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ECOLOGICAL STUDIES FOR THE  
OYSTER CREEK GENERATING STATION

Progress Report for the Period September 1975 - August 1976

VOLUME TWO

PLANKTON

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## INTRODUCTION

The Oyster Creek Generating Station (OCGS) of Jersey Central Power and Light Co. is a 620 MWe boiling water reactor which has been in commercial operation since December 1969. It is located 3.2 km inland from Barnegat Bay in Lacey Township, New Jersey. The south branch of Forked River and Oyster Creek have been modified as intake and discharge canals, respectively (Fig. 1). When OCGS is in operation, the flow in the south branch of Forked River is always upstream toward OCGS and the flow in Oyster Creek is always downstream toward Barnegat Bay. Tidal range at the mouth of Oyster Creek is 0.15 m (U. S. Atomic Energy Commission, AEC 1974).

Barnegat Bay is a relatively large (surface area 16,714 ha), shallow (average depth 1.5 m) estuary (AEC 1974). Interchange of water between the Atlantic Ocean and the Bay is limited and occurs primarily through the narrow Barnegat Inlet (Makai 1973, Carpenter 1963). Normal tidal range in Barnegat Bay is 0.3 m (Makai 1973).

Samples were taken primarily in the middle portion of Barnegat Bay from Cedar Creek in the north to Gulf Point in the south. The eastern part of the study area contains extensive shoal areas (depth 0.2 -0.9 m); most collections were taken in the deeper (1.2-3.7 m) central and western Bay.

Several studies of Barnegat Bay and OCGS have been conducted. The physico-chemical parameters of Barnegat Bay have been reported by Makai (1973) and in volume one of this document. Wurtz (1965, 1971) conducted brief studies of zooplankton and ichthyoplankton in limited portions of the Bay. Sandine (1973) studied the condition of microzooplankton entrained at OCGS. Loveland et al. (1966-1972, 1974) conducted studies of the benthic invertebrates and benthic algae;

this work was reviewed by Vouglitois (1976).

Since 8 September 1975, Ichthyological Associates, Inc. has conducted studies to determine and assess the biological impact of OCGS and has implemented a general ecological survey of Barnegat Bay, Oyster Creek, and Forked River. This document summarizes information collected from September 1975 through August 1976. Data from individual collections were presented previously (Ichthyological Assoc., Inc. 1976a, b; Tatham et al. 1977) and may be obtained at cost. Volume one covers the water quality program and investigations of fin- and shellfish populations, and volume two reports on microzoo-, macrozoo-, and ichthyoplankton investigations.

Microzooplankton was defined as planktonic invertebrates ( $< 500$  microns in length) that were retained in an 80-micron mesh net. Macrozooplankton was defined as planktonic invertebrates larger than 500 microns. Micro- and macrozooplankton included both organisms that were planktonic during their entire life cycle (holoplankton) and those that occurred in the plankton only periodically or during a portion of their life cycle (meroplankton). Emphasis was placed on forms designated as important species by the U. S. Nuclear Regulatory Commission (NRC). Important microzooplankton were the larvae of bivalves, blue crab, and polychaetes. Important macrozooplankton were the ctenophores Mnemiopsis leidyi and Beroe spp., the arrowworms Sagitta elegans and Sagitta spp., the sand shrimp Crangon septemspinosa, grass shrimp Palaemonetes spp., the mysids Neomysis americana and Mysidopsis bigelowi, polychaete epitokes and individuals  $< 1$  mm, and blue crab zoeae and megalopae. Important ichthyoplankton were the eggs and larvae of the Atlantic menhaden, bay anchovy, northern pipefish, and winter flounder. The common and corresponding scientific names used in this report for fishes and some invertebrates are given in Tables 1 to 3.

## ENTRAINMENT

Phillip H. Sandine, Kenneth A. Tighe, and Howard W. Hoffman

### Introduction

Zoo- and ichthyoplankton which pass through the cooling system of OCGS are subject to mechanical, hydraulic, thermal, and biocidal stresses. Studies were begun to determine the species composition, abundance, and biomass of entrained organisms; the magnitude of their entrainment; and their survival after passage through OCGS.

### Materials and Methods

From September through August, two consecutive oblique tows of both a 20- or 36-cm bongo sampler (505-micron mesh) and a 12.5-cm Clarke-Bumpus sampler (C-B) with a #20 net (80-micron mesh) were taken to determine the species composition, abundance, and condition of zoo- and ichthyoplankton entrained at OCGS. The C-B was used to collect microzooplankton. The 36-cm bongo sampler was always used to collect ichthyoplankton and was usually used to collect macrozooplankton. From March through May, the 20-cm bongo sampler was used occasionally to collect certain macrozooplankton for condition determinations when these forms and detritus were abundant. J. A. Posgay (National Marine Fisheries Service, Woods Hole; personal communication) found no significant difference among the catch of various sized bongos.

From September through December, collections were taken at the intake and discharge of both the dilution pumps and condensers (Fig. 2). In September, collections were taken twice a week, starting 2 h after sunset and every 2 weeks over a 24-h period at 6-h intervals. From October through February,



collections were taken once every 2 weeks, starting 2 h after sunset, and once a month over a 24-h period at 6-h intervals. From January through 3 March, however, collections were taken only at the intake and discharge of the dilution pumps because OCGS was shut down.

From 3 March when OCGS resumed operation through August, collections were taken at the intake and discharge of the condensers. Sampling at the dilution pump was discontinued because analysis of data from September through December indicated that the density of mysids collected at the condenser intake and at the dilution pump intake and discharge was not significantly different. Mortality of organisms entrained through the dilution pumps was negligible (Smith et al. 1976a). Collections were taken twice a week, starting 2 h after sunset, and every 2 weeks during four time periods over a 24-h interval. Period 1 was from sunrise to 6 h before sunset; period 2 was from 6 h before sunset to sunset; period 3A was from 2 h after sunset to 6 h after sunset; and period 4 was from 6 h after sunset to sunrise. Sampling during these time periods rather than at 6-h intervals assured that a series of collections was always taken in complete daylight or darkness.

After 3 March, collections with the C-B were taken at the condenser intake only if the condition of microzooplankton could be determined in condenser discharge collections. Ichthyoplankton collections were taken at the dilution pump discharge only when many individuals of an important form were collected live at the condenser intake.

The sampling gear was attached to a wire approximately 30 to 38 cm above a 27- to 45-kg weight. It was deployed and retrieved with a boom and a hand winch. Each tow sampled the entire water column at least twice. The volume of water sampled was determined with either a digital flowmeter (General Oceanics model 2030) centered in the mouth of the sampler or the flowmeter integral in the C-B.

Tow time was from 4 to 6 min for the bongos and from 1.5 to 2.5 min for the C-B. Tow time was shortened if excessive clogging of the net occurred or if organisms were extremely abundant.

As the sampler was removed from the water, the nets were gently rinsed on the outside with either low pressure water from a pump or water poured from buckets. The plankton buckets at the end of the nets were removed and immediately carried to the experimental trailer.

At the experimental trailer, C-B collections were poured into a glass dish. The dish was placed in a water bath which maintained organisms near ( $\pm 1$  C) the collection temperature. Collections were examined under a dissecting microscope, and the condition of both important forms and other abundant microzooplankton was determined. Examination time did not exceed 15 min. Specimens were considered live if they showed normal motility and dead if they showed no motility even when stimulated. Damaged specimens showed some movement (e.g. respiratory function or muscle spasms) but not normal motility. Determinations were possible only when microzooplankton were abundant, and both phytoplankton abundance and detrital load were low enough to permit observations of individuals. After examination, samples were preserved in buffered 5% formalin.

Bongo collections were placed in the water bath in a glass dish, and the condition of most macrozoo- and ichthyoplankton was determined by examination of samples under a magnifying lens. If organisms were abundant, half of the collection was examined. The condition of unpreserved fish eggs was impossible to determine because eggs were usually transparent. Examination time generally did not exceed 15 min. Samples were subsequently preserved in buffered 5% formalin. Ctenophores were identified and counted before preservation.

In the lab, microzooplankton collections were concentrated to a known volume and subsampled with a 1-ml Stempel pipette. The subsample was placed

in a Sedgwick-Rafter cell, and organisms were identified and enumerated under a compound microscope. A minimum of two subsamples was processed.

In collections from the condenser discharge, all microzooplankton were identified to the lowest possible taxon. Forms designated as life stage no determination were adults and juveniles. The bivalves Aequipecton irradians, Crassostrea virginica, M. mercenaria, Modiolus demissus, Mulinia lateralis, Tellina spp., and Teredinidae were identified as either the straight-hinge or umbo life stage. Straight-hinge larvae  $< 80$  microns were not identified to species because of taxonomic difficulties. These small larvae and all other bivalves were designated as class Bivalvia and identified to stage. At the condenser intake, only meroplankton were enumerated and identified. All bivalves were designated as class Bivalvia and classified to stage.

In the laboratory, all bongo collections were stained with Rose Bengal dye and later rinsed to remove formalin. When a sample contained few forms or relatively little detritus, the entire sample was examined under a dissecting microscope, and all macrozoo- and ichthyoplankton were removed. When organisms or detritus were abundant, the sample was poured into a shallow pan and examined for forms that were easily seen and removed (usually  $< 200$  individuals). Large ctenophore fragments and pieces of detritus were also removed. The sample was then split with a Folsom Plankton Splitter, and a fraction was examined under a dissecting microscope. If one or more forms of macrozooplankton were still abundant ( $> 100$  individuals), all other forms were removed, and the number of abundant forms was then estimated from a subsample drawn from the fraction with a 10-ml Stempel pipette. A minimum of two subsamples was taken, and at least 50 individuals of each abundant form were drawn from the fraction.

Biomass of macrozoo- and ichthyoplankton was determined with a Mettler H51 balance. Biomass of macrozooplankton was determined only for collections

from the condenser discharge. For small forms (i.e. polychaete larvae and decapod zoeae), weight was determined only if the biomass in the subsample was sufficient ( $\geq 0.1$  mg) to obtain an accurate weight.

Identification was made by reference to pertinent literature and by use of a voucher collection maintained in the laboratory. In collections from the condenser discharge, all macrozooplankton were identified to the lowest possible taxon. Forms designated as life stage no determination were adults and juveniles. At the condenser intake, all amphipods were grouped as unidentified Amphipoda; mud crab zoeae were grouped as Xanthidae zoeae; and all mysids were designated unidentified mysids. Although all engraulid larvae were identified as larvae of the bay anchovy, a few ( $< 1\%$ ) may have been larvae of the striped anchovy. Separation of the larvae ( $< 15$  mm) of these two anchovies is virtually impossible.

A Hewlett-Packard 9830A programmable calculator was used for data compilation and most statistical analyses. One- and two-way analyses of variance (ANOVA) were used to test for differences in the density of an individual form among stations and months. For day-night samples from the 24-h period, a three-way ANOVA was used to test for differences in density among months, time of day (day-night), and station. The significance level was the 95% level ( $P \leq 0.05$ ).

ANOVA were used only for relatively common or important forms. Prior to analysis, data were transformed by a  $\ln(X+1)$  transformation. This transformation can reduce skewness, which has marked effects on the significance level of F-tests; approximate normality; and make variances homogeneous (Sokal and Rohlf 1969). When significant differences were indicated, the LSD multiple range test was used to determine significant differences among the means of the main effects (Snedecor and Cochran 1967).

If interaction effects were present, the data were examined to determine the cause of the interaction but the significance of the main effects involved in significant interactions was not considered (Sokal and Rohlf 1969).

A chi-square test was used to determine significant differences between mortality of ichthyoplankton collected at the condenser intake and discharge.

The mean number of microzoo-, macrozoo-, and ichthyoplankton entrained per day during each month was determined from all collections taken during that month. The mean number entrained per day during each month times the number of days per month was used to estimate the total number entrained per month. The sum of the number entrained during each month was the estimate of annual entrainment.

## Results and Discussion

### Microzooplankton

Ninety-one forms of microzooplankton, including several life stages of a particular genus or species, were collected at the discharge of either the condensers or the dilution pump (Tables 4, 5). The mean density of the total number of organisms for the year was  $74,452/\text{m}^3$ . Fifteen forms composed more than 95% of the total assemblage. The most abundant larval forms included copepod nauplii, barnacle nauplii, Acartia spp. copepodids, and polychaete larvae. The most numerous adults were rotifers; the calanoid copepods Acartia clausi, A. tonsa, and Oithona colcarva (brevicornis); and harpacticoid copepods.

The seasonal distribution of abundant forms indicated two major periods

of abundance during the year (Tables 6, 7). The highest density of all forms ( $211,834/\text{m}^3$ ) occurred in February and was due to the high density of rotifers ( $124,741/\text{m}^3$ ) and copepod nauplii ( $72,270/\text{m}^3$ ). Density decreased greatly in March because rotifers declined. The second highest density occurred in April and resulted from large numbers of copepod and barnacle nauplii. The lowest density of all forms occurred in November.

Holoplankton were the dominant forms; meroplankton were abundant from April through August. Copepod nauplii were the most abundant form during every month except September, December, and February when rotifers were the most abundant form. Barnacle nauplii were most abundant during April and May. The dominance of various life stages of copepods and rotifers and of barnacle nauplii was similar to other estuaries from Massachusetts to Virginia (Deevey 1956, 1960; Anraku 1964; Jeffries 1964; Martin 1965; Herman et al. 1968; Williams et al. 1968; Sage and Herman 1972; Sandine and Swiecicki 1975).

Acartia clausi and A. tonsa were the dominant copepods in Barnegat Bay and in other estuaries from Massachusetts to Virginia (Conover 1956; Deevey 1960; Jeffries 1962, 1967). From September through November, Acartia spp. copepodids and A. tonsa adults were the dominant copepods in Barnegat Bay. In December the density of A. tonsa and A. clausi adults was similar, and from January through May, A. clausi was the dominant adult copepod. From June through August, A. tonsa again became dominant. This seasonal succession of these species has been reported by Conover (1956), Deevey (1960), and Jeffries (1962, 1967).

Two other important copepod forms, Oithona spp. copepodids and adults of Oithona colcarva (brevicornis), were abundant during October, November, July, and August.

Bivalve larvae (hinge and umbo) were abundant in April and August. During the whole year, some 71% of all larval bivalves were unidentified. Mulinia lateralis comprised 16%, M. mercenaria 8%, Aequipecten irradians 4%, and the remaining species 1% or less of the total number of bivalves. Many of the unidentified bivalves were impossible to identify to species, and this category undoubtedly contained some larvae of species which were identified.

Polychaete trochophores and larvae were abundant from September through November and from April through August. Gastropod larvae were abundant from May through August.

A one-way ANOVA was computed to determine differences in the monthly density of 13 abundant forms collected at the condenser discharge from April through August. Data from the other months were not included because they contained an insufficient number of samples to achieve a balanced design. Significant monthly differences were indicated for several forms. However, one month or group of months was not distinctly different from the other months.

A two-way (month x day-night) ANOVA was used to determine differences in density between day and night collections of the total number of organisms and 12 abundant forms at the condenser discharge. No significant day-night differences existed for any form collected from September through March. From April through August, significant day-night differences were found only for the total number of organisms. The mean density was greater during the day (Fig. 3). This difference resulted, in part, from the greater density of barnacle nauplii during the day in April and May and of copepod nauplii during the day in April. Lauer et al. (1974) found no

day-night differences in species composition and abundance of microzooplankton in the Hudson River.

The mean number of microzooplankton entrained per day, with confidence limits, was estimated for each month (Table 8). The estimates were computed using only night collections because day-night difference in density at the condenser discharge was not significant. The total number of forms entrained ranged from  $8.7 \times 10^9$ /day in October to  $5.4 \times 10^{11}$ /day in February. The mean number entrained per day for each month closely followed the seasonal distribution of microzooplankton density from condenser discharge collections. The confidence intervals were wide because the distribution of some forms was patchy both spatially and temporally. Based on the daily entrainment rates from May through August and the percentage of bivalve larvae which were identified as Mulinia lateralis (16%), an estimated  $1 \times 10^9$  to  $2 \times 10^9$  straight-hinge M. lateralis larvae were entrained per week. This was slightly less than the  $9 \times 10^9$  straight-hinge M. lateralis that the AEC (1974) predicted would be entrained per week when the ambient temperature exceeded 20 C.

The number of important and abundant forms entrained at OCGS during the year was determined from the daily estimated entrainment (Table 9). An estimated  $6 \times 10^{13}$  copepod nauplii,  $1.7 \times 10^{13}$  rotifers, and  $5.5 \times 10^{12}$  barnacle nauplii were entrained. For important forms, an estimated  $3.2 \times 10^{12}$  polychaete larvae,  $8.1 \times 10^{11}$  polychaete trochophores, and  $7.5 \times 10^{11}$  bivalve larvae (hinge and umbo) passed through OCGS.

Mortality studies to determine the condition of microzooplankton passed through the condensers were attempted but were discontinued in March 1976. Large amounts of detritus or phytoplankton in the sample and the small size of individual forms made observation of individual microzooplankton impossible.



Sandine (1973) determined the effect of entrainment at OCGS on some microzooplankton. Acartia clausi was the only copepod to show more than 20% mortality. Some 60% mortality occurred in June at a discharge temperature of 30 to 31 C ( $\Delta t = 10$  C). A. tonsa and Oithona colcarva (brevicornis), the dominant copepods in summer, experienced little ( $\leq 20\%$ ) mortality at discharge temperatures below 35 C. At a discharge temperature of 40.4 C, 80% mortality occurred. At discharge temperatures above 30 C, forms other than copepods were not collected in sufficient numbers to determine mortality.

Sandine (1973) also spawned the bivalve Mulinia lateralis in the laboratory. Various aged (0.25, 4, and 8 h) trochophores were exposed to temperatures of 27.5, 30.0, 32.5, and 35.0 C for 0.25 and 2 h. The youngest trochophores experienced some mortality at all time and temperature combinations. Generally, the youngest trochophores showed the greatest mortality at all temperatures. Larvae with shells (age 24 h) showed substantial (35%) mortality only when exposed to 35 C for 1 h.

#### Macrozooplankton

Some 166 forms of macrozooplankton, including various life stages of a particular genus or species, were collected (Tables 10, 11); 15 forms accounted for more than 85% of all macrozooplankton collected (Table 12).

The temporal distribution of abundant and important forms is summarized in Table 13, and the distribution of all macrozooplankton, by life stage, is presented in Table 14. Mysids, mud crab (Xanthidae) zoeae (early life stage of decapods), amphipods, and sand shrimp zoeae dominated collections from September through December 1975 and from March through August 1976 (Table 13). In January and February, mysids and the arrowworm

Sagitta elegans were dominant (Table 13).

Mysids were abundant ( $>100/\text{m}^3$ ) in March and common ( $1-100/\text{m}^3$ ) during all other months. Neomysis americana accounted for 94% of all mysids collected; Mysidopsis bigelowi and Heteromysis formosa were also collected. N. americana accounted for 80% of the mysids collected in Indian River Inlet, Delaware (Hopkins 1965).

Amphipods were common in September and from March through August. The dominant species were Ampelisca spp. (30% of all amphipods), Jassa falcata (26%), Microdeutopus gryllotalpa (16%), and Corophium spp. (8%). Mud crab zoeae were common from May through August. The dominant (92%) species was Neopanope texana sayi. Sand shrimp zoeae were common in December and from March through June. Arrowworms were common from January through March.

Gravid mysids, amphipods, and cumaceans were common in March and from June through August. Polychaete and ceriantharia larvae were common from December through May. Zoeae were abundant in May and June and were common in September, December, March, April, July, and August. Grass shrimp zoeae were common from June through August. Cumaceans, primarily Leucon americanus and Oxyurostylis smithi, were common in September and from May through August.

Few blue crab zoeae were collected because most spawning occurs near inlets and in coastal waters. Crab megalopae (last larval stage of crabs), primarily those of the blue crab, were collected from June through November but were common only in September.

The ctenophore Mnemiopsis leidyi was common in September, July, and August but was not collected from November through March. Adult and

juvenile sand shrimp were common on some dates from January through March although their monthly mean density did not exceed  $1/m^3$ .

A three-way (month x station x day-night) ANOVA was computed for total macrozooplankton, mysids, amphipods, adult and juvenile sand shrimp, arrowworms, Nereis spp. epitokes, and zoeae of the sand shrimp, mud crabs, and grass shrimp. Significant interactions precluded analysis of the day-night and station differences. Comparison of mean densities, however, showed that all forms, except arrowworms, were at least three times more abundant at night (Table 12). Cumaceans, blue crab megalopae, and adult and juvenile grass shrimp were also more abundant at night. Caprellids, ctenophores, and arrowworms showed no obvious difference between the density in day and night collections.

The greater density of mysids, amphipods, isopods, cumaceans, and adult and juvenile bay shrimp in night collections apparently resulted, in part, from diel vertical migrations. Some benthic amphipods (Williams and Bynum 1972) and the sand shrimp (Herman 1963) migrate into the water column at night. Diel migration of mysids has been reported for both estuaries (Herman 1963; Hopkins 1965) and coastal waters (Sandine and Swiecicki 1975). Herman (1963) found that mature mysids migrated only during the spawning season while immature mysids migrated throughout most of the year.

A comparison of densities showed that some forms were more abundant in discharge collections and others more abundant in intake collections (Table 12). The lower density of the benthic and epibenthic amphipods and cumaceans in intake collections may have occurred because the bongo sampler did not sample the bottom 0.5 m of the water column. These forms would

generally be most numerous near or on the bottom. Immediately after passage through OCGS, however, these organisms were dispersed throughout the water column. Mysids, which are primarily epibenthic during daylight, were more abundant at the condenser discharge in all months except March. In March, the density of mysids was substantially greater at the intake on five of six sampling dates. Collections in the Bay suggested that mysids were more abundant in the water column during March than other months. This change in behavior may account, in part, for increased density of mysids in condenser intake collections. The density and the difference between intake and discharge collections during March were large enough that the yearly mean was greater at the intake.

Adult sand shrimp and large ctenophores were generally more abundant in intake collections. Although an estimated  $3.2 \times 10^6$  sand shrimp were impinged on the traveling screens, they comprised only 3% of the estimated  $1.0 \times 10^8$  adult and juvenile sand shrimp entrained when OCGS was in operation (Table 15). The confidence interval on the daily entrainment was large, but it is unlikely that the number removed by the traveling screens was large enough to markedly reduce the number of sand shrimp entrained. Some of the larger ctenophores were impinged on the traveling screens and were not entrained. Other large individuals were fragmented during passage through the screens and condensers. Whole ctenophores collected at the discharge were usually less than 20 mm in length.

Small forms (i.e. crab and bay shrimp zoeae, polychaete larvae, and ceriantharia larvae) were generally more abundant in intake collections. The greater current velocity at the discharge may have caused extrusion of some of the larvae through the net. The greater density of zoeae in

intake collections may also be an artifact of sampling. Data from the 24-h sampling periods indicated that density of zoeae tended to increase during the first half of the night (Table 16). Since most sampling began 2 h after sunset and the condenser discharge was always sampled first, the density of zoeae may have been lower when the discharge was sampled than when the intake was sampled about 1 h later.

The mean number of abundant and important macrozooplankton entrained during daylight and at night (12 h each) was estimated for each month (Table 17). Separate daylight and night estimates were computed because of day-night differences in abundance for most forms. The mean number entrained per day (24-h period) for each month closely followed the seasonal densities of organisms from condenser discharge collections. An estimated maximum of  $1.2 \times 10^8$  mysids per day (day and night combined) were entrained at OCGS during March. An estimated maximum of  $6.9 \times 10^7$  amphipods were entrained per day in July,  $2.4 \times 10^8$  sand shrimp zoeae per day in May, and  $1.8 \times 10^8$  mud crab zoeae per day in June. The wide confidence interval calculated for these estimates reflected the rapid changes in seasonal distribution and the patchy occurrence of many forms.

The number of important and abundant forms entrained at OCGS during the year was determined from the daily estimated entrainment (Table 15). An estimated  $1.5 \times 10^{10}$  mysids,  $1.2 \times 10^{10}$  mud crab zoeae,  $9.9 \times 10^9$  zoeae and  $1.5 \times 10^8$  adults and juveniles of the sand shrimp, and  $6.5 \times 10^7$  megalopae of the blue crab were entrained. Few zoeae of the blue crab were entrained.

The condition of important and abundant forms entrained at OCGS was determined (Table 18). The ambient temperature at the condenser intake was

generally 8 to 10 C lower than the discharge temperature (Table 19). Although zoeae of crabs and bay shrimp were abundant, their condition could not be determined because of their small size, the limited time available to examine the sample, and the large amounts of detritus which often obscured these forms. The condition of cumaceans and caprellids was also difficult to determine because they often remained motionless even when touched with a probe.

Qualitative observations indicated that zoeae of mud crabs and grass shrimp were relatively unaffected by entrainment. Many individuals showed normal behavior when collected at discharge temperatures above 35 C. Zoeae of the mud crabs, Neopanope texana sayi, Panopeus herbstii, and Rhithropanopeus harrissii have been reared successfully at  $30 \pm 2$  C and 30 C by Chamberlain (1961) and Costlow et al. (1962, 1966), respectively. Although Sandifer (1972) found that survival of zoeae of the grass shrimp Palaemonetes vulgaris maintained at  $30.6 \pm 0.5$  C was slightly less than those held at about 25 C, this difference was not significant.

Qualitative observations of sand shrimp zoeae indicated abnormal swimming behavior at discharge temperatures above 30 C. Regnault and Costlow (1970) reported that 63% of sand shrimp zoeae completed development at 20 C but only 2.6% developed completely at 25 C. No zoeae survived beyond 24 h at a temperature cycle from 25 to 30 C.

Condition of arrowworms was not determined quantitatively. Condition was difficult to determine because arrowworms often would not swim unless repeatedly touched with a probe. Qualitatively, more individuals with bent bodies were observed in condenser discharge collections. This damage, however, may be attributable in part to the greater current velocity in the

condenser discharge which may have caused increased net mortality.

Mysids collected at discharge temperatures below 30 C had little (0-3%) additional mortality than those collected at the condenser intake (Table 18). Those collected from April through June apparently had a greater resistance to discharge temperatures above 30 C than those collected in September, July, and August. At a discharge temperature from 30 to 32.5 C the percentage of dead mysids was 1 to 3% from April through June and 65 to 70% in July and August. At a discharge temperature of 32 to 34.9 C, the percent of dead mysids was 6% in June, 98% in July, 79% in August, and 98% in September. At discharge temperatures above 35 C, 82 to 100% of the mysids were dead.

At Indian Point Nuclear Generating Station on the Hudson River, Lauer et al. (1974) found approximately 40% mortality of entrained Neomysis americana at a discharge temperature of 32.3 to 33.3 C ( $\Delta t = 7.3 - 7.9$  C) but little mortality at discharge temperatures below 31 C. Salinity in the River was usually below 10 ppt. Mihursky and Kennedy (1967) found that N. americana acclimated to 25 C had 100% mortality when exposed for 24 h to a temperature of approximately 32.5 C.

Adult and juvenile sand shrimp had 20% or less mortality at discharge temperatures below 30 C (Table 18). At a discharge temperature from 30 to 32.5 C, mortality ranged from 20 to 92%; from 32.6 to 34.9 C mortality ranged from 0 to 100%; and above 35 C, 77 to 100% were dead. The wide range in mortality resulted, in part, from the small number of individuals examined. Mihursky and Kennedy (1967) found that sand shrimp acclimated to 15 C suffered 100% mortality when exposed to a temperature of 30 C for 24 h.

Few adult and juvenile grass shrimp were collected. At discharge temperatures below 35 C their mortality ranged from 0 to 33% (Table 18). At discharge temperatures above 35 C, the mean mortality was 100% in June and July and 67% in August.

Amphipods were unaffected (<5% mortality) by entrainment at discharge temperatures below 35 C from April through July (Table 18). In August, however, 36.5% of the amphipods collected from 30 to 34.9 C were dead. At discharge temperatures above 35 C, the mean mortality was 36% in June and July and 65% in August. Bongers et al. (1975) found greater mortality of amphipods in the upper Potomac River (salinity <15 ppt) during August than in May and June.

Epitokes of Nereis spp. had 54 to 63% mortality at a discharge temperature of 30 to 35 C in April and May but had substantially less (0 - 20%) mortality from June through August (Table 18). Epitokes collected from June through August at temperatures above 35 C also had low (6 - 15%) mortality. This lower mortality may reflect acclimation to a higher temperature or an increase in thermal tolerance.

Blue crab megalopae showed little immediate effect from entrainment (Table 18). Fourteen specimens were collected from April through August at a discharge temperature from 30 to 34.9 C, and none were dead or damaged. Of the 246 individuals examined in September and October, none were dead and only one was damaged.

Many of the ctenophores Mnemiopsis leidyi and Beroe spp. examined from condenser discharge collections were fragmented although small ( $\leq 20$  mm) individuals, especially Beroe spp., were collected without obvious damage. This fragmentation probably resulted from mechanical stresses of impact on the traveling screens and passage through the OCGS



cooling system. Bongers et al. (1975) also found significant damage to and fragmentation of ctenophores entrained through an electrical generating station on the Potomac River.

Most of the mortality of macrozooplankton entrained at OCGS was apparently thermally induced. Mortality as great as 100% was found for some forms at a discharge temperature from 30 to 35 C. At temperatures above 35 C, most forms examined suffered 50 to 100% mortality.

Biocidal and mechanical effects appeared minimal as mortality of macrozooplankton was generally low at discharge temperatures below 30 C. Only large, soft-bodied ctenophores suffered obvious mechanical damage. Measurements of total chlorine in the condenser discharge were low and generally ranged from 0 to 0.05 ppm. Bongers et al. (1975) found no significant difference between the entrainment mortality of mysids exposed to 0 and 0.5 ppm chlorine.

#### Ichthyoplankton

Yearly mean densities of ichthyoplankton collected from September through August are given in Table 20. The major periods of entrainment occurred from May through September and from December through April.

From May through September, the eggs and larvae of the bay anchovy were the dominant ichthyoplankton (Table 21). Bay anchovy larvae comprised 64% of the larvae collected from May through September. They were taken in low numbers during May, increased in abundance during June, reached a maximum density of  $10.17/\text{m}^3$  in early July, and remained numerous through August. Larvae were still numerous ( $1.89/\text{m}^3$ ) in September and gradually decreased in abundance through December. Many of the bay anchovy collected after September were juveniles.

Bay anchovy eggs comprised 98% of all eggs collected from May through September. They were first taken during April in low numbers ( $0.03/\text{m}^3$ ). Their density increased to a maximum of  $168.27/\text{m}^3$  in June, remained high through July, and gradually decreased during August.

Goby (Gobiosoma spp.) larvae were the second most abundant ichthyoplankton and comprised 30% of the larvae collected from May through September (Table 21). They were first taken during April in low numbers ( $<0.01/\text{m}^3$ ) and gradually increased in abundance to a density of  $4.79/\text{m}^3$  in June. They remained relatively abundant through July and August and were also numerous during September and October 1975.

Other larvae and juveniles consistently present in low numbers from May through August included, in decreasing order of abundance, young of the northern pipefish, atherinid larvae, blenniid larvae, and northern puffer larvae (Table 21). Other eggs consistently collected during this period included those of the tautog, cunner, and hogchoker. Larvae and young taken in low numbers from October through December included those of the Atlantic menhaden, Atlantic croaker, and summer flounder.

The second period of abundance occurred from December through April. The most abundant ichthyoplankton were the larvae of the sand lance and winter flounder (Table 21). Sand lance larvae were the only abundant ichthyoplankton collected during January when their greatest monthly density ( $1.93/\text{m}^3$ ) occurred. Their number gradually decreased through April. Winter flounder larvae first appeared in low numbers ( $0.14\text{-}0.30/\text{m}^3$ ) during February, were most abundant ( $1.65\text{-}2.65/\text{m}^3$ ) in March, and decreased in abundance through April. By mid-April, most larvae had metamorphosed and were demersal.

The only other larvae consistently collected from December through April were elvers of the American eel. They were first collected in January and were taken in low numbers through July. Elvers were most abundant ( $0.55/\text{m}^3$ ) in March.

The seasonal abundance and species composition of ichthyoplankton entrained at OCGS were similar to those reported in estuaries from Long Island Sound to Chesapeake Bay (Croker 1965, Dovel 1967, Scotton 1970, Swiecicki 1976, Perlmutter 1939, Richards 1959, Wheatland 1956). The dominance of the eggs and larvae of the bay anchovy was typical of these estuaries. The low number of eggs and larvae of the Atlantic menhaden reflected both the general decline of the Atlantic menhaden populations in the New York Bight and its tendency to spawn in offshore waters (Nicholson 1972). Although the Atlantic menhaden was common in Barnegat Bay, most of the population were immature. Few larvae of anadromous fishes were collected because of limited sampling in fresh and low salinity water. The abundance of goby larvae was similar to some mid-Atlantic estuaries (Massman et al. 1963, Dovel 1967) although other workers found few larvae (Croker 1965).

Three-way (month x station x day-night) ANOVA were computed for collections taken during the 24-h periods. Two-way (month x station) ANOVA were computed for collections taken 2 h after sunset. ANOVA were computed for bay anchovy eggs and larvae, goby larvae, northern pipefish young, winter flounder larvae, and total eggs and larvae. Although significant interactions prevented meaningful comparisons among the main effects, some trends were apparent.

The density of all forms, except winter flounder larvae, was higher in night collections than in day collections. The abundance of winter flounder larvae was not significantly different between day and night collections. Pearcy (1962) found no consistent day-night differences in catches of winter flounder larvae in the Mystic River, Connecticut. Many investigators have reported an increase in the number and size of fish larvae collected at night due, in part, to decreased net avoidance or changes in behavior (Bridger 1956, Daiber 1963, Isaacs 1964). The higher density of bay anchovy eggs at night probably was due to spawning activity at night. Hildebrand and Cable (1930) reported that spawning of the bay anchovy commenced around sunset.

The density of all forms, except winter flounder larvae, was higher in collections from the intake than from the discharge. The density of winter flounder larvae was not apparently different at the intake or discharge. These apparent differences in densities may be, in part, an artifact of sampling. Data from 24-h sampling periods and night collections from the discharge canal (see page 35) suggested that the density of most ichthyoplankton increased at night. Since most sampling began 2 h after sunset and the condenser discharge was always sampled first, the density of ichthyoplankton in the water column may have been lower when the discharge was sampled than when the intake was sampled about 1 h later. Since both large and small larvae with little evidence of physical damage were consistently collected at the condenser discharge, the possibility of the destruction and loss of larvae during passage through OCGS was discounted.

An estimate of the mean number of important ichthyoplankton entrained during daylight and at night (12 h each) was computed for each month

(Table 22). A separate daylight and night estimate was computed because of day-night differences in abundance for most forms. The mean number entrained per day (24-h period) closely followed the seasonal distribution of ichthyoplankton collected at the condenser intake and discharge (Table 21). Since bay anchovy eggs comprised 98% of the eggs collected, the estimate of total eggs entrained was not calculated. Maximum entrainment of eggs occurred in June when an estimated  $3.4 \times 10^8$  eggs were entrained per day. Maximum entrainment of larvae was in July when an estimated  $2.7 \times 10^7$  larvae were entrained per day. During March,  $4.5 \times 10^6$  winter flounder larvae and  $5.9 \times 10^6$  larvae of all fishes were entrained per day. The least entrainment occurred in December.

A total of  $2.3 \times 10^9$  larvae were entrained during the year. An estimated  $2.2 \times 10^{10}$  eggs and  $9.4 \times 10^8$  larvae and young of the bay anchovy were entrained at OCGS. Some  $1.4 \times 10^8$  winter flounder larvae were entrained from February through April, and  $4.9 \times 10^7$  young of the northern pipefish were entrained from April through October.

The estimated number of fish eggs and larvae entrained for the year was substantially greater than the  $1.5 \times 10^8$  eggs and  $1.0 \times 10^8$  larvae the AEC (1974) predicted would be lost each year. The U. S. Environmental Protection Agency's, EPA (1973) predicted loss of  $1.65 \times 10^8$  Atlantic menhaden larvae per year, however, was too great because few larvae of the Atlantic menhaden were entrained.

The monthly condition of larvae examined from September 1975 through August 1976 is presented in Tables 23, 24. Condition was not determined for bay anchovy eggs due to the difficulty of differentiating live and dead eggs by observation of the unpreserved eggs.

Mortality of bay anchovy larvae collected at the condenser intake ranged from 99.9% for larvae examined in June to 18.7% for young examined in October (Table 24). Collection mortality seemed related to size; it was greatest for small larvae and least for larger larvae. In June when collection mortality was highest, no significant difference was found between mortality at the intake and discharge. In July, August, and September, collection mortality decreased (96.3-27.2%) while mortality at the discharge (91.8-99.2%) remained significantly greater than at the intake. In October, the difference between intake (18.7%) and discharge (32.1%) mortality was not significant.

Mortality of goby larvae collected at the condenser intake from May through August ranged from 79.8 to 88.0% (Table 23). Mortality decreased as the size of the larvae increased. Mortality in condenser discharge collections (97.3-100.0%) was significantly greater than collection mortality for all months.

Mortality of young northern pipefish in condenser intake samples taken from May through August ranged from 11.6 to 55.6% (Table 23). Mortality in condenser discharge samples (51.0-100.0%) was significantly greater during all months except August when too few specimens were collected at the discharge to make a valid comparison. No live young were collected at discharge temperatures above 34 C.

Mortality of winter flounder larvae collected at the condenser intake was 91.1% in March and 65.2% in April (Tables 23, 24). Mortality in condenser discharge collections for these months was 96.9 and 97.7%, respectively. These differences were significant for both months.

The condenser intake and discharge were not sampled during the period of the greatest peak abundance of sand lance larvae because OCGS was shut

down. Mortality of sand lance larvae collected at the dilution pump intake and discharge during January was high (99%) at both stations. During February, mortality was significantly higher at the dilution pump discharge (96.7%) than at the intake (84.7%). Mortality of sand lance larvae from collections at the condenser discharge (91.6%) was significantly greater than mortality at the condenser intake (70.8%) during March.

In general, the mortality of most forms was greater in condenser discharge collections except when the collection mortality was high. High collection mortality usually occurred when larvae were small. As larvae grew, mortality due to the sampling gear decreased, and a difference in mortality between intake and discharge collections was evident. Even though significant differences in mortality were found, high collection mortalities usually precluded reliable determination of the percentage mortality attributable to entrainment. Preliminary work in 1977 has indicated that shorter tow times result in lower mortality (Ichthyological Assoc., Inc., 1977).

## PASSAGE OF ENTRAINED PLANKTON DOWN THE DISCHARGE CANAL

Howard W. Hoffman, Richard P. Smith, and Phillip H. Sandine

## Introduction

After plankton is entrained at OCGS, it is released into the discharge canal where it mixes with ambient temperature water introduced into the canal through the dilution pumps. Transit time of the heated water from OCGS to the mouth of Oyster Creek, with four circulating water and two dilution pumps in operation, was approximately 1.3 h (J. J. Vouglitois, personal communication). This study was begun to determine the effects of this passage on microzoo-, macrozoo-, and ichthyoplankton.

## Materials and Methods

Collections for macrozoo- and ichthyoplankton were taken monthly from September through December 1975 and weekly from 11 March to 2 September 1976. Microzooplankton collections were taken monthly in September and October 1975 and weekly from 11 March through 2 September. No microzooplankton collections were taken in November and December because few microzooplankters were present. No collections were taken from 26 December through 3 March because OCGS was shut down.

A 20-cm bongo sampler (505-micron mesh) was used to collect macrozoo- and ichthyoplankton, and a 12.5-cm C-B sampler (80-micron mesh) was used to collect microzooplankton. Samples were taken at the OCGS condenser intake (Sta. 7) and discharge (11), in the discharge canal at four



approximately equidistant stations (14-17) between the U. S. Route 9 highway bridge and the mouth of Oyster Creek, and in the thermal plume (19) in Barnegat Bay (Fig. 4).

The gear was attached to a wire approximately 30 to 38 cm above a 17-kg depressor. It was deployed and retrieved with a hand winch and boom on the port side of a 6.4-m MonArk workboat. Each tow began at the surface. The wire was deployed at a constant rate until the depressor touched the bottom and was then retrieved in a similar manner. The gear traversed the water column at least twice during each tow. The wire angle was maintained at approximately 45 degrees from the vertical for the bongos and 25 degrees for the C-B.

Sampling began 0.5 h after sunset. Two consecutive tows of each gear were made at each station. The volume of water sampled was determined by a digital flowmeter in the mouth of the sampler. Tow time was from 4 to 6 min for the bongos and from 1.5 to 2.5 min for the C-B. Tow time was shortened if excessive clogging of the net occurred.

Condition (live/dead/damaged) of macrozoo- and ichthyoplankton (see page 5) was determined monthly. Collections were placed in jars in insulated coolers containing discharge canal water and were brought to the experimental trailer at OCGS by truck. They were generally examined within 45 min of collection. The condition determination of microzooplankton was attempted only in September and October. It was then discontinued because heavy detrital loads in the water prevented observation of individual forms.

Collections that were not used to determine condition were preserved in the field in buffered 5% formalin. When ctenophores were abundant,

a 50% solution of glacial acetic acid saturated with potassium dichromate was used as a preservative.

The laboratory procedure for the sorting and enumeration of microzooplankton samples was detailed on page 5. All forms were identified to the lowest possible taxon at stations 14 and 17. Forms designated life stage no determination were adults and juveniles. The bivalves Aequipecton irradians, Crassostrea virginica, M. mercenaria, Modiolus demissus, Mulinia lateralis, Tellina spp., and Teredinidae were identified as either the straight-hinge or umbo life stage. Straight-hinge larvae less than 80 microns could not be identified to species because of taxonomic difficulties. These small larvae and all other bivalves were grouped as class Bivalvia and were identified to stage. At stations 15, 16, and 19, only meroplankton were enumerated and identified. All bivalves were designated class Bivalvia and were classified to stage.

The laboratory procedure for the sorting and enumeration of macrozooplankton and ichthyoplankton collections was outlined on pages 6 and 7. When condition was determined, all macrozooplankton were identified to the lowest possible taxon. Forms designated as life stage no determination were adults and juveniles. When condition was not determined, all amphipods were grouped as unidentified Amphipoda; mud crab zoeae were grouped as Xanthidae zoeae; and all mysids were designated unidentified mysids. The biomass of macrozooplankton and ichthyoplankton was determined only for collections in which condition was determined.

A Hewlett-Packard 9830A programmable calculator was used for data compilation and most statistical analyses. Two-way (month x station) and three-way (month x station x date) ANOVA were computed to determine

differences in the density of abundant forms among stations in the discharge canal and the plume in the Bay. Prior to analyses, data were transformed by a  $\ln(X + 1)$  transformation. Significance was evaluated at the 95% level ( $P \leq 0.05$ ). When a significant difference was indicated, the LSD multiple range test was used to determine significant differences among the means of the main effects (Snedecor and Cochran 1967). If interactions were present, the data were examined to determine the cause of the interaction but the significance of main effects involved in significant interactions was not considered (Sokal and Rohlf 1969).

## Results and Discussion

### Microzooplankton

Although samples were enumerated so that only meroplankton were comparable among all stations, the monthly mean density of all forms at each station is presented in Tables 25 and 26. Monthly mean density of the most numerous meroplankton at each station is listed in Table 27. The lowest densities occurred in March and the highest densities in April and May. Barnacle nauplii and polychaete larvae were the most abundant meroplankters. The seasonal distribution of these forms was similar to that of entrainment collections (see page 8).

A three-way (month x date x station) ANOVA was computed to determine differences for the most abundant meroplankton from April through August. The difference in densities of most important meroplankters was not significant among stations in the discharge canal and at the condenser discharge. A significant month x date x station interaction for total

meroplankton, polychaete larvae, and cyphonaute larvae and a significant month x station interaction for bivalve larvae (umbo) indicated that the density changed each month with date and station. This change was inconsistent. Neither a trend of greater density at one station nor a gradient of density along the canal was observed.

Significant station differences occurred for larvae of gastropods and bivalves (hinge). The density of gastropod larvae just east of the Route 9 bridge (Sta. 14) was lower than the density at all other stations. For larval bivalves, however, no single station was significantly different from all other stations.

#### Macrozooplankton

The temporal distribution and species composition of macrozooplankton collected in the discharge canal were similar to that of collections at the OCGS condenser discharge (Table 28). A three-way (month x date x station) ANOVA was computed for total macrozooplankton, mysids, amphipods, the sand shrimp, cumaceans, Nereis spp. epitokes, the ctenophore Mnemiopsis leidyi, and zoeae of the sand shrimp, grass shrimp, and mud crabs. Although two- and three-way interactions precluded tests of the main effects, some trends were discernible. The abundance of most forms was usually lower in the canal than at the condenser intake and discharge.

Mysids, amphipods, and cumaceans were less abundant in canal collections than in collections at the OCGS discharge even when mortality of these forms was minimal in discharge collections (Fig. 5). Amphipods and cumaceans showed no obvious difference in density among stations in the canal. The lower density of these benthic and epibenthic forms in

collections from the canal may indicate their return to the bottom after entrainment.

Although mysids were generally epibenthic during the day, they were planktonic at night (Herman 1963). He reported that this migration into the plankton began 0.3 to 1.5 h after sunset, and maximum abundance of mysids in surface water occurred from 1 to 5 h after sunset. Since sampling began at station 14 some 0.5 h after sunset, the lower density of mysids at stations 14 and 15 may be an artifact of sampling time.

Herman (1963) found that a thermocline also apparently influenced this vertical migration. When surface water temperature was 19 C, he found that mysids ascended through the thermocline but prematurely returned to the deeper 16-C water. Prior to substantial mixing of water from OCGS and the dilution pumps some 100 m below the OCGS discharge, distinct areas of heated and near ambient temperature water exist in the immediate area of the OCGS discharge. The near ambient water tends to remain near the bottom (M. B. Roche, personal communication). Mysids entrained through OCGS or the dilution pumps and exposed to increased temperature in the canal may return to lower temperature water on the bottom.

The density of Mnemiopsis leidyi in collections from OCGS was greater than the density in collections from the canal. From June through August, density of M. leidyi at the OCGS intake generally exceeded those at the discharge and at stations in the canal. During these months, most M. leidyi were large individuals which were fragmented by impingement on the traveling screens or by passage through OCGS. On 19 August, the density was similar for both collections at OCGS and for all collections

from the canal. Although the size of individuals was not determined, the similar densities on this date may have occurred because small ( $\leq 20$  mm) individuals dominated the population. Small individuals passed through the OCGS condensers with minimum physical damage.

Densities of sand shrimp zoeae collected at OCGS were greater than densities from collections in the canal (Fig. 6). Although few adult and juvenile sand shrimp were collected, their densities in collections from the canal were also less than the density in OCGS discharge collections. This may have resulted, in part, from entrainment mortality and from a return of adults and juveniles to the bottom. The lower densities of all life stages in collections from the canal were found even when the OCGS discharge temperature was below discharge temperatures which caused immediate mortality.

Zoeae of grass shrimp were more abundant at canal stations than in collections at OCGS during May, June, and August. These greater densities in the canal may have resulted, in part, from spawning in the discharge canal. Zoeae were more abundant at OCGS during July.

The abundance of mud crab zoeae varied among stations. Although mud crab zoeae were collected in the canal in April, none were taken in concurrent samples at OCGS (Table 28). Mud crabs in the canal may spawn earlier than mud crabs in other areas of the Bay. In May and August, densities of zoeae in collections from the canal were similar to or greater than densities in OCGS collections. In June and July, densities of zoeae were lower in the canal than at OCGS.

Nereis spp. epitokes were more abundant in collections from the canal in April and from June through August. In May, they were more abundant in

collections at OCGS. The occurrence of more epitokes in canal collections may indicate spawning by a canal population. In general, density increased over the first three canal stations (14-16) and then decreased at the fourth station (17). Pettibone (1963) reported that Nereis succinea males appeared near the surface very soon after sunset, and females soon followed. The observed increase and then decrease in the canal may have resulted, in part, from the time that the stations were sampled. Stations 14 to 16 were sampled from 0.5 to 2.5 h after sunset; station 17 was sampled from 2 to 3.5 h after sunset.

When OCGS was in operation, substantial numbers of arrowworms were collected only in March; densities were similar in OCGS and canal collections. Megalopae of the blue crab were collected too infrequently to make valid comparisons among stations.

Condition of most macrozooplankton collected in the discharge canal was similar to the condition of these forms at the OCGS intake (Table 29). Forms killed or damaged by either entrainment or increased temperature in the canal were apparently not in the water column at the first canal station (14). Carpenter et al. (1974) reported that damaged copepods sank in the water column. Marcy (1976) found that dead and damaged fish larvae, especially larger forms, were not collected in the discharge canal of the Connecticut Yankee Atomic Plant.

The somewhat greater mortality of forms in collections at the station most distant from the dock may be partially due to the longer time required to transport specimens to the experimental trailer and, therefore, to longer exposure to increased temperature.

Effects of passage of forms down the discharge canal were unclear. Organisms collected in the canal included those passed through OCGS (entrained), those passed through the dilution pumps, and those residing or spawned in the canal. Differences in density among stations may be only partially attributable to the death and subsequent settling of entrained forms. The difference in sampling time between stations, the variable behavior of both resident and entrained forms, and spawning of some forms in the canal confounded meaningful comparisons among collections from the discharge canal and OCGS. Polychaetes, grass shrimp, and mud crabs may spawn in the canal, and the spawning of mud crabs may occur earlier than in other areas of the Bay.

#### Ichthyoplankton

The most abundant larvae were those of the bay anchovy, gobies (Gobiosoma spp.), winter flounder, and sand lance (Tables 30, 31). Larvae of these species were also predominant in collections at OCGS (Table 20). Larvae of the Atlantic menhaden and young northern pipefish occurred in low numbers. The most abundant eggs (93.8% of all eggs) were those of the bay anchovy.

Two-way (month x station) ANOVA indicated numerous significant interactions, and consequently, only general trends were observed. The highest density of bay anchovy and goby larvae were in collections from the OCGS discharge and off the mouth of Oyster Creek (Sta. 19). The density at stations in the canal was similar. Larvae of sand lance were more abundant in collections from the canal than at the OCGS discharge.



The higher density of bay anchovy and goby larvae at the OCGS discharge probably indicated the actual density of larvae entrained at OCGS. The higher density of larvae in collections off the mouth of Oyster Creek may have resulted, in part, from larvae secondarily entrained into the thermal plume from the Bay. The decreased density of bay anchovy and goby larvae at stations in the discharge canal may reflect mortality of these species after entrainment. Marcy (1976) noted that dead ichthyoplankton, especially larger larvae, settled out as they passed down the discharge canal at the Connecticut Yankee Atomic Plant. Larvae passed through the dilution pumps and down the discharge canal confounded analyses of the passage of larvae entrained at OCGS down the canal.

The maximum density of bay anchovy eggs occurred in and off the mouth of Oyster Creek (Sta. 17, 19). Although the density in collections just east of the Route 9 bridge (14) was the lowest, the density at the condenser discharge and at other stations in the canal (15, 16) was similar (Table 30). This distribution may be an artifact of sampling because station 14 was usually the first station sampled, and stations 17 and 19 were the last. Since bay anchovy begins spawning shortly after sunset (Hildebrand and Cable 1930), the higher density of eggs in and off the mouth of Oyster Creek may be attributable to increased spawning activity when these collections were taken.

The high mortality of most species made statistical comparisons of mortality among stations meaningless (Table 32). Northern pipefish collected from the canal from April through August had 66% mortality, and gobies had 90% mortality. Although some of this mortality may have been due to exposure to the increased temperature in the canal, some of the mortality was attributable to stress during collection and transportation

of the specimens. At least 45 min elapsed from the time the collection was taken to the time specimens were examined at the experimental trailer. The only fish with a high (93%) survival rate was the American eel ( $n = 28$ ). Marcy (1976) collected several live elvers of the American eel in the discharge canal of the Connecticut Yankee Atomic Plant at a temperature of 37 C.

EFFECTS OF THE THERMAL PLUME ON PLANKTON IN WESTERN  
BARNEGAT BAY IN THE VICINITY OF OYSTER CREEK

Richard P. Smith, Phillip H. Sandine, and Howard W. Hoffman

Introduction

The species composition, abundance, and distribution of microzoo-, macrozoo-, and ichthyoplankton collected in western Barnegat Bay from September 1975 through August 1976 are discussed. The effect of the thermal plume from Oyster Creek on these forms is examined.

Materials and Methods

From September through August, eight stations were sampled along the western shore of Barnegat Bay (Figs. 4, 7). After February, the sampling design was modified. The station at the mouth of Stouts Creek (Sta. 2) and the stations in the vicinity of the thermal plume (18, 20) were replaced with a station in the mouth of Forked River (4), the mouth of Oyster Creek (17), and one station in the thermal plume (also 18 or 20). The location of the latter station varied and depended on the configuration of the thermal plume on the day of sampling. The station in the mouth of Oyster Creek and Forked River was comparable in location to the station in the mouth of Cedar and Double creeks.

Collections were taken monthly in September, November, December, and February and twice a month in October and from March through August. Only one series of collections was taken during September because inclement weather caused cancellation of the second series of collections. No collections were taken in January due to ice on the Bay. From April through August, collections were also taken once a month at night, beginning 0.5 h after sunset, at the station in

the mouth of Forked River (Sta. 3) and Oyster Creek (17) and in the Bay off Forked River (4) and Oyster Creek (19).

Sampling procedures were detailed on page 27 and laboratory procedures for the sorting and enumeration of samples were outlined on pages 6 and 7. Biomass of macrozooplankton was determined only for collections taken at the mouth of Forked River (Sta. 4).

Meroplankton were identified and enumerated at all stations. Holoplankton were identified at all stations except off Waretown (Sta. 21) and in the thermal plume (18 and 20). Only the first replicate of collections at Cedar and Double creeks were sorted for holoplankton. All microzooplankton were identified to the lowest possible taxon in collections from the mouth of Oyster Creek (17) and Forked River (4) and from the Bay off Forked River (3) and Oyster Creek (19). Forms designated as life stage no determination were adults and juveniles. The bivalves Aequipecton irradians, Crassostrea virginica, M. mercenaria, Modiolus demissus, Mulinia lateralis, Tellina spp., and Teredinidae were identified and categorized as either the straight-hinge or umbo life stage. Straight-hinge larvae less than 80 microns were not identified to species because of taxonomic difficulties. These small larvae and all other bivalves were designated class Bivalvia and were identified to stage. At all other stations, all bivalves were designated class Bivalvia and were classified to life stage.

For collections off the mouth of Forked River (Sta. 3), all macrozooplankton were identified to the lowest possible taxon. Forms designated as life stage no determination were adults and juveniles. At all other stations, amphipods were grouped as Amphipoda, mysids were classed as unidentified mysids, and mud crab zoeae were grouped as Xanthidae zoeae.

A Hewlett-Packard 9830A programmable calculator was used for data compilation and most statistical analyses. Two- and three-way ANOVA were used to test

for differences in the density of an individual form among station, date, and month. For day-night samples, a three-way ANOVA was used to test for differences in density among months, time of day (day-night), and station. Prior to analyses, data were transformed by a  $\ln(X + 1)$  transformation. Significance was evaluated at the 95% level ( $P \leq 0.05$ ). When significant differences were indicated, the LSD multiple range test was used to determine significant differences among the main effects (Snedecor and Cochran 1967). If interactions were present, data were examined to determine the cause of the interaction but the significance of the main effects involved in significant interactions was not considered (Sokal and Rohlf 1969).

## Results and Discussion

### Microzooplankton

The yearly mean density and frequency of occurrence at each station are listed in Table 33. Since only meroplankton were comparable at all stations, an overall yearly density for all forms could not be computed. Yearly mean density of all identified forms was ranked for each station (Table 34).

Only the stations in and off the mouth of Oyster Creek (Sta. 17, 19) and Forked River (3, 4) were comparable for both holo- and meroplankton. A total of 38 to 41 forms, ranging in density from 82,843/m<sup>3</sup> to 140,398/m<sup>3</sup>, was identified at these stations. The most abundant forms were copepod nauplii, rotifers, barnacle nauplii, Polydora spp. larvae, and Acartia spp. (no determination).

The density of meroplankton was highest from May through July (Table 35). The density of most meroplankton decreased from September through March and was low during these months. At all stations, the most abundant meroplankton were barnacle nauplii, Polydora spp. larvae, polychaete larvae, trochophores, gastropod

larvae, bivalve larvae, and cyphonaute larvae.

Barnacle nauplii and bivalve larvae were most abundant from May through July. Larvae of Polydora spp. and other polychaetes were most abundant from April through July. In July and August, the density of barnacle nauplii and polychaete larvae decreased at all stations except those in the mouth of Oyster Creek (Sta. 17) and the thermal plume in the Bay (18, 19, 20). Larvae of cyphonautes and gastropods reached their greatest abundance during these 2 months.

The seasonal distribution of holoplankton was examined at stations in and off the mouth of Oyster Creek (Sta. 17, 19) and Forked River (3, 4). Copepod nauplii were the most abundant holoplankton in April and from June through August. Rotifers were the most abundant form in May but copepod nauplii had the second highest density.

Acartia spp. (no determination) were abundant all year. Acartia clausi (adults) was abundant from January through April. It was succeeded by A. tonsa from June through August. The copepods Paracalanus spp. (no determination), P. crassirostris, Oithona spp. (no determination), and O. colcarva (brevicornis) were numerous from June through August.

In general, the seasonal distribution of both the mero- and holoplankton in Barnegat Bay was similar to the seasonal distribution of forms entrained at OCGS (see page 8) and of microzooplankton in other estuaries from Massachusetts to Virginia (Deevey 1956, 1960; Conover 1956; Cronin et al. 1962; Jeffries 1962, 1969; Anraku 1964; Martin 1965; Herman et al. 1968; Sage and Herman 1972; Sandine and Swiecicki 1975). Holoplankton were more abundant than meroplankton, and copepods were the most abundant group.

A two-way (month x station) ANOVA was computed for meroplankton collected from September through February. Significant month x station interactions occurred for total meroplankton, barnacle nauplii, and gastropod larvae. The

interaction for total meroplankton occurred because the density was lower in November at two stations (18, 19) in the thermal plume and density decreased during February at all stations except Waretown (21). The interaction for barnacle nauplii resulted from a greater density in the mouth of Oyster Creek (17) and the thermal plume (18, 19, 20) during all months except November when the lowest densities in the Bay were at these stations. The interaction for gastropod larvae occurred because the densities fluctuated erratically among the stations during each month.

Significant month and station differences occurred for polychaete and cyphonaute larvae. For polychaete larvae, no single month was markedly different from other months. The highest density was in June; it was significantly greater than the density in May and August. The density at the station off the mouth of Forked River was significantly lower than density at all other stations except Sands Point Harbor (Sta. 20). The other six stations and Sands Point Harbor were not significantly different. Greater densities of cyphonaute larvae occurred during September and October, and no single station was significantly different from any other station.

A three-way (month x date x station) ANOVA was computed for meroplankton collected from April through August. Second order interactions were noted for total meroplankton, barnacle nauplii, larvae of gastropods, polychaetes, cyphonautes, and Polydora spp. The interaction for total meroplankton resulted because these forms were absent from three stations during April and two stations during August. The interaction for barnacle nauplii resulted because the density in the mouth of Oyster Creek (Sta. 17) and the thermal plume (18, 19, 20) was greater than that at other stations from May through July but not during April and August. The interactions for the other forms occurred because their densities fluctuated greatly among stations and dates during each month.

A (month x station) interaction for bivalve (umbo) resulted because this form was absent from all stations except Double Creek (Sta. 23) in April, and densities fluctuated at each station during other months.

Only two of the ANOVA computed for the year for the total number and individual meroplankters indicated a significant difference in month or location; however, no month or location was distinctly different than all other months or locations. Barnacle nauplii were apparently more abundant in the vicinity of the thermal plume (Sta. 17, 18, 19, 20) during most months. No trend in month or location differences was indicated for other meroplankton.

A two-way (month x station) ANOVA was computed for dominant holoplankton from the first replicate collection taken from March through August at the mouth of Cedar and Double creeks (Sta. 1, 23) and in and off the mouth of Oyster Creek (17, 19) and Forked River (3, 4). Although there were no significant station differences for any form, significant monthly differences occurred for total holoplankton, copepod nauplii, rotifers, Acartia spp. (no determination), and Oithona spp. (no determination). These monthly differences corresponded to the seasonal distribution of forms entrained at OCGS (see page 8).

A three-way (month x station x day-night) ANOVA was computed for total meroplankton, barnacle nauplii, copepod nauplii, rotifers, Oithona spp. (no determination), and the larvae of polychaetes, gastropods, bivalves (umbo), Polydora spp., and cyphonautes collected in and off the mouth of Oyster Creek (Sta. 17, 19) and Forked River (3, 4) from April through August. Most ANOVA were inconclusive because of first and second order interactions.

No trends in day-night differences were obvious for most forms because the relative abundance of each form oscillated among stations and from month to month. Total meroplankton, however, had a lower density at night in and off the mouth of Oyster Creek (Sta. 17, 19) during April, May, and July. Barnacle



nauplii had a lower density at night in the mouth of Oyster Creek (17) from April through June. Acartia spp. (no determination) and A. tonsa adults had a greater density at night during every month but the difference was slight in April and July.

#### Macrozooplankton

The temporal distribution of macrozooplankton collected in western Barnegat Bay (Table 36) was similar to that of macrozooplankton entrained at OCGS (see page 12). The abundant forms in daylight collections were mud crab and sand shrimp zoeae, the hydromedusae Sarsia spp., arrowworms (Sagitta spp.), and the ctenophore Mnemiopsis leidyi.

A three-way (month x date x station) ANOVA was computed for daylight collections of total macrozooplankton (no determination); zoeae of the sand shrimp, grass shrimp, and mud crabs mysids; arrowworms; polychaete larvae; and M. leidyi. Although two- and three-way interactions for all forms precluded tests for main effects, trends were discernible for many forms (Table 37). Polychaete larvae were least abundant in the Bay off Forked River (Sta. 3) but their density was fairly similar at the other stations. Sand shrimp zoeae were least abundant at the mouth of Cedar (1) and Double (23) creeks and most abundant at the mouth of Forked River (4). The density of sand shrimp zoeae at the mouth of Oyster Creek (17) was lower than at the mouth of Forked River, possibly because of mortality from entrainment and passage down the discharge canal. Mud crab zoeae were least abundant at the mouth of Cedar and Double creeks; they were most abundant in the Bay off Oyster Creek (19) and the mouth of Oyster Creek. Maximum mean density of total macrozooplankton occurred in the Bay off Oyster Creek. Although ANOVA was not computed, adult and juvenile macrozooplankton were least abundant at the three northernmost stations: the

Bay off Forked River and the mouth of Cedar Creek and of Forked River.

These forms were most abundant in the Bay off Oyster Creek and at Double Creek.

Although comparison of studies in different estuaries is difficult because sampling gear and techniques often vary, a study in the nearby Great Bay-Mullica River estuary by Swiecicki and Prendergast (1976) used similar sampling gear and techniques. In general, densities of forms in Barnegat Bay were similar to densities at their station in Little Egg Inlet. Densities from their stations in Great Bay were usually less than densities in Barnegat Bay.

A three-way (month x station x day-night) ANOVA was computed for total macrozooplankton, amphipods, mysids, adult and juvenile bay shrimp (sand and grass shrimp combined), cumaceans, and the zoeae of the sand shrimp, grass shrimp, and mud crabs. Two- and three-way interactions were significant for most forms. The density of cumaceans, however, was not significantly different among stations. All forms were more abundant at night. For adult and juvenile bay shrimp and zoeae of the sand shrimp, however, day-night differences were slight.

