diversity Index is the average of the monthly diversity values.

Table 32. Number of macroinvertebrates taken with a ponar grab by season approximately 2.0 nautical miles E of Little Egg Inlet, New Jersey in 1974.

	WINTER		SPRING		SUMMER		FALL		TOTAL			
Zone	5152		5152		5152		5152		5152			
Depth (feet)	21-30		21-24		19-27		20-22		19-27			
Air Temp. (C)	1.0-7.0		11.5-25.0		19.0-27.0		5.0-17.5		1.0-27.0			
Temp. (C), surface	3.0-4.7		9.3-21.0		21.0-24.5		5.5-16.0		3.0-24.5			
Temp. (C), bottom	3.0-4.7		9.0-19.7		20.0-23.5		5.0-16.0		3.0-23.5			
Salinity (ppt), surface	28.0-29.0		28.5-30.5		29.5-30.0		30.0-30.5		28.0-30.5			
Salinity (ppt), bottom	30.0-30.0		29.5-30.5		29.0-30.5		30.0-30.5		29.0-30.5			
Oxygen (ppm), surface	9.9-11.6		7.1-9.2		5.4-6.7		7.2-9.6		5.4-9.9			
Oxygen (ppm), bottom	10.0-11.0		7.8-9.3		4.8-7.2		7.4-9.6		4.8-11.0			
Secchi (feet)	4.0-9.5		3.5-12.0		3.5-9.5		2.0-6.0		2.0-12.0			
Sediment ^a	MS		FS-VFS		FS-VFS		FS-VFS		VFS-MS			
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ^{2d}	f ^e	Rank
Margelopsis gibbesi	-	-	present	-	-	-	-	-	present	-	2	-
Thuiaria argentea	-	-	present	-	-	-	-	-	present	-	1	-
Lirope sp.	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Embryonated hydrozoa eggs	present	-	-	-	-	-	-	-	present	-	1	-
Hydrozoa	present	-	-	-	-	-	-	-	present	-	1	-
Cnidaria medusa	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Ctenophora	-	-	present	-	-	-	-	-	present	-	1	-
Cerebratulus lacteus	-	-	-	-	17	15.3	-	-	17	3.8	1	-
Nemertea	8	7.2	10	9.0	30	27.0	9	8.1	57	-	10	-
Nematoda	present	-	-	-	-	-	-	-	present	12.8	1	-
Sagitta sp.	4	3.6	18	16.2	-	-	1	0.9	23	5.2	5	-
Amathia vidovici	-	-	-	-	-	-	present	-	present	-	1	-
Polinices duplicata	-	-	-	-	6	5.4	1	0.9	7	1.6	2	-
Polinices heros	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Polinices sp.	-	-	2	1.8	-	-	-	-	2	0.5	1	-
Nassarius trivittatus	-	-	-	-	1	0.9	3	2.7	4	0.9	3	-
Nassarius trivittatus eggs	-	-	present	-	-	-	-	-	present	-	1	-
Turbonilla interrupta	-	-	-	-	-	-	3	2.7	3	0.7	2	-
Turbonilla sp.	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Mytilus edulis spat	present	-	present	-	-	-	-	-	present	-	3	-
Petricola pholadiformis	1	0.9	-	-	-	-	-	-	1	0.2	1	-
Spisula solidissima	45	40.5	615	553.6	20	16.0	3	2.7	683	153.7	10	3
Mulinia lateralis	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Tellina agilis	47	42.3	952	857.0	190	174.6	63	56.7	1252	281.8	11	1
Ensis directus	1	0.9	18	14.4	1	0.9	2	1.8	22	5.0	6	-
Siliqua costata	6	5.4	34	30.6	-	-	-	-	40	9.0	5	-
Phyllodoce maculata	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Phyllodoce arenae	-	-	-	-	1	0.9	3	2.7	4	0.9	2	-
Phyllodoce sp.	-	-	4	3.6	-	-	-	-	4	0.9	1	-
Paranaitis kosteriensis	-	-	11	9.9	-	-	-	-	11	2.5	1	-
Eteone sp.	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Sigalion arenicola	-	-	2	1.8	-	-	-	-	2	0.5	2	-
Sthenelais boa	1	0.9	-	-	-	-	1	0.9	2	0.5	2	-

Table 32. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Sthenelais limicola</i>	-	-	1	0.9	fragment	-	-	-	1	0.2	2	-
<i>Sthenelais</i> sp.	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Sigalionidae</i>	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Glycera capitata</i>	4	3.6	-	-	-	-	-	-	4	0.9	2	-
<i>Glycera americana</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Glycera</i> sp.	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Gonia</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Nephtys buccera</i>	38	34.2	10	9.0	35	31.5	22	19.8	105	23.6	10	8
<i>Nephtys picta</i>	-	-	1	0.9	-	-	14	12.6	15	3.4	3	-
<i>Nephtys</i> sp.	-	-	8	7.2	3	2.7	-	-	11	2.5	2	-
<i>Capitellidae</i>	334	300.7	60	54.0	549	494.2	43	38.7	986	221.9	9	2
<i>Ophelia denticulata</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Scolecopides viridis</i>	30	27.0	295	265.6	31	27.9	64	57.6	420	94.5	10	5
<i>Streblospio benedicti</i>	1	0.9	-	-	44	39.6	-	-	45	10.1	9	-
<i>Scolecopsis squamata</i>	-	-	-	-	-	-	3	2.7	3	0.7	2	-
<i>Prionospio</i> sp.	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Polydora</i> sp.	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Dispio uncinata</i>	2	1.8	1	0.9	-	-	1	0.9	4	0.9	4	-
<i>Spionidae</i>	-	-	3	2.7	-	-	-	-	3	0.7	2	-
<i>Onuphis opalina</i>	-	-	-	-	1	0.9	4	3.6	5	1.1	3	-
<i>Magelona rosea</i>	5	4.5	1	0.9	15	13.5	13	11.7	34	7.7	7	-
<i>Scoloplos</i> sp.	-	-	3	2.7	2	1.8	5	4.5	10	2.3	4	-
<i>Tharyx acutus</i>	-	-	-	-	40	36.0	9	8.1	49	11.0	4	-
<i>Asabellides oculata</i>	4	3.6	242	217.8	30	27.0	11	9.9	287	64.6	10	6
<i>Ampharetidae</i>	-	-	-	-	-	-	12	10.8	12	2.7	1	-
<i>Pherusa</i> sp.	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Polychaeta</i> larvae	-	-	-	-	-	-	1	0.9	1	0.2	1	-
<i>Polychaeta</i>	fragments	-	fragments	-	4, fragments	3.6	fragments	-	4, fragments	0.9	11	-
<i>Calanoida</i>	1	0.9	7	6.3	1	0.9	1	0.9	10	2.3	5	-
<i>Leptocuma minor</i>	1	0.9	5	4.5	3	2.7	-	-	9	2.0	4	-
<i>Oxyurostylis smith</i>	1	0.9	5	4.5	20	18.0	5	4.5	31	7.0	5	-
<i>Cirolana concharum</i>	2	1.8	-	-	-	-	-	-	2	0.5	2	-
<i>Chiridotea tuftsi</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Edotea triloba</i>	4	3.6	56	50.4	21	18.9	8	7.2	89	20.0	9	9
<i>Corophium tuberculatum</i>	-	-	-	-	1	0.9	1	0.9	2	0.5	2	-
<i>Cerapus tubularis</i>	-	-	-	-	36	32.4	4	3.6	40	9.0	3	-
<i>Unciola irrorata</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
<i>Gammarus lawrencianus</i>	-	-	25	22.5	-	-	-	-	25	5.6	2	-
<i>Gammarus annulatus</i>	-	-	2	1.8	-	-	-	-	2	0.5	1	-
<i>Elasmopus levis</i>	-	-	-	-	-	-	3	2.7	3	0.7	1	-
<i>Protohaustorius deichmannae</i>	23	20.7	80	72.0	4	3.6	453	407.8	560	126.0	10	4
<i>Acanthohaustorius millsi</i>	2	1.8	2	1.8	1	0.9	21	18.9	26	5.9	6	-
<i>Acanthohaustorius shoemakeri</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Psammonyx nobilis</i>	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Monoculodes edwardsi</i>	6	5.4	-	-	-	-	2	1.8	8	1.8	4	-

Table 32. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Synchelidium americanum</i>	-	-	-	-	-	-	4	3.6	4	0.9	2	-
<i>Microprotopus raneyi</i>	-	-	-	-	2	1.8	1	0.9	3	0.7	2	-
<i>Parametopella cypris</i>	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Amphipoda	-	-	2	1.8	2	1.8	-	-	4	0.9	2	-
<i>Caprella equilibria</i>	-	-	-	-	-	-	-	0.9	1	0.2	1	-
<i>Caprella penantis</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
Caprellidae	-	-	-	-	-	-	1	0.9	1	0.2	1	-
<i>Mysidopsis bigelowi</i>	2	1.8	4	3.6	23	20.7	22	19.8	51	11.5	6	10
<i>Neomysis americana</i>	7	6.3	45	40.5	155	139.5	2	1.8	209	47.0	9	7
<i>Crangon septemspinosus</i>	-	-	4	3.6	2	1.8	-	-	6	1.4	4	-
<i>Crangon septemspionis</i>	-	-	5	4.5	-	-	-	-	5	1.1	1	-
<i>Pagurus longicarpus</i>	1	0.9	2	1.8	4	3.6	-	-	7	1.6	5	-
<i>Pagurus</i> sp. zoea	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Cancer irroratus megalopa</i>	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Cancer irroratus</i> sub-adult	-	-	18	16.2	1	0.9	-	-	19	4.3	2	-
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Xanthidae zoea	-	-	-	-	1	0.9	1	0.9	2	0.2	2	-
Fragment	present	-	-	-	-	-	-	-	present	-	1	-
<i>Ammodytes</i> sp. larvae ^f	3	2.7	-	-	-	-	-	-	3	0.7	1	-
<i>Scomber scombrus</i> eggs ^f	-	-	present	-	-	-	-	-	present	-	1	-
No. Bivalvia	100	90.0	1619	1457.4	212	190.8	68	61.2	1999	449.9		
No. Polychaeta	421	379.0	648	583.3	758	682.3	206	185.4	2033	457.5		
No. Amphipoda	32	28.8	113	101.7	46	41.4	490	441.1	681	153.3		
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
No. Taxa	32	-	45	-	41	-	44	-	87	-		
No. Specimens	586	527.5	2562	2306.2	1303	1172.9	826	743.5	5277	1187.6		
Diversity Index	1.65	-	1.79	-	1.51	-	1.62	-	1.64	-		

a See Table 164 for grain size classification.

b Number of organisms collected from 21 drops of the ponar grab.

c Average number of specimens per m².

d Number of organisms collected from 84 drops of the ponar grab.

e Number of collections in which species appeared.

f Not included in totals.

Table 33. Number and weight (g) of macroinvertebrates taken with a ponar grab by season approximately 2.5 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	WINTER				SPRING				SUMMER				FALL			
	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet)	35-36	35-36	35-36	35-36	35-40	35-40	35-40	35-40	35-40	35-40	35-40	35-40	35-41	35-41	35-41	35-41
Air Temp. (C)	-1.5-8.5	-1.5-8.5	-1.5-8.5	-1.5-8.5	12.5-24.0	12.5-24.0	12.5-24.0	12.5-24.0	19.5-27.0	19.5-27.0	19.5-27.0	19.5-27.0	5.0-17.5	5.0-17.5	5.0-17.5	5.0-17.5
Temp. (C), surface	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	10.0-20.5	10.0-20.5	10.0-20.5	10.0-20.5	21.0-25.0	21.0-25.0	21.0-25.0	21.0-25.0	5.0-17.0	5.0-17.0	5.0-17.0	5.0-17.0
Temp. (C), bottom	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	9.2-18.2	9.2-18.2	9.2-18.2	9.2-18.2	20.2-22.0	20.2-22.0	20.2-22.0	20.2-22.0	6.0-16.0	6.0-16.0	6.0-16.0	6.0-16.0
Salinity (ppt), surface	28.0-30.0	28.0-30.0	28.0-30.0	28.0-30.0	29.5-30.0	29.5-30.0	29.5-30.0	29.5-30.0	29.5-30.0	29.5-30.0	29.5-30.0	29.5-30.0	30.0-30.5	30.0-30.5	30.0-30.5	30.0-30.5
Salinity (ppt), bottom	29.8-31.0	29.8-31.0	29.8-31.0	29.8-31.0	29.5-31.0	29.5-31.0	29.5-31.0	29.5-31.0	30.0-30.5	30.0-30.5	30.0-30.5	30.0-30.5	30.0-30.5	30.0-30.5	30.0-30.5	30.0-30.5
Oxygen (ppm), surface	10.8	10.8	10.8	10.8	7.4-9.6	7.4-9.6	7.4-9.6	7.4-9.6	6.5-7.3	6.5-7.3	6.5-7.3	6.5-7.3	6.8-9.4	6.8-9.4	6.8-9.4	6.8-9.4
Oxygen (ppm), bottom	10.4-10.6	10.4-10.6	10.4-10.6	10.4-10.6	7.6-9.2	7.6-9.2	7.6-9.2	7.6-9.2	6.2-7.5	6.2-7.5	6.2-7.5	6.2-7.5	7.2-9.8	7.2-9.8	7.2-9.8	7.2-9.8
Secchi (feet)	8.0-13.5	8.0-13.5	8.0-13.5	8.0-13.5	4.0-13.0	4.0-13.0	4.0-13.0	4.0-13.0	7.0-35.0	7.0-35.0	7.0-35.0	7.0-35.0	3.5-6.0	3.5-6.0	3.5-6.0	3.5-6.0
Sediment ^a	CZ-MS	CZ-MS	CZ-MS	CZ-MS	MS-CS	MS-CS	MS-CS	MS-CS	VFS-MS	VFS-MS	VFS-MS	VFS-MS	FS	FS	FS	FS
	n ^b	n/m ^{2c}	g x 10 ^{3d}	g x 10 ^{3/m^{2e}}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}
Magelopsis gibbesi	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Liriope sp.	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Actinaria	-	-	-	-	1	0.9	0.43	0.39	-	-	-	-	-	-	-	-
Pleurobranchia sp.	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Bdelloura sp.	-	-	-	-	-	-	-	-	-	-	-	-	2	1.8	0.30	0.27
Nemertea	fragments	-	95.02	85.53	6	5.4	1.67	1.50	4	3.6	7.54	6.79	6	5.4	6.51	5.86
Nematoda	-	-	-	-	present	-	-	-	present	-	-	-	present	-	-	-
Sagitta sp.	11	9.9	3.23	2.91	22	19.8	3.62	3.27	-	-	-	-	5	4.5	0.95	0.86
Electra hastingsae	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lacuna vineta	-	-	-	-	-	-	-	-	-	-	-	-	1	0.9	0.38	0.34
Crepidula fornicata	-	-	-	-	-	-	-	-	1	0.9	0.63	0.57	-	-	-	-
Crepidula plana	-	-	-	-	-	-	-	-	1	0.9	10.30	9.27	-	-	-	-
Polinices heros	1	0.9	0.37	0.33	2	1.8	602.00	541.90	3	2.7	186.43	167.82	1	0.9	1.14	1.03
Polinices sp.	-	-	-	-	1	0.9	0.28	0.25	-	-	-	-	-	-	-	-
Nassarius trivittatus	9	8.1	183.10	164.82	3	2.7	161.50	145.38	2	1.8	183.64	165.31	7	6.3	746.04	671.56
Nassarius trivittatus eggs	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Turbonilla sp.	-	-	-	-	-	-	-	-	1	0.9	0.38	0.34	-	-	-	-
Nucula proxima	17	15.3	3.02	2.72	12	10.8	1.83	1.65	1	0.9	0.32	0.29	1	0.9	0.48	0.43
Yoldia limatula	4	3.6	1.99	1.79	-	-	-	-	-	-	-	-	-	-	-	-
Mytilus edulis	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Petricola pholadiformis	18	16.2	2.33	2.10	-	-	-	-	6	5.4	103.40	93.08	1	0.9	0.22	0.20
Spisula solidissima	50	45.0	16.64	14.98	54	48.6	88.43	79.60	33	29.7	186.24	167.65	237	213.3	46.28	41.66
Tellina agilis	112	100.8	75.23	67.72	430	387.1	251.65	226.53	166	149.4	235.34	211.85	126	113.4	61.07	54.97
Ensis directus	16	14.4	4.43	3.99	38	34.2	46.63	41.97	-	-	-	-	-	-	-	-
Siliqua costata	14	12.6	1.63	1.47	2	1.8	2.68	2.41	-	-	-	-	-	-	-	-
Zirfaea crispata	1	0.9	0.06	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Bivalvia	-	-	-	-	1	0.9	0.17	0.15	-	-	-	-	-	-	-	-
Phyllodoce arenae	-	-	-	-	-	-	-	-	-	-	-	-	5	4.5	1.03	0.93
Sigalion arenicola	-	-	-	-	2	1.8	1.08	0.97	1	0.9	14.32	12.89	-	-	-	-
Sthenelais boa	14	12.6	8.74	7.87	-	-	-	-	-	-	-	-	6	5.4	2.78	2.50
Sthenelais limicola	5	4.5	11.37	10.23	-	-	-	-	2	1.8	23.89	21.51	1	0.9	0.05	0.05
Glycera capitata	-	-	-	-	18	16.2	4.36	3.93	8	7.2	2.81	2.53	-	-	-	-
Glycera americana	5	4.5	35.58	32.03	1	0.9	4.73	4.26	1	0.9	2.91	2.62	3	2.7	8.75	7.88
Glycera dibranchiata	-	-	-	-	3	2.7	61.31	55.19	-	-	-	-	1	0.9	16.26	14.64
Goniadella gracilis	-	-	-	-	288	259.3	45.28	40.76	19	17.1	1.99	1.79	-	-	-	-

Table 33. (cont.)

	WINTER				SPRING				SUMMER				FALL			
	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
Nephtys buccera	15	13.5	256.34	230.75	30	27.0	359.68	323.77	41	36.9	188.67	169.84	20	18.0	167.14	150.45
Nephtys picta	-	-	-	-	15	13.5	35.45	31.91	4	3.6	14.65	13.19	63	56.7	50.30	45.28
Nephtys spp.	-	-	-	-	-	-	-	-	-	-	-	-	fragment	-	18.79	16.91
Nereis succinea	3	2.7	0.01	0.01	1	0.9	6.54	5.89	-	-	-	-	-	-	-	-
Capitellidae	3	2.7	0.58	0.52	705	634.6	78.91	634.62	6	71.0	0.28	0.25	14	12.6	1.71	1.54
Ophelia denticulata	1	0.9	34.84	31.36	-	-	-	-	-	-	-	-	-	-	-	-
Ophelia sp.	-	-	-	-	-	-	-	-	1	0.9	1.32	1.19	-	-	-	-
Spio setosa	-	-	-	-	4	3.6	2.93	2.64	-	-	-	-	-	-	-	-
Scolecopolides viridis	4	3.6	3.23	2.91	202	181.8	62.44	56.21	1136	1022.6	401.71	361.61	64	57.6	14.67	13.21
Streblospio benedicti	13	11.7	2.97	2.67	-	-	-	-	2	1.8	0.38	0.34	-	-	-	-
Prionospio sp.	-	-	-	-	-	-	-	-	-	-	-	-	6	5.4	1.02	0.92
Dispio uncinata	1	0.9	0.22	0.20	1	0.9	1.82	1.64	-	-	-	-	1	0.9	0.39	0.35
Paraonis fulgens	-	-	-	-	2	1.8	0.47	0.42	-	-	-	-	-	-	-	-
Aricidea jeffreysii	-	-	-	-	1	0.9	0.71	0.64	-	-	-	-	1	0.9	1.85	1.67
Onuphis opalina	-	-	-	-	-	-	-	-	-	-	-	-	2	1.8	0.67	0.60
Lumbrineris fragilis	3	2.7	194.65	175.22	2	1.8	92.04	82.85	2	1.8	96.31	86.70	-	-	-	-
Drilonereis longa	1	0.9	1.02	0.92	-	-	-	-	-	-	-	-	-	-	-	-
Magelona rosea	23	20.7	17.55	15.80	-	-	-	-	44	39.6	11.97	10.78	167	150.3	52.47	47.23
Orbinia swani	1	0.9	40.66	36.60	-	-	-	-	-	-	-	-	-	-	-	-
Scoloplos robustus	-	-	-	-	1	0.9	112.58	101.34	-	-	-	-	-	-	-	-
Scoloplos sp.	-	-	-	-	-	-	-	-	-	-	-	-	5	4.5	0.40	0.36
Tharyx acutus	6	5.4	2.42	2.18	44	39.6	22.32	20.09	11	9.9	2.53	2.28	48	43.2	8.08	7.27
Asabellides oculata	-	-	-	-	182	163.8	16.87	15.19	104	93.6	438.83	395.02	9	8.1	0.01	0.01
Ampharetidae	2	1.8	0.43	0.39	-	-	-	-	-	-	-	-	7	0.9	0.72	0.65
Pherusa affinis	2	1.8	398.26	358.50	9	8.1	4.76	4.28	-	-	-	-	-	-	-	-
Polychaeta	fragments	-	9.54	8.59	fragments	-	21.93	19.74	fragments	-	735.37	661.96	fragments	-	0.11	0.10
Calanoida	17	15.3	2.43	2.19	4	3.6	0.33	0.30	-	-	-	-	18	16.2	0.71	0.64
Cylaspis varians	-	-	-	-	1	0.9	0.22	0.20	-	-	-	-	-	-	-	-
Leptocuma minor	9	8.1	5.17	4.65	14	12.6	7.10	6.39	2	1.8	1.60	1.44	2	1.8	0.60	0.54
Leucon americanus	1	0.9	0.19	0.17	-	-	-	-	-	-	-	-	-	-	-	-
Oxyurostylis smithi	8	7.2	1.30	1.17	19	17.1	11.51	10.36	7	6.3	1.26	1.13	20	18.0	3.46	3.11
Cirolana concharum	2	1.8	119.29	107.38	-	-	-	-	-	-	-	-	-	-	-	-
Chiridotea coeca	-	-	-	-	1	0.9	4.67	4.20	-	-	-	-	-	-	-	-
Chiridotea tuftsi	1	0.9	1.93	1.74	4	3.6	1.56	1.40	1	0.9	0.35	0.32	1	0.9	2.19	1.97
Idotea metallica	-	-	-	-	1	0.9	3.46	3.11	-	-	-	-	-	-	-	-
Edotea triloba	27	24.3	18.42	16.58	50	45.0	70.51	63.47	4	3.6	1.08	0.97	6	5.4	1.70	1.53
Corophium tuberculatum	-	-	-	-	-	-	-	-	1	0.9	0.17	0.15	2	1.8	0.26	0.23
Cerapus tubularis	-	-	-	-	-	-	-	-	2	1.8	0.43	0.39	-	-	-	-
Unciola irrorata	-	-	-	-	1	0.9	0.74	0.67	30	27.0	20.70	18.63	2	1.8	0.04	0.04
Gammarus lawrencianus	-	-	-	-	1	0.9	0.21	0.19	2	1.8	1.09	0.98	-	-	-	-
Protohaustorius deichmannae	35	31.5	13.29	11.96	1	0.9	0.19	0.17	32	28.8	5.55	5.00	69	62.1	19.06	17.16
Protohaustorius wigleyi	11	9.9	9.33	8.40	-	-	-	-	15	13.5	7.54	6.79	-	-	-	-
Acanthohaustorius millsi	40	36.0	23.67	21.31	-	-	-	-	11	9.9	5.35	4.82	6	5.4	2.61	2.35
Jassa falcata	-	-	-	-	1	0.9	0.19	0.17	-	-	-	-	16	14.4	2.99	2.69
Anonyx sarsi	1	0.9	7.13	6.42	-	-	-	-	-	-	-	-	-	-	-	-
Monoculodes edwardsi	6	5.4	22.92	20.63	1	0.9	0.17	0.15	2	1.8	0.39	0.35	6	5.4	1.14	1.03

Table 33. (cont.)

	WINTER				SPRING				SUMMER				FALL			
	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
<i>Synchelidium americanum</i>	-	-	-	-	-	-	-	-	-	-	-	-	3	2.7	0.53	0.48
<i>Microprotopus raneyi</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	0.9	0.13	0.12
<i>Trichophoxus epistomus</i>	1	0.9	1.15	1.04	-	-	-	-	13	11.7	8.61	7.75	-	-	-	-
<i>Stenothoe minuta</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	1.8	0.28	0.25
<i>Caprella equilibra</i>	-	-	-	-	-	-	-	-	-	-	-	-	40	36.0	14.25	12.83
<i>Mysidopsis bigelowi</i>	3	2.7	0.61	0.55	3	2.7	0.37	0.33	38	34.2	7.37	6.63	26	23.4	5.75	5.18
<i>Neomysis americana</i>	17	15.3	17.04	15.34	156	140.4	54.82	49.35	63	56.7	24.94	22.45	4	3.6	1.65	1.49
<i>Mysidacea</i>	-	-	-	-	fragments	-	1.73	1.56	1	0.9	0.19	0.17	-	-	-	-
<i>Crangon septemspinosa</i>	-	-	-	-	6	5.4	42.19	37.98	3	2.7	18.74	16.87	3	2.7	30.57	27.52
<i>Crangon septemspinosa mysis</i>	-	-	-	-	9	8.1	5.02	4.52	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	-	-	-	-	1	0.9	12.71	11.44	8	7.2	330.43	297.44	-	-	-	-
<i>Anomura zoea</i>	-	-	-	-	-	-	-	-	1	0.9	1.42	1.28	-	-	-	-
<i>Cancer irroratus</i>	-	-	-	-	13	11.7	20.13	18.12	11	9.9	535.76	482.28	-	-	-	-
<i>Cancer irroratus megalopa</i>	-	-	-	-	7	6.3	4.18	3.76	1	0.9	0.96	0.86	-	-	-	-
<i>Xanthidae zoea</i>	-	-	-	-	-	-	-	-	2	1.8	0.14	0.13	-	-	-	-
<i>Brachyura zoea</i>	-	-	-	-	-	-	-	-	4	3.6	0.54	0.49	-	-	-	-
<i>Crustacea zoea</i>	-	-	-	-	1	0.9	0.05	0.05	-	-	-	-	-	-	-	-
<i>Echinarachnius parma</i>	-	-	-	-	1	0.9	0.12	0.11	-	-	-	-	-	-	-	-
<i>Asterias forbesii</i>	-	-	-	-	-	-	-	-	2	1.8	0.46	0.41	-	-	-	-
<i>Perophora viridis</i>	-	-	-	-	1	0.9	0.07	0.06	-	-	-	-	-	-	-	-
Fragment	present	-	29.14	26.23	-	-	-	-	-	-	-	-	-	-	-	-
<i>Hippocampus erectus</i> ^f	-	-	-	-	-	-	-	-	1	0.9	-	-	-	-	-	-
<i>Ammodytes sp.</i> ^f	-	-	-	-	-	-	-	-	-	-	-	-	1	0.9	-	-
No. Bivalvia	232	208.8	105.33	94.82	537	483.4	391.39	352.32	206	185.4	525.30	472.86	365	328.6	108.05	97.26
No. Polychaeta	102	91.1	1018.41	916.74	1511	1360.2	935.14	841.79	1382	1244.0	1937.94	1744.48	423	380.8	347.20	312.54
No. Amphipoda	94	84.6	77.49	69.75	5	4.5	1.50	1.35	108	97.2	49.83	44.86	107	96.3	27.04	24.34
No. Echinodermata	0	0.0	0.00	0.00	1	0.9	0.12	0.11	2	1.8	0.46	0.41	0	0.0	0.00	0.00
No. Taxa	43	-	-	-	54	-	-	-	49	-	-	-	46	-	-	-
No. Specimens	534	480.7	1678.47	1510.91	2380	2142.4	2339.36	2105.73	1856	1670.7	3827.23	3445.16	1037	933.5	1298.49	1168.86
Diversity Index ^g	2.15				1.83				1.81				2.13			

a See Table 164 for grain size classification.

b Numbers of specimens collected from 21 drops of the ponar grab.

c Average number of specimens per m².

d Weight of specimens collected from 21 drops of the ponar grab.

e Average weight of specimens per m².

f Not included in totals.

g Diversity Index is the average of the monthly diversity values.

Table 33. (cont.)

		TOTAL					
Zone		5255					
Depth (feet)		35-41					
Air Temp. (C)		-1.5-27.0					
Temp. (C), surface		3.0-25.0					
bottom		3.0-22.0					
Salinity (ppt), surface		28.0-30.5					
bottom		29.5-31.0					
Oxygen (ppm), surface		7.4-10.8					
bottom		6.2-10.6					
Secchi (feet)		4.0-35.0					
Sediment ^a		CZ-MS					
	n ^b	n/m ^{2c}	g x 10 ^{3d}	g x 10 ^{3/m^{2e}}	f ^f	No. Rank	Wt. Rank
Margelopsis gibbesi	present	-	-	-	2	-	-
Liriope sp.	present	-	-	-	1	-	-
Actiniaria	1	0.2	0.43	0.10	1	-	-
Pleurobranchia sp.	present	-	-	-	1	-	-
Bdelloura sp.	2	0.5	0.30	0.07	1	-	-
Nemertea	16	3.6	110.74	24.92	8	-	-
Nematoda	present	-	-	-	9	-	-
Sagitta sp.	38	8.6	7.80	1.76	4	-	-
Electra hastingsae	present	-	-	-	1	-	-
Lacuna vineta	1	0.2	0.38	0.09	1	-	-
Crepidula fornicata	1	0.2	0.63	0.14	1	-	-
Crepidula plana	1	0.2	10.30	2.32	1	-	-
Polinices heros	7	1.6	789.94	177.77	6	-	3
Polinices sp.	1	0.2	0.28	0.06	1	-	-
Nassarius trivittatus	21	4.7	1274.28	286.77	8	-	1
Nassarius trivittatus eggs	present	-	-	-	1	-	-
Turbonilla sp.	1	0.2	0.38	0.09	1	-	-
Nucula proxima	31	7.0	5.65	1.27	4	-	-
Yoldia limatula	4	0.9	1.99	0.45	1	-	-
Mytilus edulis	present	-	-	-	1	-	-
Petricola pholadiformis	25	5.6	105.95	23.84	3	-	-
Spisula solidissima	374	84.2	337.59	75.97	11	4	-
Tellina agilis	834	187.7	623.29	140.27	12	2	5
Ensis directus	54	12.2	51.06	11.49	3	-	-
Siliqua costata	16	3.6	4.31	0.97	3	-	-
Zirfaea crispata	1	0.2	0.06	0.01	1	-	-
Bivalvia	1	0.2	0.17	0.04	1	-	-
Phyllodoce arenae	5	1.1	1.03	0.23	2	-	-
Sigalion arenicola	3	0.2	14.32	3.22	1	-	-
Sthenelais boa	20	4.5	11.52	2.59	3	-	-
Sthenelais limicola	8	1.8	35.31	7.95	4	-	-
Glycera capitata	26	5.9	7.18	1.62	6	-	-
Glycera americana	10	2.3	51.97	11.70	4	-	-
Glycera dibranchiata	4	0.9	77.57	17.46	3	-	-
Goniadella gracilis	307	69.1	47.27	10.64	5	5	-
Nephtys bucera	106	23.9	971.83	218.70	11	-	2

Table 33. (cont.)

	TOTAL					f	No.	Rank	Wt.	Rank
	n	n/m ²	g x 10 ³	g x 10 ³ /m ²						
<i>Nephtys picta</i>	82	18.5	100.40	22.59	6	-	-	-	-	-
<i>Nephtys</i> spp.	fragment	-	18.79	4.23	1	-	-	-	-	-
<i>Nereis succinea</i>	4	0.9	6.55	1.47	2	-	-	-	-	-
Capitellidae	728	163.8	81.48	18.34	8	3	-	-	-	-
<i>Ophelia denticulata</i>	1	0.2	34.84	7.84	1	-	-	-	-	-
<i>Ophelia</i> sp.	1	0.2	1.32	0.30	1	-	-	-	-	-
<i>Spio setosa</i>	4	0.9	2.93	0.66	2	-	-	-	-	-
<i>Scolecopelides viridis</i>	1406	316.4	482.05	108.48	8	1	-	-	7	-
<i>Streblospio benedicti</i>	15	3.4	3.35	0.75	2	-	-	-	-	-
<i>Prionospio</i> sp.	6	1.4	1.02	0.23	1	-	-	-	-	-
<i>Dispio uncinata</i>	3	0.7	2.43	0.55	3	-	-	-	-	-
<i>Paraonis fulgens</i>	2	0.5	0.47	0.11	1	-	-	-	-	-
<i>Aricidea jeffreysii</i>	2	0.5	2.56	0.58	2	-	-	-	-	-
<i>Onuphis opalina</i>	2	0.5	0.67	0.15	1	-	-	-	-	-
<i>Lumbrineris fragilis</i>	7	1.6	383.00	86.19	4	-	-	-	10	-
<i>Drilonereis longa</i>	1	0.2	1.02	0.23	1	-	-	-	-	-
<i>Magelona rosea</i>	234	52.7	81.99	18.45	6	8	-	-	-	-
<i>Orbinia swani</i>	1	0.2	40.66	9.15	1	-	-	-	-	-
<i>Scoloplos robustus</i>	1	0.2	112.58	25.34	1	-	-	-	-	-
<i>Scoloplos</i> sp.	5	1.1	0.40	0.09	2	-	-	-	-	-
<i>Tharyx acutus</i>	109	24.5	35.35	7.96	11	10	-	-	-	-
<i>Asabellides oculata</i>	295	66.4	455.71	102.55	5	6	-	-	8	-
Ampharetidae	9	2.0	1.15	0.26	2	-	-	-	-	-
<i>Pherusa affinis</i>	11	2.5	403.02	90.70	2	-	-	-	9	-
Polychaeta	fragments	-	766.95	172.60	11	-	-	-	4	-
Calanoida	39	8.8	3.47	0.78	4	-	-	-	-	-
<i>Cylaspis varians</i>	1	0.2	0.22	0.05	1	-	-	-	-	-
<i>Leptocuma minor</i>	27	6.1	14.47	3.26	7	-	-	-	-	-
<i>Leucon americanus</i>	1	0.2	0.19	0.04	1	-	-	-	-	-
<i>Oxyurostylis smithi</i>	54	12.2	17.53	3.94	9	-	-	-	-	-
<i>Cirolana concharum</i>	2	0.5	119.29	26.85	1	-	-	-	-	-
<i>Chiridotea coeca</i>	1	0.2	4.67	1.05	1	-	-	-	-	-
<i>Chiridotea tuftsi</i>	7	1.6	6.03	1.36	5	-	-	-	-	-
<i>Idotea metallica</i>	1	0.2	3.46	0.78	1	-	-	-	-	-
<i>Edotea triloba</i>	87	19.6	91.71	20.64	7	-	-	-	-	-
<i>Corophium tuberculatum</i>	3	0.7	0.43	0.10	2	-	-	-	-	-
<i>Cerapus tubularis</i>	2	0.5	0.43	0.10	1	-	-	-	-	-
<i>Unciola irrorata</i>	33	7.4	21.48	4.83	3	-	-	-	-	-
<i>Gammarus lawrencianus</i>	3	0.7	1.30	0.29	2	-	-	-	-	-
<i>Protohaustorius deichmannae</i>	137	30.8	38.09	8.57	7	9	-	-	-	-
<i>Protohaustorius wigleyi</i>	26	5.9	16.87	3.80	3	-	-	-	-	-
<i>Acanthohaustorius millsi</i>	57	12.8	31.63	7.12	5	-	-	-	-	-
<i>Jassa falcata</i>	17	3.8	3.18	0.72	2	-	-	-	-	-
<i>Anonyx sarsi</i>	1	0.2	7.13	1.60	1	-	-	-	-	-
<i>Monoculodes edwardsi</i>	15	3.4	24.62	5.54	8	-	-	-	-	-
<i>Synchelidium americanum</i>	3	0.7	0.53	0.12	2	-	-	-	-	-
<i>Microprotopus raneyi</i>	1	0.2	0.13	0.03	1	-	-	-	-	-
<i>Trichophoxus epistomus</i>	14	3.2	9.76	2.20	2	-	-	-	-	-
<i>Stenothoe minuta</i>	2	0.5	0.28	0.06	1	-	-	-	-	-

Table 33. (cont.)

	n	n/m ²	TOTAL		f	No. Rank	Wt. Rank
			g x 10 ³	g x 10 ³ /m ²			
Caprella equilibra	40	9.0	14.25	3.21	2	-	-
Mysidopsis bigelowi	70	15.8	14.10	3.17	7	-	-
Neomysis americana	240	54.0	98.45	22.16	10	7	-
Mysidacea	1	0.2	1.92	0.43	2	-	-
Crangon septemspinosa	12	2.7	91.50	20.59	5	-	-
Crangon septemspinosa mysis	9	2.0	5.20	1.17	1	-	-
Pagurus longicarpus	9	2.0	343.14	77.22	2	-	-
Anomura zoea	1	0.2	1.42	0.32	1	-	-
Cancer irroratus	24	5.4	555.89	125.10	2	-	6
Cancer irroratus megalopa	8	1.8	5.14	1.16	2	-	-
Xanthidae zoea	2	0.5	0.14	0.03	2	-	-
Brachyura zoea	4	0.9	0.54	0.12	1	-	-
Crustacea zoea	1	0.2	0.05	0.01	2	-	-
Echinarachnius parma	1	0.2	0.12	0.03	1	-	-
Asterias forbesii	2	0.5	0.46	0.10	1	-	-
Perophora viridis	1	0.2	0.07	0.02	1	-	-
Fragment	present	-	29.14	6.56	1	-	-
Hippocampus erectus g	1	-	-	-	1	-	-
Ammodytes sp. g	1	-	-	-	1	-	-
No. Bivalvia	1340	301.6	1130.07	254.31			
No. Polychaeta	3420	769.7	4239.77	954.13			
No. Amphipoda	314	70.7	155.86	35.08			
No. Echinodermata	3	0.7	0.58	0.13			
No. Taxa	92	-	-	-			
No. Specimens ^h	5807	1306.8	9143.55	2057.69			
Diversity Index ^h	1.98	-	-	-			

a See Table 164 for grain size classifications.

b Number of specimens collected from 84 drops of the ponar grab.

c Average number of specimens per m².

d Weight of specimens collected from 84 drops of the ponar grab.

e Average weight of specimens per m².

f Number of collections in which species appeared.

g Not included in totals.

h Diversity Index is the average of the monthly diversity values.

Table 34. Number of macroinvertebrates taken with a ponar grab by season approximately 1.8 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

	WINTER		SPRING		SUMMER		FALL		TOTAL			
Zone	5161		5161		5161		5161		5161			
Depth (feet)	17-21		15-20		20-24		20-22		15-24			
Air Temp. (C)	1.0-8.5		13.0-24.0		19.5-27.0		8.0-17.5		1.0-27.0			
Temp. (C), surface	3.0-5.0		10.0-22.0		20.3-25.0		10.0-16.0		3.0-25.0			
bottom	3.0-5.0		9.5-20.0		20.3-25.0		10.5-16.0		3.0-25.0			
Salinity (ppt), surface	28.0-30.0		29.0-30.0		30.0		30.0-30.5		28.0-30.5			
bottom	29.0-31.0		29.5-30.5		30.0		30.5		29.0-30.5			
Oxygen (ppm), surface	10.4-11.9		6.0-9.6		6.9-7.5		7.2-8.9		6.0-11.9			
bottom	10.4-11.4		7.8-9.0		6.5-7.8		7.2-8.9		6.5-11.4			
Secchi (feet)	4.0-5.0		2.5-13.0		5.5-10.0		2.5-7.0		2.5-13.0			
Sediment ^a	VFS-FS		VFS-FS		VFS-FS		VFS-FS		VFS-FS			
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f ^d	Rank
Lovenella sp.	-	-	-	-	-	-	present	-	present	-	1	-
Liriope sp.	-	-	-	-	-	-	present	-	present	-	1	-
Margelopsis gibbesi	present	-	present	-	-	-	-	-	present	-	3	-
Obelia sp.	-	-	present	-	-	-	-	-	present	-	1	-
Cerebratulus lacteus	-	-	-	-	2	1.8	-	-	2	0.5	1	-
Nemertea	8	7.2	8	7.2	122	109.8	8	10.8	146	35.8	11	10
Sagitta sp.	25	22.5	13	11.7	-	-	-	-	38	9.3	3	-
Crepidula convexa	-	-	-	-	1	0.9	1	1.4	2	0.5	1	-
Polinices duplicata	-	-	-	-	-	-	1	1.4	1	0.2	1	-
Polinices heros	-	-	7	6.3	1	0.9	-	-	8	2.0	3	-
Nassarius trivittatus	-	-	-	-	5	4.5	2	2.7	7	1.7	3	-
Acanthodoris pilosa	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Nudibranchia	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Mytilus edulis spat	-	-	present	-	-	-	-	-	present	-	1	-
Petricola pholadiformis	-	-	-	-	-	-	1	1.4	1	0.2	1	-
Spisula solidissima	109	98.1	497	447.4	144	129.6	3	4.1	753	184.9	10	3
Mulinia lateralis	-	-	-	-	1	0.9	1	1.4	1	0.2	1	-
Tellina agilis	51	45.9	727	654.4	131	117.9	37	50.0	946	232.2	10	2
Donax fossor	3	2.7	-	-	-	-	-	-	3	0.7	1	-
Ensis directus	2	1.8	12	10.8	-	-	-	-	15	3.7	3	-
Siliqua costata	6	5.4	12	10.8	-	-	-	-	18	4.4	4	-
Bivalvia	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Loligo pealei	-	-	-	-	-	-	1	1.4	1	0.2	1	-
Phyllodoce arenae	-	-	-	-	1	0.9	2	2.7	3	0.7	2	-
Paranaitis sp.	-	-	2	1.8	-	-	-	-	2	0.5	1	-
Eteone heteropoda	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Sthenelais boa	2	1.8	2	1.8	-	-	-	-	4	1.0	2	-
Sthenelais limicola	-	-	3	2.7	-	-	1	1.4	4	1.0	3	-
Glycera capitata	-	-	1	0.9	3	2.7	-	-	4	1.0	2	-
Glycera americana	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Glycinde solitaria	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Nephtys bucera	24	21.6	14	12.6	21	18.9	39	52.7	98	24.1	11	-
Nephtys picta	-	-	1	0.9	1	0.9	4	5.4	6	1.5	3	-
Nereis succinea	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Capitellidae	6	5.4	37	33.3	312	280.9	14	18.9	369	90.6	8	6
Scolecoplepides viridis	10	90.0	73	65.7	7	6.3	25	33.8	115	28.2	10	-
Streblospio benedicti	-	-	1	0.9	6	5.4	-	-	7	1.7	2	-
Scolecopsis squamata	2	1.8	4	3.6	-	-	-	-	6	1.5	2	-
Prionospio sp.	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Prionospio sp.	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Dispio uncinata	5	4.5	-	-	2	1.8	-	-	7	1.7	4	-
Spionidae	-	-	2	1.8	-	-	-	-	2	0.5	1	-
Onuphis opalina	-	-	-	-	-	-	1	1.4	1	0.2	1	-
Magelona rosea	4	3.6	14	12.6	28	25.2	16	21.6	62	15.2	9	-
Orbinia swani	2	1.8	-	-	-	-	-	-	2	0.5	1	-
Scoloplos robustus	-	-	-	-	12	10.8	-	-	12	2.9	1	-
Scoloplos acutus	4	3.6	-	-	-	-	-	-	4	1.0	1	-
Scoloplos sp.	11	9.9	26	23.4	3	2.7	8	10.8	48	11.8	10	-
Tharyx acutus	-	-	-	-	48	43.2	8	10.8	56	13.7	4	-

Table 34. (cont.)

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	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Pectinaria gouldi</i>	-	-	-	-	-	-	1	1.4	1	0.2	1	-
<i>Asabellides oculata</i>	1	0.9	256	230.4	99	89.1	4	5.4	360	88.4	6	7
<i>Ampharetidae</i>	12	10.8	24	21.6	1	0.9	4	5.4	41	10.1	4	-
<i>Pherusa affinis</i>	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Polychaeta</i>	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	10	-
<i>Calanoida</i>	35	31.5	10	9.0	3	2.7	-	-	48	11.8	4	-
<i>Leptognatha caeca</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Cyclaspis varians</i>	-	-	-	-	6	5.4	-	-	6	1.5	1	-
<i>Oxyurostylis smithi</i>	1	0.9	3	2.7	33	29.7	4	5.4	41	10.1	6	-
<i>Chiridotea tuftsi</i>	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Edotea triloba</i>	9	8.1	86	77.4	295	265.6	9	12.2	399	98.0	10	5
<i>Corophium tuberculatum</i>	-	-	1	0.9	6	5.4	-	-	7	1.7	2	-
<i>Cerapus tubularis</i>	-	-	-	-	317	285.4	2	2.7	319	78.3	3	8
<i>Gammarus lawrenicianus</i>	-	-	19	17.1	1	0.9	-	-	20	4.9	4	-
<i>Bathyporeia quoddyensis</i>	13	11.7	-	-	-	-	-	-	13	3.2	2	-
<i>Protohaustorius deichmannae</i>	786	707.5	794	714.7	447	402.4	166	224.1	2193	538.4	10	1
<i>Parahaustorius longimerus</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Parahaustorius sp.</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Acanthohaustorius millsi</i>	96	86.4	66	59.4	82	73.8	8	10.8	252	61.9	8	9
<i>Psammonyx nobilis</i>	6	5.4	14	12.6	22	19.8	1	1.4	43	10.6	7	-
<i>Monoculodes edwardsi</i>	-	-	-	-	4	3.6	6	8.1	10	2.5	3	-
<i>Synchelidium americanum</i>	-	-	-	-	5	4.5	5	6.8	10	2.5	2	-
<i>Microprotopus raneyi</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Trichophoxus epistomus</i>	-	-	-	-	2	1.8	-	-	2	0.5	2	-
<i>Paraphoxus spinosus</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Parametopella cypri</i>	-	-	-	-	-	-	1	1.4	1	0.2	1	-
<i>Amphipoda</i>	-	-	fragments	-	-	-	-	-	fragments	-	1	-
<i>Mysidopsis bigelowi</i>	2	1.8	5	4.5	10	9.0	34	45.9	51	12.5	9	-
<i>Neomysis americana</i>	23	20.7	31	27.9	678	610.3	1	1.4	733	180.0	9	4
<i>Crangon septemspinosa</i>	-	-	2	1.8	2	1.8	1	1.4	5	1.2	3	-
<i>Crangon septemspinosa mysis</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Pagurus longicarpus</i>	1	0.9	2	1.8	7	6.3	1	1.4	11	2.7	5	-
<i>Pagurus longicarpus sub-adult</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Pagurus sp. glaucothoe</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Pagurus sp. zoea</i>	-	-	-	-	9	8.1	-	-	9	2.2	1	-
<i>Anomura zoea</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Cancer irroratus</i>	fragments	-	32	28.8	3	2.7	-	-	35	8.6	3	-
<i>Cancer irroratus megalopa</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Ovalipes ocellatus</i>	1	0.9	-	-	1	0.9	-	-	2	0.5	2	-
<i>Callinectes sapidus megalopa</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Xanthidae zoea</i>	-	-	-	-	2	1.8	-	-	2	0.5	1	-
<i>Asterias forbesii</i>	-	-	-	-	2	1.8	-	-	2	0.5	1	-
<i>Bothidae larvae^e</i>	-	-	-	-	-	-	1	1.4	1	0.2	1	-
Fragment	present	-	-	-	-	-	-	-	fragment	-	1	-
No. Bivalvia	171	153.9	1249	1124.3	276	248.4	42	56.7	1738	426.7		
No. Polychaeta	83	74.7	461	415.0	549	494.2	127	171.5	1220	299.5		
No. Amphipoda	904	813.8	894	804.8	887	798.5	189	255.2	2874	705.6		
No. Echinodermata	0	0.0	0	0.0	2	1.8	0	0.0	2	0.5		
No. Taxa	34	-	39	-	57	-	35	-	82	-		
No. Specimens	1264	1137.8	2805	2525.0	2901	2611.4	421	568.5	7391	1814.5		
Diversity Index ^f	1.67	-	1.90	-	1.49	-	2.00	-	1.74	-		

a See Table 164 for grain size classification.

b Number of specimens collected from 21 drops of the ponar grab in winter, spring, and summer 14 in fall and 77 for the total year.

c Average number of specimens per m².

d Number of collections in which species appeared.

e Not included in totals.

f Diversity Index is the average of the monthly diversity values.

Table 35. Number of macroinvertebrates taken with a ponar grab by season approximately 2.5 nautical miles NE of Little Egg Inlet, New Jersey in 1974.

	WINTER		SPRING		SUMMER		FALL		TOTAL			
Zone	5143		5143		5143		5143		5143			
Depth (feet)	25-34		24-28		20-33		25-26		20-34			
Air Temp. (C)	2.0-6.0		12.2-20.5		18.0-27.0		9.0-17.0		2.0-27.0			
Temp. (C), surface	3.0-5.5		9.0-19.5		19.5-23.5		10.5-16.0		3.0-23.5			
bottom	3.0-5.0		9.0-19.5		19.5-22.5		10.5-15.5		3.0-22.5			
Salinity (ppt), surface	28.5-29.0		29.5-31.0		29.5-30.0		30.5-30.5		28.5-31.0			
bottom	30.0-31.0		29.5-31.0		29.5-30.0		30.5-30.5		29.5-31.0			
Oxygen (ppm), surface	10.6-11.2		8.0-9.4		7.0-7.2		8.2-8.4		7.0-11.2			
bottom	10.4-11.0		8.0-9.4		6.7-9.0		8.2-8.9		6.7-11.0			
Secchi (feet)	4.0-9.5		3.5-10.0		6.0-17.0		4.0-6.0		3.5-17.0			
Sediment ^a	VFS		VFS-FS		VFS-FS		VFS-FS		VFS-FS			
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	rd	Rank
Margelopsis gibbesi	-	-	present	-	-	-	-	-	present	-	3	-
Hydractinia echinata	present	-	-	-	-	-	-	-	present	-	1	-
Obelia sp.	-	-	-	-	-	-	present	-	present	-	1	-
Embryonated Hydrozoa eggs	-	-	-	-	-	-	present	-	present	-	1	-
Platyhelminthes	1	0.9	-	-	-	-	-	-	1	0.2	1	-
Cerebratulus lacteus	-	-	-	-	-	-	2	1.8	2	0.5	1	-
Nemertea	7	6.3	7	6.3	242	217.8	46	41.4	302	68.0	9	8
Nematoda	present	-	present	-	present	-	-	-	present	-	3	-
Sagitta sp.	9	8.1	14	12.6	-	-	-	-	23	5.2	4	-
Amathia vidovici	-	-	-	-	-	-	present	-	present	-	1	-
Crepidula plana	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Polinices duplicata	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Polinices heros	1	0.9	1	0.9	-	-	-	-	2	0.5	2	-
Polinices sp. eggs	-	-	-	-	present	-	-	-	present	-	2	-
Nassarius trivittatus	7	6.3	-	-	14	12.6	2	1.8	23	5.2	6	-
Nassarius trivittatus eggs	-	-	present	-	present	-	-	-	present	-	2	-
Turbonilla interrupta	-	-	-	-	-	-	11	9.9	11	2.5	1	-
Yoldia limatula	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Mytilus edulis spat	present	-	present	-	-	-	-	-	present	-	2	-
Spisula solidissima	432	388.9	1355	1219.7	278	250.2	3	2.7	2068	465.4	10	1
Mulinia lateralis	-	-	-	-	5	4.5	-	-	5	1.1	2	-
Tellina agilis	74	66.6	588	529.3	494	444.7	32	28.8	1188	267.4	11	2
Donax fossor	1	0.9	-	-	-	-	-	-	1	0.2	1	-
Ensis directus	-	-	13	11.7	-	-	-	-	13	2.9	3	-
Siliqua costata	40	36.0	38	34.2	-	-	-	-	78	17.6	6	-
Phyllodoce arenae	-	-	-	-	3	2.7	9	8.1	12	2.7	4	-
Paranaitis kosteriensis	-	-	12	10.8	-	-	-	-	12	2.7	2	-
Mystides borealis	-	-	1	0.9	-	-	-	-	1	0.2	1	-
Eteone heteropoda	-	-	-	-	2	1.8	-	-	2	0.5	2	-
Antinoella sarsi	1	0.9	4	3.6	-	-	-	-	5	1.1	2	-
Sthenelais boa	7	6.3	-	-	-	-	3	2.7	10	2.3	3	-
Sthenelais limicola	7	6.3	12	10.8	5	4.5	-	-	24	5.4	8	-
Sthenelais sp.	1	0.9	-	-	-	-	-	-	1	0.2	1	-

Table 35. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Glycera capitata</i>	3	2.7	1	0.9	37	33.3	-	-	41	9.2	4	-
<i>Glycera americana</i>	-	-	-	-	18	16.2	8	7.2	26	5.9	2	-
<i>Glycera dibranchiata</i>	-	-	fragments	-	-	-	-	-	fragments	-	1	-
<i>Glycera</i> sp.	-	-	1	0.9	-	-	-	-	1	0.2	1	-
<i>Glycinde solitaria</i>	-	-	-	-	12	10.8	1	0.9	13	2.9	2	-
<i>Nephtys buccera</i>	55	49.5	32	28.8	30	27.0	17	15.3	134	30.2	11	-
<i>Nephtys picta</i>	3	2.7	2	1.8	1	0.9	8	7.2	14	3.2	5	-
<i>Nephtys</i> sp.	1	0.9	-	-	-	-	fragments	-	1	0.2	2	-
<i>Nereis succinea</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Capitellidae	113	101.7	340	306.1	536	482.5	154	138.6	1143	257.2	10	3
<i>Spio setosa</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Scolecoplepides viridis</i>	111	99.9	539	485.2	29	26.1	27	24.3	706	158.9	11	4
<i>Streblospio benedicti</i>	-	-	-	-	557	501.4	32	28.8	589	132.6	2	5
<i>Scolecopsis squamata</i>	-	-	-	-	-	-	2	1.8	2	0.5	1	-
<i>Dispio uncinata</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Spionidae	-	-	1	0.9	-	-	1	0.9	2	0.5	2	-
<i>Onuphis opalina</i>	-	-	-	-	-	-	4	3.6	4	0.9	2	-
<i>Lumbrineris fragilis</i>	-	-	-	-	2	1.8	-	-	2	0.5	1	-
<i>Magelona rosea</i>	4	3.6	2	1.8	20	18.0	16	14.4	42	9.5	8	-
<i>Orbinia swani</i>	-	-	2	1.8	-	-	-	-	2	0.5	1	-
<i>Orbinia</i> sp.	-	-	-	-	1	0.9	2	1.8	3	0.7	2	-
<i>Scoloplos robustus</i>	-	-	-	-	2	1.8	-	-	2	0.5	2	-
<i>Scoloplos</i> sp.	-	-	-	-	7	6.3	1	0.9	8	1.8	2	-
<i>Tharyx acutus</i>	1	0.9	2	1.8	175	157.5	39	35.1	217	48.8	6	9
<i>Asabellides oculata</i>	93	83.7	429	386.2	37	33.3	35	31.5	594	133.7	11	6
<i>Pherusa affi</i>	-	-	3	2.7	3	2.7	-	-	6	1.4	3	-
<i>Polychaeta</i>	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	9	-
<i>Hirudinea</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Limulus polyphemus</i> eggs	-	-	-	-	-	-	present	-	present	-	1	-
Calanoida	14	12.6	-	-	-	-	8	7.2	22	5.0	3	-
<i>Cyclaspis varians</i>	-	-	-	-	7	6.3	3	2.7	10	2.3	2	-
<i>Leptocuma minor</i>	4	3.6	3	2.7	-	-	-	-	7	1.6	2	-
<i>Oxyurostalis smithi</i>	5	4.5	6	5.4	15	13.5	19	17.1	4.5	10.1	7	-
<i>Chiridotea coeca</i>	17	15.3	-	-	-	-	-	-	17	3.8	1	-
<i>Chiridotea tuftsi</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
<i>Edotea triloba</i>	11	9.9	91	81.9	92	82.8	12	10.8	206	46.4	9	10
Isopoda	-	-	-	-	1	0.9	-	-	1	0.2	1	-
Hyperideae	-	-	-	-	-	-	2	1.8	2	0.5	1	-
<i>Ampelisca verrilli</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Corophium tuberculatum</i>	-	-	1	0.9	-	-	7	6.2	8	1.8	2	-
<i>Cerapus tubularis</i>	-	-	-	-	6	5.4	-	-	6	1.4	2	-
<i>Erichthonius rubicornis</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Unciola irrorata</i>	-	-	5	4.5	-	-	-	-	5	1.1	2	-
<i>Gammarus lawrencianus</i>	-	-	4	3.6	-	-	-	-	4	0.9	1	-
<i>Gammarus</i> sp.	-	-	-	-	-	-	1	0.9	1	0.2	1	-
<i>Elasmopus levis</i>	-	-	-	-	-	-	4	3.6	4	0.9	1	-

Table 35. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	f	Rank
<i>Bathyporeia quoddyensis</i>	2	1.8	-	-	-	-	-	-	2	0.5	1	-
<i>Protohaustorius deichmannae</i>	20	18.0	3	2.7	245	220.5	146	131.4	414	93.2	7	7
<i>Protohaustorius wigleyi</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Acanthohauastorius millsi</i>	6	5.4	-	-	4	3.6	6	5.4	16	3.6	3	-
<i>Jassa falcata</i>	-	-	-	-	20	18.0	1	0.9	21	4.7	3	-
<i>Monoculodes edwardsi</i>	23	20.7	-	-	1	0.9	-	-	24	5.4	4	-
<i>Synchelidium americanum</i>	-	-	-	-	-	-	9	8.1	9	2.0	2	-
<i>Aeginina longicornis</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
<i>Caprella equilibra</i>	-	-	-	-	6	5.4	2	1.8	8	1.8	2	-
<i>Mysidopsis bigelowi</i>	22	19.8	7	6.3	28	25.2	47	42.3	104	23.4	8	-
<i>Neomysis americana</i>	29	26.1	60	54.0	101	90.9	20	18.0	210	47.3	11	-
<i>Penaeidae mysis</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Crangon septemspinosa</i>	4	3.6	3	2.7	2	1.8	-	-	9	2.0	6	-
<i>Crangon septemspinosa mysis</i>	-	-	-	-	5	4.5	-	-	5	1.1	1	-
<i>Emerita talpoida zoea</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Pagurus longicarpus</i>	5	4.5	1	0.9	5	4.5	1	0.9	12	2.7	6	-
<i>Pagurus sp. zoea</i>	-	-	-	-	1	0.9	1	0.9	2	0.5	2	-
<i>Libinia emarginata</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
<i>Cancer irroratus</i>	1	0.9	21	18.9	1	0.9	-	-	24	5.4	3	-
<i>Cancer irroratus megalopa</i>	-	-	9	8.1	-	-	-	-	9	2.0	1	-
<i>Ovalipes ocellatus</i>	1	0.9	-	-	-	-	-	-	1	0.2	1	-
<i>Callinectes sapidus</i>	-	-	-	-	1	0.9	-	-	1	0.2	1	-
<i>Xanthidae zoea</i>	-	-	-	-	3	2.7	-	-	3	0.7	1	-
<i>Asterias forbesii</i>	-	-	-	-	6	5.4	1	0.9	7	1.6	2	-
<i>Ascidacea</i>	-	-	-	-	-	-	1	0.9	1	0.2	1	-
Unidentified fragments	-	-	-	-	fragments	-	-	-	fragments	-	1	-
No. Bivalvia	547	492.4	1994	1794.9	778	700.3	35	31.5	754.8	3354		
No. Polychaeta	400	360.1	1383	1244.9	1478	1330.5	361	325.0	815.1	3622		
No. Amphipoda	52	46.8	13	11.7	278	250.2	174	156.0	116.3	517		
No. Echinodermata	0	0.0	0	0.0	6	5.4	1	0.9	1.6	7		
No. Taxa	39	-	36	-	52	-	47	-	-	92		
No. Specimens	1138	1024.4	3613	3252.3	3068	2761.7	751	676.0	1928.6	8570		
Diversity Index ^e	2.12	-	1.84	-	1.92	-	2.17	-	-	2.00		

a See Table 164 for grain size classification.

b Number of specimens collected from 21 drops of the ponar grab. Yearly total represents 84 drops.

c Average number of specimens per m².

d Number of collections in which species appeared.

e Diversity Index is the average of the monthly diversity values.

Table 36. Number and weight of macroinvertebrates taken with a ponar grab by season approximately 300 yards E of F1 "96" in Little Egg Inlet, New Jersey in 1974.

Zone	WINTER				SPRING				SUMMER				FALL			
	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010
Depth (feet)	3-5	3-5	3-5	3-5	6-7	6-7	6-7	6-7	5-7	5-7	5-7	5	5	5	5	5
Air Temp. (C)	3.0-6.0	3.0-6.0	3.0-6.0	3.0-6.0	9.0-28.0	9.0-28.0	9.0-28.0	9.0-28.0	24.0-27.0	24.0-27.0	24.0-27.0	24.0-27.0	24.0-27.0	24.0-27.0	24.0-27.0	24.0-27.0
Temp. (C), surface	2.5-5.0	2.5-5.0	2.5-5.0	2.5-5.0	9.5-21.0	9.5-21.0	9.5-21.0	9.5-21.0	21.0-24.0	21.0-24.0	21.0-24.0	21.0-24.0	21.0-24.0	21.0-24.0	21.0-24.0	21.0-24.0
Temp. (C), bottom	2.5-5.0	2.5-5.0	2.5-5.0	2.5-5.0	9.0-22.0	9.0-22.0	9.0-22.0	9.0-22.0	21.0-23.5	21.0-23.5	21.0-23.5	21.0-23.5	21.0-23.5	21.0-23.5	21.0-23.5	21.0-23.5
Salinity (ppt), surface	27.0-29.5	27.0-29.5	27.0-29.5	27.0-29.5	28.0-30.5	28.0-30.5	28.0-30.5	28.0-30.5	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0
Salinity (ppt), bottom	27.0-29.5	27.0-29.5	27.0-29.5	27.0-29.5	28.0-30.5	28.0-30.5	28.0-30.5	28.0-30.5	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0	29.0-30.0
Oxygen (ppm), surface	10.0-11.0	10.0-11.0	10.0-11.0	10.0-11.0	6.3-8.5	6.3-8.5	6.3-8.5	6.3-8.5	5.3-8.2	5.3-8.2	5.3-8.2	5.3-8.2	5.3-8.2	5.3-8.2	5.3-8.2	5.3-8.2
Oxygen (ppm), bottom	10.0-11.0	10.0-11.0	10.0-11.0	10.0-11.0	6.2-9.0	6.2-9.0	6.2-9.0	6.2-9.0	5.2-8.2	5.2-8.2	5.2-8.2	5.2-8.2	5.2-8.2	5.2-8.2	5.2-8.2	5.2-8.2
Secchi (feet)	3.0-3.5	3.0-3.5	3.0-3.5	3.0-3.5	2.5-5.5	2.5-5.5	2.5-5.5	2.5-5.5	4.5-5.0	4.5-5.0	4.5-5.0	4.5-5.0	4.5-5.0	4.5-5.0	4.5-5.0	4.5-5.0
	n ^a	n/m ^{2b}	g x 10 ^{3c}	g x 10 ^{3/m^{2d}}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}
Porifera	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Hydractinia echinata	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Lovenella sp.	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Cerebratulus lacteus	-	-	-	-	-	-	-	-	-	-	-	-	2	3.8	71.52	135.20
Nemertea	-	-	-	-	4	5.0	0.75	0.95	15	18.9	8.42	10.61	1	1.9	0.74	1.40
Nematoda	-	-	-	-	present	-	-	-	present	-	-	-	present	-	-	-
Sagitta sp.	-	-	-	-	6	7.6	5.26	6.63	-	-	-	-	1	1.9	0.07	0.13
Crepidula fornicata	-	-	-	-	2	2.5	1.58	1.99	-	-	-	-	-	-	-	-
Crepidula convexa	-	-	-	-	1	1.3	1.26	1.59	-	-	-	-	-	-	-	-
Acanthodoris pilosa	-	-	-	-	2	2.5	0.68	0.86	-	-	-	-	-	-	-	-
Mytilus edulis	1	1.3	0.01	0.01	≈3649	4598.6	13180.77	16610.93	-	-	-	-	-	-	-	-
Spisula solidissima	6	7.6	3.19	4.02	122	153.7	274.13	345.47	58	73.1	140.30	176.81	2	3.8	2.80	5.29
Spisula solidissima ^e	1	1.3	11162.32	14067.20	fragment	-	6379.94	8040.25	-	-	-	-	-	-	-	-
Tellina agilis	1	1.3	0.69	0.87	68	85.7	12.98	16.36	252	317.6	123.41	155.52	1	1.9	1.04	1.97
Donax fossor	-	-	-	-	-	-	-	-	-	-	-	-	4	7.6	0.26	0.49
Ensis directus	-	-	-	-	-	-	-	-	1	1.3	0.25	0.32	-	-	-	-
Siliqua costata	-	-	-	-	1	1.3	1.17	1.47	-	-	-	-	-	-	-	-
Phyllodoce arenae	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9	0.05	0.09
Antinoella sarsi	-	-	-	-	1	1.3	≈ 0.14	0.18	-	-	-	-	-	-	-	-
Nephtys buccera	-	-	-	-	2	2.5	4.85	6.11	1	1.3	2.22	2.80	2	3.8	7.02	13.27
Nephtys picta	-	-	-	-	-	-	-	-	1	1.3	0.60	0.76	-	-	-	-
Caprellidae	1	1.3	0.07	0.09	1	1.3	0.22	0.28	18	22.9	2.09	2.63	-	-	-	-
•Scolecolepides viridis	-	-	-	-	-	-	-	-	30	37.8	16.55	20.86	3	5.7	4.85	9.17
Streblospio benedicti	1	1.3	0.32	0.40	-	-	-	-	17	21.4	15.92	20.06	-	-	-	-
Scolecopsis squamata	-	-	-	-	1	1.3	0.15	0.19	-	-	-	-	-	-	-	-
Polydora sp.	-	-	-	-	-	-	-	-	1	1.3	0.16	0.20	-	-	-	-
Paraonidae	-	-	-	-	-	-	-	-	2	2.5	0.19	0.24	-	-	-	-
Diopatra cuprea	-	-	-	-	-	-	-	-	1	1.3	107.14	135.02	-	-	-	-
Magelona rosea	-	-	-	-	1	1.3	0.45	0.57	29	36.5	10.75	13.55	21	39.7	27.03	51.10
Scoloplos sp.	-	-	-	-	1	1.3	2.10	2.65	2	2.5	0.78	0.98	1	1.9	5.40	10.21
Tharyx acutus	-	-	-	-	1	1.3	0.41	0.52	2	2.5	0.19	0.24	-	-	-	-
Asabellides oculata	-	-	-	-	-	-	-	-	11	13.9	5.33	6.72	-	-	-	-
Polychaeta	-	-	-	-	fragments	-	0.16	0.20	1, fragments	1.3	11.39	14.35	1, fragments	1.9	1.67	3.16
Calanoida	7	8.8	1.15	1.45	1	1.3	0.40	0.50	-	-	-	-	33	62.4	0.34	0.64
Cyclaspis varians	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9	4.05	7.66
Leptocuma minor	6	7.6	0.88	1.11	-	-	-	-	-	-	-	-	-	-	-	-
Oxyurostylis smithi	-	-	-	-	5	6.3	1.35	1.70	7	8.8	1.72	2.17	1	1.9	0.20	0.38
Cumacea	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9	0.09	0.17
Leptognatha caeca	-	-	-	-	-	-	-	-	-	-	-	-	3	5.7	0.11	0.21
Idotea baltica	-	-	-	-	1	1.3	0.43	0.54	-	-	-	-	-	-	-	-
Ampelisca abdita	-	-	-	-	-	-	-	-	3	3.8	0.37	0.47	-	-	-	-
Calliopius laevisculus	-	-	-	-	1	1.3	0.25	0.32	-	-	-	-	-	-	-	-
Corophium tuberculatum	-	-	-	-	-	-	-	-	3	3.8	0.34	0.43	-	-	-	-
Unciola irrorata	-	-	-	-	-	-	-	-	1	1.3	0.27	0.34	-	-	-	-
Elasmopus levis	-	-	-	-	1	1.3	1.45	1.83	-	-	-	-	-	-	-	-
Bathyporeia quoddyensis	41	51.7	10.29	12.97	3	3.8	1.17	1.47	7	8.8	1.31	1.65	5	9.5	1.04	1.97

Table 36. (cont.)

	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
<i>Protohaustorius deichmannae</i>	6	7.6	1.73	2.18	113	142.4	39.60	49.91	40	50.4	6.63	8.36	2	3.8	0.35	0.66
<i>Protohaustorius wigleyi</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9	0.15	0.28
<i>Parahaustorius longimerus</i>	34	42.8	18.58	23.42	20	25.2	27.21	34.29	39	49.1	29.24	36.85	94	177.7	49.14	92.89
<i>Parahaustorius holmesii</i>	-	-	-	-	-	-	-	-	1	1.3	0.08	0.10	1	1.9	0.12	0.23
<i>Parahaustorius attenuatus</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	2.8	10.44	19.74
<i>Parahaustorius sp.</i>	-	-	-	-	-	-	-	-	8	10.1	0.61	0.77	-	-	-	-
<i>Acanthohaustorius intermedius</i>	-	-	-	-	4	5.0	1.30	1.64	1	1.3	0.11	0.14	1	1.9	0.89	1.68
<i>Acanthohaustorius millsi</i>	10	12.6	6.14	7.74	42	52.9	34.76	43.81	117	147.4	48.92	61.65	47	88.8	19.83	37.49
<i>Jassa falcata</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9	0.20	0.38
<i>Orchomenella pinguis</i>	1	1.3	0.80	1.01	-	-	-	-	-	-	-	-	-	-	-	-
<i>Synchelidium americanum</i>	-	-	-	-	1	1.3	0.08	0.10	-	-	-	-	-	-	-	-
<i>Trichophoxus epistomus</i>	-	-	-	-	6	7.6	5.07	6.39	1	1.3	0.19	0.24	-	-	-	-
<i>Paraphoxus spinosus</i>	-	-	-	-	20	25.2	5.57	7.02	-	-	-	-	-	-	-	-
<i>Amphipoda</i>	-	-	-	-	-	-	-	-	fragments	-	0.69	0.87	-	-	-	-
<i>Caprella equilibra</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	2.8	0.71	1.34
<i>Caprella penantis</i>	-	-	-	-	1	1.3	0.98	1.24	-	-	-	-	-	-	-	-
<i>Mysidopsis bigelowi</i>	-	-	-	-	-	-	-	-	1	1.3	0.22	0.28	-	-	-	-
<i>Neomysis americana</i>	1	1.3	0.66	0.83	1	1.3	1.87	2.36	14	17.6	1.57	1.98	-	-	-	-
<i>Palaemonetes sp.</i>	-	-	-	-	-	-	-	-	2	2.5	0.66	0.83	-	-	-	-
<i>Crangon septemspinosa</i>	2	2.5	122.09	153.86	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	-	-	-	-	14	17.6	810.25	1021.11	7	8.8	1064.36	1341.35	-	-	-	-
<i>Pagurus sp. zoea</i>	-	-	-	-	-	-	-	-	2	2.5	0.01	0.01	-	-	-	-
<i>Emerita talpoida</i>	-	-	-	-	-	-	-	-	1	1.3	0.67	0.84	-	-	-	-
<i>Cancer irroratus</i>	-	-	-	-	49	61.8	106.14	133.76	-	-	-	-	-	-	-	-
<i>Cancer irroratus megalopa</i>	-	-	-	-	1	1.3	0.56	0.71	-	-	-	-	-	-	-	-
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	-	-	1	1.3	0.84	1.06	-	-	-	-
<i>Xanthidae zoea</i>	-	-	-	-	-	-	-	-	1	1.3	0.01	0.01	-	-	-	-
<i>Hippocampus erectus</i> ^e	-	-	-	-	-	-	-	-	1	1.3	-	-	-	-	-	-
Fragment	-	-	-	-	-	-	-	-	-	-	-	-	present	-	122.63	231.81
Fish fragment ^e	-	-	-	-	-	-	-	-	-	-	-	-	present	-	4.61	8.71
No. Bivalvia	8	10.1	3.89	4.90	≈3840	4839.3	13469.05	16974.23	311	391.9	263.96	332.65	7	13.2	4.10	7.75
No. Polychaeta	2	2.5	0.39	0.49	8	10.1	≈ 8.48	10.69	116	146.2	173.31	218.41	29	54.8	46.02	86.99
No. Amphipoda	92	115.9	37.54	47.31	211	265.9	116.46	146.77	221	278.5	88.76	111.86	154	291.1	82.16	155.31
No. Echinodermata	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
No. Taxa	15	-	-	-	34	-	-	-	38	-	-	-	27	-	-	-
No. Specimens	118	148.7	166.60	209.96	≈4147	5226.2	≈14525.50	18305.61	699	880.9	1604.51	2022.07	235	444.2	332.74	629.00
Diversity Index	1.24	-	-	-	0.98	-	-	-	1.68	-	-	-	1.57	-	-	-

a Number of specimens collected from 15 drops of the ponar grab in winter, spring, summer and from 10 in fall.

b Average number of specimens per m².

c Weight of specimens collected from 15 drops of the ponar grab in winter, spring, summer and from 10 in the fall.

d Average weight of specimens per m².

e Not included in totals.

Table 36. (cont.)

		TOTAL					
Zone				1010			
Depth (feet)				3-7			
Air Temp. (C)				3.0-28.0			
Temp. (C), surface				2.5-24.0			
bottom				2.5-23.5			
Salinity (ppt), surface				27.0-30.5			
bottom				27.0-30.5			
Oxygen (ppm), surface				5.3-11.0			
bottom				5.2-11.0			
Secchi (feet)				2.5-5.5			
	n ^b	n/m ^{2c}	g x 10 ^{3d}	g x 10 ^{3/m^{2c}}	ft	No. Rank	Wt. Rank
Porifera	present	-	-	-	1	-	-
Hydractinia echinata	present	-	-	-	1	-	-
Lovenella sp.	present	-	-	-	1	-	-
Cerebratulus lacteus	2	0.7	71.52	24.58	1	-	-
Nemertea	20	6.9	9.91	3.41	6	-	-
Nematoda	present	-	-	-	3	-	-
Sagitta sp.	7	2.4	5.33	1.83	2	-	-
Crepidula fornicata	2	0.7	1.58	0.54	1	-	-
Crepidula convexa	1	0.3	1.26	0.43	1	-	-
Acanthodoris pilosa	2	0.7	0.68	0.23	2	-	-
Mytilus edulis	~3650	1254.5	13180.78	1093.24	3	1	1
Spisula solidissima	188	64.6	420.42	144.50	11	4	3
Spisula solidissima ^e	1, fragment	0.3	17542.26	6029.30	2	-	-
Tellina agilis	322	110.7	138.12	47.47	6	2	4
Donax fossor	4	1.4	0.26	0.09	1	-	-
Ensis directus	1	0.3	0.25	0.09	1	-	-
Siliqua costata	1	0.3	1.17	0.40	1	-	-
Phyllodoce arenae	1	0.3	0.05	0.02	1	-	-
Antinoella sarsi	1	0.3	~ 0.14	0.05	1	-	-
Nephtys bucera	5	1.7	14.09	4.84	4	-	-
Nephtys picta	1	0.3	0.60	0.21	1	-	-
Capitellidae	20	6.9	2.38	0.82	4	-	-
Scolecoclepidus viridis	33	11.3	21.40	7.36	3	-	-
Streblospio benedicti	18	6.2	16.24	5.58	2	-	-
Scolecopsis squamata	1	0.3	0.15	0.05	1	-	-
Polydora sp.	1	0.3	0.16	0.05	1	-	-
Paraonidae	2	0.7	0.19	0.07	2	-	-
Diopatra cuprea	1	0.3	107.14	36.82	1	-	9
Magelona rosea	51	17.5	38.23	13.14	5	8	-
Scoloplos sp.	4	1.4	8.28	2.85	4	-	-
Tharyx acutus	3	1.0	0.60	0.21	2	-	-
Asabellides oculata	11	3.8	5.33	1.83	1	-	-
Polychaeta	2, fragments	0.7	13.22	4.54	5	-	-
Calanoida	41	14.1	1.89	0.65	33	10	-
Cyclaspis varians	1	0.3	4.05	1.39	1	-	-
Leptocuma minor	6	2.1	0.88	0.30	1	-	-
Oxyurotylis smithi	13	4.5	3.27	1.12	4	-	-
Cumacea	1	0.3	0.09	0.03	1	-	-
Leptognatha caeca	3	1.0	0.11	0.04	2	-	-
Idotea baltica	1	0.3	0.43	0.15	1	-	-
Ampelisca abdita	3	1.0	0.37	0.13	1	-	-
Calliopius laevisculus	1	0.3	0.25	0.09	1	-	-
Corophium tuberculatum	3	1.0	0.34	0.12	1	-	-
Unciola irrorata	1	0.3	0.27	0.09	1	-	-
Elasmopus levis	1	0.3	1.45	0.50	1	-	-
Bathyporeia quoddyensis	56	19.2	13.81	4.75	8	7	-

Table 36.. (cont.)

	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	f	No. Rank	Wt. Rank
Protohaustorius deichmannae	161	55.3	48.31	16.60	9	6	-
Protohaustorius wigleyi	1	0.3	0.15	0.05	1	-	-
Parahaustorius longimerus	187	64.3	124.17	42.68	9	5	5
Parahaustorius holmesi	2	0.7	0.20	0.07	2	-	-
Parahaustorius attenuatus	2	0.7	10.44	3.59	2	-	-
Parahaustorius sp.	8	2.7	0.61	0.21	1	-	-
Acanthohaustorius intermedius	6	2.1	2.30	0.79	3	-	-
Acanthohaustorius millsi	216	74.2	109.65	37.69	11	3	8
Jassa falcata	1	0.3	0.20	0.07	1	-	-
Orchomenella pinguis	1	0.3	0.80	0.27	1	-	-
Synchelidium americanum	1	0.3	0.08	0.03	1	-	-
Trichophoxus epistomus	7	2.4	5.26	1.81	3	-	-
Paraphoxus spinosus	20	6.9	5.57	1.91	1	-	-
Amphipoda	fragments	-	0.69	0.24	1	-	-
Caprella equilibra	2	0.7	0.71	0.24	1	-	-
Caprella penantis	1	0.3	0.98	0.34	1	-	-
Mysidopsis bigelowi	1	0.3	0.22	0.08	1	-	-
Neomysis americana	16	5.5	4.10	1.41	3	-	-
Palaemonetes sp.	2	0.7	0.66	0.23	1	-	-
Crangon septemspinosa	2	0.7	122.09	41.96	1	-	7
Pagurus longicarpus	21	7.2	1874.61	644.31	3	-	2
Pagurus sp. zoea	2	0.7	0.01	0.00	1	-	-
Emerita talpoida	1	0.3	0.67	0.23	1	-	-
Cancer irroratus	49	16.8	106.14	36.48	1	9	10
Cancer irroratus megalopa	1	0.3	0.56	0.19	1	-	-
Ovalipes ocellatus	1	0.3	0.84	0.29	1	-	-
Xanthidae zoea	1	0.3	0.01	0.00	1	-	-
Hippocampus erectus ^e	1	0.3	-	-	1	-	-
Fragment	present	-	122.63	42.15	2	-	6
Fish fragment ^e	present	-	4.61	1.58	1	-	-
No. Bivalvia	~4166	1431.9	13741.00	4722.80			
No. Polychaeta	155	53.3	~228.20	78.43			
No. Amphipoda	678	233.0	324.92	111.68			
No. Echinodermata	00	0.0	0.00	0.00			
No. Taxa	-	-	-	-			
No. Specimens	~5199	1786.9	~16629.35	5715.54			
Diversity Index	1.35						

a Number of specimens collected from 55 drops of the ponar grab.

b Average number of specimens per m².

c Weight of specimens collected from 55 drops of the ponar grab.

d Average weight of specimens per m².

e Not included in totals.

Table 37. Yearly number per m² of the most abundant species (top 3 ranking species at each station) collected with the ponar grab in the vicinity of Little Egg Inlet, New Jersey in 1974.

Zone	5158	5152	5258	5255	5254	5252	5161	5143	5180	5282	Total Ocean	Rank Ocean	("F" buoy)			Total Inlet	Rank Inlet	Grand Total	Rank
Mytilus edulis	present	present	-	present	-	present	present	present	-	-	present	-	1255	2975	123	4353	1	present	-
Spisula solidissima	207	154	52	84	53	18	185	465	290	14	1522	5	65	18	23	106	5	1628	4
Tellina agilis	213	282	1731	188	232	5	232	267	86	58	3294	2	111	5	44	160	4	3454	2
Glycera capitata	1	1	1	6	11	64	1	9	-	-	94	12	-	-	-	-	-	94	13
Goniadella gracilis	+ ^a	-	1	69	14	10	-	-	-	34	128	11	-	-	-	-	-	128	12
Capitellidae	22	222	4064	164	1	5	91	257	19	-	4845	1	7	-	-	7	11	4852	1
Scolecoplepides viridis	25	95	18	316	298	1	28	159	31	10	981	6	11	-	-	11	10	992	6
Magelona rosea	47	8	24	53	146	-	15	10	11	7	321	9	18	2	2	22	7	343	10
Asabellides oculata	2	65	1463	66	120	-	88	134	82	4	2024	3	4	-	-	4	12	2023	3
Gammarus lawrencianus	355	6	-	1	-	-	5	1	-	-	368	8	-	-	19	19	9	387	9
Protohaustorius deichmannae	530	126	8	31	137	1	538	93	95	3	1562	4	55	1	5	61	6	1623	5
Protohaustorius wigleyi	-	-	20	6	-	3	-	+	-	62	91	13	+	-	-	+	13	91	14
Parahaustorius longimerus	10	-	-	-	-	-	+	-	-	1	11	15	64	151	113	328	2	339	11
Acanthohaustorius millsi	114	6	18	13	19	-	62	4	-	16	252	10	74	72	80	226	3	478	8
Neomysis americana	52	47	132	54	30	31	180	47	22	32	627	7	6	10	4	20	8	647	7
Perophora viridis	-	-	-	+	-	23	-	-	-	-	23	14	-	-	-	-	-	23	15
Total Bivalvia	457	450	1852	327	336	24	427	755	383	72	5083		1432	3001	193	1629		6712	
Total Polychaeta	195	458	5743	381	760	104	300	815	178	121	9055		53	4	28	89		9144	
Total Amphipoda	1029	152	138	96	207	34	706	116	101	93	2672		233	276	279	603		3275	
Total Echinodermata	0	0	0	0	7	1	1	2	1	0	12		0	0	0	0		12	
Total Specimens	1838	1188	8245	1307	1454	265	1815	1929	764	399	19204		1787	3325	529	2422		21626	

a + = Signifies the number per m² is less than 0.5.

Table 38. Grain size analysis of sediment samples taken in the vicinity of the Site in 1974.

ZONE 5143												
Collection Number	EVG-74-011	EVG-74-020	EVG-74-038	EVG-74-050	JJH-74-052	JJH-74-076	EVG-74-068	JJH-74-088	EVG-74-092	EVG-74-099	JJH-74-149	
Sample Number	05740125D	05740213A	05740325A	05740426A	05740523A	05740614A	05740715A	05740829A	05740923A	05741011A	05741115A	
Sediment Type	VFS	VFS	VFS/VFS	VFS	FS+VFS	VFS/VFS	FS+VFS	FS+VFS	FS+VFS	FS+VFS	FS+VFS	
Mean	3.00	2.95	3.43	3.18	2.90	3.08	2.98	2.73	3.02	2.65	2.96	
Standard Deviation	0.25	0.32	0.32	0.35	0.27	0.41	0.35	0.62	0.48	0.60	0.51	
Median	3.00	3.00	3.35	3.15	2.85	2.95	2.90	2.77	2.94	2.77	2.96	
Sorting	Good	Good	Good	Good	Good	Good	Good	Moderate	Good	Moderate	Moderate	
Mode	3.25	3.10	3.30/3.65	3.00	3.00	3.0/3.5	3.00	3.00	3.00	3.00	3.00	
% Silt	2.05	1.51	5.07	5.78	2.62	9.13	3.21	3.30	7.38	3.50	5.19	
ZONE 5152												
Collection Number	EVG-74-010	EVG-74-021	EVG-74-040	EVG-74-052	JJH-74-054	JJH-74-079	EVG-74-070	JJH-74-090	EVG-74-094	EVG-74-102	JJH-74-151	EVG-74-115
Sample Number	05740125B	05740213C	05740325C	05740426C	05740523C	05740614D	05740715C	05740829C	05740923C	05741011C	05741115C	05741213B
Sediment Type	MS	MS	MS	VFS	VFS	FS+VFS	FS+VFS	FS+VFS	FS+VFS	FS+VFS	FS+VFS	FS+VFS
Mean	2.81	1.10	1.28	2.83	3.66	3.01	2.54	3.11	3.19	3.00	3.04	2.99
Standard Deviation	0.70	0.27	0.40	0.55	0.35	0.41	0.55	0.34	0.36	0.35	0.33	0.39
Median	2.85	1.05	1.35	2.90	3.10	2.94	2.62	3.04	3.19	2.94	2.96	2.93
Sorting	Good	Good	Good	Good	Good	Good	Moderate	Good	Good	Good	Good	Good
Mode	1.24	1.25	1.45	3.10	3.10	3.00	2.75	3.00	3.00	3.00	3.00	3.00
% Silt	1.24	0.33	2.42	1.49	3.79	5.07	0.92	8.10	10.20	4.47	4.27	5.13
ZONE 5161												
Collection Number	EVG-74-009	EVG-74-025	EVG-74-042	EVG-74-056	JJH-74-058	JJH-74-080	EVG-74-072	JJH-74-092	EVG-74-096	EVG-74-104	JJH-74-153	
Sample Number	05740125A	05740213F	05740325E	05740426F	05740523G	05740614E	04750715E	05740829E	05740923E	05741011G	05741115E	
Sediment Type	VFS	FS+VFS	VFS	VFS	VFS	FS+VFS	FS+VFS	VFS+FS	FS	FS+VFS	FS+VFS	
Mean	3.30	3.16	3.01	3.01	3.30	3.00	2.90	2.91	2.69	2.94	2.98	
Standard Deviation	0.25	0.55	0.42	0.75	0.37	0.40	0.33	0.63	0.54	0.43	0.41	
Median	3.10	3.10	3.00	3.00	3.15	2.94	2.87	2.90	2.78	2.87	2.93	
Sorting	Good	Good	Good	Moderate	Good	Good	Good	Moderate	Moderate	Good	Good	
Mode	3.25	3.00	3.10	3.10	3.35	3.00	3.00	3.00	3.00	3.00	3.00	
% Silt	0.67	3.64	1.74	1.83	4.99	4.31	2.37	6.37	2.05	5.46	4.71	
ZONE 5158												
Collection Number	EVG-74-008	EVG-74-039	EVG-74-051	JJH-74-053	JJH-74-078	EVG-74-069	JJH-74-089	EVG-74-093	EVG-74-100	JJH-74-150	EVG-74-113	
Sample Number	05740125C	05740325B	05740426B	05740523B	05740614C	05740715B	05740829B	05740923B	05741011B	05741115B	05741213A	
Sediment Type	FS+VFS	VFS	FS+VFS	VFS	FS	FS	FS+VFS	FS+VFS	FS	FS+VFS	FS	
Mean	2.86	3.28	3.18	3.13	2.75	2.57	3.01	2.97	2.76	2.66	2.68	
Standard Deviation	0.30	0.95	0.37	0.30	0.31	0.38	0.31	0.37	0.34	0.31	0.34	
Median	2.80	3.30	3.60	3.10	2.74	2.59	2.93	2.91	2.72	2.65	2.68	
Sorting	Good	Moderate	Good	Good	Good	Good	Good	Good	Good	Good	Good	
Mode	3.00	3.40	3.00	3.10	2.75	2.75	3.00	3.00	2.75	2.75	2.75	
% Silt	1.26	4.23	1.50	2.98	0.69	0.26	3.10	4.75	0.95	0.60	0.54	
ZONE 5254												
Collection Number	EVG-74-023	JJH-74-057	JJH-74-093	JJH-74-154	ZONE 5252							
Sample Number	05740213D	05740523F	05740829F	05741115F	EVG-74-014	EVG-74-054	EVG-74-073	EVG-74-105	EVG-74-013	EVG-74-055	EVG-74-071	EVG-74-106
Sediment Type	CS	MS	FS+VFS	FS	MS	CS	CS	CS+MS	MS+FS	CS	FS+VFS	MS
Mean	0.91	1.31	2.50	2.49	1.11	1.50	0.93	1.15	2.30	1.00	2.22	1.58
Standard Deviation	0.75	0.65	0.48	0.45	0.20	0.47	0.59	0.52	0.75	0.75	1.02	0.10
Median	0.75	1.25	2.53	2.51	1.10	0.80	0.96	1.18	2.20	0.90	2.52	1.58
Sorting	Moderate	Good	Good	Good	Good	Good	Moderate	Moderate	Moderate	Moderate	Poor	Good
Mode	0.85	1.30	2.75	2.75	1.25	0.90	1.00	1.25	2.00	0.75	3.00	1.75
% Silt	0.29	1.97	0.77	3.22	0	0	0	0	3.60	3.73	4.77	0.78

Table 38. (cont.)

ZONE 5255												
Collection Number	EVG-74-012	EVG-74-024	EVG-74-041	EVG-74-053	JJH-74-055	JJH-74-077	EVG-74-075	JJH-74-091	EVG-74-095	EVG-74-103	JJH-74-152	EVG-74-114
Sample Number	05740125F	05740213E	05740325D	05740426D	05740523D	05740614B	05740715H	05740829D	05740923D	05741011E	05741115D	05741213C
Sediment Type	CZ	MS	MS	CS+MS	CS	CS+MS	MS	FS+VFS	MS	FS	FS	FS
Mean	3.00	1.81	2.17	1.66	1.13	1.19	1.91	2.43	1.36	2.38	2.58	2.38
Standard Deviation	0.75	0.84	0.95	0.52	0.62	0.74	0.60	0.47	0.76	0.51	0.50	0.56
Median	3.00	1.50	2.15	0.85	1.15	1.12	1.87	2.50	1.38	2.44	2.63	2.43
Sorting	Good	Moderate	Moderate	Good	Good	Moderate	Moderate	Good	Moderate	Moderate	Moderate	Moderate
Mode	4.50	1.65	1.40	1.00	0.90	1.00	1.75	2.75	1.75	2.75	2.75	2.75
% Silt	18.62	0.18	0.16	0.06	0.19	0.04	0.23	1.31	0.22	0.43	3.43	1.16

ZONE 5180				ZONE 5282			
Collection Number	EVG-74-044	JJH-74-082	EVG-74-098	EVG-74-043	JJH-74-081	EVG-74-097	EVG-74-116
Sample Number	05740325G	05740614G	05740923G	05740325F	05740614F	05740923F	05741213D
Sediment Type	FS	FS+VFS	FS	MS/MS	MS	MS	MS
Mean	3.00	2.70	2.90	1.80	1.11	1.55	1.65
Standard Deviation	0.55	0.74	0.55	0.50	0.66	0.56	0.49
Median	2.90	2.78	2.80	1.10	1.12	1.55	1.65
Sorting	Good	Moderate	Moderate	Good	Moderate	Moderate	Good
Mode	2.90	3.00	2.75	1.70/1.30	1.25	1.75	1.75
% Silt	1.91	3.52	5.73	0.05	0.06	0.09	0.16

Table 39. Macroscopic gonad condition for the Atlantic surf clam.

<u>GONAD STAGE</u>	<u>EXTERNAL FEATURES</u>
1. Ripe	Gonad is large, thick (turgid), opaque and swollen with gametes.
2. Partially Spent	Gonad is slightly flacid and contains water and gametes. A layer of gametes, that varies from barely visible to about 3/4 the expected thickness of a ripe gonad, surrounds the digestive gland.
3. Spent	Gonad is flacid, slightly transparent, thin and no gametes are visible.
4. Refilling	Gonad is quite large, contains water and gametes. Easy to confuse with 2 except for time of year.

Table 40. Number of Atlantic surf clam, taken in successive replicate tows of a clam dredge in the vicinity of the Site in 1974.

Station	Zone	Duration of Tow (min)	Tow		Average	Difference	Difference	
			#1	#2			Average	100
Landward of Site	5258	15	4	1	2.5	3	120	
Landward of Site	5258	15	10	7	8.5	3	35	
Landward of Site	5258	15	24	19	21.5	3	23	
Site	5255	15	0	0	0	0	0	
Site	5255	15	0	1	0.5	1	200	
North of Site	5143	15	4	14	9.0	10	111	
Brigantine I	5150	15	2	3	2.5	1	40	
Brigantine II	5282	15	2	2	2.0	0	0	
Ridge	5252	15	5	4	4.5	1	22	
Ridge	5252	15	6	1	3.5	5	143	
Landward II	5152	15	25	48	36.5	23	63	
Landward II	5152	15	62	37	49.5	25	51	
Landward II	5152	15	53	34	43.5	19	44	
Landward I	5158	15	31	14	22.5	17	76	
Landward I	5158	15	59	65	62.0	6	10	
Landward I	5158	15	400	325	362.5	75	21	
"F" - buoy	1010	5	0	2	1.0	2	200	
"F" - buoy	1010	5	13	1	7.0	12	171	
Off Little Beach	1020	5	0	2	1.0	2	200	
Off Little Beach	1020	5	3	9	6.0	6	100	
"G" - buoy	1010	5	116	142	129.0	26	20	
"G" - buoy	1010	5	49	84	66.5	35	53	
"G" - buoy	1010	5	51	52	51.5	1	2	

Table 41. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge in the vicinity of the Site off Little Egg Inlet, New Jersey by season in 1974.*

	Winter					Spring					Summer					Fall					Total					No. Rank	Wt. Rank
Depth Range (feet)	14-38					15-35					14-42					13-14					13-42						
Salinity Range (ppt) surface	28.0-30.0					27.0-30.0					29.0-30.5					30.0-30.5					27.0-30.5						
bottom	29.0-30.0					29.5-30.5					29.0-31.0					30.0-30.5					29.0-31.0						
Temperature Range (C) surface	3.0-7.0					7.0-21.0					19.0-24.0					10.0-16.0					3.0-24.0						
bottom	4.0-7.0					6.8-19.0					18.0-23.0					10.0-16.0					4.0-23.0						
air	1.0-10.0					8.5-24.0					18.0-25.0					8.0-17.0					1.0-25.0						
Oxygen Range (ppm) surface	10.2-11.6					6.6-11.2					6.9-9.6					7.8-8.8					6.6-11.6						
bottom	10.2-11.4					6.2-10.9					6.6-9.4					7.6-8.9					6.2-11.4						
Secchi Range (feet)	3.0-17.0					3.5-12.0					3.0-24.0					4.0-5.0					3.0-24.0						
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	Rank	Rank
Unsegmented worm	-	-	-	-	-	1	*	1	*	1	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1		
Hydractinia echinata	present	-	-	-	1	present	-	-	-	2	present	-	-	5	-	-	-	present	-	-	-	-	-	-	-	8	
Actinaria	7	*	64	3	4	-	-	-	-	-	3	*	54	2	3	-	-	10	*	118	1	7					
Nemertea	1	*	1	*	1	-	-	-	-	-	-	-	-	-	-	1	*	+	2	*	1	*	2				
Crepidula plana	present	-	-	-	1	present	-	-	-	2	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	3	
Polinices duplicata	48	3	1246	66	15	90	3	1765	61	20	171	6	4681	156	24	8	3	274	91	2	317	4	7966	98	61	3	
Polinices heros	23	1	433	23	13	20	1	654	23	13	22	1	324	11	17	1	*	5	2	1	66	1	1416	17	44		
Polinices sp. egg case	-	-	-	-	-	-	-	-	-	-	present	-	-	4	-	-	-	present	-	-	-	-	-	-	-	4	
Nassarius trivittatus	7	*	7	*	3	5	*	6	*	3	12	*	12	*	12	2	1	2	1	1	26	*	27	*	19		
N. trivittatus egg case	-	-	-	-	-	-	-	-	-	-	present	-	-	1	-	-	-	present	-	-	-	-	-	-	-	1	
Mercenaria mercenaria	-	-	-	-	-	1	*	23	1	1	-	-	-	-	-	-	-	1	*	23	*	1					
Pitar morrhuana	1	*	28	1	1	-	-	-	-	-	3	*	76	3	3	-	-	4	*	104	1	4					
Spisula solidissima	653	34	114056	6003	16	568	20	105642	3643	26	1417	47	182223	607	29	470	157	51942	17314	3	3108	38	453863	5603	74	1	1
Ensis directus	-	-	-	-	-	-	-	-	-	-	8	*	20	1	6	-	-	8	*	20	*	6					
Siliqua costata	-	-	-	-	-	1	*	7	*	1	4	*	3	*	3	-	-	5	*	10	*	4					
Sigalion arenicola	2	*	1	*	2	4	*	1	*	3	3	*	1	*	1	-	-	9	*	3	*	6					
Sigalionidae	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	-	-	1	*	+	-	1					
Glycera americana	-	-	-	-	-	-	-	-	-	-	2	*	1	*	2	-	-	2	*	1	*	2					
Glycera dibranchiata	8	*	14	1	4	2	*	3	*	3	1	*	1	*	1	-	-	11	*	18	*	8					
Glycera sp.	-	-	-	-	-	fragment	-	+	-	1	6	*	2	*	4	2	1	1	*	1	8	*	3	*	6		
Nephtys buccera	5	*	9	*	3	10	*	23	1	6	6	*	7	*	3	1	*	+	-	1	22	*	39	*	13		
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	6	*	3	*	4	-	-	6	*	3	*	4					
Capitellidae	2	*	+	g	1	-	-	-	-	-	-	-	-	-	-	-	-	2	*	+	-	1					
Ophelia denticulata	14	1	28	1	2	3	*	16	1	1	-	-	-	-	-	-	-	17	*	44	1	3					
Diopatra cuprea	3	*	7	*	2	9	*	13	*	4	4	*	6	*	3	-	-	16	*	26	*	9					
Lumbrineris fragilis	13	1	5	*	4	15	1	8	*	4	18	1	9	*	5	-	-	46	1	22	*	13					
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	2	*	1	*	2	-	-	2	*	1	*	2					
Arabella iricolor	1	*	+	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1					

Table 41.. (cont.)

	Winter					Spring					Summer					Fall					Total				No. Wt.		
	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	Rank	Rank
Orbinia swani	1	*	+	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1		
Scoloplos robustus	4	*	4	*	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	*	4	*	3		
Scoloplos sp.	-	-	-	-	-	-	-	-	-	-	fragment	-	+	-	1	-	-	-	-	-	fragment	-	+	-	1		
Ampharetidae	-	-	-	-	-	1	*	+	-	3	7	*	+	-	2	-	-	-	-	-	8	*	+	-	5		
Polychaeta	-	-	-	-	-	-	-	-	-	-	fragment	-	+	-	1	-	-	-	-	-	fragment	-	+	-	1		
Limulus polyphemus	-	-	-	-	-	2	*	650	22	2	7	*	9900	330	7	1	*	80	27	1	10	*	10630	131	10	-	2
Cirolana concharum	-	-	-	-	-	1	*	+	-	1	1	*	+	-	1	-	-	-	-	-	2	*	+	-	2		
Crangon septemspinosa	1	*	1	*	1	-	-	-	-	-	1	*	2	*	1	-	-	-	-	-	2	*	3	*	2		
Pagurus longicarpus	41	2	16	1	1	5	*	4	*	4	27	1	32	1	10	-	-	-	-	-	73	1	52	1	15	5	-
Pagurus pollicaris	2	*	5	*	1	6	*	53	2	3	4	*	77	3	4	-	-	-	-	-	12	*	135	2	8		
Libinia emarginata	1	*	75	4	1	4	*	373	13	4	1	*	8	*	1	-	-	-	-	-	6	*	456	6	6		
Cancer irroratus	48	3	3126	165	12	6	*	599	21	4	8	*	15	1	6	-	-	-	-	-	62	1	3740	46	22	-	4
Ovalipes ocellatus	39	2	1404	74	4	25	1	984	34	12	13	*	524	17	5	12	4	245	82	3	89	1	3157	39	24	4	5
Echinarachnius parma	411	22	2756	145	3	29	1	200	7	4	12	*	52	2	5	-	-	-	-	-	452	6	3008	37	12	2	-
Asterias forbesii	2	*	4	*	2	4	*	12	*	4	8	*	21	1	6	1	*	10	3	1	15	*	47	1	13		
No. Gastropoda	78	4	1686	89		115	4	2425	84		205	7	5017	167		11	4	281	94		409	5	9409	116			
No. Bivalvia	654	34	114084	6004		570	20	105672	3644		1432	48	182322	6077		470	157	51942	17314		3126	39	454020	5605			
No. Decapoda	132	7	4627	244		46	2	2013	69		54	2	658	22		12	4	245	82		244	3	7543	93			
Total taxa	21					26					32					10					41						
Total specimens	1338	70	123290	6489		812	28	111037	3829		1778	59	198055	6602		499	166	52559	17520		4427	55	484941	5987			
No. collections	19					29					30					3					81						

* Seasonal totals are given for winter (January - March), spring (April - June), summer (July - September), and fall (October - December).

a n = Number of specimens collected for a season.

b n/coll = Average number of specimens per collection.

c wt = Weight of specimens collected for a season.

d wt/coll = Average weight of specimens per collection.

e f = Number of collections in which species appeared.

f * = Signifies the number is less than 0.5.

g + = Signifies the weight is less than 0.5g.

Table 42. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 1.7 nautical miles E of Little Egg Inlet, New Jersey by season in 1974.

Table 42. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of 1.5-m diameter dredge																												
		WINTER					SPRING					SUMMER					FALL					TOTAL						
		14-18					15-20					14-16					13-14					13-20						
Depth Range (feet)		28.0-30.0					27.0-30.0					29.0-30.0					30.0-30.5					27.0-30.5						
Salinity Range (ppt) surface		28.0-30.0					27.0-30.0					29.0-30.5					30.0-30.5					29.0-30.5						
bottom		29.5-30.0					30.0-30.5					19.0-22.0					10.0-16.0					3.5-22.0						
Temperature Range (C) surface		3.5-6.5					7.5-20.0					18.5-22.0					10.0-16.0					4.0-22.0						
bottom		4.0-6.0					7.0-18.0					19.0-22.5					8.0-17.0					1.0-24.0						
air		1.0-9.5					10.0-24.0					7.4-9.6					7.8-8.8					6.6-10.8						
Oxygen Range (ppm) surface		10.2-10.8					6.6-10.0					6.9-9.0					7.6-8.9					6.8-11.4						
bottom		10.2-11.4					6.8-10.1					3.0-6.5					4.0-5.0					3.0-12.0						
Secchi Range (feet)		4.0-4.5					3.5-12.0					3.0-6.5					4.0-5.0					3.0-12.0						
		n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	Rank	Wt. Rank
Hydractinia echinata		-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	present	-	-	-	-	2	
Nemertea		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	1	-	-	-	-	1		
Polinices duplicata		7	2	187	82	2	26	5	280	56	4	12	2	335	67	4	8	3	274	91	2	53	3	1076	67	12	2	4
Polinices heros		4	1	69	23	2	2	*	16	3	1	3	1	15	3	3	1	*	5	2	1	10	1	105	7	7		
Nassarius trivittatus		-	-	-	-	-	2	*	2	*	1	-	-	-	-	-	2	1	2	1	2	4	*	4	*	3		
Spisula solidissima		399	133	64154	21385	3	262	52	47527	9505	5	893	179	103765	20753	5	470	157	51942	17314	3	2024	127	267388	16712	16	1	1
Glycera dibranchiata		2	1	3	1	2	2	*	2	*	2	-	-	-	-	-	-	-	-	-	-	4	*	5	*	4		
Glycera sp.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	*	1	2	*	1	*	1		
Nephtys buccera		2	1	2	1	1	1	*	+	g	1	1	*	+	1	1	1	*	+	-	1	5	*	2	*	4		
Diopatra cuprea		1	*f	2	1	1	-	-	-	-	-	1	*	2	*	1	-	-	-	-	-	2	*	4	*	2		
Ampharetidae		-	-	-	-	-	present	-	-	-	1	-	-	-	-	-	-	-	-	-	present	-	-	-	-	1		
Limulus polyphemus		-	-	-	-	-	1	*	150	30	1	2	*	4000	800	2	1	*	80	27	1	4	*	4230	264	4	-	2
Crangon septemspinosa		1	*	1	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1		
Pagurus longicarpus		-	-	-	-	-	1	*	76	15	1	-	-	-	-	-	-	-	-	-	-	15	1	11	1	4		
Libinia emarginata		-	-	-	-	-	1	*	68	14	1	2	*	9	2	2	-	-	-	-	-	1	*	76	5	1		
Cancer irroratus		6	2	542	181	1	1	*	93	19	2	1	*	29	6	1	12	4	245	82	3	46	3	1362	85	8	3	3
Ovalipes ocellatus		30	10	995	332	2	3	1	93	19	2	1	*	2	*	1	1	*	10	3	1	4	*	19	1	4		
Asterias forbesii		-	-	-	-	-	2	*	7	1	2	1	*	2	*	1	1	*	10	3	1	4	*	19	1	4		
No. Gastropoda		11	4	256	85		30	6	298	60		15	3	350	70		11	4	281	94		67	4	1185	74			
No. Bivalvia		399	133	64154	21385		262	52	47527	9505		893	179	103765	20753		470	157	51942	17314		2024	127	267388	16712			
No. Decapoda		37	12	1538	513		6	1	238	48		17	3	48	10		12	4	245	82		72	5	2069	129			
Total taxa		9					13					11					10					18						
Total specimens		452	151	65955	21985		304	61	48222	9644		930	186	108167	21633		499	166	52559	17520		2185	137	274903	17181			
No. collections		3					5					5					3					16						

- a n = Number of specimens collected for a season.
b n/coll = Average number of specimens per collection.
c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection.
e f = Number of collections in which species appeared.
f * = Signifies the number is less than 0.5.
g + = Signifies the weight is less than 0.5g.

Table 43. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.0 nautical miles E of Little Egg Inlet, New Jersey by season in 1974.

	WINTER					SPRING					SUMMER					TOTAL						
Depth Range (feet)	20-27					20-26					22-25					20-27						
Salinity Range (ppt), surface	28.5-29.5					28.0-30.0					29.0-30.0					28.0-30.0						
bottom	29.0-30.0					30.0-30.5					29.5-30.0					29.0-30.5						
Temperature Range (C), surface	3.0-6.0					7.8-20.0					20.0-22.0					3.0-22.0						
bottom	4.0-6.0					7.0-18.0					18.5-22.0					4.0-22.0						
air	1.0-9.0					11.0-24.0					19.0-22.5					1.0-24.0						
Oxygen Range (ppm), surface	10.2-11.6					6.7-10.8					7.6-8.0					6.7-11.6						
bottom	10.6-11.2					6.8-10.8					6.8-8.4					6.8-11.2						
Secchi Range (feet)	3.0-10.0					3.5-8.0					3.0-8.5					3.0-10.0						
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank
Actiniaria	1	*f	6	2	1	-	-	-	-	-	-	-	-	-	-	1	*	6	*	1	-	-
Polinices duplicata	9	3	188	63	3	16	3	314	63	4	67	13	1776	355	5	92	7	2278	175	12	2	2
P. heros	2	1	17	6	1	5	1	171	34	2	5	1	48	10	4	12	1	236	18	7	5	-
Polinices sp. egg case	-	-	-	-	-	-	-	-	-	-	present	-	-	-	2	present	-	-	-	2	-	-
Nassarius trivittatus	1	*	1	*	1	2	*	2	*	1	1	*	1	*	1	4	*	4	*	3	-	-
Mercenaria mercenaria	-	-	-	-	-	1	*	23	5	1	-	-	-	-	-	1	*	23	2	1	-	-
Spisula solidissima	73	24	14669	4890	3	209	42	37825	7565	5	210	42	39031	7806	5	492	38	91525	7040	13	1	1
Ensis directus	-	-	-	-	-	-	-	-	-	-	3	1	11	2	2	3	*	11	1	2	-	-
Siliqua costata	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	-	-
G. dibanchiata	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	-	-
Glycera sp.	-	-	-	-	-	-	-	-	-	-	2	*	48	-	2	2	*	+	-	2	-	-
Nephtys buccera	-	-	-	-	-	-	-	-	-	-	2	*	+	-	1	2	*	+	-	1	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	1	*	+	-	1	-	-
Lumbrineris fragilis	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	1	*	+	-	1	-	-
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	1	*	+	-	1	-	-
Scoloplos robustus	1	*	1	*	1	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	-	-
Scoloplos sp.	-	-	-	-	-	-	-	-	-	-	fragment	-	+	-	1	fragment	-	+	-	1	-	-
Ampharetidae	-	-	-	-	-	present	-	-	-	1	4	1	+	-	1	4	*	+	-	2	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	1	*	1000	200	1	1	*	1000	77	1	-	4
Crangon septemspinosa	-	-	-	-	-	-	-	-	-	-	1	*	2	*	1	1	*	2	*	1	-	-
Pagurus longicarpus	-	-	-	-	-	1	*	1	*	1	-	-	-	-	-	1	*	1	*	1	-	-
P. pollicarpis	-	-	-	-	-	2	*	11	2	1	-	-	-	-	-	2	*	11	1	1	-	-
Cancer irroratus	12	4	1053	351	3	4	1	449	90	2	-	-	-	-	-	16	1	1502	116	5	3	3
Ovalipes ocellatus	-	-	-	-	-	11	2	455	91	4	4	1	151	30	1	15	1	606	47	5	4	5
Asterias forbesii	-	-	-	-	-	1	*	3	1	1	4	1	12	2	3	5	*	15	1	4	-	-
No. Gastropoda	12	4	206	69	-	23	5	487	97	-	6	1	49	10	-	41	3	742	57	-	-	-
No. Bivalvia	73	24	14669	4890	-	210	42	37848	7570	-	214	43	39043	7809	-	497	38	91560	7043	-	-	-
No. Decapoda	12	4	1053	351	-	18	4	916	183	-	5	1	153	31	-	35	3	2122	163	-	-	-
Total taxa	7	-	-	-	-	11	-	-	-	-	19	-	-	-	-	25	-	-	-	-	-	-
Total specimens	99	33	15935	5312	-	252	50	39254	7851	-	310	62	42035	8407	-	661	51	97224	7479	-	-	-
No. collections	3	-	-	-	-	5	-	-	-	-	5	-	-	-	-	13	-	-	-	-	-	-

a n = Number of specimens collected for a season. b n/coll = Average number of specimens per collection. c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection. e f = Number of collections in which species appeared. f * = Signifies the number is less than 0.5. g + = Signifies the weight is less than 0.5g.

Table 44. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.5 nautical miles SE of Little Egg Inlet, New Jersey by season in 1974.

Table 44. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of 1/2 x 1/2 x 1/2 ft. dredge																						
WINTER 36-38					SPRING 32-35					SUMMER 32-36					TOTAL 32-38							
Depth Range (feet)		28.0-30.0			28.5-29.5			29.0-30.5			28.0-30.5											
Salinity Range (ppt), surface		29.0-30.0			30.0-30.5			29.5-31.0			29.0-31.0											
bottom		4.0-6.5			7.0-21.0			20.0-22.0			4.0-22.0											
Temperature Range (ppm), surface		3.5-6.0			7.0-18.0			19.0-22.0			3.5-22.0											
bottom		2.0-9.5			11.0-24.0			20.0-22.5			2.0-24.0											
air		10.8-11.4			6.8-10.4			7.0-8.8			6.8-11.4											
Oxygen Range (ppm), surface		10.2-10.8			8.0-10.8			6.7-9.0			6.7-10.8											
bottom		3.0-17.0			4.5-8.0			4.5-14.0			3.0-17.0											
Secchi Range (feet)		n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank				
Unsegmented worm	-	-	-	-	-	-	1	*	1	*	1	-	-	-	-	-	1	-	-			
Hydractinia echinata	-	-	-	-	-	-	present	-	-	-	1	present	-	-	-	1	-	-				
Crepidula plana	-	-	-	-	-	-	present	-	-	-	1	-	-	-	-	1	-	-				
Polinices duplicata	1	*f	27	9	1	1	*	20	5	1	11	2	313	63	3	13	1	360	30	5	3	
P. heros	2	1	60	20	2	2	1	137	34	2	6	1	90	18	4	10	1	287	24	8	5	4
Polinices sp. egg case	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	1	present	-	-	-	1	-
Nassarius trivittatus	-	-	-	-	-	-	1	*	2	1	1	*	1	*	1	2	*	3	*	2	-	-
Pitar morrhuana	1	*	28	9	1	-	-	-	-	-	1	*	19	4	1	2	*	47	4	2	-	-
Spisula solidissima	3	1	700	233	2	6	2	1075	269	1	16	3	3446	689	4	25	2	5221	435	7	1	1
Sigalion arenicola	1	*	+	+	1	1	*	+	-	1	-	-	-	-	-	2	*	+	-	2	-	-
Sigalionidae	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	1	*	1	*	1	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	2	-	-
G. dibranchiata	1	*	1	*	1	fragment	-	+	-	1	-	-	-	-	-	3	*	9	1	2	-	-
Nephtys buccera	1	*	6	2	1	2	1	3	1	1	2	*	2	*	1	2	*	2	*	1	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	1	9	1	1	-	-
Ophelia denticulata	6	2	9	3	1	-	-	-	-	-	-	-	-	-	-	6	1	7	1	2	-	-
Diopatra cuprea	-	-	-	-	-	6	2	7	2	2	-	-	-	-	-	17	1	7	1	5	2	-
Lumbrineris fragilis	2	1	+	-	2	10	3	5	1	1	5	1	2	*	2	1	*	1	*	1	-	-
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	+	-	1	-	-
Orbinia swani	1	*	+	-	1	-	-	-	-	-	fragment	-	+	-	1	fragment	-	+	-	1	-	-
Polychaeta	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	4	*	28	2	3	-	-
Pagurus pollicaris	-	-	-	-	-	3	1	27	7	2	1	*	8	2	1	1	*	8	1	1	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	1	*	1	*	2	11	1	475	40	4	4	2
Cancer irroratus	8	3	474	158	2	-	-	-	-	-	3	1	1	*	-	5	*	211	18	2	-	5
Ovalipes ocellatus	-	-	-	-	-	5	1	211	53	2	-	-	-	-	-	2	*	11	1	2	-	-
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	2	*	11	2	2	1	*	3	*	1	-	-
Asterias forbesii	1	*	3	1	1	-	-	-	-	-	-	-	-	-	-	1	*	3	*	1	-	-
No. Gastropoda	3	1	87	29	-	4	1	159	40	-	18	4	404	81	-	25	2	650	54	-	-	-
No. Bivalvia	4	1	728	243	-	6	2	1075	269	-	17	3	3465	693	-	27	2	5268	439	-	-	-
No. Decapoda	8	3	474	158	-	8	2	238	60	-	5	1	10	2	-	21	2	722	60	-	-	-
Total taxa	12	-	-	-	-	14	-	-	-	-	16	-	-	-	-	26	-	-	-	-	-	-
Total specimens	28	9	1308	436	-	38	10	1488	372	-	52	10	3895	779	-	118	10	6691	558	-	-	-
No. collections	3	-	-	-	-	4	-	-	-	-	5	-	-	-	-	12	-	-	-	-	-	-

a n = Number of specimens collected for a season. b n/coll = Average number of specimens per collection. c wt = Weight of specimens collected for a season. d wt/coll = Average weight of specimens per collection.
e f = Number of collections in which species appeared. f * = Signifies the number is less than 0.5. g + = Signifies the weight is less than 0.5g.

	WINTER 25-27					SPRING 24					SUMMER 27					TOTAL 24-27						
Depth Range (feet)																						
Salinity Range (ppt), surface	28.0-29.0					29.0					29.5					28.0-29.5						
bottom	30.0					30.5					29.5					29.5-30.5						
Temperature Range (C), surface	4.0-7.0					8.5					21.0					4.0-21.0						
bottom	4.0-6.0					7.5					20.0					4.0-20.0						
air	7.5-9.0					11.0					23.0					7.5-23.0						
Oxygen Range (ppm), surface	10.6					10.8					7.4					7.4-10.8						
bottom	10.3					10.4					7.6					7.6-10.4						
Secchi Range (feet)	6.5-8.0					4.5					3.5					3.5-8.0						
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank
Nemertea	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	1	1	1	*	1	-	-
Polinices duplicata	2	1	83	42	2	1	1	14	7	1	1	1	20	10	1	4	1	117	20	4	-	3
P. heros	2	1	20	10	1	1	1	2	1	1	2	1	72	36	2	5	1	94	16	4	-	-
Spisula solidissima	8	4	1680	840	2	9	5	1561	781	2	7	4	1060	530	2	24	4	4301	717	6	1	1
Sigalion arenicola	-	-	-	-	-	-	-	-	-	-	3	2	1	1	1	3	1	1	*	1	-	-
Nephtys bucera	-	-	-	-	-	5	3	19	10	2	3	2	7	4	1	8	1	26	4	3	-	-
Ophelia denticulata	8	4	19	10	1	3	2	16	8	1	-	-	-	-	-	11	2	35	6	2	3	-
Diopatra cuprea	2	1	5	3	1	-	-	-	-	-	3	2	4	2	2	5	1	9	2	3	-	-
Lumbrineris fragilis	-	-	-	-	-	1	1	2	1	1	12	6	7	4	2	13	2	9	2	3	2	-
Cirolana concharum	-	-	-	-	-	1	1	+g	-	1	1	1	+	-	1	2	*	+	-	2	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	7	4	318	159	2	7	1	318	53	2	-	2
Echinarachnius parma	4	2	28	14	2	3	2	18	9	2	1	1										

a n = Number of specimens collected for a season.
b n/coll = Average number of specimens per collection.
c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection.
e f = Number of collections in which species appeared.
f * = Signifies the number is less than 0.5.
g + = Signifies the weight is less than 0.5g.

Table 46. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 1.8 nautical miles SE of Little Egg Inlet, New Jersey by season in 1974.

	WINTER 17-29					SPRING 15-21					SUMMER 15-20					TOTAL 15-29						
Depth Range (feet)	28.0-30.0					28.0-30.0					29.0-30.0					28.0-30.0						
Salinity Range (ppt), surface	28.0-30.0					28.0-30.0					29.0-31.0					29.0-31.0						
bottom	29.0-30.0					29.5-30.0					20.0-22.0					4.0-22.0						
Temperature Range (C), surface	4.0-7.0					9.5-21.0					18.5-22.5					4.0-22.5						
bottom	4.0-7.0					8.0-17.0					19.0-22.5					3.0-24.0						
air	3.0-9.5					11.0-24.0					7.4-9.6					7.1-11.2						
Oxygen Range (ppm), surface	10.8-11.2					7.1-10.6					7.2-9.0					7.2-11.4						
bottom	10.7-11.4					7.2-10.2					3.0-7.5					2.5-14.0						
Secchi Range (feet)	3.0-14.0					2.5-7.5																
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank
Hydractinia echinata	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	present	-	-	-	1	-	-
Actinaria	1	1	16	16	1	-	-	-	-	-	-	-	-	-	-	1	*	16	16	1	-	-
Polinices duplicata.	19	6	463	154	3	24	5	509	102	4	36	7	783	157	5	79	6	1755	135	12	2	2
P. heros	3	1	54	18	3	3	1	159	32	2	3	1	77	15	2	9	1	290	22	7	3	5
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	3	1	3	1	2	3	*	3	*	2	-	-
Spisula solidissima	88	29	12979	4326	3	52	10	11617	2323	5	96	19	18772	3754	5	236	18	43368	3336	13	1	1
Ensis directus	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	-	-
Glycera dibranchiata	-	-	-	-	-	fragment	-	1	*	1	-	-	-	-	-	fragment	-	1	*	1	-	-
Glycera sp.	-	-	-	-	-	-	-	-	-	-	2	1	48	-	1	2	*	+	-	1	-	-
Nephtys buccera	2	1	1	*	1	1	*	1	*	1	-	-	-	-	-	3	*	2	*	2	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	2	1	+	-	1	2	*	+	-	1	-	-
Diopatra cuprea	-	-	-	-	-	1	*	2	*	1	-	-	-	-	-	1	*	2	*	1	-	-
Ampharetidae	-	-	-	-	-	-	-	-	-	-	3	1	+	-	1	3	*	+	-	1	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	1	*	1000	200	1	1	*	1000	77	1	-	3
Pagurus longicarpus	-	-	-	-	-	1	*	2	*	1	-	-	-	-	-	1	*	2	*	1	-	-
P. pollicaris	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	-	-
Libinia emarginata	-	-	-	-	-	1	*	96	19	1	-	-	-	-	-	1	*	96	7	1	-	-
Cancer irroratus	6	2	275	92	2	-	-	-	-	-	2	*	4	1	1	8	1	279	21	3	4.5	-
Ovalipes ocellatus	6	2	292	97	1	1	*	32	6	1	1	*	26	5	1	8	1	350	27	3	4.5	4
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	1	*	4	1	1	1	*	4	*	1	-	-
No. Gastropoda	22	7	517	172	-	27	5	668	134	-	42	8	863	173	-	91	7	2048	158	-	-	-
No. Bivalvia	88	29	12979	4326	-	52	10	11617	2323	-	97	19	18773	3755	-	237	18	43369	3336	-	-	-
No. Decapoda	12	4	567	189	-	3	1	130	26	-	4	1	31	6	-	19	1	728	56	-	-	-
Total taxa	7	-	-	-	-	9	-	-	-	-	12	-	-	-	-	21	-	-	-	-	-	-
Total specimens	125	42	14080	4693	-	84	17	12419	2484	-	152	28	20671	3756	-	361	28	47170	3628	-	-	-
No. collections	3	-	-	-	-	5	-	-	-	-	5	-	-	-	-	13	-	-	-	-	-	-

a n = Number of specimens collected for a season.

b n/coll = Average number of specimens per collection.

c wt = Weight of specimens collected for a season.

d wt/coll = Average weight of specimens collected for a season.

e f = Number of collections in which species appeared.

f * = Signifies the number is less than 0.5.

g + = Signifies the weight is less than 0.5g.

Table 47. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.5 nautical miles NE of Little Egg Inlet, New Jersey by season in 1974.

	WINTER					SPRING					SUMMER					TOTAL						
	25-28					20-34					25-30					20-34						
Depth Range (feet)																						
Salinity Range (ppt), surface	28.0-30.0					28.0-30.0					29.0-30.0					28.0-30.0						
bottom	29.5-30.0					30.0-30.5					29.5-30.5					29.5-30.5						
Temperature Range (C), surface	4.0-6.5					7.0-20.0					19.0-24.0					4.0-24.0						
bottom	4.0-6.0					6.8-19.0					18.0-23.0					4.0-23.0						
air	1.0-10.0					8.5-24.0					20.5-25.0					1.0-25.0						
Oxygen Range (ppm), surface	10.4-11.2					7.2-11.2					7.4-9.4					7.2-11.2						
bottom	10.4-11.2					6.2-10.9					7.0-9.4					6.2-11.2						
Secchi Range (feet)	3.0-8.5					3.5-8.0					4.5-7.5					3.0-8.5						
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank
Hydractinia echinata	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	present	-	-	-	1	-	-
Actiniaria	4	1	41	14	1	-	-	-	-	-	3	1	44	14	3	7	1	95	9	4	-	-
Polinices duplicata	6	2	141	47	2	14	4	332	83	2	40	10	1339	335	4	60	5	1812	165	8	2	2
Polinices heros	3	1	62	21	3	2	1	20	5	2	3	1	22	6	2	8	1	104	9	7	-	-
Polinices sp. egg case	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	present	-	-	-	1	-	-
Nassarius trivittatus	5	2	5	2	1	-	-	-	-	-	5	1	5	1	3	10	1	10	1	4	5	-
N. trivittatus egg case	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	present	-	-	-	1	-	-
Pitar morrhuana	-	-	-	-	-	-	-	-	-	-	1	*	42	11	1	1	*	42	4	1	-	-
Spisula solidissima	77	26	17958	5986	2	21	5	4457	1114	4	183	46	11799	2950	4	281	26	34214	3110	10	1	1
Ensis directus	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	1	*	+	-	1	-	-
Siliqua costata	-	-	-	-	-	-	-	-	-	-	2	1	1	-	1	2	*	1	-	1	-	-
Glycera dibranchiata	5	2	10	3	1	-	-	-	-	-	-	-	-	-	-	5	*	10	1	1	-	-
Nephtys bucera	-	-	-	-	-	1	*	+	-	1	-	-	-	-	-	1	*	+	-	1	-	-
Caprellidae	2	1	+g	-	1	-	-	-	-	-	-	-	-	-	-	2	*	+	-	1	-	-
Lumbrineris fragilis	10	3	4	1	1	2	1	1	*	1	-	-	-	-	-	12	1	5	*	2	4	-
Arabella iricolor	1	*f	+	-	1	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	-	-
Scoloplos robustus	3	1	3	1	2	-	-	-	-	-	-	-	-	-	-	3	*	3	*	2	-	-
Ampharetidae	-	-	-	-	-	1	*	+	-	1	-	-	-	-	-	1	*	+	-	1	-	-
Limulus polyphemus	-	-	-	-	-	1	*	500	125	1	1	*	1300	325	1	2	*	1800	164	2	-	3
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	3	1	9	2	3	3	*	9	1	3	-	-
Libinia emarginata	1	*	75	25	1	1	*	100	25	1	-	-	-	-	-	2	*	175	16	2	-	5
Cancer irroratus	13	4	490	163	3	1	*	82	21	1	1	*	1	*	1	15	1	573	52	5	3	4
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	2	1	3	1	1	2	*	3	*	1	-	-
No. Gastropoda	14	5	208	69	-	16	4	352	88	-	48	12	1366	342	-	78	7	1926	175	-	-	-
No. Bivalvia	77	26	17958	5986	-	21	5	4457	1114	-	187	47	11842	2961	-	285	26	34257	3114	-	-	-
No. Decapoda	14	5	565	188	-	2	1	182	46	-	4	1	10	3	-	20	2	757	69	-	-	-
Total taxa	12	-	-	-	-	9	-	-	-	-	13	-	-	-	-	21	-	-	-	-	-	-
Total specimens	130	43	18789	6263	-	44	11	5492	1373	-	245	61	14575	3644	-	419	38	38856	3532	-	-	-
No. collections	3	-	-	-	-	4	-	-	-	-	4	-	-	-	-	11	-	-	-	-	-	-

a n = Number of specimens collected for a season.
b n/coll = Average number of specimens per collection.
c wt = Weight of specimens collected for a season.

d wt/coll = Average weight of specimens per collection.
e f = Number of collections in which species appeared.
f * = Signifies the number is less than 0.5.

g + = Signifies the weight is less than 0.5g.