The density of most forms in night collections was greatest at the mouth of Forked River (Sta. 4) and least in the Bay (3) off Forked River (Table 38). Mean density of macrozooplankton at the mouth of Forked River exceeded that at the mouth of Oyster Creek (17). This decrease in density of many forms in the plume may be due, in part, to changes in behavior and entrainment effects. Polychaete larvae and zoeae of grass shrimp and mud crabs were somewhat more abundant at the mouth of Oyster Creek. Although the mean density of Nereis spp. epitokes was two orders of magnitude greater there, this large difference apparently resulted from the very large density in collections taken on 20 April when spawning may have occurred in the discharge canal.

## Ichthyoplankton

The seasonal distribution and abundance of ichthyoplankton in western Barnegat Bay (Table 39) were generally similar to collections at OCGS (Table 20). The most abundant larvae were those of the bay anchovy, winter flounder, sand lance, and gobies (Gobiosoma spp.). The maximum density of bay anchovy and goby larvae occurred in July, and maximum density of winter flounder and sand lance larvae occurred in March. Young of the northern pipefish and larvae of the Atlantic menhaden were present at low densities. Most northern pipefish were taken in June. Atlantic menhaden larvae were collected during November and December 1975.

Eggs of the bay anchovy comprised 98.8% of all eggs taken. They were present from May through August and were most abundant in June (Table 40). The eggs of the tautog and cunner were occasional.

A two-way (month x station) ANOVA was computed for bay anchovy eggs and larvae, larvae of the winter flounder and gobies, and total larvae. The main effects were not tested because all ANOVA had significant interactions. The density of important and abundant forms in the mouth of Oyster Creek (Sta. 17) and in the thermal plume (18, 19, 20) was usually not substantially different than density at other stations. Only goby larvae were most numerous in the mouth of Oyster Creek. The density of goby larvae in the thermal plume was about equal to the density at other stations.

Larvae of the bay anchovy were most abundant at the mouth of Forked River (Sta. 4), Cedar Creek (1), and Oyster Creek (17). The stations off Waretown (21), Forked River (3), and in the thermal plume (18, 19, 20) had a lower density than stations in the creek mouths. Eggs of the bay anchovy were most abundant from samples in and off the mouth of Forked River but the

density in the mouth of Oyster Creek and the thermal plume was not substantially different than at other stations. Both winter flounder and sand lance larvae were most numerous in the periphery of the plume (18). The density at the mouth of Oyster Creek and the other plume stations was equal to the density at most other stations.

A three-way (station x month x day-night) ANOVA was computed for all abundant and important species taken in day-night collections in and off the mouth of Oyster Creek (Sta. 17, 19) and Forked River (3, 4) from April through August. Although numerous interactions were significant, some forms showed substantial differences between stations and time of day. Densities of bay anchovy eggs and larvae showed considerable variation between stations and time of day. The higher density of bay anchovy eggs at night was probably due to increased spawning activity of the bay anchovy at night (Hildebrand and Cable 1930). The increased abundance of larvae at night may have resulted from decreased net avoidance (Bridger 1956, Daiber 1963, Isaacs 1964) and diel vertical migrations (Russell 1929). Goby larvae were usually concentrated in the mouth of Oyster Creek during both day and night collections. Landry (1971) and McCullough (1971) reported that the naked goby was more abundant in the discharge canal than in the intake canal of the P. H. Robinson Generating Station.

## REPLICATE COLLECTION STUDIES

Thomas R. Tatham

## Introduction

A program was conducted to assess the variability of the sampling procedure for microzoo-, macrozoo-, and ichthyoplankton. Two tows of the plankton samplers were made at each regularly sampled station. The variability between two tows was compared to the mean value of a series of eight successive tows at several regularly sampled stations.

## Materials and Methods

Eight tows of both the C-B and bongo samplers (see page 27) were made at both the mouth of Oyster Creek (Sta. 17) and Forked River (4) on 3 and 29 June. A series of eight tows was made both off the mouth of Oyster Creek (19) and Forked River (3) on 28 July and 23 August. At the completion of each tow, the sample was preserved, and the boat returned to the starting point as soon as possible to begin the next tow. Laboratory procedure for the sorting and enumeration of samples was outlined on pages 6 and 7.

For abundant organisms, a mean for the eight tows was determined for each area on each day. A subsample of two of the eight tows was selected randomly without replacement 100 times, and the mean of each of these subsamples was determined. The 100 subsample means were compared with the sample mean, and the number of subsample means that fell within 25% of the sample mean was computed. This procedure was repeated for subsample sizes of three through seven.

## Results and Discussion

### Microzooplankton

A summary of statistics applied to microzooplankton from replicate C-B collections is given in Table 41. The average percentage of time a subsample mean fell within 25% of the sample mean was determined for each subsample size (Table 42). For relatively abundant ( $> 5000/m^3$ ) forms, the subsample mean approached within 25% of the sample mean at least 80% of the time with three subsamples. For common ( $< 5000/m^3$ ) forms, the subsample mean approached within 25% of the sample mean at least 80% of the time with five subsamples. With a subsample size of six, all common and abundant forms approached the sample mean at least 90% of the time.

Two C-B collections were made at all regular sampling stations. For abundant forms, the mean of two collections fell within 25% of the sample mean from 65 to 100% of the time. For common forms, the mean of two collections came within 25% of the sample mean from 41 to 53% of the time.

### Macrozooplankton

A summary of statistics applied to macrozooplankton from replicate bongo collections is given in Table 43. The average percentage of time a subsample mean fell within 25% of the sample mean was determined for each subsample size (Table 44). The subsample mean for the relatively abundant ( $> 2/m^3$ ) ctenophore Mnemiopsis leidyi and mud crab zoeae approached within 25% of the sample mean 76% and 63% of the time,

respectively, for a subsample size of two. For a subsample size of three, the subsample mean approached within 25% of the sample mean 85% and 78% of the time, respectively. Two bongo collections were taken at all regular stations.

The mean of two collections came within 25% of the sample mean 45% of the time for the less abundant ( $<2/m^3$ ) zoeae of grass shrimp. This form did not approach within 25% of the sample mean in 80% of the trials until a subsample size of five. All forms fell within 25% of the sample mean 90% of the time with a subsample size of six.

#### Ichthyoplankton

A summary of statistics applied to ichthyoplankton from bongo collections is given in Table 45. The average percentage of time a subsample mean fell within 25% of the sample mean was determined for each subsample size (Table 46). Only eggs and larvae of the bay anchovy were common on the 4 sampling days, and the variations in density of total eggs and total larvae followed that of bay anchovy eggs and larvae.

The two bongo collections taken at regularly sampled stations appeared to yield less variation in the density of eggs of the bay anchovy than in their larvae. Although a subsample size of two approached within 25% of the sample mean only about 40% of the time for bay anchovy larvae, two subsamples came within 25% of the sample mean about 75% of the time for bay anchovy eggs. With a subsample size of three, bay anchovy eggs fell within 25% of the sample mean 90% of the time. Bay anchovy larvae fell within 25% of the mean about 80% of the time with a subsample size of five.

## POPULATION SURVEYS

Kenneth A. Tighe, Phillip H. Sandine, and Howard W. Hoffman

## Introduction

Surveys designed to estimate the population of important and abundant zoo- and ichthyoplankton in Barnegat Bay were conducted to compare the number of these forms in the Bay to the number entrained at OCGS.

## Materials and Methods

The number of winter flounder larvae and mysids in Barnegat Bay from Cedar Beach to Gulf Point was estimated. The Bay was divided into four strata (Fig. 8), and random samples were taken in each stratum. Surveys for winter flounder larvae were done twice during March and once in April. Three randomly selected stations within each stratum were sampled with a 20-cm bongo sampler (see page 27). All collections were taken during daylight hours because it was difficult to locate the stations at night.

Collections for mysids were taken once a month in December, February, and July and twice a month in March. Two randomly selected stations within each stratum were sampled with a benthic sled. The sled frame was approximately 25 x 56 cm with a 0.5-m net (505-micron mesh) attached. Although mysids are epibenthic during daylight, the sled was specifically designed to collect mysids (D. Allen, Lehigh Univ.; personal communication). The mean and standard error of the density per  $m^3$  were determined using the formulae of Poole (1974). The population and confidence interval



were estimated by multiplying the mean density and its confidence interval by the volume of the Bay from Cedar Beach to Gulf Point. This volume ( $107,554,000 \text{ m}^3$ ) was calculated from the area of the Bay as determined with a Lietz Polar Planimeter (Model 3651-30) and from the depth ranges of the Bay (National Oceanic and Atmospheric Administration 1976).

From May through August, population estimates in the same area of the Bay were determined by random sampling from 60, 0.4-x 0.4-km quadrates (Fig. 8). Collections with a 20-cm bongo sampler were taken within 25 randomly chosen quadrates. Surveys for eggs and larvae of the bay anchovy were conducted in May, June, and August. Surveys for zoeae of the sand shrimp were conducted from March through June. A survey to estimate the population of the ctenophore Mnemiopsis leidyi was conducted in August. Other important and abundant forms collected during these surveys were also enumerated. Collections of abundant microzooplankton were taken with a C-B sampler during May and July from 12 to 15 randomly chosen quadrates.

The volume of each quadrate sampled was estimated from the mean surface area of a representative number of quadrates and the estimated depth in each quadrate. Density of organisms in the sample was multiplied by the volume in that quadrate. The mean number of organisms and the mean volume of the quadrates sampled were computed. This mean number per quadrate was extrapolated to the total number in the Bay from Cedar Beach to Gulf Point by the formula:  $(107,554,000 \text{ m}^3 / \text{mean volume of quadrates sampled}) \times \text{mean number per quadrate}$ .

## Results and Discussion

### Microzooplankton

Two surveys were taken to estimate populations of abundant meroplankton in Barnegat Bay. Polychaete larvae were the most abundant meroplankters on 28 May (Table 47). An estimated  $6.8 \times 10^{11}$  polychaete larvae and  $2.5 \times 10^{12}$  Polydora spp. larvae were calculated to be in the Bay. The population of gastropod larvae was estimated at  $1.5 \times 10^{11}$ .

On 8 July, gastropod larvae were the most abundant form, and the population was estimated to be  $6.0 \times 10^{11}$ . Polychaete larvae were still numerous ( $1.2 \times 10^{11}$ ) but the population of Polydora spp. had declined to  $3.6 \times 10^{10}$ .

### Macrozooplankton

Five surveys for mysids were conducted from 10 December 1975 through 28 July 1976 (Table 48). The estimated population of mysids ranged from  $3.4 \times 10^8$  on 19 February to  $1.1 \times 10^{10}$  on 28 July. The lowest densities occurred during February and March. In Hereford Inlet, New Jersey and the adjacent estuary, D. Allen (personal communication) also found that the density of mysids in sled collections was lowest in March.

Since March was a major period of reproduction by mysids, the abundance of mysids in daylight bongo collections at OCGS and in western Barnegat Bay may reflect the presence of either young mysids or reproductive adults in the water column. The presence of more mysids in the water column during daylight would lower the estimate of the population because more individuals were unavailable to the sled. The population estimated during February and March may be an underestimate.

The arrowworm Sagitta elegans was collected during March and April (Table 48). The estimated population on 4 March ( $6.7 \times 10^8$ ) and 16 March ( $1.1 \times 10^9$ ) was similar but by early April, the population had decreased to  $1.1 \times 10^8$ . Since arrowworms were collected in approximately equal density in day and night samples at OCGS, these estimates are probably accurate.

Zoeae of the sand shrimp were collected in six surveys from 4 March through 30 June (Table 48). The population estimate ranged from a low of  $1.1 \times 10^8$  on both 28 May and 30 June to  $1.1 \times 10^9$  on both 16 March and 5 April. Since the mean density of sand shrimp zoeae in night collections at OCGS was about three times that of day collections, these estimates were probably substantial underestimates of the actual population.

The estimated population of zoeae of both mud crabs and grass shrimp increased from 28 May ( $4.3 \times 10^8$  and  $1.5 \times 10^7$  respectively) to 30 June ( $2.3 \times 10^9$  and  $2.7 \times 10^8$ ). Since zoeae of both forms were more abundant in night collections at OCGS, these estimates are undoubtedly underestimates of the actual population.

The population of the ctenophore Mnemiopsis leidyi was estimated to be  $1.0 \times 10^8$  on 26 August.

#### Ichthyoplankton

Data for surveys to estimate the population of winter flounder larvae, bay anchovy eggs and larvae, and young of the northern pipefish are listed in Table 49.

The population estimate of winter flounder larvae ranged from  $5.6 \times 10^8$  on 16 March to  $2.5 \times 10^6$  on 5 April. The approximate hundredfold decrease

in the population from March to April represented both natural mortality and, to a lesser extent, movement of larger larvae to the bottom.

The population estimate for bay anchovy eggs ranged from  $1.5 \times 10^{10}$  on 30 June to  $2.1 \times 10^7$  on 26 August. These population estimates were, to some extent, underestimates of the number of eggs in the Bay because the surveys were conducted during daylight hours. Spawning occurred after sunset, and the greatest densities were found in night collections.

The estimated population of bay anchovy larvae ranged from  $2.1 \times 10^6$  on 9 June to  $1.9 \times 10^8$  on 30 June. As with estimates for the number of bay anchovy eggs in the Bay, these numbers are probably underestimates because population surveys were conducted during daylight. Larvae were more abundant in night collections at OCGS and in the Bay.

The population estimate for young northern pipefish ranged from  $1.1 \times 10^6$  on 26 August to  $6.9 \times 10^6$  on 30 June and indicated a relatively constant population of young northern pipefish in the open Bay during these months. These estimates were probably substantial underestimates of the actual population because no samples were taken in the eel grass beds in the shallow eastern portion of the Bay. These areas were the preferred habitat of the adults and undoubtedly also contained many young.

## IMPACT ASSESSMENT

Thomas R. Tatham

Although the magnitude of the entrainment of zoo- and ichthyoplankton can be estimated, the relevance of this potential loss to the ecosystem is difficult to assess. Large statistical variability is inherent among plankton samples (Heinle 1976). Various factors confound estimates of the mortality associated with both primary entrainment at OCGS and secondary entrainment in the discharge canal. Data on the percentage of organisms that leave Oyster Creek and re-enter Forked River are inadequate. Data on the zoo- and ichthyoplankton populations in the Bay prior to the operation of OCGS are lacking. The nature of compensatory mechanisms which offset losses of eggs and larvae are unclear and ill-defined.

Various workers have attempted to correlate and quantify the number of forms entrained to the number in the affected body of water. Carpenter et al. (1974) estimated that some 2% of the copepods in the affected portion of Long Island Sound were entrained at the Millstone Point Nuclear Power Station. Marcy (1976) determined that about 4% of the ichthyoplankton passing the Connecticut Yankee Atomic Plant were entrained. Without quantifying actual entrainment effects, Whitehouse (1971) reported that a small nuclear power station in Great Britain had no effect on the composition, abundance, and seasonal variation of resident zooplankton.

To evaluate entrainment losses at OCGS, the estimated number of certain forms of microzooplankton (Table 8), macrozooplankton (Table 17), and ichthyoplankton entrained per day was compared to estimated populations

in the portion of the Bay from Cedar Beach to Gulf Point (Fig. 8, Tables 47-49). This evaluation involved a comparison of the estimated population on a single day with the mean number entrained per day during the month. The entrainment estimate, therefore, only partly reflected the actual number entrained on the day the population was estimated. This discrepancy caused some high and low estimates of the percentage of the population entrained but the comparison was generally accurate.

#### Microzooplankton

Since the immediate mortality of microzooplankton could not be determined, 100% immediate mortality was assumed for all forms. This assumption provided a conservative (maximum) estimate of entrainment effects. During May and June, an estimated 0.7 to 6.8% of the population of four forms in the Bay were entrained at OCGS during a 24-h period (Table 47).

#### Macrozooplankton

For abundant macrozooplankton, the percentages of various forms in the Bay that were entrained at OCGS were somewhat higher than for microzooplankton (Table 48). Because of substantially greater density of various forms in night collections, the population estimates for the Bay were only comparable to the estimated number entrained during the 12-h period of daylight. For mysids, however, the estimated population was compared to the number entrained during a 24-h period because the sampling gear usually sampled the epibenthic mysids effectively.

A high percentage of the estimated population of mysids was entrained. From February through early April, some 10.7 to 17.4% of the mysids in the Bay were entrained (Table 48). These high percentages may have resulted in

part from the apparent increased abundance of mysids in the water column during daylight in March. An increased number of mysids in the water column would tend to decrease a population estimate based on sled collections. A decrease in the estimated population would increase the estimated percentage entrained. Although collections at OCGS during March had the highest density of mysids, the discharge temperature was below 30 C, and the immediate mortality was minimal. During December and July, a very small (0.4-0.8%) percentage of the estimated population in the Bay was entrained. Based on immediate mortality at discharge temperatures above 30 C (see page 18), an estimated 29% of the non-gravid and 43% of the gravid mysids were dead immediately after entrainment (Table 15).

The percentage of sand shrimp zoeae in the Bay that was entrained at OCGS varied seasonally. During March and April, an estimated 0.4 and 2.5% were entrained (Table 48). During May and June, however, the percentage of the population entrained increased to some 3.3 to 11.8% of the Bay population. Since sand shrimp zoeae experienced some stress and mortality at discharge temperatures greater than 30 C, a considerable number may have been destroyed. Based on 100% mortality at discharge temperatures above 30 C, an estimated 33% of entrained zoeae may have died immediately after entrainment (Table 15). The density of zoeae in the canal and at the mouth of Oyster Creek was generally lower than the density in collections from OCGS and at the mouth of Forked River.

The percentage of the Bay population of the arrowworm Sagitta elegans and zoeae of grass shrimp and mud crabs entrained ranged from 0.1 to 1.8% (Table 48). Qualitatively, little mortality or abnormal behavior was observed for zoeae entrained at discharge temperatures below 35 C.

An estimated 8.1% of the population of the ctenophore Mnemiopsis leidyi was entrained during August (Table 48). The number lost through entrainment depended, in part, on the size of the individual. Large individuals became fragmented after impingement on the traveling screens and passage through the condensers. Small ( $\leq 20$  mm) ctenophores, however, survived entrainment intact.

Based on observed mortalities, an estimated 18% of the amphipods, 33% of the adult and juvenile sand shrimp, and 15% of the epitokes of Nereis spp. entrained at OCGS were dead immediately after passage through the condensers (Table 15).

The entrainment of zoeae and megalopae of the blue crab at OCGS appeared to be relatively small. Most of the spawning activity in the Bay occurred near Barnegat Inlet, and the density of both life stages in collections at OCGS was relatively low. No immediate mortality of megalopae was observed at discharge temperatures below 35 C (Table 15). No evidence exists that the population of adult blue crab has decreased since OCGS began operation in late 1969. The yearly commercial catch from Barnegat Bay from 1972 through 1975 averaged 75,609 kg (62,000 - 90,800 kg), while the yearly catch from Ocean County, including Barnegat Bay, averaged 21,500 kg (1,000 - 79,545 kg) from 1960 through 1969 (E. LoVerde, personal communication).

A comparison of the density of important and abundant forms at the mouth of the intake canal (Forked River) and the discharge canal (Oyster Creek) indicated net differences in density of macrozooplankton after entrainment at OCGS. Some forms which had substantial mortality after entrainment showed a notable reduction in the number of individuals returned to the Bay through Oyster Creek. The decrease in the density of Mnemiopsis leidyi and zoeae of



the sand shrimp returned to the Bay was 19% and 26%, respectively. The density of zoeae of mud crabs in the mouth of Oyster Creek, however, was 183% greater than the density at the mouth of Forked River. This increase may have resulted from spawning of mud crabs in the discharge canal. Over the year, a net production of mud crab zoeae may result.

### Ichthyoplankton

Estimates of the population of abundant ichthyoplankton in Barnegat Bay were determined from daylight collections (Table 49) and were compared to the number of these forms entrained at OCGS during a 12-h period of daylight. Although condition determinations of ichthyoplankton entrained at OCGS were confounded by high collection mortality, it appeared that many of the entrained larvae died. The lower densities of the bay anchovy and goby larvae in the discharge canal probably resulted from entrainment losses. Immediate mortality of all forms was assumed to be 100% and, therefore, the estimated entrainment effects were conservative (maximum).

An estimated 0.8 to 10.7% of the bay anchovy eggs and 0.6 and 4.4% of the bay anchovy larvae in the Bay were entrained at OCGS. On several days the number of entrained eggs and larvae constituted a high percentage of the Bay population. Data from collections at both OCGS and western Barnegat Bay indicated that these forms were substantially less numerous when the population survey was conducted than on an average for the entire month.

Despite the probable loss of an estimated  $2.2 \times 10^{10}$  eggs and  $9.4 \times 10^8$  larvae and juveniles of the bay anchovy, substantial impact to the adult population was not apparent. The mean monthly density of eggs ( $7-82/\text{m}^3$ ) and larvae ( $0.1-11.9/\text{m}^3$ ) during June and July was approximately equal to the density of eggs ( $16.9-115.2/\text{m}^3$ ) and larvae ( $0.1-6.9/\text{m}^3$ ) from nearby

Great Bay and Little Egg Harbor from June and July of 1972 to 1975 (Thomas and Milstein 1973; Thomas et al. 1974, 1975; Milstein et al. 1976). Yearly mean catch of adult bay anchovy by seine in this study and by McClain (1973) were within the range of yearly mean catch just prior to OCGS operation (Marcellus 1972).

Any impact on the winter flounder population in an estuary may affect future year classes in that estuary because populations are composed of independent stocks associated with individual estuaries (Lobell 1939, Saila 1961). The percentage of the estimated population of winter flounder larvae entrained at OCGS ranged from 0.4 to 2.7%. At the Millstone Point Nuclear Power Station on the Niantic estuary in Connecticut, an entrainment simulation model predicted that an entrainment loss of 3% of the larvae in the estuary would result in a 16% reduction of the adult population after 35 years (Hess et al. 1975). This decrease was considered an overestimate because the model ignored several compensating factors. Since an adequate estimate of the Barnegat Bay population prior to OCGS operation does not exist, it is not known if the winter flounder population in the Bay has decreased since OCGS began operation. Since winter flounder populations in nearby New Jersey estuaries have markedly declined in recent years (Danila, unpublished data) it may be difficult to attribute any changes in the winter flounder population in Barnegat Bay to entrainment losses at OCGS.

Although an estimated 2.2 to 16.9% of the estimated population of young of the northern pipefish were entrained, this probably was a relatively small portion of the total population in the Bay. Most (89%) of the adults resided in the shallow, eastern portion of the Bay from July through October. Since

the eggs are carried in the marsupium of the male, many young were probably in the eastern area of the Bay. This shallow area was not sampled.

Few eggs and larvae of the Atlantic menhaden were collected. Although the Atlantic menhaden was common in the Bay, most of the population was immature. Most spawning occurs in offshore waters (Nicholson 1972). The EPA's (1973) estimate of  $1.65 \times 10^8$  larvae entrained per year was a very substantial overestimate.

#### Conclusion

Although the magnitude of entrainment was numerically large and a net loss of some forms occurred, no evidence exists to date that the Oyster Creek Generating Station has affected the composition, relative abundance, and seasonal variation of zoo- and ichthyoplankton in Barnegat Bay. For most forms, the percentage of the Bay populations entrained at OCGS was relatively small. The slightly advanced spawning of mud crabs and possibly the greater abundance of larval gobies at the mouth of Oyster Creek were the only noted alterations of behavior and abundance associated with the thermal discharge. The apparent spawning of the bay anchovy and several invertebrates in the discharge canal may partially offset some of the relatively small entrainment losses.

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Table 1 . Alphabetical listing by common name of all vertebrate species collected by fish and impingement programs from September 1975 through August 1976.

African Pompano - <u>Alectis crinitus</u>	Northern stargazer - <u>Astroscopus guttatus</u>
Alewife - <u>Alosa pseudoharengus</u>	Orange filefish - <u>Alutera schoepfi</u>
American eel - <u>Anguilla rostrata</u>	Oyster toadfish - <u>Opsanus tau</u>
American shad - <u>Alosa sapidissima</u>	Permit - <u>Trachinotus falcatus</u>
Atlantic croaker - <u>Micropogon undulatus</u>	Pirateperch - <u>Aphredoderus sayanus</u>
Atlantic herring - <u>Clupea harengus</u>	Planehead filefish - <u>Monacanthus hispidus</u>
Atlantic menhaden - <u>Brevoortia tyrannus</u>	Pollock - <u>Pollachius virens</u>
Atlantic moonfish - <u>Vomer setapinnis</u>	Pumpkinseed - <u>Lepomis gibbosus</u>
Atlantic needlefish - <u>Strongylura marina</u>	Rainwater killifish - <u>Lucania parva</u>
Atlantic silverside - <u>Menidia menidia</u>	Red hake - <u>Urophycis chuss</u>
Banded killifish - <u>Fundulus diaphanus</u>	Round herring - <u>Etrumeus teres</u>
Bay anchovy - <u>Anchoa mitchilli</u>	Round scad - <u>Decapterus punctatus</u>
Bigeye scad - <u>Selar crumenophthalmus</u>	Sand lance - <u>Ammodytes sp.</u>
Black drum - <u>Pogonias cromis</u>	Scrawled cowfish - <u>Lactophrys quadricornis</u>
Black sea bass - <u>Centropristis striata</u>	Scup - <u>Stenotomus chrysops</u>
Blackcheek tonguefish - <u>Symphurus plagiura</u>	Seaboard goby - <u>Gobiosoma ginsburgi</u>
Blueback herring - <u>Alosa aestivalis</u>	Sea raven - <u>Hemitripterus americanus</u>
Bluefish - <u>Pomatomus saltatrix</u>	Sheepshead minnow - <u>Cyprinodon variegatus</u>
Bluegill - <u>Lepomis macrochirus</u>	Short bigeye - <u>Pristigenys alta</u>
Bluerunner - <u>Caranx crysos</u>	Silver anchovy - <u>Engraulis eurystole</u>
Bluespotted cornetfish - <u>Fistularia tabacaria</u>	Silver hake - <u>Merluccius bilinearis</u>
Bluntnose stingray - <u>Dasyatis sayi</u>	Silver perch - <u>Bairdiella chrysura</u>
Butterfish - <u>Peprilus triacanthus</u>	Smallmouth flounder - <u>Etopus microstomus</u>
Chain pickerel - <u>Esox niger</u>	Smooth dogfish - <u>Mustelus canis</u>
Chain pipefish - <u>Syngnathus louisianae</u>	Smooth trunkfish - <u>Lactophrys triqueter</u>
Clearnose skate - <u>Raja eglanteria</u>	Spot - <u>Leiostomus xanthurus</u>
Conger eel - <u>Conger oceanicus</u>	Spotfin butterflyfish - <u>Chaetodon ocellatus</u>
Crevalle jack - <u>Caranx hippos</u>	Spotted goatfish - <u>Pseudupeneus maculatus</u>
Cunner - <u>Tautoglabrus adspersus</u>	Spotted hake - <u>Urophycis regius</u>
Diamondback terrapin - <u>Malaclemys terrapin</u>	Striped anchovy - <u>Anchoa hepsetus</u>
Feather blenny - <u>Hypsoblennius hentzi</u>	Striped bass - <u>Morone saxatilis</u>
Florida pompano - <u>Trachinotus carolinus</u>	Striped blenny - <u>Chasmodes bosquianus</u>
Fourspine stickleback - <u>Apeltes quadracus</u>	Striped burrfish - <u>Chilomycterus schoepfi</u>
Fowler's toad - <u>Bufo fowleri</u>	Striped cusk-eel - <u>Rissola marginata</u>
Gizzard shad - <u>Dorosoma cepedianum</u>	Striped killifish - <u>Fundulus majalis</u>
Gray snapper - <u>Lutjanus griseus</u>	Striped mullet - <u>Mugil ce balus</u>
Grubby - <u>Myoxocephalus aeneus</u>	Striped searobin - <u>Prionotus evolans</u>
Hogchoker - <u>Trinectes macularus</u>	Summer flounder - <u>Paralichthys dentatus</u>
Inshore lizardfish - <u>Synodus foetens</u>	Tautog - <u>Tautoga onitis</u>
Ladyfish - <u>Elops saurus</u>	Threespine stickleback - <u>Gasterosteus aculeatus</u>
Lined seahorse - <u>Hippocampus erectus</u>	Tidewater silverside - <u>Menidia beryllina</u>
Lookdown - <u>Selene vomer</u>	Weakfish - <u>Cynoscion regalis</u>
Mummichog - <u>Fundulus heteroclitus</u>	White hake - <u>Urophycis tenuis</u>
Naked goby - <u>Gobiosoma boscii</u>	White mullet - <u>Mugil curema</u>
Northern kingfish - <u>Menticirrhus saxatilis</u>	White perch - <u>Morone americana</u>
Northern pipefish - <u>Syngnathus fuscus</u>	Windowpane - <u>Scophthalmus aquosus</u>
Northern puffer - <u>Sphoeroides maculatus</u>	Winter flounder - <u>Pseudopleuronectes americanus</u>
Northern searobin - <u>Prionotus carolinus</u>	
Northern sennet - <u>Sphyraena borealis</u>	

Table 2 . Alphabetical listing by scientific name of all vertebrate species collected by fish and impingement programs from September 1975 through August 1976.

<u>Alectis crinitus</u> - African pompano	<u>Lutjanus griseus</u> - Gray snapper
<u>Alosa aestivalis</u> - Blueback herring	<u>Malaclemys terrapin</u> - Diamondback terrapin
<u>Alosa pseudoharengus</u> - Alewife	<u>Menidia beryllina</u> - Tidewater silverside
<u>Alosa sapidissima</u> - American shad	<u>Menidia menidia</u> - Atlantic silverside
<u>Alutera schoepfi</u> - Orange filefish	<u>Menticirrhus saxatilis</u> - Northern kingfish
<u>Ammodytes</u> sp. - Sand lance	<u>Merluccius bilinearis</u> - Silver hake
<u>Anchoa hepseus</u> - Striped anchovy	<u>Micropogon undulatus</u> - Atlantic croaker
<u>Anchoa mitchilli</u> - Bay anchovy	<u>Monacanthus hispidus</u> - Planehead filefish
<u>Anguilla rostrata</u> - American eel	<u>Morone americana</u> - White perch
<u>Apeltes quadracus</u> - Fourspine stickleback	<u>Morone saxatilis</u> - Striped bass
<u>Aphredoderus sayanus</u> - Pirateperch	<u>Mugil cephalus</u> - Striped mullet
<u>Astroscopus guttatus</u> - Northern stargazer	<u>Mugil curema</u> - White mullet
<u>Bairdiella chrysura</u> - Silver perch	<u>Mustelus canis</u> - Smooth dogfish
<u>Brevoortia tyrannus</u> - Atlantic menhaden	<u>Myoxocephalus aeneus</u> - Grubby
<u>Bufo fowleri</u> - Fowler's toad	<u>Opsanus tau</u> - Oyster toadfish
<u>Caranx crysos</u> - Blue runner	<u>Paralichthys dentatus</u> - Summer flounder
<u>Caranx hippos</u> - Crevalle jack	<u>Peprilus triacanthus</u> - Butterfish
<u>Centropomus striata</u> - Black sea bass	<u>Pogonias cromis</u> - Black drum
<u>Chaetodon ocellatus</u> - Spotfin butterflyfish	<u>Pollachius virens</u> - Pollock
<u>Chasmodes bosquianus</u> - Striped blenny	<u>Pomatomus saltatrix</u> - Bluefish
<u>Chilomycterus schoepfi</u> - Striped burrfish	<u>Prionotus carolinus</u> - Northern searobin
<u>Clupea harengus</u> - Atlantic herring	<u>Prionotus evolans</u> - Striped searobin
<u>Conger oceanicus</u> - Conger eel	<u>Pristiglenys alta</u> - Short bigeye
<u>Cynoscion regalis</u> - Weakfish	<u>Pseudopleuronectes americanus</u> - Winter flounder
<u>Cyprinodon variegatus</u> - Sheepshead minnow	<u>Pseudupeneus maculatus</u> - Spotted goatfish
<u>Dasyatis sayi</u> - Bluntnose stingray	<u>Raja eglanteria</u> - Clearnose skate
<u>Decapterus punctatus</u> - Round scad	<u>Rissola marginata</u> - Striped cusk-eel
<u>Dorosoma cepedianum</u> - Gizzard shad	<u>Scophthalmus aquosus</u> - Windowpane
<u>Elops saurus</u> - Ladyfish	<u>Selar crumenophthalmus</u> - Bigeye scad
<u>Engraulis mordax</u> - Silver anchovy	<u>Selene vomer</u> - Lookdown
<u>Esox niger</u> - Chain pickerel	<u>Sphaeroides maculatus</u> - Northern puffer
<u>Etropus microstomus</u> - Smallmouth flounder	<u>Sphyrna borealis</u> - Northern sennet
<u>Etrumeus teres</u> - Round herring	<u>Stenotomus chrysops</u> - Scup
<u>Fistularia tabacaria</u> - Bluespotted cornetfish	<u>Strongylura marina</u> - Atlantic needlefish
<u>Fundulus diaphanus</u> - Banded killifish	<u>Symphurus plagiusa</u> - Blackcheek tonguefish
<u>Fundulus heteroclitus</u> - Mummichog	<u>Syngnathus fuscus</u> - Northern pipefish
<u>Fundulus majalis</u> - Striped killifish	<u>Syngnathus louisianae</u> - Chain pipefish
<u>Gasterosteus aculeatus</u> - Threespine stickleback	<u>Synodus foetens</u> - Inshore lizardfish
<u>Gobiosoma boscii</u> - Naked goby	<u>Tautog onitis</u> - Tautog
<u>Gobiosoma ginsburgi</u> - Seaboard goby	<u>Tautoglabrus adspersus</u> - Cunner
<u>Hemitripterus americanus</u> - Sea raven	<u>Trachinotus carolinus</u> - Florida pompano
<u>Hippocampus erectus</u> - Lined seahorse	<u>Trachinotus falcatus</u> - Permit
<u>Hypsoblennius hentzi</u> - Feather blenny	<u>Trinectes maculatus</u> - Hogchoker
<u>Lactophrys quadricornis</u> - Scrawled cowfish	<u>Urophycis chuss</u> - Red hake
<u>Lactophrys triqueter</u> - Smooth trunkfish	<u>Urophycis regius</u> - Spotted hake
<u>Leiostomus xanthurus</u> - Spot	<u>Urophycis tenuis</u> - White hake
<u>Lepomis gibbosus</u> - Pumpkinseed	<u>Vomer setapinnis</u> - Atlantic moonfish
<u>Lepomis macrochirus</u> - Bluegill	
<u>Lucania parva</u> - Rainwater killifish	

Table 3 . Alphabetical listing by scientific names of all macroinvertebrate taxa collected by fish and impingement programs from September 1975 through August 1976.

<u>Actiniaria</u> (order) - sea anemones	<u>Neopanope texana</u> - a mud crab
<u>Aequorea</u> spp. - a hydromedusa	<u>Mercenaria mercenaria</u> - hard clam, northern quahog
<u>Anilocra laticauda</u> - an isopod	<u>Olencira praegustator</u> - a parasitic isopod
<u>Callinectes sapidus</u> - blue crab	<u>Ovalipes ocellatus</u> - lady crab
<u>Callinectes similis</u> - lesser blue crab	<u>Pagurus longicarpus</u> - long-armed hermit crab
<u>Cancer irroratus</u> - rock crab	<u>Palaeomonetes pugio</u> - grass shrimp
<u>Crangon septemspinosa</u> - sand shrimp	<u>Palaeomonetes vulgaris</u> - grass shrimp
<u>Cyanea capillata</u> - lion's mane jellyfish	<u>Panopeus herbstii</u> - a mud crab
<u>Eurypanopeus depressus</u> - flat mud crab	<u>Penaeus aztecus</u> - brown shrimp
<u>Glugea staphani</u> - a myxosporidian	<u>Penaeus setiferus</u> - white shrimp
<u>Leptosynapta</u> sp. - sea cucumber	<u>Polychaeta</u> (class) - bristle worms
<u>Lernaeenicus</u> spp. - parasitic copepods	<u>Portunus gibbesi</u> - a portunid crab
<u>Libinia dubia</u> - spider crab	<u>Procambarus blandingi</u> - Blanding's crayfish
<u>Libinia emarginata</u> - spider crab	<u>Scyphozoa</u> (class) - true jellyfishes
<u>Limulus polyphemus</u> - horseshoe crab	<u>Squilla empusa</u> - mentis shrimp
<u>Lironeca ovalis</u> - a parasitic isopod	<u>Stomatopoda</u> (order) - mantis shrimps
<u>Loliginidae</u> (family) - squids	<u>Xanthidae</u> (family) - mud crabs
<u>Loligo pealei</u> - Atlantic long-finned squid	
<u>Lolliguncula brevis</u> - brief squid	
<u>Nemertea</u> (phylum) - ribbon worms	

Table 4 . Ranks of yearly mean densities ( $\bar{X}/m^3$ ) of microzooplankton collected at the condenser discharge (11) from September-December, 1975, the dilution discharge (13) from January-February, 1976, and the condenser discharge from March-September 2, 1976.

Organism	Density
Total organisms	74859
Copepoda (naupliar)	31643
Barnacle (naupliar)	9687
Rotifers (no determination)	7488
<u>Acartia</u> spp. (copepodid)	5887
<u>Polychaeta</u> (larval)	5286
<u>Acartia clausi</u> (adult)	2197
<u>Oithona</u> spp. (copepodid)	1460
<u>Acartia tonsa</u> (adult)	1344
Class Polychaeta (trochophore)	1193
Class Gastropoda (larval)	1099
Unidentified harpacticoids (no determination)	966
Unidentified copepod (copepodite)	778
<u>Oithona brevicornis</u> (adult)	653
Class Bivalvia (umbo)	612
Class Bivalvia (hinge)	609
Parasitic cyclopoid (no determination)	578
Class Hydrozoa (no determination)	443
<u>Eurytemora</u> spp. (copepodid)	427
Trochophore (trochophore)	393
<u>Mulinio lateralis</u> (umbo)	278
<u>Paracalanus crassirostris</u> (adult)	256
<u>Paracalanus</u> sp. (copepodid)	244
<u>Pseudodiaptomus coronatus</u> (copepodid)	187
<u>Pseudodiaptomus coronatus</u> (adult)	158
<u>Eurytemora affinis</u> (adult)	132
Cyphonaute (larval)	102
<u>Mercenaria mercenaria</u> (umbo)	88
<u>Aequipecten irradians</u> (umbo)	67
<u>Acartia</u> spp. (no determination)	63
<u>Acartia tonsa</u> (no determination)	62
<u>Melampus bidentatus</u> (larvae)	47
<u>Obelia</u> spp. (no determination)	44
<u>Mercenaria mercenaria</u> (hinge)	43
<u>Eurytemora</u> spp. (copepodid)	36
<u>Nassarius</u> spp. (larval)	32
<u>Oithona brevicornis</u> (no determination)	19
<u>Podon polyphemoides</u> (no determination)	18
<u>Acartia tonsa</u> (copepodid)	17
Subclass Ostracoda (no determination)	16
<u>Polydora</u> spp. (larval)	13
Class Ascidiacea (larval)	12
Parasitic cyclopoid (larval)	12
<u>Temora longicornis</u> (adult)	12
<u>Oithona similis</u> (adult)	12
Barnacle cypris (larval)	10
<u>Mytilus edulis</u> (umbo)	10

Table 4 . (cont.)

Organism	Density
<u>Acartia clausi</u> (no determination)	10
<u>Podon</u> spp. (no determination)	9
Unidentified invertebrate (larval)	8
<u>Tellina</u> spp. (larval)	8
<u>Pseudocalanus minutus</u> (copepodid)	7
Class Hydrozoa (larval)	6
<u>Mulinia lateralis</u> (hinge)	5
<u>Tellina</u> spp. (hinge)	5
Subclass copepoda (copepodid)	5
<u>Centropages</u> spp. (copepodid)	5
<u>Eurytemora americana</u> (adult)	5
<u>Pseudocalanus minutus</u> (adult)	4
<u>Oithona</u> spp. (adult)	4
<u>Oithona similis</u> (no determination)	4
<u>Pseudodiaptomus coronatus</u> (no determination)	4
Order Cyclopoida (no determination)	4
Phylum Echinodermata (larval)	3
Unidentified invertebrate (no determination)	3
Order Cyclopoida (no determination)	3
Phylum Porifera (larval)	2
<u>Modiolus demissus</u> (larval)	2
<u>Spio</u> spp. (larval)	2
<u>Oithona brevicornis</u> (copepodid)	2
<u>Centropages hamatus</u> (adult)	2
<u>Paracalanus crassirostris</u> (no determination)	2
Order Harpacticoida (no determination)	2
Parasitic cyclopoida (larval)	2
<u>Lyonsia hyalina</u> (larval)	1
<u>Mytilus edulis</u> (hinge)	1
<u>Tellina agilis</u> (umbo)	1
<u>Eurytemora affinis</u> (copepodid)	1
Order Cyclopoida (copepodid)	1
Class Hirudinea (no determination)	1
<u>Evadne</u> sp. (no determination)	1
Suborder Aeolidacea (no determination)	1
<u>Laevicardium mortoni</u> (umbo)	<1
<u>Pleurobrachia</u> sp. (no determination)	<1
<u>Pleurobrachia pileus</u> (no determination)	<1
<u>Mnemiopsis leidyi</u> (no determination)	<1
<u>Beroe</u> spp. (no determination)	<1
Order Nudibranchi (no determination)	<1
Class Polychaeta (no determination)	<1
Order Cumacea (no determination)	<1
Total number of forms	91



TABLE 5. MEAN DENSITIES OF MICROZOOPLANKTON COLLECTED AT THE CONDENSER DISCHARGE (11)  
FOR THE ENTRAINMENT STUDY FROM SEPTEMBER 1975 THROUGH 2 SEPTEMBER 1976.<sup>b</sup>

SPECIES	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	214	31643	818	172642	33353	105
BARNACLE NAUPLIUS	163	9687	82	112564	19403	200
LIFE STAGE: COPEPODITE						
SUBCLASS COPEPODA	7	5	69	276	30	618
ACARTIA SPP	197	5887	69	63836	8159	139
ACARTIA TONSA	7	17	166	987	107	641
CENTROPAGES SPP	3	5	216	643	50	951
PSEUDODIAPTOMUS						
CORONATUS	45	187	164	3048	513	274
PARACALANUS SPP.	36	244	39	7547	971	398
EURYTEMORA SPP.	71	427	34	7233	1050	246
EURYTEMORA AFFINIS	1	1	236	236	16	-
PSEUDOCALANUS MINUTUS	9	7	69	337	37	559
ORDER CYCLOPOIDA	1	1	216	216	14	-
OITHONA SPP	119	1460	69	20440	3333	228
OITHONA BREVICORNIS	2	2	171	171	16	-
UNIDENTIFIED						
COPEPODITES	55	778	189	15499	2542	327
PARASITIC CYCLOPOIDA	1	12	2830	2830	187	1510
LIFE STAGE: ADULT						
ACARTIA CLAUSI	86	2197	69	31757	6017	274
ACARTIA TONSA	153	1344	16	14151	2470	184
CENTROPAGES HAMATUS	2	2	194	347	26	1108
PSEUDODIAPTOMUS						
CORONATUS	55	158	39	2830	450	285
PARACALANUS						
CRASSIROSTRIS	47	256	61	6132	751	293
EURYTEMORA SPP.	8	36	236	1944	215	606
EURYTEMORA AFFINIS	25	132	67	4567	543	411
EURYTEMORA AMERICANA	4	5	189	347	36	768
TEMORA LONGICORNIS	4	12	236	1563	115	947
PSEUDOCALANUS MINUTUS	4	4	69	337	32	819
OITHONA SPP	2	4	354	500	40	1081
OITHONA BREVICORNIS	105	653	31	9434	1421	218
OITHONA SIMILIS	9	12	69	735	73	604

TABLE 5. (CONT.)

SPECIES	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
CLASS POLYCHAETA	100	1193	236	14825	2195	184
TROCHOPHORES	105	393	28	11635	975	240
LIFE STAGE: LARVAL						
PHYLUM PORIFERA	1	2	463	463	31	1510
CLASS HYDROZOA	7	6	70	667	50	794
CYTHONAUTE LARVAE	41	102	51	1929	291	287
CLASS GASTROPODA	157	1099	35	19458	1697	154
NASSARIUS SPP.	22	32	48	721	117	366
MELAMPUS BIDENTATUS	17	47	129	1417	190	403
LYONSIA HYALINA	1	1	164	164	11	-
CLASS POLYCHAETA	198	5286	20	39937	6852	130
POLYDORA SPP	15	13	25	410	59	453
BARNACLE CYPRIS	9	10	41	590	60	619
PHYLUM ECHINODERMATA	1	3	674	674	45	1510
CLASS ASCIDIACEA	11	12	16	1179	88	731
UNIDENTIFIED						
INVERTEBRATE	13	8	25	721	54	654
PARASITIC CYCLOPOIDA	5	2	69	190	16	744
LIFE STAGE: HINGE						
CLASS BIVALVIA	116	609	16	13707	1402	230
MYTILUS EDULIS	2	1	51	222	15	-
AEQUIPECTEN IRRADIANS	39	222	51	6724	906	408
MERCENARIA MERCENARIA	14	43	111	2264	230	531
MULINIA LATERALIS	6	5	50	380	34	709
TELLINA SPP.	1	5	1179	1179	78	1510
LIFE STAGE: UMBO						
CLASS BIVALVIA	145	612	34	8534	1010	165
MYTILUS EDULIS	3	10	517	1132	93	918
MODIOLUS DEMISSUS	2	2	94	259	18	-
AEQUIPECTEN IRRADIANS	19	67	69	5664	428	643
LAEVICARDIUM MORTONI	1	0	42	42	3	-
MERCENARIA MERCENARIA	14	88	330	3019	404	458
MULINIA LATERALIS	75	278	36	3504	554	199
TELLINA AGILIS	1	1	171	171	11	-
TELLINA SPP.	5	8	83	629	59	775
SPIO SPP	1	2	379	379	25	-
TOTAL	228	10161				

TABLE 5. (CONT.)

LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	85	443	40	5042	890	201
OBELIA SPP	16	44	71	2568	243	548
PLEUROBRACHIA SP	4	0	2	3	0	-
PLEUROBRACHIA PILEUS	2	0	4	6	0	-
MNEMIOPSIS LEIDYI	6	0	3	13	1	-
BEROE SPP	1	0	3	3	0	-
ORDER ROTIFERA	151	7488	34	81402	12524	167
ORDER NUDIBRANCHIA	1	0	3	3	0	-
CLASS POLYCHAETA	1	0	16	16	1	-
CLASS HIRUDINEA	1	1	236	236	16	-
PODON SPP	4	9	69	1101	94	993
PODON POLYPHEMOIDES	9	18	210	943	102	564
EVADNE SP	1	1	259	259	17	-
SUBCLASS OSTRACODA	14	16	69	590	72	455
ACARTIA SPP	8	63	486	4224	406	648
ACARTIA CLAUSI	4	10	50	946	90	908
ACARTIA TONSA	14	62	208	2292	307	496
PSEUDODIAPTOMUS						
CORONATUS	6	4	41	405	30	829
PARACALANUS						
CRASSIROSTRIS	4	2	71	190	16	-
ORDER CYCLOPOIDA	4	3	127	259	25	786
OITHONA SPP	4	4	69	517	37	959
OITHONA BREVICORNIS	13	19	99	708	92	483
OITHONA SIMILIS	6	4	42	259	29	695
ORDER HARPACTICOIDA	3	2	95	208	18	-
UNIDENTIFIED						
HARPACTICIDS	150	966	41	10849	1553	161
ORDER CUMACEA	1	0	107	107	7	-
UNIDENTIFIED						
INVERTEBRATE	6	3	51	216	23	696
PARASITIC CYCLOPOIDA	145	578	62	6111	872	151
SUBORDER AEOLIDACEA	2	1	83	240	17	-
TOTAL	228	64921				

<sup>a</sup> Density (n/m<sup>3</sup>)

<sup>b</sup> Densities at the dilution discharge (13) for January and February, 1976, have been included in the yearly mean for the condenser discharge (11).

Table 6 . Seasonal distribution of microzooplankton densities entrained for each month from September 1975 through August 1976.

Location	11 <sup>a</sup>	11	11	11	13 <sup>b</sup>	13 <sup>b</sup>	11	11	11	11	11	11
Sample Size	n = 26	n = 12	n = 12	n = 12	n = 7	n = 18	n = 18	n = 28	n = 28	n = 30	n = 30	n = 32
Month	Sept. 1975	Oct.	Nov.	Dec.	Jan. 1976	Feb.	Mar.	Apr.	May	June	July	Aug.
	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$	$\bar{X} \text{ m}^{-3}$
Total Number	25788	6681	5764	60381	79821	211834	85261	168093	100164	94765	80662	39611
Copepod nauplii	7007	3009	1891	18220	36173	72270	35585	71307	26168	51169	42376	18104
Barnacle nauplii	1457	393	574	4077	462	446	2075	42487	23788	6439	663	144
Rotifera	8158	32	447	29928	34477	124741	130	14022	19700	2628	263	3046
Acartia spp. copepodid	500	- <sup>c</sup>	801	2518	3918	6855	19806	11821	2028	6775	7112	4021
Polychaete larvae	2133	260	169	409	19	157	275	13894	12621	7766	2885	2289
Acartia clausi	0	- <sup>c</sup>	23	1322	2791	5875	20192	3870	249	198	0	0
Oithona spp. copepodid	232	- <sup>c</sup>	208	209	100	36	0	7	343	767	6392	3197
Acartia tonsa	222	- <sup>c</sup>	664	1340	1561	541	638	98	15	3132	3866	1625
Polychaete trochophores	0	0	0	0	0	0	0	234	3435	2610	1446	1487
Gastropod larvae	840	119	160	21	0	15	12	520	2775	1250	1847	1240
Unidentified harpacticoid	164	66	52	114	38	81	209	678	2493	2908	817	279
Unidentified copepodid	9	0	48	12	0	95	300	11	151	1558	3879	138
Oithona colcarva	67	- <sup>c</sup>	125	111	0	0	100	39	50	630	3007	969
Bivalve umbo	348	12	18	74	0	1	37	1531	935	1027	334	587
Bivalve hinge	70	0	23	41	0	0	0	2427	931	579	310	488

a Condenser discharge.

b Dilution discharge, the plant was off-line for repairs.

c No data, these forms were not identified to a life stage for this month.

TABLE 7. MEAN DENSITIES ( $n/m^3$ ) OF MICROZOOPLANKTON COLLECTED AT THE DISCHARGE OF THE CONDENSERS (11) AND DILUTION PUMP (13) FROM SEPTEMBER 1975 THROUGH AUGUST 1976.<sup>a</sup>

MONTH	SEPTEMBER 1975					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	12	112	36	570	169	151
LIFE STAGE: LARVAE						
CYPHONAUTE LARVAE	22	618	60	1929	578	94
CLASS GASTROPODA	23	840	154	2568	749	89
NASSARIUS SPP.	18	226	48	721	229	101
MELAMPUS BIDENTATUS	2	86	822	1417	316	367
LYONSIA HYALINA	1	6	164	164	32	510
CLASS POLYCHAETA	22	2133	162	8519	2562	120
POLYDORA SPP	9	93	62	410	146	157
BAKNALE CYPRIS	2	4	41	62	14	361
CLASS ASCIDIACEA	5	37	16	366	100	271
UNIDENTIFIED INVERTEBRATE	5	54	162	721	149	279
LIFE STAGE: UMBO						
CLASS BIVALVIA	22	348	42	2137	486	140
AEQUIPECTEN IRRADIANS	1	3	83	83	16	510
LAEVICARDIUM MORTONI	1	2	42	42	8	-
MULINIA LATERALIS	20	642	36	1884	602	94
TELLINA AGILIS	1	7	171	171	34	510
TELLINA SPP.	2	10	83	164	35	373
LIFE STAGE: HINGE						
CLASS BIVALVIA	13	70	16	347	99	142
AEQUIPECTEN IRRADIANS	3	12	57	171	38	316
MULINIA LATERALIS	5	40	107	380	95	236
	26	5342				

TABLE 7. (CONT.)

MONTH	SEPTEMBER 1975					
SPECIES	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	22	7007	2935	21061	5548	79
NAUPLIUS	21	1457	82	6010	1665	114
LIFE STAGE: COPEPODIDITE						
SUBCLASS COPEPODA	2	9	72	166	35	382
ACARTIA SPP	16	500	325	1736	542	108
ACARTIA TONSA	7	146	166	987	290	198
PSEUDODIAPTOMUS						
CORONATUS	3	25	164	325	76	300
PARACALANUS SPP.	3	11	39	185	38	346
OITHONA SPP	14	232	79	881	291	125
OITHONA BREVICORNIS	2	13	171	171	46	353
LIFE STAGE: ADULT						
ACARTIA TONSA	20	222	16	1111	251	113
PSEUDODIAPTOMUS						
CORONATUS	3	11	39	185	39	342
PARACALANUS						
CRASSIROSTRIS	1	2	61	61	12	510
OITHONA SPP	1	19	500	500	98	510
OITHONA BREVICORNIS	9	67	39	694	147	219
OITHONA SIMILIS	2	19	164	333	72	375
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	10	794	40	5042	1519	191
OBELIA SPP	12	252	71	2568	543	216
MNEMIOPSIS LEIDYI	4	2	7	13	4	-
ORDER MOTIFERA	22	8158	1974	26962	6977	86
CLASS POLYCHAETA	1	1	16	16	3	-
SUBCLASS OSTRACODA	4	23	93	208	58	250
ACARTIA TONSA	6	149	208	1721	382	256
PSEUDODIAPTOMUS						
CORONATUS	4	13	41	154	36	269
PARACALANUS						
CRASSIROSTRIS	2	6	71	95	23	357
OITHONA BREVICORNIS	8	89	123	625	162	183
OITHONA SIMILIS	2	9	42	190	38	424
ORDER HARPACTICOIDA	2	12	95	208	44	379
UNIDENTIFIED						
HARPACTICOIDA	15	164	41	926	241	147
ORDER CUMACEA	1	4	107	107	21	510
PARASITIC CYCLOPOIDA	20	1027	62	5902	1267	123
	26	20446				

TABLE 7. (CONT.)

MONTH	OCTOBER 1975					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	2	5	28	34	12	235
LIFE STAGE: LARVAL						
CYPHONAUTE LARVAE	6	205	278	554	229	112
CLASS GASTROPODA	6	119	127	345	140	118
NASSARIUS SPP.	2	95	500	634	223	235
CLASS POLYCHAETA	6	260	20	1448	447	172
POLYDORA SPP	4	28	25	194	57	204
CLASS ASCIDIACEA	1	2	20	20	6	-
UNIDENTIFIED						
INVERTEBRATE	5	15	25	56	20	133
LIFE STAGE: HINGE						
MULINIA LATERALIS	1	4	50	50	14	346
LIFE STAGE: UMBO						
CLASS BIVALVIA	1	12	139	139	40	346
MULINIA LATERALIS	4	122	304	438	184	151
	12	867				
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	6	3009	1962	11982	4347	144
PARANACLE NAUPLIUS	6	393	167	1931	648	165
LIFE STAGE: COPEPODITE						
SUBCLASS COPEPODA	1	13	158	158	46	346
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	6	167	177	538	196	118
PLEUROBRACHIA PILEUS	2	1	4	6	2	-
HNEMIOPSIS LEIDYI	2	1	3	6	2	-
BELOE SPP	1	0	3	3	1	-
ORDER ROTIFERA	3	32	86	158	60	188
ACARTIA SPP	6	895	486	4224	1408	157
ACARTIA CLAUSI	2	33	50	345	99	302
ACARTIA TONSA	6	708	208	2292	972	137
PSEUDODIAPYCNUS						
CORONATUS	1	6	69	69	20	346
PARACALANUS						
CRASSIROSTRIS	2	23	86	190	58	253
OITHONA SPP	4	74	69	517	152	205
OITHONA BREVICORNIS	5	168	99	708	267	159
OITHONA SIMILIS	4	60	69	259	101	170
UNIDENTIFIED						
PARPACTICIDS	6	66	50	208	84	129
PARASITIC CYCLOPOIDA	6	168	139	556	209	125
	12	5814				

TABLE 7. (CONT.)

MONTH	NOVEMBER 1975					
	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	10	131	51	556	166	126
LIFE STAGE: LARVAL						
CLASS HYDROZOA	5	58	70	276	88	151
CYTHONAUTE LARVAE	2	13	69	83	30	235
CLASS GASTROPODA	6	160	70	1379	388	243
NASSARIUS SPP.	1	4	51	51	15	346
CLASS POLYCHAETA	5	169	95	1250	361	213
BARNACLE CYPNIS	1	6	69	69	20	346
CLASS ASCIDIACEA	2	14	70	95	33	237
UNIDENTIFIED						
INVERTEBRATE	2	17	69	138	43	249
PARASITIC CYCLOPOIDA	5	41	69	190	59	146
LIFE STAGE: HINGE						
CLASS BIVALVIA	3	23	69	138	45	195
AEQUIPECTEN IRRADIANS	4	55	69	381	112	204
LIFE STAGE: UMBO						
CLASS BIVALVIA	3	18	69	83	33	182
AEQUIPECTEN IRRADIANS	1	6	69	69	20	346
	12	715				



TABLE 7 . (CONT.)

MONTH	NOVEMBER 1975					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	11	1891	818	3472	1140	60
BARNACLE NAUPLIUS	9	574	140	2621	712	124
LIFE STAGE: COPEPODITE						
SUBCLASS COPEPODA	3	48	69	276	98	205
ACARTIA SPP	11	801	69	2358	738	92
PSEUDODIAPTOMUS						
CORONATUS	1	17	205	205	59	346
PSEUDOCALANUS MINUTUS	5	42	69	139	56	133
OITHONA SPP	10	208	69	667	180	87
LIFE STAGE: ADULT						
ACARTIA CLAUSI	3	23	69	138	45	195
ACARTIA TONSA	18	664	69	1743	357	54
PSEUDODIAPTOMUS						
CORONATUS	8	63	69	138	52	83
PSEUDOCALANUS MINUTUS	1	6	69	69	20	346
OITHONA BREVICORNIS	11	125	69	381	106	85
OITHONA SIMILIS	1	6	69	69	20	346
LIFE STAGE: NO DETERMINATION						
PLEUROBRACHIA SP	4	1	2	3	1	-
ORDER ROTIFERA	6	447	69	3542	1014	227
ORDER NUDIBRANCHIA	1	0	3	3	1	-
PODON SPP	1	6	69	69	20	346
SUBCLASS OSTRACODA	2	29	69	276	80	279
ORDER HARPACTICOIDA	1	12	138	138	40	346
UNIDENTIFIED						
HARPACTICOIDES	6	52	51	139	60	117
UNIDENTIFIED						
INVERTEBRATE	1	4	51	51	15	346
PARASITIC CYCLOPOIDA	1	26	308	308	89	346
SUBORDER AEOLIDACEA	1	7	83	83	24	346
	12	5049				

TABLE 7 . (CONT.)

MONTH	DECEMBER 1975					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	5	124	51	889	265	214
LIFE STAGE: LARVAL						
PHYLUM PORIFERA	1	39	463	463	134	346
CLASS HYDROZOA	2	61	70	667	192	312
CYPRONAUTE LARVAE	1	4	51	51	15	346
CLASS GASTROPODA	4	21	35	111	35	170
NASSARIUS SPP.	1	19	222	222	64	346
CLASS POLYCHAETA	12	409	93	889	253	62
POLYDORA SPP	2	20	54	185	54	272
UNIDENTIFIED INVERTEBRATE	1	8	93	93	27	346
LIFE STAGE: HINGE						
CLASS BIVALVIA	5	41	51	203	63	156
MYTILUS EDULIS	2	23	51	222	64	283
AEQUIPECTEN IRRADIANS	2	15	51	129	39	259
MERCENARIA MERCENARIA	1	9	111	111	32	346
LIFE STAGE: UMBO						
CLASS BIVALVIA	8	74	51	209	65	88
	12	865				

TABLE 7 . (CONT.)

MONTH	DECEMBER 1975					
SPECIES	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	12	18220	9730	24556	4491	25
BARNACLE NAUPLIUS	10	4077	557	19537	6295	154
LIFE STAGE: COPEPODITE						
SUBCLASS COPEPODA	1	12	140	140	40	346
ACARTIA SPP	10	2518	886	13333	3541	141
PSEUDODIAPTOMUS						
CORONATUS	1	21	250	250	72	346
PSEUDOCALANUS MINUTUS	2	40	222	262	95	235
OITHONA SPP	8	209	116	633	220	105
LIFE STAGE: ADULT						
ACARTIA CLAUSI	24	1322	116	6111	1463	111
ACARTIA TONSA	21	1340	116	5000	1272	95
PSEUDODIAPTOMUS						
CORONATUS	1	11	127	127	37	346
OITHONA BREVICORNIS	8	111	111	262	94	85
OITHONA SIMILIS	1	11	127	127	37	346
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	2	9	51	54	20	234
ORDER ROTIFERA	12	29928	12444	46193	9567	32
SUBCLASS OSTRACODA	1	11	129	129	37	346
ACARTIA SPP	2	294	1216	2315	726	247
ACARTIA CLAUSI	2	156	926	946	364	234
ACARTIA TONSA	2	144	648	1081	349	242
PSEUDODIAPTOMUS						
CORONATUS	1	34	405	405	117	346
ORDER CYCLOPOIDA	2	21	127	127	49	234
UNIDENTIFIED						
HARPACTICIDS	5	114	129	463	162	142
UNIDENTIFIED						
INVERTEBRATE	4	39	51	209	68	172
PARASITIC CYCLOPOIDA	12	874	135	6111	1659	190
	12	59516				

TABLE 7. (CONT.)

MONTH	JANUARY 1976					
	LOCATION 13					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: LARVAL						
CLASS POLYCHAETA	2	19	60	75	33	172
TOTAL	7	19				
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	7	36173	24906	52547	8259	23
BARNACLE NAUPLIUS	7	462	94	894	283	61
LIFE STAGE: COPEPODITE						
ACARTIA SPP	7	3918	2123	5377	1256	32
EURYTEMORA SPP.	1	24	171	171	65	265
TEMORA LONGICORNIS	1	11	75	75	28	265
PSEUDOCALANUS MINUTUS	5	90	75	236	82	91
OITHONA SPP	5	100	75	236	93	93
LIFE STAGE: ADULT						
ACARTIA CLAUSI	7	2791	1698	5189	1215	44
ACARTIA TONSA	7	1561	425	2909	934	60
PSEUDODIAPTOMUS						
CORONATUS	1	8	59	59	22	265
PARACALANUS PARVUS	1	11	79	79	30	265
EURYTEMORA SPP.	1	17	118	118	45	265
TEMORA LONGICORNIS	1	13	94	94	36	265
PSEUDOCALANUS MINUTUS	4	84	71	189	87	103
OITHONA SIMILIS	3	33	60	94	42	128
LIFE STAGE: NO DETERMINATION						
ORDER ROTIFERA	7	34477	18821	45472	9984	29
UNIDENTIFIED						
HARPACTICIDS	3	38	59	149	56	147
PARASITIC CYCLOPOIDA	1	9	60	60	23	265
TOTAL	7	79821				

TABLE 7. (CONT.)

MONTH	FEBRUARY 1976					
	LOCATION 13					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	1	7	109	109	27	400
LIFE STAGE: LARVAL						
CLASS GASTROPODA	1	15	236	236	59	400
CLASS POLYCHAETA	10	157	111	419	143	91
LIFE STAGE: UMBO						
CLASS BIVALVIA	1	11	172	172	43	400
	16	189				
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	16	72270	22209	116792	29659	41
BARNACLE NAUPLIUS	13	446	111	1415	464	104
LIFE STAGE: COPEPODITE						
ACARTIA SPP	16	6855	337	20755	6267	91
CENTROPAGES SPP	3	26	118	157	56	217
PARACALANUS SPP.	5	65	142	377	111	171
EURYTEMORA SPP.	2	50	172	629	160	320
TEMORA LONGICORNIS	1	7	109	109	27	400
PSEUDOCALANUS MINUTUS	5	62	111	262	99	161
OITHONA SPP	3	36	157	236	80	219
UNIDENTIFIED COPEPODITES	3	95	189	858	238	251
LIFE STAGE: ADULT						
ACARTIA CLAUSI	16	5875	210	15566	5041	86
ACARTIA TONSA	14	541	111	1048	364	67
CENTROPAGES HAMATUS	1	12	189	189	47	400
PSEUDODIAPTOMUS						
CORONATUS	4	38	109	197	72	187
PARACALANUS						
CHASSIROSTRIS	2	33	157	377	100	299
TEMORA LONGICORNIS	6	108	111	566	185	171
PSEUDOCALANUS MINUTUS	3	46	168	354	105	228
OITHONA SIMILIS	4	40	118	189	72	182
LIFE STAGE: NO DETERMINATION						
ORDER ROTIFERA	16	124741	39764	383817	105864	85
UNIDENTIFIED COPEPODITES	1	11	172	172	43	400
UNIDENTIFIED HARPACTICIDS	4	81	118	629	180	221
PARASITIC CYCLOPOIDA	3	30	118	197	67	220
SUBORDER AEOLIDACEA	2	177	943	1887	513	290
	16	211645				

TABLE 7. (CONT.)

MONTH	MARCH 1976					
SPECIES	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: LARVAL						
CLASS GASTROPODA	1	12	216	216	51	424
CLASS POLYCHAETA	8	275	194	1179	410	149
BARNACLE CYPRIS	1	13	236	236	56	424
LIFE STAGE: UMBO						
CLASS BIVALVIA	3	37	194	260	86	232
TOTAL	18	337				
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	18	35585	7095	87736	23342	66
BARNACLE NAUPLIUS	10	2075	194	15144	4697	226
LIFE STAGE: COPEPODITE						
ACARTIA SPP	18	19806	4808	63836	14838	75
CENTROPAGES SPP	2	31	216	347	94	300
EURYTEMORA SPP.	18	3341	1296	7233	1535	46
PSEUDOCALANUS MINUTUS	1	11	194	194	46	424
ORDER CYCLOPOIDA	1	12	216	216	51	424
UNIDENTIFIED COPEPODITES	8	300	194	1887	499	166
LIFE STAGE: ADULT						
ACARTIA CLAUSI	18	20192	12264	31757	5772	29
ACARTIA TONSA	15	638	240	1689	495	77
CENTROPAGES HAMATUS	2	30	194	347	91	304
PSEUDODIAPTOMUS						
CORONATUS	3	51	236	347	120	234
PARACALANUS						
CRASSIROSTRIS	2	28	236	260	80	291
EURYTEMORA SPP.	6	419	583	1944	664	158
EURYTEMORA AFFINIS	12	1473	735	4567	1344	91
EURYTEMORA AMERICANA	2	32	236	347	96	297
TEMORA LONGICORNIS	4	153	236	1563	391	255
PSEUDOCALANUS MINUTUS	2	28	236	263	81	292
OITHONA BREVICORNIS	5	100	216	595	181	180
OITHONA SIMILIS	2	74	595	735	216	293
LIFE STAGE: NO DETERMINATION						
ORDER ROTIFERA	4	130	270	943	276	212
UNIDENTIFIED						
NAKPACTICIDS	7	209	194	1442	371	178
UNIDENTIFIED						
INVERTEBRATE	1	12	216	216	51	424
PARASITIC CYCLOPOIDA	8	180	236	676	235	130
SUBORDER AEOLIDACEA	1	13	240	240	57	424
TOTAL	18	84924				

TABLE 7. (CONT.)

MONTH	APRIL 1976					
	LOCATION 11					
	PREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
CLASS POLYCHAETA	5	234	236	3145	675	288
TROCHOPHORES	16	593	202	3145	862	145
LIFE STAGE: LARVAL						
CLASS GASTROPODA	13	520	189	3145	963	185
CLASS POLYCHAETA	27	13894	539	31415	8877	64
CLASS ASCIDIACEA	2	15	202	205	53	367
LIFE STAGE: HINGE						
CLASS BIVALVIA	24	2427	31	13707	3036	125
AEQUIPECTEN IRRADIANS	16	1421	94	6724	2159	152
MERCENARIA MERCENARIA	11	331	205	2264	585	177
LIFE STAGE: UMBO						
CLASS BIVALVIA	26	1531	34	8534	1878	123
MYTILUS EDULIS	3	82	517	1132	258	313
MODIOLUS DEMISSUS	2	13	94	259	51	408
AEQUIPECTEN IRRADIANS	14	489	189	5664	1143	234
MERCENARIA MERCENARIA	9	592	404	3019	979	166
MULINIA LATERALIS	4	81	203	1258	258	319
TOTAL	28	22223				

TABLE 7. (CONT.)

MONTH		APRIL 1976				
-----						
LOCATION 11						
-----						
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
-----						
LIFE STAGE: NAUPLIAR						
-----						
SUBCLASS COPEPODA.	28	71307	2257	172642	53658	75
BARNACLE NAUPLIUS	28	42487	1247	112564	33015	78
-----						
LIFE STAGE: COPEPODITE						
-----						
ACARTIA SPP	28	11821	189	29151	7450	63
PARACALANUS SPP.	7	90	195	786	188	209
EURYTEMORA SPP.	25	710	34	3362	734	103
EURYTEMORA AFFINIS	1	8	236	236	45	529
OITHONA SPP	1	7	189	189	36	529
UNIDENTIFIED COPEPODITES	1	11	314	314	59	529
-----						
LIFE STAGE: ADULT						
-----						
ACARTIA CLAUSI	18	3870	101	21094	5891	152
ACARTIA TONSA	8	98	34	849	200	205
PARACALANUS CRASSIROSTRIS	3	45	214	566	140	314
EURYTEMORA SPP.	1	8	236	236	45	529
EURYTEMORA AFFINIS	6	43	67	259	90	208
EURYTEMORA AMERICANA	1	10	283	283	53	529
OITHONA BREVICORNIS	4	39	31	708	144	371
OITHONA SIMILIS	2	16	203	236	58	368
-----						
LIFE STAGE: NO DETERMINATION						
-----						
CLASS HYDROZOA	5	67	189	539	160	239
OBELIA SPP	1	9	260	260	49	529
ORDER ROTIFERA	22	14022	34	81402	22058	157
CLASS HIRUDINEA	1	8	236	236	45	529
PODON SPP.	1	3	94	94	18	529
NONE NONE	1	9	259	259	49	529
ORDER CYCLOPOIDA	1	9	259	259	49	529
UNIDENTIFIED HARPACTICIDS	19	678	234	2845	711	105
PARASITIC CYCLOPOIDA	22	493	189	1415	435	88
-----						
TOTAL	28	145870				



TABLE 7. (CONT.)

MONTH	MAY 1976					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
CLASS POLYCHAETA	26	3435	581	11635	2975	87
TROCHOPHORES	17	964	145	11635	2228	231
LIFE STAGE: LARVAL						
CLASS GASTROPODA	27	2775	472	19458	3424	123
MELAMPUS BIDENTATUS	3	43	330	515	129	301
CLASS POLYCHAETA	28	12621	3087	39937	7246	57
BARNACLE CYPRIS	1	5	145	145	27	529
LIFE STAGE: HINGE						
CLASS BIVALVIA	22	931	145	4402	1201	129
AEQUIPECTEN IRRADIANS	7	111	145	1258	270	244
MERCENARIA MERCENARIA	2	18	172	343	71	388
LIFE STAGE: UMBO						
CLASS BIVALVIA	25	935	210	3774	849	91
AEQUIPECTEN IRRADIANS	1	12	330	330	62	529
MERCENARIA MERCENARIA	1	12	330	330	62	529
MULINIA LATERALIS	19	825	157	3504	998	121
TOTAL	28	22685				

TABLE 7. (CONT.)

MONTH	MAY 1976					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	27	26168	2474	52005	11911	46
BARNACLE NAUPLIUS	27	23788	3243	57842	16479	69
LIFE STAGE: COPEPODITE						
ACARTIA SPP	27	2028	236	7247	1658	82
PARACALANUS SPP.	2	13	145	210	47	374
EURYTEMORA SPP.	19	343	145	1981	469	137
OITHONA SPP	12	168	157	629	219	130
UNIDENTIFIED COPEPODITES	8	151	210	1179	289	191
CLASS ASCIDIACEA	1	42	1179	1179	223	529
LIFE STAGE: ADULT						
ACARTIA CLAUSI	13	249	145	1468	365	147
ACARTIA TONSA	2	15	172	236	54	372
PARACALANUS CRASSIROSTRIS	1	8	210	210	40	529
EURYTEMORA AFFINIS	6	74	210	590	159	216
OITHONA SPP	1	13	354	354	67	529
OITHONA BREVICORNIS	4	50	172	674	145	293
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	21	1163	145	4402	1329	114
ORDER ROTIFERA	28	19700	2064	44906	10190	52
SUBCLASS OSTRACODA	3	36	172	590	121	341
UNIDENTIFIED HARPACTICIDS	27	2493	236	6486	1843	74
PARASITIC CYCLOPOIDA	25	980	210	6003	1192	122
TOTAL	28	77479				

TABLE 7. (CONT.)

MONTH	JUNE 1976					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
CLASS POLYCHAETA	22	2610	566	14825	3451	112
TROCHOPHORES	12	222	172	1348	379	170
LIFE STAGE: LARVAL						
CYPHONAUTE LARVAE	2	17	189	330	68	395
CLASS GASTROPODA	28	1250	367	3774	819	66
MELAMPUS BIDENTATUS	6	118	129	1179	297	252
CLASS POLYCHAETA	30	7766	194	19145	5498	71
BARNACLE CYPRI	2	19	254	330	75	384
PHYLUM ECHINODERMATA	1	22	674	674	123	548
LIFE STAGE: HINGE						
CLASS BIVALVIA	18	579	194	2830	687	119
AEQUIPECTEN IRRADIANS	5	147	222	3032	560	381
LIFE STAGE: UMBO						
CLASS BIVALVIA	24	1027	210	3538	1030	100
AEQUIPECTEN IRRADIANS	2	33	367	629	131	394
MERCENARIA MERCENARIA	1	16	472	472	86	548
MULINIA LATERALIS	8	159	222	943	303	190
TELLINA SPP.	1	13	386	386	70	548
TOTAL	30	13999				

TABLE 7. (CONT.)

MONTH	JUNE 1976					
-----						
LOCATION 11						
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
-----						
LIFE STAGE: NAUPLIAR						
-----						
SUBCLASS COPEPODA	30	51169	27969	73585	13552	26
BARNACLE NAUPLIUS	28	6439	393	31909	6517	101
-----						
LIFE STAGE: COPEPODITE						
-----						
ACARTIA SPP	30	6775	472	27839	6383	94
CENTROPAGES SPP	1	21	643	643	117	548
PSEUDODIAPTOMUS						
CORONATUS	18	616	172	3048	865	140
PARACALANUS SPP.	7	446	210	6226	1255	282
EURYTEMORA SPP.	9	262	157	2830	620	237
PSEUDOCALANUS MINUTUS	1	11	337	337	62	548
OITHONA SPP	21	767	157	5660	1233	161
UNIDENTIFIED						
COPEPODITES	17	1558	189	14717	3469	223
-----						
LIFE STAGE: ADULT						
-----						
ACARTIA CLAUSI	10	198	129	1685	420	212
ACARTIA TONSA	24	3132	157	12264	2986	95
PSEUDODIAPTOMUS						
CORONATUS	17	355	129	2264	498	140
PARACALANUS						
CRASSIROSTRIS	17	796	157	4717	1181	148
EURYTEMORA SPP.	1	11	330	330	60	548
EURYTEMORA AFFINIS	1	12	367	367	67	548
EURYTEMORA AMERICANA	1	6	189	189	35	548
PSEUDOCALANUS MINUTUS	1	11	337	337	62	548
OITHONA BREVICORNIS	16	630	210	5094	1114	177
OITHONA SIMILIS	1	9	277	277	51	548
-----						
LIFE STAGE: NO DETERMINATION						
-----						
CLASS HYDROZOA	17	840	666	3208	938	112
OBELIA SPP	3	110	388	1887	390	354
ORDER ROTIFERA	19	2628	343	10108	3425	130
PODON SPP.	2	67	901	1101	255	383
PODCN POLYPHEMOIDES	9	137	210	943	254	185
SUBCLASS OSTRACODA	1	16	472	472	86	548
ORDER CYCLOPOIDA	1	7	210	210	38	548
UNIDENTIFIED						
HARPACTICIDS	29	2908	222	10849	2414	83
PARASITIC CYCLOPOIDA	24	829	157	2358	701	85
-----						
TOTAL	30	80766				

TABLE 7. (CONT.)

MONTH	JULY 1976					
	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
CLASS POLYCHAETA	22	1446	406	7075	1675	116
TROCHOPHORES	15	548	384	3931	834	152
LIFE STAGE: LARVAL						
CYTHONAUTE LARVAE	3	64	472	786	201	312
CLASS GASTROPODA	26	1847	393	4528	1398	76
MELAMPUS BIDENTATUS	5	100	393	809	238	238
CLASS POLYCHAETA	30	2885	515	10024	2043	71
BARNACLE CYPRIS	2	35	472	590	136	383
LIFE STAGE: HINGE						
CLASS BIVALVIA	14	310	377	1348	382	123
LIFE STAGE: UMBO						
CLASS BIVALVIA	13	334	314	1415	457	137
MULINIA LATERALIS	6	148	472	943	309	208
TELLINA SPP.	2	37	472	629	141	385
TOTAL	30	7755				

TABLE 7. (CONT.)

SPECIES	JULY 1976					
	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	30	42376	1031	134434	39686	94
BARNACLE NAUPLIUS	18	663	417	2426	721	109
LIFE STAGE: COPEPODITE						
ACARTIA SPP	26	7112	384	18194	6857	96
PSEUDODIAPTOMUS						
CORONATUS	17	683	384	2695	804	118
PARACALANUS SPP.	13	1258	404	7547	2091	166
OITHONA SPP	28	6392	590	20440	5935	93
UNIDENTIFIED						
COPEPODITES	15	3879	1887	15499	4981	128
PARASITIC CYCLOPIDA	1	94	2830	2830	517	548
LIFE STAGE: ADULT						
ACARTIA TONSA	25	3866	157	14151	4344	112
PSEUDODIAPTOMUS						
CORONATUS	15	671	157	2830	938	140
PARACALANUS						
CRASSIROSTRIS	17	903	590	6132	1311	145
OITHONA BREVICORNIS	26	3007	417	9434	2464	82
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	19	533	314	1348	466	88
ORDER ROTIFERA	11	263	314	2358	486	185
SUBCLASS OSTRACODA	1	13	404	404	74	548
UNIDENTIFIED						
HARPACTICOIDES	22	817	406	2022	655	80
PARASITIC CYCLOPOIDA	11	378	404	2358	605	160
TOTAL	30	72907				

TABLE 7. (CONT.)

MONTH	AUGUST 1976 TO 2 SEPTEMBER 1976					
	LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
CLASS POLYCHAETA	25	1487	379	5195	1510	102
TROCHOPHORES	16	527	307	2830	697	132
LIFE STAGE: LARVAL						
CYTHONAUTE LARVAE	5	61	284	472	147	240
CLASS GASTROPODA	23	1240	325	4528	1333	107
MELAMPUS BIDENTATUS	1	23	749	749	132	566
CLASS POLYCHAETA	30	2289	325	6873	1854	81
LIFE STAGE: HINGE						
CLASS BIVALVIA	17	488	284	2933	689	141
AEQUIPECTEN IRRADIANS	2	68	566	1618	300	439
TELLINA SPP.	1	37	1179	1179	208	566
LIFE STAGE: UMBO						
CLASS BIVALVIA	20	587	325	3774	804	137
MERCENARIA MERCENARIA	3	86	614	1364	288	337
MULINIA LATERALIS	14	330	284	2386	529	160
SPIO SPP	1	12	379	379	67	566
TOTAL	32	7235				

TABLE 7. (CONT.)

MONTH	AUGUST 1976 TO 2 SEPTEMBER 1976					
	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	30	18104	1887	57792	12908	71
BARNACLE NAUPLIUS	6	144	379	1655	377	261
LIFE STAGE: COPEPODITE						
ACARTIA SPP	31	4021	708	18120	3656	91
PSEUDODIAPTOMUS						
CORONATUS	5	81	379	921	209	257
PARACALANUS SPP.	4	41	284	379	111	271
GITHONA SPP	25	3197	404	13930	3429	107
UNIDENTIFIED						
COPEPODITES	6	138	325	1100	319	231
LIFE STAGE: ADULT						
ACARTIA TONSA	20	1625	568	6450	1814	112
PSEUDODIAPTOMUS						
CORONATUS	8	98	284	568	179	183
PARACALANUS						
CRASSIROSTRIS	6	170	325	2150	495	291
OITHONA BREVICORNIS	22	969	379	2652	942	97
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	5	84	325	921	217	259
ORDER ROTIFERA	24	3046	379	12784	4058	133
SUBCLASS OSTRACODA	2	20	284	367	81	397
UNIDENTIFIED						
HARPACTICOIDS	14	279	325	1258	382	137
PARASITIC CYCLOPOIDA	16	359	284	1887	515	143
TOTAL	32	32376				

a Samples were collected at the dilution pump discharge (Loc. 13) during January and February 1976.



Table 6. Estimates of the mean number of microzooplankton entrained per day for each month from September 1975 through August 1976.

Location	11 <sup>a</sup>		11		11		11		13 <sup>b</sup>	
Sample Size	14		8		8		10		2	
Month	September 1975		October		November		December		January 1976	
	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.
Total number	$4.72 \times 10^{10}$	$\pm 1.20 \times 10^{10}$	$8.73 \times 10^9$	$\pm 8.26 \times 10^9$	$1.21 \times 10^{10}$	$\pm 7.80 \times 10^9$	$1.10 \times 10^{11}$	$\pm 2.35 \times 10^{10}$	$2.36 \times 10^{11}$	d
Copepod nauplii	$1.09 \times 10^{10}$	$\pm 3.82 \times 10^9$	$3.00 \times 10^9$	$\pm 2.86 \times 10^9$	$3.69 \times 10^9$	$\pm 2.20 \times 10^9$	$3.27 \times 10^{10}$	$\pm 5.96 \times 10^9$	$1.16 \times 10^{11}$	d
Barnacle nauplii	$2.32 \times 10^9$	$\pm 1.75 \times 10^9$	$3.06 \times 10^8$	$\pm 3.41 \times 10^8$	$1.31 \times 10^9$	$\pm 1.30 \times 10^9$	$8.99 \times 10^9$	$\pm 9.01 \times 10^9$	$6.10 \times 10^8$	d
Rotifers	$1.50 \times 10^{10}$	$\pm 4.88 \times 10^9$	$3.27 \times 10^7$	$\pm 7.73 \times 10^7$	$1.21 \times 10^9$	$\pm 1.88 \times 10^9$	$5.29 \times 10^{10}$	$\pm 1.27 \times 10^{10}$	$9.36 \times 10^{10}$	d
Acartia spp. copepodid	$7.04 \times 10^8$	$\pm 4.85 \times 10^8$	c		$1.34 \times 10^9$	$\pm 1.36 \times 10^9$	$4.61 \times 10^9$	$\pm 5.26 \times 10^9$	$1.02 \times 10^{10}$	d
Polychaete larvae	$4.70 \times 10^9$	$\pm 3.35 \times 10^9$	$2.23 \times 10^8$	$\pm 3.10 \times 10^8$	$4.41 \times 10^8$	$\pm 6.72 \times 10^8$	$7.54 \times 10^8$	$\pm 3.74 \times 10^8$	0	
Acartia clausi	0		0		$4.85 \times 10^7$	$\pm 8.06 \times 10^7$	$2.71 \times 10^9$	$\pm 2.64 \times 10^9$	$1.02 \times 10^{10}$	d
Oithona spp. copepodid	$2.92 \times 10^8$	$\pm 2.28 \times 10^8$	c		$3.96 \times 10^8$	$\pm 3.50 \times 10^8$	$2.88 \times 10^8$	$\pm 2.46 \times 10^8$	$1.28 \times 10^8$	d
Acartia tonsa	$4.20 \times 10^8$	$\pm 4.08 \times 10^8$	c		$1.06 \times 10^9$	$\pm 9.20 \times 10^8$	$2.27 \times 10^9$	$\pm 2.21 \times 10^9$	$4.71 \times 10^9$	d
Polychaete trochophore	0		0		0		0		0	
Gastropod larvae	$1.16 \times 10^9$	$\pm 4.50 \times 10^8$	$1.81 \times 10^8$	$\pm 1.82 \times 10^8$	$4.14 \times 10^8$	$\pm 7.43 \times 10^8$	$3.05 \times 10^7$	$\pm 4.97 \times 10^7$	0	
Bivalve larvae umbo	$4.60 \times 10^8$	$\pm 3.20 \times 10^9$	$3.27 \times 10^7$	$\pm 7.88 \times 10^7$	$3.23 \times 10^7$	$\pm 5.02 \times 10^7$	$1.29 \times 10^8$	$\pm 9.44 \times 10^7$	0	
Bivalve larvae hinge	$1.68 \times 10^8$	$\pm 1.09 \times 10^9$	c		$6.49 \times 10^7$	$\pm 8.20 \times 10^7$	$8.18 \times 10^7$	$\pm 9.31 \times 10^7$	0	

Table 8. (cont.)

Location	13b		11		11		11		11	
Sample Size	8		12		16		16		16	
Month	February		March		April		May		June	
	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.
Total Number	$5.37 \times 10^{11}$	$\pm 3.03 \times 10^{11}$	$1.77 \times 10^{11}$	$\pm 4.84 \times 10^{10}$	$4.40 \times 10^{11}$	$\pm 5.70 \times 10^{10}$	$2.82 \times 10^{11}$	$\pm 4.60 \times 10^{10}$	$2.16 \times 10^{11}$	$\pm 2.60 \times 10^{10}$
Copepod nauplii	$1.82 \times 10^{11}$	$\pm 8.19 \times 10^{10}$	$7.61 \times 10^{10}$	$\pm 3.11 \times 10^{10}$	$1.75 \times 10^{11}$	$\pm 8.80 \times 10^{10}$	$7.20 \times 10^{10}$	$\pm 1.79 \times 10^{10}$	$1.19 \times 10^{11}$	$\pm 1.90 \times 10^{10}$
Varianae nauplii	$1.37 \times 10^8$	$\pm 1.22 \times 10^8$	$7.00 \times 10^8$	$\pm 9.00 \times 10^8$	$9.99 \times 10^{10}$	$\pm 4.21 \times 10^{10}$	$4.90 \times 10^{10}$	$\pm 2.13 \times 10^{10}$	$9.48 \times 10^9$	$\pm 2.62 \times 10^9$
Rotifers	$3.01 \times 10^{11}$	$\pm 2.75 \times 10^{11}$	$2.82 \times 10^8$	$\pm 3.67 \times 10^8$	$5.26 \times 10^{10}$	$\pm 3.61 \times 10^{10}$	$4.67 \times 10^{10}$	$\pm 1.56 \times 10^{10}$	$6.42 \times 10^9$	$\pm 3.88 \times 10^9$
Acartia spp. copepodid	$2.60 \times 10^{10}$	$\pm 1.70 \times 10^{10}$	$4.01 \times 10^{10}$	$\pm 2.14 \times 10^{10}$	$2.84 \times 10^{10}$	$\pm 1.00 \times 10^{10}$	$6.47 \times 10^9$	$\pm 1.46 \times 10^9$	$1.51 \times 10^{10}$	$\pm 7.50 \times 10^9$
Polychaete larvae	$4.32 \times 10^8$	$\pm 3.30 \times 10^8$	$7.11 \times 10^8$	$\pm 6.80 \times 10^8$	$4.82 \times 10^{10}$	$\pm 1.09 \times 10^{10}$	$3.65 \times 10^{10}$	$\pm 1.12 \times 10^{10}$	$1.98 \times 10^{10}$	$\pm 6.50 \times 10^9$
Acartia clausi	$2.27 \times 10^{10}$	$\pm 1.25 \times 10^{10}$	$3.84 \times 10^{10}$	$\pm 6.92 \times 10^9$	$7.74 \times 10^9$	$\pm 6.16 \times 10^9$	$6.00 \times 10^8$	$\pm 3.71 \times 10^8$	$6.89 \times 10^8$	$\pm 7.21 \times 10^8$
Oithona spp. copepodid	$5.35 \times 10^7$	$\pm 1.27 \times 10^8$	0		0		$4.13 \times 10^8$	$\pm 3.19 \times 10^8$	$1.07 \times 10^9$	$\pm 7.50 \times 10^8$
Acartia tonsa	$1.48 \times 10^9$	$\pm 8.61 \times 10^8$	$1.36 \times 10^9$	$\pm 5.06 \times 10^8$	$1.60 \times 10^8$	$\pm 1.93 \times 10^8$	0		$7.53 \times 10^9$	$\pm 4.77 \times 10^9$
Polychaete trochophore	0		0		$8.80 \times 10^8$	$\pm 1.13 \times 10^9$	$1.00 \times 10^{10}$	$\pm 4.60 \times 10^9$	$7.00 \times 10^9$	$\pm 4.00 \times 10^9$
Gastropod larvae	$8.04 \times 10^7$	$\pm 1.90 \times 10^8$	$3.39 \times 10^7$	$\pm 7.43 \times 10^7$	$2.08 \times 10^9$	$\pm 1.58 \times 10^9$	$5.16 \times 10^9$	$\pm 1.67 \times 10^9$	$2.84 \times 10^9$	$\pm 7.10 \times 10^8$
Bivalve larvae umbo	$5.86 \times 10^7$	$\pm 1.39 \times 10^8$	$1.05 \times 10^8$	$\pm 1.22 \times 10^8$	$4.76 \times 10^9$	$\pm 3.12 \times 10^9$	$1.76 \times 10^9$	$\pm 8.80 \times 10^8$	$3.06 \times 10^9$	$\pm 1.69 \times 10^9$
Bivalve larvae hinge	0		0		$6.39 \times 10^9$	$\pm 4.91 \times 10^9$	$1.97 \times 10^9$	$\pm 1.78 \times 10^9$	$1.80 \times 10^9$	$\pm 1.06 \times 10^9$

Table 8 . (cont.)

Location	11		11	
Sample Size	16		16	
Month	July 1976		August	
	$\bar{X}$ day <sup>-1</sup>	C.I.	$\bar{X}$ day <sup>-1</sup>	C.I.
Total number	$1.94 \times 10^{11}$	$\pm 6.90 \times 10^{10}$	$9.31 \times 10^{10}$	$\pm 2.59 \times 10^{10}$
Copepod nauplii	$9.08 \times 10^{10}$	$\pm 2.62 \times 10^{10}$	$4.50 \times 10^{10}$	$\pm 1.81 \times 10^{10}$
Barnacle nauplii	$1.33 \times 10^9$	$\pm 6.80 \times 10^8$	$4.07 \times 10^8$	$\pm 4.75 \times 10^8$
Rotifers	$3.27 \times 10^8$	$\pm 3.18 \times 10^8$	$1.00 \times 10^{10}$	$\pm 6.20 \times 10^9$
Acartia spp. copepodid	$2.02 \times 10^{10}$	$\pm 7.80 \times 10^9$	$6.93 \times 10^9$	$\pm 2.20 \times 10^9$
Polychaete larvae	$7.90 \times 10^9$	$\pm 3.20 \times 10^9$	$6.45 \times 10^9$	$\pm 2.71 \times 10^9$
Acartia clausi	0		0	
Oithona spp. copepodid	$1.60 \times 10^{10}$	$\pm 7.80 \times 10^9$	$5.23 \times 10^9$	$\pm 2.61 \times 10^9$
Acartia tonsa	$1.14 \times 10^{10}$	$\pm 6.30 \times 10^9$	$2.66 \times 10^9$	$\pm 1.75 \times 10^9$
Polychaete trochophore	$4.12 \times 10^9$	$\pm 2.63 \times 10^9$	$4.50 \times 10^9$	$\pm 2.56 \times 10^9$
Gastropod larvae	$3.97 \times 10^9$	$\pm 1.75 \times 10^9$	$3.70 \times 10^9$	$\pm 2.04 \times 10^9$
Bivalve larvae umbo	$1.04 \times 10^9$	$\pm 6.70 \times 10^8$	$1.07 \times 10^9$	$\pm 6.20 \times 10^8$
Bivalve larvae hinge	$9.24 \times 10^8$	$\pm 5.86 \times 10^8$	$9.60 \times 10^8$	$\pm 8.40 \times 10^8$

a condenser discharge.

b dilution discharge, the plant was off-line for repairs.

c no data, these forms were not identified to a lifestage for this month.

d no confidence interval, sample size of two.

Table 9 . Estimated number of important and abundant microplanktonic forms entrained at Oyster Creek Generating Station<sup>a</sup> from September 1975 through August 1976.

Form	Estimated Annual Entrainment <sup>a</sup>
Copepod nauplii	$6.0 \times 10^{13}$
Rotifers	$1.7 \times 10^{13}$
Barnacle nauplii	$5.5 \times 10^{13}$
Acartia spp. copepodids	$4.8 \times 10^{12}$
Polychaete larvae	$3.8 \times 10^{12}$
Acartia clausi	$2.5 \times 10^{12}$
Acartia tonsa	$1.0 \times 10^{12}$
Polychaete trochophores	$8.1 \times 10^{11}$
Oithona spp. copepodids	$7.4 \times 10^{11}$
Gastropod larvae	$6.0 \times 10^{11}$
Bivalve larvae (umbo)	$3.8 \times 10^{11}$
Bivalve larvae (hinge)	$3.7 \times 10^{11}$

<sup>a</sup> Estimate for January and February based on number entrained through dilution pump.

TABLE 10. FREQUENCY OF OCCURRENCE AND MEAN DENSITIES ( $n/1000m^3$ ) OF MACROZOOPLANKTON COLLECTED DURING THE DAY AND NIGHT AT THE CONDENSER INTAKE (7) AND DISCHARGE (11) AND AT THE DILUTION PUMP INTAKE (12) AND DISCHARGE (13) FROM SEPTEMBER 1975 THROUGH AUGUST 1976<sup>a</sup>.

MONTH	SEPTEMBER 1975											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDCV	CVAR	FREQ	MEAN	MIN	MAX	SDCV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	8	36	51	296	74	205	2	7	58	125	26	393
JUPITEROPSIS NOTICOLA	7	16	30	116	32	199	3	13	23	232	46	367
COCCATVILLIA SPP.	0	-	-	-	-	-	1	3	74	74	14	529
HEPESIS BACHII	0	-	-	-	-	-	1	2	42	42	8	-
OBELIA SPP.	0	-	-	-	-	-	1	2	68	68	13	529
AEQUOREA SPP.	25	297	40	1010	245	83	19	122	32	522	134	170
ORDER ACTINARIA	8	51	43	437	115	225	10	27	23	177	47	176
AMPHIROPSIS ELLIOTTI	12	2679	641	6607	1783	155	6	2100	1917	8439	2198	244
AMPHIROPSIS SPP.	0	-	-	-	-	-	1	1	28	28	5	-
CNIDIDULA SPP.	2	5	74	75	20	367	0	-	-	-	-	-
ORDER KUDIBERACIDIA	0	-	-	-	-	-	1	1	23	23	4	-
CLASS BIVALVIA	1	2	51	51	10	-	1	5	137	137	26	529
CLASS POLYCHAETA	1	3	75	75	14	529	1	1	34	34	6	-
FAMILY PATELLOCAIDAE	0	-	-	-	-	-	1	4	125	125	24	529
PANAMARITIS KOSTERLENSIS	1	2	67	67	13	529	0	-	-	-	-	-
PHYLLODOCE ARENAE	1	2	60	60	11	529	2	5	42	108	22	404
LULALIA SPP.	1	4	99	99	19	529	0	-	-	-	-	-
FAMILY SYLLIDAE	4	27	32	417	90	329	5	29	31	457	92	319
AMPHIROPSIS SPP.	5	34	36	593	117	342	7	30	34	228	65	214
SUBPHYLUM PYCNOGONIDA	7	36	40	238	74	205	4	53	110	675	162	303
FAMILY CALIGIDAE	1	3	75	75	14	529	0	-	-	-	-	-
CALIGUS SPP.	0	-	-	-	-	-	3	11	62	120	33	302
ORDER CUMACEA	4	25	40	455	69	362	1	2	63	63	12	529
CYCLASPIS VARIANS	18	366	33	3750	718	196	18	579	23	3647	841	145
LIACON AMERICANUS	12	162	51	1667	344	212	11	105	27	627	176	169
GASTROSTYLIS SMITHI	20	550	64	2913	777	141	22	1764	23	6635	1959	155
CYRADUSA CURPTA	0	-	-	-	-	-	5	21	33	219	55	261
RICHOTOPUS	0	-	-	-	-	-	11	61	23	531	116	189
CRILLIOTALPA	0	-	-	-	-	-	1	1	32	32	6	-
DAILA CATAPINENSIS	0	-	-	-	-	-	3	13	74	169	29	312
COROPHUS SPP.	0	-	-	-	-	-	4	7	23	68	19	269
CEPAPUS TUNDALANIS	0	-	-	-	-	-	1	18	494	494	93	529
ERICHOTOPUS SPP.	0	-	-	-	-	-	6	16	23	137	36	224
JASSA FALCATA	3	27	33	625	119	442	1	4	106	106	20	529
HEPESIS ALBA	0	-	-	-	-	-	20	182	23	708	207	174
ELASCHOPUS LEVIS	0	-	-	-	-	-	1	1	32	32	6	-
ACUTIA HITTII	0	-	-	-	-	-	4	34	110	354	80	268
ADONOTOPUS LEWANDSKI	0	-	-	-	-	-	4	20	23	250	59	297
RICHOTOPUS KANEI	0	-	-	-	-	-	2	5	62	68	17	366
PANOTOPUS CYPRIS	0	-	-	-	-	-	14	114	23	1613	217	191
STENOPODUS MINUTA	5	48	67	833	162	340	9	43	32	220	71	165
ORDER CEPHELLIDAE	5	30	60	336	77	256	0	-	-	-	-	-
UNIDENTIFIED MYSID	22	2640	33	10000	2573	97	27	2970	30	14177	3033	162
MYDOPUS EIGELI	23	5783	407	37957	6617	149	27	7944	68	38230	9929	125
MYDOPUS AMERICANA	1	3	74	74	14	529	1	1	32	32	6	-
SUBORDER NATANTIA	0	-	-	-	-	-	1	4	125	125	24	529
FAMILY PENAEIDAE	2	7	74	119	26	378	4	12	42	125	34	272
PALAEODACTES VULGARIS	2	4	43	41	17	385	0	-	-	-	-	-
PALAEODACTES PUGIO	4	37	43	833	158	424	8	30	23	228	61	205
PALAEODACTES SPP.	1	3	61	61	15	529	0	-	-	-	-	-
DIPOLYTIS SPP.	7	62	30	667	154	249	6	36	27	469	102	264
CRANGON SETIFENSIPEDOSA	1	6	157	157	30	529	0	-	-	-	-	-
RAPHA SERRATOCARPATA	0	-	-	-	-	-	1	7	108	108	36	529
CLASS HOMIDROMIDULA	13	40	43	417	134	153	10	39	27	232	71	182
LEPTOSYRTA SPP.	5	34	79	417	92	267	6	23	31	177	51	225
SUBORDER DORIDACEA	2	4	48	75	17	377	1	4	110	110	23	529
SUBORDER ALULIDACEA	0	-	-	-	-	-	2	6	65	100	23	379
LEPTIDELLA LARABOUI	1	1	30	30	6	-	0	-	-	-	-	-
PHILIA HEMERICA	0	-	-	-	-	-	1	4	125	125	24	529
POCTIPALIA GOULDII	1	3	74	74	14	529	0	-	-	-	-	-
FAMILY AMPHIPTERIDAE	0	-	-	-	-	-	1	4	108	108	20	529
PANALITIS SPP.	0	-	-	-	-	-	1	0	228	228	43	529
LYDOR LACTEA	4	35	75	421	103	291	0	-	-	-	-	-
ORDER ISOPODA	10	30	30	148	46	156	9	36	23	359	81	223
LYDORCA OVALIS	4	58	55	1250	238	407	5	30	59	250	72	240
LYDORCA BALTICA	10	350	30	2376	650	186	15	241	62	1250	365	151
LYDORCA TILLOIA	1	1	30	30	6	-	2	8	65	169	34	404
ERICHOTOPUS SPP.	0	-	-	-	-	-	1	4	125	125	24	529
PHILANTHUS TILLOIS	2	195	665	4533	875	450	1	4	125	125	24	529
ORDER AMPHIPODA	21	542	30	2381	651	170	8	46	23	457	49	214
UNIDENTIFIED AMPHIPODA	19	1779	78	9703	2706	152	23	1107	23	5560	1345	152
AMPHIROPSIS SPP.	0	-	-	-	-	-	0	-	-	-	-	-
LIFE STAGE: JUVENILES												
CALIGIDELLA BRACHYURA	4	11	48	104	29	263	7	7	23	32	13	176
INBAULULA BRACHYURA	1	4	114	114	22	529	0	-	-	-	-	-
	26	1608					28	1740				

TABLE 10. (CONT.)

MONTH

SEPTEMBER 1975

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	3	6	30	75	18	313	1	8	220	220	42	529
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	1	3	96	96	18	529
CYCLASPIS VARIANS	0	-	-	-	-	-	1	13	375	375	71	529
LEUCON AMERICANUS	0	-	-	-	-	-	1	4	116	116	22	529
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	2	10	96	177	37	384
ELASMOPUS LEVIS	0	-	-	-	-	-	3	18	62	216	57	324
MONOCULODES EDWARDSI	0	-	-	-	-	-	1	16	456	456	86	529
MICROPROTOPUS RANEYI	0	-	-	-	-	-	4	31	23	385	96	312
STENOTHOE MINUTA	0	-	-	-	-	-	1	4	125	125	24	529
MYSIDOPSIS BIGELOWI	4	22	120	198	56	256	5	37	27	506	107	292
NEOMYSIS AMERICANA	14	176	58	1364	296	169	13	86	47	750	159	184
ERICHSONELLA FILIFORMIS	1	2	55	55	10	-	0	-	-	-	-	-
ORDER AMPHIPODA	1	15	417	417	79	529	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	4	21	81	238	57	277	0	-	-	-	-	-
AMPELISCA SPP.	13	172	60	1275	300	174	9	143	95	1250	313	219
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	2	7	75	114	25	375	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
FAMILY PENAEIDAE	0	-	-	-	-	-	2	8	110	110	29	367
PALAEONETES SPP	11	120	40	741	206	171	16	165	23	1096	260	157
FAMILY HIPPOLYTIDAE	0	-	-	-	-	-	1	4	120	120	23	529
HIPPOLYTE SPP.	4	19	32	296	63	323	5	31	74	348	78	256
CRANGON SEPTemspINOSA	1	2	48	48	9	-	0	-	-	-	-	-
UPOGEBIA AFFINIS	2	7	93	99	25	367	0	-	-	-	-	-
EMERITAS TALPOIDA	1	3	93	93	18	529	0	-	-	-	-	-
PAGURUS SP	13	123	33	833	216	175	15	138	23	741	220	159
LIBINIA SPP.	0	-	-	-	-	-	1	4	108	108	20	529
CALLINECTES SAPIDUS	1	10	288	288	54	529	0	-	-	-	-	-
PANOPEUS HERBSTII	0	-	-	-	-	-	1	1	29	29	5	-
NEOPANOPE TEXANA	15	913	33	7037	1723	189	17	825	30	5407	1474	179
RHITHROpanopeus HARRISI	6	49	58	833	161	328	7	43	62	442	103	238
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	23	2081	148	40000	7480	359	20	1046	29	8148	2047	196
INFRAORDER BRACHYURA	2	33	99	833	158	474	2	11	63	250	48	432
LIFE STAGE: EPITOKES												
NEREIS SPP	5	36	87	417	96	267	8	15	27	123	30	198
	28	3817					28	2664				

TABLE 10. (CONT.)

MONTH	SEPTEMBER 1975											
	LOCATION 12						LOCATION 13					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	13	46	28	261	72	155	5	16	46	186	42	263
ORDER ATHECATA	0	-	-	-	-	-	1	2	46	46	8	-
TURRITOPSIS NUTRICOLA	14	28	28	180	40	146	10	15	21	103	25	166
BOUGAINVILLEA SPP.	1	1	35	35	6	-	0	-	-	-	-	-
NEMOPSIS BACHEI	1	3	76	76	14	548	2	2	24	50	10	405
AEQUORHA SPP.	26	310	24	1522	375	121	25	226	35	692	221	93
ORDER ACTINARIA	2	3	32	45	10	386	10	31	23	373	73	236
PHYLLOCTENOPHORA	1	5	138	138	25	548	0	-	-	-	-	-
HALIOPSIS LEIDYI	14	3586	633	11291	2735	167	14	3283	594	8854	2360	154
BENUE SPP.	5	7	27	75	18	248	4	3	23	26	9	260
CLASS GASTROPODA	0	-	-	-	-	-	1	1	35	35	6	-
CREPIDULA SPP.	1	2	68	68	12	548	4	8	23	115	24	303
ORDER MUDIBRANCHIA	1	3	99	99	18	548	5	6	23	61	15	249
CLASS BIVALVIA	3	6	46	99	21	330	0	-	-	-	-	-
TELLINA SPP.	1	6	180	180	33	548	0	-	-	-	-	-
CLASS POLYCHALTA	3	5	28	99	19	369	3	6	35	93	20	330
FAMILY PHYLLOSCIDAE	0	-	-	-	-	-	2	6	71	95	21	385
PHYLLOSCIDEA AENEAE	0	-	-	-	-	-	1	1	23	23	4	-
EULALIA SPP.	1	1	28	28	5	-	0	-	-	-	-	-
EULALIA VIRIDIS	1	5	138	138	25	548	0	-	-	-	-	-
FAMILY SYLLIDAE	5	8	32	88	21	250	4	13	32	248	46	370
NEREIS SUCCINEA	1	2	70	70	13	548	0	-	-	-	-	-
NEREIS SPP.	3	5	33	69	16	320	11	20	22	192	39	194
SUBPHYLUM PYCNOGONIDA	9	31	28	259	61	199	9	37	35	320	74	202
CALIGUS SPP.	1	1	32	32	6	-	0	-	-	-	-	-
ARGULUS SPP.	1	1	35	35	6	-	0	-	-	-	-	-
ORDER STOMATOPODA	0	-	-	-	-	-	1	2	71	71	13	548
NAUJOSQUILLA GRAYI	0	-	-	-	-	-	3	60	24	1600	293	489
SUBCLASS MALACOSTRACA	0	-	-	-	-	-	1	2	50	50	9	-
ORDER CARAPACEA	4	72	75	1036	254	353	3	23	28	615	113	502
CYCLASPIDES VARIANS	18	274	38	1600	410	150	20	419	24	3170	667	159
LEUCON AMERICANUS	13	173	47	901	266	154	21	210	22	1831	369	175
DIASPYLIS POLITA	0	-	-	-	-	-	1	7	217	217	40	548
GAYRUSSTYLIS SMITHI	20	343	32	2342	509	148	20	490	25	3474	757	154
JASSA FALCATA	3	15	80	250	52	339	13	252	48	1179	344	137
MELITA RITIDA	0	-	-	-	-	-	1	3	96	96	18	548
STENOPODE MINUTA	1	2	66	66	12	548	0	-	-	-	-	-
ORDER CAPRELLIDAE	11	28	25	140	46	167	15	49	23	228	68	138
UNIDENTIFIED HYSID	4	546	32	16188	2954	541	3	40	46	1095	200	495
NEOSIDOPSIS BIGELOWI	22	3801	45	17559	4485	118	25	6249	25	28700	8815	141
NEOSIDOPSIS AMERICANA	23	6019	27	56856	11250	187	24	7513	23	76033	18395	245
SUBORDER NATANTIA	0	-	-	-	-	-	1	1	23	23	4	-
FAMILY PENAEIDAE	1	3	75	75	14	548	3	10	47	213	40	392
PALAEONETES VULGARIS	1	2	56	56	10	-	7	6	21	46	12	196
PALAEONETES SPP.	6	27	32	341	80	299	7	54	18	500	136	250
HIPPOLYTE SPP.	2	2	28	32	8	-	0	-	-	-	-	-
CRANGON SEPTASPINOSE	7	34	28	347	90	260	9	29	22	213	59	202
SAGITTIA SEMIATULANTATA	1	1	38	38	7	-	0	-	-	-	-	-
LEPTOSYARPA SPP.	15	44	28	265	61	139	19	33	22	115	35	105
SUBORDER DORIDACEA	3	3	20	47	11	316	5	8	25	106	23	270
SUBORDER NEOLIDACEA	3	42	34	1098	201	474	6	11	25	93	24	220
SCOLOPORUS ROBUSTUS	0	-	-	-	-	-	1	1	32	32	6	-
SCOLOPORUS SPP.	0	-	-	-	-	-	1	1	35	35	6	-
PERGIPES PERGIPES	0	-	-	-	-	-	1	1	25	25	5	-
ORDER ISOPODA	4	7	28	99	20	307	7	20	28	143	43	211
LIAMOLCA OVALIS	7	15	23	180	36	251	11	22	23	142	37	167
IDOTEA BALTICA	5	24	36	375	76	317	9	122	23	2150	413	338
BOOPHA TRILOBA	20	273	36	1017	331	121	16	262	25	1150	398	152
EMACHOGALLIA FILIFORMIS	0	-	-	-	-	-	1	1	16	16	3	-
EMACHOGALLIA SPP.	2	11	140	201	44	387	5	11	21	141	31	286
ORDER AMPHIPODA	1	13	390	498	73	548	3	56	113	1036	209	375
UNIDENTIFIED AMPHIPODA	26	505	46	2362	585	116	27	1162	101	4344	1122	97
AMPHISCIA SPP.	23	1247	27	3964	1354	109	23	1075	25	3628	1089	101
LIFE STAGE: JUVENILES												
CALLINectes SAPIDUS	5	8	28	68	19	243	8	14	22	141	30	222
IMPADONIA BRACHYURA	0	-	-	-	-	-	1	2	61	61	11	548
	30	17559					30	21897				

TABLE 10. (CONT.)

MONTH	SEPTEMBER 1975											
	LOCATION 12						LOCATION 13					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	3	3	23	35	9	310	1	1	28	28	5	-
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	1	2	57	57	10	-
CYCLASPIS VARIANS	1	4	107	107	20	548	0	-	-	-	-	-
LEUCON AMERICANUS	1	7	224	224	41	548	3	10	47	191	36	379
OXYUROSTYLIS SMITHI	1	6	180	180	33	548	0	-	-	-	-	-
JASSA FALCATA	0	-	-	-	-	-	8	18	26	121	33	186
MYSIDOPSIS BIGELOWI	9	99	34	836	214	216	12	91	43	700	179	198
NEOMYSIS AMERICANA	12	171	25	3055	568	331	12	189	94	2190	464	245
IDOTEA BALTICA	0	-	-	-	-	-	2	2	23	32	7	-
UNIDENTIFIED AMPHIPODA	7	69	38	1098	215	314	13	64	25	563	122	190
AMPELISCA SPP.	15	123	47	853	214	174	16	159	23	1146	285	179
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	1	2	63	63	12	548	2	6	77	93	22	382
INFRAORDER CARIDEA	0	-	-	-	-	-	1	1	23	23	4	-
LIFE STAGE: ZOEAL												
SUBORDER NATANTIA	1	1	34	34	6	-	0	-	-	-	-	-
PALAEOMNETES SPP	16	73	32	360	105	144	12	49	28	355	87	178
HIPPOLYTE SPP.	12	43	23	259	70	164	8	20	25	229	47	236
CRANGON SEPTEMSPINOSA	2	14	62	356	66	471	3	11	54	137	35	325
UPOGEBIA AFFINIS	2	7	99	113	27	381	0	-	-	-	-	-
EMERITAS TALPOIDA	1	1	35	35	6	-	0	-	-	-	-	-
PAGURUS SP	14	35	32	224	57	164	10	34	23	227	59	176
FAMILY XANTHIDAE	1	1	32	32	6	-	1	2	71	71	13	548
NEOPANOPE TEXANA	19	518	28	3509	985	190	18	321	26	1773	521	162
EURYPANOPEUS DEPRESSUS	0	-	-	-	-	-	1	2	54	54	10	-
REITHROPANOPEUS HARRISI	5	12	27	189	37	304	6	11	46	71	23	206
UCA SPP.	0	-	-	-	-	-	1	2	45	45	8	-
INFRAORDER BRACHYURA	0	-	-	-	-	-	1	4	109	109	20	548
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIOUS	21	865	50	8468	1675	194	23	806	25	5803	1399	174
INFRAORDER BRACHYURA	4	10	32	138	30	294	5	35	56	414	102	295
LIFE STAGE: EPITOKES												
NEHEIS SPP	9	48	32	597	120	251	11	50	23	390	108	218
	30	2112					30	1886				



TABLE 10. (CONT.).

MONTH	OCTOBER 1975											
SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	3	39	38	11	346	1	2	27	27	7	-
TURRITOPSIS NUTRICOLA	1	4	44	44	13	346	0	-	-	-	-	-
NEOMOPSIS BACHEI	3	30	38	191	63	212	2	3	27	28	9	273
OLLIA SPP	0	-	-	-	-	-	1	2	31	31	8	-
PHALIDIUM SPP	0	-	-	-	-	-	1	2	28	28	7	-
ALJUREA SPP	1	3	32	32	9	346	3	24	28	286	72	303
ORDER ACTINARIA	0	-	-	-	-	-	3	19	31	163	48	250
PHYLUM CTENOPHORA	4	58	76	256	96	166	4	16	25	112	35	218
AMELIOPSIS LEIDYI	2	873	4463	6016	2066	237	2	390	2727	3520	1077	276
OROE SPP	11	692	41	1570	452	65	12	140	54	362	125	89
CLASS BIVALVIA	0	-	-	-	-	-	1	8	130	130	33	400
TELLINA SPP.	0	-	-	-	-	-	1	18	286	286	72	400
FAMILY SYLLIDAE	1	3	32	32	9	346	3	16	31	117	39	241
MEGIS SPP	0	-	-	-	-	-	2	3	27	28	9	273
SUBPHYLUM PYCNOGONIDA	5	45	38	331	94	209	9	73	28	286	95	130
CYCLASPIS VARIANS	5	41	60	194	60	147	7	92	30	327	126	138
LEUCON AMERICANUS	6	82	32	331	120	146	9	275	112	2122	519	189
OXYUROSTYLIS SMITHI	5	41	32	194	63	156	11	202	54	1053	301	149
CYADUSA COMPTA	0	-	-	-	-	-	2	10	30	130	33	329
MICRODEUTOPUS	0	-	-	-	-	-	6	69	28	571	149	215
GYLLOLALPA	0	-	-	-	-	-	2	20	89	234	61	303
BATEA CATHARINENSIS	0	-	-	-	-	-	1	7	110	110	28	400
COROPHUM SPP	0	-	-	-	-	-	11	92	27	331	110	119
JASSA FALCATA	7	104	60	331	112	108	12	114	25	643	159	139
ELASMOPIUS LEVIS	0	-	-	-	-	-	1	7	112	112	28	400
MELITA NITIDA	0	-	-	-	-	-	6	52	30	327	90	174
MOROCULODES EDWARDSI	0	-	-	-	-	-	1	18	286	286	72	400
MICROPHOTOPUS RAMEYI	0	-	-	-	-	-	1	2	31	31	8	-
PARALITOPUS CYPRI	0	-	-	-	-	-	4	25	62	117	46	185
STENOPODE MINUTA	0	-	-	-	-	-	4	11	30	55	20	188
ORDER CAPRILLIDAE	12	10655	32	54215	19745	185	0	-	-	-	-	-
UNIDENTIFIED MYSID	0	-	-	-	-	-	16	3125	27	14286	4277	137
MYSIDOPSIS BIGLOWI	0	-	-	-	-	-	16	12558	245	37142	11220	89
MYSIDOPSIS AMERICANA	0	-	-	-	-	-	2	4	28	31	10	274
PALAEONETES SPP	2	9	32	78	24	257	1	8	130	130	33	400
LEPTOSYNAPTA SPP	0	-	-	-	-	-	3	18	27	234	58	321
SUBORDER DOKIDALEA	1	3	33	33	10	346	12	226	54	857	282	125
SUBORDER ALOLIIDAE	0	-	-	-	-	-	1	4	66	66	17	400
LITTELLA BARNARDI	0	-	-	-	-	-	1	2	25	25	6	-
PHYLUM RENCKEIA	0	-	-	-	-	-	1	2	30	30	8	-
PARANATIS SP	1	5	64	64	18	346	0	-	-	-	-	-
ORDER ISOPODA	3	15	32	78	28	194	1	4	65	65	16	400
LIKONECA OVALIS	1	3	32	32	9	346	1	2	25	25	6	-
IDOEA BALTICA	1	7	83	83	24	346	4	17	27	110	37	216
IDOEA THILGSA	1	4	44	44	13	346	0	-	-	-	-	-
ERICHSONELLA FILIFORMIS	11	207	32	840	213	103	5	66	31	428	134	203
UNIDENTIFIED AMPHIPODA	6	157	64	819	268	171	11	285	54	1469	409	144
AMPELISCA SPP.	12	13043	-	-	-	-	16	18032	-	-	-	-
LIFE STAGE: GRAVID												
MICRODEUTOPUS	0	-	-	-	-	-	2	15	75	163	44	294
GYLLOLALPA	1	3	32	32	9	346	1	7	110	110	28	400
JASSA FALCATA	0	-	-	-	-	-	1	8	130	130	33	400
ELASMOPIUS LEVIS	0	-	-	-	-	-	1	2	30	30	8	-
MICROPHOTOPUS RAMEYI	4	144	127	992	292	203	1	14	220	220	55	400
UNIDENTIFIED MYSID	0	-	-	-	-	-	1	8	130	130	33	400
MYSIDOPSIS BIGLOWI	0	-	-	-	-	-	9	235	30	1053	355	151
MYSIDOPSIS AMERICANA	1	13	156	156	45	346	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	2	13	78	83	31	234	1	2	24	24	6	-
AMPELISCA SPP.	-	-	-	-	-	-	-	-	-	-	-	-
LIFE STAGE: ADULT												
HYPOITE SPP.	1	5	64	64	18	346	0	-	-	-	-	-
CRABON SEPTIMIFRUSA	9	249	65	819	258	104	10	135	31	526	160	119
LIFE STAGE: ADULT												
CALLINECTES RAPIDUS	9	281	32	968	347	123	8	127	27	771	222	174
-	12	708	-	-	-	-	16	552	-	-	-	-

TABLE 10. (CONT.)

MONTH	OCTOBER 1975											
	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	5	33	27	122	47	144	2	18	51	163	48	269
NEOMOPSIS BACHEI	3	11	27	67	21	200	3	7	27	27	12	181
PHIALIDIUM SPP	0	-	-	-	-	-	1	2	27	27	8	346
AEQUORIA SPP	5	24	37	78	31	131	4	16	27	80	27	170
ORDER ACTINARIA	1	7	78	78	23	346	8	35	25	103	34	98
PHYLUM Ctenophora	5	82	27	519	160	196	7	123	45	372	158	128
MNEMIOPSIS LLIDYI	3	1331	188	10234	3224	242	2	1028	5540	6794	2415	235
BEROE SPP	11	297	37	790	246	83	12	284	23	690	188	66
CREPIDULA SPP.	1	2	29	29	8	346	0	-	-	-	-	-
FAMILY SYLLIDAE	1	6	67	67	19	346	2	9	27	86	25	269
NEREIS SPP	0	-	-	-	-	-	1	2	22	22	6	-
SUBPHYLUM PYCNOGONIDA	5	42	34	336	95	225	6	32	27	89	37	116
CYCLASPIS VARIANS	7	131	37	527	185	142	4	18	25	86	30	164
LEUCON AMERICANUS	6	114	59	618	187	164	5	85	27	345	126	149
OXYUROSTYLIS SMITHI	10	200	37	781	251	125	4	38	72	163	60	158
JASSA FALCATA	11	1045	35	3399	1038	99	12	1436	151	3680	1037	72
ORDER CAPRELLIDEA	5	30	20	134	49	161	5	21	22	92	33	158
UNIDENTIFIED MYSIDS	10	5219	724	12031	4594	88	12	4538	25	16379	5806	128
PENAEUS AZTECUS	1	5	59	59	17	346	0	-	-	-	-	-
PALAEONETES VULGARIS	0	-	-	-	-	-	1	7	82	82	24	346
PALAEONETES SPP	1	4	53	53	15	346	0	-	-	-	-	-
HIPPOLYTE SPP.	0	-	-	-	-	-	1	6	72	72	21	346
CRANGON SEPTIMSPINOSA	1	3	37	37	11	346	0	-	-	-	-	-
LEPTOSYNAPTA SPP	1	2	29	29	8	346	0	-	-	-	-	-
SUBORDER AEULIDACEA	3	14	20	101	31	220	3	13	27	82	26	203
SCOLOPORUS SPP	0	-	-	-	-	-	1	8	92	92	27	346
ORDER ISOPODA	0	-	-	-	-	-	1	2	27	27	8	346
LIKIALICA OVALIS	3	11	20	78	23	220	3	9	27	54	18	195
LODGEA BALTICA	2	15	27	154	44	295	1	2	27	27	8	346
LODGEA TRILOBA	1	10	122	122	35	346	3	15	27	86	31	200
ENICOSPHELLA SP	1	3	37	37	11	346	1	2	27	27	8	346
UNIDENTIFIED AMPHIPODA	12	505	94	1646	474	94	12	777	371	1225	326	42
AMPELISCA SPP.	6	284	35	2008	578	204	2	26	144	172	62	235
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	2	9	39	67	21	243	3	15	45	82	29	189
INFRAORDER BRACHYURA	1	2	20	20	6	-	0	-	-	-	-	-
	12	9439					12	8573				
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	11	134	134	39	346	0	-	-	-	-	-
AUTOLYTUS SPP	0	-	-	-	-	-	1	4	51	51	15	346
JASSA FALCATA	5	110	39	744	238	198	8	91	27	239	89	97
UNIDENTIFIED MYSIDS	4	27	37	154	47	179	3	64	53	460	145	226
ORDER AMPHIPODA	0	-	-	-	-	-	1	2	27	27	8	346
UNIDENTIFIED AMPHIPODA	2	17	47	156	46	271	4	40	53	245	74	185
AMPELISCA SPP.	1	3	37	37	11	346	0	-	-	-	-	-
LIFE STAGE: LARVAL												
PALAEONETES SPP	0	-	-	-	-	-	1	4	43	43	12	346
HIPPOLYTE SPP.	3	11	29	53	20	188	0	-	-	-	-	-
CRANGON SEPTIMSPINOSA	11	698	63	2752	909	130	8	206	86	690	247	170
LIFE STAGE: MEJALOPAL												
CALLINECTES SAPIDUS	9	232	35	645	216	93	10	263	27	1469	427	163
LIFE STAGE: EPITOMES												
NEREIS SPP	0	-	-	-	-	-	1	2	26	26	8	346
	12	1109					12	677				

TABLE 10. (CONT.)

MONTH	NOVEMBER 1975											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
ORDER SIPHONOPHORA	1	11	119	119	36	332	0	-	-	-	-	-
PHYLUM CTENOPHORA	6	1237	206	4219	1632	132	3	44	137	225	85	195
HEROE SPP	3	26	85	108	45	172	4	18	32	89	31	170
PHYLLODOCE ARENAE	0	-	-	-	-	-	1	5	69	69	19	361
HEREIS SPP	0	-	-	-	-	-	1	4	57	57	16	361
CLASS HIRUDINEA	0	-	-	-	-	-	2	25	93	229	67	269
SUBPHYLUM PYCNOGONIDA	6	74	57	251	91	123	4	59	47	276	104	178
CYCLASPIS VARIANS	2	27	67	227	69	260	2	39	47	464	128	326
LEUCON AMERICANUS	4	93	217	336	132	143	6	163	118	882	256	157
OXYUROSTYLIS SMITHI	4	106	103	476	172	163	6	103	71	411	142	137
CYMA DUSA COMPTA	0	-	-	-	-	-	3	37	104	263	79	213
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	9	162	64	488	148	92
BATEA CATHARINENSIS	0	-	-	-	-	-	4	55	32	279	104	187
COROPHIUM SPP	0	-	-	-	-	-	3	114	47	976	288	253
ERICHTHONIUS RUBICORNIS	0	-	-	-	-	-	2	36	221	244	87	244
JASSA FALCATA	4	78	103	434	136	173	7	124	47	473	170	137
ELASMOPOUS LEVIS	0	-	-	-	-	-	6	139	32	828	239	172
MONOCULODES EDWARDSI	0	-	-	-	-	-	3	31	47	244	72	230
STENOTHOE MINUTA	0	-	-	-	-	-	4	65	32	488	141	217
ORDER CAPRELLIDEA	1	9	103	103	31	332	3	37	104	231	75	203
UNIDENTIFIED MYSIOS	11	13486	122	31870	11908	88	2	169	971	1220	415	246
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	11	2339	128	7420	2194	94
NEOMYSIS AMERICANA	0	-	-	-	-	-	13	17876	112	45913	14576	82
PALAEONETES VULGARIS	2	14	34	119	36	261	4	45	61	286	86	192
PALAEONETES SPP	1	3	28	28	8	332	2	12	32	118	33	288
HIPPOLYTE SPP.	0	-	-	-	-	-	1	4	57	57	16	361
CRANGON SEPTEMSPINOSA	1	14	156	156	47	332	0	-	-	-	-	-
SAGITTA ELEGANS	2	14	34	119	36	261	0	-	-	-	-	-
LEPTOSYNAPTA SPP	0	-	-	-	-	-	1	5	71	71	20	361
SUBORDER AEOLIDACEA	5	61	57	217	85	138	7	139	32	552	196	141
PARANAITIS SP	1	11	119	119	36	332	0	-	-	-	-	-
PALAEONETES												
INTERMEDIUS	1	9	101	101	30	332	0	-	-	-	-	-
HIPPOLYTE PLEUROCANTHUS	0	-	-	-	-	-	1	4	57	57	16	361
LIRONECA OVALIS	0	-	-	-	-	-	1	6	74	74	21	361
IDOTEA BALTICA	1	3	31	31	9	332	1	18	229	229	64	361
IDOTEA TRILOBA	1	5	57	57	17	332	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	9	817	114	3087	987	121	4	84	229	355	134	160
AMPELISCA SPP.	4	235	227	1310	424	181	8	301	186	732	291	96
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	1	3	31	31	9	332	0	-	-	-	-	-
	11	16335					13	22263				

TABLE 10. (CONT.)

MONTH	NOVEMBER 1975											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
COROPHUM SPP	0	-	-	-	-	-	1	6	74	74	21	361
JASSA FALCATA	0	-	-	-	-	-	2	27	118	231	69	259
PARAMETOPELLA CYPRIS	0	-	-	-	-	-	1	11	137	137	38	361
UNIDENTIFIED MYSIDS	1	21	227	227	68	332	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	2	13	47	118	34	269
NEOMYSIS AMERICANA	0	-	-	-	-	-	6	111	93	441	148	133
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	1	14	156	156	47	332	1	18	229	229	64	361
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	4	120	103	739	226	189	4	80	137	457	143	178
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	2	6	31	34	13	223	0	-	-	-	-	-
	11	160					13	265				

TABLE 10. (CONT.)