Table 48.. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.4 nautical miles SE of Brigantine Inlet, New Jersey by season in 1974.

	WINTER					SPRING					SUMMER					TOTAL						
Depth Range (feet)	25					22					27					22-27						
Salinity Range (ppt), surface	29.5					30.0					30.0					29.5-30.0						
bottom	30.0					30.0					30.0					30.0						
Temperature Range (C), surface	4.5					20.0					21.0					4.5-21.0						
bottom	4.0					17.0					21.0					4.0-21.0						
air	4.0					22.0					20.0					4.0-22.0						
Oxygen Range (ppm), surface	10.5					7.6					7.0					7.0-10.5						
bottom	10.4					7.5					7.4					7.4-10.4						
Secchi Range (feet)	10.0					5.5					24.0					5.5-24.0						
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank
Hydractinia echinata	present	-	-	-	1	present	-	-	-	1	-	-	-	-	-	present	-	-	-	2	-	-
Actiniaria	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	1	*f	1	*	1	-	-
Crepidula plana	present	-	-	-	1	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	-	-
Polinices duplicata	1	1	58	58	1	5	3	125	63	2	3	2	85	43	1	9	2	268	54	4	3	3
P. heros	1	1	64	64	1	2	1	23	12	1	-	-	-	-	-	3	1	87	17	2	4	4
Spisula solidissima	-	-	-	-	-	5	3	1164	582	2	7	4	3000	1500	2	12	2	4164	833	4	2	1
Siliqua costata	-	-	-	-	-	1	1	7	4	1	-	-	-	-	-	1	*	7	1	1	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	1	1	2250	1125	1	1	*	2250	450	1	-	2
Pagurus longicarpus	41	41	16	16	1	2	1	+g	-	1	2	1	2	1	2	45	9	18	4	4	1	-
P. pollicaris	2	2	5	5	1	-	-	-	-	-	-	-	-	-	-	2	*	5	1	1	5	-
Ovalipes ocellatus	-	-	-	-	-	1	1	42	21	1	-	-	-	-	-	1	*	42	8	1	-	5
Asterias forbesii	-	-	-	-	-	1	1	2	1	1	-	-	-	-	-	1	*	2	*	1	-	-
No. Gastropoda	2	2	122	122	-	7	4	148	74	-	3	2	85	43	-	12	2	355	71	-	-	-
No. Bivalvia	-	-	-	-	-	6	3	1171	586	-	7	4	3000	1500	-	13	3	4171	834	-	-	-
No. Decapoda	43	43	21	21	-	3	2	42	21	-	2	1	2	1	-	48	10	65	13	-	-	-
Total taxa	7	-	-	-	-	8	-	-	-	-	4	-	-	-	-	12	-	-	-	-	-	-
Total specimens	46	46	144	144	-	17	9	1363	682	-	13	7	5337	2668	-	76	15	6844	1369	-	-	-
No. collections	1	-	-	-	-	2	-	-	-	-	2	-	-	-	-	5	-	-	-	-	-	-

- a n = Number of specimens collected for a season.
b n/coll = Average number of specimens per collection.
c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection.
e f = Number of collections in which species appeared.
f * = Signifies the number is less than 0.5.
g + = Signifies the weight is less than 0.5g.

Table 49. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.8 nautical miles SE of Brigantine Inlet, New Jersey by season in 1974.

	WINTER					SPRING					SUMMER					TOTAL								
Depth Range (feet)	38					34					42					34-42								
Salinity Range (ppt), surface	29.5					29.0					30.0					29.0-30.0								
bottom	30.0					30.0					30.0					30.0								
Temperature Range (C), surface	3.5					20.0					21.0					3.5-21.0								
bottom	4.0					17.0					21.0					4.0-21.0								
air	4.5					22.0					20.0					4.5-22.0								
Oxygen Range (ppm), surface	11.2					8.2					7.0					7.0-11.2								
bottom	10.8					7.3					7.4					7.3-10.8								
Secchi Range (feet)	12.0					6.0					24.0					6.0-24.0								
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No	Rank	Wt	Rank
<i>Crepidula plana</i>	-	-	-	-	-	present	-	-	-	1	-	-	-	-	-	present	-	-	-	1	-	-	-	-
<i>Polinices duplicata</i>	3	3	99	99	1	3	2	171	86	2	-	-	-	-	-	6	1	270	54	3	-	-	5	-
<i>P. heros</i>	6	6	87	87	1	3	2	126	63	2	1	1	30	15	1	10	2	243	49	4	3	-	-	-
<i>Nassarius trivittatus</i>	1	1	1	1	1	-	-	-	-	-	2	1	2	1	2	3	1	3	1	3	-	-	-	-
<i>Pitar morrhuana</i>	-	-	-	-	-	-	-	-	-	-	1	1	15	8	1	1	1	15	3	1	-	-	-	-
<i>Spisula solidissima</i>	5	5	1916	1916	1	4	2	716	358	2	5	3	1350	675	2	14	3	3982	796	5	2	1	-	-
<i>Ensis directus</i>	-	-	-	-	-	-	-	-	-	-	3	2	8	4	2	3	1	8	2	2	-	-	-	-
<i>Siliqua costata</i>	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	*	1	*	1	-	-	-	-
<i>Sigalion arenicola</i>	1	1	1	1	1	3	2	1	1	2	-	-	-	-	-	4	1	2	*	3	-	-	-	-
<i>Glycera</i> sp.	-	-	-	-	-	-	-	-	-	-	2	1	2	1	1	2	*	2	*	1	-	-	-	-
<i>Nephtys</i> sp.	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	*	1	*	1	-	-	-	-
<i>Diopatra cuprea</i>	-	-	-	-	-	2	1	4	2	1	-	-	-	-	-	2	*	4	1	1	-	-	-	-
<i>Lumbrineris fragilis</i>	1	1	1	1	1	2	1	+8	-	1	-	-	-	-	-	3	1	1	*	2	-	-	-	-
<i>Limulus polyphemus</i>	-	-	-	-	-	-	-	-	-	-	1	1	350	175	1	1	*	350	70	1	-	-	3	-
<i>Pagurus longicarpus</i>	-	-	-	-	-	-	-	-	-	-	8	4	11	6	2	8	2	11	2	2	4	-	-	-
<i>P. pollicaris</i>	-	-	-	-	-	1	1	15	8	1	2	1	75	38	2	3	1	90	18	3	-	-	-	-
<i>Libinia emarginata</i>	-	-	-	-	-	1	1	101	51	1	-	-	-	-	-	1	*	101	20	1	-	-	-	-
<i>Cancer irroratus</i>	3	3	292	292	1	-	-	-	-	-	-	-	-	-	-	3	1	292	58	1	-	-	4	-
<i>Ovalipes ocellatus</i>	3	3	117	117	1	4	2	151	76	2	-	-	-	-	-	7	1	268	54	3	5	-	-	-
<i>Echinarachnius parma</i>	407	407	2728	2728	1	26	13	182	91	2	9	5	37	19	2	442	88	2947	389	5	1	2	-	-
<i>Asterias forbesii</i>	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	-	-	-	-
No. Gastropoda	10	10	187	187	-	6	3	297	149	-	3	2	32	16	-	19	4	516	103	-	-	-	-	-
No. Bivalvia	5	5	1916	1916	-	4	2	716	358	-	10	5	1374	687	-	19	4	4006	801	-	-	-	-	-
No. Decapoda	6	6	409	409	-	6	3	267	134	-	10	5	86	43	-	22	4	762	152	-	-	-	-	-
Total taxa	10	-	-	-	-	10	-	-	-	-	12	-	-	-	-	20	-	-	-	-	-	-	-	-
Total specimens	431	431	5243	5243	-	409	25	1467	734	-	36	18	1882	941	-	516	103	8592	1718	-	-	-	-	-
No. collections	1	-	-	-	-	2	-	-	-	-	2	-	-	-	-	5	-	-	-	-	-	-	-	-

a n = Number of specimens collected for a season. b n/coll = Average number of specimens per collection. c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection. e f = Number of collections in which species appeared. f * = Signifies the number is less than 0.5.
g + = Signifies the weight is less than 0.5g.

Table 50. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 0.75 nautical mile from NW tip of Little Beach Island in Little Egg Inlet, New Jersey by season in 1974.

		WINTER					SPRING					SUMMER					TOTAL							
		10					10					10-11					10-11							
Depth Range (feet)		26.0-28.0					25.0-28.0					29.0-30.0					25.0-30.0							
Salinity Range (ppt), surface		26.0-28.0					25.0-28.0					29.0-30.0					25.0-30.0							
bottom		3.0-7.5					12.5-21.0					23.0-26.0					3.0-26.0							
Temperature Range (C), surface		3.0-7.5					12.0-22.0					23.0-26.0					3.0-26.0							
bottom		4.5-10.0					17.0-25.0					24.0-30.0					4.5-30.0							
air		8.8-11.2					7.5-8.8					6.0-8.4					6.0-11.2							
Oxygen Range (ppm), surface		9.4-11.5					7.0-8.8					6.2-7.8					6.2-11.5							
bottom		1.5-3.0					1.0-3.0					2.0-3.5					1.0-3.5							
Secchi Range (feet)		1.5-3.0					1.0-3.0					2.0-3.5					1.0-3.5							
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No	Rank	Wt	Rank
Spisula solidissima	30	10	5193	1731	3	28	7	3803	951	3	37	9	7596	1899	4	95	9	16592	1508	10	1	-	1	-
Glycera dibranchiata	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	3	-	-	-
Pagurus longicarpus	-	-	-	-	-	3	1	2	1	1	-	-	-	-	-	3	*	2	*	1	2	-	-	-
Ovalipes ocellatus	2	1	20	7	1	3	1	126	32	3	1	*	40	10	1	6	1	186	17	5	2	2	3	-
Eurypanope depressus	1	=f	8	3	1	-	-	-	-	-	-	-	-	-	-	1	*	8	1	1	-	-	-	-
Asterias forbesii	-	-	-	-	-	1	*	2	1	1	-	-	-	-	-	1	*	2	*	1	-	-	-	-
No. Bivalvia	30	10	5193	1731	-	28	7	3803	951	-	37	9	7596	1899	-	95	9	16592	1508	-	-	-	-	-
No. Decapoda	3	1	28	7	-	6	2	128	32	-	1	*	40	10	-	10	1	196	18	-	-	-	-	-
Total taxa	3	-	-	-	-	4	-	-	-	-	3	-	-	-	-	6	-	-	-	-	-	-	-	-
Total specimens	33	11	5221	1740	-	35	9	3933	983	-	39	10	7637	1909	-	107	10	16791	1526	-	-	-	-	-
No. collections	3	-	-	-	-	4	-	-	-	-	4	-	-	-	-	11	-	-	-	-	-	-	-	-

a n = Number of specimens collected for a season.

b n/coll = Average number of specimens per collection.

c wt = Weight of specimens collected for a season.

d wt/coll = Average weight of specimens per collection.

e f = Number of collections in which species appeared.

f * = Signifies the number is less than 0.5.

g + = Signifies the weight is less than 0.5g.

Table 51. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 50 yards NE of "F" buoy in Little Egg Inlet, New Jersey by season in 1974.

	WINTER 18-25					SPRING 17-20					SUMMER 20					TOTAL 17-25								
Depth Range (feet)																								
Salinity Range (ppt), surface	25.0-30.0					25.0-29.0					29.5-31.0					25.0-31.0								
bottom	27.0-30.0					28.0-30.0					30.0					27.0-30.0								
Temperature Range (C), surface	2.0-5.5					10.0-19.5					20.5-23.5					2.0-23.5								
bottom	2.5-6.0					10.0-19.0					20.0-23.0					2.5-23.0								
air	6.0-10.0					17.0-21.0					24.0-32.0					6.0-32.0								
Oxygen Range (ppm), surface	10.0-11.2					6.0-9.2					6.3-6.8					6.0-11.2								
bottom	9.8-10.8					7.2-8.6					6.1-7.4					6.1-10.8								
Secchi Range (feet)	1.5-3.5					3.0-6.5					3.0-12.0					1.5-12.0								
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No	Rank	Wt	Rank
Hydractinia enchinata	present	-	-	-	1	present	-	-	-	2	present	-	-	-	2	present	-	-	-	5	-	-	-	-
Crepidula plana	present	-	-	-	1	present	-	-	-	1	-	-	-	-	-	present	-	-	-	2	-	-	-	-
Polinices duplicata	1	* ^f	22	7	1	4	1	121	30	2	1	*	21	5	1	6	1	164	15	4	-	-	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	1	*	1	1	1	1	*	1	*	1	-	-	-	-
Urosalpinx cinereus	2	1	4	1	1	-	-	-	-	-	-	-	-	-	-	2	*	4	*	1	-	-	-	-
Mytilus edulis	3	1	13	4	1	4	1	18	5	3	present	-	-	-	2	7	1	31	3	6	-	-	-	-
Spisula solidissima	30	10	4711	1570	3	12	3	1900	475	3	43	11	11820	2955	4	85	8	18431	1676	10	2	1	-	-
Antinoella sarsi	1	*	+	-	1	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	-	-	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	-	-	-	-
G. dibranchiata	1	*	1	*	1	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	-	-	-	-
Nereis sp.	-	-	-	-	-	1	*	1	*	1	-	-	-	-	-	1	*	1	*	1	-	-	-	-
Sabellaria vulgaris	present	-	-	-	1	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	-	-	-	-
Diopatra cuprea	5	2	6	2	1	-	-	-	-	-	-	-	-	-	-	5	*	6	1	1	-	-	-	-
Arabellidae	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	1	*	+	-	1	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	1	*	800	200	1	1	*	800	200	1	-	-	4	-
Cirolana concharum	-	-	-	-	-	-	-	-	-	-	1	*	+	-	1	1	*	+	-	1	-	-	-	-
Pagurus longicarpus	-	-	-	-	-	3	1	+ ^g	-	3	1	*	+	-	1	4	*	+	-	4	-	-	-	-
P. pollicaris	1	*	12	4	1	1	*	7	2	1	-	-	-	-	-	2	*	19	2	2	-	-	-	-
Libinia emarginata	13	4	696	232	3	3	1	296	74	2	7	2	5000	1250	2	23	11	5992	545	7	3	2	-	-
Cancer irroratus	68	23	1714	571	3	50	13	909	227	4	22	6	435	109	2	140	13	3058	278	9	1	3	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	6	2	351	88	2	6	1	351	32	2	-	-	5	-
Neopanope texana	8	3	13	4	2	1	*	1	*	1	1	*	+	-	1	10	1	14	1	4	4	-	-	-
Eurypanope depressus	1	*	1	*	1	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	-	-	-	-
Asterias forbesii	4	1	90	30	2	3	1	7	2	2	2	1	17	4	2	9	1	114	10	6	5	-	-	-
No. Gastropoda	3	1	26	9	-	4	1	121	30	-	2	1	22	6	-	9	1	169	15	-	-	-	-	-
No. Bivalvia	33	11	4724	1575	-	16	4	1918	480	-	43	11	11820	2955	-	92	8	18462	1678	-	-	-	-	-
No. Decapoda	91	30	2436	812	-	58	15	1213	303	-	37	9	5786	1447	-	186	17	9435	858	-	-	-	-	-
Total taxa	16	-	-	-	-	12	-	-	-	-	15	-	-	-	-	24	-	-	-	-	-	-	-	-
Total specimens	138	46	7283	2428	-	82	21	3260	815	-	88	22	18446	4612	-	308	28	28989	2635	-	-	-	-	-
No. collections	3	-	-	-	-	4	-	-	-	-	4	-	-	-	-	11	-	-	-	-	-	-	-	-

a n = Number of specimens collected for a season. b n/coll = Average number of specimens per collection. c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection. e f = Number of collections in which species appeared. f * = Signifies the number is less than 0.5. g + = Signifies the weight is less than 0.5g.

Table 52. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 300 yards E of F1 "96" in Little Egg Inlet, New Jersey by season in 1974.

	WINTER 5-7					SPRING 6-7					SUMMER 6-10					FALL 5					TOTAL 5-10						
Depth Range (feet)																											
Salinity Range (ppt) surface	27.0-30.0					28.0-30.0					29.0-30.0					28.0-29.5					27.0-30.0						
bottom	27.0-30.0					28.0-30.0					29.0-31.0					29.0-29.5					27.0-31.0						
Temperature Range (C) surface	2.0-6.0					12.0-17.0					21.0-23.0					7.0-10.5					2.0-23.0						
bottom	2.5-5.5					11.5-18.0					21.5-23.0					7.0-11.0					2.5-23.0						
air	8.0-10.0					16.0-20.0					24.5-30.0					6.5-13.0					6.5-30.0						
Oxygen Range (ppm) surface	8.8-11.3					7.6-9.6					5.6-7.3					8.5-8.9					5.6-11.3						
bottom	9.0-11.2					7.5-9.0					5.3-7.2					8.9-9.6					5.6-11.2						
Secchi Range (feet)	1.5-4.5					2.5-6.5					5.5-8.0					3.5-4.0					1.5-8.0						
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No. Rank	Wt. Rank
Mercenaria mercenaria	-	-	-	-	-	1	*	83	21	1	-	-	-	-	-	-	-	-	-	-	1	*	83	6	1		
Spisula solidissima	245	82	37855	12618	3	549	137	117454	29364	4	316	79	53390	13348	4	157	52	24266	8089	3	1267	91	232965	16640	14	1	1
Nephtys buccera	-	-	-	-	-	1	*	1	*	1	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1		
Nephtys sp.	fragment	-	1	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	fragment	-	1	*	1		
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	2	1	900	225	2	-	-	-	-	-	2	*	900	64	2		
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	*	2	1	1	1	*	2	*	1		
Cancer irroratus	34	11	2525	842	2	7	2	334	84	2	-	-	-	-	-	1	*	195	65	1	42	3	3054	218	5	3	2
Ovalipes ocellatus	2	1	43	14	2	15	4	496	124	4	26	7	1258	315	3	26	9	1125	375	2	69	5	2922	209	11	2	3
Asterias forbesii	1	*f	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	*	2	*	1		
No. Bivalvia	245	82	37855	12618		550	138	117537	29384		316	79	53390	13348		157	52	24266	8089		1268	91	233048	16646			
No. Decapoda	36	12	2568	856		22	6	830	208		26	7	1258	315		28	9	1322	441		112	8	5978	427			
Total taxa	5					5					3					4					9						
Total specimens	282	94	40426	13475		573	143	118368	29592		344	86	55548	13887		185	62	25588	8529		1384	99	239930	17138			
No. collections	3					4					4					3					14						

- a n = Number of specimens collected for a season.
b n/coll = Average number of specimens per collection.
c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection.
e f = Number of collections in which species appeared.
f * = Signifies the number is less than 0.5.

Table 53. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 400 yards S of Fl "96" in Little Egg Inlet, New Jersey by season in 1974.

	WINTER					SPRING					SUMMER					TOTAL						
	25					15-20					17-20					15-25						
Depth Range (feet)																						
Salinity Range (ppt), surface	25.0-30.0					22.0-28.0					27.5-30.0					22.0-30.0						
bottom	28.0-30.0					28.0					28.0-30.0					28.0-30.0						
Temperature Range (C) surface	2.0-7.0					13.0-19.0					22.0-26.5					2.0-26.5						
bottom	3.0-6.0					12.0-20.0					22.0-25.5					3.0-25.5						
air	8.0-10.0					16.0-25.0					24.5-32.0					8.0-32.0						
Oxygen Range (ppm), surface	9.2-11.1					5.8-8.6					5.4-7.4					5.4-11.1						
bottom	8.8-11.0					6.2-8.0					5.7-7.4					5.7-11.0						
Secchi Range (feet)	2.0-5.0					3.0-4.5					5.5-7.0					2.0-7.0						
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank
Hydractinia echinata	present	-	-	-	1	present	-	-	-	1	present	-	-	-	1	present	-	-	-	3	-	-
Nemertea	-	-	-	-	-	-	-	-	-	-	fragment	-	2	1	1	fragment	-	2	-	1	-	-
Crepidula fornicata	present	-	-	-	2	-	-	-	-	-	-	-	-	-	-	present	-	-	-	2	-	-
Crepidula plana	present	-	-	-	2	-	-	-	-	-	present	-	-	-	1	present	-	-	-	3	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	1	*	3	1	1	1	*	3	*	1	-	-
Urosalpinx cinereus	3	1	6	2	1	1	*	4	1	1	-	-	-	-	-	4	*	10	1	2	-	-
Nassarius trivittatus	-	-	-	-	-	1	*	1	*	1	-	-	-	-	-	1	*	1	*	1	-	-
Mytilus edulis	2102	1010	30068	14382	3	4680	1170	84051	21013	4	21725	5431	8919	2230	4	28507	2592	123038	11185	11	1	1
Anomia simplex	present	-	-	-	1	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	-	-
Spisula solidissima	12	4	2120	707	1	-	-	-	-	-	-	-	-	-	-	12	1	2120	193	1	-	4
Antinoella sarsi	4	1	+	-	2	9	2	1	*	2	2	1	+	-	1	15	1	1	*	5	5	-
Lepidonotus sublevis	4	1	1	*	1	-	-	-	-	-	-	-	-	-	-	4	*	1	*	1	-	-
Glycera americana	-	-	-	-	-	1	*	2	1	1	1	*	2	1	1	2	*	4	*	2	-	-
Glycera dibranchiata	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	1	*	1	*	1	-	-
Nereis succinea	-	-	-	-	-	7	2	2	1	1	4	1	1	*	2	11	1	3	*	3	-	-
Nereis sp.	4	1	1	*	2	3	1	2	1	2	-	-	-	-	-	7	1	3	*	4	-	-
Sabellaria vulgaris	present	-	-	-	2	-	-	-	-	-	-	-	-	-	-	present	-	-	-	2	-	-
Diopatra cuprea	1	f	1	*	1	-	-	-	-	-	-	-	-	-	-	1	*	1	*	1	-	-
Hydroides dianthus	present	-	-	-	1	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	-	-
Balanus sp.	present	-	-	-	1	present	-	-	-	1	-	-	-	-	-	present	-	-	-	2	-	-
Pagurus longicarpus	8	3	4	1	1	2	1	g	-	1	9	2	6	2	4	19	2	10	1	6	-	-
P. pollicaris	3	1	47	16	2	-	-	-	-	-	2	1	18	5	2	5	*	65	6	4	-	-
Libinia emarginata	8	3	474	158	2	4	1	57	14	2	1	*	81	20	1	13	1	612	56	5	-	5
Cancer irroratus	30	13	1760	587	3	9	2	483	121	3	44	11	460	115	4	83	8	2703	246	10	3	3
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	2	1	65	16	1	2	*	65	6	1	-	-
Neopanope texana	34	11	25	8	3	12	3	12	3	3	20	5	27	7	2	66	6	64	6	8	4	-
Eurypanope depressus	2	1	1	*	2	-	-	-	-	-	1	*	4	1	1	3	*	5	*	3	-	-
Arbacia punctulata	1	*	32	11	1	-	-	-	-	-	-	-	-	-	-	1	*	32	3	1	-	-
Asterias forbesii	70	37	5550	1850	3	53	13	4120	1030	2	18	5	1069	267	3	141	13	10739	976	8	2	2
No. Gastropoda	3	1	6	2	-	2	1	5	1	-	1	*	3	1	-	6	1	14	1	-	-	-
No. Bivalvia	2114	709	32188	11436	-	4680	1170	84051	21013	-	21725	5431	8919	2230	-	28519	2593	125158	11378	-	-	-
No. Decapoda	93	31	2311	770	-	27	7	552	138	-	79	20	661	165	-	199	18	3524	320	-	-	-
Total taxa	22	-	-	-	-	14	-	-	-	-	17	-	-	-	-	29	-	-	-	-	-	-
Total specimens	2286	572	40090	13363	-	4782	1173	88735	22184	-	21831	5458	10658	2665	-	28899	2627	139483	12680	-	-	-
No. collections	3	-	-	-	-	4	-	-	-	-	4	-	-	-	-	11	-	-	-	-	-	-

a n = Number of specimens collected for a season. b n/coll = Average number of specimens per collection. c wt = Weight of specimens collected for a season. d wt/coll = Average weight of specimens per collection.
e f = Number of collections in which species appeared. f * = Signifies the number is less than 0.5. g + = Signifies the weight is less than 0.5g.

Table 54. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 1.8 nautical mile from Marshelder Channel in Little Sheephead Creek, New Jersey by season in 1974.

		WINTER					SPRING					SUMMER					TOTAL					
Depth Range (feet)		12-15					15					15					12-15					
Salinity Range (ppt), surface		26.0-28.0					27.0-29.0					27.5-30.0					26.0-30.0					
bottom		26.0-28.0					27.0-29.0					27.0-30.0					26.0-30.0					
Temperature Range (C), surface		3.0-7.0					11.5-21.0					23.0-26.0					3.0-26.0					
bottom		3.0-7.0					11.0-20.0					23.3-26.0					3.0-26.0					
air		4.5-9.0					17.0-25.0					24.5-32.0					4.5-32.0					
Oxygen Range (ppm), surface		8.6-11.2					6.2-9.0					6.0-7.6					6.0-11.2					
bottom		9.0-10.8					6.0-9.4					5.4-6.3					5.4-10.8					
Secchi Range (feet)		1.5-4.0					1.5-3.5					3.0-5.0					1.5-5.0					
	n ^a	n/coll ^b	wt ^c	wt/coll ^d	f ^e	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	n	n/coll	wt	wt/coll	f	No Rank	Wt Rank
Microciona prolifera	present	-	-	-	2	present	-	-	-	1	present	-	-	-	2	present	-	-	-	5	-	-
Cliona sp.	present	-	-	-	2	-	-	-	-	-	present	-	-	-	1	present	-	-	-	3	-	-
Hydractinia echinata	present	-	-	-	1	-	-	-	-	-	-	-	-	-	-	present	-	-	-	1	-	-
Bryozoa	-	-	-	-	-	present	-	-	-	3	-	-	-	-	-	present	-	-	-	3	-	-
Crepidula plana	present	-	-	-	1	present	-	-	-	1	present	-	-	-	1	present	-	-	-	3	-	-
Busycon canaliculatum	-	-	-	-	-	1	*	98	25	1	1	*	83	21	1	2	*	181	16	2	-	4
Acanthodoris pilosa	-	-	-	-	-	-	-	-	-	-	3	1	1	*	1	3	*	1	*	1	-	-
Anadara ovalis	1	*f	22	7	1	-	-	-	-	-	11	3	326	82	2	12	1	348	32	3	4	3
Merceneria mercenaria	107	36	8521	2840	3	82	21	9014	2254	4	68	17	5791	1448	4	257	23	23326	2121	11	1	1
Pitar morrhuana	1	*	9	3	1	-	-	-	-	-	-	-	-	-	-	1	*	9	1	1	-	-
Petricola pholadiformis	2	1	4	1	1	-	-	-	-	-	-	-	-	-	-	2	*	4	*	1	-	-
Tagelus plebeius	3	1	53	18	1	-	-	-	-	-	-	-	-	-	-	3	*	53	5	1	-	-
Ensis directus	-	-	-	-	-	-	-	-	-	-	2	1	28	7	2	2	*	28	3	2	-	-
Phyllodocidae	-	-	-	-	-	fragment	-	1	*	1	-	-	-	-	-	fragment	-	1	*	1	-	-
Nereis succinea	-	-	-	-	-	1	*	48	-	1	-	-	-	-	-	1	*	+	-	1	-	-
Nereis sp.	-	-	-	-	-	1	*	1	*	1	-	-	-	-	-	1	*	1	*	1	-	-
Sabellaria vulgaris	5	2	1	*	2	-	-	-	-	-	-	-	-	-	-	5	*	1	*	2	-	-
Lumbrineris fragilis	-	-	-	-	-	fragment	-	1	*	1	-	-	-	-	-	fragment	-	1	*	1	-	-
Hydroides dianthus	20	7	2	1	2	25	6	3	1	3	50	13	2	1	1	95	9	7	1	6	2	-
Pagurus pollicaris	1	*	23	8	1	2	1	18	5	1	1	*	16	4	1	4	*	57	5	3	-	-
Libinia emarginata	8	3	450	150	1	11	3	858	215	3	1	*	74	19	1	20	2	1382	126	5	3	2
L. dubia	2	1	126	42	2	-	-	-	-	-	-	-	-	-	-	2	*	126	11	2	-	5
Cancer irroratus	2	1	26	9	1	-	-	-	-	-	-	-	-	-	-	2	*	26	2	1	-	-
Neopanope texana	1	*	1	*	1	3	1	7	2	1	4	1	3	1	1	8	1	11	1	3	5	-
No. Gastropoda	-	-	-	-	-	1	*	98	25	-	4	1	84	21	-	5	*	182	17	-	-	-
No. Bivalvia	114	38	8609	2870	-	82	21	9014	2254	-	81	20	6145	1536	-	277	25	23768	2161	-	-	-
No. Decapoda	14	5	626	209	-	16	4	883	221	-	6	2	93	23	-	36	3	1602	146	-	-	-
Total taxa	16	-	-	-	-	13	-	-	-	-	12	-	-	-	-	24	-	-	-	-	-	-
Total specimens	153	51	9238	3079	-	126	32	10001	2500	-	141	35	6324	1581	-	420	38	25563	2324	-	-	-
No. collections	3	-	-	-	-	4	-	-	-	-	4	-	-	-	-	11	-	-	-	-	-	-

a n = Number of specimens collected for a season. b n/coll = Average number of specimens per collection. c wt = Weight of specimens collected for a season.
d wt/coll = Average weight of specimens per collection. e f = Number of collections in which species appeared. f * = Signifies the number is less than 0.5.
g + = Signifies the weight is less than 0.5g.

Table 55. Length-frequency distributions of 1,133 Atlantic surf clam, *Spisula solidissima*, collected off Little Egg Inlet, New Jersey in September 1974.

Station	1-50	-	-	-	46	48	1	2	3	10	47	49	50	13	14	4	15
Depth (feet)	10-56	less than 20	20-40	greater than 40	10	12	14	14	14	14	15	16	16	17	18	19	19
Length (mm)																	
175-179	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
170-174	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
165-169	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
160-164	5	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-
155-159	4	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150-154	4	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
145-149	4	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-
140-144	5	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-
135-139	6	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-
130-134	18	8	9	1	-	-	-	-	-	-	-	-	-	-	-	-	-
125-129	44	27	14	3	1	1	-	-	1	3	-	5	1	-	8	5	-
120-124	50	30	17	3	2	-	-	-	2	2	-	9	2	1	4	5	-
115-119	81	67	12	2	9	2	-	-	7	10	-	20	8	-	5	5	-
110-114	96	90	6	-	20	4	-	-	15	13	-	21	4	-	4	4	3
105-109	153	149	4	-	30	11	6	3	19	6	-	41	10	-	18	4	-
100-104	196	193	1	2	38	7	12	20	41	4	1	21	6	-	38	5	-
95-99	185	184	1	-	27	3	23	36	46	2	-	13	8	-	23	3	-
90-94	125	125	-	-	4	3	57	30	14	1	-	6	1	-	6	3	-
85-89	60	60	-	-	6	-	37	11	3	1	-	-	-	-	-	-	-
80-84	17	17	-	-	-	-	14	2	-	-	1	-	-	-	-	-	-
75-79	3	2	-	1	-	-	1	-	-	-	1	-	-	-	-	-	-
70-74	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65-69	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	8	8	-	-	-	-	-	-	4	-	-	1	-	-	-	-	-
30-34	20	20	-	1	-	-	1	-	2	-	2	-	-	-	4	-	1
25-29	28	28	-	-	-	-	10	-	3	-	-	-	-	-	5	1	6
20-24	9	9	-	-	-	-	4	-	-	-	-	-	-	-	1	-	3
15-19	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-14	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean	101	98	127	114	103	80	86	96	98	111	66	108	108	122	100	111	47
Mode	102	102	122	125	102	107	92	97	97	112	32	107	107	-	102	122	27
Standard Deviation	22	21	24	25	10	36	20	5	18	9	-	10	11	-	24	18	38

[illegible]

Table 56. Macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in the vicinity of the Site off Little Egg Inlet, New Jersey by season in 1974.*

		WINTER					SPRING					SUMMER					FALL					TOTAL			
Depth Range (feet)		8-48					11-48					9-45					10-52					8-52			
Salinity Range (ppt), surface		27.5-31.0					27.5-31.5					28.0-31.0					28.5-31.0					27.5-31.5			
bottom		28.5-31.0					28.0-31.5					28.5-31.0					29.0-31.0					28.0-31.5			
Temperature Range, (C) surface		2.0-7.0					6.0-20.2					16.5-25.0					5.0-19.2					2.0-25.0			
bottom		2.0-6.0					5.5-20.0					15.3-24.1					5.4-19.2					2.0-24.1			
air		0.0-12.0					8.0-24.0					17.5-26.5					-2.0-21.0					-2.0-26.5			
Oxygen Range (ppm), surface		9.6-12.0					6.8-11.0					5.8-12.0					7.2-10.4					5.8-12.0			
bottom		9.8-12.2					5.1-10.6					3.8-10.7					6.2-9.6					3.8-12.2			
Secchi Range (feet)		3.0-17.0					2.5-15.0					4.0-39.0					2.0-34.0					2.0-39.0			
	n ^a	wt ^b	f ^c	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank
Hydractinia echinata	present	-	13	-	-	present	-	19	-	-	present	-	42	-	-	present	-	23	-	-	present	-	97	-	-
Aquorea sp.	-	-	-	-	-	-	-	-	-	-	present	-	22	-	-	present	-	1	-	-	present	-	23	-	-
Cyanea capillata	-	-	-	-	-	-	-	-	-	-	present	-	22	-	-	38	9200	11	10	6	38+	9200+	33	20	8
Actiniaria	1	1	1	18.5	21.5	19	17	2	14.5	18	-	-	-	-	-	-	-	-	-	-	20	18	3	23	28.5
Beroe sp.	-	-	-	-	-	-	-	-	-	-	present	-	4	-	-	-	-	-	-	-	present	-	4	-	-
Ctenophora	present	-	1	-	-	-	-	-	-	-	present	-	31	-	-	present	-	2	-	-	present	-	34	-	-
Crepidula fornicata	-	-	-	-	-	present	-	2	-	-	present	-	3	-	-	present	-	2	-	-	present	-	7	-	-
Crepidula plana	present	-	3	-	-	present	-	14	-	-	present	-	21	-	-	present	-	12	-	-	present	-	50	-	-
Crepidula convexa	-	-	-	-	-	present	-	3	-	-	present	-	8	-	-	present	-	3	-	-	present	-	14	-	-
Polinices duplicata	2	32	2	13.5	13	6	169	6	20	14	7	207	2	19	17	-	-	-	-	-	15	408	10	26	21
Polinices heros	17	468	13	8	7	31	1303	13	12	10	8	51	7	17.5	19	4	138	3	21	17	60	1960	36	15	13
Polinices sp. egg case	-	-	-	-	-	present	-	4	-	-	present	-	8	-	-	-	-	-	-	-	present	-	12	-	-
Nassarius trivittatus	866	566	25	3	6	556	397	27	4	13	245	167	31	9	18	76	57	13	9	20	1743	1187	96	7	15
Nassarius rivittatus eggs	-	-	-	-	-	present	-	3	-	-	present	-	4	-	-	-	-	-	-	-	present	-	7	-	-
Acanthodoris pilosa	-	-	-	-	-	4	2	1	22.5	22.5	-	-	-	-	-	-	-	-	-	-	4	2	1	31	38.5
Yoldia limatula	-	-	-	-	-	-	-	-	-	-	5	7	2	22	22	-	-	-	-	-	5	7	2	29	31
Mytilus edulis	-	-	-	-	-	343	3276	1	8	7	6	5	1	20.5	23	-	-	-	-	-	349	3281	2	10	11
Astarte castanea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	1	30.5	24	1	4	1	43.5	34.5
Pitar morrhuana	1	6	1	18.5	15	-	-	-	-	-	2	38	1	25.5	20	-	-	-	-	-	3	44	2	34	24
Spisula solidissima	3	378	2	11.5	8	-	-	-	-	-	4	598	3	23	12	2	185	2	26.5	15	9	1161	7	28	16
Ensis directus	-	-	-	-	-	1	2	1	26	22.5	-	-	-	-	-	-	-	-	-	-	1	2	1	43.5	38.5
Siliqua costata	-	-	-	-	-	-	-	-	-	-	1	+ ^d	1	30.5	-	-	-	-	-	-	1	+	1	43.5	-
Loligo pealei	-	-	-	-	-	368	4418	15	7	5	6872	10447	34	2	2	880	8781	29	4	7	8120	23646	78	3	6
Lolliguncula brevis	-	-	-	-	-	-	-	-	-	-	673	2164	21	7	10	398	754	34	7	11	1071	2918	55	9	12
Loliginidae eggs	-	-	-	-	-	present	-	3	-	-	present	-	1	-	-	-	-	-	-	-	present	-	4	-	-
Antinoella sarsi	-	-	-	-	-	8	1	3	18	25.5	3	2	2	24	24.5	-	-	-	-	-	11	3	5	27	37
Lepidonotus squamatus	-	-	-	-	-	1	1	1	26	25.5	-	-	-	-	-	-	-	-	-	-	1	1	1	43.5	40.5
Lepidonotus sublevis	-	-	-	-	-	6	1	5	20	25.5	8	2	5	17.5	24.5	10	1	8	17	29	24	4	10	22	34.5
Sthenelais limicola	-	-	-	-	-	1	+	1	26	-	-	-	-	-	-	-	-	-	-	-	1	+	1	43.5	-
Glycera americana	1	1	1	18.5	21.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	43.5	40.5

Table 56. (cont.)

	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank
<i>Nephtys incisa</i>	-	-	-	-	-	-	-	-	-	-	1	+	1	30.5	-	-	-	-	-	-	1	+	1	43.5	-
<i>Diopatra cuprea</i>	2	2	1	13.5	20	1	1	1	26	25.5	-	-	-	-	-	1	1	1	30.5	29	4	4	2	31	34.5
<i>Asabellides oculata</i>	-	-	-	-	-	present	-	4	-	-	-	-	-	-	-	-	-	-	-	present	-	4	-	-	-
<i>Ampharetidae</i>	-	-	-	-	-	present	-	4	-	-	present	-	12	-	-	2	+	1	26.5	-	2	+	17	36.5	-
<i>Limulus polyphemus</i>	3	3500	1	11.5	4	42	60400	16	11	1	32	66200	13	14	1	23	29500	17	14	1	100	159600	47	14	1
<i>Squilla empusa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	2	26.5	23	2	8	2	36.5	30
<i>Nannosquilla grayi</i>	-	-	-	-	-	1	3	1	26	21	1	1	1	30.5	27	1	1	1	30.5	29	3	5	3	34	32
<i>Cirolana conchârum</i>	26	14	10	7	14	16	6	4	16	19	2	+	2	25.5	-	7	3	3	18.5	25.5	51	23	19	18	26.5
<i>Litonia ovalis</i>	-	-	-	-	-	-	-	-	-	-	1	+	1	30.5	-	-	-	-	-	-	1	+	1	42.5	-
<i>Penaeus aztecus</i>	-	-	-	-	-	-	-	-	-	-	11	243	8	16	16	28	426	10	13	12	39	669	18	19	20
<i>Palaemonetes vulgaris</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	1	30.5	-	1	+	1	42.5	-
<i>Dichelopandalus leptocerus</i>	6	4	6	10	17	22	15	4	13	18	1	1	1	30.5	27	3	3	3	23.5	25.5	32	23	15	21	26.5
<i>Crangon septemspinosus</i>	10601	5754	39	1	3	5229	1853	34	2	9	30765	8170	48	1	5	4073	1408	32	1	10	50668	17185	153	1	7
<i>Homarus americanus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	308	3	21	14	4	308	3	31	22
<i>Pagurus acadianus</i>	-	-	-	-	-	-	-	-	-	-	1	+	1	30.5	-	-	-	-	-	-	1	+	1	42.5	-
<i>Pagurus longicarpus</i>	142	43	27	6	12	464	156	32	5	14	943	506	49	6	15	255	96	36	8	19	1804	801	144	6	18
<i>Pagurus pollicaris</i>	7	50	3	9	11	68	526	22	10	12	86	551	24	11	13	37	315	13	11.5	13	198	1442	62	11	14
<i>Libinia emarginata</i>	1	89	1	18.5	10	19	2409	9	14.5	8	56	2474	22	12	9	37	2811	16	11.5	9	113	7783	48	12	10
<i>Libinia dubia</i>	-	-	-	-	-	-	-	-	-	-	1	1	1	30.5	27	-	-	-	-	-	1	1	1	42.5	40.5
<i>Cancer irroratus</i>	474	42848	37	5	1	442	34563	36	6	2	1664	2868	51	3	8	696	14254	47	5	5	3276	94533	171	5	2
<i>Cancer borealis</i>	1	3	1	18.5	18.5	12	44	2	17	16	1	+	1	30.5	-	4	102	3	21	18	18	149	7	24.5	23
<i>Carcinus maenas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	43	1	30.5	21	1	43	1	42.5	25
<i>Ovalipes ocellatus</i>	-	-	-	-	-	119	4298	25	9	6	428	7600	31	8	6	640	22349	48	6	2	1187	34247	104	8	4
<i>Portunus gibbesi</i>	-	-	-	-	-	-	-	-	-	-	46	530	8	13	14	12	174	6	16	16	58	704	14	16	19
<i>Callinectes sapidus</i>	1	110	1	18.5	9	6	866	3	20	11	30	4213	22	15	7	18	2957	8	15	8	55	8146	34	17	9
<i>Callinectes similis</i>	-	-	-	-	-	-	-	-	-	-	101	984	16	10	11	3	40	3	23.5	22	104	1024	19	13	17
<i>Neopanope texana</i>	1	5	1	18.5	16	4	4	2	22.5	20	6	8	4	20.5	21	7	1	6	18.5	29	18	18	13	24.5	28.5
<i>Eurypanopeus depressus</i>	1	3	1	18.5	18.5	-	-	-	-	-	-	-	-	-	-	2	1	2	26.5	29	3	4	3	34	34.5
<i>Echinarachnius parma</i>	2006	13188	20	2	2	5668	30833	22	1	3	1425	10418	24	4	3	2241	15297	31	2	3	11340	69736	97	2	3
<i>Asterias forbesii</i>	845	3058	35	4	5	901	4747	31	3	4	1198	8764	49	5	4	1679	15015	50	3	4	4623	31584	165	4	5
Decapoda	11235	48909				6385	44734				34140	28149				5821	45288				57581	167080			
Echinodermata	2851	16246				6569	35580				2623	19182				3920	30312				15963	101320			
Totals	15008	70123				14358	150311				44634	127220				11186	124233				85186	471887			
No. Collections	42					44					58					58					202				
No. Taxa	25					36					46					38					60				
Species Diversity	0.81					1.10					0.94					1.22									

* Seasonal totals are given for winter (January - March), spring (April - June), summer (July - September), and fall (October - December).

a n = Number of specimens collected for a season.

b wt = Weight in gms.

c f = Number of collections in which a species appeared.

d t = Weight less than 1 gm.

Table 57. Macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in the vicinity of the Site off Little Egg Inlet, New Jersey by season in 1974. Species with n/coll < 1 in all columns have been deleted.

	WINTER				SPRING				SUMMER				FALL				TOTAL			
	n/coll ^a	wt/coll ^b	n/f ^c	wt/f ^d	n/coll	wt/coll	n/f	wt/f	n/coll	wt/coll	n/f	wt/f	n/coll	wt/coll	n/f	wt/f	n/coll	wt/coll	n/f	wt/f
<i>Cyanea capillata</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	159	3	836	0	46	1	279
<i>Polinices heros</i>	0 ^e	11	1	36	1	30	2	100	0	1	1	7	0	2	1	46	0	10	2	54
<i>Nassarius trivittatus</i>	21	13	35	23	13	9	21	15	4	3	8	5	1	1	6	4	9	6	18	12
<i>Mytilus edulis</i>	-	-	-	-	8	74	343	3276	0	0	6	5	-	-	-	-	2	16	1745	1640
<i>Loligo pealei</i>	-	-	-	-	8	100	25	295	118	180	202	307	15	151	30	303	40	117	104	303
<i>Lolliguncula brevis</i>	-	-	-	-	-	-	-	-	12	37	32	103	7	13	12	22	5	14	19	53
<i>Limulus polyphemus</i>	0	83	3	3500	1	1373	3	3775	1	1141	3	5092	0	509	1	1735	0	790	2	3396
<i>Cirolana concharum</i>	1	0	3	1	0	0	4	1	0	0	1	0	0	0	3	1	0	0	3	1
<i>Dichelopandalus leptocerus</i>	0	0	1	1	1	0	6	4	0	0	1	1	0	0	1	1	0	0	2	1
<i>Crangon septemspinosa</i>	252	137	272	148	119	42	154	55	530	141	641	170	70	24	127	44	251	85	331	112
<i>Pagurus longicarpus</i>	3	1	5	2	11	4	15	5	16	9	19	10	4	2	7	3	9	4	12	5
<i>Pagurus pollicaris</i>	0	1	2	17	2	12	3	24	1	10	4	23	1	5	3	24	1	7	3	23
<i>Libinia emarginata</i>	0	2	1	89	0	55	2	268	1	43	3	112	1	48	2	176	1	39	2	162
<i>Cancer irroratus</i>	11	1020	13	1158	10	786	12	960	29	49	33	56	12	246	15	303	16	468	19	553
<i>Ovalipes ocellatus</i>	-	-	-	-	3	98	5	172	7	131	14	245	11	385	13	466	6	170	11	329
<i>Portunus gibbesi</i>	-	-	-	-	-	-	-	-	1	9	6	66	0	3	2	29	0	3	4	50
<i>Callinectes sapidus</i>	0	3	1	110	0	20	2	289	1	73	1	192	0	51	2	370	0	40	2	239
<i>Callinectes similis</i>	-	-	-	-	-	-	-	-	2	17	6	62	0	1	1	13	1	5	5	54
<i>Echinarachnius parma</i>	48	314	100	659	129	701	258	1402	25	180	59	24	39	264	72	493	56	345	117	719
<i>Asterias forbesii</i>	20	73	24	87	20	108	29	153	21	151	24	179	29	259	33	300	23	156	28	191
Total No. Decapoda	268 ^f	1165			145	1017			589	485			100	780			285	827		
Total No. Echinodermata	68	387			149	809			45	331			67	523			79	501		
Total No. specimens	357	1670			326	3416			770	2193			193	2142			422	2336		

a n/coll = Number of specimens per collection.

b wt/coll = Weight per collection in grams.

c n/f = Number of specimens per collection in which they appeared.

d wt/f = Weight in grams per collection in which the species appeared.

e 0 = n/coll is less than 1.

f Totals include species with n/coll < 0.5 which are not listed in this table.

Table 58. Number and weight of macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in the vicinity of the Site off Little Egg Inlet, New Jersey by month in 1974.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
Depth Range (feet)	12-48		8-45		15-48		11-45		12-45		11-48		10-45		10-45		9-45		12-50		10-50		12-52	
Salinity Range (ppt)																								
surface	27.5-29.5		28.5-30.0		28.0-31.0		28.0-31.0		27.5-31.5		28.5-30.0		28.0-30.0		29.5-31.0		28.0-30.5		28.5-31.0		28.5-30.5		30.0-30.5	
bottom	29.0-30.0		28.5-30.5		29.0-31.0		29.0-31.0		28.0-30.5		29.5-30.5		28.5-31.0		30.0-31.0		28.5-31.0		30.0-31.0		29.0-31.0		30.0-30.5	
Temp. Range (C)																								
surface	4.0-5.0		2.0-3.9		5.0-7.0		6.0-10.0		9.0-15.0		18.5-20.2		20.2-24.0		16.5-24.5		20.0-25.0		16.0-19.2		9.5-13.7		5.0-7.0	
bottom	4.0-5.5		2.0-3.8		5.0-6.0		5.5-10.0		9.0-15.0		16.0-20.0		17.0-21.0		15.3-24.1		17.0-22.0		16.0-19.2		10.0-13.5		5.4-7.5	
air	0.0-11.5		2.0-6.0		5.0-12.0		8.0-14.0		10.0-16.5		20.5-24.0		21.5-28.0		23.0-26.5		17.5-25.0		15.0-20.5		10.0-21.0		-2.0-6.0	
Oxygen Range (ppm)																								
surface	10.0-10.9		11.0-12.0		9.6-11.0		8.2-11.0		8.6-10.5		6.8-10.0		6.7-8.2		6.7-12.0		5.8-7.8		7.2-9.7		7.8-10.4		9.2-9.6	
bottom	9.8-10.7		10.4-12.2		10.0-11.1		8.6-10.6		8.5-9.7		5.1-10.4		4.4-8.2		5.9-10.7		3.8-8.2		6.2-8.9		7.5-9.5		9.2-9.6	
Secchi Range (feet)	3.0-14.5		3.0-17.0		3.5-10.0		2.5-12.0		4.0-17.0		9.5-15.0		4.0-13.0		4.0-36.0		5.0-39.0		4.5-34.0		4.0-13.5		2.0-6.0	
	No. ^a	Wt. ^b	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-
Aquorea sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanea capillata	-	-	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	38	9200	-	-	-	-
Actiniaria	-	-	-	-	1	1	2	5	17	12	-	-	-	-	present	-	-	-	-	-	-	-	-	-
Beroe sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	present	-	-	-	-	-	-	-
Ctenophora	present	-	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-
Crepidula fornicata	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-
Crepidula plana	-	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-
Crepidula convexa	-	-	-	-	-	-	present	-	-	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-
Polinices duplicata	1	10	1	22	-	-	3	88	-	-	3	81	7	207	-	-	-	-	-	-	-	-	-	-
Polinices heros	-	-	8	180	-	288	17	900	6	302	8	101	6	42	1	9	1	+ ^c	1	8	2	72	1	58
Polinices sp. egg case	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	14	10	770	498	82	58	329	279	58	37	169	81	98	58	59	38	88	71	21	18	4	4	51	35
Nassarius trivittatus eggs	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	-	-	-	-	-	-	-	-
Acanthodoris pilosa	-	-	-	-	-	-	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yoldia limatula	-	-	-	-	-	-	-	-	-	-	-	-	5	7	-	-	-	-	-	-	-	-	-	-
Mytilus edulis	-	-	-	-	-	-	-	-	343	3276	-	-	-	-	-	-	6	5	-	-	-	-	-	-
Astarte castanea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4
Pitar morrhuana	1	6	-	-	-	-	-	-	-	-	-	-	2	38	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	-	-	2	295	1	83	-	-	-	-	-	-	4	598	-	-	-	-	1	177	-	-	1	8
Ensis directus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siliqua costata	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-
Loligo pealei	-	-	-	-	-	-	-	-	36	1525	332	2893	734	2621	410	1159	5728	6667	274	904	605	7685	1	192
Loliguncula brevis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	164	468	509	1696	261	407	137	347	-	-
Loliginidae eggs	-	-	-	-	-	-	-	-	present	-	present	-	-	-	present	-	-	-	-	-	-	-	-	-
Antinoella sarsi	-	-	-	-	-	-	-	-	5	1	3	+	3	2	-	-	-	-	-	-	-	-	-	-
Lepidonotus squamatus	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lepidonotus sublevis	-	-	-	-	-	-	-	-	-	-	6	1	4	2	2	+	2	+	6	+	1	+	3	1
Sthenelais limicola	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-
Glycera americana	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-
Nephtys incisa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
Diopatra cuprea	2	2	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asabellides oculata	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-
Ampharetidae	-	-	-	-	-	-	-	-	-	-	present	-	present	-	-	-	present	-	2	+	-	-	-	-
Limulus polyphemus	-	-	-	-	3	3500	32	50200	9	9900	1	300	17	34500	9	20500	6	11200	13	19700	4	4800	6	5000
Squilla empusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	1	5
Nannosquilla grayi	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	1	1	-	-	-	-	1	1
Cirolana concharum	4	2	11	6	11	6	3	1	1	+	12	5	2	+	-	-	-	-	-	-	3	1	4	2
Lironica ovalis	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-
Penaeus aztecus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	36	9	207	15	252	13	174	-	-
Palaeomonetes vulgaris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Dichelopandalus leptocerus	-	-	5	4	1	+	19	12	3	3	-	-	-	-	-	-	1	1	-	-	2	2	1	1

Table 58. (cont.)

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
<i>Crangon septemspinosa</i>	2265	1350	7657	3888	679	516	874	460	2137	667	2218	726	14514	4475	4172	768	12079	2927	487	72	390	55	3196	1281
<i>Homarus americanus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	245	3	63
<i>Pagurus acadianus</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	24	6	87	26	31	11	123	52	82	28	259	76	617	360	84	31	242	115	72	33	124	50	59	13
<i>Pagurus pollicaris</i>	1	9	6	41	-	-	24	239	5	53	39	234	45	319	8	42	33	190	5	41	4	27	28	247
<i>Libinia emarginata</i>	1	89	-	-	-	-	4	300	5	533	10	1576	11	1577	10	140	35	757	21	222	3	177	13	2412
<i>Libinia dubia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
<i>Cancer irroratus</i>	112	7910	232	22245	130	12690	341	32443	38	2058	63	62	1143	1498	281	542	240	828	225	1494	295	6880	176	5880
<i>Cancer borealis</i>	-	-	-	-	1	3	1	-	11	44	-	-	-	-	-	-	1	+	3	50	-	-	1	52
<i>Carcinus maenas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	43
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	42	1130	73	3083	4	85	74	1870	139	1692	215	4038	166	5898	316	12424	158	4027
<i>Portunus gibbesi</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	45	526	3	30	8	117	1	27
<i>Callinectes sapidus</i>	-	-	1	110	-	-	2	310	-	-	4	556	7	1029	13	1743	10	1441	-	-	17	2828	1	129
<i>Callinectes similis</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	1	21	144	78	839	1	4	2	36	-	-
<i>Neopanope texana</i>	1	5	-	-	-	-	3	3	1	1	-	-	-	-	2	1	4	7	2	+	3	+	2	1
<i>Eurypanopeus depressus</i>	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	1	1
<i>Echinarachnius parma</i>	849	5550	886	5754	271	1894	5459	29344	162	1140	47	349	1288	9481	14	92	123	845	407	3090	1147	7331	687	4876
<i>Asterias forbesii</i>	196	630	481	760	168	1668	617	3138	113	563	171	1046	340	2746	375	2331	483	3687	723	9363	861	4676	95	976
Total taxa	17		15		15		23		23		27		33		29		33		28		28		31	
Total specimens	3473	15583	10147	33829	1388	20711	7901	118910	3106	23227	3351	8174	18926	61431	5767	29740	19941	36049	2749	50966	3943	47932	4494	25335
Species diversity	0.62		0.77		1.03		1.03		1.06		1.26		0.80		1.02		0.99		1.28		1.36		0.74	

a No= Number of specimens collected for a month.

b Wt. = Weight in grams of specimens collected for a month.

c + = Signifies the weight is less than 0.5g.

Table 59. Number and weight of macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in Little Egg Inlet, Great Bay, and the Mullica River, New Jersey by season in 1974.

	WINTER					SPRING					SUMMER					FALL					TOTAL				
Depth Range (feet)	3-35					5-35					6-25					6-25					3-35				
Salinity Range (ppt), surface	19.0-26.5					10.0-30.0					17.0-30.0					21.0-31.0					10.0-31.0				
bottom	20.0-29.0					13.0-30.0					19.0-30.5					20.5-31.5					13.0-31.5				
Temperature Range (C), surface	3.3-7.0					8.5-21.0					19.0-26.9					4.0-17.0					3.3-26.9				
bottom	3.3-7.5					8.0-21.0					19.5-26.9					4.0-18.0					3.3-26.9				
air	3.0-11.0					10.0-17.0					19.0-28.0					6.0-23.0					3.0-28.0				
Oxygen Range (ppm), surface	11.1-12.0					7.7-10.6					5.7-8.0					7.1-10.2					5.7-12.0				
bottom	10.7-12.0					7.3-10.3					5.7-8.6					7.8-11.0					5.7-12.0				
Secchi Range (feet)	1.5-3.5					1.0-4.5					1.0-6.0					1.0-7.0					1.0-7.0				
	n ^a	wt ^b	f ^c	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	wt. rank	n	wt	f	#rank	Wt. rank
Microciona prolifera	present	-	4	-	-	present	-	4	-	-	present	-	6	-	-	present	4000	8	-	4	present	4000	22	-	8
Cliona sp.	present	-	2	-	-	present	-	2	-	-	present	-	1	-	-	present	32000	2	-	1	present	32000	7	-	2
Hydractinia echinata	present	-	2	-	-	present	-	1	-	-	present	-	3	-	-	present	-	2	-	-	present	-	8	-	-
Aequorea sp.	-	-	-	-	-	-	-	-	-	-	present	-	1	-	-	-	-	-	-	-	present	-	1	-	-
Beroe sp.	-	-	-	-	-	-	-	-	-	-	present	-	1	-	-	-	-	-	-	-	present	-	1	-	-
Ctenophora	-	-	-	-	-	present	-	2	-	-	present	-	1	-	-	-	-	-	-	-	present	-	3	-	-
Nemertea	-	-	-	-	-	2	1	2	15.5	21	-	-	-	-	-	-	-	-	-	-	2	1	2	29	35.5
Crepidula convexa	present	-	2	-	-	present	+ ^d	1	-	-	present	-	1	-	-	present	-	2	-	-	present	+	6	-	-
Crepidula plana	present	-	1	-	-	-	-	-	-	-	present	-	2	-	-	present	-	1	-	-	present	-	4	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	78	1	22.5	12.5	+	78	1	-	22
Urosalpinx cinereus	-	-	-	-	-	2	3	2	15.5	19	-	-	-	-	-	2	1	1	19	24.5	4	4	3	24.5	32
Anachis translirata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1	1	11	24.5	12	1	1	16.5	35.5
Busycon canaliculatum	-	-	-	-	-	1	47	1	21.5	11	-	-	-	-	-	present	-	1	-	-	1	47	2	36	24
Busycon sp.	-	-	-	-	-	1	-	1	21.5	-	-	-	-	-	-	-	-	-	-	-	1	-	1	36	-
Illyanassa obsoleta	7	7	2	10	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7	2	20.5	29.5
Mytilus edulis	-	-	-	-	-	present	-	1	-	-	60696	46309	1	1	1	-	-	-	-	-	60696	46309	2	1	1
Crassostrea virginica	1	29	1	14	10	-	-	-	-	-	-	-	-	-	-	2	124	1	19	10	3	153	2	27	18
Anomia simplex	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	1	22.5	21	1	7	1	6	29.5
Mercenaria mercenaria	2	-	1	11.5	-	-	-	-	-	-	18	1600	1	11	3	-	-	-	-	-	20	1600	2	14	10
Lolliguncula brevis	-	-	-	-	-	1	10	1	21.5	16	169	594	7	2	4	8	51	3	12.5	16	178	655	11	9	11
Nereis succinea	-	-	-	-	-	-	-	-	-	-	1	+	1	19.5	-	-	-	-	-	-	1	+	1	36	-
Nereis sp.	-	-	-	-	-	1	+	1	21.5	-	-	-	-	-	-	-	-	-	-	-	1	+	1	36	-
Ampharetidae	-	-	-	-	-	present	-	1	-	-	-	-	-	-	-	-	-	-	-	-	present	-	1	36	-
Sabellaria vulgaris	-	-	-	-	-	-	-	-	-	-	present	+	1	-	-	-	-	-	-	-	present	+	1	36	-
Limulus polyphemus	1	250	1	14	5	4	3000	1	13	3	1	300	1	19.5	6	3	3800	2	16.5	5	9	7350	5	18	6
Squilla empusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20	1	22.5	19	1	20	1	36	26
Cirolana concharum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	2	15	23	4	3	2	24.5	33.5
Lironeca ovalis	-	-	-	-	-	1	+	1	21.5	-	-	-	-	-	-	-	-	-	-	-	1	+	1	36	-
Penaeus aztecus	-	-	-	-	-	-	-	-	-	-	3	65	3	16	11	2	32	1	19	18	5	97	4	23	20
Palaemonetes vulgaris	2317	550	2	2	3	24	8	5	7	17	33	3	3	9	18	234	74	7	3	14	2608	635	17	3	12
Palaemonetes pugio	-	-	-	-	-	3	+	1	14	-	-	-	-	-	-	-	-	-	-	-	3	+	1	27	-
Palaemonetes sp.	present	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	1	-	-
Hippolytina wurdemanni	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	1	22.5	-	1	+	1	36	-
Crangon septemspinosa	36315	18202	8	1	2	16836	8760	11	1	1	127	11	4	3	16	739	282	9	1	8	54017	27255	32	2	4
Upogebia affinis	1	5	1	14	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	1	36	1

Table 59. (cont.)

	WINTER					SPRING					SUMMER					FALL					TOTAL				
	n	wt	f	#rank	wt.rank	n	wt	f	#rank	wt.rank	n	wt	f	#rank	wt.rank	n	wt	f	#rank	wt.rank	n	wt	f	#rank	wt.rank
Pagurus longicarpus	238	63	3	5	8	143	31	5	4	13	78	42	5	4	12	48	13	6	9	20	507	149	19	5	19
Pagurus pollicaris	-	-	-	-	-	1	+	1	21.5	-	2	+	1	18	-	-	-	-	-	-	3	+	2	27	-
Libinia emarginata	-	-	-	-	-	1	58	1	21.5	10	3	308	3	16	5	8	170	4	12.5	9	12	536	8	16.5	13
Libinia dubia	-	-	-	-	-	5	234	3	12	7	9	73	5	12	10	3	5	2	16.5	22	17	312	10	15	15
Libinia sp.	-	-	-	-	-	7	500	1	10	5	-	-	-	-	-	-	-	-	-	-	7	500	1	20.5	14
Cancer irroratus	248	23391	4	4	1	17	1878	3	8	4	49	206	4	8	9	44	2724	6	10	7	358	28199	17	8	3
Carcinus maenas	-	-	-	-	-	1	40	1	21.5	12	-	-	-	-	-	-	-	-	-	-	1	40	1	36	25
Ovalipes ocellatus	2	58	1	11.5	9	10	166	5	9	8	8	269	2	13	7	114	6542	6	4	2	134	7035	14	11	7
Portunus gibbesi	-	-	-	-	-	-	-	-	-	-	3	10	2	16	73	5	78	1	14	12.5	8	88	3	19	21
Callinectes sapidus	68	199	4	7	6	195	3683	8	3	2	70	2803	10	6	2	56	4693	9	8	3	389	11378	31	7	5
Callinectes similis	-	-	-	-	-	-	-	-	-	-	6	13	3	14	15	-	-	-	-	-	6	13	3	22	27
Panopeus herbstii	-	-	-	-	-	1	11	1	21.5	15	-	-	-	-	-	-	-	-	-	-	1	11	1	36	28
Neopanope texana	100	64	5	6	7	39	26	5	6	14	67	33	7	7	13	264	122	10	2	11	470	245	27	6	16
Eurypanopeus depressus	11	6	3	9	12	6	3	4	11	19	22	16	4	10	14	57	41	10	7	17	96	66	21	12	23
Xanthidae	-	-	-	-	-	115	100	2	5	9	-	-	-	-	-	60	60	2	6	15	175	160	4	10	17
Arbacia punctulata	-	-	-	-	-	1	-	1	21.5	-	-	-	-	-	-	-	-	-	-	-	1	-	1	36	-
Asterias forbesii	311	301	4	3	4	634	455	7	2	6	76	251	7	5	8	83	2834	9	5	6	1104	3841	27	4	9
Mogula manhattensis	25	+	2	8	-	present	3	2	-	19	present	-	3	-	-	-	-	-	-	-	25	3	7	13	33.5
Decapoda	39300	42538				17405	15498				480	3852				1635	14386				58820	76724			
Echinodermata	311	301				635	455				76	251				83	2834				1105	3841			
Taxa	21					34					30					30					59				
Total	39647	43125				18052	19017				61441	52906				1752	57755				120892	172803			
No. Collections	8					12					12					12					44				
Species Diversity	0.74					1.06					1.12					1.40					-				

- a n = Number of specimens collected for a season.
b wt = Weight in gms collected for a season.
c f = Number of collections in which a species appeared.
d + = Signifies the weight is less than 0.5g.

Table 60. Macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in the vicinity of the Site in Little Egg Inlet, Great Bay, and the Mullica River, New Jersey by season in 1974.
Species with n/coll < 1 in all columns have been deleted.

	WINTER				SPRING				SUMMER				FALL				TOTAL			
	n/coll ^a	wt/coll ^b	n/f ^c	wt/f ^d	n/coll	wt/coll	n/f	wt/f	n/coll	wt/coll	n/f	wt/f	n/coll	wt/coll	n/f	wt/f	n/coll	wt/coll	n/f	wt/f
Anachis translirata	-	-	-	-	-	-	-	-	-	-	-	-	1	0	12	1	0	0	12	1
Busycon sp.	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	0	-	1	-
Ilyanassa obsoleta	1	1	3	3	-	-	-	-	-	-	-	-	-	-	-	-	0	0	3	3
Mytilus edulis	-	-	-	-	present	-	-	-	5058	3859	60696	46309	-	-	-	-	300	229	30348	23155
Mercenaria mercenaria	0 ^e	-	2	-	-	-	-	-	2	139	18	1600	-	-	-	-	0	8	10	1300
Lolliguncula brevis	-	-	-	-	0	1	1	10	14	50	24	85	1	4	3	17	1	3	16	60
Nereis succinea	-	-	-	-	0	0	1	0	1	+	1	0	-	-	-	-	0	0	1	0
Palaemonetes vulgaris	290	69	1159	275	2	1	5	2	3	0	11	1	20	6	33	11	13	3	153	37
Crangon septemspinosa	4539	2275	4539	2275	1403	730	1531	796	11	1	32	3	62	24	82	31	267	135	1688	852
Pagurus longicarpus	30	8	79	21	12	3	29	6	7	4	16	8	4	1	8	2	3	1	27	8
Libinia emarginata	-	-	-	-	0	5	1	58	0	26	1	103	1	14	2	43	0	3	1	67
L. dubia	-	-	-	-	0	20	2	78	1	6	2	15	0	0	1	2	0	2	2	31
Cancer irroratus	31	2924	62	5848	1	57	6	622	4	17	12	52	4	227	7	454	2	140	21	1659
Ovalipes ocellatus	0	7	2	58	1	14	2	31	1	22	4	134	10	545	19	1090	1	35	10	503
Callinectes sapidus	9	25	17	50	16	307	24	460	6	234	7	28	5	391	6	521	2	56	13	367
C. similis	-	-	-	-	-	-	-	-	1	1	2	4	-	-	-	-	0	0	2	4
Neopanope texana	13	8	25	13	3	2	8	5	6	3	10	5	22	10	3	12	2	1	17	9
Eurypanopeus depressus	1	1	4	2	-	-	-	-	2	1	5	4	5	3	6	4	0	0	5	3
Xanthidae	-	-	-	-	10	8	58	50	-	-	-	-	5	5	30	30	1	1	44	40
Asterias forbesii	39	38	78	75	43	38	91	65	6	21	11	36	7	236	9	315	5	19	41	142
Molgula manhattensis	3	0	12	0	present	0	-	1	present	-	-	-	-	-	-	-	1	0	3	0
Total Decapoda	4913 ^f	5317			1450	1292			40	321			136	1236			291	380		
Total Echinodermata	39	38			53	38			6	21			7	236			5	19		
Totals	4956	5391			1504	1585			5120	4409			146	4813			598	855		

a n/coll = Number of specimens per collection.

b wt/coll = Weight per collection in grams.

c n/f = Number of specimens per collection in which they appeared.

d wt/f = Weight in grams per collection in which the species appeared.

e 0 = n/coll is less than 1.

f Totals include species with n/coll < 0.5 which are not listed in this table.

Table 61. Number and weight of macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in Little Egg Inlet, Great Bay, and the Mullica River, New Jersey by month in 1974.

	FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	5-35		3-27		4-35		5-35		5-14		6-25		7-20		6-22		6-14		8-22		9-25	
Depth Range (feet)																						
Salinity Range (ppt)																						
surface	22.0-26.5		19.0-26.5		10.0-24.0		21.0-30.0		21.0-29.5		17.0-27.0		20.5-30.0		20.0-30.0		21.0-30.0		24.0-30.0		24.5-31.0	
bottom	23.0-26.5		20.0-29.0		13.0-27.5		24.0-30.0		22.5-29.5		19.0-28.0		21.0-30.5		20.0-30.0		20.5-29.5		24.5-30.0		26.5-31.5	
Temp. Range (C)																						
surface	3.3-4.0		6.0-7.0		8.5-9.0		14.0-18.5		18.5-21.0		22.0-24.0		19.0-26.9		20.0-23.0		16.0-17.0		15.0-17.0		4.0-6.0	
bottom	3.3-4.0		6.0-7.5		8.0-9.0		15.0-18.5		18.2-21.0		22.5-23.5		19.5-26.9		21.0-23.0		16.5-18.0		15.0-16.0		4.0-6.0	
air	3.0-6.0		9.0-11.0		13.0		10.0-15.0		17.0		25.0-27.0		25.0-28.0		19.0-20.0		20.0-22.5		19.8-23.0		6.0-6.5	
Oxygen Range (ppm)																						
surface	11.4-12.0		11.1-11.8		10.0-10.6		8.1-9.0		7.7-8.5		7.2-8.0		5.7-7.2		6.8-7.8		8.0-10.2		7.1-9.6		8.8-10.0	
bottom	10.8-12.0		10.7-11.3		9.8-10.3		7.3-8.9		7.5-8.4		6.8-8.0		5.7-6.9		7.0-8.6		7.8-9.8		8.8-9.4		9.6-11.0	
Secchi Range (feet)	2.0-3.5		1.5-2.51		2.0-3.5		1.0-2.5		2.5-4.5		3.5-6.0		2.5-3.0		1.0-3.0		2.0-3.5		4.0-7.0		1.0-1.5	
	No. ^a	Wt. ^b	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Microciona prolifera	present	-	present	-	present	-	present	-	-	-	-	-	present	-	present	-	present	400	present	2600	present	1000
Cliona sp.	present	-	present	-	present	1	present	-	-	-	-	-	-	-	present	-	present	-	-	-	present	3200
Hydractinia echinata	present	-	present	-	-	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-	-	-
Aequorea sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-
Beroe sp.	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Ctenophora	-	-	-	-	-	-	present	-	present	-	present	-	-	-	-	-	-	-	-	-	-	-
Nemertea	-	-	-	-	1	1	1	+ ^c	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula convexa	present	-	present	-	-	-	-	-	present	-	present	-	-	-	-	-	present	-	present	-	-	-
Crepidula plana	-	-	present	-	-	-	-	-	-	-	present	-	present	-	-	-	-	-	present	-	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	78	-	-	-	-
Urosalpinx cinereus	-	-	-	-	-	-	1	1	1	2	-	-	-	-	-	-	2	1	-	-	-	-
Anachis translirata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1	-	-
Busycon canaliculatum	-	-	-	-	-	-	-	-	1	47	-	-	-	-	-	-	present	-	-	-	-	-
B. canaliculatum eggs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-
Busycon sp.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illyanassa obsoleta	-	-	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mytilus edulis	-	-	-	-	-	-	-	-	present	-	-	-	60696	46309	-	-	-	-	-	-	-	-
Mytilus edulis spat	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-
Crassostrea virginica	-	-	1	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	124	-	-
Anomia simplex	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-
Mercenaria mercenaria	-	-	2	-	-	-	-	-	-	-	18	1600	-	-	-	-	-	-	-	-	-	-
Lolliguncula brevis	-	-	-	-	-	-	1	10	-	-	1	31	81	283	87	280	7	50	1	1	-	-
Nereis succinea	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-
Nereis sp.	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ampharetidae	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 61. (cont.)

	FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Sabellaria vulgaris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-
Hydroides dianthus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-
Limulus polyphemus	-	-	1	250	-	-	4	3000	-	-	-	-	-	-	1	300	2	3500	-	-	1	300
Squilla empusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20
Cirolana concharum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3
Lironeca ovalis	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-
Penaeus aztecus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	65	2	32	-	-	-	-
Paleomonetes vulgaris	2	+	2315	550	12	3	present	-	12	5	present	-	2	1	31	2	13	3	18	3	203	68
Paleomonetes pugio	-	-	-	-	-	-	3	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paleomonetes sp.	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hippolytina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-
wurdemanni	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crangon septemspinosa	335	212	35980	17990	5959	4450	10764	4265	113	45	1	1	present	-	126	10	36	10	4	4	699	268
Upogebia affinis	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	202	54	36	9	51	11	50	10	42	10	67	39	9	2	2	1	31	7	12	3	5	3
Pagurus pollicaris	-	-	-	-	-	-	-	-	1	+	2	+	-	-	-	-	-	-	-	-	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	1	58	1	3	1	250	1	55	5	39	1	1	2	130
Libinia dubia	-	-	-	-	3	200	-	-	2	34	1	15	4	2	4	56	-	-	3	5	-	-
Libinia sp.	-	-	-	-	-	-	7	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	33	624	215	22767	16	1878	-	-	1	+	7	43	39	159	3	4	5	37	17	1526	22	1161
Carcinus maenas	-	-	-	-	-	-	1	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	-	2	58	3	78	4	50	3	38	7	200	-	-	1	69	98	6000	12	525	4	17
Portunus gibbesi	-	-	-	-	-	-	-	-	-	-	-	-	3	10	-	-	-	-	5	78	-	-
Callinectes sapidus	1	3	67	196	8	12	171	2086	16	1585	10	223	13	891	47	1689	36	4392	9	143	11	158
Callinectes similis	-	-	-	-	-	-	-	-	-	-	-	-	5	5	1	8	-	-	-	-	-	-
Panopeus herbstii	-	-	-	-	-	-	-	-	1	11	-	-	-	-	-	-	-	-	-	-	-	-
Neopanope texana	47	47	53	17	1	4	36	20	2	2	1	+	8	3	58	30	93	40	132	38	39	44
Eurypanopeus depressus	4	4	7	2	1	1	4	2	1	+	-	-	3	3	19	13	14	10	25	10	18	21
Xanthidae	-	-	-	-	115	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	60
Arbacia punctulata	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asterias forbesii	281	272	30	29	624	442	3	2	7	11	1	1	66	204	9	46	57	2490	22	269	4	75
Molgula manhattensis	25	+	present	-	-	-	present	3	present	-	-	-	present	-	-	-	-	-	-	-	-	-
Total taxa	14	-	20	-	14	-	22	-	22	-	18	-	19	-	21	-	21	-	20	-	16	-
Total specimens	930	1216	38717	41909	6794	7180	11053	9989	205	1848	117	2156	60931	48122	393	2628	403	17089	276	5338	1073	35328
No. collections	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-
Species diversity	1.08	-	0.57	-	0.82	-	1.01	-	1.34	-	1.07	-	1.00	-	1.28	-	1.66	-	1.54	-	0.99	-

a No. = Number of specimens collected for a month.

b Wt. = Weight in gms of specimens collected for a month.

c + = Signifies the weight is less than 0.5g.

Table 62. Results of Wilcoxon's signed rank test applied to day-night differences in trawl hauls in the vicinity of the Site in 1974.

	Normal deviate	+ Trend	Significant $\leq .05$
Nassarius trivittatus	-1.92	night	NO
Loligo pealei	3.06	day	YES
Crangon septemspinosa	-3.29	night	YES
Pagurus longicarpus	-0.31	night	NO
Cancer irroratus	.34	day	NO
Ovalipes ocellatus	- .36	night	NO
Echinarachnius parma	-1.68	night	NO
Asterias forbesii	-1.16	night	NO
Total number	-2.78	night	YES
Total weight	-0.28	night	NO

Table 63. Commercial landings of major species of shellfish in Atlantic County and in New Jersey in 1974.

Species	New Jersey				Atlantic County			
	Pounds	Rank	Dollars	Rank	Pounds	Rank	Dollars	Rank
Blue crab	2,870,675	2	724,123	5	130,760	3	32,871	4
Red crab	25,263	11	1,860	13	-	-	-	-
Rock crab	345,693	7	22,212	11	103,036	5	5,196	6
Lobster	1,191,297	5	1,915,856	2	120,457	4	211,240	3
Hard clam	1,741,000	3	1,739,312	3	795,620	2	794,792	1
Soft clam	87,240	10	72,700	8	-	-	-	-
Surf clam	22,656,648	1	2,948,367	1	6,441,198	1	858,059	2
Conch	107,714	9	31,790	9	2,700	7	959	7
Mussel	7,050	13	3,755	12	-	-	-	-
Oyster	1,009,914	6	1,028,702	4	-	-	-	-
Bay Scallops	16,248	12	24,372	10	-	-	-	-
Ocean Scallops	327,686	8	506,860	6	569	8	854	8
Squid	1,286,819	4	237,034	7	91,183	6	19,494	5
Total	31,673,247		9,256,944		7,685,523		1,923,465	

Table 64. Length-frequency distributions by month of 3,608 Atlantic surf clam, *Spisula solidissima*, collected with the ponar grab on the Site transects in 1974.

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lt(mm)	January	February	March	April	May	June	July	August	September	October	November	December
24.0-24.4							1					
23.5-23.9												
23.0-23.4							3					
22.5-22.9												
22.0-22.4							2					
21.5-21.9												
21.0-21.4							2					
20.5-20.9							1					
20.0-20.4							5					
19.5-19.9							5					
19.0-19.4						1	5					
18.5-18.9							3	1				
18.0-18.4							8					
17.5-17.9						1	5					
17.0-17.4							9					
16.5-16.9							9					
16.0-16.4						2	16					
15.5-15.9						3	12	1				
15.0-15.4						4	16					
14.5-14.9	1						20					
14.0-14.4						2	24					
13.5-13.9							14					
13.0-13.4						5	20					
12.5-12.9						6	17	2				
12.0-12.4						12	19					
11.5-11.9						8	28	1				
11.0-11.4						6	20	1				
10.5-10.9			1			16	15	1				
10.0-10.4	1				1	11	26					
9.5-9.9	1				2	9	11		1			
9.0-9.4	1		1		1	16	25					
8.5-8.9	1				4	16	11					
8.0-8.4	2			1	10	14	13	1	1			
7.5-7.9	2		1	1	7	16	7	1				
7.0-7.4	2	2			8	26	15					
6.5-6.9	2	3	1		6	37	10					
6.0-6.4	2		1	1	18	46	9	1				
5.5-5.9	5	3	4	1	26	57	6	1				
5.0-5.4	4		2	3	29	78	6	2			1	1
4.5-4.9	4	2	5	4	43	73	8					
4.0-4.4	6	4	5	7	33	69	5	1			1	1
3.5-3.9	8	7	12	5	34	91		1			3	
3.0-3.4	8	6	16	17	74	84	4	1			6	4
2.5-2.9	19	17	23	31	109	68	4	3	1		13	9
2.0-2.4	45	23	54	47	316	73	16	1	1		23	18
1.5-1.9	110	73	70	62	490	63	30	4	6	3	78	55
1.0-1.4	41	21	24	18	105	9	7	1			38	4
0.5-0.9				3	2							
n (number of organisms)	265	161	220	201	1318	922	492	25	10	4	163	92
X (mean)	2.5	2.3	2.5	2.4	2.5	5.1	10.9	6.4	3.3	2.0	1.8	2.0
S (standard deviation)	1.8	1.2	1.3	1.1	1.5	2.9	5.0	5.0	3.0	0.2	0.6	0.6

Table 65. Length-frequency distributions of 494 Atlantic surf clam, Spisula solidissima, collected with a clam dredge at zones 5152, 5255, 5161, and 5143 off Little Egg Inlet, New Jersey in 1974.

lt (mm)	January	February	April	May	June	July	August	September
155-159								1
150-154								
145-149								
140-144	1		1					1
135-139	1	1	1					2
130-134	4		1	1	2	1	1	5
125-129	11	4	7	4	1	2	3	16
120-124	9	9	13	3	2	3	4	18
115-119	4	11	5	10	2	7	5	13
110-114	11	6	9	15	7	6	5	8
105-109	6	7	4	7	3	8	4	4
100-104	1	2	1	2	2	6	3	
95-99	3		1	1		1	1	
90-94	1					1		
85-89								
80-84								
.								
.								
.								
45-49								
40-44								
35-39								
30-34							2	
25-29							23	
20-24						1	71	
15-19							59	
10-14							12	
n (number of organisms)	52	40	43	43	19	36	193	68
X (mean)	117	117	118	114	115	109	33	122
S (standard deviation)	11	8	9	7	9	17	33	8

Table 66. Length-frequency distributions of 2,325 Atlantic surf clam, *Spisula solidissima*, collected with a clam dredge at zone 1010 in Little Egg Inlet and zone 5158 in the ocean in 1974.

lt (mm)	January		February		March		April		May		June		July		August		September		October		November	
Zones	5158	1010	5158	1010	5158	1010	5158	1010	5158	1010	5158	1010	5158	1010	5158	1010	5158	1010	5158	1010	5158	1010
165-169											1											
160-164																						
155-159																						
150-154																						
145-149																						
140-144																						
135-139																						
130-134			1						1													
125-129							2		4	1	2		3		2	3			1			
120-124	2		9		3	1	3	7	8	6	2		2		2	11	2		2	2	1	
115-119	8	2	16	3	5	5	7	16	12	12	13	1	15	3	6	15	10		6	4	1	
110-114	7	1	30	5	7	21	4	53	11	26	12		19	4	30	21	13	3	14	10	4	1
105-109	12	10	30	16	4	27	5	54	16	54	6	3	7	8	61	26	6	1	12	16	20	5
100-104	20	5	15	22	1	34	2	21	8	37	4	5	9	17	60	8	4	6	8	30	51	10
95-99	16	11	20	21		19	3	9	3	19	1	8	4	19	54	7	2	15	2	14	41	5
90-94	10	10	8	28	1	14	1	2	2	7		6	6	26	25	2	1	2	2	2	13	7
85-89	4	5	2	14	1	7				4		2		10	6		1	1		3	3	
80-84		7		5		5	1			1		2		3	1							
75-79	1			1		1				1								1				
70-74																						
65-69															1							
60-64																						
55-59																						5
50-54																						36
45-49																						54
40-44	1														1							20
35-39	1														19			1				6
30-34															172							1
25-29									1						100							6
20-24															23							1
15-19															6							
n (number of organisms)	82	51	131	115	22	134	28	162	66	168	41	27	65	90	567	92	42	29	48	81	256	28
X (mean)	101	97	107	97	111	102	110	109	110	105	114	97	109	97	61	110	111	98	107	104	73	100
S (standard deviation)	13	9	9	8	8	9	11	6	14	8	11	8	9	8	36	8	9	7	12	7	29	6

Table 67. Number, sex, and condition of rock crab, Cancer irroratus, collected by month in the bays and other waterways near Little Egg Inlet and in the vicinity of the Site off Little Egg Inlet, New Jersey in 1974.

	OCEAN								BAY AND INLET								TOTAL							
	N ^a	♂ ^b	♀ ^c	? ^d	♀G ^e	♀P ^f	♂M ^g	♀M ^h	N	♂	♀	?	♀G	♀P	♂M	♀M	N	♂	♀	?	♀G	♀P	♂M	♀M
January	141	82	14	2	5	-	33	5	61	39	5	3	4	3	6	1	202	121	19	5	9	3	39	6
February	285	224	30	1	3	2	22	3	65	34	16	5	7	-	3	-	350	258	46	6	10	2	25	3
March	174	153	8	3	1	-	8	1	346	136	18	166	14	12	-	-	520	289	26	169	15	12	8	1
April	365	327	27	1	4	2	4	-	101	48	16	3	23	3	6	2	466	375	43	4	27	5	10	2
May	173	150	11	1	1	-	7	3	20	6	2	10	-	1	1	-	193	156	13	11	1	1	8	3
June	301	92	24	171	1	2	8	3	11	7	3	-	1	-	-	-	312	99	27	171	2	2	8	3
July	1380	441	252	426	-	28	141	92	32	23	8	-	-	-	-	-	1412	464	260	426	-	28	142	92
August	382	185	156	14	-	10	11	6	60	42	15	-	-	1	1	1	442	227	171	14	-	11	12	7
September	240	100	94	-	-	42	1	3	24	3	18	-	2	1	-	-	264	103	112	-	2	43	1	3
October	230	86	127	2	1	12	1	1	6	4	1	1	-	-	-	-	236	90	128	3	1	12	1	1
November	294	192	73	-	4	22	-	3	72	61	10	1	-	-	-	-	366	253	83	1	4	22	-	3
December	186	119	45	-	17	4	-	1	22	17	4	-	1	-	-	-	208	136	49	-	18	4	-	1
Total specimens	4151	2151	861	621	37	124	236	121	820	420	116	189	52	21	18	4	4971	2571	977	810	89	145	254	125
Percent of yearly catch	83.5								16.5								100.0							

a N = number
b ♂ = male

c ♀ = female
d ? = not sexed

e ♀G = female gravid
f ♀P = female plugged

g ♂M = male molting
h ♀M = female molting

Table 68. Number, sex, and condition of rock crab, Cancer irroratus, collected by month, by gear in the vicinity of Little Egg Inlet, New Jersey in 1974.

	LOBSTER POT								PONAR								TRAWL								CLAM DREDGE							
	N ^a	♂ ^b	♀ ^c	? ^d	♀G ^e	♀P ^f	♂M ^g	♀M ^h	N	♂	♀	?	♀G	♀P	♂M	♀M	N	♂	♀	?	♀G	♀P	♂M	♀M	N	♂	♀	?	♀G	♀P	♂M	♀M
January	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113	69	14	1	1	-	24	4	28	13	-	1	4	-	9	1
February	43	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232	177	28	-	3	-	21	3	10	4	2	1	-	2	1	-
March	33	32	-	-	1	-	-	-	1	-	-	1	-	-	-	-	130	113	8	-	-	-	8	1	10	8	-	2	-	-	-	-
April	38	33	2	-	-	-	3	-	-	-	-	-	-	-	-	-	321	289	25	-	4	2	1	-	6	5	-	1	-	-	-	-
May	134	127	6	-	-	-	1	-	1	-	-	1	-	-	-	-	38	23	5	-	1	-	6	3	-	-	-	-	-	-	-	-
June	80	75	2	-	1	2	-	-	158	-	-	158	-	-	-	-	63	17	22	13	-	-	8	3	-	-	-	-	-	-	-	-
July	72	53	8	6	-	3	2	-	165	3	3	159	-	-	-	-	1141	383	241	261	-	25	139	92	2	2	-	-	-	-	-	-
August	95	48	31	14	-	-	2	-	-	-	-	-	-	-	-	-	281	136	120	-	-	10	9	6	6	1	5	-	-	-	-	-
September	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	100	94	-	-	42	1	3	-	-	-	-	-	-	-	-
October	5	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	225	83	127	-	1	12	1	1	-	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	294	192	73	-	4	22	-	3	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	186	119	45	-	17	4	-	1	-	-	-	-	-	-	-	-
Total specimens	500	414	49	22	2	5	8	-	325	3	3	319	-	-	-	-	3264	1701	802	275	31	117	218	120	62	33	7	5	4	2	10	1
Percent of yearly catch	12.1								7.8								78.6								1.5							

a N = number

b ♂ = male

c ♀ = female

d ? = not sexed

e ♀G = female gravid

f ♀P = female plugged

g ♂M = male molting

h ♀M = female molting

Table 69. Number, sex, and condition of rock crab, Cancer irroratus, collected by month, by gear in the bays and waterways adjacent to Little Egg Inlet, New Jersey in 1974.

	CLAM DREDGE								INLET AND GREAT BAY TRAWL								LITTLE SHEEPSHEAD, BIG SHEEPSHEAD BRIGANTINE, AND LITTLE EGG HARBOR TRAWL							
	N ^a	♂ ^b	♀ ^c	? ^d	♀G ^e	♀P ^f	♂M ^g	♀M ^h	N	♂	♀	?	♀G	♀P	♂M	♀M	N	♂	♀	?	♀G	♀P	♂M	♀M
January	37	18	5	3	4	3	4	-	23	20	-	-	-	-	2	1	1	1	-	-	-	-	-	-
February	27	15	5	4	2	-	1	-	34	16	10	1	5	-	2	-	4	3	1	-	-	-	-	-
March	70	30	11	4	13	12	-	-	270	102	5	162	1	-	-	-	6	4	2	-	-	-	-	-
April	48	9	9	1	23	-	5	1	49	37	7	-	-	3	1	1	4	2	-	2	-	-	-	-
May	10	6	2	-	-	1	1	-	10	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
June	9	5	3	-	1	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July	24	17	6	-	-	-	1	-	8	6	2	-	-	-	-	-	-	-	-	-	-	-	-	-
August	21	15	5	-	-	-	-	1	39	27	10	-	-	1	1	-	-	-	-	-	-	-	-	-
September	21	2	16	-	2	1	-	-	3	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-
October	-	-	-	-	-	-	-	-	5	4	1	-	-	-	-	-	1	-	-	1	-	-	-	-
November	1	1	-	-	-	-	-	-	19	16	3	-	-	-	-	-	52	44	7	1	-	-	-	-
December	-	-	-	-	-	-	-	-	22	17	4	-	1	-	-	-	-	-	-	-	-	-	-	-
Total specimens	268	118	62	12	45	17	12	2	484	248	44	173	7	4	6	2	68	54	10	4	-	-	-	-
Percent of yearly catch	32.7								59.0								8.3							

a N = number
b ♂ = male

c ♀ = female
d ? = not sexed

e ♀G = female gravid
f ♀P = female plugged

g ♂M = male molting
h ♀M = female molting

Table 70. Width frequency distribution by month of 2,783 rock crab, Cancer irroratus, collected in a 25-ft semiballoon trawl in the vicinity of the Site, off Little Egg Inlet, New Jersey in 1974.

	JANUARY				FEBRUARY				MARCH				APRIL				MAY				JUNE			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
135	-	-	-	-	-	-	-	-	1	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	1	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
125	1	1.1	-	-	-	-	-	-	2	1.7	-	-	1	0.5	-	-	-	-	-	-	-	-	-	-
120	6	6.5	-	-	1	1.0	-	-	1	0.8	-	-	6	2.9	-	-	1	3.4	-	-	-	-	-	-
115	4	4.3	-	-	5	4.8	-	-	10	8.3	-	-	1	0.5	-	-	2	6.9	-	-	-	-	-	-
110	4	4.3	-	-	8	7.7	-	-	9	7.5	-	-	12	5.9	-	-	1	3.4	-	-	-	-	-	-
105	3	3.3	-	-	7	6.7	-	-	6	5.0	-	-	12	5.9	-	-	1	3.4	-	-	-	-	-	-
100	4	4.3	-	-	7	6.7	-	-	12	10.0	-	-	13	6.4	-	-	1	3.4	-	-	-	-	-	-
95	6	6.5	-	-	11	10.6	-	-	8	6.7	-	-	17	8.3	-	-	-	-	-	-	-	-	-	-
90	9	9.8	-	-	12	11.5	1	3.6	8	6.7	-	-	23	11.3	-	-	1	3.4	-	-	-	-	-	-
85	3	3.3	-	-	10	9.6	-	-	9	7.5	-	-	26	12.7	1	4.3	2	6.9	-	-	-	-	-	-
80	6	6.5	1	5.3	6	5.8	1	3.6	8	6.7	-	-	16	7.8	-	-	1	3.4	-	-	-	-	-	-
75	-	-	-	-	9	8.7	3	10.7	4	3.3	1	14.3	14	6.9	4	17.4	1	3.4	-	-	-	-	-	-
70	4	4.3	1	5.3	2	1.9	-	-	6	5.0	-	-	9	4.4	-	-	-	-	-	-	-	-	-	-
65	4	4.3	1	5.3	1	1.0	2	7.1	4	3.3	-	-	10	4.9	1	4.3	-	-	2	22.2	-	-	-	-
60	2	2.2	-	-	4	3.8	3	10.7	6	5.0	2	28.6	10	4.9	3	13.0	2	6.9	-	-	-	-	-	-
55	2	2.2	1	5.3	5	4.8	2	7.1	6	5.0	-	-	5	2.5	3	13.0	1	3.4	1	11.1	-	-	-	-
50	4	4.3	-	-	4	3.8	3	10.7	6	5.0	-	-	4	2.0	2	8.7	1	3.4	-	-	-	-	-	-
45	7	7.6	2	10.5	3	2.9	7	25.0	1	0.8	-	-	3	1.5	-	-	1	3.4	1	11.1	-	-	1	5.3
40	6	6.5	6	31.6	4	3.8	1	3.6	1	0.8	2	28.6	3	1.5	-	-	-	-	1	11.1	1	4.0	-	-
35	3	3.3	3	15.8	2	1.9	2	7.1	6	5.0	-	-	7	3.4	2	8.7	4	13.8	-	-	1	4.0	1	5.3
30	3	3.3	-	-	-	-	-	-	2	1.7	-	-	2	1.0	3	13.0	3	10.3	-	-	1	4.0	1	5.3
25	3	3.3	2	10.5	2	1.9	-	-	2	1.7	-	-	3	1.5	2	8.7	2	6.9	3	33.3	3	12.0	1	5.3
20	7	7.6	2	10.5	-	-	2	7.1	-	-	-	-	3	1.5	1	4.3	2	6.9	1	11.1	2	8.0	1	5.3
15	1	1.1	-	-	1	1.0	1	3.6	1	0.8	2	28.6	3	1.5	1	4.3	1	3.4	-	-	2	8.0	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3.4	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	1	0.5	-	-	-	-	-	-	14	56.0	13	68.4
0-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4.0	1	5.3
N ^a	92.0		19.0		104.0		28.0		120.0		7.0		204.0		23.0		29.0		9.0		25.0		19.0	
X ^b	73.1		44.3		83.5		53.5		84.2		45.9		81.0		51.4		60.6		42.1		14.2		12.2	
Sx ^c	32.4		16.2		23.8		18.1		26.8		22.3		24.6		20.4		34.7		18.0		11.8		12.6	
Max ^d	128.0		80.0		121.0		91.0		138.0		78.0		126.0		85.0		121.0		69.0		43.0		45.0	
Min ^e	18.0		21.0		18.0		15.0		19.0		18.0		6.0		19.0		13.0		24.0		4.0		3.0	
Range	110.0		59.0		103.0		76.0		119.0		60.0		120.0		66.0		108.0		45.0		39.0		42.0	
Percent Gravid	-		5.3		-		8.8		-		-		-		12.9		-		11.1		-		-	
Percent Molting	25.8		61.7		6.6		8.8		6.6		11.1		0.3		-		20.7		33.3		32.0		12.0	
X Size Female Plugged	-		-		-		-		-		-		-		68.5		-		-		-		-	
X Size Female Gravid	-		36.0		-		58.3		-		-		-		64.5		-		25.0		-		-	
Number Per Collection	6.6		1.4		7.4		2.0		8.6		0.5		11.3		1.3		2.1		0.6		2.1		1.6	

Table 70. (cont.)

	JULY				AUGUST				SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1.0	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.8	-	-
115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.5	-	-	1	0.8	-	-
110	1	0.2	-	-	-	-	-	-	-	-	-	-	1	1.2	-	-	6	3.1	-	-	1	0.8	-	-
105	-	-	-	-	-	-	-	-	-	-	-	-	1	1.2	-	-	2	1.0	-	-	2	1.7	-	-
100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.5	-	-	2	1.7	-	-
95	1	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	3.1	-	-	1	0.8	-	-
90	1	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1.0	-	-	6	5.0	-	-
85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.5	-	-	3	2.5	-	-
80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.5	-	-	1	0.8	-	-
75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.5	1	1.0	-	-	3	4.5
70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.7	1	0.5	2	2.0	2	1.7	2	3.0
65	-	-	1	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2.9	1	0.8	3	4.5
60	1	0.2	-	-	-	-	-	-	-	-	-	-	1	1.2	-	-	5	2.6	1	1.0	6	5.0	8	11.9
55	1	0.2	2	0.6	-	-	-	-	1	1.0	-	-	-	-	2	1.4	7	3.6	8	7.8	8	6.7	3	4.5
50	2	0.4	1	0.3	-	-	-	-	-	-	-	-	-	-	3	2.1	8	4.2	8	7.8	9	7.6	9	13.4
45	1	0.2	2	0.6	-	-	1	0.7	-	-	-	-	1	1.2	3	2.1	25	13.0	13	12.7	12	10.1	11	16.4
40	5	1.0	2	0.6	1	0.7	2	1.5	-	-	1	0.7	4	4.8	2	1.4	18	9.4	11	10.8	10	8.4	8	11.9
35	15	2.9	11	3.1	1	0.7	-	-	8	8.0	1	0.7	6	7.1	12	8.6	17	8.9	7	6.9	10	8.4	3	4.5
30	15	2.9	9	2.5	13	9.0	11	8.1	26	26.0	18	13.0	12	14.3	29	20.7	26	13.5	12	11.8	9	7.6	4	6.0
25	6	1.1	9	2.5	17	11.7	17	12.5	21	21.0	51	37.0	29	34.5	38	27.1	35	18.2	17	16.7	18	15.1	7	10.4
20	19	3.6	7	1.9	52	35.9	63	46.3	18	18.0	45	32.6	14	16.7	32	22.9	16	8.3	13	12.7	11	9.2	5	7.5
15	127	24.3	114	31.8	44	30.3	29	21.3	13	13.0	18	13.0	11	13.1	18	12.9	11	5.7	6	5.9	4	3.4	1	1.5
10	238	45.6	156	43.5	11	7.6	12	8.8	11	11.0	3	2.2	3	3.6	-	-	-	-	-	-	1	0.8	-	-
5	86	16.5	44	12.3	6	4.1	1	0.7	2	2.0	1	0.7	1	1.2	-	-	-	-	-	-	-	-	-	-
0-4	3	0.6	1	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N	522.0		359.0		145.0		136.0		100.0		138.0		84.0		140.0		192.0		102.0		119.0		67.0	
X̄	15.1		15.5		20.7		22.0		25.1		24.3		28.8		28.3		43.9		38.4		48.0		46.6	
Sx	10.4		8.4		6.1		6.0		8.6		5.2		15.2		9.2		24.9		14.2		25.2		15.2	
Max	114.0		65.0		40.0		46.0		57.0		41.0		111.0		73.0		128.0		77.0		120.0		79.0	
Min	4.0		4.0		5.0		8.0		7.0		9.0		8.0		15.0		15.0		18.0		13.0		16.0	
Range	110.0		61.0		35.0		38.0		50.0		32.0		103.0		58.0		113.0		59.0		107.0		63.0	
Percent Gravid	-		-		-		-		-		-		-		0.7		-		3.9		-		25.4	
Percent Molting	26.6		25.6		6.2		4.4		1.0		2.2		1.2		0.7		-		2.9		-		1.5	
X̄ Size Female Plugged	-		38.8		-		27.2		-		25.9		-		23.9		-		29.9		-		54.8	
X̄ Size Female Gravid	-		-		-		-		-		-		-		24.0		-		29.3		-		38.1	
Number Per Collection	32.6		22.4		8.1		7.6		4.2		5.8		3.5		5.8		8.0		4.3		11.9		6.7	

a N = Number of organisms.

b \bar{X} = Mean

c Sx = Standard deviation.

d Max = Maximum size

e Min = Minimum size.

Table 71. Width frequency distribution by month of 200 rock crab, *Cancer irroratus*, collected in a 25-ft semiballoon trawl in Little Egg Inlet and Great Bay, New Jersey in 1974.

	FEBRUARY				MARCH				APRIL				JUNE				JULY				AUGUST			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
120	-	-	-	-	2	3.7	-	-	1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115	-	-	-	-	1	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	4	7.4	-	-	2	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105	-	-	-	-	5	9.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	1	5.6	-	-	6	11.1	-	-	2	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95	-	-	-	-	9	16.7	-	-	3	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
90	1	5.6	-	-	5	9.3	-	-	2	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85	-	-	-	-	5	9.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	5	9.3	-	-	1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	1	5.6	-	-	-	-	-	-	1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	1	1.8	3	75.0	-	-	-	-	-	-	-	-	1	20.0	-	-	-	-	-	-
65	-	-	-	-	1	1.8	-	-	1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	1	5.6	-	-	3	5.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	1	5.6	1	6.7	4	7.4	-	-	-	-	1	100.0	-	-	-	-	-	-	-	-	-	-	-	-
50	2	11.1	5	33.3	1	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	2	11.1	-	-	-	-	-	-	1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	1	5.6	2	13.3	-	-	1	25.0	1	6.7	-	-	-	-	-	-	-	-	-	-	1	3.6	1	9.1
35	3	16.7	3	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	50.0	6	54.5
30	3	16.7	2	13.3	2	3.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	25.0	1	9.1
25	1	5.6	1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	14.3	3	27.3
20	1	5.6	1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7.1	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	40.0	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	-	-	1	20.0	1	50.0	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20.0	1	50.0	-	-	-	-
N ^a	18.0		15.0		54.0		4.0		15.0		1.0		1.0		-		5.0		2.0		28.0		11.0	
X ^b	49.2		42.1		88.7		64.5		89.3		55.0		10.0		-		24.4		9.5		27.9		28.5	
Sx ^c	21.7		11.2		20.7		15.0		23.1		-		-		-		23.9		0.7		5.1		5.1	
Max ^d	102.0		59.0		121.0		73.0		122.0		55.0		10.0		-		67.0		10.0		35.0		35.0	
Min ^e	22.0		23.0		34.0		42.0		42.0		55.0		10.0		-		9.0		9.0		15.0		20.0	
Range	80.0		36.0		87.0		31.0		80.0		0.0		0.0		-		58.0		1.0		20.0		15.0	
Percent Gravid	-		33.3		-		25.0		-		-		-		-		-		-		3.6		-	
Percent Molting	11.1		-		-		-		-		-		-		-		-		-		7.0		2.8	
Number Per Collection	4.5		3.8		13.5		1.0		3.8		0.3		0.3		-		1.3		0.5		-		-	

Table 71. (cont.)

	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER			
	Male		Female		Male		Female		Male		Female		Male		Female	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
115	-	-	-	-	-	-	-	-	1	7.1	-	-	1	5.8	-	-
110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105	-	-	-	-	-	-	-	-	3	21.4	-	-	1	5.8	-	-
100	-	-	-	-	-	-	-	-	-	-	-	-	1	5.8	-	-
95	-	-	-	-	-	-	-	-	3	21.4	-	-	1	5.8	-	-
90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85	-	-	-	-	-	-	-	-	1	7.1	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	1	7.1	-	-	-	-	-	-
75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	1	7.1	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	1	7.1	-	-	1	5.8	-	-
60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	1	25.0	1	7.1	-	-	4	23.5	1	20.0
50	-	-	-	-	-	-	-	-	-	-	-	-	2	11.7	-	-
45	-	-	-	-	-	-	-	-	1	7.1	1	33.3	1	5.8	1	20.0
40	-	-	-	-	-	-	-	-	-	-	1	33.3	3	17.6	1	20.0
35	-	-	-	-	-	-	-	-	-	-	1	33.3	2	11.7	-	-
30	-	-	-	-	-	-	1	25.0	1	7.1	-	-	-	-	1	20.0
25	-	-	-	-	-	-	1	25.0	-	-	-	-	-	-	1	20.0
20	-	-	2	100.0	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	1	100.0	-	-	-	-	1	25.0	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N	1.0		2.0		-		4.0		14.0		3.0		17.0		5.0	
X	100.0		21.5		-		32.0		83.7		41.3		62.3		41.2	
Sx	-		0.7		-		18.6		25.6		5.5		26.3		13.5	
Max	14.0		22.0		-		58.0		117.0		45.0		115.0		59.0	
Min	14.0		21.0		-		14.0		31.0		35.0		35.0		25.0	
Range	0.0		1.0		-		44.0		86.0		10.0		80.0		34.0	
Percent Gravid	-		-		-		-		-		-		-		20.0	
Percent Molting	-		-		-		-		-		-		-		-	
Number Per Collection	0.3		0.5		-		1.0		3.5		0.8		4.3		1.3	

a N = Number of organisms.

b X = Mean

c Sx = Standard deviation.

d Max = Maximum size.

e Min = Minimum size.

Table 72. Sex ratio, breeding and molting conditions of rock crab, Cancer irroratus, by month, season, and year in bays and waterways near Little Egg Inlet and in the vicinity of the Site off Little Egg Inlet, New Jersey in 1974.

	OCEAN							BAY AND INLET							TOTAL						
	Total ♂ ^a	Total ♀ ^b	M/F sex Ratio	% Gravid	% Plugged	% ♂M ^c	% ♀M ^d	Total ♂	Total ♀	M/F sex Ratio	% Gravid	% Plugged	% ♂M	% ♀M	Total ♂	Total ♀	M/F sex Ratio	% Gravid	% Plugged	% ♂M	% ♀M
January	115	24	4.8:1	20.8	-	28.7	26.3	45	13	3.5:1	30.8	23.1	13.3	11.1	160	37	4.3:1	24.3	8.1	24.4	21.4
February	246	38	6.5:1	7.9	5.3	8.9	8.6	37	23	1.6:1	30.4	-	8.1	-	283	61	4.6:1	16.4	3.3	8.8	5.9
March	161	10	16.1:1	10.0	-	5.0	11.1	136	44	3.1:1	31.8	27.3	-	-	297	54	5.5:1	27.8	22.2	2.7	2.6
April	331	33	10.0:1	12.1	6.1	12.1	-	54	44	1.2:1	52.3	6.8	11.1	9.5	385	77	5.0:1	35.1	6.5	2.6	4.0
May	157	15	10.5:1	6.7	-	46.7	21.4	7	3	2.3:1	-	33.3	14.3	-	163	19	9.1:1	5.6	5.6	4.9	16.7
June	100	30	3.3:1	3.3	6.7	26.7	10.3	7	4	1.8:1	25.0	-	-	-	107	34	3.2:1	5.9	5.9	7.5	9.4
July	582	372	1.6:1	-	7.5	24.2	24.7	24	8	3.0:1	-	-	4.2	-	606	380	1.6:1	-	7.4	23.4	24.2
August	196	172	1.1:1	-	5.8	5.6	3.5	43	17	2.5:1	-	5.9	2.3	5.9	239	189	1.3:1	-	5.8	5.0	3.7
September	101	139	0.7:1	-	30.2	1.0	2.2	3	21	0.1:1	9.5	4.8	-	-	104	160	0.7:1	1.3	26.9	1.0	1.9
October	87	141	0.6:1	0.7	8.5	1.2	0.7	4	1	4.0:1	-	-	-	-	91	142	0.6:1	0.7	8.5	1.1	0.7
November	192	102	1.9:1	3.9	21.6	-	3.1	61	10	6.1:1	-	-	-	-	253	112	2.3:1	3.6	19.6	-	2.8
December	119	67	1.8:1	25.4	6.0	-	2.0	17	5	3.4:1	20.0	-	-	-	136	72	1.9:1	25.0	5.6	-	1.9
Winter	522	72	7.3:1	12.5	2.8	12.1	14.3	218	80	2.7:1	31.3	18.8	4.1	1.8	740	152	4.9:1	22.34	11.2	9.7	8.5
Spring	588	78	7.5:1	7.7	5.1	3.2	9.7	68	51	1.3:1	47.1	7.8	10.3	7.4	656	129	5.1:1	23.23	6.2	4.0	8.1
Summer	879	683	1.3:1	-	11.7	17.4	14.8	70	46	1.5:1	4.4	4.4	2.9	2.3	949	729	1.3:1	0.3	11.3	16.3	14.0
Fall	398	310	1.3:1	7.1	12.3	0.3	1.7	82	16	5.1:1	6.3	-	-	-	480	326	1.5:1	7.1	11.7	0.2	1.7
Total 1974	2387	1143	2.1:1	3.2	10.9	9.9	11.0	438	193	2.3:1	26.9	10.9	4.1	2.8	2825	1336	2.1:1	6.7	10.9	9.0	10.1

a ♂ = males

b ♀ = females

c % ♂M = Percent males molting

d % ♀M = Percent females molting

Table 73. Protoplankton cell densities (cells/l) at the Site on 17 May 1972.

Zone	5255
Depth (feet), water	30
sampled	surface
Coll. No. (JHC-72-)	012
Hour	1345
Tide	Flood 2
Air Temp. (C)	22.2
Temp. (C), surface	15.5
midwater	-
bottom	-
Salinity (ppt), surface	29.4
midwater	-
bottom	-
Oxygen (ppm), surface	-
midwater	-
bottom	-
Secchi (feet)	6.0
<u>DIATOMS</u>	
Unidentified pennates (< 30 μ m long)	630
Unidentified pennates (\geq 30 μ m long)	310
Unidentified centrics (< 23 μ m dia.)	160
Unidentified centrics (\geq 23 μ m dia.)	310
TOTAL DIATOMS	1,410
<u>CHLOROPHYTES</u> (non-motile) (1 sp.)	4,720
<u>CYANOPHYTES</u> (2-3 μ m dia.)	248,820
<u>NAKED FLAGELLATES</u> (pigmented)	
Small forms (< 6 μ m)	20,470
Med.-size forms (6-12 μ m)	17,320
Large forms (> 12 μ m)	4,720
TOTAL NAKED FLAGELLATES	42,510
<u>DINOFLAGELLATES</u>	
<u>Unarmored</u>	
Family Gymnodiniidae (2 spp.)	1,730
<u>Armored</u>	
<u>Ceratium</u> sp.	160
<u>Prorocentrum</u> <u>triangulatum</u>	2,050
<u>Prorocentrum</u> <u>micans</u>	80
<u>Peridinium</u> sp.	400
Family Peridiniidae (2 spp.)	320
Suborder Peridiniina (1 sp.)	160
Unidentified forms	2,360
TOTAL DINOFLAGELLATES	7,260
<u>CILIATES</u>	
Order Tintinnida (9 spp.)	14,410
<u>Unidentified Algae</u>	114,960

Table 74. . . Protoplankton cell densities (cells/l) at the Site on 20 June 1972.

Zone	5255
Depth (feet), water	35
sampled	surface
Coll. No. (JHC-72-)	124
Hour	1318
Tide	Flood 2
Air Temp. (C)	21.0
Temp. (C), surface	15.5
midwater	-
bottom	14.5
Salinity (ppt), surface	27.5
midwater	-
bottom	30.5
Oxygen (ppm), surface	9.5
midwater	-
bottom	5.6
Secchi (feet)	5.8

DIATOMS

<u>Rhizosolenia delicatula</u> ?	470
<u>Nitzschia closterium</u>	420
<u>Thalassiosira rotula</u>	1,210
Unidentified pennates (30 um long)	240
Unidentified centrics (23 um dia.)	50
TOTAL DIATOMS	2,390

CHLOROPHYTES (non-motile) (2 spp.) 9,490

CYANOPHYTES (2-3 um dia.) 859,700

NAKED FLAGELLATES (pigmented)

Family Euglenidae (1sp. ?)	14,240
Small forms (6 um)	43,250
Med. - size forms (6-12 um)	68,570
Large forms (12 um)	5,270
TOTAL NAKED FLAGELLATES	131,330

SILICOFLAGELLATES

<u>Ebria tripartita</u>	240
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DINOFLAGELLATES

<u>Unarmored</u>	
Family Gymnodiniidae (2 spp.)	39,000
Superfamily Gymnodinioidea (1 sp.)	1,420

Armored

<u>Dinophysis norvegica</u>	110
<u>Dinophysis</u> sp.	110
<u>Ceratium bucephalum</u>	5,490
<u>Ceratium minutum</u>	38,920
<u>Ceratium fusus</u>	840
<u>Ceratium tripos</u>	2,530
<u>Prorocentrum triangulatum</u>	1,190
<u>Prorocentrum micans</u>	470

Table 74. (cont.)

<u>Peridinium</u> sp.	240
<u>Peridinium</u> sp.	240
<u>Peridinium</u> sp.	2,370
<u>Peridinium</u> sp.	1,660
Suborder Peridiniina (9 spp.)	122,810
Unidentified forms	22,310
TOTAL DINOFLAGELLATES	239,710
 <u>CILIATES</u>	
Order Oligotrichida (2 spp.)	12,100
Order Tintinnida (11 spp.)	15,630
TOTAL CILIATES	27,730
 <u>Unidentified Algae</u>	552,740

Table 75. Protoplankton cell densities (cells/l) at the Site on 20 July 1972.

Zone	5255
Depth (feet), water	36
sampled	surface
Coll. No. (JHC-72-)	263
Hour	1154
Tide	Flood 1
Air Temp. (C)	25.0
Temp. (C), surface	20.0
midwater	14.3
bottom	13.7
Salinity (ppt), surface	28.8
midwater	28.8
bottom	29.2
Oxygen (ppm), surface	7.4
midwater	3.5
bottom	3.6
Secchi (feet)	6.0

DIATOMS

<u>Rhizosolenia</u> sp.?	2,100
<u>Nitzschia closterium</u>	P
<u>Thalassiothrix nitzschioides</u>	P
<u>Paralia sulcata</u>	900
<u>Cocconeis scutellum</u> ?	P
<u>Cocconeis</u> sp.	P
<u>Actinopteryx senarius</u>	P
<u>Biddulphia</u> sp. #1	P
<u>Eunotogramma</u> sp. #2	P
<u>Rhaphoneis amphiceros</u>	P
<u>Pleurosigma</u> sp. ?	40
<u>Cyclotella</u> spp.	P
<u>Coscinodiscus</u> sp. ?	P
<u>Amphiprora</u> sp.	P
<u>Achnanthes</u> sp. ?	P
<u>Licmophora</u> sp.	P
Family Naviculaceae (1 sp.)	P
Unidentified pennates (< 30 μ m long)	5,110
Unidentified pennates (\geq 30 μ m long)	620
Unidentified centrics (< 23 μ m dia.)	130
Unidentified centrics (\geq 23 μ m dia.)	P
TOTAL DIATOMS	8,900

CHLOROPHYTES (non-motile)

6,600

CYANOPHYTES (2-3 μ m dia.)

198,200

NAKED FLAGELLATES (pigmented)

Family Euglenidae (1 sp.)	3,150
Small forms (< 6 μ m)	23,080
Med. - size forms (6-12 μ m)	4,200
TOTAL NAKED FLAGELLATES	30,430

Table 75. (cont.)

SILICOFLAGELLATES

<u>Ebria tripartita</u>	p
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DINOFLAGELLATES

<u>Unarmored</u>	
Family Gymnodiniidae (2 spp.)	450

<u>Armored</u>	
<u>Dinophysis norvegica</u>	130
<u>Dinophysis acuminata</u> ?	p
<u>Dinophysis rotundata</u>	220
<u>Dinophysis</u> sp. #4	p
<u>Prorocentrum scutellum</u>	130
<u>Prorocentrum triangulatum</u>	p
<u>Prorocentrum micans</u>	p
<u>Prorocentrum</u> sp.	130
<u>Exuviaella compressa</u> ?	p
Family Peridiniidae (2 spp.)	p
Suborder Peridiniina (1 sp.)	p
Unidentified forms	220
TOTAL DINOFLAGELLATES	1,280

CILIATES

Order Oligotrichida (2 spp.)	p
Order Tintinnida (5-6 spp.)	260

<u>Unidentified Algae</u>	81,370
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Table 76. Protoplankton cell densities (cells/l) at the Site on 14 February 1973.

Zone	5255
Depth (feet), water	34
sampled	surface
Coll. No. (JHC-73-)	040
Hour	1220
Tide	Flood 1
Air Temp. (C)	4.4
Temp. (C), surface	1.5
midwater	2.0
bottom	3.5
Salinity (ppt), surface	24.0
midwater	28.0
bottom	32.0
Oxygen (ppm), surface	11.3
midwater	11.3
bottom	11.2
Secchi (feet)	5.8

DIATOMS

<u>Rhizosolenia fragilissima</u>	46,280
<u>Rhizosolenia shrubsolei</u>	90
<u>Rhizosolenia setigera</u>	600
<u>Nitzshia closterium</u>	190
<u>Skeletonema costatum</u>	40,630
<u>Asterionella japonica</u>	20,390
<u>Thalassiothrix nitzschoides</u>	6,830
<u>Thalassiothrix sp.</u>	p ¹
<u>Paralia sulcata</u>	1,080
<u>Thalassiosira nordenshioldii</u>	70,240
<u>Thalassiosira sp.</u> ²	5,650
<u>Thalassiosira sp.</u>	890
<u>Corethron criophilum</u>	380
<u>Chaetoceros decipiens</u> ?	750
<u>Chaetoceros willei</u> ?	P
<u>Chaetoceros diadema</u>	P
<u>Chaetoceros holsaticum</u>	P
<u>Chaetoceros simplex</u> ?	P
<u>Chaetoceros ceratosporum</u> ?	150
<u>Chaetoceros</u> spp. (Sect. Stenocincta ?)	2,380
<u>Chaetoceros</u> spp. (Sect. Diadema ?)	P
<u>Chaetoceros</u> spp. (Sect. Brevicatenata)	2,230
<u>Chaetoceros</u> sp. (Sect. Simplicia)	P
<u>Chaetoceros</u> spp. (Subgenus Hyalochaetae)	1,190
<u>Cocconeis scutellum</u>	P
<u>Actinopterychus senarius</u>	30
<u>Ditylum brightwellii</u>	40
<u>Biddulphia alternans</u> ?	80
<u>Biddulphia pulchella</u>	P
<u>Fragilaria</u> sp.	4,840
<u>Fragilaria</u> sp. ?	P
<u>Amphora</u> sp.	P
<u>Cerataulina pelagica</u>	P

Table 76.. (cont.)

<u>Pleurosigma/Gyrosigma</u> sp.	P
<u>Amphiprora</u> sp.	P
<u>Licmophora</u> sp.	80
Unidentified pennates (30 um long)	30,970
Unidentified pennates (30 um long)	7,750
Unidentified centrics (23 um dia.)	3,130
Unidentified centrics (23 um dia.)	700
Unidentified diatoms	1,120
TOTAL DIATOMS	248,690
<u>CHLOROPHYTES</u> (non-motile) (1-2 spp.)	21,100
<u>CYANOPHYTES</u>	419,450
<u>NAKED FLAGELLATES</u> (pigmented)	
Small forms (6 um)	20,830
Med. - size forms (6-12 um)	26,790
Large forms (12 um)	2,980
TOTAL NAKED FLAGELLATES	50,600
<u>SILICOFLAGELLATES</u>	
<u>Distephanus speculum</u>	290
<u>Ebria tripartita</u>	60
TOTAL SILICOFLAGELLATES	350
<u>DINOFLAGELLATES</u>	
<u>Unarmored</u>	
Family Gymnodiniidae (6 spp.)	660
Superfamily Gymnodinioidea (1 sp.)	80
<u>Armored</u>	
<u>Dinophysis</u> sp.	30
<u>Prorocentrum micans</u>	150
Suborder Peridiniina (6 spp.)	390
Unidentified forms	60
TOTAL DINOFLAGELLATES	1,370
<u>CILIATES</u>	
Order Tintinnida (1 sp.)	80
<u>Unidentified Algae</u>	247,670

1 Present in net sample but not in enumerations.

2 Possibly T. nordenskioldii in poor condition.

Table 77. Protoplankton cell densities (cells/l) at the Site on 13 March 1973.

Zone	5255
Depth (feet), water	38
sampled	surface
Coll. No. (JHC-73-)	074
Hour	1152
Tide	Flood 1
Air Temp. (C)	10.2
Temp. (C), surface	7.5
midwater	5.0
bottom	5.0
Salinity (ppt), surface	29.5
midwater	29.8
bottom	31.0
Oxygen (ppm), surface	10.7
midwater	11.2
bottom	11.0
Secchi (feet)	16.0

DIATOMS

<u>Rhizosolenia fragilissima</u>	P
<u>Rhizosolenia setigera</u>	340
<u>Nitzschia closterium</u>	90
<u>Skeletonema costatum</u>	P
<u>Asterionella japonica</u>	170
<u>Thalassiothrix nitzschioides</u>	P
<u>Paralia sulcata</u>	P
<u>Thalassiosira nordenskioldii</u>	12, 940
<u>Chaetoceros diadema</u>	P
<u>Chaetoceros holsaticum</u>	P
<u>Chaetoceros cinctum</u>	P
<u>Chaetoceros</u> sp. (Sect. Brevicatenata)	P
<u>Chaetoceros</u> sp. (Sect. Simplicia)	P
<u>Chaetoceros</u> spp. (Subgenus Hyalochaetae)	P
Unidentified pennates (< 30 μ m long)	8, 140
Unidentified pennates (\geq 30 μ m long)	90
Unidentified centrics (< 23 μ m dia.)	690
Unidentified centrics (\geq 23 μ m dia.)	40
TOTAL DIATOMS	22, 500

CHLOROPHYTES (non-motile) (1-2 spp.) 5, 140

CYANOPHYTES (2-4 μ m dia.) 573, 260

NAKED FLAGELLATES (pigmented)

Small forms (< 6 μ m)	24, 420
Med. - size forms (6-12 μ m)	19, 280
Large forms (> 12 μ m)	1, 290
TOTAL NAKED FLAGELLATES	44, 990

SILICOFLAGELLATES

<u>Distephanus speculum</u>	340
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Table 77. (cont.)

DINOFLAGELLATESUnarmored

Superfamily Gmnodinioidea (1 sp.)	40
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Armored

<u>Ceratium lineatum</u>	p
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<u>Ceratium fusus</u>	40
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<u>Ceratium tripos</u>	p
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Unidentified forms	90
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Unidentified dinoflagellates	90
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TOTAL DINOFLAGELLATES	260
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<u>Unidentified Algae</u> ¹	258,350
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- 1 Includes forms which may be small weakly siliceous pennate diatoms or broken Skeletonema costatum chains.

Table 78. Protoplankton cell densities (cells/l) at the Site on 11 April 1973.

Zone	5255
Depth (feet), water	30
sampled	surface
Coll. No. (JHC-73-)	112
Hour	1145
Tide	Flood 1
Air Temp. (C)	7.8
Temp. (C), surface	6.5
midwater	6.5
bottom	-
Salinity (ppt), surface	26.0
midwater	26.5
bottom	-
Oxygen (ppm), surface	7.5
midwater	7.4
bottom	-
Secchi (feet)	4.0

DIATOMS

<u>Rhizosolenia fragilissima</u>	8,640
<u>Rhizosolenia setigera</u>	90
<u>Rhizosolenia hebetata</u> f. <u>hemalis</u>	60
<u>Rhizosolenia shrubsolei</u> ?	P
<u>Nitzschia closterium</u>	1,100
<u>Nitzschia/Bacillaria</u> sp.	P
<u>Skeletonema costatum</u>	P
<u>Asterionella japonica</u>	750
<u>Paralia sulcata</u>	2,390
<u>Biddulphia alternans</u>	60
<u>Cocconeis scutellum</u>	120
<u>Thalassiothrix nitzschioides</u>	350
<u>Thalassiothrix</u> sp.	230
<u>Actinopteryx senarius</u>	60
<u>Rhabdonema adriaticum</u>	60
<u>Eunotogramma</u> sp. #1	350
<u>Eunotogramma</u> sp. #2	60
<u>Grammatophora</u> sp.	290
<u>Fragilaria</u> sp. #1	2,250
<u>Pleurosigma</u> spp. ?	210
<u>Amphora</u> spp.	320
<u>Plagiogramma vanheurckii</u> ?	P
<u>Cyclotella</u> sp.	P
<u>Coscinodiscus</u> spp.	120
<u>Gyrosigma</u> sp. ?	290
<u>Coscinosira</u> sp. ?	P
<u>Rhaphoneis amphiceros</u>	P
<u>Amphiprora</u> sp.	P
<u>Tabellaria fenestrata</u> ?	60
<u>Licmophora</u> sp.	P
Family Naviculaceae	P
Unidentified pennates (< 30 μ m long)	7,390

Table 78. (cont.)

Unidentified pennates ($\geq 30 \mu\text{m}$ long)	17,100
Unidentified centrics ($< 23 \mu\text{m}$ dia.)	3,310
Unidentified centrics ($\geq 23 \mu\text{m}$ dia.)	1,110
Unidentified diatoms	300
TOTAL DIATOMS	47,070
<u>CHLOROPHYTES (non-motile)</u>	
<u>Scenedesmus</u> sp.	60
Unidentified forms	9,280
TOTAL CHLOROPHYTES	9,340
<u>CYANOPHYTES (2-3 μm dia.)</u>	381,350
<u>NAKED FLAGELLATES (pigmented)</u>	
Family Euglenidae (1 sp.)	290
Small forms ($< 6 \mu\text{m}$)	17,910
Med. - size forms (6-12 μm)	5,200
TOTAL NAKED FLAGELLATES	23,400
<u>SILICOFLAGELLATES</u>	
<u>Distephanus speculum</u>	120
<u>Ebria tripartita</u>	300
<u>Dictyocha fibula</u>	P
TOTAL SILICOFLAGELLATES	420
<u>DINOFLAGELLATES</u>	
<u>Unarmored</u>	
Family Gymnodiniidae (5-6 spp.)	940
Superfamily Gymnodinioidea (1 sp.)	260
<u>Armored</u>	
<u>Dinophysis lachmanni</u> ?	180
<u>Dinophysis</u> sp.	150
<u>Ceratium lineatum</u>	460
<u>Ceratium tripos</u>	60
<u>Peridinium</u> sp.	60
Family Peridiniidae (4 spp.)	180
Suborder Peridiniina (1 sp.)	60
Unidentified forms	580
TOTAL DINOFLAGELLATES	2,930
<u>CILIATES</u>	
Order Tintinnida (2 spp.)	60
<u>RHIZOPODS</u>	
Order Foraminiferida (benthic sp.)	P
<u>Unidentified Algae</u>	109,615

Table 79. Cell densities (cells/l) of the major protoplankton groups for all surface collections enumerated from the Site (May, 1972 through April, 1973). Total protoplankton density for each date is also given.