NOVEMBER 1975												
MONTH												
SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	28	40	180	57	207	0	-	-	-	-	-
PHYLUM CTENOPHORA	8	1341	25	5000	1703	127	7	646	76	2467	880	136
HEROE SPP	6	79	57	310	98	123	5	31	22	96	38	125
PHYLLODOCE ARENAE	0	-	-	-	-	-	1	5	45	45	14	316
SUBPHYLUM PYCNOGONIDA	2	49	133	360	117	237	2	46	206	250	97	212
CYCLASPIS VARIANS	2	22	101	115	46	211	2	27	88	179	60	226
LEUCON AMERICANUS	3	202	101	1609	504	249	5	407	88	2500	775	190
OXYUROSTYLIS SMITHI	3	83	101	575	181	218	3	51	167	179	83	161
JASSA FALCATA	8	531	57	2248	766	144	10	1373	780	2689	547	40
ORDER CAPRELLIDEA	2	29	101	192	65	223	3	38	83	206	69	183
UNIDENTIFIED MYSIDS	10	11748	69	28391	11232	96	8	14189	89	49076	16553	117
PALAEONETES VULGARIS	3	19	40	78	31	169	3	10	22	47	17	172
PALAEONETES SPP	0	-	-	-	-	-	2	31	19	294	92	296
CALLINECTES SAPIDUS	1	3	29	29	9	316	0	-	-	-	-	-
LEPTOSYNAPTA SPP	0	-	-	-	-	-	1	21	206	206	65	316
SUBORDER AEOLIDACEA	7	128	40	313	123	96	7	170	47	1031	309	181
SCOLOPLOS SPP	1	12	115	115	36	316	0	-	-	-	-	-
LIRONECA OVALIS	1	6	57	57	18	316	1	21	206	206	65	316
IDOTEA BALTICA	0	-	-	-	-	-	1	2	23	23	7	316
ERICHSONELLA SP	1	12	115	115	36	316	1	9	88	88	28	316
UNIDENTIFIED AMPHIPODA	8	477	57	1333	468	98	10	756	30	2185	715	95
AMPELISCA SPP.	5	561	667	1954	686	122	5	659	500	2500	969	147
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	2	21	78	133	46	220	0	-	-	-	-	-
	10	15349					10	18489				
LIFE STAGE: GRAVID												
JASSA FALCATA	0	-	-	-	-	-	3	47	81	208	82	174
UNIDENTIFIED MYSIDS	2	76	304	460	165	216	2	124	469	769	270	218
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	2	17	83	89	36	211
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	0	-	-	-	-	-	1	5	54	54	17	316
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	5	128	101	460	168	131	4	33	42	154	52	158
	10	204					10	226				

TABLE 10. (CONT.)

MONTH	DECEMBER 1975												
	LOCATION 7						LOCATION 11						
	SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION													
CLASS HYDROZOA	3	65	175	386	126	195	0	-	-	-	-	-	-
BOUGAINVILLEA SPP.	0	-	-	-	-	-	1	3	35	35	9	374	-
ORDER SIPHONOPHORA	1	23	270	270	78	346	0	-	-	-	-	-	-
ORDER ACTINIARIA	0	-	-	-	-	-	1	7	93	93	25	374	-
PHYLUM CTENOPHORA	11	735	33	3500	1023	139	10	158	50	579	195	123	-
GENUS SPP	1	15	175	175	51	346	0	-	-	-	-	-	-
CLASS POLYCHAETA	1	18	215	215	62	346	0	-	-	-	-	-	-
FAMILY SYLLIDAE	1	16	196	196	57	346	1	7	93	93	25	374	-
FAMILY CAPITELLIDAE	1	29	343	343	99	346	1	17	231	231	62	374	-
FAMILY SPIONIDAE	1	16	196	196	57	346	1	4	61	61	16	374	-
CLASS NEMERTINEA	2	60	33	687	198	329	5	106	93	925	246	233	-
SUBPHYLUM PYCNOGONIDA	3	147	88	1000	332	225	6	61	71	331	94	155	-
CYCLASPIS VARIANS	2	85	343	680	212	248	5	73	59	331	121	167	-
LEUCOM. AMERICANUS	5	229	263	794	324	142	9	211	35	694	232	110	-
DIATYLIS POCITA	0	-	-	-	-	-	1	57	804	804	215	374	-
OXYURUS STYLIS SMITHI	5	189	33	1000	326	172	9	176	59	509	180	102	-
CYADUSA CUMPTA	0	-	-	-	-	-	1	14	201	201	54	374	-
MICROCEPHALUS	0	-	-	-	-	-	12	343	95	1206	340	99	-
GRYLLOSTALPA	0	-	-	-	-	-	4	51	93	331	100	195	-
BATLA CATHARINENSIS	0	-	-	-	-	-	13	739	190	1488	474	64	-
COROPHUM SPP	0	-	-	-	-	-	1	12	165	165	44	374	-
GAMMARUS LAURENCIANUS	0	-	-	-	-	-	2	13	93	95	34	254	-
GAMMARUS HUCKONATUS	0	-	-	-	-	-	9	151	104	491	146	97	-
JASSA FALCATA	0	-	-	-	-	-	3	28	71	201	61	219	-
EDASMOPOUS LEVIS	0	-	-	-	-	-	1	19	267	267	71	374	-
HELITA NITIDA	0	-	-	-	-	-	9	273	93	992	323	119	-
MONOCULODES EDWARDSI	0	-	-	-	-	-	1	7	104	104	28	374	-
FAMILY STENOHOIDAE	0	-	-	-	-	-	7	117	71	599	170	146	-
STENOHOE MINUTA	2	75	215	680	200	269	5	57	35	331	103	180	-
ORDER CAPRELLIDAE	12	24284	616	103348	31448	130	4	398	278	4157	1104	277	-
UNIDENTIFIED NYSIDS	0	-	-	-	-	-	11	1153	36	3681	1283	111	-
MYSTICOPSIS BIGLOWI	0	-	-	-	-	-	14	28419	2607	79527	21410	75	-
NECHYSIS AMERICANA	0	-	-	-	-	-	1	20	278	278	74	374	-
HEILACHYSIS FCKNOSA	0	-	-	-	-	-	0	-	-	-	-	-	-
SUBORDER NATANTIA	1	36	430	430	124	346	0	-	-	-	-	-	-
INFRAORDER CARIDEA	0	-	-	-	-	-	1	24	331	331	88	374	-
PALAEOMNETES VULGARIS	6	78	33	258	99	127	9	168	37	806	228	136	-
PALAEOMNETES FUGIO	0	-	-	-	-	-	1	2	30	30	8	374	-
PALAEOMNETES SPP	1	83	1000	1000	289	346	1	3	35	35	9	374	-
HIPPOLYTE SPP.	4	106	68	1000	285	268	5	48	50	267	81	168	-
CRANGON SEPTIMSPIROSA	7	147	196	323	134	91	12	427	185	1196	337	79	-
SAGITTA ELEGANS	9	238	43	680	232	97	8	233	37	1493	428	183	-
SAGITTA SPP	0	-	-	-	-	-	1	21	236	296	79	374	-
SUBORDER AEOLIDACEA	0	-	-	-	-	-	5	60	59	245	96	160	-
PARALATIS SP	0	-	-	-	-	-	1	3	35	35	9	374	-
PALAEOMNETES	1	4	44	44	13	346	3	41	30	299	99	241	-
INTERMEDIUS	0	-	-	-	-	-	2	31	139	299	85	273	-
HIPPOLYTE PLEUROCANTHUS	0	-	-	-	-	-	2	46	150	491	134	293	-
SPIO SPP	0	-	-	-	-	-	1	6	89	89	24	174	-
IDOTEA BALTICA	2	9	44	68	22	240	2	19	59	201	55	295	-
EDOTEA TRILOBA	0	-	-	-	-	-	5	149	59	736	251	169	-
UNIDENTIFIED AMPHIPODA	10	446	34	1828	569	128	10	326	118	938	324	99	-
AMPELISCA SPP.	7	258	47	1000	340	132	0	-	-	-	-	-	-
LIFE STAGE: JUVENILES													
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	4	50	50	13	374	-
	12	27390					14	34303					-

TABLE 10. (CONT.)

MONTH	DECEMBER 1975											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	1	7	95	95	25	374
COROPHIUM SPP	0	-	-	-	-	-	1	3	35	35	9	374
JASSA FALCATA	0	-	-	-	-	-	3	33	104	214	70	209
STENOTHOR MINUTA	0	-	-	-	-	-	1	4	59	59	16	374
CRANGON SEPTemspINOSA	0	-	-	-	-	-	1	2	30	30	8	374
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	10	5101	343	15098	5807	114	11	1045	36	3881	1120	107
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	11	1379	307	4000	1162	84	12	1006	150	3195	901	90
NEOPANOPE TEXANA	0	-	-	-	-	-	1	7	93	93	25	374
	12	6481					14	2106				

TABLE 10. (CONT.)

MONTH	DECEMBER 1975											
SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	3	31	31	9	346	2	7	37	51	17	237
BOUGAINVILLEA SPP.	0	-	-	-	-	-	1	2	18	18	5	-
NEUROPSIS BACHEI	1	3	35	35	10	346	0	-	-	-	-	-
PHYLUM CTENOPHORA	12	773	147	1792	455	59	12	565	101	1361	473	84
GENOE SPP	3	19	46	112	37	195	1	7	78	78	23	346
CLASS POLYCHAETA	0	-	-	-	-	-	3	13	21	101	30	226
FAMILY SYLLIDAE	1	6	69	69	20	346	0	-	-	-	-	-
FAMILY CAPITELLIDAE	1	4	49	49	14	346	1	2	20	20	6	-
POLYDORA SPP	0	-	-	-	-	-	1	3	39	39	11	346
CLASS NERUDINEA	1	8	98	98	28	346	6	98	21	792	224	229
SUBPHYLUM PYCNOGONIDA	2	7	35	46	16	236	1	3	36	36	10	346
CYCLASPID VARIANS	1	11	126	126	36	346	4	21	36	101	35	168
LEUCON AMERICANUS	7	85	91	252	84	99	5	123	36	594	221	180
ORIGOSTYLIS SMITHI	5	102	46	462	163	159	3	45	101	327	98	217
JASSA FALCATA	6	80	46	324	112	140	7	226	20	1633	457	202
ORDER CAPRELLIDAE	4	29	46	116	46	160	1	3	36	36	10	346
UNIDENTIFIED MYSID	12	4523	110	17489	4989	110	11	10788	104	48515	14355	133
PALAEONETES VULGARIS	4	20	49	69	29	149	5	145	39	1088	313	215
PALAEONETES SPP	3	81	228	414	151	187	3	97	18	1128	325	334
HIPPOLYTE SPP.	1	5	59	59	17	346	1	7	78	78	23	346
CRANGON SEPTEMSPINOSA	5	55	49	313	98	177	7	96	50	291	100	105
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	3	36	36	10	346
SALPITA ELEGANS	11	164	32	296	91	56	7	110	101	279	109	99
SALPITA SPP	0	-	-	-	-	-	1	6	73	73	21	346
PALAEONETES												
INTERMEDIUS	0	-	-	-	-	-	1	4	51	51	15	346
DIKONICA OVALIS	0	-	-	-	-	-	1	2	18	18	5	-
ICOTEA BALTICA	1	3	35	35	10	346	1	3	37	37	11	346
ICOTEA TRILOBA	1	4	49	49	14	346	3	13	36	78	25	198
UNIDENTIFIED AMPHIPODA	9	164	32	694	201	123	11	496	40	1188	418	84
AMPELISCA SPP.	7	165	59	694	230	140	7	127	68	549	160	126
	12	6311					12	13013				
LIFE STAGE: GRAVID												
JASSA FALCATA	2	5	31	32	12	234	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	2	8	31	62	19	249	3	13	36	78	25	198
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	10	5175	245	16458	6004	116	7	788	202	2652	947	120
LIFE STAGE: ZOEAL												
CRANGON SEPTEMSPINOSA	12	654	195	1199	312	48	12	603	18	1905	559	93
	12	5842					12	1404				



TABLE 10. (CONT.)

SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
RAHMA OCTOPUNCTATA	1	2	20	20	6	-	1	2	20	20	6	-
CLASS HYDROCOA	1	4	41	41	13	316	0	-	-	-	-	-
ORSLIA SPP	1	4	39	39	12	316	0	-	-	-	-	-
ORDER SIPHONOPHORA	0	-	-	-	-	-	1	2	22	22	7	316
ORDER ACTINARIA	1	4	39	39	12	316	1	3	31	31	10	316
CLASS POLYCHAETA	3	29	39	166	55	193	1	4	37	37	12	316
FAMILY SYLLIDAE	2	14	62	80	30	213	2	5	18	29	10	218
ORSLIA SPP	1	6	62	62	20	316	2	4	20	22	9	211
FAMILY CAVITELLIDAE	5	47	40	186	64	137	5	26	20	149	46	174
FAMILY SPIONIDAE	0	-	-	-	-	-	1	3	29	29	9	316
CLASS NEMATOIDA	4	58	41	248	93	168	4	66	20	372	132	193
SCYPHYLLA PTEROGONIDA	3	21	41	124	40	195	1	3	29	29	9	316
ORDER CUMACEA	1	6	62	62	20	316	0	-	-	-	-	-
LEPIDICHA NINJA	1	8	79	79	25	316	2	8	22	58	19	236
LEPIDICHA AMERICANA	4	32	39	124	49	154	3	13	22	74	24	193
UNIDENTIFIED SMITHI	1	4	39	39	12	316	2	9	30	63	21	227
NICTOPHIDUS	0	-	-	-	-	-	1	2	22	22	7	316
CAVITELLIDAE	0	-	-	-	-	-	1	12	122	122	39	316
CAVITELLIDAE	0	-	-	-	-	-	8	54	18	122	43	61
BRACHIOPODUS	0	-	-	-	-	-	1	2	22	22	7	316
BRACHIOPODUS	0	-	-	-	-	-	3	12	29	61	22	174
JASSA FALCATA	0	-	-	-	-	-	10	935	63	1967	547	59
MONOCULUS EDWARDSI	0	-	-	-	-	-	4	118	149	476	177	151
FAMILY STENOPODIDAE	0	-	-	-	-	-	2	4	18	19	8	211
STENOPODUS NINJA	0	-	-	-	-	-	4	42	58	159	60	143
STENOPODUS BREVIDENTIS	0	-	-	-	-	-	5	37	22	102	44	120
ORDER CARIDEIDAE	2	10	41	62	22	216	3	7	18	29	11	165
UNIDENTIFIED MYSID	10	6512	81	27889	10639	163	0	-	-	-	-	-
MYSIDUS NIGELONI	0	-	-	-	-	-	2	980	4201	5594	2091	213
MYSIDUS AMERICANA	0	-	-	-	-	-	10	7310	176	30969	12055	165
PALAEONETES VULGARIS	4	51	39	231	83	161	4	23	19	110	38	162
CRABON SEPTENSEPINOSA	6	289	116	926	343	118	8	269	18	1125	340	126
BRACHIOPODUS	10	8199	1358	16414	5689	69	10	8079	297	14543	5046	62
SCYPHYLLA SPP	1	4	40	40	13	316	0	-	-	-	-	-
CYPRIDINUS CONCHARUM	0	-	-	-	-	-	1	3	30	30	9	316
UNIDENTIFIED AMPHIPODA	9	363	56	709	265	73	5	17	10	60	22	126
AMPHIPODA SPP	0	-	-	-	-	-	2	8	34	44	17	213
	10	15667					10	18061				
LIFE STAGE: GRAVID												
JASSA FALCATA	0	-	-	-	-	-	1	2	22	22	7	316
UNIDENTIFIED MYSID	1	4	41	41	13	316	0	-	-	-	-	-
NEONIS AMERICANA	0	-	-	-	-	-	1	22	223	223	71	316
CRABON SEPTENSEPINOSA	1	12	116	116	37	316	2	9	29	63	21	228
LIFE STAGE: LARVAL												
ORDER CERITHIARIA	2	6	20	41	14	226	0	-	-	-	-	-
CLASS POLYCHAETA	10	2616	683	7233	1976	75	10	513	125	1344	348	68
LIFE STAGE: ZOEAL												
CRABON SEPTENSEPINOSA	5	124	39	559	203	164	8	153	29	669	210	137
INFRAORDER BRACHIOPODA	1	12	116	116	37	316	0	-	-	-	-	-
	10	2793					10	709				

TABLE 10. (CONT.)

FEBRUARY 1976												
SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	5	146	88	979	282	194	2	15	81	158	43	289
MARCOLEPIS GIBBESI	2	15	88	95	36	234	3	14	27	149	39	270
SARZIA SPP	6	391	63	2218	780	200	7	410	54	2846	937	229
PAIRSEA OCTOPUNCTATA	4	51	75	263	88	172	2	28	208	235	76	274
CEILIA SPP	2	24	90	197	60	252	3	8	39	47	17	216
ORCAE LERATODA	0	-	-	-	-	-	1	7	118	118	30	400
CEPHIDILLA SPP.	0	-	-	-	-	-	1	2	39	39	10	460
CLASSE LIPADIA	1	15	179	179	52	346	1	3	51	51	13	400
CLASSE POLYCHAETA	5	173	179	672	256	148	0	-	-	-	-	-
FAMILY STELLIDAE	0	-	-	-	-	-	4	24	51	154	47	196
NEREIS SPP	0	-	-	-	-	-	1	3	44	44	11	400
FAMILY CAPITELLIDAE	0	-	-	-	-	-	3	21	47	152	49	237
FAMILY SPIONIDAE	0	-	-	-	-	-	2	14	47	171	44	320
CLASSE NEMERTEA	6	111	149	305	124	112	7	63	39	496	127	200
SUBPHYLUM MICROGONIDA	1	16	197	197	57	346	5	25	45	158	45	164
ORCAE CORACIA	4	77	75	305	126	164	0	-	-	-	-	-
LEOCOR AMERICANUS	1	16	190	190	55	346	7	90	45	474	143	159
OSTEOSPIRIS SMITHI	2	12	63	75	27	235	1	21	331	331	83	400
CHADORA CORIA	0	-	-	-	-	-	1	10	158	158	40	400
MICRODEUTOPUS	0	-	-	-	-	-	9	171	47	630	215	126
UNIDENTIFIED	0	-	-	-	-	-	5	33	77	171	54	164
ORCAE SPP	0	-	-	-	-	-	2	6	45	45	15	273
BRASILIENSIS	0	-	-	-	-	-	1	12	190	190	48	400
FAMILY GASTROIDEA	0	-	-	-	-	-	5	14	39	51	22	154
GASTROIDEA ACRONATUS	0	-	-	-	-	-	9	135	27	409	164	121
JASSA PALCATA	0	-	-	-	-	-	10	238	41	896	275	116
MONOCOLLES EDWARDSI	0	-	-	-	-	-	1	7	116	116	29	400
STENOPOE MINOTA	0	-	-	-	-	-	5	27	42	202	54	202
STENOPOE BRADICORNIS	0	-	-	-	-	-	3	8	39	45	17	215
ORCAE CAPITELLIDAE	1	25	305	305	88	346	0	-	-	-	-	-
UNIDENTIFIED MYDIDS	12	26708	4313	89511	26895	101	0	-	-	-	-	-
MYDIDOPSIS GILLOEII	0	-	-	-	-	-	7	264	27	2975	740	250
MYDIDOPSIS AMERICANA	0	-	-	-	-	-	17	24190	1197	72025	24627	172
PALAEONETES VULGARIS	2	18	63	149	45	256	8	42	41	202	57	116
PALAEONETES SPP	0	-	-	-	-	-	1	3	42	42	11	460
NEPHELE SPP.	1	8	90	90	26	346	0	-	-	-	-	-
ORCAE SEPTENTRIONOSA	6	298	175	1418	433	145	12	579	41	1350	561	87
SAGITTIA ELIGANS	0	-	-	-	-	-	16	15835	1435	52987	15353	97
SAGITTIA SPP	12	20267	3731	34018	9945	49	1	10	158	158	40	400
SULCATEA GONIDACEA	0	-	-	-	-	-	1	3	51	51	13	460
ORCAE NIGRASCENS	1	8	90	90	26	346	1	3	41	41	10	460
LEOCIA BALTICA	0	-	-	-	-	-	3	17	45	379	166	273
LEOCIA TALLICA	0	-	-	-	-	-	2	14	51	165	42	314
UNIDENTIFIED AMPHIPODA	8	880	526	2072	771	88	4	22	27	136	47	213
AMPHIPODA SPP.	0	-	-	-	-	-	5	324	84	1973	617	191
	12	49257					16	42721				
LIFE STAGE: GRAVID												
UNIDENTIFIED MYDIDS	1	12	140	140	40	346	0	-	-	-	-	-
LIFE STAGE: LARVAL												
CLASS SCYPHOZOA	1	25	305	305	88	346	0	-	-	-	-	-
ORCAE ACTINIAVIA	0	-	-	-	-	-	1	2	27	27	7	-
ORCAE CENTAURIA	10	20918	4304	64018	22346	107	9	294	118	1026	357	121
CLASS POLYCHAETA	12	7360	1399	22016	6201	84	16	1340	127	4015	1138	85
LIFE STAGE: ZOEAL												
ORCAE SEPTENTRIONOSA	10	629	75	1429	534	85	11	518	101	1709	568	110
	10	629	75	1429	534	85	10	518	101	1709	568	110

TABLE 10. (CONT.)

MONTH	MARCH 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	PLAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROCOA	7	380	252	1839	578	152	4	111	340	727	239	215
MAKROLOPSIS VIBBESI	0	-	-	-	-	-	8	382	119	4961	1169	291
SARSA SPP	18	8156	1096	22657	6360	78	20	6784	647	13091	4091	60
KATHIRA OCTOPUNCTATA	3	137	252	1177	359	262	7	323	93	2481	646	200
GALLIA SPP	2	75	548	800	222	297	3	83	146	825	235	282
ORDER ACTINARIA	0	-	-	-	-	-	2	29	93	485	109	378
ORDER RUBRANACHIA	1	33	588	580	139	424	0	-	-	-	-	-
CLASS EIVALVIA	2	80	546	869	240	300	4	122	485	762	257	211
CLASS POLYCHAETA	1	8	147	147	35	424	0	-	-	-	-	-
FAMILY POLYCHIDAL	3	157	588	1345	384	245	1	6	119	119	27	447
FAMILY SYLLICIA	0	-	-	-	-	-	2	7	22	119	27	380
AUTOLYTUS SPP	2	143	860	1778	449	314	0	-	-	-	-	-
NEREIS SPP	0	-	-	-	-	-	1	2	32	32	7	-
FAMILY CAPITILLIDAE	0	-	-	-	-	-	1	35	696	696	156	447
FAMILY SPIRIDAL	0	-	-	-	-	-	1	21	428	428	96	447
CLASS HIRUDINIA	15	1670	252	7200	1924	103	13	452	119	1440	469	104
SUPERFAMILY HYGROGONIDA	0	-	-	-	-	-	1	10	206	206	46	447
ORDER CORACIA	2	139	727	1778	443	319	0	-	-	-	-	-
CYCLASPIS VARIANS	2	103	800	1053	303	294	0	-	-	-	-	-
LEPTOCOA NIGRA	1	46	833	833	196	424	0	-	-	-	-	-
LOCUS AMERICANA	11	1203	252	6767	2043	170	12	420	22	1636	506	120
OKINOSTYLIS SMITHI	7	545	503	4384	1082	199	12	396	93	1404	421	106
MICRODOLOPUS	0	-	-	-	-	-	6	190	119	1650	411	236
GRYLLIDALIA	0	-	-	-	-	-	1	36	727	727	163	447
FAMILY GABRIOLA	0	-	-	-	-	-	4	69	30	684	180	260
GABRIOLA INCONSPICUA	0	-	-	-	-	-	1	18	352	352	79	447
JASSA PULCATA	0	-	-	-	-	-	1	6	129	129	29	447
ELASMOPOUS LLVIS	0	-	-	-	-	-	12	656	119	4730	1071	163
MONOCULUS LORANESI	0	-	-	-	-	-	0	-	-	-	-	-
ORDER CATHELIIDIA	3	142	800	920	327	231	0	-	-	-	-	-
UNIDENTIFIED NYSTOR	18	168685	18772	514521	124655	74	0	-	-	-	-	-
NYSTORIS BIGELCOWI	0	-	-	-	-	-	4	271	1123	1636	564	208
NYSTORIS AMERICANA	0	-	-	-	-	-	20	68096	647	116545	35769	52
FAMILY PALAEMONIDAE	2	121	147	2038	480	395	0	-	-	-	-	-
PALAEMONIDES VULGARIS	6	41	69	222	67	163	10	102	30	818	191	168
CRANGON SEPTENTRIONALIS	13	1475	137	5605	1807	123	18	587	61	2086	611	164
SAGITTIA ELEGANS	0	-	-	-	-	-	18	11288	762	24020	7260	64
SAGITTIA SPP	18	14742	351	42314	12990	88	0	-	-	-	-	-
HIPPOCYTE PLEUROCANTHUS	1	51	920	920	217	424	0	-	-	-	-	-
TORUS LAVIS HELGOLANDICA	1	244	4364	4384	1033	424	0	-	-	-	-	-
ORDER ISOPODA	2	45	86	727	171	379	0	-	-	-	-	-
CIRRIOLANA CORCORAN	0	-	-	-	-	-	2	11	91	119	33	311
IDOLEA BALTICA	3	23	115	168	54	234	7	41	22	428	101	249
EDOTIA TRILLOA	9	617	252	4384	1073	174	6	151	119	762	266	177
UNIDENTIFIED AMPHIPODA	17	6390	727	35068	8738	137	6	91	119	684	179	147
AMPHISCIA SPP.	0	-	-	-	-	-	7	2599	382	31754	7380	201
	18	205650					20	53393				
LIFE STAGE: GRAVID												
OKINOSTYLIS SMITHI	0	-	-	-	-	-	3	35	702	702	157	447
MONOCULUS LORANESI	0	-	-	-	-	-	2	29	292	292	90	308
UNIDENTIFIED NYSTOR	15	3518	526	9195	3499	99	0	-	-	-	-	-
NYSTORIS AMERICANA	0	-	-	-	-	-	17	1984	171	5990	1698	86
CRANGON SEPTENTRIONALIS	2	9	56	160	26	304	1	1	22	22	5	-
UNIDENTIFIED AMPHIPODA	1	20	351	351	83	424	0	-	-	-	-	-
AMPHISCIA SPP.	0	-	-	-	-	-	1	456	9123	9123	2040	447
LIFE STAGE: LARVAL												
ORDER CLADANTHARIA	15	4439	351	16727	5154	116	17	2169	119	10654	2655	126
CLASS POLYCHAETA	15	3663	125	30605	7164	156	10	1090	239	6472	1904	175
LIFE STAGE: ZOEAL												
CRANGON SEPTENTRIONALIS	15	3926	1177	13313	3500	89	19	6640	1574	15515	4501	68
	18	15577					20	12352				

TABLE 10. (CONT.)

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	14	523	143	4848	987	189	0	-	-	-	-	-
SPASIA SPP	21	2243	194	12093	3079	137	16	1185	113	5806	1781	150
SPASIA OCTOPUNCTATA	1	22	606	606	115	529	3	23	136	294	70	309
OSEDIA SPP	0	-	-	-	-	-	10	115	95	650	188	163
ORDER ACTINIARIA	1	9	238	238	45	529	2	19	208	335	73	373
ACTINOPSIS LILYI	3	9	34	154	31	357	1	3	70	70	13	529
CLASS BIVALVIA	5	46	143	364	106	228	3	23	95	294	73	319
CLASS POLYCHAETA	4	64	245	811	183	285	3	43	288	533	131	364
FAMILY PHYLLODOCIDAE	0	-	-	-	-	-	1	7	208	208	39	529
FAMILY POLYDORIDAE	1	9	244	244	46	529	1	7	194	194	37	529
FAMILY SYLLIDAE	9	529	234	4000	1057	200	7	382	190	3245	919	240
AUTOLYTES SPP	7	101	43	1216	253	251	13	333	103	1660	486	146
NEREIS SPP	0	-	-	-	-	-	2	8	81	133	29	379
FAMILY CAPITELLIDAE	9	275	223	2388	582	212	8	95	190	533	162	175
FAMILY SPIGIDAE	0	-	-	-	-	-	1	32	887	887	168	529
POLYDORA SPP	1	21	597	597	113	529	2	65	208	1612	309	471
CLASS HIRUDINEA	1	8	234	234	44	529	3	25	193	280	73	298
SPERMATOPHYTES PTERODONIDA	1	11	298	298	56	529	2	14	194	194	51	367
CAULUS SPP	1	9	238	238	45	529	1	7	186	186	35	529
CELLASPIES VARIANS	6	154	220	1860	403	262	5	106	85	258	255	247
LOPHOSOMA-MILWAUKEE	1	9	256	256	48	529	0	-	-	-	-	-
LEUCIA AMERICANA	10	318	135	2439	612	192	9	243	185	2333	540	222
ALLOPOTYLLIS SMITHI	19	895	38	7547	1656	185	19	902	113	3660	1034	115
MICROSTOTUPIS	0	-	-	-	-	-	18	980	255	4893	1424	146
CHYLOSTOMA	0	-	-	-	-	-	2	22	294	323	81	368
BATEA CATHARINENSIS	0	-	-	-	-	-	5	33	63	252	77	234
CORONILLA SPP	0	-	-	-	-	-	1	38	1067	1067	202	529
FAMILY GAMMARIDAE	0	-	-	-	-	-	4	48	90	774	157	325
GAMMARUS RUCKENSTEINI	0	-	-	-	-	-	4	49	252	417	123	254
GAMMARUS RUCKENSTEINI SPP	0	-	-	-	-	-	7	150	80	2667	512	342
JASSA FALCATA	0	-	-	-	-	-	13	225	103	1656	391	174
LOPHOSOMA LEVINS	0	-	-	-	-	-	1	7	208	208	39	529
MICROSTOTUPIS LEVINS	0	-	-	-	-	-	2	23	280	360	85	370
MICROSTOTUPIS WATLEYI	0	-	-	-	-	-	2	54	533	968	206	333
FAMILY STENOPODIDAE	0	-	-	-	-	-	5	39	80	417	98	254
STENOPODUS MINOTA	0	-	-	-	-	-	2	30	164	671	129	434
STENOPODUS MINOTA	0	-	-	-	-	-	15	262	95	2448	432	187
ORDER CAPITELLIDAE	10	156	220	769	249	159	0	-	-	-	-	-
UNIDENTIFIED HYDIDS	27	9206	256	47304	12310	134	5	25	50	323	69	272
HYDIDS HYDIDS-I	0	-	-	-	-	-	28	8291	69	22105	6952	94
HYDIDS HYDIDS-II	0	-	-	-	-	-	0	-	-	-	-	-
FAMILY POLYDORIDAE	4	10	32	137	30	300	12	52	21	302	90	172
POLYDORUS VULGARIS	5	31	30	606	116	179	3	14	97	186	44	302
POLYDORUS SPP	2	17	303	736	148	400	15	106	21	650	154	144
CRABRON SEPIEMSPINOSA	8	89	35	1472	291	328	1	1	20	20	4	-
FAMILY ANTHIDAE	0	-	-	-	-	-	7	97	85	1000	229	237
SAUTITA SPP	4	86	244	1027	251	292	0	-	-	-	-	-
LOPHOSOMA SPP	1	1	34	34	6	-	1	10	288	288	54	529
SUBORDINATA ACULIDACEA	0	-	-	-	-	-	1	3	97	97	18	529
HYDROIDES DIANTHUS	0	-	-	-	-	-	0	-	-	-	-	-
SCOLOPUS SPP	1	11	298	298	56	529	0	-	-	-	-	-
FAMILY ANHARETIDAE	2	34	303	364	88	369	1	2	65	65	12	529
DIANTHUS OVALIS	0	-	-	-	-	-	2	34	417	533	126	370
TOXOTHAUDICA	5	70	43	597	178	253	9	81	63	666	171	210
LODGEA FALLOSA	1	33	143	513	111	331	2	11	50	258	49	442
BRACHIOHELLA SPP	1	2	43	43	8	-	12	519	95	7855	1507	290
UNIDENTIFIED AMPHIPODA	27	4035	234	20488	4517	112	22	5802	95	43816	11293	195
AMPHIPODA SPP.	0	-	-	-	-	-	-	-	-	-	-	-
LIFE STAGE: JUVENILES												
CALLINectes SAPIOUS	5	16	34	303	58	354	10	30	21	221	53	178
	28	19059					28	20677				

TABLE 10. (CONT.)

MONTH	APRIL 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	59	1644	1644	311	529	2	58	194	1441	273	468
AUFOLYTUS SPP	2	34	273	676	136	401	4	29	69	335	82	281
LEUCON AMERICANUS	0	-	-	-	-	-	1	11	294	294	56	529
OXYUROSTYLIS SMITHI	1	9	244	244	46	529	0	-	-	-	-	-
MICRODEUTOPUS												
GHYLLOTALPA	0	-	-	-	-	-	4	28	69	360	83	294
GAMMARUS MUCRONATUS	0	-	-	-	-	-	1	3	81	81	15	529
JASSA FALCATA	0	-	-	-	-	-	1	2	69	69	13	529
ORDER CAPRELLIDEA	0	-	-	-	-	-	1	3	95	95	18	529
UNIDENTIFIED MYSIDS	3	18	35	244	61	342	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	8	140	62	2028	408	291
CRANGON SEPTEMSPINOSA	3	21	36	491	93	447	3	4	20	63	13	336
IDOTEA BALTICA	0	-	-	-	-	-	1	2	69	69	13	529
UNIDENTIFIED AMPHIPODA	2	124	1282	2196	473	381	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	3	264	294	4435	961	364
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	1	8	217	217	41	529	3	22	97	323	72	325
CLASS POLYCHAETA	27	4188	216	21000	4947	118	21	1065	100	5588	1358	128
LIFE STAGE: ZOEAL												
CRANGON SEPTEMSPINOSA	28	29478	5641	138113	28794	98	28	14974	3327	50612	12350	82
PAGURUS SP	0	-	-	-	-	-	1	7	208	208	39	529
FAMILY XANTHIDAE	2	16	223	234	60	367	2	7	69	113	25	379
NEOPANOPE TEXANA	0	-	-	-	-	-	1	9	252	252	48	529
INFRAORDER BRACHYURA	0	-	-	-	-	-	2	56	80	1500	283	502
LIFE STAGE: EPITOKES												
NEREIS SPP	2	179	97	4908	927	519	3	63	113	859	216	344
	28	34134					28	16749				

TABLE 10. (CONT.)

SPECIES	MAY 1976											
	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	97	519	1422	312	321	1	13	352	352	68	520
MANGLOPUS GIBBESI	0	-	-	-	-	-	1	14	369	369	71	520
SARISIA SPP	3	61	141	842	206	338	0	-	-	-	-	-
MATHIA OCTOPUNCTATA	0	-	-	-	-	-	1	4	96	96	18	520
OBELIA SPP	2	55	128	1422	269	486	1	3	92	92	18	520
ORDER ACTINIARIA	1	2	57	57	11	529	2	47	282	1000	198	417
ANEMONOPSIS LEIDYI	12	44	32	316	75	171	2	2	24	36	8	360
CLASS BIVALVIA	6	68	46	593	163	241	6	97	310	558	190	196
CLASS DIBOLCTUS	3	31	46	780	147	469	2	14	35	352	68	473
CLASS POLYCHAETA	5	124	183	1762	364	293	5	71	96	737	179	252
FAMILY PHYLLOPODIDAE	4	84	49	1684	329	393	3	31	42	444	107	344
EULALIA SPP.	0	-	-	-	-	-	1	4	96	96	18	520
FAMILY SYLLIDAE	6	127	128	1550	341	269	10	321	96	3000	744	232
AUTOLYTUS SPP	3	14	66	183	46	316	2	29	388	404	106	360
NEHEIS SPP	1	2	47	47	9	-	3	8	63	92	25	292
FAMILY CAPITELLIDAE	16	459	128	1558	566	123	19	972	73	4000	1126	116
FAMILY SPIRIDAE	1	11	303	303	57	529	3	67	92	1270	256	382
POLYDORA SPP	7	304	46	3939	875	288	17	613	71	6349	1245	203
SCOLICOLEPES VIRIDIS	0	-	-	-	-	-	3	40	261	473	120	297
CLASS OLIUCHALIA	1	13	352	352	67	529	1	10	261	261	50	520
CLASS NIKUDINEA	0	-	-	-	-	-	2	26	63	630	121	473
SUBPHYLUM PYCNOGONIDA	2	15	148	258	55	381	0	-	-	-	-	-
CYCLASPIIS VARIANS	3	104	303	2078	403	388	4	117	315	1350	339	269
LEPTOCURA MINOR	1	13	352	352	67	529	0	-	-	-	-	-
LEUCON AMERICANUS	8	485	183	4615	1078	222	12	424	92	2949	721	170
OMYKOSYLIS SMITHI	19	1060	153	3604	1153	109	18	1575	310	6627	2002	127
MICRODOLOPUS												
GRYLLOTALPA	0	-	-	-	-	-	27	12353	213	34122	12122	98
COROPHUM SPP	0	-	-	-	-	-	17	2279	149	26263	5402	237
ENICHTHONUS KURICORNIS	0	-	-	-	-	-	2	80	889	1270	293	366
GAMMARUS MICHONATUS	0	-	-	-	-	-	5	143	315	2000	412	288
MARINOGAMMARUS SPP	0	-	-	-	-	-	2	24	18	620	119	305
JASSA FALCATA	0	-	-	-	-	-	6	111	288	808	276	203
LYSIANOPSIS ALBA	0	-	-	-	-	-	4	113	288	1270	324	268
ELASMOPOUS LEVIS	0	-	-	-	-	-	14	434	69	2014	622	145
MELITA NITIDA	0	-	-	-	-	-	4	157	045	1350	390	249
MOGOCULONES EDWARDSI	0	-	-	-	-	-	5	60	92	620	159	264
MICROPHOTOPUS FAREII	0	-	-	-	-	-	3	91	518	1000	273	299
FAMILY SPENOTRIDAE	0	-	-	-	-	-	2	39	444	620	144	366
STENOCHILUS HELVICORNIS	0	-	-	-	-	-	11	206	30	1649	390	189
ORDER CAPRELLIDAE	17	566	66	3117	810	143	25	1063	71	5000	1214	114
UNIDENTIFIED YESIDS	25	3753	155	15724	4081	109	0	-	-	-	-	-
MYSTICOPSIS BIGLOWI	0	-	-	-	-	-	1	1	28	28	5	-
NEUSYSIS AMERICANA	0	-	-	-	-	-	25	5660	142	24341	5864	104
ORDER DECAPODA	0	-	-	-	-	-	1	1	32	32	6	-
INFRAORDER CARIDEA	0	-	-	-	-	-	1	41	1099	1099	212	520
FAMILY PALAEONIDAE	1	1	33	33	6	-	1	3	69	69	13	520
PALAEONETES VULGARIS	5	22	44	352	69	316	10	43	34	506	102	235
PALAEONETES SPP	3	12	68	156	36	311	4	29	55	392	87	299
HIPPOLYTE SPP.	0	-	-	-	-	-	1	1	21	21	4	-
CRABRON SOFTASPIROSA	6	98	38	2116	400	410	14	122	34	461	159	131
LEPTOSTRAPHIA SPP	7	19	32	141	39	209	5	66	34	1076	226	340
SULONER ALULIDACEA	1	6	159	159	30	529	3	63	444	705	166	294
INVERTEBRATE	0	-	-	-	-	-	1	47	1270	1270	244	520
SCOLOPUS SPP	4	96	46	1539	325	338	3	40	261	505	120	302
FAMILY AMPHAPTIDAE	1	11	303	303	57	529	1	13	352	352	68	520
THARYX SPP	1	19	530	530	100	529	0	-	-	-	-	-
ORDER ISOPODA	1	27	744	744	141	529	1	16	437	437	84	520
LIKALICA OVALIS	3	4	35	46	13	296	2	4	28	79	16	402
LIKALICA BALTICA	4	35	159	296	89	256	9	112	73	1010	233	200
LIKALICA TRILOBIA	8	280	66	3077	715	256	12	451	75	4051	912	202
ENICHTHONELLA SP	1	13	369	369	70	529	1	2	55	55	11	520
UNIDENTIFIED AMPHIPODA	28	18943	400	123959	26933	142	14	792	96	4051	1149	145
AMPHIPODA SPP.	0	-	-	-	-	-	24	7643	71	34206	9747	110
LIFE STAGE: JUVENILES												
CALLINectes SAPIIDUS	15	56	32	375	91	163	13	34	23	190	49	145
	28	27111					27	36641				

TABLE 10. (CONT.)

MONTH	MAY 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
CLASS POLYCHAETA	0	-	-	-	-	-	1	14	369	369	71	520
FAMILY SYLLIDAE	2	10	132	141	36	367	1	4	96	96	18	520
AUTOLYTUS SPP	3	45	352	546	136	301	0	-	-	-	-	-
FAMILY SPIONIDAE	0	-	-	-	-	-	1	13	352	352	68	520
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	12	374	92	2222	577	154
COROPHIUM SPP	0	-	-	-	-	-	1	18	473	473	91	520
ELASMOPUS LEVIS	0	-	-	-	-	-	2	27	288	444	100	369
STENOTHOE BREVICORNIS	0	-	-	-	-	-	1	4	96	96	18	520
ORDER CAPRELLIDEA	1	19	519	519	98	529	3	45	282	518	133	297
UNIDENTIFIED MYSIDS	1	15	415	415	78	529	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	9	77	23	1270	248	324
PALAEOMNETES VULGARIS	0	-	-	-	-	-	3	3	24	36	9	294
PALAEOMNETES SPP	0	-	-	-	-	-	1	1	31	31	6	-
CRANGON SEPTemspINOSA	3	30	46	705	134	439	7	15	28	127	31	205
IDOTEA BALTICA	1	3	90	90	17	529	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	7	244	256	1638	506	207	1	65	1762	1762	339	520
AMPELISCA SPP.	0	-	-	-	-	-	2	61	369	1270	252	415
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	0	-	-	-	-	-	7	153	71	1147	327	214
CLASS POLYCHAETA	22	2099	155	10419	2947	140	17	1190	71	10000	2189	184
LIFE STAGE: ZOEAL												
PALAEOMNETES SPP	14	900	155	8064	1763	196	10	353	282	2700	660	187
HIPPOLYTE SPP.	0	-	-	-	-	-	2	66	679	1115	247	372
CRANGON SEPTemspINOSA	28	82501	2606	394105	125580	152	28	20010	518	72911	16625	83
PAGURUS SP	6	114	296	1152	262	230	2	131	1359	2186	487	371
FAMILY XANTHIDAE	26	34121	132	316364	74942	220	4	98	510	1013	253	258
PANOPEUS HERBSTII	0	-	-	-	-	-	3	664	576	8889	2312	348
NEOPANOPE TEXANA	0	-	-	-	-	-	19	25169	96	200538	50822	202
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	19	880	92	3524	1045	119
INFRAORDER BRACHYURA	7	567	153	6006	1570	277	5	188	92	1673	461	245
LIFE STAGE: EPITOKES												
NEREIS SPP	14	618	32	10308	1994	323	16	119	18	1266	287	241
	28	121287					27	49741				

TABLE 10. (CONT.)

MONTH

JUNE 1976

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	15	1005	335	6202	1530	152	2	23	211	471	93	409
OBELIA SPP	3	51	379	769	166	326	0	-	-	-	-	-
CLASS ANTHOZOA	0	-	-	-	-	-	1	2	63	63	12	548
ORDER ACTINIARIA	0	-	-	-	-	-	5	17	24	270	53	310
MNEMIOPSIS LEIDYI	13	75	39	476	117	158	0	-	-	-	-	-
ORDER NUDIBRANCHIA	3	36	35	720	141	397	3	116	219	2302	449	388
CLASS BIVALVIA	3	98	671	1322	311	317	2	10	65	241	45	443
ENSIS DIRECTUS	2	2	4	64	12	515	3	50	231	1006	192	380
CLASS POLYCHAETA	1	1	42	42	8	-	3	42	118	753	153	364
FAMILY PHYLLODOCIDAE	1	1	44	44	8	-	2	91	947	1797	366	400
PARANAITIS SPECIOSA	1	9	275	275	50	548	0	-	-	-	-	-
FAMILY POLYNOIDAE	0	-	-	-	-	-	2	53	590	1006	210	394
FAMILY SYLLIDAE	7	237	165	2645	597	252	10	351	438	2192	626	178
AUTOLYTUS SPP	2	8	42	183	34	454	1	4	114	114	21	548
NEREIS SUCCINEA	0	-	-	-	-	-	1	2	63	63	12	548
NEREIS SPP	1	1	35	35	6	-	2	13	29	362	66	507
FAMILY CAPITELLIDAE	3	69	669	721	210	305	13	501	211	4776	1019	203
FAMILY SPIONIDAE	0	-	-	-	-	-	2	45	339	1006	192	428
POLYDORA SPP	5	49	167	567	130	263	9	195	211	1531	378	194
SCOLECOLEPIDES VIRIDIS	0	-	-	-	-	-	2	16	219	270	62	383
SABELLARIA VULGARIS	0	-	-	-	-	-	1	16	468	468	85	548
CLASS OLIGOCHAETA	0	-	-	-	-	-	1	34	1013	1013	185	548
CLASS HIRUDINEA	0	-	-	-	-	-	1	12	362	362	66	548
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	1	4	118	118	22	548
CALIGUS SPP	0	-	-	-	-	-	1	32	972	972	177	548
ARGULUS SPP.	1	42	1270	1270	232	548	0	-	-	-	-	-
CYCLASPIS VARIANS	4	100	55	1539	324	326	4	164	482	2388	501	305
LEPTOCUMA MINOR	1	49	1468	1468	268	548	1	32	947	947	173	548
LEUCON AMERICANUS	19	5583	379	26903	7820	140	23	7734	723	31079	9364	121
OXYUROSTYLIS SMITHI	21	5180	747	32385	8014	155	26	6605	211	29494	9553	120
FAMILY PARATANAIDAE	0	-	-	-	-	-	1	60	1798	1798	328	548
CYMAIDUSA COMPTA	0	-	-	-	-	-	2	65	813	1151	253	387
MICRODEUTOPUS	0	-	-	-	-	-	23	2558	39	21818	4096	160
GRYLLOTALPA	0	-	-	-	-	-	10	372	97	3636	849	228
BATEA CATHARINENSIS	0	-	-	-	-	-	28	3402	58	18305	3756	110
COROPHIUM SPP	0	-	-	-	-	-	2	62	773	1096	241	387
ERICHTHONIUS SPP.	0	-	-	-	-	-	1	16	468	468	85	548
ERICHTHONIUS RUBICORNIS	0	-	-	-	-	-	2	2	30	34	8	381
FAMILY GAMMARIDAE	0	-	-	-	-	-	4	88	471	1013	241	274
GAMMARUS MUCRONATUS	0	-	-	-	-	-	19	3760	241	22034	5028	134
JASSA FALCATA	0	-	-	-	-	-	10	296	169	3117	667	225
LYSIANOPSIS ALBA	0	-	-	-	-	-	16	638	231	3038	834	131
ELASHOPUS LEVIS	0	-	-	-	-	-	10	176	30	1151	334	189
MELITA NITIDA	0	-	-	-	-	-	11	698	523	4156	1184	170
MONOCULODES EDWARDSI	0	-	-	-	-	-	10	840	30	14328	2710	323
MICROPHOTOPUS RANEYI	0	-	-	-	-	-	6	484	988	8421	1575	325
FAMILY STENOCHTHIDAE	0	-	-	-	-	-	-	-	-	-	-	-



TABLE 10. (CONT.)

MONTH

JUNE 1976

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
STENOTHOE MINUTA	0	-	-	-	-	-	2	73	1092	1108	279	381
STENOTHOE BREVICORNIS	0	-	-	-	-	-	12	778	211	7457	1748	225
ORDER CAPRELLIDEA	17	624	42	2192	723	116	29	2508	219	9468	2532	101
UNIDENTIFIED MYSIDS	26	47900	167	208001	63280	132	2	609	7164	11111	2375	390
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	4	291	947	4545	922	317
NEOMYSIS AMERICANA	0	-	-	-	-	-	29	35775	447	173121	48290	135
ORDER DECAPODA	0	-	-	-	-	-	2	33	31	947	173	530
PALAEONETES VULGARIS	4	10	42	130	30	292	4	6	30	63	16	272
PALAEONETES SPP	3	11	90	126	34	308	1	1	31	31	6	-
HIPPOLYTE SPP.	0	-	-	-	-	-	1	1	24	24	4	-
CRANGON SEPTENSPINOSA	16	96	21	550	136	142	15	113	29	1101	224	198
CALLINECTES SAPIDUS	1	2	45	45	8	-	0	-	-	-	-	-
LEPTOSYNAPTA SPP	2	4	35	79	16	410	3	11	33	241	45	423
SUBORDER DORIDACEA	1	12	357	357	65	548	4	39	37	494	121	308
SUBORDER AEOLIDACEA	1	6	190	190	35	548	8	118	219	678	216	183
INVERTEBRATE	1	2	45	45	8	-	2	133	693	3288	609	459
INFRAORDER BRACHYURA	0	-	-	-	-	-	1	16	494	494	90	548
PHYLUM NEMERTEA	1	13	379	379	69	548	1	8	231	231	42	548
HYDROIDES DIANTHUS	0	-	-	-	-	-	1	1	29	29	5	-
SCOLOPLOS SPP	4	15	34	335	62	406	6	210	30	2899	673	320
PECTINARIA GOULOTII	1	11	335	335	61	548	4	87	390	1013	242	280
FAMILY AMPHARETIDAE	0	-	-	-	-	-	3	27	219	339	83	312
PARANAITIS SP	1	1	44	44	8	-	2	6	30	137	25	457
SPIO SETOSA	0	-	-	-	-	-	1	2	63	63	12	548
SPIO SPP	1	34	1026	1026	187	548	1	2	48	48	9	-
GLYCERA CAPITATA	1	3	79	79	14	548	0	-	-	-	-	-
UNCIOLOA IRRORATA	0	-	-	-	-	-	1	1	34	34	6	-
THARYX SPP	0	-	-	-	-	-	2	60	773	1039	232	385
PODARKE OBSCURA	1	6	192	192	35	548	3	108	1006	1151	329	306
ORDER ISOPODA	0	-	-	-	-	-	1	11	339	339	62	548
LIRONECA OVALIS	1	32	947	947	173	548	0	-	-	-	-	-
IDOTEA BALTICA	24	745	34	8900	1655	222	17	388	24	2931	655	169
EDOTEA TRILOBA	14	737	35	7692	1533	208	23	1605	270	5681	1402	87
ERICHSONELLA SP	4	30	34	769	140	475	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	27	12530	179	67965	15149	121	22	1928	211	6038	1915	99
AMPELISCA SPP.	0	-	-	-	-	-	24	8211	219	23208	7802	95
LIFE STAGE: JUVENILES	-	-	-	-	-	-	-	-	-	-	-	-
CALLINECTES SAPIDUS	14	49	4	228	67	135	11	36	31	317	69	191
	30	75469	-	-	-	-	30	82877	-	-	-	-

TABLE 10. (CONT.)

MONTH	JUNE 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	2	126	1006	2759	530	422
CYCLASPIS VARIANS	1	24	720	720	131	548	0	-	-	-	-	-
LEUCON AMERICANUS	3	336	721	7934	1464	435	8	326	339	2192	655	201
OXYUROSTYLIS SMITHI	0	-	-	-	-	-	1	32	947	947	173	548
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	7	203	34	2759	559	275
BATEA CATHARINENSIS	0	-	-	-	-	-	2	31	144	773	143	467
COROPHIUM SPP	0	-	-	-	-	-	3	49	29	1356	247	508
JASSA FALCATA	0	-	-	-	-	-	6	99	30	1546	345	349
ELASHOPUS LEVIS	0	-	-	-	-	-	1	11	339	339	62	548
MICROPROTOPUS RANEYI	0	-	-	-	-	-	2	191	947	4776	883	463
STENOTHOE BREVICORNIS	0	-	-	-	-	-	1	17	523	523	95	548
ORDER CAPRELLIDEA	0	-	-	-	-	-	3	32	219	390	99	314
UNIDENTIFIED MYSIDS	4	150	360	1988	452	301	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	12	565	68	5517	1272	225
PALAEONETES VULGARIS	0	-	-	-	-	-	3	7	63	86	23	308
PALAEONETES SPP	0	-	-	-	-	-	1	2	58	58	11	-
CRANGON SEPTEMSPINOSA	6	10	4	83	25	235	3	10	31	190	38	369
IDOTEA BALTICA	7	36	42	669	123	343	3	14	49	211	47	343
UNIDENTIFIED AMPHIPODA	7	272	83	2308	636	234	1	11	339	339	62	548
AMPELISCA SPP.	0	-	-	-	-	-	8	252	172	2297	529	210
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	0	-	-	-	-	-	5	52	211	471	124	240
CLASS POLYCHAETA	6	218	292	1539	486	223	7	461	339	5681	1314	285
LIFE STAGE: ZOEAL												
ORDER DECAPODA	1	13	379	379	69	548	0	-	-	-	-	-
PALAEONETES SPP	27	5172	357	19505	5038	97	27	2793	219	14798	3577	128
HIPPOLYTE SPP.	3	70	190	1296	260	369	3	74	339	941	242	329
CRANGON SEPTEMSPINOSA	28	27076	79	167928	34041	126	29	16409	947	45392	13427	82
UPOGEBIA AFFINIS	19	1692	314	10275	2598	154	11	635	362	7273	1435	226
PAGURUS SP	13	538	314	3077	809	150	9	263	211	1850	519	198
LIBINIA SPP.	6	429	567	7692	1444	336	7	291	241	2388	681	234
CANCER IRRORATUS	0	-	-	-	-	-	1	24	724	724	132	548
CALLINECTES SAPIDUS	1	177	5308	5308	969	548	8	666	219	5031	1458	219
FAMILY XANTHIDAE	30	87738	10219	285873	75232	86	0	-	-	-	-	-
PANOPEUS HERUSTII	0	-	-	-	-	-	17	3054	766	21775	4909	161
NEOPANOPE TEXANA	0	-	-	-	-	-	30	47756	2973	162013	45537	95
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	24	1549	23	5833	1749	113
INFRAORDER BRACHYURA	13	1672	670	13603	3165	189	13	722	270	6474	1420	197
LIFE STAGE: EPITOKES												
NEREIS SPP	18	198	35	1202	314	159	15	146	29	1301	284	194
	30	125821					30	76871				

TABLE 10. (CONT.)

MONTH	JULY 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	6	402	76	7089	1362	339	4	117	449	1468	333	285
TURRITOPSIS NUTRICOLA	12	409	63	7442	1397	342	9	309	260	2500	593	192
NEMOPSIS BACHEI	1	4	118	118	22	548	2	6	80	110	24	386
OBELIA SPP	3	47	175	736	161	344	1	21	635	635	116	548
ORDER ACTINIARIA	1	7	222	222	41	548	4	99	96	1360	305	309
PHYLUM CTENOPHORA	1	4	128	128	23	548	0	-	-	-	-	-
MNEMIOPSIS LEIDYI	29	1443	76	11683	2347	163	7	153	118	2530	481	313
ORDER NEMATODA	1	53	1600	1600	292	548	0	-	-	-	-	-
ORDER MUDIBRANCHIA	2	18	76	471	87	475	1	12	351	351	64	548
ENSIS DIRECTUS	1	17	506	506	92	548	0	-	-	-	-	-
CLASS POLYCHAETA	4	58	76	800	179	309	5	120	351	1348	322	268
FAMILY PHYLLODOCIDAE	2	11	123	198	42	392	15	459	80	3636	762	166
PHYLLODOCE ARENAE	0	-	-	-	-	-	3	51	124	769	180	352
FAMILY SYLLIDAE	4	103	123	2105	394	383	9	298	351	2373	624	210
NEREIS SUCCINEA	0	-	-	-	-	-	2	7	91	124	28	385
NEREIS SPP	0	-	-	-	-	-	2	26	80	690	126	492
FAMILY CAPITELLIDAE	6	264	76	2352	629	238	11	673	533	8750	1648	245
FAMILY SPIONIDAE	1	3	76	76	14	548	3	72	440	1270	253	351
POLYDORA SPP	1	8	234	234	43	548	6	151	339	1212	339	224
SCOLECOLEPIDES VIRIDIS	1	78	2352	2352	429	548	0	-	-	-	-	-
DIOPATRA	4	102	99	2352	432	424	4	61	103	769	185	304
SUBPHYLUM PYCNOGONIDA	15	813	76	4444	1260	155	14	913	351	6400	1595	175
CYCLASPIS VARIANS	5	252	234	2376	655	260	3	45	412	482	136	306
LEPTOCUMA MINOR	1	74	2207	2207	403	548	1	137	4124	4124	753	548
LEUCON AMERICANUS	20	4186	137	31899	6974	167	26	5120	227	35088	7334	143
OXYUROSTYLIS SMITHI	20	1250	175	6897	1919	154	23	2175	339	10275	2539	117
FAMILY PARATANAIDAE	1	13	396	396	72	548	1	18	533	533	97	548
CYMAIDUSA COMPTA	0	-	-	-	-	-	4	125	88	2909	539	433
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	17	1193	339	13211	2481	208
BATEA CATHARINENSIS	0	-	-	-	-	-	19	599	96	2979	742	124
COROPHIUM SPP	0	-	-	-	-	-	25	1560	426	10090	2066	132
CERAPUS TUBULARIS	0	-	-	-	-	-	8	315	227	2424	692	220
ERICHTHONIUS SPP.	0	-	-	-	-	-	4	97	267	1270	284	293
ERICHTHONIUS												
BRASILIANUS	0	-	-	-	-	-	1	40	1212	1212	221	548
GAMMARUS LAWRENCIANUS	0	-	-	-	-	-	1	48	1441	1441	263	548
GAMMARUS MUCRONATUS	0	-	-	-	-	-	1	45	1360	1360	248	548
JASSA FALCATA	0	-	-	-	-	-	30	9399	1953	20851	5032	54
LYSIANOPSIS ALBA	0	-	-	-	-	-	14	318	103	1290	408	128
ELASMOPIUS LEVIS	0	-	-	-	-	-	23	1338	440	3729	1166	87
MELITA NITIDA	0	-	-	-	-	-	8	235	88	3604	697	297
MONOCULODES EDWARDSI	0	-	-	-	-	-	5	161	439	1468	395	245
MICROPROTOPUS RANEYI	0	-	-	-	-	-	16	571	227	3077	795	139
FAMILY STENOHOIDEAE	0	-	-	-	-	-	3	271	1702	3232	859	317
PARAMETOPELLA CYPRIIS	0	-	-	-	-	-	4	303	1277	3871	872	287
STENOHOE MINUTA	0	-	-	-	-	-	7	290	175	2162	648	224
STENOHOE BREVICORNIS	0	-	-	-	-	-	16	757	339	4444	1074	142
ORDER CAPRELLIDEA	26	1676	364	5432	1618	97	29	3278	965	9697	2222	68

TABLE 10 . (CONT.)

MONTH	JULY 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
UNIDENTIFIED MYSIDS	29	22602	76	68837	20557	91	5	546	339	9231	1858	340
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	23	2416	360	13153	2788	115
NEOMYSIS AMERICANA	0	-	-	-	-	-	30	20704	800	54545	14977	72
HETEROMYSIS FORMOSA	0	-	-	-	-	-	1	6	180	180	33	548
ORDER DECAPODA	0	-	-	-	-	-	1	15	440	440	80	548
PALAEONETES VULGARIS	1	2	63	63	12	548	2	11	80	241	46	429
PALAEONETES SPP	4	55	147	800	171	312	2	71	351	1778	329	463
HIPPOLYTE SPP.	0	-	-	-	-	-	1	24	721	721	132	548
CRANGON SEPTEMSPINOSA	10	153	61	1429	344	224	17	168	91	1333	269	159
LEPTOSYNAPTA SPP	1	4	132	132	24	548	2	25	120	635	117	466
SUBORDER DORIDACEA	1	6	182	182	33	548	1	12	360	360	66	548
SUBORDER AEOLIDACEA	2	44	513	800	171	390	6	147	227	1270	336	229
INVERTEBRATE	3	78	175	1928	354	452	1	12	361	361	66	548
LISTRIELLA BARNARDI	0	-	-	-	-	-	5	77	339	533	176	231
PHYLUM NEMERTEA	0	-	-	-	-	-	2	35	360	702	142	401
SCOLOPLOS SPP	3	23	59	494	93	400	4	40	103	808	151	375
PECTINARIA GOULDII	1	17	506	506	92	548	3	51	351	727	164	321
FAMILY AMPHARETIDAE	0	-	-	-	-	-	1	11	339	339	62	548
PARANAITIS SP	0	-	-	-	-	-	2	27	172	645	121	444
ETEONE LACTEA	1	15	449	449	82	548	1	49	1468	1468	268	548
GLYCERA CAPITATA	1	3	96	96	18	548	0	-	-	-	-	-
UNCIOLOA IRRORATA	0	-	-	-	-	-	4	108	103	1280	331	307
THARYX SPP	3	76	471	1111	246	325	1	43	1290	1290	236	548
PODARKE OBSCURA	2	5	59	76	17	384	6	138	91	1468	348	252
ORDER SABELLIDA	0	-	-	-	-	-	1	14	426	426	78	548
FAMILY SERPULIDAE	0	-	-	-	-	-	1	8	227	227	41	548
FAMILY TEREBELLIDAE	0	-	-	-	-	-	1	26	769	769	140	548
LIRONECA OVALIS	1	7	222	222	41	548	3	47	103	825	172	366
IDUTEA BALTICA	10	248	117	2222	506	204	18	545	124	2857	677	124
EDOTEA THILOBA	18	593	153	3721	763	129	30	1847	444	5887	1167	63
ERICHSONELLA SP	2	7	91	123	27	385	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	30	14576	685	64810	17575	121	28	3733	339	14274	3902	105
AMPELISCA SPP.	0	-	-	-	-	-	24	5851	175	36697	8718	149
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	9	39	61	294	74	188	1	3	78	78	14	548
	30	49848					30	68792				

TABLE 10. (CONT.)