	May 17	June 20	July 20	Aug. 10	Aug. 25	Sept. 25	Oct. 17	Nov. 10	Dec. 19	Jan. 5	Feb. 14	March 13	April 11
Diatoms	1,410	2,390	8,900	149,040	55,950	826,380	151,810	60,080	61,320	83,170	248,690	22,500	47,070
Chlorophytes (non-motile)	4,720	9,490	6,600	37,370	7,080	12,570	11,170	13,720	5,450	9,330	21,100	5,140	9,340
Cyanophytes	248,820	859,700	198,200	380,770	398,020	304,270	368,720	399,180	170,000	296,000	419,450	573,260	381,350
Naked Flagellates	42,510	131,330	30,430	257,300	328,740	117,210	43,160	185,180	78,640	78,670	50,600	44,990	23,400
Silicoflagellates	0	240	present	350	1,790	0	present	140	120	1,120	350	340	420
Dinoflagellates	7,260	239,710	1,280	4,460	384,390	33,800	11,720	2,180	2,920	920	1,370	260	2,930
Ciliates	14,410	27,730	260	370	35,370	1,990	6,310	2,550	120	1,580	80	0	60
Unidentified Algae	114,960	552,740	81,370	2,000	189,800	248,110	138,730	151,300	250,910	149,330	247,670	258,350	109,615
Totals	434,090	1,823,330	327,040	831,660	1,401,140	1,544,330	731,620	814,330	569,480	620,120	989,310	904,840	574,185

Table 80. Ocean, inlet, and bay zooplankton stations regularly sampled during 1974.

Vicinity of Site

1. Seaward of Ridge (Seaward Zone 5550)
Approximately 4.5 nautical miles SE of Little Egg Inlet; 40-54 ft
2. Site (Zones 5254-5256)
2.3 nautical miles SE of Little Egg Inlet; 32-40 ft
3. Landward of Site (Landward Zone 5150)
Landward of BW "LE" Mo (A) Bell, 1.5 nautical miles SE of Little Egg Inlet;
15-23 ft

North and Offshore of Study Area

4. Off Brant Beach (Zone 4340)
Approximately 2.5 nautical miles ESE of Brant Beach; 53-58 ft
5. Offshore of Brant Beach (Zone 4940)
Approximately 8.0 nautical miles ESE of Brant Beach; 76-77 ft
6. Offshore of Little Egg Inlet (Zone 5850)
Approximately 8.0 nautical miles ESE of Little Egg Inlet; 58-64 ft

Inlet

7. Little Egg Inlet (L.E. Inlet, Zone 1010)
Between lighted buoy BW "F" Mo (A) and light FL R "96"

Great Bay

8. Great Bay #2 (G.B.#2, Zone 1100)
Intracoastal Waterway, between light FL R "14" and light FL R "20"
9. Great Bay #3 (G.B.#3, Zone 1070)
Approximately 500 m off Graveling Point towing toward the old Coast Guard Station.

Mullica River

10. Mullica River #1 (M.R.#1, Zone 1520)
Between Akimbo Point and Deep Point.

Little Egg Harbor

11. Little Egg Harbor #2 (L.E.H. #2, Zone 2040)
Between N.J. Buoy "G" and can buoy C "73"

Brigantine Bays

12. Brigantine Bays #1 (B.B.#1, Zone 2530)
Intercoastal Waterway, between light FL R "38" and light FL R "44".

Table 81. Species of zooplankton collected in this study from 1972 through 1974.

PHYLUM COELENTERATA

Class Hydrozoa

Order Athecata

Family Tubulariidae

Hybocodon proliferHybocodon sp.Margelopsis gibbesi

Family Corynidae

Dipurena strangulataSarsia tubulosaSarsia sp.

Family Hydractiniidae

Podocoryne sp.

Family Bougainvilliidae

Bougainvillia sp.Nemopsis bachei

Family Rathkeidae

Rathkea octopunctata

Family Pandeidae

Amphinema dinemaLeuckartiara sp.

Order Thecata

Family Campanularidae

Obelia sp.Phialidium sp.

Family Laodiceidae

Laodicea sp.

Family Lovenellidae

Blackfordia sp.

Family Aequoreidae

Aequorea sp.

Order Trachymedusae

Family Geryonidae

Liriope tetraphylla

Family Rhopalonematidae

Aglantha sp.

Order Siphonophora

Physalia physalia

Other siphonophores

Class Scyphozoa

Order Coronatae

Family Nausithoidae

Nausithoe punctata

Order Semaestomeae

Family Cyanidae

Cyanea capillata

Table 81. (cont.)

		Family Ulmaridae
		<u>Aurelia</u> sp.
Class Anthozoa	Order Ceriantharia	<u>Cerianthus</u> sp. larvae
		<u>Ceriantharia</u> larvae
PHYLUM CTENOPHORA		
Class Tentaculata	Order Cydippida	Family Pleurobrachiidae
		<u>Pleurobrachia</u> <u>pileus</u>
		Order Lobata
		Family Mnemiidae
		<u>Mnemiopsis</u> <u>leidyi</u>
Class Nuda	Order Beroida	Family Beroidae
		<u>Beroe</u> <u>ovata</u>
PHYLUM PLATYHELMINTHES		
Class Turbellaria	Order Acoela	<u>Rhabdocoels</u>
		Order Polycladida
		Family Planoceridae
PHYLUM ASCHELMINTHES		
Class Rotifera		<u>Rotifers</u>
Class Nematoda		<u>Nematodes</u>
PHYLUM ANNELIDA		
Class Polychaeta	Order Phyllodocida	Family Phyllodocidae
		<u>Paranaitis</u> <u>kosteriensis</u>
		<u>Paranaitis</u> <u>speciosa</u>
		Family Tomopteridae
		<u>Tomopteris</u> <u>helgolandica</u>
		Family Polynoidae
		<u>Antinoella</u> sp.
		Family Syllidae
		<u>Autolytus</u> <u>cornutus</u>
		<u>Autolytus</u> <u>emertoni</u>
		Family Nereidae
		<u>Nereis</u> sp.
		Order Capitellida
		Family Capitellidae
		Order Spionida
		Family Spionidae
		<u>Polydora</u> sp.
		<u>Streblospio</u> <u>benedicti</u>
		Order Magelonida
		Family Magelonidae
		<u>Magelona</u> <u>rosea</u>

Table 81. (cont.)

	Order Cirratulida	Family Cirratulidae <u>Tharyx acutus</u>
	Order Terebellida	Family Ampharetidae <u>Asabellides oculata</u>
	Order Flabelligerida	Family Flabelligeridae <u>Pherusa affinis</u>
PHYLUM MOLLUSCA		
Class Gastropoda		
Subclass Prosobranchia		
	Order Mesogastropoda	Family Pterotracheidae <u>Firoloida lesueurii</u>
		Family Heteropoda
	Order Neogastropoda	Family Nassariidae <u>Nassarius sp.</u>
Subclass Opisthobranchia		
	Order Thecosomata	Family Limacinidae <u>Limacina retroversa</u>
Subclass Pulmonata		
	Order Basommatophora	Family Ellobiidae <u>Melampus bidentatus</u>
Class Bivalvia		
Subclass Pteriomorpha		
	Order Prionodontida	Family Arcidae <u>Anadara sp.</u>
		Family Mytilidae <u>Modiolus demissus</u> <u>Mytilus edulis</u>
		Family Anomiidae <u>Anomia simplex</u>
Subclass Teleodesmata		
	Order Heterodontida	Family Veneridae <u>Mercenaria mercenaria</u> <u>Pitar morhuana</u>
		Family Petrocolidae <u>Petricola pholadiformis</u>
		Family Mactridae <u>Mulinia lateralis</u> <u>Spisula solidissima</u>
		Family Tellinidae <u>Tellina agilis</u> <u>Tellina sp.</u>

Table 81. (cont.)

	Family Donacidae
	<u>Donax fossor</u>
	Family Solecurtidae
	<u>Tagelus plebeius</u>
	Family Solenidae
	<u>Ensis directus</u>
	<u>Siliqua costata</u>
	Family Pholadidae
	<u>Barnea truncata</u>
	Family Teredinidae
	<u>Teredo</u> sp.
Class Cephalopoda	
Subclass Coleoidae	
Order Teuthidida	
	Family Loliginidae
	<u>Loligo pealei</u>
	<u>Lolliguncula brevis</u>
PHYLUM ARTHROPODA	
Subphylum Pycnogonida	
Class Pantopoda	
	Family Phoxichilidiidae
Subphylum Chelicerata	
Class Merostomata	
Order Xiphosurida	
	Family Limulidae
	<u>Limulus polyphemus</u>
Subphylum Mandibulata	
Class Crustacea	
Subclass Branchiopoda	
Order Cladocera	
	Family Polyphemidae
	<u>Podon leuckarti</u>
	<u>Podon polyphemoides</u>
	<u>Evadne nordmanni</u>
	Family Sididae
	<u>Penilia avirostris</u>
Subclass Ostracoda	
Subclass Copepoda	
Order Calanoida	
	Family Acartiidae
	<u>Acartia clausi</u>
	<u>Acartia longiremis</u>
	<u>Acartia tonsa</u>
	Family Calonidae
	<u>Calanus finmarchicus</u>
	Family Candaciidae
	<u>Candacia armata</u>
	<u>Candacia varicans</u>

Table 81. (cont.)

	Family Centropagidae
	<u>Centropages</u> <u>bradyi</u>
	<u>Centropages</u> <u>hamatus</u>
	<u>Centropages</u> <u>typicus</u>
	Family Diaptomidae
	<u>Pseudodiaptomus</u> <u>coronatus</u>
	Family Eucalanidae
	<u>Rhinacalanus</u> sp.
	Family Paracalanidae
	<u>Paracalanus</u> <u>crassirostris</u>
	<u>Paracalanus</u> <u>parvus</u>
	Family Pseudocalanus
	<u>Pseudocalanus</u> <u>minutus</u>
	Family Temoridae
	<u>Eurytemora</u> <u>affinis</u>
	<u>Eurytemora</u> <u>herdmani</u>
	<u>Temora</u> <u>longicornis</u>
	Family unknown
	<u>Anomalocera</u> <u>patersoni</u>
	<u>Labidocera</u> <u>aestiva</u>
	<u>Tortanus</u> <u>discaudatus</u>
Order Cyclopoida	
	Family Oithonidae
	<u>Oithona</u> <u>brevicornis</u>
	<u>Oithona</u> <u>similis</u>
	<u>Oithona</u> <u>spirostris</u>
Order Harpacticoida	
	Harpacticoids
Order Caligoida	
	Family Caligidae
	<u>Caligus</u> sp.
Subclass Cirripedia	
Order Thoracica	
	Family Balanidae
	Barnacle larvae
Subclass Malacostraca	
Superorder Hoplocarida	
Order Stomatopoda	
	Family Squillidae
	<u>Squilla</u> <u>empusa</u>
	Stomatopod pseudozoaea
Superorder Peracarida	
Order Cumacea	
	Family Bodotriidae
	<u>Cyclaspis</u> <u>varians</u>
	<u>Leptocuma</u> <u>minor</u>

Table 81. (cont.)

	Family Diastylidae
	<u>Diastylus</u> sp.
	<u>Oxyurostylis</u> <u>smithi</u>
	Family Leuconidae
	<u>Eudorella</u> sp.
Order Tanaidacea	Family Paratanaidae
	<u>Leptognatha</u> <u>caeca</u>
Order Isopoda	Family Cirolanidae
	<u>Cirolana</u> <u>concharum</u>
	Family Cymothoidae
	<u>Lironeca</u> <u>ovalis</u>
	Family Idoteidae
	<u>Chiridotea</u> <u>coeca</u>
	<u>Edotea</u> <u>triloba</u>
	<u>Idotea</u> <u>baltica</u>
	<u>Idotea</u> <u>metallica</u>
Order Amphipoda	Family Amphithoidae
	<u>Ampithoe</u> <u>longimana</u>
	Family Bateidae
	<u>Batea</u> <u>catharinensis</u>
	Family Calliopidae
	<u>Calliopius</u> <u>laeviusculus</u>
	Family Corophiidae
	<u>Cerapus</u> <u>tubularis</u>
	<u>Corophium</u> <u>tuberculatum</u>
	<u>Unciola</u> <u>irrorata</u>
	Family Gammaridae
	<u>Gammarus</u> <u>annulatus</u>
	<u>Gammarus</u> <u>lawrencianus</u>
	<u>Gammarus</u> <u>mucronatus</u>
	Family Hyperiidæ
	<u>Hyperioides</u> <u>longipes</u>
	<u>Hyperia</u> <u>galba</u>
	<u>Parathimisto</u> <u>gaudichaudi</u>
	Family Ischyroceridae
	<u>Jassa</u> <u>falcata</u>
	Family Lysianassidae
	<u>Anonyx</u> <u>sarsi</u>
	<u>Orchomenella</u> <u>punguis</u>
	Family Oedicerotidae
	<u>Monoculodes</u> <u>edwardsi</u>
	Family Photidae
	<u>Microprotopus</u> <u>raneyi</u>
	Family Stenothoidae
	<u>Parametopella</u> <u>cypriis</u>
	<u>Stenothoe</u> <u>minuta</u>

Table 81. (cont.)

	Family Talitridae
	<u>Orchestia</u> sp.
Order Caprellidea	Family Caprellidae
	<u>Aeginina</u> sp.
	<u>Caprella</u> <u>equilibrata</u>
	<u>Caprella</u> <u>penantis</u>
Order Mysidacea	Family Mysidae
	<u>Heteromysis</u> <u>formosa</u>
	<u>Mysidopsis</u> <u>bigelowi</u>
	<u>Neomysis</u> <u>americana</u>
Order Euphausiacea	Family Euphausiidae
	<u>Meganyctiphanes</u> <u>norvegica</u>
	<u>Euphausia</u> sp.
	<u>Thysanoessa</u> <u>inermis</u>
Superorder Eucarida	
Order Decapoda	
Infraorder Penaeidea	Family Sergestidae
	<u>Acetes</u> <u>carolinae</u>
	<u>Lucifer</u> <u>faxonii</u>
Infraorder Caridea	Family Palaemonidae
	<u>Palaemonetes</u> sp.
	Family Hippolytidae
	<u>Lysmata</u> sp. zoea
	Family Crangonidae
	<u>Crangon</u> <u>septemspinosa</u>
Infraorder Astacidea	Family Nephropsidae
	<u>Homarus</u> <u>americanus</u>
Infraorder Anomura	
	Superfamily Thalassinoidea
	Family Callinassidae
	<u>Callinassa</u> <u>atlantica</u>
	Family Upogebiidae
	<u>Upogebia</u> <u>affinis</u>
	Family Laomediidae
	<u>Naushonia</u> <u>crangonoides</u>
	Superfamily Hippoidea
	Family Hippidae
	<u>Emerita</u> <u>talpoida</u>
	Superfamily Paguroidea
	Family Paguridae
	<u>Pagurus</u> spp.

Table 81. (cont.)

	Infraorder Brachyura
	Family Majidae
	<u>Libinia</u> spp.
	Family Cancridae
	<u>Cancer</u> <u>irroratus</u>
	Family Portunidae
	<u>Arenaeus</u> <u>cribrarius</u>
	<u>Callinectes</u> <u>sapidus</u>
	<u>Ovalipes</u> <u>ocellatus</u>
	<u>Portunus</u> sp.
	Family Xanthidae
	<u>Hexapanopeus</u> <u>angustifrons</u>
	<u>Neopanope</u> <u>texana</u> <u>sayi</u>
	<u>Panopeus</u> <u>herbstii</u>
	Family Pinnotheridae
	<u>Dissodactylus</u> <u>millitae</u>
	<u>Pinnixa</u> <u>retineus</u>
	<u>Pinnotheres</u> sp.
	Family Grapsidae
	<u>Sesarma</u> sp.
	Family Ocypodidae
	<u>Uca</u> spp.
PHYLUM PHORONIDA	
	<u>Actinotroch</u> larvae
PHYLUM ECTOPROCTA	
Class Gymnolaemata	
	<u>Cyphonaute</u> larvae
PHYLUM CHAETOGNATHA	
	<u>Sagitta</u> <u>elegans</u>
	<u>Sagitta</u> <u>enflata</u>
	<u>Sagitta</u> <u>serratodentata</u>
	<u>Sagitta</u> <u>tenuis</u>
	<u>Sagitta</u> sp.
PHYLUM ECHINODERMATA	
Class Asteroiodes	
	Order Forcipulatida
	Family Asteriidae
	<u>Asterias</u> sp. larvae
	<u>Bipinnaria</u> larvae
	<u>Brachiolaria</u> larvae
Class Echinoidea	
	Pluteus larvae
Class Ophiuroidea	
	Pluteus larvae
Class Holothuroidea	
	Huricularia larvae

Table 81. (cont.)

PHYLUM CHORDATA

Subphylum Urochordata

Class Ascidiacea

Appendicularia larvae

Class Thaliacea

Order Doliolida

Family Doliolidae

Doliolum nationalis

Doliolum sp.

Order Salpida

Family Salpidae

Thalia democratica

Class Larvacea

Family Fritillariidae

Fritillaria sp.

Family Oikopleuridae

Oikopleura dioica

Oikopleura sp.

Table 82. Zooplankton densities (#/m³) at ocean stations in 1974.

	DATE OF COLLECTION											
	January 24	February 12 27	March 11 25	April 8 29	May 8 21	June 5 20	July 8 22	August 2 30	September 9 30	October 7 21	November 4 18	December 6
<u>COPEPODS</u>												
Landward of Site	14093	2132 7468	13843 9219	40794 10120	5923	40229	14141	25074	49042	49151	13531	
Site	12082	7449 13142	12455 26395	56214 12780	15962 11500	14647 34124	25950 48640	21000 21032	14070 57372	21175 47477	77471 44924	8154
Seaward of Ridge	19866	5220 9862	9386	25271 15063	20167	24464	15029	30071	50924	22514	60456	
Offshore L. E. Inlet			15076		23369	24872	37204	75908	6470	37144	21221	
Off Brant Beach			15935		16389	28185	23567	59074	17051	44269	24506	
Offshore Brant Beach			8329		13397	15532	30518	31278	3648	25263	18484	
<u>NAUPLII</u>												
Landward of Site	15753	22272 16627	23675 17308	5914 9593	1636	32541	5445	64784	27168	48553	3020	
Site	20727	31597 21255	23120 52855	88119 15241	46119 18100	30086 22324	10950 1600	13278 7446	2901 34559	23099 37043	26537 74347	11594
Seaward of Ridge	30982	17265 16552	17500	91217 18654	23917	36231	10893	3615	33405	24502	70137	
Offshore L. E. Inlet			35541		49638	47949	14362	20325	3117	22078	9342	
Off Brant Beach			36504		38109	29816	17589	45278	11186	18025	5486	
Offshore Brant Beach			39423		30030	35575	17788	24767	3081	16353	7464	
<u>OTHER HOLOPLANKTON</u>												
Landward of Site	-	P P	722 -	P 174	202	137	611	505	128	6702	6362	
Site	-	927 783	1824 85	569 127	15065 200	- P	1800 288	3222 34425	76011 P	1017 9261	248 15070	-
Seaward of Ridge	-	560 347	480	105 160	-	692	2783	26868	736	3480	38903	
Offshore L. E. Inlet			2317		1009	P	P	8333	4559	8572	5148	
Off Brant Beach			1582		3026	-	2491	18043	98270	22451	2834	
Offshore Brant Beach			33774		561	518	3366	13372	5081	5639	7050	
<u>MEROPLANKTON</u>												
Landward of Site	4555	1061 482	2838 577	241 4447	2420	15922	11444	10934	4911	41404	4210	
Site	1129	321 1075	6183 1356	461 10032	66835 3000	4286 4577	5250 5040	2111 2965	732 6542	6951 44471	12132 9997	616
Seaward of Ridge	580	930 703	4097	1889 1795	2584	1154	14345	5657	15889	30468	13880	
Offshore L. E. Inlet			2861		11417	2051	8382	1213	1698	14546	40667	
Off Brant Beach			1874		13977	389	3877	1204	1411	8096	7464	
Offshore Brant Beach			5371		8835	4575	3578	698	2865	9023	52429	

Table 83. Zooplankton densities (#/m³) at bay stations in 1974.

	DATE OF COLLECTION									
	16 January	13 February	27 March	8 April	8 May	5 June	8 July	6 August	12 September	23 October
<u>INLET</u>										
Copepods	1903	3183	16162	33334	14940	9349	12199	37114	35586	12096
Copepod nauplii	5046	13723	49576	51797	40574	5054	4367	6263	15203	17656
Other Holoplankton	138	2021	580	P	10328	-	-	P	P	4101
Meroplankton	92	639	879	P	11435	7011	7378	232	450	6015
Total Zooplankton	7179	19566	67197	85131	77277	21414	23944*	43609	51239	39868
<u>LITTLE EGG HARBOR #2</u>										
Copepods	7283	13450	16907	21576	15733	15197	20501	16115	64570	10855
Copepod nauplii	28900	63012	28987	47058	7184	17892	9933	11446	37420	7728
Other Holoplankton	1606	2486	202	2618	2012	-	-	-	P	P
Meroplankton	172	131	873	7853	16668	6309	4718	4818	796	120
Total Zooplankton	37961	79079	46633	79105	41597	39398	35152	32379	102786	18703
<u>BRIGANTINE BAYS #1</u>										
Copepods	3699	10613	3824	29577	10466	13520	26411	4517	25185	3645
Copepod nauplii	5662	32774	10501	32623	16168	22817	39670	14740	37865	5170
Other Holoplankton	P	1774	-	P	3397	-	107	281	-	68
Meroplankton	P	P	342	1829	28669	11830	4456	4517	14022	136
Total Zooplankton	9361	45161	14667	64029	58700	48167	70644	24055	77072	9019
<u>GREAT BAY #2</u>										
Copepods	3851	7416	12261	17838	9204	17181	39209	3910	35521	10320
Copepod nauplii	4303	25583	18323	44451	4773	36897	12690	4810	24066	9498
Other Holoplankton	-	2083	34	P	1040	P	P	13	P	2694
Meroplankton	P	P	275	2328	9764	19455	2033	5891	1683	2055
Total Zooplankton	8154	35082	20893	64617	24781	73534	53931	14624	61270	24567
<u>GREAT BAY #3</u>										
Copepods	1582	8158	23226	49117	10290	15494	136373	2548	11394	14467
Copepod nauplii	2959	37164	13610	31471	42276	91123	53232	16596	18649	3028
Other Holoplankton	86	2909	-	-	-	88	-	71	-	97
Meroplankton	-	-	-	4118	3686	11382	7820	1417	9296	290
Total Zooplankton	4627	48231	36836	84706	56252	118087	197425	20632	39339	17882
<u>MULLICA RIVER #1</u>										
Copepods	3006	16579	7549	6776	6586	10527	94920	5460	11209	No Collection
Copepod nauplii	2298	7795	5832	12383	22500	33195	52640	11954	9232	
Other Holoplankton	-	1184	-	P	-	-	140	345	-	
Meroplankton	242	395	P	1636	26342	5639	51683	2643	2218	
Total Zooplankton	5546	25953	13381	20795	55428	49361	199383	20402	22659	
<u>MONTHLY AVERAGE</u>										
Copepods	3554	9900	13004	26370	11203	13545	63483	11611	30578	10277
Copepod nauplii	8195	30009	20890	36631	22246	34496	33633	10968	23739	8616
Other Holoplankton	307	2076	127	443	2796	16	51	120	5	1394
Meroplankton	88	198	425	2962	16094	10271	14142	3253	4744	1723
Total Zooplankton	12138	42178	34400	66397	52339	58327	111307	25951	59061	22008

* Bottom Collection.

Table 84. Densities ($\#/m^3$) of *Acartia clausi* at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January 16	430	1290	1558	3014	5849	482						
24												
February 12							-	-	-			
13	16184	7802	7250	7419	13450	1383	-	-	p ^a			
27												
March 11							1807	96	-			
25												
27	3116	22863	4518 1346	2168	3920 1470	P	1265 1344	1015 750 ^b 482 577	91			
April 8	3738	46029	7308 6910	1373	7520	P		252 218		234	-	370
29												
May 8	2744	289	5196 9821	8700	2946	1290	178	1091 612	P 64			
21												
June 5	226	263	230	493	1103	272	202	502 1490 P		123 P	P	149 P
20												
July 8	-	-	-	-	-	753 ^c	1504 2276	492 1010 1078 1154	P	P 427	-	-
22								487				
August 2									P			
6	-	-	-	-	-	-						
14												
30												
September 9												
12												
30												
October 7												P
21												
23												
November 4					P							
18												
December 6												

a P = Present

b Replicate collections.

c Bottom collection.

Table 85. Densities (#/m³) of *Acartia tonsa* at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	93	34	450	-	344	-	-	-	-			
24							-	-	-			
February												
12							-	-	-			
13	-	-	-	1742	152	-	-	-	-			
27							-	-	-			
March												
11							-	-	-			
25					p ^a	P	-	-	-			
27	-	-	-	-			-	-	-			
April												
8	-	-	P	-	-	P	-	-	-			
29							-	40	- _b			
May												
8	P	9840	74 60	-	-	-	-	-	-	-	P 152	-
21							-	-	-			
June												
5	9812	14618	12758	10352	1961	4511	15176 19545	- 167 5267 5441	-	-	-	-
20												
July												
8	89320	128689	25086 39234	23673	13170	4066 ^c	3259 8222	1463 9440	515 197	-	-	-
22												
August												
2								5222 6111		229 211	463	-
6	2586	1099	1068 1379	1463	5735	6843						
14								263				
30							7236	5604 4160	3533 1374			
September												
9								1639 1030		2188	2853	-
12	377	8108	11580 12474	4354 9756	13854	9347	12755	15842 9064	8185 5527			
30												
October												
7								2621 1673		260	2050 577	-
21							-	261	P			
23		11373	3927	2344	6555	469						
November												
4								2104 1324		-	-	-
18							2599	1884	913			
December												
6								73				

a P = Present

b Replicate collections.

c Bottom collection.

Table 86. Densities (#/m³) of *Centropages hamatus* at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	pa	80	137	-	183						
24							-	p	-b	-		
February												
12							-	-	-			
13	-	-	-	323	-	319						
27							361	-	-			
March												
11							723	712	395			
25								2892	2972	350		
27	-	-	422	270	-	592	360	962	p	1482	3158	1113
April												637
8	-	441	P	280	2592	1637		2124	6276	3734	4091	179
29									1744	288	545	629
May												
8	-	-	196	655	-	934		369				
21												
June							942	592	529	1154	685	123
5	-	-										410
20			57	141	3064	870						107
July							1231	2879	296	588		
8	-	P	517	361	107	112		452 ^c	5337	10851	3000	P
22												1068
August							148	P	3300	809	P	233
2									1280	206	P	840
6	-	-	-	-	-	-			556	556		
14										1714	421	P
30												698
September												
9												
12	-	-	-	-	-	-						
30												
October												
7												
21												
23												
November												
4												
18												
December												
6												

252

a P = present
b Replicate collections.
c Bottom collection.

Table 87. Densities (#/m³) of Centropages typicus at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	Inlet	Landward	Site	Seaward	Offshore L. E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	-	-	-	-	-	p ^a	201	p ^b	134		
24												
February												
12							-	-	185	P		
13	-	-	-	-	-	-	-	-		P		
27												
March												
11							-	-	-			
25							-	P	-	-	P	-
27	-	-	-	120	-	-						
April												
8	-	-	-	-	-	-		-				
29												
May												
8	-	-	-	-	-	-		P	P	P	-	P 305
21								-		333		92 320
June												
5	-	-	-	-	-	-		1084	167	1282	2622	3419
20								P	-	P		1896
July												
8	-	-	345	217	-	112	452 ^c	-	-	2574	233	1852
22										P	197	3894
August												
2										3314	5053	1852
6	-	-	-	-	-	-						1860
14												
30												
September												
9								99	206	407	96	54
12	-	-	-	-	-	-						
30								248	P	P	-	
October												
7								-		-	P	443
21							596	391		142		226
23		P	137	-	-	-						
November												
4								-		P	139	180
18							P	-		-		237
December												
6								870				

a P = Present
b Replicate collections.
c Bottom collection.

Table 88. Densities (#/m³) of *Oithona brevicornis* at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	L.E. Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	-	-	-	-	P						
24							1027	721 713 ^b	893			
February												
12							-	321 406	560			
13	-	-	p ^a	-	-	-						
27							241	500 240	302			
March												
11							235	500 263	130			
25							958	241 203		241 1140	-	P
27	359	-	-	-	395 200	P 682						
April												
8	985	530	1154 153	459	1961	1634	483	1888 1529	1607 524			
29							-	144 182	160			
May												
8	-	-	P	P	-	-		P 628		-	123 P	P 107
21							-	-	167			
June												
5	-	175	575	352	5515	652		P		-	-	-
20							410 909	P 319	2077			
July												
8	210	2195	776 867	913	1972	452 ^c		1200		-	310 152	-
22							815 1556	7200	875 1447			
August												
2								3111 6444		12686 16211	5833	930
6	-	213	251 402	451	2410	580						
30							3281	3544 2440	2853 1923			
September												
9								8593 10220		291	5545	54
12	3237	773	19231 16755	10111 16197	38615	14752						
30							6760	6601 4323	4884 7483			
October												
7								301 1349		P	P	-
21							447	391	426			
23		838	731	408	1774	703						
November												
4								2847 1654		P	180	P
18							717	2898	2557			
December												
6								217				

a P = Present

b Replicate collections.

c Bottom collection.

Table 89. Densities (#/m³) of *Oithona similis* at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	L.E. Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	pa	161	274	344	138						
24							8904	6490 6821 ^b	13393			
February												
12							1061	1133 2153	1025			
13	-	P	166	323	P 301	523	1084	4450 4135	6220			
27												
March												
11							5657	4894 2987	3020			
25							577	4506 3664		4870 3421	5449	3245
27	-	P	960 876	227	2363 870	804 1841						
April												
8	234	794	2808 176	2439	980	4902	7121	26439 15000	7232 8488			
29							1047	648 1545	1250			
May												
8	-	P	123 149	P	718	4057		4135 5649		3239 4795	4249 3735	4418 4804
21							673	3100	5500			
June												
5	75	-	575	211	123	435		4246 5975		10256	3846 3846	1725
20							4375 5303	3894 4149	5308			
July												
8	210	1098	P 217	269	1265	1506 ^c		12600		28235	13345 11400	21158
22							2000 1889	10800	8647 8355			
August												
2								3222 6333		22171 21263	20278	18372
6	-	-	-	-	P	P						
30							337	2060 3680	476 1511			
September												
9								695 288		562	609	243
12	-	486	711 149	221 191	159	1014						
30							191	2475 1543	1782 1276			
October												
7								146 108		779	3168 2163	2143
21							2383	2870	2415			
23		-	182	68	60	1094						
November												
4								8911 9044		3324 2570	3147	5687
18							896	P	3105			
December												
6								5181				

a P = Present

b Replicate collections.

c Bottom collection.

Table 90. Densities (#/m³) of Pseudodiaptomus coronatus at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	L.E. Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	pa	120	1541	-	631	550						
24							-	-	-			
February												
12							-	-	-			
13	395	-	P	806	75	-	-	-	-			
27							-	-	-			
March												
11							-	-	-			
25							-	-	-	-	-	-
27	P	P	-	-	-	-						
April												
8	-	-	-	-	-	-	-	-	-			
29							-	-	-			
May												
8	P	-	96	-	-	-	-	-	-	-	-	-
21							-	-	-			
June												
5	P	-	977	70	735	326	1504	4697 ^b	721	3192	-	-
20												
July												
8	1540	3156	3879	4624	591	2604	1807 ^c	600		-	-	-
22							2320	5000	4800	361	237	
August												
2								1111	1000	-	P	-
6	230	-	-	-	452	P						
30							3534	165	120	275		
September												
9								-	P	-	-	-
12	299	1027	1672	1080	738	1677	3742	4392				
30							2423	2063	2022	594	170	
October												
7								146	P	-	-	-
21							-	-	-			
23		1192	868	68	421	P						
November												
4								-	-	-	-	-
18							-	-	-			
December												
6												

a P = Present
b Replicate collections.
c Bottom collection.

Table 91. Densities (#/m³) of *Paracalanus crassirostris* at bay and ocean stations in 1974.

	M.R. #1	G.B. #3	G.B. #2	B.B. #1	L.E.H. #2	L.E. Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	-	-	-	-	P ^a						
24							P	121 116	224			
February												
12							-	486	-			
13	-	-	-	-	-	-						
27							P	-	98			
March												
11							235	500 224	220			
25							-	892 965		370 877	234	325
27	-	-	301 167	115	691 540	804 P						
April												
8	-	-	1808 644	1373	1960	P	362	693 291	179 P			
29							959	309 409	64			
May												
8	-	-	P -	P	-	P		-		-	185 -	136 P
21							202	P	250			
June												
5	-	-	-	-	123	P		P		-	-	-
20							273 P	P P	P			
July												
8	-	-	129 145	107	112	- ^c		3300		735	-	208
22							1111 1444	10160	1206 3224			
August												
2								3667 4111		7429 3579	23981	349
6	-	-	1068 402	1920	753	28647						
30							8582	4342 10302	22554 13049			
September												
9								3079 2060		2730	7339	2757
12	-	54	585 968	627 1334	5334	4279						
30							19324	12871 11783	14983 4847			
October												
7								7456 3022		2208	2050 4471	1128
21							3128	1174	852			
23		226	1689	646	271	2149						
November												
4								20792 24265		1662 1528	2968	355
18							358	5797	7489			
December												
6								435				

a P = Present
b Replicate collections.
c Bottom collection.

Table 92. Densities (#/m³) of *Paracalanus parvus* at bay and ocean stations in 1974.

	M. R. #1	G. B. #3	G. B. #2	B. B. #1	L. E. H. #2	Inlet	Landward	Site	Seaward	Offshore L. E. Inlet	Offshore Brant Beach	Offshore Brant Beach
January												
16	-	-	48	-	p ^a	-	856	361	228 ^b	446		
24												
February												
12												
13	-	-	-	-	-	-						
27												
March												
11												
25												
27	-	-	-	-	-	-						
April												
8	-	-	P	-	-	-						
29												
May												
8	-	-	-	-	-	-						
21												
June												
5	-	-	-	-	-	-	273	-	P			
20												
July						c				1765	388	985
8	-	-	-	-	-	-						316
22												
August										4800	1368	2500
2												1395
6	-	-	-	-	-	-			4212	549		
30												
September												
9										68	-	108
12	-	-	-	-	-	-	765	165	349	594	765	
30												
October												
7							3277	583	162	3896	4286	5913
21								7565				3722
22						923						
November												
4							269	3960	4853	2601	4861	3147
18								P	913			1363
December												
6								326				

a P = Present

b Replicate collections

c Bottom collection

Table 93. Densities (#/m³) of Pseudocalanus minutus at bay and ocean stations in 1974.

	M. R. # 1	G. B. # 3	G. B. # 2	B. B. # 1	L. E. H. # 2	L. E. Inlet	Landward	Site	Seaward	Offshore L. E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	P ^a	-	-	-	P	275	-	521	171 ^b	134		
24												
February							1071	2106	1341	1400		
12												
13	P	143	-	-	P	426	1084	6800	6779	877		
27												
March							3614	4955	3816	4317		
11							2688	1164	6232		5556 4649	6738 2800
25												
27	-	P	3494 2525	286	9769 4590	8413 11386						
April												
8	-	-	1538 4109	14480	1637	15850 4012	15448	18939 20995	3542 4192			
29								4431 4045	1282			
May												
8	-	-	123 P	P	1006	554	202	2404 1130		3872 4024	1047 4802	2368 3897
21								1400	3167			
June												
5	-	-	114	70	-	-	8613 7727	2566 2277		4103	3846 3419	4834
20								7500 11968	6462			
July												
8	-	-	-	-	-	904 ^c		2100		1616	5431 10450	1999
22							P	160	258 658			
August												
2										914 1053	P	1395
6	-	-	-	-	-	232						
14												
30												
September												
9												
12	-	-	-	-	-	-						
30												
October												
7												
21												
23		-	-	-	-	-						
November												
4												
18												
December												
6												

a P = present

b Replicate collections

c Bottom collection.

Table 94. Densities (#/m³) of *Temora longicornis* at bay and ocean stations in 1974.

	M. R. # 1	G. B. # 3	G. B. # 2	B. B. # 1	L. E. H. # 2	L. E. Inlet	Landward	Site	Seaward	Offshore L. E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	pa	-	P	P	92						
24							P	211	86 ^b	89		
February												
12							P	-	650	-		
13	-	-	-	P	-	-						
27							602	1150	1058	249		
March												
11							1030	1515	750	778		
25							2308	1759	2395		982 790	1054 805
27	-	P	5361 2222	286	4436 2610	1923 1705						
April												
8	-	P	1962 2241	5183	1637	4412	5190	5225 6699	3750 7650			
29							1657	3422 4318	7051			
May												
8	-	P	270 238	543	2874	3689		5914 6025		12362 11473	8559 8156	3095 5018
21							1346	4200	8750			
June												
5	-	-	114	282	-	326		2667 1177		8462	8392 17521	4316
20							684 1813	2164 2075	3462			
July												
8	-	-	P	-	186	P ^c		600		735	1164 2121	1895
22							-	4800	-			
August												
2								-		343 P	-	2326
6	-	-	-	-	753	P						
14												
30			-				-		-			
September												
9								-		P	-	-
12	-	-	-	-	P	-						
30							-	P	P			
October												
7								-		260	-	338
21							P	391	-			
23		-	137	-	-	117						
November												
4								-		P	-	-
18							-	-	-			
December												
6								109				

a P = present

b Replicate collections

c Bottom collection

Table 95. Densities (#/m³) of harpacticoids at bay and ocean stations in 1974.

	M.R.#1	G.B.#3	G.B.#2	B.B.#1	L.E.H.#2	Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	-	209	-	P ^a	P						
24							226	80	57 ^b	P		
February												
12							-	-	-			
13	-	-	-	-	- P	-						
27							P	100	144	P		
March												
11							-	197	P	P		
25							P	410	203		P	P
27	318	-	-	P	- P	P P						
April												
8	467	1029	P	468	-	2940	3268	630	655	536 P		
29							523	103	227	224		
May												
8	1373	97	96	446	408	5100	3874	337	P	186	283	- P P
21							539	300		P		
June												
5	301	350	402	493	1838	598	P	303	P	167	350	P -
20								P	638	P		
July												
8	560	961	129	361	322	335	P ^c	-				
22							148	P	240	-		
August												
2								556	P	P	-	-
6	2299	1135	1068	2010	678	3012	232					
14												
30			1815				1599	824	440	2038	549	
September												
9								149	82		224	128
12	1439	892	2383	2197	1550	3011	2866	1014				54
30							6824	15017	16663	12739	7134	
October												
7								6408	6043		21558	13975 19183
21							21745	21130		9162		13421
23		838	1826		111	1714	3359					
November												
4								36634	20515		7587 7986	7734
18							2330	18985		29041		7820
December												
6								616				

a P = Present.

b Replicate collections.

c Bottom collection.

Table 96. Densities (#/m³) of *Noctiluca scintillans* at bay and ocean stations in 1974.

	<u>M.R.</u>	<u>G.B.#3</u>	<u>G.B.#2</u>	<u>B.B.#1</u>	<u>L.E.H.#2</u>	<u>Inlet</u>	<u>Landward</u>	<u>Site</u>	<u>Seaward</u>	<u>Offshore L.E. Inlet</u>	<u>Off Brant Beach</u>	<u>Offshore Brant Beach</u>
January												
February												
March												
April	THIS	SPECIES	WAS	NOT	FOUND	IN	THE	MONTHS	JANUARY	THROUGH	JULY.	
May												
June												
July												
August												
2								-		-	-	-
6	-	-	-	-	-	-		-				
14							168	28900	32360 ^b	275		
30												
September												
9								40182	102857	2554	94712	2054
12	-	-	-	-	597	7995						
30												
October												
7										5974	18820	20048
21							4617	6261	1705			2030
23	-	97	2694	68	P ^a	3867						
November												
4								247	P	2457	4306	270
18							2778	10434	31598			3318
December												
6												

a P = Present

b Replicate collections.

262

Table 97. Densities ($\#/m^3$) of *Penilia avirostris* at bay and ocean stations in 1974.

	M.R.#1	G.B.#3	G.B.#2	B.B.#1	L.E.H.#2	Inlet	Landward	Site	Seaward	Offshore L.E.	Inlet	Off Brant Beach	Offshore Brant Beach
January													
February													
March	THIS	SPECIES	WAS	NOT	FOUND	IN	THE	MONTHS	JANUARY	THROUGH		JUNE.	
April													
May													
June													
July													
8	-	-	-	-	-	- c	-	-	-		pa	-	-
22													
August								p	- b		5600	4000	7580
2													10116
6	-	-	-	-	-	-							
14								3882					
30								2390	4680	33967	17857		
September													
9								3377	5275			3558	2865
12	-	-	-	-	-	P							
30													
October													
7											P	372	P
21							298	1565	426				1015
23													
November													
4								-	P		P	417	P
18													-
December													
6													

a P = Present

b Replicate collections.

c Bottom collection.

Table 98. Densities (#/m³) of *Oikopleura* spp. at bay and ocean stations in 1974.

	<u>M.R.#1</u>	<u>G.B.#3</u>	<u>G.B.#2</u>	<u>B.B.#1</u>	<u>L.E.H.#2</u>	<u>L.E.Inlet</u>	<u>Landward</u>	<u>Site</u>	<u>Seaward</u>	<u>Offshore</u> <u>L.E. Inlet</u>	<u>Off</u> <u>Brant Beach</u>	<u>Offshore</u> <u>Brant Beach</u>
January	THIS	SPECIES	WAS	NOT	FOUND	IN	THE	MONTHS	JANUARY	THROUGH	APRIL.	
February												
March												
April												
May												
8	-	-	-	-	-	-	-	-	-	171	308	-
21												
June												
5	-	-	-	-	-	-	- P	- pb	P			
20												
July												
8	-	-	- pa	-	-	-c	- P	1800		P	2405	2576
22								288	1905	1447		3158
August												
2								3000	3000	6429	4737	9167
6	-	-	-	-	-	-						349
14								1513				
30							-	440	408	549		
September												
9								248	82	291		54
12	-	-	-	-	-	-	-	-	P			
30										170		
October												
7								97	-	1818	3354	2019
21							1787	783	568			1466
23												
November												
4								248	-	1301	1597	1754
18							1254	1014	4018			2310
December												
6												

a P = Present.

b Replicate collections.

c Bottom collection.

Table 99. Densities (#/m³) of bivalve larvae at bay and ocean stations in 1974.

	M.R.#1	G.B.#3	G.B.#2	B.B.#1	L.E.H.#2	L.E. Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach				
January																
16	-	-	-	-	-	P ^a										
24							4555	923	827 ^b	491						
February																
12							-	321	P	185						
13	-	-	-	P	-	-		100	192	227						
27																
March							596	455	171	1257						
11							P	-		425	-	234	601			
25																
27	-	-	-	-	-	P										
April																
8	-	-	-	-	657	-	P	-	268	838						
29							1047	2062	2364	1378						
May																
8	P	64	122	60	1223	P	1107	43279	26611		10351	10788	9914	7698	5374	8648
21							606	2400		2000						
June																
5	75	175	230	141	-	217		1973	1177		2051		350	P		3368
20							5195	3939	1154	1755	1154					
July																
8	6160	823	-	483	-	- ^c		123	900		7941		3724	2955		3262
22							P	P	1200	1390	855					
August																
2								1111	444		800	632	1204			465
6	402	106	189	114	395	602	P									
14								6711								
30			-				2861	824	720	2446	2473					
September																
9								397	206		1131		962			1676
12	1079	4270	502	112	258	343	-	-								
30							1020	1073	1185	8845	11480					
October																
7								6505	4640		13896		4845	5769		6880
21							35447	38478		27130						
23		P	1553	-		P	4453									
November																
4								26485	1324		29480	44444	5935			50474
18							2419	8550		11689						
December																
6								217								

a P = Present

b Replicate collections.

c Bottom collection.

Table 100. Bivalve larvae densities (#/m³) at the Site obtained from oblique tows made with a Clarke-Bumpus sampler (#20 net) on selected dates. Identification by Paul Chanley of the Shelter Island Oyster Co., Greenport, Long Island.

	8 May	4 June	11	26 June	9 July	10 July	24 July	13 Aug.	27 Aug.	4 Sept.	22 Oct.	16 Nov.	21 Nov.
* Anomia simplex	-	-	-	-	-	235	-	-	-	-	-	-	-
Anadara sp.	-	-	-	-	-	118	-	340	-	254	-	-	-
Donax variabilis	-	-	-	-	-	-	-	-	-	127	92	-	-
* Ensis directus	1679	-	-	-	-	-	-	-	-	-	-	68	-
Erycinaceans	-	-	-	-	61	118	-	-	-	-	92	-	-
* Modiolus demissus	-	24	62	-	307	1175	526	5218	1514	127	186	610	10176
* Mulinia lateralis	49	148	-	-	923	235	1526	3403	-	-	-	-	-
* Mytilus edulis	419	24	-	176	-	235	-	-	-	-	464	299	118
Pholads (Barnea truncata?)	-	-	62	-	-	-	-	1134	151	381	279	-	24
Petricola pholadiformis	-	-	-	-	307	-	-	-	-	-	4086	-	-
or Pitar morrhuana	-	-	-	-	-	-	-	-	-	-	-	-	24
Petricola pholadiformis	49	-	-	-	-	-	-	-	-	-	-	-	-
Pitar morrhuana	-	-	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	-	1383	812	3825	27707	7875	-	-	-	-	557	299	1302
Tagelus plebeius	-	-	-	-	61	-	-	-	-	-	-	-	-
* Tellina agilis	-	-	62	1059	307	235	-	227	151	381	929	-	118
* Teredo navalis	-	-	-	-	-	-	-	-	-	-	186	-	-
Unidentified	296	889	5187	823	923	1563	8689	1134	13478	5209	2508	345	237

* common estuarine species in bay study area.

Table 101. Densities (#/m³) of polychaete larvae at bay and ocean stations in 1974.

	M.R.#1	G.B.#3	G.B.#2	B.B.#1	L.E.H.#2	L.E.Inlet	Landward	Site	Seaward	Offshore L.E. Inlet	Off Brant Beach	Offshore Brant Beach
January												
16	-	-	-	pa	-	92						
24							-	P	-			
February												
12							-	-	-			
13	-	-	P	-	75	213						
27							482	450	529 ^b	98		
March												
11							1988	4394	2276	1893		
25							577	P			555	439
27	-	-	181	P	227	493	360	-			586	1406
April												
8	P	4118	2038	2429	1829	6539	-	241	252	146	1518	1153
29							3052	5567	7864	417		
May												
8	5764	3269	4630	11071	24913	8908	2767	2222	3389		410	171
21							337	600		167	555	2439
June												
5	1391	9454	16421	10281	5085	5979		987	588		-	-
20							5606	8636	865	3830	P	
July												
8	5530	274	P	289	2308	633	2710 ^c	3150			P	233
22							222	444	1680		152	P
August												
2								889	1333		P	211
6	632	496	3647	5286	3502	2409	232				P	
14								395				
30			1370				6604	742	720	1803	P	
September												
9								199	P		-	96
12	1139	3486	1003	447	2841	3239	796	450				432
30							1913	1155	1394	132	170	
October												
7								971	809		390	932
21							4021	5217			1298	226
23		226	P		68	-	1289					
November												
4								3218	2426		4335	2083
18							627	724		365	764	474
December												
6								P				

a P = Present.

b Replicate collections.

c Bottom collection

Table 102. Part I. Densities of *Sagitta elegans* taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of *Sagitta elegans* taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II				
		Site				Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet			Site		
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour	Surface	Bottom	Oblique	
Jan.	12	32.53 ^b	57.39	344.61	NS ^a	NS	NS	NS	Jun. 20	2000	0.03	25.81	25.59
	24	11.65	2.39	40.79	NS					2200	2.14	35.28	NS
Feb.	12	0.20	2.40	4.69	NS	NS	NS	NS		2400	1.29	4.16	27.81
	27	0.02	0.66	2.80	NS				Jul. 8	2000	-	NS	-
Mar.	11	0.01	2.61	18.20	NS	NS	NS	NS		2200	-	NS	NS
	25	NS	NS	NS	84.46	0.21	3.50	5.55	Jul. 22	2025	-	-	p ^c
Apr.	8	0.01	NS	170.10	18.18	NS	NS	NS		2200	-	-	NS
	29	NS	NS	NS	2.79					0000	-	-	-
May	8	0.02	NS	1.88	0.57	1.70	7.10	6.10	Sep. 9	1900	-	-	-
	21	-	NS	2.32	6.94					2100	-	-	NS
Jun.	5	-	NS	-	0.25	16.64	49.20	18.34		2300	-	-	-
	20	-	NS	53.91	1.09				Oct. 21	1745	-	-	NS
Jul.	8	0.05	NS	3.17	P	-	45.90	0.32		1945	-	-	NS
	22	-	NS	0.92	-	-				2145	-	-	NS
Aug.	2	-	NS	-	-	-	41.48	-					
	30	-	NS	-	-	-							
Sep.	9	-	NS	-	-	-	91.82	-					
	30	-	NS	-	-	-							
Oct.	7	-	NS	-	-	-	71.32	-					
	21	-	NS	-	-	-							
	23	-	NS	-	NS	-							
Nov.	4	-	NS	-	-	-	48.36	-					
	18	-	NS	-	NS	-							

a NS = No Sample

b = All values are n/m³.

c P = Present

Table 103. Part I. Densities of *Neomysis americana* taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of *Neomysis americana* taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II					
Site					Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet	Site						
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour		Surface	Bottom	Oblique	
Jan.	12	-	-	pb	NS ^a	NS	NS	NS	Jun.	20	2000	-	7. 51	6. 51
	24	-	-	2. 86 ^c	NS						2200	90. 16	24. 50	NS
Feb.	12	P	-	0. 11	NS	NS	NS	NS			2400	6. 78	125. 46	77. 04
	27	P	-	-	NS				Jul.	8	2000	NS	NS	0. 01
Mar.	11	-	-	-	NS	NS	NS	NS			2200	12. 92	NS	NS
	25	NS	NS	NS	P	-	0. 18	-	Jul.	22	2025	0. 74	NS	39. 93
Apr.	8	-	NS	2. 71	0. 57	NS	NS	NS			2200	52. 79	156. 17	NS
	29	NS	NS	NS	1. 69						0000	921. 75	900. 00	235. 29
May	8	-	NS	4. 05	0. 56	0. 01	0. 06	0. 13	Sep.	9	1900	-	14. 85	-
	21	-	NS	0. 50	1. 86						2100	72. 60	37. 72	NS
Jun.	5	-	NS	-	P	2. 26	-	-			2300	4. 86	20. 72	20. 49
	20	-	NS	2. 00	0. 30				Oct.	21	1745	-	-	NS
Jul.	8	-	NS	0. 08	-	4. 86	0. 16	0. 39			1945	-	-	NS
	22	10. 01	NS	15. 81	7. 24						2145	-	-	NS
Aug.	2	0. 46	NS	0. 40	1. 69	1. 21	0. 74	-						
	30	1. 49	NS	-	-									
Sep.	9	-	NS	-	P	-	0. 26	0. 59						
	30	0. 07	NS	1545. 65	-									
Oct.	7	-	NS	-	0. 02	-	-	-						
	21	P	NS	-	P									
	23	-	NS	-	NS									
Nov.	4	-	NS	-	-	-	-	-						
	18	P	NS	P	NS									

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 104. Part I. Densities of Crangon septemspinosa zoeae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of Crangon septemspinosa zoeae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II					
		Site				Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet			Site			
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour		Surface	Bottom	Oblique	
Jan.	12	-	-	p ^b	NS ^a	NS	NS	NS	Jun.	20	2000	-	11.37	25.27
	24	-	-	2.28 ^c	NS						2200	50.43	3.67	NS
Feb.	12	-	0.09	0.05	NS	NS	NS	NS			2400	7.75	31.23	24.86
	27	-	0.02	0.11	NS				Jul.	8	2000		NS	0.01
Mar.	11	-	-	0.14	NS	NS	NS	NS			2200	14.34	NS	NS
	25	-	10.20	1.35	5.10	0.51	1.19	0.64	Jul.	22	2025	-	NS	1.58
Apr.	8	-	NS	38.15	15.79	NS	NS	NS			2200	14.56	1.75	NS
	29	NS	NS	NS	29.46						0000	-	-	0.94
May	8	-	NS	38.15	14.27	0.56	0.28	3.88	Sep.	9	1900	-	P	P
	21	-	NS	68.50	43.83						2100	-	-	P
Jun.	5	-	NS	-	13.07	20.22	9.76	2.98			2300	-	-	-
	20	0.39	NS	47.26	51.20				Oct.	21	1745	0.58	-	NS
Jul.	8	0.04	NS	-	16.22	7.37	22.02	26.76			1945	-	-	NS
	22	-	NS	0.39	-						2145	-	0.26	NS
Aug.	2	-	NS	-	-	2.87	4.37	2.99						
	30	-	NS	-	-									
Sep.	9	-	NS	NS	P	-	1.03	0.98						
	30	0.26	NS	-	-									
Oct.	7	0.02	NS	0.03	0.33	0.68	-	-						
	21	-	NS	-	P									
	23	2.57	NS	0.38	NS									
Nov.	4	0.16	NS	-	2.57	0.56	-	0.73						
	18	0.02	NS	-	NS									

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 105. Part I. Densities of Palaemonetes spp. zoeae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of Palaemonetes spp. zoeae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II				
Site						Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet	Site				
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour	Surface	Bottom	Oblique	
Jan.	12	-	-	-	NS ^a	NS	NS	NS	Jun. 20	2000	15. 69		
	24	-	-	-	NS					2200	-	NS	
Feb.	12	-	-	-	NS	NS	NS	NS		2400	1. 56	3. 37	
	27	-	-	-	NS				Jul. 8	2000	NS	0. 02	
Mar.	11	-	-	-	NS	NS	NS	NS		2200	12. 92	NS	
	25	NS	NS	NS	-	-	-	-	Jul. 22	2025	0. 74	39. 93	
Apr.	8	-	NS	-	-	NS	NS	NS		2200	52. 79	NS	
	29	NS	NS	NS	-	-	-	-		0000	71. 60	81. 25	
May	8	-	NS	-	-	-	-	-	Sep. 9	1900	p ^b	-	
	21	-	NS	-	-	-	-	-		2100	-	NS	
Jun.	5	1. 55 ^c	NS	-	0. 48	-	-	-		2300	p		
	20	15. 67	NS	6. 52	11. 50				Oct. 21	1745	-	NS	
Jul.	8	1. 84	NS	265. 48	17. 12	0. 14	p ^b	0. 52		1945	-	NS	
	22	1. 61	NS	22. 90	7. 24					2145	-	NS	
Aug.	2	0. 46	NS	0. 40	1. 69	0. 49	1. 34	0. 05					
	30	1. 49	NS	-	-								
Sep.	9	p	NS	-	-	-	-	-					
	30	-	NS	-	-								
Oct.	7	-	NS	-	-	-	-	-					
	21	-	NS	-	-								
	23	-	NS	-	NS								
Nov.	4	-	NS	-	-	-	-	-					
	18	-	NS	-	NS								

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 106. Part I. Densities of total crab zoeae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of total crab zoeae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II					
		Site				Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet			Site			
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour	Surface	Bottom	Oblique		
Jan.	12	-	-	-	NS ^b	NS	NS	NS	Jun.	20	2000	0. 02	33. 52	98. 21
	24	-	-	-	NS						2200	124. 12	12. 76	113. 97
Feb.	12	-	-	-	NS	NS	NS	NS			2400	166. 69	18. 99	NS
	27	-	-	-	NS				Jul.	8	2000	NS	NS	0. 09
Mar.	11	0. 02 ^a	-	-	NS	NS	NS	NS			2200	387. 93	NS	NS
	25	NS	NS	NS	P ^c	1. 88	2. 25	0. 91	Jul.	22	2025	8. 70	NS	80. 50
Apr.	8	-	NS	0. 13	4. 01	NS	NS	NS			2200	228. 22	192. 91	NS
	29	NS	NS	NS	2. 07						0000	278. 51	144. 06	50. 93
May	8	0. 33	NS	33. 54	13. 11	24. 96	12. 56	25. 76	Sep.	9	1900	33. 18	11. 72	115. 09
	21	-	NS	25. 48	29. 39						2100	1. 47	0. 67	NS
Jun.	5	0. 56	NS	0. 21	26. 33	27. 81	42. 68	33. 51			2300	21. 27	1. 44	213. 64
	20	9. 22	NS	64. 43	158. 59				Oct.	21	1745	0. 19	-	NS
Jul.	8	0. 80	NS	658. 75	141. 76	6. 10	14. 66	38. 80			1945	-	-	NS
	22	4. 24	NS	97. 52	54. 28						2145	0. 19	0. 57	NS
Aug.	2	15. 50	NS	44. 00	64. 07	2. 90	1. 39	3. 38						
	30	8. 80	NS	55. 68	97. 26									
Sep.	9	5. 82	NS	NS	33. 83	15. 21	8. 21	2. 05						
	30	5. 52	NS	32. 15	3. 84									
Oct.	7	0. 14	NS	3. 46	1. 71	1. 65	3. 46	0. 75						
	21	0. 20	NS	0. 27	-									
	23	0. 01	NS	0. 38	NS									
Nov.	4	-	NS	0. 05	0. 01	0. 01	0. 01	1. 08						
	18	0. 14	NS	-	NS									

a = All values are n/m³.

b NS = No Sample

c P = Present

Table 107. Part I. Densities of Cancer sp. zoeae/megalopae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of Cancer sp. zoeae/megalopae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II				
		Site				Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet			Site		
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour		Surface	Bottom	Oblique
Jan.	12	-	-	-	NS ^b	NS	NS	NS	Jun.	20	2000	-	1.64/0.22 -
	24	-	-	-	NS						2200	-/0.02	-/0.02 NS
Feb.	12	-	-	-	NS	NS	NS	NS			2400	-/1.65	-/0.25 0.37/0.19
	27	-	-	-	NS				Jul.	8	2000	NS	NS -
Mar.	11	0.02 ^a	-	-	P ^c	NS	NS	NS			2200	-	NS NS
	25	NS	NS	NS	-	0.33	2.25	0.91	Jul.	22	2025	-	NS -
Apr.	8	-	NS	0.13	0.21	NS	NS	NS			2200	-/0.02	- NS
	29	NS	NS	NS	1.04						0000	-	-/0.31 -
May	8	0.33	NS	8.01	3.63	4.40	12.47	11.83	Sep.	9	1900	P	- -
	21	-	NS	-	0.67						2100	-/0.07	- NS
Jun.	5	0.15/0.29	NS	-/0.21	0.96/0.02	33.29/10.83	25.00/17.67	19.84/14.17			2300	0.23	-/0.05 -/P
	20	-	NS	/0.02	-/P				Oct.	21	1745	-	- NS
Jul.	8	-	NS	-	-	-/0.14	3.65/0.21	1.63/0.49			1945	-	- NS
	22	-	NS	-	-						2145	-/0.01	- NS
Aug.	2	-	NS	-	-	-	-/0.09	-					
	30	-	NS	-	-								
Sep.	9	-	NS	NS	-	-	-	-					
	30	-	NS	/0.02	-								
Oct.	7	-	NS	-	-	-	-	-					
	21	-	NS	-	-								
	23	-	NS	-	NS								
Nov.	4	-	NS	-	-	-	-	-					
	18	-	NS	-	NS								

a = All values are n/m³.

b NS = No Sample

c P = Present

Table 108. Part I. Densities of Callinectes sp. zoeae/megalopae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974.
Part II. Densities of Callinectes sp. zoeae/megalopae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I													PART II				
Site						Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet	Site								
Surface Midwater Bottom Oblique						Oblique	Oblique	Oblique	Hour	Surface	Bottom	Oblique					
Jan.	12	-	-	-	NS ^a	NS	NS	NS	Jun.	20	2000	-	-	-			
	24	-	-	-	NS						2200	-/0.01	-	NS			
Feb.	12	-	-	-	NS	NS	NS	NS			2400	-	-	-			
	27	-	-	-	NS				Jul.	8	2000	NS	NS	-			
Mar.	11	-	-	-	NS	NS	NS	NS			2200	21.41	NS	NS			
	25	NS	NS	NS	-	-	-	-	Jul.	22	2025	0.78	NS	-			
Apr.	8	-	NS	-	-	NS	NS	NS			2200	-/0.61	-	NS			
	29	NS	NS	NS	-	-	-	-			0000	-	-	-			
May	8	-	NS	-	-	-	-	-	Sep.	9	1900	P ^c	-	-			
	21	-	NS	-	-	-	-	-			2100	-	-	NS			
Jun.	5	-	NS	-	0.15 ^b	0.10/0.06	-/0.01	-/0.01			2300	0.23/0.23	-	-/0.54			
	20	-	NS	-	-	-	1.27	-/0.01	Oct.	21	1745	-	-	NS			
Jul.	8	-	NS	-	-	-					1945	-/0.38	-	NS			
	22	0.03	NS	1.28	-	-	P/0.03	0.86/0.03			2145	-/0.17	-	NS			
Aug.	2	-	NS	-/0.20	-/0.02	-											
	30	-	NS	-	-	8.35	8.14/0.04	1.39/0.05									
Sep.	9	1.04	NS	NS	-												
	30	-/0.01	NS	-/8.48	-/0.01												
Oct.	7	-/0.04	NS	-/0.01	-	0.91/0.05	1.91/0.02	-/0.37									
	21	-/0.15	NS	-	-												
	23	-	NS	-	NS												
Nov.	4	-	NS	-	-	-	-	0.18									
	18	-	NS	-	NS												

a NS = No Sample

b = AH values are n/m³.

c P = Present.

Table 109. Part I. Densities of Ovalipes ocellatus zoeae/megalopae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of Ovalipes ocellatus zoeae/megalopae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I								PART II				
Site				Off Brant Beach	Offshore of	Offshore of		Site				
Surface	Midwater	Bottom	Oblique	Oblique	Brant Beach	Little Egg Inlet		Hour	Surface	Bottom	Oblique	
Jan. 12	-	-	NS ^a	NS	NS	NS		Jun. 20	2000	-	11.37	9.97
24	-	-	NS					2200	11.00	P ^b	-	
Feb. 12	-	-	NS	NS	NS	NS		2400	8.07	P	4.28	
27	-	-	NS					Jul. 8	2000	NS	NS	-
Mar. 11	-	-	NS	NS	NS	NS		2200	35.14	NS	NS	
25	NS	NS	-	-	-	-		Jul. 22	2025	0.07	NS	0.56/0.01
Apr. 8	-	NS	-	NS	NS	NS		2200	-	17.48	NS	
29	NS	NS	-	-	-	-		0000	1.99	-	1.05	
May 8	-	NS	-	-	-	-		Sep. 9	1900	4.12	-	5.59
21	-	NS	-	-	-	-		2100	1.40	-	NS	
Jun. 5	0.05 ^c	NS	7.62	0.31	-	-		2300	2.71	-	7.37/0.01	
20	-	NS	P	0.89	-	-		Oct. 21	1745	-	NS	
Jul. 8	0.02	NS	24.21	19.15	0.46	4.54	12.50	1945	-	-	NS	
22	0.01	NS	1.69	11.11	-	1.13	0.37/0.13	2145	-	-	NS	
Aug. 2	1.82	NS	0.40	8.03	-	-	-					
30	0.08	NS	-	32.20	-	-	-					
Sep. 9	4.16	NS	-	12.87	3.30	-/0.02	0.20					
30	0.38	NS	-/0.02	0.16	-	-	-					
Oct. 7	0.01	NS	-	0.02	-	1.53	-/0.37					
21	-	NS	-	-	-	-	-					
23	-	NS	-	NS	-	-	-					
Nov. 4	-	NS	-	-	-	-	-					
18	-	NS	-	NS	-	-	-					

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 110. Part I. Densities of *Libinia* sp. zoeae/megalopae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of *Libinia* sp. zoeae/megalopae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I								PART II					
Site					Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet	Site					
					Oblique	Oblique	Oblique	Hour	Surface	Bottom	Oblique		
Jan.	12	-	-	NS ^a	NS	NS	NS	Jun.	20	2000	-	3.73	4.75
	24	-	-	NS						2200	11.00	-	NS
Feb.	12	-	-	NS	NS	NS	NS			2400	-	-	2.46
	27	-	-	NS				Jul.	8	2000	NS	NS	-
Mar.	11	-	-	NS	NS	NS	NS			2200	24.03	NS	NS
	25	NS	NS	NS	-	-	-	Jul.	22	2025	-	-	0.12/0.12
Apr.	8	-	NS	-	NS	NS	NS			2200	1.82/0.61	96.74	NS
	29	NS	NS	NS	-	-	-			0000	-/3.98	-	1.15
May	8	-	NS	-	-	-	-	Sep.	9	1900	0.52	0.04	0.56
	21	-	NS	-	-	-	-			2100	-	-	NS
Jun.	5	-	NS	-	3.01	-	-			2300	6.78	P	-
	20	0.52 ^b	NS	3.19	2.93	-	-	Oct.	21	1745	-	-	NS
Jul.	8	0.18/0.01	NS	41.67	19.37	0.43	-			1945	-	-	NS
	22	0.05	NS	24.31	9.19	-	-			2145	-	-	NS
Aug.	2	P ^c	NS	1.80/0.20	5.38	-	-						
	30	0.14	NS	0.67	1.07	-	-						
Sep.	9	P	NS	-	1.23	1.49	-						
	30	0.08	NS	-	0.11	-	-						
Oct.	7	-	NS	0.04	0.05/0.01	0.23	-						
	21	-	NS	-	-	-	-						
	23	-	NS	-	NS	-	-						
Nov.	4	-	NS	-	-	-	-						
	18	-	NS	-	NS	-	-						

a NS = No Sample
b = All values are n/m³.
c P = Present

Table 111. Part I. Densities of Xanthidae zoeae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of Xanthidae zoeae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II					
Site					Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet							
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique		Hour	Surface	Bottom	Oblique		
Jan.	12	-	P	-	NS ^a	NS	NS	NS	Jun.	20	2000	0.02	1.27	p ^b
	24	-	-	-	NS						2200	-	-	-
Feb.	12	-	-	-	NS	NS	NS	NS			2400	-	P	0.64
	27	-	-	-	NS				Jul.	8	2000	NS	NS	-
Mar.	11	-	-	-	NS	NS	NS	NS			2200	1.82	NS	NS
	25	NS	NS	NS	-	-	-	-	Jul.	22	2025	3.98	NS	1.65
Apr.	8	-	NS	-	-	NS	NS	NS			2200	1.82	12.24	NS
	29	NS	NS	NS	-						0000	-	P	-
May	8	-	NS	-	-	-	-	-	Sep.	9	1900	0.40	-	1.49
	21	-	NS	-	-						2100	P	-	2.16
Jun.	5	0.07 ^c	NS	-	0.24	-	-	-			2300	0.23	0.38	NS
	20	5.17	NS	P	27.39	-	-	-	Oct.	21	1745	-	-	NS
Jul.	8	-	NS	12.70	1.39	-	-	-			1945	-	-	NS
	22	3.03	NS	18.03	5.51						2145	-	-	NS
Aug.	2	10.33	NS	5.40	11.17	-	-	0.13						
	30	5.39	NS	10.56	38.24									
Sep.	9	-	NS	-	-	-	-	-						
	30	0.19	NS	P	0.09									
Oct.	7	0.01	NS	0.01	0.02	-	-	0.37						
	21	-	NS	-	-									
	23	-	NS	-	NS									
Nov.	4	-	NS	-	-	-	-	-						
	18	-	NS	-	NS									

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 112. Part I. Densities of Uca spp. zoeae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of Uca spp. zoeae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II				
Site					Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet	Site					
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour	Surface	Bottom	Oblique	
Jan.	12	-	-	-	NS ^a	NS	NS	NS	Jun. 20	2000	-	-	p ^b
	24	-	-	-	NS					2200	-	-	-
Feb.	12	-	-	-	NS	NS	NS	NS		2400	-	-	-
	27	-	-	-	NS				Jul. 8	2000	NS	NS	0. 07
Mar.	11	-	-	-	NS	NS	NS	NS		2200	218. 09	NS	NS
	25	NS	NS	NS	-	-	-	-	Jul. 22	2025	3. 52	NS	4. 72
Apr.	8	-	NS	-	-	NS	NS	NS		2200	3. 03	-	NS
	29	NS	NS	NS	-	-	-	-		0000	92. 18	-	4. 59
May	8	-	NS	-	-	-	-	-	Sep. 9	1900	-	-	-
	21	-	NS	-	-	-	-	-		2100	-	-	-
Jun.	5	-	NS	-	-	-	-	-		2300	-	-	-
	20	-	NS	-	3. 39 ^c	-	-	-	Oct. 21	1745	-	-	NS
Jul.	8	0. 24	NS	-	52. 56	0. 68	2. 03	4. 35		1945	-	-	NS
	22	0. 17	NS	-	2. 65					2145	-	-	NS
Aug.	2	2. 89	NS	1. 00	-	-	-	0. 13					
	30	-	NS	-	-	-	-	-					
Sep.	9	-	NS	-	-	-	-	-					
	30	-	NS	-	-	-	-	-					
Oct.	7	-	NS	-	-	-	-	-					
	21	-	NS	-	-	-	-	-					
	23	-	NS	-	NS	-	-	-					
Nov.	4	-	NS	-	-	-	-	-					
	18	-	NS	-	NS	-	-	-					

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 113. Part I. Densities of *Pagurus* spp. zoeae/glaucothoe taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of *Pagurus* spp. zoeae/glaucothoe taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II					
		Site				Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet			Site			
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour		Surface	Bottom	Oblique	
Jan.	12	-	-	-	NS ^a	NS	NS	NS	Jun.	20	2000	p ^b	15.29	81.04
	24	-	-	-	NS						2200	99.33	12.74	NS
Feb.	12	-	-	-	NS	NS	NS	NS			2400	155.52	18.74	105.23
	27	-	-	-	NS				Jul.	8	2015	NS	NS	0.02
Mar.	11	-	-	-	NS	NS	NS	NS			2245	83.40	NS	NS
	25	NS	NS	NS	-	-	-	-	Jul.	22	2025	0.35	-	72.39/0.38
Apr.	8	-	NS	-	-	NS	NS	NS			2234	179.00/1.21	35.55/0.02	NS
	29	NS	NS	NS	-						0000	108.75/9.28	131.25/P	41.95/0.21
May	8	-	NS	25.53 ^c	9.20	-	0.10	0.04	Sep.	9	1900	28.12	5.25	88.06
	21	-	NS	25.48	21.66						2100	-	-/P	-
Jun.	5	-	NS	-	12.66	2.94	1.11	-			2300	8.81	-/0.21	30.19
	20	1.04	NS	61.24	122.49				Oct.	21	1745	0.19	-	NS
Jul.	8	-	NS	579.79/0.79	47.60	3.88	-	10.38			1945	-	-	NS
	22	0.03	NS	60.48/0.14	25.56/0.01						2145	-	0.57	NS
Aug.	2	0.46	NS	131.25	37.70/0.20	2.72	-	1.49						
	30	3.16	NS	43.23	24.64									
Sep.	9	-	NS	-	17.73	0.29	-	0.20						
	30	2.65	NS	15.28	3.00									
Oct.	7	0.02	NS	2.68	1.38	0.23	-	-						
	21	-	NS	0.27	-									
	23	0.01	NS	0.38	NS									
Nov.	4	-	NS	-	0.01	-	-	0.36						
	18	-	NS	-	NS									

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 14. Part I. Densities of *Emerita talpoida* zoeae taken at stations at the Site, off Brant Beach, offshore of Brant Beach, and offshore of Little Egg Inlet in 1974. Part II. Densities of *Emerita talpoida* zoeae taken at sunset and 2 and 4 hours after sunset at the Site in 1974.

PART I									PART II				
Site					Off Brant Beach	Offshore of Brant Beach	Offshore of Little Egg Inlet	Site					
		Surface	Midwater	Bottom	Oblique	Oblique	Oblique	Oblique	Hour	Surface	Bottom	Oblique	
Jan.	12	-	-	-	NS ^a	NS	NS	NS	Jun.	20	2000	-	0.69
	24	-	-	-	NS						2200	0.61	NS
Feb.	12	-	-	-	NS	NS	NS	NS			2400	1.45	0.37
	27	-	-	-	NS				Jul.	8	2000	NS	NS
Mar.	11	-	-	-	NS	NS	NS	NS			2200	4.04	NS
	25	NS	NS	NS	-	-	-	-	Jul.	22	2025	-	0.50
Apr.	8	-	NS	-	-	NS	NS	NS			2200	0.61	0.58
	29	NS	NS	NS	-						0000	0.66	P
May	8	-	NS	-	-	-	-	-	Sep.	9	1900	0.02	P
	21	-	NS	-	-						2100	P	0.16
Jun.	5	-	NS	-	-	-	-	-			2300	2.03	0.26
	20	0.03 ^c	NS	p ^b	0.01				Oct.	21	1745	-	-
Jul.	8	-	NS	2.78	1.69	0.44	-	-			1945	-	-
	22	-	NS	1.68	0.27						2145	0.01	-
Aug.	2	-	NS	1.60	0.50	0.18	0.15	0.39					
	30	P	NS	0.22	0.10								
Sep.	9	P	NS	-	1.00	-	0.03	0.01					
	30	-	NS	0.74	0.06								
Oct.	7	-	NS	0.18	0.07	-	-	0.01					
	21	0.05	NS	-	-								
	23	-	NS	-	NS								
Nov.	4	-	NS	0.05	-	0.01	0.01	-					
	18	P	NS	-	NS								

a NS = No Sample

b P = Present

c = All values are n/m³.

Table 115. Occurrence (X) and peak abundance (XX) of selected macroplankters collected at the Site in 1974. No samples were taken in December.

	January	February	March	April	May	June	July	August	September	October	November
HYDROMEDUSAE:											
Liriope sp.	-	-	-	-	-	-	-	X	X	XX	X
Obelia spp.	X	X	XX	X	X	X	X	-	-	-	-
Rathkea octopunctata	X	X	X	X	XX	X	X	-	X	-	-
CHAETOGNATHA:											
Sagitta elegans	XX	X	X	XX	X	X	X	-	-	-	-
Sagitta enflata	-	-	-	-	-	-	-	X	X	XX	X
MYSIDACEA:											
Neomysis americana	X	X	X	X	X	X	X	X	XX	X	X
Mysidopsis bigelowi	X	X	X	-	-	-	X	-	X	XX	X
NATANTIA											
Callinassa sp. zoeae	-	-	-	-	-	-	-	-	X	-	-
Crangon septemspinosa zoeae	X	X	X	X	XX	X	X	-	X	X	X
Lucifer faxoni zoeae	-	-	-	-	-	-	-	X	X	X	X
Naushonia crangonoides	-	-	-	-	-	X	-	-	-	-	-
Palemonetes spp. zoeae	-	-	-	-	-	X	XX	X	X	-	-
Upogebia sp. zoeae	-	-	-	-	-	X	X	XX	X	-	-
BRACHYURA LARVAE:											
Callinectes sp. zoeae	-	-	-	-	-	X	XX	-	X	-	-
megalopae	-	-	-	-	-	-	-	X	XX	X	-
Cancer sp. zoeae	-	-	X	X	XX	X	-	-	-	-	-
megalopae	-	-	-	-	-	X	-	-	X	-	-
Dissodactylus mellitae zoeae	-	-	-	-	-	X	X	-	-	-	-
Libinia spp. zoeae	-	-	-	-	-	X	XX	X	X	X	-
megalopae	-	-	-	-	-	-	X	X	-	X	-
Ovalipes ocellatus zoeae	-	-	-	-	-	X	X	XX	X	X	-
Pinnixa sp. zoeae	-	-	-	-	-	X	X	X	X	-	-
Pinnothere sp. zoeae	-	-	-	-	-	-	-	X	-	-	-
Uca spp. zoeae	-	-	-	-	-	-	-	-	-	-	-
Xanthidae zoeae	-	-	-	-	-	-	-	-	-	-	-
Total crab larvae	-	-	X	X	X	XX	XX	XX	X	X	X
ANOMURA LARVAE:											
Emerita talpoida zoeae	-	-	-	-	-	X	X	X	XX	X	X
Pagurus spp. zoeae	-	-	-	-	X	X	XX	X	X	X	X
glaucothoe	-	-	-	-	-	-	X	X	-	-	-
OTHER FORMS:											
Doliolum nationalis	-	-	-	-	-	-	XX	-	X	X	-
Hyperidean amphipods	-	-	-	-	X	-	-	-	XX	X	X
Limulus polyphemus	-	-	-	-	-	-	X	-	-	-	-
Loliginidae	-	-	-	-	-	X	-	X	X	X	-
Polychaeta larvae	X	-	X	X	X	X	X	X	X	XX	X
Squilla sp. pseudozoeae	-	-	-	-	-	X	X	-	XX	-	-
Thalia democratica	-	-	-	-	-	-	-	XX	-	-	-
Tomopteris helgolandica	X	X	-	X	-	X	-	XX	-	-	-

Table 116. Densities (#/m³) of gastropod larvae at the Site during sampling on 20 June and 22 July 1974.
Over 90% of the larvae were those of the marsh snail, Melampus bidentatus, on both dates.

<u>20 June</u>					
Hour	1700	2100	2230	0035	
Tide	Flood 1	High	Ebb 1	Ebb 2	
Surface	10	31112	55551	150426	
Bottom	901	804	298	1094	
Oblique	1117	2119	4789	5469	
<u>22 July</u>					
Hour	1435	1815	2000	2210	0030
Tide	Ebb 2	Flood 1	Flood 2	Flood 2	Ebb 1
Surface	5104	998	3343	39205	16293
Bottom	1161	219	9500	183	814
Oblique	4800	17455	4974	3579	6223

Table 117. Species of macrozooplankton of known oceanic or estuarine affinities collected at ocean stations in 1974.

ESTUARINE

OCEANIC - (stenohaline marine)

Estuarine and Marine:

Callinectes sp. zoeae and megalopae
 Naushonia crangonoides
 Palaemonetes spp. zoeae
 Uca spp. zoeae
 Upogebia sp. zoeae

Cancer sp. zoeae
 Dissodactylus mellitae zoeae
 Doliolum nationalis
 Euphausiacea
 Gammarus annulatus
 Hyperidean amphipods
 Liriope sp.
 Lucifer faxoni
 Nausithoe sp.
 Pleurobrachia sp.
 Pteropoda
 Sagitta elegans
 Sagitta enflata
 Sagitta serratodentata
 Sagitta sp.
 Sagitta tenuis
 Thalia democratica
 Tomopteris helgolandica

Euryhaline marine:

Aequorea sp.
 Beroe ovata
 Callinassa sp. zoeae
 Callinectes sp. zoeae and megalopae
 Cerapus tubularis
 Crangon septemspinosa zoeae
 Edotea triloba
 Emerita talpoida zoeae
 Hippolyte sp. zoeae
 Idotea baltica
 Idotea metallica
 Libinia spp. zoeae and megalopae
 Lysmata sp. zoeae
 Mysidopsis bigelowi
 Neomysis americana
 Ovalipes ocellatus zoeae
 Pagurus spp. zoeae
 Pinnixa sp. zoeae
 Pinnotheres sp. zoeae
 Rathkea octopunctata
 Squilla sp. pseudozoeae

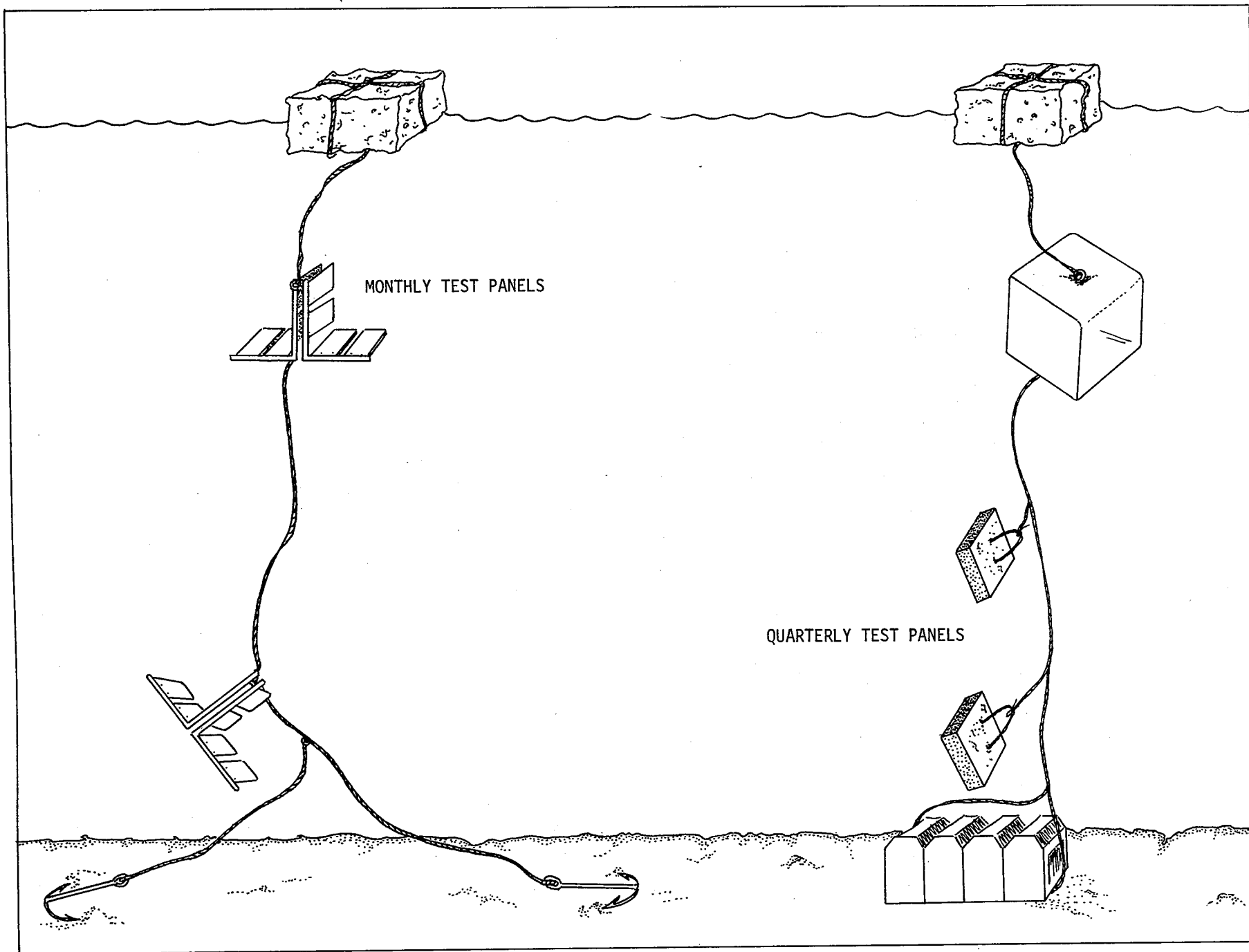


Fig. 1. Arrays used to collect epifauna on concrete substrates at the Site during 1974.

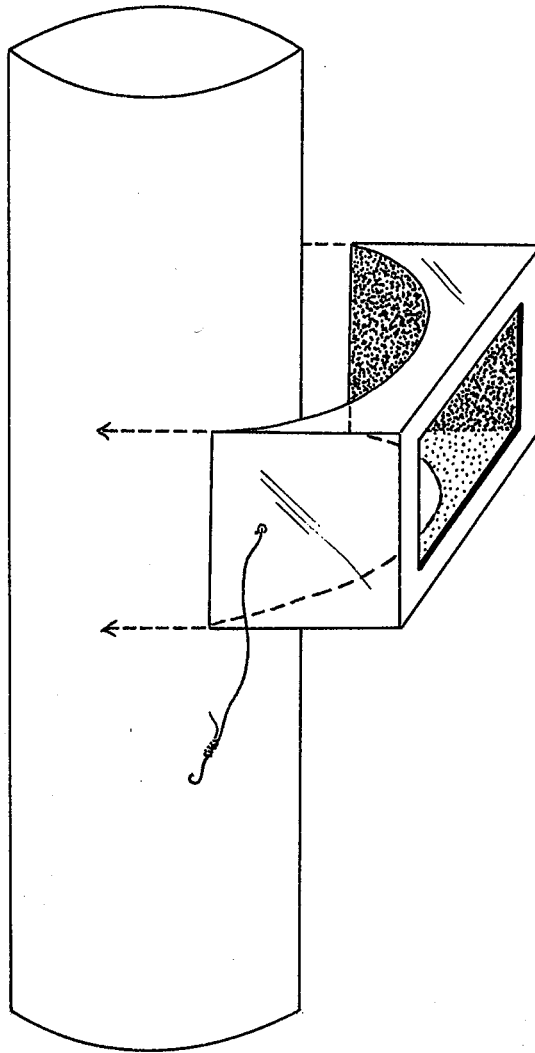


Fig. 2. Submerged Epifauna Collection Shield used while taking samples from a leg of the EG&G tower located at the Site.

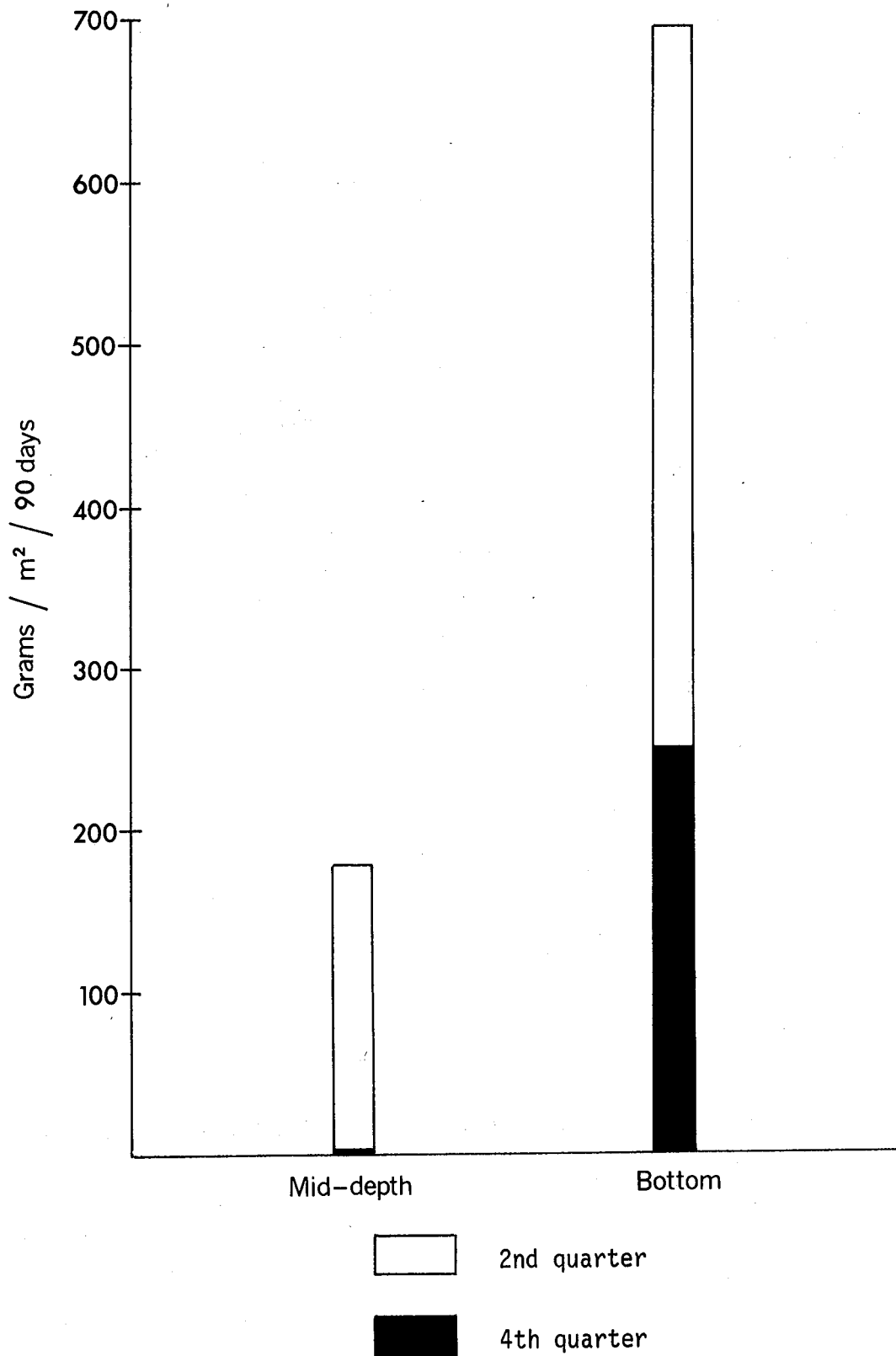


Fig. 3. Adjusted dry weights for epifauna scraped from concrete test blocks moored near the Site during the 2nd and 4th quarters of 1974.

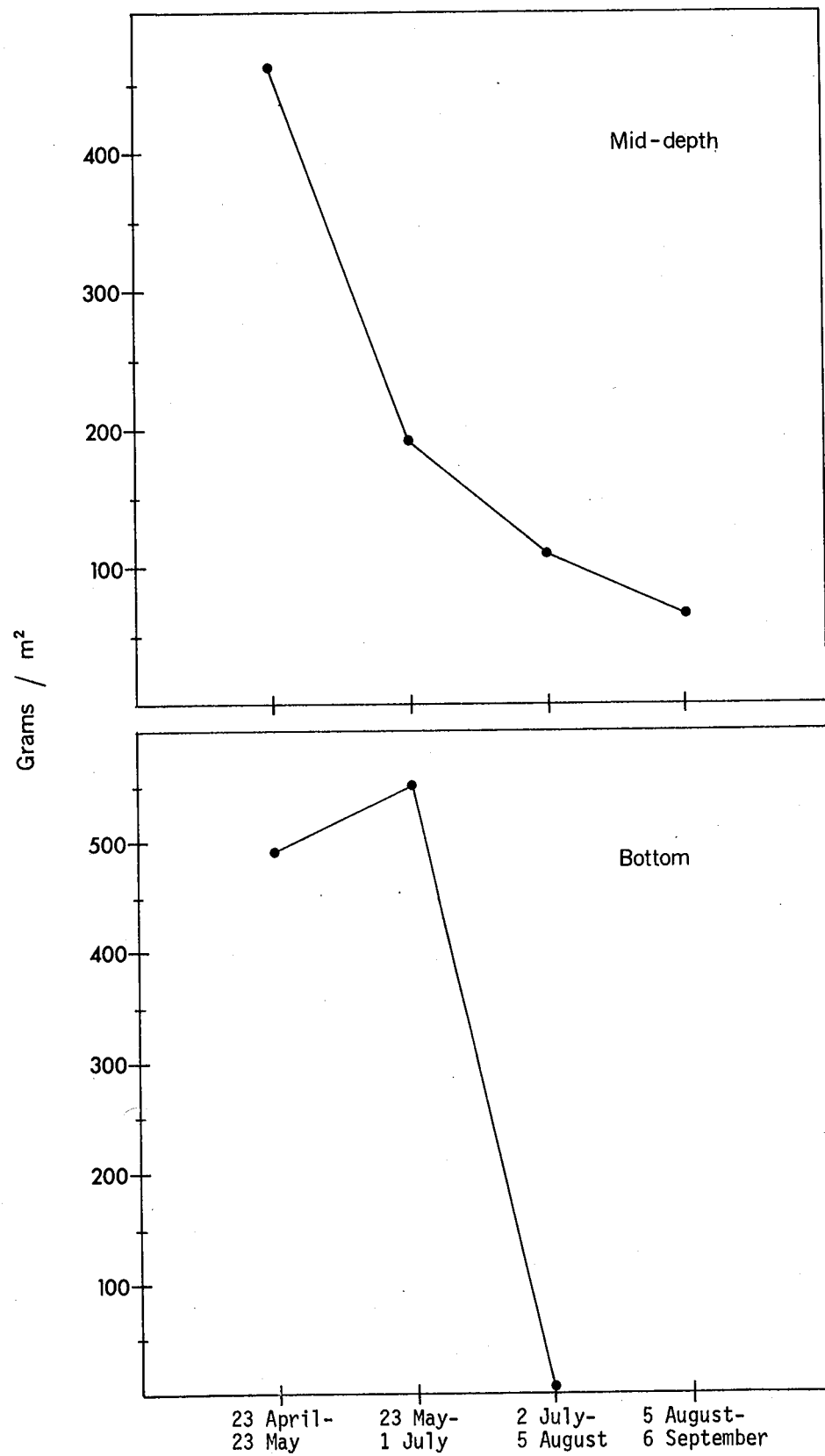


Fig. 4.. Average dry weight/m²/30 days on concrete test panels moored at the Site during 1974.

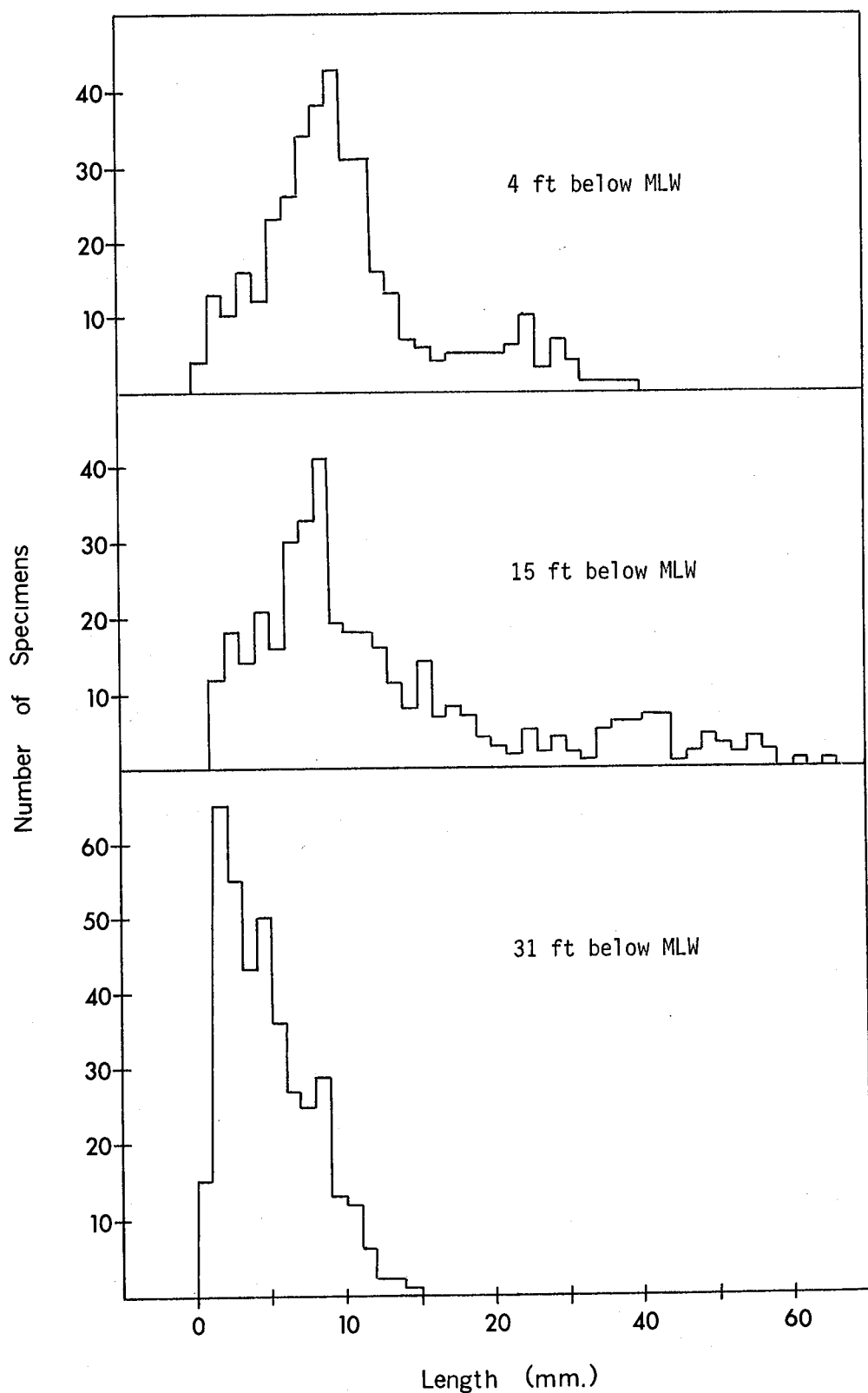


Fig. 5. Lengths of *Mytilus edulis* scraped from the E.G.&G. tower at the Site after one year of exposure, June 1973-June 1974.

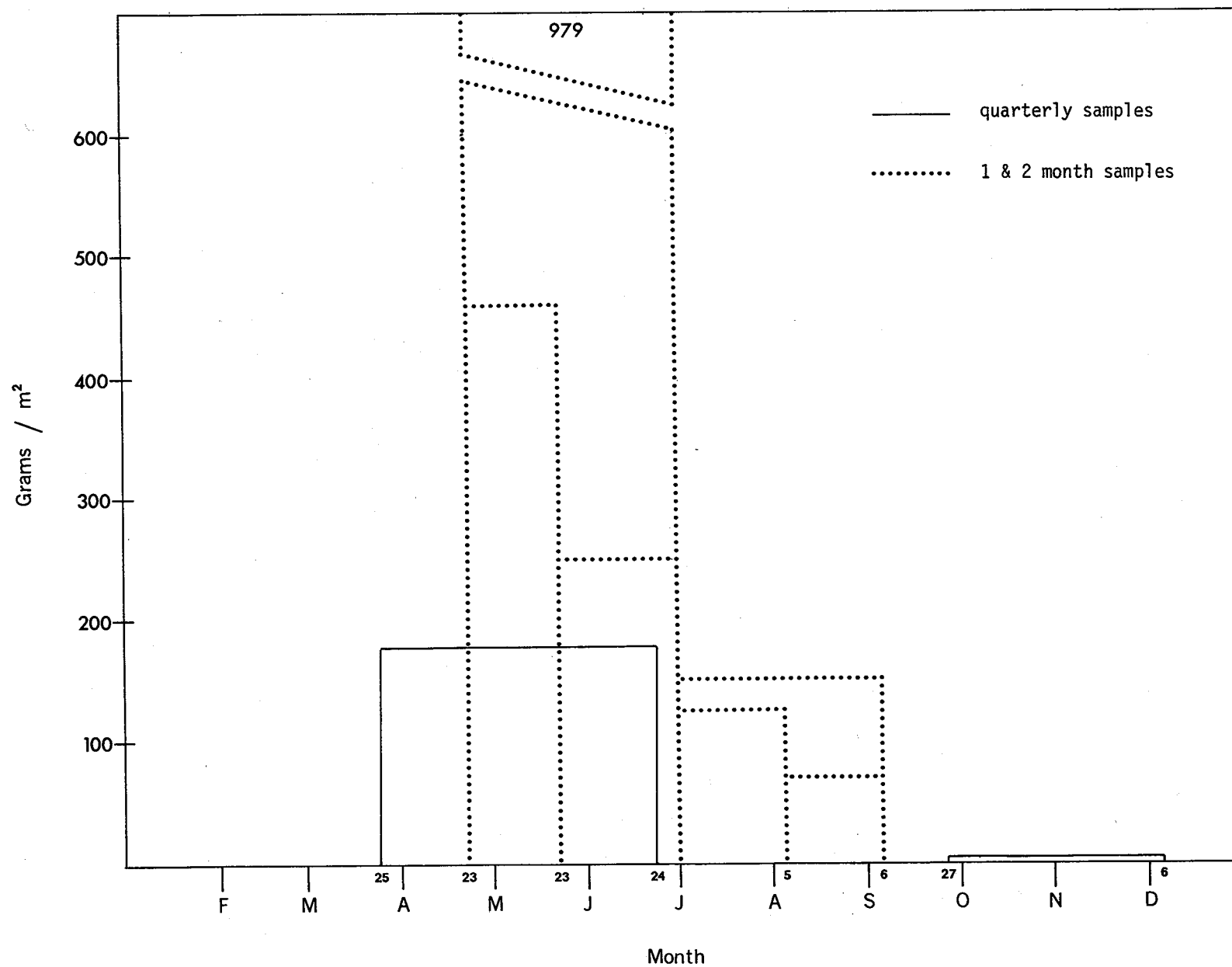


Fig. 6. Average dry weights (g/m²) of epifauna colonizing middepth concrete substrates at the Site during 1974.

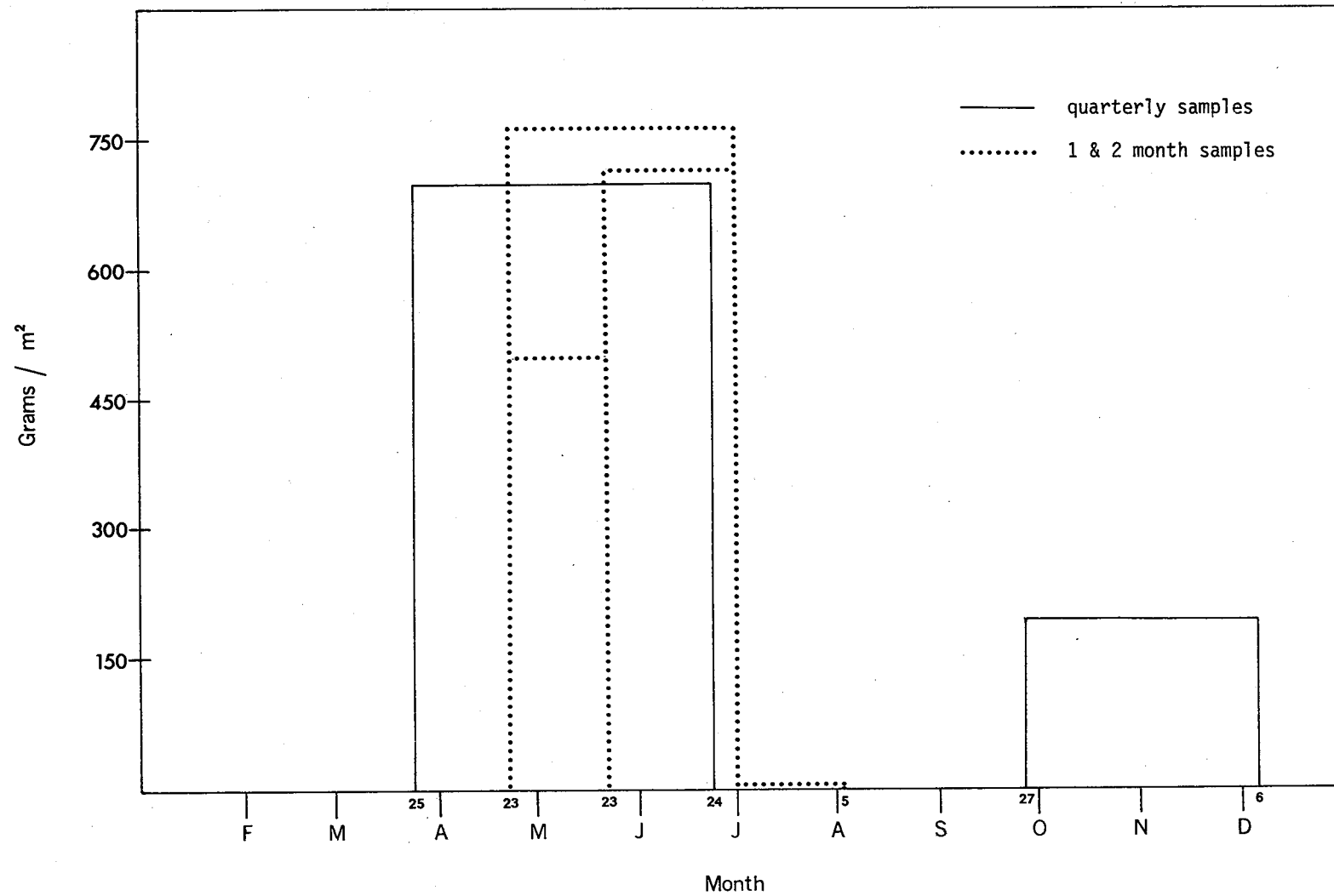


Fig. 7. Average dry weights (g/m²) of epifauna colonizing concrete substrates near the bottom at the Site during 1974.

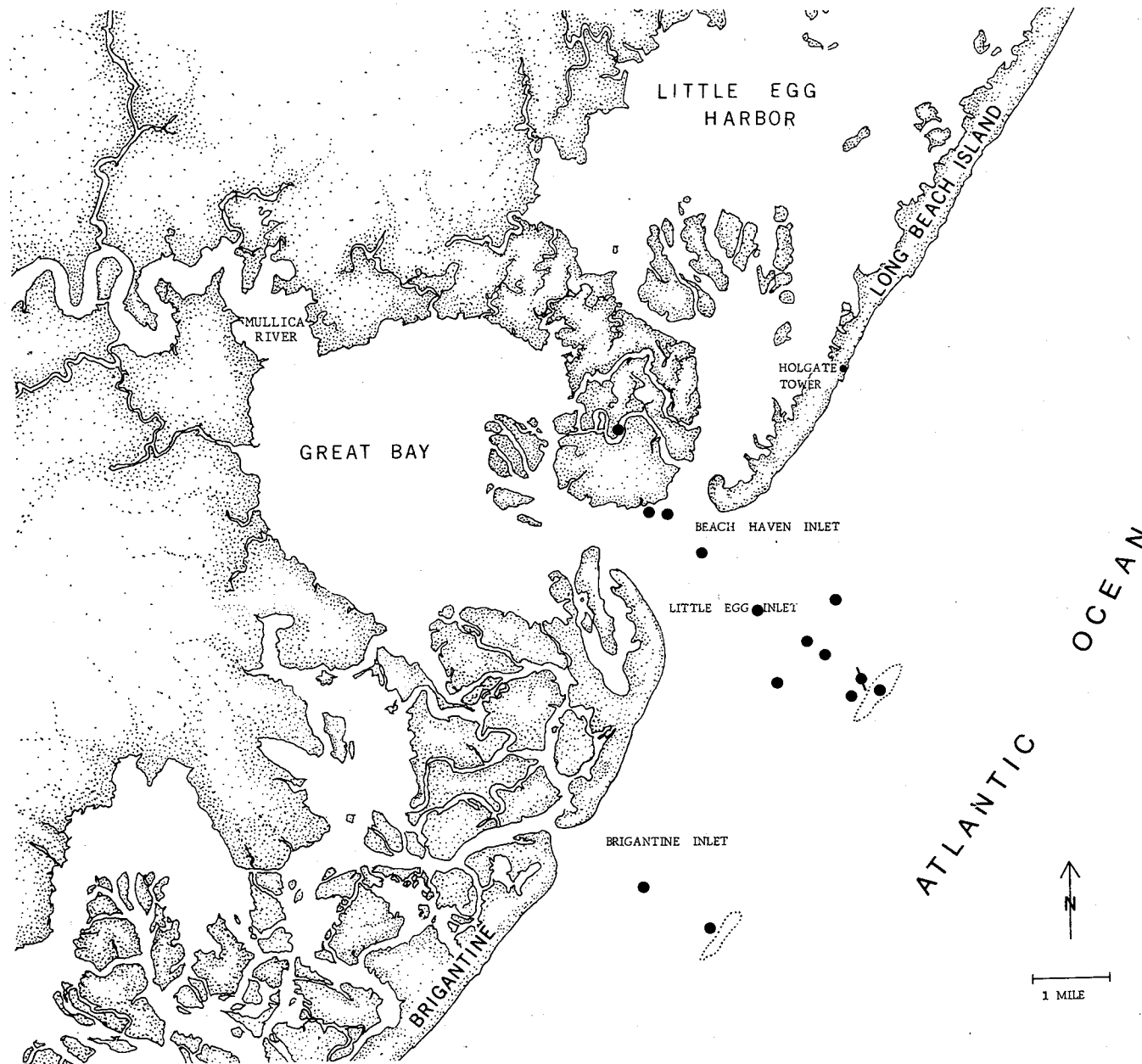


Fig. 8. Locations sampled on a regular basis with a ponar grab and clam dredge in 1974.

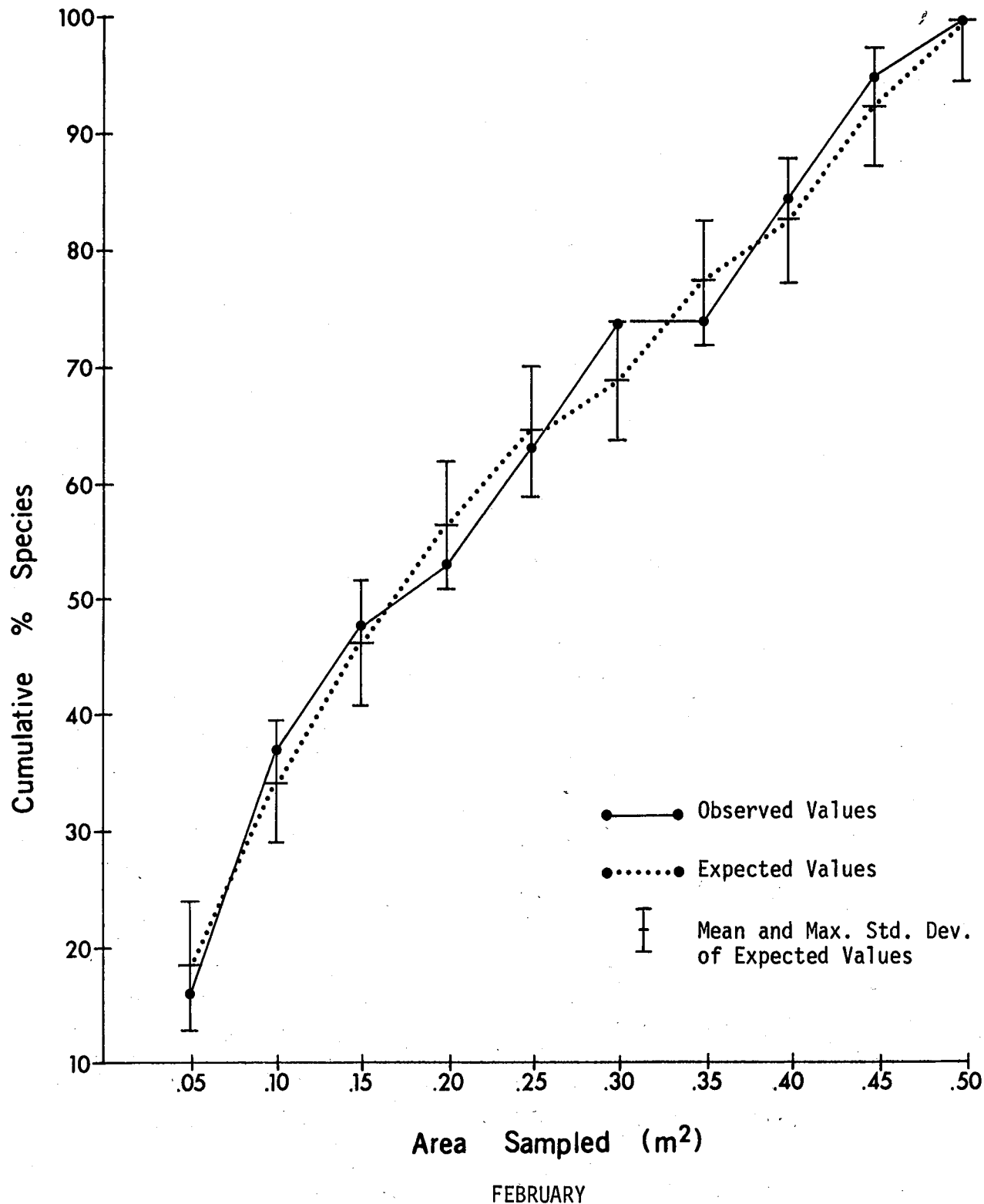


Fig. 9. Cumulative percent frequency of species taken in successive drops of the ponar grab at the Landward II station (zone 5152) off Little Egg Inlet, New Jersey in 1974.

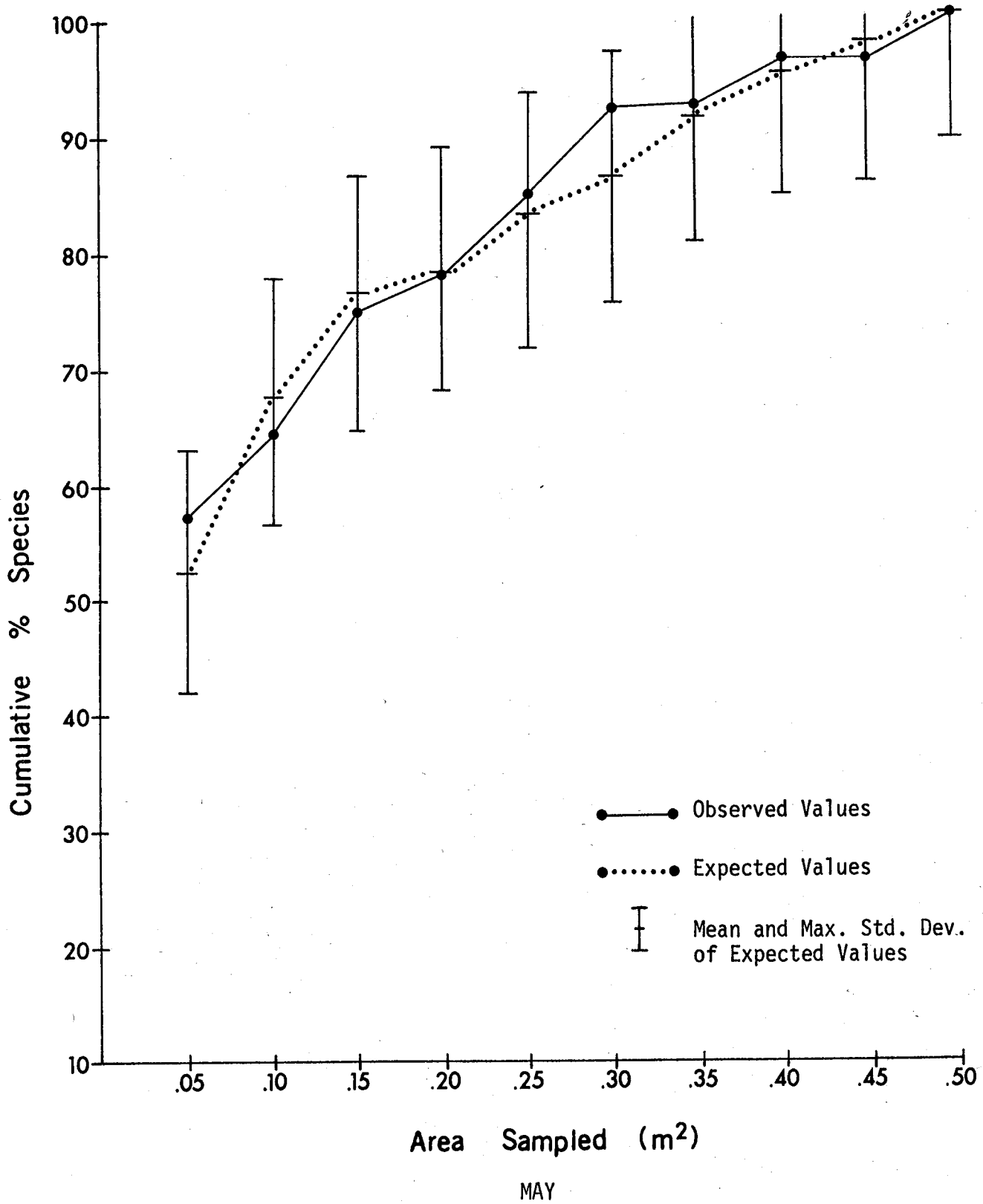


Fig. 9. (cont.)

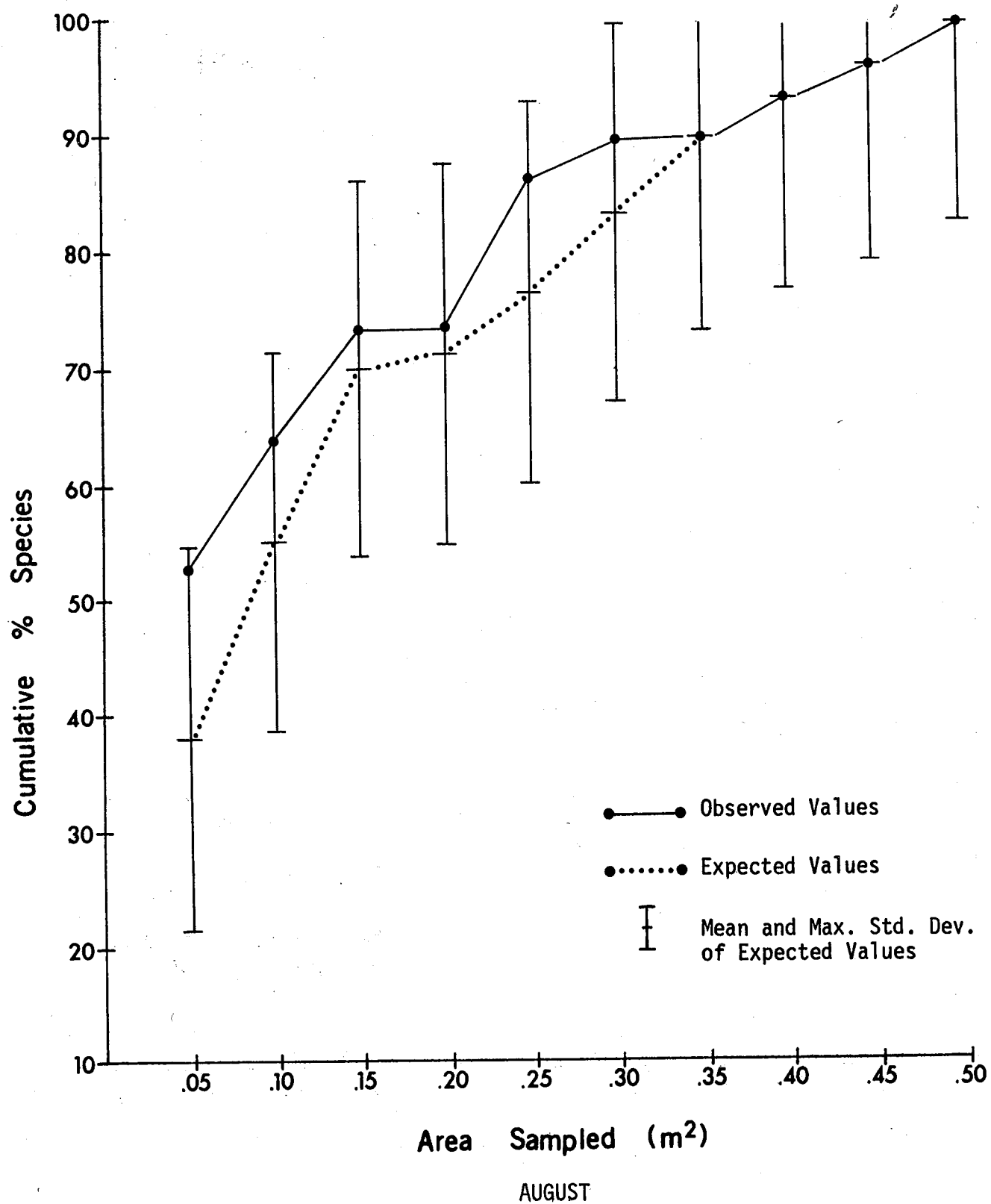
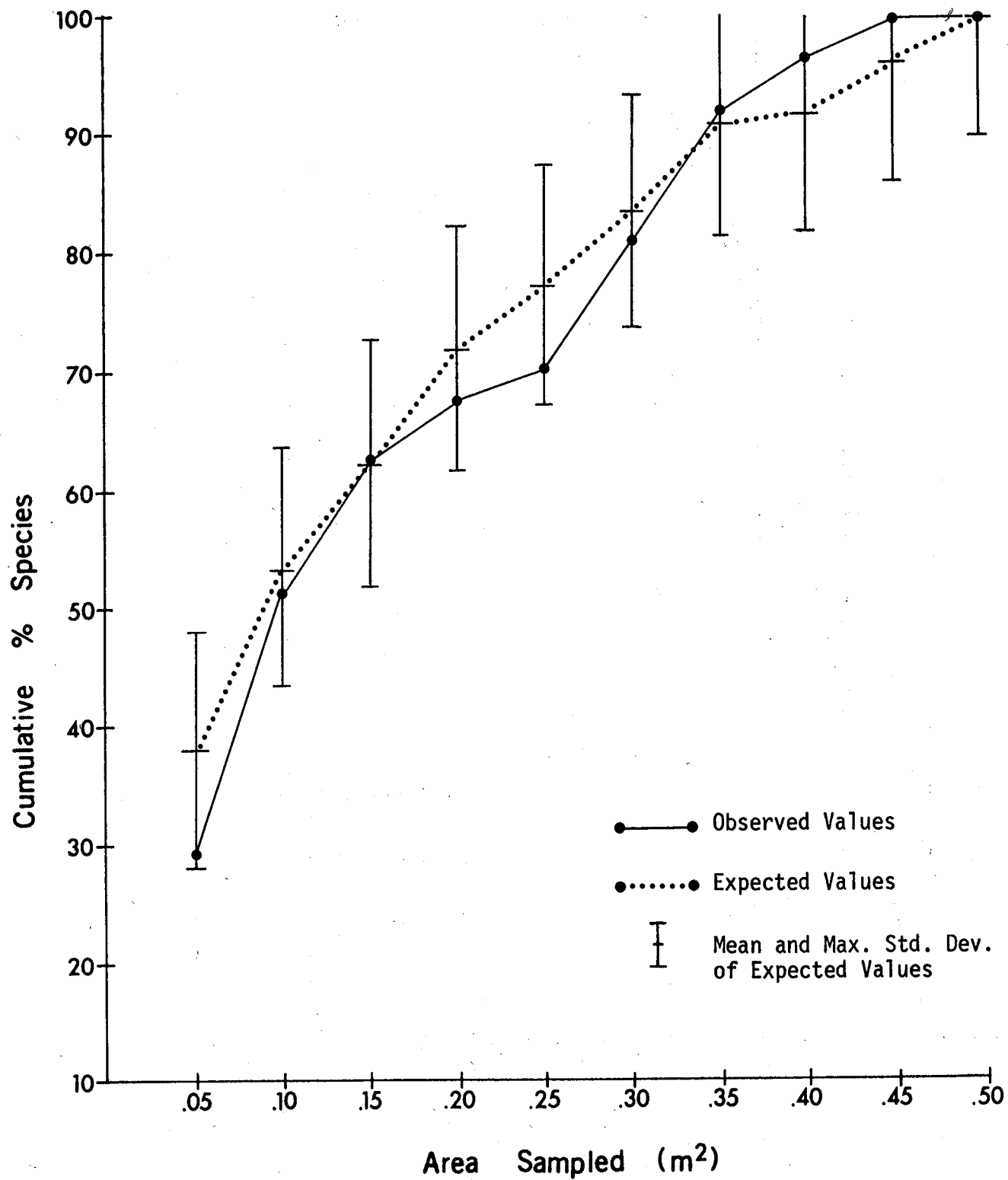


Fig. 9, (cont.)



NOVEMBER

Fig. 9. (cont.)

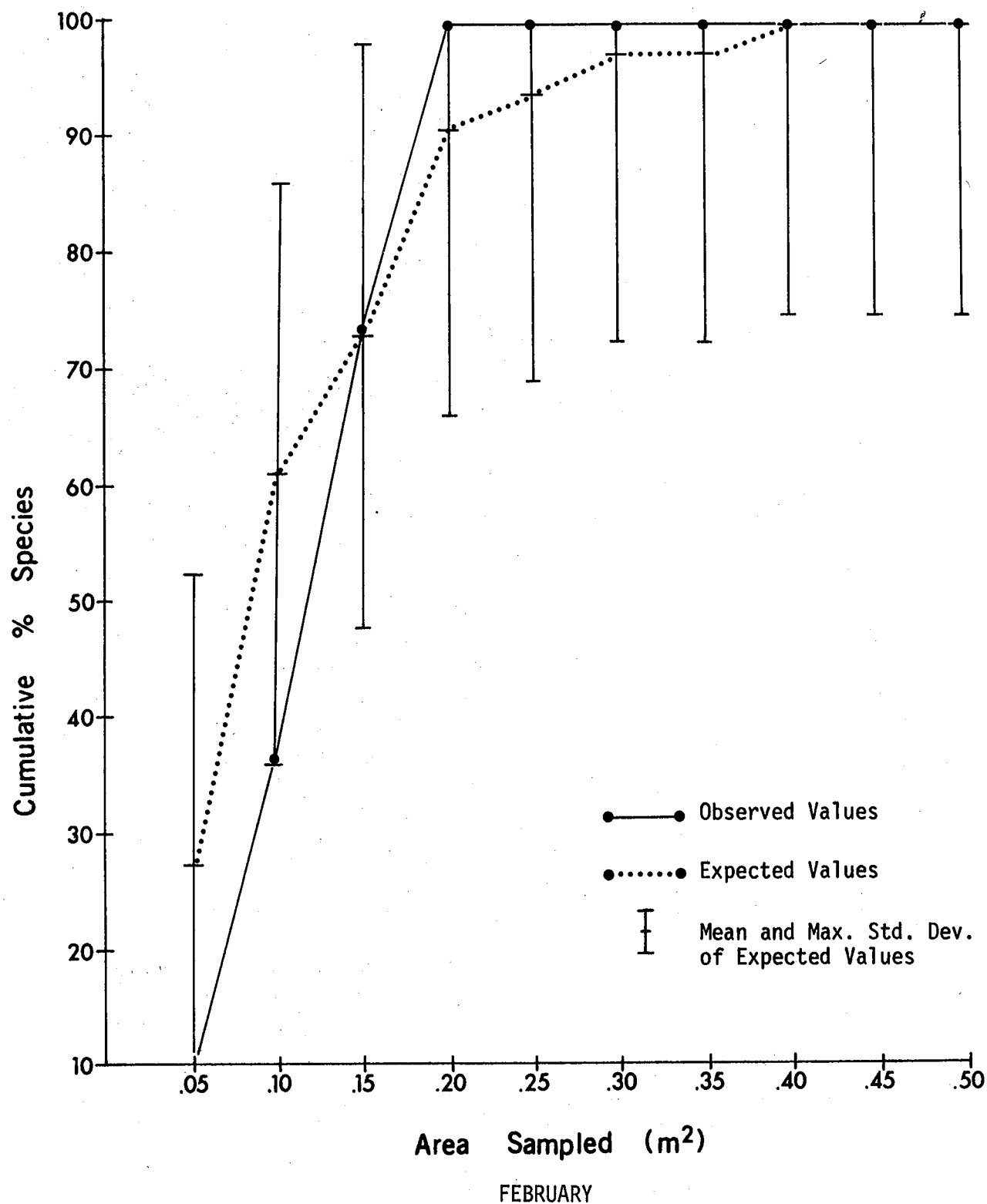


Fig. 10. Cumulative percent frequency of species taken in successive drops of the ponar grab at the station East of Stake "96" (zone 1010) in Little Egg Inlet, New Jersey in 1974.