MONTH	JULY 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	16	494	494	90	548	2	26	351	426	99	382
SUBPHYLUM PYCNOGONIDA	1	3	99	99	18	548	1	16	482	482	88	548
LUCCON AMERICANUS	4	196	800	2106	554	283	4	179	533	2368	527	295
CYNALOSA COMPTA	0	-	-	-	-	-	1	49	1455	1455	266	548
MICRODEUTOPIUS	0	-	-	-	-	-	1	49	1468	1468	268	548
GRYLLOCTALPA	0	-	-	-	-	-	3	23	110	476	90	387
BATEA CATHARINENSIS	0	-	-	-	-	-	4	46	103	702	152	330
COPPELUM SPP	0	-	-	-	-	-	1	27	808	808	148	548
GAMMARUS MUCRONATUS	0	-	-	-	-	-	20	656	90	2936	747	114
JASSA FALCATA	0	-	-	-	-	-	2	77	851	1468	305	395
ELASMOPUS LEVIS	0	-	-	-	-	-	1	4	118	118	22	548
MONOCULOBES EDWARDSI	0	-	-	-	-	-	6	122	103	1446	318	261
MICROPACIOFUS HANEYI	0	-	-	-	-	-	2	30	175	727	135	450
STENOCHOR MINUTA	0	-	-	-	-	-	5	97	227	1458	289	297
CELEBR CAPRELLIDEA	2	9	91	175	36	400	0	-	-	-	-	-
UNIDENTIFIED NYSID	9	342	94	7059	1292	378	1	7	202	202	37	548
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	20	664	161	2936	777	117
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	4	133	133	24	548
CRANGON SEPTENTRIONALIS	0	-	-	-	-	-	3	35	96	779	145	414
IDOLCEA BALTICA	0	-	-	-	-	-	1	3	88	88	16	548
UNIDENTIFIED AMPHIPODA	12	801	247	8101	1746	218	4	305	80	4404	1003	329
AMPHISCIA SPP.	0	-	-	-	-	-	-	-	-	-	-	-
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	14	470	123	2353	700	149	13	478	124	4404	932	195
UNIDENTIFIED INVERTEBRATE	1	18	526	526	96	548	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
ORDER DECAPODA	1	6	182	182	33	548	3	64	426	1053	217	339
PALAEONETES SPP	27	6650	123	31628	8296	125	23	2064	78	9123	2286	114
HIPPOLYTE SPP.	4	44	175	506	123	281	2	72	690	1458	292	406
CRANGON SEPTENTRIONALIS	17	886	471	4172	1094	123	16	792	175	3956	1155	146
LEGOBIA AFFINIS	15	644	137	5581	1174	182	14	501	175	2208	666	133
PAGURUS SP	14	436	137	2069	584	134	13	321	175	2424	535	167
LIBINIA SPP.	4	45	76	792	154	343	11	312	175	2128	534	171
FAMILY XANTHIDAE	30	61132	1728	292093	60015	98	2	135	1835	2208	515	382
PAGURUS HEBESTII	0	-	-	-	-	-	20	2197	227	12338	3004	137
NEOPAGURUS TEXANA	0	-	-	-	-	-	30	32065	1379	101284	25874	81
NEOPAGURUS HARRISI	0	-	-	-	-	-	10	271	175	2308	516	190
INFRAORDER BRACHYURA	7	291	385	3743	749	258	8	420	426	4337	963	229
LIFE STAGE: MEALOPAL												
ORDER DECAPODA	1	13	396	396	72	548	0	-	-	-	-	-
INFRAORDER BRACHYURA	1	16	471	471	86	548	1	21	635	635	116	548
LIFE STAGE: EPITOKES												
CLASS POLYCHAETA	1	3	94	94	17	548	0	-	-	-	-	-
NEALIS SPP	12	93	61	706	170	184	15	161	78	1468	301	187
	30	72113					30	42233				

TABLE 10. (CONT.)

MONTH	AUGUST 1976											
	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
TURRITOPSIS NUTRICOLA	14	346	156	1970	524	152	18	529	70	3053	798	151
REMOPSIS BACHLI	0	-	-	-	-	-	2	8	65	175	34	421
PHIALIDION SPP	1	7	222	222	41	548	0	-	-	-	-	-
ORDEA ACTINARIA	0	-	-	-	-	-	3	53	126	860	186	357
REMOPSIS LEIDYI	29	6098	200	35238	8911	110	12	195	100	1224	335	174
ORDEA SPP	4	55	141	632	156	286	0	-	-	-	-	-
ORDEA MUDIBANCHIA	1	13	396	396	72	548	1	18	533	533	97	548
CLASS BIVALVIA	0	-	-	-	-	-	1	15	460	460	84	548
LOLIGO PLALLI	1	7	200	200	37	548	0	-	-	-	-	-
CLASS POLYCHAETA	4	118	50	2576	480	400	2	44	258	1066	195	450
FAMILY PHYLLODOLAL	3	29	105	597	113	308	11	319	83	2267	609	191
FAMILY SYLLIDAE	5	50	145	476	122	244	11	251	142	1613	446	178
AUTOLYTUS SPP	0	-	-	-	-	-	1	4	133	133	24	548
AKALIS SPP	1	14	421	421	77	548	2	7	97	126	29	384
FAMILY CAPITELLIDAE	1	13	400	400	73	548	0	-	-	-	-	-
POLYDORA SPP	1	10	303	303	55	548	0	-	-	-	-	-
LIOPATRA	1	3	90	90	16	548	5	23	70	300	62	274
SUBPHYLUM PYCNOGONIDA	22	667	115	2985	826	124	23	1188	175	3333	976	82
ORDEA STOMATOPODA	1	5	164	164	30	548	0	-	-	-	-	-
ORDEA COCCLIA	0	-	-	-	-	-	1	9	258	258	47	548
CYCLASPIS VARIANS	0	-	-	-	-	-	5	95	323	816	236	241
LEUCON AMERICANUS	16	528	421	2182	615	116	23	1247	126	3441	1127	90
OXYMUS STYLIS SMITHI	5	60	147	748	170	283	14	302	61	1416	441	146
MICRODEUTOPUS	0	-	-	-	-	-	5	132	104	2133	423	322
GRYLLotalpa	0	-	-	-	-	-	11	281	149	1720	486	173
BATIA CATHARINENSIS	0	-	-	-	-	-	16	745	126	3883	1058	142
CORUPHIA SPP	0	-	-	-	-	-	16	201	142	1703	355	176
CERAPUS TUBULAKIS	0	-	-	-	-	-	7	28	842	842	154	548
CORUPHIA TUBULACULUM	0	-	-	-	-	-	7	141	126	1667	345	245
ENICHTHONIS SPP.	0	-	-	-	-	-	29	13253	533	36302	8720	66
JASSA FALCATA	0	-	-	-	-	-	10	203	142	1206	360	177
LYSIANOPSIS ALBA	0	-	-	-	-	-	21	633	150	3429	745	118
ELASMODUS LEVIS	0	-	-	-	-	-	8	183	142	1600	405	222
REUTIA NITILA	0	-	-	-	-	-	3	67	460	842	211	314
MONOCULUS LEMAKESI	0	-	-	-	-	-	4	124	400	1277	345	278
MICROPHOTOPUS KLEYI	0	-	-	-	-	-	16	688	526	5053	1008	147
FAMILY STENOPODIDAE	0	-	-	-	-	-	2	43	175	1119	206	477
TARANTOPELLA CYRIS	0	-	-	-	-	-	6	203	356	1846	488	240
STENOPODUS BRIVICORNIS	0	-	-	-	-	-	28	2436	128	12571	3031	124
ORDEA CAPRELLIDAE	27	813	100	3582	798	98	0	-	-	-	-	-
UNIDENTIFIED PYSIDS	25	25279	441	139167	33752	134	22	2623	388	10430	3081	117
PYSIDOPSIS BIGELIUMI	0	-	-	-	-	-	30	39986	377	150600	41707	104
ALONYSIS AMERICANA	0	-	-	-	-	-	2	14	89	331	62	443
ORDEA DECAPODA	0	-	-	-	-	-	1	10	299	299	55	548
PALAEONETES VULGARIS	0	-	-	-	-	-	19	300	100	1866	410	137
PALAEONETES SPP	18	327	109	1478	397	121	0	-	-	-	-	-
HIPPODITE SPP.	1	33	1600	1600	183	548	17	539	88	1720	602	112
CRANGON STEPHENSPINOSA	14	349	116	1618	520	149	0	-	-	-	-	-
SAGITTIA SPP	2	17	222	360	67	395	0	-	-	-	-	-
LEPTOSYNAPTEA SPP	3	22	82	476	89	403	1	3	89	89	16	548
SUBORDER DORIDACEA	0	-	-	-	-	-	4	76	165	860	226	296
SUBORDER AEOLIDACEA	2	12	156	200	46	384	6	117	143	1026	270	238
INTELLIBRACE	3	20	137	303	65	329	6	177	65	2239	509	207
FAMILY LILIBOURIDAE	0	-	-	-	-	-	1	13	403	403	74	548
LILIBOURA LARGESCI	0	-	-	-	-	-	4	112	460	1703	311	279
HYDROIDES DIANTHUS	1	5	145	145	26	548	0	-	-	-	-	-
PLEURANKIA COLELLI	0	-	-	-	-	-	1	3	104	104	19	548
GLYCLA CAPITATA	1	5	149	149	27	548	0	-	-	-	-	-
UNCLOLA INKORATA	0	-	-	-	-	-	1	4	126	126	23	548
TRANKA SPP	1	11	320	320	60	548	0	-	-	-	-	-
FOURKE OUSCORA	0	-	-	-	-	-	1	23	692	692	126	548
STAURONTELIS KUDOLPHI	6	-	-	-	-	-	2	30	65	842	154	504
LIRONCA OVALIS	2	8	50	187	35	443	4	12	65	128	32	273
LOPTEA LALICA	9	98	100	667	193	196	10	213	154	1119	356	167
LOPTEA TRILOBA	12	176	145	1791	314	176	21	847	351	2917	833	98
ENICHSOMELLA SP	0	-	-	-	-	-	1	29	866	866	157	548
UNIDENTIFIED AMPHIPODA	26	2629	175	14545	2796	106	17	847	126	5333	1257	151
AMPHISCIA SPP.	0	-	-	-	-	-	23	916	88	3200	868	95
LIFE STAGE: JUVENILES												
CALLINectes SAPHIRUS	2	14	156	261	55	393	1	3	104	104	19	548
	30	39643					30	70566				

TABLE 10. (CONT.)

MONTH	AUGUST 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	15	455	455	83	548	6	103	126	1282	272	253
SUBPHYLUM PYCNOGONIDA	1	6	175	175	32	548	2	51	385	1143	218	428
LEUCON AMERICANUS	1	6	180	180	33	548	2	27	165	645	121	446
OSTEA CALHARENSIS	0	-	-	-	-	-	2	32	89	860	157	497
COROPHUM SPP	0	-	-	-	-	-	4	66	142	1119	224	342
JASSA FALCATA	0	-	-	-	-	-	23	1169	104	4211	1284	110
MELITA NITIDA	0	-	-	-	-	-	1	4	126	126	23	548
MICROPOLIPUS HANEYI	0	-	-	-	-	-	1	2	70	70	13	548
ORCULA CAPRELLIDEA	0	-	-	-	-	-	4	116	165	2285	439	380
UNIDENTIFIED MYSIDS	15	390	156	1970	578	148	1	17	516	516	94	548
MYDIOLEPSIS BIGELOWI	0	-	-	-	-	-	3	28	83	602	112	403
MYDIOLEPSIS AMERICANA	0	-	-	-	-	-	20	1467	165	6989	1945	133
ICHTER BALTICA	0	-	-	-	-	-	2	6	77	97	22	383
UNIDENTIFIED AMPHIPODA	4	50	328	421	130	261	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	6	109	142	1684	332	305
AMPHITHOE LONGIMANA	0	-	-	-	-	-	1	20	597	597	109	548
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	11	268	156	2388	586	218	11	374	126	3733	792	212
FAMILY SYLLIDAE	1	4	115	115	21	548	0	-	-	-	-	-
CLASS OLIGOCHAETA	1	15	444	444	81	548	0	-	-	-	-	-
LIFE STAGE: ADULT												
PALAEONETES SPP	19	1205	50	8571	1937	161	15	517	126	2526	716	138
BIFFOLYLL SPP.	9	92	115	748	178	193	5	150	417	1818	398	265
CRANGON SEPTENTRIONALIS	8	165	100	1194	337	204	8	204	175	2000	447	219
FAMILY CALLINANASSIDAE	1	81	2424	2424	443	548	0	-	-	-	-	-
OPHOGEBIA AFFINIS	7	60	147	421	120	198	4	109	417	1194	310	285
PAGURUS SP	9	68	147	597	131	192	7	124	126	1143	286	231
LISINIA SPP.	2	15	152	299	60	402	4	99	385	1119	279	282
FAMILY XANTHIDAE	28	11156	580	77576	18016	161	1	221	6617	6617	1208	548
PAROPEUS HERBSTII	0	-	-	-	-	-	8	506	833	4571	1173	200
NEOPAROPE TEXANA	0	-	-	-	-	-	30	7179	1132	27200	5630	78
PHILIPPOPAROPEUS HARRISI	0	-	-	-	-	-	5	97	323	920	243	252
INFRAORDER BRACHYURA	4	171	164	4486	818	478	2	38	496	645	146	384
FAMILY PINNOTHERIDAE	1	20	597	597	109	548	0	-	-	-	-	-
PINNAIXA CHALOPTERANA	0	-	-	-	-	-	2	19	165	417	81	417
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	7	176	180	1368	405	229	4	66	142	930	208	314
INFRAORDER BRACHYURA	7	211	303	2424	522	247	8	281	258	1986	542	193
LIFE STAGE: EPITOLES												
MEKEIS SPP	12	101	76	563	163	161	12	72	65	842	167	231
	30	14276					30	13352				

<sup>a</sup> Enumeration of *M. leidy* was not done from 8 through 19 September because specimens could not be adequately preserved.

<sup>b</sup> From September through December collections were taken at the condenser intake (Loc. 7) and discharge (11) and dilution pump intake (12) and discharge (13); for January and February they were taken at the dilution pump intake and discharge; and from April through August only at the condenser intake and discharge.

TABLE 11. MONTHLY MEAN DENSITIES (n/1000m<sup>3</sup>) OF MACROZOOPLANKTON FROM DAY AND NIGHT COLLECTIONS AT THE CONDENSER INTAKE (7) AND DISCHARGE (11)<sup>a</sup> DURING 24-HOUR PERIODS FROM SEPTEMBER 1975 THROUGH AUGUST 1976.

MONTH/TIME PERIOD

SEPTEMBER 1975/DAY

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	37	148	148	74	200	1	15	58	58	29	200
TURRITOPSIS NUTRICOLA	2	36	71	74	42	116	1	6	23	23	12	200
ACQUORSA SPP	4	315	146	519	187	59	4	146	94	161	40	27
ORDER ACTINARIA	0	-	-	-	-	-	1	6	23	23	12	200
NEUMYSIS LUDYI	2	1002	1600	2409	1204	120	0	-	-	-	-	-
ORDER GODEFRANCHIA	0	-	-	-	-	-	1	6	23	23	12	200
FAMILY SYLLIDAE	1	19	74	74	37	200	1	15	58	58	29	200
NEUMYSIS SPP	2	157	36	523	231	185	0	-	-	-	-	-
CYCLASIS VARIANS	2	119	33	444	217	182	1	6	23	23	12	200
OSTROSTYLIS SMITHI	0	-	-	-	-	-	1	6	23	23	12	200
CYANUSA COMPTA	0	-	-	-	-	-	1	15	58	58	29	200
MICROSCOPUS	0	-	-	-	-	-	3	43	23	90	40	92
CEPHALOPUS	0	-	-	-	-	-	2	18	23	47	22	123
CEPHALOPUS TUBULARIS	1	8	33	33	17	200	2	18	23	47	22	123
CEPHALOPUS FALCATA	0	-	-	-	-	-	4	60	23	116	43	72
CEPHALOPUS LEVIS	0	-	-	-	-	-	1	6	23	23	12	200
MICROSCOPUS KANEYI	0	-	-	-	-	-	2	13	23	30	16	117
STENOIDE MINUTA	1	8	33	33	17	200	4	103	30	205	77	75
MYSTICOPSIS BIGELOWI	0	-	-	-	-	-	4	195	68	271	88	45
NEUMYSIS AMERICANA	1	19	74	74	37	200	0	-	-	-	-	-
SCUDINEA KATANIA	1	19	74	74	37	200	0	-	-	-	-	-
PALAEONETES VULGARIS	0	-	-	-	-	-	1	6	23	23	12	200
PALAEONETES SPP	1	167	667	667	334	200	0	-	-	-	-	-
CRANGON SEPTEMPINOSA	0	-	-	-	-	-	1	47	188	189	94	200
CLASS POLYDOROCIDEA	2	146	213	370	180	124	1	23	91	91	46	200
LEPTOSYAPTIA SPP	1	37	148	148	74	200	2	23	23	70	33	142
LIKONCA OVATIS	1	259	1037	1037	518	200	0	-	-	-	-	-
NEOTIA TRILONA	2	194	36	740	364	188	1	6	23	23	12	200
UNIDENTIFIED AMPHIPODA	1	759	3037	3037	1518	200	3	28	23	58	24	86
AMPHISCIA SPP.												
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	6	23	23	12	200
	4	3301					4	811				
LIFE STAGE: GRAVID												
MICROSCOPUS KANEYI	0	-	-	-	-	-	1	6	23	23	12	200
NEUMYSIS AMERICANA	0	-	-	-	-	-	2	26	47	58	31	117
AMPHISCIA SPP.	1	204	815	815	408	200	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
PALAEONETES SPP	1	111	444	444	222	200	2	12	23	23	13	115
PAGURUS SP	2	64	33	222	107	167	1	6	23	23	12	200
NEOPANOPE TEXANA	3	582	33	2222	1094	188	3	136	30	376	171	126
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	1	315	1259	1259	629	200	1	12	47	47	24	200
	4	1275					4	197				



TABLE 11. (CONT.)

SPECIES	SEPTEMBER 1975/HICKS											
	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	25	99	99	50	200	1	31	125	125	63	200
AECIDIA SPP.	4	220	108	396	125	57	3	141	125	247	106	75
ORDER ACTINARIA	1	109	437	437	219	200	2	34	27	110	52	152
PHENIOPSIS LEUCY	2	1180	1475	3243	1541	131	2	1176	2247	2457	1361	116
CLASS BIVALVIA	0	-	-	-	-	-	1	34	137	137	69	200
LULALIA SPP.	1	25	99	99	50	200	0	-	-	-	-	-
FAMILY SYLLIDAE	0	-	-	-	-	-	2	122	31	457	224	183
NEREIS SPP.	1	50	198	198	99	200	2	47	62	125	60	128
SUBPHYLUM PYCNOGONIDA	2	80	99	219	104	131	1	28	110	110	55	200
CYCLASPIS VARIANS	4	548	421	792	171	31	4	840	438	1235	350	42
LUCCON AMERICANUS	1	99	396	396	198	200	1	62	247	247	124	200
OKYUROSTYLIS SMITHI	4	1033	324	1881	645	62	4	1279	986	2000	486	38
CYMAUSA COMPTA	0	-	-	-	-	-	2	63	31	219	105	169
CONOMIUS SPP.	0	-	-	-	-	-	1	28	110	110	55	200
EMICHTHORIUS SPP.	0	-	-	-	-	-	1	124	494	494	247	200
ELASMOPIUS LEVIS	0	-	-	-	-	-	4	329	219	494	131	40
MONOCULUS LEXARDISI	0	-	-	-	-	-	2	120	229	250	139	116
WICKIPICTIUS KAGUYI	0	-	-	-	-	-	1	63	250	250	125	200
STENOPOGON MINUTA	0	-	-	-	-	-	1	125	500	500	250	200
ORDER CARILLIDEA	1	55	219	219	110	200	1	28	110	110	55	200
MYRIDOPSIS BIGELOWI	4	3391	2316	5683	1551	46	4	3958	1500	5943	1846	47
NEONYSS AMERICANA	5	8446	541	12678	2612	31	4	7398	1625	9973	3907	53
PALAEONETIS VULGARIS	0	-	-	-	-	-	2	47	62	125	60	128
PALAEONETIS SPP.	1	26	105	105	53	200	1	46	184	184	92	200
CHANGON SEPTENTRINOSA	2	178	316	396	208	117	3	194	27	469	222	115
LEPTOSYNAPTIS SPP.	2	51	99	105	59	116	0	-	-	-	-	-
SUBORDER DORIDACEA	1	55	219	219	110	200	2	39	31	125	59	152
ORDER ISOPODA	1	105	421	421	211	200	0	-	-	-	-	-
LYNCELA OVALIS	1	25	99	99	50	200	0	-	-	-	-	-
IDOTEA BALTICA	2	67	55	211	100	150	2	120	229	250	139	116
IDOTEA TILLOA	4	1097	108	2376	1115	102	2	621	1235	1250	717	115
ORDER AMPHIPODA	1	216	865	865	433	200	1	31	125	125	63	200
UNIDENTIFIED AMPHIPODA	3	1076	674	2376	981	91	1	114	457	457	229	200
AMPELISCIA SPP.	4	4310	874	9703	4163	97	4	2839	767	5500	2108	74
LIFE STAGE: JUVENILES												
CALLINECTES RAPIDUS	1	25	99	99	50	200	2	16	31	31	18	115
	4	22488	-	-	-	-	4	20094	-	-	-	-
LIFE STAGE: GRAVID												
CYCLASPIS VARIANS	0	-	-	-	-	-	1	94	375	375	188	200
MYRIDOPSIS BIGELOWI	1	50	198	198	99	200	2	93	125	247	110	127
NEONYSS AMERICANA	3	289	297	437	207	70	2	249	247	750	354	142
LAJONQUELLA FILIFORMIS	1	14	55	55	28	200	0	-	-	-	-	-
AMPELISCIA SPP.	4	419	211	594	157	38	3	617	229	1250	597	97
LIFE STAGE: TOEAL												
PALAEONETIS SPP.	1	124	495	495	248	200	2	89	125	229	111	125
UTOCLIA AFFRIS	1	25	99	99	50	200	0	-	-	-	-	-
PAGURUS SP.	1	25	99	99	50	200	1	63	250	250	125	200
NEOPAROPUS TEXANA	2	953	842	2970	1402	147	2	684	1235	1500	797	117
KRITHOPAROPUS HARRISI	2	78	99	211	100	130	2	124	247	250	143	115
LIFE STAGE: MEGALOPAL												
CALLINECTES RAPIDUS	4	468	216	842	306	65	3	2651	457	8148	3763	142
INFRAORDIN LACHNOCERA	1	25	99	99	50	200	1	63	250	250	125	200
LIFE STAGE: EPITOELS												
NEREIS SPP.	1	26	105	105	53	200	2	39	27	123	50	156
	4	2493	-	-	-	-	4	4763	-	-	-	-

TABLE 11. (CONT.)

MONTH/TIME PERIOD

OCTOBER 1975/DAY

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
THALASSEUS NUTRICOLA	1	11	44	44	22	200	0	-	-	-	-	-
NEOMYSIS BACHEI	0	-	-	-	-	-	2	14	27	29	16	116
UBELLA SPP	0	-	-	-	-	-	1	8	31	31	16	200
PHIALIDIUM SPP	0	-	-	-	-	-	1	7	28	28	14	200
AEOLUS SPP	1	8	32	32	16	200	1	7	28	29	14	200
ORDER ACTINARIA	0	-	-	-	-	-	1	8	31	31	16	200
PHYLUM CTEROPHORA	2	122	231	256	141	115	3	58	25	112	54	93
BELO SPP	4	664	594	806	97	15	4	125	84	154	30	24
FAMILY SYLLIDAE	1	8	32	32	16	200	1	8	31	31	16	200
NELEIS SPP	0	-	-	-	-	-	1	7	27	27	14	200
SOPHYLUM PYCNOGONIDA	1	11	44	44	22	200	2	15	28	31	17	116
LEUCON AMERICANUS	1	8	32	32	16	200	0	-	-	-	-	-
VALDOSTYLIS SMITHI	1	8	32	32	16	200	0	-	-	-	-	-
MICRODUTOPUS	0	-	-	-	-	-	1	7	28	28	14	200
GRYLLOTALPA	0	-	-	-	-	-	4	50	27	93	31	62
JASSA FALCATA	3	125	99	224	98	78	3	28	25	54	22	81
ELASIOPIUS LEVIS	0	-	-	-	-	-	1	8	31	31	16	200
PARANETOPHELIA CYPRIIS	0	-	-	-	-	-	1	16	62	62	31	200
SIGNATURE MINUTA	0	-	-	-	-	-	1	8	31	31	16	200
ORDER CAPRELLIDAE	0	-	-	-	-	-	1	8	31	31	16	200
UNIDENTIFIED MYSID	4	482	32	1410	639	133	0	-	-	-	-	-
MYSTICOPSIS BIGELOWI	0	-	-	-	-	-	4	47	27	75	22	48
NEOMYSIS AMERICANA	0	-	-	-	-	-	4	526	245	843	261	50
PALAEONETES SPP	0	-	-	-	-	-	1	8	31	31	16	200
SUBORDER CORONACA	0	-	-	-	-	-	1	7	27	27	14	200
SUBORDER NEOLIDACEA	1	8	33	33	17	200	4	126	54	224	82	65
PHYLUM NEMERTEA	0	-	-	-	-	-	1	6	25	25	13	200
ORDER ISOPODA	1	16	64	64	32	200	0	-	-	-	-	-
LIDUNEA OVALIS	1	8	32	32	16	200	0	-	-	-	-	-
LEUTEA BALTICA	1	8	32	32	16	200	1	6	25	25	13	200
LEUTEA TRILOBA	0	-	-	-	-	-	1	7	27	27	14	200
ERICHSONELLA FILIFORMIS	1	11	44	44	22	200	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	4	123	32	165	62	51	2	22	31	56	27	125
AMPELISCA SPP.	0	-	-	-	-	-	1	23	93	93	47	200
	4	1519					4	1148				
LIFE STAGE: GRAVID												
MICRODUTOPUS	0	-	-	-	-	-	1	19	75	75	38	200
GRYLLOTALPA	1	8	32	32	16	200	0	-	-	-	-	-
JASSA FALCATA	0	-	-	-	-	-	1	6	24	24	12	200
AMPELISCA SPP.	0	-	-	-	-	-	1	6	24	24	12	200
LIFE STAGE: ZOEAL												
CRANGON SEPTENSPIROSA	4	272	96	528	188	69	4	170	31	399	163	96
LIFE STAGE: NEALOPAL												
CALLINECTES SAPIIDUS	3	27	32	44	19	70	3	26	27	50	20	78
	4	397					4	221				

TABLE 11. (CONT.)

MONTH/TIME PERIOD		OCTOBER 1975/NIGHT										
SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	10	38	38	19	200	1	7	27	27	14	200
NEMOPSIS BACHEI	3	90	38	191	87	97	0	-	-	-	-	-
AEQUOREA SPP	0	-	-	-	-	-	1	17	66	66	33	200
PHYLUM CTENOPHORA	2	52	76	130	63	123	0	-	-	-	-	-
BEROE SPP	4	698	387	1048	276	40	4	206	54	362	160	78
SUBPHYLUM PYCNOGONIDA	3	41	38	64	29	72	3	109	55	263	113	104
CYCLASPIS VARIANS	3	83	60	194	81	98	2	34	30	107	51	148
LEUCON AMERICANUS	3	137	60	258	126	92	2	140	263	296	162	116
OXYUROSTYLIS SMITHI	4	114	60	194	60	53	4	132	54	296	112	85
CYMA DUSA COMPTA	0	-	-	-	-	-	1	8	30	30	15	200
MICRODEUTOPUS	0	-	-	-	-	-	1	14	55	55	28	200
GRYLLOTALPA	0	-	-	-	-	-	1	22	89	89	45	200
BATEA CATHARINENSIS	0	-	-	-	-	-	2	43	66	107	53	122
JASSA FALCATA	2	64	60	194	91	144	3	82	30	166	80	97
ELASMOPOUS LEVIS	0	-	-	-	-	-	1	8	30	30	15	200
MONOCULOQUES EDWARDSI	0	-	-	-	-	-	3	35	30	55	26	75
ORDER CAPRELLIDEA	0	-	-	-	-	-	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	4	3715	3238	4194	494	13	4	297	107	592	208	70
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	4	7707	2983	14868	5442	71
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	7	28	28	14	200
PALAEOMNETES SPP	0	-	-	-	-	-	0	-	-	-	-	-
LEPTOSYNAPTA SPP	1	8	32	32	16	200	0	-	-	-	-	-
SUBORDER DORIDACEA	0	-	-	-	-	-	1	8	30	30	15	200
SUBORDER AEOLIDACEA	0	-	-	-	-	-	3	101	107	166	72	71
LITRIELLA BARNARDI	0	-	-	-	-	-	1	17	66	66	33	200
PARANAITIS SP	0	-	-	-	-	-	1	8	30	30	15	200
LIRONCA OVALIS	1	16	64	64	32	200	0	-	-	-	-	-
EDOTEA TRILOBA	0	-	-	-	-	-	1	8	30	30	15	200
UNIDENTIFIED AMPHIPODA	4	335	129	840	338	101	1	107	428	428	214	200
AMPELISCA SPP.	3	62	64	119	49	78	3	100	54	197	89	89
	4	5422					4	9212				
LIFE STAGE: GRAVID												
UNIDENTIFIED MYSIDS	1	32	127	127	64	200	0	-	-	-	-	-
MICROPROTOPUS RANEYI	0	-	-	-	-	-	1	8	30	30	15	200
NEOMYSIS AMERICANA	0	-	-	-	-	-	3	62	30	111	56	90
LIFE STAGE: ZOEAL												
HIPPOLYTE SPP.	1	16	64	64	32	200	0	-	-	-	-	-
CRANGON SEPTEMSPINOSA	4	269	65	478	193	72	3	228	118	526	227	100
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	4	583	179	968	365	63	3	209	107	461	201	96
	4	899					4	506				

TABLE 11. (CONT.)

MONTH/TIME PERIOD		NOVEMBER 1975/DAY										
SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
PHYLUM CTENOPHORA	3	1695	854	4219	1821	107	1	75	225	225	130	173
BEROE SPP	1	23	93	93	47	200	2	26	32	47	24	91
CLASS HIRUDINEA	0	-	-	-	-	-	1	31	93	93	54	173
SUBPHYLUM PYCNOGONIDA	1	14	57	57	29	200	1	16	47	47	27	173
CYCLASPIS VARIANS	0	-	-	-	-	-	1	16	47	47	27	173
OXYUROSTYLIS SMITHI	0	-	-	-	-	-	1	31	93	93	54	173
MICRODEUTOPUS	0	-	-	-	-	-	3	174	64	233	95	55
GRYLLOTALPA	0	-	-	-	-	-	2	104	32	279	153	147
BATEA CATHARINENSIS	0	-	-	-	-	-	1	16	47	47	27	173
COROPHIUM SPP	0	-	-	-	-	-	2	53	47	112	56	106
JASSA FALCATA	2	82	156	170	94	116	2	119	32	326	180	151
ELASMOPUS LEVIS	0	-	-	-	-	-	1	16	47	47	27	173
MONOCULODES EDWARDSI	0	-	-	-	-	-	2	73	32	186	99	137
STENOCHOE MINUTA	0	-	-	-	-	-	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	4	883	122	1818	859	97	2	492	128	1349	745	151
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	3	3120	112	7070	3573	115
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	31	93	93	54	173
PALAEONETES VULGARIS	0	-	-	-	-	-	1	11	32	32	18	173
PALAEONETES SPP	0	-	-	-	-	-	0	-	-	-	-	-
CRANGON SEPTemspINOSA	1	39	156	156	78	200	3	95	32	140	56	59
SUBORDER AEOLIDACEA	2	45	57	122	58	130	0	-	-	-	-	-
EDOTEA TRILOBA	1	14	57	57	29	200	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	2	59	114	122	68	116	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	1	62	186	186	107	173
	4	2853	-	-	-	-	1	4560	-	-	-	-
LIFE STAGE: GRAVID												
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	1	16	47	47	27	173
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	31	93	93	54	173
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	1	185	739	739	370	200	0	-	-	-	-	-
	4	185	-	-	-	-	3	47	-	-	-	-

TABLE 11. (CONT.)

MONTH/TIME PERIOD		NOVEMBER 1975/NIGHT										
SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
PHYLUM CTENOPHORA	1	69	206	206	119	173	1	34	137	137	69	200
BEROE SPP	0	-	-	-	-	-	1	17	66	66	33	200
PHYLLODOCE ARENAE	0	-	-	-	-	-	1	17	69	69	35	200
SUBPHYLUM PYCNOGONIDA	2	118	103	251	126	107	1	69	276	276	138	200
LEUCOM AMERICANUS	0	-	-	-	-	-	3	222	213	411	170	77
OXYUROSTYLIS SMITHI	1	34	103	103	59	173	4	255	71	411	140	55
CYMAEUS COMPTA	0	-	-	-	-	-	1	66	263	263	132	200
MICRODEUTOPUS	0	-	-	-	-	-	2	134	263	274	155	116
GRYLLOTALPA	0	-	-	-	-	-	1	66	263	263	132	200
BATEA CATHARINENSIS	1	34	103	103	59	173	1	34	137	137	69	200
JASSA FALCATA	0	-	-	-	-	-	2	276	274	828	390	142
ELASMOPUS LEVIS	0	-	-	-	-	-	1	34	137	137	69	200
STENOHOE MINUTA	1	34	103	103	59	173	1	36	142	142	71	200
ORDER CAPELLIDEA	3	22363	14388	31134	8401	38	0	-	-	-	-	-
UNIDENTIFIED MYSID	0	-	-	-	-	-	4	3850	3050	5241	963	25
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	4	22975	13758	32632	7847	34
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	36	142	142	71	200
PALAEMONETES VULGARIS	0	-	-	-	-	-	1	18	71	71	36	200
LEPTOSYNAPTA SPP	2	93	72	206	105	113	1	138	552	552	276	200
SUBORDER AEOLIDACEA	1	10	31	31	18	173	0	-	-	-	-	-
IDOTEA BALTICA	3	1032	502	1443	482	47	2	155	263	355	182	118
UNIDENTIFIED AMPHIPODA	1	103	309	309	178	173	3	407	526	552	271	67
AMPELISCA SPP.	3	23891	-	-	-	-	4	28837	-	-	-	-
LIFE STAGE: GRAVID												
PARAMETOPELLA CYPRIS	0	-	-	-	-	-	1	34	137	137	69	200
NEOMYSIS AMERICANA	0	-	-	-	-	-	3	169	137	276	129	76
LIFE STAGE: ZOEAL												
CRANGON SEPTEMSPINOSA	1	34	103	103	59	173	1	34	137	137	69	200
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIIDUS	1	10	31	31	18	173	0	-	-	-	-	-
	3	45	-	-	-	-	4	238	-	-	-	-

TABLE 11. (CONT.)

MONTH/TIME PERIOD	DECEMBER 1975/DAY											
	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
BOUGAINVILLIA SPP.	0	-	-	-	-	-	1	18	35	35	-	-
PHYLUM CTENOPHORA	2	37	33	40	-	-	2	89	70	107	-	-
CLASS HIRUDINEA	1	17	33	33	-	-	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	2	88	71	104	-	-
LEUCON AMERICANUS	0	-	-	-	-	-	1	18	35	35	-	-
OXYUROSTYLIS SMITHI	1	17	33	33	-	-	0	-	-	-	-	-
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	2	123	107	138	-	-
COROPHIUM SPP	0	-	-	-	-	-	2	1084	679	1488	-	-
JASSA FALCATA	0	-	-	-	-	-	2	228	179	277	-	-
ELASHOPUS LEVIS	0	-	-	-	-	-	1	36	71	71	-	-
STENOTHOE MINUTA	0	-	-	-	-	-	2	174	71	277	-	-
ORDER CAPRELLIDEA	0	-	-	-	-	-	2	53	35	71	-	-
UNIDENTIFIED MYSIDS	2	1341	1263	1419	-	-	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	2	174	36	311	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	2	2757	2607	2907	-	-
PALAEONETES VULGARIS	1	17	33	33	-	-	0	-	-	-	-	-
PALAEONETES SPP	0	-	-	-	-	-	1	18	35	35	-	-
SAGITTA ELEGANS	1	83	165	165	-	-	2	211	208	214	-	-
PARANAITIS SP	0	-	-	-	-	-	1	18	35	35	-	-
UNIDENTIFIED AMPHIPODA	2	83	34	132	-	-	0	-	-	-	-	-
	2	1593					2	5084				
LIFE STAGE: GRAVID												
COROPHIUM SPP	0	-	-	-	-	-	1	18	35	35	-	-
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	1	479	957	957	-	-	1	18	36	36	-	-
LIFE STAGE: ZOEAL												
CRANGON SEPTEMSPINOSA	2	583	307	858	-	-	2	982	857	1107	-	-
	2	1061					2	1018				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

DECEMBER 1975/NIGHT

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	98	175	215	114	117	0	-	-	-	-	-
ORDER SIPHONOPHORA	1	68	270	270	135	200	0	-	-	-	-	-
FAMILY CTENOPHORA	4	1416	175	3500	1559	110	2	275	522	579	319	116
PEROE SPP	1	44	175	175	88	200	0	-	-	-	-	-
CLASS POLYCHAETA	1	54	215	215	108	200	0	-	-	-	-	-
FAMILY SPICNIDAE	0	-	-	-	-	-	1	15	61	61	31	200
SUBPHYLUM PYCNOGONIDA	2	272	88	1000	487	179	2	120	150	331	157	131
CYCLASPIS VARIANS	0	-	-	-	-	-	2	158	299	331	182	116
LEUCON AMERICANUS	2	227	263	645	305	134	3	307	300	597	244	80
UAYKROSTYLIS SMITHI	2	358	430	1000	474	133	3	214	150	373	172	81
MICRODEUTERIUS	0	-	-	-	-	-	0	-	-	-	-	-
GRYLLLOTALPA	0	-	-	-	-	-	4	256	150	331	79	31
DATEA CATHARINENSIS	0	-	-	-	-	-	1	83	331	331	166	200
COLOPHIUM SPP	0	-	-	-	-	-	4	787	331	1472	488	62
CAMMARUS LAWRENCIANUS	0	-	-	-	-	-	1	41	165	165	83	200
JASSA FALCATA	0	-	-	-	-	-	2	160	150	491	232	144
MONOCULOUS EDWARDSI	0	-	-	-	-	-	3	446	299	992	417	94
STENOHOE MINUTA	0	-	-	-	-	-	1	150	599	599	300	200
ORDER CAPRELLIDAE	1	54	215	215	108	200	2	120	150	331	157	131
UNIDENTIFIED MYSIDS	4	29250	15000	47742	16012	55	2	1223	736	4157	1986	162
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	4	2209	1348	3681	1070	48
MECHYSIS AMERICANA	0	-	-	-	-	-	4	32654	15730	54215	16137	49
SUBORDER NATANTIA	1	108	430	430	215	200	0	-	-	-	-	-
INFRAORDER CARIDEA	0	-	-	-	-	-	1	83	331	331	166	200
PALAEONETES VULGARIS	3	138	132	215	99	72	3	67	37	149	64	95
PALAEONETES SPP	1	250	1000	1000	500	200	0	-	-	-	-	-
HIPPOLYTE SPP.	3	294	60	1000	473	161	1	28	112	112	56	200
CRANGON SEPTEMSPINOSA	3	214	263	323	145	68	4	343	224	449	93	27
SAGITTA ELEGANS	3	265	88	541	261	99	3	486	37	1493	697	143
SUBORDER ACOLIDACEA	0	-	-	-	-	-	1	61	245	245	123	200
PALAEONETES	0	-	-	-	-	-	0	-	-	-	-	-
INTERMEDIUS	1	11	44	44	22	200	2	136	245	299	159	117
HIPPOLYTE PLEUROCANTHUS	0	-	-	-	-	-	1	75	299	299	150	200
SPIO SPP	0	-	-	-	-	-	2	160	150	491	232	144
DATEA BALICA	2	28	44	68	34	121	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	2	589	526	1828	863	147	2	259	300	736	348	134
AMPELISCA SPP.	2	316	263	1000	473	150	3	256	245	449	190	74
	4	34050					4	41173				
LIFE STAGE: GRAVID												
JASSA FALCATA	0	-	-	-	-	-	1	38	150	150	75	200
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	4	7174	1316	12703	5029	70	4	1592	599	3881	1552	97
LIFE STAGE: ZOEAL												
CRANGON SEPTEMSPINOSA	3	1950	789	4000	1869	96	2	368	150	1322	640	174
	4	9124					4	1998				

TABLE 11. (CONT.)

MONTH/TIME PERIOD		JANUARY 1976/DAY										
SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	10	41	41	21	200	0	-	-	-	-	-
KATHKEA OCTOPUNCTATA	1	5	20	20	10	200	1	5	20	20	10	200
ORDER ACTINIARIA	1	10	39	39	20	200	0	-	-	-	-	-
CLASS POLYCHAETA	3	72	39	166	71	99	1	9	37	37	19	200
FAMILY SYLLIDAE	0	-	-	-	-	-	1	5	18	18	9	200
NEREIS SPP	0	-	-	-	-	-	1	5	20	20	10	200
FAMILY CAPITELLIDAE	1	10	41	41	21	200	2	14	20	37	18	125
CLASS HIRUDINEA	0	-	-	-	-	-	1	5	20	20	10	200
SUBPHYLUM PYCNOGONIDA	2	21	41	41	24	115	0	-	-	-	-	-
COROPHIUM SPP	0	-	-	-	-	-	3	39	18	97	42	109
JASSA FALCATA	0	-	-	-	-	-	4	1409	951	1967	432	31
FAMILY STENOHOIDEAE	0	-	-	-	-	-	2	9	18	19	11	116
STENOHOE MINUTA	0	-	-	-	-	-	2	60	81	159	76	127
STENOHOE BREVICORNIS	0	-	-	-	-	-	2	43	74	97	50	118
ORDER CAPRELLIDEA	1	10	41	41	21	200	1	5	18	18	9	200
UNIDENTIFIED MYSIDS	4	316	81	456	168	53	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	4	180	136	221	47	26
PALAEMONETES VULGARIS	0	-	-	-	-	-	1	5	19	19	10	200
CRANGON SEPTEMPINOSA	0	-	-	-	-	-	2	15	18	40	19	131
SAGITTA ELEGANS	4	9522	4625	13859	3785	40	4	10276	8012	12353	2140	21
UNIDENTIFIED AMPHIPODA	4	302	101	539	208	69	3	25	18	60	25	103
	4	10278					4	12107				
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	4	1691	791	2822	895	53	4	376	331	398	30	8
ORDER CERIANTHARIA	1	5	20	20	10	200	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
CRANGON SEPTEMPINOSA	2	51	81	124	62	120	3	63	74	99	43	69
	4	1747					4	439				



TABLE 11. (CONT.)

MONTH/DIE PERIOD

JANUARY 1976/NIGHT

SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
OURELIA SPP	1	10	39	39	20	200	0	-	-	-	-	-
ORDER SIPHONOPHORA	0	-	-	-	-	-	1	6	22	22	11	200
ORDER ACTINIARIA	0	-	-	-	-	-	1	8	31	31	16	200
FAMILY SYLLIDAE	1	20	80	80	40	200	1	7	29	29	15	200
NEREIS SPP	0	-	-	-	-	-	1	6	22	22	11	200
FAMILY CAPITELLIDAE	3	61	40	123	53	87	2	14	22	34	17	121
FAMILY SPIONIDAE	0	-	-	-	-	-	1	7	29	29	15	200
CLASS HIRUDINEA	2	68	41	231	110	162	1	6	22	22	11	200
SCOTRYLLUM PYCNOGONIDA	0	-	-	-	-	-	1	7	29	29	15	200
LEPTOCOMA MINOR	1	20	79	79	40	200	2	20	22	58	27	137
LEUCON AMERICANUS	3	49	39	116	48	99	2	13	22	29	15	118
OXYUROSTYLIS SMITHI	1	10	39	39	20	200	1	8	30	30	15	200
MICROFLOICUS	-	-	-	-	-	-	-	-	-	-	-	-
GRYLLOTALPA	0	-	-	-	-	-	1	6	22	22	11	200
BATEA CATHARINENSIS	0	-	-	-	-	-	1	31	122	122	61	200
COROPHUM SPP	0	-	-	-	-	-	4	80	29	122	41	51
BRICHTOMIUS	-	-	-	-	-	-	-	-	-	-	-	-
CRASITILINIS	0	-	-	-	-	-	1	6	22	22	11	200
GAMMARUS MUCRONATUS	0	-	-	-	-	-	3	31	29	61	25	61
JASSA FALCATA	0	-	-	-	-	-	4	800	595	1128	232	29
MONOCULODES EDWARDSI	0	-	-	-	-	-	3	257	176	475	212	82
STEROTHOE MINUTA	0	-	-	-	-	-	2	45	58	122	58	129
STEROTHOE BREVICORNIS	0	-	-	-	-	-	2	31	22	102	48	156
GREEN CAPRELLIDEA	0	-	-	-	-	-	2	13	22	29	15	118
UNIDENTIFIED MYSIDS	4	2695	2090	3346	643	24	0	-	-	-	-	-
ALGOSIS AMERICANA	0	-	-	-	-	-	4	3094	1960	3750	783	25
VALAENORETES VULGARIS	4	129	39	231	86	67	2	45	68	118	54	123
CRANGON SEPTENSPINOSA	4	290	116	394	126	43	4	266	183	340	72	27
SAGITTIA ELLEGANS	4	10246	3893	16414	6673	65	4	9659	5374	14543	4894	51
SCOLOPLOS SPP	1	10	40	40	20	200	0	-	-	-	-	-
CIRRIOLANA CORCHARUM	0	-	-	-	-	-	1	8	30	30	15	200
UNIDENTIFIED AMPHIPODA	4	498	56	709	305	61	2	18	29	44	22	120
AMPELISCA SPP.	0	-	-	-	-	-	2	20	34	44	23	117
	4	14104	-	-	-	-	4	14506	-	-	-	-
LIFE STAGE: GRAVID												
JASSA FALCATA	0	-	-	-	-	-	1	6	22	22	11	200
UNIDENTIFIED MYSIDS	1	10	41	41	21	200	0	-	-	-	-	-
CRANGON SEPTENSPINOSA	1	29	116	116	58	200	1	7	29	29	15	200
LIFE STAGE: LARVAL												
ORDER CERANTHARIA	1	10	41	41	21	200	0	-	-	-	-	-
CLASS POLYCHAETA	4	4358	2749	7283	2013	46	4	727	238	1344	473	65
LIFE STAGE: ZOEAL												
CRANGON SEPTENSPINOSA	1	10	39	39	20	200	3	60	29	122	55	93
INFAUNORDER BRACHYURA	1	29	116	116	58	200	0	-	-	-	-	-
	4	4446	-	-	-	-	4	800	-	-	-	-

TABLE 11. (CONT.)

MONTH/TIME PERIOD		FEBRUARY 1976/DAY										
SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	125	179	197	109	87	1	20	81	81	41	200
MARGELOPSIS GIBBESI	1	32	95	95	55	173	3	58	27	149	65	113
SARSIA SPP	0	-	-	-	-	-	4	221	54	416	166	75
RATHREA OCTOPUNCTATA	1	32	95	95	55	173	2	111	208	235	128	116
OBELIA SPP	1	66	197	197	114	173	0	-	-	-	-	-
ORDER NEMATODA	0	-	-	-	-	-	1	30	118	118	59	200
CLASS BIVALVIA	1	60	179	179	103	173	0	-	-	-	-	-
CLASS POLYCHAETA	2	119	179	179	103	87	0	-	-	-	-	-
CLASS HIRUDINEA	1	66	197	197	114	173	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	1	66	197	197	114	173	0	-	-	-	-	-
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	1	14	54	54	27	200
JASSA FALCATA	0	-	-	-	-	-	2	66	27	235	114	174
UNIDENTIFIED MYSIDS	3	5715	4313	6920	1314	23	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	2	59	27	208	100	171
NEOMYSIS AMERICANA	0	-	-	-	-	-	4	3071	1662	5912	1922	63
SAGITTA ELEGANS	0	-	-	-	-	-	4	33556	16118	52987	16981	51
SAGITTA SPP	3	28317	25119	34018	4949	17	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	1	7	27	27	14	200
	3	34596					4	37210				
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	3	43237	22660	64018	20680	48	5	524	118	892	269	51
ORDER ACTINIARIA	0	-	-	-	-	-	1	7	27	27	14	200
CLASS POLYCHAETA	3	7738	6256	9458	1614	21	4	2477	1247	4015	1146	46
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	3	1157	664	1429	428	37	4	471	235	744	211	45
	3	52132					4	3478				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

FEBRUARY 1976/NIGHT

SPECIES	LOCATION 12						LOCATION 13					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	102	305	305	176	173	0	-	-	-	-	-
SARSIA SPP	2	51	63	90	46	91	1	23	90	90	45	200
RATHKEA OCTOPUNCTATA	1	60	180	180	104	173	0	-	-	-	-	-
OBELIA SPP	1	30	90	90	52	173	0	-	-	-	-	-
NEREIS SPP	0	-	-	-	-	-	1	11	44	44	22	200
CLASS HIRUDINEA	2	192	270	305	167	87	2	165	165	496	234	141
ORDER CUMACEA	1	102	305	305	176	173	0	-	-	-	-	-
LEUCON AMERICANUS	1	63	190	190	110	173	4	216	165	331	77	36
OXYUROSTYLIS SMITHI	1	21	63	63	36	173	1	83	331	331	166	200
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	3	214	165	359	166	78
FAMILY GAMMARIDAE	0	-	-	-	-	-	1	48	190	190	95	200
JASSA FALCATA	0	-	-	-	-	-	1	95	379	379	190	200
MONOCULODES EDWARDSI	0	-	-	-	-	-	4	370	41	896	377	102
ORDER CAPRELLIDEA	1	102	305	305	176	173	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	3	40293	28559	51709	11578	29	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	2	898	616	2975	1415	158
NEOMYSIS AMERICANA	0	-	-	-	-	-	4	57573	44305	72025	11438	20
PALAEMONETES VULGARIS	1	21	63	63	36	173	2	22	41	47	26	116
HIPPOLYTE SPP.	1	30	90	90	52	173	0	-	-	-	-	-
CRANGON SEPTESPINOSA	2	400	570	631	348	87	4	446	41	826	327	73
SAGITTA ELEGANS	0	-	-	-	-	-	4	15256	2975	25661	9341	61
SAGITTA SPP	3	27229	22975	32072	4577	17	0	-	-	-	-	-
CHIRIDOTEA NIGRESCENS	1	30	90	90	52	173	1	10	41	41	21	200
IDOTEA BALTICA	0	-	-	-	-	-	3	147	45	379	169	115
EDOTEA TRILOBA	0	-	-	-	-	-	1	41	165	165	83	200
UNIDENTIFIED AMPHIPODA	3	1825	1646	2072	221	12	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	4	1273	661	1973	543	43
		70549						76891				
LIFE STAGE: LARVAL												
CLASS SCYPHOZOA	1	102	305	305	176	173	0	-	-	-	-	-
ORDER CERIAANTHARIA	3	9886	4304	13282	4872	49	2	322	569	718	376	117
CLASS POLYCHAETA	3	9578	2468	14733	6362	66	4	1980	1488	3049	738	37
LIFE STAGE: ZOEAL												
CRANGON SEPTESPINOSA	2	277	380	450	242	88	4	793	165	1256	465	59
	3	19843					4	3095				

TABLE 11. (CONT.)

MONTH/TIME PERIOD		MARCH 1976/DAY										
SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	610	1096	1345	712	117	0	-	-	-	-	-
MARGELOPSIS GIBBESI	0	-	-	-	-	-	2	1483	970	4961	2364	159
SARSIA SPP	4	3939	1096	9412	3719	94	4	8724	7442	10182	1167	13
RATHKEA OCTOPUNCTATA	0	-	-	-	-	-	3	1069	825	2481	1034	97
OBELIA SPP	1	137	548	548	274	200	2	380	694	825	442	116
CLASS BIVALVIA	1	137	548	548	274	200	1	121	485	485	243	200
FAMILY POLYNOIDAE	1	336	1345	1345	672	200	0	-	-	-	-	-
FAMILY SYLLIDAE	0	-	-	-	-	-	1	6	22	22	11	200
CLASS HIRUDINEA	3	961	548	1951	861	90	1	206	825	825	413	200
LEUCON AMERICANUS	1	336	1345	1345	672	200	2	127	22	485	239	189
OXYUROSTYLIS SMITHI	0	-	-	-	-	-	1	121	485	485	243	200
MICRODEUTOPUS	0	-	-	-	-	-	1	412	1650	1650	825	200
GRYLLOTALPA	0	-	-	-	-	-	1	8	30	30	15	200
GAMMARUS MUCRONATUS	0	-	-	-	-	-	1	242	970	970	485	200
MONOCULODES EDWARDSI	0	-	-	-	-	-	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	4	128155	50081	233950	84421	66	1	364	1455	1455	727	200
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	4	60368	34707	93196	24264	40
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	8	30	30	15	200
PALAEMONETES VULGARIS	2	38	69	83	44	116	4	406	152	775	296	73
CRANGON SEPTemspINOSA	3	597	137	1157	613	103	4	17185	14072	23273	4145	24
SAGITTA ELEGANS	0	-	-	-	-	-	0	-	-	-	-	-
SAGITTA SPP	4	24337	11707	42314	13560	56	0	-	-	-	-	-
IDOTEA BALTICA	1	42	168	168	84	200	1	6	22	22	11	200
EDOTEA TRILOBA	3	810	548	1345	658	81	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	4	3184	1322	6723	2430	76	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	1	206	825	825	413	200
	4	163619					4	91440				
LIFE STAGE: GRAVID												
UNIDENTIFIED MYSIDS	4	2978	548	8067	3528	118	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	3	2567	2424	4124	1859	72
CRANGON SEPTemspINOSA	0	-	-	-	-	-	1	6	22	22	11	200
LIFE STAGE: LARVAL												
ORDER CERIAANTHARIA	3	2409	1096	5289	2347	97	3	1643	694	3397	1568	95
CLASS POLYCHAETA	3	1272	1096	2645	1086	85	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	4	4388	2645	6723	1833	42	4	11263	7423	15515	3928	35
	4	11046					4	15479				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

MARCH 1976/NIGHT

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	607	588	1839	867	143	1	174	696	696	348	200
SAKSIA SPP	4	13227	8824	22857	6484	49	4	7005	1368	9051	3765	54
RATHKEA OCTOPUNCTATA	2	554	1039	1177	642	116	1	107	428	428	214	200
OBELIA SPP	0	-	-	-	-	-	1	37	146	146	73	200
ORDER NUDIBRANCHIA	1	147	588	588	294	200	0	-	-	-	-	-
CLASS POLYCHAETA	1	37	147	147	74	200	0	-	-	-	-	-
FAMILY POLYNOIDAE	1	147	588	588	294	200	0	-	-	-	-	-
FAMILY CAPITELLIDAE	0	-	-	-	-	-	1	174	696	696	348	200
FAMILY SPIONIDAE	0	-	-	-	-	-	1	107	428	428	214	200
CLASS HIRUDINEA	4	2406	920	4156	1679	70	4	806	292	1391	456	57
LEUCON AMERICANUS	4	1186	920	1765	390	33	2	281	438	684	339	121
OKYUROSTYLIS SMITHI	1	460	1839	1839	919	200	3	460	428	730	334	73
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	1	87	348	348	174	200
GAMMARUS MUCRONATUS	0	-	-	-	-	-	2	278	428	684	338	121
MONOCULODES EDWARDSI	0	-	-	-	-	-	3	557	348	1022	469	84
ORDER CAPRELLIDAE	1	230	920	920	460	200	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	4	186696	93758	256207	77289	41	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	1	281	1123	1123	561	200
NEOMYSIS AMERICANA	0	-	-	-	-	-	4	83599	72564	91652	8585	10
FAMILY PALAEMONIDAE	2	546	147	2038	997	183	0	-	-	-	-	-
PALAEMONETES VULGARIS	1	32	130	130	65	200	0	-	-	-	-	-
CRANGON SEPTemspINOSA	4	4372	2727	5605	1199	27	4	1064	86	2086	864	81
SAGITTA ELEGANS	0	-	-	-	-	-	3	8331	5565	16314	7082	85
SAGITTA SPP	4	10065	3057	23908	9389	93	0	-	-	-	-	-
HIPPOLYTE PLEUROCANTHUS	1	230	920	920	460	200	0	-	-	-	-	-
IDOTEA BALTICA	2	61	115	130	71	116	1	107	428	428	214	200
EDOTEA TRILOBA	2	377	588	920	456	121	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	3	3243	1019	10000	4575	141	2	208	146	684	325	157
AMPELISCA SPP.	0	-	-	-	-	-	1	261	1043	1043	521	200
	4	224622					4	103921				
LIFE STAGE: GRAVID												
MONOCULODES EDWARDSI	0	-	-	-	-	-	1	73	292	292	146	200
UNIDENTIFIED MYSIDS	4	5911	1019	9195	3680	62	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	4	2493	171	5990	2471	99
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	3	2452	1019	6437	2826	115	3	845	438	2087	899	106
CLASS POLYCHAETA	4	4582	920	8312	3648	80	2	455	428	1391	656	144
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	3	1820	1177	4023	1698	93	3	3353	1739	6417	2992	89
	4	14765					4	7219				

TABLE 11. (CONT.)

MONTH/TIME PERIOD							APRIL 1976/DAY						
SPECIES	LOCATION 7						LOCATION 11						
	FREQ	MEAN	MIN	MAX	SDIV	CVAR	FREQ	MEAN	MIN	MAX	SDIV	CVAR	
LIFE STAGE: NO DETERMINATION													
CLASS HYDROZOA	6	1163	194	4848	1624	140	0	-	-	-	-	-	
SAKSIA SPP	8	3887	194	12093	4423	114	5	1415	113	4852	1771	125	
HAIRIA OCTOPUNCTATA	1	76	606	606	214	283	0	-	-	-	-	-	
OBELIA SPP	0	-	-	-	-	-	4	103	95	340	128	125	
MELAIOPSIS LEIDYI	1	7	54	54	19	283	0	-	-	-	-	-	
CLASS BIVALVIA	1	32	256	256	91	283	1	12	95	95	34	263	
CLASS POLYCHAETA	1	32	256	256	91	283	0	-	-	-	-	-	
FAMILY SYLLIDAE	2	262	234	1860	651	249	1	24	190	190	67	283	
AUTOLYTUS SPP	2	33	43	217	76	234	1	13	163	163	36	263	
FAMILY CAPITELLIDAE	1	152	1212	1212	429	263	2	49	190	198	90	185	
FAMILY SPIRONIDAE	0	-	-	-	-	-	1	111	887	887	214	283	
CLASS CIRRODINEA	1	29	234	234	83	283	1	25	198	198	70	283	
SUPHYLON HYDROGONIDA	0	-	-	-	-	-	1	25	198	198	70	283	
CYCLAPIS VARIANS	1	233	1860	1360	658	283	1	11	85	85	30	283	
DAYTONOSTYLIS SMITHI	3	59	43	234	97	166	2	40	113	207	78	196	
MICROGLOTHUS	0	-	-	-	-	-	4	179	255	517	205	114	
GRYLLotalpa	0	-	-	-	-	-	2	37	69	226	80	217	
COROPHUM SPP	0	-	-	-	-	-	2	24	80	113	46	189	
JASSA FALCATA	0	-	-	-	-	-	4	87	103	206	96	113	
ELASMODUS LIVIS	0	-	-	-	-	-	2	34	80	190	69	263	
STENOCHILUS HIRUTA	0	-	-	-	-	-	4	233	95	850	366	157	
ORDER CAPTELLIDIA	2	172	606	769	321	187	4	233	95	850	366	157	
UNIDENTIFIED MYSID	6	602	256	1860	631	105	0	-	-	-	-	-	
MYSIDOPSIS BIGLORI	0	-	-	-	-	-	3	31	50	113	46	148	
NECHYSIS AMERICANA	0	-	-	-	-	-	8	679	69	1422	514	76	
PALAEONETES VULGARIS	0	-	-	-	-	-	1	3	21	21	7	283	
PALAEONETES SPP	0	-	-	-	-	-	1	14	113	113	40	283	
SAGITTIA SPP	0	-	-	-	-	-	3	59	85	198	86	149	
DIOTEA BALTICA	1	5	43	43	15	283	0	-	-	-	-	-	
DIOTEA TELLIDA	0	-	-	-	-	-	4	61	85	190	72	118	
ERICHSONELLA SP	1	5	43	43	15	283	1	6	50	50	16	283	
UNIDENTIFIED AMPHIPODA	7	570	234	1304	408	72	2	36	95	190	71	196	
AMPHISCIA SPP.	0	-	-	-	-	-	2	36	95	192	71	196	
LIFE STAGE: JUVENILES													
CALLINECTUS SAPIBUS	0	-	-	-	-	-	1	14	113	113	40	283	
	8	7317	-	-	-	-	8	3359	-	-	-	-	
LIFE STAGE: GRAVID													
AUTOLYTUS SPP	0	-	-	-	-	-	1	9	69	69	24	283	
MICROGLOTHUS	0	-	-	-	-	-	2	23	69	113	44	192	
GRYLLotalpa	0	-	-	-	-	-	1	9	69	69	24	283	
JASSA FALCATA	0	-	-	-	-	-	1	12	95	95	34	263	
ORDER CAPTELLIDIA	0	-	-	-	-	-	1	9	69	69	24	283	
DIOTEA BALTICA	0	-	-	-	-	-	1	9	69	69	24	283	
LIFE STAGE: LARVAL													
ORDER CERCARIA	1	27	217	217	77	283	1	25	198	198	70	283	
CLASS POLYCHAETA	8	4316	216	12692	4693	109	4	492	106	2376	635	176	
LIFE STAGE: ZOOAL													
CHARON SEPTENTRIONALIS	8	22242	9126	45581	15190	69	8	8513	3127	21584	6223	73	
FAMILY XANTHODIA	1	29	234	234	63	283	2	73	69	113	44	196	
DIKRODIA BRACHYURA	0	-	-	-	-	-	1	10	80	80	24	283	
LIFE STAGE: EPITOLES													
GLIS SPP	0	-	-	-	-	-	1	14	113	113	40	283	
	8	26615	-	-	-	-	8	9137	-	-	-	-	

TABLE 11. (CONT.)

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SECV	CVAK	FREQ	MEAN	MIN	MAX	SECV	CVAK
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	4	373	261	1270	471	176	0	-	-	-	-	-
SPANIA SPP	6	2459	223	7436	2884	117	5	1898	132	5806	2523	133
OBOLIA SPP	0	-	-	-	-	-	2	147	526	650	274	167
ORDER ACTINIARIA	1	30	238	238	84	283	0	-	-	-	-	-
CLASS POLYCHAETA	3	113	256	304	158	141	1	32	252	252	89	263
CLASS POLYCHAETA	1	61	468	486	173	283	1	67	533	533	168	203
FAMILY POLYCHAETA	1	31	244	244	86	263	0	-	-	-	-	-
FAMILY SYLLIDAE	2	863	2905	4000	1625	168	3	835	533	3265	1356	167
AUCULIUS SPP	1	31	244	244	86	263	2	310	881	1666	666	195
EBRIS SPP	0	-	-	-	-	-	2	27	81	333	51	192
FAMILY CAPITELLIDAE	3	130	223	513	196	151	3	143	252	533	212	148
FAMILY CAPITELLIDAE	0	-	-	-	-	-	1	204	1632	1632	577	263
CALIGUS SPP	1	30	238	238	84	283	0	-	-	-	-	-
CYCLANOPSIS VARIANS	1	94	755	755	267	283	3	297	650	968	418	141
LEPTOCORA BIRGE	1	32	256	256	91	283	0	-	-	-	-	-
LEUCOR AMERICANUS	3	506	769	2439	862	170	4	658	645	2333	885	135
OSTRODIELIS SMITHI	6	1806	256	7547	2481	137	6	1054	333	2133	899	85
OSTRODIELIS	0	-	-	-	-	-	5	1030	325	4890	1670	162
GRYLLIDAE	0	-	-	-	-	-	1	37	252	252	89	263
COROPHUS SPP	0	-	-	-	-	-	1	133	1067	1067	377	263
FAMILY GORGONIIDAE	0	-	-	-	-	-	1	11	90	90	32	283
GORGONIA HYPOMYCTES	0	-	-	-	-	-	2	77	252	360	145	189
GORGONIA SPP	0	-	-	-	-	-	1	333	2667	2667	943	263
LEASOPUS LEVIS	0	-	-	-	-	-	2	228	816	1066	425	167
HYDROPHYLUS KANEI	0	-	-	-	-	-	1	45	360	360	127	263
FAMILY STELLERIDAE	0	-	-	-	-	-	1	67	533	533	186	263
ORDER CAPITELLIDAE	3	162	244	769	273	169	4	473	323	2448	833	176
CRISTIDIELUS RYSDIS	9	5330	303	9553	2817	53	0	-	-	-	-	-
NEOLYSIS AMERICANA	0	-	-	-	-	-	6	13173	3467	22185	6214	47
PHALANODONTES VULGARIS	3	99	45	606	211	213	2	28	63	161	56	207
PHALANODONTES SPP	1	36	303	303	107	283	0	-	-	-	-	-
CRANOGNATHUS SUPPLENDRIOSE	2	11	35	56	22	192	5	152	83	650	270	345
SARPIA SPP	3	264	244	1027	425	161	3	247	323	1000	385	156
FAMILY AMPHARCTIDAE	2	83	303	364	155	166	0	-	-	-	-	-
IGOLEA BRITICA	0	-	-	-	-	-	1	67	533	533	186	263
IGOLEA BRITICA	2	99	281	513	194	195	2	91	63	666	233	256
CRISTIDIELUS AMPHIDROMA	8	8177	2227	20486	6457	79	6	567	252	1836	626	110
AMPHIDROMA SPP.	0	-	-	-	-	-	8	16264	102	43816	17375	107
LIFE STAGE: JUVENILES												
CALLINectes SAPIDUS	2	44	47	303	106	242	2	24	90	102	45	186
	8	20865	-	-	-	-	8	30710	-	-	-	-
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	1	180	1441	1441	509	263
AUCULIUS SPP	0	-	-	-	-	-	1	32	252	252	89	263
OSTRODIELIS SMITHI	1	31	244	244	86	283	0	-	-	-	-	-
OSTRODIELIS	0	-	-	-	-	-	2	77	252	360	145	189
GORGONIA HYPOMYCTES	0	-	-	-	-	-	1	10	81	81	29	263
CRISTIDIELUS RYSDIS	2	35	35	244	85	245	0	-	-	-	-	-
NEOLYSIS AMERICANA	0	-	-	-	-	-	4	194	90	806	289	149
CRANOGNATHUS SUPPLENDRIOSE	1	7	56	56	20	283	1	8	63	63	22	263
CRISTIDIELUS AMPHIDROMA	2	435	1282	2196	841	194	0	-	-	-	-	-
AMPHIDROMA SPP.	0	-	-	-	-	-	2	880	2666	4435	1710	153
LIFE STAGE: LARVAL												
ORDER CERIA-GHARTA	0	-	-	-	-	-	1	40	323	323	114	263
CLASS POLYCHAETA	6	3817	364	12693	4720	124	6	1064	252	3265	1164	164
LIFE STAGE: TOTAL												
CRANOGNATHUS SUPPLENDRIOSE	8	32843	5641	138113	44556	136	6	19776	3548	50612	14954	76
FAMILY AMPHIDROMA	1	28	223	223	75	283	0	-	-	-	-	-
HYDROPHYLUS LEAVIS	0	-	-	-	-	-	1	37	252	252	89	263
	8	37195	-	-	-	-	8	22302	-	-	-	-

TABLE 11. (CONT.)