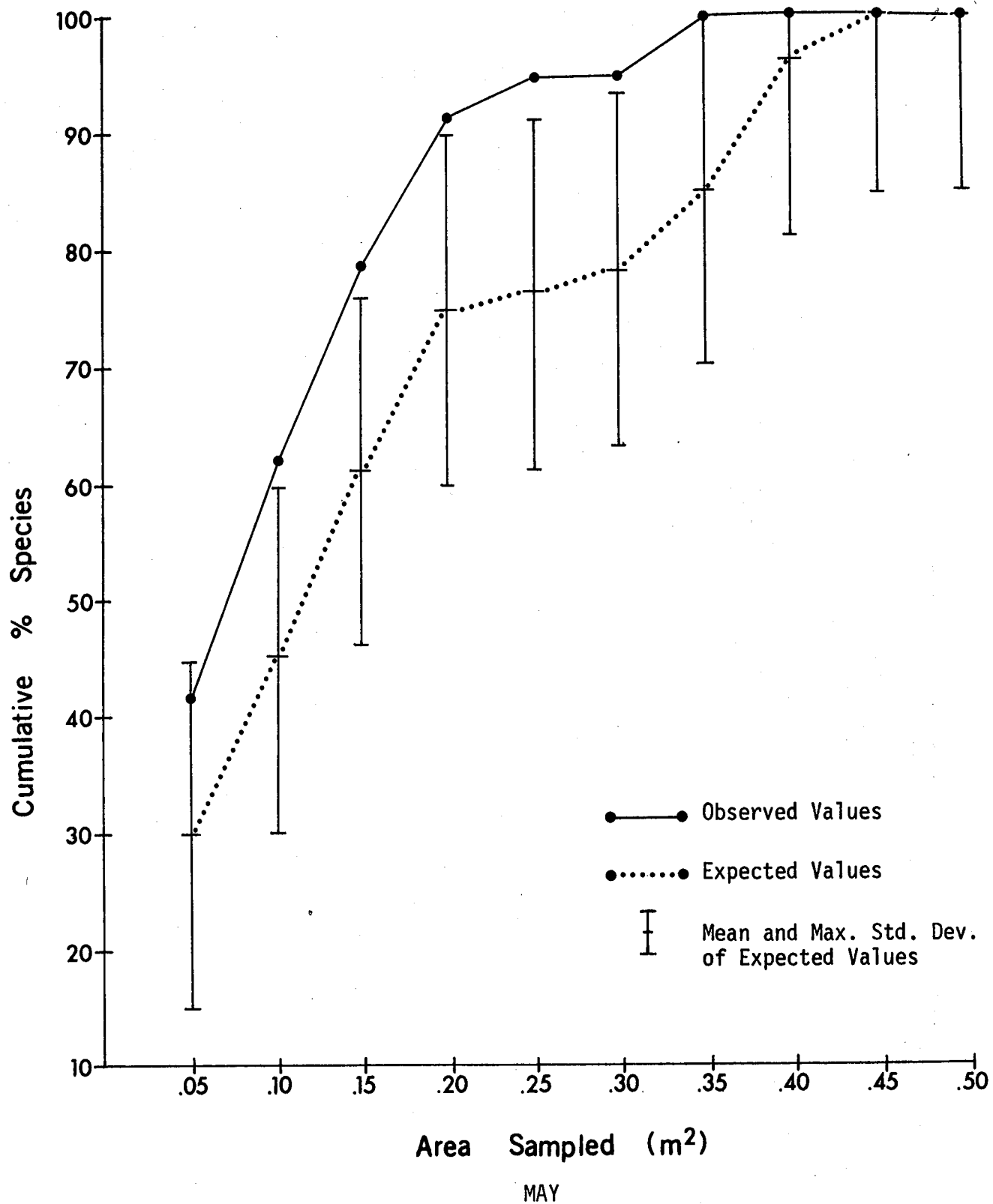


Fig. 10. (cont.)

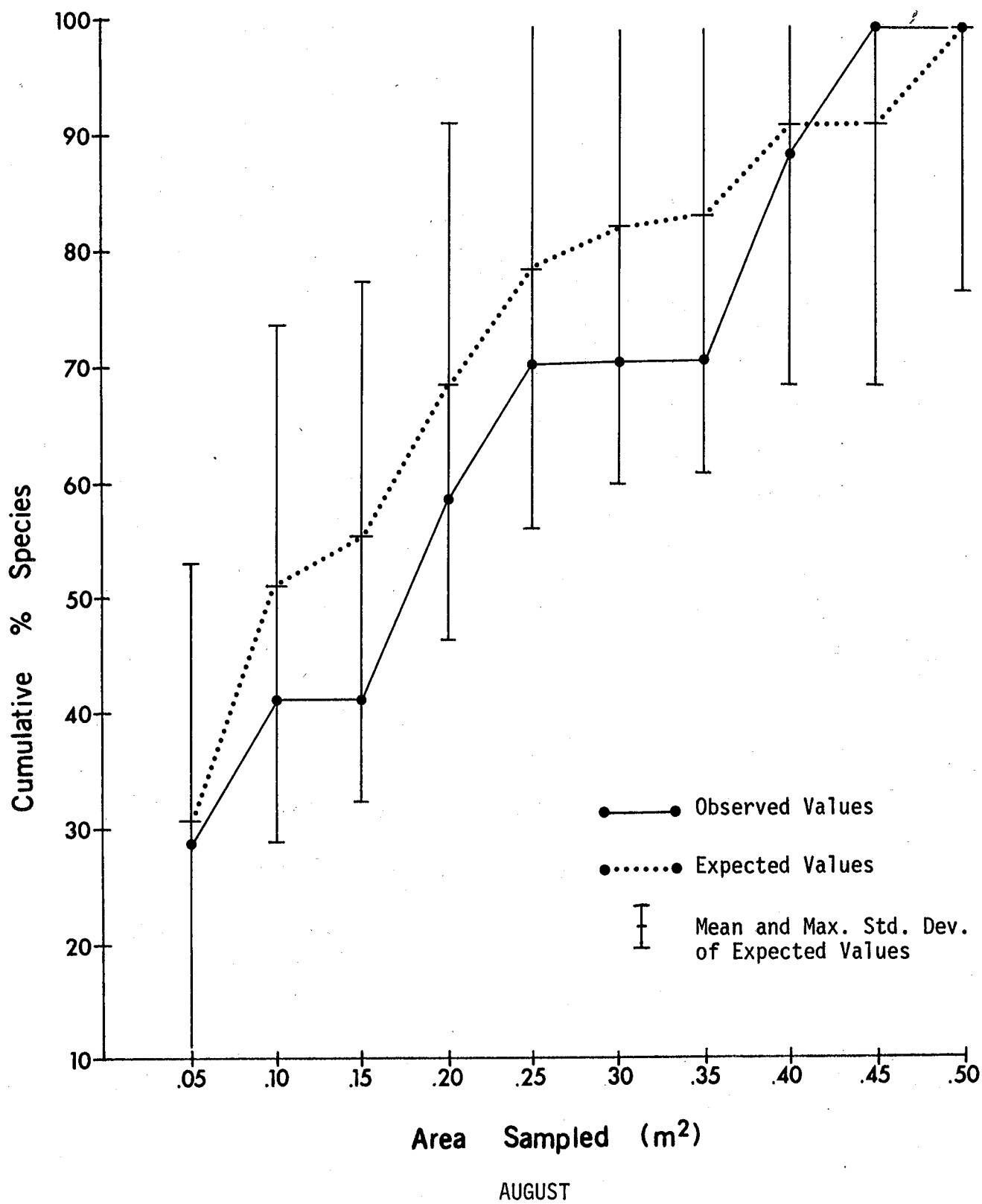


Fig. 10. (cont.)

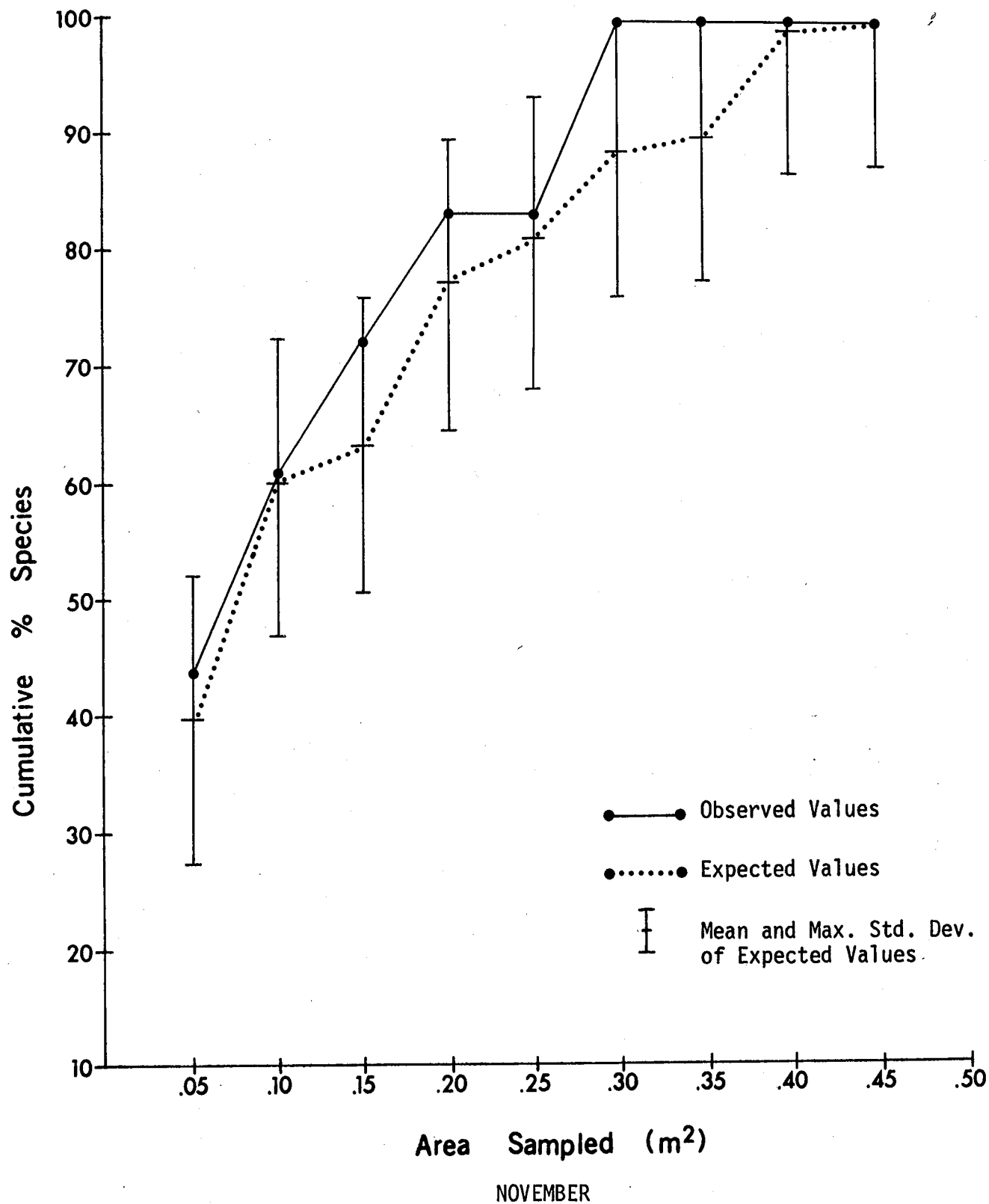


Fig. 10. (cont.)

SITE TRANSECTS (ZONES 5158,
5152, 5255, 5161, 5143)

INLET (ZONES 1010, 1010
["F" BUOY] ,1020)

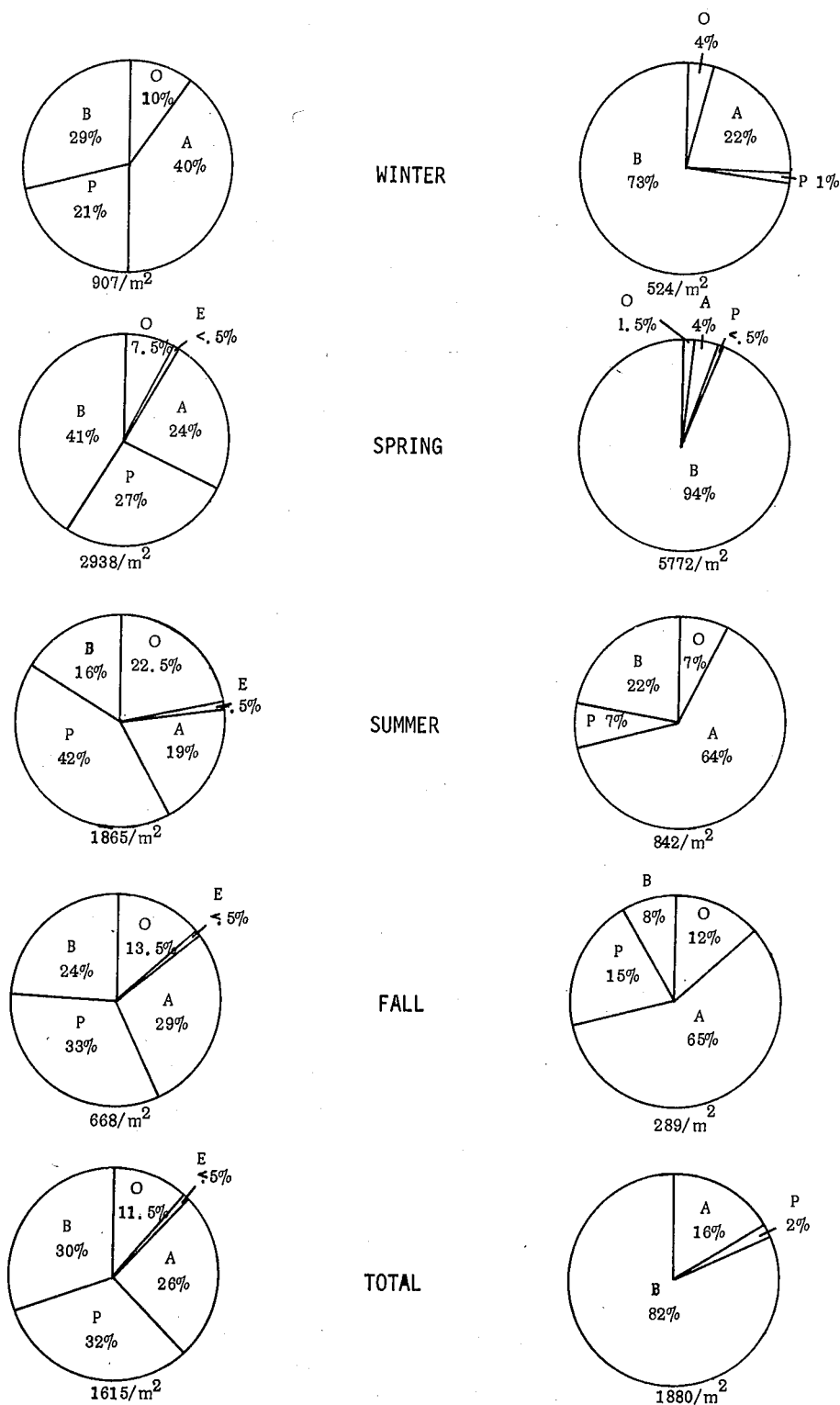


Fig. 11. Infaunal community composition expressed as a percentage of the average yearly density of stations in the vicinity of the Site and Little Egg Inlet, New Jersey in 1974.

Key: B = Bivalvia, P = Polychaeta, A = Amphipoda, E = Echinodermata and O = Others.

INLET (ZONE 1010)

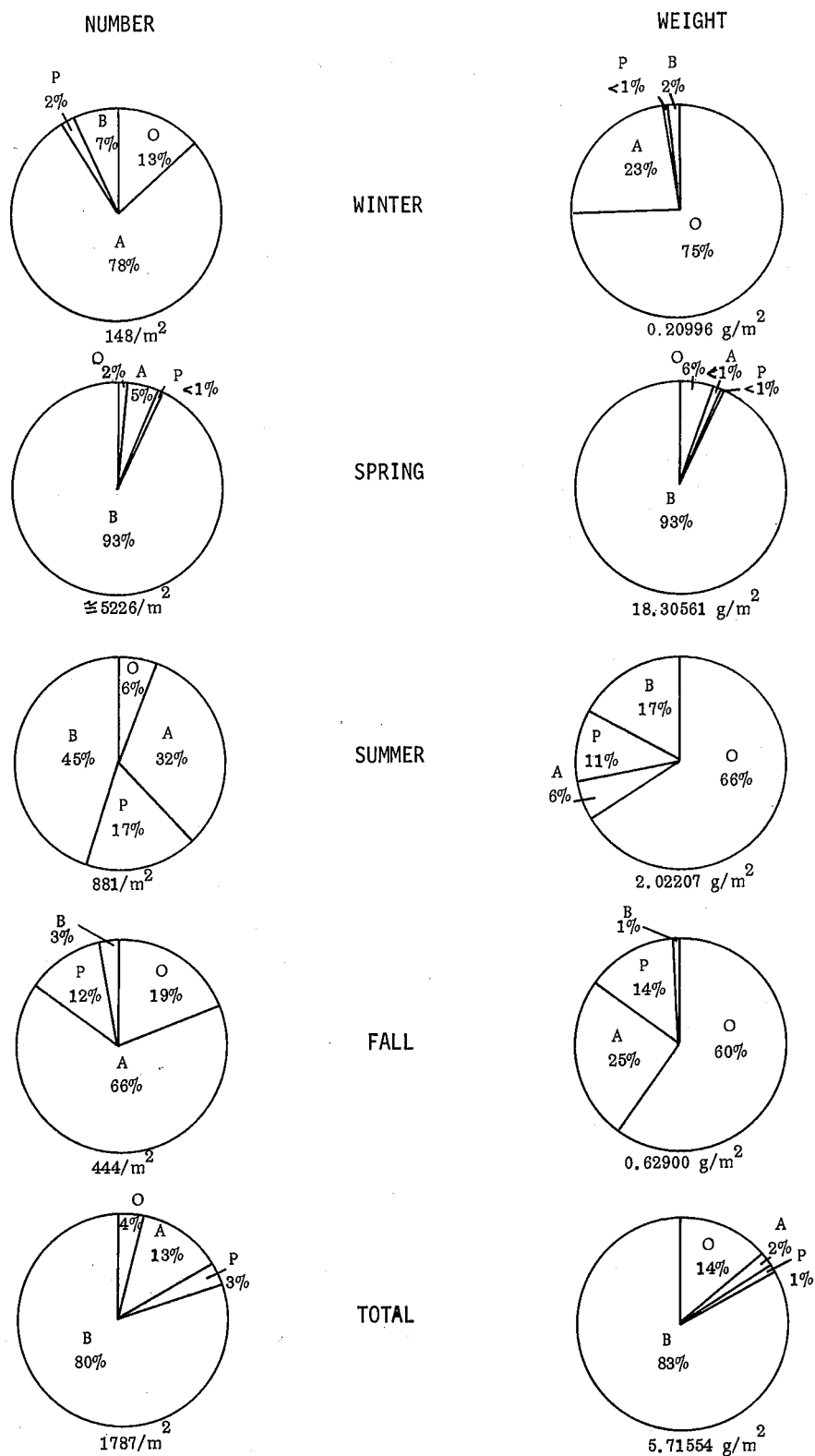


Fig. 12. Infaunal community composition expressed as a percentage of average seasonal density and biomass near "G" buoy in Little Egg Inlet, New Jersey in 1974.

Key: B = Bivalvia, P = Polychaeta, A = Amphipoda, E = Echinodermata and O = Others.

SITE (ZONE 5255)

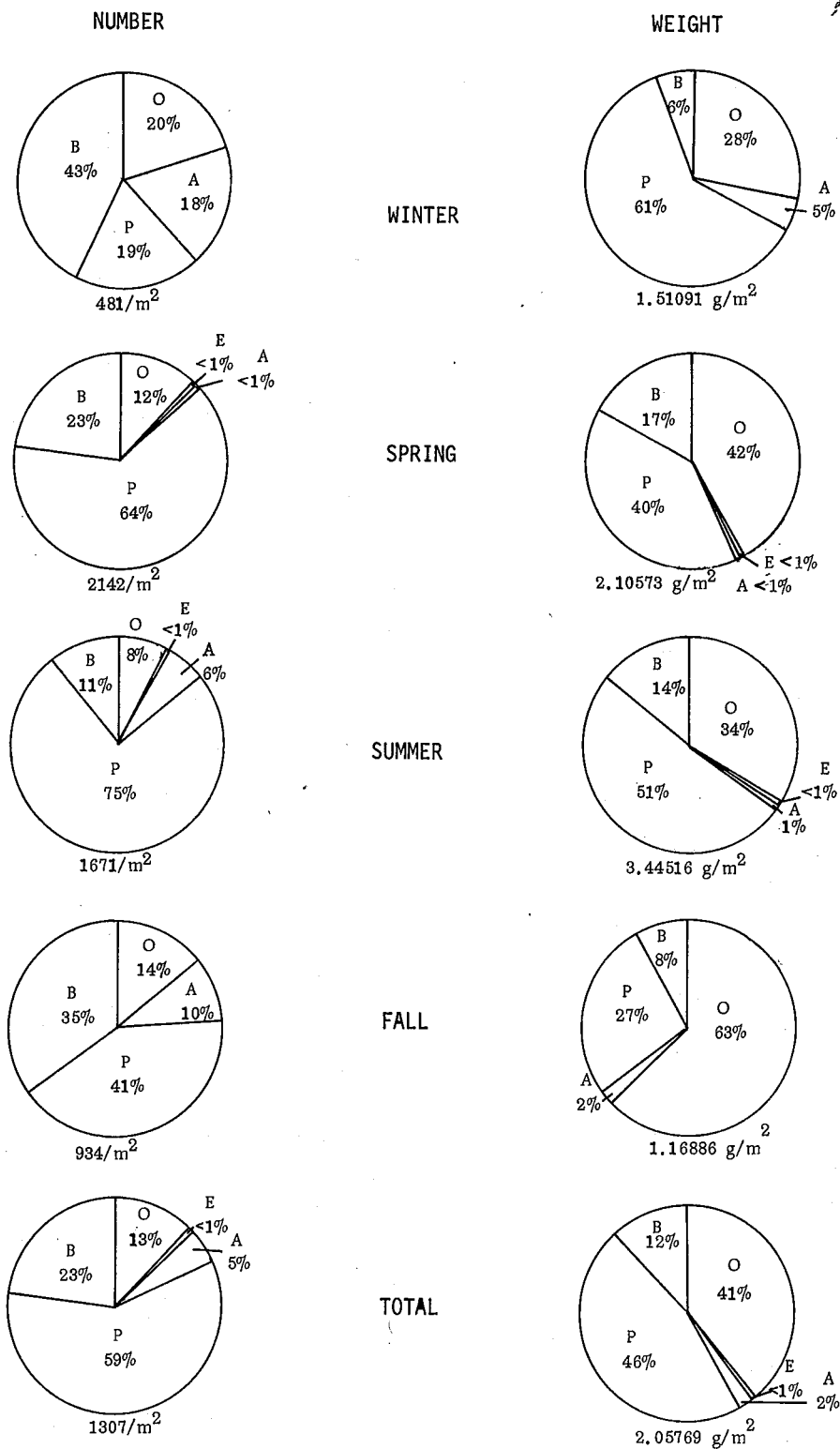


Fig. 13. Infaunal community composition expressed as a percentage of average seasonal density and biomass at the Site station (zone 5255) off Little Egg Inlet, New Jersey in 1974.

Key: B = Bivalvia, P = Polychaeta, A = Amphipoda, E = Echinodermata and O = Others.

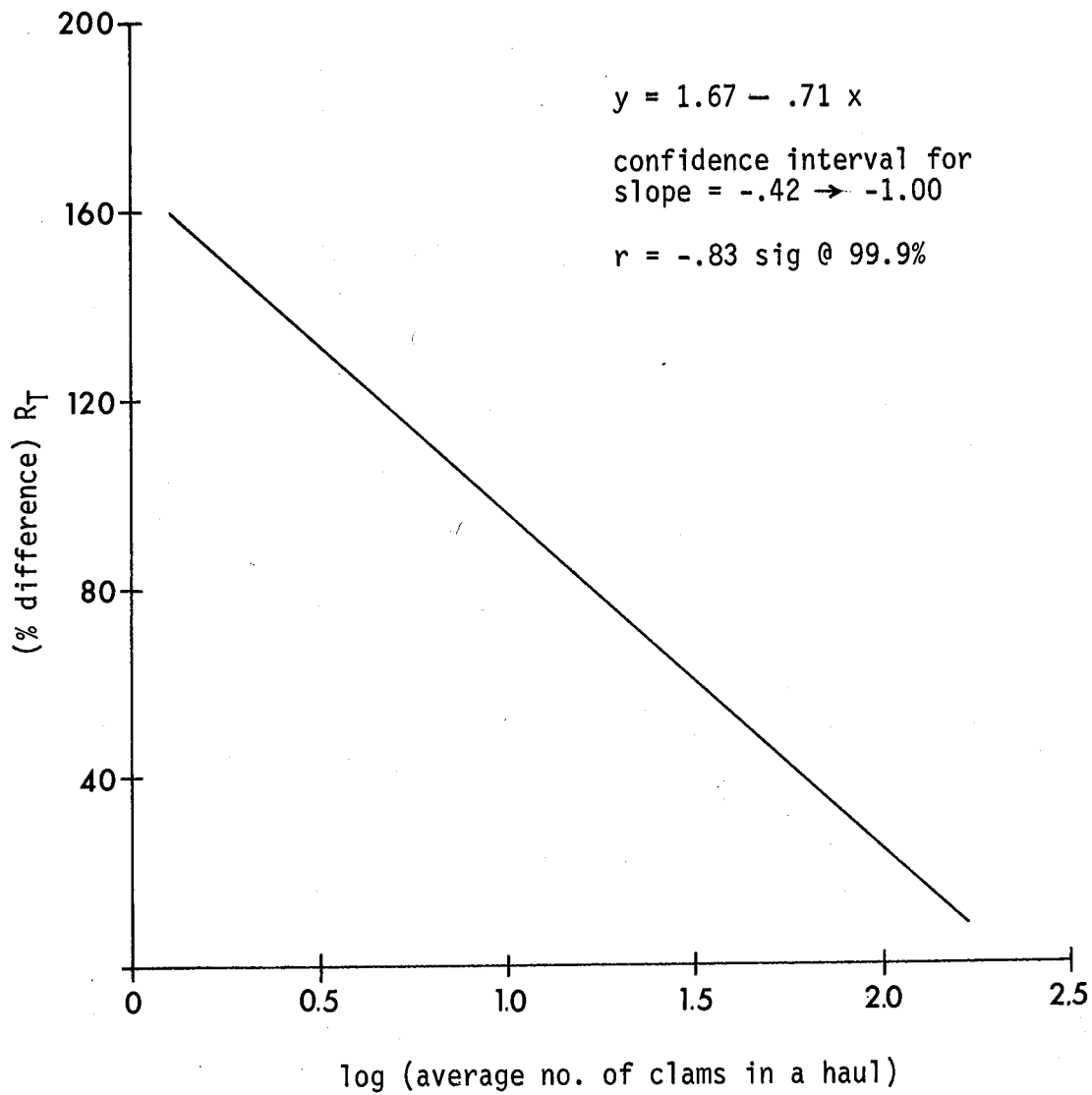


Fig. 14. Linear regression of log of sample size versus % difference for number of Atlantic surf clams in replicate clam dredge collections.

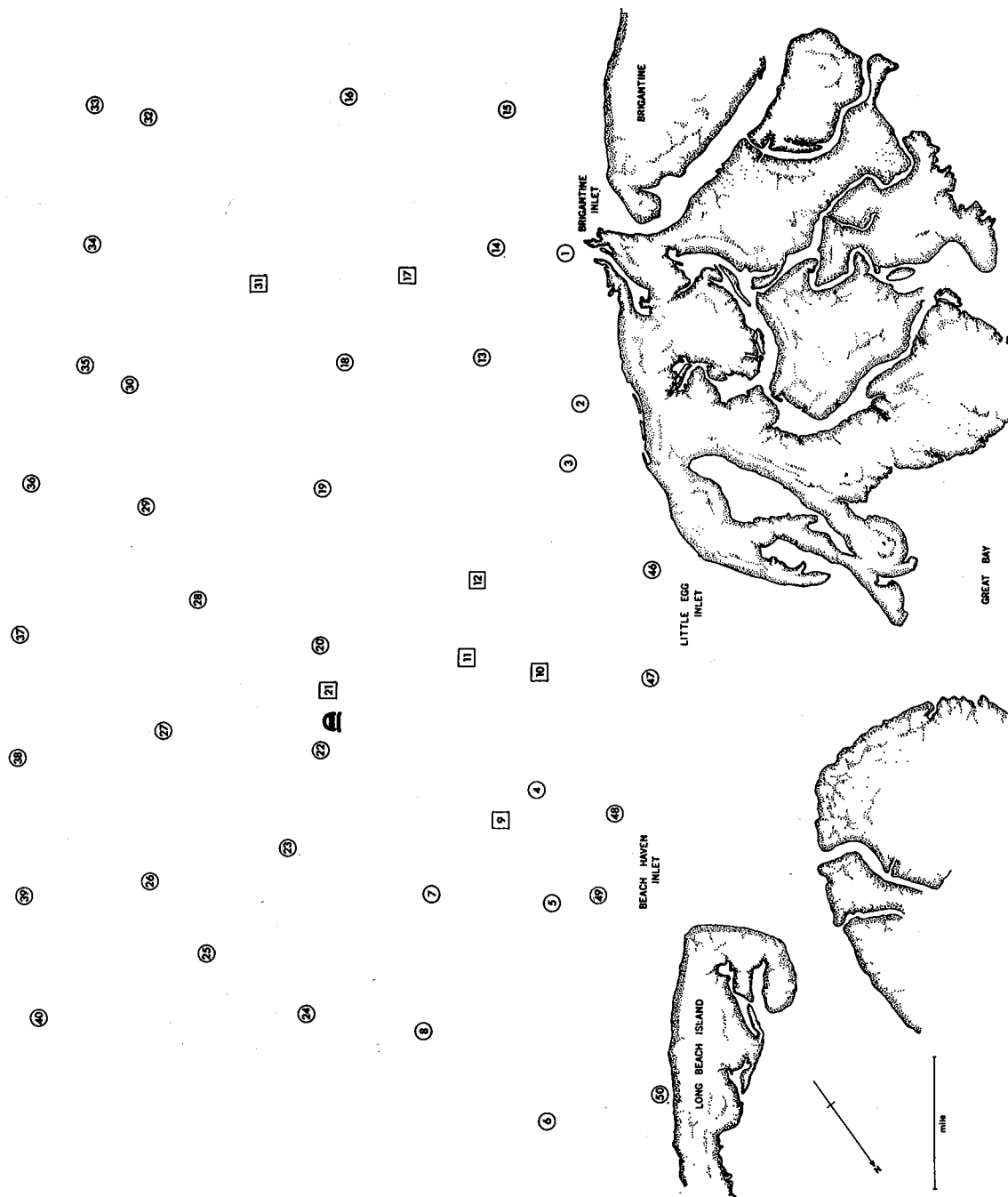
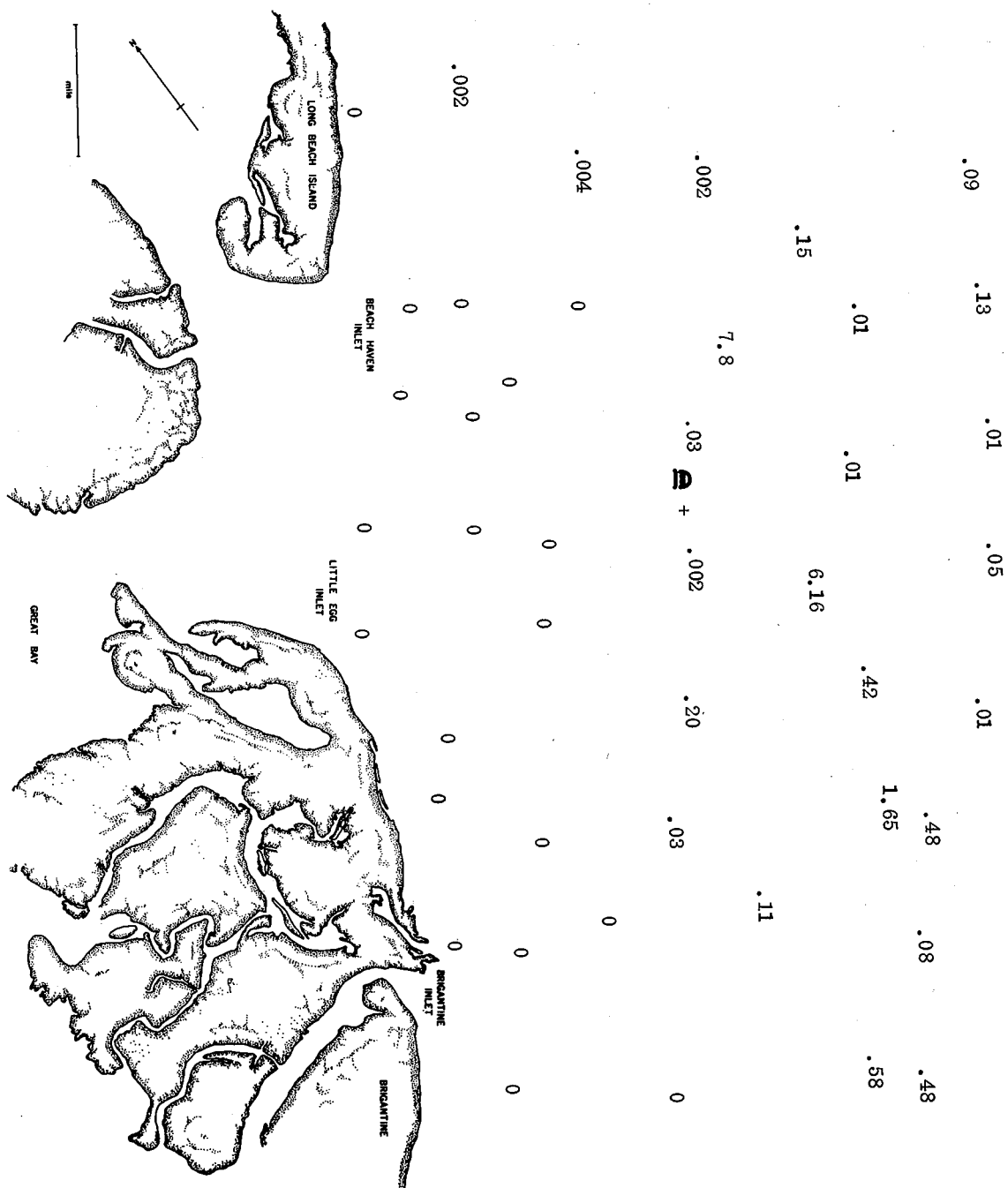
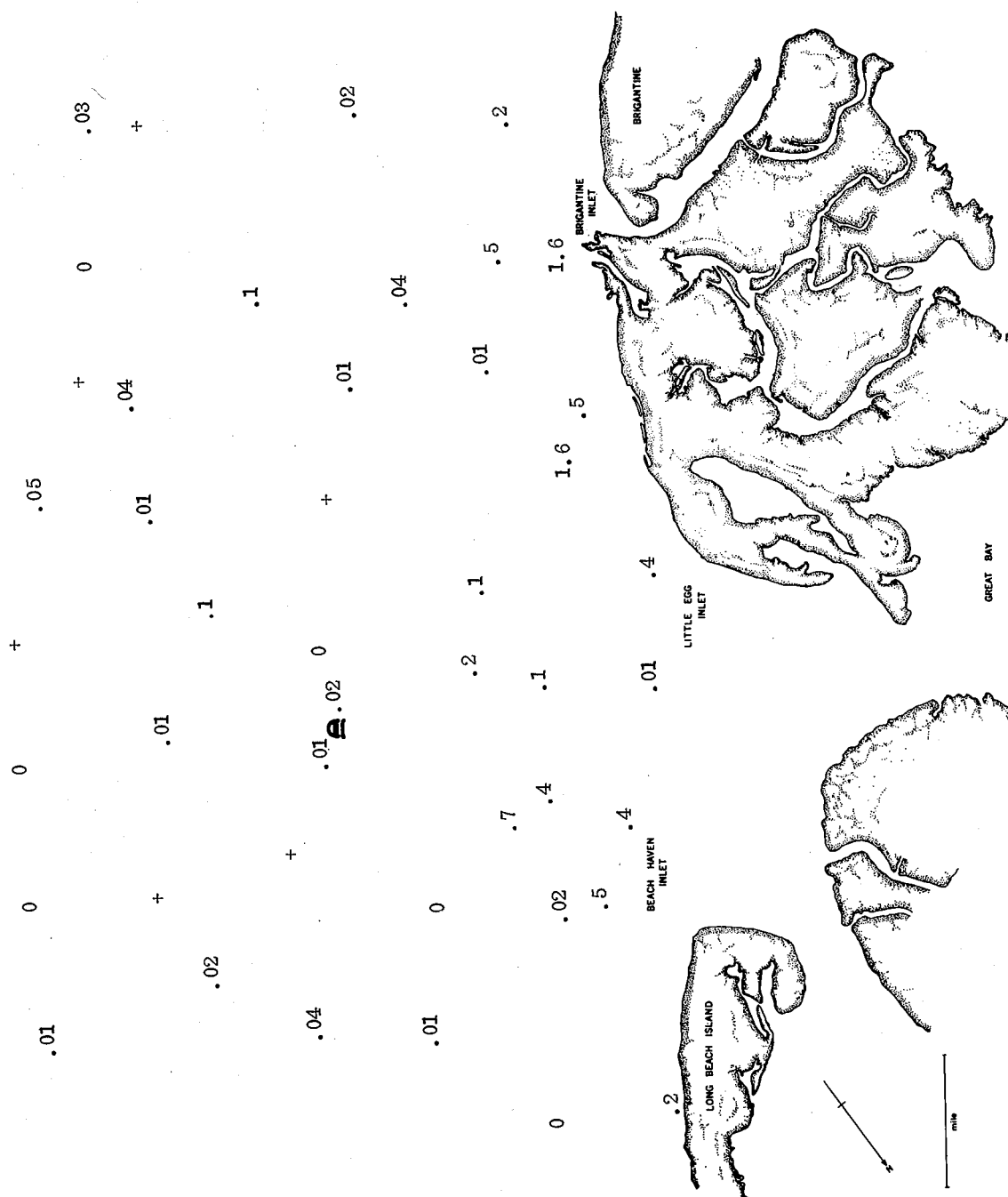


Fig. 15. Stations sampled during the clam dredge survey off Little Egg Inlet, New Jersey in September 1974. O = survey station. □ = monthly station.

double clam dredge in September 1974.





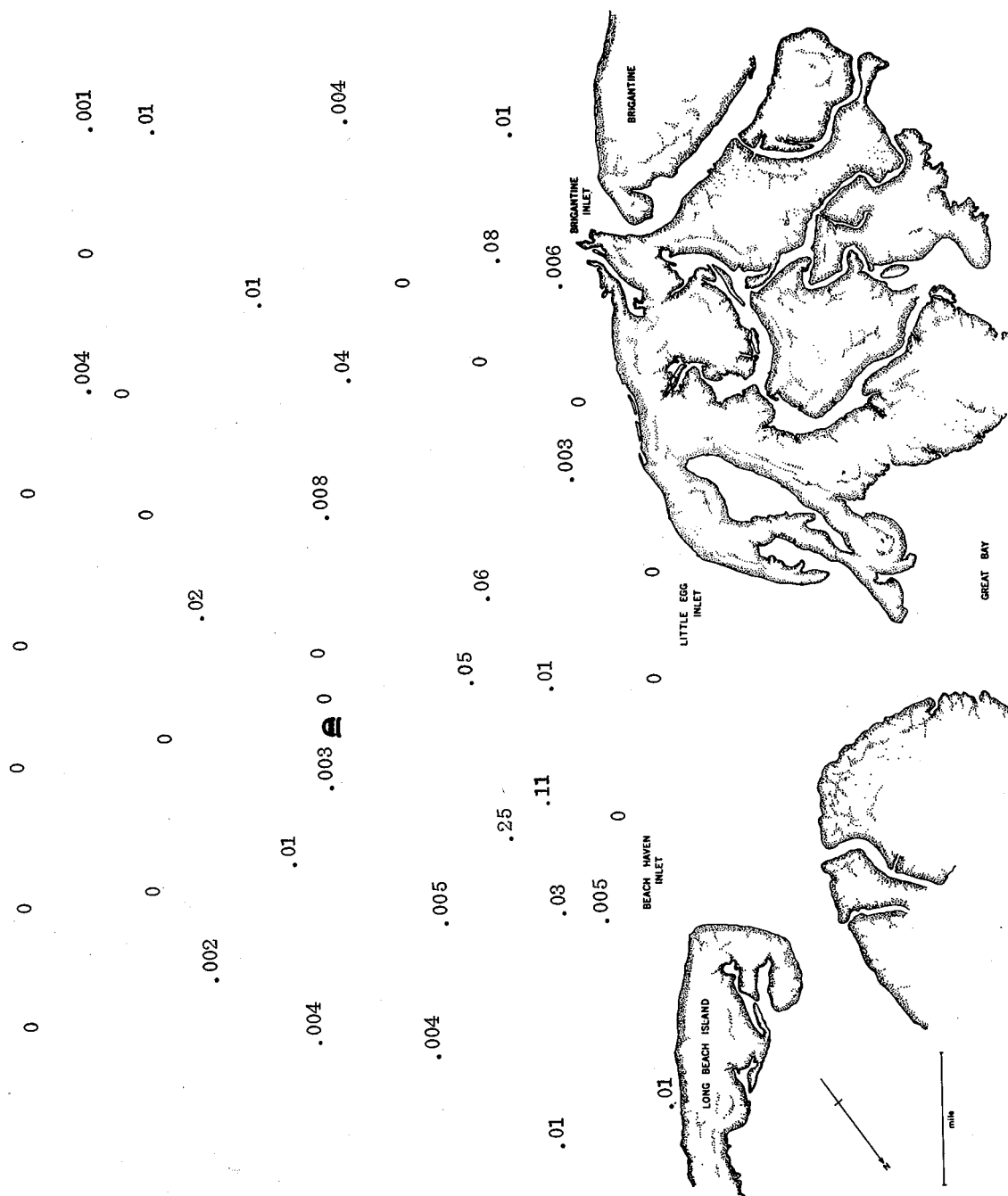


Fig. 18. Density (n/m²) of the Atlantic moon snail collected in the vicinity of Little Egg Inlet with the double clam dredge in September 1974.

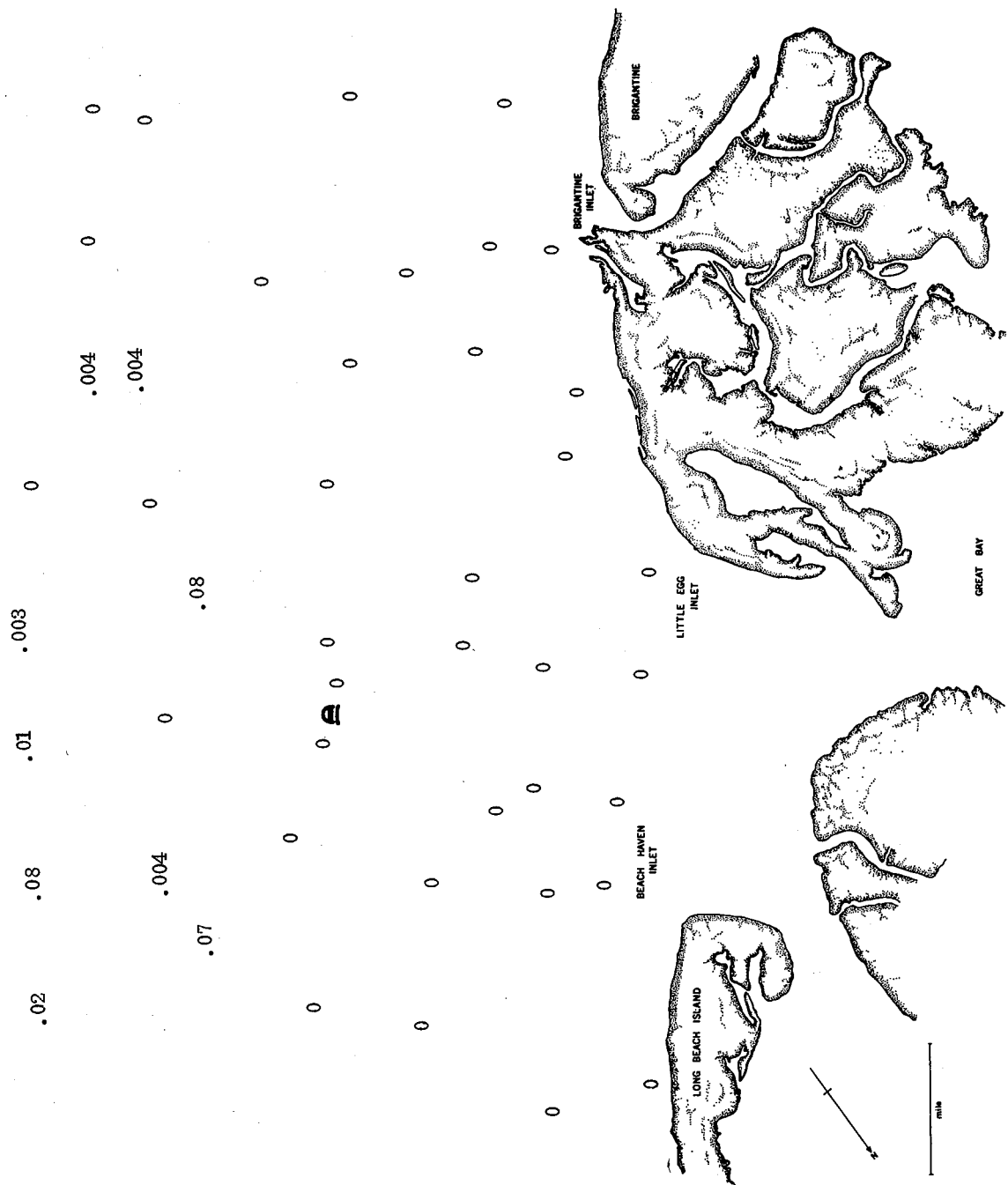


Fig. 19. Density (n/m^2) of the smooth astarte collected in the vicinity of Little Egg Inlet with a double clam dredge in September 1974.

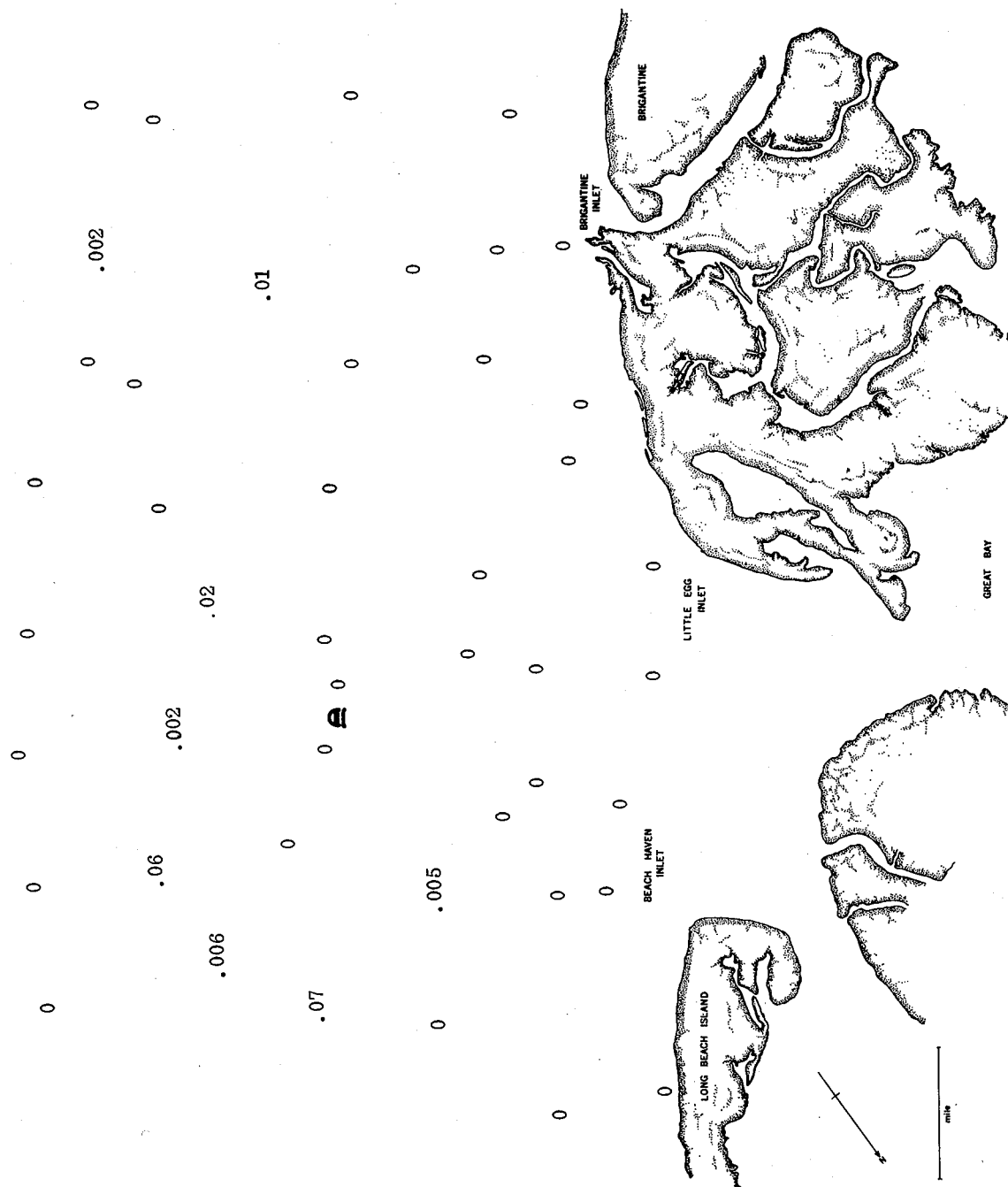


Fig. 20. Density (n/m^2) of the *morrhua venus* collected in the vicinity of Little Egg Inlet with a double clam dredge in September 1974.

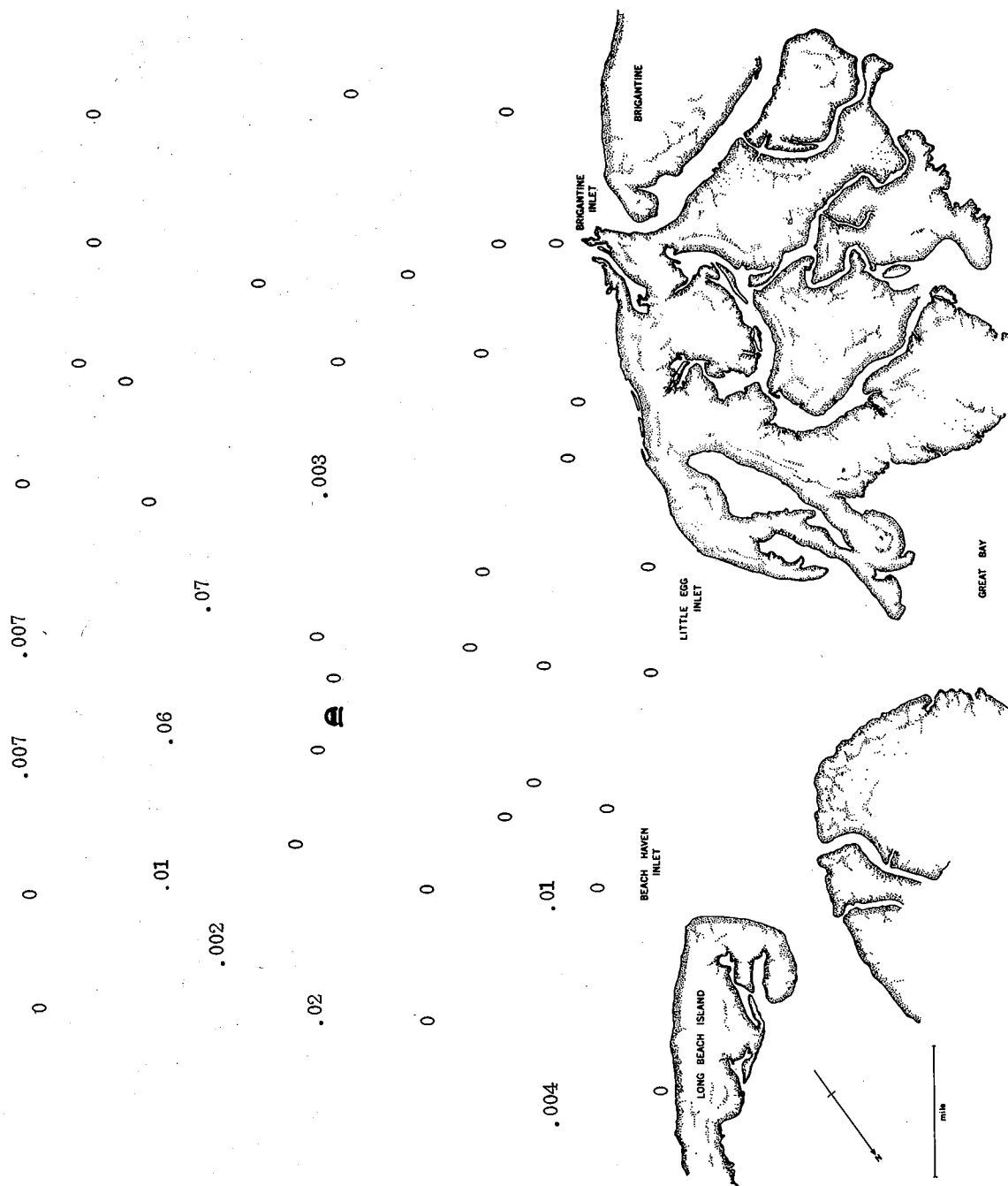


Fig. 21. Density (n/m^2) of the rock crab collected in the vicinity of Little Egg Inlet with a double clam dredge in September 1974.

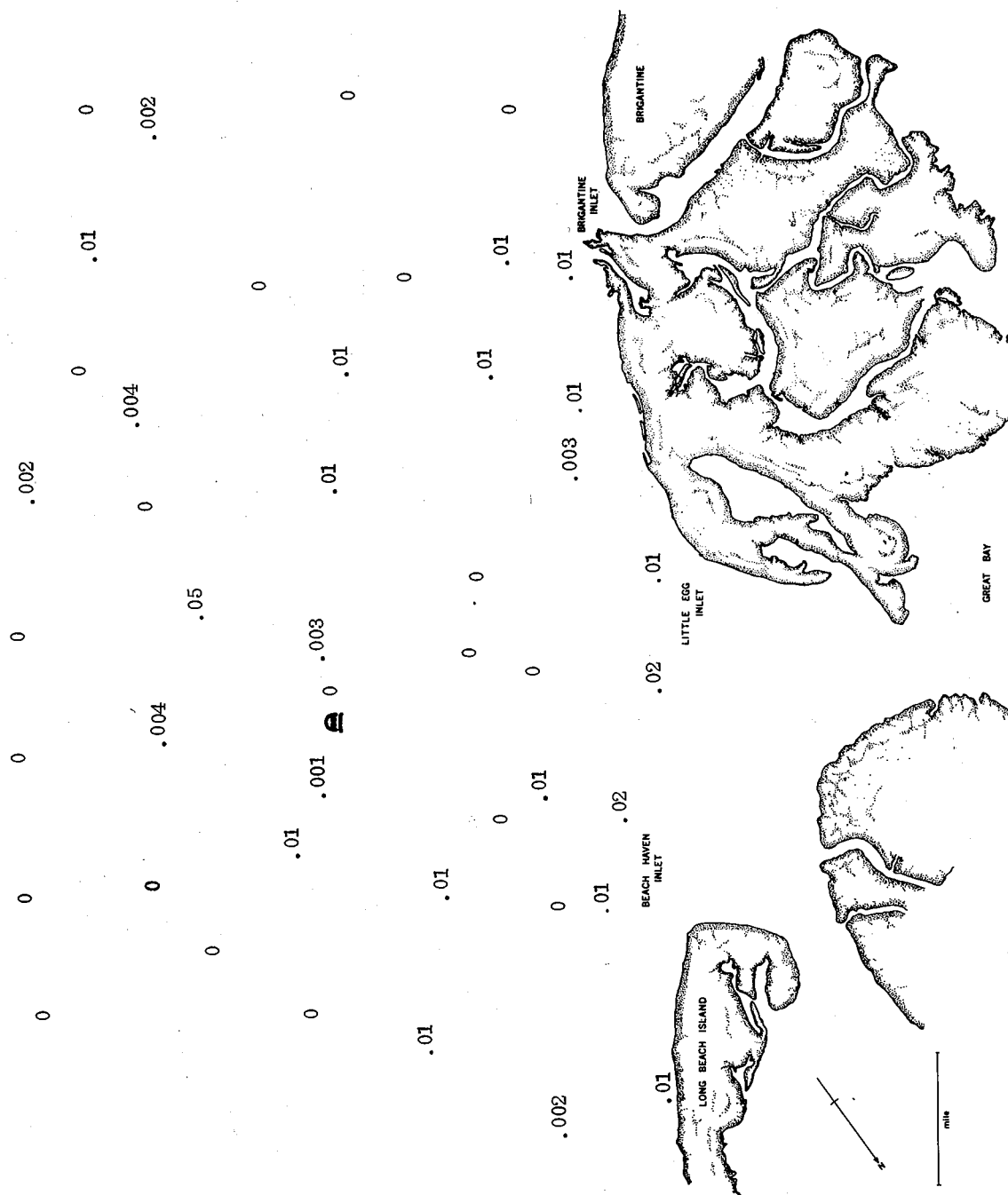


Fig. 22. Density (n/m^2) of the lady crab collected in the vicinity of Little Egg Inlet with a double clam dredge in September 1974.

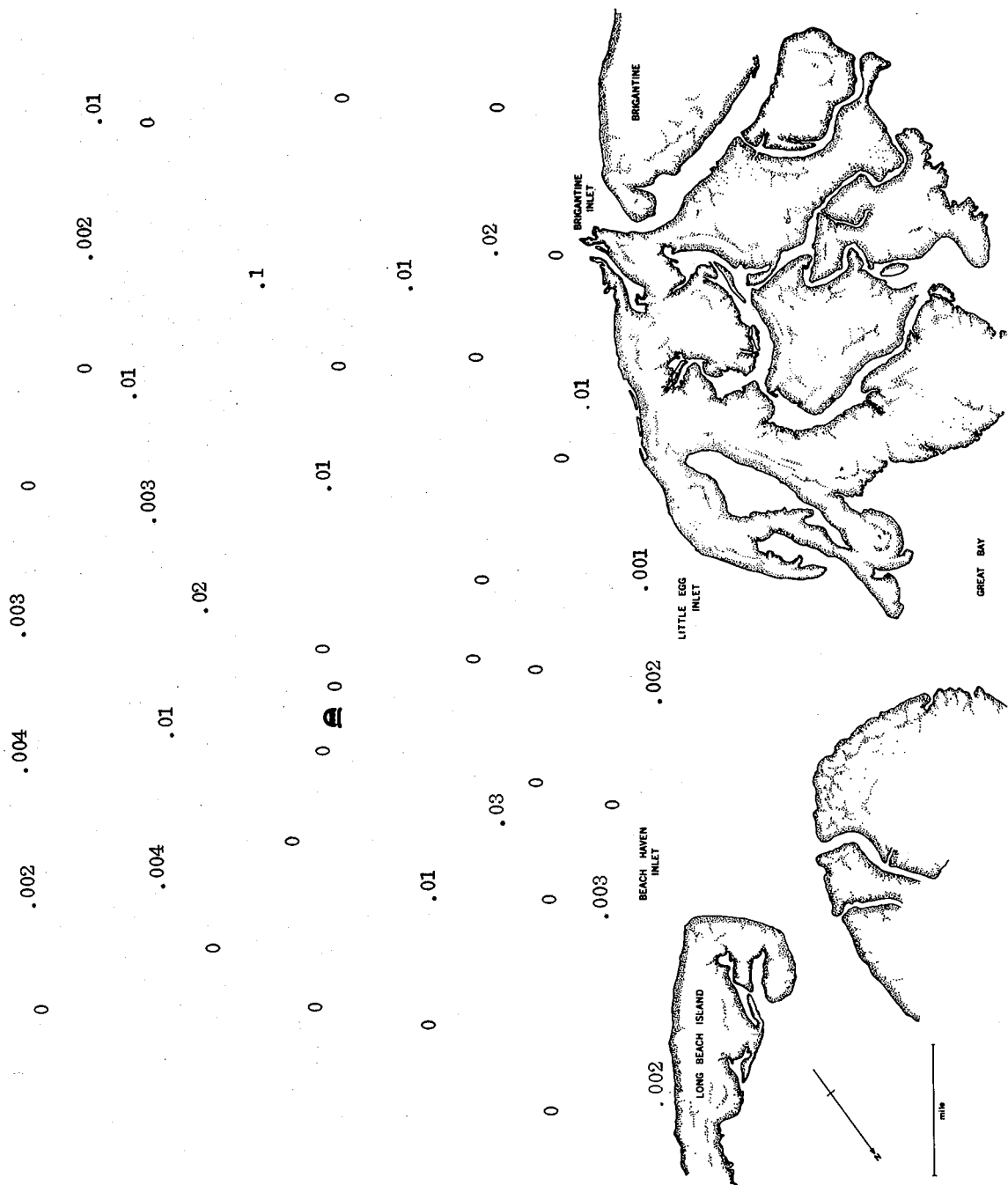


Fig. 23. Density (n/m^2) of the long-armed hermit crab collected in the vicinity of Little Egg Inlet with a double clam dredge in September 1974.

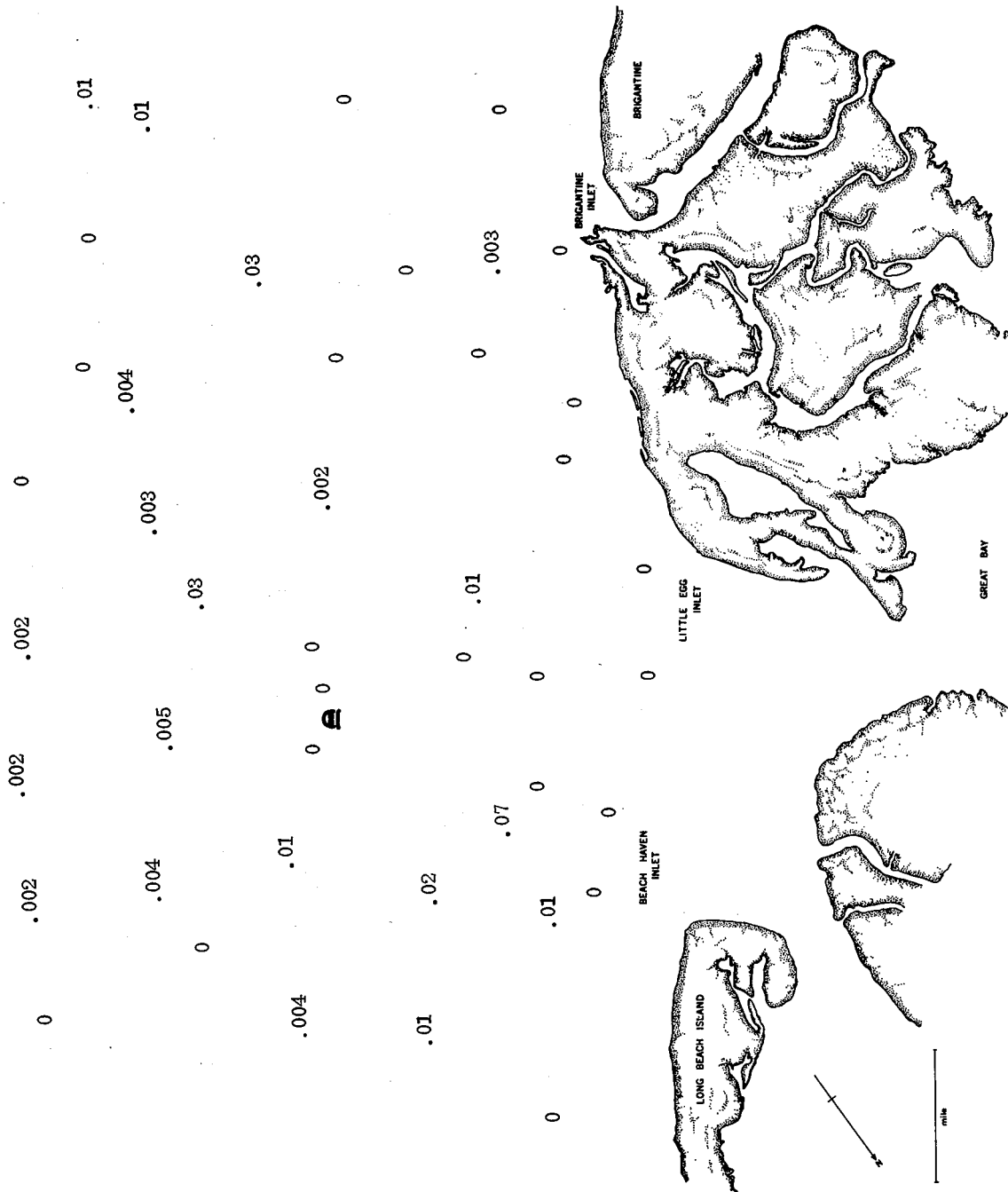


Fig. 24. Density (n/m^2) of the New England nassa collected in the vicinity of Little Egg Inlet with a double clam dredge in September 1974.

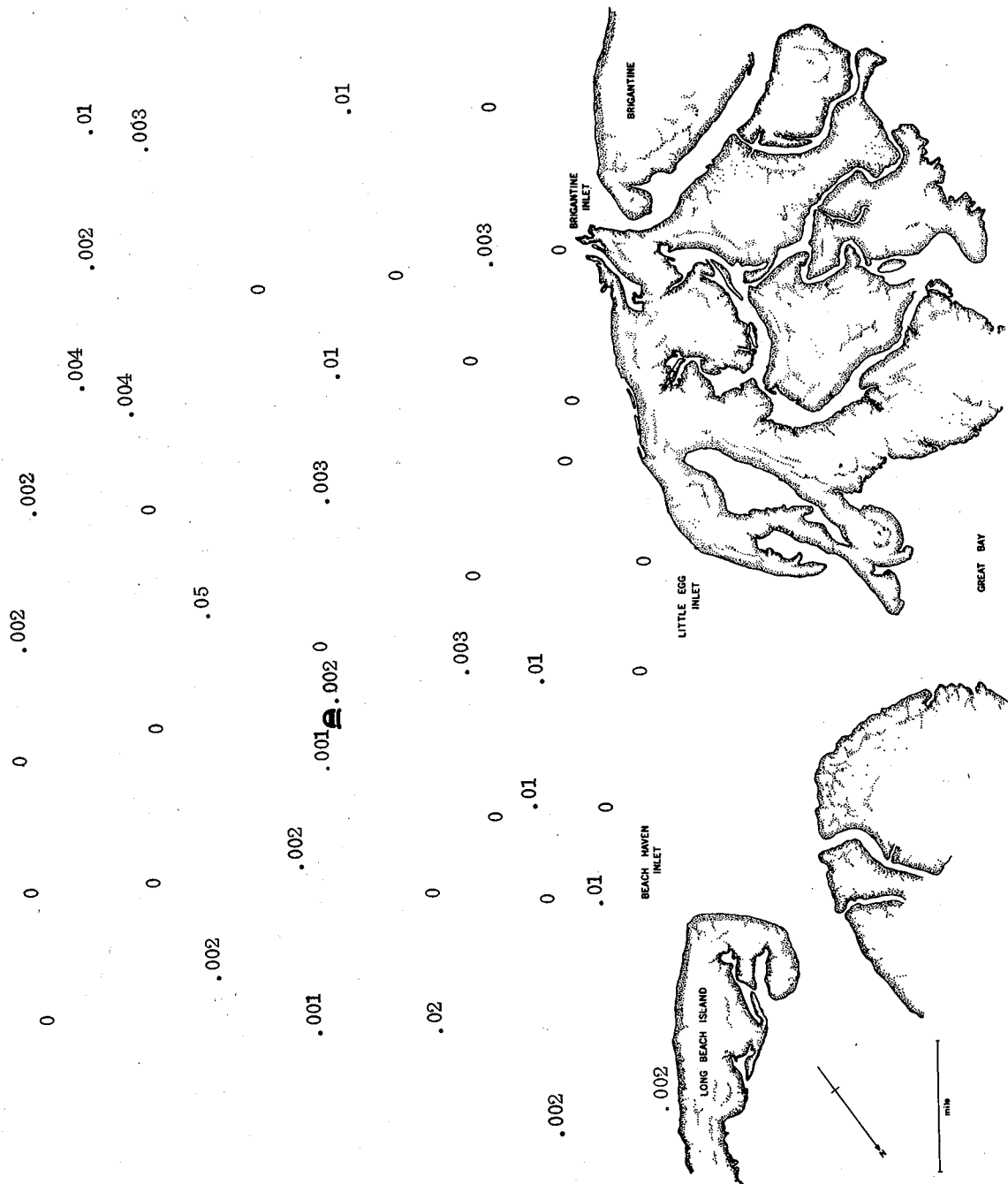


Fig. 25. Density (n/m^2) of the northern moon snail collected in the vicinity of Little Egg Inlet with the double clam dredge in September 1974.

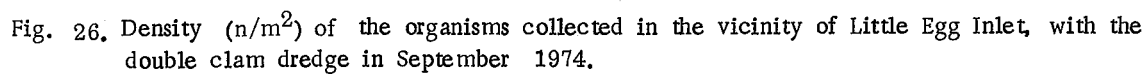




Fig. 27. Sediment composition in the vicinity of Little Egg Inlet, New Jersey in September 1974. (CS = coarse sand, MS = medium sand, FS = fine sand, VFS = very fine sand)

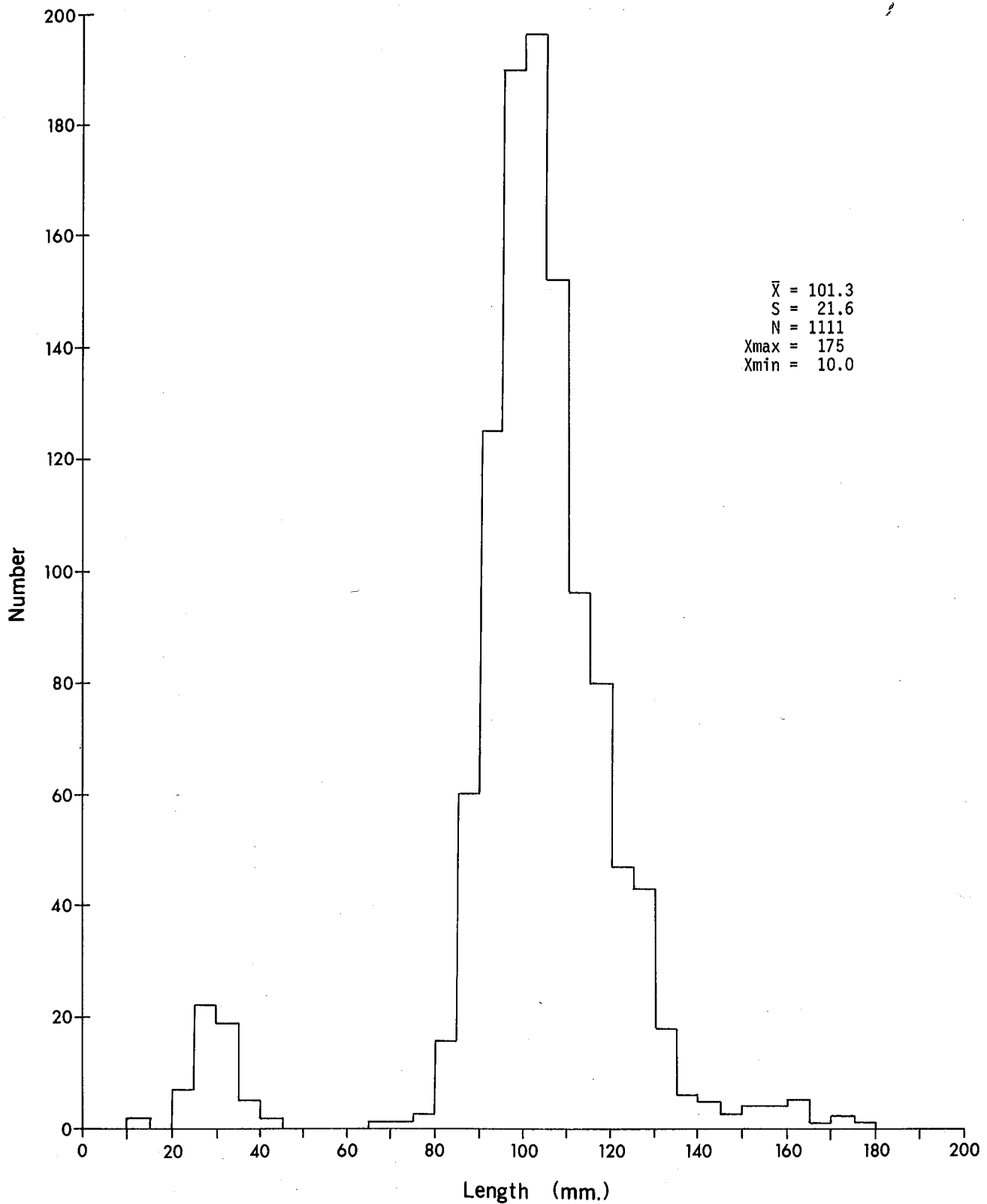


Fig. 28. Length-frequency distribution of all surf clams measured on the clam dredge survey in September 1974.

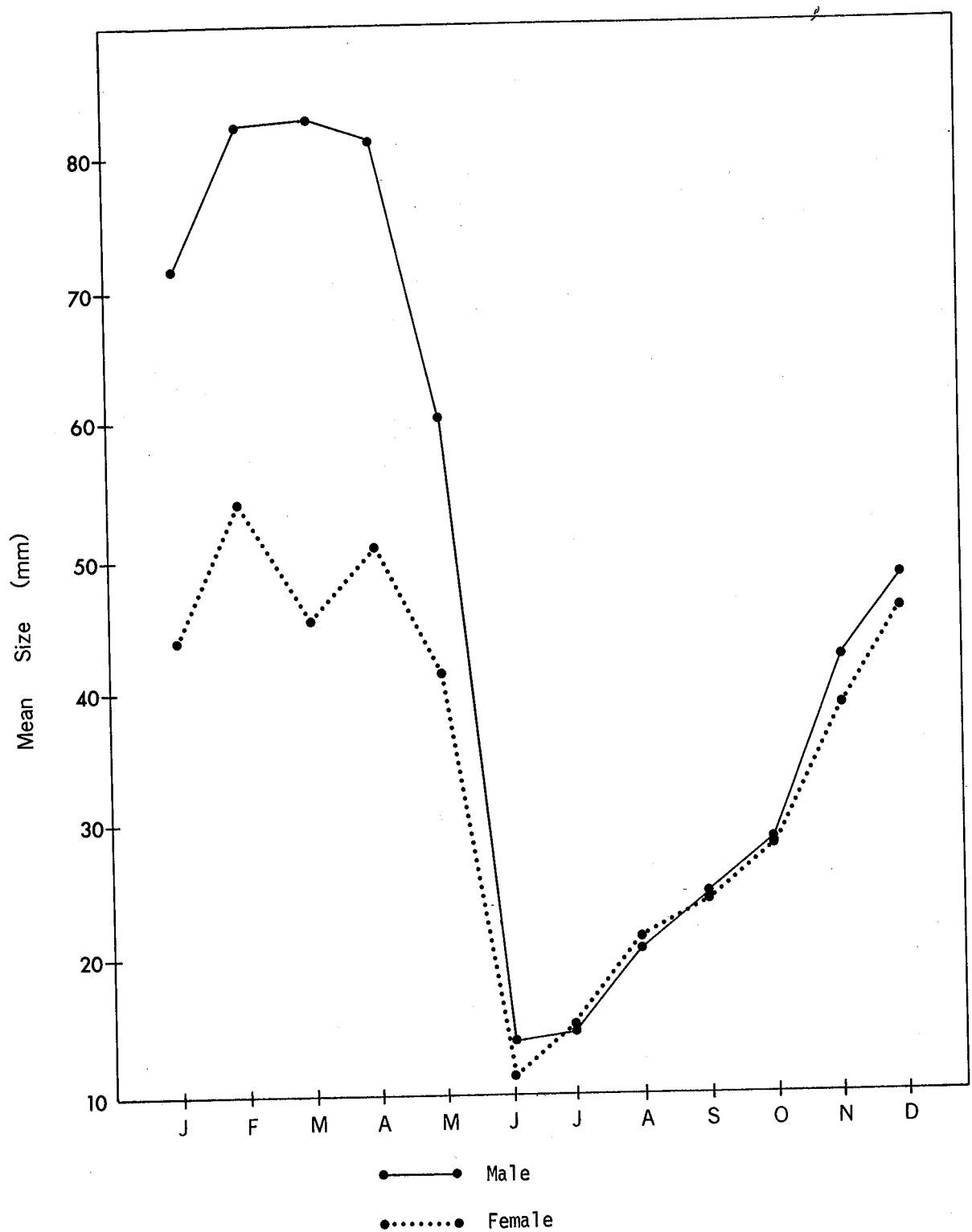


Fig. 29. Mean size distributions by month of 2,783 rock crabs, *Cancer irroratus*, collected in a 25-ft semiballoon trawl in the vicinity of the Site, off Little Egg Inlet, New Jersey in 1974.

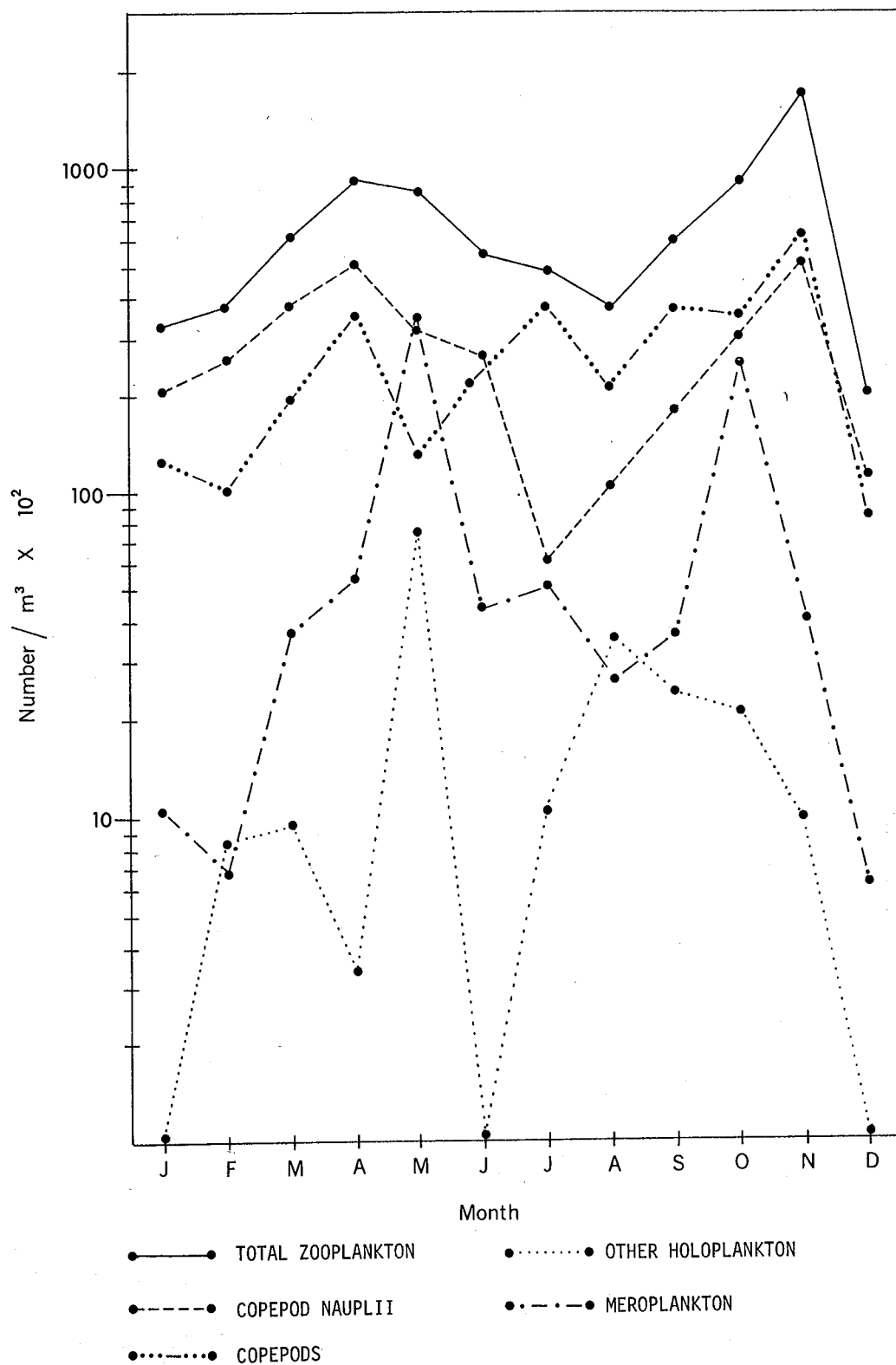


Fig. 30. Average monthly densities of various zooplankton groups at the Site in 1974. Values are those obtained from oblique tows.

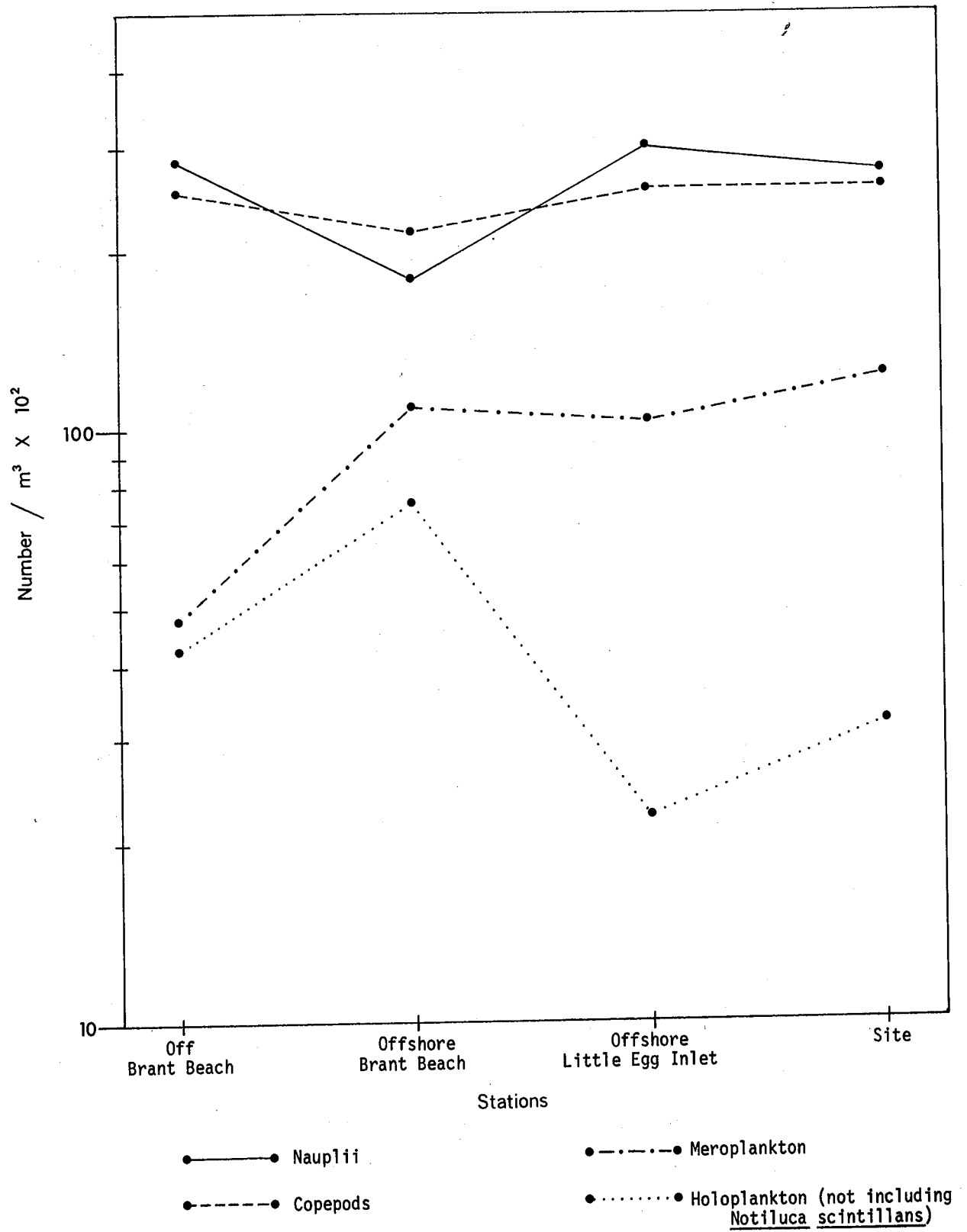


Fig. 31. Average zooplankton densities at four stations in 1974.

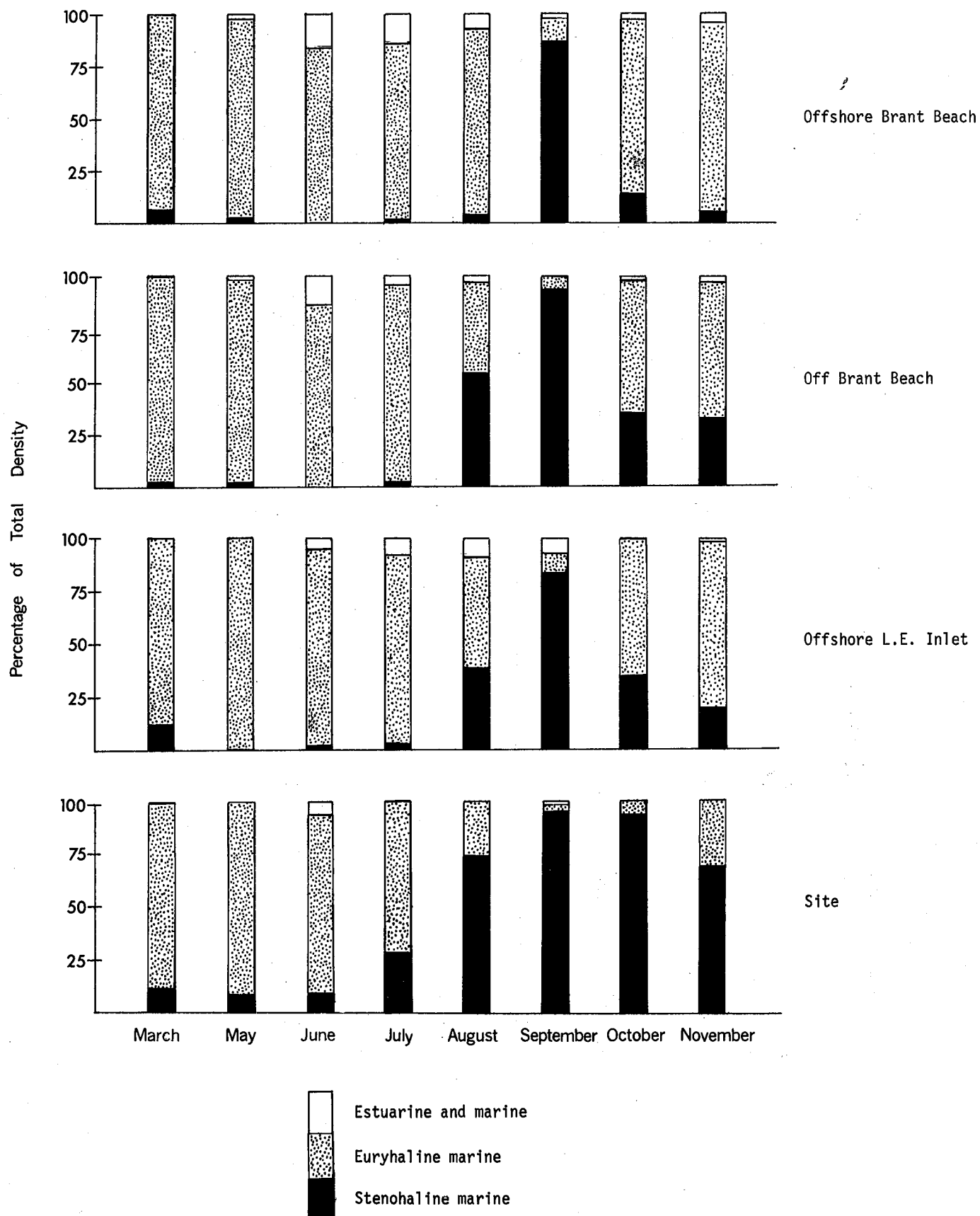


Fig. 32. Percentage composition of copepods of estuarine (includes "estuarine and marine" and "euryhaline marine" forms) and oceanic ("stenohaline marine") affinities at ocean stations in 1974.

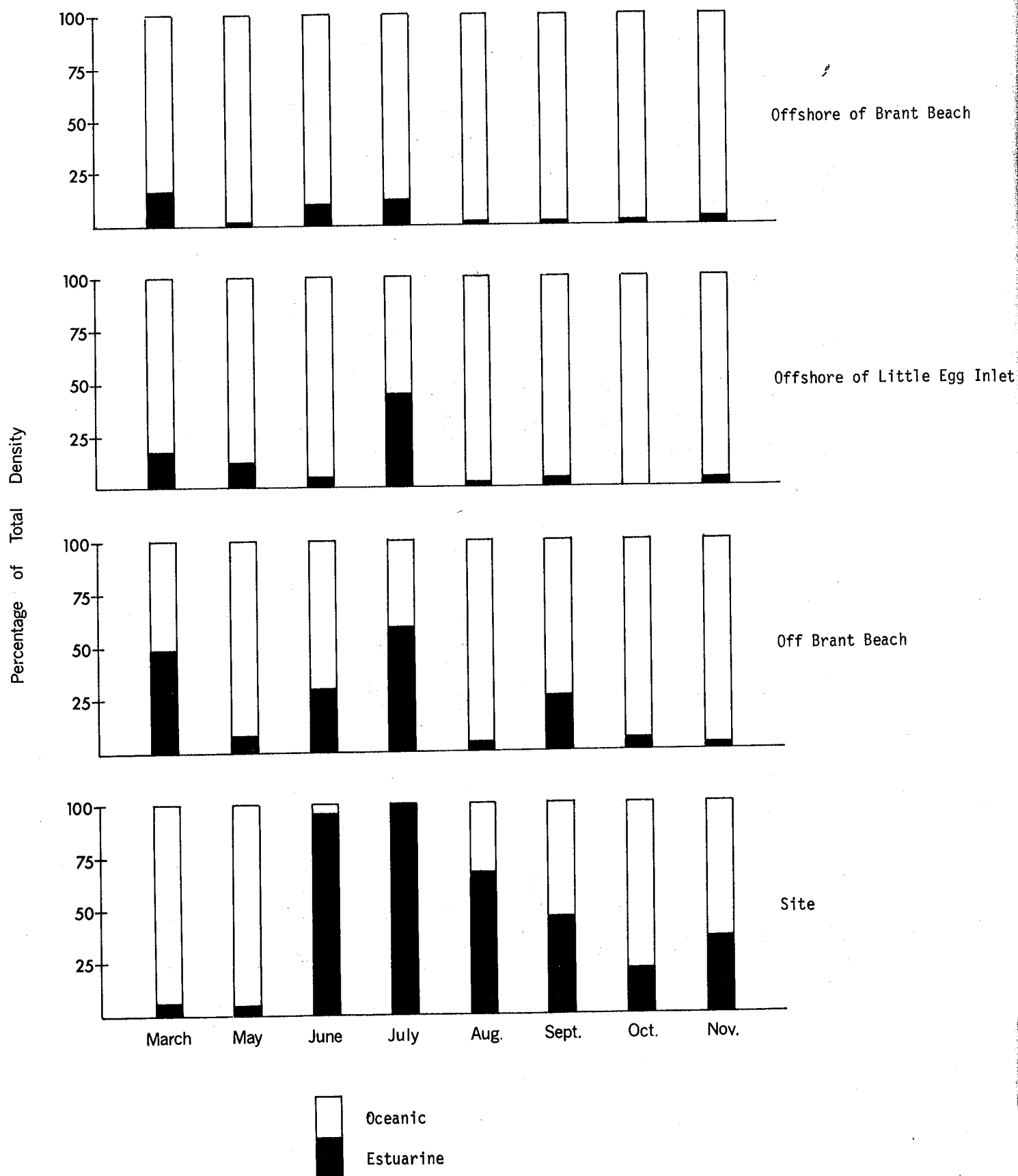


Fig. 33. Percentage composition of macrozooplankton of estuarine (includes "estuarine and marine" and "euryhaline marine" forms) and oceanic ("stenohaline marine") affinities at ocean stations in 1974.

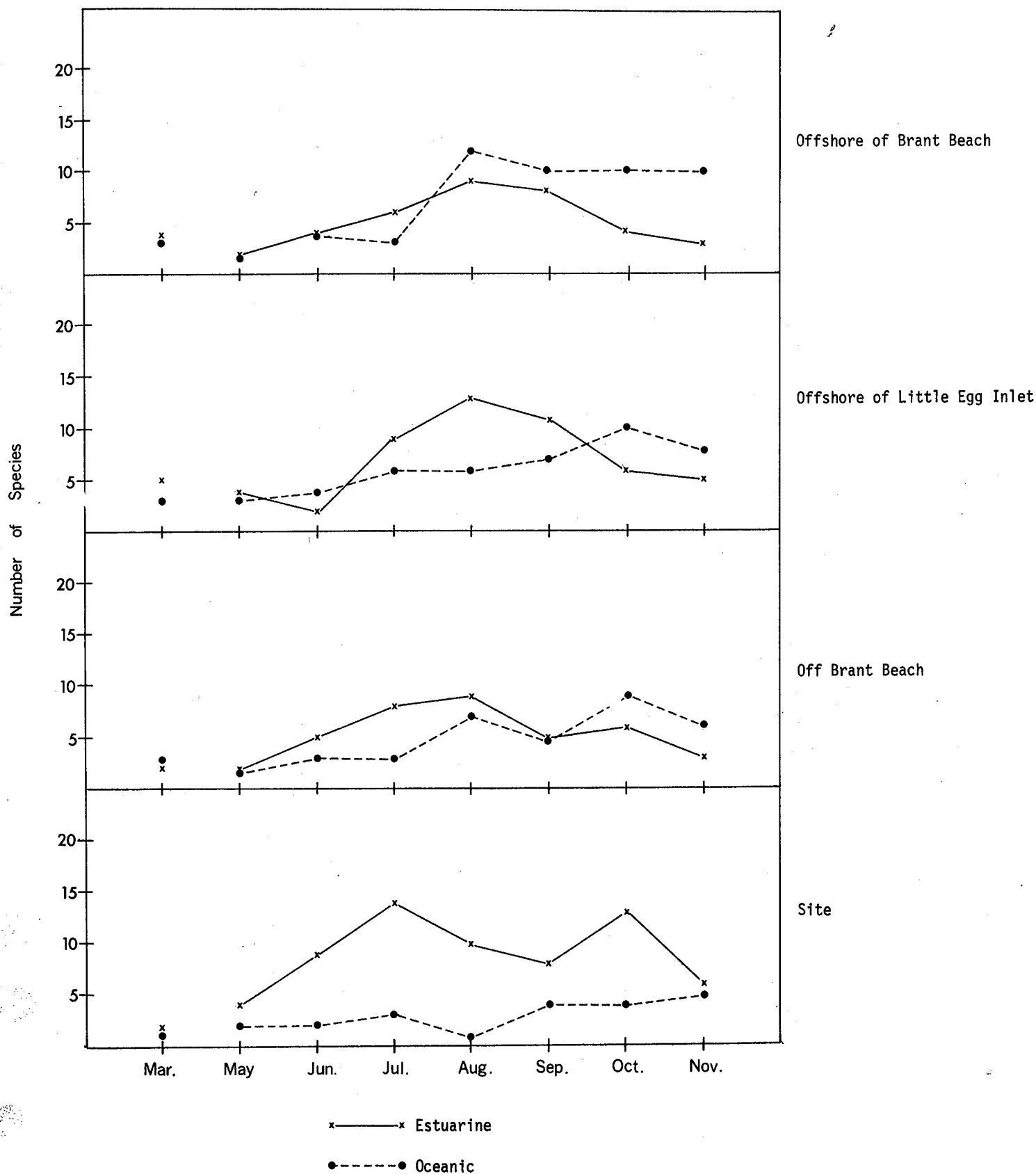


Fig. 34. Number of estuarine and oceanic species of macrozooplankton collected by month at the four ocean stations in 1974.

APPENDIX I

Appendix Table 1. Number of macroinvertebrates taken with a ponar grab approximately 1.7 nautical miles E of Little Egg Inlet, New Jersey in 1974.

Zone	5158	5158	5158	5158	5158	5158	5158	5158	5158	5158	5158	5158
Depth (feet)	14	15	20	16	18	11	10	19	20	14	13	14
Coll. No.	EVG-74-008	EVG-74-022	EVG-74-039	EVG-74-051	JJH-74-053	JJH-74-078	EVG-74-069	JJH-74-089	EVG-74-093	EVG-74-100	JJH-74-150	EVG-74-113
Date	25 January	13 February	25 March	26 April	23 May	14 June	15 July	29 August	23 September	11 October	15 November	11 December
Hour	1055	1140	1130	1005	1350	1000	1010	1005	1000	0950	0855	0905
Tide	Ebb 1	Flood 2	Ebb 1	Flood 2	Ebb 2	Flood 1	Flood 1	Ebb 2	Flood 1	Ebb 2	Ebb 1	Ebb 1
Air Temp. (C)	5.0	6.0	-1.0	12.0	20.0	21.0	27.0	28.0	18.0	17.0	9.0	5.0
Temp. (C), surface	5.0	2.5	4.5	9.2	14.0	21.0	24.0	24.0	20.0	16.0	10.0	5.0
bottom	5.0	3.0	4.5	9.2	13.0	21.0	24.5	22.5	19.0	16.0	10.0	5.0
Salinity (ppt), surface	29.0	28.0	29.5	30.0	30.0	28.0	29.0	30.0	30.0	30.0	30.5	30.0
bottom	30.0	30.0	30.5	30.5	30.5	28.0	29.0	30.5	30.0	30.5	30.0	30.0
Oxygen (ppm), surface	10.6	11.7	9.5	9.2	8.4	6.4	6.4	6.0	6.2	7.8	8.8	9.0
bottom	10.4	11.1	10.2	9.0	8.0	6.7	6.0	4.8	7.2	7.6	8.9	9.2
Secchi (feet)	9.5	5.0	5.0	3.5	2.5	10.0	7.0	4.5	3.0	5.0	4.0	2.5
Sediment ^a	FS + VFS	-	FS	FS + VFS	VFS	FS	FS	FS + VFS	FS + VFS	FS	FS + VFS	FS
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Margelopsis gibbesi	-	-	-	-	sparse	-	common	-	-	-	-	-
Nemertea	2	5.4	2	5.4	2	5.4	3	8.1	fragments	-	4	10.8
Nematoda	-	-	-	-	-	-	-	-	-	-	-	-
Sagitta sp.	-	-	-	-	17	45.9	57	153.9	rare	-	-	-
Crepidula plana	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	-	-
Polinices heros	-	-	-	-	-	-	-	1	2.7	1	2.7	-
Mitrella lunata	-	-	-	-	-	-	-	5	13.5	-	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	-	-
Nassarius trivittatus eggs	-	-	-	-	-	-	-	-	-	-	-	-
Turbonilla interrupta	-	-	-	-	-	-	-	3	8.1	-	-	-
Turbonilla sp.	3	8.1	-	-	-	-	-	-	-	-	-	-
Mytilus edulis spat	present	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	20	54.0	41	110.7	162	437.5	76	205.2	393	1061.3	174	469.9
Mulinia lateralis	-	-	-	-	-	-	-	-	-	-	-	-
Tellina agilis	20	54.0	17	45.9	45	121.5	132	356.5	560	1512.3	17	45.9
Donax fossor	106	286.3	-	-	-	-	-	-	-	-	-	-
Ensis directus	-	-	-	-	1	2.7	2	5.4	7	18.9	-	-
Siliqua costata	1	2.7	2	5.4	18	48.6	2	5.4	10	27.0	-	-
Phyllodoce arenae	-	-	-	-	-	-	-	-	-	-	-	-
Mystides borealis	-	-	-	-	-	-	1	2.7	-	-	-	-
Antinoella sarsi	-	-	-	-	-	-	-	5	13.5	-	-	-
Sthenelais limicola	-	-	-	-	2	5.4	-	-	-	-	-	-
Sthenelais boa	-	-	-	-	-	-	3	8.1	3	8.1	-	-
Glycera capitata	-	-	-	-	2	5.4	-	-	1	2.7	-	-
Goniadella gracilis	-	-	-	-	-	-	1	2.7	-	-	-	-
Glycinide solitaria	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys bucera	2	5.4	3	8.1	3	8.1	2	5.4	4	10.8	3	8.1
Nephtys picta	-	-	1	2.7	1	2.7	-	-	-	-	-	-
Autolytus sp.	-	-	-	-	-	-	-	11	29.7	-	-	-
Capitellidae	1	2.7	1	2.7	2	5.4	4	10.8	11	29.7	-	-
Scolecoides viridis	-	-	-	-	1	2.7	2	5.4	43	116.1	1	2.7
Sireblosio benedicti	-	-	-	-	-	-	-	-	-	-	-	-
Scolecopsis squamata	-	-	-	-	1	2.7	-	-	-	1	2.7	-
Prionospio sp.	-	-	-	-	-	-	-	-	-	-	-	-
Polydora ligni	-	-	-	-	-	-	-	1	2.7	-	-	-
Polydora sp.	-	-	-	-	-	-	-	-	-	1	2.7	-
Dispio uncinata	-	-	-	-	-	8	21.6	3	8.1	-	-	-
Spionidae	5	13.5	2	5.4	-	-	-	-	-	-	-	-
Onuphis opalina	-	-	-	-	-	-	-	-	-	-	1	2.7
Diopatra cuprea	-	-	-	-	-	-	-	-	-	1	2.7	-
Onuphidae	-	-	-	-	-	-	-	-	-	1	2.7	-
Magelona rosea	10	27.0	fragments	-	-	10	27.0	6	16.2	-	5	15.5
Orbinia sp.	-	-	-	-	-	-	-	-	-	1	2.7	-

Appendix Table 1. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
<i>Scoloplos fragilis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	-	-
<i>Scoloplos</i> sp.	-	-	6	16.2	1	2.7	10	27.0	11	29.7	2	5.4	3	8.1	3	8.1	-	-	-	-	-	-	-	-
<i>Tharyx acutus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8.1	9	24.3	-	-	-	-	-	-	-
<i>Asabellides oculata</i>	-	-	-	-	-	-	-	-	-	4	10.8	-	-	-	-	2	5.4	1	2.7	-	-	-	-	-
Ampharetidae	-	-	-	-	28	75.6	15	40.5	215	580.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Polychaeta</i>	fragments	-	fragments	-	-	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	-	-	fragments	-
Calanoida	-	-	2	5.4	30	81.0	30	81.0	8	21.6	-	-	-	-	-	6	16.2	-	-	-	-	-	-	-
<i>Leptocuma minor</i>	-	-	-	-	2	5.4	3	8.1	3	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Oxyurostylis smithi</i>	-	-	-	-	5	13.5	1	2.7	5	13.5	-	-	-	-	5	13.5	-	-	-	2	5.4	1	2.7	2.7
<i>Chiridotea tuftsi</i>	-	-	-	-	-	2	5.4	-	-	12	32.4	2	5.4	-	-	1	2.7	1	2.7	1	2.7	2	5.4	
<i>Edotea triloba</i>	1	2.7	-	-	3	8.1	4	10.8	87	234.9	7	18.9	-	-	-	1	2.7	-	-	-	-	1	2.7	
<i>Calliopius laevisculus</i>	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Corophium tuberculatum</i>	-	-	-	-	-	2	5.4	2	5.4	2	5.4	2	5.4	-	-	-	-	-	-	-	-	-	-	-
<i>Cerapus tubularis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-
<i>Gammarus lawrencianus</i>	-	-	-	-	-	-	-	-	1578	4261.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gammarus annulatus</i>	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Amphiporeia virginiana</i>	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-
<i>Bathyporeia quoddyensis</i>	5	13.5	17	45.9	-	-	1	2.7	-	-	1	2.7	-	-	-	-	-	-	-	1	2.7	-	-	-
<i>Protohaustorius</i>																								
<i>deichmannae</i>	273	737.2	446	1204.4	53	143.1	504	1361.1	22	59.4	463	1250.3	375	1012.7	27	72.9	44	72.9	67	180.9	12	32.4	69	186.3
<i>Parahaustorius longimerus</i>	33	89.1	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	12	32.4	-	-	-
<i>Parahaustorius holmesii</i>	-	-	-	-	-	-	-	-	-	-	1	2.7	1	2.7	-	-	-	-	-	-	-	-	-	-
<i>Parahaustorius attenuatus</i>	10	27.0	-	-	-	-	-	-	-	-	8	21.6	-	-	-	-	-	-	-	-	-	-	-	-
<i>Acanthohaustorius millsi</i>	48	129.6	37	99.9	2	5.4	1	2.7	-	240	648.1	137	370.0	4	10.8	7	18.9	15	40.5	8	21.6	7	18.9	
<i>Jassa falcata</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	1	2.7	-	-	-
<i>Psammonyx nobilis</i>	3	8.1	5	13.5	2	5.4	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Monoculodes edwardsi</i>	-	-	1	2.7	-	-	-	-	-	6	16.2	1	2.7	2	5.4	7	18.9	-	-	-	-	-	-	-
<i>Trichophoxus epistomus</i>	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Microprotopus raneyi</i>	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Gammaridae, immature	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Caprella penantis</i>	-	-	-	-	-	-	-	3	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caprellidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-
<i>Mysidopsis bigelowi</i>	-	-	-	-	-	20	54.0	-	-	-	-	-	-	10	27.0	9	24.3	-	-	-	-	-	-	-
<i>Neomysis americana</i>	-	-	4	10.8	-	65	175.5	21	56.7	-	-	-	-	39	105.3	100	270.0	-	-	1	2.7	-	-	-
Mysidacea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	fragments	-	-	-	-	-	-	-	-
<i>Crangon septemspinosa</i>	2	5.4	-	-	-	-	-	1	2.7	-	-	2	5.4	-	-	-	-	-	-	-	-	-	-	-
<i>Crangon septemspinosa mysis</i>	-	-	-	-	-	4	10.8	3	8.1	1	2.7	2	5.4	-	-	-	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	-	-	-	-	-	-	-	-	-	-	-	1	2.7	6	16.2	-	-	-	-	-	-	-	-	-
<i>Pagurus</i> sp. zoea	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-
<i>Anomura</i>	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cancer irroratus</i>	-	-	-	-	-	-	-	-	3	8.1	5	13.5	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cancer irroratus megalopa</i>	-	-	-	-	-	-	-	-	10	27.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Callinectes sapidus megalopa</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-
Xanthidae zoea	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-
Fragment	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Scomber scombrus</i> eggs ^d	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. Bivalvia	147	397.0	60	162.0	226	610.3	212	572.5	970	2619.5	191	515.8	41	110.7	89	240.3	58	156.6	5	13.5	19	51.3	13	35.1
No. Polychaeta	18	48.6	13	35.1	41	110.7	56	151.2	314	848.0	11	29.7	12	32.4	52	140.4	139	375.4	145	391.6	44	118.8	20	54.0
No. Amphipoda	372	1004.6	506	1366.5	57	153.9	510	1377.3	1604	4331.6	724	1955.2	515	1390.8	33	89.1	60	162.0	82	221.4	34	91.8	76	205.2
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No. Taxa	18	-	16	-	22	30	31	24	20	20	20	20	20	25	26	26	17	17	14	14	14	14	14	14
No. Specimens	545	1471.8	587	1585.2	383	1034.3	967	2611.4	3028	8177.2	964	2603.3	585	1579.8	248	669.7	398	1074.8	236	637.3	102	275.5	123	332.2
Diversity Index	1.62	-	0.99	-	1.88	-	1.74	-	1.54	-	1.42	-	1.10	-	2.18	-	2.29	-	1.56	-	1.83	-	1.55	-

a See Table 164 for grain size classification.

b Number of specimens collected from 7 drops of the ponar grab.

c Average number of specimens per m².

d Not included in totals.

Appendix Table 2. Number of macroinvertebrates taken with a ponar grab approximately 2.0 nautical miles E of Little Egg Inlet, New Jersey in 1974.

Zone	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152
Depth (feet)	21	22	30	24	23	21	19	27	26	22	20	21
Coll. No.	EVG-74-010	EVG-74-021	EVG-74-040	EVG-74-052	JJH-74-054	JJH-74-079	EVG-74-070	JJH-74-090	EVG-74-094	EVG-74-102	JJH-74-151	EVG-74-115
Date	25 January	13 February	25 March	26 April	23 May	14 June	15 July	29 August	23 September	11 October	15 November	11 December
Hour	1020	1200	1150	1015	1410	1025	1032	1030	1030	1047	1015	0930
Tide	Ebb 1	Flood 2	Ebb 2	Flood 2	Ebb 2	Flood 1	Ebb 2	Ebb 2	Flood 1	Ebb 2	Ebb 1	Ebb 1
Air temp. (C)	5.0	7.0	1.0	11.5	20.0	25.0	27.0	26.0	19.0	17.5	9.0	5.0
Temp. (C), surface	4.0	3.0	4.7	9.3	13.0	21.0	24.5	24.5	21.0	16.0	10.5	5.5
Temp. (C), bottom	4.0	3.0	4.7	9.0	12.0	19.7	23.5	22.5	20.0	16.0	10.5	5.0
Sal. (ppt), surface	29.0	28.0	29.0	30.5	30.5	28.5	29.5	30.0	30.0	30.0	30.5	30.0
Sal. (ppt), bottom	30.0	30.0	30.0	30.5	30.5	29.5	29.0	30.5	30.0	30.0	30.5	30.0
Oxygen (ppm), surface	10.8	11.6	9.9	9.2	8.4	7.1	6.7	5.4	6.4	7.2	9.0	9.6
Oxygen (ppm), bottom	10.8	11.0	10.0	9.3	7.8	8.8	6.7	4.8	7.2	7.4	8.9	9.6
Secchi (feet)	9.5	4.0	6.0	4.0	3.5	12.0	9.5	5.5	3.5	6.0	3.5	2.0
Sediment ^a	MS	MS	MS	VFS	VFS	FS + VFS	FS + VFS	FS + VFS	FS + VFS	FS + VFS	FS + VFS	FS + VFS
	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Margelopsis gibbesi	-	-	-	-	abundant	-	abundant	-	-	-	-	-
Thuiaria argentea	-	-	-	-	-	-	present	-	-	-	-	-
Liriope sp.	-	-	-	-	-	-	-	-	-	-	1	2.7
Embryonated Hydrozoa	-	-	-	-	-	-	-	-	-	-	-	-
eggs	common	-	-	-	-	-	-	-	-	-	-	-
Hydrozoa	-	present	-	-	-	-	-	-	-	-	-	-
Cnidaria medusa	-	-	-	-	-	-	-	-	-	1	2.7	-
Ctenophora	-	-	-	-	-	present	-	-	-	-	-	-
Cerebratulus lacteus	-	-	-	-	-	-	-	-	17	45.9	-	-
Nemertea	7	18.9	1	2.7	-	1	2.7	5	13.5	4	10.8	-
Nematoda	-	-	-	common	-	-	-	-	-	-	-	-
Sagitta sp.	1	2.7	2	5.4	1	2.7	18	48.6	-	-	-	-
Amathia vidovici	-	-	-	-	-	-	-	-	-	-	-	1
Polinices duplicata	-	-	-	-	-	-	-	-	6	16.2	-	-
Polinices heros	-	-	-	-	-	-	-	-	1	2.7	-	-
Polinices sp.	-	-	-	-	-	-	2	5.4	-	-	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	1	2.7	-	-
Nassarius trivittatus egg case	-	-	-	-	-	present	-	-	-	-	-	-
Turbonilla interrupta	-	-	-	-	-	-	-	-	-	-	2	5.4
Turbonilla sp.	-	-	-	-	-	-	-	-	-	1	2.7	-
Mytilus edulis spat	sparse	-	-	-	-	sparse	-	rare	-	-	-	-
Petricola pholadiformis	-	-	-	1	2.7	-	-	-	-	-	-	-
Spisula solidissima	26	70.2	2	5.4	17	45.9	11	29.7	309	834.5	295	796.7
Mulinia lateralis	-	-	-	-	-	-	-	-	-	-	-	-
Tellina agilis	17	45.9	8	21.6	22	59.4	73	197.1	297	802.1	582	1571.7
Ensis directus	-	-	-	1	2.7	3	8.1	11	29.7	4	18.8	-
Siliqua costata	4	10.8	-	2	5.4	9	24.3	18	48.6	7	18.9	-
Phyllodoce maculata	-	-	-	-	-	-	1	2.7	-	-	-	-
Phyllodoce arenae	-	-	-	-	-	-	-	-	-	1	2.7	3
Phyllodoce sp.	-	-	-	-	-	-	-	4	10.8	-	-	-
Paranaitis kosteriensis	-	-	-	-	-	-	11	29.7	-	-	-	-
Eteone sp.	-	-	-	-	-	-	-	1	2.7	-	-	-
Sigalion arenicola	-	-	-	-	-	1	2.7	1	2.7	-	-	-
Sthenelais boa	1	2.7	-	-	-	-	-	-	-	-	-	-
Sthenelais limicola	-	-	-	-	-	-	1	2.7	-	-	-	-
Sthenelais sp.	-	-	-	-	-	-	-	1	2.7	-	-	-
Sigalionidae	-	-	-	-	-	-	-	1	2.7	-	-	-
Glycera capitata	1	2.7	-	3	8.1	-	-	-	-	-	-	-

Appendix Table 2. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Glycera americana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-
Glycera sp.	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goniadidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-
Nephtys buccera	34	91.8	1	2.7	3	8.1	2	5.4	8	21.6	-	-	-	-	8	21.6	27	72.9	11	29.7	4	10.8	7	18.9
Nephtys picta	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	2	5.4	12	32.4	-	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	8	21.6	-	-	3	8.1	-	-	-	-	-	-	-	-
Capitellidae	326	880.4	-	-	8	21.6	1	2.7	5	13.5	54	145.8	-	-	184	496.9	365	985.7	27	72.9	16	43.2	-	-
Ophelia denticulata	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scolecopelides viridis	29	78.3	1	2.7	-	-	3	8.1	289	780.4	3	8.1	-	-	2	5.4	29	78.3	24	64.8	39	105.3	1	2.7
Streblospio benedicti	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	41	110.7	3	8.1	-	-	-	-	-	-
Scolecopsis squamata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	2	5.4	
Prionospio sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polydora sp.	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-
Dispio uncinata	1	2.7	1	2.7	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-
Spionidae	-	-	-	-	-	-	-	-	2	5.4	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-
Onuphis opalina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	3	8.1	1	2.7	-
Magelona rosea	4	10.8	1	2.7	-	-	-	-	-	-	1	2.7	-	-	-	-	15	40.5	7	18.9	5	13.5	1	2.7
Scoloplos sp.	-	-	-	-	-	-	-	-	-	-	3	8.1	-	-	-	-	2	5.4	3	8.1	2	5.4	-	-
Tharyx acutus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	21.6	32	86.4	4	10.8	5	13.5	-	-
Asabellides oculata	3	-	-	-	1	2.7	9	24.3	191	515.7	42	113.4	-	-	27	72.9	3	8.1	5	13.5	3	8.1	3	8.1
Ampharetidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	32.4	-	-	-
Pherusa sp.	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-
Polychaeta larva	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-
Polychaeta	fragments	-	fragments	-	-	-	-	-	fragments	-	fragments	-	fragments	-	fragments	-	4	10.8	fragments	-	fragments	-	-	-
Calanoida	-	-	-	-	1	2.7	4	10.8	3	8.1	-	-	-	-	-	1	2.7	-	-	1	2.7	-	-	-
Leptocuma minor	-	-	-	-	1	2.7	3	8.1	-	-	2	5.4	-	-	-	-	3	8.1	-	-	-	-	-	-
Oxyurostylis smithi	-	-	-	-	1	2.7	-	-	5	13.5	-	-	-	-	11	29.7	9	24.3	-	-	-	-	5	13.5
Cirolana concharum	-	-	1	2.7	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chiridotea tuftsi	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Edotea triloba	4	10.8	-	-	-	-	2	5.4	33	89.1	21	56.7	1	2.7	3	8.1	17	45.9	-	-	4	10.8	4	10.8
Corophium tuberculatum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	1	2.7	-	-	-
Cerapus tubularis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	86.4	4	10.8	-	-	4	10.8	-	-
Unciola irrorata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-
Gammarus lawrencianus	-	-	-	-	-	-	1	2.7	24	64.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gammarus annulatus	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	-	-	-	-	-	-	-
Elasmopus levis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8.1	-	-	-
Protohaustorius	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
deichmannae	21	56.7	1	2.7	1	2.7	33	89.1	41	110.7	6	16.2	3	8.1	-	-	1	2.7	-	-	313	845.3	140	378.1
Acanthohaustorius millsi	1	2.7	1	2.7	-	-	2	5.4	-	-	-	-	1	2.7	-	-	-	-	-	7	18.9	14	37.8	-
Acanthohaustorius shoemakeri	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psammonyx nobilis	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoculodes edwardsi	1	2.7	5	13.5	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	1	2.7	-	-	-
Synchelidium americanum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	2	5.4	
Microprotopus raneyi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	1	2.7	
Parametopella cypris	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	2	5.4	-	-	-	-	-	-	-
Caprella equilibra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-

Appendix Table 2. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Caprella penantis	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caprellidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mysidopsis bigelowi	2	5.4	-	-	-	-	4	10.8	-	-	-	-	-	-	16	43.2	7	18.9	21	56.7	1	2.7	-	-
Neomysis americana	4	10.8 fragments	-	-	3	8.1	16	43.2	23	62.1	6	16.2	-	-	126	340.3	29	78.3	-	-	2	5.4	-	-
Crangon septemspinosa	-	-	-	-	-	-	2	5.4	2	5.4	-	-	-	-	1	2.7	1	2.7	-	-	-	-	-	-
Crangon septemspinosa mysis	-	-	-	-	-	-	-	-	5	13.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	1	2.7	-	-	-	-	-	-	1	2.7	1	2.7	-	-	3	8.1	1	2.7	-	-	-	-	-	-
Pagurus sp. zoea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-
Cancer irroratus megalopa	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus sub-adult	-	-	-	-	-	-	-	-	-	18	48.6	1	2.7	-	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-
Xanthidae zoea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	1	2.7	-	-
Unidentified fragments	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammodytes sp. larvae	3	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scomber scombrus eggs	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. Bivalvia	47	126.9	10	27.0	43	116.1	96	259.2	635	1714.8	888	2398.1	17	45.9	111	299.8	84	226.8	29	78.3	21	56.7	18	48.6
No. Polychaeta	401	1082.9	5	13.5	15	40.5	17	45.9	510	1377.3	121	326.8	0	0.0	274	739.9	484	1307.0	87	234.9	104	280.9	15	40.5
No. Amphipoda	23	62.1	7	18.9	2	5.4	36	97.2	69	180.9	8	21.6	4	10.8	37	99.0	5	13.5	1	2.7	332	896.6	157	424.0
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No. Taxa	23	14	17	21	26	26	26	26	26	26	26	26	5	28	26	26	18	34	18	34	18	18	18	18
No. Specimens	492	1328.7	26	72.9	68	183.6	199	537.4	1291	3486.4	1072	2895.0	23	62.1	604	1631.1	676	1825.5	148	399.7	475	1282.7	203	548.2
Diversity Index	1.37	1.77	1.81	2.03	1.95	1.39	0.71	2.06	1.77	2.12	1.49	1.24												

a. See Table 164 for grain size classification.

b. Number of organisms collected from 7 drops of the ponar grab.

c. Average number of specimens per m³.

d. Not included in totals.

Appendix Table 3. Number and weight (g) of macroinvertebrates taken with a ponar grab, approximately 2.5 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	5255				5255				5255				5255			
Depth (feet)	35				36				35				35			
Coll. No.	EVG-74-012				EVG-74-024				EVG-74-041				EVG-74-053			
Date	25 January				13 February				25 March				26 April			
Hour	1230				1330				1225				1032			
Tide	Ebb 2				Ebb 1				Ebb 1				Flood 2			
Air Temp. (C)	7.0				8.5				-1.5				12.5			
Temp. (C) surface	5.0				3.0				5.0				10.0			
Temp. (C) bottom	5.0				3.0				5.0				9.2			
Salinity (ppt) surface	30.0				28.0				29.8				30.0			
Salinity (ppt) bottom	30.0				31.0				29.8				30.2			
Oxygen (ppm) surface	10.8				-				10.8				9.6			
Oxygen (ppm) bottom	10.6				-				10.4				9.2			
Secchi (feet)	13.5				7.0				8.0				5.0			
Sediment ^a	CZ				MS				MS				CS + MS			
	n ^b	n/m ^{2c}	g x 10 ^{3d}	g x 10 ^{3/m^{2e}}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}
Margelopsis gibbesi	-	-	-	-	-	-	-	-	-	-	-	-	rare	-	-	-
Actiniaria	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	0.43	1.16
Nemertea	fragments	-	95.02	256.60	-	-	-	-	-	-	-	-	-	-	-	-
Nematoda	sparse	-	-	-	rare	-	-	-	-	-	-	-	abundant	-	-	-
Electra hastingsae	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sagitta sp.	-	-	-	-	-	-	-	-	11	29.7	3.23	8.72	2	5.4	0.28	8.86
Polinices heros	-	-	-	-	1	2.7	0.37	1.00	-	-	-	-	1	2.7	0.19	0.51
Nassarius trivittatus	8	21.6	161.62	436.46	-	-	-	-	1	2.7	21.48	58.01	2	5.4	90.80	245.21
Nucula proxima	17	45.9	3.02	8.16	-	-	-	-	-	-	-	-	-	-	-	-
Yoldia limatula	4	10.8	1.99	5.37	-	-	-	-	-	-	-	-	-	-	-	-
Mytilus edulis	-	-	-	-	-	-	-	-	-	-	-	-	rare	-	-	-
Petricola pholadiformis	18	48.6	2.33	6.29	-	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	6	16.2	3.91	10.56	19	51.3	4.53	12.23	25	67.5	8.20	22.14	14	37.8	5.88	15.88
Tellina agilis	90	243.0	45.06	121.69	8	21.6	16.29	43.99	14	37.8	13.88	37.48	14	37.8	9.46	25.55
Ensis directus	16	43.2	4.43	11.96	-	-	-	-	-	-	-	-	-	-	-	-
Siliqua costata	13	35.1	1.21	3.27	-	-	-	-	1	2.7	0.42	1.13	-	-	-	-
Zirfaea crispata	1	2.7	0.06	0.16	-	-	-	-	-	-	-	-	-	-	-	-
Sigalion arenicola	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	0.40	1.08
Sthenelais boa	14	37.8	8.74	23.60	-	-	-	-	-	-	-	-	-	-	-	-
Sthenelais limicola	3	8.1	4.04	10.91	-	-	-	-	2	5.4	7.33	19.79	-	-	-	-
Glycera capitata	-	-	-	-	-	-	-	-	-	-	-	-	7	18.9	2.60	7.02
Glycera americana	5	13.5	35.58	96.08	-	-	-	-	-	-	-	-	-	-	-	-
Goniadella gracilis	-	-	-	-	-	-	-	-	-	-	-	-	154	415.9	26.85	72.51
Nephtys bucera	-	-	-	-	8	21.6	27.90	75.34	7	18.9	228.44	618.91	8	21.6	81.30	219.55
Nereis succinea	3	8.1	0.01	0.03	-	-	-	-	-	-	-	-	-	-	-	-
Capitellidae	3	8.1	0.58	1.57	-	-	-	-	-	-	-	-	-	-	-	-
Ophelia denticulata	-	-	-	-	1	2.7	34.84	94.09	-	-	-	-	-	-	-	-
Scolecopelides viridis	-	-	-	-	-	-	-	-	4	10.8	3.23	8.72	-	-	-	-
Sreblosio benedicti	13	35.1	2.97	8.02	-	-	-	-	-	-	-	-	-	-	-	-
Dispio uncinata	-	-	-	-	-	-	-	-	1	2.7	0.22	0.59	1	2.7	1.82	4.91
Lumbrineris fragilis	3	8.1	194.65	525.65	-	-	-	-	-	-	-	-	-	-	-	-
Drilonereis longa	1	2.7	1.02	2.75	-	-	-	-	-	-	-	-	-	-	-	-
Magelona rosea	-	-	-	-	-	-	-	-	23	62.1	17.55	47.39	-	-	-	-

Appendix Table 3. (cont.)