MONTH/TIME PERIOD	MAY 1976/DAY											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
SARSEA SPP	1	18	141	141	50	283	0	-	-	-	-	-
OBOLIA SPP	1	16	128	128	45	283	0	-	-	-	-	-
OBOLIA ACTINARIA	0	-	-	-	-	-	1	35	282	282	100	283
AREALOPSIS LILLYI	1	9	70	70	25	283	0	-	-	-	-	-
CLASS POLYCHAETA	0	-	-	-	-	-	1	33	261	261	92	263
FAMILY SYLLIDAE	2	55	128	311	113	205	3	126	261	404	177	141
AGOLYTUS SPP	2	28	66	155	56	204	1	51	404	404	143	263
HELEIS SPP	0	-	-	-	-	-	1	9	73	73	26	283
FAMILY CAPITELLIDAE	3	68	128	282	105	154	3	31	73	98	43	140
POLYDORA SPP	3	174	307	639	256	147	8	497	71	1212	409	62
SCOLIOLEPIDES VIRIDIS	0	-	-	-	-	-	1	33	261	261	92	283
CLASS OLIPOCHAETA	0	-	-	-	-	-	1	33	261	261	92	283
SUSPHYLUM PYCNOGONIDA	1	19	148	148	52	283	0	-	-	-	-	-
CATACOSTYLIS SMITHI	1	19	153	153	54	283	0	-	-	-	-	-
HYDROBATES	0	-	-	-	-	-	8	2100	213	5435	2004	95
CRYLLOLALWA	0	-	-	-	-	-	7	4320	149	26263	8967	208
COARPHIDIA SPP	0	-	-	-	-	-	1	2	18	18	6	283
NAKINOGAMMARUS SPP	0	-	-	-	-	-	1	101	808	808	286	283
JASSA FALCATA	0	-	-	-	-	-	2	75	261	339	140	167
ELASMOPLUS LEVIS	0	-	-	-	-	-	1	106	845	845	299	283
MELITA NITIDA	0	-	-	-	-	-	3	77	71	282	123	160
STENOPOE BRADYICORNIS	6	328	66	1037	348	106	8	524	71	1019	350	67
ORDER CAPRELLIDAE	6	306	155	779	288	94	0	-	-	-	-	-
UNIDENTIFIED MYSID	0	-	-	-	-	-	6	874	142	4416	1493	171
NEUSYSIS AMERICANA	0	-	-	-	-	-	1	3	21	21	7	283
NEUPOLYPT SPP	1	18	141	141	50	293	0	-	-	-	-	-
LEPTOSYMPTE SPP	1	20	159	159	56	283	1	70	563	563	199	283
SUDANOK ALALIOCLADA	0	-	-	-	-	-	1	33	261	261	92	283
SCUDOPLOS SPP	2	9	35	40	17	186	0	-	-	-	-	-
LITORECA OVALIS	1	20	159	159	56	283	4	89	73	390	134	151
UDOTA BALTICA	3	77	66	296	125	162	2	45	75	282	99	223
UDOTA TILLODA	7	795	400	2045	602	76	2	510	845	3232	1139	224
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	5	131	71	339	141	107
AMPHISCICA SPP	0	-	-	-	-	-	0	-	-	-	-	-
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	0	-	-	-	-	-	3	4	33	33	12	263
8	1977						8	9509				
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	18	141	141	50	283	0	-	-	-	-	-
ORDER CAPRELLIDAE	0	-	-	-	-	-	2	86	262	404	162	189
FALAEGRITES VULGARIS	0	-	-	-	-	-	1	3	25	25	9	263
UNIDENTIFIED AMPHIPODA	1	32	256	256	91	283	0	-	-	-	-	-
LIFE STAGE: LARVAL												
ORDER CENIASTHAKIA	0	-	-	-	-	-	1	9	71	71	25	263
CLASS POLYCHAETA	7	677	155	1534	589	87	5	190	71	585	233	121
LIFE STAGE: ZOEAL												
PALAEONETES SPP	3	123	155	511	195	158	2	163	282	1019	366	221
NEUPOLYPT SPP	0	-	-	-	-	-	1	85	679	679	240	263
CENAEON SEPTENTRIONA	8	5984	2606	9351	2261	38	6	6432	3644	14267	3139	52
FAUDUS SP	0	-	-	-	-	-	1	170	1359	1359	480	283
FAMILY LANTHIDAE	8	3763	986	5823	1810	48	2	135	510	567	250	164
PROPARQUE TEXANA	0	-	-	-	-	-	6	2760	597	7606	2992	164
NEUTHECAPROPUS HARRISI	0	-	-	-	-	-	6	574	261	1614	543	55
INTEGROPE BRACHYDORA	4	1543	153	6066	2716	176	0	-	-	-	-	-
LIFE STAGE: EPITOKES												
HELEIS SPP	0	-	-	-	-	-	1	2	36	18	6	263
8	12139						8	10607				



TABLE 11. (CONT.)

MONTH/TIME PERIOD

MAY 1976/NIGHT

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
BAIKIA OCTOPUNCTATA	0	-	-	-	-	-	1	12	96	96	34	283
CLASS HYDROZOA	1	98	780	780	276	283	0	-	-	-	-	-
URELIA SPP	0	-	-	-	-	-	1	12	92	92	33	283
ORDER ACTINARIA	1	7	57	57	20	283	0	-	-	-	-	-
SCALLOPSIS LEIDYI	6	74	41	195	71	96	2	8	24	35	14	190
CLASS BIVALVIA	1	46	365	365	129	283	3	154	310	558	223	145
ENSIS DIRECTUS	2	104	53	780	274	263	1	4	35	35	12	283
CLASS POLYCHAETA	1	23	183	183	65	283	1	12	96	96	34	283
FAMILY PHYLLOCCIDAE	2	217	49	1684	593	274	0	-	-	-	-	-
COLLARIA SPP.	0	-	-	-	-	-	1	12	96	96	34	283
FAMILY SYLLIDAE	2	119	132	822	288	241	3	85	96	310	133	156
AUTOLYUS SPP	1	23	183	183	65	283	1	49	388	388	137	283
SEALIS SPP	1	6	47	47	17	283	1	12	92	92	33	283
FAMILY CAPITULIDAE	4	321	163	1096	430	134	6	720	276	1720	713	99
FAMILY SPIONIDAE	0	-	-	-	-	-	1	12	92	92	33	283
POLYDORA SPP	1	66	526	526	186	283	4	356	315	1099	442	124
CLASS HIRUDINEA	0	-	-	-	-	-	1	79	630	630	223	283
SUBPHYLUM PYCNOGONIDA	1	32	258	258	91	283	0	-	-	-	-	-
CYCLASPIS VARIANS	0	-	-	-	-	-	2	183	315	1147	405	222
LEUCON AMERICANUS	2	137	183	909	319	233	4	192	92	576	253	132
OSTEOSIYLIS SMITHI	7	962	489	1684	567	59	8	1061	310	2867	837	79
MICRODEUTOPUS	0	-	-	-	-	-	8	11648	1103	34122	11947	103
CELLULALPA	0	-	-	-	-	-	4	635	558	1720	764	120
COMPTON SPP	0	-	-	-	-	-	1	39	315	315	111	283
GAMMARUS MUCRONATUS	0	-	-	-	-	-	1	78	520	620	219	283
MARINOGAMMARUS SPP	0	-	-	-	-	-	2	106	288	558	209	197
JASSA FALCATA	0	-	-	-	-	-	2	175	288	1115	393	224
LYSIANOPSIS ALBA	0	-	-	-	-	-	6	597	69	2014	800	134
ELASMOPUS LEVIS	0	-	-	-	-	-	4	140	92	620	222	158
MONOCULODUS EDWARDSI	0	-	-	-	-	-	1	78	620	620	219	283
FAMILY STENOCHTHIDAE	0	-	-	-	-	-	5	347	30	1649	569	164
STENOCHTHO BREVICORNIS	2	110	132	744	261	238	7	425	192	863	279	66
ORDER CAPRELLICEA	7	5442	909	15724	5328	98	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	0	-	-	-	-	-	8	11655	5216	24341	6498	56
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	137	1099	1099	389	283
INFRAORDER CARIDEA	1	4	33	33	12	283	1	9	69	69	24	283
FAMILY PALAEMONIDAE	0	-	-	-	-	-	5	43	34	155	52	121
PALAEMONETES VULGARIS	1	14	114	114	40	283	0	-	-	-	-	-
PALAEMONETES SPP	0	-	-	-	-	-	3	27	34	108	42	157
CRANGON SEPTENSPINOSA	3	25	33	114	41	165	2	9	34	35	16	165
LEPTOSYNAPTA SPP	1	6	46	46	16	283	1	39	310	310	110	283
SCOLOPLOS SPP	1	93	744	744	263	283	0	-	-	-	-	-
ORDER ISOPODA	1	6	46	46	16	283	1	10	79	79	28	283
LIRONECA OVALIS	2	65	258	253	121	185	3	118	78	552	206	175
ISOTEA BALTICA	0	-	-	-	-	-	3	181	315	576	262	145
ISOTEA TRILOBA	8	11011	1143	22727	8193	74	6	489	96	1673	554	113
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	8	7028	673	21290	8336	119
AMPELISCA SPP.	0	-	-	-	-	-	0	-	-	-	-	-
LIFE STAGE: JUVENILES												
CALLINECTES SAPIIDUS	6	42	32	99	32	77	4	16	23	36	18	110
	8	19051					8	36988				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

MAY 1976/NIGHT (CONT.)

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	17	132	132	47	283	1	12	96	96	34	283
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	5	547	92	1673	631	115
ELASMOPUS LEVIS	0	-	-	-	-	-	1	36	288	288	102	283
STENOTHOE BREVICORNIS	0	-	-	-	-	-	1	12	96	96	34	283
NEOMYSIS AMERICANA	0	-	-	-	-	-	4	63	23	315	108	172
PALAEONETES VULGARIS	0	-	-	-	-	-	2	8	24	36	14	190
CRANGON SEPTemspINOSA	0	-	-	-	-	-	1	9	72	72	25	283
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	0	-	-	-	-	-	4	296	92	1147	424	143
CLASS POLYCHAETA	6	3709	163	10419	4476	121	4	645	184	1727	843	131
LIFE STAGE: ZOEAL												
PALAEONETES SPP	4	916	1488	2341	1008	110	2	286	558	1727	614	215
HIPPOLYTE SPP.	0	-	-	-	-	-	1	139	1115	1115	394	283
CRANGON SEPTemspINOSA	8	111312	9143	394105	170392	153	8	16155	5735	32892	8662	54
FAMILY XANTHIDAE	6	89085	132	316364	126104	142	1	70	558	558	197	283
PANOPEUS HERDSTII	0	-	-	-	-	-	1	72	576	576	204	283
NEOPANOPE TEXANA	0	-	-	-	-	-	5	63918	96	200538	81256	127
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	6	913	92	3441	1241	136
INFRAORDER BRACHYURA	1	186	1488	1488	526	283	4	508	92	1673	695	137
LIFE STAGE: EPITOKES												
NEREIS SPP	4	57	53	183	76	133	5	62	34	310	104	168
	8	205282					8	83748				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

JUNE 1976/DAY

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	4	401	335	1296	500	125	1	26	211	211	75	283
UBELIA SPP	2	95	379	379	175	185	0	-	-	-	-	-
ORDER ACTINIARIA	0	-	-	-	-	-	2	37	24	270	95	257
MNEMIOPSIS LEIOYI	2	15	39	84	31	201	0	-	-	-	-	-
ORDER NUDIBRANCHIA	1	39	314	314	111	283	1	27	219	219	77	283
CLASS POLYCHAETA	0	-	-	-	-	-	1	49	390	390	138	283
FAMILY SYLLIDAE	1	21	167	167	59	283	1	55	438	438	155	283
NEREIS SPP	0	-	-	-	-	-	1	45	362	362	128	283
FAMILY CAPITELLIDAE	0	-	-	-	-	-	1	26	211	211	75	283
POLYDORA SPP	4	114	167	379	139	121	4	310	211	1171	424	137
SCOLECOLEPIDES VIRIDIS	0	-	-	-	-	-	2	61	219	270	114	187
SABELLARIA VULGARIS	0	-	-	-	-	-	1	59	468	468	165	283
CLASS HIRUDINEA	0	-	-	-	-	-	1	45	362	362	128	283
LEUCON AMERICANUS	1	47	379	379	134	283	0	-	-	-	-	-
OXYUROSTYLIS SMITHI	1	103	821	821	290	283	5	409	211	1404	556	136
MICRODEUTOPUS												
GRYLLOALPA	0	-	-	-	-	-	7	1119	39	2381	946	85
COROPHIUM SPP	0	-	-	-	-	-	7	2550	932	5992	2117	83
ERICHTHONIUS RUBICORNIS	0	-	-	-	-	-	1	59	468	468	165	283
FAMILY GAMMARIDAE	0	-	-	-	-	-	1	4	30	30	11	283
JASSA FALCATA	0	-	-	-	-	-	2	601	493	4315	1511	251
LYSIANOPSIS ALBA	0	-	-	-	-	-	2	113	270	632	230	204
MELITA NITIDA	0	-	-	-	-	-	3	80	30	390	146	183
MICROPROTOPUS RANEYI	0	-	-	-	-	-	1	4	30	30	11	283
STENOTHOE MINUTA	0	-	-	-	-	-	1	139	1108	1108	392	283
STENOTHOE BREVICORNIS	0	-	-	-	-	-	5	265	211	952	323	122
ORDER CAPRELLIDEA	3	223	379	758	325	146	9	875	219	1561	286	33
UNIDENTIFIED MYSIDS	4	264	167	948	392	148	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	7	3866	447	12479	4314	112
HIPPOLYTE SPP.	0	-	-	-	-	-	1	3	24	24	8	283
SUBORDER DORIDACEA	1	45	357	357	126	283	1	52	415	415	147	283
SUBORDER AEOLIDACEA	1	24	190	190	67	283	3	126	219	476	187	149
PHYLUM NEMERTEA	1	47	379	379	134	283	0	-	-	-	-	-
HYDROIDES DIANTHUS	0	-	-	-	-	-	1	4	29	29	10	283
PECTINARIA GOULDII	0	-	-	-	-	-	3	198	390	724	288	146
FAMILY AMPHARETIDAE	0	-	-	-	-	-	1	27	219	219	77	283
PARANAITIS SP	0	-	-	-	-	-	1	4	30	30	11	283
UNCIOLOA INRRORATA	0	-	-	-	-	-	1	4	34	34	12	283
IDOTEA BALTICA	8	178	72	379	96	54	5	133	24	438	180	135
EDOTEA TRILOBA	3	211	167	941	357	169	4	363	270	1556	541	149
ERICHSONELLA SP	2	10	40	42	19	185	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	5	1145	179	4974	1795	157	6	845	211	1905	768	91
AMPELISCA SPP.	0	-	-	-	-	-	2	61	219	270	114	187
	8	2983					8	12642				

TABLE 11 . (CONT.)

MONTH/TIME PERIOD	JUNE 1976/DAY (CONT.)											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	2	56	34	415	145	259
COROPHIUM SPP	0	-	-	-	-	-	1	10	77	77	27	283
JASSA FALCATA	0	-	-	-	-	-	2	11	30	55	21	196
ORDER CAPRELLIDEA	0	-	-	-	-	-	2	76	219	390	148	195
IDOTEA BALTICA	3	28	45	95	41	147	2	33	49	211	74	228
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	0	-	-	-	-	-	3	105	211	362	151	143
CLASS POLYCHAETA	2	131	292	758	273	208	2	135	421	658	258	191
LIFE STAGE: ZOEAL												
ORDER DECAPODA	1	47	379	379	134	283	0	-	-	-	-	-
PALAEONETES SPP	5	882	357	2591	986	112	6	619	219	1404	544	88
HIPPOLYTE SPP.	2	186	190	1296	454	244	0	-	-	-	-	-
CRANGON SEPTemspINOSA	8	10341	1641	13839	4210	41	8	13502	1810	27704	8659	64
UPOGEBIA AFFINIS	5	807	314	3239	1094	136	3	273	362	1429	497	182
PAGURUS SP	5	493	314	1296	527	107	3	192	211	936	333	173
LIBINIA SPP.	0	-	-	-	-	-	1	49	390	390	138	283
CANCER IRRORATUS	0	-	-	-	-	-	1	91	724	724	256	283
CALLINECTES SAPIDUS	1	664	5308	5308	1877	283	2	206	219	1429	500	243
FAMILY XANTHIDAE	8	33712	10219	75789	24165	72	0	-	-	-	-	-
PANOPEUS HERBSTII	0	-	-	-	-	-	5	1456	934	3258	1370	94
NEOPANOPE TEXANA	0	-	-	-	-	-	8	14916	2973	21854	7430	50
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	8	1042	23	2381	1013	97
INFRAORDER BRACHYURA	4	2771	670	13603	4868	176	5	1161	270	3743	1482	128
LIFE STAGE: EPITOKES												
NEREIS SPP	0	-	-	-	-	-	2	9	30	45	18	190
	8	50063					8	33939				

TABLE 11. (CONT)

MONTH/TIME PERIOD

JUNE 1976/NIGHT

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	4	860	731	3516	1222	142	1	59	471	471	167	263
ORDER ACTINIARIA	0	-	-	-	-	-	1	9	74	74	26	263
ORDER NUDIBRANCHIA	1	4	35	35	12	283	0	-	-	-	-	-
CLASS BIVALVIA	0	-	-	-	-	-	1	30	241	241	85	283
GENUS DIRECTUS	0	-	-	-	-	-	1	25	231	231	82	263
CLASS POLYCHAETA	1	5	42	42	15	283	1	94	753	753	266	283
FAMILY PHYLLODOCIDAE	1	6	44	44	16	283	1	225	1797	1797	635	283
FAMILY POLYNOIDAE	0	-	-	-	-	-	1	74	590	590	209	283
FAMILY SYLLIDAE	1	136	1088	1088	385	283	3	346	462	1531	560	162
AUTOLYTUS SPP	1	5	42	42	15	283	0	-	-	-	-	-
NEREIS SPP	0	-	-	-	-	-	1	4	29	29	10	283
FAMILY CAVITELLIDAE	0	-	-	-	-	-	3	199	231	773	312	157
POLYDORA SPP	0	-	-	-	-	-	3	295	241	1531	542	183
CYCLASPIS VARIANS	1	7	55	55	19	283	1	60	482	482	170	283
LEUCON AMERICANUS	6	2482	1115	5275	2146	86	8	3423	723	6184	1758	52
OXYUROSTYLIS SMITHI	7	3497	747	8846	2885	82	8	4036	925	10786	3031	77
FAMILY PARAFANIDAE	0	-	-	-	-	-	1	225	1798	1798	636	283
CYHAUSA COMPTA	0	-	-	-	-	-	1	102	813	813	287	283
NICHOLOUTUS	0	-	-	-	-	-	7	2011	590	3596	1249	62
GRYLLOTALPA	0	-	-	-	-	-	2	42	97	241	87	207
BATEA CATHARINENSIS	0	-	-	-	-	-	7	2268	58	9187	3065	136
COPOPHILUS SPP	0	-	-	-	-	-	1	97	773	773	273	283
BRICHRONATUS SPP.	0	-	-	-	-	-	2	137	471	627	256	152
GAMMARUS NUCRONATUS	0	-	-	-	-	-	4	1136	241	4682	1815	160
JASSA FALCATA	0	-	-	-	-	-	3	335	241	1650	647	193
LYSIANOPSIS ALBA	0	-	-	-	-	-	7	980	231	2952	972	99
ELASMODUS LEVIS	0	-	-	-	-	-	4	359	241	941	440	122
MELIA NITIDA	0	-	-	-	-	-	4	670	590	2297	869	130
MONOCULODES EDWARDSI	0	-	-	-	-	-	4	557	471	1850	746	134
MICROPHOTOPUS RAHEVI	0	-	-	-	-	-	1	1053	8421	8421	2977	283
FAMILY STENOHOIDAE	0	-	-	-	-	-	5	1985	241	7457	2899	146
STENOHOE BREVICORNIS	0	-	-	-	-	-	8	2474	241	5393	1870	76
ORDER CAPRELLIDAE	6	1042	42	2192	940	90	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	8	45339	3734	139505	49466	109	8	66605	5561	173121	70259	105
NEOMYSIS AMERICANA	0	-	-	-	-	-	2	10	30	48	19	192
SALAEONETES VULGARIS	2	22	42	130	46	215	2	46	29	173	60	133
CRANGON SEPTEMPINOSA	4	58	44	220	81	140	5	30	241	241	85	253
LEPTOSYNAPTA SPP	0	-	-	-	-	-	2	34	37	231	81	241
SUBORDER DORIDACEA	0	-	-	-	-	-	2	103	231	590	213	207
SUBORDER AECIOLIDACEA	0	-	-	-	-	-	1	87	693	693	245	283
INVEFIBRATE	0	-	-	-	-	-	1	29	231	231	82	263
PHYLUM NEMERTEA	0	-	-	-	-	-	7	111	30	861	303	272
SCOLOPLOS SPP	3	15	34	44	21	139	1	30	241	241	85	283
FAMILY AMPHARETIDAE	0	-	-	-	-	-	0	-	-	-	-	-
PARANAITIS SP	1	6	44	44	16	283	1	6	48	48	17	283
SPIO SPP	0	-	-	-	-	-	1	97	773	773	273	283
THALYX SPP	0	-	-	-	-	-	5	438	37	1797	640	146
IDUTEA BALTICA	6	521	34	1988	841	161	6	1167	941	2297	828	71
EDUTEA TRILOBA	3	326	35	1411	597	183	0	-	-	-	-	-
BRICHRONELLA SP	1	4	34	34	12	283	6	1683	773	3699	1542	92
UNIDENTIFIED AMPHIPODA	8	15358	2531	35174	12487	81	8	7020	1850	20096	6422	91
AMPHISCICA SPP.	0	-	-	-	-	-	-	-	-	-	-	-
LIFE STAGE: JUVENILES												
CALLINECIES SAPIDUS	4	74	70	228	90	122	5	55	37	145	60	110
	8	69782					8	100863				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

JUNE 1976/NIGHT (CONT.)

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
LEUCON AMERICANUS	0	-	-	-	-	-	1	97	773	773	273	283
MICRODEUTOPUS	0	-	-	-	-	-	1	29	231	231	82	283
GRYLLOTALPA	0	-	-	-	-	-	2	115	144	773	271	236
BATEA CATHARINENSIS	0	-	-	-	-	-	1	4	29	29	10	283
COROPHIUM SPP	0	-	-	-	-	-	1	193	1546	1546	547	283
JASSA FALCATA	2	422	1391	1988	798	189	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	0	-	-	-	-	-	4	448	290	1348	581	130
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	7	58	58	21	283
PALAEONETES SPP	1	5	42	42	15	283	0	-	-	-	-	-
CRANGON SEPTEMSPINOSA	2	12	42	55	23	187	0	-	-	-	-	-
IDOTEA BALTICA	2	271	83	2087	734	271	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	3	494	733	2297	821	166
AMPELISCA SPP.	0	-	-	-	-	-	0	-	-	-	-	-
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	0	-	-	-	-	-	2	89	241	471	176	198
CLASS POLYCHAETA	1	146	1164	1164	412	283	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
PALAEONETES SPP	8	5985	1391	19505	5950	99	8	4162	231	14798	4977	120
HIPPOLYTE SPP.	1	78	622	622	220	283	2	233	925	941	432	185
CRANGON SEPTEMSPINOSA	8	35153	5114	69660	22173	63	8	19846	5411	43100	14548	73
UPOGEBIA AFFINIS	5	1165	1115	3516	1221	105	1	148	1181	1181	418	283
PAGURUS SP	2	501	1813	2192	932	186	4	611	471	1850	800	131
LIBINIA SPP.	2	336	696	1988	711	212	1	30	241	241	85	283
CALLINECTES SAPIDUS	0	-	-	-	-	-	2	607	2297	4162	1576	195
FAMILY XANTHIDAE	8	74410	12174	153516	46061	62	0	-	-	-	-	-
PANOPEUS HERBSTII	0	-	-	-	-	-	1	96	766	766	271	283
NEOPANOPE TEXANA	0	-	-	-	-	-	8	50613	20000	84451	23224	46
WHITROPANOPEUS HARRISI	0	-	-	-	-	-	4	1090	462	5455	1930	177
INFRAORDER BRACHYURA	3	947	1391	3265	1412	149	6	1371	471	6474	2132	156
LIFE STAGE: EPITOKES												
NEREIS SPP	6	250	35	1087	383	153	4	129	29	773	268	208
	8	119680					8	80611				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

JULY 1976/DAY

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	123	76	455	205	167	1	56	449	449	159	283
TERRITOPUS RUTRICOLA	4	119	123	400	152	128	2	278	1053	1171	516	185
HELMSPIS BACHEI	0	-	-	-	-	-	1	14	110	110	39	283
ORELIA SPP	2	114	175	736	259	227	0	-	-	-	-	-
HELMSPIS LEIDYI	6	483	76	899	273	57	0	-	-	-	-	-
ORDER NUDIBRANCHIA	1	10	76	76	27	283	1	44	351	351	124	283
CLASS POLYCHAETA	2	53	76	350	123	231	1	169	1340	1348	477	283
FAMILY PHYLLODOCIDAE	1	15	123	123	43	283	3	210	112	1017	377	180
FAMILY SYLLIDAE	1	15	123	123	43	283	6	624	351	2373	756	121
HELMIS SPP	0	-	-	-	-	-	1	86	690	690	244	283
FAMILY CAPITELLIDAE	1	10	76	76	27	283	0	-	-	-	-	-
FAMILY SPIRIDAE	1	10	76	76	27	283	2	111	440	449	206	185
POLICHA SPP	0	-	-	-	-	-	3	215	339	851	327	152
SUBPHYLUM HYDROSONIDA	5	529	76	2281	776	147	5	736	351	2373	966	131
GLUCON AMERICANUS	1	17	137	137	48	283	5	313	227	879	331	106
CALYPTOSTYLIS SMITHI	7	277	175	449	142	51	6	875	339	2252	805	92
CYTHOCLA COMPA	0	-	-	-	-	-	1	11	88	88	31	283
HYDRODOLOPUS	0	-	-	-	-	-	6	864	339	2523	823	102
ORTILODOLPA	0	-	-	-	-	-	1	28	227	227	80	283
OSTIA CATHARINENSIS	0	-	-	-	-	-	8	1983	449	5957	1901	96
CORCHIA SPP	0	-	-	-	-	-	4	347	227	1758	597	172
CLAPUS TORULARIS	0	-	-	-	-	-	2	171	678	690	317	145
ERICHTHONIUS SPP.	0	-	-	-	-	-	8	13783	3158	20851	6735	49
JASSA FALCATA	0	-	-	-	-	-	2	101	360	449	189	187
LESIANOPSIS ALBA	0	-	-	-	-	-	6	1270	440	3729	1308	103
ELASMOPIUS LEVIS	0	-	-	-	-	-	1	55	440	440	156	283
MELIA MITIDA	0	-	-	-	-	-	7	1133	227	3077	1075	95
MICROPOTOPUS RANEYI	0	-	-	-	-	-	1	213	1702	1702	602	283
FAMILY MICHOTHOIDAE	0	-	-	-	-	-	2	108	175	690	243	225
SIENOTHOE MINUTA	0	-	-	-	-	-	5	723	339	2712	964	133
SIENOTHOE BREVICORNIS	8	1345	364	2807	1004	75	8	3174	955	7458	2111	67
ORDER CAPPELLIDAE	7	473	76	899	355	75	1	42	339	339	120	283
UNIDENTIFIED MYSID	0	-	-	-	-	-	2	98	360	426	183	186
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	8	3080	1461	5532	1535	50
HELMYSIS AMERICANA	0	-	-	-	-	-	1	55	440	440	156	283
ORDER DECAPODA	1	23	182	182	64	283	1	45	360	360	127	283
SUBORDER DORIDACEA	0	-	-	-	-	-	2	156	227	1017	357	230
SUBORDER AROLIDACEA	2	53	175	245	99	189	0	-	-	-	-	-
INVERTEBRATE	0	-	-	-	-	-	1	42	339	339	120	283
DISIRICILLA BARNARDI	0	-	-	-	-	-	2	133	360	702	262	198
PHYLUS WEMERIEA	0	-	-	-	-	-	2	100	351	449	187	187
POCINARIA GOULDII	0	-	-	-	-	-	1	42	339	339	120	283
FAMILY AMPHARETIIDAE	0	-	-	-	-	-	1	22	172	172	61	283
ERANATIS SP	1	56	449	449	159	283	0	-	-	-	-	-
ETEOPE LACTEA	1	10	76	76	27	283	0	-	-	-	-	-
FOURNE OBSCURA	0	-	-	-	-	-	1	53	426	426	151	283
ORDER SABELLIDA	0	-	-	-	-	-	1	29	227	227	80	283
FAMILY SABELLIDAE	3	154	153	999	310	201	6	730	339	1910	673	92
LOTEA BALTICA	5	423	153	1235	482	115	8	1505	690	2983	766	40
LOTEA FRILLOSA	2	27	91	123	50	180	0	-	-	-	-	-
ERICHSONELLA SP	8	1953	685	4800	1309	67	3	3112	339	7568	2866	92
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	3	197	175	1171	404	206
AMPELISCA SPP.	8	6290	-	-	-	-	8	37214	-	-	-	-

TABLE 11. (CONT.)

MONTH/TIME PERIOD	JULY 1976/DAY (CONT.)											
	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
BATEA CATHARINENSIS	0	-	-	-	-	-	2	28	110	112	51	185
COROPHIUM SPP	0	-	-	-	-	-	1	14	110	110	39	283
JASSA FALCATA	0	-	-	-	-	-	7	622	90	1461	539	87
MICROPROTOPUS RANEYI	0	-	-	-	-	-	3	211	360	879	327	155
STENOCHOE MINUTA	0	-	-	-	-	-	1	22	175	175	62	283
ORUER CAPRELLIDEA	2	33	91	175	66	197	3	128	227	440	186	145
NEOMYSIS AMERICANA	0	-	-	-	-	-	2	96	339	426	179	187
UNIDENTIFIED AMPHIPODA	2	97	247	526	194	201	0	-	-	-	-	-
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	5	382	123	2105	711	186	5	341	426	721	303	89
UNIDENTIFIED INVERTEBRATE	1	66	526	526	186	283	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
ORDER DECAPODA	1	23	182	182	64	283	2	108	426	440	200	185
PALAEONETES SPP	4	372	123	2400	826	222	3	140	227	449	204	146
HIPPOLYTE SPP.	2	53	175	245	99	189	1	86	690	690	244	283
CHANGON SEPTESPINOSA	8	2281	1298	4172	1005	44	8	2166	175	3956	1419	66
UPOGEBIA AFFINIS	5	154	137	400	149	97	5	408	175	1136	448	110
PAGURUS SP	3	165	137	736	279	169	6	315	175	678	239	76
LIBINIA SPP.	2	40	76	245	87	217	3	131	175	449	199	151
FAMILY XANTHIDAE	8	7864	1728	21600	7497	95	0	-	-	-	-	-
PANOPEUS HERBSTII	0	-	-	-	-	-	5	405	227	1379	489	121
NEOPANOPE TEXANA	0	-	-	-	-	-	8	8985	1379	25618	9648	107
RHITHROpanopeus HARRISI	0	-	-	-	-	-	2	67	175	360	133	199
INFRAORDER BRACHYURA	1	57	455	455	161	283	1	90	721	721	255	283
	8	11585					8	14361				



TABLE 11. (CONT.)

MONTH/TIME PERIOD		JULY 1976/NIGHT											
SPECIES	LOCATION 7						LOCATION 11						
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR	
LIFE STAGE: NO DETERMINATION													
CLASS HYDROZOA	0	-	-	-	-	-	2	200	779	818	370	185	
TORPITOPSIS NUTRICOLA	4	435	119	2222	793	182	1	33	260	260	92	283	
NEAPYSIS BACHEI	1	15	118	118	42	283	0	-	-	-	-	-	
ORDER ACTINARIA	0	-	-	-	-	-	2	188	727	779	349	185	
PHYLLUM CTENOPHORA	1	16	128	128	45	283	0	-	-	-	-	-	
NEAPOPSIS LEIDYI	9	1186	278	2788	774	65	2	34	118	156	64	188	
CLASS POLYCHAETA	1	64	513	513	151	283	2	192	471	1067	330	203	
FAMILY PHYLLODOCIDAE	0	-	-	-	-	-	4	568	808	3636	1255	145	
FAMILY SYLLIDAE	1	48	385	385	136	283	1	179	1429	1429	505	283	
GENUS SUCCINEA	0	-	-	-	-	-	1	11	91	91	32	283	
FAMILY CAPITELLIDAE	1	139	1111	1111	393	283	5	1648	533	8750	2961	180	
POLYDORA SPP	0	-	-	-	-	-	3	352	533	1212	521	149	
SUSPENSION PHYCNOGONIDA	2	98	96	690	241	246	2	223	533	1250	455	204	
CYCLASPIS VARIANS	1	153	1221	1221	432	283	0	-	-	-	-	-	
LEUCON AMERICANUS	8	4181	964	11034	3322	79	0	6113	1616	13991	4284	70	
OSTYOSTYLIS SMITHI	4	2326	2564	6897	2745	118	5	2621	808	7273	2787	106	
FAMILY PARATNIDAE	0	-	-	-	-	-	1	67	533	533	183	283	
CYNABOSA COMPTA	0	-	-	-	-	-	1	364	2909	2909	1028	283	
MICRODUTOPUS	0	-	-	-	-	-	4	455	533	1412	555	122	
GRYLLOTALPA	0	-	-	-	-	-	6	566	130	1212	479	85	
BATEA CATHARINENSIS	0	-	-	-	-	-	5	1115	808	3294	1193	107	
COROPHIUM SPP	0	-	-	-	-	-	1	303	2424	2424	857	263	
CELAEPUS TUBULARIS	0	-	-	-	-	-	1	33	267	267	94	283	
ERICTHORIUS SPP.	0	-	-	-	-	-	1	33	267	267	94	283	
ERICTHORIUS	0	-	-	-	-	-	1	152	1212	1212	429	283	
BRASILIERIS	0	-	-	-	-	-	8	6698	1953	11600	3017	45	
JASSA FALCATA	0	-	-	-	-	-	3	327	588	1250	487	149	
LYSIANOPSIS ALBA	0	-	-	-	-	-	7	1286	706	3232	949	74	
ELLASOPUS LEVIS	0	-	-	-	-	-	2	134	267	808	288	214	
MELITA NITIDA	0	-	-	-	-	-	2	247	779	1200	472	191	
ACROCOLODES EDWARDSI	0	-	-	-	-	-	5	538	303	1882	639	119	
MICROPROTOPUS RANEYI	0	-	-	-	-	-	2	804	3200	3232	1489	185	
FAMILY STENOHOIDEAE	0	-	-	-	-	-	3	648	625	2424	1032	159	
STENOHOE BREVICORNIS	5	555	385	1379	564	102	7	3236	1529	9697	3065	95	
ORDER CAPRELLIDAE	8	30285	13846	62857	14829	49	0	-	-	-	-	-	
UNIDENTIFIED NISIOS	0	-	-	-	-	-	8	3086	779	7273	2099	68	
NEAPOPSIS BIGELOWI	0	-	-	-	-	-	8	27662	800	54545	16683	60	
NEAPYSIS AMERICANA	4	251	96	1429	492	196	7	147	91	267	85	58	
CRANGON SEPIENSPINOSA	1	64	513	513	181	283	2	176	625	779	328	187	
SUBORDER AEOLIDACEA	1	241	1928	1928	682	283	0	-	-	-	-	-	
INVERTEBRATE	0	-	-	-	-	-	1	67	533	533	188	283	
LITIDIELLA BARNARDI	0	-	-	-	-	-	1	101	808	808	286	283	
SCOLOPLOS SPP	0	-	-	-	-	-	1	91	727	727	257	283	
PECILINARIA GOULDII	1	12	96	96	34	283	0	-	-	-	-	-	
GLYCERA CAPITATA	0	-	-	-	-	-	1	152	1212	1212	429	283	
UNCIOLE IRONATA	2	225	690	1111	432	192	0	-	-	-	-	-	
THALYX SPP	0	-	-	-	-	-	3	223	91	1067	404	181	
PODAKKE OBSCURA	4	576	385	2222	804	140	6	913	533	2857	923	101	
DOULEA BALTICA	5	612	385	1379	578	94	8	1770	779	2424	621	35	
ECOLEA TRILOBA	8	11932	3846	35556	10430	87	8	3176	471	10727	3320	105	
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	8	5425	625	14091	5672	105	
AMPELISCA SPP.	0	-	-	-	-	-	0	-	-	-	-	-	
LIFE STAGE: JUVENILES													
CALLINECTES SAPIDUS	4	50	76	139	56	113	1	10	78	78	28	283	
	8	53462					8	72630					

TABLE 11. (CONT.)

MONTH/TIME PERIOD		JULY 1976/NIGHT (CONT.)										
SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
LEUCON AMERICANUS	0	-	-	-	-	-	1	67	533	533	188	283
CYMA DUSA COMPTA	0	-	-	-	-	-	1	182	1455	1455	514	283
COROPHIUM SPP	0	-	-	-	-	-	1	59	471	471	167	283
GAMMARUS MUCRONATUS	0	-	-	-	-	-	1	101	808	808	286	283
JASSA FALCATA	0	-	-	-	-	-	4	691	404	2133	876	127
MONOCULODES EDWARDSI	0	-	-	-	-	-	1	15	118	118	42	283
STENOTHOE MINUTA	0	-	-	-	-	-	1	91	727	727	257	283
UNIDENTIFIED MYSIDS	2	104	139	690	242	233	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	1	25	202	202	71	283
NEOMYSIS AMERICANA	0	-	-	-	-	-	6	488	273	1067	377	77
CRANGON SEPTemspINOSA	0	-	-	-	-	-	1	17	133	133	47	283
IDOTEA BALICA	0	-	-	-	-	-	1	97	779	779	275	283
UNIDENTIFIED AMPHIPODA	2	441	964	2564	922	209	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	1	179	1429	1429	505	283
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	4	442	690	1111	488	111	4	465	533	1250	549	118
LIFE STAGE: ZOEAL												
PALAEONETES SPP	9	4289	941	11034	3035	71	7	1258	78	2857	1034	82
HIPPOLYTE SPP.	1	48	385	385	136	283	0	-	-	-	-	-
CRANGON SEPTemspINOSA	5	588	513	1429	557	95	4	480	533	1429	570	119
UPOGEBIA AFFINIS	4	804	1026	2824	1016	126	2	367	727	2208	786	214
PAGURUS SP	3	494	769	2069	771	156	2	394	727	2424	859	218
LIBINIA SPP.	0	-	-	-	-	-	3	358	625	1429	543	152
FAMILY XANTHIDAE	8	56675	12235	112222	38278	68	1	276	2208	2208	781	283
PANOPEUS HERBSTII	0	-	-	-	-	-	6	3804	1067	12338	4049	106
NEOPANOPE TEXANA	0	-	-	-	-	-	8	24812	12500	45909	11830	48
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	3	278	625	818	387	139
INFRAORDER BRACHYURA	3	338	385	1379	537	159	0	-	-	-	-	-
LIFE STAGE: EPITOKES												
NEREIS SPP	4	78	118	192	86	110	3	61	78	273	99	164
	8	64300					8	34563				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

AUGUST 1976/DAY

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
TURRITOPSIS NUTRICOLA	6	657	156	1970	786	120	7	465	88	2128	695	150
NEMOPSIS BACHEI	0	-	-	-	-	-	1	22	175	175	62	283
ORDER ACTINIARIA	0	-	-	-	-	-	1	16	126	126	45	283
MNEMIOPSIS LEIDYI	8	6502	2029	12121	4175	64	2	61	175	313	119	195
CLASS POLYCHAETA	1	6	50	50	18	283	0	-	-	-	-	-
FAMILY PHYLLODOCIDAE	0	-	-	-	-	-	1	16	126	126	45	283
FAMILY SYLLIDAE	1	18	145	145	51	283	2	178	175	1250	437	246
NEREIS SPP	0	-	-	-	-	-	2	28	97	126	52	187
FAMILY CAPITELLIDAE	1	50	400	400	141	283	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	7	465	115	1471	479	103	8	1620	175	3333	1113	69
ORDER STOMATOPODA	1	21	164	164	58	283	0	-	-	-	-	-
CYCLASPIS VARIANS	0	-	-	-	-	-	1	52	417	417	147	283
LEUCON AMERICANUS	0	-	-	-	-	-	3	88	126	400	144	164
OXYUROSTYLIS SMITHI	1	18	147	147	52	283	4	188	126	777	280	149
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	1	32	252	252	89	283
BATEA CATHARINENSIS	0	-	-	-	-	-	1	50	400	400	141	283
COROPHIUM SPP	0	-	-	-	-	-	6	1221	126	3883	1432	117
CERAPUS TUBULARIS	0	-	-	-	-	-	3	179	175	777	295	165
ERICHTHONIUS SPP.	0	-	-	-	-	-	3	118	126	426	184	157
JASSA FALCATA	0	-	-	-	-	-	8	14600	5409	30194	9558	65
LYSIANOPSIS ALBA	0	-	-	-	-	-	1	49	388	388	137	283
ELASMOPUS LEVIS	0	-	-	-	-	-	7	589	377	1200	361	61
MELITA NITIDA	0	-	-	-	-	-	1	48	385	385	136	283
MICROPROTOPUS RANEYI	0	-	-	-	-	-	2	210	400	1277	453	216
FAMILY STENOHOIDEAE	0	-	-	-	-	-	5	648	526	1277	586	90
PAKAMETOPELLA CYPRIS	0	-	-	-	-	-	1	22	175	175	62	283
STENOHOE BREVICORNIS	0	-	-	-	-	-	2	263	503	1600	568	216
ORDER CAPRELLIDAE	8	534	100	1600	477	89	8	3172	702	7200	2044	64
UNIDENTIFIED MYSIDS	4	321	441	781	356	111	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	3	190	388	702	277	146
NEOMYSIS AMERICANA	0	-	-	-	-	-	8	2274	377	5200	1745	77
PALAEMONETES SPP	0	-	-	-	-	-	2	141	526	602	262	186
CRANGON SEPTEMPINOSA	0	-	-	-	-	-	1	11	88	88	31	283
SUBORDER DORIDACEA	0	-	-	-	-	-	1	52	417	417	147	283
SUBORDER AEOLIDACEA	1	20	156	156	55	283	2	146	400	769	288	197
INVERTEBRATE	1	19	152	152	54	283	0	-	-	-	-	-
HYDROIDES DIANTHUS	1	18	145	145	51	283	0	-	-	-	-	-
UNCIOLO IRRORATA	0	-	-	-	-	-	1	16	126	126	45	283
LIRONECA OVALIS	1	6	50	50	18	283	1	11	88	88	31	283
LOOTEA BALICA	2	27	100	115	50	186	3	219	388	964	350	160
EDUTEA TRILOBA	3	58	145	164	80	138	5	766	351	2917	1040	136
UNIDENTIFIED AMPHIPODA	7	1054	303	3594	1241	118	5	484	126	1667	595	123
AMPELISCA SPP.	0	-	-	-	-	-	3	242	88	1446	506	209
	8	2124					8	28481				

TABLE 11. (CONT.)

MONTH/TIME PERIOD		AUGUST 1976/DAY (CONT.)										
SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	1	16	126	126	45	283
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	1	48	385	385	136	283
COROPHIUM SPP	0	-	-	-	-	-	1	22	175	175	62	283
JASSA FALCATA	0	-	-	-	-	-	6	1124	126	2530	1104	98
MELITA NITIDA	0	-	-	-	-	-	1	16	126	126	45	283
ORDER CAPRELLIDEA	0	-	-	-	-	-	1	22	175	175	62	283
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	53	426	426	151	283
IDOTEA BALTICA	0	-	-	-	-	-	1	12	97	97	34	283
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	5	433	156	2121	724	167	6	534	126	1928	653	122
FAMILY SYLLIDAE	1	14	115	115	41	283	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
PALAEONETES SPP	3	56	50	230	91	164	2	66	126	400	142	216
HIPPOLYTE SPP.	5	129	115	328	130	100	2	173	417	964	351	204
CRANGON SEPTEMPINOSA	3	150	100	606	251	167	6	521	175	2000	649	125
UPOGEBIA AFFINIS	3	88	147	328	131	149	1	52	417	417	147	283
PAGURUS SP	5	96	147	164	80	83	3	118	126	417	185	157
LIBINIA SPP.	1	19	152	152	54	283	1	48	385	385	136	283
FAMILY XANTHIDAE	8	2032	580	3030	903	44	0	-	-	-	-	-
PANOPEUS HERBSTII	0	-	-	-	-	-	2	393	833	2308	827	211
NEOPANOPE TEXANA	0	-	-	-	-	-	8	2778	1132	7200	2105	76
RHITHROPOPEUS HARRISI	0	-	-	-	-	-	2	101	385	426	188	185
INFRAORDER BRACHYURA	2	58	164	303	114	196	0	-	-	-	-	-
PINNIXA CHAETOPTERANA	0	-	-	-	-	-	1	52	417	417	147	283
	8	3076					8	6148				

TABLE 11. (CONT.)

MONTH/TIME PERIOD

AUGUST 1976/NIGHT

SPECIES	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
TURRITOPSIS NUTRICOLA	4	319	180	959	421	132	5	1004	81	3053	1168	116
NEMOPSIS BACHEI	0	-	-	-	-	-	1	8	65	65	23	283
MNEMIOPSIS LEIDYI	8	11590	1545	35238	12444	107	2	196	527	1042	388	198
CLASS BIVALVIA	0	-	-	-	-	-	1	58	460	460	163	283
CLASS POLYCHAETA	0	-	-	-	-	-	1	32	258	258	91	283
FAMILY PHYLLODOCIDAE	1	22	175	175	62	283	2	197	645	930	372	189
FAMILY SYLLIDAE	2	97	299	476	186	191	3	374	602	1613	591	158
DIOPATRA	1	11	90	90	32	283	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	5	531	299	1930	648	122	5	890	645	2124	858	96
ORDER CUMACEA	0	-	-	-	-	-	1	32	258	258	91	283
CYCLASPIS VARIANS	0	-	-	-	-	-	2	129	323	708	260	202
LEUCON AMERICANUS	7	984	526	2182	651	66	8	2063	930	3200	756	37
OXYUROSTYLIS SMITHI	4	206	175	748	288	140	4	400	81	1416	560	140
BATEA CATHARINENSIS	0	-	-	-	-	-	4	481	211	1416	624	130
COROPHIUM SPP	0	-	-	-	-	-	5	809	323	2000	845	104
CERAPUS TUBULARIS	0	-	-	-	-	-	2	200	400	1203	429	214
ERICHTHONIUS SPP.	0	-	-	-	-	-	1	89	708	708	250	283
JASSA FALCATA	0	-	-	-	-	-	7	9243	4400	17168	5870	64
LYSIANOPSIS ALBA	0	-	-	-	-	-	4	283	226	930	366	129
ELASMOPUS LEVIS	0	-	-	-	-	-	6	541	150	1379	483	89
MONOCULODES EDWARDSI	0	-	-	-	-	-	2	146	460	708	278	191
MICROPROTOPUS RANEYI	0	-	-	-	-	-	1	116	930	930	329	283
FAMILY STENOHOIDEAE	0	-	-	-	-	-	4	600	708	1613	706	118
ORDER CAPRELLIDAE	7	660	175	1495	487	74	8	1547	800	2791	711	46
UNIDENTIFIED MYSIDS	7	16945	12381	31096	10386	61	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	7	3100	602	6452	2470	80
NEOMYSIS AMERICANA	0	-	-	-	-	-	8	40666	17806	82421	19781	49
ORDER DECAPODA	0	-	-	-	-	-	1	11	89	89	31	283
PALAEOMNETES SPP	7	481	187	1091	335	70	7	490	100	1860	608	124
CRANGON SEPTENSPINOSA	4	469	450	1818	646	138	4	461	443	1290	546	118
LEPTOSYNAPTA SPP	1	60	476	476	168	283	1	11	89	89	31	283
INVERTEBRATE	1	17	137	137	48	283	1	8	65	65	23	283
FAMILY LILJEBORGIIDAE	0	-	-	-	-	-	1	50	403	403	142	283
LITRIELLA BARNARDI	0	-	-	-	-	-	2	208	460	1203	433	208
GLYCERA CAPITATA	1	19	149	149	53	283	0	-	-	-	-	-
STAUONEREIS RUDOLPHI	0	-	-	-	-	-	1	8	65	65	23	283
LIRONCA OVALIS	1	23	187	187	66	283	1	8	65	65	23	283
IDOTEA BALTICA	2	81	175	476	171	210	2	129	323	708	260	202
EDOTEA TRILOBA	4	272	351	748	311	114	7	1030	400	2124	706	69
UNIDENTIFIED AMPHIPODA	8	2523	175	5476	1816	72	2	197	645	930	372	189
AMPELISCA SPP.	0	-	-	-	-	-	8	1454	602	2124	509	35
	8	35309					8	67269				

TABLE 11. (CONT.)

MONTH/TIME PERIOD	AUGUST 1976/NIGHT (CONT.)											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	1	32	258	258	91	283
SUBPHYLUM PYCNOGONIDA	1	22	175	175	62	283	0	-	-	-	-	-
LEUCON AMERICANUS	1	23	180	180	64	283	1	81	645	645	228	283
BATEA CATHARINENSIS	0	-	-	-	-	-	1	11	89	89	31	283
JASSA FALCATA	0	-	-	-	-	-	6	1246	105	4211	1696	136
ORDER CAPRELLIDEA	0	-	-	-	-	-	1	105	842	842	298	283
UNIDENTIFIED MYSIDS	4	125	175	360	145	116	1	65	516	516	182	283
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	1	75	602	602	213	283
NEOMYSIS AMERICANA	0	-	-	-	-	-	7	1328	323	2481	935	70
UNIDENTIFIED AMPHIPODA	1	44	351	351	124	283	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	1	24	194	194	69	283
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	1	22	175	175	62	283	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
PALAEMONETES SPP	4	1327	548	8571	2948	222	4	658	516	2526	904	137
HIPPOLYTE SPP.	3	162	180	748	271	168	1	75	602	602	213	283
CHANGON SEPTESPINOSA	4	396	180	1194	519	131	1	116	930	930	329	283
UPOGEBIA AFFINIS	1	23	180	180	64	283	0	-	-	-	-	-
PAGURUS SP	1	22	175	175	62	283	1	116	930	930	329	283
LIBINIA SPP.	1	37	299	299	106	283	1	116	930	930	329	283
FAMILY XANTHIDAE	6	8902	1644	23810	8264	93	1	827	6617	6617	2339	283
PANOPEUS HERBSTII	0	-	-	-	-	-	3	663	920	2526	1012	153
NEOPANOPE TEXANA	0	-	-	-	-	-	8	10102	6452	12632	1951	19
RHITHROPOPEUS HARRISI	0	-	-	-	-	-	3	261	323	920	399	153
INFRAORDER BRACHYURA	2	583	175	4486	1578	271	1	81	645	645	228	283
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	1	23	180	180	64	283	2	149	258	930	328	221
INFRAORDER BRACHYURA	1	94	748	748	264	283	2	209	258	1416	496	237
LIFE STAGE: EPITOKES												
NEREIS SPP	3	93	91	476	168	180	4	41	65	105	45	110
	8	11895					8	16381				

\* Collections were taken at the dilution pump intake (Loc. 12) and discharge (13) in January and February.

Table 12. Mean day and night densities (n/m<sup>1000</sup>) of abundant<sup>a</sup>, important, and total macrozooplankton collected at the condenser intake and discharge from September through December 1975 and March through August 1976 and at the dilution intake and discharge in January and February 1976.

CONDENSER INTAKE					
	DAY			NIGHT	
	Density (n/1000m <sup>3</sup> )	Percent		Density (n/1000m <sup>3</sup> )	Percent
Mysids	8905	31.41	Mysids	30348	31.62
Xanthidae zoeae	5884	20.58	Xanthidae zoeae	25459	26.03
Crangon septemspinosus zoeae	5260	18.37	Crangon septemspinosus zoeae	17932	18.32
Sagitta spp.	1455	5.07	Amphipods	7677	8.37
Mnemiopsis leidyi	1019	3.56	Palaeomonetes spp. zoeae	1848	1.89
Amphipods	1077	3.76	Leucon americanus	1896	1.93
Polychaete larvae	833	2.91	Mnemiopsis leidyi	1465	1.50
Sarsia spp.	701	2.45	Polychaete larvae	1464	1.50
Brachyuran zoeae	529	1.85	Oxyurostylis smithi	1227	1.25
Caprellids	311	1.09	Sagitta spp.	1182	1.21
Palaeomonetes spp. zoeae	189	0.66	Mysids (gravid)	430	0.44
Mysids (gravid)	183	0.64	Callinectes sapidus megalopae	295	0.50
Callinectes sapidus zoeae	79	0.28	Crangon septemspinosus	235	0.24
Callinectes sapidus megalopae	49	0.17	Nereis spp. epitokes	154	0.16
Crangon septemspinosus	48	0.17	Palaeomonetes spp.	84	0.09
Boreo spp.	41	0.14	Boreo spp.	46	0.05
Palaeomonetes spp.	6	0.02	Callinectes sapidus zoeae	25	0.03
Nereis spp. epitokes	2	0.01	Callinectes sapidus juveniles	24	0.02
			Callinectes septemspinosus gravid	8	0.01
Total Macrozooplankton	28636	100.00	Total Macrozooplankton	97869	100.00

CONDENSER DISCHARGE					
	DAY			NIGHT	
	Density (n/1000m <sup>3</sup> )	Percent		Density (n/1000m <sup>3</sup> )	Percent
Neomysis americana	5666	13.46	Neomysis americana	24126	32.04
Crangon septemspinosus zoeae	4655	15.99	Neopanope texana zoeae	14037	18.64
Neopanope texana zoeae	3775	12.97	Crangon septemspinosus zoeae	6913	9.18
Jassa falcata	3452	11.99	Amphipoda spp.	3674	5.14
Sagitta elegans	1454	4.99	Jassa falcata	3413	4.63
Other Amphipods <sup>b</sup>	1352	4.64	Other Amphipods <sup>b</sup>	2748	3.65
Corophium spp.	1241	4.26	Microdeutopus gryllotalpa	2080	2.76
Caprellids	958	3.29	Leucon americanus	1958	2.60
Sarsia spp.	794	2.73	Oxyurostylis smithi	1655	2.20
Microdeutopus gryllotalpa	558	1.92	Mysidopsis bigelowi	1405	1.95
Cerithiaria larvae	376	1.29	Caprellids	1209	1.61
Polychaete larvae	349	1.20	Corophium spp.	1042	1.38
Edotea villosa	343	1.18	Sagitta elegans	970	1.29
Mysidopsis bigelowi	226	0.78	Panopeus herbstii zoeae	818	1.09
Neomysis americana gravid	193	0.66	Palaeomonetes spp. zoeae	735	0.98
Palaeomonetes spp. zoeae	160	0.55	Neomysis americana gravid	609	0.76
Mnemiopsis leidyi	70	0.24	Crangon septemspinosus	210	0.28
Crangon septemspinosus	34	0.12	Mnemiopsis leidyi	178	0.24
Palaeomonetes spp.	27	0.09	Callinectes sapidus megalopae	142	0.19
Callinectes sapidus zoeae	25	0.09	Palaeomonetes spp.	96	0.13
Callinectes sapidus megalopae	12	0.04	Callinectes sapidus megalopae	85	0.11
Boreo spp.	9	0.03	Nereis spp. epitokes	71	0.09
Nereis spp. epitokes	4	0.01	Callinectes sapidus juveniles	16	0.02
Callinectes sapidus juveniles	3	0.01	Boreo spp.	11	0.01
Callinectes septemspinosus gravid	< 1	< 0.01	Mysidopsis bigelowi gravid	10	0.01
Palaeomonetes spp. gravid	< 1	< 0.01	Crangon septemspinosus gravid	4	0.01
			Palaeomonetes spp. gravid	< 1	< 0.01
Total Macrozooplankton	29115	100.00	Total Macrozooplankton	75297	100.00

<sup>a</sup> Those forms constituting more than 1% of the assemblage.

<sup>b</sup> Those species with a percent less than one added together.

Table 12. (cont.)

DILUTION INTAKE					
	DAY			NIGHT	
	Density (n/1000m <sup>3</sup> )	Percent		Density (n/1000m <sup>3</sup> )	Percent
Ceriantharia larvae	23658	44.8	Mysids	25897	51.8
Sagitta elegans	18519	35.1	Sagitta elegans	12645	25.3
Polychaete larvae	6499	12.3	Polychaete larvae	4478	9.0
Mysids	2882	5.5	Amphipods	861	1.7
			Palaemonetes spp.	52	0.1
			Crangon septemspinosa	462	0.9
Total Macrozooplankton	52838	100.0	Total Macrozooplankton	50022	100.0

DILUTION DISCHARGE					
	DAY			NIGHT	
	Density (n/1000m <sup>3</sup> )	Percent		Density (n/1000m <sup>3</sup> )	Percent
Sagitta elegans	21916	82.3	Mysids	25598	66.5
Mysids	1654	6.2	Sagitta elegans	8824	22.9
Polychaete larvae	1427	5.4	Polychaete larvae	842	2.2
Amphipods	835	3.1	C. septemspinosa	661	1.7
Ceriantharia larvae	262	1.0	Amphipods	362	1.0
Palaemonetes spp.	2	0.1	Palaemonetes spp.	51	0.1
Crangon septemspinosa	7	0.1			
Total Macrozooplankton	26618	100.0	Total Macrozooplankton	38482	100.0

<sup>a</sup> Those forms constituting more than 1% of the assemblage.



Table 13 . Monthly mean densities (n/1000m<sup>3</sup>) of abundant and important macrozooplankton from day and night collections at either the condenser intake (I) or discharge (D) from September 1975 through August 1976.<sup>a</sup>

	Station	September	October	November	December	January	February	March	April	May	June	July	August
<i>Sarsia</i> spp.	I	-	-	-	-	-	391	8158	2243	81	-	-	-
<i>Mnemiopsis leidyi</i>	I	2879	873	-	-	-	-	-	-	9	44	75	1443
<i>Beroe</i> spp.	I	1	692	26	15	-	-	-	-	-	-	-	55
<i>Leucon americanus</i>	D	105	275	163	211	13	90	420	243	424	7734	5120	1247
<i>Oxyurostylis smidli</i>	D	1264	202	103	176	9	21	396	902	1575	6605	2175	302
<i>Ampellicca</i> spp.	D	1107	285	301	328	8	324	2599	5802	7643	8211	5851	918
<i>Jassa falcata</i>	D	18	92	124	151	835	135	18	150	111	3760	9399	13253
<i>Microdeutopus gryllotalpa</i>	D	61	69	162	343	2	171	190	980	12353	2558	1193	132
<i>Corophium</i> spp.	D	13	7	114	739	54	33	-	33	2279	3402	1560	745
Other Amphipoda	D	453	314	447	683	244	336	858	1054	2139	6518	9246	3614
<i>Neomysis americana</i>	D	7944	12558	17876	28419	7310	24180	68096	8291	5860	35775	20704	39988
<i>N. americana</i> gravid	D	176	235	111	-	22	-	1984	140	77	565	664	1487
<i>Myadopsis bigelowi</i>	D	2970	3125	2339	1153	980	264	271	26	1	291	2416	2623
<i>M. bigelowi</i> gravid	D	37	6	13	-	-	-	-	-	-	-	7	28
<i>Palaeomonetes</i> spp.	D	42	4	57	173	23	45	102	86	75	7	82	310
<i>Palaeomonetes</i> spp. gravid	D	-	-	-	-	-	-	-	-	4	9	-	-
<i>Orangon septemspinosa</i>	D	36	-	-	427	269	579	587	108	122	115	168	539
<i>C. septemspinosa</i> gravid	D	-	-	-	2	12	-	9	21	46	10	4	-
<i>Callinectes sapidus</i> juveniles	D	7	-	-	4	-	-	-	30	56	-	-	-
<i>Sagitta elegans</i>	D	-	-	14	254	8079	15835	11288	97	-	-	-	-
Polychaete larvae	I	7	-	14	5101	2336	7360	3663	4188	2099	218	470	270
Ceriantharia larvae	I	-	-	-	-	6	20918	4439	8	-	-	-	-
<i>Palaeomonetes</i> spp. zoae	I	165	-	-	-	-	-	-	-	900	5172	6650	1205
<i>C. septemspinosa</i> zoae	I	2	249	120	1379	124	629	3928	29478	82501	27016	886	165
Xanthidae zoae	I	962	-	-	-	-	-	-	18	34121	87738	61132	11156
<i>C. sapidus</i> zoae	I	10	-	-	-	-	-	-	-	-	666	-	-
<i>C. sapidus</i> megalopae	D	1046	127	6	3	-	-	-	-	-	-	-	66
<i>Nereis</i> spp. epitokes	D	15	-	-	-	-	-	-	63	119	146	161	72

<sup>a</sup> Dilution pump intake and discharge sampled in January and February.