	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
Orbinia swani	-	-	-	-	1	2.7	40.66	109.80	-	-	-	-	-	-	-	-
Tharyx acutus	5	13.5	2.33	6.29	1	2.7	0.09	0.24	-	-	-	-	1	2.7	2.65	7.16
Ampharetidae	2	5.4	0.43	1.16	-	-	-	-	-	-	-	-	-	-	-	-
Pherusa affinis	2	5.4	398.26	1075.51	-	-	-	-	-	-	-	-	-	-	-	-
Polychaeta	fragments	-	9.26	25.01	-	-	-	-	fragments	-	0.28	0.76	fragments	-	1.89	5.10
Calanoida	-	-	-	-	-	-	-	-	17	45.9	2.43	6.56	1	2.7	0.06	0.16
Leptocuma minor	-	-	-	-	3	8.1	2.45	6.62	6	16.2	2.72	7.35	3	8.1	2.23	6.27
Leucon americanus	1	2.7	0.19	0.51	-	-	-	-	-	-	-	-	-	-	-	-
Oxyurostylis smithi	7	18.9	1.00	2.70	-	-	-	-	1	2.7	0.30	0.81	1	2.7	0.39	1.05
Cirolana concharum	-	-	-	-	2	5.4	119.29	322.4	-	-	-	-	-	-	-	-
Chiridotea coeca	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	4.67	12.61
Chiridotea tufsi	-	-	-	-	-	-	-	-	1	2.7	1.93	5.21	-	-	-	-
Edotea triloba	27	72.9	18.42	49.74	-	-	-	-	-	-	-	-	-	-	-	-
Unciola irrorata	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	0.74	2.00
Protohaustorius deichmannae	-	-	-	-	-	-	-	-	35	94.5	13.29	35.89	-	-	-	-
Protohaustorius wigleyi	-	-	-	-	5	13.5	5.91	15.96	6	16.2	3.42	9.24	-	-	-	-
Acanthoahustorius millsi	-	-	-	-	-	-	-	-	40	108.00	23.67	63.92	-	-	-	-
Anonyx sarsi	-	-	-	-	1	2.7	7.13	19.25	-	-	-	-	-	-	-	-
Monoculodes edwardsi	3	8.1	2.32	6.27	1	2.7	16.78	45.31	2	5.4	3.82	10.32	-	-	-	-
Trichophoxus epistomus	-	-	-	-	1	2.7	1.15	3.11	-	-	-	-	-	-	-	-
Mysidopsis bigelowi	-	-	-	-	-	-	-	-	3	8.1	0.61	1.65	3	8.1	0.37	1.00
Neomysis americana	11	29.7	11.45	30.92	2	5.4	3.02	8.16	4	10.8	2.57	6.94	9	24.3	3.60	9.72
Mysidacea	-	-	-	-	-	-	-	-	-	-	-	-	fragments	-	1.73	4.67
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	0.12	0.32
Peaophora viridis	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	0.07	0.19
Fragments	present	-	29.14	78.69	-	-	-	-	-	-	-	-	-	-	-	-
No. Bivalvia	165	445.6	62.01	167.46	27	72.9	20.82	56.22	40	108.00	22.50	60.76	28	75.6	15.34	41.43
No. Polychaeta	54	145.8	657.87	1776.59	11	29.7	103.49	279.48	37	99.9	257.05	694.17	173	467.2	117.51	317.34
No. Amphipoda	3	8.1	2.32	6.27	8	27.0	30.97	83.63	83	224.1	44.20	119.36	1	2.7	0.74	2.00
No. Echinodermata	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	1	2.7	0.12	0.32
No. Taxa	25	-	-	-	14	-	-	-	20	-	-	-	21	-	-	-
No. Specimens	276	745.3	1039.04	2805.94	54	145.8	280.41	757.25	204	550.9	359.02	969.54	228	615.7	238.62	644.40
Diversity Index	2.39	-	-	-	1.77	-	-	-	2.28	-	-	-	1.32	-	-	-

Appendix Table 3. (cont.)

Zone	5255				5255				5255				5255			
Depth (feet)	40				40				39				38			
Coll. No.	JJH-74-055				JJH-74-077				EVG-74-075				JJH-74-091			
Date	23 May				14 June				15 July				29 August			
Hour	1220				1100				1345				1115			
Tide	Ebb 1				Flood 1				Flood 2				Ebb 2			
Air Temp. (C)	20.0				24.0				27.0				26.0			
Temp. (C) surface	15.0				20.5				24.0				25.0			
bottom	11.0				18.2				22.0				21.0			
Salinity (ppt) surface	30.0				29.5				29.5				30.0			
bottom	31.0				29.5				30.0				30.5			
Oxygen (ppm) surface	7.4				7.1				7.2				7.3			
bottom	7.6				8.0				6.6				7.5			
Secchi (feet)	4.0				13.0				35.0				8.0			
Sediment	CS				CS + MS				MS				FS + VFS			
	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
Margelopsis gibbesi	rare	-	-	-	-	-	-	-	fragments	-	7.00	18.90	2	5.4	0.46	1.24
Nemertea	6	16.2	1.67	4.51	-	-	-	-	-	-	-	-	-	-	-	-
Nematoda	abundant	-	-	-	abundant	-	-	-	rare	-	-	-	-	-	-	-
Sagitta sp.	20	54.0	3.34	9.02	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula fornicata	-	-	-	-	-	-	-	-	1	2.7	0.63	1.70	-	-	-	-
Crepidula plana	-	-	-	-	-	-	-	-	1	2.7	10.30	27.82	-	-	-	-
Polinices heros	1	2.7	601.81	1625.20	-	-	-	-	1	2.7	184.86	499.22	2	5.4	1.57	4.24
Polinices sp.	-	-	-	-	1	2.7	0.28	0.76	-	-	-	-	-	-	-	-
Nassarius trivittatus	1	2.7	70.70	190.93	-	-	-	-	2	5.4	183.64	495.92	-	-	-	-
Nassarius trivittatus eggs	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turbonilla sp.	-	-	-	-	-	-	-	-	1	2.7	0.38	1.03	-	-	-	-
Nucula proxima	12	32.4	1.83	4.94	-	-	-	-	1	2.7	0.32	0.86	-	-	-	-
Petricola pholadiformis	-	-	-	-	-	-	-	-	6	16.2	103.40	279.23	-	-	-	-
Spisula solidissima	30	81.0	31.11	84.01	10	27.0	51.44	138.91	19	51.3	177.68	479.83	10	27.0	4.25	11.48
Tellina agilis	336	907.4	186.67	504.10	80	216.0	55.52	149.93	74	199.8	97.61	263.60	73	197.1	98.34	265.57
Ensis directus	36	97.2	32.82	88.63	2	5.4	13.81	37.29	-	-	-	-	-	-	-	-
Siliqua costata	2	5.4	2.68	7.24	-	-	-	-	-	-	-	-	-	-	-	-
Bivalvia	1	2.7	0.17	0.46	-	-	-	-	-	-	-	-	-	-	-	-
Sthenelais limicola	-	-	-	-	-	-	-	-	2	5.4	23.89	64.53	-	-	-	-
Glycera capitata	2	5.4	1.70	4.59	9	24.3	0.07	0.19	6	16.2	2.12	5.73	1	2.7	0.35	0.95
Glycera americana	-	-	-	-	1	2.7	4.73	12.77	1	2.7	2.91	7.86	-	-	-	-
Glycera dibranchiata	2	5.4	27.95	75.48	1	2.7	33.36	90.09	-	-	-	-	-	-	-	-
Goniadella gracilis	18	48.6	1.48	4.00	116	313.3	16.95	45.77	1	2.7	0.32	0.86	-	-	-	-
Nephtys buccera	6	16.2	48.77	131.70	16	43.2	229.61	620.20	18	48.6	53.23	143.75	14	37.8	64.95	175.40
Nephtys picta	4	10.8	5.79	15.64	11	29.7	29.66	80.10	-	-	-	-	4	10.8	14.65	39.56
Nereis succinea	1	2.7	6.54	17.66	-	-	-	-	-	-	-	-	-	-	-	-
Capitellidae	704	1901.2	76.89	207.64	1	2.7	2.02	5.46	-	-	-	-	5	13.5	0.24	0.65
Ophelia sp.	-	-	-	-	-	-	-	-	1	2.7	1.32	3.56	-	-	-	-
Spio setosa	2	5.4	2.43	6.56	2	5.4	0.50	1.35	-	-	-	-	-	-	-	-
Scolecoplepides viridis	202	545.5	62.44	168.62	-	-	-	-	1132	3057.0	397.81	1074.29	3	8.1	1.54	4.16
Streblospio benedicti	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	0.38	1.03
Paraonis fulgens	-	-	-	-	2	5.4	0.47	1.27	-	-	-	-	-	-	-	-
Aricidea jeffreysii	-	-	-	-	1	2.7	0.71	1.92	-	-	-	-	-	-	-	-
Lumbrineris fragilis	1	2.7	41.14	111.10	1	2.7	50.90	137.46	2	5.4	96.31	260.09	-	-	-	-
Magelona rosea	-	-	-	-	-	-	-	-	-	-	-	-	34	91.8	7.30	19.71
Scoloplos robustus	-	-	-	-	1	2.7	112.58	304.02	-	-	-	-	-	-	-	-
Tharyx acutus	42	113.4	19.45	52.52	1	2.7	0.22	0.59	4	10.8	0.78	2.11	6	16.2	1.07	2.89
Asabellides oculata	101	272.8	12.91	34.86	81	218.7	3.96	10.69	103	278.2	438.60	1184.45	-	-	-	-

Appendix Table 3. (cont.)

	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
<i>Pherusa affinis</i>	-	-	-	-	9	24.3	4.76	12.85	-	-	-	-	-	-	-	-
<i>Polychaeta</i>	fragments	-	18.51	49.99	fragments	-	1.53	4.13	fragments	-	733.10	1979.75	fragments	-	2.11	5.70
<i>Calanoida</i>	3	8.1	0.27	0.73	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cyclaspis varians</i>	-	-	-	-	1	2.7	0.22	0.59	-	-	-	-	-	-	-	-
<i>Leptocuma minor</i>	4	10.8	1.83	4.94	7	18.9	2.95	7.97	2	5.4	1.60	4.32	-	-	-	-
<i>Oxyurostylis smithi</i>	8	21.6	3.12	8.43	10	27.0	8.00	21.60	-	-	-	-	4	10.8	0.67	1.81
<i>Chiridotea tuftsi</i>	1	2.7	0.86	2.32	3	8.1	0.70	1.89	-	-	-	-	-	-	-	-
<i>Edotea metallica</i>	-	-	-	-	1	2.7	3.46	9.34	-	-	-	-	-	-	-	-
<i>Edotea triloba</i>	8	21.6	11.08	29.92	42	113.4	59.43	160.49	2	5.4	0.55	1.49	2	5.4	0.53	1.43
<i>Corophium tuberculatum</i>	-	-	-	-	-	-	-	-	1	2.7	0.17	0.46	-	-	-	-
<i>Cerapus tubularis</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	0.43	1.16
<i>Unciola irritata</i>	-	-	-	-	-	-	-	-	30	81.0	20.70	55.90	-	-	-	-
<i>Gammarus lawrencianus</i>	-	-	-	-	1	2.7	0.21	0.57	2	5.4	1.09	2.94	-	-	-	-
<i>Protohaustorius deichmannae</i>	-	-	-	-	1	2.7	0.19	0.51	1	2.7	0.18	0.49	31	83.7	5.37	14.50
<i>Acanthohaustorius millsi</i>	-	-	-	-	-	-	-	-	6	16.2	0.64	1.73	2	5.4	0.56	1.51
<i>Jassa falcata</i>	1	2.7	0.19	0.51	-	-	-	-	-	-	-	-	-	-	-	-
<i>Monoculodes edwardsi</i>	1	2.7	0.17	0.46	-	-	-	-	1	2.7	0.32	0.86	1	2.7	0.07	0.19
<i>Mysidopsis bigelowi</i>	-	-	-	-	-	-	-	-	-	-	-	-	37	99.9	6.56	17.72
<i>Neomysis americana</i>	135	364.6	44.11	119.12	12	32.4	7.11	19.20	46	124.2	21.87	59.06	16	43.2	2.94	7.94
<i>Mysidacea</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	0.19	0.52
<i>Crangon septemspinosa</i>	2	5.4	39.09	105.56	4	10.8	3.10	8.37	3	8.1	18.74	49.88	-	-	-	-
<i>Crangon septemspinosa mysis</i>	9	24.3	5.02	13.56	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	1	2.7	12.71	34.32	-	-	-	-	8	21.6	330.43	892.33	-	-	-	-
<i>Anomura zoea</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	1.42	3.83
<i>Cancer irroratus</i>	-	-	-	-	13	35.1	20.13	54.36	11	29.7	535.76	1446.83	-	-	-	-
<i>Cancer irroratus megalopa</i>	-	-	-	-	7	18.9	4.18	11.29	1	2.7	0.96	2.59	-	-	-	-
<i>Xanthidae zoea</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	0.14	0.38
<i>Brachyura zoea</i>	-	-	-	-	-	-	-	-	4	10.8	0.54	1.46	-	-	-	-
<i>Crustacea zoea</i>	-	-	-	-	1	2.7	0.05	0.14	-	-	-	-	-	-	-	-
<i>Asterias forbesii</i>	-	-	-	-	-	-	-	-	2	5.4	0.46	1.24	-	-	-	-
<i>Hippocampus erectus</i> ^f	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-
No. Bivalvia	417	1126.1	255.28	689.39	92	248.4	120.77	326.14	100	270.0	379.01	1023.52	83	224.1	102.59	277.05
No. Polychaeta	1085	2930.1	326.00	880.37	253	683.2	492.03	1328.73	1270	3429.7	1750.39	4726.95	69	186.3	92.59	250.04
No. Amphipoda	2	5.4	0.36	0.97	2	5.4	0.40	1.08	41	110.7	23.10	61.06	36	97.2	6.43	17.36
No. Echinodermata	0	0	0.00	0.00	0	0.0	0.00	0.00	2	5.4	0.46	1.24	0	0.0	0.00	0.00
No. Taxa	32	-	-	-	31	-	-	-	34	-	-	-	23	-	-	-
No. Specimens	1703	4599.0	1377.25	-	449	1212.5	722.81	1951.96	1496	4045.4	3450.22	9317.36	255	688.6	216.09	583.55
Diversity Index	1.89	-	-	-	2.27	-	-	-	1.11	-	-	-	2.18	-	-	-

Appendix Table 3. (cont.)

Zone	5255				5255				5255				5255			
Depth (feet)	40				35				41				38			
Coll. No.	EVG-74-095				EVG-74-103				JH-74-152				EVG-74-114			
Date	23 September				11 October				15 November				11 December			
Hour	1045				1135				1135				1025			
Tide	Flood 1				Flood 1				Ebb 1				Ebb 2			
Air Temp. (C)	19.5				17.5				9.0				5.0			
Temp. (C) surface	21.0				17.0				10.5				5.0			
bottom	20.2				16.0				10.5				6.0			
Salinity (ppt) surface	30.0				30.5				30.5				30.0			
bottom	30.0				30.5				30.5				30.0			
Oxygen (ppm) surface	6.5				6.8				8.8				9.4			
bottom	6.2				7.2				8.9				9.8			
Secchi (feet)	7.0				6.0				4.0				3.5			
Sediment	MS				FS				FS				FS			
	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
Liriope sp.	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-
Pleurobranchia sp.	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-
Bdelloura sp.	-	-	-	-	-	-	-	-	2	5.4	0.30	0.81	-	-	-	-
Nemertea	2	5.4	0.08	0.22	2	5.4	5.02	13.56	2	5.4	0.73	1.97	2	5.4	0.76	2.05
Nematoda	sparse	-	-	-	present	-	-	-	sparse	-	-	-	sparse	-	-	-
Sagitta sp.	-	-	-	-	-	-	-	-	-	-	-	-	5	13.5	0.95	2.57
Lacuna vineta	-	-	-	-	-	-	-	-	1	2.7	0.38	1.03	-	-	-	-
Polinices heros	-	-	-	-	1	2.7	1.14	3.08	-	-	-	-	-	-	-	-
Nassarius trivittatus	-	-	-	-	3	8.1	460.75	1244.26	3	8.1	198.41	535.81	1	2.7	86.88	234.62
Nucula proxima	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	0.48	1.30
Petricola pholadiformis	-	-	-	-	-	-	-	-	1	2.7	0.22	0.59	-	-	-	-
Spisula solidissima	4	10.8	4.31	11.64	-	-	-	-	152	410.5	32.86	88.74	85	229.5	13.42	36.24
Tellina agilis	19	51.3	39.39	106.37	31	83.7	13.09	35.35	56	151.2	16.88	45.58	39	105.3	31.10	83.99
Phyllodoce arenae	-	-	-	-	3	8.1	0.28	0.76	2	5.4	0.75	2.03	-	-	-	-
Sigalion arenicola	1	2.7	14.32	38.67	-	-	-	-	-	-	-	-	-	-	-	-
Sthenelais boa	-	-	-	-	-	-	-	-	2	5.4	0.74	2.00	4	10.8	2.04	5.51
Sthenelais himicola	-	-	-	-	-	-	-	-	1	2.7	0.05	0.14	-	-	-	-
Glycera capitata	1	2.7	0.34	0.92	-	-	-	-	-	-	-	-	-	-	-	-
Glycera americana	-	-	-	-	-	-	-	-	3	8.1	8.75	23.63	-	-	-	-
Glycera dibranchiata	-	-	-	-	1	2.7	16.26	43.91	-	-	-	-	-	-	-	-
Goniadella gracilis	18	48.6	1.67	4.51	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys bucera	9	24.3	70.49	190.36	7	18.9	29.50	79.67	8	21.6	29.08	78.53	5	13.5	108.56	293.17
Nephtys picta	-	-	-	-	3	8.1	6.38	17.23	41	110.7	13.77	37.19	19	51.3	30.15	81.42
Nephtys spp.	-	-	-	-	-	-	-	-	-	-	-	-	fragment	-	18.79	50.74
Capitellidae	1	2.7	0.04	0.11	2	5.4	0.87	2.35	10	27.0	0.67	1.81	2	5.4	0.17	0.46
Scolecoplepides viridis	1	2.7	2.36	6.37	21	56.7	2.84	7.67	30	81.0	8.19	22.12	13	35.1	3.64	9.83
Prionospio sp.	-	-	-	-	-	-	-	-	6	16.2	1.02	2.75	-	-	-	-
Dispio uncinata	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	0.39	1.05
Aricidea jeffreysii	-	-	-	-	1	2.7	1.85	5.00	-	-	-	-	-	-	-	-
Onuphis opalina	-	-	-	-	-	-	-	-	2	5.4	0.67	1.81	-	-	-	-

Appendix Table 3. (cont.)

	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
Magelona rosea	10	27.0	4.67	12.61	136	367.3	45.10	121.79	19	51.3	3.96	10.69	12	32.4	3.41	9.21
Scoloplos sp.	-	-	-	-	1	2.7	0.37	1.00	4	10.8	0.03	0.08	-	-	-	-
Tharyx acutus	1	2.7	0.63	1.84	10	27.0	1.87	5.05	23	62.1	2.45	6.62	15	40.5	3.76	10.15
Asabellides oculata	1	2.7	0.23	0.62	-	-	-	-	9	24.3	0.01	0.03	-	-	-	-
Ampharetida	-	-	-	-	-	-	-	-	-	-	-	-	7	18.9	0.72	1.94
Polychaeta	fragments	-	0.16	0.43	fragment	-	0.11	0.30	-	-	-	-	-	-	-	-
Calanoida	-	-	-	-	-	-	-	-	-	-	-	-	18	48.6	0.71	1.92
Leptocuma minor	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	0.60	1.62
Oxyurostylis smithi	3	8.1	0.59	1.59	-	-	-	-	14	37.8	2.31	6.24	6	16.2	1.15	3.11
Chiridotea tuftsi	1	2.7	0.35	0.95	-	-	-	-	1	2.7	2.19	5.91	-	-	-	-
Edotea triloba	-	-	-	-	-	-	-	-	4	10.8	0.73	1.97	2	5.4	0.97	2.62
Corophium tuberculatum	-	-	-	-	-	-	-	-	2	5.4	0.26	0.70	-	-	-	-
Unciola irrorata	-	-	-	-	-	-	-	-	2	5.4	0.04	0.11	-	-	-	-
Protohaustorius deichmannae	-	-	-	-	24	64.8	4.43	11.96	2	5.4	0.48	1.30	43	116.1	14.15	38.21
Protohaustorius wigleyi	15	40.5	7.54	20.36	-	-	-	-	-	-	-	-	-	-	-	-
Acanthohaustorius millsi	3	8.1	4.15	11.21	6	16.2	2.61	7.05	-	-	-	-	-	-	-	-
Jassa falcata	-	-	-	-	-	-	-	-	-	-	-	-	16	43.2	2.99	8.07
Monoculodes edwardsi	-	-	-	-	-	-	-	-	4	10.8	0.82	2.21	2	5.4	0.32	0.86
Synchelidium americanum	-	-	-	-	1	2.7	0.24	0.65	-	-	-	-	2	5.4	0.29	0.78
Microprotopus raneyi	-	-	-	-	-	-	-	-	1	2.7	0.13	0.35	-	-	-	-
Trichophoxus epistomus	13	35.1	8.61	23.25	-	-	-	-	-	-	-	-	2	5.4	0.28	0.76
Stenothoe minuta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caprella equilibra	-	-	-	-	-	-	-	-	1	2.7	0.61	1.65	39	105.3	13.64	36.83
Mysidopsis bigelowi	1	2.7	0.81	2.19	6	16.2	1.91	5.16	13	35.1	2.64	7.13	7	18.9	1.20	3.24
Neomysis americana	1	2.7	0.13	0.35	-	-	-	-	4	18.0	1.65	4.46	-	-	-	-
Crangon septemspinosa	-	-	-	-	1	2.7	1.20	3.24	-	-	-	-	2	5.4	29.37	79.31
Ammodytes sp. ^f	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-
No. Bivalvia	23	62.1	43.70	118.01	31	83.7	13.09	35.35	209	564.4	49.96	134.92	125	337.6	45.00	121.52
No. Polychaeta	43	116.1	94.96	256.44	185	499.6	105.43	290.12	160	432.1	70.14	189.41	78	210.6	171.63	463.49
No. Amphipoda	31	83.7	20.30	54.82	31	83.7	7.28	19.66	11	29.7	1.73	4.67	65	175.5	18.03	48.69
No. Echinodermata	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
No. Taxa	19	-	-	-	19	-	-	-	32	-	-	-	27	-	-	-
No. Specimens	105	283.6	160.92	434.57	260	702.1	595.82	1614.42	425	1147.1	331.78	895.98	352	950.6	370.89	1001.59
Diversity Index	2.15	-	-	-	1.66	-	-	-	2.28	-	-	-	2.46	-	-	-

a See Table 164 for grain size classification.

b Number of specimens collected from 7 drops of the ponar grab.

c Average number of specimens per m².

d Weight of specimens collected from 7 drops of the ponar grab.

e Average weight of specimens per m².

f Not included in totals.

Appendix Table 4. Number of macroinvertebrates taken with a ponar grab approximately 1.8 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	5161	5161	5161	5161	5161	5161	5161	5161	5161	5161	5161	
Depth (feet)	20	17	21	19	20	15	20	22	24	22	20	
Coll. No.	EVG-74-009	EVG-74-025	EVG-74-042	EVG-74-056	JJH-74-058	JJH-74-080	EVG-74-072	JJH-74-092	EVG-74-096	EVG-74-104	JJH-74-153	
Date	25 January	13 February	25 March	26 April	23 May	14 June	15 July	29 August	23 September	11 October	15 November	
Hour	0955	1430	1055	1200	1440	1225	1420	1205	1145	1300	1430	
Tide	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Flood 2	Flood 2	Ebb 2	Flood 1	Flood 2	Flood 1	
Air Temp. (C)	4.5	8.5	1.0	13.0	21.0	24.0	27.0	26.0	19.5	17.5	8.0	
Temp. (C), surface	5.0	3.0	4.5	10.0	12.0	22.0	24.5	25.0	20.3	16.0	10.0	
bottom	5.0	3.0	4.5	9.5	14.0	20.0	23.0	25.0	20.3	16.0	10.5	
Salinity (ppt), surface	28.0	30.0	30.0	30.0	30.0	29.0	30.0	30.0	30.0	30.5	30.0	
bottom	29.0	31.0	29.5	30.2	30.5	29.5	30.0	30.0	30.0	30.5	30.5	
Oxygen (ppm), surface	10.4	11.9	10.8	9.6	8.8	6.0	7.5	7.4	6.9	7.2	8.9	
bottom	10.4	11.4	11.0	9.0	8.0	7.8	7.4	7.8	6.5	7.2	8.9	
Secchi (feet)	7.0	4.0	5.0	4.0	2.5	13.0	10.0	5.5	7.0	7.0	2.5	
Sediment ^a	VFS	FS + VFS	VFS	VFS	VFS	VFS + FS	FS + VFS	FS + VFS	FS	FS + VFS	FS + VFS	
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Lovenella sp.	-	-	-	-	-	-	-	-	-	-	present	-
Liriope sp.	-	-	-	-	-	-	-	-	-	-	present	-
Margelopsis gibbesi	-	-	-	common	-	common	-	-	-	-	-	-
Obelia sp.	-	-	-	-	present	-	-	-	-	-	-	-
Cerebratulus lacteus	-	-	-	-	-	-	2	5.4	-	-	-	-
Nemertea	6	16.2	1	2.7	1	2.7	3	8.1	fragments	5	13.5	fragments
Sagitta sp.	-	-	4	10.8	21	56.7	13	35.1	-	-	-	-
Crepidula convexa	-	-	-	-	-	-	-	-	1	2.7	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	1	2.7
Polinices heros	-	-	-	-	-	-	5	13.5	2	5.4	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	4	10.8	1	2.7
Acanthodoris pilosa	-	-	-	-	-	-	-	-	1	2.7	-	-
Nudibranchia	-	-	-	-	-	1	2.7	-	-	-	-	-
Mytilus edulis spat	-	-	-	-	-	-	common	-	-	-	-	-
Petricola pholadiformis	-	-	-	-	-	-	-	-	-	-	1	2.7
Spisula solidissima	52	140.4	25	67.5	32	86.4	50	135.0	197	532.0	250	675.1
Mulinia lateralis	-	-	-	-	-	-	-	-	-	1	2.7	-
Tellina agilis	21	56.7	19	51.3	11	29.7	85	229.5	430	1161.2	212	572.5
Donax fossor	-	-	3	8.1	-	-	-	-	-	-	-	-
Ensis directus	2	5.4	-	-	-	-	9	24.3	3	8.1	-	-
Siliqua costata	3	8.1	3	8.1	-	-	4	10.8	8	21.6	-	-
Bivalvia	-	-	-	-	-	-	-	1	2.7	-	-	-
Loligo pealei	-	-	-	-	-	-	-	-	-	-	-	-
Phyllodoce arenae	-	-	-	-	-	-	-	-	-	-	1	2.7
Paranaitis sp.	-	-	-	-	-	-	2	5.4	-	-	-	2
Eteone heteropoda	-	-	-	-	-	-	-	-	-	-	1	2.7
Sthenelais boa	-	-	-	2	5.4	-	-	2	5.4	-	-	-
Sthenelais limicola	-	-	-	-	-	2	5.4	-	1	2.7	-	1
Glycera capitata	-	-	-	-	-	-	-	-	1	2.7	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	1	2.7	-
Glycinde solitaria	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys bucera	11	29.7	4	10.8	9	24.3	3	8.1	5	13.5	6	16.2

Appendix Table 4. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Nephtys picta	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	1	2.7	-	-	4	10.8
Nereis succinea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-
Capitellidae	2	5.4	-	-	4	10.8	23	62.1	14	37.8	-	-	-	-	-	-	1	2.9	-	-	-	-
Scolecoplepides viridis	5	13.5	-	-	5	13.5	17	45.9	45	121.5	11	29.7	1	2.7	13	35.1	298	804.8	14	37.8	-	-
Streblospio benedicti	-	-	-	-	-	-	1	2.7	-	-	-	-	1	2.7	2	5.4	4	10.8	14	37.8	11	29.7
Scolecoplepis squamata	2	5.4	-	-	-	-	-	-	-	-	4	10.8	-	-	-	-	6	16.2	-	-	-	-
Prionospio sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dispio uncinata	2	5.4	2	5.4	1	2.7	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-
Spionidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	-
Onuphis opalina	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	-	-	-	-	-	-
Orbinia swani	2	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-
Magelona rosea	2	5.4	-	-	2	5.4	1	2.7	1	2.7	12	32.4	2	5.4	26	70.2	-	-	15	40.5	1	2.7
Scoloplos robustus	-	-	-	-	-	-	-	-	-	-	-	-	12	32.4	-	-	-	-	-	-	-	-
Scoloplos acutus	4	10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scoloplos sp.	3	8.1	6	16.2	2	5.4	7	18.9	5	13.5	14	37.8	-	-	1	2.7	2	5.4	7	18.9	1	2.7
Tharyx acutus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	21.6	40	108.0	6	16.2	2	5.4
Pectinaria gouldi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asabellides oculata	1	2.7	-	-	-	-	-	-	172	464.5	84	226.8	16	43.2	-	-	83	224.1	-	-	1	2.7
Ampharetidae	-	-	-	-	12	32.4	24	64.8	-	-	-	-	-	-	1	2.7	-	-	4	10.8	-	-
Pherusa affinis	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-
Polychaeta	-	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-
Calanoida	-	-	2	5.4	33	89.1	10	27.0	-	-	-	-	-	3	8.1	-	-	-	-	-	-	-
Leptognatha caeca	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclaspis varians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxyurostylis smithi	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	6	16.2	-	-	-	-
Chiridotea tuftsi	-	-	-	-	-	-	-	-	3	8.1	-	-	-	-	2	5.4	31	83.7	2	5.4	2	5.4
Edotea triloba	6	16.2	2	5.4	1	2.7	10	27.0	63	170.1	13	35.1	2	5.4	12	32.4	281	758.8	-	-	9	24.3
Corophium tuberculatum	-	-	-	-	-	-	-	-	1	2.7	-	-	6	16.2	-	-	-	-	-	-	-	-
Cerapus tubularis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gammarus lawrencianus	-	-	-	-	-	-	4	10.8	14	37.8	1	2.7	1	2.7	1	2.7	316	853.4	-	-	2	5.4
Bathyporeia quoddyensis	4	10.8	9	24.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protohaustorius	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
deichmannae	269	726.4	467	1261.1	50	135.0	38	102.6	46	124.2	710	1917.4	428	1155.8	19	51.3	-	-	22	59.4	144	388.9
Parahaustorius longimerus	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parahaustorius sp.	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthohaustorius millsii	19	51.3	75	202.5	2	5.4	-	-	1	2.7	65	175.5	80	216.0	2	5.4	-	-	-	-	8	21.6
Psammonyx nobilis	3	8.1	3	8.1	-	-	1	2.7	8	21.6	5	13.5	22	89.4	-	-	-	-	1	2.7	-	-
Monoculodes edwardsi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	3	8.1	-	-	6	16.2
Synchelidium americanum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	3	8.1	-	-	
Microprotopus raneyi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	13.5	5	13.5	-	-	
Trichophoxus epistomus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-
Paraphoxus spinosus	-	-	1	2.7	-	-	-	-	-	-	-	-	1	2.7	1	2.7	-	-	-	-	-	-
Parametopella cypris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	fragments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7
Mysidopsis bigelowi	1	2.7	1	2.7	-	-	3	8.1	-	-	2	5.4	3	8.1	3	8.1	4	10.8	32	86.4	2	5.4
Neomysis americana	-	-	19	51.3	4	10.8	9	24.3	17	45.9	5	13.5	2	5.4	644	1239.1	32	86.4	-	-	1	2.7
Crangon septemspinosa	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	2	5.4	-	-	1	2.7	-	-
Crangon septemspinosa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
mysis stage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	-	-	-	-	1	2.7	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-
Pagurus longicarpus sub-adult	-	-	-	-	-	-	-	-	-	-	2	5.4	2	5.4	5	13.5	-	-	-	-	1	2.7
Pagurus sp. glaucothoe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-
Pagurus sp. zoea	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-
Anomura zoea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	24.3	-	-	-	-	-
Cancer irroratus	fragments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-
Cancer irroratus magalopa	-	-	-	-	-	-	-	-	-	-	32	86.4	3	8.1	-	-	-	-	-	-	-	-
Ovalipes ocellatus	1	2.7	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-

Appendix Table 4. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Callinectes sapidus megalopa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-
Xanthidae zoea	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	-	2	2.7	-	-	-	-	-	-	-	-	-
Bothidae larvae ^d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	
Unidentified fragment	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. Bivalvia	78	210.6	50	135.0	43	116.4	139	375.4	645	1741.8	465	1255.7	142	383.5	43	116.1	91	245.7	22	59.4	20	54.0
No. Polychaeta	34	91.8	12	32.4	37	99.9	79	213.3	246	664.3	136	367.3	36	97.2	65	175.5	448	1209.8	76	205.2	51	137.7
No. Amphipoda	295	796.7	557	1504.4	52	140.4	43	116.1	70	189.0	781	2109.1	538	1452.9	25	67.5	324	875.0	28	75.6	161	434.8
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	5.4	0	0.0	0	0.0	0	0.0	0	0.0
No. Taxa	22	-	21	-	20	-	22	-	24	-	26	-	25	-	33	-	25	-	20	-	26	-
No. Specimens	421	1136.9	649	7143.7	221	596.8	310	837.2	1049	2832.8	1446	3904.9	738	1993.0	828	2236.0	1330	3591.7	170	459.1	251	677.8
Diversity Index	1.41	-	1.12	-	2.49	-	2.25	-	1.82	-	1.64	-	1.38	-	1.08	-	2.01	-	2.34	-	1.65	-

a 'See Table 164 for grain size classification.

b Number of specimens collected from 7 drops of the ponar grab.

c Average number of specimens per m².

d Not included in totals.

Appendix Table 5. Number of macroinvertebrates taken with a ponar grab approximately 2.5 nautical miles NE of Little Egg Inlet, New Jersey in 1974.

Zone	5143	5143	5143	5143	5143	5143	5143	5143	5143	5143	5143	
Depth (feet)	34	26	25	25	28	24	20	26	33	26	25	
Coll. No.	EVG-74-011	EVG-74-020	EVG-74-038	EVG-74-050	JJH-74-052	JJH-74-076	EVG-74-068	JJH-74-088	EVG-74-092	EVG-74-099	JJH-74-149	
Date	25 January	13 February	25 March	26 April	23 May	14 June	15 July	29 August	23 September	11 October	15 November	
Hour	1125	1040	1400	0908	1315	0930	0940	0934	0930	0905	1105	
Tide	Ebb 2	Flood 2	Ebb 2	Ebb 2	Ebb 2	Flood 1	Ebb 2	Ebb 2	Flood 1	Ebb 2	Ebb 1	
Air Temp. (C)	6.0	6.0	2.0	12.2	20.0	20.5	27.0	27.0	18.0	17.0	9.0	
Temp. (C), surface	5.0	3.0	5.5	9.0	12.5	19.5	23.0	23.5	19.5	16.0	10.5	
Temp. (C), bottom	5.0	3.0	5.0	9.0	11.0	19.5	22.5	22.0	19.5	15.5	10.5	
Sal. (ppt), surface	28.5	29.0	29.0	31.0	31.0	29.5	29.5	30.0	30.0	30.5	30.5	
Sal. (ppt), bottom	30.0	31.0	30.0	31.0	31.0	29.5	29.5	30.0	30.0	30.5	30.5	
Oxygen (ppm), surface	10.6	11.2	10.6	9.4	8.0	8.5	7.2	7.2	7.0	8.2	8.4	
Oxygen (ppm), bottom	10.4	11.0	11.0	9.4	8.0	9.0	7.4	9.0	6.7	8.2	8.9	
Secchi (feet)	9.5	5.0	4.0	4.0	3.5	10.0	13.0	17.0	6.0	6.0	4.0	
Sediment ^a	VFS	VFS	VFS/VFS	VFS	FS + VFS	VFS/VFS	FS + VFS	FS + VFS	FS + VFS	FS + VFS	FS + VFS	
	n ^b	n/m ^{2c}	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Margelopsis gibbesi	-	-	-	common	-	common	-	sparse	-	-	-	-
Hydractinia echinata	-	-	-	present	-	-	-	-	-	-	-	-
Obelia sp.	-	-	-	-	-	-	-	-	-	-	-	present
Embryonated Hydrozoa eggs	-	-	-	-	-	-	-	-	-	-	-	present
Platyhelminthes	-	1	2.7	-	-	-	-	-	-	-	-	-
Cerebratulus lacteus	-	-	-	-	-	-	-	-	-	2	5.4	-
Nemertea	5	13.5	2	5.4	-	1	2.7	-	6	16.2	236	40
Nematoda	-	-	-	sparse	-	sparse	-	-	-	rare	-	-
Sagitta sp.	-	3	8.1	6	16.2	11	29.7	3	8.1	-	-	-
Amathia viduicci	-	-	-	-	-	-	-	-	-	-	-	present
Crepidula plana	-	-	-	-	-	-	-	-	1	2.7	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	1	2.7	-
Polinices heros	1	2.7	-	-	-	-	1	2.7	-	-	-	-
Polinices sp. eggs	-	-	-	-	-	-	-	-	present	present	-	-
Nassarius trivittatus	-	-	2	5.4	5	13.5	-	-	3	8.1	-	11
Nassarius trivittatus eggs	-	-	-	-	-	-	-	present	-	present	-	-
Turbonilla interrupta	-	-	-	-	-	-	-	-	-	-	-	11
Yoldia limatula	-	-	-	-	-	-	-	-	-	1	2.7	-
Mytilus edulis spat	-	-	sparse	-	-	rare	-	-	-	-	-	-
Spisula solidissima	175	472.6	161	434.8	96	259.2	92	248.4	633	1709.4	630	1701.3
Mulinia lateralis	-	-	-	-	-	-	-	-	-	4	10.8	-
Tellina agilis	28	75.6	18	48.6	28	75.6	63	170.1	200	540.1	325	877.7
Donax fossor	1	2.7	-	-	-	-	-	-	-	-	-	-
Ensis directus	-	-	-	-	-	1	2.7	3	8.1	9	24.3	-
Siliqua costata	16	43.2	15	40.5	9	24.3	14	37.8	16	43.2	8	21.6
Phyllodoce arenae	-	-	-	-	-	-	-	-	-	-	1	2.7
Paranaitis kosteriensis	-	-	-	-	-	-	-	9	24.3	3	8.1	-
Mystides borealis	-	-	-	-	-	1	2.7	-	-	-	-	-
Eteone heteropoda	-	-	-	-	-	-	-	-	-	-	-	2
Antinoella sarsi	-	-	-	1	2.7	-	-	4	10.8	-	-	-
Sthenelais boa	7	18.9	-	-	-	-	-	-	-	-	-	2
Sthenelais limicola	-	-	6	16.2	1	2.7	4	10.8	5	13.5	3	8.1
										5.4 fragment	-	3

Appendix Table 5. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
Sthenelais sp.	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glycera capitata	2	5.4	1	2.7	-	-	1	2.7	-	-	-	-	-	-	-	37	99.9	-	-	-	-	
Glycera americana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	48.6	8	21.6	-	-	
Glycera dibranchiata	-	-	-	-	-	-	-	-	-	fragments	-	-	-	-	-	-	-	-	-	-	-	
Glycera sp.	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	
Glycinde solitaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	32.4	1	2.7	-	-	
Nephtys buccera	25	67.5	21	56.7	9	24.3	4	10.8	16	43.2	12	32.4	5	13.5	18	48.6	7	18.9	3	8.1	14	37.8
Nephtys picta	-	-	3	8.1	-	-	1	2.7	1	2.7	-	-	-	-	-	1	2.7	-	-	8	21.6	
Nephtys sp.	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	fragments	-	-	
Nereis succinea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	
Capitellidae	56	151.2	30	81.0	27	72.9	10	27.0	207	559.0	123	332.2	-	-	27	72.9	509	1374.6	153	413.2	1	2.7
Spio setosa	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	
Scolecoplepides viridis	50	135.0	20	54.0	41	110.7	12	32.4	508	1371.9	19	51.3	7	18.9	6	16.2	16	43.2	11	29.7	16	43.2
Streblospio benedicti	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	557	1504.2	32	86.4	-	-	
Scolecopsis squamata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	
Dispio uncinata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	
Spionidae	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	1	2.7	
Onuphis apalina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	2	5.4	
Lumbrineris fragilis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	-	-	
Magelona rosea	3	8.1	-	-	1	2.7	-	-	-	-	2	5.4	1	2.7	17	45.9	2	5.4	1	2.7	15	40.5
Orbinia swani	-	-	-	-	-	-	2	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
Orbinia sp.	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	2	5.4	
Scoloplos robustus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	1	2.7	-	-	-	
Scoloplos sp.	-	-	-	-	-	-	-	-	-	-	-	-	7	18.9	-	-	-	-	-	1	2.7	
Tharyx acutus	1	2.7	-	-	-	-	-	1	2.7	1	2.7	-	-	-	-	175	472.6	38	102.6	1	2.7	
Asbellides aculata	42	113.4	15	40.5	36	97.2	24	64.8	300	810.2	105	283.6	19	51.3	5	13.5	13	35.1	29	78.3	6	16.2
Pherusa affinis	-	-	-	-	-	-	-	-	1	2.7	2	5.4	3	8.1	-	-	-	-	-	-	-	
Polychaeta	-	-	-	-	fragmenta	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	fragments	-	-	
Hirudinea	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	
Limulus polyphemus eggs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Calanoida	-	-	1	2.7	13	35.1	-	-	-	-	-	-	-	-	-	-	-	-	-	8	21.6	
Cyclaspis varians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	18.9	3	8.1	-	-	
Leptocuma minor	-	-	1	2.7	3	8.1	1	2.7	-	-	2	5.4	-	-	-	-	-	-	-	-	-	
Oxyurostylis smithi	-	-	-	-	5	13.5	4	10.8	2	5.4	-	-	-	2	5.4	13	35.1	16	43.2	3	8.1	
Chiridotea coeca	17	45.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chiridotea tuftsi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	
Edotea triloba	-	-	6	16.2	5	13.5	22	59.4	50	135.0	19	51.3	2	5.4	-	-	90	243.0	6	16.2	6	16.2
Isopoda	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	
Hyperideae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5.4	-	-	
Ampelisca verrilli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	
Corophium tuberculatum	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	7	18.9	-	-	
Cerapus tubularis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	5	13.5	-	-	-	
Erichthonius rubicornis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	-	
Unciola irrorata	-	-	-	-	-	-	-	-	1	2.7	4	10.8	-	-	-	-	-	-	-	-	-	
Gammarus lawrencianus	-	-	-	-	-	-	4	10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gammarus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	
Elasmopus levis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	10.8	-	
Bathyporeia quoddyensis	2	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Protohaustorius	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
deichmannae	12	32.4	5	13.5	3	8.1	3	8.1	-	-	-	-	191	515.8	54	145.8	-	-	-	-	146	394.3
Protohaustorius wigleyi	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Appendix Table 5. (cont.)

	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²	n	n/m ²
<i>Acanthoautorius millsi</i>	6	16.2	-	-	-	-	-	-	-	-	-	4	10.8	-	-	-	-	-	-	6	16.2	
<i>Jassa falcata</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	8	21.6	12	32.4	1	2.7	-	-	
<i>Monoculodes edwardsi</i>	21	56.7	1	2.7	-	-	-	-	-	1	2.7	-	-	-	-	-	-	-	-	-	-	
<i>Synchelidium americanum</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8.1	6	16.2	
<i>Aeginina longicornis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	
<i>Caprella equilibra</i>	-	-	-	-	-	-	-	-	-	-	-	-	6	16.2	-	-	-	2	5.4	-	-	
<i>Mysidopsis bigelowi</i>	1	2.7	-	-	21	56.7	7	18.9	-	-	-	2	5.4	14	37.8	12	32.4	45	121.5	2	5.4	
<i>Neomysis americana</i>	2	5.4	12	32.4	15	40.5	19	51.3	33	89.1	8	21.6	1	2.7	85	229.5	15	40.5	18	48.6	2	5.4
<i>Penaeidae mysis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	
<i>Crangon septemspinosa</i>	-	-	2	5.4	2	5.4	-	-	2	5.4	1	2.7	1	2.7	1	2.7	-	-	-	-	-	
<i>Crangon septemspinosa mysis</i>	-	-	-	-	-	-	-	-	-	-	-	5	13.5	-	-	-	-	-	-	-	-	
<i>Emerita talpoida zoea</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	
<i>Pagurus longicarpus</i>	-	-	-	-	5	13.5	1	2.7	-	-	-	2	5.4	2	5.4	1	2.7	1	2.7	-	-	
<i>Pagurus sp. zoea</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	1	2.7	-	-	
<i>Libinia emarginata</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	
<i>Cancer irroratus</i>	-	-	-	-	1	2.7	-	-	-	-	21	56.7	1	2.7	-	-	-	-	-	-	-	
<i>Cancer irroratus megalopa</i>	-	-	-	-	-	-	-	-	-	-	9	24.3	-	-	-	-	-	-	-	-	-	
<i>Ovalipes ocellatus</i>	1	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Callinectes sapidus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	-	-	-	-	
<i>Xanthidae zoea</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8.1	-	-	-	-	-	-	
<i>Asterias forbesi</i>	-	-	-	-	-	-	-	-	-	-	-	6	16.2	-	-	-	-	1	2.7	-	-	
<i>Ascidacea</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.7	
Unidentified fragments	-	-	-	-	-	-	-	-	-	-	-	-	fragments	-	-	-	-	-	-	-	-	
No. Bivalvia	220	594.1	194	523.9	133	359.2	170	459.1	852	2300.8	972	2624.9	538	1452.9	53	143.1	187	505.0	27	72.9	8	21.6
No. Polychaeta	186	502.3	96	259.2	118	318.7	59	159.3	1053	2843.6	271	731.8	46	124.2	75	202.5	1357	3664.6	289	780.4	72	194.4
No. Amphipoda	42	113.4	6	16.2	4	10.8	7	18.9	2	5.4	4	10.8	196	529.3	64	172.8	18	48.6	16	40.5	158	426.7
No. Echinodermata	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	16.2	0	0.0	0	0.0	1	2.7	0	0.0
No. Taxa	23	-	21	-	26	-	23	-	23	-	22	-	24	-	24	-	34	-	34	-	30	-
No. Specimens	475	1282.7	326	880.4	337	910.1	302	815.6	1998	5395.6	1313	3545.8	803	2168.5	314	848.0	1951	5268.7	472	1274.6	279	753.4
Diversity Index	2.16		1.86		2.34		2.17		1.79		1.57		1.51		2.21		2.03		2.39		1.95	

a See Table 164 for grain size classification.

b Number of specimens collected from 7 drops of the ponar crab

c Average number of specimens per m².

Appendix Table 6. Number and weight of macroinvertebrates taken with a ponar grab approximately 300 yards E of F1 "96" in Little Egg Inlet, New Jersey in 1974.

Zone	1010				1010				1010				1010			
Depth (feet)	4				3				5				6			
Coll. No.	JJH-74-006				JJH-74-021				EVG-74-047				EVG-74-059			
Date	7 January				19 February				27 March				25 April			
Hour	1200				1020				1148				1140			
Tide	Ebb 1				Ebb 1				Ebb 1				Ebb 2			
Air Temp. (C)	6.0				5.0				3.0				9.0			
Temp. (C), surface	5.0				2.5				4.5				9.5			
bottom	5.0				2.5				4.5				9.0			
Sal. (ppt), surface	28.0				27.0				29.5				30.5			
bottom	28.0				27.0				29.5				30.5			
Oxygen (ppm), surface	10.0				11.0				10.1				8.5			
bottom	10.0				11.0				10.1				9.0			
Secchi (feet)	3.5				3.0				3.5				2.5			
	n ^a	n/m ^{2b}	g x 10 ^{3c}	g x 10 ^{3/m^{2d}}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}	n	n/m ²	g x 10 ³	g x 10 ^{3/m²}
Porifera	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Sagitta sp.	-	-	-	-	-	-	-	-	-	-	-	-	6	22.7	5.26	19.89
Mytilus edulis spat ^e	-	-	-	-	1	3.8	0.01	0.04	-	-	-	-	-	-	-	-
Spisula solidissima	1	3.8	1.55	5.86	1	3.8	1.07	4.05	4	15.1	0.57	2.16	1	3.8	0.07	0.26
Spisula solidissima	-	-	-	-	-	-	-	-	1	3.8	11162.32 ^e	42201.59 ^e	fragment	-	6379.94 ^e	24120.76 ^e
Tellina agilis	-	-	-	-	1	3.8	0.69	2.61	-	-	-	-	-	-	-	-
Caprellidae	-	-	-	-	1	3.8	0.07	0.26	-	-	-	-	-	-	-	-
Streblospio benedicti	-	-	-	-	1	3.8	0.32	1.21	-	-	-	-	-	-	-	-
Calanoida	-	-	-	-	-	-	-	-	7	26.5	1.15	4.35	1	3.8	0.40	1.51
Leptocuma minor	-	-	-	-	6	22.7	0.88	3.33	-	-	-	-	-	-	-	-
Bathyporeia quoddyensis	31	117.2	7.99	30.21	10	37.8	23.0	8.70	-	-	-	-	-	-	-	-
Protohaustorius deichmannae	-	-	-	-	6	22.7	1.73	6.54	-	-	-	-	1	3.8	0.94	3.55
Parahaustorius longimerus	12	45.4	5.12	19.36	15	56.7	5.13	19.40	7	26.5	8.33	31.49	16	60.5	20.71	78.30
Acanthohaustorius millsi	1	3.8	0.43	1.63	6	22.7	4.28	16.18	3	11.3	1.43	5.41	15	56.7	11.90	44.99
Orchomenella pinguis	-	-	-	-	1	3.8	0.80	3.02	-	-	-	-	-	-	-	-
Neomysis americana	-	-	-	-	-	-	-	-	1	3.8	0.66	2.50	1	3.8	1.87	7.07
Crangon septemspinosa	2	7.6	122.09	461.59	-	-	-	-	-	-	-	-	-	-	-	-
No. Bivalvia	1	3.8	1.55	5.86	2	7.6	1.77	6.69	5	18.9	0.57	2.16	1	3.8	0.07	0.26
No. Polychaeta	0	0.0	0.00	0.00	2	7.6	0.39	1.47	0	0.0	0.00	0.00	0	0.0	0.00	0.00
No. Amphipoda	44	166.4	13.54	51.19	38	143.7	14.24	53.84	10	37.8	9.76	36.90	32	121.0	33.55	126.84
No. Echinodermata	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
No. Taxa	5	-	-	-	10	-	-	-	5	-	-	-	7	-	-	-
No. Specimens	47	177.7	137.18	518.64	48	181.5	17.28	65.33	23	87.0	12.14	45.90	41	155.0	41.15	155.58
Diversity Index	0.81	-	-	-	1.62	-	-	-	1.29	-	-	-	1.19	-	-	-

Appendix Table 6. (cont.)

Zone	1010				1010				1010				1010			
Depth (feet)	7				7				6				5			
Coll. No.	JH-74-047A				JH-74-071				FAS-74-013				EVG-74-081			
Date	21 May				13 June				18 July				15 August			
Hour	1030				1005				1135				1030			
Tide	Ebb 1				Flood 1				Ebb 2				Ebb 2			
Air Temp. (C)	28.0				21.0				26.5				24.0			
Temp. (C), surface	14.5				21.0				24.0				21.5			
bottom	14.0				22.0				23.5				21.5			
Sal. (ppt), surface	30.0				28.0				29.0				30.0			
bottom	30.0				28.0				29.0				30.0			
Oxygen (ppm), surface	7.2				6.3				5.3				8.2			
bottom	7.0				6.2				5.2				8.2			
Secchi (feet)	5.5				5.0				5.0				4.5			
	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
Hydractinia echinata	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Lovenella sp.	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nemertea	3	11.3	0.57	2.16	1	3.8	0.18	0.68	10	37.8	3.07	11.61	1	3.8	0.67	2.53
Nematoda	rare	-	-	-	-	-	-	-	-	-	-	-	rare	-	-	-
Crepidula fornicata	2	7.6	1.58	5.97	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula convexa	-	-	-	-	1	3.8	1.26	4.76	-	-	-	-	-	-	-	-
Acanthodoris pilosa	1	3.8	0.13	0.49	1	3.8	0.55	2.08	-	-	-	-	-	-	-	-
Mytilus edulis spat	348	1319.5	401.54	1518.11	~ 3300	12476.4	12779.23	48314.67	-	-	-	-	-	-	-	-
Spisula solidissima	71	268.4	32.68	123.55	50	189.0	241.88	912.59	41	155.0	122.85	464.46	15	56.7	8.00	30.25
Tellina agilis	49	185.3	7.53	28.47	19	71.8	5.45	20.60	249	941.4	123.36	466.39	3	11.3	0.05	0.19
Ensis directus	-	-	-	-	-	-	-	-	1	3.8	0.25	0.95	-	-	-	-
Siliqua costata	1	3.8	1.17	4.42	-	-	-	-	-	-	-	-	-	-	-	-
Antinoella sarsi	-	-	-	-	1	3.8	~ 0.14	0.53	-	-	-	-	-	-	-	-
Nephtys bucera	2	7.6	4.85	18.34	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys picta	-	-	-	-	-	-	-	-	1	3.8	0.60	2.27	-	-	-	-
Caprellidae	1	3.8	0.22	0.83	-	-	-	-	17	64.3	1.99	7.52	1	3.8	0.10	0.38
Scolecoplepides viridis	-	-	-	-	-	-	-	-	30	113.4	16.55	62.57	-	-	-	-
Sureblosio benedicti	-	-	-	-	-	-	-	-	17	64.3	15.92	60.19	-	-	-	-
Scolecoplepis squamata	1	3.8	0.15	0.57	-	-	-	-	-	-	-	-	-	-	-	-
Polydora sp.	-	-	-	-	-	-	-	-	1	3.8	0.16	0.60	-	-	-	-
Paraonidae	-	-	-	-	-	-	-	-	-	-	-	-	1	3.8	0.01	0.04
Diopatra cuprea	-	-	-	-	-	-	-	-	1	3.8	107.14	405.07	-	-	-	-
Magelona rosea	1	3.8	0.45	1.70	-	-	-	-	-	-	-	-	1	3.8	0.87	3.29
Scoloplos sp.	1	3.8	2.10	7.94	-	-	-	-	1	3.8	0.62	2.34	-	-	-	-
Tharyx acutus	1	3.8	0.41	1.55	-	-	-	-	2	7.6	0.19	0.72	-	-	-	-
Asabellides oculata	-	-	-	-	-	-	-	-	11	41.6	5.33	20.15	-	-	-	-
Polychaeta	fragments	-	0.16	0.60	-	-	-	-	1, fragments	3.8	10.49	39.66	-	-	-	-
Oxyurostylis smithi	5	18.9	1.35	5.10	-	-	-	-	6	22.7	1.46	5.52	1	3.8	0.26	0.98
Idotea baltica	1	3.8	0.43	1.63	-	-	-	-	-	-	-	-	-	-	-	-
Callispius laeviusculus	-	-	-	-	1	3.8	0.25	0.95	-	-	-	-	-	-	-	-
Corophium tuberculatum	-	-	-	-	-	-	-	-	3	11.3	0.34	1.29	-	-	-	-
Unciola irrorata	-	-	-	-	-	-	-	-	1	3.8	0.27	1.02	-	-	-	-
Elasmopus levis	-	-	-	-	1	3.8	1.45	5.48	-	-	-	-	-	-	-	-
Bathyporeia quoddyensis	2	7.6	0.81	3.06	1	3.8	0.36	1.36	1	3.8	0.34	1.29	2	7.6	0.35	1.32
Protohaustorius deichmannae	86	325.1	31.92	120.68	26	98.3	6.74	25.48	11	41.6	1.09	4.12	26	98.3	5.01	18.94
Parahaustorius longimerus	4	15.1	6.50	24.57	-	-	-	-	1	3.8	0.08	0.30	24	90.7	12.31	46.54
Parahaustorius holmesii	-	-	-	-	-	-	-	-	1	3.8	0.08	0.30	-	-	-	-
Acanthohaustorius intermedius	4	15.1	1.30	4.91	-	-	-	-	-	-	-	-	1	3.8	0.11	0.42
Acanthohaustorius millsi	25	94.5	22.56	85.29	2	7.6	0.30	1.13	31	117.2	~ 25.13	95.01	34	128.5	7.38	27.90
Synchelidium americanum	1	3.8	0.08	0.30	-	-	-	-	-	-	-	-	-	-	-	-
Trichophoxus episternus	4	15.1	2.56	9.68	2	7.6	2.51	9.49	1	3.8	0.19	0.72	-	-	-	-
Paraphoxus spinosus	-	-	-	-	20	75.6	5.57	21.06	-	-	-	-	-	-	-	-
Caprella penantis	-	-	-	-	1	3.8	0.98	3.71	-	-	-	-	-	-	-	-

Appendix Table 6. (cont.)

	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
<i>Mysidopsis bigelowi</i>	-	-	-	-	-	-	-	-	1	3.8	0.22	0.83	-	-	-	-
<i>Neomysis americana</i>	-	-	-	-	-	-	-	-	14	52.9	1.57	5.94	-	-	-	-
<i>Palaemonetes</i> sp.	-	-	-	-	-	-	-	-	2	7.6	0.66	2.50	-	-	-	-
<i>Crangon septemspinosa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	1	3.8	98.03	370.62	13	49.1	712.22	2692.70	7	26.5	1064.36	4024.05	-	-	-	-
<i>Pagurus</i> sp. zoea	-	-	-	-	-	-	-	-	2	7.6	0.01	0.04	-	-	-	-
<i>Emerita talpoida</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	3.8	0.67	2.53
<i>Cancer irroratus</i>	-	-	-	-	49	185.3	106.14	401.29	-	-	-	-	-	-	-	-
<i>Cancer irroratus megalopa</i>	-	-	-	-	1	3.8	0.56	2.12	-	-	-	-	-	-	-	-
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	-	-	1	3.8	0.84	-	-	-	-	-
Xanthidae zoea	-	-	-	-	-	-	-	-	1	3.8	0.01	-	-	-	-	-
<i>Hippocampus erectus</i> ^e	-	-	-	-	-	-	-	-	1	3.8	-	-	-	-	-	-
No. Bivalvia	470	1776.9	442.92	1674.56	3369	12737.2	13026.06	49247.86	291	1100.2	246.46	931.80	18	68.1	8.05	30.43
No. Polychaeta	7	26.5	8.34	31.53	1	3.8	0.14	0.53	82	310.0	158.99	601.10	3	11.3	0.98	3.71
No. Amphipoda	126	476.4	65.73	248.51	53	200.4	17.18	64.95	50	189.0	27.52	104.05	87	328.9	25.16	95.12
No. Echinodermata	0	0.0	0.00	0.0	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
No. Taxa	23				17				30				13			
No. Specimens	616	2328.9	619.08	2340.57	3490	13194.7	13865.27	52420.68	467	1765.6	1505.17	5690.62	111	419.7	35.79	135.31
Diversity Index	1.45				0.31				1.82				1.62			

Zone	1010				1010				1010			
Depth (feet)	7				5				5			
Coll. No.	JJH-74-146				FAS-74-018				EVG-74-109			
Date	17 September				22 October				13 November			
Hour	1045				1000				1010			
Tide	Flood 2				Flood 1				Ebb 1			
Air Temp. (C)	27.0				6.5				13.0			
Temp. (C), surface	21.0				7.0				10.5			
bottom	21.0				7.0				11.0			
Sal. (ppt), surface	30.0				28.0				29.5			
bottom	30.0				29.0				29.5			
Oxygen (ppm), surface	6.6				8.5				8.9			
bottom	5.8				9.6				8.9			
Secchi (feet)	4.5				4.0				3.5			
	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²	n	n/m ²	g x 10 ³	g x 10 ³ /m ²
Cerebratulus lacteus	-	-	-	-	2	7.6	71.52	270.40	-	-	-	-
Nemertea	4	15.1	4.68	17.69	1	3.8	0.74	2.80	-	-	-	-
Nematoda	-	-	-	-	-	-	-	-	rare	-	-	-
Sagitta sp.	-	-	-	-	-	-	-	-	1	3.8	0.07	0.26
Spisula solidissima	2	7.6	9.45	35.73	1	3.8	2.4	9.30	1	3.8	0.34	1.29
Tellina agilis	-	-	-	-	-	-	-	-	1	3.8	1.04	3.93
Donax fossor	-	-	-	-	4	15.1	0.26	0.98	-	-	-	-
Phyllodoce arenae	-	-	-	-	1	3.8	0.05	0.19	-	-	-	-
Nephtys bucera	1	3.8	2.22	8.39	1	3.8	6.87	25.97	1	3.8	0.15	0.57
Scolecopelides viridis	-	-	-	-	2	7.6	4.66	17.62	1	3.8	0.19	0.72
Paraonidae	1	3.8	0.18	0.68	-	-	-	-	-	-	-	-
Magelona rosea	28	105.9	9.88	37.35	3	11.3	6.85	25.90	18	68.1	25.18	95.20
Scoloplos sp.	1	3.8	0.16	0.60	1	3.8	5.40	20.42	-	-	-	-
Polychaeta	fragments	-	0.90	3.40	1	3.8	-	-	fragments	-	1.67	6.31
Calanoida	-	-	-	-	-	-	-	-	33	124.8	0.34	1.29
Cyclaspis varians	-	-	-	-	-	-	-	-	1	3.8	4.05	15.31
Oxyurostylis smithi	-	-	-	-	-	-	-	-	1	3.8	0.20	0.76
Cumacea	-	-	-	-	-	-	-	-	1	3.8	0.09	0.34
Leptognatha caeca	-	-	-	-	1	3.8	0.04	0.15	2	7.6	0.07	0.26
Ampelisca abdita	3	11.3	0.37	1.40	-	-	-	-	-	-	-	-
Bathyporeia quoddyensis	4	15.1	0.62	2.34	-	-	-	-	5	18.9	1.04	3.93
Protohaustorius deichmannae	3	11.3	0.53	2.00	1	3.8	0.16	0.60	1	3.8	0.19	0.72
Protohaustorius wigleyi	-	-	-	-	-	-	-	-	1	3.8	0.15	0.57
Parahaustorius longimerus	14	52.9	16.85	63.71	49	185.3	23.96	90.59	45	170.1	25.18	95.20
Parahaustorius holmesi	-	-	-	-	1	3.8	0.12	0.45	-	-	-	-
Parahaustorius attenuatus	-	-	-	-	1	3.8	8.77	33.16	1	3.8	1.67	6.37
Parahaustorius sp.	8	30.2	0.61	2.31	-	-	-	-	-	-	-	-
Acanthohaustorius intermedius	-	-	-	-	1	3.8	0.89	3.36	-	-	-	-
Acanthohaustorius millsi	52	196.6	16.41	62.04	38	143.7	15.78	59.66	9	34.0	4.05	15.31
Jassa falcata	-	-	-	-	-	-	-	-	1	3.8	0.20	0.76
Amphipoda	fragments	-	0.69	2.61	-	-	-	-	-	-	-	-
Caprella equilibra	-	-	-	-	2	7.6	0.71	2.68	-	-	-	-
Fragments	-	-	-	-	present	-	81.17	306.88	present	-	41.46	156.75
Fish fragments	-	-	-	-	-	-	-	-	present	-	4.61	17.43
No. Bivalvia	2	7.6	9.45	35.73	5	18.9	2.72	10.28	2	7.6	1.38	5.22
No. Polychaeta	31	117.2	13.34	50.43	9	34.0	18.83	71.19	20	75.6	27.19	102.80
No. Amphipoda	84	317.6	36.08	136.41	91	344.0	49.68	187.83	63	238.2	32.48	122.80
No. Echinodermata	0	0.0	0.00	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0.00
No. Taxa	13	-	-	-	13	-	-	-	13	-	-	-
No. Specimens	121	457.5	63.55	240.28	111	419.7	225.41	852.21	124	468.8	107.33	405.78
Diversity Index	1.59	-	-	-	1.45	-	-	-	1.68	-	-	-

a Number of specimens collected from 5 drops of the ponar grab.

b Average number of specimens per m².

c Weight of specimens collected from 5 drops of the ponar grab.

d Average weight of specimens per m².

e Not included in totals.

Appendix Table 7. Number and weight (g) of macroinvertebrates in 15-minute hauls of a clam dredge in the vicinity of the Site off Little Egg Inlet, New Jersey in 1974.

Location	North of Site		Landward of Site I		Landward of Site II		Site	Ridge	South of Site		Ridge	Site	North of Site		Landward of Site II		Landward of Site I		South of Site	
Zone	5143		5158		5152		5255	5252	5161		5252	5255	5143		5152		5158		5161	
Depth (feet)	26		16		26		38	27	21		25	36	25		20		14		17	
Coll. No.	EVG-74-017		EVG-74-018		EVG-74-016		EVG-74-019	EVG-74-020	EVG-74-015		JJH-74-031	JJH-74-030	JJH-74-027		JJH-74-028		JJH-74-026		JJH-74-029	
Date	28 January		28 January		28 January		28 January	28 January	28 January		28 February	28 February	28 February		28 February		28 February		28 February	
Hour	1035-1050		1115-1130		1200-1215		1228-1243	1255-1310	1415-1430		1020-1035	1050-1105	1130-1145		1200-1215		1230-1245		1300-1315	
Tide	Flood 2		Ebb 1		Ebb 1		Ebb 1	Ebb 1	Ebb 2		Flood 2	Flood 2	Flood 2		Ebb 1		Ebb 1		Ebb 1	
Air Temp. (C)	10.0		9.5		9.0		9.5	9.0	9.5		7.5	7.5	7.5		7.5		7.5		7.5	
Temp. (C), surface	6.5		6.5		6.0		6.5	7.0	7.0		4.0	4.0	4.0		4.0		4.0		4.0	
bottom	6.0		6.0		6.0		6.0	6.0	7.0		4.0	4.0	4.0		4.0		4.0		4.0	
Sal. (ppt), surface	28.5		28.0		28.5		28.5	28.0	28.0		29.0	28.0	28.0		29.0		29.0		30.0	
bottom	30.0		30.0		30.0		30.0	30.0	29.0		30.0	29.0	30.0		29.0		30.0		30.0	
Oxygen (ppm), surface	-		-		-		-	-	-		10.6	10.8	10.4		10.2		10.2		10.8	
bottom	-		-		-		-	-	-		10.3	10.2	10.4		10.6		10.2		10.7	
Secchi (feet)	6.0		4.5		4.5		6.5	6.5	3.5		8.0	3.0	3.0		3.0		-		3.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Actiniaria	4	41	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nemertea	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	5	125	3	56	4	79	-	-	1	60	10	220	1	27	1	16	4	88	4	131
P. heros	1	11	3	57	-	-	-	-	2	20	1	7	-	-	1	14	1	19	-	10
Nassarius trivittatus	5	5	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pitar morrhuana	-	-	-	-	-	-	-	-	-	-	-	-	1	28	-	-	-	-	-	-
Spisula solidissima	49	11273	157	22890	12	2807	-	-	1	500	74	10581	7	1180	1	500	28	6685	61	11810
Glycera dibranchiata	5	10	1	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
Nephtys buccera	-	-	2	2	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-
Ophelia denticulata	-	-	-	-	-	-	-	-	8	19	-	-	-	-	-	-	-	-	-	-
Diopatra cuprea	-	-	-	-	-	-	-	-	2	5	-	-	-	-	-	-	-	1	2	-
Lumbrineris fragilis	-	-	-	-	-	-	1	a	-	-	-	-	-	-	-	-	-	-	-	-
Scoloplos robustus	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Crangon septemspinosus	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Libinia emarginata	1	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	5	221	6	542	8	723	6	413	-	-	3	137	-	-	5	159	2	247	-	3
Ovalipes ocellatus	-	-	16	518	-	-	-	-	-	-	-	-	-	-	-	-	14	477	-	-
Echinarachnius parma	-	-	-	-	-	-	-	-	3	21	-	-	1	7	-	-	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-
Total taxa	9		8		5		3		7		5		3		4		5		5	
Total specimens	77	11762	189	24068	26	3616	8	416	18	626	90	10946	9	1210	4	569	35	6879	70	2639

b Tow less than 15 minutes.

b Tow less than 15 minutes.

Appendix Table 7. (cont.)

Location	Landward of Site I		Landward of Site II		North of Site		Site		South of Site		Off Brigantine II		Off Brigantine I		North of Site		North of Site		Landward of Site I		Landward of Site I		Landward of Site II	
Zone	5158		5152		5143		5255		5161		5282		5180		5143		5143		5158		5158		5152	
Depth (feet)	18		27		28		36		29		38		25		22		22		15		15		24	
Coll. No.	EVG-74-032		EVG-74-033		EVG-74-031		EVG-74-034		EVG-74-035		EVG-74-036		EVG-74-037		FAS-74-001a		FAS-74-001b		FAS-74-002a		FAS-74-002b		FAS-74-003a	
Date	14 March		14 March		14 March		14 March		14 March		14 March		14 March		11 April		11 April		11 April		11 April		11 April	
Hour	0907-0922		0934-0949		1002-1017		1032-1047		1101-1116		1127-1142		1207-1222		0940-0955		1005-1020		1035-1050		1107-1122		1131-1146	
Tide	Ebb 1		Ebb 1		Ebb 1		Ebb 1		Ebb 2		Ebb 2		Ebb 2		Flood 2		Flood 2		Ebb 1		Ebb 1		Ebb 1	
Air Temp. (C)	1.0		1.0		1.0		2.0		3.0		4.5		4.0		8.5		8.5		10.0		10.0		11.0	
Temp. (C), surface	3.5		3.0		4.0		4.0		4.0		3.5		4.5		7.0		7.0		7.5		7.5		7.8	
Temp. (C), bottom	4.0		4.0		4.0		3.5		4.0		4.0		4.0		6.8		6.8		7.0		7.0		7.0	
Sal. (ppt), surface	30.0		29.5		30.0		30.0		29.5		29.5		29.5		28.0		28.0		27.0		27.0		28.0	
Sal. (ppt), bottom	29.5		30.0		29.5		30.0		30.0		30.0		30.0		30.5		30.5		30.5		30.5		30.0	
Oxygen (ppm), surface	10.8		11.6		11.2		11.4		11.2		11.2		10.5		11.2		11.2		10.0		10.0		10.0	
Oxygen (ppm), bottom	11.4		11.2		11.4		10.8		11.4		10.8		10.4		10.9		10.9		10.1		10.1		10.0	
Secchi (feet)	4.0		10.0		8.5		17.0		14.0		12.0		10.0		3.5		3.5		3.5		3.5		4.5	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Actinaria	-	-	-	-	-	-	-	-	1	16	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	1	21	-	-	-	-	3	65	3	99	1	58	1	37	-	-	-	-	3	64	1	25
P. heros	1	12	-	-	1	32	1	46	1	37	6	87	1	64	-	-	-	-	2	16	-	-	2	128
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	37	6713	fragments	52	-	-	2	200	1	85	5	1916	-	-	4	844	14	3117	31	5387	14	2383	25	5483
Sigalion arenicola	-	-	-	-	-	-	1	+	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Glycera dibranchiata	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-
Nephtys buccera	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capitellidae	-	-	-	-	2	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ophelia denticulata	-	-	-	-	-	-	6	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbrineris fragilis	-	-	-	-	10	4	1	+	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Arabella iricolor	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Orbinia swani	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scoloplos robustus	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	-	-	41	16	-	-	-	-	-	-	-	-	-	-
P. pollicaris	-	-	-	-	-	-	-	-	-	-	-	-	2	5	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	-	-	2	83	3	110	2	61	-	-	3	292	-	-	1	82	-	-	-	-	1	68	2	195
Ovalipes ocellatus	-	-	-	-	-	-	-	-	6	292	3	117	-	-	-	-	-	-	-	-	1	44	7	281
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	407	2728	-	-	-	-	-	-	-	-	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Total taxa	2		3		6		9		5		10		7		3		1		3		4		5	
Total specimens	38	6725	3	156	18	148	16	323	12	495	431	5243	46	144	6	963	14	3117	34	5404	19	2559	37	6112

Appendix Table 7. (cont.)

Location	Landward of Site II		Site		Site		Ridge		Ridge		South of Site		South of Site		Site		North of Site		Landward of Site I		Landward of Site I		Landward of Site II	
Zone	5152		5255		5255		5252		5252		5161		5161		5255		5143		5158		5158		5152	
Depth (feet)	24		35		35		24		24		15		15		35		20		15		15		20	
Coll. No.	FAS-74-003b		FAS-74-004a		FAS-74-004b		FAS-74-005a		FAS-74-005b		FAS-74-007a		FAS-74-007b		JJH-74-045		JJH-74-042		JJH-74-043a		JJH-74-043b		JJH-74-044a	
Date	11 April		11 April		11 April		11 April		11 April		11 April		11 April		13 May		13 May		13 May		13 May		13 May	
Hour	1159-1214		1230-1245		1300-1315		1335-1350		1358-1413		1435-1450		1500-1515		0950-1000 ^b		1050-1103 ^b		1116-1131		1150-1205		1215-1230	
Tide	Ebb 1		Ebb 2		Ebb 2		Ebb 2		Ebb 2		Ebb 2		Ebb 2		Flood 1		Flood 2		Flood 2		Flood 2		Flood 2	
Air Temp. (C)	11.0		11.0		11.0		11.0		11.0		11.0		11.0		18.0		16.5		14.0		14.0		15.0	
Temp. (C), surface	7.8		7.0		7.0		8.5		8.5		9.5		9.5		14.0		13.8		13.2		13.2		13.2	
bottom	7.0		7.0		7.0		7.5		7.5		8.0		8.0		12.0		12.5		12.2		12.2		13.0	
Sal. (ppt), surface	28.0		29.0		29.0		29.0		29.0		28.0		28.0		29.5		29.0		30.0		30.0		30.0	
bottom	30.0		30.5		30.5		30.5		30.5		29.5		29.5		30.2		30.0		30.5		30.5		30.5	
Oxygen (ppm), surface	10.0		10.4		10.4		10.8		10.8		10.6		10.6		9.0		8.8		9.1		9.1		10.8	
bottom	10.0		10.8		10.8		10.4		10.4		10.2		10.2		8.6		9.0		9.4		9.4		10.8	
Secchi (feet)	4.5		6.5		6.5		4.5		4.5		5.5		5.5		4.5		3.5		3.5		3.5		3.5	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Unsegmented worm	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydractinia echinata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	-	-	-	-	1	14	-	-	-	-	1	10	-	-	-	3	61	2	20	4	71	
P. heros	-	-	-	-	1	63	-	-	1	2	-	-	1	84	1	74	1	11	-	-	-	-	3	43
Mercenaria mercenaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	23
Spisula solidissima	48	8579	-	-	-	-	5	580	4	981	4	1243	1	157	-	-	3	481	59	11298	65	10820	62	10459
Nephtys bucera	-	-	-	-	-	-	3	14	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ophelia denticulata	-	-	-	-	-	-	3	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diopatra cuprea	-	-	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbrineris fragilis	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cirolana concharum	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus pollicaris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	9	-	-	-	-	-	-	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	-	-	1	96	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	2	254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	1	55	-	-	-	-	-	-	-	-	-	-	-	-	1	16	-	-	-	-	-	-	1	39
Echinarachnius parma	-	-	-	-	-	-	2	12	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-
Total taxa	3		0		3		6		5		1		4		5		2		3		2		5	
Total specimens	51	8888	0	0	5	68	15	638	9	994	4	1243	4	347	4	99	4	492	63	11362	67	10840	71	10635

Appendix Table 7. (cont.)

	Landward of Site I		South of Site		South of Site		Site		North of Site		Landward of Site I		Landward of Site II		South of Site		Off Brigantine II		Off Brigantine II		Off Brigantine I		Off Brigantine I	
Location	5152		5161		5161		5255		5143		5158		5152		5161		5282		5282		5180		5180	
Zone	20		18		18		32		34		20		26		21		34		34		22		22	
Depth (feet)	JJH-74-044b		JJH-74-046a		JJH-74-046b		JJH-74-067		JJH-74-064		JJH-74-065		JJH-74-066		JJH-74-068		JJH-74-069a		JJH-74-069b		JJH-74-070a		JJH-74-070b	
Coll. No.	13 May		13 May		13 May		10 June		10 June		10 June		10 June		10 June		10 June		10 June		10 June		10 June	
Date	1245-1300		1310-1325		1330-1345		1045-1100		1140-1155		1220-1235		1300-1315		1350-1405		1425-1440		1445-1500		1515-1530		1530-1545	
Hour	Flood 2		Flood 2		Flood 2		Flood 2		Flood 2		Ebb 1		Ebb 1		Ebb 1		Ebb 1		Ebb 1		Ebb 2		Ebb 2	
Tide	15.0		15.0		15.0		24.0		24.0		24.0		24.0		24.0		22.0		22.0		22.0		22.0	
Air Temp. (C)	13.2		13.0		13.0		21.0		20.0		20.0		20.0		21.0		20.0		20.0		20.0		20.0	
Temp. (C), surface	13.0		13.2		13.2		18.0		19.0		18.0		18.0		17.0		17.0		17.0		17.0		17.0	
bottom	30.0		30.0		30.0		28.5		30.0		28.0		29.0		28.0		29.0		29.0		30.0		30.0	
Sal. (ppt), surface	30.5		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0	
bottom	10.8		10.6		10.6		6.8		7.2		6.6		6.7		7.1		8.2		8.2		7.6		7.6	
Oxygen (ppm), surface	10.8		10.1		10.1		8.0		6.2		6.8		6.8		7.2		7.3		7.3		7.5		7.5	
bottom	3.5		2.5		2.5		8.0		8.0		12.0		8.0		7.5		6.0		6.0		5.5		5.5	
Secchi (feet)	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-
Crepidula plana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-
Polinices duplicata	9	183	3	60	5	121	1	20	13	295	18	135	2	35	15	318	1	21	2	150	2	65	3	60
P. heros	-	-	-	-	-	-	-	-	1	9	-	-	-	-	2	75	2	105	1	21	2	23	-	-
Nassarius trivittatus	-	-	-	-	-	-	1	2	-	-	2	2	2	2	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	37	6245	10	1289	7	1407	6	1075	fragment	15	93	17639	37	7059	30	7221	2	441	2	275	2	432	3	732
Siliqua costata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-
Sigalion arenicola	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	1	1	2	+	-	-	-	-
Glycera dibranchiata	-	-	-	-	fragment	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Glycera sp.	-	-	-	-	-	-	fragment	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys bucera	-	-	-	-	-	-	2	3	1	+	1	+	-	-	1	1	-	-	-	-	-	-	-	-
Diopatra cuprea	-	-	-	-	-	-	3	3	-	-	-	-	-	-	1	2	-	-	2	4	-	-	-	-
Lumbrineris fragilis	-	-	-	-	-	-	10	5	2	1	-	-	-	-	-	-	-	-	2	+	-	-	-	-
Ampnaretidae	-	-	-	-	-	-	-	-	1	+	present	-	present	-	-	-	-	-	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	1	500	1	150	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	2	-	-	-	-	-	-	2	+
Pagurus pollicaris	-	-	-	-	-	-	1	18	-	-	-	-	2	11	-	-	1	15	-	-	-	-	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	1	100	1	76	-	-	-	-	-	-	1	101	-	-	-	-
Ovalipes ocellatus	-	-	-	-	-	-	4	195	-	-	2	49	2	80	1	32	2	71	2	80	1	42	-	-
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	80	15	102	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	1	4	1	3	-	-	-	-	-	-	-	-	1	2
Total taxa	2		2		3		10		8		11		8		7		8		9		5		4	
Total specimens	46	6428	13	1349	12	1529	29	1321	20	920	121	18057	47	7191	51	7651	20	734	29	733	8	569	9	794

Appendix Table 7. (cont.)

Location	North of Site	Landward of Site I	Landward of Site II	South of Site	Site	Ridge	Ridge	North of Site	Landward of Site I	Landward of Site I	Landward of Site II	Landward of Site II
Zone	5143	5158	5152	5161	5255	5252	5252	5143	5158	5158	5152	5152
Depth (feet)	30	16	22	15	36	27	27	25	15	15	25	25
Coll. No.	EVG-74-062	EVG-74-063	EVG-74-064	EVG-74-066	EVG-74-065	EVG-74-067a	EVG-74-067b	EVG-73-076	EVG-74-077a	EVG-74-077b	EVG-74-078a	EVG-74-078b
Date	1 July	1 July	1 July	1 July	1 July	1 July	1 July	8 August	8 August	8 August	8 August	8 August
Hour	0910-0925	0945-1000	1012-1027	1045-1100	1143-1158	1205-1220	1230-1245	0920-0935	1000-1015	1020-1035	1045-1100	1115-1130
Tide	Flood 2	Flood 2	Flood 2	Flood 2	Ebb 1	Ebb 1	Ebb 1	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2
Air Temp. (C)	20.5	22.5	22.5	22.5	22.5	23.0	23.0	22.0	22.0	22.0	22.0	22.0
Temp. (C), surface	19.5	19.5	20.0	20.0	20.0	21.0	21.0	19.0	19.0	19.0	20.0	20.0
Temp. (C), bottom	19.5	20.0	20.0	20.0	20.0	20.0	20.0	18.0	18.5	18.5	18.5	18.5
Sal. (ppt), surface	29.0	29.0	29.0	29.0	29.0	29.5	29.5	30.0	30.0	30.0	30.0	30.0
Sal. (ppt), bottom	29.5	29.0	29.5	29.5	29.5	29.5	29.5	30.5	30.5	30.5	30.0	30.0
Oxygen (ppm), surface	7.4	7.4	7.6	7.4	8.0	7.4	7.4	7.8	9.6	9.6	8.0	8.0
Oxygen (ppm), bottom	7.0	7.1	6.8	7.4	6.7	7.6	7.6	8.6	9.0	9.0	8.4	8.4
Secchi (feet)	4.5	4.0	5.0	4.5	4.5	3.5	3.5	7.5	6.5	6.5	8.5	8.5
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	-	-	-	-	-	-	present	-	present	-
Actinaria	1	19	-	-	-	-	-	-	1	25	-	-
Polinices duplicata	5	99	4	116	9	128	7	104	1	18	-	-
P. heros	2	21	1	13	2	28	1	12	1	32	1	26
Polinices sp. egg case	present	-	-	-	present	-	-	-	-	-	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	1	1	-	-
N. trivittatus eggs	present	-	-	-	-	-	-	-	-	-	-	-
Pitar morrhuana	-	-	-	-	-	-	1	19	-	-	-	-
Spisula solidissima	5	116	113	20240	56	9796	40	6020	5	75	6	1000
Ensis directus	-	-	-	-	-	-	-	-	-	-	-	-
Siliqua costata	-	-	-	-	-	-	-	-	2	1	-	-
Sigalion arenicola	-	-	-	-	-	-	-	-	3	1	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	-	-	-
Glycera dibranchiata	-	-	-	-	1	1	-	-	-	-	-	-
Nephtys bucera	-	-	-	-	2	+	-	-	3	7	-	-
Diopatra cuprea	-	-	1	2	-	-	-	2	3	1	1	-
Lumbrineris fragilis	-	-	-	-	1	+	-	4	2	11	6	1
Scoloplos sp.	-	-	-	-	fragment	+	-	-	-	-	-	-
Ampharetidae	-	-	-	-	4	+	3	+	-	-	-	-
Limulus polyphemus	-	-	1	600	1	1000	1	1000	-	-	-	-
Cirolana concharum	-	-	-	-	-	-	-	-	1	+	-	-
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	-	-	1	8	-	-	-	-	1	1	1	1
Ovalipes ocellatus	-	-	-	-	4	151	-	-	2	141	5	177
Echinarachnius parma	-	-	-	-	-	-	-	-	1	4	-	-
Asterias forbesii	2	3	1	2	1	1	-	-	-	-	-	-
Total taxa	5	7	11	5	6	7	8	11	6	7	4	8
Total specimens	15	258	122	20981	81	11105	52	7136	13	146	24	1180

Location	Site	Site	South of Site	South of Site	North of Site	North of Site	South of Site	South of Site	Landward of Site II	Landward of Site II	Landward of Site I	Landward of Site I
Zone	5255	5255	5161	5161	5143	5143	5161	5161	5152	5152	5158	5158
Depth (feet)	35	35	20	20	27	27	19	19	24	24	14	14
Coll. No.	EVG-74-079a	EVG-74-079b	EVG-74-080a	EVG-74-080b	JJH-74-103a	JJH-74-103b	JJH-74-107a	JJH-74-107b	JJH-74-108a	JJH-74-108b	JJH-74-109a	JJH-74-109b
Date	8 August	8 August	8 August	8 August	13 September	13 September	14 September	14 September	14 September	14 September	14 September	14 September
Hour	1150-1205	1215-1230	1250-1305	1315-1330	1435-1450	1435-1450	1135-1150	1135-1150	1210-1225	1210-1225	1300-1315	1300-1315
Tide	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Flood 2	Flood 2	Ebb 2	Ebb 2	Flood 1	Flood 1	Flood 1	Flood 1
Air Temp. (C)	22.0	22.0	22.0	22.0	25.0	25.0	19.0	19.0	19.0	19.0	19.0	19.0
Temp. (C), surface	20.0	20.0	20.0	20.0	24.0	24.0	22.0	22.0	22.0	22.0	22.0	22.0
bottom	19.0	19.0	18.5	18.5	23.0	23.0	22.5	22.5	22.0	22.0	22.0	22.0
Sal. (ppt), surface	30.5	30.5	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	29.0
bottom	31.0	31.0	31.0	31.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Oxygen (ppm), surface	8.8	8.8	9.6	9.6	9.4	9.4	7.7	7.7	8.0	8.0	7.6	7.6
bottom	9.0	9.0	9.0	9.0	9.4	9.4	7.2	7.2	8.0	8.0	6.9	6.9
Secchi (feet)	13.0	13.0	4.5	4.5	6.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	present	-	-	-	present	-	-	-	-	-
Actinaria	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	1	24	9	271	12	300	9	159	7	500	8	240
P. heros	1	8	3	30	2	65	-	-	-	-	-	-
Polinices sp. egg case	-	-	present	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	1	1	-	-	1	1	-	-	2	2	2	2
Spisula solidissima	-	-	1	121	24	4752	19	4400	11	2000	28	7000
Ensis directus	-	-	-	-	-	-	-	-	1	+	1	1
Glycera americana	1	+	-	-	-	-	-	-	-	-	-	-
Glycera sp.	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	2	+
Lumbrineris fragilis	1	+	-	-	-	-	-	-	-	-	1	+
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	-	-
Polychaeta	-	-	fragment	+	-	-	-	-	-	-	1	+
Crangon septemspinosa	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	1	2
Pagurus pollicaris	-	-	1	1	-	-	1	1	-	-	-	-
Libinia emarginata	1	8	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	-	-	2	1	-	-	2	4	-	-	-	-
Ovalipes ocellatus	-	-	-	-	1	26	-	-	-	-	-	-
Echinarachnius parma	-	-	1	6	-	-	-	-	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	1	4	-	-	-	-
Total taxa	6		8		5		6		4		4	
Total specimens	6	41	17	430	40	5144	32	4568	21	2505	41	7257
									15	1933	13	1890
									47	8752	43	9205

Appendix Table 7. (cont.)

Location	Site		Off		Off		Off		Off		Landward		Landward		Landward	
Zone	5255	5255	Brigantine I	Brigantine I	Brigantine I	Brigantine I	Brigantine II	Brigantine II	Brigantine II	Brigantine II	of Site I	of Site I	of Site I	of Site I	of Site I	of Site I
Depth (feet)	32	32	27	27	42	42	14	13	13	13	14	13	13	13	13	13
Coll. No.	JJH-74-113a	JJH-74-113b	JJH-74-115a	JJH-74-115b	JJH-74-126a	JJH-74-126b	EVG-74-101	JJH-74-155a	JJH-74-155b							
Date	14 September	14 September	14 September	14 September	16 September	16 September	11 October	15 November	15 November							
Hour	1610-1625	1610-1625	0930-0945	0930-0945	0930-0945	0930-0945	1015-1030	0915-0930	0915-0930							
Tide	Flood 2	Flood 2	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Ebb 1	Ebb 1							
Air Temp. (C)	20.0	20.0	18.0	18.0	20.0	20.0	17.0	8.0	8.0							
Temp. (C), surface	22.0	22.0	21.0	21.0	21.0	21.0	16.0	10.0	10.0							
bottom	22.0	22.0	21.0	21.0	21.0	21.0	16.0	10.0	10.0							
Sal. (ppt), surface	30.0	30.0	30.5	30.5	30.0	30.0	30.0	30.5	30.5							
bottom	30.5	30.5	31.0	31.0	30.0	30.0	30.5	30.0	30.0							
Oxygen (ppm), surface	7.0	7.0	6.9	6.9	7.0	7.0	7.8	8.8	8.8							
bottom	7.4	7.4	6.6	6.6	7.4	7.4	7.6	8.9	8.9							
Secchi (feet)	14.0	14.0	10.0	10.0	24.0	24.0	5.0	4.0	4.0							
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Nemertea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Polinices duplicata	-	-	-	-	-	-	3	85	1	30	-	-	7	230	-	44
P. heros	1	20	-	-	-	-	-	-	-	-	1	5	-	-	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	1	1	1	1	2	2	-	-
Pitar morrhuana	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-
Spisula solidissima	7	2750	3	500	5	2250	2	750	1	350	4	1000	168	22882	144	16100
Ensis directus	-	-	-	-	-	-	-	-	1	5	2	3	-	-	-	-
Siliqua costata	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-
Sigalionidae	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycera sp.	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-
Nephtys buccera	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-
Nephtys sp.	-	-	2	2	-	-	-	-	1	1	-	-	-	-	-	-
Lumbrineridae	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	1	2250	-	-	1	350	1	80	-	-
Pagurus longicarpus	-	-	-	-	1	+	1	2	5	5	3	6	-	-	-	-
P. pollicaris	-	-	-	-	-	-	-	-	1	60	1	15	-	-	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	-	-	6	70	5	100
Echinarachnius parma	-	-	1	5	-	-	-	-	3	2	6	35	-	-	-	75
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	-	-	1	10	-	-
Total taxa	3		4		2		4		9		9		2		4	
Total specimens	9	2770	7	508	6	2250	7	3087	16	456	20	1426	189	23280	149	16200

Appendix Table 8. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 1.7 nautical miles E of Little Egg Inlet, New Jersey in 1974.

Little Egg Inlet, New Jersey in 1974.																			
Zone Station	5158		5158		5158		5158		5158		5158		5158		5158		5158		
Depth (feet)	16		14		18		15		15		15		15		20		16		
Coll. No.	EVG-74-018		JJH-74-026		EVG-74-032		FAS-74-002a		FAS-74-002b		JJH-74-043a		JJH-74-043b		JJH-74-065		EVG-74-063		
Date	28 January		28 February		14 March		11 April		11 April		13 May		13 May		10 June		1 July		
Hour	1115-1130		1230-1245		0907-0922		1035-1050		1107-1122		1116-1131		1150-1205		1220-1235		0945-1000		
Tide	Ebb 1		Ebb 1		Ebb 1		Ebb 1		Ebb 1		Flood 2		Flood 2		Ebb 1		Flood 2		
Air Temp. (C)	9.5		7.5		1.0		10.0		10.0		14.0		14.0		24.0		22.5		
Temp. (C), surface	6.5		4.0		3.5		7.5		7.5		13.2		13.2		20.0		19.5		
bottom	6.0		4.0		4.0		7.0		7.0		12.2		12.2		18.0		20.0		
Sal. (ppt), surface	28.0		29.0		30.0		27.0		27.0		30.0		30.0		28.0		29.0		
bottom	30.0		30.0		29.5		30.5		30.5		30.5		30.5		30.0		29.0		
Oxygen (ppm), surface	-		10.2		10.8		10.0		10.0		9.1		9.1		6.6		7.4		
bottom	-		10.2		11.4		10.1		10.1		9.4		9.4		6.8		7.1		
Secchi (feet)	4.5		-		4.0		3.5		3.5		3.5		3.5		12.0		4.0		
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	
Hydractinia echinata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Polinices duplicata	3	56	4	131	-	-	-	-	3	64	3	61	2	20	18	135	4	116	
P. heros	3	57	-	-	1	12	2	16	-	-	-	-	-	-	-	-	1	13	
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	
Spisula solidissima	157	22890	205	34551	37	6713	31	5387	14	2383	59	11298	65	10820	93	17639	113	20240	
Glycera dibranchiata	1	2	1	1	-	-	1	1	-	-	-	-	-	-	1	1	-	-	
Nephtys bucera	2	2	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	
Diopatra cuprea	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	1	2	
Ampharetidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	150	1	600	
Crangon septemspinosa	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	76	-	-	
Cancer irroratus	6	542	-	-	-	-	-	-	1	68	-	-	-	-	-	-	1	8	
Ovalipes ocellatus	16	518	14	477	-	-	-	-	1	44	-	-	-	-	2	49	-	-	
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	1	3	-	-	1	4	1	2	
Total taxa	8		5		2		3		4		3		2		11		7		
Total specimens	189 24068		225 35162		38 6725		34 5404		19 2559		63 11362		67 10840		121 18057		122 20981		

* + = Signifies the weight is less than 0.5g.

Appendix Table 8. (cont.)

Zone	5158	5158	5158	5158	5158	5158	5158							
Depth (feet)	15	15	14	14	14	13	13							
Coll. No.	EVG-74-077a	EVG-74-077b	JJH-74-109a	JJH-74-109b	EVG-74-101	JJH-74-155a	JJH-74-155b							
Date	8 August	8 August	14 September	14 September	11 October	15 November	15 November							
Hour	1000-1015	1020-1035	1300-1315	1300-1315	1015-1030	0915-0930	0915-0930							
Tide	Flood 2	Flood 2	Flood 1	Flood 1	Ebb 2	Ebb 1	Ebb 1							
Air Temp. (C)	22.0	22.0	19.0	19.0	17.0	8.0	8.0							
Temp. (C), surface	19.0	19.0	22.0	22.0	16.0	10.0	10.0							
bottom	18.5	18.5	22.0	22.0	16.0	10.0	10.0							
Sal. (ppt), surface	30.0	30.0	29.0	29.0	30.0	30.5	30.5							
bottom	30.5	30.5	30.0	30.0	30.5	30.0	30.0							
Oxygen (ppm), surface	9.6	9.6	7.6	7.6	7.8	8.8	8.8							
bottom	9.0	9.0	6.9	6.9	7.6	8.9	8.9							
Secchi (feet)	6.5	6.5	3.0	3.0	5.0	4.0	4.0							
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	present	-	-	-	-	-	-	-	-	-	-	-
Nemertea	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Polinices duplicata	3	63	4	126	-	-	1	30	7	230	-	-	1	44
P. heros	-	-	1	2	-	-	1	+	1	5	-	-	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	2	2	-	-	-	-
Spisula solidissima	400	39266	325	29259	32	10000	23	5000	168	22882	144	16100	158	12960
Gycera sp.	-	-	-	-	-	-	-	-	2	1	-	-	-	-
Nephtys bucera	-	-	1	+	-	-	-	-	1	+	-	-	-	-
Limulus polyphemus	-	-	1	3400	-	-	-	-	1	80	-	-	-	-
Pagurus longicarpus	7	3	5	2	2	5	-	-	-	-	-	-	-	-
Cancer irroratus	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	1	29	-	-	-	-	-	-	6	70	5	100	1	75
Asterias forbesii	-	-	-	-	-	-	-	-	1	10	-	-	-	-
Total taxa	6		7		2		3		9		2		4	
Total specimens	412	39362	337	32789	34	10005	25	5030	189	23280	149	16200	161	13079

Appendix Table 9. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.7 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

miles SE of Little Egg Inlet, New Jersey in 1974.												
Zone	5252		5252		5252		5252		5252		5252	
Depth (feet)	27		25		24		24		27		27	
Coll. No.	EVG-74-020		JJH-74-031		FAS-74-005a		FAS-74-005b		EVG-74-067a		EVG-74-067b	
Date	28 January		28 February		11 April		11 April		1 July		1 July	
Hour	1255-1310		1020-1035		1335-1350		1358-1413		1205-1220		1230-1245	
Tide	Ebb 1		Flood 2		Ebb 2		Ebb 2		Ebb 1		Ebb 1	
Air Temp. (C)	9.0		7.5		11.0		11.0		23.0		23.0	
Temp. (C), surface	7.0		4.0		8.5		8.5		21.0		21.0	
bottom	6.0		4.0		7.5		7.5		20.0		20.0	
Sal. (ppt), surface	28.0		29.0		29.0		29.0		29.5		29.5	
bottom	30.0		30.0		30.5		30.5		29.5		29.5	
Oxygen (ppm), surface	-		10.6		10.8		10.8		7.4		7.4	
bottom	-		10.3		10.4		10.4		7.6		7.6	
Secchi (feet)	6.5		8.0		4.5		4.5		3.5		3.5	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Nemertea	1	1	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	1	60	1	23	1	14	-	-	-	-	1	20
P. heros	2	20	-	-	-	-	1	2	1	26	1	46
Spisula solidissima	1	500	7	1180	5	580	4	981	6	1000	1	60
Sigalion arenicola	-	-	-	-	-	-	-	-	-	-	3	1
Nephtys bucera	-	-	-	-	3	14	2	5	-	-	3	7
Ophelia denticulata	8	19	-	-	3	16	-	-	-	-	-	-
Diopatra cuprea	2	5	-	-	-	-	-	-	2	3	1	1
Lumbrineris fragilis	-	-	-	-	1	2	-	-	11	6	1	1
Cirolana concharum	-	-	-	-	-	-	1	+	1	+	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	2	141	5	177
Echinarachnius parma	3	21	1	7	2	12	1	6	1	4	-	-
Total taxa	7		3		6		5		7		8	
Total specimens	18	626	9	1210	15	638	9	994	24	1180	16	313

* + = Signifies the weight is less than 0.5g.

Appendix Table 10. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.0 nautical miles E of Little Egg Inlet, New Jersey in 1974.

Zone	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152	5152
Depth (feet)	26	20	27	24	24	20	20	26	22	25	25	24	24	24
Coll. No.	EVG-74-016	JJH-74-028	EVG-74-033	FAS-74-003a	FAS-74-003b	JJH-74-044a	JJH-74-044b	JJH-74-066	EVG-74-064	EVG-74-078a	EVG-74-078b	JJH-74-108a	JJH-74-108b	JJH-74-108b
Date	28 January	28 February	14 March	11 April	11 April	13 May	13 May	10 June	1 July	8 August	8 August	14 September	14 September	14 September
Hour	1200-1215	1200-1215	0934-0949	1131-1146	1159-1214	1215-1230	1245-1300	1300-1315	1012-1027	1045-1100	1115-1130	1210-1225	1210-1225	1210-1225
Tide	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Flood 2	Flood 2	Ebb 1	Flood 2	Flood 2	Flood 2	Flood 1	Flood 1	Flood 1
Air Temp. (C)	9.0	7.5	1.0	11.0	11.0	15.0	15.0	24.0	22.5	22.0	22.0	19.0	19.0	19.0
Temp. (C), surface	6.0	4.0	3.0	7.8	7.8	13.2	13.2	20.0	20.0	20.0	20.0	22.0	22.0	22.0
bottom	6.0	4.0	4.0	7.0	7.0	13.0	13.0	18.0	20.0	18.5	18.5	22.0	22.0	22.0
Sal. (ppt), surface	28.5	29.0	29.5	28.0	28.0	30.0	30.0	29.0	29.0	30.0	30.0	30.0	30.0	30.0
bottom	30.0	29.0	30.0	30.0	30.0	30.5	30.5	30.0	29.5	30.0	30.0	30.0	30.0	30.0
Oxygen (ppm), surface	-	10.2	11.6	10.0	10.0	10.8	10.8	6.7	7.6	8.0	8.0	8.0	8.0	8.0
bottom	-	10.6	11.2	10.0	10.0	10.8	10.8	6.8	6.8	8.4	8.4	8.0	8.0	8.0
Secchi (feet)	4.5	3.0	10.0	4.5	4.5	3.5	3.5	8.0	5.0	8.5	8.5	3.0	3.0	3.0
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Actiniaria	1	6	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	4	79	4	88	1	21	1	25	4	71	9	183	2	35
P. heros	-	-	2	17	-	-	2	128	3	43	-	-	2	28
Polinices sp. egg case	-	-	-	-	-	-	-	-	-	-	present	-	present	-
Nassarius trivittatus	1	1	-	-	-	-	-	-	-	-	2	2	-	-
Mercenaria mercenaria	-	-	-	-	-	-	-	-	1	23	-	-	-	-
Spisula solidissima	12	2807	61	11810	fragment	52	25	5483	48	8579	62	10459	37	6245
Ensis directus	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siliqua costata	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G. dibranchiata	-	-	-	-	-	-	-	-	-	-	1	1	-	-
Glycera sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys buccera	-	-	-	-	-	-	-	-	-	-	2	+	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbrineris fragilis	-	-	-	-	-	-	-	-	-	-	1	+	-	-
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scoloplos robustus	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Scoloplos sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ampharetidae	-	-	-	-	-	-	-	-	-	-	present	4	+	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	1	1000	-	-
Crangon septemspinosa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P. pollicaris	-	-	-	-	-	-	-	-	-	-	2	11	-	-
Cancer irroratus	8	723	2	247	2	83	2	195	2	254	-	-	-	-
Ovalipes ocellatus	-	-	-	-	-	-	7	281	1	55	1	39	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	1	3	1	1
Total taxa	5	5	3	5	3	5	3	5	2	8	11	4	8	7
Total specimens	26	3616	70	12163	3	156	37	6112	51	8888	71	10635	46	6428

* + = Signifies the weight is less than 0.5g.

Appendix Table 11. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.5 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet)	38	36	36	35	35	35	32	36	35	35	32	32
Coll. No.	EVG-74-019	JJH-74-030	EVG-74-034	FAS-73-004a	FAS-74-004b	JJH-74-045	JJH-74-067	EVG-74-065	EVG-74-079a	EVG-74-079b	JJH-74-113a	JJH-74-113b
Date	28 January	28 February	14 March	11 April	11 April	13 May	10 June	1 July	8 August	8 August	14 September	14 September
Hour	1228-1243	1050-1105	1032-1047	1230-1245	1300-1315	0950-1000 ^a	1045-1100	1143-1158	1150-1205	1215-1230	1610-1625	1610-1625
Tide	Ebb 1	Flood 2	Ebb 1	Ebb 2	Ebb 2	Flood 1	Flood 2	Ebb 1	Ebb 1	Ebb 1	Flood 2	Flood 2
Air Temp. (C)	9.5	7.5	2.0	11.0	11.0	18.0	24.0	22.5	22.0	22.0	20.0	20.0
Temp. (C), surface	6.5	4.0	4.0	7.0	7.0	14.0	21.0	20.0	20.0	20.0	22.0	22.0
Temp. (C), bottom	6.0	4.0	3.5	7.0	7.0	12.0	18.0	20.0	19.0	19.0	22.0	22.0
Sal. (ppt), surface	28.5	28.0	30.0	29.0	29.0	29.5	28.5	29.0	30.5	30.5	30.0	30.0
Sal. (ppt), bottom	30.0	29.0	30.0	30.5	30.5	30.2	30.0	29.5	31.0	31.0	30.5	30.5
Oxygen (ppm), surface	-	10.8	11.4	10.4	10.4	9.0	6.8	8.0	8.8	8.8	7.0	7.0
Oxygen (ppm), bottom	-	10.2	10.8	10.8	10.8	8.6	8.0	6.7	9.0	9.0	7.4	7.4
Secchi (feet)	6.5	3.0	17.0	6.5	6.5	4.5	8.0	4.5	13.0	13.0	14.0	14.0
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Unsegmented worm	-	-	-	-	-	-	1	1	-	-	-	-
Hydractinia echinata	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	1	27	-	-	-	-	-	-	-	-
P. heros	-	-	1	14	1	46	-	-	1	20	1	18
Polinices sp. egg case	-	-	-	-	-	-	1	63	1	74	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	-	-
Pitar morrhua	-	-	1	28	-	-	-	-	1	2	-	-
Spisula solidissima	-	-	1	500	2	200	-	-	-	-	-	-
Sigalion arenicola	-	-	-	-	1	+	-	-	-	-	-	-
Sigalionidae	-	-	-	-	-	-	-	-	-	-	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	-	-	-
G. dibanchiata	-	-	-	-	1	1	-	-	-	-	-	-
Glycera sp.	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys buccera	-	-	-	-	1	6	-	-	-	-	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	-	-
Ophelia denticulata	-	-	-	-	6	9	-	-	-	-	-	-
Diopatra cuprea	-	-	-	-	-	-	3	4	-	-	-	-
Lumbrineris fragilis	1	^b	-	-	1	+	-	-	3	3	-	-
Lumbrineridae	-	-	-	-	-	-	-	-	10	5	4	2
Orbinia swani	-	-	-	-	1	+	-	-	-	-	-	-
Polychaeta	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus pollicaris	-	-	-	-	-	-	-	-	-	-	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	6	413	-	-	2	61	-	-	-	-	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	1	16	4	195
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	-	-
Asterias forbesii	1	3	-	-	-	-	-	-	-	-	-	-
Total taxa	3		4		9		0		3		5	
Total specimens	8	416	4	569	16	323	0	0	5	68	4	99

a Tow less than 15 minutes.

b + = Signifies the weight is less than 0.5g.

Appendix Table 12. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 1.8 nautical miles SE of Little Egg Inlet, New Jersey in 1974.

Zone	5161	5161	5161	5161	5161	5161	5161	5161								
Depth (feet)	21	17	29	15	15	18	18	21								
Coll. No.	EVG-74-015	JJH-74-029	EVG-74-035	FAS-74-007a	FAS-74-007b	JJH-74-046a	JJH-74-046b	JJH-74-068								
Date	28 January	28 February	14 March	11 April	11 April	13 May	13 May	10 June								
Hour	1415-1430	1300-1315	1101-1116	1435-1450	1500-1515	1310-1325	1330-1345	1350-1405								
Tide	Ebb 2	Ebb 1	Ebb 2	Ebb 2	Ebb 2	Flood 2	Flood 2	Ebb 1								
Air Temp. (C)	9.5	7.5	3.0	11.0	11.0	15.0	15.0	24.0								
Temp. (C), surface	7.0	4.0	4.0	9.5	9.5	13.0	13.0	21.0								
bottom	7.0	4.0	4.0	8.0	8.0	13.2	13.2	17.0								
Sal. (ppt), surface	28.0	30.0	29.5	28.0	28.0	30.0	30.0	28.0								
bottom	29.0	30.0	30.0	29.5	29.5	30.0	30.0	30.0								
Oxygen (ppm), surface	-	10.8	11.2	10.6	10.6	10.6	10.6	7.1								
bottom	-	10.7	11.4	10.2	10.2	10.1	10.1	7.2								
Secchi (feet)	3.5	3.0	14.0	5.5	5.5	2.5	2.5	7.5								
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Actiniaria	-	-	-	-	1	16	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	10	220	6	178	3	65	-	-	1	10	3	60	5	121	15	318
P. heros	1	7	1	10	1	37	-	-	1	84	-	-	-	-	2	75
Spisula solidissima	74	10581	13	2313	1	85	4	1243	1	157	10	1289	7	1407	30	7221
Glycera dibranchiata	-	-	-	-	-	-	-	-	-	-	-	-	fragment	1	-	-
Nephtys bucera	2	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Diopatra cuprea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
Libinia emarginata	-	-	-	-	-	-	-	-	1	96	-	-	-	-	-	-
Cancer irroratus	3	137	3	138	-	-	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	-	-	-	6	292	-	-	-	-	-	-	-	-	1	32
Total taxa	5		4		5		1		4		2		3		7	
Total specimens	90	10946	23	2639	12	495	4	1243	4	347	13	1349	12	1529	51	7651

* + = Signifies the weight is less than 0.5g.

Appendix Table 12. (cont.)

Zone	5161	5161	5161	5161	5161
Depth (feet)	15	20	20	19	19
Coll. No.	EVG-74-066	EVG-74-080a	EVG-74-080b	JJH-74-107a	JJH-74-107b
Date	1 July	8 August	8 August	14 September	14 September
Hour	1045-1100	1250-1305	1315-1330	1135-1150	1135-1150
Tide	Flood 2	Ebb 1	Ebb 1	Ebb 2	Ebb 2
Air Temp. (C)	22.5	22.0	22.0	19.0	19.0
Temp. (C), surface	20.0	20.0	20.0	22.0	22.0
bottom	20.0	18.5	18.5	22.5	22.5
Sal. (ppt), surface	29.0	30.0	30.0	30.0	22.0
bottom	29.5	31.0	31.0	30.0	30.0
Oxygen (ppm), surface	7.4	9.6	9.6	7.7	7.7
bottom	7.4	9.0	9.0	7.2	7.2
Secchi (feet)	4.5	4.5	4.5	3.0	3.0
	No. Wt.	No. Wt.	No. Wt.	No. Wt.	No. Wt.
Hydractinia echinata	- -	- -	present	- -	- -
Polinices duplicata	7 104	12 300	9 159	4 130	4 90
P. heros	1 12	2 65	- -	- -	- -
Nassarius trivittatus	- -	1 1	- -	2 2	- -
Spisula solidissima	40 6020	24 4752	19 4400	8 1800	5 1800
Ensis directus	- -	- -	- -	1 1	- -
Glycera sp.	- -	- -	- -	- -	2 +
Nephtys sp.	- -	- -	- -	- -	2 +
Ampharetidae	3 +*	- -	- -	- -	- -
Limulus polyphemus	1 1000	- -	- -	- -	- -
Pagurus pollicaris	- -	- -	1 1	- -	- -
Cancer irroratus	- -	- -	2 4	- -	- -
Ovalipes ocellatus	- -	1 26	- -	- -	- -
Asterias forbesii	- -	- -	1 4	- -	- -
Total taxa	5	5	6	4	4
Total specimens	52 7136	40 5144	32 4568	15 1933	13 1890

Appendix Table 13. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.5 nautical miles NE of Little Egg Inlet, New Jersey in 1974.

Zone	5143	5143	5143	5143	5143	5143	5143	5143	5143	5143	5143	
Depth (feet)	26	25	28	22	22	20	34	30	25	27	27	
Coll. No.	EVG-74-017	JJH-74-027	EVG-74-031	FAS-74-001a	FAS-74-001b	JJH-74-042	JJH-74-064	EVG-74-062	EVG-74-076	JJH-74-103a	JJH-74-103b	
Date	28 January	28 February	14 March	11 April	11 April	13 May	10 June	1 July	8 August	13 September	13 September	
Hour	1035-1050	1130-1145	1002-1017	0940-0955	1005-1020	1050-1103 ^a	1140-1155	0910-0925	0920-0935	1435-1450	1435-1450	
Tide	Flood 2	Flood 2	Ebb 1	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2	Flood 2	
Air Temp. (C)	10.0	7.5	1.0	8.5	8.5	16.5	24.0	20.5	22.0	25.0	25.0	
Temp. (C), surface	6.5	4.0	4.0	7.0	7.0	13.8	20.0	19.5	19.0	24.0	24.0	
Temp. (C), bottom	6.0	4.0	4.0	6.8	6.8	12.5	19.0	19.5	18.0	23.0	23.0	
Sal. (ppt), surface	28.5	28.0	30.0	28.0	28.0	29.0	30.0	29.0	30.0	30.0	30.0	
Sal. (ppt), bottom	30.0	30.0	29.5	30.5	30.5	30.0	30.0	29.5	30.5	30.0	30.0	
Oxygen (ppm), surface	-	10.4	11.2	11.2	11.2	8.8	7.2	7.4	7.8	9.4	9.4	
Oxygen (ppm), bottom	-	10.4	11.4	10.9	10.9	9.0	6.2	7.0	8.6	9.4	9.4	
Secchi (feet)	6.0	3.0	8.5	3.5	3.5	3.5	8.0	4.5	7.5	6.0	6.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	-	-	-	-	-	-	present	-	-	-
Actinaria	4	41	-	-	-	-	-	-	1	19	1	10
Polinices duplicata	5	125	1	16	-	-	1	37	-	-	-	-
P. heros	1	11	1	19	1	32	-	-	1	11	1	9
Polinices sp. egg case	-	-	-	-	-	-	-	-	present	-	-	-
Nassarius trivittatus	5	5	-	-	-	-	-	-	-	-	1	1
Nassarius trivittatus eggs	-	-	-	-	-	-	-	-	present	-	-	-
Pitar morrhua	-	-	-	-	-	-	-	-	-	-	1	42
Spisula solidissima	49	11273	28	6685	-	-	4	844	14	3117	3	481
Ensis directus	-	-	-	-	-	-	-	-	-	-	fragment	15
Siliqua costata	-	-	-	-	-	-	-	-	-	-	5	116
Glycera dibranchiata	5	10	-	-	-	-	-	-	-	-	139	2683
Nephtys bucera	-	-	-	-	-	-	-	-	-	-	11	2000
Capitellidae	-	-	-	-	-	-	-	-	-	-	28	7000
Lumbrineris fragilis	-	-	-	-	2	+	-	-	-	-	-	-
Arabella iricolor	-	-	-	-	10	4	-	-	-	-	-	-
Scoloplos robustus	2	1	-	-	1	+	-	-	-	-	-	-
Ampharetidae	-	-	-	-	1	2	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	1	500
Pagurus longicarpus	-	-	-	-	-	-	-	-	-	-	1	100
Libinia emarginata	1	75	-	-	-	-	-	-	-	-	1	100
Cancer irroratus	5	221	5	159	3	110	1	82	-	-	-	-
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	2	3
Total taxa	9		4		6		3		1		2	
Total specimens	77	11762	35	6879	18	148	6	963	14	3117	4	492

a Tow less than 15 minutes.

b + = Signifies the weight is less than 0.5g.

Appendix Table 14. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.4 nautical miles SE of Brigantine Inlet, New Jersey in 1974.

Zone	5180	5180	5180	5180	5180
Depth (feet)	25	22	22	27	27
Coll. No.	EVG-74-037	JJH-74-070a	JJH-74-070b	JJH-74-115a	JJH-74-115b
Date	14 March	10 June	10 June	15 September	15 September
Hour	1207-1222	1515-1530	1530-1545	0930-0945	0930-0945
Tide	Ebb 2	Ebb 2	Ebb 2	Ebb 1	Ebb 1
Air Temp. (C)	4.0	22.0	22.0	18.0	18.0
Temp. (C), surface	4.5	20.0	20.0	21.0	21.0
bottom	4.0	17.0	17.0	21.0	21.0
Sal. (ppt), surface	29.5	30.0	30.0	30.5	30.5
bottom	30.0	30.0	30.0	31.0	31.0
Oxygen (ppm), surface	10.5	7.6	7.6	6.9	6.9
bottom	10.4	7.5	7.5	6.6	6.6
Secchi (feet)	10.0	5.5	5.5	10.0	10.0

	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	-	-	present	-	-	-	-	-
Actiniaria	1	1	-	-	-	-	-	-	-	-
Crepidula plana	present	-	-	-	-	-	-	-	-	-
Polinices duplicata	1	58	2	65	3	60	-	-	3	85
P. heros	1	64	2	23	-	-	-	-	-	-
Spisula solidissima	-	-	2	432	3	732	5	2250	2	750
Siliqua costata	-	-	1	7	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	1	2250
Pagurus longicarpus	41	16	-	-	2	+	1	+	1	2
P. pollicaris	2	5	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	-	1	42	-	-	-	-	-	-
Asterias forbesii	-	-	-	-	1	2	-	-	-	-
Total taxa	7		5		4		2		4	
Total specimens	46	144	8	569	9	794	6	2250	7	3087

* + = Signifies the weight is less than 0.5g.

Appendix Table 15. Number and weight (g) of macroinvertebrates taken in 15-minute hauls of a clam dredge approximately 2.8 nautical miles SE of Brigantine Inlet, New Jersey in 1974.

SE of Brigantine Inlet, New Jersey in 1974.										
Zone	5282		5282		5282		5282		5282	
Depth (feet)	38		34		34		42		42	
Coll. No.	EVG-74-036		JJH-74-069a		JJH-74-069b		JJH-74-126a		JJH-74-126b	
Date	14 March		10 June		10 June		16 September		16 September	
Hour	1127-1142		1425-1440		1445-1500		0930-0945		0930-0945	
Tide	Ebb 2		Ebb 1		Ebb 1		Ebb 1		Ebb 1	
Air Temp. (C)	4.5		22.0		22.0		20.0		20.0	
Temp. (C), surface	3.5		20.0		20.0		21.0		21.0	
bottom	4.0		17.0		17.0		21.0		21.0	
Sal. (ppt), surface	29.5		29.0		29.0		30.0		30.0	
bottom	30.0		30.0		30.0		30.0		30.0	
Oxygen (ppm), surface	11.2		8.2		8.2		7.0		7.0	
bottom	10.8		7.3		7.3		7.4		7.4	
Secchi (feet)	12.0		6.0		6.0		24.0		24.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
<i>Crepidula plana</i>	-	-	present	-	-	-	-	-	-	-
<i>Polinices duplicata</i>	3	99	1	21	2	150	1	30	-	-
<i>P. heros</i>	6	87	2	105	1	21	-	-	-	-
<i>Nassarius trivittatus</i>	1	1	-	-	-	-	1	1	1	1
<i>Pitar morrhuana</i>	-	-	-	-	-	-	-	-	1	15
<i>Spisula solidissima</i>	5	1916	2	441	2	275	1	350	4	1000
<i>Ensis directus</i>	-	-	-	-	-	-	1	5	2	3
<i>Siliqua costata</i>	-	-	-	-	-	-	-	-	1	1
<i>Sigalion arenicola</i>	1	1	1	1	2	+	-	-	-	-
<i>Glycera</i> sp.	-	-	-	-	-	-	2	2	-	-
<i>Nephtys</i> sp.	-	-	-	-	-	-	1	1	-	-
<i>Diopatra cuprea</i>	-	-	-	-	2	4	-	-	-	-
<i>Lumbrineris fragilis</i>	1	1	-	-	2	+	-	-	-	-
<i>Limulus polyphemus</i>	-	-	-	-	-	-	-	-	1	350
<i>Pagurus longicarpus</i>	-	-	-	-	-	-	5	5	3	6
<i>P. pollicaris</i>	-	-	1	15	-	-	1	60	1	15
<i>Libinia emarginata</i>	-	-	-	-	1	101	-	-	-	-
<i>Cancer irroratus</i>	3	292	-	-	-	-	-	-	-	-
<i>Ovalipes ocellatus</i>	3	117	2	71	2	80	-	-	-	-
<i>Echinarachnius parma</i>	407	2728	11	80	15	102	3	2	6	35
<i>Asterias forbesii</i>	1	1	-	-	-	-	-	-	-	-
Total taxa	10		8		9		9		9	
Total specimens	431	5243	20	734	29	733	16	456	20	1426

* + = Signifies the weight is less than 0.5g.

Appendix Table 16. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 0.75 nautical mile from the NW tip of Little Beach Island in Little Egg Inlet, New Jersey in 1974.

Zone	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020
Depth (feet)	10	10	10	10	10	10	10	11	11	10	10
Coll. No.	JJH-74-005	EVG-74-027	JJH-74-033	JJH-74-041a	JJH-74-041b	JJH-74-050	JJH-74-061	FAS-74-010a	FAS-74-010b	JJH-74-087	EVG-74-088
Date	2 January	14 February	8 March	17 April	17 April	14 May	6 June	3 July	3 July	1 August	3 September
Hour	1315-1320	1340-1345	0955-1000	1420-1425	1435-1440	1230-1235	1110-1115	1010-1015	1020-1025	1030-1035	1025-1030
Tide	Flood 1	Ebb 2	Ebb 1	Flood 2	Flood 2	Flood 2	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 1
Air Temp. (C)	4.5	8.0	10.0	17.0	17.0	20.0	25.0	28.0	28.0	30.0	24.0
Temp. (C), surface	4.0	3.0	7.5	12.5	12.5	15.0	21.0	24.0	24.0	26.0	23.0
Temp. (C), bottom	4.0	3.0	7.5	12.0	12.0	15.0	22.0	24.0	24.0	26.0	23.0
Sal. (ppt), surface	26.0	26.0	28.0	25.0	25.0	28.0	27.0	29.5	29.5	29.0	30.0
Sal. (ppt), bottom	27.0	26.0	28.0	25.0	25.0	28.0	27.0	29.5	29.5	29.0	30.0
Oxygen (ppm), surface	11.2	11.0	8.8	8.8	8.8	7.5	8.0	7.0	7.0	6.0	8.4
Oxygen (ppm), bottom	11.5	10.8	9.4	8.8	8.8	8.0	7.0	6.8	6.8	6.2	7.8
Secchi (feet)	1.5	3.0	2.0	1.0	1.0	1.5	3.0	3.5	3.5	2.0	2.0
<i>Spisula solidissima</i>	12 2188	7 1235	11 1770	- -	2 253	19 2886	7 664	3 1000	9 2000	21 3900	4 696
<i>Glycera dibranchiata</i>	- -	- -	- -	- -	- -	- -	- -	- -	1 1	- -	- -
<i>Pagurus longicarpus</i>	- -	- -	- -	- -	- -	- -	3 2	- -	- -	- -	- -
<i>Ovalipes ocellatus</i>	2 20	- -	- -	1 29	1 51	1 46	- -	- -	- -	1 40	- -
<i>Eurypanope depressus</i>	- -	1 8	- -	- -	- -	- -	- -	- -	- -	- -	- -
<i>Asterias forbesii</i>	- -	- -	- -	- -	- -	- -	1 2	- -	- -	- -	- -
Total taxa	2	2	1	1	2	2	3	1	2	2	1
Total specimens	14 2208	8 1243	11 1770	1 29	3 304	20 2932	11 668	3 1000	10 2001	22 3940	4 696

Appendix Table 17. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 50 yards NE of "F" buoy in Little Egg Inlet, New Jersey in 1974.

Zone	1010		1010		1010		1010		1010		1010		1010		1010		1010		1010		1010	
Depth (feet)	20		18		25		17		17		20		15		20		20		20		20	
Coll. No.	JJH-74-001		EVG-74-026		JJH-74-032		JJH-74-037a		JJH-74-037b		JJH-74-047		JJH-74-060		FAS-74-009a		FAS-74-009b		JJH-74-085		EVG-74-087	
Date	2 January		14 February		8 March		17 April		17 April		14 March		6 June		3 July		3 July		1 August		3 September	
Hour	1045-1050		1130-1135		0920-0925		0940-0945		0955-1000		1010-1015		1130-1135		0850-0855		0910-0915		0950-0955		0950-0955	
Tide	Flood 1		Ebb 2		Ebb 1		Ebb 2		Ebb 2		Flood 1		Ebb 1		Ebb 1		Ebb 1		Ebb 1		Flood 2	
Air Temp. (C)	6.0		7.0		10.0		17.0		17.0		21.0		19.0		25.0		25.0		32.0		24.0	
Temp. (C), surface	4.0		2.0		5.5		10.0		10.0		15.0		19.5		20.5		20.5		23.5		23.0	
Temp. (C), bottom	4.0		2.5		6.0		10.0		10.0		14.5		19.0		20.0		20.0		22.0		23.0	
Sal. (ppt), surface	26.0		25.0		30.0		25.0		25.0		25.0		29.0		29.5		29.5		30.0		31.0	
Sal. (ppt), bottom	28.0		27.0		30.0		28.0		28.0		28.0		30.0		30.0		30.0		30.0		30.0	
Oxygen (ppm), surface	10.4		11.2		10.0		9.2		9.2		7.5		6.0		6.4		6.4		6.3		6.8	
Oxygen (ppm), bottom	10.6		10.8		9.8		8.6		8.6		7.2		6.8		6.2		6.2		6.1		7.4	
Secchi (feet)	1.5		3.5		3.5		3.0		3.0		3.5		6.5		3.0		3.0		7.5		12.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	-	-	-	-	present	-	present	-	-	-	-	-	present	-	present	-	-	-	-	-
Crepidula plana	present	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	1	22	-	-	-	-	1	51	-	-	3	70	-	-	1	21	-	-	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-
Urosalpinx cinereus	-	-	-	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mytilus edulis	-	-	-	-	3	13	3	13	1	5	present	-	present	-	present	-	present	-	-	-	-	-
Spisula solidissima	19	3101	10	1570	1	40	-	-	2	405	2	169	8	1326	13	6700	fragment	39	8	1700	22	3381
Antinocoella sarsi	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycera americana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
G. dibranchiata	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nereis sp.	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-
Sabellaria vulgaris	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diopatra cuprea	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arabellidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	800	-	-
Cirolana concharum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-
Pagurus longicarpus	-	-	-	-	-	-	1	+	1	+	-	-	1	+	1	+	-	-	-	-	-	-
Pagurus pollicaris	1	12	-	-	-	-	-	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-
Libinia emarginata	5	291	3	169	5	236	2	98	1	198	-	-	-	-	1	500	6	4500	-	-	-	-
Cancer irroratus	20	572	19	860	29	282	27	563	11	91	3	157	9	98	12	307	10	128	-	-	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	150	4	201
Neopanope texana	4	5	-	-	4	8	1	1	-	-	-	-	-	-	-	-	1	+	-	-	-	-
Eurypanope depressus	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asterias forbesii	-	-	2	87	2	3	1	2	-	-	-	-	2	5	1	8	1	9	-	-	-	-
Total taxa	120		5		7		7		8		3		8		9		10		3		2	
Total specimens	57	3989	35	2708	46	586	35	677	17	750	5	326	25	1507	30	7516	21	5698	11	2650	26	3582

* + = Signifies the weight is less than 0.5g.