Table 14. Monthly mean densities (n/1000m<sup>3</sup>) of macrozooplankton by life stage collected during the day and night at the condenser intake and discharge<sup>a</sup> from September 1975 through August 1976. -

Life Stage		Month											
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
No Determination: <sup>b</sup>	Intake	16086	13043	16335	27390	15667	49257	205650	19059	27131	75469	49848	39843
	Discharge	17481	18032	22263	34303	18061	42721	93393	20677	36841	82877	68792	70566
Gravid:	Intake	414	173	21	-	16	12	3547	265	366	828	1367	467
	Discharge	373	291	168	-	33	-	2605	544	721	1978	2419	3217
Larval: <sup>c</sup>	Intake	7	-	14	5101	2642	28303	8102	4196	2099	218	488	287
	Discharge	-	-	18	1045	513	1636	3207	1087	1343	513	478	374
Zoeal:	Intake	1246	254	120	1371	136	629	3928	29494	118203	124417	69843	13033
	Discharge	1219	135	80	1013	153	518	6640	15053	47559	74236	39154	9343
Megalopal:	Intake	2114	281	6	-	-	-	-	-	-	-	29	387
	Discharge	1057	127	-	-	-	-	-	-	-	-	21	734
Epitokes:	Intake	36	-	-	-	-	-	-	179	618	198	96	101
	Discharge	15	-	-	-	-	-	-	63	119	146	161	72
Total:	Intake	19903	13751	16496	33862	18461	78201	221227	53193	148417	201130	121671	54118
	Discharge	20145	18585	22529	36361	18760	44875	105745	37424	86583	159750	111025	84306

<sup>a</sup> Collections taken at dilution intake and discharge in January and February.

<sup>b</sup> Adult and juvenile stages.

<sup>c</sup> Excluding decapod larval forms; zoeal and megalopal.

Table 15 . Estimated number of important and abundant macroplanktonic forms entrained at Oyster Creek Generating Station<sup>a</sup> from September 1975 through August 1976.

Form	Estimated Annual Entrainment <sup>a</sup>	Estimated Annual Loss <sup>b</sup>	% Lost <sup>b</sup>
Mysids	$1.5 \times 10^{10}$	$4.4 \times 10^9$	29%
Xanthidae zoeae	$1.2 \times 10^{10}$	-	-
Crangon septemspinosa zoeae	$9.9 \times 10^9$	$3.3 \times 10^9$	33%
Amphipoda	$7.8 \times 10^9$	$1.4 \times 10^9$	18%
Sagitta elegans	$3.0 \times 10^9$	-	-
Cumaceans	$1.7 \times 10^9$	-	-
Palaemonetes spp. zoeae	$8.4 \times 10^8$	-	-
Mnemiopsis leidyi	$7.0 \times 10^8$	-	-
Mysids - gravid	$3.0 \times 10^8$	$1.3 \times 10^8$	43%
Crangon septemspinosa juveniles and adults	$1.5 \times 10^8$	$4.9 \times 10^7$	33%
Nereis spp. epitokes	$8.0 \times 10^7$	$1.2 \times 10^7$	15%
Callinectes sapidus megalopae	$6.5 \times 10^7$	0	0%

<sup>a</sup> Estimate for January and February based on number entrained through dilution pump.

<sup>b</sup> Estimated loss only after passage through OCGS condensers.

Table 16. Mean densities ( $n/1000m^3$ ) of sand shrimp, mud crabs, and grass shrimp zoeae from night 24-hour entrainment collections at the condenser intake and discharge. Data are presented in sequence of collection.<sup>a</sup>

	STATION					
	<u>Discharge</u>	<u>Intake</u>	<u>Discharge</u>	<u>Intake</u>	<u>Discharge</u>	
Sand shrimp zoeae						
5 April	4668	6235	16146	20629	X	
19	23361	92390	35938	12117	X	
3 May	12631	25753	12741	9345	X	
17	10840	387052	28406	23097	X	
1 June	14406	51554	42491	35341	X	
14	6533	7426	X	46288	15954	
Mud crab zoeae						
3 May	-	68	94	163	X	
17	195572	285340	72811	70771	X	
1 June	24345	57010	52553	68343	X	
14	47620	33758	X	138528	82675	
6 July	51851	108870	19033	15349	X	
19	25431	47920	X	56007	20364	
2 August	10488	11905	14977	10216	X	
16	8872	12665	13077	822	X	
Grass shrimp zoeae						
1 June	477	3836	4359	5791	X	
14	817	1612	X	12796	1099	
6 July	2520	6628	5095	1240	X	
19	1067	3563	X	2393	938	
2 August	-	4286	1728	299		

<sup>a</sup> Approximate time of collection in hours after sunset; first 2 hrs., second 3 hrs., third 6 hrs., fourth 7 hrs.

Table 17. Estimates of the mean number of macrozooplankton entrained per day and per night for each month from September 1975 through August 1976.

Sample Size (Day/Night) Month		7/14 September 1975		4/8 October		4/8 November		2/8 December		4/4 January 1976		4/6 February	
		$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.	$\bar{X}$ day <sup>-1</sup>	C.L.
<i>Monomopsis lekyl</i> <sup>b</sup>	day (D)	0		0		0		0		0		0	
	night (N)	0		0		0		0		0		0	
<i>Squilla elegans</i> <sup>c</sup>	D	0		0		0		$1.98 \times 10^5$	f	$1.40 \times 10^7 \pm 3.75 \times 10^6$		$4.57 \times 10^7 \pm 3.68 \times 10^7$	
	N	0		0		0		$3.30 \times 10^5 \pm 4.64 \times 10^5$		$4.07 \times 10^6 \pm 6.18 \times 10^6$		$1.50 \times 10^7 \pm 1.41 \times 10^7$	
<i>Nereis</i> spp. <i>epitokes</i> <sup>c</sup>	D	0		0		0		0		0		0	
	N	$7.34 \times 10^4 \pm 1.26 \times 10^5$		0		0		0		0		0	
<i>Mytilus</i> <sup>c</sup>	D	$6.24 \times 10^6 \pm 8.05 \times 10^6$		$5.39 \times 10^5 \pm 2.70 \times 10^5$		$2.87 \times 10^6 \pm 4.46 \times 10^6$		$2.76 \times 10^6$	f	$2.45 \times 10^5 \pm 1.01 \times 10^5$		$4.26 \times 10^6 \pm 3.27 \times 10^6$	
	N	$1.43 \times 10^7 \pm 5.00 \times 10^6$		$2.45 \times 10^7 \pm 1.22 \times 10^7$		$2.91 \times 10^7 \pm 1.53 \times 10^7$		$3.62 \times 10^7 \pm 2.10 \times 10^7$		$2.66 \times 10^7 \pm 4.05 \times 10^7$		$4.93 \times 10^7 \pm 3.02 \times 10^7$	
<i>Mytilus</i> - <i>gravid</i> <sup>c</sup>	D	$4.48 \times 10^4 \pm 5.07 \times 10^4$		0		$3.29 \times 10^4 \pm 8.46 \times 10^4$		0		0		0	
	N	$1.73 \times 10^5 \pm 1.46 \times 10^5$		$2.76 \times 10^5 \pm 3.20 \times 10^5$		$1.40 \times 10^5 \pm 1.64 \times 10^5$				$1.60 \times 10^4 \pm 2.42 \times 10^5$			
<i>Crangon septemspinosa</i> (zoeae) <sup>b</sup>	D	0		$2.56 \times 10^5 \pm 1.77 \times 10^5$		$1.74 \times 10^5 \pm 3.48 \times 10^5$		$1.20 \times 10^6 \pm 7.93 \times 10^5$		$6.98 \times 10^4 \pm 8.41 \times 10^4$		$1.61 \times 10^6 \pm 4.79 \times 10^5$	
	N	$3.76 \times 10^3 \pm 1.30 \times 10^4$		$1.62 \times 10^5 \pm 3.03 \times 10^5$		$8.94 \times 10^4 \pm 1.08 \times 10^5$		$1.67 \times 10^6 \pm 1.29 \times 10^6$		$3.38 \times 10^5 \pm 3.96 \times 10^5$		$4.74 \times 10^6 \pm 5.97 \times 10^5$	
<i>C. septemspinosa</i> (adults & juveniles) <sup>c</sup>	D	0		0		0		0		$1.98 \times 10^5 \pm 2.89 \times 10^4$		0	
	N	$6.77 \times 10^4 \pm 1.29 \times 10^5$		0		0		$4.36 \times 10^5 \pm 3.38 \times 10^5$		$7.19 \times 10^5 \pm 5.56 \times 10^5$		$8.92 \times 10^5 \pm 7.08 \times 10^5$	
<i>Palaeomonetes</i> spp. (zoeae) <sup>b</sup>	D	$6.96 \times 10^4 \pm 1.70 \times 10^5$		0		0		0		0		0	
	N	$1.46 \times 10^5 \pm 2.37 \times 10^5$		0		0		0		0		0	
<i>Bay shrimp</i> (adults & juveniles) <sup>c</sup>	D	$1.85 \times 10^4 \pm 2.46 \times 10^4$		$7.29 \times 10^3 \pm 1.87 \times 10^4$		$2.94 \times 10^4 \pm 5.30 \times 10^4$		$1.65 \times 10^4$	f	$6.47 \times 10^3 \pm 2.06 \times 10^4$		0	
	N	$7.38 \times 10^4 \pm 5.27 \times 10^4$		0		$8.11 \times 10^4 \pm 1.30 \times 10^5$		$1.76 \times 10^5 \pm 1.55 \times 10^5$		$5.01 \times 10^4 \pm 1.12 \times 10^5$		$8.43 \times 10^4 \pm 8.59 \times 10^4$	
<i>Callinectes sapidus</i> (megalopae) <sup>c</sup>	D	0		0		0		0		0		0	
	N	$1.88 \times 10^6 \pm 1.43 \times 10^6$		$2.15 \times 10^5 \pm 2.44 \times 10^5$		0		0		0		0	
<i>Xanthidae</i> (zoeae) <sup>b</sup>	D	0		0		0		0		0		0	
	N	0		0		0		0		0		0	
<i>Amphipoda</i> <sup>c</sup>	D	$4.72 \times 10^5 \pm 6.07 \times 10^5$		$1.43 \times 10^5 \pm 1.19 \times 10^5$		$4.83 \times 10^5 \pm 5.30 \times 10^5$		$1.55 \times 10^6$	f	$2.18 \times 10^6$	$5.78 \times 10^5$	$1.17 \times 10^5 \pm 1.52 \times 10^5$	
	N	$2.42 \times 10^6 \pm 9.12 \times 10^5$		$8.60 \times 10^5 \pm 4.93 \times 10^5$		$1.59 \times 10^6 \pm 8.81 \times 10^5$		$2.23 \times 10^6 \pm 1.09 \times 10^6$		$1.02 \times 10^6 \pm 1.02 \times 10^6$		$1.75 \times 10^6 \pm 1.53 \times 10^6$	
<i>Cumaceans</i> <sup>c</sup>	D	$2.43 \times 10^5 \pm 3.05 \times 10^5$		0		$3.29 \times 10^4 \pm 8.46 \times 10^4$		$1.66 \times 10^4$	f	0		0	
	N	$2.42 \times 10^6 \pm 1.64 \times 10^6$		$5.04 \times 10^5 \pm 3.29 \times 10^5$		$2.89 \times 10^5 \pm 2.44 \times 10^6$		$6.50 \times 10^5 \pm 3.91 \times 10^5$		$9.13 \times 10^4 \pm 2.48 \times 10^4$		$2.23 \times 10^5 \pm 2.76 \times 10^5$	

Table 17: (cont.)

Sample Size		6/12		8/16		8/16		8/18		8/18		8/18	
Month		March		April		May		June		July		August	
		$\bar{X}$ day <sup>-1</sup>	C. L.	$\bar{X}$ day <sup>-1</sup>	C. L.	$\bar{X}$ day <sup>-1</sup>	C. L.	$\bar{X}$ day <sup>-1</sup>	C. L.	$\bar{X}$ day <sup>-1</sup>	C. L.	$\bar{X}$ day <sup>-1</sup>	C. L.
<i>Mnemiopsis leidyi</i>	D	0		$8.46 \times 10^3 \pm 2.39 \times 10^4$		$1.09 \times 10^4 \pm 3.10 \times 10^4$		$1.92 \times 10^4 \pm 3.87 \times 10^5$		$6.05 \times 10^4 \pm 3.43 \times 10^5$		$8.15 \times 10^6 \pm 5.23 \times 10^6$	
	N	0		e		e		$1.25 \times 10^5 \pm 1.68 \times 10^5$		$2.45 \times 10^6 \pm 3.67 \times 10^5$		$1.13 \times 10^7 \pm 1.38 \times 10^7$	
<i>Sagitta elegans</i>	D	$1.21 \times 10^7 \pm 2.84 \times 10^6$		$7.41 \times 10^4 \pm 8.81 \times 10^4$		0		0		0		0	
	N	$1.11 \times 10^7 \pm 4.28 \times 10^6$		$4.55 \times 10^4 \pm 8.87 \times 10^4$		0		0		0		0	
<i>Nereis</i> spp. (epitokes)	D	0		0		0		0		0		0	
	N	0		$3.92 \times 10^5 \pm 1.54 \times 10^6$		$1.35 \times 10^6 \pm 3.22 \times 10^6$		$3.95 \times 10^5 \pm 4.51 \times 10^5$		$1.85 \times 10^5 \pm 2.53 \times 10^5$		$2.12 \times 10^5 \pm 2.29 \times 10^5$	
<i>Myxids</i>	D	$3.83 \times 10^7 \pm 3.06 \times 10^7$		$8.89 \times 10^6 \pm 5.01 \times 10^5$		$1.10 \times 10^6 \pm 1.41 \times 10^6$		$4.84 \times 10^6 \pm 4.03 \times 10^6$		$4.03 \times 10^6 \pm 1.48 \times 10^6$		$3.09 \times 10^6 \pm 1.87 \times 10^6$	
	N	$7.93 \times 10^7 \pm 2.05 \times 10^7$		$1.30 \times 10^7 \pm 4.07 \times 10^6$		$8.37 \times 10^6 \pm 4.13 \times 10^6$		$4.96 \times 10^7 \pm 2.37 \times 10^7$		$3.68 \times 10^7 \pm 8.64 \times 10^6$		$7.16 \times 10^7 \pm 2.92 \times 10^7$	
<i>Myxids</i> - gravid	D	$1.61 \times 10^6 \pm 1.65 \times 10^6$		0		0		0		$1.20 \times 10^5 \pm 1.67 \times 10^5$		$6.67 \times 10^4 \pm 1.67 \times 10^5$	
	N	$2.20 \times 10^6 \pm 9.81 \times 10^5$		$2.69 \times 10^5 \pm 3.51 \times 10^8$		$1.49 \times 10^5 \pm 2.05 \times 10^5$		$9.98 \times 10^5 \pm 9.75 \times 10^5$		$1.21 \times 10^6 \pm 5.37 \times 10^5$		$2.51 \times 10^6 \pm 1.39 \times 10^6$	
<i>C. septemspinosa</i> (zoeae)	D	$4.13 \times 10^6 \pm 1.72 \times 10^6$		$2.79 \times 10^7 \pm 1.93 \times 10^7$		$7.50 \times 10^6 \pm 2.83 \times 10^6$		$1.30 \times 10^7 \pm 5.27 \times 10^6$		$2.86 \times 10^6 \pm 1.26 \times 10^6$		$1.88 \times 10^5 \pm 3.14 \times 10^5$	
	N	$4.19 \times 10^6 \pm 3.68 \times 10^6$		$4.56 \times 10^7 \pm 4.43 \times 10^7$		$1.72 \times 10^8 \pm 1.81 \times 10^8$		$3.85 \times 10^7 \pm 5.25 \times 10^7$		$3.78 \times 10^5 \pm 6.56 \times 10^5$		$1.30 \times 10^5 \pm 3.58 \times 10^5$	
<i>C. septemspinosa</i> (adults & juveniles)	D	$6.25 \times 10^5 \pm 2.92 \times 10^5$		0		0		0		0		$1.38 \times 10^4 \pm 3.90 \times 10^4$	
	N	$7.68 \times 10^5 \pm 6.81 \times 10^5$		$1.69 \times 10^5 \pm 1.54 \times 10^5$		$2.43 \times 10^5 \pm 2.14 \times 10^5$		$2.18 \times 10^5 \pm 3.39 \times 10^5$		$3.04 \times 10^5 \pm 4.03 \times 10^5$		$1.01 \times 10^6 \pm 7.50 \times 10^5$	
<i>Palaeomonetes</i> spp. (zoeae)	D	0		0		$1.53 \times 10^5 \pm 2.44 \times 10^5$		$1.10 \times 10^6 \pm 1.23 \times 10^6$		$4.65 \times 10^5 \pm 1.03 \times 10^6$		$6.95 \times 10^5 \pm 1.14 \times 10^5$	
	N	0		0		$1.60 \times 10^6 \pm 2.76 \times 10^6$		$7.69 \times 10^6 \pm 5.69 \times 10^6$		$1.32 \times 10^7 \pm 1.18 \times 10^7$		$2.41 \times 10^6 \pm 2.81 \times 10^6$	
Bay shrimp	D	$4.70 \times 10^3 \pm 1.03 \times 10^4$		$2.10 \times 10^4 \pm 3.73 \times 10^4$		$3.29 \times 10^3 \pm 7.01 \times 10^3$		$3.58 \times 10^3 \pm 7.93 \times 10^3$		0		$1.77 \times 10^5 \pm 2.45 \times 10^5$	
	N	$1.64 \times 10^5 \pm 1.38 \times 10^5$		$1.35 \times 10^5 \pm 6.71 \times 10^4$		$1.40 \times 10^5 \pm 9.88 \times 10^4$		$1.37 \times 10^4 \pm 1.23 \times 10^4$		$2.21 \times 10^5 \pm 2.75 \times 10^5$		$3.46 \times 10^5 \pm 9.22 \times 10^5$	
<i>Callinectes sapidus</i> (megalopae)	D	0		0		0		0		0		0	
	N	0		0		0		0		0		$7.38 \times 10^4 \pm 1.03 \times 10^5$	
<i>Xanthidae</i> (zoeae)	D	0		$3.68 \times 10^4 \pm 1.04 \times 10^5$		$4.71 \times 10^6 \pm 2.27 \times 10^6$		$4.22 \times 10^7 \pm 3.03 \times 10^7$		$9.85 \times 10^6 \pm 9.38 \times 10^6$		$2.55 \times 10^6 \pm 1.13 \times 10^6$	
	N	0		0		$6.13 \times 10^7 \pm 1.19 \times 10^8$		$1.35 \times 10^8 \pm 1.07 \times 10^8$		$1.14 \times 10^8 \pm 7.92 \times 10^7$		$2.06 \times 10^7 \pm 2.72 \times 10^7$	
<i>Amphipoda</i>	D	$6.51 \times 10^5 \pm 8.92 \times 10^5$		$5.42 \times 10^5 \pm 2.39 \times 10^5$		$9.30 \times 10^6 \pm 1.29 \times 10^7$		$7.32 \times 10^6 \pm 2.53 \times 10^6$		$3.02 \times 10^7 \pm 9.46 \times 10^6$		$2.35 \times 10^7 \pm 1.31 \times 10^7$	
	N	$6.00 \times 10^6 \pm 7.10 \times 10^6$		$1.38 \times 10^7 \pm 6.58 \times 10^6$		$4.29 \times 10^7 \pm 1.53 \times 10^7$		$4.22 \times 10^7 \pm 1.04 \times 10^7$		$3.88 \times 10^7 \pm 7.36 \times 10^6$		$2.49 \times 10^7 \pm 5.94 \times 10^6$	
<i>Cumaceans</i>	D	$1.68 \times 10^5 \pm 3.29 \times 10^5$		$6.34 \times 10^4 \pm 7.34 \times 10^4$		0		$5.13 \times 10^5 \pm 5.20 \times 10^5$		$1.49 \times 10^6 \pm 8.49 \times 10^5$		$4.11 \times 10^5 \pm 2.36 \times 10^5$	
	N	$1.16 \times 10^6 \pm 7.19 \times 10^5$		$2.09 \times 10^6 \pm 1.31 \times 10^6$		$4.16 \times 10^6 \pm 3.49 \times 10^6$		$2.74 \times 10^7 \pm 2.18 \times 10^7$		$1.31 \times 10^7 \pm 1.33 \times 10^7$		$2.48 \times 10^6 \pm 1.24 \times 10^6$	

a From October through February daytime collections are from one sampling date; they are from two dates in September and from March through August.

b Estimates based on collections at the condenser intake (dilution intake in January and February).

c Estimates based on collections at the condenser discharge (dilution intake in January and February).

d Form present in September but not enumerated prior to 19 September.

e Not computed.

f Not computed, only two collections.

g *Palaeomonetes* spp., *Hippolytes* spp., and *Upogebia* affinis.

Table 18. Percentages of live, dead and damaged macrozooplankton collected at the condenser intake and discharge of OCGS from April through August 1976.

Discharge Temperatures (C)	Number of Collections <sup>a</sup>	MYSIDS			Number of Collections	Condenser Discharge			Number of Organisms	ADULT AND JUVENILE SAND SHRIMP			Number of Organisms	Condenser Discharge		
		Condenser Intake				% Live	% Dead	% Damaged		Condenser Intake				% Live	% Dead	% Damaged
April																
15-19.9	6	93	5	2	9	87	5	8	8	88	12	0	14	93	7	0
20-24.9	6	99	0.5	0.5	5	98	0	2	17	100	0	0	10	100	0	0
25-29.9	4	97	1	2	5	96	4	0	1	100	0	0	5	80	20	0
30-32.4	2	100	0	0	2	97	1	2	48	100	0	0	30	7	53	40
May																
25-29.9	13	97	2	0.5	13	92	5	3	17	100	0	0	64	87.5	9.4	3.1
30-32.5	4	100	0	0	3	99	1	0	1	100	0	0	30	80	20	0
June																
25-29.9	2	99	1	0	2	100	0	0	4	100	0	0	7	88	14	0
30-32.5	7	99.9	0.1	0	9	96	3.2	0.8	4	100	0	0	7	57	43	0
32.6-34.9	3	99	1	0	5	93	6.8	0.2	6	100	0	0	3	33	67	0
> 35	10	99.5	0.5	0	10	18	82	0	31	100	0	0	22	14	86	0
July																
25-29.9	2	100	0	0	2	97.5	1.5	1	2	100	0	0	13	100	0	0
30-32.5	6	99.5	0.5	0	8	8.5	89.9	21.6	25	100	0	0	12	8	92	0
32.6-34.9	6	100	0.0	0	6	1	97.5	1.5	3	100	0	0	15	0	100	0
> 35	8	99.6	0.4	0	11	0	99.9	0.09	3	100	0	0	17	0	100	0
August																
30-32.4	7	98.4	1	0.6	11	33	65.5	1	36	97	0	3	85	42	53	4
32.5-34.9	3	95	3.7	1.3	6	16.7	83.3	0	23	96	0	1	16	100	0	0
> 35	7	98	1	1	8	0	100	0	58	100	0	0	78	42	58	0

<sup>a</sup> Only collections containing 25 or more individuals of mysids or amphipods used to compute the means. All others based on number of individuals collected.

Table 18. (cont.)

Discharge Temperatures (C)	Number of Collections	AMPHIPODS Condenser Intake			Number of Collections	Condenser Discharge			Number of Organisms	ADULT AND JUVENILE GRASS SHRIMP Condenser Intake			Number of Organisms	Condenser Discharge		
		% Live	% Dead	% Damaged		% Live	% Dead	% Damaged		% Live	% Dead	% Damaged		% Live	% Dead	% Damaged
April																
15-19.9	7	99.5	0.5	0	6	93	2	5	2	100	0	0	8	100	0	0
20-24.9	3	100	0	0	3	100	0	0	4	100	0	0	9	100	0	0
25-29.9	3	97	3	0	4	99	1	0	28	100	0	0	1	100	0	0
30-34.9	2	100	0	0	2	100	0	0	25	100	0	0	24	88	0	12
May																
25-29.9	15	99.2	0.8	0	17	99.7	0.3	0	19	100	0	0	33	97.5	2.5	0
30-34.9	10	99.9	0.1	0	10	100	0	0	3	100	0	0	25	96	4	0
June																
25-29.9	2	100	0	0	2	100	0	0	4	100	0	0	1	100	0	0
30-34.9	12	100	0.08	0	18	98.3	1.3	0	6	100	0	0	3	66	33	0
>35	10	98.5	0.8	0.7	10	62.7	37	0.7	7	100	0	0	1	0	100	0
July																
25-29.9	2	100	0	0	2	100	0	0	13	100	0	0	2	0	100	0
30-34.9	13	99.7	0.3	0	16	98.5	1.5	0	5	100	0	0	1	100	0	0
>35	8	99.9	0.1	0	12	64	36	0.2	1	100	0	0	4	0	100	0
August																
30-34.9	5	100	0	0	14	63.5	36.5	0	55	100	0	0	64	91	8	1
>35	2	92	8	2	5	26.5	73.5	0	33	100	0	0	9	22	67	10



Table 18. (cont.)

MNEMIOPSIS LEBDYI									NEREIS SPP. EPITOKES								
Discharge Temperatures (C)	Number of Organisms	Condenser Intake			Number of Collections	Condenser Discharge			Number of Organisms	Condenser Intake			Number of Organisms	Condenser Discharge			
		% Live	% Dead	% Damaged		% Live	% Dead	% Damaged		% Live	% Dead	% Damaged		% Live	% Dead	% Damaged	
April																	
15-19.9	4	50	0	50	1	0	100	0	0	-	-	-	8	100	0	0	
20-24.9	1	0	100	0	0	-	-	-	0	-	-	-	0	-	-	-	
25-29.9	1	0	0	100	0	-	-	-	0	-	-	-	0	-	-	-	
30-34.9	0	-	-	-	0	-	-	-	15	100	0	0	72	37.5	62.5	0	
May																	
25-29.9	19	53	5	42	1	100	0	0	143	99	0	1	51	67	33	4	
30-34.9	10	80	0	20	1	0	0	100	8	75	25	0	14	14	79	7	
June																	
25-29.9	1	0	0	100	0	-	-	-	2	100	0	0	2	100	0	0	
30-34.9	10	40	10	50	fragments only				47	100	0	0	19	79	0	21	
>35	18	33	0	67	fragments only				52	100	0	0	49	39	6	55	
July																	
25-29.9	149	52	0	48	21	0	100	0	2	100	0	0	0	-	-	-	
30-34.9	179	22.3	6	72	9	0	89	11	15	100	0	0	22	63.6	13.6	22.7	
>35	62	55	11	34	11	0	100	0	8	100	0	0	27	67	15	18	
August																	
30-34.9	839	35	15	50	163	0	97	13	5	100	0	0	5	80	20	0	
>35	759	55	0.3	45	14	0	100	0	18	100	0	0	15	60	13.4	26.6	

Table 18 . (cont.)

BEROE SPP.								
Discharge	Number of	Condenser Intake			Number of	Condenser Discharge		
Temperatures (C)	Organisms	% Live	% Dead	% Damaged	Organisms	% Live	% Dead	% Damaged
August								
30-34.9	4	100	0	0	0	0	0	0
> 35	11	91	9	0	1	0	100	0
CALLINECTES SAPIDUS MEGALOPAE								
August								
30-34.9	30	100	0	0	14	100	0	0
> 35	19	100	0	0	0	0	0	0

Table 19. Mean monthly water temperature in the OCGS condenser intake and the condenser discharge and the difference between these temperatures ( $\Delta t$ ) from September 1975 through August 1976.

	No. of Observations	Mean temp. Condenser Intake (C)	Mean temp. Condenser Discharge (C)	$\Delta t$
September 1975	30	20.1	28.9	8.8
October	31	16.4	22.8	6.4
November	30	11.8	21.4	9.6
December	31	4.4	13.7	9.3
January 1976 <sup>a</sup>	31	0.6	1.2	0.6
February <sup>a</sup>	29	4.1	4.4	0.3
March	31	8.9	13.8	4.9
April	30	14.3	22.5	8.2
May	31	20.0	28.7	8.7
June	30	25.8	35.4	9.6
July	31	26.7	34.4	7.7
August	31	26.6	36.3	9.7

a. OCGS not in operation; only dilution pumps operating.

TABLE 20 . MEAN DENSITIES (n/m<sup>3</sup>) AND BIOMASS (mg/m<sup>3</sup>) OF ICHTHYOPLANKTON BY YEAR COLLECTED AT THE OYSTER CREEK GENERATING STATION.

LOCATION <sup>a</sup>	7	11	12	13				
TEMPERATURE: AIR	0.0 - 33.0	-1.5 - 35.0	-3.0 - 28.0	-7.0 - 26.0				
SURFACE	3.0 - 29.0	4.5 - 38.0	0.4 - 23.0	-0.2 - 24.0				
BOTTOM	5.0 - 28.1	7.0 - 36.0	0.0 - 23.0	-0.2 - 24.0				
SALINITY: SURFACE	16.5 - 29.0	17.0 - 29.0	16.0 - 24.5	16.0 - 24.5				
BOTTOM	17.0 - 29.0	17.0 - 29.0	17.0 - 25.0	16.5 - 25.0				
OXYGEN: SURFACE	5.2 - 13.5	4.8 - 13.0	6.4 - 13.0	6.0 - 14.0				
BOTTOM	5.2 - 13.4	5.6 - 13.4	6.6 - 14.0	7.2 - 13.0				
PH: SURFACE	7.2 - 8.4	7.0 - 8.4	7.7 - 8.3	7.7 - 8.4				
BOTTOM	6.9 - 8.4	7.0 - 8.4	7.8 - 8.3	7.8 - 8.3				
-----								
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES								
ANGUILLA ROSTRATA	0.000	-	0.000	-	0.000	-	0.000	0.2
ALOSA AESTIVALIS	-	-	0.000	-	-	-	-	-
CLUPEA HARENGUS	0.000	-	-	-	-	-	-	-
OPSANUS TAU	-	-	0.000	-	-	-	-	-
APELTES QUADRACUS	-	-	0.000	-	-	-	-	-
HIPPICAMPUS ERECTUS	-	-	0.000	-	-	-	0.001	-
SYNGNATHUS FUSCUS	0.133	0.1	0.088	0.1	0.008	0.0	0.005	0.0
CYNOSCION REGALIS	-	-	0.000	-	-	-	-	-
MICROPOGON UNDULATUS	-	-	0.000	-	-	-	-	-
GUBIOSOMA SP.	-	-	0.000	-	-	-	-	-
GUBIOSOMA BOSCI	-	-	0.001	0.1	-	-	-	-
GUBIOSOMA GINSBURGI	0.002	-	0.003	-	-	-	-	-
PARALICHTHYS DENTATUS	-	-	0.000	-	-	-	-	-
-----								
LARVAE								
ANGUILLA ROSTRATA	0.015	-	0.074	-	0.007	-	0.035	-
BREVOORTIA TYRANNUS	0.002	0.1	0.002	0.1	0.002	0.0	0.006	0.3
CLUPEA HARENGUS	0.001	-	0.001	-	-	-	0.004	-
ANCHOA MITCHILLI	2.596	26.8	1.786	19.6	0.169	6.2	0.366	25.7
SYNGNATHUS FUSCUS	0.001	-	-	-	-	-	-	-
ENCHELYOPUS CIMBRIUS	-	-	0.000	-	-	-	-	-
POLLACHIUS VIRENS	-	-	0.021	-	-	-	-	-
STROMGYLURA MARINA	0.000	-	-	-	-	-	-	-
FAMILY ATHERINIDAE	0.023	0.0	0.028	0.0	0.001	0.0	0.005	0.1
APELTES QUADRACUS	0.000	-	0.004	-	-	-	-	-
FAMILY GASTEROSTIIDAE	0.002	-	-	-	-	-	-	-
CYNOSCION REGALIS	0.001	-	0.008	-	-	-	-	-
MICROPOGON UNDULATUS	-	-	-	-	0.001	-	-	-
ASTROSCOPUS CUTTATUS	0.000	-	-	-	-	-	-	-
FAMILY BLENNIIDAE	0.017	-	0.019	-	0.011	-	0.007	0.0
AMMODYTES SP.	0.023	-	0.049	-	0.372	-	0.418	-
FAMILY GOBIIDAE	1.184	0.0	0.993	0.0	0.055	0.0	0.046	0.1
MYOXOCEPHALUS SP.	-	-	0.001	-	-	-	-	-
PARALICHTHYS DENTATUS	-	-	-	-	0.001	-	-	-
ESLOCHEURINECTES AMERICANUS	0.138	0.0	0.227	0.0	0.100	0.0	0.201	0.0
TRINECTES MACULATUS	-	-	0.000	-	-	-	-	-
SPHOEROCIDES MACULATUS	0.010	-	0.001	-	-	-	-	-
UNIDENTIFIED FISH	0.012	-	0.000	-	-	-	0.000	-
-----								
EGGS								
BREVOORTIA TYRANNUS	-	-	0.001	-	-	-	-	-
ANCHOA MITCHILLI	42.403	-	23.700	-	-	-	-	-
ENCHELYOPUS CIMBRIUS	0.001	-	0.001	-	-	-	-	-
HEMIGLIA MENIDIA	-	-	0.002	-	-	-	-	-
TAUTOGA ONITIS	0.337	-	0.118	-	-	-	-	-
TAUTOGOLABRUS ADSPERSUS	0.176	-	0.111	-	-	-	-	-
PETRIUS TRIACANTHUS	0.000	-	-	-	-	-	-	-
SCOPHTHALMUS AQUOSUS	-	-	0.006	-	-	-	-	-
TRINECTES MACULATUS	0.050	-	0.052	-	-	-	-	-
UNIDENTIFIED FISH	0.047	-	0.230	-	0.001	-	0.001	-
-----								
TOTAL LARVAE & JUVENILES	4.161	27.1	3.239	19.9	0.726	6.3	1.095	26.5
TOTAL EGGS	43.014	0.0	24.221	0.0	0.001	0.0	0.001	0.0
TOTAL COLLECTIONS	230		238		90		96	

<sup>a</sup> see figure 2

TABLE 21. MONTHLY MEAN DENSITIES ( $n/m^3$ ) AND BIOMASS ( $mg/m^3$ ) OF ICHTHYOPLANKTON COLLECTED AT OCGS FROM SEPTEMBER 1975 THROUGH AUGUST 1976.

MONTH

SEPTEMBER 1975

LOCATION <sup>a</sup>	7	11	12	13
TEMPERATURE: AIR	11.0 - 25.0	11.8 - 26.0	11.7 - 28.0	11.0 - 26.0
SURFACE	18.0 - 23.0	19.2 - 34.5	17.0 - 23.0	18.0 - 24.0
BOTTOM	18.3 - 22.0	19.3 - 34.5	18.5 - 23.0	18.3 - 24.0
SALINITY: SURFACE	17.5 - 25.0	18.5 - 25.0	17.0 - 24.5	16.0 - 24.5
BOTTOM	18.0 - 25.0	18.5 - 25.0	17.0 - 25.0	16.5 - 25.0
OXYGEN: SURFACE	6.0 - 13.5	5.8 - 12.9	6.4 - 12.2	6.0 - 12.4
BOTTOM	6.6 - 13.4	5.6 - 13.4	6.6 - 12.0	7.2 - 12.6
PH: SURFACE	7.7 - 8.2	7.8 - 8.2	7.8 - 8.2	7.8 - 8.3
BOTTOM	7.8 - 8.2	7.6 - 8.2	7.9 - 8.2	7.8 - 8.3
	DENSITY BIOMASS	DENSITY BIOMASS	DENSITY BIOMASS	DENSITY BIOMASS
JUVENILES				
HIPPOCAMPUS ERECTUS	-	-	0.001	-
SYNGNATHUS FUSCUS	0.025	0.0	0.018	0.0
GOBIOSOMA GINSBURGI	-	-	0.001	-
LARVAE				
ANCHOA MITCHILLI	1.890	60.2	1.100	24.4
FAMILY ATHERINIDAE	0.015	-	0.002	0.0
FAMILY BLENNIIDAE	0.046	-	0.020	-
FAMILY GOBIIDAE	0.441	0.1	0.249	0.2
UNIDENTIFIED FISH	0.014	-	0.001	-
EGGS				
UNIDENTIFIED FISH	-	-	0.004	-
TOTAL LARVAE & JUVENILES	2.430	60.4	1.391	24.7
TOTAL EGGS	0.000	0.0	0.004	0.0
TOTAL COLLECTIONS	28		28	
			30	
				30

TABLE 21. (CONT.)

MONTH		OCTOBER 1975							
LOCATION		7		11		12		13	
TEMPERATURE:	AIR	15.0 - 23.0		-1.0 - 22.0		11.0 - 24.0		13.0 - 22.0	
	SURFACE	16.9 - 18.7		20.5 - 24.0		17.0 - 18.4		16.8 - 18.4	
	BOTTOM	17.0 - 18.5		22.5 - 24.2		17.0 - 18.4		17.0 - 18.8	
SALINITY:	SURFACE	17.2 - 21.0		17.2 - 21.0		17.2 - 21.0		17.2 - 21.0	
	BOTTOM	17.2 - 21.0		17.2 - 21.0		17.2 - 21.0		17.2 - 21.0	
OXYGEN:	SURFACE	7.6 - 9.9		7.3 - 9.5		7.9 - 9.6		7.9 - 9.6	
	BOTTOM	7.4 - 9.7		7.8 - 9.4		7.8 - 9.6		7.9 - 9.7	
PH:	SURFACE	7.8 - 8.3		7.8 - 8.2		7.8 - 8.2		7.8 - 8.2	
	BOTTOM	7.8 - 8.3		7.8 - 8.3		7.8 - 8.2		7.8 - 8.2	
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES									
ANGUILLA ROSTRATA		-	-	-	-	-	-	0.002	1.9
SYNGNATHUS FUSCUS		0.006	0.0	0.002	0.0	-	-	-	-
GOBIOSOMA BOSCI		-	-	0.003	1.1	-	-	-	-
LARVAE									
BREVOORTIA TYRANNUS		0.003	0.1	0.004	0.0	0.006	0.1	0.007	0.2
ANCHOA MITCHILLI		0.248	21.3	0.076	3.4	0.055	8.1	0.216	40.7
FAMILY BLENNIIDAE		-	-	-	-	0.006	-	0.013	-
FAMILY GOBIIDAE		0.011	0.0	0.006	0.0	0.006	0.0	-	-
TOTAL LARVAE & JUVENILES		0.267	21.4	0.090	4.5	0.073	8.2	0.238	42.8
TOTAL EGGS		0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS			12		14		12		12

TABLE 21 . (CONT.)

MONTH

NOVEMBER 1975

LOCATION		7		11		12		13	
TEMPERATURE:	AIR	4.0	9.9	5.0	12.5	5.5	14.0	5.0	12.0
	SURFACE	8.2	17.5	14.0	27.5	12.5	17.0	13.5	17.2
	BOTTOM	8.0	14.5	-	-	12.5	14.5	15.1	17.2
SALINITY:	SURFACE	16.5	20.0	17.0	20.5	20.0	20.5	20.0	20.5
	BOTTOM	17.0	20.0	17.0	17.0	20.0	20.5	20.0	20.0
OXYGEN:	SURFACE	8.3	10.2	8.1	10.2	8.4	10.0	8.6	9.4
	BOTTOM	8.5	10.0	-	-	8.5	8.6	8.3	9.4
PH:	SURFACE	7.2	8.1	7.0	8.1	7.9	8.1	7.7	8.1
	BOTTOM	6.9	8.0	7.0	7.1	7.8	8.1	7.8	8.0
-----									
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES									
MICROPOGON UNDULATUS		-	-	0.004	-	-	-	-	-
LARVAE									
BREVOORTIA TYRANNUS		0.002	0.1	0.014	0.3	0.007	0.1	0.027	0.7
ANCHOA MITCHILLI		0.029	3.7	0.023	1.4	0.038	1.9	0.096	26.4
-----									
TOTAL LARVAE & JUVENILES		0.031	3.8	0.041	1.7	0.045	2.0	0.123	27.1
TOTAL EGGS		0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS		12		14		10		10	

TABLE 21. (CONT.)

MONTH

DECEMBER 1975

LOCATION		7		11		12		13	
TEMPERATURE:	AIR	0.5	- 6.0	0.5	- 16.0	0.0	- 7.0	0.0	- 7.0
	SURFACE	4.5	- 8.2	12.0	- 22.5	5.0	- 8.3	4.7	- 8.5
	BOTTOM	-	-	18.0	- 23.0	-	-	6.5	- 8.5
SALINITY:	SURFACE	21.0	- 24.0	20.5	- 24.0	21.0	- 24.0	21.5	- 24.0
	BOTTOM	-	-	22.0	- 22.0	-	-	21.5	- 22.0
OXYGEN:	SURFACE	9.3	- 11.8	8.6	- 11.4	9.2	- 11.4	9.7	- 11.6
	BOTTOM	-	-	8.6	- 10.8	-	-	9.7	- 10.8
PH:	SURFACE	7.9	- 8.3	8.0	- 8.4	7.7	- 8.3	7.7	- 8.4
	BOTTOM	-	-	8.1	- 8.4	-	-	8.2	- 8.3
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES									
ANGUILLA ROSTRATA		-	-	-	-	0.003	-	-	-
GOBIOSOMA GINSBURGI		-	-	0.004	-	-	-	-	-
PARALICHTHYS DENTATUS		-	-	0.008	-	-	-	-	-
LARVAE									
BREVOORTIA TYRANNUS		0.021	1.6	0.011	0.8	-	-	0.019	1.5
ANCHOA MITCHILLI		0.009	-	0.003	0.1	0.005	0.3	0.023	0.8
MICROPOGON UNDULATUS		-	-	-	-	0.005	-	-	-
PARALICHTHYS DENTATUS		-	-	-	-	0.005	-	-	-
TOTAL LARVAE & JUVENILES		0.030	1.6	0.026	0.9	0.017	0.3	0.042	2.3
TOTAL EGGS		0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS		12		14		12		12	



TABLE 21 . (CONT.)

MONTH

JANUARY 1976

LOCATION		12		13	
TEMPERATURE:	AIR	-3.0	- 14.0	-7.0	- 13.0
	SURFACE	0.4	- 4.0	-0.2	- 3.5
	BOTTOM	0.0	- 2.2	-0.2	- 3.5
SALINITY:	SURFACE	16.0	- 19.5	18.0	- 19.0
	BOTTOM	18.5	- 20.0	18.0	- 19.0
OXYGEN:	SURFACE	10.5	- 12.8	10.6	- 12.6
	BOTTOM	11.1	- 12.6	10.2	- 13.0
PH:	SURFACE	7.9	- 8.2	7.9	- 8.2
	BOTTOM	7.9	- 8.0	7.9	- 8.2
		DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE					
ANGUILLA ROSTRATA		0.008	-	0.007	-
AMMODYTES SP.		1.853	-	1.933	-
EGGS					
UNIDENTIFIED FISH		0.004	-	-	-
TOTAL LARVAE & JUVENILES		1.861	0.0	1.939	0.0
TOTAL EGGS		0.004	0.0	0.000	0.0
TOTAL COLLECTIONS		10		10	

TABLE 21. (CONT.)

MONTH

FEBRUARY 1976

LOCATION		12		13	
TEMPERATURE:	AIR	4.0 -	9.5	3.0 -	8.5
	SURFACE	0.5 -	6.5	1.5 -	6.5
	BOTTOM	0.5 -	6.5	1.6 -	6.5
SALINITY:	SURFACE	18.0 -	22.0	18.0 -	22.5
	BOTTOM	18.0 -	20.0	18.0 -	21.0
OXYGEN:	SURFACE	9.4 -	13.0	9.6 -	14.0
	BOTTOM	11.6 -	14.0	9.6 -	10.4
PH:	SURFACE	7.9 -	8.3	7.9 -	8.3
	BOTTOM	7.9 -	8.3	7.9 -	8.2
		DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE					
ANGUILLA ROSTRATA		-	-	0.097	-
CLUPEA HARENGUS		-	-	0.003	-
AMMODYTES SP.		1.003	-	0.984	-
PSEUDOPLEURONECTES AMERICANUS		0.298	0.0	0.143	0.1
EGGS					
UNIDENTIFIED FISH		-	-	0.006	-
TOTAL LARVAE & JUVENILES		1.301	0.0	1.227	0.1
TOTAL EGGS		0.000	0.0	0.006	0.0
TOTAL COLLECTIONS		12		16	

TABLE 21. (CONT.)

MONTH

MARCH 1976

LOCATION		7		11		12		13	
TEMPERATURE:	AIR	0.0 - 12.0		-1.5 - 18.5		-3.0 - 10.0		-4.0 - 9.0	
	SURFACE	3.0 - 11.5		4.5 - 19.5		5.0 - 11.0		4.0 - 11.0	
	BOTTOM	5.0 - 11.5		7.0 - 19.5		10.9 - 10.9		11.0 - 11.0	
SALINITY:	SURFACE	18.0 - 23.0		18.5 - 23.0		20.0 - 20.0		20.0 - 22.0	
	BOTTOM	19.0 - 23.0		20.0 - 23.0		20.0 - 20.0		20.0 - 20.0	
OXYGEN:	SURFACE	9.6 - 12.9		8.1 - 13.0		10.1 - 10.4		10.0 - 12.0	
	BOTTOM	9.8 - 11.0		9.9 - 11.6		10.2 - 10.2		10.3 - 10.3	
PH:	SURFACE	7.8 - 8.0		7.5 - 8.0		7.8 - 7.8		7.8 - 7.9	
	BOTTOM	7.8 - 8.0		7.9 - 8.0		7.8 - 7.8		7.8 - 7.8	
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE									
ANGUILLA ROSTRATA		0.115	-	0.554	-	0.129	-	0.297	-
BREVOORTIA TYRANNUS		-	-	0.002	-	-	-	-	-
CLUPEA HARENGUS		-	-	0.005	-	-	-	0.062	-
POLLACHIUS VIRENS		-	-	0.007	-	-	-	-	-
APELTES QUADRACUS		-	-	0.050	-	-	-	-	-
AMMODYTES SP.		0.256	-	0.552	-	0.734	-	0.847	-
MYOXOCEPHALUS SP.		-	-	0.009	-	-	-	-	-
PSEUDOPLEURONECTES AMERICANUS		1.645	0.3	2.646	0.4	1.364	0.3	2.831	0.6
EGGS									
ENCHELYOPUS CIMBRIUS		0.018	-	-	-	-	-	-	-
TOTAL LARVAE & JUVENILES		2.015	0.3	3.826	0.4	2.227	0.3	4.037	0.6
TOTAL EGGS		0.018	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS		18		20		4		6	

TABLE 21. (CONT.)

MONTH

APRIL 1976

LOCATION		7		11	
TEMPERATURE:	AIR	2.5	- 29.0	4.0	- 29.0
	SURFACE	7.2	- 21.5	15.5	- 30.5
	BOTTOM	6.2	- 22.0	15.0	- 21.4
SALINITY:	SURFACE	19.0	- 22.0	19.0	- 22.0
	BOTTOM	19.0	- 22.0	21.0	- 22.0
OXYGEN:	SURFACE	7.0	- 11.0	7.0	- 11.7
	BOTTOM	7.0	- 11.6	8.7	- 10.4
PH:	SURFACE	7.6	- 8.4	7.6	- 8.3
	BOTTOM	7.6	- 8.3	7.9	- 8.3
-----					
		DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES					
CLUPEA HARENGUS		0.001	-	-	-
SYNGNATHUS FUSCUS		-	-	0.007	0.0
LARVAE					
ANGUILLA ROSTRATA		0.024	-	0.223	-
BREVOORTIA TYRANNUS		0.002	0.3	0.001	0.1
CLUPEA HARENGUS		0.006	-	0.004	-
ENCHELYOPUS CIMBRIUS		-	-	0.001	-
FAMILY ATHERINIDAE		0.017	0.0	0.027	-
FAMILY GASTEROSTIIDAE		0.020	-	-	-
AMMODYTES SP.		0.024	-	0.021	-
FAMILY GOBIIDAE		0.005	-	-	-
PSEUDOPLEURONECTES					
AMERICANUS		0.079	0.1	0.042	0.1
EGGS					
ANCHOA MITCHILLI		0.034	-	0.002	-
ENCHELYOPUS CIMBRIUS		-	-	0.002	-
MENIDIA MENIDIA		-	-	0.018	-
TAUTOGA ONITIS		0.283	-	0.022	-
TAUTOGOLABRUS ADSPERSUS		0.055	-	0.007	-
SCOPHTHALMUS AQUOSUS		-	-	0.020	-
UNIDENTIFIED FISH		-	-	0.047	-
-----					
TOTAL LARVAE & JUVENILES		0.178	0.4	0.327	0.1
TOTAL EGGS		0.373	0.0	0.116	0.0
TOTAL COLLECTIONS			28		28

TABLE 21. (CONT.)

MONTH

MAY 1976

LOCATION	7	11
TEMPERATURE: AIR	4.0 - 25.0	7.0 - 24.5
SURFACE	14.5 - 22.3	23.0 - 31.5
BOTTOM	14.5 - 22.1	24.0 - 32.0
SALINITY: SURFACE	20.0 - 24.0	20.0 - 24.0
BOTTOM	20.0 - 24.0	21.0 - 24.0
OXYGEN: SURFACE	7.6 - 10.9	6.8 - 11.2
BOTTOM	7.1 - 10.9	6.5 - 10.8
PH: SURFACE	7.8 - 8.2	7.8 - 8.2
BOTTOM	7.6 - 8.2	7.7 - 8.1

	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES				
ALOSA AESTIVALIS	-	-	0.001	-
SYNGNATHUS FUSCUS	0.199	0.1	0.125	0.1
LARVAE				
ANGUILLA ROSTRATA	0.019	-	0.006	-
BREVOORTIA TYRANNUS	0.002	0.1	0.002	0.1
ANCHOA MITCHILLI	-	-	0.020	0.0
FAMILY ATHERINIDAE	0.080	-	0.083	-
APELTES QUADRACUS	0.002	-	-	-
FAMILY BLENNIIDAE	0.001	-	-	-
FAMILY GOBIIDAE	0.277	-	0.229	-
TRINECTES MACULATUS	-	-	0.001	-
SPHOEROIDES MACULATUS	0.041	-	-	-
EGGS				
ANCHOA MITCHILLI	38.683	-	24.196	-
ENCHELYOPUS CIMBRIUS	-	-	0.010	-
TAUTOGA ONITIS	2.271	-	0.249	-
TAUTOGOLABRUS ADSPERSUS	0.792	-	0.402	-
SCOPHTHALMUS AQUOSUS	-	-	0.030	-
TRINECTES MACULATUS	0.026	-	0.075	-
UNIDENTIFIED FISH	0.253	-	1.292	-
TOTAL LARVAE & JUVENILES	0.621	0.2	0.466	0.3
TOTAL EGGS	42.024	0.0	26.253	0.0
TOTAL COLLECTIONS		28		28

TABLE 21. (CONT.)

MONTH

JUNE 1976

LOCATION	7	11
TEMPERATURE: AIR	11.0 - 33.0	14.0 - 35.0
SURFACE	17.0 - 29.0	28.7 - 38.0
BOTTOM	20.5 - 28.1	28.7 - 31.0
SALINITY: SURFACE	22.0 - 25.0	23.0 - 24.0
BOTTOM	22.0 - 25.5	23.0 - 25.0
OXYGEN: SURFACE	5.7 - 8.8	5.7 - 8.0
BOTTOM	5.2 - 8.1	7.6 - 7.6
PH: SURFACE	7.8 - 8.4	7.8 - 8.4
BOTTOM	7.8 - 8.4	8.1 - 8.4
	DENSITY BIOMASS	DENSITY BIOMASS
JUVENILES		
ANGUILLA ROSTRATA	0.004 -	- -
APELTES QUADRACUS	- -	0.003 -
SYNGNATHUS FUSCUS	0.573 0.5	0.354 0.3
GOBIOSOMA SP.	- -	0.002 -
LARVAE		
ANGUILLA ROSTRATA	0.002 -	- -
ANCHOA MITCHILLI	3.586 0.6	2.584 0.4
STRONGYLURA MARINA	0.001 -	- -
FAMILY ATHERINIDAE	0.051 -	0.094 -
FAMILY BLENNIIDAE	0.047 -	0.090 -
FAMILY GOBIIDAE	4.785 -	3.982 -
SPHOEROIDES MACULATUS	0.042 -	0.007 -
UNIDENTIFIED FISH	0.070 -	- -
EGGS		
BREVOORTIA TYRANNUS	- -	0.008 -
ANCHOA MITCHILLI	168.274 -	96.769 -
TAUTOGA ONITIS	0.152 -	0.648 -
TAUTOGOLABRUS ADSPERSUS	0.556 -	0.499 -
PEPRILUS TRIACANTHUS	0.001 -	- -
TRINECTES MACULATUS	0.142 -	0.271 -
UNIDENTIFIED FISH	0.104 -	0.351 -
TOTAL LARVAE & JUVENILES	9.160 1.1	7.117 0.7
TOTAL EGGS	169.225 0.0	98.545 0.0
TOTAL COLLECTIONS	30	30

TABLE 21. (CONT.)

MONTH

JULY 1976

LOCATION		7		11	
TEMPERATURE:	AIR	18.7 - 30.0		19.0 - 30.0	
	SURFACE	22.5 - 28.0		25.2 - 38.0	
	BOTTOM	23.0 - 27.4		25.2 - 34.0	
SALINITY:	SURFACE	24.0 - 28.0		26.0 - 27.0	
	BOTTOM	24.0 - 28.0		26.0 - 27.0	
OXYGEN:	SURFACE	5.2 - 7.8		4.8 - 7.5	
	BOTTOM	5.2 - 7.5		5.7 - 7.4	
PH:	SURFACE	7.7 - 8.1		7.7 - 8.1	
	BOTTOM	7.8 - 8.2		7.7 - 8.1	
-----					
		DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES					
ANGUILLA ROSTRATA		-	-	0.003	-
OPSANUS TAU		-	-	0.003	-
SYNGNATHUS FUSCUS		0.132	0.2	0.187	0.1
GOBIOSOMA GINSBURGI		-	-	0.004	-
LARVAE					
ANGUILLA ROSTRATA		0.003	-	0.003	-
ANCHOA MITCHILLI		10.171	37.5	7.130	33.2
SYNODUS FOETENS		0.004	-	-	-
FAMILY ATHERINIDAE		0.009	-	0.014	-
CYNOSCION REGALIS		0.006	-	0.052	-
ASTROSCOPUS GUTTATUS		0.003	-	-	-
FAMILY BLENNIIDAE		0.023	-	-	-
FAMILY GOBIIDAE		2.329	-	2.425	0.0
UNIDENTIFIED FISH		0.004	-	-	-
EGGS					
ANCHOA MITCHILLI		106.213	-	59.424	-
TAUTOGA ONITIS		0.044	-	-	-
TRINECTES MACULATUS		0.218	-	0.070	-
UNIDENTIFIED FISH		0.018	-	0.134	-
-----					
TOTAL LARVAE & JUVENILES		12.684	37.7	9.821	33.3
TOTAL EGGS		106.493	0.0	59.628	0.0
TOTAL COLLECTIONS			30		30

TABLE 21 . (CONT.)

MONTH

AUGUST 1976

LOCATION	7	11
TEMPERATURE: AIR	13.0 - 26.0	13.0 - 27.0
SURFACE	22.3 - 27.4	32.0 - 35.8
BOTTOM	22.7 - 26.9	32.5 - 36.0
SALINITY: SURFACE	21.0 - 29.0	20.5 - 29.0
BOTTOM	20.5 - 29.0	22.0 - 29.0
OXYGEN: SURFACE	6.0 - 9.1	6.2 - 9.2
BOTTOM	5.9 - 8.9	6.1 - 7.7
PH: SURFACE	7.8 - 8.3	7.7 - 8.2
BOTTOM	7.7 - 8.3	7.7 - 8.2

	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES				
SYNGNATHUS FUSCUS	0.102	0.1	0.014	0.0
CYNOSCION REGALIS	-	-	0.004	-
GOBIOSOMA BOSCI	-	-	0.009	-
GOBIOSOMA GINSBURGI	0.015	-	0.018	-
LARVAE				
ANCHOA MITCHILLI	4.056	85.9	3.193	84.4
FAMILY ATHERINIDAE	0.012	-	0.010	-
CYNOSCION REGALIS	0.004	-	0.015	-
FAMILY BLENNIIDAE	0.003	-	-	-
FAMILY GOBIIDAE	1.052	-	0.890	-
UNIDENTIFIED FISH	0.005	-	-	-
EGGS				
ANCHOA MITCHILLI	14.409	-	9.234	-
TAUTOGA ONITIS	0.005	-	0.039	-
UNIDENTIFIED FISH	-	-	0.087	-
TOTAL LARVAE & JUVENILES	5.249	86.0	4.152	84.4
TOTAL EGGS	14.414	0.0	9.359	0.0
TOTAL COLLECTIONS		30		30

a see figure 2



Table 22. Estimates of the mean number of Ichthyoplankton entrained per day and per night for each month from September 1975 through August 1976.

		September 1975		October		November		December	
		$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)
Anchoa mitchilli (eggs)	D	0		0		0		0	
	N	0		0		0		0	
Anchoa mitchilli (larvae)	D	$6.05 \times 10^5$	$\pm 6.53 \times 10^5$ (8)	$1.97 \times 10^4$	$\pm 6.29 \times 10^4$ (4)	$4.04 \times 10^4$	$\pm 9.84 \times 10^4$ (4)	$1.11 \times 10^4$	$\pm 3.92 \times 10^4$ (4)
	N	$1.05 \times 10^6$	$\pm 5.76 \times 10^5$ (12)	$1.09 \times 10^5$	$\pm 6.91 \times 10^4$ (8)	$1.08 \times 10^4$	$\pm 2.78 \times 10^4$ (6)	0	
Pseudopleuronectes americanus (larvae)	D	0		0		0		0	
	N	0		0		0		0	
Syngnathus fuscus (juveniles)	D	$1.91 \times 10^4$	$\pm 2.72 \times 10^4$ (16)	$5.17 \times 10^3$	$\pm 1.22 \times 10^4$ (8)	0		0	
	N	$2.28 \times 10^4$	$\pm 1.22 \times 10^4$ (12)	$4.39 \times 10^3$	$\pm 9.35 \times 10^3$ (6)	0		0	
Total larvae	D	$1.38 \times 10^6$	$\pm 1.02 \times 10^6$ (16)	$3.14 \times 10^4$	$\pm 2.53 \times 10^4$ (8)	$4.96 \times 10^4$	$\pm 7.13 \times 10^4$ (8)	$2.47 \times 10^4$	$\pm 3.02 \times 10^4$ (8)
	N	$1.72 \times 10^6$	$\pm 8.29 \times 10^5$ (24)	$2.34 \times 10^5$	$\pm 1.20 \times 10^5$ (12)	$1.98 \times 10^4$	$\pm 2.66 \times 10^4$ (12)	$6.74 \times 10^3$	$\pm 1.48 \times 10^4$ (12)

		January 1976		February		March		April	
		$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)
Anchoa mitchilli (eggs)	D	0		0		0		$5.64 \times 10^4$	$\pm 1.20 \times 10^5$ (12)
	N	0		0		0		$2.50 \times 10^4$	$\pm 4.77 \times 10^4$ (32)
Anchoa mitchilli (larvae)	D	0		0		0		0	
	N	0		0		0		0	
Pseudopleuronectes americanus (larvae)	D	0		0		$2.10 \times 10^6$	$\pm 1.63 \times 10^6$ (8)	$3.24 \times 10^4$	$\pm 4.32 \times 10^4$ (16)
	N	0		$9.41 \times 10^5$	$\pm 8.40 \times 10^5$ (8)	$2.39 \times 10^6$	$\pm 8.63 \times 10^5$ (24)	$1.07 \times 10^5$	$\pm 6.75 \times 10^4$ (32)
Syngnathus fuscus (juveniles)	D	0		0		0		0	
	N	0		0		0		$1.83 \times 10^4$	$\pm 3.47 \times 10^4$ (16)
Total larvae	D	$3.46 \times 10^6$	$\pm 1.27 \times 10^6$ (8)	$2.44 \times 10^6$	$\pm 1.50 \times 10^6$ (8)	$2.56 \times 10^6$	$\pm 1.73 \times 10^6$ (8)	$7.06 \times 10^4$	$\pm 4.78 \times 10^4$ (16)
	N	$1.51 \times 10^6$	$\pm 5.03 \times 10^5$ (8)	$1.79 \times 10^6$	$\pm 6.24 \times 10^5$ (8)	$3.36 \times 10^6$	$\pm 9.56 \times 10^5$ (24)	$4.10 \times 10^5$	$\pm 1.68 \times 10^5$ (32)

Table 22. (cont.)

		May 1976		June		July		August	
		$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)	$\bar{X}$ day	C. L. (n)
<i>Anchoa mitchilli</i> (eggs)	D	$2.60 \times 10^7$	$+2.23 \times 10^7$ (16)	$1.24 \times 10^8$	$+8.18 \times 10^7$ (16)	$1.99 \times 10^8$	$+7.99 \times 10^7$ (16)	$1.96 \times 10^8$	$+5.74 \times 10^6$ (16)
	N	$5.55 \times 10^7$	$+2.62 \times 10^7$ (36)	$2.14 \times 10^8$	$+8.46 \times 10^7$ (32)	$8.07 \times 10^7$	$+3.23 \times 10^7$ (36)	$5.06 \times 10^8$	$+2.88 \times 10^8$ (36)
<i>Anchoa mitchilli</i> (larvae)	D	0		$1.06 \times 10^6$	$+1.37 \times 10^6$ (8)	$6.29 \times 10^6$	$+4.72 \times 10^6$ (8)	$2.76 \times 10^6$	$+1.31 \times 10^6$ (8)
	N	$3.83 \times 10^4$	$+8.08 \times 10^4$ (18)	$4.69 \times 10^6$	$+2.91 \times 10^6$ (16)	$1.01 \times 10^7$	$+5.60 \times 10^6$ (8)	$3.98 \times 10^6$	$+8.85 \times 10^5$ (18)
<i>Pseudopleuronectes americanus</i> (larvae)	D	0		0		0		0	
	N	0		0		0		0	
<i>Syngnathus fuscus</i> (juveniles)	D	$6.78 \times 10^4$	$+6.32 \times 10^4$ (16)	$3.71 \times 10^5$	$+2.21 \times 10^5$ (16)	$1.63 \times 10^5$	$+1.46 \times 10^5$ (16)	$2.44 \times 10^4$	$+5.21 \times 10^4$ (16)
	N	$2.36 \times 10^5$	$+1.85 \times 10^5$ (18)	$4.16 \times 10^5$	$+4.00 \times 10^4$ (16)	$2.37 \times 10^5$	$+2.76 \times 10^5$ (18)	$2.93 \times 10^4$	$+6.18 \times 10^4$ (18)
Total larvae	D	$1.54 \times 10^4$	$+1.82 \times 10^5$ (16)	$3.38 \times 10^6$	$+2.05 \times 10^6$ (16)	$1.13 \times 10^7$	$+4.87 \times 10^6$ (16)	$4.22 \times 10^6$	$+8.64 \times 10^5$ (16)
	N	$6.72 \times 10^5$	$+3.20 \times 10^5$ (36)	$1.38 \times 10^7$	$+4.04 \times 10^6$ (32)	$1.63 \times 10^7$	$+3.74 \times 10^6$ (36)	$5.79 \times 10^6$	$+8.03 \times 10^5$ (36)

Table 23. Monthly totals of live, dead, and damaged ichthyoplankton collected at the intake (7) and discharge (11) at OCGS from April through August 1976.