Appendix Table 18. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 300 yards E of F1 "96" in Little Egg Inlet, New Jersey in 1974.

Zone Station	1010	1010	1010	1010	1010	1010	1010	1010
Depth (feet)	5	7	7	6	6	7	7	6
Coll. No.	JJH-74-002	EVG-74-029	JJH-74-035	JJH-74-039a	JJH-74-039b	JJH-74-049	JJH-74-059	FAS-74-008a
Date	2 January	14 February	8 March	17 April	17 April	14 May	6 June	3 July
Hour	1120-1125	1128-1133	1100-1105	1230-1235	1240-1245	1145-1150	1000-1005	1037-1042
Tide	Flood 1	Flood 1	Ebb 2	Flood 1	Flood 1	Flood 2	Flood 2	Ebb 1
Air Temp. (C)	9.5	8.0	10.0	16.0	16.0	20.0	18.5	28.5
Temp. (C), surface	3.0	2.0	6.0	12.0	12.0	15.0	17.0	21.0
bottom	3.0	2.5	5.5	11.5	11.5	15.0	18.0	21.5
Sal. (ppt), surface	27.0	27.0	30.0	28.0	28.0	28.0	30.0	29.0
bottom	27.0	28.0	30.0	28.0	28.0	28.0	30.0	29.0
Oxygen (ppm), surface	11.2	11.3	8.8	9.6	9.6	7.6	7.6	6.8
bottom	11.2	11.2	9.0	9.0	9.0	7.6	7.5	6.1
Secchi (feet)	1.5	4.5	3.5	3.0	3.0	2.5	6.5	5.5
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
<i>Mercenaria mercenaria</i>	-	-	-	-	1	83	-	-
<i>Spisula solidissima</i>	73	9120	124	23977	48	4758	116	23162
<i>Nephtys buccera</i>	-	-	-	-	-	-	-	-
<i>Nephtys</i> sp.	fragments	1	-	-	-	-	-	-
<i>Limulus polyphemus</i>	-	-	-	-	-	-	-	-
<i>Cancer irroratus</i>	1	15	-	-	33	2510	4	235
<i>Ovalipes ocellatus</i>	-	-	1	8	1	35	1	35
<i>Asterias forbesii</i>	-	-	-	-	1	2	-	-
Total taxa	3		2		4		3	
Total specimens	74	9136	125	23985	83	7305	122	23513
							146	32876
							234	49018
							71	12961
							51	8200

Appendix Table 18. (cont.)

Zone	1010	1010	1010	1010	1010	1010
Depth (feet)	6	7	10	5	5	5
Coll. No.	FAS-74-008b	JJH-74-083	EVG-74-089	FAS-74-023a	FAS-74-023b	EVG-74-111
Date	3 July	1 August	3 September	22 October	22 October	13 November
Hour	1050-1055	1105-1110	1055-1100	0904-0909	0915-0920	0905-0910
Tide	Ebb 1	Ebb 1	Ebb 1	Flood 1	Flood 1	Ebb 1
Air Temp. (C)	28.5	30.0	24.5	6.5	6.5	13.0
Temp. (C), surface	21.0	23.0	23.0	7.0	7.0	10.5
bottom	21.5	23.0	23.0	7.0	7.0	11.0
Sal. (ppt), surface	29.0	30.0	30.0	28.0	28.0	29.5
bottom	29.0	29.5	31.0	29.0	29.0	29.5
Oxygen (ppm), surface	6.8	5.6	7.3	8.5	8.5	8.9
bottom	6.1	5.3	7.2	9.6	9.6	8.9
Secchi (feet)	5.5	7.0	8.0	4.0	4.0	3.5
	No. Wt.	No. Wt.	No. Wt.	No. Wt.	No. Wt.	No. Wt.
<i>Spisula solidissima</i>	86 10770	123 28097	58 6523	51 9000	52 8500	54 6766
<i>Limulus polyphemus</i>	- -	1 200	1 700	- -	- -	- -
<i>Pagurus longicarpus</i>	- -	- -	- -	- -	1 2	- -
<i>Cancer irroratus</i>	- -	- -	- -	- -	- -	1 195
<i>Ovalipes ocellatus</i>	- -	8 400	16 658	5 125	- -	21 1000
Total taxa	1	3	3	2	2	3
Total specimens	86 10770	132 28697	75 7881	56 9125	53 8502	76 7961

Appendix Table 19. Number and weight (g) of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 400 yards S of Fl "96" in Little Egg Inlet, New Jersey 1974.

Zone	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	
Depth (feet)	25	25	25	18	15	15	20	20	20	20	17	
Coll. No.	JJH-74-011	EVG-74-028	JJH-74-034	JJH-74-038	JJH-74-048a	JJH-74-048b	JJH-74-062	FAS-74-011	JJH-74-084a	JJH-74-084b	EVG-74-090	
Date	24 January	14 February	8 March	17 April	14 May	14 May	6 June	3 July	1 August	1 August	3 September	
Hour	1057-1102	1115-1120	1020-1025	1155-1200	1050-1055	1110-1115	1145-1150	1125-1130	1230-1235	1245-1250	1145-1150	
Tide	Flood 2	Ebb 2	Ebb 2	Flood 1	Flood 1	Flood 1	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 1	
Air Temp. (C)	10.0	8.0	10.0	16.0	21.0	21.0	25.0	29.0	32.0	32.0	24.5	
Temp. (C), surface	5.0	2.0	7.0	13.0	16.5	16.5	19.0	22.0	26.5	26.5	23.5	
bottom	6.0	3.0	6.0	12.0	15.0	15.0	20.0	22.0	25.5	25.5	23.0	
Sal: (ppt), surface	28.0	25.0	30.0	22.0	26.0	26.0	28.0	27.5	28.5	28.5	30.0	
bottom	28.0	28.0	30.0	28.0	28.0	28.0	28.0	28.0	29.0	29.0	30.0	
Oxygen (ppm), surface	10.8	11.1	9.2	8.6	8.2	8.2	5.8	6.1	5.4	5.4	7.4	
bottom	11.0	10.6	8.8	8.0	7.5	7.5	6.2	6.0	5.7	5.7	7.4	
Secchi (feet)	2.0	5.0	3.5	-	3.0	3.0	4.5	5.5	6.0	6.0	7.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	-	-	-	-	-	-	present	-	present	-
Nemertea	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula fornicata	present	-	present	-	-	-	-	-	-	-	-	-
Crepidula plana	present	-	present	-	-	-	-	-	present	-	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	-	-
Urosalpinx cinereus	3	6	-	-	-	-	-	1	4	-	-	-
Nassarius trivittatus	-	-	-	-	-	1	1	-	-	-	-	-
Mytilus edulis	1111	16042	63	948	928	13078	1150	19063	1534	27937	1607	29267
Anomia simplex	present	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	-	-	12	2120	-	-	-	-	-	-	-	-
Antinoella sarsi	2	+	-	-	2	+	1	+	-	-	8	1
Lepidonotus sublevis	4	1	-	-	-	-	-	-	-	-	-	-
Glycera americana	-	-	-	-	-	-	-	-	1	2	-	-
G. dibranchiata	-	-	-	-	-	-	-	-	-	-	1	1
Nereis succinea	-	-	-	-	-	-	-	-	7	2	-	-
Nereis sp.	1	1	-	-	3	+	2	1	-	-	1	1
Sabellaria vulgaris	present	-	present	-	-	-	-	-	-	-	-	-
Diopatra cuprea	-	-	1	1	-	-	-	-	-	-	-	-
Hydroides dianthus	present	-	-	-	-	-	-	-	-	-	-	-
Balanus sp.	-	-	-	-	present	-	-	-	-	-	present	-
Pagurus longicarpus	8	4	-	-	-	-	-	-	2	+	-	-
P. pollicaris	2	24	1	23	-	-	-	-	-	-	1	14
Libinia emarginata	6	314	2	160	-	-	-	-	1	8	-	-
Cancer irroratus	16	379	8	700	6	681	2	271	5	177	2	35
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	-	-
Neopanope texana	22	17	3	3	9	5	3	6	-	-	2	3
Eurypanope depressus	1	+	-	-	1	1	-	-	-	-	-	-
Arbacia punctulata	1	32	-	-	-	-	-	-	-	-	-	-
Asterias forbesii	14	534	16	1788	40	3228	36	2900	-	-	17	1220
Total taxa	19		11		8		7		3		4	
Total specimens	1191	17354	106	5743	989	16993	1195	22242	1540	28122	1612	29306
									435	9065	5	17
									8643	3467	13062	4616
									121	2558		

* + = Signifies the weight is less than 0.5g.

Appendix Table 20. Number and weight of macroinvertebrates taken in 5-minute hauls of a clam dredge approximately 1.8 nautical miles from Marshelder Channel in Little Sheepshead Creek, New Jersey in 1974.

Creek, New Jersey in 1974.																							
Zone	2210		2210		2210		2210		2210		2210		2210		2210		2210		2210		2210		
Depth (feet)	15		12		15		15		15		15		15		15		15		15		15		
Coil. No.	JJH-74-004		EVG-74-030		JJH-74-036		JJH-74-040		JJH-74-051a		JJH-74-051b		JJH-74-063		FAS-74-012		JJH-74-086a		JJH-74-086b		EVG-74-091		
Date	2 January		14 February		8 March		17 April		14 May		14 May		6 June		3 July		1 August		1 August		3 September		
Hour	1230-1235		1300-1305		1225-1230		1340-1345		1340-1345		1405-1410		1240-1245		1155-1200		1320-1325		1330-1335		1220-1225		
Tide	Flood 1		Flood 1		Ebb 2		Flood 1		Flood 2		Flood 2		Ebb 1		Ebb 2		Ebb 2		Ebb 2		Ebb 2		
Air Temp. (C)	4.5		8.0		9.0		17.0		21.0		21.0		25.0		32.0		30.0		30.0		24.5		
Temp. (C), surface	4.0		3.0		7.0		11.5		15.5		15.5		21.0		23.0		26.0		26.0		23.5		
bottom	3.0		4.0		7.0		11.0		15.5		15.5		20.0		23.5		26.0		26.0		23.3		
Sal. (ppt), surface	26.0		28.0		28.0		28.0		29.0		29.0		27.0		27.5		28.0		28.0		30.0		
bottom	26.0		28.0		28.0		28.0		29.0		29.0		27.0		27.0		28.5		28.5		30.0		
Oxygen (ppm), surface	11.2		10.8		8.6		9.0		7.2		7.2		6.2		6.0		6.0		6.0		7.6		
bottom	10.8		10.8		9.0		9.4		7.3		7.3		6.0		5.4		5.8		5.8		6.3		
Secchi (feet)	1.5		4.0		3.0		2.5		1.5		1.5		3.5		3.5		5.0		5.0		3.0		
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	
Microciona pro ifera	-	-	present	-	present	-	present	-	-	-	-	-	-	-	present	-	-	-	-	-	present	-	
Cliona sp.	-	-	present	-	present	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	
Hydractinia echinata	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bryozoa	-	-	-	-	-	-	present	-	present	-	present	-	-	-	-	-	-	-	-	-	-	-	
Crepidula plana	-	-	-	-	present	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	present	-	
Busycon canaliculatum	-	-	-	-	-	-	-	-	-	-	1	98	-	-	1	83	-	-	-	-	-	-	
Acanthodoris pilosa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	
Andara ovalis	-	-	-	-	1	22	-	-	-	-	-	-	-	1	20	-	-	-	-	-	10	306	
Mercenaria mercenaria	5	519	5	404	97	7598	28	3026	33	3306	11	1300	10	1382	4	261	13	900	16	1435	35	3195	
Pitar morr	-	-	1	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Petricola pholadiformis	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tagelus plebeius	-	-	3	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ensis directus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20	1	8	-	-	-	
Phyllodoctidae	-	-	-	-	-	-	-	-	-	-	fragment	1	-	-	-	-	-	-	-	-	-	-	
Nereis succinea	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nereis sp.	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	
Sabellaria vulgaris	present	-	-	-	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lumbrineris fragilis	-	-	-	-	-	-	fragment	1	fragment	+	-	-	-	-	-	-	-	-	-	-	-	-	
Hydroides dianthus	present	-	-	-	20	2	-	-	1	+	4	+	20	3	-	-	-	-	-	-	50	2	
Pagurus pollicaris	-	-	-	-	1	23	-	-	-	-	2	18	-	-	-	-	-	-	-	-	1	16	
Libinia emarginata	-	-	-	-	8	450	1	42	2	184	8	632	-	-	-	-	-	-	-	-	1	74	
Libinia dubia	1	76	-	-	1	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cancer irroratus	-	-	-	-	2	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Neopanope texana	-	-	-	-	1	1	2	3	1	4	-	-	-	-	-	-	-	-	-	-	4	3	
Total taxa	5		5		13		7		6		9		2		5		2		2		9		
Total specimens	8	599	9	466	136	8173	32	3072	37	3494	27	2050	30	1385	6	364	14	920	17	1443	104	3597	

* + = Signifies the weight is less than 0.5g

Appendix Table 21. Macroinvertebrates taken in 15-minute hauls of a double dredge in the vicinity of the Site off Little Egg Inlet, New Jersey in September, 1974.

Station No.	1				2				3				4				5				6			
Coll. No.	JJH-74-094				JJH-74-095				JJH-74-096				JJH-74-097				JJH-74-098				JJH-74-099			
Depth (feet)	14				14				14				19				23				23			
Loran																								
3H4	3850				3961				39 9				3992				4000				4013			
3H5	3181				3182				3182				3182				3182				3182			
Heading (degrees)	045				045				045				045				045				045			
Replicate No.	1		2		1		2		1		2		1		2		1		2		1		2	
	No.	Wt. ^a	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Nemertea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	3	0.1	-	-	-	-	-	-	1	0.035	-	-	9	0.325	9	0.250	1	0.025	3	0.1	-	-	3	0.1
Polinices heros	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.04	-	-	-	-	1	0.01	-	-
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.001	-	-	-	-
Spisula solidissima	382	31.0	435	52.0	77	10.5	70	8.5	263	42.0	268	36.0	35	8.6	35	7.75	2	0.9	1	0.35	-	-	-	-
Glycera sp.	-	-	-	-	-	-	-	-	-	-	1	+ ^b	1	0.004	-	-	-	-	-	-	-	-	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	1	0.001	2	0.002
Ophelia denticulata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.001	-	-
Diopatra cuprea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.002	-	-	1	0.001	-	-
Pagurus longicarpus	-	-	-	-	1	0.01	1	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.2	-	-	-	-	-	-
Cancer irroratus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.009	1	0.03	-	-	2	0.012
Ovalipes ocellatus	5	0.09	1	0.1	2	0.11	-	-	-	-	1	0.06	2	0.01	-	-	-	-	-	-	-	-	1	0.012
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.001
Asterias forbesii	-	-	-	-	-	-	-	-	-	-	1	0.01	-	-	-	-	-	-	-	-	-	-	-	-
Totals	390	31.19	436	52.1	80	10.62	71	8.51	264	42.035	271	36.07	48	8.939	45	7.84	6	1.136	6	0.481	5	0.014	9	0.127
Total taxa	3		2		3		2		2		4		5		3		5		4		5		5	

a weight in kg.

b += 1 g.

Appendix Table 21. (cont.)

Station No.	7				8				9				10				11				12			
Coll. No.	JJH-74-119				JJH-74-120				JJH-74-103				JJH-74-109				JJH-74-108				JJH-74-107			
Depth (feet)	36				34				27				14				24				19			
Loran																								
3H4	4000				4011				3990				3982				3980				3976			
3H5	3177				3178				3178				3182				3178				3178			
Heading (degrees)	180				180				045				180				180				180			
Replicate No.	1		2		1		2		1		2		1		2		1		2		1		2	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Actiniaria	-	-	-	-	-	-	-	-	-	-	1	0.01	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	1	0.023	1	0.01	-	-	7	0.5	8	0.24	-	-	1	0.03	10	0.23	6	0.205	4	0.13	4	0.09
Polinices heros	-	-	-	-	1	0.01	3	0.045	-	-	-	-	-	-	1	+	1	0.01	-	-	-	-	-	-
Nassarius trivittatus	3	0.003	1	0.001	4	0.004	2	0.002	2	0.002	2	0.002	-	-	-	-	-	-	-	-	2	0.002	-	-
Pitar morrhuana	1	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	-	-	-	-	1	0.13	2	0.4	11	2.0	28	7.0	32	10.0	23	5.0	32	8.5	35	9.0	8	1.8	5	1.8
Ensis directus	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	1	0.01	-	-	1	0.001	-	-
Sigalionidae	-	-	-	-	1	+	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycera sp.	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	1	+	1	+	-	-	2	+
Nephtys sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	2	+
Diopatra cuprea	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-
Orbiniidae	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	1	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crangon septemspinosa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.002	-	-	-	-	-	-
Pagurus longicarpus	-	-	1	0.002	-	-	-	-	1	0.003	1	0.005	2	0.005	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	-	1	0.005	1	0.01	2	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Echinarachnius parma	-	-	-	-	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	5	0.024	6	0.031	11	1.665	10	0.497	21	2.505	41	7.257	34	10.005	25	5.03	47	8.752	43	9.205	15	1.933	13	1.89
Total taxa	3		6		8		5		4		6		2		3		7		4		4		4	

Appendix Table 21. (cont.)

Station No.	13				14				15				16				17				18			
Coll. No.	JJH-74-106				JJH-74-105				JJH-74-104				JJH-74-114				JJH-74-115				JJH-74-116			
Depth (feet)	17				18				19				33				27				33			
Loran																								
3H4	3960				3950				3938				3940				3953				3960			
3H5	3178				3178				3177				3174				3176				3174			
Heading (degrees)	200				135				135				180				180				180			
Replicate No.	1		2		1		2		1		2		1		2		1		2		1		2	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Actiniaria	-	-	-	-	-	-	-	-	-	-	1	0.03	-	-	-	-	-	-	-	-	-	-	-	-
Nemertea	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	-	-	15	1.1	12	0.55	1	0.01	-	-	-	-	-	-	-	3	0.085	6	0.205	6	0.22	-
Polinices heros	-	-	-	-	1	0.001	-	-	-	-	-	-	1	0.02	1	0.01	-	-	-	1	0.022	2	0.05	-
Nassarius trivittatus	-	-	-	-	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	1	0.4	-	-	125	17.66	130	18.5	3	0.03	10	0.6	2	0.3	3	1.5	5	2.25	2	0.75	2	0.212	1	0.21
Ensis directus	-	-	-	-	-	-	-	-	1	0.001	+	0.001	-	-	-	-	-	-	-	1	0.005	-	-	-
Siliqua costata	1	0.002	2	0.004	-	-	-	-	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycera sp.	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2.25	-	-	-	-	-
Pagurus longicarpus	-	-	-	-	6	0.02	-	-	-	-	-	-	-	-	-	-	1	+	1	0.002	-	-	-	-
Ovalipes ocellatus	1	0.075	-	-	1	0.005	2	0.1	-	-	-	-	-	-	-	-	-	-	-	2	0.01	1	0.012	-
Echinarachinus parma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	0.02	5	0.03	-
Totals	3	0.472	3	0.004	149	18.787	144	19.15	7	0.042	13	0.631	4	0.32	4	1.51	6	2.25	7	3.087	17	0.474	15	0.522
Total taxa	3		2		6		3		5		4		3		2		2		4		6		5	

Appendix Table 21. (cont.)

Station No.	19				20				21				22				23				24			
Coll. No.	JJH-74-117				JJH-74-118				JJH-74-113				JJH-74-112				JJH-74-111				JJH-74-110			
Depth (feet)	38				31				32				41				42				50			
Loran																								
3H4	3971				3980				3984				3990				3999				4010			
3H5	3174				3174				3174				3173				3173				3173			
Heading (degrees)	180				180				135				135				135				135			
Replicate No.	1		2		1		2		1		2		1		2		1		2		1		2	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
<i>Polinices duplicata</i>	1	0.025	4	0.078	-	-	-	-	-	-	-	-	2	0.1	-	-	2	0.05	2	0.08	1	0.03	3	0.1
<i>Polinices heros</i>	1	0.09	1	0.038	-	-	-	-	1	0.02	-	-	-	-	1	0.05	1	0.04	-	-	1	0.01	-	-
<i>Nassarius trivittatus</i>	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	0.005	-	-	-	-	4	0.004
<i>Pitar morhuana</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	1.0	26	0.75
<i>Spisula solidissima</i>	1	0.004	1	0.24	-	-	-	-	7	2.75	3	0.5	2	1.5	2	0.8	1	+	-	-	24	6.0	17	3.2
<i>Sigalionidae</i>	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Nephtys</i> sp.	-	-	-	-	-	-	-	-	-	-	2	0.002	-	-	-	-	-	-	-	-	-	-	-	-
<i>Diopatra cuprea</i>	-	-	1	0.001	-	-	-	-	-	-	-	-	1	+	-	-	-	-	1	0.001	5	0.005	8	0.008
<i>Lumbrineridae</i>	-	-	-	-	-	-	-	-	-	-	1	0.001	-	-	-	-	1	+	-	-	-	-	-	-
<i>Limulus polyphemus</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	1.5	-	-	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	7	0.01	1	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pagurus pollicaris</i>	1	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.03	-	-
<i>Libinia emarginata</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.3
<i>Cancer irroratus</i>	1	0.001	1	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	0.025	12	0.07
<i>Ovalipes ocellatus</i>	-	-	3	0.015	1	0.01	-	-	-	-	-	-	-	1	0.05	-	2	0.003	2	0.03	-	-	-	-
<i>Echinarachnius parma</i>	64	0.475	54	0.45	-	-	-	-	-	-	1	0.005	12	0.1	6	0.05	2000	10.0	2250	11.25	-	-	1	0.005
<i>Asterias forbesii</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	0.015	1	0.005
Totals	77	0.616	66	0.829	1	0.01	0	0	9	2.77	7	0.508	18	3.2	10	0.95	2012	10.098	2255	11.361	79	7.115	73	4.442
Total taxa	8		8		1		0		3		4		5		4		7		4		8		9	

Appendix Table 21. (cont.)

Station No.	25				26				27				28				29				30			
Coll. No.	JJH-74-121				JJH-74-122				JJH-74-123				JJH-74-125				JJH-74-128				JJH-74-127			
Depth (feet)	56				54				47				46				39				36			
Loran																								
3H4	4009				3998				3990				3977				3970				3960			
3H5	3168				3167				3168				3169				3167				3168			
Heading (degrees)	135				135				135				135				090				090			
Replicate No.	1		2		1		2		1		2		1		2		1		2		1		2	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Polinices duplicata	1	0.05	-	-	-	-	-	-	-	-	-	-	1	0.05	-	-	-	-	-	-	-	-	-	-
Polinices heros	1	0.015	-	-	-	-	-	-	-	-	-	-	3	0.1	-	-	-	-	-	-	1	0.02	-	-
Nassarius trivittatus	-	-	-	-	-	-	2	0.002	3	0.003	1	0.001	1	0.001	1	0.001	1	0.001	1	0.001	-	-	1	0.001
Astarte castanea	9	0.06	22	0.15	1	0.005	1	0.01	-	-	-	-	3	0.025	2	0.02	-	-	-	-	1	0.01	-	-
Pitar morrhua	-	-	3	0.05	13	0.31	20	0.425	2	0.065	-	-	1	0.05	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	4	1.5	4	0.7	-	-	1	0.035	2	0.2	3	0.475	1	0.2	3	1.05	9	2.25	9	2.0	4	2.0	6	3.0
Sigalionidae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	+	-	-
Glycera sp.	-	-	-	-	2	0.002	-	-	-	-	1	0.001	-	-	1	+	-	-	-	-	1	+	-	-
Nephtys sp.	-	-	-	-	-	-	-	-	1	+	-	-	1	+	1	+	-	-	-	-	-	-	-	-
Diopatra cuprea	-	-	-	-	-	-	3	0.003	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbrineridae	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	3	0.001
Limulus polyphemus	-	-	-	-	1	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pagurus longicarpus	-	-	-	-	1	0.001	1	0.001	3	0.006	2	0.005	1	0.001	-	-	1	0.002	1	0.002	4	0.004	-	-
Pagurus pollicaris	-	-	-	-	-	-	1	0.01	-	-	1	0.11	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	-	-	1	0.005	1	0.004	6	0.04	36	0.06	16	0.1	4	0.05	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	-	-	-	-	-	-	-	1	0.075	2	0.1	3	0.15	-	-	-	-	-	-	1	0.005	-	-
Echinarachnius parma	16	0.14	51	0.275	3	0.055	-	-	5	0.025	1	0.005	174	2.0	196	1.75	148	1.3	113	1.1	241	2.2	200	1.3
Asterias forbesii	-	-	1	0.002	-	-	-	-	2	0.002	4	0.01	1	0.005	1	0.01	-	-	-	-	1	0.005	1	0.005
Totals	31	1.765	82	1.182	22	0.877	35	0.526	56	0.436	31	0.807	194	2.632	206	2.831	159	3.553	124	3.103	256	4.244	211	4.307
Total taxa	5		6		7		8		11		9		12		8		4		4		9		5	

Appendix Table 21. (cont.)

Station No.	31				32				33				34				35				36			
Coll. No.	JJH-74-126				JJH-74-124				JJH-74-136				JJH-74-137				JJH-74-138				JJH-74-129			
Depth (feet)	42				42				46				47				50				37			
Loran																								
3H4	3952				3941				3940				3950				3960				3970			
3H5	3172				3167				3163				3163				3163				3163			
Heading (degrees)	090				045				045				022				0				090			
Replicate No.	1		2		1		2		1		2		1		2		1		2		1		2	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
<i>Crepidula plana</i>	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Polinices duplicata</i>	1	0.03	-	-	4	0.12	2	0.1	1	0.04	-	-	-	-	1	0.125	-	-	-	-	-	-	-	-
<i>Polinices heros</i>	-	-	-	-	1	0.045	1	0.055	1	0.02	-	-	-	-	1	0.075	-	-	-	-	1	0.012	-	-
<i>Nassarius trivittatus</i>	1	0.001	1	0.001	2	0.002	2	0.002	2	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Astarte castanea</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.01	-	-	-	-	-	-
<i>Pitar morrhuana</i>	-	-	1	0.015	-	-	-	-	-	-	-	-	-	-	1	0.025	-	-	-	-	-	-	-	-
<i>Spisula solidissima</i>	1	0.35	4	1.0	2	0.4	1	0.3	4	1.5	1	0.874	-	-	-	-	1	0.5	-	-	14	6.0	18	5.4
<i>Ensis directus</i>	1	0.005	2	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Siliqua costata</i>	-	-	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Glycera</i> sp.	2	0.002	-	-	-	-	-	-	-	-	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-
<i>Nephtys</i> sp.	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Diopatra cuprea</i>	-	-	-	-	1	0.002	-	-	-	-	-	-	-	-	-	-	2	0.02	-	-	1	0.002	-	-
<i>Lumbrineridae</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	0.001	-	-	-	-	-	-	-	-	-	-
<i>Limulus polyphemus</i>	-	-	1	0.35	-	-	-	-	1	1.0	-	-	-	-	-	-	-	-	1	1.2	-	-	-	-
<i>Pagurus longicarpus</i>	5	0.005	3	0.006	-	-	-	-	1	0.002	-	-	1	0.005	-	-	-	-	-	-	-	-	-	-
<i>Pagurus pollicaris</i>	1	0.06	1	0.015	-	-	-	-	1	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	1	0.01	-	-	-	-	2	0.01	-	-	-	-	-	-	1	0.05	-	-
<i>Echinarachnius parma</i>	3	0.002	6	0.035	226	1.1	160	0.9	48	0.3	25	0.16	26	0.1	8	0.025	70	0.475	46	0.23	4	0.015	1	0.005
<i>Asterias forbesii</i>	-	-	-	-	2	0.01	-	-	-	-	-	-	1	0.005	-	-	-	-	1	0.005	-	-	-	-
Totals	16	0.456	20	1.426	238	1.679	167	1.367	59	2.884	27	1.035	31	0.121	10	0.08	75	1.195	49	1.445	21	6.079	19	5.405
Total taxa	9		9		7		6		8		3		5		3		5		4		5		2	

Appendix Table 21. (cont.)

Station No.	37				38				39				40				46				47			
Coll. No.	JJH-74-130				JJH-74-131				JJH-74-132				JJH-74-133				JJH-74-134				JJH-74-135			
Depth (feet)	50				55				56				57				13				15			
Loran																								
3H4	3980				3990				4000				4010				3971				3980			
3H5	3163				3163				3163				3163				3186				3186			
Heading (degrees)	090				090				090				090				130				090			
Replicate No.	1		2		1		2		1		2		1		2		1		2		1		2	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
<i>Polinices heros</i>	-	-	1	0.038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Nassarius trivittatus</i>	-	-	1	0.001	-	-	1	0.001	1	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Astarte castanea</i>	1	0.025	1	0.02	1	0.01	5	0.05	32	0.24	21	0.155	4	0.041	3	0.035	-	-	-	-	-	-	-	-
<i>Spisula solidissima</i>	1	0.07	1	0.19	-	-	-	-	-	-	-	-	1	0.3	1	0.07	135	20.5	124	19.5	4	0.21	2	0.3
<i>Siliqua costata</i>	-	-	-	-	-	-	1	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sigalionidae</i>	-	-	-	-	-	-	-	-	-	-	2	0.001	-	-	-	-	-	-	-	-	-	-	-	-
<i>Glycera</i> sp.	-	-	-	-	1	+	-	-	-	-	-	-	1	+	1	+	-	-	-	-	-	-	-	-
<i>Nephtys</i> sp.	-	-	1	+	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-
<i>Lumbrineridae</i>	-	-	-	-	-	-	1	+	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-
<i>Limulus polyphemus</i>	-	-	-	-	-	-	1	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	1	0.002	1	0.002	2	0.03	-	-	-	-	1	0.002	-	-	-	-	1	0.002	-	-	1	0.003	-	-
<i>Libinia emarginata</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.08	
<i>Cancer irroratus</i>	2	0.028	2	0.05	1	0.2	2	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.07	3	0.15	7	0.25	3	0.13
<i>Echinarachnius parma</i>	-	-	28	0.25	-	-	5	0.05	34	0.34	49	0.5	19	0.16	14	0.12	-	-	-	-	-	-	-	-
<i>Asterias forbesii</i>	-	-	-	-	1	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	5	0.125	36	0.551	6	0.245	16	1.654	67	0.581	74	0.658	26	0.501	19	0.225	137	20.572	127	19.65	12	0.463	6	0.51
Total taxa	4		8		5		7		3		5		5		4		3		2		3		3	

Appendix Table 21. (cont.)

Station No.	48		49		50	
Coll. No.	JJH-74-102		JJH-74-101		JJH-74-100	
Depth (feet)	12		16		16	
Loran						
3H4	3990		4002		401	
3H5	3185		3186		3187	
Heading (degrees)	045		045		045	
Replicate No.	1		2		1	
	No.	Wt.	No.	Wt.	No.	Wt.
<i>Polinices duplicata</i>	-	-	-	-	2	0.04
<i>Polinices heros</i>	-	-	-	-	1	0.01
<i>Spisula solidissima</i>	36	3.5	37	4.5	3	0.09
<i>Ensis directus</i>	-	-	-	-	1	0.035
<i>Limulus polyphemus</i>	-	-	1	1.0	-	-
<i>Pagurus longicarpus</i>	-	-	-	-	-	-
<i>Pagurus pollicaris</i>	-	-	-	-	1	0.005
<i>Ovalipes ocellatus</i>	2	0.02	1	0.02	-	-
<i>Asterias forbesii</i>	-	-	-	-	3	0.025
Totals	38	3.52	39	5.52	4	0.001
Total taxa	2		3		4	

Appendix Table 21. (cont.)

Station No.	48		49		50	
Coll. No.	JJH-74-102		JJH-74-101		JJH-74-100	
Depth (feet)	12		16		16	
Loran						
3H4	3990		4002		401	
3H5	3185		3186		3187	
Heading (degrees)	045		045		045	
Replicate No.	1	2	1	2	1	2
	No. Wt.	No. Wt.	No. Wt.	No. Wt.	No. Wt.	No. Wt.
<i>Polinices duplicata</i>	- -	- -	2 0.04	1 0.01	3 0.09	- -
<i>Polinices heros</i>	- -	- -	3 0.04	2 0.05	1 0.035	- -
<i>Spisula solidissima</i>	36 3.5	37 4.5	154 26.5	148 27.5	58 11.1	46 10.25
<i>Ensis directus</i>	- -	- -	- -	- -	- -	1 0.001
<i>Limulus polyphemus</i>	- -	1 1.0	- -	- -	- -	- -
<i>Pagurus longicarpus</i>	- -	- -	1 0.01	1 0.01	- -	1 0.005
<i>Pagurus pollicaris</i>	- -	- -	1 0.01	- -	- -	- -
<i>Ovalipes ocellatus</i>	2 0.02	1 0.02	4 0.16	3 0.11	- -	3 0.025
<i>Asterias forbesii</i>	- -	- -	- -	1 0.02	1 0.001	- -
Totals	38 3.52	39 5.52	165 26.76	156 27.7	63 11.226	51 10.281
Total taxa	2	3	6	6	4	4

Appendix Table 21. (cont.)

T O T A L S									
	n	wt	f ^a	n/coll	wt/coll	n/f	wt/f	No. Rank	Wt. Rank
Actiniaria	2	0.04	2	0 ^b	0	1	0.02	22.5	15
Nemertea	2	0.001	2	0	0	1	0	22.5	24
Crepidula plana	present	-	1	-	-	present	-	-	-
Polinices duplicata	146	5.681	39	1.6	0.063	3.743	0.146	3	4
Polinices heros	38	1.001	30	0.4	0.011	1.266	0.033	10	7
Nassarius trivittatus	50	0.049	28	0.5	0.001	1.75	0.002	9	14
Astarte castanea	108	0.866	16	1.2	0.010	6.75	0.054	4	8
Pitar morrhua	106	2.71	10	1.2	0.030	10.6	0.271	5	5
Spisula solidissima	2927	454.86	75	32.5	5.054	39.027	6.065	2	1
Ensis directus	10	0.027	9	0.1	0	1	0.003	16	17
Siliqua costata	6	0.011	5	0.1	0	1.2	0.002	20	18
Sigalionidae	7	0.001	5	0.1	0	1.4	0	19	24
Glycera sp.	19	0.010	16	0.2	0	1.188	0	13	19
Nephtys sp.	16	0.006	13	0.2	0	1.23	0	14	20
Ophelia denticulata	1	0.001	1	0	0	1	0.001	25	24
Diopatra cuprea	27	0.046	13	0.3	0	2.077	0.002	11	16
Lumbrineridae	11	0.003	9	0.1	0	1.222	0	15	21
Orbinidae	1	+	1	0	0	1	0	25	-
Limulus polyphemus	9	10.8	9	0.1	0.120	1	1.2	17	3
Crangon septemspinosa	1	0.002	1	0	0	1	0.002	25	22
Pagurus longicarpus	57	0.175	32	0.6	0.002	1.781	0.005	8	12
Pagurus pollicaris	8	0.265	8	0.1	0.003	1	0.033	18	11
Libinia emarginata	3	0.58	3	0	0.006	1	0.193	21	9
Cancer irroratus	95	0.739	17	1.1	0.006	5.6	0.033	6	10
Ovalipes ocellatus	70	2.092	35	0.8	0.023	2.0	0.060	7	6
Echinarachnius parma	6320	37.304	41	70.2	0.414	154.1	0.910	1	2
Asterias forbesii	23	0.115	16	0.3	0.001	1.4	0.007	12	13
Taxa	27								
Totals	10063	517.387		111.8	5.749				
Gastropoda	234	6.731		2.6	0.075				
Bivalvia	3157	458.474		35.1	5.094				
Polychaeta	82	0.067		0.9					
Decapoda	234	3.853		2.6	0.041				
Echinodermata	6343	37.419		70.5	0.416				
No. Collections	90								

a f = Number of collections in which a species appeared.

b 0 = n/coll < 1 or wt/coll < .001 kg or wt/f < .001 kg.

Appendix Table 22. Number and weight of macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in the vicinity of the Site off Little Egg Inlet, New Jersey in 1974.

Location	Landward of Site		Seaward of Ridge		Seaward of Ridge		Nearshore		Off Holgate Tower		Off Holgate Tower		Landward of Site		Seaward of Ridge		Seaward of Ridge		Off Brigantine	
Zone	5150	5255	5350	5450	5020	5120	5220	5150	5250	5350	5450	5180	5150	5250	5350	5450	5180	5150	5180	
Depth (feet)	16	34-38	43	48	14-16	25-30	42-45	18-20	36-40	40-42	42-43	12-15	18-20	36-40	40-42	42-43	12-15	18-20	36-40	
Coll. No.	CBM-74-002	CBM-74-003	CBM-74-004	CBM-74-001	CBM-74-007	CBM-74-006	CBM-74-005	RPS-74-005	RPS-74-004	RPS-74-003	RPS-74-002	RPS-74-008	RPS-74-005	RPS-74-004	RPS-74-003	RPS-74-002	RPS-74-008	RPS-74-005	RPS-74-004	
Date	8 January	8 January	8 January	8 January	8 January	8 January	8 January	22 January	22 January	22 January	22 January	22 January	22 January	22 January	22 January	22 January	22 January	22 January	22 January	
Hour	1405-1420	1120-1135	1040-1055	0950-1005	1310-1325	1240-1255	1200-1215	1145-1200	1102-1117	1020-1035	0950-1005	1225-1240	1145-1200	1102-1117	1020-1035	0950-1005	1225-1240	1145-1200	1102-1117	
Tide	Ebb 2	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 2	Ebb 2	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 1	
Boat Heading (degrees)	210	210	210	045	050	210	045	045	050	045	045	215	045	045	045	045	215	045	045	
Air Temp. (C)	2.0	1.0	2.0	3.0	2.0	1.5	0.0	11.0	9.0	9.0	9.0	11.0	11.0	9.0	9.0	9.0	11.0	11.0	11.0	
Temp. (C), surface	4.0	4.0	4.0	5.0	5.0	5.0	4.0	5.0	4.5	4.5	5.0	5.0	5.0	4.5	4.5	5.0	5.0	5.0	5.0	
Temp. (C), bottom	5.0	4.0	5.0	4.5	5.0	5.0	5.5	5.0	5.0	5.0	5.0	5.5	5.0	5.0	5.0	5.0	5.5	5.0	5.5	
Sal. (ppt), surface	27.5	28.0	28.0	29.0	29.5	29.5	29.0	28.0	27.5	29.5	29.0	29.5	30.0	30.0	30.0	30.0	30.0	29.5	29.5	
Sal. (ppt), bottom	29.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	
Oxygen (ppm), surface	10.5	10.5	10.5	10.0	10.6	10.4	10.8	10.6	10.9	10.8	10.5	10.7	10.5	10.9	10.8	10.5	10.7	10.5	10.7	
Oxygen (ppm), bottom	9.8	10.3	10.5	10.4	10.6	10.0	9.8	10.4	10.5	10.5	10.5	10.3	10.5	10.5	10.5	10.5	10.3	10.5	10.3	
Secchi (feet)	3.0	7.5	8.5	14.0	7.0	8.5	14.0	4.5	8.0	7.5	14.0	3.5	4.5	8.0	7.5	14.0	3.5	4.5	8.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	-	-	present	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-
Ctenophora	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	-	-	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	-	-	1	1	2	1	-	-	2	2	-	-	-	-	4	3	-	-	-	-
Pitar morrhuana	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycera americana	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diopatra cuprea	-	-	2	2	fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cirolana concharum	-	-	-	-	2	1	-	-	-	-	-	-	2	1	-	-	-	-	-	-
Crangon septemspinosa	450	268	28	8	-	-	-	-	2	1	7	3	3	1	275	226	89	49	160	49
Pagurus longicarpus	-	-	-	-	12	2	-	-	-	-	1	+ ^a	4	1	2	1	1	3	1	-
Pagurus pollicaris	-	-	1	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	1	89	-	-	-	-	-	-	-	-
Cancer irroratus	8	1000	25	626	5	260	4	37	-	-	6	277	7	105	20	2351	10	760	4	306
Eurypanopeus depressus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Echinarachnius parma	-	-	-	-	172	1041	450	3402	-	-	-	-	1	5	-	-	1	5	2	10
Asterias forbesii	2	4	55	52	24	61	14	187	2	6	25	106	17	59	3	6	3	7	8	13
Total taxa	3		9		9		3		2		7		5		5		6		3	
Total specimens	460	1272	115	705	218	1376	468	3626	4	7	42	477	32	171	302	2585	104	822	181	382
Species diversity	0.12		1.26		0.79		0.18		-		1.21		1.26		0.38		0.55		0.53	

Appendix Table 22. (cont.)

Location	Off		Off		Landward		Seaward		Seaward		Nearshore		Off Holgate		Off Holgate		Landward		Seaward	
Zone	Brigantine	Brigantine	Brigantine	Brigantine	of Site	Site	of Ridge	of Ridge	of Ridge	of Ridge			Tower	Tower	Tower	Tower	of Site	Site	of Ridge	
Depth (feet)	5280	5380	5150	5250	5350	5450	5020	5120	5220	5150	5255	5350	5120	5220	5150	5255	5350	5350	5350	
Coil. No.	30	40	18-24	38-40	40-45	40-45	15	27-30	42-45	15-18	35-36	35-37	27-30	42-45	15-18	35-36	35-37	35-37	35-37	
Date	RPS-74-007	RPS-74-006	CBM-74-017	CBM-74-018	CBM-74-019	CBM-74-020	CBM-74-023	CBM-74-022	CBM-74-021	CBM-74-024	CBM-74-025	CBM-74-026	CBM-74-022	CBM-74-021	CBM-74-021	CBM-74-024	CBM-74-025	CBM-74-026	CBM-74-026	
Hour	22 January	22 January	11 February	11 February	11 February	11 February	11 February	11 February	11 February	21 February	21 February	21 February	11 February	11 February	21 February	21 February	21 February	21 February	21 February	
Tide	1257-1312	1340-1355	1305-1320	1340-1355	1420-1435	0940-0955	1210-1225	1125-1140	1040-1055	1245-1300	1210-1225	1130-1145	1125-1140	1040-1055	1245-1300	1210-1225	1130-1145	1130-1145	1130-1145	
Boat Heading (degrees)	Ebb 2	Ebb 2	Ebb 1	Ebb 1	Ebb 1	Flood 2	High	Flood 2	Flood 2	Ebb 2	Ebb 2	Ebb 1	Flood 2	Flood 2	Ebb 2	Ebb 2	Ebb 1	Ebb 1	Ebb 1	
Air Temp. (C)	060	225	040	040	225	040	000	040	040	220	045	220	040	040	220	045	220	220	220	
Temp. (C), surface	11.5	11.5	2.0	2.0	1.0	1.0	2.0	2.0	2.0	7.0	6.5	6.5	2.0	2.0	7.0	6.5	6.5	6.5	6.5	
Temp. (C), bottom	5.0	5.0	2.0	2.0	2.0	2.0	2.1	2.5	2.7	3.5	3.7	3.2	2.5	2.7	3.5	3.7	3.2	3.2	3.2	
Sal. (ppt), surface	5.0	5.0	2.1	2.0	2.0	2.0	2.7	2.5	3.1	3.4	3.8	3.2	2.5	3.1	3.4	3.8	3.2	3.2	3.2	
Sal. (ppt), bottom	29.5	29.0	28.5	28.5	28.5	28.5	30.0	29.0	28.5	28.5	29.0	29.5	30.0	28.5	28.5	29.0	29.5	29.5	29.5	
Oxygen (ppm), surface	30.0	30.0	28.5	30.0	28.5	30.5	30.5	30.0	30.0	29.0	30.0	30.0	30.0	30.0	29.0	30.0	30.0	30.0	30.0	
Oxygen (ppm), bottom	10.6	10.8	11.9	-	-	11.4	12.0	12.0	11.7	11.2	11.4	11.4	12.0	11.7	11.2	11.4	11.4	11.4	11.4	
Secchi (feet)	10.4	10.7	12.2	-	-	11.9	12.0	11.9	11.8	11.1	10.4	10.7	11.9	11.8	11.1	10.4	10.7	10.7	10.7	
	5.5	6.5	4.0	5.0	6.0	5.0	3.0	4.0	6.0	5.0	8.0	10.0	4.0	6.0	5.0	8.0	10.0	10.0	10.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	present	-	-	-	present	-	-	-	-	-	-	-	-	-	present	-	present	-
Crepidula plana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-
Polinices heros	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	2	2	3	1	-	-	45	22	45	23	8	5	2	37	1	5	2	37	-	-
Cirolana concharum	-	-	-	-	-	-	2	2	-	-	-	-	1	1	23	9	-	-	344	192
Dichelopandalus leptocerus	-	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	1	1	-	-
Crangon septemspinosa	230	120	194	31	2859	1551	616	136	602	263	29	14	1032	552	206	75	100	28	468	288
Pagurus longicarpus	-	-	1	+	-	-	9	2	12	4	1	1	-	-	-	-	1	+	30	11
Pagurus pollicaris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	12
Cancer irroratus	2	44	3	29	17	1603	4	90	9	292	-	-	9	847	-	-	-	-	-	-
Neopanope texana	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95	11752	38	2784
Echinarachnius parma	132	860	-	-	-	-	-	-	46	214	169	1343	-	-	-	-	-	-	-	-
Asterias forbesii	1	6	38	116	-	-	9	3	28	138	2	5	7	15	17	105	87	488	-	-
Total taxa	6	6	2	7	8	6	4	4	4	4	4	4	6	6	5	10	140	134	127	
Total specimens	368	1037	239	177	2876	3154	685	255	745	937	210	1402	1054	1416	226	218	226	567	569	12091
Species diversity	0.75	0.59	-	0.44	0.78	0.67	0.12	0.34	1.18	0.52	1.27	1.44								

Appendix Table 22. (cont.)

Location	Seaward		Nearshore		Off		Off		Landward		Seaward		Seaward		Nearshore		Off Holgate		Off Holgate		Landward	
Zone	of Ridge		5080		Brigantine		Brigantine		of Site		of Ridge		of Ridge		5020		Tower		Tower		of Site	
Depth (feet)	37-42		8-12		30-34		40-45		15-20		38-43		44-45		15		25		46-48		18-22	
Coll. No.	CBM-74-027		CBM-74-030		CBM-74-029		CBM-74-028		CBM-74-035		CBM-74-036		CBM-74-037		CBM-74-038		CBM-74-041		CBM-74-040		CBM-74-039	
Date	21 February		21 February		21 February		21 February		6 March		6 March		6 March		6 March		6 March		6 March		19 March	
Hour	1045-1100		1330-1345		1405-1420		1000-1015		1255-1310		1220-1235		1150-1205		1125-1140		0910-0925		0950-1005		1025-1040	
Tide	Ebb 1		Ebb 2		Ebb 2		Ebb 1		Ebb 2		Ebb 2		Ebb 2		Ebb 2		Ebb 1		Ebb 1		Ebb 2	
Boat Heading (degrees)	300		220		220		045		225		225		045		225		220		225		225	
Air Temp. (C)	4.0		5.5		6.0		4.0		12.0		12.0		12.0		10.0		8.5		10.0		10.5	
Temp. (C), surface	3.2		3.9		3.3		3.1		7.0		6.5		6.0		5.5		5.5		5.5		6.0	
bottom	3.2		3.8		3.0		3.3		6.0		5.0		5.0		5.0		5.5		5.5		5.0	
Sal. (ppt), surface	29.5		28.5		29.0		30.0		28.0		28.5		30.0		31.0		30.0		30.0		30.0	
bottom	30.0		28.5		30.0		30.0		29.0		29.0		30.0		31.0		30.0		30.0		30.0	
Oxygen (ppm), surface	11.9		11.0		11.4		11.2		10.2		10.4		10.0		10.6		10.0		11.0		10.0	
bottom	10.4		10.9		10.7		10.6		10.0		10.0		10.2		10.6		10.0		11.0		10.2	
Secchi (feet)	17.0		3.5		11.0		13.0		3.5		4.5		8.0		10.0		4.0		6.0		9.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	-	-	present	-	present	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-
Actinaria	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polinices heros	1	37	-	-	1	30	-	-	1	18	3	63	-	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	38	30	1	1	14	17	75	74	-	-	6	3	31	16	3	12	-	-	11	5	-	-
Spisula solidissima	-	-	2	295	-	-	-	-	-	-	1	83	-	-	-	-	-	-	-	-	-	-
Cirolana concharum	-	-	-	-	-	-	2	1	1	1	2	1	-	-	-	4	3	4	1	-	-	-
Crangon septemspinosa	8	3	613	478	276	171	182	40	27	18	58	29	23	11	15	30	267	251	87	65	40	28
Pagurus longicarpus	9	2	-	-	3	2	6	1	-	-	-	-	2	2	-	-	-	-	1	1	1	+
Pagurus pollicaris	-	-	-	-	2	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	2	51	24	1816	10	972	7	510	21	1631	8	818	6	438	2	272	4	211	5	148	14	578
Callinectes sapidus	-	-	-	-	1	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Echinarachinus parma	115	800	-	-	3	27	119	739	-	-	-	-	9	48	12	88	-	-	-	-	-	-
Asterias forbesii	9	82	-	-	-	-	37	80	-	-	3	3	18	100	36	276	1	4	-	-	2	6
Total taxa	8		4		10		8		4		8		7		5		4		3		5	
Total specimens	182	1005	640	2590	310	1358	428	1445	50	1668	82	1001	89	615	68	678	276	469	96	214	68	618
Species diversity	1.13		0.19		0.51		1.39		0.85		1.10		1.54		1.22		0.18		0.38		1.10	

Appendix Table 22. (cont.)

Location	Site	Seaward of Ridge	Seaward of Ridge	Off Brigantine	Off Brigantine	Off Brigantine	Landward of Site	Site	Seaward of Ridge															
Zone	5250	5350	5450	5180	5280	5380	5150	5250	5350															
Depth (feet)	35-40	40-43	40-45	18	37-40	30-40	17-20 ^b	35-36	37															
Coll. No.	CBM-74-049	CBM-74-050	CBM-74-051	CBM-74-054	CBM-74-053	CBM-74-052	CBM-74-059 ^R FJM-74-076 ^R	CBM-74-060 ^R FJM-74-077 ^R	CBM-74-061 ^R FJM-74-078 ^R															
Date	19 March	19 March	19 March	19 March	19 March	19 March	2 April	2 April	2 April															
Hour	0940-0955	1020-1035	1100-1115	1320-1335	1155-1210	1235-1250	0905-0920	0945-1000	1030-1045															
Tide	Ebb 2	Ebb 2	Ebb 2	Flood 1	Low	Flood 1	Ebb 2	Ebb 2	Ebb 2															
Boat Heading (degrees)	045	045	045	045	045	045	045	045	045															
Air Temp. (C)	5.0	6.0	6.0	9.0	8.5	9.0	8.0	8.0	8.0															
Temp. (C), surface	5.0	5.0	5.0	6.0	6.0	5.5	6.0	6.0	6.0															
bottom	5.0	5.0	5.0	6.5	5.5	6.0	6.0	6.5	5.5															
Sal. (ppt), surface	29.5	29.5	30.0	28.5	30.0	30.0	28.0	29.0	29.5															
bottom	30.0	31.0	30.0	30.5	30.0	30.5	29.0	30.0	30.0															
Oxygen (ppm), surface	9.6	-	-	10.0	10.4	10.7	10.6	10.2	11.0															
bottom	10.6	10.6	11.1	10.1	10.4	10.2	10.0	10.4	10.6															
Secchi (feet)	7.0	7.0	8.0	5.0	8.0	9.0	3.5	6.5	9.0															
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.				
Hydractinia echinata	present	-	-	-	-	-	-	-	-	present	-	-	-	-	present	-	-	-	present	-	-	-		
Actinaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	-	-	-	-	-			
Crepidula plana	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-			
Crepidula convexa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	present	-			
Polinices duplicata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	22	-	-	-	-	1	46		
Polinices heros	1	54	-	-	1	5	1	72	1	50	1	26	5	268	-	2	84	-	-	1	54	-		
Nassarius trivittatus	18	9	-	-	3	4	-	-	3	2	7	7	-	-	-	176	188	-	-	55	35	35	22	
Acanthodoris pilosa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	2	-	-	-	-	-		
Diopatra cuprea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-		
Limulus polyphemus	-	-	-	-	-	-	-	-	-	3	3500	5	7700	1	3250	2	2000	-	-	4	5000	1	1000	
Dichelopandalus leptocerus	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	2	4	-	-		
Crangon septemspinosus	8	6	-	-	12	8	72	40	24	9	26	9	134	57	50	18	102	44	-	38	10	21	5	
Pagurus longicarpus	8	2	1	1	1	1	2	+	8	2	7	2	-	-	-	22	5	-	-	29	6	17	5	
Pagurus pollicaris	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	3	13	-	-	4	21	1	23	
Libinia emarginata	-	-	-	-	-	-	-	-	-	-	-	-	1	200	-	-	-	2	-	-	-	-	-	
Cancer irroratus	11	908	1	39	1	123	10	325	1	2	4	700	43	5201	4	480	79	4471	7	-	18	1316	2	146
Cancer borealis	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
Ovalipes ocellatus	-	-	-	-	-	-	-	-	-	-	-	-	4	52	1	7	-	-	-	1	23	-	-	
Neopanope texana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	
Echinarachnius parma	-	-	3	9	203	1450	-	-	39	262	5	27	-	-	-	-	1	7	-	-	427	2272	91	303
Asterias forbesii	2	1	7	7	68	1104	4	7	13	106	14	54	6	6	-	-	70	43	-	-	308	1474	37	46
Total taxa	8		4		8		5		7		9		8		5		15		3		13		10	
Total specimens	49	983	12	56	290	2695	89	444	89	433	67	4325	199	13489	59	3758	465	6885	10	-	887	10215	206	1596
Species diversity	1.58		1.08		0.85		0.64		1.43		1.73		1.02		0.61		1.61		0.80		1.30		1.53	

Appendix Table 22. (cont.)

Location	Seaward of Ridge		Nearshore		Off Holgate Tower		Off Holgate Tower		Landward of Site		Seaward of Ridge		Seaward of Ridge		Nearshore		Off Brigantine		Off Brigantine			
Zone	5450		5020		5120		5220		5150		5350		5450		5030		5280		5380			
Depth (feet)	37-45		15		28-32		42		18-23		30-35		37-38		45		11-12		32-35			
Coll. No.	CBM-74-062 ^R FJM-74-079 ^R		CBM-74-065		CBM-74-064		CBM-74-063		CBM-74-066		CBM-74-067		CBM-74-068		CBM-74-069		CBM-74-072		CBM-74-071			
Date	2 April		2 April		2 April		2 April		15 April		15 April		15 April		15 April		15 April		15 April			
Hour	1115-1130		1345-1400		1250-1305		1205-1220		0930-0945		1015-1030		1105-1120		1135-1150		1425-1440		1320-1335			
Tide	Low		Flood 1		Flood 1		Flood 1		Ebb 2		Flood 1		Flood 1		Flood 1		Flood 2		Flood 2			
Boat Heading (degrees)	045		225		045		045		050		050		050		220		050		050			
Air Temp. (C)	8.5		9.0		8.5		8.5		13.5		13.5		14.0		13.5		14.0		14.0			
Temp. (C), surface	3.0		6.0		6.0		6.0		9.0		9.0		9.0		9.0		10.0		9.5			
Temp. (C), bottom	5.5		6.5		6.0		6.0		8.0		8.0		8.0		7.5		10.0		8.5			
Sal. (ppt), surface	30.0		30.0		30.5		30.0		29.0		30.0		30.0		30.0		31.0		30.5			
Sal. (ppt), bottom	30.5		30.0		30.5		30.5		30.5		31.0		31.0		31.0		31.0		31.0			
Oxygen (ppm), surface	10.2		10.0		10.0		10.2		9.4		9.0		9.0		8.6		8.2		8.8			
Oxygen (ppm), bottom	10.0		9.5		9.5		10.0		8.6		9.2		9.0		9.4		9.0		9.2			
Secchi (feet)	12.0		5.5		6.5		11.0		2.5		4.0		5.0		7.0		2.5		6.5			
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula plana	present	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	present	-	-	-	-
Crepidula convexa	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	-	-	1	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polinices heros	8	469	-	-	1	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	17	15	1	1	-	-	27	10	14	5	-	-	2	1	2	2	-	-	-	-	-	-
Limulus polyphemus	1	1000	-	-	4	7000	8	12000	5	10000	1	1250	-	-	-	-	-	-	-	-	-	-
Nannosquilla grayi	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cirolana concharum	-	-	-	-	-	-	-	-	-	-	1	+	2	1	-	-	-	-	-	-	-	-
Dichelopandalus leptocerus	-	-	-	-	-	-	-	-	-	-	3	1	-	-	14	7	-	-	-	-	-	-
Crangon septemspinosa	22	5	4	1	206	178	160	77	27	9	31	10	-	-	8	5	2	+	69	41	-	-
Pagurus longicarpus	2	1	12	6	-	-	11	18	23	6	1	1	2	1	4	3	-	-	-	-	-	-
Pagurus pollicaris	7	77	-	-	-	-	3	60	4	29	-	-	-	-	-	-	-	-	1	11	-	-
Libinia emarginata	-	-	-	-	-	-	-	-	1	100	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	6	565	6	565	11	1723	77	9698	69	7035	1	37	3	142	2	43	3	49	2	135	7	815
Ovalipes ocellatus	2	92	-	-	3	73	1	69	-	-	-	-	2	14	-	-	3	118	15	573	6	63
Callinectes sapidus	-	-	-	-	-	-	2	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Echinarachnius parma	3515	18995	1389	7500	-	-	-	-	-	-	-	-	-	-	2	2	32	256	-	-	2	9
Asterias forbesii	46	813	25	442	6	5	84	147	25	102	-	-	-	-	-	-	10	60	-	-	-	-
Total taxa	12		6		8		9		11		7		5		6		5		3		5	
Total specimens	3626	22032	1437	8515	233	9027	373	22389	168	17286	38	1299	11	159	32	62	50	483	86	749	16	898
Species diversity	0.19		0.19		0.54		1.48		1.65		0.75		1.59		1.48		1.07		0.57		1.16	

Appendix Table 22. (cont.)

Location	Landward of Site		Seaward of Ridge		Seaward of Ridge		Nearshore		Off Holgate Tower		Off Holgate Tower		Landward of Site		Seaward of Ridge		Seaward of Ridge		Nearshore	
Zone	5150	5250	5350	5450	5020	5120	5220	5150	5250	5350	5450	5080	5150	5250	5350	5450	5080	5150	5250	
Depth (feet)	16-17	34-35	37-40	38-40	14-15	24-27	37-38	16-18	30	35-40	40-45	12	16-18	30	35-40	40-45	12	16-18	30	
Coll. No.	CBM-74-086	CBM-74-087	CBM-74-088	CBM-74-089	CBM-74-092	CBM-74-091	CBM-74-090	CBM-74-102	CBM-74-104	CBM-74-103	CBM-74-105	CBM-74-108	CBM-74-102	CBM-74-104	CBM-74-103	CBM-74-105	CBM-74-108	CBM-74-102	CBM-74-104	
Date	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	2 May	
Hour	0903-0918	0945-1000	1036-1051	1121-1136	1409-1424	1334-1349	1257-1312	0900-0915	0945-1000	1035-1050	1125-1140	1350-1405	0900-0915	0945-1000	1035-1050	1125-1140	1350-1405	0900-0915	0945-1000	
Tide	Ebb 2	Ebb 2	Ebb 2	Low	Flood 1	Flood 1	Flood 1	Ebb 2	Flood 1	Flood 1	Flood 1	Flood 2	Ebb 2	Flood 1	Flood 1	Flood 1	Flood 2	Ebb 2	Flood 1	
Boat Heading (degrees)	225	045	045	045	225	045	045	225	045	225	225	225	225	045	225	225	225	225	045	
Air Temp. (C)	10.0	10.0	10.0	10.0	11.0	10.5	10.5	16.0	16.0	16.0	16.0	16.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Temp. (C), surface	9.5	9.0	9.5	11.0	9.5	10.0	10.5	15.0	15.0	14.5	14.5	15.0	9.5	9.0	9.5	11.0	9.5	9.0	9.5	
Temp. (C), bottom	9.5	9.0	9.5	10.0	10.0	9.5	10.0	15.0	14.5	14.0	14.0	15.0	9.5	9.0	9.5	10.0	9.5	9.0	9.5	
Sal. (ppt), surface	30.0	30.5	31.0	30.5	31.5	31.0	30.5	27.5	27.5	28.0	28.0	28.0	30.0	30.5	31.0	30.5	31.0	30.0	30.5	
Sal. (ppt), bottom	30.5	31.0	31.0	31.0	31.5	31.5	31.0	27.5	27.5	28.0	28.0	28.0	30.0	30.5	31.0	30.5	31.0	30.0	30.5	
Oxygen (ppm), surface	9.6	9.7	9.8	10.2	9.6	10.1	10.2	10.1	8.6	9.9	9.6	9.4	9.6	9.7	9.8	9.6	9.4	9.6	9.7	
Oxygen (ppm), bottom	9.4	9.6	9.8	9.5	9.7	9.7	9.7	9.2	8.6	9.9	9.6	9.4	9.6	9.7	9.8	9.6	9.4	9.6	9.7	
Secchi (feet)	8.0	13.0	17.0	17.0	7.5	14.0	14.0	4.0	5.0	5.0	7.0	3.0	8.0	13.0	17.0	17.0	7.5	14.0	14.0	
No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	
Hydractinia echinata	-	-	present	-	-	-	-	present	-	present	-	-	-	-	-	present	-	-	-	
Actinaria	-	-	-	-	-	-	-	-	-	-	17	12	-	-	-	-	-	-	-	
Crepidula plana	-	-	present	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	
Polinices heros	1	58	-	-	-	-	-	-	-	-	-	-	3	235	1	4	1	5	-	
Nassarius trivittatus	1	1	10	4	-	2	2	-	-	-	-	-	3	2	18	9	16	12	5	
Mytilus edulis	-	-	-	-	-	-	-	-	-	-	-	-	343	3276	-	-	-	-	-	
Loligo pealei	5	101	3	319	1	23	6	86	-	-	-	-	9	385	-	-	-	-	-	
Loliginidae eggs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Antinoella sarsi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	
Lepidonotus squamatus	-	-	-	-	-	-	-	-	-	-	-	-	5	1	-	-	-	-	-	
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	
Cirolana concharum	-	-	-	-	-	-	-	-	4	5000	1	1300	-	-	-	-	-	-	-	
Dichelopandalus leptocerus	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	
Crangon septemspinosa	-	-	-	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	
Pagurus longicarpus	2	4	14	4	-	2	2	166	89	29	6	-	-	-	320	170	840	280	400	
Pagurus pollicaris	-	-	-	-	-	-	-	-	2	1	20	6	-	-	10	2	20	8	400	
Libinia emarginata	1	61	-	-	-	-	-	-	10	-	-	-	1	2	-	-	-	-	-	
Cancer irroratus	2	443	12	188	5	97	2	281	5	462	7	374	3	368	1	104	-	-	-	
Cancer borealis	-	-	-	-	-	-	-	-	-	-	-	-	2	198	-	-	-	-	-	
Ovalipes ocellatus	7	250	5	300	-	-	-	-	-	-	-	-	11	44	-	-	-	-	-	
Neopanope texana	-	-	-	-	9	400	7	107	10	204	19	1200	12	600	-	-	-	-	-	
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asterias forbesii	1	1	8	4	24	72	18	74	-	-	10	41	25	259	-	-	-	-	-	
Total taxa	8	8	5	8	7	9	13	4	8	10	9	3	8	10	430	826	73	897	355	
Total specimens	20	919	52	815	40	595	89	964	188	5756	92	3298	502	5370	336	409	883	1313	430	
Species diversity	1.81	1.69	1.09	1.28	0.52	1.73	1.15	0.24	0.25	0.34	1.56	0.08	0.25	0.34	0.34	0.34	0.34	0.34	0.34	

Appendix Table 22. (cont.)

Location	Off Brigantine	Off Brigantine	Site 5250	Site 5250	Seaward of Ridge 5350	Seaward of Ridge 5350	Seaward of Ridge 5450	Seaward of Ridge 5450	Landward of Site 5150	Site 5250	Seaward of Ridge 5350	Seaward of Ridge 5450
Zone	5280	5380	5250	5250	5350	5350	5450	5450	5150	5250	5350	5450
Depth (feet)	30-34	35	32-35	32-35	40-43	40-45	45-48	44-52	18-20	34-35	30-47	40-42
Coll. No.	CBM-74-107	CBM-74-106	CBM-74-111 ^D	CBM-74-114 ^N	CBM-74-110 ^D	CBM-74-113 ^N	CBM-74-109 ^D	CBM-74-112 ^N	CBM-74-115	CBM-74-116	CBM-74-117	CBM-74-118
Date	29 May	29 May	11 June	11 June	11 June	11 June	11 June	11 June	14 June	14 June	14 June	14 June
Hour	1305-1320	1220-1235	1910-1925	2312-2327	1830-1845	2210-2225	1750-1805	2120-2135	0920-0935	1050-1105	1115-1130	1155-1210
Tide	Flood 2	Flood 2	Low	Flood 2	Ebb 2	Flood 1	Ebb 2	Flood 1	Low	Flood 1	Flood 1	Flood 1
Boat Heading (degrees)	225	225	045	045	045	045	045	045	225	225	225	225
Air Temp. (C)	16.0	16.5	22.0	20.0	24.0	20.5	24.0	20.5	21.0	20.0	20.0	20.5
Temp. (C), surface	15.0	14.5	19.0	18.5	19.0	18.5	19.5	19.0	20.0	20.0	19.5	20.2
Temp. (C), bottom	14.0	14.0	16.0	16.0	16.5	16.0	16.0	16.0	19.0	18.0	17.0	17.1
Sal. (ppt), surface	27.5	28.0	29.0	30.0	29.0	29.5	29.0	29.0	28.5	29.5	29.5	29.0
Sal. (ppt), bottom	30.0	30.0	29.5	30.5	30.0	30.0	30.0	30.0	29.5	30.0	29.5	30.0
Oxygen (ppm), surface	9.6	9.5	9.5	9.2	9.5	10.2	9.7	10.0	6.8	7.2	9.0	8.8
Oxygen (ppm), bottom	9.0	8.6	8.2	10.4	8.2	9.2	8.8	9.0	8.6	7.2	5.1	7.2
Secchi (feet)	4.0	8.0	10.0	-	11.0	-	11.0	-	10.0	10.0	12.0	15.0
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	-	-	present	-	present	-	present	-	present	-
Crepidula fornicata	-	-	-	-	present	-	present	-	present	-	present	-
Crepidula plana	-	-	-	-	present	-	present	-	present	-	present	-
Polinices duplicata	-	-	-	-	-	-	1	28	-	-	1	27
Polinices heros	-	-	-	-	2	8	-	-	-	-	1	12
Polinices sp. egg case	-	-	-	-	-	-	-	-	present	-	present	-
Nassarius trivittatus	-	-	3	3	23	11	65	26	6	5	1	+
Nassarius trivittatus eggs	-	-	-	-	-	-	-	-	-	-	present	-
Ensis directus	-	-	-	-	-	-	-	-	1	2	-	-
Loligo pealei	1	3	4	54	-	-	-	7	695	-	-	-
Loliginidae eggs	-	-	-	-	-	-	-	-	-	-	present	-
Antinoella sarsi	-	-	-	-	-	-	-	-	2	+	-	-
Lepidonotus sublevis	-	-	-	-	1	1	-	-	1	+	-	-
Sthenelais limicola	-	-	-	-	-	-	1	+	-	-	-	-
Asabellides oculata	-	-	-	-	-	-	-	-	present	-	-	-
Ampharetidae	-	-	-	-	present	-	present	-	present	-	present	-
Limulus polyphemus	-	-	-	-	-	-	1	300	-	-	-	-
Cirolana concharum	-	-	-	-	-	-	12	5	-	-	-	-
Crangon septemspinosa	2	1	14	2	71	33	1812	625	-	-	68	9
Pagurus longicarpus	5	1	1	+	64	18	42	12	16	5	36	14
Pagurus pollicaris	-	-	1	+	4	15	7	28	5	26	9	51
Libinia emarginata	-	-	-	-	1	87	-	-	-	-	-	-
Cancer irroratus	-	-	1	9	6	17	4	29	3	+	8	3
Ovalipes ocellatus	-	-	1	10	-	-	-	-	1	26	-	-
Callinectes sapidus	-	-	-	-	1	175	-	-	-	-	-	-
Echinarachnius parma	1	6	2	21	1	12	-	-	3	12	4	9
Asterias forbesii	3	11	7	3	18	36	14	25	41	420	6	15
Total taxa	5	9	13	14	12	12	12	12	7	12	12	12
Total specimens	12	22	34	102	190	405	1960	1058	84	1219	135	101
Species diversity	1.42	1.74	1.51	0.38	1.63	1.42	1.55	1.08	0.58	1.91	1.26	1.23

Appendix Table 22. (cont.)

Location	Nearshore	Off Holgate	Landward				Seaward of				Seaward				Off		Off		Off					
Zone	5020	5220	5150				5250				5350				5180		5280		5380					
Depth (feet)	11-15	47-48	18-22				35-38				38-40				40-42		26-30		30-40					
Coll. No.	CBM-74-120	CBM-74-119	RPS-74-071 ^R	CBM-74-125 ^R			RPS-74-072 ^R	CBM-74-126 ^R			RPS-74-073	RPS-73-074 ^R		CBM-74-128 ^R		CBM-74-131	CBM-74-130		CBM-74-129					
Date	14 June	14 June	1 July				1 July				1 July				1 July		1 July		1 July					
Hour	1435-1450	1250-1305	0925-0940				1015-1030				1117-1132				1203-1218		1430-1445		1345-1400		1300-1315			
Tide	Flood 2	Flood 2	Ebb 2				Ebb 2				Ebb 2				Flood 1		Flood 1		Flood 1					
Boat Heading (degrees)	225	225	040				030				040				045		045		045					
Air Temp. (C)	21.0	20.5	21.5				22.5				21.0				22.0		22.5		22.0					
Temp. (C), surface	20.1	20.0	20.5				20.5				20.8				20.2		22.0		21.0		20.0			
Temp. (C), bottom	20.0	17.0	19.8				19.0				19.5				19.5		21.0		19.0		19.0			
Sal. (ppt), surface	29.5	29.5	29.0				29.0				29.0				29.5		28.0		28.0		30.0			
Sal. (ppt), bottom	29.5	30.0	29.0				29.5				30.0				30.0		28.5		30.0		30.0			
Oxygen (ppm), surface	9.2	8.8	7.6				7.8				8.2				8.0		7.9		7.5		8.0			
Oxygen (ppm), bottom	9.4	6.5	7.1				7.4				7.4				7.4		7.9		7.6		8.2			
Secchi (feet)	9.5	13.0	4.0				7.0				7.0				9.0		4.5		6.0		9.5			
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	present	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	-	-	-	-
Ctenophora	-	-	-	-	present	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula fornicata	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	present	-	-	-	-	-	-	-	present	-	present	-	-	-	present	-	-	-	present	-	-	-
Crepidula convexa	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Polinices duplicata	-	-	1	26	-	-	-	-	-	-	1	48	-	-	-	-	-	-	-	-	6	159	-	-
Polinices heros	-	-	-	-	-	-	1	+	-	-	1	+	-	-	-	-	-	-	-	1	17	2	19	
Polinices sp. egg case	-	-	present	-	-	-	present	-	present	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	-	-	23	9	-	-	6	6	25	10	2	1	21	12	2	+	11	6	-	-	-	-	9	9
Nassarius trivittatus eggs	-	-	present	-	-	-	present	-	present	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-
Yoldia limatula	-	-	-	-	-	-	-	-	-	-	4	7	1	+	-	-	-	-	-	-	-	-	-	-
Pitar morrhua	-	-	-	-	-	-	-	-	-	-	2	38	-	-	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	-	-	-	-	-	-	-	-	-	-	1	17	-	-	-	-	-	-	1	2	2	579	-	-
Ensis directus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siliqua costata	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loligo pealei	-	-	89	476	-	-	-	-	-	-	-	-	2	5	232	832	218	549	-	-	-	-	55	147
Loliginidae eggs	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Antinoella sarsi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-
Lepidonotus sublevis	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-
Sthenelais himicola	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asabellides oculata	present	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ampharetidae	-	-	-	-	-	-	-	-	present	-	present	-	present	-	-	-	present	-	-	-	present	-	present	-
Limulus polyphemus	-	-	-	-	1	1000	2	6750	-	-	4	9000	-	-	-	-	-	-	-	-	8	11250	-	-
Cirolana concharum	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Crangon septemspinosa	2	1	27	3	38	13	6010	2113	1291	453	1595	584	2244	404	16	2	-	-	20	7	1022	511	82	9
Pagurus acadianus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-
Pagurus longicarpus	16	3	8	1	-	-	20	7	33	9	10	6	62	20	3	1	46	12	3	1	263	243	51	18
Pagurus pollicaris	1	+	3	1	-	-	-	-	1	8	12	78	8	62	-	-	1	30	1	16	6	35	1	+
Libinia emarginata	-	-	-	-	-	-	-	-	3	227	3	752	-	-	-	-	-	-	1	300	2	192	-	-
Cancer irroratus	1	+	-	-	1	+	65	18	183	79	360	709	209	92	6	6	2	6	-	-	55	374	31	7
Ovalipes ocellatus	1	4	-	-	1	16	3	59	2	22	9	259	2	42	-	-	-	-	49	1250	8	222	-	-
Callinectes sapidus	-	-	-	-	-	-	-	-	1	163	1	153	1	139	-	-	-	-	-	-	1	107	-	-
C. similis	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Echinarachnius parma	-	-	-	-	-	-	-	-	-	-	-	-	33	220	3	28	28	220	-	-	-	-	-	-
Asterias forbesii	2	+	27	59	-	-	-	-	9	7	6	7	20	129	10	71	24	77	1	1	-	-	38	75
Total taxa	8		10		5		12		11		19		16		8		12		8		14		10	
Total specimens	23	8	178	575	41	1029	6111	8954	1548	978	2011	11659	2605	1127	272	940	333	901	76	1577	1374	13689	270	284
Species diversity	1.09		1.42		0.34		0.10		0.61		0.65		0.59		0.64		1.16		0.99		0.80		1.72	

Appendix Table 22. (cont.)

Location	Site	Site	Seaward of Ridge	Seaward of Ridge	Seaward of Ridge	Seaward of Ridge	Landward of Site	Site	Seaward of Ridge												
Zone	5250	5250	5350	5350	5450	5450	5150	5250	5350												
Depth (feet)	33-38	33-39	30-33	35-38	43-45	43-44	20	35-40	35-38												
Coll. No.	CBM-74-134 ^D	CBM-74-137 ^N	CBM-74-133 ^D	CBM-74-136 ^N	CBM-74-132 ^D	CBM-74-135 ^N	CBM-74-147 ^R RPS-74-093 ^R	CBM-74-148 ^R RPS-74-094 ^R	CBM-74-149 ^R RPS-74-095 ^R												
Date	8 July	8 July	8 July	8 July	8 July	8 July	5 August	5 August	5 August												
Hour	1935-1950	2238-2253	1900-1915	2152-2207	1823-1838	2115-2130	0940-0955	1025-1040	1118-1133												
Tide	Flood 1	Flood 2	Flood 1	Flood 2	Flood 1	Flood 2	Flood 2	Ebb 1	Ebb 1												
Boat Heading (degrees)	045	045	045	045	045	045	045	045	045												
Air Temp. (C)	27.0	25.0	27.0	25.0	28.0	24.2	23.0	25.0	25.0												
Temp. (C), surface	23.3	22.0	23.7	22.0	24.0	23.0	19.2	19.0	20.8												
bottom	17.5	17.0	18.0	17.3	17.3	18.0	16.0	15.8	16.0												
Sal. (ppt), surface	30.0	30.0	30.0	30.0	29.5	30.0	30.0	30.5	30.0												
bottom	30.5	30.0	31.0	30.0	30.5	30.5	30.5	31.0	31.0												
Oxygen (ppm), surface	7.2	7.5	6.7	7.5	6.8	6.8	6.8	7.5	7.2												
bottom	4.4	4.8	7.3	4.6	5.1	4.7	5.9	5.9	6.5												
Secchi (feet)	13.0	-	11.0	-	11.0	-	5.0	8.5	7.0												
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	
Hydractinia echinata	present	-	present	-	present	-	present	-	present	-	-	-	-	present	-	present	-	present	-	-	-
Cyanea capillata	-	-	-	-	-	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-	
Beroe sp.	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	present	-	present	-	
Ctenophora	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	present	-	-	-	
Crepidula fornicata	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Crepidula plana	present	-	present	-	-	-	present	-	present	-	-	-	-	-	present	-	-	present	-	-	
Polinices heros	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Polinices sp. egg case	-	-	present	-	-	-	-	-	-	-	present	-	present	-	present	-	present	-	-	-	
Nassarius trivittatus	4	3	10	3	2	2	5	5	-	-	1	1	-	-	9	5	3	1	24	18	
Nassarius trivittatus eggs	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	
Loligo pealei	13	85	1	16	85	81	4	242	118	492	6	172	-	-	-	-	4	14	11	125	
Lolliguncula brevis	-	-	-	-	-	-	-	-	-	-	-	-	5	12	6	21	1	1	-	-	
Antinoella sarsi	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
Lepidonotus sublevis	-	-	1	+	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	
Ampharetidae	present	-	present	-	-	-	present	-	present	-	-	-	-	-	-	-	-	-	-	-	
Limulus polyphemus	-	-	2	6500	-	-	-	-	-	-	-	-	-	-	-	3	7700	1	2000	-	
Lironeca ovalis	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	-	-	-	
Crangon septemspinosa	7	4	1753	333	-	-	428	40	-	-	8	2	3	1	50	9	2620	421	470	94	
Pagurus longicarpus	36	12	34	12	22	7	20	9	5	1	9	2	-	-	-	3	1	3	1	6	
Pagurus pellicaris	6	41	3	20	-	-	6	29	-	-	-	-	-	-	-	-	-	-	-	-	
Libinia emarginata	1	98	-	-	-	-	1	8	-	-	-	-	-	-	-	3	25	3	28	2	
Cancer irroratus	85	32	49	33	-	-	83	74	10	50	4	18	1	4	1	2	59	95	53	113	
Callinectes sapidus	2	295	1	172	-	-	-	-	-	-	-	-	-	-	-	2	265	1	142	3	
Callinectes similis	-	-	-	-	-	-	-	-	-	-	-	-	3	15	1	24	-	-	1	3	
Echinarachnius parma	-	-	-	-	6	35	666	5698	-	-	552	3280	-	-	-	-	-	-	1	4	
Asterias forbesii	44	44	24	34	7	24	123	2120	18	98	16	59	-	-	-	-	29	35	21	36	
Total taxa	13	13	13	13	7	7	14	14	7	7	10	10	6	6	6	13	13	12	12	14	
Total specimens	198	614	1878	7123	123	155	1338	8226	151	641	597	3534	12	32	58	56	2729	8548	559	2429	
Species diversity	1.56	0.35	0.98	1.25	0.74	0.39	1.27	0.50	0.22	0.63	-	1363	107	856	1.51						

	Seaward		Nearshore		Off Holgate		Off Holgate		Landward		Seaward		Seaward		Off		Off		Off			
Location	of Ridge				Tower		Tower		of Site		of Ridge		of Ridge		Brigantine		Brigantine		Brigantine			
Zone	5450		5020		5120		5220		5150		5250		5350		5450		5180		5280		5380	
Depth (feet)	40		12-14		22-23		32-37		16-17		36-37		33-37		42-45		10		30-33		40-41	
Coll. No.	CBM-74-150 ^R RPS-74-096 ^R		CBM-74-153		CBM-74-152		CBM-74-151		CBM-74-158		CBM-74-159		CBM-74-160		CBM-74-161		CBM-74-164		CBM-74-163		CBM-74-162	
Date	5 August		5 August		5 August		5 August		19 August		19 August		19 August		19 August		19 August		19 August		19 August	
Hour	1158-1213		1405-1420		1325-1340		1245-1300		0910-0925		0950-1005		1035-1050		1125-1140		1345-1400		1300-1315		1215-1230	
Tide	Ebb 1		Ebb 2		Ebb 2		Ebb 1		Flood 2		Ebb 1		Ebb 1		Ebb 1		Ebb 2		Ebb 2		Ebb 1	
Boat Heading (degrees)	045		045		045		045		045		045		045		045		045		045		225	
Air Temp. (C)	25.0		23.0		25.0		25.0		25.0		25.0		24.0		24.0		26.0		26.0		26.5	
Temp. (C), surface	20.5		16.5		17.5		19.0		22.7		22.0		22.7		22.6		24.5		24.1		23.1	
bottom	15.3		15.3		15.5		15.3		22.1		21.5		21.0		21.0		24.1		22.3		21.0	
Sal. (ppt), surface	30.5		30.5		30.5		31.0		30.0		30.0		30.0		30.0		29.5		30.0		30.0	
bottom	30.5																					

Location	Landward of Site				Site				Seaward of Ridge				Seaward of Ridge				Nearshore		Off Holgate Tower		Off Holgate Tower		Site	
Zone	5150				5250				5350				5450				5020		5120		5220		5250	
Depth (feet)	18-20				35-40				38-40				43-45				14-15		28		40-42		33-35	
Coll. No.	RPS-74-106 ^R RCB-74-115 ^R				RPS-74-107 ^R RCB-74-116 ^{Ra}				RPS-74-108 ^R RCB-74-117 ^R				RPS-74-109 ^R RCB-74-118 ^R				RPS-74-112		RPS-74-111		RPS-74-110		CBM-74-169 ^D	
Date	4 September				4 September				4 September				4 September				4 September		4 September		4 September		9 September	
Hour	0930-0945				1015-1030				1050-1105				1135-1150				1410-1425		1330-1345		1253-1308		1730-1745	
Tide	Flood 2				Ebb 1				Ebb 1				Ebb 1				Ebb 2		Ebb 2		Ebb 1		Ebb 1	
Boat Heading (degrees)	190				045				225				035				220		045		220		300	
Air Temp. (C)	17.5				17.5				17.5				17.5				18.0		17.5		17.5		22.5	
Temp. (C), surface	22.0				22.0				22.0				22.0				22.0		22.0		22.0		21.5	
bottom	20.0				17.0				18.0				18.0				21.0		19.0		18.0		22.0	
Sal. (ppt), surface	30.0				30.0				30.5				30.0				30.0		30.0		30.0		30.0	
bottom	30.0				30.5				30.5				31.0				30.0		30.0		30.5		30.0	
Oxygen (ppm), surface	5.8				7.5				7.5				7.3				7.6		7.4		7.8		7.1	
bottom	5.2				4.4				3.8				6.1				7.4		5.5		4.5		6.2	
Secchi (feet)	12.0				33.0				36.0				39.0				7.0		19.0		24.0		13.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	present	-	present	-	-	-	present	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-
Aequorea sp.	present	-	present	-	present	-	-	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-	present	-
Cyanea capillata	present	-	present	-	present	-	-	-	-	-	-	-	present	-	present	-	-	-	-	-	-	-	-	-
Ctenophora	present	-	present	-	present	-	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-	present	-
Crepidula plana	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	-	present	-
Crepidula convexa	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	present	-	present	-
Polinices heros	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	1	+	-	-	13	11	-	-	1	1	-	-	4	3	-	-	-	-	2	2	4	5	22	14
Mytilus edulis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loligo pealei	-	-	-	-	-	-	-	-	184	136	11	55	498	521	254	302	57	137	-	-	1615	1021	-	-
Lolliguncula brevis	70	187	29	188	70	291	-	-	20	52	22	113	-	-	-	-	-	-	148	440	2	18	17	30
Lepidonotus sublevis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	+
Limulus polyphemus	-	-	-	-	3	5500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1200
Penaeus aztecus	2	58	2	46	1	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	18
Crangon septemspinosa	53	15	64	14	3420	719	-	-	198	37	13	1	4	1	4	1	25	4	58	10	392	51	1712	531
Pagurus longicarpus	7	3	1	1	6	2	-	-	19	6	-	-	13	4	2	1	4	1	14	6	70	49	16	6
Pagurus pollicaris	-	-	-	-	4	31	-	-	1	16	-	-	-	-	-	-	-	-	3	4	-	-	7	46
Libinia emarginata	-	-	-	-	2	58	-	-	4	26	3	41	1	13	-	-	-	-	-	-	-	-	9	271
Libinia dubia	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cancer irroratus	3	17	5	13	16	51	-	-	24	82	19	54	5	19	6	18	2	3	-	-	3	9	35	178
Ovalipes ocellatus	28	125	35	186	-	-	-	-	8	357	1	54	2	56	3	30	19	1004	-	-	-	-	1	15
Portunus gibbesi	4	43	10	99	1	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	55
Callinectes sapidus	-	-	2	274	1	176	-	-	-	-	-	-	-	-	-	-	-	-	1	118	-	-	1	202
Callinectes similis	4	33	8	91	1	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	233
Neopanope texana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	-	-	-	-	-	-
Echinarachnius parma	-	-	-	-	-	-	-	-	10	70	9	55	3	16	5	40	-	-	-	-	7	51	-	-
Asterias forbesii	-	-	-	-	4	12	-	-	57	426	32	197	8	21	6	75	5	11	9	48	22	30	8	19
Total taxa	16	-	13	-	18	-	-	-	13	-	9	-	12	-	10	-	10	-	12	-	12	-	21	-
Total specimens	174	482	156	912	3542	6920	-	-	526	1209	110	570	538	654	280	467	114	1167	235	628	2115	1234	1861	2823
Species diversity	1.54	-	1.60	-	0.20	-	-	-	1.56	-	1.81	-	0.40	-	0.47	-	1.37	-	1.05	-	0.73	-	0.46	-

Appendix Table 22. (cont.)

Location	Site	Seaward of Ridge	Seaward of Ridge	Seaward of Ridge	Seaward of Ridge	Landward of Site	Site	Seaward of Ridge	Seaward of Ridge	Off Brigantine	Off Brigantine	Off Brigantine
Zone	5250	5350	5350	5450	5450	5150	5250	5350	5450	5180	5280	5380
Depth (feet)	32-37	37-40	40-42	42-45	41-45	18-24	36-38	40	36-42	9	32	40
Coll. No.	CBM-74-172 ^N	CBM-74-173 ^D	CBM-74-171 ^N	CBM-74-168 ^D	CBM-74-170 ^N	DAH-74-053	DAH-74-054	DAH-74-055	DAH-74-056	DAH-74-059	DAH-74-058	DAH-74-057
Date	9 September	9 September	9 September	9 September	9 September	16 September	16 September	16 September	16 September	16 September	16 September	16 September
Hour	2120-2135	1800-1815	2045-2100	1835-1850	2000-2015	0913-0928	0943-0958	1025-1040	1105-1120	1323-1338	1240-1255	1200-1215
Tide	Ebb 2	Ebb 1	Ebb 2	Ebb 1	Ebb 2	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 2
Boat Heading (degrees)	045	045	045	045	045	045	045	045	045	045	045	045
Air Temp. (C)	21.0	22.5	21.5	21.5	21.5	19.0	19.0	20.0	22.0	23.0	25.0	22.0
Temp. (C), surface	22.0	22.0	22.5	22.0	22.0	20.0	25.0	20.7	21.0	21.0	22.0	21.8
Temp. (C), bottom	22.0	21.5	22.5	22.0	22.0	21.0	21.0	21.0	21.0	21.5	21.3	21.5
Sal. (ppt), surface	29.0	29.5	29.5	29.5	29.5	29.0	29.5	30.0	30.0	28.0	30.0	30.0
Sal. (ppt), bottom	29.5	30.0	30.0	30.5	30.5	30.0	30.0	30.0	30.0	28.5	30.0	30.0
Oxygen (ppm), surface	9.0	6.8	8.4	7.6	8.2	6.7	7.2	6.3	6.5	6.2	6.2	6.8
Oxygen (ppm), bottom	8.2	6.2	7.8	6.2	7.2	8.2	7.8	6.6	7.2	6.2	6.3	7.5
Secchi (feet)	-	15.0	-	-	-	5.0	9.0	10.0	10.5	2.5	9.5	28.0
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	present	-	present	-	present	-	present	-	present	-	present	-
Aequorea sp.	present	-	present	-	present	-	present	-	present	-	present	-
Cyanea capillata	-	-	-	-	-	-	-	-	-	-	-	-
Ctenophora	-	-	present	-	present	-	present	-	present	-	present	-
Crepidula fornicata	-	-	-	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	present	-	present	-	-	-	present	-	present	-
Crepidula convexa	-	-	present	-	present	-	-	-	-	-	-	-
Nassarius trivittatus	14	11	3	3	14	12	-	-	7	6	-	-
Loligo pealei	-	-	223	127	-	-	920	2265	5	45	-	-
Lolliguncula brevis	-	-	-	-	-	-	-	-	76	169	1	3
Nephtys incisa	-	-	-	-	-	-	-	-	1	+	-	-
Ampharetidae	-	-	-	-	-	-	-	-	present	-	present	-
Limulus polyphemus	2	4500	-	-	-	-	-	-	-	-	-	-
Nannosquilla grayi	-	-	-	-	1	1	-	-	-	-	-	-
Penaeus aztecus	-	-	-	-	-	-	-	-	1	25	-	-
Dichelopandalus leptocerus	-	-	-	-	1	1	-	-	-	-	-	-
Crangon septemspinosa	4445	1089	276	50	1338	388	4	1	21	3	-	-
Pagurus longicarpus	5	2	3	1	3	2	15	5	12	4	3	2
Pagurus pollicaris	2	14	1	9	1	1	-	-	-	-	10	48
Libinia emarginata	2	37	8	139	2	89	-	-	1	74	1	3
Cancer irroratus	51	183	27	69	11	50	7	27	2	4	2	6
Cancer borealis	-	-	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	10	44	5	39	53	155	-	-	4	2	2	82
Portunus gibbesi	15	201	-	-	7	90	-	-	-	-	-	-
Callinectes sapidus	1	136	-	-	-	-	1	142	1	140	1	147
Callinectes similis	19	188	2	15	7	65	-	-	-	-	1	3
Neopanope texana	-	-	-	-	-	-	-	-	-	-	-	-
Echinarachnius parma	-	-	5	32	48	314	12	86	10	76	-	-
Asterias forbesii	14	34	68	430	117	1703	7	31	5	25	-	-
Total taxa	14		16		18		10		13		8	
Total specimens	4580	6439	621	914	1603	2871	966	2557	68	379	85	409
Species diversity	0.19		1.32		0.72		0.27		1.96		0.50	

Appendix Table 22. (cont.)

Location	Landward		Seaward		Seaward		Off Holgate		Off Holgate		Seaward		Seaward		Seaward	
Zone	of Site	Site	of Ridge	of Ridge	Nearshore	Tower	Tower	Site	Site	of Ridge	of Ridge	of Ridge	of Ridge	of Ridge	of Ridge	of Ridge
Depth (feet)	5150	5250	5350	5450	5020	5120	5220	5250	5250	5350	5350	5350	5350	5350	5350	5450
Coll. No.	18-20	36-39	37	40-41	12	23-34	35-38	33-35	32-35	43	38-40	45-50	45-50	45-50	45-50	45-50
Date	CBM-74-176	CBM-74-177	CBM-74-178	CBM-74-179	CBM-74-182	CBM-74-181	CBM-74-180	CBM-74-185 ^D	CBM-74-188 ^N	CBM-74-184 ^D	CBM-74-187 ^N	CBM-74-183 ^D	CBM-74-183 ^D	CBM-74-183 ^D	CBM-74-183 ^D	CBM-74-183 ^D
Hour	1 October	1 October	1 October	1 October	1 October	1 October	1 October	7 October	7 October	7 October	7 October	7 October	7 October	7 October	7 October	7 October
Tide	0935-0950	0950-1005	1028-1043	1115-1130	1340-1355	1255-1310	1215-1230	1820-1835	2105-2120	1745-1800	2005-2020	1650-1705	1650-1705	1650-1705	1650-1705	1650-1705
Boat Heading (degrees)	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 2	Ebb 2	Flood 1	Ebb 2	Flood 1	Ebb 2	Ebb 2	Ebb 2	Ebb 2	Ebb 2
Air Temp. (C)	045	045	045	045	225	045	045	045	225	045	220	045	045	045	045	045
Temp. (C), surface	15.0	15.0	15.0	17.0	17.0	17.0	17.0	17.5	16.0	19.5	16.0	20.5	18.5	18.5	18.5	18.5
Temp. (C), bottom	19.0	19.0	18.8	19.0	18.4	18.5	19.2	16.0	16.0	16.5	16.0	17.0	16.0	16.0	16.0	16.0
Sal. (ppt), surface	18.5	19.0	19.0	19.2	17.9	18.2	19.0	16.0	16.0	16.0	16.0	17.0	16.0	16.0	16.0	16.0
Sal. (ppt), bottom	30.0	30.5	31.0	31.0	30.5	30.0	30.0	30.0	30.0	30.0	30.2	31.0	30.5	30.5	30.5	30.5
Oxygen (ppm), surface	30.5	30.5	31.0	31.0	30.5	30.5	30.0	30.0	30.0	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Oxygen (ppm), bottom	7.4	7.4	7.8	7.6	7.9	7.2	7.5	7.8	7.2	8.8	7.2	7.2	7.8	7.8	7.8	7.8
Secchi (feet)	7.0	6.8	7.4	6.8	6.8	6.6	7.0	7.4	6.4	6.2	7.8	7.8	7.8	7.8	7.8	7.8
	6.0	8.0	14.0	16.0	4.5	8.0	8.0	-	-	6.5	-	10.0	-	-	-	-
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	present	-	-	-	-	-	-	-	present	-	present	-	-	present
Cyanea capillata	6	1000	1	200	2	500	6	1500	12	3100	2	800	-	-	1	-
Ctenophora	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	present	-	-	-	present	-	-	-	-	-	-	-	-	-
Crepidula convexa	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-
Polinices heros	-	-	-	-	-	-	-	-	1	8	-	-	-	-	-	-
Nassarius trivittatus	-	-	1	1	10	7	1	1	-	-	1	1	-	4	4	-
Spisula solidissima	-	-	-	-	-	-	-	-	-	-	1	177	-	-	-	-
Loligo pealei	-	-	-	-	16	211	28	70	1	20	2	16	-	-	-	-
Lolliguncula brevis	6	34	18	38	6	5	-	-	3	22	8	43	37	129	12	10
Lepidonotus sublevis	-	-	1	+	-	-	-	-	-	-	1	+	-	-	-	-
Limulus polyphemus	-	-	1	1500	1	700	-	-	-	-	1	3000	1	2000	1	1000
Penaeus aztecus	-	-	-	-	-	-	-	-	1	18	-	-	-	-	-	-
Crangon septemspinosa	-	-	-	-	1	+	-	-	-	-	50	12	-	-	253	41
Pagurus longicarpus	-	-	4	2	3	1	2	+	1	4	8	2	-	-	16	6
Pagurus pollicaris	-	-	1	5	1	+	-	-	-	-	-	-	-	-	-	-
Libinia emarginata	-	-	1	9	1	10	-	-	1	42	2	24	-	-	1	73
Cancer irroratus	-	-	-	-	4	5	2	2	-	-	2	12	76	210	15	39
Cancer borealis	-	-	-	-	-	-	-	-	-	-	2	46	-	-	1	4
Ovalipes ocellatus	-	-	-	-	1	39	-	-	26	2300	1	80	1	6	-	-
Portunus gibbesi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Callinectes similis	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-
Echinarachnius parma	-	-	-	-	2	12	5	35	-	-	-	-	2	13	-	-
Asterias forbesii	-	-	10	31	4	7	26	99	-	-	11	40	43	110	7	23
Total taxa	2	12	15	8	3	9	14	38	3349	226	4356	23	2223	294	1172	227
Total specimens	12	1034	39	1790	52	1497	70	1707	30	2340	1.68	1.69	1.19	0.61	1.17	1.40
Species diversity	0.69	1.60	2.12	1.40	0.47	1.68	1.69	1.19	0.61	1.17	1.40	1.82	-	-	-	-

Appendix Table 22. (cont.)

	Seaward				Landward				Seaward				Seaward				Off		Off		Off					
Location	of Ridge				of Site				Site				of Ridge				of Ridge				Brigantine		Brigantine		Brigantine	
Zone	5450				5150				5250				5350				5450				5180		5280		5380	
Depth (feet)	43-45				21-22				35-40				40-42				45-46				15		20-35		38-44	
Coll. No.	CBM-74-186 ^N				CBM-74-189 ^R RPS-74-129 ^R				CBM-74-190 ^R RPS-74-130 ^R				CBM-74-191 ^R RPS-74-131 ^R				CBM-74-192 ^R RPS-74-132 ^R				RPS-74-135		RPS-74-134		RPS-74-133	
Date	7 October				15 October				15 October				15 October				15 October				15 October		15 October		15 October	
Hour	1915-1930				0915-0930				1000-1015				1035-1050				1115-1130				1330-1345		1250-1310		1215-1230	
Tide	Low				Ebb 1				Ebb 1				Ebb 1				Ebb 2				Ebb 2		Ebb 2		Ebb 2	
Boat Heading (degrees)	225				045				045				045				045				045		045		045	
Air Temp. (C)	17.0				18.0				18.0				18.0				19.0				19.0		19.0		19.0	
Temp. (C), surface	17.0				16.0				16.0				16.3				16.0				16.8		16.8		17.0	
Temp. (C), bottom	17.0				16.0				16.0				16.5				16.0				16.8		16.8		17.0	
Sal. (ppt), surface	30.5				30.0				30.5				30.5				30.5				29.5		30.5		30.5	
Sal. (ppt), bottom	31.0				30.0				30.5				30.5				30.5				30.0		30.5		30.5	
Oxygen (ppm), surface	7.2				9.0				9.0				8.9				9.3				8.5		9.7		8.4	
Oxygen (ppm), bottom	7.2				8.1				8.6				8.6				8.9				7.8		7.8		8.0	
Secchi (feet)	-				8.0				13.0				20.0				30.0				5.0		11.0		34.0	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.		
Hydractinia echinata	-	-	present	-	-	-	present	-	present	-	-	-	-	-	-	-	present	-	-	-	present	-	-			
Cyanea capillata	3	500	present	-	4	1600	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-			
Crepidula plana	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Crepidula convexa	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Loligo pealei	7	1	-	-	-	-	-	-	-	-	42	253	34	41	-	-	97	265	-	-	13	17	34	10		
Lolliguncula brevis	-	-	2	4	1	7	5	6	25	33	-	-	-	-	-	-	5	19	-	-	-	-	-	-		
Lepidonotus sublevis	-	-	-	-	-	-	-	-	1	+	-	-	-	-	-	2	+	-	-	-	-	-	-	-		
Ampharetidae	-	-	-	-	-	-	-	-	2	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Limulus polyphemus	-	-	-	-	-	-	1	1250	2	2250	-	-	2	3500	-	-	-	-	-	-	-	-	-	-		
Squilla empusa	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-		
Penaeus aztecus	-	-	3	59	7	112	-	-	1	31	-	-	-	-	-	-	-	3	32	-	-	-	-	-		
Crangon septemspinosa	15	1	-	-	-	-	6	1	3	+	1	+	1	+	-	-	-	1	+	-	-	-	-	-		
Pagurus longicarpus	-	-	1	+	1	1	2	1	13	6	-	-	-	-	-	-	-	4	2	-	-	-	2	2		
Pagurus pollicaris	-	-	-	-	-	-	2	31	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Libinia emarginata	-	-	-	-	-	-	1	1	-	-	-	-	1	1	1	19	-	9	13	-	-	-	-	-		
Cancer irroratus	4	17	-	-	2	214	6	21	8	24	1	3	-	-	19	73	7	22	2	196	-	-	-	-		
Ovalipes ocellatus	-	-	5	122	25	725	5	300	19	1000	-	-	-	-	1	30	-	-	18	700	2	67	1	75		
Neopanope texana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	+	-	-	-	-	-		
Eurypanopeus depressus	-	-	-	-	1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Echinarachnius parma	208	1800	-	-	-	-	-	-	-	-	17	111	11	72	5	38	2	11	-	-	1	7	4	26		
Asteria forbesii	108	1300	-	-	-	-	9	19	10	48	58	750	64	1300	64	906	12	152	3	9	9	28	10	66		
Total taxa	6		6		7		11		13		6		7		5		5		10		4		6			
Total specimens	345	3619	11	185	41	2659	37	1630	85	3397	120	1120	114	4914	90	1066	120	450	47	971	25	119	51	179		
Species diversity	0.98		1.24		1.25		1.99		1.91		1.12		1.11		0.83		0.70		1.70		1.04		0.99			

Appendix Table 22. (cont.)

	Landward of Site				Seaward of Ridge				Seaward of Ridge				Nearshore		Off Holgate Tower		Off Holgate Tower		Landward of Site			
Location	Site				Site				Site				Site		Site		Site		Site			
Zone	5150				5250				5350				5450		5020		5120		5150			
Depth (feet)	18-22				36-40				36-40				40-50		12-14		22-25		36-37			
Coll. No.	CBM-74-197 ^R RPS-74-138 ^R				CBM-74-198 ^R RPS-74-139 ^R				CBM-74-199 ^R RPS-74-140 ^R				CBM-74-200 ^R RPS-74-141 ^R		CBM-74-203		CBM-74-202		CBM-74-201			
Date	4 November				4 November				4 November				4 November		4 November		4 November		11 November			
Hour	0915-0930				0950-1005				1030-1045				1115-1130		1330-1345		1250-1305		1215-1230			
Tide	Flood 2				Flood 2				High				Ebb 1		Ebb 2		Ebb 1		Ebb 2			
Boat Heading (degrees)	045				045				045				045		045		045		220			
Air Temp. (C)	17.0				17.0				18.0				19.0		21.0		21.0		12.0			
Temp. (C), surface	13.5				13.0				13.0				13.0		13.7		13.5		13.5			
bottom	13.0				12.7				12.5				12.8		13.5		13.5		11.5			
Sal. (ppt), surface	30.0				30.0				30.0				30.0		30.5		30.5		29.5			
bottom	30.5				30.5				30.5				30.0		31.0		30.5		30.0			
Oxygen (ppm), surface	9.2				8.8				8.8				10.4		8.0		8.3		8.6			
bottom	8.5				8.1				8.0				7.5		8.1		8.2		9.3			
Secchi (feet)	8.0				8.5				9.0				9.0		6.5		10.5		5.5			
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	-	-	present	-	-	-	-	-	-	-	present	-	present	-	-	-	present	-	-	-
Ctenophora	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Crepidula plana	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-	-	-	present	-	-	
Nassarius trivittatus	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	
Loligo pealei	-	-	1	10	-	-	1	242	3	15	2	10	94	532	54	526	1	2	-	4	21	-
Lolliguncula brevis	5	23	6	14	3	19	8	22	1	3	2	7	15	66	9	42	2	2	8	27	2	12
Diopatra cuprea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
Limulus polyphemus	-	-	-	-	-	-	1	1000	-	-	-	-	-	-	-	-	-	-	2	3500	-	
Penaeus aztecus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	28	-	-	5	
Crangon septemspinosa	-	-	-	-	-	-	1	+	-	-	-	-	1	+	-	-	-	-	-	-	4	
Homarus americanus	-	-	-	-	-	-	-	-	-	-	-	-	1	245	-	-	-	-	-	-	-	
Pagurus longicarpus	-	-	-	-	3	2	-	-	-	-	-	-	6	1	-	-	2	1	-	-	2	
Pagurus pollicaris	1	13	-	-	-	-	1	8	-	-	-	-	-	-	1	4	-	-	-	-	-	
Libinia emarginata	-	-	-	-	1	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cancer irroratus	7	379	2	424	17	181	10	182	3	12	4	29	16	425	-	-	1	13	5	325	102	
Ovalipes ocellatus	11	450	2	46	14	750	8	158	15	500	-	-	4	200	1	76	22	915	19	850	30	
Portunus gibbesi	-	-	-	-	-	-	2	37	-	-	-	-	-	-	-	-	-	-	-	-	4	
Callinectes sapidus	3	476	-	-	4	764	2	240	-	-	-	-	-	-	-	-	-	3	522	1	159	
Callinectes similis	-	-	-	-	-	-	-	-	1	24	-	-	-	-	-	-	-	-	-	-	-	
Neopanope texana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Echinarachnius parma	-	-	-	-	-	-	-	-	20	128	2	10	10	71	7	57	-	-	-	-	-	
Asterias forbesii	1	4	1	60	1	1	4	5	33	248	18	100	9	16	29	221	1	1	5	24	7	
Total taxa	6		6		9		10		7		5		11		7		6		6		11	
Total specimens	28	1345	12	554	43	1736	38	1886	76	930	28	156	157	1567	101	926	29	934	41	1776	151	6141
Species diversity	1.50		1.36		1.50		1.94		1.40		1.13		1.42		1.18		0.93		1.47		1.06	

Appendix Table 22. (cont.)

Location	Site	Seaward of Ridge	Seaward of Ridge	Off Brigantine	Off Brigantine	Off Brigantine	Site	Site	Seaward of Ridge	Seaward of Ridge	Seaward of Ridge	Seaward of Ridge
Zone	5250	5350	5450	5180	5280	5380	5250	5250	5350	5350	5450	5450
Depth (feet)	37	36-37	36	10-11	30	37	28-30	30-35	38-39	38	43-45	44-45
Coll. No.	DAH-74-101	DAH-74-102	DAH-74-103	DAH-74-106	DAH-74-105	DAH-74-104	CBM-74-204 ^D	CBM-74-209 ^N	CBM-74-205 ^D	CBM-74-208 ^N	CBM-74-206 ^D	CBM-74-207 ^N
Date	11 November	11 November	11 November	11 November	11 November	11 November	18 November	18 November	18 November	18 November	18 November	18 November
Hour	1010-1025	1143-1158	1216-1231	1410-1425	1330-1345	1255-1310	1445-1500	1845-1900	1520-1535	1815-1830	1600-1615	1730-1745
Tide	Ebb 2	Flood 1	Flood 1	Flood 1	Flood 1	Flood 1	Ebb 2	Flood 1	Ebb 2	Flood 1	Ebb 2	Flood 1
Boat Heading (degrees)	060	220	220	220	220	220	045	045	045	045	045	045
Air Temp. (C)	12.0	14.5	15.0	15.0	15.0	15.0	11.5	10.0	11.0	10.0	10.0	10.5
Temp. (C), surface	11.5	12.0	12.0	10.5	11.8	12.1	9.5	9.0	9.5	9.0	10.0	9.5
bottom	12.0	12.0	12.0	10.5	12.0	12.0	10.0	9.5	10.0	9.5	10.0	9.0
Sal. (ppt), surface	29.5	30.0	29.5	28.5	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
bottom	30.0	30.0	30.0	29.0	30.0	30.0	30.5	30.0	30.0	30.0	30.0	30.0
Oxygen (ppm), surface	7.8	8.8	7.9	8.2	8.2	8.1	9.3	9.4	9.5	9.3	9.4	9.2
bottom	8.4	8.5	8.0	9.5	8.1	8.6	9.4	9.5	9.2	9.6	9.2	9.2
Secchi (feet)	4.0	6.5	8.5	6.0	6.0	7.5	8.5	-	9.5	-	11.0	-
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	present	-	present	-	-	-	present	-	-	present
Crepidula fornicata	-	-	-	-	-	-	-	-	present	-	-	-
Crepidula convexa	-	-	-	-	-	-	-	-	present	-	-	-
Crepidula plana	-	-	present	-	-	-	-	-	present	-	-	-
Polinices heros	-	-	-	-	-	-	-	-	2	72	-	-
Nassarius trivittatus	-	-	1	1	-	-	-	-	1	1	-	-
Loligo pealei	2	49	1	10	3	105	-	-	1	9	47	679
Lolliguncula brevis	7	12	4	18	2	3	-	-	2	2	13	19
Lepidonotus sublevis	-	-	-	-	-	-	-	-	-	-	-	-
Limulus polyphemus	-	-	-	-	-	-	-	-	-	-	1	300
Cirolana concharum	-	-	-	-	-	-	-	-	2	1	-	-
Penaeus aztecus	-	-	-	-	-	-	-	-	2	36	-	-
Dichelopandalus leptocerus	1	+	-	-	-	-	-	-	-	-	-	-
Crangon septemspinosa	20	4	-	-	1	1	13	3	21	3	-	-
Pagurus longicarpus	4	+	8	2	1	2	-	-	1	+	8	3
Pagurus pollicaris	-	-	-	-	-	-	-	-	1	2	-	-
Libinia emarginata	-	-	1	100	-	-	-	-	-	-	-	-
Cancer irroratus	6	241	26	382	1	71	3	418	1	74	3	48
Ovalipes ocellatus	33	1527	13	600	12	400	7	150	27	1300	34	1700
Portunus gibbesi	-	-	-	-	-	-	-	-	-	-	-	-
Callinectes sapidus	1	128	-	-	-	-	-	-	-	-	-	-
Callinectes similis	1	12	-	-	-	-	-	-	-	-	-	-
Neopanope texana	-	-	-	-	-	-	1	+	-	-	-	-
Echinarachnius parma	-	-	4	34	13	90	-	-	-	-	47	348
Asterias forbesii	-	-	9	33	35	11	1	1	7	15	11	22
Total taxa	9		11		8		5		7		7	
Total specimens	75	1973	67	1180	67	682	13	570	53	1420	84	1801
Species diversity	1.56		1.73		1.33		1.26		1.35		1.49	

Appendix Table 22. (cont.)

Location	Landward of Site		Seaward of Ridge		Seaward of Ridge		Nearshore		Off Holgate Tower		Off Holgate Tower		Off Brigantine		Off Brigantine		Off Brigantine	
Zone	5150	5250	5350	5450	5020	5120	5220	5180	5280	5380								
Depth (feet)	18-20	35-40	33-38	49-52	12-18	25-30	43-48	14-15	30-33	33-45								
Coll. No.	CBM-74-214	CBM-74-215	CBM-74-216	CBM-74-217	CBM-74-220	CBM-74-219	CBM-74-218	CBM-74-223	CBM-74-222	CBM-74-221								
Date	5 December	5 December	5 December	5 December	5 December	5 December	5 December	5 December	5 December	5 December								
Hour	1300-1305	0855-0910	1000-1015	1045-1100	0710-0725	0740-0755	0810-0825	1235-1250	1200-1215	1130-1145								
Tide	Ebb 1	Flood 2	Flood 2	Flood 2	Flood 1	Flood 1	Flood 2	Ebb 1	Ebb 1	High								
Boat Heading (degrees)	045	225	045	225	045	045	045	045	045	225								
Air Temp. (C)	6.0	2.0	2.0	2.0	-2.0	-2.0	-1.0	6.0	6.0	2.0								
Temp. (C), surface	7.0	6.8	7.0	7.0	5.0	5.2	6.0	5.2	7.0	7.0								
bottom	7.0	6.0	7.5	7.0	5.5	5.4	6.0	6.2	6.8	6.8								
Sal. (ppt), surface	30.0	30.0	30.0	30.5	30.0	30.0	30.0	30.0	30.5	30.0								
bottom	30.0	30.5	30.0	30.5	30.0	30.0	30.0	30.5	30.5	30.0								
Oxygen (ppm), surface	9.6	9.2	9.2	9.4	9.4	9.4	9.4	9.6	9.6	9.4								
bottom	9.2	9.2	9.4	9.4	9.2	9.6	9.4	9.4	9.2	9.4								
Secchi (feet)	6.0	4.5	5.5	6.0	2.0	4.0	4.5	3.0	5.0	5.5								
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Hydractinia echinata	-	-	present	-	-	-	present	-	present	-	present	-	-	-	-	-	present	-
Aequorea sp.	-	-	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-
Crepidula fornicata	-	-	-	-	-	-	present	-	-	-	-	-	-	-	-	-	-	-
Crepidula plana	-	-	present	-	-	-	present	-	present	-	-	-	-	-	-	-	present	-
Polinices heros	-	-	-	-	-	-	1	58	-	-	-	-	-	-	-	-	-	-
Nassarius trivittatus	-	-	24	17	-	-	26	17	1	1	-	-	-	-	-	-	-	-
Astarte castanea	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-
Spisula solidissima	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loligo pealei	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	192
Lepidonotus sublevis	-	-	-	-	-	-	1	+	-	-	2	1	-	-	-	-	-	-
Limulus polyphemus	-	-	2	1000	1	1400	1	1000	-	-	-	-	-	-	1	1100	1	500
Squilla empusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5
Nannosquilla grayi	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Cirolana concharum	-	-	-	-	-	-	-	-	-	-	4	2	-	-	-	-	-	-
Palaemonetes vulgaris	-	-	-	-	-	-	-	-	-	-	-	-	1	+	-	-	-	-
Dichelopandalus leptocerus	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Crangon septemspinosa	112	78	340	74	175	34	479	76	721	142	436	362	269	200	222	155	312	130
Homarus americanus	-	-	-	-	-	-	-	-	1	30	2	33	-	-	-	-	-	-
Pagurus longicarpus	-	-	8	2	3	+	26	6	8	2	-	-	-	-	-	2	+	12
Pagurus pollicaris	-	-	5	41	-	-	7	59	1	15	12	113	-	-	-	-	-	3
Libinia emarginata	-	-	12	2400	-	-	-	-	-	-	-	-	-	-	-	1	12	-
Cancer irroratus	8	1007	25	1284	10	787	83	1283	7	503	38	870	-	-	-	1	107	4
Cancer borealis	-	-	-	-	-	-	-	-	-	-	1	52	-	-	-	-	-	-
Carcinus maenas	1	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	36	2128	1	15	8	136	7	84	54	794	6	52	1	15	1	8	11	162
Portunus gibbesi	-	-	1	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Callinectes sapidus	-	-	1	129	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neopanope texana	-	-	1	+	-	-	-	-	-	-	-	-	-	-	1	1	-	-
Eurypanopeus depressus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Echinarachnius parma	-	-	-	-	192	1212	6	48	12	77	-	-	470	3500	-	-	3	22
Asterias forbesii	-	-	14	65	37	329	9	38	14	249	6	107	-	-	2	52	4	31
Total taxa	4		15		7		16		11		10		6		5		9	
Total specimens	157	3256	435	5062	426	3898	648	2674	819	1813	503	1590	745	3718	227	216	336	1565
Species diversity	0.76		0.95		1.15		1.00		0.53		0.57		0.70		0.14		0.38	

a + = weight is less than 1 gm
b R = replicate collection

c D=day collection
d N=night collection

Appendix Table 23. Macroinvertebrates taken in 15-minute bottom hauls of a 25-ft semiballoon trawl in Little Egg Inlet, Great Bay, and the Mullica River, New Jersey in 1974.

Zone	1510	1075	1045	1015	1510	1075	1045	1015	1510	1045	1075	1015
Depth (feet)	18-30	7-8	5-10	15-35	12-27	4-6	3-6	13-18	12-35	4-9	8	14-20
Coll. No.	FJM-74-054	FJM-74-055	FJM-74-056	FJM-74-057	HKH-74-027	HKH-74-026	HKH-74-025	HKH-74-024	FJM-74-083	FJM-74-081	FJM-74-082	FJM-74-080
Date	21 February	21 February	21 February	21 February	19 March	19 March	19 March	19 March	2 April	2 April	2 April	2 April
Hour	1000-1015	1055-1110	1135-1150	1225-1240	1555-1610	1508-1523	1314-1329	1155-1210	1420-1435	1305-1320	1345-1400	1220-1235
Tide	Ebb 1	Ebb 1	Ebb 1	Ebb 2	Flood 2	Flood 2	Flood 1	Flood 1	Flood 1	Flood 1	Flood 1	Flood 1
Boat Heading (degrees)	180	040	070	170	330	020	280	000	350	280	025	000
Air Temp. (C)	3.0	4.0	6.0	6.0	11.0	11.0	9.0	9.0	13.0	13.0	13.0	13.0
Temp. (C), surface	3.3	3.3	3.5	4.0	7.0	7.0	6.0	6.0	9.0	9.0	9.0	8.5
Temp. (C), bottom	3.3	3.5	3.8	4.0	7.0	7.5	6.0	6.0	8.5	9.0	8.5	8.0
Sal. (ppt), surface	26.0	26.5	22.0	26.5	19.0	20.5	21.0	26.5	10.0	18.0	15.5	24.0
Sal. (ppt), bottom	26.5	24.0	23.0	26.5	27.0	20.0	21.0	29.0	13.0	20.5	17.5	27.5
Oxygen (ppm), surface	11.4	12.0	12.0	11.4	11.5	11.1	11.8	11.2	10.6	10.3	10.2	10.0
Oxygen (ppm), bottom	11.3	10.8	12.0	11.6	11.3	10.7	10.8	11.2	10.3	10.3	10.1	9.8
Secchi (feet)	2.5	2.0	2.5	3.5	2.0	1.5	1.5	2.5	2.0	2.5	2.0	3.5
<i>Microciona prolifera</i>	present	present	present	-	present	-	-	-	present	present	-	-
<i>Cliona</i> sp.	-	-	present	-	-	-	present	-	-	present	-	-
<i>Hydractinia echinata</i>	-	-	present	-	-	-	present	-	-	-	-	-
<i>Nemertea</i>	-	-	-	-	-	-	-	-	-	-	-	1
<i>Crepidula plana</i>	-	-	-	-	-	-	present	-	-	-	-	-
<i>Crepidula convexa</i>	-	-	present	-	-	-	present	-	-	-	-	-
<i>Ilyanassa obsoleta</i>	-	-	-	-	1	6	-	-	-	-	-	-
<i>Crassostrea virginica</i>	-	-	-	-	1	-	-	-	-	-	-	-
<i>Mercenaria mercenaria</i>	-	-	-	-	2	-	-	-	-	-	-	-
<i>Limulus polyphemus</i>	-	-	-	-	-	-	1	-	-	-	-	-
<i>Palaemonetes vulgaris</i>	-	-	2	-	2315	-	-	-	-	5	7	-
<i>Palaemonetes</i> sp.	present	-	-	-	-	-	-	-	-	-	-	-
<i>Crangon septemspinosa</i>	present	present	45	290	33027	2926	8	19	5294	500	146	19
<i>Upogebia affinis</i>	-	-	-	-	-	1	-	-	-	-	-	-
<i>Pagurus longicarpus</i>	-	-	135	67	-	-	36	-	-	50	-	1
<i>Libinia dubia</i>	-	-	-	-	-	-	-	-	-	3	-	-
<i>Cancer irroratus</i>	-	-	1	32	-	-	184	31	-	2	-	14
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	-	2	-	1	-	2
<i>Callinectes sapidus</i>	-	1	-	-	9	57	1	-	5	-	3	-
<i>Neopanope texana</i>	-	-	46	1	20	16	17	-	1	-	-	-
<i>Eurypanopeus depressus</i>	-	-	4	-	6	-	1	-	1	-	-	-
Xanthidae	-	-	-	-	-	-	-	-	15	100	-	-
<i>Asterias forbesii</i>	-	-	252	29	-	9	21	-	2	500	118	4
<i>Molgula manhattensis</i>	present	-	-	-	present	-	-	-	-	-	-	-
Total taxa	4	3	11	5	10	6	12	3	7	10	4	6
Total specimens	-	1	485	419	35381	3015	269	52	5318	1161	274	41
Species diversity	-	-	1.22	0.94	0.25	0.16	1.07	0.80	0.03	1.13	0.84	1.28

Appendix Table 23. (cont.)

Zone	1510	1075	1045	1015	1510	1075	1045	1015	1510	1080	1065	1010
Depth (feet)	15-30	5-10	8-10	15-35	12-14	7	5	12-14	6-25	7	8	10-15
Coll. No.	RCB-74-071	RCB-74-070	RCB-74-073	RCB-74-072	CBM-74-124	CBM-74-123	CBM-74-122	CBM-74-121	RPS-74-077	RPS-74-078	RPS-74-076	RPS-74-075
Date	20 May	20 May	20 May	20 May	25 June	25 June	25 June	25 June	1 July	1 July	1 July	1 July
Hour	0926-0941	0835-0850	1225-1240	1120-1135	1150-1205	1105-1120	1015-1030	0850-0905	1500-1515	1540-1555	1420-1435	1315-1330
Tide	Flood 2	Flood 2	Ebb 2	Ebb 2	Flood 2	Flood 2	Flood 2	Flood 1	Flood 1	Flood 1	Flood 1	Ebb 2
Boat Heading (degrees)	125	070	-	135	000	045	270	000	020	220	040	180
Air Temp. (C)	10.0	10.0	15.0	14.4	17.0	17.0	17.0	17.0	26.5	27.0	26.0	25.0
Temp. (C), surface	18.5	16.0	18.2	14.0	21.0	20.0	19.8	18.5	23.2	24.0	23.2	22.0
bottom	17.5	17.5	18.5	15.0	21.0	20.0	19.5	18.2	22.5	23.5	23.0	21.5
Sal. (ppt), surface	21.0	23.5	25.0	30.0	21.0	25.5	26.0	29.5	17.0	22.0	23.0	27.0
bottom	24.0	23.5	24.5	30.0	22.5	25.0	26.0	29.5	19.0	22.0	24.0	28.0
Oxygen (ppm), surface	9.0	8.1	8.4	8.6	7.7	8.3	8.5	8.4	7.2	8.0	8.0	7.3
bottom	8.9	7.3	8.4	8.6	7.5	7.9	8.4	8.3	6.8	8.0	7.7	7.3
Secchi (feet)	2.5	1.0	-	2.5	2.5	3.0	4.0	4.5	4.0	3.5	4.0	6.0
<i>Microciconia prolifera</i>	present	present	-	-	-	-	-	-	-	-	-	-
<i>Cliona</i> sp.	-	-	present	-	-	-	-	-	-	-	-	-
<i>Hydractinia echinata</i>	-	-	-	-	-	-	-	present	-	-	-	present
<i>Beroe</i> sp.	-	-	-	-	-	-	-	-	-	-	present	-
Ctenophora	present	present	-	-	-	present	present	present	-	-	-	present
Nemertea	1	-	-	-	-	-	-	-	-	-	-	-
<i>Crepidula plana</i>	-	-	-	-	-	-	-	-	-	-	-	present
<i>Crepidula convexa</i>	-	-	-	-	-	-	-	present	-	-	-	present
<i>Urosalpinx cinereus</i>	-	-	-	1	-	1	-	-	-	-	-	-
<i>Busycon canaliculatum</i>	-	-	-	-	1	-	-	-	-	-	-	-
<i>Busycon</i> sp.	-	-	1	-	-	-	-	-	-	-	-	-
<i>Mytilus edulis</i> spat	-	-	-	-	-	-	-	present	-	-	-	-
<i>Mercenaria mercenaria</i>	-	-	-	-	-	-	-	-	18	-	-	-
<i>Lolliguncula brevis</i>	1	-	-	-	-	-	-	-	-	-	1	-
<i>Nereis</i> sp.	1	-	-	-	-	-	-	-	-	-	-	-
Ampharetidae	-	-	-	-	present	-	-	-	-	-	-	-
<i>Limulus polyphemus</i>	-	-	4	-	-	-	-	-	-	-	-	-
<i>Lironeca ovalis</i>	-	-	-	-	-	1	-	-	-	-	-	-
<i>Palaemonetes vulgaris</i>	present	-	-	-	1	11	-	-	present	-	-	-
<i>Palaemonetes pugio</i>	-	3	-	-	-	-	-	-	-	-	-	-
<i>Crangon septemspinosa</i>	present	10759	-	5	7	33	9	64	-	-	1	-
<i>Pagurus longicarpus</i>	-	-	-	50+	-	-	5	37	-	-	-	66
<i>Pagurus pollicaris</i>	-	-	-	-	-	-	-	1	-	-	-	2
<i>Libinia emarginata</i>	-	-	-	-	-	-	-	1	-	-	1	-
<i>Libinia dubia</i>	-	-	-	-	1	1	-	-	1	-	-	-
<i>Libinia</i> sp.	-	-	7	-	-	-	-	-	-	-	-	-
<i>Cancer irroratus</i>	-	-	-	-	-	-	-	1	-	-	1	6
<i>Carcinus maenas</i>	-	-	1	-	-	-	-	-	-	-	-	-
<i>Ovalipes ocellatus</i>	-	-	4	-	-	-	2	1	-	-	-	7
<i>Callinectes sapidus</i>	3	168	present	-	5	5	6	-	3	5	2	-
<i>Panopeus herbstii</i>	-	-	-	-	1	-	-	-	-	-	-	-
<i>Nempanope texana</i>	9	17	10	-	-	-	-	2	-	-	1	-
<i>Eurypanopeus depressus</i>	2	2	-	-	-	-	1	-	-	-	-	-
Xanthidae	-	-	-	-	-	-	-	-	-	-	-	-
<i>Arbacia punctulata</i>	-	-	-	1	-	-	-	-	-	-	-	-
<i>Asterias forbesii</i>	-	-	-	3	-	3	4	-	-	-	-	1
<i>Molgula manhattensis</i>	present	-	-	-	present	-	-	-	-	-	-	-
Total taxa	11	7	8	5	8	8	7	11	4	1	8	9
Total specimens	17	10949	27	60+	16	55	27	107	22	5	8	82
Species diversity	1.39	0.10	1.53	-	1.42	1.15	1.85	0.92	0.58	-	1.91	0.72

Appendix Table 23. (cont.)

Zone	1510	1080	1045	1010	1510	1075	1045	1015	1510	1075	1045	1015
Depth (feet)	18-20	7	8-12	15	12-22	6-8	6	15	8-14	6	6	11
Coll. No.	RPS-74-099	RPS-74-100	RPS-74-098	RPS-74-097	RCB-74-121	RCB-74-122	RCB-74-120	RCB-74-119	CBM-74-196	CBM-74-195	CBM-74-194	CBM-74-193
Date	5 August	5 August	5 August	5 August	4 September	4 September	4 September	4 September	15 October	15 October	15 October	15 October
Hour	1537-1552	1607-1622	1411-1426	1302-1317	1430-1445	1505-1520	1335-1350	1235-1250	1445-1500	1400-1415	1320-1335	1230-1245
Tide	Ebb 2	Ebb 2	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 2	Ebb 1	Ebb 2	Ebb 2	Ebb 2	Ebb 2
Boat Heading (degrees)	107	200	070	120	150	180	180	000	340	100	250	000
Air Temp. (C)	28.0	28.0	28.0	25.0	20.0	20.0	19.0	19.0	22.5	22.5	22.0	20.0
Temp. (C), surface	26.5	26.9	26.0	19.0	23.0	22.5	21.8	20.0	16.0	16.0	17.0	17.0
Temp. (C), bottom	26.5	26.9	26.0	19.5	23.0	23.0	22.0	21.0	17.0	16.5	18.0	16.5
Sal. (ppt), surface	20.5	24.0	26.5	30.0	20.0	22.0	27.0	30.0	21.0	23.5	27.5	30.0
Sal. (ppt), bottom	21.0	24.0	27.0	30.5	20.0	22.0	26.0	30.0	20.5	23.5	25.0	29.5
Oxygen (ppm), surface	5.7	6.3	7.2	6.0	7.8	7.3	7.3	6.8	8.0	8.4	8.2	10.2
Oxygen (ppm), bottom	5.7	6.1	6.9	6.5	8.0	8.0	8.6	7.0	7.8	8.4	8.0	9.8
Secchi (feet)	3.0	3.0	2.5	2.5	1.5	-	1.0	3.0	3.0	2.0	3.0	3.5
<i>Microciconia prolifera</i>	present	present	present	-	present	present	present	-	present	present	present	-
<i>Cliona</i> sp.	-	-	-	-	-	-	present	-	-	-	present	-
<i>Hydractinia echinata</i>	-	-	-	present	-	-	-	present	-	-	-	present
<i>Aequorea</i> sp.	-	-	-	-	-	-	present	-	-	-	-	-
<i>Crepidula plana</i>	-	-	-	present	-	-	-	-	-	-	-	-
<i>Crepidula convexa</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Polinices duplicata</i>	-	-	-	-	-	-	-	-	-	-	-	present
<i>Urosalpinx cinereus</i>	-	-	-	-	-	-	-	-	-	-	2	1
<i>Busycon canaliculatum</i> eggs	-	-	-	-	-	-	-	-	-	-	present	-
<i>Mytilus edulis</i>	-	-	-	60696	-	-	-	-	-	-	-	-
<i>Lolliguncula brevis</i>	1	-	62	18	-	1	80	6	-	4	3	-
<i>Nereis succinea</i>	1	-	-	-	-	-	-	-	-	-	-	-
<i>Sabellaria vulgaris</i>	-	-	-	-	-	-	present	-	-	-	-	-
<i>Hydroides dianthus</i>	-	-	-	-	-	-	present	-	-	-	-	-
<i>Limulus polyphemus</i>	-	-	-	-	1	-	-	-	-	-	-	2
<i>Penaeus aztecus</i>	-	-	-	-	1	1	1	-	-	-	-	2
<i>Palaemonetes vulgaris</i>	-	-	2	-	-	31	-	-	-	9	4	-
<i>Hippolytina wurdemanni</i>	-	-	-	-	-	-	-	-	-	-	1	-
<i>Crangon septemspinosa</i>	present	-	-	-	112	14	-	-	1	7	16	12
<i>Pagurus longicarpus</i>	-	-	3	6	-	-	-	2	-	-	6	25
<i>Libinia emarginata</i>	-	-	-	1	-	-	-	1	-	-	1	4
<i>Libinia dubia</i>	-	2	2	-	-	2	2	-	-	-	-	-
<i>Cancer irroratus</i>	-	-	-	39	-	-	-	3	-	-	1	4
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	-	1	-	-	29	69
<i>Portunus gibbesi</i>	1	-	2	-	-	-	-	-	-	-	-	-
<i>Callinectes sapidus</i>	6	5	2	-	13	29	4	1	4	5	26	1
<i>Callinectes similis</i>	-	4	1	-	-	-	1	-	-	-	-	-
<i>Neopanope texana</i>	1	5	2	-	1	23	34	-	-	14	26	53
<i>Eurypanopeus depressus</i>	2	-	1	-	-	6	13	-	2	2	-	10
<i>Asterias forbesii</i>	-	-	55	11	2	1	5	1	1	3	47	6
<i>Molgula manhattensis</i>	present	present	present	-	-	-	-	-	-	-	-	-
Total taxa	9	6	12	8	7	10	13	8	5	8	14	14
Total specimens	12	16	132	60771	130	108	140	15	8	44	162	189
Species diversity	1.47	1.33	1.20	0.01	0.54	1.67	1.24	1.68	1.21	1.77	1.92	1.75

Appendix Table 23. (cont.)

Zone	1510	1075	1045	1015	1510	1075	1045	1015
Depth (feet)	8-20	8	8	18-22	18-25	9	8-12	18-25
Coll. No.	RPS-74-145	RPS-74-144	RPS-74-143	RPS-74-142	CBM-74-213	CBM-74-212	CBM-74-211	CBM-74-210
Date	4 November	4 November	4 November	4 November	3 December	3 December	3 December	3 December
Hour	1424-1439	1341-1356	1309-1324	1214-1229	1210-1225	1050-1105	1020-1035	0930-0945
Tide	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Ebb 1	Flood 2	Flood 2	Flood 2
Boat Heading (degrees)	160	040	240	340	170	030	275	290
Air Temp. (C)	23.0	23.0	21.5	19.8	6.5	6.5	6.0	6.0
Temp. (C), surface	16.0	16.8	17.0	15.0	4.0	4.0	4.0	6.0
Temp. (C), bottom	16.5	16.0	16.0	15.0	4.0	4.0	4.0	6.0
Sal. (ppt), surface	24.0	26.0	27.0	30.0	24.5	28.0	28.0	31.0
Sal. (ppt), bottom	24.5	27.5	-	30.0	26.5	28.0	28.0	31.5
Oxygen (ppm), surface	7.1	9.1	9.2	9.6	10.0	10.0	9.0	8.8
Oxygen (ppm), bottom	8.8	9.1	9.2	9.4	11.0	10.5	9.6	9.8
Secchi (feet)	4.0	6.0	7.0	6.0	1.0	1.0	1.5	1.0
<i>Microciona prolifera</i>	present	present	present	-	present	-	present	-
<i>Cliona</i> sp.	-	-	-	-	-	-	present	-
<i>Hydractinia echinata</i>	-	-	present	-	-	-	-	-
<i>Crepidula plana</i>	-	-	present	-	-	-	-	-
<i>Crepidula convexa</i>	-	-	present	-	-	-	-	-
<i>Anachis translirata</i>	-	12	-	-	-	-	-	-
<i>Crassostrea virginica</i>	2	-	-	-	-	-	-	-
<i>Anomia simplex</i>	-	-	1	-	-	-	-	-
<i>Lolliguncula brevis</i>	-	-	1	-	-	-	1	-
<i>Limulus polyphemus</i>	-	-	-	-	-	-	-	1
<i>Squilla empusa</i>	-	-	-	-	-	-	-	3
<i>Cirolana concharum</i>	-	-	-	-	-	-	1	-
<i>Palaemonetes vulgaris</i>	4	13	1	-	158	-	45	-
<i>Crangon septemspinosa</i>	-	-	4	-	494	39	96	70
<i>Pagurus longicarpus</i>	-	2	8	2	-	-	3	2
<i>Libinia emarginata</i>	-	-	-	1	-	-	-	2
<i>Libinia dubia</i>	-	1	2	-	-	-	-	-
<i>Cancer irroratus</i>	-	-	1	16	-	-	1	21
<i>Ovalipes ocellatus</i>	-	1	1	10	-	-	-	4
<i>Portunus gibbesi</i>	-	-	-	5	-	-	-	-
<i>Callinectes sapidus</i>	-	1	8	-	4	6	1	-
<i>Neopanope texana</i>	7	60	44	21	4	-	33	2
<i>Eurypanopeus depressus</i>	1	9	5	10	2	1	15	-
Xanthidae	-	-	-	-	10	-	50	-
<i>Asterias forbesii</i>	-	2	7	13	-	-	3	1
Total taxa	5	10	16	8	7	3	13	9
Total specimens	14	101	83	78	672	46	249	106
Species diversity	1.17	1.33	1.83	1.83	0.71	0.49	1.63	1.13

Appendix Table 24. Zooplankton ($\#/m^3$) taken at Little Egg Inlet station in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.	L.E.I.
Zone	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010
Depth (feet), water	20	20	20	17	17	22	21	15	23	18	15	20
Type of tow	Oblique	Oblique	Bottom	Oblique	Oblique	Oblique	Oblique	Oblique	Bottom	Oblique	Oblique	Oblique
Coll. No.	ZOB-74-004	ZOB-74-016	ZOB-74-017	ZOB-74-036	ZOB-74-037	ZOB-74-042	ZOB-74-052	ZOB-74-071	ZOB-74-077	ZOB-74-081	ZOB-74-116	ZOB-74-130
Date	16 January	13 February	13 February	27 March	27 March	8 April	8 May	5 June	8 July	6 August	12 September	23 October
Hour	1130	1150	1210	1245	1255	0905	0950	1630	1445	1050	1110	1315
Tide	Low	Flood 2		Ebb 1		Flood 2	Flood 2	High	Ebb 2	High	Ebb 2	Flood 2
Air Temp. (C)	3.0	5.0		9.0		9.2	13.0	-	30.0	23.0	24.0	-
Temp. (C), surface	2.0	2.5		6.0		6.7	10.8	20.8	21.0	18.3	23.0	-
Temp. (C), bottom	3.0	3.5		5.5		-	11.0	19.8	21.0	-	23.0	-
Sal. (ppt), surface	23.0	27.0		28.5		30.0	30.0	25.0	30.0	30.5	25.0	29.5
Sal. (ppt), bottom	26.0	27.0		29.0		30.3	30.0	27.5	30.0	-	27.5	29.5
Oxygen (ppm), surface	11.7	12.4		10.2		-	8.8	7.8	6.2	6.2	-	-
Oxygen (ppm), bottom	11.3	11.8		10.2		-	8.4	7.2	6.2	-	-	-
Secchi (feet)	5.5	3.5		5.0		1.5	3.3	5.0	6.5	4.0	3.5	9.5
Volume sampled (m^3)	1.09	0.47	6.78	0.52 (C) ²	0.88	0.15 (C)	0.61	0.92	1.66	0.97 (C)	1.11	2.24
Plankton net used	#20-S	#20-S	#8-S	#20-S	#20-L	#20-S	#20-S	#20-S	#8	#20-L	#20-L	#20-L
Notiluca scintillans	-	-	-	-	-	-	-	-	-	-	-	3867
Liriope sp.	-	-	-	-	-	-	-	-	-	-	-	(24)
Other hydromedusae	-	-	-	-	477	-	369	-	-	-	-	117
Ceriantharia larvae	-	-	-	804	477	-	-	-	-	-	-	-
Mnemiopsis leidyi	-	-	-	-	-	-	-	-	-	-	-	-
Ctenophore eggs	-	-	-	P	1159	-	-	-	-	(6)	-	-
Rotifers	138	2021	-	-	-	-	10328	P	-	P	-	156
Nematodes	p ³	P	-	-	-	-	-	-	-	-	-	-
Trochophores	P	426	-	-	-	-	-	-	-	-	-	-
Polydora larvae	-	-	-	-	-	-	4793	-	301	-	-	-
Unidentified polychaete larvae	92	213	25	-	-	-	554	4946	602	232	-	-
Gastropod larvae	-	-	-	-	-	-	2213	1033	2108	P	450	1289
Bivalve larvae	P	-	39	-	P	-	P	272	301	-	P	P
Unidentified invertebrate larvae	-	-	-	-	-	-	1107	217	-	P	-	4453
Evadne nordmanni	-	-	-	-	-	-	2030	-	-	-	-	-
Penilia avirostris	-	-	-	-	-	-	-	-	-	-	-	78
Ostracods	P	-	-	-	-	-	-	-	-	-	P	-
Acartia clausi	482	1383	387	-	P	-	1290	272	753	-	-	-
A. tonsa	-	-	-	-	P	P	-	4511	4066	6843	9347	469
Centropages hamatus	183	319	271	962	P	2124	369	870	452	-	-	-
C. typicus	-	-	-	-	-	-	-	-	452	-	-	508
C. copepodites spp.	-	-	-	-	P	-	-	-	602	-	-	469
Eurytemora sp.	P	-	-	-	-	-	-	-	-	-	-	-
Oithona brevicornis	P	-	-	-	682	1634	-	652	452	580	14752	703
O. similis	138	523	103	804	1841	4902	4057	435	1506	P	1014	1094
O. copepodites spp.	-	-	-	-	P	-	-	-	-	-	-	-
Paracalanus crassirostris	P	-	-	804	P	P	P	P	-	28647	4279	2149
P. parvus	-	-	-	-	-	-	-	-	-	-	-	923

Appendix Table 24. (cont.)

	ZOB-74-004	ZOB-74-016	ZOB-74-017	ZOB-74-036	ZOB-74-037	ZOB-74-042	ZOB-74-052	ZOB-74-071	ZOB-74-077	ZOB-74-081	ZOB-74-116	ZOB-74-130
Paracalanus copepodites spp.	-	-	-	-	-	-	-	-	-	-	-	2149
Pseudocalanus minutus	275	426	271	8413	11386	15850	554	-	904	232	-	-
Pseudodiaptomus coronatus	550	-	77	-	-	-	-	326	1807	P	4392	P
Temora longicornis	92	-	-	1923	1705	4412	3689	326	P	P	-	117
Unidentified copepodites	183	532	-	2644	1159	1144	1107	1359	1205	580	788	156
Harpacticoids	P	-	P	P	P	3268	3874	598	P	232	1014	3359
Copepod nauplii	5046	13723	-	30288	68864	51797	40574	5054	4367	6263	15203	17656
Barnacle nauplii	-	-	-	-	-	-	-	163	-	-	P	-
Leptocuma minor	-	-	(1) ³	-	-	-	-	-	-	-	-	-
Oxyurostylis smithi	-	-	(P)	-	-	-	-	-	-	-	-	-
Unidentified cumacea	-	-	-	-	-	-	-	-	P	-	-	-
Cerapus tubularis	-	-	-	-	-	-	-	-	P	-	-	-
Unidentified amphipods	-	-	(P)	-	-	-	-	-	-	-	-	(P)
Mysids	-	P	(I)	-	-	-	369	-	-	-	P	-
Crangon zoeae	-	-	-	-	-	-	-	P	P	-	-	-
Neopanope texana sayi zoeae	-	-	-	-	-	-	-	380	P	-	-	-
Pagurus spp. zoeae	-	-	-	-	-	-	-	-	452	P	P	-
Uca spp. zoeae	-	-	-	-	-	-	-	-	3614	-	-	-
Cyphonaute larvae	-	-	-	-	-	-	-	-	-	-	-	78
Sagitta sp.	-	-	-	-	-	P	-	-	-	-	-	-
Pluteus larvae	-	-	-	-	-	-	-	-	-	-	-	78
Fish eggs	-	-	-	-	-	-	-	-	P	-	-	-
Fish larvae	-	-	-	-	-	P	-	-	-	-	-	-
Copepods	1903	3183	1109	15550	16773	33334	14940	9349	12199	37114	35586	12096
Copepod nauplii	5046	13723	-	30288	68864	51797	40574	5054	4367	6263	15203	17656
Other Holoplankton	138	2021	-	P	1159	P	10328	-	-	P	P	4101
Meroplankton	92	639	64	804	954	P	11435	7011	7378	232	450	6015
Total Zooplankton	7179	19566	1173	46642	87750	85131	77277	21414	23944	43609	51239	39868

Appendix Table 25. Zooplankton (#/m³) taken at Little Egg Harbor station in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2
Zone	2040	2040	2040	2040	2040	2040	2040	2040
Depth (feet), water	25	25	20	20	25	30	26	19
Type of Tow	Oblique	Surface	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOB-74-001	ZOB-74-002	ZOB-74-011	ZOB-74-012	ZOB-74-038	ZOB-74-039	ZOB-74-040	ZOB-74-041
Date	16 January	16 January	13 February	13 February	27 March	27 March	27 March	27 March
Hour	0935	1000	0950	1010	1330	1340	1400	1410
Tide	Ebb 2		Flood 1		Ebb 1			
Air Temp. (C)	2.0		3.0		8.0			
Temp. (C), surface	1.0		1.0		6.0			
Temp. (C), bottom	2.5		2.0		5.5			
Sal. (ppt), surface	23.0		24.0		27.0			
Sal. (ppt), bottom	26.0		26.0		28.3			
Oxygen (ppm), surface	11.9		12.5		10.8			
Oxygen (ppm), bottom	11.3		12.3		10.6			
Secchi (feet)	3.0		3.0		6.5			
Volume Sampled (m ³)	1.09 (C)	0.99	0.57 (C)	1.66	1.14 (C)	1.25 (C)	1.35 (C)	0.68
Plankton net used	#20-S	#20-S	#20-S	#10-S	#20-L	#20-L	#20-S	#20-S
Cerianthacia larvae	-	-	-	-	592	300	583	882
Ctenophore eggs	-	-	-	-	P	-	P	-
Rotifers	1606	833	2486	-	-	-	-	-
Nematodes	-	-	P	-	-	-	-	-
Trochophores	172	-	131	-	-	-	-	-
Unidentified polychaete larvae	-	P	-	75	493	360	667	294
Gastropod larvae	P	-	-	-	-	-	-	-
Ostracods	-	-	-	-	-	-	P	-
Acartia clausi	5849	7273	13450	14232	3920	1470	2750	2647
A. tonsa	344	152	-	-	-	-	-	P
Calanus finmarchicus	-	-	-	-	-	-	333	-
Centropages hamatus	-	P	-	P	592	360	333	1176
C. copepodites spp.	-	-	-	-	197	-	-	-
Eurytemora sp.	-	-	-	-	-	-	-	294
Oithona brevicornis	-	-	-	-	395	200	250	441
O. similis	344	227	-	301	2363	870	1500	1029
Paracalanus crassirostris	-	-	-	-	691	540	750	294
P. parvus	P	-	-	-	-	-	-	-
Pseudocalanus minutus	P	P	P	P	9769	4590	5917	2647
Pseudodiaptomus coronatus	631	152	-	75	-	-	-	-
Temora longicornis	P	152	-	-	4436	2610	3000	1176
Tortanus discaudatus	-	-	-	-	P	-	P	-
Unidentified copepodites	115	152	-	P	-	810	1250	441
Harpacticoids	P	-	-	P	-	P	P	P
Copepod nauplii	28900	1796	63012	11633	38174	19800	29416	22206
Barnacle nauplii	-	152	-	-	-	-	-	-
Barnacle cypris	-	-	-	-	P	-	-	-
Mysids	P	-	-	-	-	-	-	-
Sagitta spp.	-	P	-	-	197	P	166	P
Sagitta eggs	-	-	-	-	197	P	P	P
Copepods	7283	8108	13450	14608	22363	11450	16083	10135
Copepod nauplii	28900	1796	63012	11633	38174	19800	29416	22206
Other Holoplankton	1606	833	2486	-	394	P	166	P
Meroplankton	172	152	131	75	1085	660	1250	1176
Total Zooplankton	37961	10889	79079	26316	62016	31910	46915	33517

Appendix Table 25. (cont.)

Location	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2	L.E.H. #2
Zone	1010	2040	2040	2040	2040	2040	2040
Depth (feet), water	15	26	25	12	24	20	25
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOB-74-043	ZOB-74-053	ZOB-74-069	ZOB-74-078-2	ZOB-74-079	ZOB-74-118	ZOB-74-127
Date	8 April	8 May	5 June	8 July	6 August	12 September	23 October
Hour	0915	1010	1530	1530	1000	1140	1115
Tide	High	Flood 2	Ebb 2	Ebb 2	Flood 2	Ebb 2	Flood 1
Air Temp. (C)	10.0	13.0	21.0	28.0	25.0	-	-
Temp. (C), surface	8.5	11.5	21.0	27.0	24.2	24.0	-
bottom	7.0	11.0	21.0	26.0	-	23.2	-
Sal. (ppt), surface	27.5	30.0	26.5	-	29.0	26.0	26.0
bottom	28.0	29.5	26.5	-	-	26.0	26.0
Oxygen (ppm), surface	-	9.2	7.0	9.2	5.8	-	-
bottom	-	9.2	7.5	9.0	-	-	-
Secchi (feet)	1.5	4.5	6.5	5.5	6.0	5.0	9.0
Volume sampled (m ³)	0.20 (C)	0.87	1.02	1.68	0.83	1.57	2.91
Plankton net used	#20-S	#20-S	#20-S	#20-L	#20-L	#20-L	#20-L
Aequorea sp.	-	-	-	-	-	(22)	-
Liriope sp.	-	-	-	-	-	(0.6)	-
Unidentified hydromedusae	-	216	-	-	-	-	-
Beroe ovata	-	-	-	-	-	(0.6)	-
Ctenophore eggs	2618	-	-	-	-	-	-
Rotifers	-	1796	-	-	-	-	P
Nematodes	657	-	-	-	-	-	-
Trochophores	-	3377	-	-	-	-	-
Polydora larvae	6539	5172	1654	P	-	-	-
Unidentified polychaete larvae	-	3736	3431	633	2409	796	-
Gastropod larvae	-	-	551	3013	1355	-	120
Bivalve larvae	657	-	-	-	602	-	P
Mytilus edulis (post larval)	-	P	-	-	-	-	-
Unidentified invertebrate larvae	-	3017	-	-	-	-	-
Evadne nordmanni	-	216	-	-	-	-	-
Ostracods	-	-	-	-	-	P	P
Acartia clausi	7520	2946	1103	-	-	-	P
A. tonsa	-	-	1961	13170	8735	13854	6555
Calanus finmarchicus	-	287	-	-	-	-	-
Centropages hamatus	1637	934	3248	112	-	-	-
C. typicus	-	-	-	112	-	-	-
Eurytemora sp.	-	-	-	P	-	-	-
Oithona brevicornis	1961	-	5515	1972	2410	38615	1774
O. similis	980	718	123	1265	P	159	60
Paracalanus crassirostris	1960	-	123	112	753	5334	271
Pseudocalanus minutus	1637	1006	-	-	-	-	-
Pseudodiaptomus coronatus	-	-	735	2604	452	3742	421
Temora longicornis	1637	2874	-	186	-	P	-
Unidentified copepodites	1304	1868	551	633	753	P	60
Harpacticoids	2940	5100	1838	335	3012	2866	1714
Copepod nauplii	47058	7184	17892	9933	11446	37420	7728
Barnacle nauplii	P	287	-	-	-	P	-
Barnacle cypris	-	-	61	-	-	-	-
Mysids	-	-	-	-	-	P	-
Crangon zoeae	-	863	-	-	-	-	P
Palaemonetes zoeae	-	-	61	-	-	-	-
Unidentified shrimp-like zoeae	-	-	-	74	452	P	-
Cancer irroratus zoeae	-	-	-	112	-	-	-
Pinnixa sp. zoeae	-	-	-	P	-	-	-
Neopanope texana sayi zoeae	-	-	551	558	-	-	-
Uca spp. zoeae	-	-	-	179	-	-	-
Unidentified brachyuran zoeae	-	-	-	149	-	-	-
Sagitta spp.	P	-	-	-	-	-	-
Sagitta eggs	-	P	-	-	-	-	-
Fish eggs	-	-	-	P	-	-	-
Copepods	21576	15733	15197	20501	16115	64570	10855
Copepod nauplii	407058	7184	17892	9933	11446	37420	7728
Other Holoplankton	2618	2012	-	-	-	P	P
Meroplankton	7853	16668	6309	4718	4818	796	120
Total Zooplankton	79105	41597	39398	35152	32379	102786	18703

Appendix Table 26. Zooplankton (#/m³) taken at Brigantine Bay station in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	B.B. #1	B.B. #1	B.B. #1	B.B. #1	B.B. #1	B.B. #1	B.B. #1	B.B. #1	B.B. #1	B.B. #1	B.B. #1
Zone	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530
Depth (feet), water	9	9	9	8	9	6	8	8	7	7	6
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOB-74-005	ZOB-74-021	ZOB-74-031	ZOB-74-047	ZOB-74-057	ZOB-74-066	ZOB-74-075	ZOB-74-084	ZOB-74-121-1	ZOB-74-121-2	ZOB-74-124
Date	16 January	13 February	27 March	8 April	8 May	5 June	8 July	6 August	12 September	12 September	23 October
Hour	1200	1350	1140	1200	1259	1330	1210	1150	1315	1320	0915
Tide	Low	Flood 2	Flood 2	Ebb 1	Ebb 2	Ebb 2	Flood 1	Ebb 1	Flood 1		Low
Air Temp. (C)	5.5	6.0	5.0	11.0	-	23.0	32.0	26.0	29.0		-
Temp. (C), surface	2.0	2.5	5.0	8.0	12.5	22.0	26.3	24.0	26.0		-
bottom	2.0	-	-	8.0	12.0	20.5	25.0	-	24.0		-
Sal. (ppt), surface	25.0	27.0	28.0	30.0	30.0	25.0	29.0	30.0	25.5		27.0
bottom	25.0	-	-	30.0	30.0	26.0	29.5	-	26.3		26.5
Oxygen (ppm), surface	13.4	13.4	10.8	-	9.5	8.9	6.6	7.4	-		-
bottom	13.8	-	-	-	9.2	8.2	6.7	-	-		-
Secchi (feet)	4.5	3.0	3.5	4.5	4.0	2.5	5.5	3.5	1.7		4.3
Volume sampled (m ³)	0.73	0.31 (C)	0.73	0.41	0.92	0.71	1.62	0.59	2.71	3.28	1.84
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	-	-	-	-	-	-	-	-	-	-	68
<i>Obelia</i> sp.	-	-	-	-	P	-	-	-	-	-	-
Unidentified hydromedusae	-	-	-	-	-	-	-	-	-	-	-
<i>Ceriantharia</i> larvae	-	-	115	-	-	-	-	-	P	P	-
Ctenophore eggs	-	-	-	-	-	-	-	-	-	-	-
<i>Mnemiopsis leidyi</i>	-	-	-	-	-	-	-	-	-	-	P
Rotifers	P	1774	-	-	3125	-	-	(3.4)	-	-	-
Nematodes	-	P	-	-	-	-	-	169	-	-	-
Trochophores	-	-	-	-	2446	-	-	-	-	-	-
<i>Polydora</i> larvae	-	-	P	-	4076	2746	644	395	-	-	-
Unidentified polychaete larvae	P	-	227	1829	19837	7535	1664	3107	2841	3239	68
Unidentified gastropod larvae	-	P	-	-	1087	1197	698	339	10185	11178	P
Bivalve larvae	-	P	-	-	1223	141	483	395	258	343	-
<i>Evadne nordmanni</i>	-	-	-	-	272	-	-	-	-	-	-
Podon sp.	-	P	-	-	-	-	P	-	-	-	-
<i>Acartia clausi</i>	3014	7419	2168	1373	8700	493	-	-	-	-	-
<i>A. tonsa</i>	-	1742	-	-	-	10352	23673	1468	4354	9756	2344
<i>Centropages hamatus</i>	137	323	-	2592	-	141	107	-	-	-	-
<i>C. copepodites</i> spp.	-	-	115	-	P	70	-	-	-	-	-
<i>Eurytemora</i> sp.	182	P	P	-	-	-	-	-	-	-	-
<i>Labidocera aestiva</i>	-	-	-	-	-	-	P	-	-	-	-
<i>Oithona brevicornis</i>	-	-	-	459	P	352	913	451	10111	16197	408
<i>O. similis</i>	274	323	227	2439	P	211	269	-	221	191	68
<i>O. copepodites</i> spp.	-	-	-	-	-	-	-	-	111	152	-
<i>Paracalanus crassirostris</i>	-	-	115	1373	P	-	107	1920	627	1334	646
<i>Pseudocalanus minutus</i>	-	-	286	14480	P	70	-	-	-	-	-
<i>Pseudodiaptomus coronatus</i>	-	806	-	-	-	70	591	-	738	1677	68
<i>Temora longicornis</i>	P	P	286	5183	543	282	-	-	-	-	-

Appendix Table 26. (cont.)

	ZOB-74-005	ZOB-74-021	ZOB-74-031	ZOB-74-047	ZOB-74-057	ZOB-74-066	ZOB-74-075	ZOB-74-084	ZOB-74-121-1	ZOB-74-121-2	ZOB-74-124
Unidentified copepodites	92	-	627	1678	815	986	429	-	148	191	-
Harpacticoids	-	-	P	-	408	493	322	678	1550	3011	111
Copepod nauplii	5662	32774	10501	32623	16168	22817	39670	14740	31218	44512	5170
Barnacle nauplii	-	-	-	-	P	141	-	-	-	P	-
Barnacle cypris	-	-	-	-	P	-	-	-	-	-	-
Mysids	P	-	-	-	-	-	-	-	-	-	-
Unidentified shrimp-like zoeae	-	-	-	-	-	-	269	-	-	-	-
Neopanope texana sayi zoeae	-	-	-	-	-	-	322	P	-	-	-
Uca spp. zoeae	-	-	-	-	-	-	376	112	-	-	-
Unidentified brachyuran zoeae	-	-	-	-	-	-	-	P	-	-	-
Cyphonaute larvae	-	-	-	-	-	70	-	P	-	-	-
Sagitta spp.	-	-	-	P	-	-	-	-	-	-	-
Fritillaria sp.	-	-	-	-	P	-	-	-	-	-	-
Oikopleura sp.	-	-	-	-	-	-	107	112	-	-	-
Fish eggs	-	-	-	-	-	-	P	-	-	-	-
Fish larvae	-	-	-	-	-	-	P	-	-	-	-
Copepods	3699	10613	3824	29577	10466	13520	26411	4517	17860	32509	3645
Copepod nauplii	5662	32774	10501	32623	16168	22817	39670	14740	31218	44512	5170
Other Holoplankton	P	1774	-	P	3397	-	107	281	-	-	68
Meroplankton	P	P	342	1829	28669	11830	4456	4517	13284	14760	136
Total Zooplankton	9361	45161	14667	64029	58700	48167	70644	24055	62362	91781	9019

Appendix Table 27. Zooplankton (#/m³) taken at Great Bay station #2 in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2
Zone	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Depth (feet), water	5	5	9	7	7	7	10	10	9	7	7	7
Type of tow	Oblique	Surface	Oblique	Oblique	Oblique	Surface	Oblique	Oblique	Surface	Oblique	Oblique	Oblique
Coll. No.	ZOB-74-007	ZOB-74-008	ZOB-74-018	ZOB-74-033	ZOB-74-034	ZOB-74-035	ZOB-74-045-1	ZOB-74-045-2	ZOB-74-046	ZOB-74-056-1	ZOB-74-056-2	ZOB-74-068
Date	16 January	16 January	13 February	27 March	27 March	27 March	8 April	8 April	8 April	8 May	8 May	5 June
Hour	1235	1240	1310	1215	1225	1230	1220	1225	1240	1229	1238	1410
Tide	Flood 1		Flood 2	Flood 2			Ebb 1			Ebb 1		Ebb 2
Air Temp. (C)	6.0		7.0	7.5			12.9			13.0		-
Temp. (C), surface	1.0		2.0	6.0			8.0			12.8		21.0
Temp. (C), bottom	-		-	-			8.0			12.5		21.2
Sal. (ppt), surface	20.0		23.0	25.0			27.7			27.0		23.0
Sal. (ppt), bottom	-		-	-			28.0			28.0		22.5
Oxygen (ppm), surface	11.8		12.8	10.2			-			9.0		7.8
Oxygen (ppm), bottom	-		-	-			-			8.4		7.4
Secchi (feet)	4.0		2.5	4.5			3.0			4.5		3.0
Volume sampled (m ³)	1.09	1.46	0.30	0.83	0.99	0.99	0.26 (C)	0.36 (C)	0.87 (C)	1.02	1.68 (C)	0.87 (C)
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S
Obelia sp.	-	-	-	-	-	-	P	P	P	-	-	-
Margelopsis gibbesi	-	-	-	-	-	-	-	P	-	-	-	-
Unidentified hydromedusae	-	-	-	-	P	-	-	-	P	P	-	-
Ceriantharia larvae	-	-	-	301	68	-	P	188	-	-	-	-
Ctenophore eggs	-	-	-	P	P	-	-	-	P	-	-	-
Mnemiopsis leidyi	-	-	-	-	-	-	-	-	-	-	-	1
Rotifers	-	46	2083	-	-	-	-	-	P	905	1012	-
Nematodes	-	-	-	-	-	-	P	-	-	-	-	-
Trochophores	-	-	-	-	-	-	-	-	-	809	952	-
Polydora larvae	-	-	-	-	-	-	2038	2429	2394	2449	5357	1897
Unidentified polychaete larvae	-	-	P	181	P	P	-	P	P	2181	5714	14524
Gastropod larvae	-	-	-	-	-	-	-	-	-	122	685	747
Bivalve larvae	-	-	-	-	-	-	-	-	-	122	60	230
Evadne nordmanni	-	-	-	-	-	-	-	-	-	74	89	-
Podon polyphemoides	-	-	-	-	-	-	-	-	-	P	-	-
Ostracods	-	-	-	-	-	-	P	-	-	-	-	-
Acartia clausi	1558	3616	7250	4518	1346	-	7308	6910	2394	5196	9821	230
A. tonsa	450	227	-	-	-	-	-	P	-	74	60	12758
Calanus finmarchicus	-	-	-	-	P	-	P	-	-	-	-	-
Centropages hamatus	80	117	-	422	270	151	-	280	474	196	655	57
C. typicus	-	-	-	120	-	-	-	-	-	-	-	-
C. copepodites spp.	-	-	-	-	101	P	2038	188	-	74	-	57
Eurytemora sp.	209	227	-	-	-	-	-	-	-	-	-	-
Oithona brevicornis	-	P	-	P	-	-	1154	153	474	P	-	575
O. similis	161	117	166	960	876	758	2808	176	474	123	149	575
Paracalanus crassirostris	-	-	-	301	167	-	1808	644	762	P	-	-
P. parvus	48	-	-	-	-	-	P	-	-	-	-	-
Pseudocalanus minutus	-	-	-	3494	2525	1616	1538	4109	1724	123	P	114
Pseudodiaptomus coronatus	1541	1048	P	-	-	-	-	-	-	96	-	977

Appendix Table 27. (cont.)

	ZOB-74-007	ZOB-74-008	ZOB-74-018	ZOB-74-033	ZOB-74-034	ZOB-74-035	ZOB-74-045-1	ZOB-74-045-2	ZOB-74-046	ZOB-74-056-1	ZOB-74-056-2	ZOB-74-068
Temora longicornis	-	-	-	5361	2222	101	1962	2241	718	270	238	114
Unidentified copepodites	-	P	-	1265	573	P	1423	468	675	464	327	1322
Harpacticoids	209	P	-	-	-	-	P	468	287	96	446	402
Copepod nauplii	4303	8209	25583	21325	15320	5859	43335	45566	19731	3235	6310	36897
Barnacle nauplii	-	-	-	-	-	-	P	P	144	243	744	1552
Barnacle cypris	-	-	-	-	-	P	-	-	-	-	-	-
Mysids	P	P	-	-	-	-	-	-	-	-	-	-
Crangon zoeae	-	-	-	-	-	-	-	-	-	P	89	-
Cyphonaute larvae	-	-	-	-	-	-	P	-	-	-	-	448
Sagitta eggs	-	-	-	-	68	P	-	-	-	-	-	-
Fish eggs	-	-	-	-	-	-	-	-	-	-	-	57
Fish larvae	-	-	-	-	P	-	-	-	-	-	-	-
Copepods	3851	5352	7416	16441	8080	2626	20039	15637	7982	6712	11696	17181
Copepod nauplii	4303	8209	25583	21325	15320	5859	43335	45566	19731	3235	6310	36897
Other Holoplankton	-	46	2083	P	68	P	P	-	P	979	1101	1
Meroplankton	P	P	P	482	68	P	2038	2617	2538	5926	13601	19455
Total Zooplankton	8154	13607	35082	38248	23536	8485	65412	63820	30251	16852	32708	73534

Appendix Table 27. (cont.)

Location	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2	G.B. #2
Zone	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Depth (feet), water	8	8	8	8	8	8	6	6	6	8
Type of tow	Oblique	Oblique	Oblique	Oblique	Surface	Oblique	Oblique	Oblique	Surface	Oblique
Coll. No.	ZOB-74-076-1	ZOB-74-076-2	ZOB-74-082-1	ZOB-74-082-2	ZOB-74-083	ZOB-74-097	ZOB-74-113-1	ZOB-74-113-2	ZOB-74-114	ZOB-74-132
Date	8 July	8 July	6 August	6 August	6 August	29 August	12 September	12 September	12 September	23 October
Hour	1259	1305	1115	1120	1130	1100	1020	1025	1040	1400
Tide	Ebb 1		Ebb 1			Ebb 2	Ebb 2			Flood 2
Air Temp. (C)	32.0		29.0			29.0	28.0			-
Temp. (C), surface	26.0		24.5			27.0	24.0			-
bottom	26.0		-			-	24.0			-
Sal. (ppt), surface	27.0		28.0			22.0	22.0			26.0
bottom	27.0		-			-	22.5			26.5
Oxygen (ppm), surface	6.6		7.0			7.1	-			-
bottom	6.2		-			-	-			-
Secchi (feet)	6.0		4.0			2.5	3.5			7.5
Volume sampled (m ³)	2.90	1.73	0.53	0.58	3.52	1.35	2.99	2.35	3.00	2.19
Plankton net used	#20-L	#20-L	#20-L	#20-L	#8-S	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	-	-	-	-	-	-	-	-	-	2694
<i>Aequorea</i> sp.	-	-	-	-	-	(P)	-	-	-	-
<i>Liriope</i> sp.	-	-	-	-	-	(P)	-	-	-	-
Unidentified hydromedusae	-	-	-	-	-	-	-	-	-	91
Ctenophore eggs	-	-	-	-	-	-	P	-	-	-
<i>Mnemiopsis leidyi</i>	-	-	(11)	(14)	(58)	-	-	-	-	-
Rotifers	-	-	P	-	-	926	-	-	-	P
Trochophores	-	-	-	-	-	-	-	P	-	P
Polydora larvae	-	-	P	172	-	74	-	-	-	-
Unidentified polychaete larvae	P	289	3647	5286	-	741	418	447	525	411
Gastropod larvae	213	217	755	1379	-	1370	1003	447	613	P
Bivalve larvae	-	-	-	-	-	778	502	112	204	1553
Unidentified invertebrate larvae	-	-	189	114	-	-	-	-	-	-
<i>Acartia tonsa</i>	25086	39234	1068	1379	-	4963	11580	12474	4696	3927
<i>Centropages hamatus</i>	517	361	-	-	-	-	-	-	-	-
<i>C. typicus</i>	345	217	-	-	-	-	-	-	-	137
<i>Oithona brevicornis</i>	776	867	251	402	-	4122	19231	16755	14729	731
<i>O. similis</i>	P	217	-	-	-	1767	711	149	117	182
<i>O. copepodites</i> spp.	-	-	-	-	-	-	-	223	88	-
<i>Paracalanus crassirostris</i>	129	145	1068	402	-	333	585	968	1079	1689
<i>Pseudodiaptomus coronatus</i>	3879	4624	-	-	-	-	1672	1080	1254	868
<i>Temora longicornis</i>	-	P	-	-	-	-	-	-	-	137
Unidentified copepodites	86	1445	P	172	-	-	251	782	146	823
Harpacticoids	129	361	1068	2010	-	1815	2383	2197	1167	1826
Copepod nauplii	9483	15896	4275	5345	-	26741	24749	23383	20271	9498
Barnacle nauplii	-	-	-	-	-	74	251	186	204	-
Penaeid larvae	431	434	-	-	-	-	-	-	-	-
<i>Libinia</i> zoeae	-	650	-	-	-	-	-	-	-	-

Appendix Table 27. (cont.)

	ZOB-74-076-1	ZOB-74-076-2	ZOB-74-082-1	ZOB-74-082-2	ZOB-74-083	ZOB-74-097	ZOB-74-113-1	ZOB-74-113-2	ZOB-74-114	ZOB-74-132
Neopanope texana sayi zoeae	216	145	125	114	-	(P)	-	-	-	-
Pagurus zoeae	-	217	-	-	-	-	-	-	-	-
Uca zoeae	819	434	-	P	-	-	-	-	-	P
Cyphonaute larvae	-	-	-	-	-	-	-	-	-	-
Oikopleura sp.	P	-	-	-	-	-	-	-	-	-
Fish eggs	P	-	-	-	-	-	-	-	-	-
Fish larvae	-	P	-	-	-	-	-	-	-	-
Copepods	30947	47471	3455	4365	NC	13000	36413	34628	23276	10320
Copepod nauplii	9483	15896	4275	5345	NC	26741	24749	23383	20271	9498
Other Holoplankton	P	-	11	14	58	926	P	-	-	2694
Meroplankton	1679	2386	4716	7065	NC	3037	2174	1192	1546	2055
Total Zooplankton	42109	65753	12446	16789	X	43704	63336	59203	45093	24567

Appendix Table 28. Zooplankton (#/m³) taken at Great Bay station #3 in 1974 with a 12-cm Clarke-Bumpus sampler

Location	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3	G.B. #3
Zone	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070
Depth (feet), water	7	8	8	7	7	7	7	10	8	8	8	8
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Surface	Oblique	Oblique	Surface	Oblique	Oblique
Coll. No.	ZOB-74-009	ZOB-74-022	ZOB-74-027	ZOB-74-049	ZOB-74-059	ZOB-74-065	ZOB-74-064	ZOB-74-074	ZOB-74-086	ZOB-74-087	ZOB-74-110	ZOB-74-135
Date	16 January	13 February	27 March	8 April	8 May	5 June	5 June	8 July	6 August	6 August	12 September	23 October
Hour	1310	1420	0930	1335	1425	1230	1220	1110	1225	1235	0950	1510
Tide	Flood 1	Flood 2	Flood 2	Ebb 1	Ebb 1	Ebb 1		Flood 2	Ebb 1		Ebb 2	Flood 2
Air Temp. (C)	5.0	7.0	2.0	13.0	-	24.0		-	25.0		28.0	-
Temp. (C), surface	1.0	2.0	6.0	10.0	13.0	21.0		26.0	24.5		24.0	-
Temp. (C), bottom	-	-	-	9.0	13.0	21.0		25.0	-		23.2	-
Sal. (ppt), surface	18.2	20.5	18.0	16.0	23.0	20.0		25.0	26.0		20.0	24.0
Sal. (ppt), bottom	-	-	-	18.3	24.0	22.0		25.0	-		20.5	23.5
Oxygen (ppm), surface	11.8	13.6	11.0	-	10.0	9.0		6.6	6.4		-	-
Oxygen (ppm), bottom	-	-	-	-	9.9	8.6		6.0	-		-	-
Secchi (feet)	6.0	3.5	2.5	1.5	3.0	3.2		4.0	6.0		4.0	6.5
Volume sampled (m ³)	2.18	0.47	0.62	0.51	1.17	0.71	0.82	0.82	1.41	2.39	1.85	1.94
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	-	-	-	-	-	-	-	-	-	-	-	97
<i>Mnemiopsis leidyi</i>	-	-	-	-	-	-	P	-	P	-	-	-
Rotifers	86	2909	-	-	-	88	P	-	71	-	-	-
Trochophores	-	-	-	-	64	-	-	-	177	-	-	-
Polydora larvae	-	-	-	-	833	7353	1754	274	-	-	P	-
Unidentified polychaete larvae	-	-	-	4118	2436	2101	4268	-	496	42	3486	226
Gastropod larvae	-	-	-	-	P	438	382	2744	532	-	1270	64
Bivalve larvae	-	-	-	-	64	175	-	823	106	P	4270	P
Unidentified invertebrate larvae	155	-	-	-	-	-	-	-	-	-	-	-
<i>Acartia clausi</i>	1290	7802	22863	46029	289	263	152	-	-	-	-	-
<i>A. tonsa</i>	34	-	-	-	9840	14618	16616	128689	1099	42	8108	11373
<i>Centropages hamatus</i>	P	-	-	441	-	-	-	P	-	-	-	-
<i>C. typicus</i>	-	-	-	-	-	-	-	-	-	-	-	P
<i>C. copepodites</i> spp.	-	-	-	-	P	-	-	-	-	-	-	-
<i>Eurytemora</i> sp.	138	-	363	-	-	88	-	-	-	-	-	-
<i>Oithona brevicornis</i>	-	-	-	530	-	175	-	2195	213	-	773	838
<i>O. similis</i>	P	P	P	794	P	-	P	1098	-	P	486	-
<i>O. copepodites</i> spp.	-	-	-	-	-	-	-	-	71	-	-	-
<i>Paracalanus crassirostris</i>	-	-	-	-	-	-	-	-	-	-	54	226
<i>Pseudocalanus minutus</i>	-	143	P	-	-	-	-	-	-	-	-	-
<i>Pseudodiaptomus coronatus</i>	120	-	P	-	-	-	-	3156	-	-	1027	1192
<i>Temora longicornis</i>	P	-	P	P	P	-	-	-	-	-	-	-
Unidentified copepodites	-	213	-	294	64	-	-	274	-	-	54	-
Harpacticoids	-	-	-	1029	97	350	152	961	1135	-	892	838
Copepod nauplii	2959	37164	13610	31471	42276	91123	74695	53232	16596	575	18649	3028
Barnacle nauplii	-	-	-	1029	128	1139	457	P	-	-	216	-
Mysids	-	-	-	-	-	-	-	-	-	-	-	P
Unidentified shrimp-like zoeae	-	-	-	-	-	-	-	274	-	-	-	-
<i>Palaemonetes</i> zoeae	-	-	-	-	P	-	-	-	-	-	-	-
<i>Neopanope texana sayi</i> zoeae	-	-	-	-	-	-	-	1921	106	157	-	-
<i>Ovalipes ocellatus</i>	-	-	-	-	-	-	-	-	P	-	-	-
<i>Uca</i> spp. zoeae	-	-	-	-	-	-	-	1784	-	P	-	-
Cyphonaute larvae	-	-	-	-	64	88	229	-	-	-	54	-
Fish eggs	-	-	-	-	97	88	P	P	-	-	-	-
Fish larvae	-	-	-	-	-	-	-	P	-	-	-	-
Copepods	1582	8158	23226	49117	10290	15494	16920	136373	2548	42	11394	14467
Copepod nauplii	2959	37164	13610	31471	42276	91123	74695	53232	16596	575	18649	3028
Other Holoplankton	86	2909	-	-	-	88	P	-	71	-	-	97
Meroplankton	-	-	-	4118	3686	11382	7090	7820	1417	199	9296	290
Total Zooplankton	4627	48231	36836	84706	56252	118087	98705	197425	20632	816	39339	17882

Appendix Table 29. Zooplankton (#/m³) taken at Mullica River station in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	M.R.#1	M.R.#1	M.R.#1	M.R.#1	M.R.#1	M.R.#1	M.R.#1	M.R.#1	M.R.#1
Zone	1520	1520	1520	1520	1520	1520	1520	1520	1520
Depth (feet), water	22	30	29	25	24	28	24	33	28
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOB-74-010	ZOB-74-025	ZOB-74-028	ZOB-74-050	ZOB-74-060	ZOB-74-063	ZOB-74-073	ZOB-74-088	ZOB-74-109
Date	16 January	13 February	27 March	8 April	8 May	5 June	8 July	6 August	12 September
Hour	1400	1458	0955	1420	1515	1150	1055	1310	0935
Tide	Flood 1	Flood 2	Flood 2	Ebb 1	Ebb 2	Ebb 1	Flood 2	Ebb 1	Ebb 2
Air Temp. (C)	8.0	8.0	3.0	13.1	13.0	28.0	30.0	26.0	26.0
Temp. (C), surface	1.0	1.2	6.0	10.0	13.5	20.3	26.0	26.0	23.0
bottom	1.0	1.5	-	9.0	14.5	18.7	27.0	-	23.0
Sal. (ppt), surface	12.0	16.0	12.0	12.0	15.8	16.0	18.0	22.0	15.0
bottom	15.0	21.0	-	15.0	16.5	20.0	8.0	-	16.0
Oxygen (ppm), surface	13.3	14.0	9.7	-	9.4	8.5	5.8	6.4	-
bottom	12.8	13.0	-	-	9.2	7.6	5.5	-	-
Secchi (feet)	3.3	2.5	2.5	1.5	1.5	3.0	4.0	3.0	3.0
Volume sampled (m ³)	2.23	0.57	0.73(C)	1.07	0.41(C)	1.33	2.50	0.87(C)	1.39(C)
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-L	#20-L	#20-L
Aequorea sp.	-	-	-	-	-	-	-	-	P
Ctenophore eggs	-	-	-	P	-	-	-	-	-
Mnemiopsis leidyi	-	-	-	-	-	-	-	(4)	-
Rotifers	-	1184	-	-	-	-	140	345	-
Trochophores	-	-	-	-	-	-	140	P	-
Nereis larvae	-	-	-	-	-	-	140	P	-
Polydora larvae	-	-	-	-	3020	451	2030	P	-
Unidentified polychaete larvae	-	-	-	P	2744	940	3360	632	180
Gastropod larvae	-	-	-	P	-	376	37660	1609	959
Bivalve larvae	-	-	-	-	P	75	6160	402	1079
Unidentified invertebrate larvae	37	-	-	-	-	-	-	-	-
Acartia clausi	430	16184	3116	3738	2744	226	-	-	-
A. tonsa	93	-	-	-	P	9812	89320	2586	3777
Eurytemora sp.	2483	-	3596	1402	2469	113	-	-	-
Oithona brevicornis	-	-	359	935	-	-	210	-	3237
O. similis	-	-	-	234	-	75	210	-	-
Pseudocalanus minutus	P	P	-	-	-	-	-	-	-
Pseudodiaptomus coronatus	P	P	160	-	-	-	3080	345	2457
Unidentified cepepodites	P	395	P	-	P	P	1540	230	299
Harpacticoids	-	-	318	467	1373	301	560	2299	1439
Copepod nauplii	2298	7795	5832	12383	22500	33195	52640	11954	9232
Barnacle nauplii	-	-	P	1636	15639	3421	420	-	-
Barnacle cypris	-	-	-	-	-	-	100	-	-
Unidentified amphipods	-	-	-	-	-	-	P	-	-
Caprellids	-	-	-	-	-	-	-	-	P
Mysids	205	395	-	P	-	-	-	-	-
Neopanope texana sayi larvae	-	-	-	-	-	P	-	P	-
Uca spp. zoeae	-	-	-	-	-	-	1533	-	-
Cyphonaute larvae	-	-	-	-	4939	376	-	-	-
Appendicularia larvae	-	-	-	-	-	-	-	P	-
Fish eggs	-	-	-	-	-	P	140	-	-
Fish larvae	-	-	-	-	-	-	(16)	-	-
Copepods	3006	16579	7549	6776	6586	10527	94920	5460	11209
Copepod nauplii	2298	7795	5832	12383	23500	33195	52640	11954	9232
Other Holoplankton	-	1184	-	P	-	-	140	345	-
Meroplankton	242	395	P	1636	26342	5639	51683	2643	2218
Total Zooplankton	5546	25953	13381	20795	55428	49361	199383	20402	2265

Appendix Table 30. Zooplankton (#/m³) taken Landward of the Site in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	Landward	Landward	Landward	Landward	Landward	Landward	Landward	Landward	Landward	Landward	Landward	Landward
Zone	5150	5150	5150	5150	5150	5150	5150	5150	5150	5150	5150	5150
Depth (feet), water	20	18	17	18	17	15	18	20	22	20	20	20
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-008	ZOO-74-018	ZOO-74-024	ZOO-74-033	ZOO-74-041	ZOO-74-046	ZOO-74-052-1	ZOO-74-060	ZOO-72-077-1	ZOO-74-077-2	ZOO-74-094-1	ZOO-74-094-2
Date	24 January	12 February	27 February	11 March	25 March	8 April	29 April	21 May	20 June	20 June	22 July	22 July
Hour	1330	1500	1310	1430	1500	1300	1800	0900	1745	1750	1645	1650
Tide	Ebb 2	Ebb 1	Ebb 1	Ebb 2	Low	Ebb 2	Ebb 1	Ebb 1	Flood 1		Ebb 2	
Air Temp. (C)	4.0	4.0	0.0	6.0	-0.5	11.0	16.0	15.0	24.5		23.0	
Temp. (C), surface	5.0	2.8	3.5	5.5	5.5	8.0	-	15.5	21.0		23.0	
Temp. (C), bottom	5.0	3.5	3.8	6.0	5.0	8.0	10.5	14.0	17.0		22.3	
Sal. (ppt), surface	29.5	28.0	28.5	30.0	26.0	30.0	30.0	30.0	29.5		30.0	
Sal. (ppt), bottom	29.0	29.5	29.2	30.0	28.0	30.0	30.0	30.5	30.0		30.0	
Oxygen (ppm), surface	10.6	12.0	11.2	10.0	8.6	9.8	-	9.0	6.6		6.4	
Oxygen (ppm), bottom	10.6	11.2	11.2	9.6	8.7	9.9	9.4	7.8	6.6		5.9	
Secchi (feet)	6.8	6.5	7.0	6.5	-	6.0	5.0	5.0	8.0		6.0	
Volume sampled (m ³)	0.78	0.33 (C)	0.33	0.33	0.52	1.45	1.72	2.60	0.64	0.99	1.35	0.90
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
Obelia sp.	-	-	-	-	P	-	-	-	-	-	-	-
Unidentified hydromedusae	-	-	-	-	-	-	174	-	-	-	-	-
Ceriantharia larvae	-	1061	-	-	-	-	-	-	-	-	-	-
Ctenophore eggs	-	P	P	-	P	-	174	202	-	-	-	-
Ctenophores (very small)	-	-	-	-	-	-	-	-	-	-	P	222
Nnemiopsis leidyi	-	-	-	-	-	-	-	-	-	-	(2.2)	(2.2)
Rotifers	-	-	P	542	-	-	-	-	-	-	-	-
Planula larvae	-	-	-	-	-	-	-	-	-	-	P	-
Trochophores	-	-	-	127	-	-	-	1006	820	-	P	-
Polydora larvae	-	-	-	-	-	-	-	-	1094	-	-	-
Unidentified polychaete larvae	-	-	482	1988	577	241	3052	337	4512	8636	222	444
Melampus bidentatus larvae	-	-	-	-	-	-	-	-	NC	2576	10074	9889
Unidentified gastropod larvae	-	-	-	-	-	P	-	-	3418	454	P	P
Bivalve larvae	4555	-	-	596	P	P	1047	606	5195	3939	P	P
Ostrocods	-	-	-	P	-	-	-	-	-	-	-	-
Acartia clausi	-	-	1807	1265	1344	-	178	202	1504	2276	-	-
A. tonsa	-	-	-	-	-	-	-	-	15176	19545	3259	8222
Centropages hamatus	-	-	361	723	-	6276	1744	942	1231	2879	148	-
C. typicus	P	-	-	-	-	-	-	-	-	-	-	-
C. copepodites spp.	799	P	2289	361	1921	-	-	1817	957	-	P	-
Labidocera aestiva	-	-	-	-	-	-	-	P	P	-	-	-
Oithona brevicornis	1027	-	241	235	958	483	-	-	410	909	815	1556
O. similis	8904	1061	1084	5657	-	7121	1047	673	4375	5303	2000	1889
O. copepodites spp.	2055	-	-	-	-	-	-	-	-	-	-	-

Appendix Table 30. (cont.)

Coll. No.	ZOO-74-008	ZOO-74-018	ZOO-74-024	ZOO-74-033	ZOO-74-041	ZOO-74-046	ZOO-74-052-1	ZOO-74-060	ZOO-74-077-1	ZOO-74-077-2	ZOO-74-094-1	ZOO-74-094-2
Paracalanus crassirostris	P	-	P	235	-	362	959	202	273	P	1111	1444
P. parvus	856	-	-	-	-	-	-	-	273	-	-	-
Pseudocalanus minutus	-	1071	1084	3614	2688	15448	4012	202	8613	7727	-	P
Pseudodiaptomus coronatus	-	-	-	-	-	-	-	-	1504	4697	2320	5000
Temora longicornis	P	P	602	1030	2308	5190	1657	1346	684	1818	-	-
Tortanus discaudatus	-	-	-	127	-	P	-	-	-	-	-	-
Unidentified copepodites	226	-	P	596	-	5914	-	-	-	-	148	222
Harpacticoids	226	-	P	-	P	-	523	539	-	303	148	P
Copepod nauplii	15753	22272	16627	23675	17308	5914	9593	1636	25840	39242	5111	5778
Barnacle nauplii	-	-	-	-	-	-	174	202	-	P	-	-
Barnacle cypris	-	-	-	-	-	P	-	-	-	-	-	-
Pagurus spp. zoea	-	-	-	-	-	-	P	269	P	-	-	-
Uca spp. zoeae	-	-	-	-	-	-	-	-	-	-	815	1444
Actinotroch larvae	P	-	-	-	-	-	-	-	-	-	-	-
Cyphonaute larvae	-	-	-	-	-	-	-	-	P	-	-	-
Sagitta spp.	-	-	-	180	-	P	-	-	273	-	-	-
Bipinnaria larvae	-	-	-	127	-	-	-	-	-	-	-	-
Doliolids	-	-	-	-	-	-	-	-	-	-	-	P
Oikopleura dioica	-	-	-	-	-	-	-	-	-	-	222	777
Oikopleura sp.	-	-	-	-	-	-	-	-	-	P	-	-
Copepods	14093	2132	7468	13843	9219	40794	10120	5923	35000	45457	9949	18333
Copepod nauplii	15753	22272	16627	23675	17308	5914	9593	1636	25840	39242	5111	5778
Other holoplankton	-	P	P	722	-	P	174	202	273	P	222	999
Meroplankton	4555	1061	482	2838	577	241	4447	2420	15039	15605	11111	11777
Total zooplankton	34401	25465	24577	41078	11499	46949	24334	10181	76152	100304	26393	36887

Appendix Table 30. (cont.)

Location	Landward	Landward	Landward	Landward
Zone	5150	5150	5150	5150
Depth (feet), water	18	20	16	18
Type of tow	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-113	ZOO-74-128	ZOO-74-139	ZOO-74-158
Date	30 August	30 September	21 October	18 November
Hour	1300	0900	1130	0930
Tide	Low	Ebb 1	Flood 2	Flood 2
Air Temp. (C)	26.0	17.0	9.0	10.0
Temp. (C), surface	25.0	17.5	13.0	10.0
bottom	22.0	18.2	12.4	10.0
Sal. (ppt), surface	29.5	30.0	30.0	30.0
bottom	31.0	30.0	30.0	30.0
Oxygen (ppm), surface	6.4	7.8	8.0	9.7
bottom	6.8	7.8	8.2	9.5
Secchi (feet)	-	2.5	15.0	10.0
Volume sampled (m ³)	1.04	1.76	2.35	2.79
Plankton net used	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	168	-	4617	2778
<i>Liriope</i> sp.	-	-	(108)	-
Unidentified hydromedusae	-	-	(2.5)	-
Siphonophores	-	128	-	-
Rotifers	337	-	P	2330
Trochophores	337	319	-	358
<i>Nereis</i> larvae	724	-	-	-
<i>Polydora</i> larvae	168	-	-	-
Unidentified polychaete larvae	4712	1913	4021	627
Gastropod larvae	1851	2679	745	179
Bivalve larvae	2861	1020	35447	2419
<i>Evadne nordmanni</i>	-	-	P	P
<i>Penilia avirostris</i>	-	-	298	-
<i>Acartia longiremis</i>	-	P	(P)	-
<i>A. tonsa</i>	7236	12755	-	2599
<i>Centropages typicus</i>	-	-	596	P
<i>C. copepodites</i> sp.	-	P	894	1523
<i>Oithona brevicornis</i>	3281	6760	447	717
<i>O. similis</i>	337	191	2383	896
<i>O. copepodites</i> spp.	-	P	447	269
<i>Paracalanus crassirostris</i>	8582	19324	3128	358
<i>P. parvus</i>	-	765	3277	269
<i>P. copepodites</i> spp.	-	-	13404	1344
<i>Pseudocalanus coronatus</i>	3534	2423	-	-

Appendix Table 30. (cont.)

Coll. No.	ZOO-74-113	ZOO-74-128	ZOO-74-139	ZOO-74-158
Temora longicornis	-	-	P	-
Unidentified copepodites	505	-	2830	3226
Harpacticoids	1599	6824	21745	2330
Copepod nauplii	64784	27168	48553	3020
Amphipods	-	P	-	-
Pelagic amphipods	-	-	(P)	-
Neopanope texana sayi zoeae	P	-	-	-
Pagurus spp. zoeae	168	-	-	-
Pinnixa spp. zoeae	P	-	-	-
Cyphonaute larvae	-	-	-	627
Sagitta sp.	-	-	(P)	-
Pluteus larvae	-	-	1191	P
Oikopleura sp.	-	-	1787	1254
Fish larvae	(19)	-	-	-
Copepods	25074	49042	49151	13531
Copepod nauplii	64784	27168	48553	3020
Other holoplankton	505	128	6702	6362
Meroplankton	10840	4911	41404	4210
Total zooplankton	101297	81249	145810	27123

Appendix Table 31. Zooplankton (#/m³) taken at the Site in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	40	40	40	40	40	40	40	40	40	40	40	40
Type of Tow	Oblique	Oblique	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Oblique
Coll. No.	ZOO-74-004	ZOO-74-005	ZOO-74-003	ZOO-74-003	ZOO-74-013	ZOO-74-014	ZOO-74-015	ZOO-74-016	ZOO-74-019	ZOO-74-019	ZOO-74-020	ZOO-74-021
Date	24 January	24 January	24 January	12 February	12 February	12 February	12 February	12 February	27 February	27 February	27 February	27 February
Hour	1025	1036	1045	1045	1320	1326	1334	1345	1120	1120	1130	1140
Tide	Ebb 2				Flood 2				Flood 2			
Air Temp. (C)	6.0				7.0				1.0			
Temp. (C), surface	4.5				3.0				3.5			
bottom	5.0				4.0				4.0			
Sal. (ppt), surface	30.0				27.5				27.8			
bottom	30.0				29.5				29.5			
Oxygen (ppm), surface	10.1				12.0				9.8			
bottom	10.7				11.2				9.6			
Secchi (feet)	10.0				6.0				8.0			
Volume Sampled (m ³)	1.56	1.46	1.25	0.93(C)	0.72(C)	0.99(C)	0.54(C)	0.80(C)	2.14	2.03	1.25	1.30
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S	#20-S
Hydromedusae	-	-	-	-	-	-	-	-	-	-	P	-
Ceriantharia larvae	80	-	-	-	P	P	602	650	-	443	350	240
Ctenophore eggs	-	-	-	-	-	-	-	-	P	-	-	-
Rotifers	-	-	-	-	927	-	463	1747	221	P	700	865
Trochophores	201	227	150	224	-	-	-	-	P	P	P	289
Polychaete larvae	P	-	-	-	-	-	-	-	-	222	450	529
Gastropod larvae	P	-	-	-	-	-	-	-	-	P	-	-
Bivalve larvae	923	827	750	89	321	-	P	P	93	111	100	192
Acartia clausi	-	-	-	-	-	-	-	-	-	-	P	96
Centropages hamatus	P	-	-	-	-	-	-	-	-	610	-	-
C. typicus	201	P	-	-	-	-	-	-	-	P	-	-
C. copepodites spp.	280	570	650	134	-	-	926	-	121	P	350	289
Oithona brevicornis	721	713	1400	P	321	-	-	406	-	-	500	240
O. similis	6490	6821	7850	1433	1133	P	1852	2153	374	2217	4450	4135
O. copepodites spp.	2324	2853	1100	403	3403	-	-	-	-	-	-	-
Paracalanus crassirostris	121	114	P	89	486	-	-	-	-	111	-	192
P. parvus	361	228	550	89	-	-	-	-	-	-	-	-
Pseudocalanus minutus	521	171	300	806	2106	-	3241	1341	-	7370	6800	6779
Temora longicornis	211	86	-	224	-	-	602	650	-	1219	1150	1058
Tortanus discaudatus	-	-	-	-	-	-	-	-	-	P	-	-
Unidentified copepodites	641	599	300	313	-	-	-	-	-	-	P	-
Harpacticoids	80	47	-	134	-	-	463	-	-	P	100	144
Copepod nauplii	19992	21461	22300	6809	31597	1944	17269	22994	5607	12914	24000	18510
Barnacle nauplii	P	-	-	134	-	-	-	-	-	-	-	-
Pluteus larvae	-	-	-	-	-	-	-	-	-	P	-	-
Sagitta sp.	-	-	-	-	-	-	-	P	-	P	-	P
Fish larvae	-	-	-	-	-	-	-	-	-	-	100	-
Copepods	11951	12212	12150	3625	7449	P	7084	4550	495	11527	13350	12983
Copepod nauplii	19992	21461	22300	6809	31597	1944	17269	22994	5607	12914	24000	18570
Other Holoplankton	-	-	-	-	927	-	463	1747	221	-	700	865
Meroplankton	1204	1054	900	447	321	P	602	650	-	665	900	1250
Total Zooplankton	33147	34727	35350	10881	40294	1944	25418	29941	6323	25106	38950	33558

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	37	37	37	37	32	32	32	32	40	40	40	40
Type of Tow	Oblique	Oblique	Surface	Bottom	Oblique	Oblique	Surface	Bottom	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-029	ZOO-74-030	ZOO-74-031	ZOO-74-031	ZOO-74-039	ZOO-74-040	ZOO-74-038	ZOO-74-038	ZOO-74-043-1	ZOO-74-043-2	ZOO-74-045-1	ZOO-74-045-2
Date	11 March	11 March	11 March	11 March	25 March	25 March	25 March	25 March	8 April	8 April	8 April	8 April
Hour	1235	1245	1255	1255	1320	1330	1310	1310	1050	1105	1120	1130
Tide	Ebb 1				Ebb 2				Ebb 1			
Air Temp. (C)	6.0				0.0				11.0			
Temp. (C), surface	7.2				5.5				8.0			
Temp. (C), bottom	7.2				5.0				7.5			
Sal. (ppt), surface	30.0				30.0				30.0			
Sal. (ppt), bottom	30.0				30.0				30.0			
Oxygen (ppm), surface	9.3				8.5				10.2			
Oxygen (ppm), bottom	9.2				8.4				10.0			
Secchi (feet)	23.0				12.5				8.0			
Volume Sampled (m ³)	0.99	1.14	1.30	1.25	0.83(C)	0.78	0.69(C)	0.73(C)	1.39	4.12	2.32	3.52
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-S	#20-L	#20-S	#20-S	#20-L	#20-L	#20-S	#20-S
Obelia sp.	152	P	-	140	410	865	434	P	-	-	-	P
Ceriantharia larvae	303	263	-	630	892	376	435	P	207	P	119	341
Ctenophore eggs	P	-	-	-	-	P	-	-	503	218	178	-
Rotifers	2924	434	31	P	169	P	290	-	P	-	-	P
Trochophores	P	224	62	280	169	-	-	-	-	-	-	-
Polychaete larvae	4394	2276	-	3500	P	P	-	-	136	146	356	128
Gastropod larvae	P	171	-	P	-	-	-	-	-	-	-	P
Bivalve larvae	2121	1224	62	1120	P	P	-	P	440	-	P	-
Unidentified larvae	455	171	-	210	-	-	-	-	-	-	-	-
Acartia clausi	1015	750	P	840	482	577	290	480	126	218	P	P
Calanus finmarchis	-	-	-	-	-	-	P	-	-	-	-	-
Centropages hamatus	712	395	-	1960	2892	2972	P	-	189	291	3734	4091
C. typicus	-	-	-	-	P	-	-	-	-	-	-	-
C. copepodites spp.	P	224	-	-	1205	779	2609	1199	-	-	-	-
Eurytemora sp.	-	-	-	P	-	-	-	-	-	-	-	-
Oithona brevicornis	500	263	-	980	241	203	435	-	944	1529	711	384
O. similis	4894	2987	P	3920	4506	3664	2174	2757	13220	15000	10846	10568
Paracalanus crassirostris	500	224	-	700	892	865	290	-	693	291	474	554
Pseudocalanus minutus	4955	3816	-	6860	16072	11164	6232	10188	18939	20995	20092	18365
Temora longicornis	1515	750	-	2170	1759	2395	1594	1199	5225	6699	7823	5540
Tortanus discaudatus	-	-	-	-	-	-	-	-	P	-	-	-
Unidentified copepodites	909	303	-	980	1133	376	435	1199	16313	10461	6934	5200
Harpacticoids	197	-	-	210	410	203	-	-	630	655	534	-
Copepod nauplii	27424	18816	1769	22260	54940	50769	41449	41593	89515	86723	64423	46108
Barnacle nauplii	409	203	-	630	-	-	-	-	-	-	-	-
Barnacle cypris	-	-	-	-	-	-	290	-	P	P	-	-
Bipinnaria larvae	P	-	-	-	-	-	-	-	-	-	-	-
Brachiolaria larvae	-	-	-	P	-	-	-	-	-	-	-	-
Sagitta eggs	-	-	P	-	-	P	-	-	-	-	119	-
Sagitta sp.	197	92	-	-	-	P	-	-	126	291	178	-
Copepods	15197	9712	P	18620	29592	23198	14059	17022	56288	56139	51148	44702
Copepod nauplii	27424	18816	1769	22260	54940	50769	41449	41593	89515	86723	64423	46108
Other Holoplankton	3121	526	31	P	169	P	290	-	629	509	475	P
Meroplankton	7834	4532	124	6510	1471	1241	1159	P	775	146	475	469
Total Zooplankton	53576	33586	1924	47390	86172	75208	56957	58615	147207	143517	116521	86079

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	35	35	35	35	35	35	35	35	35	35	35	35
Type of Tow	Oblique	Oblique	Oblique	Oblique	Surface	Bottom	Oblique	Oblique	Oblique	Oblique	Surface	Bottom
Coll. No.	ZOO-74-048-1	ZOO-74-048-2	ZOO-74-048-3	ZOO-74-048-4	ZOO-74-049	ZOO-74-049	ZOO-74-054-1	ZOO-74-054-2	ZOO-74-055-1	ZOO-74-055-2	ZOO-74-053	ZOO-74-053
Date	29 April	29 April	29 April	29 April	29 April	29 April	8 May	8 May	8 May	8 May	8 May	8 May
Hour	1410	1410	1420	1420	1500	1500	0955	0955	1010	1010	0940	0945
Tide	Ebb 1						High					
Air Temp. (C)	-						9.5					
Temp. (C), surface	13.0						11.3					
bottom	11.0						11.0					
Sal. (ppt), surface	30.0						30.0					
bottom	30.5						30.0					
Oxygen (ppm), surface	9.0						9.3					
bottom	9.0						8.8					
Secchi (feet)	12.0						10.5					
Volume Sampled (m ³)	3.12	3.47	2.91	3.30	1.61	2.88	1.69	2.60	1.82	2.39	2.29	1.79(C)
Plankton net used	#20-S	#20-L	#20-S	#20-L	#20-S	#20-S	#20-S	#20-L	#20-S	#20-L	#20-S	#20-S
Actinula larvae	-	P	-	-	-	-	-	-	824	-	-	-
Obelia sp.	-	-	-	-	P	-	-	-	P	-	-	111
Unidentified hydromedusae	-	-	-	-	-	-	1479	1779	274	377	-	223
Ceriantharia larvae	-	-	-	-	-	-	-	P	-	377	-	-
Ctenophore eggs	-	P	-	182	-	-	P	-	P	-	-	P
Rhabdocels	-	-	-	-	-	-	P	P	-	-	-	-
Rotifers	P	-	155	P	P	-	13609	13058	14286	17071	14978	2291
Nereis larvae	-	-	-	-	-	-	P	P	-	-	-	P
Polydora larvae	2063	4899	NC	-	-	-	518	337	-	251	-	223
Unidentified polychaete larvae	942	2882	5567	7864	5497	2500	1849	1885	2473	3138	-	3240
Trochophores	-	-	-	-	-	-	43185	36683	10302	14058	268	72850
Gastropod larvae	-	-	-	-	-	-	1849	2087	1786	2134	-	670
Bivalve larvae	781	1657	2062	2364	2143	833	39645	43279	25412	26611	229	2514
Evadne nordmanni	-	-	-	-	-	-	518	135	P	-	-	-
Podon polyphemoides	P	72	-	-	P	104	-	-	-	-	-	-
Acartia clausi	120	612	825	1091	373	313	888	1490	824	502	P	111
A. tonsa	40	-	-	-	-	-	-	-	-	251	-	-
Calanus finmarchicus	-	P	-	-	-	-	-	-	-	-	-	-
Candacia sp.	-	-	-	-	P	-	-	-	-	-	-	-
Centropages hamatus	80	288	515	545	1677	1094	592	529	-	-	115	223
C. typicus	-	-	-	-	P	-	P	P	-	377	115	-
C. copepodites spp.	-	-	-	-	-	-	888	240	687	502	P	503
Oithona brevicornis	-	144	155	182	186	-	296	-	274	628	-	P
O. similis	200	648	361	1545	1118	729	3920	4135	4396	5649	1452	2235
Paracalanus crassirostris	80	216	309	409	839	885	-	-	-	-	-	-
Pseudocalanus minutus	1182	4431	4330	4045	10248	4896	1109	2404	1511	1130	P	1453
Temora longicornis	581	3422	2371	4318	5590	3802	6805	5914	6731	6025	-	2402
Tortanus discaudatus	-	72	155	P	-	156	444	P	-	-	-	-

Appendix Table 31. (cont.)

	ZOO-74-048-1	ZOO-74-048-2	ZOO-74-048-3	ZOO-74-048-4	ZOO-74-049	ZOO-74-049	ZOO-74-054-1	ZOO-74-054-2	ZOO-74-055-1	ZOO-74-055-2	ZOO-74-058	ZOO-74-058
Unidentified copepodites	140	648	1082	2500	5963	5000	1553	1058	1374	753	153	1173
Harpacticoids	80	216	103	227	466	260	-	337	687	-	-	279
Copepod nauplii	4567	13437	12887	17045	23571	10156	54290	44288	43407	47950	7757	8659
Barnacle nauplii	-	216	-	182	-	156	-	-	-	-	-	-
Barnacle cypris	-	-	103	-	P	P	-	-	P	P	-	-
Neomysis americana	-	-	P	-	P	-	-	-	-	-	-	-
Crangon septemspinosa zoeae	40	-	P	P	P	-	223	96	274	-	-	112
Cancer irroratus zoeae	-	-	-	-	-	-	-	P	-	-	-	-
Sagitta eggs	-	P	-	-	-	P	P	-	-	-	-	-
Sagitta spp.	P	-	-	P	-	-	-	P	-	P	-	111
Pluteus larvae	-	-	-	-	-	-	-	P	274	-	P	P
Fritillaria sp.	-	-	-	-	-	-	1331	577	P	-	-	168
Copepods	2503	10697	10206	14862	26460	17135	16495	16107	16484	15817	1835	8379
Copepod nauplii	4567	13437	12887	17045	23571	10156	54290	44288	43407	47950	7757	8659
Other Holoplankton	P	72	155	182	P	104	14127	13058	14286	17071	14978	2402
Meroplankton	3826	9654	7732	10410	7640	3489	90079	86723	41619	46946	497	80111
Total Zooplankton	10896	33860	30980	42499	57671	30884	174991	160176	115796	127784	25067	99551

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5250	5250	5250	5250	5258	5258	5258	5258	5258
Depth (feet), water	35	35	35	35	35	35	35	37	37	37	37	42
Type of Tow	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Oblique	Surface	Bottom	Oblique	Oblique	Surface
Collection No.	ZOO-74-062	ZOO-74-062	ZOO-74-061	ZOO-74-072	ZOO-74-072	ZOO-74-071-1	ZOO-74-071-2	ZOO-74-075	ZOO-74-075	ZOO-74-076-1	ZOO-74-076-2	ZOO-74-079
Date	21 May	21 May	21 May	5 June	5 June	5 June	5 June	20 June	20 June	20 June	20 June	20 June
Hour	1042	1042	1030	1450	1450	1420	1435	1640	1640	1700	1705	2055
Tide	Ebb 1			Flood 2				Flood 1				High
Air Temp. (C)	17.0			19.0				24.5				24.0
Temp. (C), surface	15.0			17.0				21.5				20.2
Temp. (C), bottom	13.0			17.0				15.5				17.0
Sal. (ppt), surface	30.0			29.0				29.0				30.0
Sal. (ppt), bottom	30.5			29.0				30.3				30.3
Oxygen (ppm), surface	8.4			8.1				7.0				7.2
Oxygen (ppm), bottom	7.5			7.3				6.2				7.8
Secchi (feet)	5.5			9.0				7.0				-
Volume sampled (m ³)	1.00	1.30	2.00	2.24	2.39	1.35	1.98	0.91	2.08 *	1.04	0.94	1.82
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
Unidentified hydromedusae	-	-	-	-	-	P	P	-	-	-	-	-
Ctenophore eggs	-	P	200	-	-	-	-	-	-	-	-	-
Rotifers	-	-	P	-	-	-	-	-	-	-	-	-
Planula larvae	-	-	-	-	628	196	10	-	-	-	-	-
Trochophores	-	-	-	502	126	1381	1515	-	120	-	-	-
Polydora larvae	-	-	300	-	-	-	-	1635	-	-	-	1648
Unidentified polychaete larvae	P	-	300	P	83	987	588	7019	240	865	3830	165
Melampus bidentatus	-	-	-	-	-	-	-	-	-	-	-	30082
Unidentified Gastropod larvae	-	-	P	-	208	P	588	-	901	433	1117	1030
Bivalve larvae	-	355	2400	-	208	1973	1177	-	661	1154	1755	275
Unidentified invertebrate larvae 150	-	-	-	-	-	-	-	-	-	-	-	-
Podon polyphemoides	-	-	-	-	-	-	-	P	-	-	-	-
Acartia clausi	-	118	-	279	2342	492	1010	1539	120	1079	1154	412
A. tonsa	-	-	-	-	167	-	167	36346	421	5267	5441	2060
Centropages hamatus	510	2189	1000	279	418	296	588	4231	1382	5337	10851	3159
C. typicus	-	-	-	2232	377	1084	167	-	901	P	-	1442
C. copepodites spp.	-	-	1200	4855	753	2270	1515	-	-	1298	-	-
Labidocera aestiva	-	-	-	-	-	-	-	-	P	-	-	-
Oithona brevicornis	P	-	-	-	-	P	-	-	-	-	-	-
O. similis	3960	296	3100	1953	292	4246	5975	572	-	-	319	206
O. copepodites spp.	-	-	-	P	-	-	-	481	841	3894	4149	2129
Paracalanus crassirostris	150	-	P	-	83	P	P	289	P	721	479	549
P. parvus	-	-	-	-	-	-	-	289	240	-	-	962
Pseudocalanus minutus	P	2367	1400	391	3640	2566	2277	192	10457	7500	11968	4808
Pseudodiaptomus coronatus	-	-	-	-	-	-	-	2212	721	721	3192	137
Temora longicornis	-	10946	4200	2065	8285	2667	1177	673	3065	2164	2075	687
Tortanus discaudatus	-	P	-	-	-	-	-	-	-	-	-	-
Unidentified copepodites	540	296	300	670	188	1283	1346	289	541	-	-	481

Appendix Table 31. (cont.)

	ZOO-74-062	ZOO-74-062	ZOO-74-061	ZOO-74-072	ZOO-74-072	ZOO-74-071-1	ZOO-74-071-2	ZOO-74-075	ZOO-74-075	ZOO-74-076-1	ZOO-74-076-2	ZOO-74-079
Harpacticoids	-	296	300	P	377	-	167	-	P	-	638	137
Copepod nauplii	8280	2426	18100	9598	11987	30121	30051	20385	4387	18317	26330	3708
Barnacle cypris	-	-	-	-	-	-	167	-	-	-	-	-
Cumaceans	-	-	-	-	P	-	-	-	-	-	-	P
Isopods	-	-	-	-	-	-	-	-	P	-	-	-
Amphipods	-	-	-	-	P	-	-	-	-	-	-	-
Mysids	-	P	P	-	-	-	-	-	-	-	-	-
Crangon septemspinosa zoeae	-	-	P	-	167	-	-	P	120	-	-	P
Libinia spp. zoeae	-	-	-	-	-	-	-	-	-	-	-	137
Ovalipes ocellatus	-	-	-	-	P	-	-	-	-	-	-	-
Pagurus spp. zoeae	-	-	-	-	208	-	-	-	P	-	-	P
Unidentified brachyuran zoeae	-	-	-	-	P	-	-	-	-	-	P	-
Sagitta eggs	-	118	-	-	-	-	-	-	300	-	-	-
Oikopleura sp.	-	-	-	-	-	-	-	-	P	-	P	-
Fish eggs	-	-	-	P	-	-	-	-	-	-	-	-
Copepods	5160	16508	11500	12724	16922	14904	14389	47113	18689	27981	40266	17169
Copepod nauplii	8280	2426	18100	9598	11987	30121	30051	20385	4387	18317	26330	3708
Other Holoplankton	-	118	200	-	-	-	-	P	300	-	P	-
Meroplankton	150	355	3000	502	1628	4537	4035	8654	2042	2452	8702	3118
Total Zooplankton	13590	19407	32800	22824	30537	49562	48475	76152	25418	48750	73298	23995

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5258	5258	5258	5258	5258	5258	5258	5258	5255	5255	5255	5254
Depth (feet), water	42	42	40	40	40	39	39	39	40	40	40	339
Type of Tow	Bottom	Oblique	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Oblique
Coll. No.	ZOO-74-079	ZOO-74-080	ZOO-74-081	ZOO-74-081	ZOO-74-082-1	ZOO-74-083	ZOO-74-083	ZOO-74-084-1	ZOO-74-090	ZOO-74-090	ZOO-74-089	ZOO-74-091
Date	20 June	20 June	20 June	20 June	20 June	21 June	21 June	21 June	8 July	8 July	8 July	22 July
Hour	2055	2115	2230	2230	2250	0035	0035	0045	1700	1705	1645	1435
Tide	Flood 2	Flood 2	Ebb 1			Ebb 2			Ebb 2			Ebb 2
Air Temp. (C)	24.0		21.3			22.0			27.0			24.0
Temp. (C), surface	20.2		19.2			19.8			22.0			21.5
Temp. (C), bottom	17.0		16.0			16.0			19.5			18.7
Sal. (ppt), surface	30.0		30.0			30.0			30.0			30.0
Sal. (ppt), bottom	30.3		30.0			30.3			30.0			30.3
Oxygen (ppm), surface	7.2		7.8			8.0			7.4			7.6
Oxygen (ppm), bottom	7.8		-			5.2			6.4			6.2
Secchi (feet)	-		-			-			14.0			14.0
Volume Sampled (m ³)	1.40	1.77	0.39(C)	0.88(C)	2.13	1.76	0.88	1.92	3.20	2.00	1.50	1.25
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
Unidentified hydromedusae	-	-	-	-	-	-	-	-	125	-	-	P
Ctenophore eggs	P	-	-	170	-	-	-	-	-	-	-	P
Planula larvae	536	-	-	170	423	-	-	P	-	-	-	-
Trochophores	-	254	-	P	-	-	-	234	-	-	-	-
Polydora larvae	-	424	-	170	845	-	-	1563	-	-	-	-
Unidentified polychaete larvae	-	2542	-	469	845	597	1591	1328	94	-	3150	1680
Melampus bidentatus	625	NC	NC	NC	NC	NC	NC	NC	-	-	-	-
Unidentified gastropod larvae	179	2119	55551	298	4789	150426	1094	5469	94	525	P	1200
Bivalve larvae	P	989	423	-	1549	852	199	1406	125	375	900	1200
Acartia clausi	P	339	-	128	423	938	P	234	P	720	487	-
A. tonsa	P	1780	P	128	1690	1193	1193	1641	156	480	1463	9440
Centropages hamatus	857	2458	2776	426	2958	2898	2088	4531	94	6300	3300	1280
C. typicus	-	339	1282	-	704	1449	199	156	-	750	-	-
C. copepodites spp.	-	170	P	170	423	256	-	-	-	P	-	-
Oithona brevicornis	-	254	-	-	P	171	-	313	531	P	1200	15280
O. similis	179	4068	4058	85	2817	12102	199	5547	1719	4725	12600	7280
Paracalanus crassirostris	143	170	-	-	282	-	P	703	-	750	3300	10160
P. parvus	-	-	-	-	-	P	-	-	-	-	-	-
Pseudocalanus minutus	286	4746	9615	511	5775	9546	597	6641	P	5850	2100	160
Pseudodiaptomus coronatus	P	254	-	P	P	341	497	469	144	1200	600	4800
Temora longicornis	143	1017	5128	128	1127	2301	398	1094	63	1050	900	P
Tortanus discaudatus	-	-	-	-	-	-	-	-	-	-	-	P
Unidentified copepodites	-	1186	-	P	845	767	199	1016	-	-	-	-
Harpacticoids	143	254	-	298	P	256	696	781	-	P	-	240
Copepod nauplii	1518	21893	4369	1790	24225	9290	4375	21563	3875	6225	10950	1600
Barnacle cypris	-	-	-	-	-	-	-	-	-	P	-	-
Oxyurostylis smithi	-	-	-	-	-	-	-	-	-	P	-	-
Unidentified cumaceans	-	-	-	-	P	-	-	-	-	-	-	-

Appendix Table 31. (cont.)

	ZOO-74-079	ZOO-74-080	ZOO-74-081	ZOO-74-081	ZOO-74-082-1	ZOO-74-083	ZOO-74-083	ZOO-74-084-1	ZOO-74-090	ZOO-74-090	ZOO-74-089	ZOO-74-091
Amphipods	-	P	P	-	-	-	-	-	-	-	-	-
Mysids	P	-	-	-	P	-	199	-	-	-	-	160
Crangon septemspinosa zoeae	P	170	-	P	P	-	-	P	-	-	-	-
Callinectes sapidus zoeae	-	-	P	-	-	-	-	-	-	-	-	-
Libinia spp. zoeae	-	-	P	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	-	P	-	-	-	-	-	-	-	-	-
Pagurus spp. zoeae	-	P	-	P	P	171	-	156	-	600	600	160
Uca spp. zoeae	-	P	-	-	-	-	-	-	-	-	-	-
Unidentified brachyuran zoeae	-	-	-	-	-	-	-	-	125	375	600	640
Cyphonaute larvae	-	-	-	-	P	-	-	-	-	-	-	-
Sagitta eggs	-	-	-	-	-	-	-	P	-	-	-	-
Sagitta sp.	-	P	-	P	-	-	-	-	-	-	-	-
Oikopleura dioeca	-	-	-	-	-	-	-	-	875	-	1800	288
Oikopleura sp.	-	283	-	-	P	171	-	234	-	-	-	-
Fish eggs	-	-	P	-	-	426	-	-	63	-	-	-
Copepods	1751	17023	22859	1874	17044	32218	6066	23126	2707	21825	25950	48640
Copepod nauplii	1518	21893	4369	1790	24225	9290	4375	21563	3875	6225	10950	1600
Other Holoplankton	P	283	-	170	P	171	-	234	626	-	1800	288
Meroplankton	1340	6498	55974	1107	8451	152472	3083	10156	875	1875	5250	5040
Total Zooplankton	4609	45697	83202	4941	49720	194151	13524	55079	8083	29925	43950	55568

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5254	5254	5254	5254	5254	5254	5254	5254	5254	5254	5254	Site
Depth (feet), water	39	39	36	36	36	36	36	38	38	38	43	43
Type of Tow	Surface	Bottom	Oblique	Oblique	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Oblique	Surface'
Coll. No.	ZOO-74-092	ZOO-74-092	ZOO-74-095-1	ZOO-74-095-2	ZOO-74-096	ZOO-74-096	ZOO-74-097	ZOO-74-098-1	ZOO-74-098-2	ZOO-74-099-1	ZOO-74-099-2	ZOO-74-100
Date	22 July	22 July	22 July	22 July	22 July	22 July	22 July	22 July	22 July	22 July	22 July	22 July
Hour	1450	1450	1815	1820	1850	1850	2000	2020	2025	2210	2215	2230
Tide	Ebb 2		Flood 1				Flood 2			Flood 2		
Air Temp. (C)	24.0		23.0				21.0			-		
Temp. (C), surface	21.5		22.0				21.5			21.2		
bottom	18.7		19.5				19.0			18.8		
Sal. (ppt), surface	30.0		30.3				30.0			30.0		
bottom	30.3		30.0				30.0			30.0		
Oxygen (ppm), surface	7.6		7.9				7.2			7.8		
bottom	6.2		6.2				6.5			6.3		
Secchi (feet)	14.0		9.0				-			-		
Volume sampled (m ³)	1.20	1.40	1.50	1.65	2.03	2.40	2.35	1.78	1.80	1.60	1.90	2.20
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
Aequorea sp.	-	-	-	-	-	-	-	-	-	(P)	-	-
Unidentified hydromedusae	-	-	P	121	P	-	-	-	-	P	-	P
Ctenophore eggs	365	-	133	182	-	-	-	-	-	-	-	-
Ctenophores	-	-	(P)	-	(2.5)	-	-	(1.7)	-	-	(P)	-
Trochophores	-	-	-	-	-	-	-	-	-	P	-	170
Polychaete larvae	156	357	933	364	296	P	240	534	250	-	105	-
Melampus bidentatus larvae	NC	NC	25200	NC	NC	NC	NC	NC	NC	NC	NC	38421
Unidentified gastropod larvae	5104	1161	400	17455	998	219	4974	3343	9500	1328	3579	784
Bivalve larvae	1041	714	200	424	P	182	106	309	250	P	211	341
Unidentified invertebrate larvae	-	-	-	P	-	-	-	-	-	-	-	-
Acartia tonsa	1719	21518	1800	2606	850	4010	2234	1039	1333	8906	11632	7273
Calanus finmarchicus	-	-	-	-	-	-	-	-	-	P	-	-
Centropages hamatus	P	446	333	1030	259	474	1144	562	417	1328	1368	170
C. typicus	P	P	-	-	-	-	319	112	250	-	263	114
C. copepodites spp.	P	446	-	364	74	292	612	702	1417	-	368	170
Labidocera aestiva	-	-	P	-	P	-	-	-	-	-	P	-
Oithona brevicornis	5885	7411	5533	4546	1958	17865	6968	8539	17583	10703	4842	3920
O. similis	10417	5357	11467	9515	2512	5760	10213	3062	20667	1875	2211	7045
O. copepodites spp.	104	-	-	-	296	109	-	-	-	-	-	1364
Paracalanus crassirostris	2813	2232	2400	2182	591	1094	2979	1798	833	1719	1421	3920
Pseudocalanus minutus	P	1161	P	-	P	1057	293	P	250	156	632	P
Pseudodiaptomus coronatus	-	8125	867	1152	222	1349	1330	337	550	5313	3263	1534
Temora longicornis	-	P	-	P	P	-	53	-	167	391	-	P
Tortanus discaudatus	-	-	-	-	-	-	P	-	-	-	-	-
Unidentified copepodites	313	1161	-	-	296	583	-	-	-	-	-	625
Harpacticoids	P	P	-	121	P	73	80	112	P	-	-	170
Copepod nauplii	21771	18929	24933	25030	3769	13818	27021	10562	17750	12422	13158	14830
Mysids	-	-	-	-	-	-	P	-	317	547	316	511
Unidentified shrimp-like zoeae	-	-	-	-	74	-	-	-	-	-	-	-
Crangon septemspinosa zoeae	-	-	-	-	-	-	-	-	-	P	-	-

Appendix Table 31. (cont.)

	ZOO-74-092	ZOO-74-092	ZOO-74-095-1	ZOO-74-095-2	ZOO-74-096	ZOO-74-096	ZOO-74-097	ZOO-74-098-1	ZOO-74-098-1	ZOO-74-099-1	ZOO-74-099-2	ZOO-74-100
Callinectes sapidus zoeae	-	-	-	-	-	-	-	-	-	-	-	P
Libinia spp. zoeae	-	179	-	-	-	-	-	-	-	-	-	-
Neopanope texana sayi zoeae	P	-	-	-	P	-	-	-	-	-	-	-
Ovalipes ocellatus zoeae	-	P	-	-	-	-	-	-	-	-	-	-
Pagurus spp. zoeae	-	P	P	P	-	109	P	-	P	P	P	-
Uca spp. zoeae	-	-	-	364	-	P	186	-	-	-	-	-
Unidentified brachyuran zoeae	-	179	-	-	-	73	-	225	-	469	526	170
Brachyuran megalopae	-	-	-	-	-	-	-	-	-	-	-	P
Cyphonaute larvae	-	-	-	P	-	P	-	-	-	-	-	-
Sagitta sp.	P	-	-	-	-	-	-	-	-	-	-	-
Fritillaria sp.	-	-	-	P	-	-	-	-	-	-	-	-
Oikopleura dioeca	4427	1786	1667	1576	111	693	1782	197	667	2734	1368	739
Fish eggs	-	-	-	-	P	-	P	84	-	156	158	341
Copepods	21251	47857	22400	21516	7058	32666	26225	16263	43467	30391	26000	26305
Copepod nauplii	21771	18929	24933	25030	3769	13818	27021	10562	17750	12422	13158	14830
Other Holoplankton	4792	1786	1800	1758	111	693	1782	197	667	2734	1368	739
Meroplankton	6301	2590	26733	18728	1368	583	5506	4495	10317	2500	4995	40738
Total Zooplankton	54115	71162	75866	67032	12306	47760	60534	31517	72201	48047	45521	82612

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5254	5254	5254	5254	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	43	40	40	40	40	40	40	40	40	39	38	38
Type of Tow	Bottom	Oblique	Surface	Bottom	Oblique	Oblique	Surface	Bottom	Oblique	Oblique	Oblique	Surface
Coil. No.	ZOO-74-100	ZOO-74-101	ZOO-74-102	ZOO-74-102	ZOO-74-107-1	ZOO-74-107-2	ZOO-74-108	ZOO-74-108	ZOO-74-111	ZOO-74-114-1	ZOO-74-114-2	ZOO-74-115
Date	22 July	23 July	23 July	23 July	2 August	2 August	2 August	2 August	14 August	30 August	30 August	30 August
Hour	2230	0030	0040	0040	1330	1335	1345	1345	1535	1500	1505	1515
Tide	Flood 2	Ebb 1			Ebb 2				Flood 1	Flood 1		
Air Temp. (C)	-	21.5			26.0				26.0	25.0		
Temp. (C), surface	21.2	21.4			24.2				24.0	24.0		
bottom	18.8	18.8			19.5				21.0	19.0		
Sal. (ppt), surface	30.0	30.0			30.0				30.0	30.5		
bottom	30.0	30.0			30.0				31.0	31.0		
Oxygen (ppm), surface	7.8	7.4			8.8				7.2	8.6		
bottom	6.3	6.0			3.4 ?				7.4	7.2		
Secchi (feet)	-	-			12.0				8.0	-		
Volume sampled (m ³)	2.05	2.35	2.05	2.15	0.9	0.9	0.45 ?	1.85	1.52	1.82	2.50	1.04
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	-	-	-	-	-	-	-	-	-	28900	32360	25769
<i>Hydromedusae</i>	-	-	P	-	333	-	-	-	P	-	80	-
<i>Siphonophores</i>	-	-	-	-	-	-	-	-	-	-	80	-
<i>Ctenophore eggs</i>	-	-	-	-	-	444	293	108	-	-	-	-
<i>Ctenophores</i>	-	-	-	-	(P)	-	(P)	-	-	-	-	-
<i>Rotifers</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Planula larvae</i>	P	-	-	116	-	-	-	-	-	-	-	P
<i>Trochophores</i>	-	P	-	-	-	-	-	-	-	-	-	-
<i>Nereis larvae</i>	-	-	-	-	-	-	-	P	-	-	-	-
<i>Polydora larvae</i>	P	-	-	-	-	-	-	-	-	P	P	-
Unidentified polychaete larvae	305	-	-	174	889	1333	-	1351	395	742	720	769
<i>Melampus bidentatus</i> larvae	NC	6117	NC	NC	-	-	-	-	-	-	-	-
Unidentified gastropod larvae	183	106	16293	814	P	222	P	486	-	-	160	P
Bivalve larvae	122	1277	385	-	1111	444	889	162	6711	824	720	577
Unidentified invertebrate larvae	-	-	-	-	-	-	-	-	197	-	-	-
<i>Penilia avirostris</i>	-	P	-	-	P	-	P	-	3882	2390	4680	1058
<i>Acartia clausi</i>	-	P	-	-	-	-	-	-	-	-	-	-
<i>A. tonsa</i>	8232	3883	1475	14244	5222	6111	2960	7676	263	5604	4160	2500
<i>Centropages hamatus</i>	1829	638	2822	1802	556	556	-	486	132	165	P	-
<i>C. typicus</i>	P	585	834	-	-	-	-	-	-	-	-	-
<i>C. copepodites</i> spp.	-	426	-	-	-	-	-	-	-	-	-	-
<i>Labidocera aestiva</i>	P	P	-	-	-	-	-	-	-	-	-	-
<i>Oithona brevicornis</i>	3598	2447	2951	5814	3111	6444	444	1568	1842	3544	2440	5000
<i>O. similis</i>	4756	7660	7633	2442	3222	6333	1480	6054	1118	2060	3680	2212
<i>O. copepodite</i> spp.	244	-	577	-	-	-	-	-	-	-	-	-
<i>Paracalanus crassirostris</i>	732	3298	6037	698	3667	4111	P	2162	4342	10302	8560	5769
<i>Pseudocalanus minutus</i>	793	372	-	640	-	-	-	162	-	-	-	-
<i>Pseudodiaptomus coronatus</i>	4024	2926	4024	5233	1111	1000	-	1784	-	165	120	673

Appendix Table 31. (cont.)

	ZOO-74-100	ZOO-74-101	ZOO-74-102	ZOO-74-102	ZOO-74-107-1	ZOO-74-107-2	ZOO-74-108	ZOO-74-108	ZOO-74-111	ZOO-74-114-1	ZOO-74-114-2	ZOO-74-115
Temora longicornis	122	213	P	-	-	-	-	-	-	-	-	P
Unidentified copepodites	P	160	1098	640	-	-	-	-	-	-	-	-
Caligus sp.	-	-	-	P	-	-	-	-	-	-	-	-
Harpacticoids	P	-	P	291	-	556	-	432	-	824	440	288
Copepod nauplii	4756	10532	12500	6686	13333	13222	10667	14324	6053	7500	7392	12019
Microprotopus raneyi	-	-	P	-	-	-	-	-	-	-	-	-
Unidentified amphipods	P	-	-	-	-	-	-	-	-	-	-	-
Mysids	305	426	854	P	-	-	-	324	-	-	-	-
Crangon septemspinosa zoeae	-	-	P	-	-	-	-	-	-	-	-	-
Callinectes sapidus zoeae	183	-	-	-	-	-	-	-	-	-	-	-
Pagurus spp. zoeae	P	-	-	P	-	-	-	-	-	P	80	-
Uca spp. zoeae	610	372	305	407	-	-	-	-	-	-	-	-
Unidentified brachyuran zoeae	-	-	-	-	333	-	-	-	-	-	-	577
Actinotroch larvae	-	-	-	-	-	-	-	-	789	1484	1120	-
Sagitta sp.	-	-	-	P	-	-	-	-	-	-	-	-
Brachiolaria larvae	-	-	-	-	-	-	-	-	-	P	P	-
Pluteus larvae	-	-	-	-	-	-	-	-	461	-	-	-
Doliolids	-	106	-	-	-	-	-	-	-	-	-	-
Frittilaria sp.	-	-	-	-	-	-	-	-	-	-	P	-
Oikopleura dioeca	183	2340	2744	116	3000	3000	1778	2595	1513	-	440	192
Fish eggs	-	160	793	-	-	-	-	-	-	-	-	-
Copepods	24330	22608	27451	31804	16889	25111	4884	20324	7697	22664	19400	16442
Copepod nauplii	4756	10532	12500	6686	13333	13222	10667	14324	6053	7500	7392	288
Other Holoplankton	183	2446	2744	116	3000	3444	2071	2703	5395	31290	37560	27019
Meroplankton	1708	8458	18830	1511	2666	1999	889	2323	8553	3050	2880	1923
Total Zooplankton	30977	44044	61325	40117	35888	43776	18511	39674	27698	64504	67232	45672

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5265	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	38	37	37	37	37	37	37	37	38	38	36	36
Type of Tow	Bottom	Oblique	Oblique	Surface	Bottom	Surface	Bottom	Oblique	Oblique	Oblique	Surface	Bottom
Coll. No.	ZOO-74-115	ZOO-74-117-1	ZOO-74-117-2	ZOO-74-118	ZOO-74-118	ZOO-74-122	ZOO-74-122	ZOO-74-123	ZOO-74-124-1	ZOO-74-124-2	ZOO-74-125	ZOO-74-125
Date	30 August	9 September	9 September	9 September	9 September	9 September	9 September	9 September	9 September	9 September	9 September	9 September
Hour	1515	1300	1308	1315	1315	1904	1910	2010	2120	2125	2130	2135
Tide	Flood 1	Flood 2				Ebb 2			Flood 1			
Air Temp. (C)	25.0	25.5				22.0			22.0			
Temp. (C), surface	24.0	22.5				21.0			20.5			
bottom	19.0	20.5				21.0			20.5			
Sal. (ppt), surface	30.5	30.0				29.0			-			
bottom	31.0	30.0				30.0			30.0			
Oxygen (ppm), surface	8.6	7.0				7.8			7.6			
bottom	7.2	6.4				6.4			7.2			
Secchi (feet)	-	16.0				-			-			
Volume sampled (m ³)	1.31	3.02	3.64	3.79	3.64	2.31	2.18	1.46	1.01	3.28	2.14	2.47
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	-	40182	102857	78298	824	85227	4587	66897	75248	111509	10386	38917
<i>Amphinema dinema</i>	-	-	-	-	-	-	(P)	-	-	-	-	-
<i>Liriope</i> sp.	-	-	-	-	-	(5)	(32)	-	-	-	(4)	(11)
Unidentified hydromedusae	-	-	-	-	-	(P)	(P)	-	-	P	-	-
Siphonophores	-	-	-	-	-	(P)	-	-	-	-	-	(P)
<i>Beroe ovata</i>	-	-	-	-	-	-	(5)	-	-	-	(P)	(2.5)
Small unidentified ctenophores	-	-	-	281	-	-	-	-	-	-	-	-
Planula larvae	-	-	-	-	110	-	-	-	495	-	-	-
<i>Nereis</i> larvae	-	-	-	-	-	-	P	-	-	P	-	-
Unidentified polychaete larvae	1260	199	P	132	P	P	-	P	P	229	327	P
Gastropod larvae	-	397	165	330	330	108	1239	P	248	152	164	P
Bivalve larvae	1489	397	206	-	852	1786	P	616	866	838	613	607
<i>Evadne nordmanni</i>	-	-	P	-	-	-	-	-	-	-	P	-
<i>Penilia avirostris</i>	687	3377	5275	132	1346	2273	229	3288	1856	2210	1186	253
<i>Podon polyphemoides</i>	-	-	-	-	P	-	92	-	-	-	-	-
<i>Acartia tonsa</i>	458	1639	1030	2111	495	433	1101	1541	2599	3887	2004	2176
<i>Centropages hamatus</i>	-	-	P	-	-	-	-	-	-	-	-	-
<i>C. typicus</i>	-	99	206	P	-	P	-	514	-	152	654	-
<i>C. copepodites</i> spp.	-	-	-	-	-	-	-	-	P	229	-	P
<i>Oithona brevicornis</i>	1718	8593	10220	528	6951	8009	5688	16130	8416	7622	15619	5111
<i>O. similis</i>	2290	695	288	-	357	974	183	1130	619	1753	900	455
<i>O. copepodites</i> spp.	-	-	-	-	110	162	-	-	248	2058	204	-
<i>Paracalanus crassirostris</i>	7557	3079	2060	264	1490	6818	2752	9041	7302	8460	6542	4808
<i>P. parvus</i>	-	-	-	-	55	-	-	-	-	762	P	-
<i>Pseudodiaptomus coronatus</i>	-	-	-	-	-	-	321	-	-	-	-	202
Unidentified copepodites	-	-	-	P	-	108	-	-	-	762	82	P
Harpacticoids	2519	149	82	165	192	325	275	P	-	152	204	P
Copepod nauplii	2748	3328	2473	2111	1868	10173	4174	7295	9406	12195	6460	7945

Appendix Table 31. (cont.)

	ZOO-74-115	ZOO-74-117-1	ZOO-74-117-2	ZOO-74-118	ZOO-74-118	ZOO-74-122	ZOO-74-122	ZOO-74-123	ZOO-74-124-1	ZOO-74-124-2	ZOO-74-125	ZOO-74-125
Mysids	-	-	-	-	P	-	-	-	-	-	P	101
Peneaid larvae	-	-	-	-	-	-	-	-	-	-	82	-
Emerita talpoida zoeae	-	-	-	P	-	-	P	-	-	-	P	-
Ovalipes ocellatus zoeae	-	-	-	-	-	P	P	-	P	-	P	-
Pagurus spp. zoeae	-	-	-	-	-	-	-	P	-	-	-	-
Unidentified brachyuran zoeae	-	99	-	-	-	108	-	-	-	-	123	-
Actinotroch larvae	P	P	-	-	P	-	-	-	P	-	-	-
Cyphonaute larvae	-	-	-	-	-	P	-	-	-	-	-	-
Sagitta sp.	-	-	P	-	-	-	-	P	-	-	P	-
Oikopleura dioeca	-	248	82	-	P	-	-	-	-	-	-	-
Copepods	14542	14254	13886	3068	9650	16829	10320	28356	19184	25837	26209	12550
Copepod nauplii	2748	3328	2473	2111	1868	10173	4174	7295	9406	12195	6460	7945
Other Holoplankton	687	43807	108214	78711	2170	87500	4908	70185	77104	113719	11572	39170
Meroplankton	2749	1092	371	462	1292	2002	1239	616	1609	1219	1309	910
Total Zooplankton	20726	62481	124944	84352	14980	116504	20641	106452	107303	152970	45550	60575

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	37	37	37	37	38	38	38	38	45	45	45	45
Type of Tow	Oblique	Oblique	Surface	Bottom	Surface	Bottom	Oblique	Oblique	Oblique	Oblique	Surface	Bottom
Coll. No.	ZOO-74-126-1	ZOO-74-126-2	ZOO-74-127	ZOO-74-127	ZOO-74-129	ZOO-74-129	ZOO-74-130	ZOO-74-131	ZOO-74-134-1	ZOO-74-134-2	ZOO-74-135	ZOO-74-135
Date	9 September	9 September	9 September	9 September	30 September	30 September	30 September	30 September	7 October	7 October	7 October	7 October
Hour	2330	2340	2355	2405	1020	1020	1100	1115	1200	1210	1220	1220
Tide	Flood 1				Ebb 1		Ebb 2		Ebb 1			
Air Temp. (C)	22.0				17.0				18.0			
Temp. (C), surface	20.5				18.5				17.0			
Temp. (C), bottom	20.7				18.9				16.5			
Sal. (ppt), surface	28.5				30.0				29.9			
Sal. (ppt), bottom	29.5				30.0				30.0			
Oxygen (ppm), surface	7.9				7.9				8.2			
Oxygen (ppm), bottom	8.4				7.6				7.8			
Secchi (feet)	-				4.0				8.5			
Volume sampled (m3)	2.2	2.4	2.55	2.15	3.16	4.09	3.03	2.51	3.09	5.56	3.11	3.01
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiula scintillans</i>	90966	58229	12280	120837	-	-	-	-	-	-	-	-
<i>Aequorea</i> sp.	-	-	(P)	-	-	-	-	-	-	-	-	-
<i>Amphinema</i> sp.	-	-	(P)	(P)	-	-	-	-	-	-	-	-
<i>Liriope</i> sp.	-	-	(6)	(16)	-	-	-	-	-	-	-	-
<i>Obelia</i> sp.	-	-	-	-	-	-	P	-	-	-	-	-
Unidentified hydromedusae	-	-	(P)	-	-	-	165	209	P	162	241	-
Siphonophores	-	-	(P)	-	-	-	-	-	97	-	-	-
<i>Cynanea capillata</i>	-	-	-	-	-	-	(P)	-	-	-	-	-
<i>Beroe ovata</i>	(1.4)	-	(2.7)	-	-	-	-	-	-	-	-	-
Rotifers	-	-	-	-	-	-	-	-	437	1403	924	183
Planula larvae	227	P	P	P	-	-	P	-	-	-	-	-
Trochophores	-	-	-	-	P	-	P	349	194	270	121	-
<i>Nereis</i> larvae	P	-	-	-	-	-	-	-	-	-	-	-
<i>Polydora</i> larvae	-	P	-	P	-	342	P	279	-	-	-	365
Unidentified polychaete larvae	-	208	417	-	696	941	1155	1115	971	809	241	3929
Gastropod larvae	-	P	49	140	1709	210	4208	2649	146	108	80	365
Bivalve larvae	455	1146	833	1465	981	1626	1073	1185	6505	4640	423	3426
<i>Penilia avirostris</i>	2614	2604	1544	8372	-	-	-	-	-	-	-	-
<i>Acartia tonsa</i>	2841	1563	833	4047	5918	13820	15842	9064	2621	1673	5305	2924
<i>Centropages hamatus</i>	-	-	-	-	-	-	-	-	P	-	-	-
<i>C. typicus</i>	P	P	49	140	P	P	248	-	-	-	80	-
<i>C. copepodites</i> spp.	-	625	P	209	-	86	-	P	243	P	80	-
<i>Labidocera aestiva</i>	-	-	-	-	-	P	-	-	-	-	-	-
<i>Oithona brevicornis</i>	9148	5104	2819	13814	4652	3466	6601	4323	301	1349	2170	5528
<i>O. similis</i>	227	2396	147	419	127	-	2475	1543	146	108	P	229
<i>O. copepodites</i> spp.	-	1146	-	-	-	-	2145	906	583	324	-	-
<i>Paracalanus crassirostris</i>	7500	4792	4485	5023	13133	1202	12871	11783	6456	3022	8944	21012
<i>P. parvus</i>	P	521	-	-	380	86	165	349	583	162	780	1545

Appendix Table 31. (cont.)

Coll. No.	ZOO-74-126-1	ZOO-74-126-2	ZOO-74-127	ZOO-74-127	ZOO-74-129	ZOO-74-129	ZOO-74-130	ZOO-74-131	ZOO-74-134-1	ZOO-74-134-2	ZOO-74-135	ZOO-74-135
P. copepodites spp.	-	-	-	-	-	-	6353	4323	5922	6097	6555	8343
Pseudodiaptomus coronatus	P	-	-	140	1203	8814	2063	2022	146	P	80	320
Temora longicornis	-	-	-	-	-	-	P	-	-	-	-	-
Unidentified copepodites	P	-	-	-	-	171	825	1185	-	162	-	137
Harpacticoids	625	729	270	488	10316	1575	15017	16683	6408	6043	10129	868
Copepod nauplii	8636	10313	4706	4884	24241	11167	36139	32978	27961	18237	27563	8679
Barnacle nauplii	-	-	-	-	-	-	P	-	-	-	-	-
Pelagic amphipods	-	-	P	-	-	-	-	-	-	-	-	-
Mysids	-	-	-	(21)	-	-	-	-	-	-	-	-
Callinectes sapidus megalopae	-	-	-	(1.4)	-	-	-	-	-	-	-	-
Cancer irroratus megalopae	-	-	-	(P)	-	-	-	-	-	-	-	-
Emerita talpoida	-	-	-	(3)	-	-	-	-	-	-	-	-
Neopanope texana sayi zoeae	P	-	-	-	-	-	-	-	-	-	-	-
Pagurus spp. zoeae	-	-	-	(P)	P	-	-	-	P	-	-	-
Unidentified brachyuran zoeae	-	-	-	(P)	-	-	-	-	-	-	-	-
Cyphonaute larvae	-	-	-	-	380	171	-	697	97	P	-	183
Sagitta sp.	-	-	P	-	-	-	-	-	-	-	-	-
Brachiolaria larvae	-	-	-	P	-	-	-	-	-	-	-	-
Pluteus larvae	-	-	-	-	-	-	-	-	-	P	-	-
Doliolids	-	-	(P)	(P)	-	-	-	-	-	-	-	-
Oikopleura sp.	P	-	-	698	63	-	-	P	97	-	-	-
Fish larvae	-	-	P	-	-	-	-	-	-	-	-	-
Copepods	20341	16876	8603	24280	35729	29220	64605	52161	23409	18940	28223	40906
Copepod nauplii	8636	10313	4706	4884	24241	11167	36139	32978	27961	18237	27563	8679
Other holoplankton	93580	60833	13824	129907	63	-	-	P	631	1403	924	183
Meroplankton	682	1354	1299	2303	3766	3290	6601	6483	7913	5989	1206	8268
Total zooplankton	123239	89376	28432	161374	63799	43677	107345	91622	59914	44569	57916	58036

Appendix Table 31. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet) water	38	38	38	38	38	38	38	38	39	39	42	42
Type of tow	Oblique	Surface	Bottom	Surface	Bottom	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Oblique
Coll. No.	ZOO-74-140	ZOO-74-141	ZOO-74-141	ZOO-74-144	ZOO-74-144	ZOO-74-146	ZOO-74-146	ZOO-74-147	ZOO-74-149	ZOO-74-149	ZOO-74-156-1	ZOO-74-156-2
Date	21 October	21 October	21 October	21 October	21 October	21 October	21 October	21 October	21 October	21 October	4 November	4 November
Hour	1150	1225	1230	1815	1820	2030	2035	2045	2230	2235	1530	1535
Tide	Flood 2			Ebb 2		Flood 1					Ebb 2	
Air Temp. (C)	7.0			7.0		7.0					17.0	
Temp. (C), surface	13.0			13.0		13.0					15.0	
bottom	13.2			13.0		13.0					14.0	
Sal. (ppt), surface	30.0			30.0		30.0					30.5	
bottom	30.0			30.0		30.0					30.0	
Oxygen (ppm), surface	9.1			8.0		8.8					8.2	
bottom	9.0			7.8		8.6					7.8	
Secchi (feet)	17.5			-		-					10.0	
Volume sampled (m ³)	2.30	2.09	0.61	2.65	1.89	2.55	2.14	2.19	2.60	1.79	1.01	1.36
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	6261	1077	1434	2700	6667	3733	4790	6164	4000	2530	247	-
<i>Amphinema</i> sp.	(P)	-	-	-	-	-	-	-	-	-	-	-
<i>Bougainvillia</i> sp.	-	-	-	-	-	-	-	(1)	-	(1)	-	-
<i>Liriope</i> sp.	(102)	P	(NC)	(49)	(97)	(96)	(115)	(97)	(58)	(104)	(13)	(3)
<i>Phialidium</i> sp.	(3)	-	-	-	-	-	-	-	-	-	-	-
Unidentified hydromedusae	(6)	-	P	(7)	(3)	(8)	(4)	(6)	(13)	(10)	-	(1)
Siphonophores	261	P	-	P	-	267	P	P	231	P	-	-
<i>Beroe ovata</i>	(P)	-	-	-	-	-	-	-	-	-	-	-
Rotifers	P	120	-	P	P	P	234	457	P	-	P	P
Planula larvae	-	-	-	P	-	-	-	-	-	-	-	-
Trochophores	-	-	-	-	-	-	-	-	-	-	-	P
<i>Nereis</i> larvae	-	P	-	-	-	-	P	-	154	-	-	-
<i>Paranaites speciosa</i>	-	-	-	-	-	-	-	(P)	-	-	-	-
<i>Polydora</i> larvae	-	120	-	-	-	P	-	-	-	-	-	-
Unidentified polychaete larvae	5217	1256	2767	4050	2222	4267	2336	2626	3538	3352	3218	2426
Gastropod larvae	391	179	308	338	370	667	-	1256	385	223	371	441
<i>Mytilus edulis</i> (post larval)	-	-	-	-	-	-	-	(2)	-	-	-	-
Bivalve larvae	38478	28947	8607	29925	32222	27733	19860	27626	23231	19888	26485	1324
Squid (juveniles)	-	-	-	-	(1)	-	-	-	-	-	-	-
Unidentified invertebrate larvae	-	-	-	-	-	-	P	-	-	-	-	-
<i>Evadne nordmanni</i>	391	658	-	450	P	P	-	P	308	223	-	-
<i>Penilia avirostris</i>	1565	1077	205	563	556	-	P	-	231	P	-	(P)
<i>Acartia tonsa</i>	261	120	205	225	-	-	P	P	231	P	2104	1324
<i>Centropages typicus</i>	391	1316	1538	563	370	400	701	P	308	223	-	-
<i>C. copepodites</i> sp.	1565	478	718	1350	1852	400	1402	2397	923	1229	-	551
<i>Oithona brevicornis</i>	391	2333	1025	1238	556	267	935	799	769	1341	2847	1654

Appendix Table 31. (cont.)

Coll. No.	ZOO-74-140	ZOO-74-141	ZOO-74-141	ZOO-74-144	ZOO-74-144	ZOO-74-146	ZOO-74-146	ZOO-74-147	ZOO-74-149	ZOO-74-149	ZOO-74-156-1	ZOO-74-156-2
<i>Oithona similis</i>	2870	2691	1434	2475	3704	2667	1636	3995	3000	2011	8911	9044
<i>O. coepodites</i> spp.	-	-	P	450	370	-	350	457	-	447	1238	P
<i>Paracalanus crassirostris</i>	1174	2501	2660	1463	1667	1467	1752	1484	2154	2346	20792	24285
<i>P. parvus</i>	7565	3825	4594	1350	2222	3467	1986	1712	923	670	3960	4853
<i>P. coepodites</i> spp.	11739	8239	4957	11363	8519	9067	8411	11187	29385	12737	6931	8162
<i>Temora longicornis</i>	391	-	-	P	P	P	P	P	154	P	-	-
Unidentified copepodites	P	837	205	338	P	933	350	1027	769	P	495	662
Harpacticoids	21130	13337	20390	12375	18704	17733	16822	12329	14769	16313	36634	20515
Copepod nauplii	37043	26196	43238	31838	40185	42933	42757	40183	28154	42682	23515	29559
Cumaceans	-	-	-	-	-	-	(4)	-	-	P	-	-
<i>Edotea triloba</i>	-	-	-	-	-	-	-	(P)	-	-	-	-
Unidentified isopods	-	-	-	-	-	-	-	-	(P)	-	-	-
Pelagic amphipods	-	-	-	-	-	(P)	-	-	(P)	-	(P)	(P)
Caprellid amphipods	-	-	-	-	-	-	(4)	-	-	-	-	-
Unidentified amphipods	-	-	-	-	-	-	-	-	-	(P)	-	-
<i>Mysidopsis bigelowi</i>	-	-	-	-	-	-	-	(1)	-	-	-	-
<i>Neomysis americana</i>	-	-	-	-	-	-	-	(2)	-	-	-	-
Unidentified mysids	-	-	-	(P)	(4)	(P)	(7)	-	-	(P)	-	-
<i>Brachiolaria</i> larvae	-	-	-	P	-	P	-	P	-	-	-	-
<i>Pluteus</i> larvae	391	598	P	338	556	-	P	571	231	335	-	-
<i>Cyphonaute</i> larvae	-	-	-	-	-	-	-	-	-	-	-	P
<i>Sagitta</i> sp.	-	P	-	(P)	(P)	-	-	-	(P)	P	(P)	(P)
<i>Oikopleura</i> sp.	783	1136	1025	900	1481	533	350	P	385	335	248	-
Copepods	47477	35677	37726	33190	37964	36401	34345	35387	53385	37317	83912	71030
Copepod nauplii	37043	26196	43238	31838	40185	42933	42757	40183	28154	42682	23515	29559
Other holoplankton	9261	4068	2664	4613	8704	4533	5374	6621	5155	3088	495	P
Meroplankton	44477	31100	11682	34651	35370	32667	22196	32079	27539	32798	30074	4191
Total zooplankton	138258	97041	95310	104292	120001	116534	104672	114270	114233	106885	137996	104780

Location	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet) water	42	42	43	43	35	35	35	35
Type of tow	Surface	Bottom	Oblique	Surface	Bottom	Surface	Bottom	Oblique
Coil. No.	ZOO-74-157	ZOO-74-157	ZOO-74-159	ZOO-74-160	ZOO-74-160	ZOO-74-162	ZOO-74-162	ZOO-74-163
Date	4 November	4 November	18 November	18 November	18 November	6 December	6 December	6 December
Hour	1545	1550	1045	1105	1115	1225	1230	1240
Tide	Ebb 2		Flood 2			Flood 2		
Air Temp. (C)	17.0		10.0			11.0		
Temp. (C), surface	15.0		10.7			7.8		
bottom	14.0		11.3			7.8		
Sal. (ppt), surface	30.5		30.0			30.0		
bottom	30.0		30.5			30.0		
Oxygen (ppm), surface	8.2		9.7			9.6		
bottom	7.9		9.6			9.0		
Secchi (feet)	10.0		10.0			8.0		
Volume sampled (m ³)	2.26	2.28	2.07	1.82	2.25	1.75	1.93	3.45
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	P	-	10434	9065	17200	-	-	-
<i>Liriope</i> sp.	(2)	(3.5)	-	-	-	-	-	-
Unidentified hydromedusae	(P)	(3.5)	-	-	-	-	-	-
Siphonophores	-	(P)	-	-	-	-	-	-
Rotifers	332	P	3333	2197	3067	-	-	-
Planula larvae	-	-	-	-	-	-	-	P
Trochophores	664	P	289	-	267	-	-	-
Polydora larvae	-	-	P	-	-	-	78	-
Unidentified polychaete larvae	1062	1381	724	P	2667	-	P	P
Gastropod larvae	133	132	P	-	-	P	233	P
<i>Mytilus edulis</i> "eyed" larvae	-	-	-	-	-	-	857	326
Unidentified bivalve larvae	2323	855	8550	3708	13467	214	P	217
<i>Evadne nordmanni</i>	P	-	289	P	267	-	-	-
<i>Acartia tonsa</i>	1128	460	1884	824	2133	-	389	73
<i>Centropages typicus</i>	-	-	-	549	-	857	2176	870
<i>C. copepodites</i> sp.	265	1315	579	P	-	-	117	181
<i>Oithona brevicornis</i>	1062	592	2898	1236	5200	129	427	217
<i>O. similis</i>	3717	8355	-	1236	2933	6686	777	5181
<i>O. copepodites</i> spp.	332	263	434	-	533	129	-	-
<i>Paracalanus crassirostris</i>	6704	24671	5797	10028	9733	471	894	435
<i>P. parvus</i>	531	5526	P	2747	267	557	117	326
<i>P. copepodites</i> spp.	929	11250	13768	19368	14667	386	P	73
<i>Temora longicornis</i>	-	-	-	-	-	-	P	109
Unidentified copepodites	-	723	579	274	-	-	-	73
Harpacticoids	4845	19342	18985	21840	27733	129	466	616
Copepod nauplii	16195	30065	74347	62087	72133	16971	1671	11594
Barnacle nauplii	-	-	-	-	-	-	-	P
<i>Cerapus tubularis</i>	-	(1)	-	-	-	-	-	-
Cyphonaute larvae	133	328	434	P	267	-	-	-
<i>Sagitta</i> sp.	(P)	(P)	-	-	-	-	P	-
Pluteus larvae	-	-	P	412	267	214	-	73
Doliolids	P	-	-	-	-	-	-	-
<i>Oikopleura</i> sp.	-	P	1014	549	2000	-	-	-
Fish eggs	(P)	(P)	-	-	-	-	-	-
Copepods	19513	72497	44924	58102	63199	9344	5363	8154
Copepod nauplii	16195	30065	74347	62087	72133	16971	1671	11594
Other holoplankton	332	P	15070	11811	22534	-	P	-
Meroplankton	4315	2696	9997	4120	16935	428	1168	616
Total zooplankton	40355	105258	144338	136120	174801	26743	8202	20364

Appendix Table 32. Zooplankton (#/m³) taken Seaward of the Ridge in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	Seaward	Seaward	Seaward	Seaward	Seaward	Seaward	Seaward	Seaward	Seaward	Seaward	Seaward	Seaward
Zone	5450	5450	5450	5450	5450	5450	5450	5450	5450	5450	5450	5450
Depth (feet), water	40	42	40	43	48	48	50	45	45	43	43	50
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-006	ZOO-74-011	ZOO-74-022	ZOO-74-028	ZOO-74-042-1	ZOO-74-042-2	ZOO-74-050	ZOO-74-065	ZOO-74-074	ZOO-74-093-1	ZOO-74-093-2	ZOO-74-116-1
Date	24 January	12 February	27 February	11 March	8 April	8 April	29 April	21 May	20 June	22 July	22 July	30 August
Hour	1225	1045	1105	1100	0940	0945	1550	1225	1515	1600	1605	1550
Tide	Ebb 1	Flood 2	High	High	High		Ebb 1	Ebb 2	Flood 1	Ebb 2		Flood 1
Air Temp. (C)	4.5	1.0	1.5	3.5	9.0		16.0	17.5	23.7	23.5		24.0
Temp. (C), surface	4.8	2.0	3.5	5.0	7.0		12.0	15.7	19.2	22.0		24.0
Temp. (C), bottom	5.0	2.1	4.0	5.0	7.2		10.0	11.8	16.9	19.5		19.0
Sal. (ppt), surface	28.5	28.5	29.7	30.1	30.0		30.0	30.0	30.3	30.0		29.5
Sal. (ppt), bottom	30.0	29.5	29.9	30.1	30.0		30.5	30.5	30.3	30.0		30.5
Oxygen (ppm), surface	11.4	11.0	9.8	10.4	10.0		9.6	8.6	7.2	7.7		9.2
Oxygen (ppm), bottom	10.8	10.8	9.8	9.8	10.4		9.0	7.2	7.0	6.4		8.2
Secchi (feet)	14.5	8.0	12.5	20.0	8.0		-	7.5	10.0	38.0		-
Volume sampled (m ³)	1.40	1.25(C)	1.72	1.35 (C)	1.68	1.67	4.68	2.13	1.30	1.70	1.90	1.84
Plankton net used	#20-S	#20-S	#20-S	#20-S	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
Obelia sp.	-	-	P	259	-	-	-	-	-	-	-	-
Unidentified hydromedusae	-	-	-	-	-	-	-	-	-	P	-	-
Ceriantharia larvae	P	465	P	298	-	-	-	-	-	-	-	-
Ctenophore eggs	-	-	45	-	-	210	-	-	692	-	-	-
Ctenophore larvae	-	-	-	-	-	P	-	-	-	243	-	-
Rotifers	-	560	302	480	P	P	P	-	-	-	-	-
Trochophores	89	280	378	-	-	-	-	-	-	P	-	-
Nereis larvae	-	-	-	-	-	-	-	-	-	-	-	1495
Long worm form	-	-	-	-	-	P	-	-	-	-	-	408
Unidentified polychaete larvae	-	-	98	1893	1518	1153	417	167	P	-	-	-
Melanopus bidentatus larvae	-	-	-	-	-	-	-	-	-	13588	12237	-
Unidentified gastropod larvae	-	-	-	130	-	P	-	167	-	361	-	408
Bivalve larvae	491	185	227	1257	268	838	1378	2000	1154	1390	855	2446
Unidentified invertebrate larvae	-	-	-	130	-	-	-	-	-	-	-	543
Evadne nordmanni	-	-	-	-	P	-	-	-	-	-	-	679
Penilia avirostris	-	-	-	-	-	-	-	-	-	-	-	33967
Podon polyphemoides	-	-	-	-	-	-	160	-	-	-	-	-
Acartia clausi	-	P	-	91	P	P	64	-	P	-	P	-
A. tonsa	-	-	-	-	-	-	-	-	-	515	197	3533
Centropages hamatus	-	-	-	350	179	629	192	750	3000	206	-	-
C. typicus	134	185	P	-	-	-	-	333	P	P	197	-
C. copepodites spp.	1875	185	2116	-	4911	5135	4712	1250	3231	927	1250	-
Labidocera aestiva	-	-	-	-	-	-	-	-	P	-	-	-
Oithonis brevicornis	893	560	302	130	1607	524	160	167	2077	875	1447	2853

Appendix Table 32. (cont.)

Coll. No.	ZOO-74-006	ZOO-74-011	ZOO-74-022	ZOO-74-028	ZOO-74-042-1	ZOO-74-042-2	ZOO-74-050	ZOO-74-065	ZOO-74-074	ZOO-74-093-1	ZOO-74-093-2	ZOO-74-116-1
Oithona similis	13383	1025	6220	3020	7232	8488	1250	5500	5308	8647	8355	4076
O. copepodites spp.	1607	1865	-	-	-	-	-	-	-	P	-	272
Paracalanus crassirostris	224	-	98	220	179	P	64	250	P	1206	3224	22554
P. parvus	446	-	-	-	-	-	-	-	462	361	-	4212
Pseudocalanus minutus	134	1400	877	4317	3542	4192	1282	3167	6462	258	658	-
Pseudodiaptomus coronatus	-	-	-	-	-	-	-	-	-	361	237	-
Temora longicornis	89	-	249	778	3750	7650	7051	8750	3462	-	-	-
Tortanus discaudatus	-	-	-	-	-	-	64	-	-	-	-	-
Unidentified copepodites	1071	P	-	480	625	1362	-	-	462	544	592	-
Harpacticoids	P	-	P	P	536	P	224	P	P	-	-	2038
Copepod nauplii	30982	17265	16552	17500	98392	84042	18654	23917	36231	11324	10461	4620
Barnacle nauplii	-	-	-	130	-	-	-	-	-	-	-	-
Barnacle cypris	-	-	-	-	-	-	-	-	P	-	-	-
Crangon septemspinosa zoeae	-	-	-	-	-	-	-	250	-	-	-	-
Pagurus spp. zoeae	-	-	-	-	-	-	-	-	-	-	-	P
Uca spp. zoeae	-	-	-	-	-	-	-	-	-	258	P	-
Cyphonaute larvae	-	P	-	-	-	-	-	-	-	-	-	-
Sagitta spp.	-	-	P	P	-	P	-	-	-	-	-	-
Brachiolaria larvae	-	-	-	-	-	-	-	-	-	-	-	2717
Pluteus larvae	-	-	-	-	-	-	-	P	-	-	-	-
Doliolids	-	-	-	-	-	-	-	-	-	1838	632	-
Oikopleura sp.	-	-	-	-	-	-	-	-	P	1905	1447	408
Copepods	19866	5220	9862	9386	22561	27980	15063	20167	24464	13900	16157	39538
Copepod nauplii	30982	17265	16552	17500	98392	84042	18654	23917	36231	11324	10461	4620
Other holoplankton	-	560	347	480	P	210	160	-	692	3486	2079	35054
Meroplankton	580	930	703	4097	1786	1991	1795	2584	1154	15597	13092	8017
Total zooplankton	51428	23975	27464	31463	122739	114223	35672	46668	62541	44307	41789	87229

Location	Seaward	Seaward	Seaward	Seaward	Seaward
Zone	5450	5450	5450	5450	5450
Depth (feet), water	50	52	52	47	60
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-116-2	ZOO-74-132	ZOO-74-133	ZOO-74-142	ZOO-74-161
Date	30 August	30 September	30 September	31 October	18 November
Hour	1550	1200	1215	1345	1210
Tide	Flood 1	Ebb 2		Ebb 1	Ebb 1
Air Temp. (C)	24.0	19.0		7.0	11.0
Temp. (C), surface	24.0	18.0		14.0	12.0
bottom	19.0	18.2		12.5	12.0
Sal. (ppt), surface	29.5	30.0		30.0	31.0
bottom	30.5	30.0		30.0	31.0
Oxygen (ppm), surface	9.2	7.8		8.0	9.6
bottom	8.2	7.8		8.2	9.4
Secchi (feet)	-	6.5		31.0	25.0
Volume sampled (m ³)	1.82	3.03	2.94	3.52	2.19
Plankton net used	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	275	-	-	1705	31598
<i>Liriope</i> sp.	-	-	-	(194)	-
Unidentified hydromedusae	-	P	170	-	-
Siphonophores	-	-	-	213	-
Ctenophores (very small)	P	-	-	-	-
Rotifers	P	792	510	284	2922
Trochophores	P	594	510	-	P
Long worm form	-	-	-	-	365
<i>Polydora</i> larvae	-	132	170	-	-
Unidentified polychaete larvae	P	2310	6718	2770	-
Gastropod larvae	412	P	425	284	P
Bivalve larvae	2473	8845	11480	27130	11689
Unidentified invertebrate larvae	P	-	-	-	-
<i>Evadne nordmanni</i>	-	-	-	426	365
<i>Penilia avirostris</i>	17857	-	-	284	-
<i>Acartia tonsa</i>	1374	8185	5527	P	913
<i>Centropages typicus</i>	-	P	-	142	-
<i>C. copepodites</i> spp.	275	-	-	639	3105
<i>Oithona brevicornis</i>	1923	4884	7483	426	2557
<i>O. similis</i>	1511	1782	1276	2415	3105
<i>O. copepodites</i> spp.	824	2244	1616	-	-
<i>Paracalanus crassirostris</i>	13049	14983	4847	852	7489
<i>P. parvus</i>	549	594	765	2060	913
<i>P. copepodites</i> spp.	-	6139	17092	5824	10959
<i>Pseudodiaptomus coronatus</i>	275	594	170	-	-
<i>Temora longicornis</i>	-	-	P	-	-
Unidentified copepodites	275	1914	1870	994	2374
Harpacticoids	549	12739	7143	9162	29041
Copepod nauplii	2610	32541	34269	24502	70137
Pelagic amphipods	-	-	-	(P)	-
<i>Cyphonaute</i> larvae	-	198	225	-	-
<i>Brachiolaria</i> larvae	412	-	P	-	-
<i>Pluteus</i> larvae	-	-	-	284	1826
Doliolids	-	P	-	-	-
<i>Oikopleura</i> sp.	549	-	170	568	4018
Copepods	20604	54058	47789	22514	60456
Copepod nauplii	2610	32541	34269	24502	70137
Other holoplankton	18681	792	680	3480	38903
Meroplankton	3297	12079	19698	30468	13880
Total zooplankton	45192	99470	102436	80964	183376

Appendix Table 33. Zooplankton (#/m³) taken offshore of Little Egg Inlet in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet	Offshore-Inlet
Zone	5850	5850	5850	5850	5850	5850	5850	5850	5850	5850	5850	5850
Depth (feet), water	56	56	55	55	60	55	60	60	62	61	60	60
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-036	ZOO-74-037	ZOO-74-056-1	ZOO-74-056-2	ZOO-74-070	ZOO-74-088	ZOO-74-106-1	ZOO-74-106-2	ZOO-74-119	ZOO-74-136	ZOO-74-155-1	ZOO-74-155-2
Date	25 March	25 March	8 May	8 May	5 June	8 July	2 August	2 August	9 September	7 October	4 November	4 November
Hour	1230	1240	1105	1105	1340	1415	1200	1205	1440	1345	1340	1345
Tide	Ebb 1		Ebb 1		Ebb 2	Ebb 2	Ebb 2		Ebb 1	Ebb 2	Ebb 1	
Air Temp. (C)	-1.0		12.0		19.5	27.0	25.0		24.0	20.0	18.0	
Temp.(C), surface	5.0		12.0		17.3	18.7	23.5		22.3	18.0	15.0	
bottom	4.5		10.3		16.0	17.5	17.3		21.8	17.0	15.0	
Sal. (ppt), surface	30.0		31.0		30.0	30.0	30.0		30.5	30.0	30.0	
bottom	30.0		31.0		30.0	30.5	30.1		31.0	31.0	30.5	
Oxygen, (ppm), surface	9.0		9.8		10.2	8.2	8.0		6.7	8.0	7.9	
bottom	9.0		9.2		9.2	5.8	6.0		6.0	9.2	7.0	
Secchi (feet)	16.0		23.0		20.0	33.0	>40.0		>40.0	36.0	14.0	
Volume sampled (m ³)	1.35 (C)	1.14 (C)	4.70	2.92	3.90	1.70	1.75 (C)	1.90 (C)	3.69	2.31	1.73	1.80
Plankton net used	#20-S	#20-S	#20-L	#20-S	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
Notiluca scintillans	-	-	-	-	-	-	-	-	2554	5974	2457	4306
Liriope sp.	-	-	-	-	-	-	-	-	(13.6)	-	(2.3)	(5)
Obelia sp.	1222	1930	-	-	-	-	-	-	-	-	-	-
Phialidium sp.	-	-	-	-	-	-	-	-	-	-	(P)	-
Unidentified hydromedusae	-	-	149	-	-	-	-	-	45	-	-	(4.9)
Siphonophores	-	-	-	-	-	-	-	-	P	P	(P)	-
Ceriantharia larvae	296	175	-	-	-	-	-	-	-	-	-	-
Ctenophore eggs	-	-	74	257	-	-	-	211	-	-	-	-
Beroe ovata	-	-	-	-	-	-	-	-	(1.1)	-	-	-
Rotifers	2463	1930	233	514	-	P	-	-	-	-	-	-
Trochophores	241	263	446	-	-	-	229	P	-	P	P	P
Polydora larvae	-	-	P	-	-	-	-	P	-	P	P	-
Unidentified polychaete larvae	555	439	410	171	-	P	-	211	-	390	4335	2083
Gastropod larvae	-	-	149	257	-	441	343	P	251	260	361	278
Mytilus edulis "eyed" larvae	120	-	-	-	-	-	-	-	-	-	-	-
Unidentified bivalve larvae	306	-	10351	10788	2051	7941	800	632	1131	13896	29480	44444
Squid (juveniles)	-	-	-	-	-	-	-	-	(1.4)	-	-	-
Unidentified invertebrate larvae	-	-	-	-	-	-	-	-	203	-	-	-
Evadne nordmanni	-	-	335	171	-	-	-	-	562	390	(P)	P
Penilia avirostris	-	-	-	-	-	P	5600	4000	-	P	P	417
Podon leuckarti	-	-	149	P	-	-	-	-	-	-	-	-
Acartia clausi	370	-	149	-	-	-	-	-	P	-	-	-
A. tonsa	-	-	-	-	-	-	229	211	2188	260	-	-
Centropages hamatus	1482	3158	1154	685	-	809	1714	421	-	-	-	-
C. typicus	-	P	P	-	1282	2574	3314	5053	407	-	P	139
C. copepodites spp.	-	-	223	1969	769	-	2286	4421	-	-	-	-
Labidocera aestiva	-	-	-	-	-	-	343	-	-	-	-	-
Oithona brevicornis	241	1140	-	-	-	-	12686	16211	291	P	P	P
O. similis	4870	3421	3239	4795	10256	28235	22171	21263	562	779	3324	2570
O. copepodites spp.	-	-	-	-	-	-	1029	1263	-	390	-	-
Paracalanus crassirostris	370	877	-	-	-	735	7429	3579	2730	2208	1662	1528
P. parvus	-	-	-	-	-	1765	4800	1368	68	3896	2601	4861
P. copepodites spp.	-	-	-	-	-	-	16286	19368	-	6494	6358	3056
Pseudocalanus minutus	5556	4649	3872	4024	4103	1616	914	1053	-	-	-	-
Pseudodiaptomus coronatus	-	-	-	-	-	-	-	-	-	-	-	-
Rhinacalanus sp.	-	-	-	-	-	-	-	-	-	-	(1.2)	-

Appendix Table 33. (cont.)

Coll. No.	ZOO-74-036	ZOO-74-037	ZOO-74-056-1	ZOO-74-056-2	ZOO-74-070	ZOO-74-088	ZOO-74-106-1	ZOO-74-106-2	ZOO-74-119	ZOO-74-136	ZOO-74-155-1	ZOO-74-155-2
Temora longicornis	982	790	12362	11473	8462	735	343	P	P	260	P	P
Tortanus discaudatus	-	-	186	171	-	-	-	-	-	-	-	-
Unidentified copepodites	667	1140	1564	685	-	735	1429	2632	-	1299	145	625
Harpacticoids	-	439	186	283	-	-	P	-	224	21558	7587	7986
Copepod nauplii	33889	37193	52872	46404	47949	14362	24229	16421	3117	22078	9032	9652
Barnacle cypris	-	175	P	-	-	-	-	-	-	-	-	-
Pelagic amphipods	-	-	-	-	-	-	-	-	P	-	(P)	P
Mysidopsis bigelowi	-	-	-	-	-	-	-	-	-	-	(8.7)	(1.7)
Crangon septemspinosa	-	-	-	-	-	P	-	-	(0.8)	-	-	-
Callinectes sapidus zoeae	-	-	-	-	-	-	-	211	-	-	-	-
Cancer irroratus zoeae	-	-	P	-	-	-	-	-	-	-	-	-
Pagurus sp. zoeae	-	-	-	-	-	-	-	-	-	-	-	(1.1)
Unidentified megalopae	-	-	-	-	P	-	-	-	-	-	-	-
Sagitta eggs	P	-	P	-	-	-	-	-	-	-	-	-
Sagitta spp.	241	-	P	P	P	P	-	-	-	-	217	(>19)
Brachiolaria larvae	-	-	-	-	-	-	P	-	-	-	-	-
Pluteus larvae	-	-	-	-	-	-	-	-	68	-	145	208
Doliolids	-	-	-	-	-	P	1486	632	1152	390	-	P
Fritillaria sp.	-	-	112	-	-	-	-	-	-	-	-	-
Oikopleura spp.	-	-	-	171	-	P	6429	4737	291	1818	1301	1597
Fish eggs	-	-	112	-	-	-	-	-	(P)	-	(1.7)	-
Centropistes striata	-	-	-	-	-	-	-	-	(P)	-	-	-
Enchelyopus cimbrius	-	-	-	-	-	-	-	-	-	-	P	-
Etropus microstomus	-	-	-	-	-	-	-	-	(1.1)	-	-	-
Copepods	14538	15614	22935	23802	24872	37204	74973	76843	6470	37144	21677	20765
Copepod nauplii	33889	37193	52872	46404	47949	14362	24229	16421	3117	22078	9032	9652
Other holoplankton	2704	1930	904	1113	P	P	13517	9580	4559	8572	3975	6320
Meroplankton	2740	2982	11617	11216	2051	8382	1372	1054	1698	14546	34321	47013
Total zooplankton	53871	57719	88328	82535	74872	59948	114089	103898	15844	82340	69005	83750

Appendix Table 34. Zooplankton (#/m³) taken off Brant Beach in 1974 with a 12-cm Clarke-Bumpus sampler.

Location	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach
Zone	4340	4340	4340	4340	4340	4340	4340	4340	4340	4340	4340	4340
Depth (feet), water	50	48	48	55	55	40	40	52	4340	4340	63	55
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-034	ZOO-74-059-1	ZOO-74-059-2	ZOO-74-068-1	ZOO-74-068-2	ZOO-74-086-1	ZOO-74-086-2	ZOO-74-104	ZOO-74-121	ZOO-74-138-1	ZOO-74-138-2	ZOO-74-153
Date	25 March	8 May	8 May	5 June	5 June	8 July	8 July	2 August	9 September	7 October	7 October	4 November
Hour	0930	1405	1410	1035	1045	1125	1130	0915	1720	1620	1625	1030
Tide	High	Ebb 2		Ebb 1		High		Ebb 1	Ebb 1	Ebb 2		Flood 2
Air Temp. (C)	-0.5			18.0		27.0		26.0	22.0	19.0		16.3
Temp. (C), surface	5.0	11.0		17.0		22.5		23.0	21.3	16.5		15.0
bottom	4.0	10.5		15.8		16.5		18.0	20.5	16.5		15.0
Sal. (ppt), surface	30.0	29.5		28.0		30.0		30.0	30.0	30.0		30.0
bottom	30.0	30.0		30.0		30.0		30.1	29.5	31.0		30.5
Oxygen (ppm), surface	12.0	10.4		11.1		5.5		8.0	7.0	9.5		6.4
bottom	11.2	8.8		9.4		5.0		4.8	6.4	10.0		6.2
Secchi (feet)	17.0	13.0		11.0		27.0		40.0	> 40	12.0		26.0
Volume sampled (m ³)	1.92	2.03	3.28	5.72	2.34	2.90	3.30	2.70	3.12	1.61(C)	2.08(C)	2.78
Plankton net used	#20-S	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	-	-	-	-	-	-	-	-	94712	18820	20048	270
<i>Liriope</i> sp.	-	-	-	-	-	-	-	-	(23)	-	-	(11)
<i>Obelia</i> sp.	410	-	P	-	427	-	-	-	-	-	-	-
<i>Phialidium</i> sp.	-	-	-	-	-	-	-	-	-	-	-	(P)
Unidentified hydromedusae	-	493	1296	-	-	-	-	-	P	-	721	(9)
Siphonophores	-	-	-	-	-	-	-	-	P	-	-	(P)
<i>Ceriantharia</i> larvae	293	-	-	-	-	-	-	-	-	-	-	-
<i>Beroe</i> ovata	-	-	-	-	-	-	-	-	-	-	-	-
Rotifers	1582	2771	2973	-	-	-	-	463	(0.6)	-	-	-
Planula larvae	-	185	152	-	-	-	-	-	-	P	P	360
Trochophores	234	-	2135	-	-	-	-	-	P	-	-	-
<i>Nereis</i> larvae	-	-	-	-	-	-	-	-	-	932	577	180
<i>Polydora</i> larvae	-	370	-	-	-	-	-	-	P	-	-	-
Unidentified polychaete larvae	586	185	2439	-	-	233	152	P	96	932	1298	764
Gastropod larvae	-	1293	2287	-	-	310	379	P	353	1118	-	225
Bivalve larvae	234	9914	7698	350	P	3724	2955	1204	962	4845	5769	5935
Unidentified invertebrate larvae	-	-	-	-	-	-	-	-	P	-	-	P
<i>Evadne nordmanni</i>	-	P	P	-	-	-	-	P	-	-	-	450
<i>Penilia avirostris</i>	-	-	-	-	-	-	-	-	-	-	-	P
<i>Acartia clausi</i>	234	123	-	-	427	-	-	7580	3558	372	-	P
<i>A. tonsa</i>	-	-	152	-	-	-	-	-	-	-	-	-
<i>Calanus finmarchicus</i>	-	-	P	-	-	-	-	463	2853	2050	577	-
<i>Centropages hamatus</i>	1113	123	-	P	1068	233	P	-	-	-	-	-
<i>C. typicus</i>	-	P	305	2622	3419	233	227	1852	96	-	433	180
<i>C. copepodites</i> spp.	-	P	381	350	1068	388	P	833	P	-	-	135
<i>Labidocera aestiva</i>	-	-	-	-	-	-	P	-	-	-	-	-
<i>Oithona brevicornis</i>	-	123	P	-	-	310	152	5833	5545	-	P	180
<i>O. similis</i>	5449	4249	3735	3846	3846	13345	11400	20278	609	3168	2163	3147
<i>O. copepodites</i> spp.	-	-	-	-	-	-	-	1019	385	P	-	-
<i>Paracalanus crassirostris</i>	234	185	-	-	-	-	-	23981	7339	2050	4471	2968
<i>P. parvus</i>	-	-	-	-	-	388	985	2500	-	4286	5913	3147
<i>P. copepodites</i> spp.	-	-	-	-	-	-	-	-	-	16770	11250	6835
<i>Pseudocalanus minutus</i>	6738	1047	4802	3846	3419	5431	10450	P	-	-	-	-
<i>Pseudodiaptomus coronatus</i>	-	-	-	-	-	-	-	P	-	-	-	-
<i>Temora longicornis</i>	1054	8559	8156	8392	17521	1164	2121	-	-	-	-	-
<i>Tortanus discaudatus</i>	-	P	-	-	-	-	-	-	-	-	-	P
Unidentified copepodites	1113	-	838	3846	2350	155	152	2315	96	373	1875	180
Harpacticoids	P	-	P	350	-	-	-	-	128	13975	19183	7734
Copepod nauplii	36504	45197	31021	28611	30556	13966	21212	45278	11186	15280	20769	5486

Appendix Table 34. (cont.)

Coll. No.	ZOO-74-034	ZOO-74-059-1	ZOO-74-059-2	ZOO-74-068-1	ZOO-74-068-2	ZOO-74-086-1	ZOO-74-086-2	ZOO-74-104	ZOO-74-121	ZOO-74-138-1	ZOO-74-138-2	ZOO-74-153
Barnacle nauplii	117	P	-	-	-	-	-	-	-	-	-	-
Barnacle cypris	P	-	-	-	-	-	-	-	P	-	-	-
Pelagic amphipods	-	-	-	-	-	-	-	-	-	P	288	(P)
Cerapus tubularis	-	-	-	-	-	-	-	-	(P)	-	-	-
Mysids	-	-	-	P	-	-	-	-	(13)	-	-	-
Callinectes sapidus zoeae	-	-	-	-	-	-	-	-	(1)	-	-	-
C. sapidus megalopae	-	-	-	-	-	-	-	-	(0.6)	-	-	-
Emerita talpoida	-	-	-	-	-	-	-	-	(1)	-	-	-
Ovalipes ocellatus zoeae	-	-	-	-	-	-	-	-	(P)	-	-	-
O. ocellatus 1st crab stage	-	-	-	-	-	-	-	-	(P)	-	-	-
Pagurus spp. zoeae	-	-	-	-	-	-	-	-	(2)	-	-	-
Unidentified crab megalopae	-	-	-	P	-	-	-	-	(1)	-	-	-
Sagitta eggs	P	P	-	-	-	-	-	-	-	-	-	-
Sagitta spp.	P	P	-	-	-	-	-	-	(P)	-	-	(P)
Brachiolaria larvae	-	-	-	-	-	-	-	-	P	-	-	P
Pluteus larvae	-	-	-	-	-	-	-	-	-	-	P	360
Doliolids	-	-	-	-	-	-	-	833	-	-	-	-
Fritillaria sp.	-	-	P	-	-	-	-	-	-	-	-	-
Oikopleura spp.	-	308	-	-	-	2405	2576	9167	-	3354	2019	1754
Fish eggs	-	-	-	-	-	-	P	-	-	-	-	-
Copepods	15935	14409	18369	23252	33118	21647	25487	59074	17051	42672	45865	24506
Copepod nauplii	36504	45197	31021	28611	30556	13966	21212	45278	11186	15280	20769	5486
Other holoplankton	1582	3079	2973	-	-	2405	2576	18043	98270	22547	22355	2834
Meroplankton	1874	11947	16007	350	427	4267	3486	1204	1411	7827	8365	7464
Total zooplankton	55895	74632	68370	52213	64101	42285	52761	123599	127918	88326	97354	40290

Appendix Table 35. Zooplankton (#/m³) taken offshore of Brant Beach in 1974 in a 20-m² plankton net. [You are Viewing an Archived Copy from the New Jersey State Library](#)

Location	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach
Zone	4940	4940	4940	4940	4940	4940	4940	4940	4940
Depth (feet), water	55	53	53	57	55	73	77	60	73
Type of tow	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique	Oblique
Coll. No.	ZOO-74-035	ZOO-74-057-2	ZOO-74-058-1	ZOO-74-069	ZOO-74-087	ZOO-74-105	ZOO-74-120-2	ZOO-74-137	ZOO-74-154
Date	25 March	8 May	8 May	5 June	8 July	2 August	9 September	7 October	4 November
Hour	1015	1300	1315	1205	1230	1040	1615	1500	1140
Tide	Ebb 1	Ebb 2		Ebb 2	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 1
Air Temp. (C)	-1.0	14.5		19.0	29.0	27.2	24.0	19.5	18.0
Temp. (C), surface	4.5	-		16.5	23.0	23.5	22.0	17.0	15.0
bottom	5.0	10.2		14.2	16.1	17.5	22.0	16.8	15.0
Sal. (ppt), surface	30.0	31.0		29.0	30.0	30.0	30.0	30.0	30.5
bottom	30.0	31.0		29.0	30.0	30.1	30.5	32.0	30.5
Oxygen (ppm), surface	8.6	-		10.7	7.4	8.3	6.6	8.4	7.0
bottom	8.4	8.0		8.6	5.3	6.3	6.0	8.8	6.8
Secchi (feet)	21.0	34.0		16.0	>40	73.0	40.0	36.0	32
Volume sampled (m ³)	2.08	4.94	5.62	3.85	0.95 (C)	2.15	3.70	2.66	2.11
Plankton net used	#20-S	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L	#20-L
<i>Notiluca scintillans</i>	-	-	-	-	-	-	2054	2030	3318
<i>Liriope</i> sp.	-	-	-	-	-	-	(14)	-	(54)
<i>Obelia</i> sp.	1959	-	P	-	-	-	-	-	-
Unidentified hydromedusae	-	228	480	-	-	-	81	-	(10)
Siphonophores	-	-	-	-	-	-	-	-	(P)
<i>Ceriantharia</i> larvae	240	92	-	-	-	-	-	-	-
Ctenophore eggs	-	P	107	-	-	-	-	-	-
Ctenophore larvae	-	-	-	-	-	-	-	-	P
<i>Beroe ovata</i>	-	-	-	-	-	-	(1)	-	(0.5)
Rhabdocoels	120	P	-	-	-	-	-	-	-
Rotifers	33774	228	534	-	-	-	P	451	474
Trochophores	757	-	-	-	-	P	595	-	-
Long worm form	-	-	-	-	P	-	-	-	-
<i>Polydora</i> larvae	P	-	-	-	-	-	-	-	-
<i>Tomopteris</i> sp.	-	-	-	-	-	P	-	P	-
Unidentified polychaete larvae	1406	820	587	-	-	-	432	226	474
Gastropod larvae	84	364	801	1207	316	-	81	-	1303
Bivalve larvae	601	5374	8648	3368	3262	465	1,766	5001	50474
Squid (juveniles)	-	-	-	-	-	-	(P)	-	-
Unidentified invertebrate larvae	-	92	-	-	-	-	-	-	-
<i>Evadne nordmanni</i>	-	-	-	-	-	349	108	451	652
<i>Penilia avirostris</i>	-	-	-	-	-	10116	2865	1015	-
<i>Podon leucharti</i>	-	P	-	-	-	-	-	-	-
<i>Acartia clausi</i>	-	P	-	-	-	-	-	-	-
<i>A. tonsa</i>	-	-	-	-	-	-	324	-	-
<i>Calanus finmarchicus</i>	P	-	-	-	-	-	-	-	-
<i>Candacia</i>	-	-	-	-	-	P	-	-	-
<i>Centropages hamatus</i>	637	410	107	-	340	698	-	-	-
<i>C. typicus</i>	-	92	320	1896	3894	1860	54	226	237
<i>C. copepodites</i> spp.	-	136	226	1725	P	1744	54	-	-
<i>Oithona brevicornis</i>	P	P	107	-	-	930	54	-	P
<i>O. similis</i>	3245	4418	4804	1725	21158	18372	243	2143	5687
<i>O. copepodites</i> spp.	-	-	-	-	-	-	-	338	-
<i>Paracalanus crassirostris</i>	325	136	P	-	208	349	2757	1128	355
<i>P. parvus</i>	-	-	-	-	316	1395	108	3722	1363
<i>P. copepodites</i> spp.	-	-	-	-	-	2209	-	3496	2844
<i>Pseudocalanus minutus</i>	2800	2368	3897	4834	1999	1395	-	-	-
<i>Rhinacalanus</i> sp.	-	-	-	-	-	-	-	-	(P)
<i>Temora longicornis</i>	805	3098	5018	4316	1895	2326	-	338	-

Appendix Table 35. (cont.)

Coll. No.	ZOO-74-035	ZOO-74-057-2	ZOO-74-058-1	ZOO-74-069	ZOO-74-087	ZOO-74-105	ZOO-74-120-2	ZOO-74-137	ZOO-74-154
Tortanus discaudatus	-	-	P	P	-	-	-	-	-
Unidentified copepodites	517	910	747	1036	208	-	-	451	178
Caligus sp.	-	-	-	-	-	-	(P)	-	-
Harpacticoids	P	P	P	-	-	-	54	13421	7820
Copepod nauplii	39423	26644	33416	35575	17788	24767	3081	16353	7464
Barnacle nauplii	120	92	-	-	-	-	-	-	-
Barnacle cypris	84	-	-	-	-	-	-	-	-
Pelagic amphipods	-	-	-	-	-	-	-	-	296
Mysidopsis bigelowi	-	-	-	-	-	-	-	-	(2, 5)
Crangon septemspinosus	-	-	-	-	-	-	-	-	(P)
Callinectes sapidus zoeae	-	-	-	-	-	P	-	-	-
Unidentified brachyuran zoeae	-	92	-	-	-	-	(P)	-	-
Cyphonaute larvae	P	P	-	-	-	-	-	-	-
Sagitta eggs	-	-	-	518	-	-	-	-	-
Sagitta spp.	P	P	160	-	208	-	-	-	(>20)
Brachiolaria larvae	P	-	-	-	-	-	-	-	-
Pluteus larvae	P	-	P	-	-	-	-	1917	178
Doliolids	-	-	-	-	P	2558	P	226	(P)
Fritillaria sp.	-	92	-	-	-	-	-	-	-
Oikopleura fusiformis	-	-	-	-	-	-	-	1466	P
Oikopleura spp.	-	-	-	-	3158	349	54	-	2310
Fish eggs	-	-	P	-	P	P	P	-	-
Etropus microstomus	-	-	-	-	-	-	(I)	-	-
Pepilus triacanthus	-	-	-	-	-	-	(P)	-	-
Unidentified fish larvae	-	-	-	-	-	233	-	-	(2)
Copepods	8329	11568	15226	15532	30518	31278	3648	25263	18484
Copepod nauplii	39423	26644	33416	35575	17788	24767	3081	16353	7464
Other holoplankton	33774	320	801	518	3366	13372	5081	5639	7050
Meroplankton	5371	7154	10516	4575	3578	698	2865	9023	52429
Total zooplankton	86897	45686	59959	56200	55250	70115	14675	56278	85427

Appendix Table 36. Macrozooplankton (#/m³) collected at the Site in 1974

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Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	35-37	-	-	36-40	-	-	36-40	-	-	37-40	-	-
Type of Tow	Surface	Midwater	Bottom	Surface	Midwater	Bottom	Surface	Midwater	Bottom	Surface	Midwater	Bottom
Coll. No.	TRT-74-003	TRT-74-003	TRT-74-003	TRT-74-005	TRT-74-005	TRT-74-005	TRT-74-006	TRT-74-006	TRT-74-006	TRT-74-016	TRT-74-016	TRT-74-016
Date	12 January			24 January			24 January			12 February		
Hour	1345			1045			1110			1410		
Tide	Ebb 1			Ebb 2			Ebb 1			High		
Boat Heading (degrees)	45			50			50			45		
Air Temp. (C)	0.0			6.0			6.0			7.0		
Temp. (C), surface	5.0			4.5			4.5			3.0		
midwater	-	5.0	-	-	5.0	-	-	5.0	-	-	-	-
bottom	-	-	5.0	-	-	5.0	-	-	5.0	-	-	4.0
Sal. (ppt), surface	28.3	-	-	30.0	-	-	30.0	-	-	27.5	-	-
midwater	-	28.3	-	-	30.0	-	-	30.0	-	-	29.5	-
bottom	-	-	28.3	-	-	30.0	-	-	30.0	-	-	29.5
Oxygen (ppm), surface	10.3			10.1			10.1			12.0		
midwater	-	10.4	-	-	11.0	-	-	10.8	-	-	11.6	-
bottom	-	-	10.4	-	-	10.7	-	-	10.7	-	-	11.2
Secchi (feet)	12.0	-	-	10.0	-	-	10.0	-	-	6.0	-	-
Volume Sampled (m ³)	743.9	158.8	165.4	735.2	136.7	114.3	685.7	131.4	109.8	570.6	81.2	108.3
Gear	1.0m net	0.5m net	0.5m net	1.0m net	0.5m net	0.5m net	1.0m net	0.5m net	0.5m net	1.0m net	0.5m net	0.5m net
Margelopsis gibbesi	-	-	-	-	-	-	-	-	-	-	0.01	-
Podocoryne sp.	-	-	-	-	P	-	-	-	-	-	-	-
Bougainvillia sp.	-	-	-	-	-	P	-	-	-	-	-	-
Rathkea octopunctata	-	-	-	-	-	-	-	-	-	-	0.01	-
Obelia sp.	-	-	-	P	-	0.10	-	P	P	0.05	0.15	0.06
Hydrozoa	-	-	P	-	-	-	-	-	-	-	-	-
Siphonophora	P*	P	P	-	-	0.02	-	-	-	-	-	-
Ceriantharia	-	-	-	-	-	0.08	-	-	-	-	P	-
Tomopteris helgolandica	P	P	P	-	-	-	-	-	P	-	-	-
Polychaeta larvae	-	-	P	P	-	0.04	P	-	P	-	-	-
Ensis directus	P	-	-	-	-	-	-	-	-	-	-	-
Ostracoda	P	-	-	-	-	-	-	-	-	-	-	-
Candacia armata	-	-	(0.09)	-	-	-	-	-	-	-	-	-
Candacia sp.	-	P	-	-	-	-	-	-	-	-	-	-
Rhinacalanus sp.	(0.01)	(0.09)	(3.27)	P	(0.02)	P	-	-	P	-	(0.01)	-
Caligus sp.	-	-	-	-	-	P	-	-	-	-	-	-
Leptocuma minor	-	-	-	-	-	0.03	-	-	-	-	-	-
Oxyurostylis smithi	-	-	-	-	-	0.10	-	-	-	-	-	-
Cumacea	-	-	P	-	-	-	-	-	-	-	-	0.09
Edotea triloba	-	-	P	-	P	0.03	-	-	P	-	-	-
Hyperiidea	-	1.88	-	P	P	-	-	-	-	-	-	-
Cerapus tubularis	-	-	-	-	-	0.04	-	-	-	-	-	-
Amphipoda	0.03	-	P	-	-	-	P	-	0.02	-	-	-
Caprella penantis	P	-	-	-	-	-	-	-	-	-	-	-
Mysidopsis bigelowi	-	-	-	-	-	0.52	-	-	-	-	-	0.06
Neomysis americana	-	-	P	-	-	0.03	-	-	5.69	P	-	0.11
Crangon septemspinosa zoeae	-	-	P	-	-	0.08	-	-	4.55	-	0.09	0.05
Xanthidae zoeae	-	P	-	-	-	-	-	-	-	-	-	-
Sagitta elegans	32.53	57.39	344.61	1.06	2.30	1.89	22.24	2.47	79.69	0.20	2.40	4.69
Total Macrozooplankton	32.56	59.27	344.61	1.06	2.30	2.96	22.24	2.47	89.95	0.25	2.66	5.06

* P=Present

Appendix Table 36. (cont.)

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Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	38-40	-	-	38-40	-	-	35-37	-	-	-	-	-
Type of Tow	Surface	Midwater	Bottom	Surface	Midwater	Bottom	Surface	Midwater	Bottom	Oblique	Oblique	Star. oblique
Coll. No.	DPS-74-005	DPS-74-005	DPS-74-005	DPS-74-006	DPS-74-006	DPS-74-006	TRT-74-020	TRT-74-020	TRT-74-020	TRT-74-034	TRT-74-034	TRT-74-047
Date	27 February			27 February			11 March			25 March	25 March	8 April
Hour	1125			1154			1318			1345	1405	1155
Tide	Ebb 1			Ebb 1			Ebb 1			Ebb 2		Ebb 1
Boat Heading (degrees)	45			45			45			45		235
Air Temp. (C)	1.0			1.0			6.0			0.0		11.0
Temp. (C), surface	3.5			3.5			7.2			5.5		8.0
midwater	-	3.9	-	-	3.9	-	-	7.3	-	-	-	-
bottom	-	-	4.0	-	-	4.0	-	-	7.2	5.0	-	7.5
Sal. (ppt), surface	27.8	-	-	27.8	-	-	30.0	-	-	30.0	-	30.0
midwater	-	38.5	-	-	38.5	-	-	30.0	-	-	-	-
bottom	-	-	29.5	-	-	29.5	-	-	30.0	30.0	-	30.0
Oxygen (ppm), surface	9.8	-	-	9.8	-	-	9.3	-	-	8.5	-	10.2
midwater	-	9.6	-	-	9.6	-	-	9.2	-	-	-	-
bottom	-	-	9.6	-	-	9.6	-	-	9.2	8.4	-	10.0
Secchi (feet)	7.0	-	-	7.0	-	-	23.0	-	-	12.5	-	8.0
Volume Sampled (m ³)	800.8	157.4	157.4	782.4	152.3	152.4	754.0	139.2	90.6	143.0	130.9	138.4
Gear	1.0m net	0.5m net	0.5m net	1.0m net	0.5m net	0.5m net	1.0m net	0.5m net	0.5m net	0.5m net	0.5m net	0.1m ² Bongo
<i>Margelopsis gibbesi</i>	-	-	-	-	-	-	-	-	0.07	-	-	-
<i>Sarsia</i> sp.	-	-	-	-	-	0.04	-	P	0.70	-	-	-
<i>Bougainvillia</i> sp.	-	-	0.01	-	-	-	-	-	-	-	-	-
<i>Rathkea octopunctata</i>	-	-	-	-	P	-	-	-	0.09	-	-	-
<i>Obelia</i> sp.	-	-	0.02	0.02	-	P	-	0.04	0.31	10.48	39.34	-
<i>Hydromedusae</i>	-	-	0.04	-	-	-	-	-	-	-	-	-
<i>Ceriantharia</i>	-	-	P	-	-	P	-	-	-	-	P	-
<i>Actinula</i> -like larvae	-	-	-	-	-	-	-	-	P	-	-	-
<i>Nematoda</i>	-	-	-	-	-	-	-	-	0.03	-	-	-
<i>Tomopteris helgolandica</i>	-	-	0.01	-	-	-	-	-	-	-	-	-
<i>Polychaeta</i> larvae	-	-	-	-	-	-	-	-	-	-	P	-
<i>Polychaeta</i>	-	-	0.01	-	-	-	-	-	-	P	-	-
<i>Siliqua costata</i>	-	-	-	-	-	-	-	-	0.01	-	-	-
<i>Rhinacalanus</i> sp.	-	-	-	-	-	P	-	(0.03)	-	-	-	(0.01)
<i>Caligus</i> sp.	-	-	-	-	-	-	-	-	(0.01)	-	-	-
<i>Oxyurostylis smithi</i>	-	-	0.02	-	-	-	-	-	-	-	-	P
<i>Cumacea</i>	-	-	-	-	-	-	-	-	0.08	-	-	-
<i>Edotea triloba</i>	-	-	-	-	-	-	-	-	-	-	-	0.01
<i>Hyperiid</i>	-	-	-	-	-	-	-	0.02	0.04	-	-	-
<i>Mysidopsis bigelowi</i>	-	-	1.85	-	1.37	-	-	-	0.05	-	-	-
<i>Neomysis americana</i>	P	-	-	-	-	-	-	-	-	P	P	0.46
<i>Penaeidea</i> zoeae	-	-	-	-	-	-	-	-	-	8.71	8.78	-
<i>Lysmata</i> sp. zoeae	-	-	-	-	-	-	-	-	0.03	-	-	0.03
<i>Crangon septemspinosa</i> zoeae	-	0.02	0.22	-	0.01	-	-	-	0.14	-	10.20	1.35
<i>Cancer</i> sp. zoeae	-	-	-	-	-	-	0.02	-	-	-	P	0.42
<i>Brachyura</i> zoeae	-	-	-	-	-	-	-	-	0.09	-	-	-
<i>Decapoda</i>	-	-	-	-	P	-	-	P	-	-	-	-
<i>Sagitta elegans</i>	P	0.91	3.30	0.04	0.40	2.30	0.01	2.61	18.20	73.42	95.50	3.85
Total macrozooplankton	P	0.93	5.48	0.06	1.78	2.34	0.03	2.67	19.79	92.61	153.82	6.12

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	-	-	-	35-40	-	-	-	35	-	34-37	-	-
Type of Tow	Port oblique	Surface	Bottom	Star. oblique	Port oblique	Star. oblique	Port oblique	Surface	Bottom	Star. oblique	Port oblique	Surface
Coll. No.	TRT-74-047	TRT-74-048	TRT-74-048	TRT-74-058	TRT-74-058	TRT-74-062	TRT-74-062	TRT-74-063	TRT-74-063	TRT-74-068	TRT-74-068	TRT-74-069
Date	8 April	8 April		29 April		8 May		8 May		21 May		21 May
Hour	1155	1215		1325		0840		0915		1035		1100
Tide	Ebb 1	Ebb 1		Flood 2		Flood 2		Flood 2		Ebb 1		Flood 2
Boat Heading (degrees)	235	235		235		45		45		45		215
Air Temp. (C)	11.0	11.0		-		9.5		9.5		17.0		17.0
Temp. (C), surface	8.0	8.0		13.0		11.3		11.3		15.0		15.0
bottom	7.5	-	7.5	11.0	-	11.0	-	-	11.0	13.0	-	-
Sal. (ppt), surface	30.0	30.0	-	30.0	-	30.0	-	30.0	-	30.0	-	30.0
bottom	30.0	-	30.0	30.5	-	30.0	-	-	30.0	30.5	-	-
Oxygen (ppm), surface	10.2	10.2	-	9.0	-	9.3	-	9.3	-	8.4	-	8.4
bottom	10.0	-	10.0	9.0	-	8.8	-	-	8.8	7.5	-	-
Secchi (feet)	8.0	8.0	-	12.0	-	10.5	-	10.5	-	5.5	-	5.5
Volume Sampled (m ³)	138.4	234.9	232.8	133.0	133.0	104.2	109.7	130.6	132.7	73.6	74.1	129.7
Gear	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net
Margelopsis gibbesi	0.04	-	-	-	-	-	-	-	0.06	-	-	-
Sarsia sp.	-	-	-	0.01	P	-	-	-	-	-	-	-
Rathkea octopunctata	-	-	-	0.56	-	7.20	69.05	-	27.32	0.68	-	0.01
Obelia sp.	6.50	0.03	0.52	0.56	4.14	-	4.10	-	17.71	-	-	0.01
Phialidium sp.	-	-	-	-	-	-	P	-	-	-	-	-
Hydromedusae	-	-	-	3.57	-	-	-	-	P	-	-	-
Ceriantharia	P	-	5.32	-	-	-	-	-	-	-	-	-
Nematoda	-	-	-	-	-	-	-	-	P	-	-	-
Phyllodocidae	-	-	-	-	-	-	-	-	0.02	-	-	-
Polynoidae	-	-	0.22	-	-	P	-	-	-	-	-	-
Tomopteris helgolandica	-	-	P	-	P	-	-	-	-	-	-	-
Autolytus sp.	-	-	0.04	-	-	-	-	-	P	-	0.67	-
Polychaeta larvae	-	-	0.59	-	P	-	-	-	-	-	-	0.01
Polychaeta	-	-	-	0.04	-	-	0.11	-	-	4.08	-	-
Gastropoda	-	-	-	-	-	P	-	-	-	-	-	-
Rhinacalanus sp.	P	-	-	-	-	-	-	-	-	-	-	-
Caligus sp.	-	-	-	-	P	-	(0.01)	-	-	(0.01)	-	-
Oxyurostylis smithi	P	-	-	-	-	-	-	-	-	-	-	-
Cumacea	-	-	-	-	-	-	-	-	P	-	-	-
Lironeca ovalis	-	-	-	-	-	-	-	-	0.01	-	-	-
Edotea triloba	-	-	-	-	-	-	-	-	-	-	-	0.02
Unciola sp.	-	-	-	-	-	-	-	-	P	-	-	-
Amphipoda	-	-	-	-	-	-	-	-	-	-	-	0.02
Mysidopsis bigelowi	-	-	-	P	-	-	-	-	-	-	-	-
Neomysis americana	0.67	-	2.71	1.50	1.88	0.43	0.68	-	4.05	-	3.71	-
Mysidacea	-	-	-	-	-	-	-	-	-	2.38	-	-
Penaeidea zoeae	-	-	-	-	P	-	-	-	-	-	-	-
Lysmata sp. zoeae	-	-	0.09	-	-	-	-	-	-	-	-	-
Crangon septemspinosa zoeae	15.79	-	-	31.01	27.91	13.03	15.50	-	38.15	41.78	45.88	-
Pagurus spp. zoeae	-	-	-	-	-	10.65	7.74	-	25.53	19.70	23.62	-
Cancer sp. zoeae	-	-	0.13	2.07	-	3.60	3.65	0.33	8.01	-	1.34	-
Cancer megalopae	-	-	-	-	-	-	-	-	-	-	-	0.01
Carcinus sp. zoeae	-	-	-	-	-	-	-	-	-	2.04	-	-
Ovalipes ocellatus zoeae	-	-	-	-	-	-	-	-	-	1.70	3.04	-
Brachyura zoeae	3.59	-	-	-	1.41	0.58	-	-	-	-	1.34	-
Decapoda	P	-	-	-	-	-	-	-	-	P	-	-
Sagitta elegans	32.51	0.01	170.1	2.26	3.29	P	1.14	0.02	1.88	7.81	6.07	-
Echinodermata larvae	-	-	-	-	-	-	-	-	P	-	-	-
Total Macrozooplankton	59.1	0.04	179.72	41.58	38.63	35.49	101.87	0.35	122.74	80.17	85.67	0.08

Appendix Table 36. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5240	5240	5255	5255	5255
Depth (feet), water	-	32-36	-	32-36	-	37	-	-	-	-	-	-
Type of Tow	Bottom	Star. oblique	Port oblique	Surface	Bottom	Star. oblique	Port oblique	Surface	Bottom	Star. oblique	Port oblique	Surface
Coll. No.	TRT-74-069	TRT-74-076	TRT-74-076	TRT-74-077	TRT-74-077	TRT-74-079	TRT-74-079	TRT-74-080	TRT-74-080	TRT-74-083	TRT-74-083	TRT-74-084
Date	21 May	5 June		5 June		20 June		20 June		20 June		20 June
Hour	1100	1500		1525		1600		1620		2005		2030
Tide	Flood 2	Ebb 1		Flood 1		Flood 1		Flood 1		Flood 2		Flood 2
Boat Heading (degrees)	215	45		45		45		45		45		45
Air Temp. (C)		19.0		19.0		24.5		24.5		24.0		24.0
Temp. (C), surface		17.0		17.0		21.5		21.5		20.2		20.2
bottom	13.0	17.0	-	-	17.0	15.5	-	-	15.5	17.0	-	-
Sal. (ppt), surface	-	29.0	-	29.0	-	29.0	-	29.0	-	30.0	-	30.0
bottom	30.5	29.0	-	-	29.0	30.3	-	-	30.3	30.3	-	-
Oxygen (ppm), surface	-	8.1	-	8.1	-	7.0	-	7.0	-	7.2	-	7.2
bottom	7.5	7.3	-	-	7.3	6.2	-	-	6.2	7.8	-	-
Secchi (feet)	-	9.0	-	9.0	-	7.0	-	7.0	-	-	-	-
Volume Sampled (m ³)	151.1	125.4	130.0	136.6	154.4	129.7	126.8	193.1	187.8	127.6	125.5	180.0
Gear	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net
Bougainvillea	-	-	-	-	-	P	-	-	P	-	-	-
Rathkea octopunctata	0.35	3.59	4.14	0.04	-	-	-	-	-	-	-	-
Obelia sp.	0.49	P	0.48	P	-	-	-	-	-	-	-	-
Scyphozoa ephyra	-	P	-	-	-	-	-	-	-	-	-	-
Paranaitis speciosa	-	-	-	-	-	-	0.01	-	-	-	0.05	-
Autolytus sp.	-	0.20	-	-	-	-	-	-	-	-	P	-
Polychaeta larvae	-	P	-	-	-	0.58	-	-	-	-	-	-
Polychaeta	0.03	-	0.29	0.01	-	-	-	-	P	-	-	-
Piscicolidae	0.05	-	-	-	-	-	-	-	-	-	-	-
Gastropoda	-	-	-	-	-	-	-	-	-	11.17	9.96	-
Loliginidae	-	-	-	-	-	-	-	-	0.01	-	-	-
Leptocuma minor	-	-	-	-	-	-	-	-	-	P	0.40	-
Cumacea	-	-	-	-	-	-	-	-	2.13	-	-	-
Cirolana concharum	-	0.01	-	-	-	-	0.01	-	-	-	-	-
Lironeca ovalis	-	-	-	-	-	-	-	-	-	-	-	P
Edotea triloba	-	0.06	0.04	-	-	0.57	0.39	0.38	1.33	-	0.29	0.30
Isopoda	-	-	-	0.02	-	-	-	-	-	-	-	-
Cerapus tubularis	-	-	-	-	-	0.05	-	0.01	0.93	-	-	-
Aeginina longicornis	-	-	-	-	-	-	-	-	P	-	-	-
Aeginina sp.	-	-	-	-	-	P	-	-	-	-	-	-
Neomysis americana	0.50	P	-	-	-	-	0.59	-	2.00	7.84	5.18	-
Mysidacea	-	-	P	-	-	2.31	-	-	-	-	-	-
Palaemonetes spp. zoeae	-	-	0.96	1.55	-	11.18	11.83	15.67	6.52	1.76	1.20	-
Crangon septemspinosa zoeae	68.50	18.64	7.50	-	-	57.44	44.95	0.39	47.26	27.82	22.71	-
Upogebia sp. zoeae	-	-	-	-	-	-	7.10	-	-	10.58	9.16	0.07
Naushonia sp. zoea	-	-	-	-	-	-	-	0.01	-	-	-	-
Natantia larvae	-	-	-	-	1.27	2.31	-	-	-	-	-	-

Appendix Table 36. (cont.)

	TRT-74-069	TRT-74-076	TRT-74-076	TRT-74-077	TRT-74-077	TRT-74-079	TRT-74-079	TRT-74-080	TRT-74-080	TRT-74-083	TRT-74-083	TRT-74-084
<i>Emerita talpoida</i> zoeae	-	-	-	-	-	0.01	-	0.03	P	0.78	0.60	-
<i>Pagurus</i> spp. zoeae	25.48	11.36	13.95	-	-	115.84	129.14	1.04	61.24	88.36	73.71	P
<i>Libinia</i> spp. zoeae	-	5.72	0.29	-	-	2.89	2.96	0.52	3.19	3.92	5.58	-
<i>Cancer</i> sp. zoeae	-	-	1.92	0.15	-	-	-	-	-	-	-	-
<i>Cancer</i> sp. megalopae	-	0.01	0.02	0.29	0.21	-	-	-	-	-	-	-
<i>Callinectes</i> spp. zoeae	-	0.30	-	-	-	-	-	-	-	-	-	-
<i>Ovalipes ocellatus</i> zoeae	-	5.72	9.52	0.05	-	P	1.77	-	P	10.97	8.96	-
<i>Hexapanopeus</i> sp. zoeae	-	-	-	-	-	-	-	-	-	-	-	0.02
<i>Neopanope</i> sp. zoeae	-	-	0.48	0.07	-	26.79	-	-	-	-	-	-
<i>Xanthidae</i> zoeae	-	P	-	-	-	-	27.99	5.17	P	P	-	-
<i>Dissadactylus</i> sp. zoeae	-	-	-	-	-	P	-	-	-	-	-	-
<i>Pinnixa</i> sp. zoeae	-	-	-	-	-	1.54	0.12	P	-	-	-	-
<i>Uca</i> spp. zoeae	-	-	-	-	-	5.78	0.99	-	-	P	-	-
<i>Brachyura</i> zoeae	-	2.22	1.15	-	-	-	0.79	2.46	-	3.53	-	P
<i>Sagitta elegans</i>	2.32	P	0.49	-	-	-	2.17	-	53.91	25.47	25.70	0.03
Echinodermata larvae	-	P	-	-	-	-	-	-	-	-	-	-
Total macrozooplankton	97.72	47.83	41.23	2.18	1.48	227.29	230.81	25.68	178.52	164.50	163.50	0.42

Appendix Table 36. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	35	45	-	35-40	45	-	35	-	35-37	35-37	35-37	37-40
Type of tow	Oblique	Surface	Bottom	Oblique	Surface	Bottom	Surface	Bottom	Oblique	Surface	Bottom	Oblique
Coll. No.	TRT-74-124	TRT-74-125	TRT-74-125	TRT-74-129	TRT-74-130	TRT-74-130	TRT-74-131	TRT-74-131	TRT-74-132	TRT-74-133	TRT-74-133	TRT-74-135
Date	9 September	9 September		9 September	9 September		9 September		9 September	9 September		30 September
Hour	1212	1238		1912	1935		2112		2300	2330		1000
Tide	Flood 2	Flood 2		Ebb 2	Ebb 2		Flood 1		Flood 1	Flood 1		Ebb 1
Boat Heading (degrees)	45	45		45	45		45		45	45		45
Air Temp. (C)	25.5	25.5		22.0	22.0		22.0		22.0	22.0		17.0
Temp. (C), surface	22.5	22.5		21.0	21.0		20.5		20.5	20.5		18.5
Temp. (C), bottom	20.5	-	20.5	21.0	-	21.0	-	20.5	20.5	-	20.7	18.9
Sal. (ppt), surface	30.0	30.0	-	29.0	29.0	-	29.0	-	28.5	28.5	-	30.0
Sal. (ppt), bottom	30.0	-	30.0	30.0	-	30.0	-	30.0	29.5	-	29.5	30.0
Oxygen (ppm), surface	7.0	7.0	-	7.8	7.8	-	7.6	-	7.9	7.9	-	7.9
Oxygen (ppm), bottom	6.4	-	6.4	6.4	-	6.4	-	7.2	8.4	-	8.4	7.6
Secchi (feet)	16.0	16.0	-	-	-	-	-	-	-	-	-	4.0
Volume sampled (m ³)	129.7	120.1	144.1	134.0	62.5	50.5	120.1	145.8	148.4	177.1	74.5	88.4
Gear	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.5m net	0.5m net	0.5m net	0.5m net	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo
Bougainvillea sp.	0.51	P		0.28	0.13	-	-	P	0.19	0.23	-	0.07
Nemopsis sp.	-	-		-	-	-	-	-	-	-	-	0.18
Amphinema sp.	0.18	-		0.32	0.06	-	-	P	0.28	-	-	-
Laodicea sp.	1.00	-		-	-	-	-	-	-	-	-	-
Obelia sp.	-	-		P	P	-	-	-	-	-	-	-
Phialidium sp.	-	-		-	-	-	-	-	-	-	-	0.23
Blackfordia sp.	-	-		0.02	-	-	-	0.04	-	4.40	0.04	-
Aequorea sp.	-	-		P	0.10	-	-	-	P	-	-	-
Liriope sp.	26.75	14.57		3.36	10.48	1.15	42.83	0.71	40.97	3.84	25.13	12.01
Hydromedusae	0.77	-		-	1.17	-	-	-	0.15	-	-	-
Siphonophora bracts	P	P		P	P	-	-	-	P	-	P	P
Siphonophora	-	P		P	1.18	P	-	2.57	2.48	0.45	0.45	-
Scyphozoa ephyra	-	-		-	-	-	-	-	P	-	-	-
Ceriantharia	-	-		P	1.20	-	-	-	P	6.55	-	-
Beroe ovata	1.77	P		-	-	1.29	-	P	0.88	2.59	1.45	0.01
Ctenophora	-	P		-	-	P	-	-	-	-	-	-
Phyllodoce arenae	-	-		-	-	-	-	-	-	0.23	-	-
Autolytus sp.	-	-		-	-	-	-	-	-	-	-	0.02
Streblospio benedicti	-	-		-	-	-	-	-	-	-	0.01	-
Ampharetidae	-	-		-	-	-	-	-	-	-	0.17	-
Polychaeta larvae	-	-		-	-	-	-	-	-	0.23	0.43	-
Polinices sp.	-	-		-	-	-	-	-	-	0.45	0.45	-
Firolida sp.	-	-		-	0.05	-	-	-	-	-	-	-
Loliginidae	-	-		-	-	-	0.20	-	-	-	-	0.03
Trochophore	-	-		-	-	-	-	-	-	1.13	-	-
Pycnogonida	-	-		-	-	-	-	-	P	-	-	-
Squilla sp. larvae	0.23	0.04		0.01	-	0.08	-	0.05	0.03	-	0.05	-

Appendix Table 36. (cont.)

Coll. No.	TRT-74-124	TRT-74-125	TRT-74-125	TRT-74-129	TRT-74-130	TRT-74-130	TRT-74-131	TRT-74-131	TRT-74-132	TRT-74-133	TRT-74-133	TRT-74-135
Oxyurostylis smithi	-	-	-	-	-	-	-	-	-	-	0.16	-
Cumacea	-	-	-	-	-	-	-	1.02	P	-	1.07	-
Edotea triloba	-	-	E	-	0.06	P	-	4.46	-	0.45	-	0.05
Idotea metallica	P	0.02	-	-	-	-	-	-	-	-	-	-
Isopoda	-	-	-	-	-	-	-	-	-	-	0.54	-
Hyperideae	17.42	0.49	-	0.54	P	0.99	-	P	-	-	P	0.01
Cerapus tubularis	-	-	P	P	-	-	-	2.40	P	-	0.16	1.97
Gammarus lawrencianus	-	-	-	-	-	0.02	-	-	-	-	-	-
Haustoriidae	-	-	-	-	-	-	P	-	-	-	P	-
Jassa falcata	-	-	-	-	-	-	-	P	-	-	P	0.01
Microprotopus raneyi	-	-	-	-	-	-	0.07	0.34	-	0.68	0.27	-
Parametopella cypris	-	-	-	-	-	-	-	-	-	0.23	-	-
Stenothoe minuta	-	-	N	-	-	-	-	-	-	-	-	0.01
Amphipoda	-	-	-	-	-	-	-	0.18	-	-	1.07	-
Caprella sp.	-	-	-	-	-	-	-	-	P	-	-	-
Mysidopsis bigelowi	-	-	-	-	-	-	-	18.35	5.18	-	3.49	-
Neomysis americana	P	-	-	-	-	14.85	72.60	37.72	20.49	4.86	20.72	-
Lucifer faxoni	P	-	-	0.21	-	-	-	0.34	P	-	-	0.01
Sergestidae zoeae	-	-	P	-	-	-	-	-	-	-	-	-
Penaeidea zoeae	1.00	-	-	-	-	-	-	P	-	-	-	-
Palaemonetes spp. zoeae	-	P	-	-	P	-	-	-	P	-	-	-
Crangon septemspinosa zoeae	P	-	P	-	-	P	-	-	-	-	-	-
Crangon septemspinosa	-	-	-	-	-	-	-	0.51	-	0.02	0.54	-
Callinassa sp. zoeae	-	-	-	-	-	P	-	-	-	-	-	-
Upogebia sp. zoeae	-	-	N	-	-	-	-	-	-	19.56	-	-
Emerita talpoida zoeae	1.00	P	-	1.30	0.02	P	P	0.16	171.43	2.03	0.26	0.06
Pagurus spp. zoeae	17.73	-	-	88.06	28.12	5.25	-	-	30.19	8.81	-	3.00
Pagurus spp. glaucorhoe	-	-	-	-	-	-	-	P	-	-	0.21	-
Libinia sp. zoeae	1.23	P	-	0.56	0.52	0.04	-	-	-	6.78	P	0.11
Cancer sp. zoeae	-	-	-	-	P	-	-	-	-	0.23	-	-
Cancer sp. megalopae	-	-	-	-	-	-	0.07	-	P	-	0.05	-
Callinectes sp. zoeae	-	1.04	-	-	P	-	-	-	-	0.23	P	0.41
Callinectes sp. megalopae	-	-	-	-	-	-	-	-	0.54	0.23	-	0.01
Ovalipes ocellatus zoeae	12.87	4.16	-	5.59	4.12	-	1.40	-	7.37	2.71	-	0.16
Ovalipes ocellatus	-	-	-	-	-	-	-	-	0.01	-	-	-
Pinnixa sp. zoeae	-	-	-	-	-	-	-	-	-	-	-	0.06
Xanthidae zoeae	-	-	-	1.49	0.40	-	P	-	2.16	0.23	0.38	0.09
Brachyura zoeae	1.00	-	S	18.09	-	-	-	-	-	-	-	-
Brachyura megalopae	-	0.62	-	-	-	6.43	-	-	1.94	-	-	-
Sagitta enflata	P	-	N	0.29	3.52	-	P	P	0.54	0.68	-	0.23
Asterias forbesi, post-larval	-	-	-	-	-	-	-	-	-	-	0.16	-
Brachiolaria	-	-	-	-	8.00	-	-	-	-	4.97	-	-
Doliolum nationalis	-	-	-	1.11	0.14	-	-	-	-	-	-	-
Total macrozooplankton	125.32	20.94		139.86	59.48	30.10	117.17	68.85	284.83	72.80	56.36	18.74

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5258	5258	5258	5258	5258	5258	5258	5255	5255	5255	5255	5250
Depth (feet), water	41-42	40	-	39	-	39	-	-	-	-	-	33-38
Type of tow	Bottom	Surface	Bottom	Star. oblique	Port oblique	Surface	Bottom	Star. oblique	Port oblique	Surface	Bottom	Surface
Coll. No.	TRT-74-084	TRT-74-085	TRT-74-085	TRT-74-086	TRT-74-086	TRT-74-087	TRT-74-087	DPS-74-042	DPS-74-042	DPS-74-043	DPS-74-043	TRT-74-094
Date	20 June	20 June	-	20 June	-	20 June	-	8 July	-	8 July	-	8 July
Hour	2030	2210	-	2340	-	2355	-	1630	-	1605	-	2015
Tide	Flood 2	Ebb 1	-	Ebb 2	-	Ebb 2	-	Ebb 2	-	Ebb 2	-	Flood 1
Boat Heading (degrees)	45	45	-	45	-	45	-	45	-	45	-	235
Air Temp. (C)	24.0	21.3	-	22.0	-	22.0	-	27.0	-	27.0	-	27.0
Temp. (C), surface	-	19.2	-	19.8	-	19.8	-	22.0	-	22.0	-	23.3
Temp. (C), bottom	17.0	-	16.0	16.0	-	16.0	-	19.5	-	19.5	-	17.5
Sal. (ppt), surface	-	30.0	-	30.0	-	30.0	-	30.0	-	30.0	-	30.0
Sal. (ppt), bottom	30.3	-	30.0	30.3	-	30.3	-	30.0	-	30.0	-	30.5
Oxygen (ppm), surface	-	7.8	-	8.0	-	8.0	-	7.4	-	7.4	-	7.2
Oxygen (ppm), bottom	7.8	-	-	5.2	-	5.2	-	6.4	-	6.4	-	4.4
Secchi (feet)	-	-	-	-	-	-	-	14.0	-	14.0	-	13.0
Volume sampled (m ³)	204.0	163.6	204.1	138.4	136.2	154.8	192.1	122.4	128.8	112.4	63.0	135.2
Gear	0.5m net	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net	0.5m net	0.5m net
<i>Bougainvillia</i> sp.	-	-	-	-	-	-	-	P	-	0.01	-	-
<i>Nemopsis</i> sp.	-	-	-	-	-	-	-	-	P	-	P	-
<i>Rathkea octopunctata</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Hydromedusae</i>	-	-	P	-	-	-	P	-	-	-	-	-
<i>Platyhelminthes</i>	-	-	P	-	-	-	-	-	-	-	-	-
<i>Paranaitis kosteriensis</i>	-	-	-	-	-	-	-	-	-	-	0.02	-
<i>Capitellidae</i>	-	-	-	-	-	-	-	-	-	-	0.02	-
<i>Asabellides oculata</i>	-	-	-	-	-	-	-	-	-	-	0.05	-
<i>Pherusa affinis</i>	-	0.01	-	-	-	-	-	-	-	-	-	-
<i>Polychaeta</i> larvae	-	-	-	-	-	-	-	0.82	-	0.01	3.17	-
<i>Polychaeta</i>	0.24	-	0.69	-	0.32	-	0.33	-	-	-	-	-
<i>Polinices</i> sp.	2.94	14.98	-	-	0.37	-	-	-	-	-	-	-
<i>Gastropoda</i>	-	-	-	P	-	-	-	-	-	-	-	-
<i>Loliginidae</i>	-	0.01	-	-	-	-	-	-	-	-	-	-
<i>Caligus</i> sp.	-	-	-	-	-	-	-	(0.02)	-	(0.01)	-	-
<i>Squilla</i> sp. larvae	-	-	P	-	-	-	-	-	-	-	0.02	-
<i>Cyclaspis varians</i>	-	-	-	-	-	P	-	-	-	-	-	-
<i>Leptocuma minor</i>	3.73	0.10	-	6.14	7.71	5.98	2.08	-	-	-	3.17	-
<i>Diastylus</i> sp.	-	-	2.45	-	-	-	-	-	-	-	-	-
<i>Oxyurostylis smithi</i>	0.32	0.03	0.01	0.72	0.37	-	-	-	-	-	0.79	-
<i>Cumacea</i>	-	-	-	-	-	-	-	-	P	-	-	-
<i>Cirolana concharum</i>	-	-	P	-	-	-	-	-	-	-	-	-
<i>Chiridotea coeca</i>	-	-	0.02	-	-	-	-	-	-	-	-	-
<i>Chiridotea tuftsi</i>	-	0.01	-	-	-	-	-	-	-	-	-	-
<i>Edotea triloba</i>	1.09	0.92	11.02	1.99	-	0.63	16.66	0.17	0.13	0.02	1.19	-
<i>Idotea baltica</i>	-	-	-	-	-	-	-	-	-	0.07	-	-
<i>Isopoda</i>	-	-	7.68	-	2.74	-	-	-	-	0.08	-	-
<i>Amphithoidae</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cerapus tubularis</i>	0.32	-	-	-	-	-	-	1.02	-	-	-	-
<i>Corophium tuberculatum</i>	-	0.02	-	-	-	-	-	-	-	-	-	-
<i>Corophium</i> sp.	-	-	-	P	-	-	-	-	-	-	-	-
<i>Unciola irroratus</i>	0.32	0.04	-	-	-	0.01	-	-	-	-	-	-
<i>Unciola</i> sp.	-	-	-	P	-	-	-	-	-	-	-	-
<i>Gammarus annulatus</i>	1.64	0.23	-	3.97	6.24	0.81	14.58	-	-	-	-	-
<i>Monoculodes edwardsi</i>	-	-	-	-	-	-	P	-	-	-	-	-
<i>Microprotopus raneyi</i>	0.32	0.09	-	0.54	-	0.81	P	-	-	-	-	-
<i>Amphipoda</i>	-	-	1.71	-	1.17	-	-	-	P	-	-	-
<i>Aeginina longicornis</i>	-	-	P	-	-	0.01	-	-	-	-	-	-
<i>Aeginina</i> sp.	-	-	-	-	-	-	-	-	-	-	-	-
<i>Mysidopsis bigelowi</i>	-	1.53	0.49	-	-	-	-	-	-	-	-	-
<i>Neomysis americana</i>	7.51	90.16	24.50	75.14	78.93	6.78	125.46	-	-	-	0.08	0.01
<i>Palaemonetes</i> spp. zoeae	15.69	-	-	3.43	3.30	-	1.56	17.56	16.69	1.84	265.48	0.02

Appendix Table 36. (cont.)

	TRT-74-084	TRT-74-085	TRT-74-085	TRT-74-086	TRT-74-086	TRT-74-087	TRT-74-087	DPS-74-042	DPS-74-042	DPS-74-043	DPS-74-043	TRT-74-094
Crangon septemspinosa zoeae	11.37	50.43	3.87	23.66	26.06	7.75	31.23	20.02	12.42	0.04	-	0.01
Crangon septemspinosa	-	1.65	3.87	P	0.91	0.65	-	-	-	-	15.87	-
Upogebia sp. zoeae	1.57	-	-	3.97	5.87	8.40	-	-	-	0.21	-	-
Emerita talpoida zoeae	-	0.61	-	-	0.73	1.45	-	1.63	1.75	-	2.78	-
Pagurus spp. zoeae	15.29	99.33	12.74	107.30	103.16	155.52	18.74	44.93	50.27	-	575.79	0.02
Pagurus spp. glaucothoe	-	-	-	-	-	-	-	-	-	-	0.79	-
Libinia sp. zoeae	3.73	11.00	-	3.07	1.84	-	-	0.11	38.63	0.18	41.67	-
Libinia sp. megalopae	-	-	-	-	-	-	-	-	-	0.01	-	-
Cancer sp. zoeae	1.64	-	-	-	0.73	-	-	-	-	-	-	-
Cancer sp. megalopae	0.22	0.02	0.02	-	0.37	1.65	0.25	-	P	-	0.02	-
Callinectes sp. megalopae	-	0.01	-	-	-	-	-	-	-	-	-	-
Ovalipes ocellatus zoeae	11.37	11.00	P	4.52	4.04	8.07	P	28.59	9.70	0.02	24.21	-
Portunus sp. zoeae	-	-	-	-	-	-	-	P	-	-	-	-
Hexapanopeus sp. zoeae	-	-	-	-	-	-	-	P	-	-	-	-
Neopanope sp. zoeae	-	-	-	-	-	-	-	1.23	-	-	-	-
Xanthidae sp. zoeae	1.27	-	-	0.90	0.37	-	P	-	1.55	-	12.70	-
Dissodactylus sp. zoeae	-	-	-	-	-	-	-	-	P	-	0.79	-
Uca spp. zoeae	-	-	-	-	-	-	-	61.27	43.86	0.24	-	-
Brachyura zoeae	-	2.15	-	0.90	-	-	-	-	-	0.35	-	0.07
Phoronida actinotrochs	-	-	-	-	-	-	-	-	P	-	-	-
Sagitta elegans	25.81	2.14	35.28	23.30	32.31	1.29	4.16	P	P	0.05	3.17	-
Echinodermata pluteus	-	-	-	-	-	-	-	P	-	-	-	-
Oikopleura sp.	-	-	-	-	-	-	-	-	0.58	-	-	-
Total Macrozooplankton	106.39	286.42	103.95	259.55	277.54	196.27	215.05	177.35	175.58	3.13	951.78	0.13

Appendix Table 36. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5250	5254	5254	5254	5254	5254	5258	5254	5254	5254	5254	5254
Depth (feet), water	33-39	35-40	-	38-40	-	38-40	-	38-40	-	38-40	-	38-43
Type of tow	Surface	Surface	Bottom	Star, oblique	Port oblique	Surface	Bottom	Surface	Bottom	Star, oblique	Port oblique	Surface
Coll. No.	TRT-74-095	TRT-74-104	TRT-74-104	TRT-74-107	TRT-74-107	TRT-74-108	TRT-74-108	TRT-74-109	TRT-74-109	TRT-74-110	TRT-74-110	TRT-74-111
Date	8 July	22 July		22 July		22 July		22 July		22 July		22 July
Hour	2245	1410		1708		1735		2025		2055		2234
Tide	Flood 2	Ebb 2		Flood 1		Flood 1		Flood 2		Flood 2		Flood 2
Boat Heading (degrees)	45	235		235		235		235		235		235
Air Temp. (C)	25.0	24.0		23.0		23.0		21.0		21.0		-
Temp. (C), surface	22.0	21.5		22.0		22.0		21.5		21.5		21.2
bottom	17.0	-	18.7	19.5		-	19.5	-		19.0		-
Sal. (ppt), surface	30.0	30.0	-	30.3		30.3	-	30.0		30.0		30.0
bottom	30.0	-	30.3	30.0		-	30.0	-		30.0		-
Oxygen (ppm), surface	7.5	7.6	-	7.9		7.9	-	7.2		7.2		7.8
bottom	4.8	-	6.2	6.2		-	6.2	-		6.5		-
Secchi (feet)	-	14.5	-	9.0		9.0	48.8	-		-		-
Volume sampled (m ³)	123.8	57.0	92.8	132.3	132.3	113.2	-	91.5		106.0	106.0	41.2
Gear	0.5m net	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net	0.5m net	0.5m net		0.1m ² Bongo	0.1m ² Bongo	0.5m net
<i>Nemopsis</i> sp.	-	-	-	-	-	0.04	-	-		P	0.01	-
<i>Phialidium</i> sp.	-	-	0.81	-	-	-	-	-		1.96	-	-
<i>Phyllodoce</i> <i>arenae</i>	-	-	-	-	-	-	-	-		-	0.01	-
<i>Paranaitis</i> <i>speciosa</i>	0.04	-	0.01	-	-	-	-	-		-	-	-
Gastropoda	0.61	-	-	-	-	-	-	-		-	-	-
Loliginidae	-	-	-	-	-	-	-	-		0.02	-	-
Pycnogonida	-	-	-	0.15	-	-	-	-		-	-	-
<i>Limulus</i> <i>polyphemus</i> hatchling	-	-	-	-	-	0.02	-	0.10		P	0.05	0.41
<i>Caligus</i> sp.	-	-	(0.03)	-	-	-	(0.04)	-		-	-	-
<i>Squilla</i> sp. larvae	-	-	-	-	-	-	-	0.03		-	-	-
<i>Oxyurostylis</i> <i>smithi</i>	-	-	1.08	-	-	-	-	-		-	0.47	-
Cumacea	-	-	-	-	-	-	-	-		P	-	-
<i>Edotea</i> <i>triloba</i>	0.02	-	1.62	0.02	0.03	-	0.14	-		P	2.12	-
<i>Erichsonella</i> sp.	-	-	-	0.01	-	-	-	-		-	-	-
<i>Idotea</i> <i>baltica</i>	-	-	-	-	-	0.04	-	-		-	-	-
<i>Idotea</i> <i>metallica</i>	-	-	-	0.01	0.01	0.02	-	0.17		-	-	1.21
<i>Cerapus</i> <i>tubularis</i>	-	-	4.58	0.91	0.74	-	-	-		-	0.71	-
<i>Gammatus</i> <i>annulatus</i>	-	-	-	-	-	-	-	-		-	0.07	31.55
<i>Microprotopus</i> <i>raneyi</i>	0.02	-	-	-	-	0.04	-	-		-	0.47	1.21
<i>Orchestia</i> sp.	-	-	-	-	-	P	-	-		-	-	-
Amphipoda	-	-	-	-	-	-	-	-		P	-	-
<i>Mysidopsis</i> <i>bigelowi</i>	-	-	3.77	-	-	-	-	-		-	-	-
<i>Neomysis</i> <i>americana</i>	1.01	-	4.84	-	-	-	-	-		174.56	131.60	80.46
<i>Palaemonetes</i> spp. zoeae	12.92	1.61	22.90	5.22	9.26	18.40	8.71	0.74		70.19	9.67	52.79
<i>Crangon</i> <i>septemspinosa</i> zoeae	14.34	-	0.27	-	-	-	0.51	-		1.73	1.42	14.56
<i>Crangon</i> <i>septemspinosa</i>	0.09	-	-	-	-	-	-	-		-	-	-
<i>Upogebia</i> sp.	6.66	-	-	7.79	-	-	-	-		-	5.19	0.61

Appendix Table 36. (cont.)

	TRT-74-095	TRT-74-104	TRT-74-104	TRT-74-107	TRT-74-107	TRT-74-108	TRT-74-108	TRT-74-109	TRT-74-109	TRT-74-110	TRT-74-110	TRT-74-111
<i>Emerita talpoida</i> zoeae	4.04	-	2.69	0.38	0.15	-	0.66	-	-	0.75	0.24	0.61
<i>Pagurus</i> spp. zoeae	83.40	0.05	27.21	32.50	18.62	P	93.75	0.35	-	63.40	81.37	179.00
<i>Pagurus</i> spp. glaucothoe	-	-	0.27	0.01	-	-	-	-	-	0.75	-	1.21
<i>Libinia</i> sp. zoeae	24.03	0.09	35.29	18.37	-	-	13.32	-	N	P	0.24	1.82
<i>Libinia</i> sp. megalopae	-	-	-	-	-	-	-	-	O	-	0.24	0.61
<i>Cancer</i> sp. megalopae	-	-	-	-	-	-	-	-	-	-	-	0.02
<i>Callinectes</i> sp. zoeae	21.41	0.05	-	-	-	-	2.56	0.78	S	-	-	-
<i>Callinectes</i> sp. megalopae	-	-	-	-	-	-	-	-	A	-	-	0.61
<i>Ovalipes ocellatus</i> zoeae	35.14	0.02	0.81	22.22	-	-	2.56	0.07	M	-	1.18	-
<i>Ovalipes ocellatus</i> juvenile	-	-	-	-	-	-	-	-	P	0.02	-	0.05
<i>Xanthidae</i> zoeae	1.82	3.70	29.90	8.09	2.93	2.36	6.15	3.98	-	P	3.30	1.82
<i>Pinnixa</i> sp. zoeae	-	-	1.35	-	-	-	-	-	-	-	0.01	-
<i>Uca</i> spp. zoeae	218.09	0.33	-	-	5.29	P	-	3.52	-	-	9.43	3.03
<i>Brachyura</i> zoeae	-	-	-	-	-	-	-	-	-	-	-	4.25
<i>Brachyura</i> megalopae	-	-	-	-	-	-	-	-	-	P	0.47	35.19
<i>Sagitta elegans</i>	-	-	0.81	-	-	-	1.02	-	-	P	-	-
<i>Doliolum nationalis</i>	-	1.56	4.04	1.44	0.24	P	4.10	0.28	-	0.75	0.71	3.03
Total Macrozooplankton	423.64	7.41	142.25	97.12	37.27	20.92	133.48	10.02	-	314.13	248.98	414.05

Appendix Table 36. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5254	5254	5254	5254	5254	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	38-43	38-40	-	38-40	-	35-40	-	35-40	-	35	35	-
Type of tow	Bottom	Star. oblique	Port oblique	Surface	Bottom	Star. oblique	Port oblique	Surface	Bottom	Star. oblique	Surface	Bottom
Coll. No.	TRT-74-111	TRT-74-112	TRT-74-112	TRT-74-113	TRT-74-113	TRT-74-118	TRT-74-118	TRT-74-119	TRT-74-119	TRT-74-121	TRT-74-122	TRT-74-122
Date	22 July	22 July		23 July		2 August		2 August		30 August	30 August	-
Hour	2234	2350		0015		1300		1320		1405	1445	
Tide	Flood 2	Ebb 1		Ebb 1		Ebb 2		Ebb 2		Flood 1	Flood 1	
Boat Heading (degrees)	235	235		235		235		235		45	45	
Air Temp. (C)	-	21.5		21.5		26.0		26.0		25.0	25.0	
Temp. (C), surface	-	21.4		21.4		24.2		24.2		24.0	24.0	
bottom	18.8	18.8		-	18.8	19.5		-	19.5	19.0	-	19.0
Sal. (ppt), surface	-	30.0		30.0		30.0		30.0		30.5	30.5	-
bottom	30.0	30.0		-	30.0	30.0		-	30.0	31.0	-	31.0
Oxygen (ppm), surface	-	7.4		7.4		8.8		8.8		8.6	8.6	-
bottom	6.3	6.0		-	6.0	3.5		-	3.5	7.2	-	7.2
Secchi (feet)	-	-		-		12.0		12.0		-	-	-
Volume sampled (m ³)	42.9	119.8	119.8	37.7	32.0	100.6	100.6	65.8	50.0	116.7	124.7	149.2
Gear	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.1m ³ Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.5m net	0.5m net
Bougainvillia sp.	-	-	-	-	-	-	-	-	-	0.02	0.02	-
Nemopsis sp.	-	0.21	-	-	-	-	-	-	0.02	-	-	-
Obelia sp.	2.33	-	-	-	-	-	-	-	-	-	-	-
Phialidium sp.	0.32	-	-	-	1.81	-	-	-	-	-	-	-
Aequorea sp.	-	-	-	-	-	-	-	-	-	-	0.01	-
Liriope sp.	-	-	-	-	-	-	-	-	-	-	-	0.09
Cyanea capillata	-	-	-	-	-	-	-	-	-	-	P	-
Scyphozoa bracts	-	-	-	-	-	-	-	-	-	-	-	P
Ctenophora	-	-	-	-	-	-	-	-	-	-	P	-
Tomopteris helgolandica	-	-	-	-	-	-	-	-	-	-	-	0.09
Glycera dibranchiata	-	0.23	-	-	-	-	-	-	-	-	-	-
Nereis succinea	-	-	0.03	0.05	-	-	-	-	-	-	-	-
Capitellidae	-	-	-	-	P	-	-	-	-	-	-	-
Polychaeta larvae	-	-	-	-	-	-	-	-	0.80	-	-	37.03
Polychaeta	-	-	-	-	0.31	-	-	-	-	-	-	-
Loliginidae	-	-	-	-	-	-	-	-	-	0.01	-	-
Limulus polyphemus hatchling	0.02	-	-	0.21	-	-	-	-	-	-	-	-
Caligus sp.	-	-	(0.01)	(0.03)	-	(0.01)	-	(0.03)	-	-	-	-
Squilla sp. larvae	-	0.21	-	-	-	-	-	-	-	-	-	-
Cyclaspis varians	-	0.42	-	-	-	-	-	-	-	-	-	-
Leptocuma minor	-	0.42	1.67	1.99	-	-	-	-	-	-	-	0.16
Oxyurostylis smithi	-	0.21	1.67	-	-	-	P	-	-	-	-	-
Cumacea	4.66	-	-	-	25.00	-	-	-	-	-	-	-
Leptognathia caeca	-	-	-	-	P	-	-	-	-	-	-	-
Cirolana concharum	0.02	-	0.01	-	-	-	-	-	-	-	-	-
Chiridotea coeca	-	-	-	-	P	-	-	-	-	-	-	-
Edotea triloba	1.17	0.83	1.67	0.05	18.75	0.01	-	-	0.20	0.02	-	0.16

Appendix Table 36. (cont.)

	TRT-74-111	TRT-74-112	TRT-74-112	TRT-74-113	TRT-74-113	TRT-74-118	TRT-74-118	TRT-74-119	TRT-74-119	TRT-74-121	TRT-74-122	TRT-74-122
<i>Idotea metallica</i>	-	-	-	0.05	-	-	-	-	-	-	-	-
<i>Cerapus tubularis</i>	11.66	1.46	1.67	-	30.00	0.35	P	-	1.40	0.21	-	1.01
<i>Unciola irrorata</i>	-	-	0.83	-	-	-	-	-	-	-	-	-
<i>Gammarus annulatus</i>	-	1.25	1.67	15.25	-	-	-	0.18	0.20	-	-	-
<i>Microprotopus raneyi</i>	-	0.21	3.34	3.31	0.80	-	-	-	-	-	-	-
<i>Amphipoda</i>	-	-	-	-	43.75	-	-	-	-	-	-	-
<i>Caprella equilibra</i>	-	-	-	-	-	-	-	-	-	0.01	-	-
<i>Mysidopsis bigelowi</i>	1.75	-	-	-	-	-	-	-	-	-	-	-
<i>Neomysis americana</i>	156.17	229.34	241.24	921.75	900.00	2.14	0.50	-	46.20	-	0.05	8.70
<i>Lucifer faxoni</i>	-	-	-	-	-	-	-	-	-	0.01	-	-
<i>Palaemonetes</i> spp. zoeae	16.90	8.14	2.50	71.60	81.25	2.13	1.24	0.46	0.40	-	1.49	-
<i>Crangon septemspinosa</i> zoeae	1.75	0.21	1.67	-	-	-	-	-	-	-	-	-
<i>Crangon septemspinosa</i>	-	32.14	0.47	7.96	6.00	-	-	-	-	-	-	-
<i>Upogebia</i> sp. zoeae	26.22	1.88	-	2.65	-	6.46	6.79	1.06	2.20	6.96	-	-
<i>Emerita talpoida</i> zoeae	0.58	-	1.67	0.66	P	0.61	0.99	-	1.60	0.10	P	0.22
<i>Pagurus</i> spp. zoeae	35.55	27.13	56.76	108.75	131.25	40.60	34.79	0.46	32.60	24.64	3.16	43.23
<i>Pagurus</i> spp. glaucothoe	0.02	0.42	-	9.28	P	-	-	-	0.20	-	-	-
<i>Libinia</i> sp. zoeae	96.74	0.63	1.67	-	-	6.46	4.30	P	1.80	1.07	0.14	0.67
<i>Libinia</i> sp. megalopae	-	-	-	3.98	-	-	-	-	0.20	-	-	-
<i>Cancer</i> sp. megalopae	-	-	-	-	0.31	-	-	-	-	-	-	-
<i>Callinectes</i> sp. megalopae	-	-	-	-	-	0.02	-	-	0.20	-	-	-
<i>Ovalipes ocellatus</i> zoeae	17.48	0.42	1.67	1.99	-	7.60	8.45	1.32	0.40	33.20	0.08	-
<i>Xanthidae</i> zoeae	12.24	-	-	-	P	11.23	11.10	10.33	5.40	38.24	5.39	10.56
<i>Pinnixa</i> sp. zoeae	7.58	-	-	-	-	P	-	-	0.40	-	-	0.50
<i>Pinnotheres</i> sp. zoeae	-	-	-	-	-	-	-	-	-	-	0.03	0.50
<i>Uca</i> spp. zoeae	-	3.34	5.84	92.18	-	-	-	2.89	1.00	-	-	-
<i>Brachyura</i> zoeae	22.14	-	-	61.67	-	1.99	-	P	-	-	-	-
<i>Brachyura</i> megalopae	0.58	0.63	1.67	-	12.50	-	-	-	0.20	0.01	-	-
<i>Sagitta enflata</i>	-	-	-	-	-	-	-	-	-	-	-	1.84
<i>Sagitta</i> sp.	1.17	-	-	-	-	-	-	-	2.60	0.03	-	-
<i>Brachiolaria</i>	-	-	-	-	-	-	-	-	-	118.68	P	82.44
<i>Doliolum nationalis</i>	4.08	0.63	2.50	11.90	18.75	-	-	-	-	-	-	-
<i>Thalia democratica</i>	-	-	-	-	-	33.96	39.76	40.27	3.00	-	-	-
Total Macrozooplankton	421.13	310.36	330.22	1315.28	1270.48	113.56	107.92	57.47	101.02	223.21	10.37	187.20

Appendix Table 36. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	-	-	35-43	35-43	-	38-43	38-43	-	38	-	38	-
Type of tow	Surface	Bottom	Oblique	Surface	Bottom	Oblique	Surface	Bottom	Surface	Bottom	Surface	Bottom
Coll. No.	TRT-74-136	TRT-74-136	TRT-74-138	TRT-74-139	TRT-74-139	TRT-74-144	TRT-74-145	TRT-74-145	ZOO-74-143	ZOO-74-143	ZOO-74-145	ZOO-74-145
Date	30 September		7 October	7 October		21 October	21 October		21 October		21 October	
Hour	1025		1137	1207		1200	1215		1745		1945	
Tide	Ebb 1		Ebb 1	Ebb 1		Flood 2	Flood 2		Ebb 2		Flood 1	
Boat Heading (degrees)	45		45	45		45	45		-		-	
Air Temp. (C)	17.0		18.0	18.0		7.0	7.0		7.0		7.0	
Temp. (C), surface	18.5		17.0	17.0		13.0	13.0		13.0		13.0	
bottom	-	18.9	16.5	-	16.5	13.2	-	13.2	-	13.0	-	13.0
Sal. (ppt), surface	30.0	-	29.9	29.9	-	30.0	30.0	-	30.0	-	30.0	-
bottom	-	30.0	30.0	-	30.0	30.0	-	30.0	-	30.0	-	30.0
Oxygen (ppm), surface	7.9	-	8.9	8.2	-	9.1	9.1	-	8.0	-	8.8	-
bottom	-	7.6	7.8	-	7.8	9.0	-	9.0	-	7.8	-	8.6
Secchi (feet)	4.0		8.5	8.5		17.5	17.5		-		-	
Volume sampled(m ³)	121.0	46.0	88.3	134.2	145.6	69.5	99.3	91.3	85.7	20.7	87.5	60.6
Gear	0.5m net	0.5m net	0.1m ³ Bongo	0.5m net	0.5m net	0.1m ² Bongo	0.5m net	0.5m net	0.5m net	0.5m net	0.5m net	0.5m net
Bougainvillia sp.	0.04	-	0.10	0.01	0.08	0.72	0.60	0.21	-	3.62	0.38	0.41
Nemopsis sp.	0.02	0.50	-	-	0.01	-	-	-	-	-	-	-
Amphinema sp.	-	-	-	-	-	-	-	0.03	-	-	-	-
Phialidium sp.	0.07	P	0.06	-	0.01	-	-	0.16	-	-	0.76	-
Blackfordia sp.	-	P	-	-	-	-	-	-	-	-	-	-
Liriope sp.	2.32	P	2.20	12.56	5.63	59.20	78.30	32.85	54.84	356.28	89.33	106.85
Hydromedusae	-	-	-	-	-	0.33	1.80	0.26	1.36	3.62	-	3.30
Siphonophora bracts	-	P	P	P	P	P	P	P	P	P	P	P
Siphonophora	-	-	3.45	1.53	0.01	-	1.66	1.11	-	0.19	-	-
Nausithoe sp.	-	-	-	-	0.01	11.73	4.30	-	6.22	19.32	8.19	0.41
Ceriantharia	-	P	-	-	-	-	-	-	-	-	-	-
Beroe ovata	-	-	0.01	-	-	0.04	-	0.27	-	0.10	-	0.83
Ctenophora	-	-	-	P	-	-	-	P	-	-	-	-
Nematoda	-	3.37	-	-	-	-	-	-	-	-	-	-
Polynoidae	0.04	-	-	-	-	-	-	-	-	-	-	-
Autolytus sp.	0.02	-	-	0.01	0.03	-	-	-	-	-	-	-
Syllidae	-	-	0.02	-	-	-	-	-	-	-	-	-
Streblospio benedicti	0.14	-	-	-	-	-	-	-	-	-	-	-
Spionidae	0.18	-	-	-	-	-	-	-	-	-	-	-
Magelona rosea	0.02	-	-	-	-	-	-	-	-	-	-	-
Tharyx acutus	0.02	-	-	-	-	-	-	-	-	-	-	-
Ampharetidae	0.04	-	-	-	-	-	-	-	-	-	-	-
Polychaeta larvae	-	-	-	0.25	0.76	29.50	8.86	46.27	5.45	67.63	7.05	7.01
Polychaeta	-	3.48	0.01	-	-	-	-	-	-	-	-	0.41
Pisicolididae	-	-	-	-	-	-	-	-	-	-	-	-
Gastropoda	-	-	-	-	-	-	-	-	0.39	-	-	-
Loliguncula brevis	-	-	-	-	-	-	-	-	-	-	0.01	-

Appendix Table 36. (cont.)

Coll. No.	TRT-74-136	TRT-74-136	TRT-74-138	TRT-74-139	TRT-74-139	TRT-74-144	TRT-74-145	TRT-74-145	ZOO-74-143	ZOO-74-143	ZOO-74-145	ZOO-74-145
Loliginidae	-	0.13	-	-	-	-	-	-	-	-	-	-
Squilla sp. larvae	-	0.02	-	-	-	-	-	-	-	-	-	-
Leptocuma minor	0.02	-	-	-	-	-	-	-	-	-	-	-
Oxyurostylis smithi	-	10.22	-	-	-	-	-	-	-	-	-	-
Lironeca ovalis	0.01	-	-	-	0.01	-	-	-	0.01	-	0.19	-
Edotea triloba	0.08	40.33	0.01	0.05	-	-	-	0.25	-	-	-	3.30
Hyperidea	0.01	-	0.02	0.01	-	0.04	0.10	P	-	6.04	0.38	0.41
Cerapus tubularis	0.20	12.72	0.31	-	0.21	-	-	1.09	-	-	-	0.41
Microprotopus raneyi	0.02	-	-	-	-	-	-	-	-	-	-	0.41
Amphipoda	-	7.61	0.01	-	-	-	-	-	-	-	-	-
Caprella equilibra	-	-	0.11	0.01	0.01	-	-	-	-	-	-	-
Caprella penantis	-	-	0.01	-	-	-	-	-	-	-	-	-
Caprellida	-	0.87	-	-	-	-	-	-	-	-	-	-
Mysidopsis bigelowi	0.60	-	-	0.01	-	P	-	P	0.39	16.91	17.71	43.73
Neomysis americana	0.07	1545.65	0.02	-	-	P	P	-	-	-	-	-
Mysidacea	-	-	-	-	0.06	-	-	-	-	-	-	-
Lucifer faxoni	0.01	-	-	0.01	-	-	-	-	-	-	-	-
Penaeidea zoeae	-	-	-	-	0.01	-	-	-	-	-	-	-
Hippolyte sp. zoeae	-	-	0.02	-	-	-	-	-	-	-	-	-
Lysmata sp. zoeae	-	0.04	-	-	0.01	-	-	-	-	-	-	-
Crangon septemspinosa zoeae	0.26	-	0.33	0.02	0.03	P	-	-	0.58	-	-	0.41
Crangon septemspinosa	-	0.52	-	-	-	-	-	-	-	-	-	-
Upogebia sp. zoeae	0.07	-	-	-	-	-	-	-	-	-	-	-
Emerita talpoida zoeae	-	0.74	0.07	-	0.18	-	0.05	-	-	-	-	-
Pagurus spp. zoeae	2.65	15.28	1.38	0.02	2.68	-	-	0.27	0.19	-	-	-
Libinia sp. zoeae	0.08	-	0.05	-	0.04	-	-	-	-	-	-	-
Libinia sp. megalopae	-	-	0.01	-	-	-	-	-	-	-	-	-
Cancer sp. megalopae	-	0.02	-	-	-	-	-	-	-	-	-	-
Callinectes sp. megalopae	0.01	8.48	-	0.04	0.01	-	0.15	-	-	-	0.38	-
Ovalipes ocellatus zoeae	0.38	-	0.02	0.01	-	-	-	-	-	-	-	-
Ovalipes ocellatus	-	0.02	-	-	-	-	-	-	-	-	-	-
Pinnixa sp. zoeae	0.23	7.61	0.06	0.04	0.49	-	-	-	-	-	-	-
Xanthidae zoeae	0.19	P	0.02	0.01	0.01	-	-	-	-	-	-	-
Brachyura zoeae	1.98	-	0.10	0.02	0.05	-	-	-	-	-	-	-
Sagitta enflata	0.07	-	2.54	5.74	5.43	0.72	16.00	-	1.56	1.21	0.95	2.89
Sagitta tenuis	-	-	-	-	-	-	-	-	-	-	0.19	-
Sagitta sp.	-	P	-	-	-	-	7.00	P	-	-	-	-
Doliolum nationalis	-	-	-	-	-	-	3.00	P	-	-	-	-
Oikopleura sp.	-	-	-	-	-	-	-	P	-	-	-	-
Total macrozooplankton	9.85	1657.61	10.94	20.35	15.77	102.28	121.82	82.77	70.99	474.92	125.52	-

Appendix Table 36. (cont.)

Location	Site	Site	Site	Site	Site	Site	Site	Site	Site
Zone	5255	5255	5255	5255	5255	5255	5255	5255	5255
Depth (feet), water	39	-	35	-	42	38-42	-	40-43	-
Type of tow	Surface	Bottom	Surface	Bottom	Oblique	Surface	Bottom	Surface	Bottom
Coll. No.	ZOO-74-148	ZOO-74-148	ZOO-74-150	ZOO-74-150	TRT-74-150	TRT-74-151	TRT-74-151	TRT-74-158	TRT-74-158
Date	21 October		23 October		4 November	4 November		18 November	
Hour	2145		1215		1438	1502		1015	
Tide	Flood 1		Flood 2		Ebb 2	Ebb 2		High	
Boat Heading (degrees)	-		-		45	45		45	
Air Temp. (C)	7.5		-		17.0	17.0		10.0	
Temp. (C), surface	11.0		-		15.0	15.0		10.7	
bottom	-	12.5	-	-	14.0	-	14.0	-	11.3
Sal. (ppt), surface	30.0	-	28.5	-	30.5	30.5	-	30.0	-
bottom	-	30.0	-	30.0	30.0	-	30.0	-	30.5
Oxygen (ppm), surface	8.2	-	-	-	8.2	8.2	-	9.7	-
bottom	-	7.8	-	-	7.9	-	7.9	-	9.6
Secchi (feet)	-	-	15.0		10.0	10.0		10.0	
Volume sampled (m ³)	71.2	58.5	96.6	43.8	108.9	199.5	194.4	166.7	92.1
Gear	0.5m net	0.5m net	0.5m net	0.5m net	0.1m ² Bongo	0.5m net	0.5m net	0.5m net	0.5m net
Bougainvillia sp.	-	0.85	0.03	0.09	-	-	-	-	P
Nemopsis sp.	-	-	-	-	-	-	-	-	0.36
Amphinema sp.	0.70	-	-	0.38	-	-	-	-	-
Phialidium sp.	-	0.26	-	6.47	0.02	0.02	0.03	-	P
Liriope sp.	119.38	103.99	18.73	122.15	3.86	1.00	16.72	9.96	8.55
Hydromedusae	2.11	1.42	2.59	1.14	-	-	-	0.01	-
Siphonophora	1.08	0.02	0.13	0.38	-	-	-	P	-
Siphonophora bracts	-	-	-	P	0.72	-	P	P	P
Nausithoe sp.	10.53	1.71	-	12.93	-	-	-	-	P
Pleurobrachia sp.	-	-	0.06	-	-	-	-	0.01	-
Beroe ovata	-	0.03	-	0.02	-	-	P	-	-
Phyllodocidae	0.35	-	-	-	-	-	-	-	-
Autolytus sp.	-	-	-	-	-	-	P	-	-
Polychaeta larvae	2.81	6.55	0.41	23.21	0.02	-	1.46	0.02	0.58
Loliguncula brevis	0.04	-	-	-	-	-	-	-	-
Edotea triloba	-	-	-	0.38	0.01	-	P	-	-
Idotea metallica	-	-	-	-	0.02	P	-	-	-
Hyperideae	0.01	0.26	0.16	0.76	0.07	0.04	-	0.01	-
Cerapus tubularis	-	0.26	-	-	1.40	-	0.77	-	P
Jassa falcata	0	0.02	-	-	-	-	-	-	-
Microprotopus raneyi	-	0.05	-	-	-	0.01	-	-	-
Caprella equilibra	-	-	-	-	-	P	-	-	-
Mysidopsis bigelowi	6.67	8.83	-	2.66	0.01	0.02	-	-	-
Neomysis americana	-	-	-	-	-	-	-	P	P
Mysidacea	-	-	-	-	-	-	P	-	-
Crangon septemspinosa zoeae	-	0.26	-	0.38	2.57	0.16	-	0.02	-
Emerita talpoida zoeae	0.01	-	-	-	-	-	0.05	P	-
Pagurus spp. zoeae	-	0.57	-	0.38	0.01	-	-	-	-
Cancer sp. megalopae	0.01	-	-	-	-	-	-	-	-
Callinectes megalopae	0.17	-	-	-	-	-	-	-	-
Brachyura zoeae	-	-	-	-	-	0.08	-	0.14	-
Sagitta enflata	0.70	-	0.41	0.76	1.04	0.50	0.26	1.32	1.23
Sagitta tenuis	-	-	0.21	0.38	1.04	0.08	0.86	0.18	1.95
Brachiolaria	-	-	-	1.14	-	-	-	-	-
Total macrozooplankton	144.57	125.08	22.73	173.60	10.79	1.91	20.15	11.67	12.67

Appendix Table 37. Macrozooplankton (#/m³) collected 8.0 nautical miles ESE of Little Egg Inlet in 1974.

Location	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet	Off Little Egg Inlet
Zone	5850	5850	5850	5850	5850	5850	5850	5850	5850	5850	5850	5850	5850
Depth (feet) water	-	-	55	-	58-60	-	-	60-62	-	-	58-64	61	60-62
Type of tow	3 step oblique	3 step oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique
Coll. No.	TRT-74-033	TRT-74-033	TRT-74-064	TRT-74-064	TRT-74-075	TRT-74-075	DPS-74-041	DPS-74-041	TRT-74-117	TRT-74-117	TRT-74-126	TRT-74-140	TRT-74-149
Date	25 March	8 May	5 June	8 July	2 August	9 September	7 October	4 November					
Hour	1155	1125	1317	1437	1437	1338	1307						
Tide	Ebb 1	Ebb 1	Ebb 2	Ebb 2	Ebb 2	Ebb 1	Ebb 1	Ebb 1					
Boat Heading (degrees)	45	45	45	45	235	45	45	45					
Air Temp. (C)	-1.0	12.0	19.5	27.0	25.0	24.0	20.0	18.0					
Temp. (C), surface	5.0	12.0	17.3	18.7	23.5	22.2	18.0	15.0					
bottom	4.5	10.3	16.0	17.5	17.3	21.8	17.0	15.0					
Sal. (ppt), surface	30.0	31.0	30.0	30.0	30.0	30.0	30.0	30.0					
bottom	30.0	31.0	30.0	30.0	30.5	30.1	31.0	30.5					
Oxygen (ppm), surface	9.0	9.8	10.2	8.2	8.0	6.0	6.0	9.2					
bottom	9.0	9.2	9.2	5.8	6.0	40.0+	40.0+	36.0					
Secchi (feet)	16.0	23.0	20.0	33.0	40.0+	101.1	101.1	126.7					
Volume sampled (m ³)	163.4	167.9	76.1	80.3	136.6	141.3	64.4	73.3	101.1	101.1	126.7	67.8	81.9
Gear	0.5m net	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo
Bougainvillia sp.	-	-	-	-	-	-	-	-	0.01	0.02	-	0.01	-
Sarsia sp.	0.18	-	0.26	-	-	-	-	-	-	-	-	-	-
Amphinema sp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Leukartiara sp.	-	-	-	-	-	-	-	-	-	-	0.01	0.43	0.1
Obelia sp.	30.78	26.60	0.61	1.99	-	-	-	-	0.01	-	-	-	-
Aequorea sp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Liriope sp.	-	-	-	-	-	-	-	-	-	0.01	-	-	-
Hydromedusae	-	0.01	2.01	-	-	-	-	-	-	-	11.44	15.48	16.48
Siphonophora	-	-	-	-	-	-	-	-	0.05	0.09	0.16	0.16	-
Nausithoe sp.	-	-	-	-	-	-	-	-	0.01	0.01	0.83	2.71	2.44
Ceriantharia	1.04	2.62	-	-	P	P	-	-	-	-	-	3.32	6.59
Pleurobrachia pileus	-	-	-	-	-	-	-	-	-	-	-	0.10	-
Beroe ovata	-	-	-	-	-	-	-	-	-	-	-	0.01	-
Actinula-like larvae	-	-	0.08	-	-	-	-	-	-	-	0.04	0.06	0.04
Polynoidae	-	0.01	-	-	-	-	-	-	-	-	-	-	-
Tomopteris helgolandica	0.28	0.05	-	-	0.01	-	-	-	-	-	-	-	-
Syllidae	-	0.01	0.03	0.02	-	-	-	-	2.47	4.94	-	-	-
Polychaeta larvae	-	-	-	-	-	-	-	-	-	-	-	-	-
Polinices sp.	-	-	-	-	-	-	-	-	-	-	0.39	40.93	76.37
Limacina sp.	-	-	-	-	-	2.33	P	5.19	1.23	0.20	-	-	-
Pteropod	-	-	-	-	-	-	-	-	-	-	-	0.47	-
Gastropoda	-	P	0.08	-	-	-	-	-	0.25	-	0.20	4.42	-
Loliginidae	-	-	-	-	-	-	-	-	-	-	0.20	-	-
Trochophore	-	-	-	-	0.98	3.40	0.17	0.14	0.04	0.02	0.41	0.85	-
Squilla sp. larvae	-	-	-	-	-	-	0.39	0.68	-	-	-	-	-
Candacia armata	-	-	-	-	-	-	0.02	-	0.02	0.01	0.04	0.01	-
	-	-	-	-	-	-	-	-	-	P	-	-	-

Appendix Table 37. (cont.)

Coll. No.	TRT-74-033	TRT-74-033	TRT-74-064	TRT-74-064	TRT-74-075	TRT-74-075	DPS-74-041	DPS-74-041	TRT-74-117	TRT-74-117	TRT-74-126	TRT-74-140	TRT-74-149
Copepoda	-	-	-	-	-	-	-	-	-	-	(0.03)	(0.06)	-
Leptocuma minor	0.06	-	-	-	-	-	-	-	-	-	-	-	0.36
Oxyurostylis smithi	-	-	-	-	-	-	-	-	-	-	-	-	-
Edotea triloba	0.06	0.01	-	-	-	-	-	-	0.01	-	-	-	-
Idotea baltica	-	-	-	-	-	-	-	-	-	0.01	0.01	-	-
Idotea metallica	-	-	-	-	-	-	-	-	-	-	2.11	28.40	25.27
Hyperiidea	-	-	-	-	-	-	-	-	-	-	-	-	3.66
Mysidopsis bigelowi	0.08	0.13	-	-	-	-	-	-	-	-	0.59	-	-
Neomysis americana	-	-	0.26	-	-	-	0.78	-	-	-	-	-	-
Lucifer faxoni	-	-	-	-	-	-	-	0.01	-	-	-	-	-
Palaemonetes spp. zoeae	-	-	-	-	-	-	P	1.02	0.03	0.06	-	-	-
Lysmata sp. zoeae	0.56	0.49	-	-	-	-	-	-	-	-	-	-	-
Crangon septemspinosa zoeae	0.92	0.36	4.64	3.11	3.12	2.83	22.13	31.38	3.95	2.03	0.98	-	0.73
Naushonia crangonoides zoeae	-	-	-	-	-	-	0.02	0.01	-	-	-	-	-
Emerita talpoida zoeae	-	-	-	-	-	-	-	-	0.50	0.27	0.01	0.01	-
Pagurus spp. zoeae	-	-	0.08	-	-	-	10.87	9.89	1.23	1.74	0.20	-	0.36
Libinia sp. zoeae	-	-	-	-	-	-	-	-	-	-	0.20	-	-
Cancer sp. zoeae	0.86	0.95	27.77	23.66	22.25	16.42	1.55	1.70	-	-	-	-	-
Cancer sp. megalopae	-	-	-	-	11.91	16.42	0.56	0.42	-	-	-	-	-
Callinectes sp. zoeae	-	-	-	-	-	-	-	-	0.99	0.74	1.39	-	0.18
Callinectes sp. megalopae	-	-	-	-	0.01	0.01	-	0.01	0.01	0.04	0.05	0.37	-
Ovalipes sp. zoeae	-	-	-	-	-	-	12.03	12.96	0.25	0.49	0.20	-	-
Xanthidae zoeae	-	-	-	-	-	-	-	-	0.25	-	-	0.37	-
Uca spp. zoeae	-	-	-	-	-	-	4.27	4.43	0.25	-	-	-	-
Brachyura zoeae	-	-	-	-	-	-	9.70	9.21	-	-	-	-	0.18
Brachyura megalopae	-	-	-	-	-	-	-	-	-	-	-	-	0.36
Crustacea	-	-	-	-	-	-	0.02	-	-	-	-	-	-
Sagitta elegans	4.96	6.13	11.91	0.29	19.13	17.55	0.20	0.44	-	-	-	-	-
Sagitta enflata	-	-	-	-	-	-	-	-	0.05	0.05	0.47	6.26	34.25
Sagitta tenuis	-	-	-	-	-	-	-	-	-	-	-	0.01	0.15
Sagitta sp.	-	-	-	-	-	-	53.96	51.16	-	-	63.14	59.70	102.19
Brachiolaria	-	-	-	-	-	-	-	P	-	-	0.20	-	0.55
Doliolum nationalis	-	-	-	-	-	-	10.87	12.96	40.30	52.67	40.64	99.56	2.38
Thalia democratica	-	-	-	-	-	-	-	-	195.10	234.60	-	-	-
Total Macrozooplankton	39.78	37.37	47.73	29.07	57.41	56.63	129.87	136.42	250.97	299.03	124.11	263.64	272.55

*P = Present

Appendix Table 38. Macrozooplankton (#/m³) collected 2.5 nautical miles ESE of Brant Beach in 1974.

Location	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach	Off Brant Beach
Zone	4340	4340	4340	4340	4340	4340	4340	4340	4340	4340	4340	4340
Depth (feet), water	50	40-45	40-45	55	55	-	-	53-55	-	54-58	56-60	55
Type of tow	3 step oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique	Port oblique	Oblique	Oblique	Oblique
Coll. No.	TRT-74-031	TRT-74-066	TRT-74-066	TRT-74-073	TRT-74-073	DPS-74-039	DPS-74-039	TRT-74-115	TRT-74-115	TRT-74-128	TRT-74-142	TRT-74-147
Date	25 March	8 May		5 June		8 July		2 August		9 September	7 October	4 November
Hour	0920	1429		1020		1106		0900		1708	1620	1000
Tide	High	Ebb 2		Ebb 1		High		Ebb 1		Ebb 2	Ebb 2	Flood 2
Boat Heading (degrees)	45	235		45		45		45		45	45	45
Air Temp. (C)	-0.5	14.0		18.0		27.0		26.0		22.0	19.0	16.3
Temp. (C), surface	5.0	11.0		17.0		22.5		23.0		21.3	16.5	15.0
bottom	4.0	10.5		15.5		16.5		18.0		20.5	16.5	15.0
Sal. (ppt), surface	30.0	29.5		28.0		30.0		30.0		30.0	30.0	30.0
bottom	30.0	30.0		30.0		30.0		30.0		29.5	31.0	30.5
Oxygen (ppm), surface	12.0	10.4		11.1		5.5		8.0		7.0	9.5	6.4
bottom	11.2	8.8		9.4		5.0		4.8		6.4	10.0	6.2
Secchi (feet)	17.0	13.0		11.0		27.0		40.0		40.0+	12.0	26.0
Volume sampled (m ³)	164.2	69.8	73.9	128.3	132.1	57.7	61.8	82.7	82.7	118.8	87.7	104.0
Gear	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo
Bougainvillia sp.	-	-	-	-	-	-	-	-	-	-	0.45	-
Obelia sp.	21.10	0.33	1.22	-	-	-	-	-	-	-	-	-
Aequorea sp.	-	-	-	-	-	-	-	-	-	-	-	-
Liriope sp.	-	-	-	-	-	-	-	0.02	-	-	-	-
Hydromedusae	-	2.66	16.03	-	-	-	-	0.13	0.09	10.14	1.78	15.43
Siphonophora bracts	-	-	-	-	-	-	-	P	P	1.19	0.03	2.23
Siphonophora	-	-	-	-	-	-	-	-	P	P	-	P
Nausithoe sp.	-	-	-	-	-	-	-	-	0.03	P	0.68	0.01
Ceriantharia	1.55	-	-	-	-	-	-	-	-	-	1.71	1.87
Pleurobrachia sp.	-	-	-	-	-	-	-	-	-	-	-	-
Beroe ovata	-	-	-	-	-	-	-	-	-	-	0.02	-
Polynoidae	0.09	-	-	-	-	-	-	-	-	-	0.02	0.01
Tomopteris helgolandica	0.02	-	-	-	-	-	-	-	-	-	-	-
Syllidae	-	-	-	0.01	-	-	-	0.30	0.77	-	-	-
Polychaeta larvae	0.18	-	-	-	-	P	0.11	-	-	-	-	-
Polychaeta	-	-	0.30	-	-	-	-	-	0.30	0.89	1.14	8.22
Polinices sp.	-	-	-	-	-	0.78	0.21	-	-	0.59	-	-
Limacina sp.	-	-	-	-	-	-	-	-	-	-	-	-
Gastropoda	-	1.35	0.81	-	-	-	-	-	-	-	0.11	-
Heteropoda	-	-	-	-	-	-	-	0.01	-	0.89	-	-
Loliginidae	-	-	-	-	-	-	-	-	-	-	-	-
Trochophore	-	-	-	1.24	3.43	-	-	-	-	0.01	-	-
Candacia armata	-	-	-	-	-	-	-	-	-	-	-	-
Caligus sp.	-	-	-	-	0.01	-	-	-	P	-	(0.11)	-
Copepoda	-	-	-	-	-	-	-	-	-	(0.01)	-	-
										(0.02)	-	-

Appendix Table 38. (cont.)

Coll. No.	TRT-74-031	TRT-74-066	TRT-74-066	TRT-74-073	TRT-74-073	DPS-74-039	DPS-74-039	TRT-74-115	TRT-74-115	TRT-74-128	TRT-74-142	TRT-74-147
Squilla sp. larvae	-	-	-	-	-	-	-	-	-	0.02	-	-
Lironeca ovalis	-	-	-	-	-	-	-	-	-	-	0.01	-
Idotea metallica	-	-	-	-	-	-	-	0.05	-	-	-	-
Hyperidea	-	-	-	-	-	-	-	-	-	4.53	2.28	0.72
Gammarus annulatus	-	-	-	-	-	-	-	-	0.13	-	-	-
Neomysis americana	-	0.01	-	2.49	2.02	3.90	5.82	1.21	1.21	-	-	-
Euphausiacea	-	-	-	-	0.01	-	-	-	-	-	-	-
Lysmata sp. zoeae	0.01	-	-	-	-	-	-	-	-	-	-	-
Palaemonetes spp. zoeae	-	-	-	-	-	0.17	0.11	0.91	0.06	-	-	-
Crangon septemspinosa zoeae	0.51	-	1.12	23.49	16.95	6.76	7.98	2.42	3.32	-	0.68	0.56
Callinassa sp. zoeae	-	-	-	-	-	-	-	0.01	-	-	-	-
Upogebia sp. zoeae	-	-	-	-	-	-	-	0.60	-	-	-	-
Pagurus spp. zoeae	-	-	-	0.62	5.25	2.69	5.07	1.81	3.62	0.29	0.23	-
Emerita talpoida zoeae	-	-	-	-	-	0.35	0.53	0.23	0.13	-	-	0.01
Libinia sp. zoeae	-	-	-	-	-	0.17	0.68	-	-	1.49	0.23	-
Cancer sp. zoeae	0.33	3.42	5.38	33.67	32.90	-	-	-	-	-	-	-
Cancer sp. megalopae	-	-	-	9.35	12.31	0.14	0.13	-	-	-	-	-
Callinectes sp. zoeae	-	-	-	-	0.20	-	-	-	-	8.35	0.91	-
Callinectes sp. megalopae	-	-	-	0.07	0.04	-	-	-	-	-	0.05	-
Ovalipes ocellatus zoeae	-	-	-	0.41	0.20	0.60	0.32	-	-	3.30	-	-
Pinnothere sp. zoeae	-	-	-	-	-	-	-	-	-	-	0.23	-
Uca spp. zoeae	-	-	-	-	-	0.60	0.75	-	-	-	-	-
Brachyura zoeae	-	0.01	-	0.41	-	0.17	-	-	-	-	-	-
Brachyura megalopae	-	-	-	-	-	-	-	-	-	1.78	-	-
Sagitta elegans	0.21	1.37	2.03	12.68	20.59	-	-	-	-	-	-	-
Sagitta enflata	-	-	-	-	-	-	-	0.09	0.03	0.59	0.34	2.02
Sagitta sp.	-	-	-	-	-	4.16	18.23	2.11	3.32	-	38.65	1.73
Brachiolaria	-	-	-	-	-	-	0.11	-	-	14.31	-	-
Doliolum nationalis	-	-	-	-	-	0.62	0.63	19.34	39.60	22.65	12.54	-
Thalia democratica	-	-	-	-	-	-	-	250.00	248.50	-	-	-
Total macrozooplankton	24.00	9.15	26.89	84.44	93.91	21.11	40.68	279.24	301.11	71.02	62.09	32.81

* P = present

Appendix Table 39. Macrozooplankton (#/m³) collected 8.0 nautical miles ESE of Brant Beach.

Location	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach	Offshore Brant Beach
Zone	4940	4940	4940	4940	4940	4940	4940	4940	4940	4940	4940	4940	4940
Depth (feet), water	55	50-53	-	57	-	-	-	76	-	76-77	-	76	73
Type to tow	3 step oblique	Star oblique	Star oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique	Port oblique	Star oblique	Port oblique	Oblique	Oblique
Coll. No.	TRT-74-032	TRT-74-065	TRT-74-065	TRT-74-074	TRT-74-074	DPS-74-040	DPS-74-040	TRT-74-116	TRT-74-116	TRT-74-127	TRT-74-127	TRT-74-141	TRT-74-148
Date	25 March	8 May	-	5 June	-	8 July	-	2 August	-	9 September	-	7 October	4 November
Hour	1024	1250	-	1140	-	1250	-	1010	-	1550	-	1510	1119
Tide	Ebb 1	Ebb 2	-	Ebb 2	-	Ebb 1	-	Ebb 1	-	Ebb 1	-	Ebb 2	Ebb 1
Boat Heading (degrees)	45	235	-	225	-	45	-	235	-	45	-	45	45
Air Temp. (C)	-1.0	14.5	-	19.0	-	29.0	-	27.2	-	24.0	-	19.5	18.0
Temp. (C), surface	4.5	11.0	-	16.5	-	23.0	-	23.5	-	22.0	-	17.0	15.0
Temp. (C), bottom	5.0	10.2	-	14.2	-	16.1	-	17.5	-	22.0	-	16.8	15.0
Sal. (ppt), surface	30.0	31.0	-	29.0	-	30.0	-	30.0	-	30.0	-	30.0	30.5
Sal. (ppt), bottom	30.0	31.0	-	29.0	-	30.0	-	30.1	-	30.5	-	32.0	30.5
Oxygen (ppm), surface	8.6	9.8	-	10.7	-	7.4	-	8.3	-	6.6	-	8.4	7.0
Oxygen (ppm), bottom	8.4	8.0	-	8.6	-	5.3	-	6.3	-	6.0	-	8.8	6.8
Secchi (feet)	21.0	34.0+	-	16.0	-	40.0+	-	73.0+	-	40.0+	-	36.0+	32.0+
Volume sampled (m ³)	168.4	79.4	82.3	129.9	132.8	39.3	48.4	90.8	90.8	97.2	97.2	65.2	73.4
Gear	0.5m net	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo	0.1m ² Bongo
Bougainvillia sp.	-	-	-	-	-	-	-	0.03	0.03	-	P	-	-
Amphinema sp.	-	-	-	-	-	-	-	-	-	-	P	-	-
Obelia sp.	98.72	12.37	-	-	-	-	-	-	-	-	-	0.78	0.68
Aequorea sp.	-	-	-	-	-	-	-	-	P	-	-	-	-
Liriope sp.	-	-	-	-	-	-	-	0.02	0.01	-	-	-	-
Hydromedusae	-	3.78	-	-	-	-	-	0.03	-	9.77	8.40	5.75	57.22
Siphonophora bracts	-	-	-	-	-	-	-	-	0.03	0.04	-	0.07	-
Siphonophora	-	-	-	-	-	-	-	P	P	P	-	P	-
Nausithoe sp.	-	-	-	-	-	-	-	-	2.20	0.77	1.71	2.37	1.36
Ceriantharia	0.24	-	-	P	P	-	-	-	-	-	-	-	11.24
Beroe ovata	-	-	-	-	-	-	-	-	-	0.51	0.68	0.43	-
Ctenophora	-	-	-	-	-	-	-	-	-	1.05	0.09	0.02	-
Tomopteris helgolandica	0.25	-	-	-	-	-	-	-	P	-	-	-	-
Syllidae	-	-	0.01	-	-	-	-	14.32	11.66	-	-	-	-
Polychaeta larvae	-	2.64	-	-	-	-	-	-	-	-	-	-	-
Polinices sp.	-	-	-	-	-	-	-	-	-	0.51	0.19	-	10.90
Limacina sp.	-	-	-	-	-	8.90	10.85	P	-	P	-	-	2.04
Pteropod	-	-	-	-	-	-	-	-	-	-	-	0.07	0.34
Gastropoda	-	12.28	12.39	-	-	-	-	0.38	2.27	0.07	0.77	11.88	0.03
Heteropoda	-	-	-	-	-	-	-	-	-	-	0.77	-	-
Loliginidae	-	-	-	-	-	-	-	0.08	P	-	0.02	-	-
Trochophore	-	-	-	P	P	P	0.33	0.38	0.37	P	0.51	0.07	0.01
Candacia armata	-	-	-	-	P	-	(0.31)	(18.72)	(24.96)	(0.51)	(2.23)	-	(0.68)
Copepoda copepoda	-	-	-	-	-	-	-	-	-	-	(0.06)	P	-
Squilla sp. larvae	-	-	-	-	0.01	-	-	0.13	0.01	0.08	0.15	0.02	0.01

Appendix Table 39. (cont.)

Coll. No.	TRT-74-032	TRT-74-065	TRT-74-065	TRT-74-074	TRT-74-074	DPS-74-040	DPS-74-040	TRT-74-116	TRT-74-116	TRT-74-127	TRT-74-127	TRT-74-141	TRT-74-148
Idotea metallica	-	-	-	-	-	-	-	0.03	0.03	0.01	P	-	-
Hyperideia	-	-	-	-	-	-	-	-	-	3.60	2.23	87.80	55.50
Gammarus annulatus	-	-	-	-	-	-	-	0.15	-	-	-	-	-
Mysidopsis bigelowi	0.03	-	-	-	-	-	-	-	-	-	-	-	5.11
Neornysis americana	0.18	-	0.12	-	-	-	0.31	-	1.47	0.51	-	-	-
Euphausiacea	-	-	-	0.05	0.06	-	-	-	-	-	-	-	-
Lucifer faxoni	-	-	-	-	-	-	-	-	-	0.02	0.04	0.06	-
Lysmata sp. larvae	0.61	-	-	0.01	-	-	-	-	-	-	-	-	-
Palaemonetes spp. zoeae	-	-	-	-	-	P	P	0.36	2.33	-	-	-	-
Crangon septemspinosa zoeae	1.19	0.19	0.36	11.08	8.43	25.44	18.60	3.59	5.14	1.03	1.03	-	-
Emerita talpoida zoeae	-	-	-	-	-	-	-	0.26	0.04	0.02	0.03	-	0.01
Pagurus spp. zoeae	-	0.19	-	-	-	1.91	0.31	-	-	-	-	-	-
Cancer sp. zoeae	2.25	11.33	13.60	23.71	26.30	6.36	0.93	-	-	-	-	-	-
Cancer sp. megalopae	-	-	-	18.47	16.87	-	0.41	0.12	0.06	-	-	-	-
Callinectes sp. zoeae	-	-	-	-	-	2.54	-	-	P	8.74	7.54	1.91	-
Callinectes sp. megalopae	-	-	-	0.01	-	-	-	0.03	-	0.04	P	0.02	-
Ovalipes ocellatus zoeae	-	-	-	-	-	3.81	5.27	0.05	2.21	-	-	1.53	-
Ovalipes ocellatus megalopae	-	-	-	-	-	-	-	-	-	0.02	0.02	-	-
Uca spp. zoeae	-	-	-	-	-	1.27	2.79	-	-	-	-	-	-
Brachyura zoeae	-	-	-	-	-	-	3.72	-	P	-	-	-	-
Brachyura megalopae	-	-	-	-	-	-	-	-	-	-	0.18	-	-
Actinotroch	-	0.19	0.24	-	-	-	-	-	-	-	-	-	-
Sagitta elegans	3.50	7.75	6.44	46.19	52.20	62.97	28.82	35.24	47.72	98.25	85.39	71.32	48.36
Sagitta enflata	-	-	-	-	-	-	-	0.15	P	0.95	1.03	4.60	15.67
Sagitta serratodentata	-	-	-	-	-	-	-	0.09	P	-	-	-	-
Sagitta tenuis	-	-	-	-	-	-	-	-	-	-	-	0.10	0.05
Brachiolaria	-	-	-	-	-	-	-	-	-	2.31	3.94	-	-
Doliolum nationalis	-	-	-	-	-	73.79	27.58	123.34	168.13	179.01	122.90	177.90	2.38
Thalia democratica	-	-	-	-	-	-	-	342.50	488.99	0.26	-	-	-
Brachyura megalopae	-	-	-	-	-	-	-	-	-	-	0.18	-	-
Total Macrozooplankton	106.97	50.72	33.16	99.52	103.87	186.99	100.23	521.28	732.70	307.57	237.62	366.70	210.91

* P = Present