Month	April						April						May						May					
Location	7						11						7						11					
Temperature: (C), air	2.5-29.0						4.0-29.0						4.0-25.0						7.0-24.5					
surface	7.2-21.5						15.5-30.5						14.5-22.3						23.0-31.5					
bottom	6.2-22.0						15.0-21.4						14.5-22.1						24.0-32.0					
Salinity: (ppt), surface	19.0-22.0						19.0-22.0						20.0-24.0						20.0-24.0					
bottom	19.0-22.0						21.0-22.0						20.0-24.0						21.0-24.0					
Oxygen: (ppm), surface	7.0-11.0						7.0-11.7						7.6-10.9						8.8-11.2					
bottom	7.0-11.6						8.7-10.4						7.1-10.9						6.5-10.8					
pH: surface	7.6-8.4						7.6-8.3						7.8-8.2						7.8-8.2					
bottom	7.6-8.3						7.9-8.3						7.6-8.2						7.7-8.1					
	Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>JUVENILES</b>																								
<i>Syngnathus fuscus</i>	-	-	-	-	-	-	-	-	-	-	-	-	103	85.1	14	11.6	4	3.3	44	43.1	52	51.0	6	5.9
<b>LARVAE</b>																								
<i>Anguilla rostrata</i>	17	94.4	1	6.6	0	-	223	95.7	10	4.3	0	-	15	100.0	0	-	0	-	6	85.7	1	14.3	0	-
<i>Anchoa mitchilli</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	16	100.0	0	-
Family Atherinidae	5	35.7	9	64.3	0	-	6	13.5	31	83.8	1	2.7	16	41.0	19	48.7	4	10.3	4	5.6	67	93.0	1	1.4
<i>Ammodytes</i> sp.	6	60.0	2	20.0	2	20.0	6	28.6	15	71.4	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Family Gobiidae	-	-	-	-	-	-	-	-	-	-	-	-	18	9.4	188	88.0	6	2.6	0	-	198	100.0	0	-
<i>Pseudopleuronectes americanus</i>	12	28.1	30	65.2	4	8.7	1	2.3	42	97.7	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 23. (cont.)

Month	June						June						July						July					
Location	7						11						7						11					
Temperature: (C), air	11.0-33.0						14.0-35.0						18.7-30.0						19.0-30.0					
	surface						17.0-29.0						22.5-28.0						25.2-38.0					
Salinity	bottom						20.5-28.1						23.0-27.4						25.2-34.0					
Salinity: (ppt), surface	22.0-25.0						23.0-24.0						24.0-28.0						26.0-27.0					
Salinity: (ppt), bottom	22.0-25.5						23.0-25.0						24.0-28.0						26.0-27.0					
Oxygen: (ppm), surface	5.7-8.8						5.7-8.0						5.2-7.8						4.8-7.5					
Oxygen: (ppm), bottom	5.2-8.1						7.6-7.8						5.2-7.6						5.7-7.4					
pH: surface	7.8-8.4						7.8-8.4						7.7-8.1						7.7-8.1					
pH: bottom	7.8-8.4						8.1-8.4						7.8-8.2						7.7-8.1					
	Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
JUVENILES																								
Syngnathus fuscus	181	52.2	180	46.1	6	1.7	41	17.5	186	79.5	7	3.0	28	68.3	10	24.4	3	7.3	4	7.7	46	88.5	2	3.8
LARVAE																								
Anchoa mitchilli	3	0.1	2076	99.9	0	-	0	-	1265	100.0	0	-	79	2.5	3013	96.3	36	1.2	14	0.6	2173	99.2	4	0.2
Family Atherinidae	8	33.3	12	66.7	0	-	3	3.5	82	96.5	0	-	1	33.3	2	66.7	0	-	0	-	4	100.0	0	-
Family Gobiidae	269	11.7	1993	86.6	38	1.7	8	0.3	2401	99.6	2	0.1	75	10.8	608	87.6	11	1.6	11	1.6	691	98.7	2	0.3

Table 23. (cont.)

Month	August						August					
Location	7						11					
Temperature: (C), air	13.0-26.0						13.0-27.0					
surface	22.3-27.4						32.0-35.8					
bottom	22.7-26.9						32.5-36.0					
Salinity: (ppt), surface	21.0-29.0						20.5-29.0					
bottom	20.5-29.0						22.0-29.0					
Oxygen: (ppm), surface	6.0-9.1						6.2-9.2					
bottom	5.9-8.9						6.1-7.7					
pH: surface	7.8-8.3						7.7-8.2					
bottom	7.7-8.3						7.7-8.2					
	Alive		Dead		Damaged		Alive		Dead		Damaged	
	#	%	#	%	#	%	#	%	#	%	#	%
JUVENILES												
Syngnathus fuscus	12	44.4	15	55.6	0	-	0	-	4	100.0	0	-
LARVAE												
Anchoa mitchilli	232	21.7	779	72.9	58	5.4	10	1.0	979	98.6	4	0.4
Family Atherinidae	0	-	4	100.0	0	-	0	-	3	100.0	0	-
Family Gobiidae	50	18.7	214	79.8	4	1.5	7	2.7	249	97.3	0	-

Table 24. Monthly totals of live, dead, and damaged ichthyoplankton collected at the intake (7) and discharge (11) at OCGS for September and October 1975, and March 1976.

Station	07						11						07						11					
Date	September 1975						September 1975						October 1975						October 1975					
Air Temp. (C)	15.0-22.0						19.0-25.0						15.0-23.0						11.0-22.0					
Water Temp. (C), surface	19.3-23.0						19.2-34.5						16.9-18.7						20.5-24.0					
	bottom						10.3-34.5						17.0-18.5						22.5-24.2					
Salinity (ppt), surface	17.5-25.0						18.5-25.0						17.2-21.0						17.2-21.0					
	bottom						18.5-25.0						17.2-21.0						17.2-21.0					
Oxygen (ppm), surface	6.0-8.5						5.8-8.4						7.6-8.9						7.3-9.5					
	bottom						5.7-8.2						7.4-9.7						7.8-9.4					
pH, surface	7.7-8.2						7.8-8.2						7.8-8.3						7.8-8.2					
	bottom						7.6-8.2						7.8-8.3						7.8-8.3					
	Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Fish Larvae																								
Anchoa mitchilli	114	63.3	49	27.2	17	9.4	13	7.6	157	91.8	1	0.6	0	-	1	100.0	0	-	1	50.0	0	-	1	50.0
Syngnathus fuscus	4	80.0	1	20.0	0	-	2	66.7	1	33.3	0	-	50	68.7	14	18.7	11	14.6	16	67.2	9	32.1	3	10.7
													2	100.0	0	-	0	-	1	100.0	0	-	0	-
Date	March 1976						March 1976																	
	7						11																	
Temp. (C), air	0.0-12.0						-1.5-18.5																	
	surface						4.5-19.5																	
	bottom						7.0-19.5																	
Salinity (ppt), surface	18.0-23.0						18.5-23.0																	
	bottom						20.0-23.0																	
Oxygen (ppm), surface	9.6-12.9						8.1-13.0																	
	bottom						9.9-11.6																	
pH, surface	7.8-8.0						7.5-8.0																	
	bottom						7.9-8.0																	
	Alive		Dead		Damaged		Alive		Dead		Damaged													
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
LARVAE																								
Ammodytes sp.	6	25.0	17	70.8	1	4.2	16	7.0	208	91.6	3	1.3												
Pseudopleuronectes americanus	16	7.5	195	91.1	3	1.4	24	3.0	776	96.9	1	0.1												

TABLE 25. MEAN DENSITIES<sup>a</sup> OF MICROZOOPLANKTON COLLECTED AT THE CONDENSED DISCHARGE (11), THE DISCHARGE CANAL (14, 15, 16, 17), AND THE THERMAL PLUME (19)<sup>b</sup>, FOR THE THERMAL PLUME PASSAGE STUDY FROM MARCH THROUGH AUGUST 1976<sup>c</sup>.

MONTH	PAGE 1775											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDCV	CVAR	FREQ	MEAN	MIN	MAX	SDCV	CVAR
LIFE STAGE: LARVAL												
CLASS GASTROPODA	1	36	216	216	88	245	0	-	-	-	-	-
CLASS POLYCHAETA	5	469	194	1179	480	102	3	544	867	1500	637	117
POLYCHAETA SPP	0	-	-	-	-	-	2	203	289	931	375	184
LIFE STAGE: MISC												
CLASS BIVALVIA	0	-	-	-	-	-	1	167	1000	1000	408	245
LIFE STAGE: U480												
CLASS BIVALVIA	3	112	194	260	124	111	0	-	-	-	-	-
	6	616	-	-	-	-	6	914	-	-	-	-
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	6	39107	5196	67217	21956	56	6	54235	10903	81200	33239	61
NAUPLIAR NAUPLIUS	4	5124	194	15144	7557	148	3	6970	560	24924	10931	157
LIFE STAGE: COPEPODITE												
ACARTIA SPP	6	15925	4806	33015	10731	67	0	-	-	-	-	-
CENTROPAGES SPP	1	36	216	216	88	245	0	-	-	-	-	-
EURYTEMORA SPP.	6	2461	1556	3444	757	31	0	-	-	-	-	-
PSEUDOCALANUS MINUTUS	1	32	194	194	79	245	0	-	-	-	-	-
ORDER CYCLOPOIDA	1	36	216	216	88	245	0	-	-	-	-	-
UNIDENTIFIED COPEPODITES	3	108	194	236	119	150	0	-	-	-	-	-
LIFE STAGE: ADULT												
ACARTIA CLAUSI	6	16141	12264	19811	2870	18	0	-	-	-	-	-
ACARTIA TONSA	6	533	240	781	185	35	0	-	-	-	-	-
CENTROPAGES PARVATUS	1	32	194	194	79	245	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	1	43	260	260	106	245	0	-	-	-	-	-
EURYTEMORA SPP.	2	254	583	943	410	161	0	-	-	-	-	-
EURYTEMORA AFFINIS	4	1966	1940	4567	1786	90	0	-	-	-	-	-
EURYTEMORA AMERICANA	1	39	236	236	96	245	0	-	-	-	-	-
TONSA LONGICORNIS	1	39	236	236	96	245	0	-	-	-	-	-
PSEUDOCALANUS MINUTUS	1	39	236	236	96	245	0	-	-	-	-	-
OTIDONA BREVICORNIS	2	101	216	389	166	164	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	254	583	943	410	161	2	175	518	533	272	155
SUBCLASS COPEPODA	0	-	-	-	-	-	5	685	310	1333	491	61
ACARTIA SPP	0	-	-	-	-	-	6	9554	3726	16000	4743	50
ACARTIA CLAUSI	0	-	-	-	-	-	6	38017	11166	74500	25122	66
ACARTIA TONSA	0	-	-	-	-	-	2	177	259	806	323	183
PSEUDOCALANUS												
CONGATUS	0	-	-	-	-	-	2	263	779	800	408	155
PARACALANUS												
CRASSIROSTRIS	0	-	-	-	-	-	1	43	259	259	106	245
EURYTEMORA SPP.	0	-	-	-	-	-	6	1779	1734	6000	1455	39
TONSA LONGICORNIS	0	-	-	-	-	-	1	44	266	266	109	245
PSEUDOCALANUS MINUTUS	0	-	-	-	-	-	4	370	259	896	338	166
OTIDONA SPP	0	-	-	-	-	-	1	40	289	289	118	245
OTIDONA BREVICORNIS	0	-	-	-	-	-	2	708	448	806	341	164
UNIDENTIFIED												
PARACALANUS	4	195	194	1442	543	138	2	148	310	578	244	165
UNIDENTIFIED												
UNIDENTIFIED	1	36	216	216	88	245	0	-	-	-	-	-
PARACALANUS	1	43	260	260	106	245	2	141	310	533	229	163
SUBCLASS ROTIFERA	1	40	236	240	98	245	0	-	-	-	-	-
	6	82801	-	-	-	-	6	114676	-	-	-	-

TABLE 25. (CONT.)

MONTH	MARCH 1976											
	LOCATION 15						LOCATION 16					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	0	-	-	-	-	-	1	51	306	306	125	245
LIFE STAGE: LARVAL												
CLASS GASTROPODA	0	-	-	-	-	-	1	73	439	439	179	245
CLASS POLYCHAETA	6	636	208	1311	444	70	3	396	213	1836	719	181
POLYDORA SPP	2	333	684	1311	552	166	2	157	328	612	259	165
	6	969					6	677				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	0	-	-	-	-	-	6	47822	11824	80253	26667	56
BARNACLE NAUPLIUS	4	7264	416	24918	11152	154	5	6750	253	24795	10411	154
LIFE STAGE: NO DETERMINATION												
ORDER ROTIPERA	0	-	-	-	-	-	3	186	253	439	214	115
SUBCLASS COPEPODA	0	-	-	-	-	-	4	407	253	897	398	98
ACARTIA SPP	0	-	-	-	-	-	6	8325	3941	14430	4354	52
ACARTIA CLAUSI	0	-	-	-	-	-	6	33228	4927	57447	22584	68
ACARTIA TONSA	0	-	-	-	-	-	2	162	213	759	305	188
PARACALANUS												
CRASSIROSTRIS	0	-	-	-	-	-	2	78	213	253	121	156
EURYTEMORA SPP.	0	-	-	-	-	-	6	3512	1346	5063	1421	40
TEMORA LONGICORNIS	0	-	-	-	-	-	1	106	638	638	260	245
PSEUDOCALANUS MINUTUS	0	-	-	-	-	-	2	144	426	439	223	155
OITHONA BREVICORNIS	0	-	-	-	-	-	3	186	253	439	214	115
OITHONA SIMILIS	0	-	-	-	-	-	3	186	253	439	214	115
UNIDENTIFIED												
HARPACTICOIDS	0	-	-	-	-	-	5	347	253	612	209	60
PARASITIC CYCLOPOIDA	0	-	-	-	-	-	3	148	253	328	164	111
	6	7264					6	101586				



TABLE 25. (CONT.)

MONTH	MARCH 1976											
	LOCATION 17						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	1	64	385	385	157	245	0	-	-	-	-	-
LIFE STAGE: LARVAL												
CLASS GASTROPODA	1	77	461	461	188	245	0	-	-	-	-	-
CYPHONAUTE LARVAE	0	-	-	-	-	-	1	21	125	125	51	245
CLASS POLYCHAETA	4	455	250	1923	731	161	5	344	259	625	214	62
POLYDORA SPP	2	472	909	1923	798	169	3	373	450	1038	449	120
	6	1068					6	738				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	6	52419	17273	81750	22039	42	2	27111	71721	90947	42438	157
BARNACLE NAUPLIUS	2	10800	17879	46923	19087	177	4	2415	445	7142	3380	140
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	4	310	385	513	244	79	2	181	287	796	323	179
SUBCLASS COPEPODA	4	580	461	1363	572	99	1	191	1148	1148	469	245
ACARTIA SPP	6	10056	5000	16250	4068	40	2	4379	11932	14344	6827	156
ACARTIA CLAUSI	6	42142	14242	72250	22436	53	2	24074	66288	78156	37483	156
ACARTIA TONSA	1	167	1000	1000	408	245	1	96	574	574	234	245
CENTROPAGES SPP	1	77	461	461	188	245	0	-	-	-	-	-
PSEUDODIAPTOMUS												
CORONATUS	1	43	256	256	105	245	0	-	-	-	-	-
PAPACALANUS												
CRASSIROSTRIS	1	64	385	385	157	245	1	48	287	287	117	245
EURYTEMORA SPP.	6	8398	2272	23846	7872	94	2	2311	5833	8033	3647	158
TEMORA LONGICORNIS	0	-	-	-	-	-	1	48	287	287	117	245
PSEUDOCALANUS MINUTUS	4	212	250	461	181	85	0	-	-	-	-	-
UIITHONA BREVICORNIS	1	76	454	454	185	245	1	44	265	265	108	245
UIITHONA SIMILIS	0	-	-	-	-	-	2	92	265	287	143	155
UNIDENTIFIED												
HARPACTICOIDES	3	157	256	385	177	113	0	-	-	-	-	-
PARASITIC CYCLOPOIDA	2	92	250	303	144	156	0	-	-	-	-	-
	6	125591					6	60990				

TABLE 25. (CONT.)

MONTH	APRIL 1976											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
CLASS POLYCHAETA	3	619	236	3145	1156	187	0	-	-	-	-	-
TROCHOPHORES	6	909	202	3145	1282	141	5	841	150	3600	1293	154
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	0	-	-	-	-	-	7	1663	384	3750	1477	89
CLASS GASTROPODA	5	1080	202	3145	1420	132	4	564	274	2400	906	161
NASSARIUS SPP.	0	-	-	-	-	-	2	98	384	400	182	185
CLASS POLYCHAETA	8	19571	9670	29245	8015	41	8	10817	5357	20666	6009	56
NEREIS SPP.	0	-	-	-	-	-	2	55	137	300	110	202
POLYDORA SPP	0	-	-	-	-	-	8	8873	3900	15600	3803	43
CLASS ASCIDIACEA	1	25	202	202	71	283	0	-	-	-	-	-
UNIDENTIFIED												
INVERTEBRATE	0	-	-	-	-	-	6	908	412	2000	816	90
LIFE STAGE: HINGE												
CLASS BIVALVIA	7	3173	314	13707	4936	156	8	4182	769	13247	4323	103
AEQUIPECTEN IRRADIANS	4	1762	517	6724	2884	164	0	-	-	-	-	-
MERCENARIA MERCENARIA	2	212	405	1293	459	216	0	-	-	-	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	7	953	236	2328	779	82	8	2949	274	5600	1778	60
AEQUIPECTEN IRRADIANS	4	342	259	1034	453	133	0	-	-	-	-	-
MERCENARIA MERCENARIA	1	51	404	404	143	283	0	-	-	-	-	-
MULINIA LATERALIS	2	183	203	1258	440	241	0	-	-	-	-	-
	8	28879					8	30950				

TABLE 25. (CONT.)

MONTH	APRIL 1976											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	8	56970	15330	123103	40996	72	8	52473	10950	113766	38884	74
BARNACLE NAUPLIUS	8	38570	11149	68017	26502	69	8	34802	6599	63300	22166	64
LIFE STAGE: COPEPODITE												
ACARTIA SPP	8	9478	4481	12973	3247	34	0	-	-	-	-	-
PARACALANUS SPP.	1	98	786	786	278	283	0	-	-	-	-	-
EURYTEMORA SPP.	7	982	203	3362	1056	108	0	-	-	-	-	-
EURYTEMORA AFFINIS	1	30	236	236	83	283	0	-	-	-	-	-
UNIDENTIFIED COPEPODITES	1	39	314	314	111	283	0	-	-	-	-	-
LIFE STAGE: ADULT												
ACARTIA CLAUSI	5	1557	786	4655	1780	114	0	-	-	-	-	-
ACARTIA TONSA	1	39	314	314	111	283	0	-	-	-	-	-
EURYTEMORA AFFINIS	2	65	259	259	120	185	0	-	-	-	-	-
OITHONA BREVICORNIS	1	39	314	314	111	283	0	-	-	-	-	-
OITHONA SIMILIS	1	25	203	203	72	283	0	-	-	-	-	-
LIFE STAGE: DETERMINATION												
CLASS HYDROZOA	1	49	393	393	139	283	0	-	-	-	-	-
ORDER ROTIFERA	8	17952	517	53459	17657	98	7	32542	1299	126666	41387	127
SUBCLASS COPEPODA	0	-	-	-	-	-	2	51	150	260	99	194
ACARTIA SPP	0	-	-	-	-	-	8	6080	2198	14375	4043	66
ACARTIA CLAUSI	0	-	-	-	-	-	7	1627	137	6753	2564	158
ACARTIA TONSA	0	-	-	-	-	-	1	32	254	254	90	283
CENTROPAGES SPP	0	-	-	-	-	-	1	32	254	254	90	283
PSEUDODIAPYCNUS	0	-	-	-	-	-	1	32	254	254	90	283
CORONATUS	0	-	-	-	-	-	1	32	254	254	90	283
PARACALANUS	0	-	-	-	-	-	3	114	254	400	164	143
CRASSIROSTRIS	0	-	-	-	-	-	5	210	137	625	224	107
EURYTEMORA SPP.	0	-	-	-	-	-	0	-	-	-	-	-
ORDER CYCLOPOIDA	1	32	259	259	92	283	0	-	-	-	-	-
OITHONA BREVICORNIS	0	-	-	-	-	-	1	33	260	260	92	283
UNIDENTIFIED	0	-	-	-	-	-	1	33	260	260	92	283
HARPACTICOIDES	8	1208	236	2845	793	66	7	574	254	1200	376	66
PARASITIC CYCLOPOIDA	7	705	236	1258	427	61	6	439	137	1200	464	106
PHYLUM PLATYHELMINTHES	0	-	-	-	-	-	3	299	260	1333	503	168
	8	127839					8	129339				

TABLE 25. (CONT.)

MONTH	APRIL 1976											
	LOCATION 15						LOCATION 16					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	616	136	2838	1062	173	3	657	697	2603	1044	159
LIFE STAGE: LARVAL												
CYPRONARIE LARVAE	6	1013	546	2276	838	83	5	1763	371	5050	2012	114
CLASS GASTROPODA	4	806	284	2916	1193	148	4	873	282	4991	1675	192
ASSARIUS SPP.	1	101	810	810	286	283	3	188	371	641	269	143
CLASS POLYCHAETA	8	10709	2134	23188	6996	65	6	3876	1025	9293	3772	97
NEKEIS SPP.	1	101	810	810	286	283	2	201	489	1115	407	203
POLYDORA SPP.	6	23855	2993	82031	31587	132	8	8190	1977	17143	5551	64
CLASS ASCIDIACEA	2	35	136	142	64	185	1	22	174	174	62	283
UNIDENTIFIED INVERTEBRATE	1	101	810	810	286	283	2	276	743	1467	547	198
LIFE STAGE: HINGE												
CLASS BIVALVIA	8	4713	405	14141	5114	109	8	3965	348	13194	5312	134
MEQUIPECTEN IRRADIANS	0	-	-	-	-	-	1	18	141	141	50	233
MULINIA LATERALIS	0	-	-	-	-	-	1	22	174	174	62	283
LIFE STAGE: UNBO												
CLASS BIVALVIA	8	2779	272	8333	2443	88	7	1793	174	3913	1355	76
MULINIA LATERALIS	0	-	-	-	-	-	1	245	1956	1956	692	283
	8	44829					8	22087				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	0	-	-	-	-	-	3	42312	9039	88571	32931	78
BARRACLE NAUPLIUS	8	22299	5468	45576	16933	76	8	29556	7336	65473	22293	75
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	0	-	-	-	-	-	8	14954	694	44021	14462	97
CLASSOIDA CRUSTACEA	0	-	-	-	-	-	1	18	141	141	50	283
SUBCLASS COPEPODA	0	-	-	-	-	-	1	167	1333	1333	471	283
ACARTIA SPP.	0	-	-	-	-	-	8	4536	522	10714	3829	84
ACARTIA CLAUSI	0	-	-	-	-	-	7	1543	141	5000	2029	132
ACARTIA TORSA	0	-	-	-	-	-	1	43	347	347	123	283
PARACALANUS	0	-	-	-	-	-	1	61	489	489	173	283
CRASSIROSTRIS	0	-	-	-	-	-	1	44	348	348	123	283
EURYTEMORA SPP.	0	-	-	-	-	-	2	108	371	489	292	197
OITHONA SPP.	0	-	-	-	-	-	2	108	371	489	292	197
UNIDENTIFIED	0	-	-	-	-	-	5	891	714	3147	1102	124
RAFFACTICIDS	0	-	-	-	-	-	4	410	347	1282	512	125
PARASITIC CYCLOPOIDA	0	-	-	-	-	-	1	61	489	489	173	283
PHYLUM PLATYHELMINTHES	2	172	546	833	328	190	1	61	489	489	173	283
	8	22471					8	94702				

TABLE 25. (CONT.)

MONTH	APRIL 1976											
	LOCATION 17						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	886	166	4859	1730	195	3	251	344	870	378	151
LIFE STAGE: LARVAL												
CYPRONAUTE LARVAE	7	2345	503	5500	1996	85	5	492	246	1428	530	113
CLASS GASTROPODA	4	782	176	3164	1236	158	4	498	476	1616	637	128
MASSAFIUS SPP.	1	94	754	754	267	263	1	47	373	373	132	293
CLASS POLYCHAETA	7	7227	4000	11805	3828	53	8	7811	4285	13443	3502	45
NEBEIS SPP.	2	281	754	1495	557	198	2	164	621	638	304	185
POLYDORA SPP.	7	9327	3500	21197	6539	70	6	7540	1442	13532	6018	79
CLASS ASCIDIACEA	1	21	166	166	59	283	2	135	458	621	254	168
UNIDENTIFIED INVERTEBRATE	4	451	666	1495	548	121	3	154	124	793	281	182
LIFE STAGE: BINGE												
CLASS BIVALVIA	8	3246	500	14017	4651	143	7	3306	480	9483	3698	112
LIFE STAGE: UABO												
CLASS BIVALVIA	8	2202	166	4103	1290	59	8	3623	1202	10613	3134	86
	8	26862					8	24121				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	8	47154	1974	88688	37839	80	2	28424	102874	124519	52348	186
BASENACLE NAUPLIUS	8	26502	7476	53472	16851	64	8	23192	8095	50235	13786	59
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	6	22010	17676	42264	16381	74	1	210	1693	1683	595	283
LYONSIA HYALINA	0	-	-	-	-	-	1	20	158	158	56	283
PODO SPP.	1	47	373	373	132	283	0	-	-	-	-	-
EVADNE SPP.	0	-	-	-	-	-	1	109	870	870	308	283
SUBCLASS COPEPODA	2	109	176	694	244	225	1	30	240	240	85	283
ACANTIA SPP.	6	4927	1885	10050	3221	65	2	1506	6010	6034	2738	165
ACANTIA CLAUSI	8	9541	166	67839	23621	248	2	726	1724	4087	1486	205
PSEUDOSIAPTONUS												
CORONATUS	0	-	-	-	-	-	1	30	240	240	85	283
PAPACALANUS												
CRASSINOSTRIS	2	132	373	684	258	196	0	-	-	-	-	-
EURYTENDRA SPP.	5	242	166	747	272	113	2	384	1149	1923	741	193
THORAX LONGICORNIS	1	47	373	373	132	283	0	-	-	-	-	-
OTHODIA SPP.	1	47	373	373	132	283	0	-	-	-	-	-
OTHODIA BREVICORNIS	1	43	342	342	121	283	0	-	-	-	-	-
OTHODIA STALLIS	1	43	342	342	121	283	2	66	240	287	123	186
UNIDENTIFIED												
PARAFACICOLOR	7	691	166	1806	669	97	2	192	575	962	370	133
PARASITIC CYCLOPOIDA	6	401	176	1368	452	113	2	66	240	287	123	186
PHYLLOA PLATYHOLANTHUS	1	87	694	694	245	283	1	99	793	793	280	293
	8	112021					8	55054				

TABLE 25. (CONT.)

MONTH	MAY 1976											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDCV	CVAR	FREQ	MEAN	MIN	MAX	SDCV	CVAR
LIFE STAGE: TROCHOPHORE												
CLASS POLYCHAETA	6	2850	708	7017	2382	84	0	-	-	-	-	-
TROCHOPHORE	3	338	354	1201	470	139	6	1089	400	2066	564	61
LIFE STAGE: LARVAL												
CYPRIDINAE LARVAE	0	-	-	-	-	-	4	1207	160	3043	1409	117
CLASS GASTROPODA	6	1765	472	2889	821	46	5	1571	434	2647	750	48
NEPHEUS SPP.	0	-	-	-	-	-	1	69	413	413	169	245
NEPHEUS BILIMBIATUS	1	59	354	354	145	245	0	-	-	-	-	-
CLASS POLYCHAETA	6	13291	8233	19399	4076	37	6	5523	1304	12396	3746	68
PLATIS SPP.	0	-	-	-	-	-	2	136	420	413	210	155
PLATIS SPP.	0	-	-	-	-	-	6	6243	1739	11209	3346	54
EPYRAEIDAE CYPRIS	0	-	-	-	-	-	1	67	400	400	163	245
UNIDENTIFIED INDEFINITE	0	-	-	-	-	-	3	392	413	1176	493	126
LIFE STAGE: NYMPH												
CLASS NYMPH	3	218	354	600	272	114	3	707	588	2060	903	128
LIFE STAGE: NYMPH												
CLASS NYMPH	5	519	300	1544	529	98	2	340	800	1239	544	160
MULLUS LATEALIS	1	79	472	472	193	245	0	-	-	-	-	-
	6	19159	-	-	-	-	6	17342	-	-	-	-
LIFE STAGE: NAUPLIAR												
NAUPLIAR NAUPLIUS	6	32692	13600	52005	16461	50	6	26071	20900	33522	4754	18
NAUPLIAR NAUPLIUS	6	34071	14010	55189	15423	45	6	22871	2353	47600	17556	77
LIFE STAGE: COPEPODITE												
COPEPODITE SPP.	6	2855	1238	5560	1056	65	0	-	-	-	-	-
COPEPODITE SPP.	3	357	257	1415	552	155	0	-	-	-	-	-
COPEPODITE SPP.	3	205	300	515	234	114	0	-	-	-	-	-
UNIDENTIFIED COPEPODITES	2	197	472	708	314	159	0	-	-	-	-	-
LIFE STAGE: ADULT												
ADULT CLAUDI	3	297	472	708	333	112	0	-	-	-	-	-
ADULT CLAUDI AFFINIS	2	139	354	472	217	157	0	-	-	-	-	-
ADULT SPP.	1	59	354	354	145	245	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
CLASS HYDRODORA	5	1190	257	4127	1592	134	2	451	1176	1531	768	157
CLASS HYDRODORA	6	15575	7842	21226	5033	32	6	15952	2551	27465	10839	68
CLASS COPEPODA	0	-	-	-	-	-	2	157	434	510	245	155
ADULT SPP.	0	-	-	-	-	-	6	2321	434	6411	2487	137
ADULT CLAUDI	0	-	-	-	-	-	2	404	876	1600	673	156
ADULT CLAUDI	0	-	-	-	-	-	1	43	255	255	104	245
ADULT CLAUDI SPP.	0	-	-	-	-	-	5	472	294	1239	412	87
ADULT SPP.	0	-	-	-	-	-	1	49	294	294	125	245
ADULT SPP.	0	-	-	-	-	-	1	67	400	400	163	245
UNIDENTIFIED HYDRODORIDAE	6	2870	1029	5403	1782	62	6	2606	1276	5735	1976	76
PARASITIC CYCLOPOIDA	5	1095	300	2316	995	91	4	577	400	1364	532	92
	6	91660	-	-	-	-	6	72641	-	-	-	-

TABLE 25. (CONT.)

MONTH	MAY 1976											
	LOCATION 15						LOCATION 16					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	5	1486	322	6111	2342	158	3	841	1194	2632	1058	126
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	2225	2013	4779	1948	88	4	3198	3555	6364	2719	85
CLASS GASTROPODA	6	888	367	1290	334	38	5	954	795	1625	566	59
NASSARIUS SPP.	0	-	-	-	-	-	1	136	813	813	332	245
CLASS POLYCHAETA	6	4715	2438	9032	2444	52	6	3753	1777	4737	1050	28
POLYDORA SPP	6	8823	3308	17222	6031	68	6	6117	888	9545	3190	52
UNIDENTIFIED INVERTEBRATE	1	41	244	244	100	245	5	1022	406	1591	577	66
LIFE STAGE: HINGE												
CLASS BIVALVIA	5	835	488	1470	574	69	4	471	300	1591	589	125
LIFE STAGE: UMBO												
CLASS BIVALVIA	5	632	278	2416	886	140	3	674	263	3182	1251	186
MULINIA LATERALIS	0	-	-	-	-	-	1	66	398	398	162	245
	6	19644					6	17231				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	0	-	-	-	-	-	6	28580	15114	40597	10336	36
BARNACLE NAUPLIUS	6	24340	6098	49156	18635	77	6	26859	7895	57777	21312	79
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	1	66	398	398	162	245
ORDER ROTIFERA	0	-	-	-	-	-	6	15663	2386	34125	13955	89
PODON SPP	0	-	-	-	-	-	1	44	263	263	107	245
ACARTIA SPP	0	-	-	-	-	-	5	1375	1053	2386	835	61
ACARTIA CLAUSI	0	-	-	-	-	-	2	183	300	795	323	177
PARACALANUS												
CRASSIROSTRIS	0	-	-	-	-	-	1	50	300	300	122	245
EURYTEMORA SPP.	0	-	-	-	-	-	3	290	398	813	344	119
UNIDENTIFIED												
HARPACTICIDS	0	-	-	-	-	-	6	2123	795	3977	1049	49
BARNACLE CYPRIS	0	-	-	-	-	-	1	203	1219	1219	498	245
UNIDENTIFIED												
INVERTEBRATE	1	54	322	322	131	245	0	-	-	-	-	-
PARASITIC CYCLOPOIDA	0	-	-	-	-	-	5	1288	263	2784	1191	92
	6	24394					6	76722				

TABLE 25. (CONT.)

MONTH	MAY 1976											
	LOCATION 17						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	6	1623	432	3235	1069	66	6	1038	465	1579	459	44
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	4234	3600	8661	3662	86	4	2193	2774	3846	1755	80
CLASS GASTROPODA	6	1426	280	2400	1037	73	6	2703	592	4425	1882	70
NASSARIUS SPP.	2	112	280	389	176	158	1	22	130	130	53	245
CLASS POLYCHAETA	6	4002	1678	8661	2646	66	6	8455	1957	14423	4490	53
NEREIS SPP.	0	-	-	-	-	-	2	156	130	805	322	207
POLYDORA SPP.	6	8475	3028	24118	7996	94	6	13992	8217	19711	4058	29
BARNACLE CYPRIS	1	49	294	294	120	245	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	4	521	559	1200	464	89	4	588	130	2011	829	141
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	490	280	1200	552	113	5	848	130	2414	861	102
LIFE STAGE: UMBO												
CLASS BIVALVIA	5	504	389	882	320	64	5	758	395	2414	850	112
	6	21435					6	30751				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	6	25898	15167	38529	7777	30	0	-	-	-	-	-
BARNACLE NAUPLIUS	6	22182	5315	56299	19202	87	6	16679	1304	37674	14451	87
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	679	839	3235	1296	191	0	-	-	-	-	-
ORDER ROTIFERA	6	18167	4755	35200	12276	68	0	-	-	-	-	-
SUBCLASS COPEPODA	3	310	294	1167	454	146	0	-	-	-	-	-
ACARTIA SPP.	6	1977	393	4000	1467	74	0	-	-	-	-	-
ACARTIA CLAUSI	2	326	400	1556	623	191	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	2	115	294	393	180	157	0	-	-	-	-	-
EURYTEMORA SPP.	2	595	1167	2400	1000	168	0	-	-	-	-	-
OITHONA SPP.	2	142	294	559	236	166	0	-	-	-	-	-
OITHONA BREVICORNIS	1	49	294	294	120	245	0	-	-	-	-	-
UNIDENTIFIED												
HARPACTICOIDS	6	2698	1181	4400	1201	44	0	-	-	-	-	-
PARASITIC CYCLOPOIDA	6	923	280	1574	493	53	0	-	-	-	-	-
	6	74060						16679				



TABLE 25. (CONT.)

MONTH	JUNE 1976											
	LOCATION 11						LOCATION 14					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
CLASS POLYCHAETA	4	2399	786	10108	3665	153	0	-	-	-	-	-
TROCHOPHORES	3	409	337	1348	598	146	4	486	500	1538	598	123
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	0	-	-	-	-	-	5	3608	366	20049	7084	196
CLASS GASTROPODA	7	920	472	1769	496	54	5	1301	938	3490	1367	105
NASSARIUS SPP.	0	-	-	-	-	-	1	11	250	250	88	283
MELAMPUS BIDENTATUS	4	439	295	1179	499	114	0	-	-	-	-	-
CLASS POLYCHAETA	7	5279	1179	10108	3443	65	8	3472	816	9375	3021	87
NEREIS SPP.	0	-	-	-	-	-	2	79	250	384	151	191
POLYDORA SPP	0	-	-	-	-	-	6	2638	1113	7339	2480	94
PHYLUM ECHINODERMATA	1	96	674	674	255	265	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	0	-	-	-	-	-	3	187	366	742	281	151
LIFE STAGE: HINGE												
CLASS BIVALVIA	3	542	674	1769	747	138	4	424	366	1389	578	136
AEQUIPECTEN IPRADIANS	2	517	590	3032	1130	218	0	-	-	-	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	6	1974	786	3538	1407	71	6	1342	769	4455	1413	105
	7	12575					8	13567				

TABLE 25. (CONT.)

MONTH	JUNE 1976											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	8	45681	30660	61995	11776	26	8	57480	29388	88366	19892	35
BARNACLE NAUPLIUS	8	3203	393	6065	2196	69	8	5345	816	14375	4869	91
LIFE STAGE: COPEPODITE												
ACARTIA SPP	8	8503	1348	17689	6126	72	0	-	-	-	-	-
PSEUDODIAPTOMUS												
CORONATUS	6	875	295	2695	950	109	0	-	-	-	-	-
PSEUDOCALANUS MINUTUS	1	42	337	337	119	283	0	-	-	-	-	-
OITHONA SPP	6	999	295	3145	1166	117	0	-	-	-	-	-
UNIDENTIFIED												
COPEPODITES	4	1572	2358	4717	1832	117	0	-	-	-	-	-
LIFE STAGE: ADULT												
ACARTIA CLAUSI	3	444	393	1685	716	161	0	-	-	-	-	-
ACARTIA TONSA	7	3763	674	7075	2498	66	0	-	-	-	-	-
PSEUDODIAPTOMUS												
CORONATUS	4	249	337	590	277	112	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	4	1528	1769	4717	1882	123	0	-	-	-	-	-
PSEUDOCALANUS MINUTUS	1	42	337	337	119	283	0	-	-	-	-	-
OITHONA BREVICORNIS	5	841	393	3302	1155	137	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	337	1348	1348	624	185	0	-	-	-	-	-
OBELIA SPP	0	-	-	-	-	-	1	39	313	313	111	283
ORDER ROTIFERA	4	2635	393	10108	4616	175	4	2493	625	11009	4170	167
PODON SPP	0	-	-	-	-	-	4	175	313	371	187	107
SUBCLASS COPEPODA	0	-	-	-	-	-	4	797	1113	2449	938	118
ACARTIA SPP	0	-	-	-	-	-	8	6744	1538	23762	7885	117
ACARTIA CLAUSI	0	-	-	-	-	-	2	122	347	625	237	195
ACARTIA TONSA	0	-	-	-	-	-	6	3860	1736	10577	3630	94
PSEUDODIAPTOMUS												
CORONATUS	0	-	-	-	-	-	5	1020	384	3846	1338	131
PARACALANUS												
CRASSIROSTRIS	0	-	-	-	-	-	6	4714	1042	14851	5309	113
EURYTEMORA SPP.	0	-	-	-	-	-	3	261	625	769	362	139
OITHONA SPP	0	-	-	-	-	-	4	414	500	1113	476	115
OITHONA BREVICORNIS	0	-	-	-	-	-	7	1141	313	2083	849	74
OITHONA SIMILIS	0	-	-	-	-	-	3	466	313	2449	869	187
UNIDENTIFIED												
HARPACTICOIDS	7	4418	1179	10849	3624	82	8	2170	750	5769	1645	76
PARASITIC CYCLOPOIDA	7	1117	472	2358	846	76	8	1372	384	2188	664	48
	8	76248					8	88609				

TABLE 25. (CONT.)

MONTH	JUNE 1975											
	LOCATION 15						LOCATION 16					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	5	806	705	2611	895	111	5	872	283	3846	1291	148
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	5	1959	377	6950	2848	145	7	3963	308	16415	6479	163
CLASS GASTROPODA	8	2328	373	4528	1408	60	7	1765	580	4528	1464	83
BASSARIUS SPP.	1	29	235	235	83	283	2	69	270	283	128	185
CLASS POLYCHAETA	3	3984	633	10189	2990	75	8	4043	769	12923	4113	102
BOCEPS SPP.	2	143	236	909	320	224	3	209	270	1091	380	182
POLYDORA SPP.	7	2139	370	5597	2078	97	4	1546	1132	5600	2167	136
CLASS ANCIIDACEA	1	47	377	377	133	283	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	0	-	-	-	-	-	2	105	270	566	209	209
LIFE STAGE: HINGE												
CLASS BIVALVIA	7	1540	235	7170	2371	154	5	1706	384	6462	2569	151
LIFE STAGE: UMBO												
CLASS BIVALVIA	5	1130	403	3058	1285	114	6	742	283	1621	639	86
MODIOLUS DEHISSEUS	0	-	-	-	-	-	2	312	1081	1415	585	187
MERCENARIA MERCENARIA	0	-	-	-	-	-	1	91	727	727	257	283
MODIOLUS LATERALIS	0	-	-	-	-	-	3	217	308	849	333	153
	8	14115					8	15640				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	0	-	-	-	-	-	8	52436	30725	65943	14067	27
BARNACLE NAUPLIUS	8	6096	633	13962	4978	82	7	5880	1111	12076	5063	96
LIFE STAGE: NO DETERMINATION												
ORFEDIA SPP.	0	-	-	-	-	-	1	39	308	308	109	283
ORFEDIA ROTIFERA	0	-	-	-	-	-	5	2339	364	9230	3813	163
PODOP SPP.	0	-	-	-	-	-	3	177	308	727	272	154
SUBCLASS COPEPODA	0	-	-	-	-	-	6	797	384	2432	848	166
ACARTIA SPP.	0	-	-	-	-	-	6	3418	384	12735	4501	132
ACARTIA CLAUSI	0	-	-	-	-	-	1	48	384	384	136	283
ACARTIA TONSA	0	-	-	-	-	-	5	11012	4444	62264	21029	191
PSEUDODIAPYCNUS	0	-	-	-	-	-	6	875	308	1981	706	81
CORONATUS	0	-	-	-	-	-	1	135	1081	1081	362	283
PARACALANUS SPP.	0	-	-	-	-	-	6	3358	1091	8773	3446	102
PARACALANUS	0	-	-	-	-	-	1	96	769	769	272	283
CRASSIROSTRIS	0	-	-	-	-	-	2	138	540	566	256	185
EURYTEMORA SPP.	0	-	-	-	-	-	6	1148	566	3333	1184	103
OLITHONA SPP.	0	-	-	-	-	-	8	2401	384	7075	2070	86
OLITHONA BREVICORNIS	0	-	-	-	-	-	8	1973	1132	3461	881	45
UNIDENTIFIED PARASITIC CYCLOPOIDA	0	-	-	-	-	-						
	8	6096					8	86270				

TABLE 25. (CONT.)

MONTH	JUNE 1976											
	LOCATION 17						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	6	1802	625	6250	2271	126	5	1885	222	6756	2744	146
LIFE STAGE: LARVAL												
CYPRID LARVAE	5	2637	313	10135	4057	154	5	564	250	1621	672	119
CLASS GASTROPODA	6	2280	364	6756	2590	114	8	2537	476	7692	2615	103
CLASS POLYCHAETA	2	155	225	1013	356	230	2	124	221	769	272	220
CLASS POLYCHAETA	8	5760	1442	14800	4819	84	7	2958	884	8500	2903	93
MEGALIS SPP.	2	106	400	450	197	186	3	188	229	1025	355	189
POLYDORA SPP.	6	2126	481	5469	2136	100	7	2103	250	5405	1834	87
UNIDENTIFIED												
INVENTORATE	3	215	225	1013	366	170	0	-	-	-	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	5	2176	364	8400	3496	161	7	2277	221	8000	2792	123
MULINIA LATERALIS	1	60	481	481	170	283	0	-	-	-	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	5	1204	364	3153	1346	112	5	1844	229	7948	3014	163
MERCENARIA MERCENARIA	1	60	481	481	170	203	0	-	-	-	-	-
MULINIA LATEFALIS	0	-	-	-	-	-	1	60	476	476	168	283
	8	18582					8	14538				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	8	68122	44711	123600	25121	37	2	8214	30476	35238	15263	186
BAHNCLE NAUPLIUS	8	7471	1013	20000	7425	99	8	4472	540	9750	3671	82
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	7	2205	450	7031	2964	134	0	-	-	-	-	-
OBELIA SPP.	0	-	-	-	-	-	1	31	250	250	86	283
PODON SPP.	3	180	313	729	275	153	0	-	-	-	-	-
SUBCLASS COPEPODA	3	588	1200	1923	834	142	0	-	-	-	-	-
ACARTIA SPP.	6	4132	364	13514	5773	140	2	179	476	952	354	198
ACARTIA CLAUSI	2	186	391	1093	391	211	0	-	-	-	-	-
ACARTIA TONSA	7	4945	364	11628	4336	87	2	1548	3333	9048	3247	210
PSEUDODIAPYTOUS												
CORONATUS	5	892	938	2364	874	98	2	476	1429	2381	918	193
PARACALANUS SPP.	2	140	391	729	275	196	0	-	-	-	-	-
PARACALANUS												
CRASSIPEDIS	7	4252	391	11036	4250	100	2	595	2381	2381	1102	185
EURYTEMORA SPP.	2	137	313	781	282	207	0	-	-	-	-	-
OTHORA SPP.	3	164	337	581	236	144	0	-	-	-	-	-
OTHONA BRUVICORNIS	8	1401	364	3365	926	66	2	417	952	2381	861	207
UNIDENTIFIED												
PARAPACIFICUS	8	3019	1600	5104	1412	47	2	357	1429	1429	661	185
PARASITIC CYCLOPOIDA	6	1610	1013	2907	1229	76	2	298	952	1429	566	190
	8	99683					8	16587				

TABLE 25. (CONT.)

MONTH	JULY 1976											
	LOCATION 11						LOCATION 14					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
CLASS POLYCHAETA	10	1180	406	2830	728	62	0	-	-	-	-	-
TROCHOPHORES	5	452	406	1509	583	129	7	744	391	2010	754	101
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	1	67	674	674	213	316	10	5076	2734	10213	2147	42
CLASS GASTROPODA	9	1593	515	4043	1115	70	8	1413	725	4110	1314	93
NASSARIUS SPP.	0	-	-	-	-	-	2	108	391	685	237	220
MELAMPUS BIDENTATUS	2	126	472	786	275	219	0	-	-	-	-	-
CLASS POLYCHAETA	10	3505	515	10024	2657	76	8	1272	685	2553	870	68
POLYDORA SPP	0	-	-	-	-	-	5	273	170	1389	433	159
BARNACLE CYPRIS	1	59	590	590	187	316	0	-	-	-	-	-
UNIDENTIFIED												
INVERTEBRATE	0	-	-	-	-	-	6	591	464	1915	700	118
INVERTEBRATE	0	-	-	-	-	-	1	36	362	362	114	316
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	334	377	1348	493	147	5	313	85	1667	538	172
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	348	314	1415	565	162	6	479	309	1389	550	115
MULINIA LATERALIS	1	79	786	786	249	316	0	-	-	-	-	-
	10	7744					10	10304				

TABLE 25. (CONT.)

MONTH	JULY 1976											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	10	20540	1031	54245	18305	89	10	24629	6429	49500	16321	66
BARNACLE NAUPLIUS	5	5221	674	30189	10644	204	3	189	255	1277	404	213
LIFE STAGE: COPEPODITE												
ACARTIA SPP	9	5880	515	15094	5789	98	0	-	-	-	-	-
PSEUDODIAPTOMUS												
CORONATUS	3	324	472	1415	577	178	0	-	-	-	-	-
PARACALANUS SPP.	2	1274	5189	7547	2742	215	0	-	-	-	-	-
EURYTEMORA SPP.	2	189	472	1415	456	241	0	-	-	-	-	-
OITHONA SPP	7	2677	786	10108	3454	129	0	-	-	-	-	-
UNIDENTIFIED												
COPEPODITES	5	904	472	3145	1248	138	0	-	-	-	-	-
LIFE STAGE: ADULT												
ACARTIA CLAUSI	2	118	472	708	255	216	0	-	-	-	-	-
ACARTIA TONSA	8	2879	157	13679	4738	165	0	-	-	-	-	-
PSEUDODIAPTOMUS												
CORONATUS	6	734	157	2358	980	134	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	2	350	674	2830	897	256	0	-	-	-	-	-
EURYTEMORA AFFINIS	2	83	354	472	176	213	0	-	-	-	-	-
OITHONA SPP	1	35	354	354	112	316	0	-	-	-	-	-
OITHONA BREVICORNIS	6	1851	1623	5391	1974	107	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	6	403	314	1348	451	112	1	16	155	155	49	316
OBELIA SPP	0	-	-	-	-	-	2	75	362	391	159	211
ORDER ROTIFERA	4	4031	314	21226	8345	207	5	417	85	2000	687	165
NASSARIUS SPP.	0	-	-	-	-	-	1	9	85	85	27	316
CLASS POLYCHAETA	0	-	-	-	-	-	1	117	1172	1172	371	316
SUBCLASS COPEPODA	0	-	-	-	-	-	5	189	85	638	243	128
ACARTIA SPP	0	-	-	-	-	-	7	2820	362	7000	3044	108
ACARTIA TONSA	0	-	-	-	-	-	8	3100	309	8219	3033	98
PSEUDODIAPTOMUS												
CORONATUS	0	-	-	-	-	-	7	479	170	1277	437	91
PARACALANUS												
CRASSIROSTRIS	0	-	-	-	-	-	6	2245	362	10213	3266	145
OITHONA SPP	0	-	-	-	-	-	6	794	255	3261	1075	135
OITHONA BREVICORNIS	0	-	-	-	-	-	9	3017	935	10417	3018	100
OITHONA SIMILIS	0	-	-	-	-	-	1	36	362	362	114	316
UNIDENTIFIED												
HARPACTICIDS	8	1217	406	4599	1370	113	5	619	694	2055	810	131
PARASITIC CYCLOPOIDA	5	578	629	2123	738	128	5	449	85	2740	855	190
	10	49287					10	39200				

TABLE 25. (CONT.)

JULY 1976												
SPECIES	LOCATION 15						LOCATION 16					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	8	1686	455	5909	2050	122	9	1362	600	3692	1054	77
LIFE STAGE: LARVAL												
CYPRONAUTAE LARVAE	10	4741	1364	13636	3821	81	10	4597	1481	10462	3267	71
CLASS GASTROPODA	10	2129	833	4545	1098	52	10	1620	175	2963	1036	64
CLASS POLYCHAETA	1	39	392	392	124	316	0	-	-	-	-	-
CLASS POLYCHAETA	9	2086	909	3409	1141	55	9	1522	300	3692	1039	68
CLASS POLYCHAETA	1	70	704	704	223	316	3	107	300	423	174	163
POLYCHAETA SPP.	5	371	294	1667	530	143	8	351	75	1071	338	96
UNIDENTIFIED INVERTEBRATE	7	794	352	2656	849	107	8	857	281	1509	614	72
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	143	211	465	198	139	5	235	75	1071	379	161
LIFE STAGE: UMBO												
CLASS BIVALVIA	5	467	282	2045	665	142	7	405	75	1231	458	113
MULINIA LATERALIS	0	-	-	-	-	-	1	30	300	300	95	316
	10	12526	-	-	-	-	10	11086	-	-	-	-
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	0	-	-	-	-	-	10	24036	3925	52963	15136	75
NAUPLIUS	7	594	211	1667	615	103	5	598	75	3692	1179	197
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	2	45	94	357	114	252
CLASS POLYCHAETA	0	-	-	-	-	-	6	289	188	755	301	164
SUBCLASS GASTROPODA	0	-	-	-	-	-	1	38	377	377	119	316
SUBCLASS COPEPODA	0	-	-	-	-	-	5	219	345	741	257	117
ACANTHA SPP.	0	-	-	-	-	-	7	2470	425	9231	3325	135
ACANTHA LONGA	0	-	-	-	-	-	8	3085	188	8148	3106	101
PSEUDODIAPTOMUS	0	-	-	-	-	-	5	339	75	1846	586	173
PARACALANUS	0	-	-	-	-	-	6	2755	423	8148	3326	121
CRASSIROSTRIS	0	-	-	-	-	-	3	513	563	3300	1064	207
OLIGONA SPP.	0	-	-	-	-	-	10	3834	250	9630	3026	79
OLIGONA BREVICORNIS	0	-	-	-	-	-	2	72	300	423	155	215
OLIGONA STALLIS	0	-	-	-	-	-	5	408	300	1231	492	121
UNIDENTIFIED HAPTICOID	0	-	-	-	-	-	4	264	188	1429	462	175
PARASITIC CYCLOPOIDA	0	-	-	-	-	-						
	10	594	-	-	-	-	10	30964	-	-	-	-

TABLE 45. (CONT.)

MONTH	JULY 1976											
	LOCATION 17						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	7	764	288	1667	686	90	8	2271	732	4348	1276	56
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	8	5861	2333	9273	2478	42	8	10373	1944	45556	14371	139
CLASS GASTROPODA	8	1662	273	2609	787	47	8	1872	732	3056	917	49
NASSARIUS SPP.	2	95	273	486	185	195	3	108	217	366	154	143
CLASS POLYCHAETA	8	1764	238	4348	1410	80	8	2242	366	7500	2279	102
NEREIS SPP.	1	61	486	486	172	283	3	90	183	278	127	141
POLYDORA SPP	4	450	333	1415	608	135	7	998	278	2222	787	79
UNIDENTIFIED INVERTEBRATE	5	447	273	1667	576	129	6	564	366	1522	510	91
LIFE STAGE: HINGE												
CLASS BIVALVIA	6	516	238	1636	538	104	4	145	183	515	186	128
LIFE STAGE: UMBO												
CLASS BIVALVIA	3	316	545	1135	464	147	3	213	278	773	325	152
MODIOLUS DEMISSUS	0	-	-	-	-	-	1	82	652	652	231	283
	8	11936					8	18955				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	8	29343	4926	45566	15439	53	2	10137	35543	45556	18961	187
BARNACLE NAUPLIUS	5	725	714	1739	676	93	6	477	278	1289	459	96
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	64	238	273	119	186	0	-	-	-	-	-
OBELIA SPP	1	42	333	333	118	283	2	76	278	326	140	186
ORDER ROTIFERA	3	178	273	870	306	172	1	35	278	278	98	283
SUBCLASS COPEPODA	3	240	238	870	380	158	0	-	-	-	-	-
ACARTIA SPP	4	3464	2830	15652	5341	154	2	180	326	1111	393	219
ACARTIA TONSA	8	3877	238	9565	3443	89	2	2425	7174	12222	4688	193
PSEUDODIAPTOMUS												
CORONATUS	7	567	273	1442	456	80	2	325	652	1944	693	214
PARACALANUS												
CRASSIROSTRIS	6	3830	667	9730	3748	98	2	424	1111	2283	846	199
DITHONA SPP	3	967	273	4000	1715	177	2	818	2935	3611	1526	186
DITHONA BREVICORNIS	8	5625	1159	9519	2775	49	2	2077	7174	9444	3894	187
UNIDENTIFIED												
HARPACTICOIDS	5	495	290	1981	667	135	1	35	278	278	98	283
PARASITIC CYCLOPOIDA	4	433	333	1739	615	142	1	104	833	833	295	283
	8	49850					8	17112				



TABLE 25. (CONT.)

MONTH	AUGUST - 2 SEPTEMBER 1976											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
CLASS POLYCHAETA	7	2233	708	5195	2020	91	0	-	-	-	-	-
TROCHOPHORES	7	616	307	1497	557	90	9	1975	431	5313	1360	69
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	1	43	426	426	135	316	8	4245	625	9375	3449	81
CLASS GASTROPODA	8	962	325	3310	1045	109	6	1145	714	2642	1141	100
MELAMPUS BIDENTATUS	1	75	749	749	237	316	0	-	-	-	-	-
CLASS POLYCHAETA	10	3010	325	6368	1993	66	9	2203	394	3774	1260	57
NEREIS SPP.	0	-	-	-	-	-	1	48	431	431	144	300
POLYDORA SPP	0	-	-	-	-	-	5	495	394	1875	644	130
BARNACLE CYPRIS	0	-	-	-	-	-	1	44	394	394	131	300
UNIDENTIFIED INVERTEBRATE	0	-	-	-	-	-	4	608	377	2143	872	143
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	646	307	2933	1080	167	6	657	550	1563	604	92
MULINIA LATERALIS	0	-	-	-	-	-	1	122	1094	1094	365	300
LIFE STAGE: UMBO												
CLASS BIVALVIA	5	377	325	1705	556	147	4	1047	313	4151	1580	151
MERCENARIA MERCENARIA	1	61	614	614	194	316	0	-	-	-	-	-
MULINIA LATERALIS	4	232	325	921	342	147	2	183	550	1094	387	212
	10	8254					9	12771				

TABLE 25. (CONT.)

MONTH	AUGUST - 2 SEPTEMBER 1976											
	LOCATION 11						LOCATION 14					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	10	27302	7177	57792	16530	61	8	31878	8988	83243	32088	101
BARNACLE NAUPLIUS	1	166	1655	1655	523	316	4	365	431	1132	481	132
LIFE STAGE: COPEPODITE												
ACARTIA SPP	9	5518	708	18120	5756	104	0	-	-	-	-	-
PSEUDODIAPTOMUS												
CORONATUS	2	137	449	921	310	226	0	-	-	-	-	-
PARACALANUS SPP.	1	31	307	307	97	316	0	-	-	-	-	-
OITHONA SPP	9	4750	828	13930	4831	102	0	-	-	-	-	-
UNIDENTIFIED COPEPODITES	3	235	325	1100	423	180	0	-	-	-	-	-
LIFE STAGE: ADULT												
ACARTIA TONSA	7	2344	708	6450	2465	105	0	-	-	-	-	-
PSEUDODIAPTOMUS												
CORONATUS	2	63	307	325	133	211	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	3	431	325	2150	832	193	0	-	-	-	-	-
OITHONA BREVICORNIS	7	1121	426	2566	1067	95	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	5	269	325	921	328	122	1	69	625	625	208	300
ORDER ROTIFERA	8	4526	828	11080	4308	95	7	4696	1282	12143	3906	83
SUBCLASS OSTRACODA	1	37	367	367	116	316	0	-	-	-	-	-
SUBCLASS COPEPODA	0	-	-	-	-	-	3	8580	2500	71321	23564	275
ACARTIA SPP	0	-	-	-	-	-	5	7110	431	25283	10118	142
ACARTIA TONSA	0	-	-	-	-	-	9	6318	469	14054	5242	83
PSEUDODIAPTOMUS												
CORONATUS	0	-	-	-	-	-	3	171	156	755	301	176
PARACALANUS												
CRASSIROSTRIS	0	-	-	-	-	-	4	1056	714	4688	1686	160
OITHONA SPP	0	-	-	-	-	-	5	1056	321	5660	1842	175
OITHONA BREVICORNIS	0	-	-	-	-	-	8	5417	431	18438	6489	120
OITHONA SIMILIS	0	-	-	-	-	-	1	17	156	156	52	300
UNIDENTIFIED												
HARPACTICIDS	6	362	325	852	349	97	2	146	377	938	322	220
PARASITIC CYCLOPOIDA	3	131	325	614	223	171	7	438	321	755	284	65
	10	47419					9	67316				

TABLE 25. (CONT.)

MONTH	AUGUST - 2 SEPTEMBER 1976											
	LOCATION 15						LOCATION 16					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAP
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	8	2513	625	7031	2212	88	9	2426	377	7328	2128	88
LIFE STAGE: LARVAL												
CYPRINAUTE LARVAE	9	6752	1042	12556	4387	65	8	4605	755	12075	3369	34
CLASS TARTROPODA	6	1521	714	3125	1012	67	9	1656	1132	3243	660	40
NAUSAEUS SPP.	1	31	273	278	93	300	0	-	-	-	-	-
CLASS POLYCHAETA	9	2907	938	6944	1981	68	9	2512	377	5172	1920	76
NEKIS SPP.	1	52	469	469	156	300	2	121	273	811	275	227
POLIDORA SPP.	7	1856	625	3906	1430	77	7	960	362	3056	976	102
BARNAACLE CYPRIS	0	-	-	-	-	-	1	48	431	431	144	390
UNIDENTIFIED INVERTEBRATE	4	877	1379	2500	1090	124	4	912	377	4722	1501	176
LIFE STAGE: RINGE												
CLASS BIVALVIA	7	682	357	1563	548	80	9	873	476	1887	397	46
MULINIA LATERALIS	4	498	357	2143	746	150	3	143	189	725	255	177
LIFE STAGE: UMBO												
CLASS BIVALVIA	5	1113	208	3906	1595	143	7	808	189	4444	1390	172
UDOLUS DEMISSUS	1	52	469	469	156	300	0	-	-	-	-	-
MULINIA LATERALIS	5	826	357	3333	1177	142	4	473	755	1293	593	123
	9	19680					9	15537				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	0	-	-	-	-	-	9	46784	15849	90278	27041	58
BARNAACLE NAUPLIUS	4	197	238	625	258	131	4	268	377	1132	385	144
TROCHOPHORES	1	212	1905	1905	635	300	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
OUELIA SPP	0	-	-	-	-	-	1	20	181	181	60	300
ORDER ROTIFERA	0	-	-	-	-	-	7	8371	5676	15094	5772	69
SUBCLASS COPEPODA	0	-	-	-	-	-	2	435	862	3056	1023	235
ACARTIA SPP	0	-	-	-	-	-	6	7284	377	23889	9306	128
ACARTIA TONSA	0	-	-	-	-	-	9	8254	377	32075	9651	117
PSEUDODIAPTOMUS	0	-	-	-	-	-	6	335	189	833	325	97
CORONATUS	0	-	-	-	-	-	2	781	2586	4444	1618	207
PARACALANUS	0	-	-	-	-	-	4	612	181	4340	1414	231
CRASSIROSTRIS	0	-	-	-	-	-	9	7058	377	24167	8243	105
OITHONA SPP	0	-	-	-	-	-	2	364	377	2899	959	263
OITHONA BREVICORNIS	0	-	-	-	-	-	5	299	181	833	345	116
OITHONA SIMILIS	0	-	-	-	-	-	7	676	362	1905	635	94
UNIDENTIFIED HARPOCTICOID	0	-	-	-	-	-	0	-	-	-	-	-
PARASITIC CYCLOPOIDA	0	-	-	-	-	-	0	-	-	-	-	-
	9	409					9	82341				

TABLE 25. (CONT.)

MONTH	AUGUST - 2 SEPTEMBER 1976											
	LOCATION 17						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	9	2589	379	5859	1604	62	7	2421	345	4752	1447	61
LIFE STAGE: LARVAL												
COPEPODITE LARVAL	9	5234	584	10156	3436	55	7	4539	362	11467	4002	53
CLASS SARPTOPODA	9	1624	741	3516	855	53	6	1771	313	3471	1355	74
NOTIPIUS SPP.	0	-	-	-	-	-	2	56	156	214	99	174
CLASS POLYCHAETA	9	2897	833	9420	2629	91	7	2225	1250	3080	643	29
NOEUS SPP.	0	-	-	-	-	-	1	52	362	362	137	265
POGONIA SPP.	8	1335	195	3030	1073	80	7	1092	543	1852	434	46
OPHIOLE CYPRIS	1	22	195	195	55	300	2	52	156	208	90	173
UNIDENTIFIED	4	1071	580	5972	1760	164	2	441	469	2614	974	221
INVENTEDS	-	-	-	-	-	-	-	-	-	-	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	7	1638	290	7609	2345	143	5	513	165	1667	612	119
MYSTICINIA MACEBARIA	0	-	-	-	-	-	1	66	463	463	175	255
NOELIA LATERALIS	4	200	195	690	269	135	3	110	172	417	159	144
LIFE STAGE: URBO												
CLASS BIVALVIA	8	755	290	2734	814	108	5	457	338	714	252	55
NOELIA LATERALIS	4	583	391	2070	858	147	5	437	169	1289	434	111
	9	1738	-	-	-	-	7	1425	-	-	-	-
LIFE STAGE: NAUPLIAR												
SPECIALS COPEPODA	9	46349	10547	93941	30331	67	4	18859	13466	54772	23405	124
BRACHIO NAUPLIUS	6	379	345	758	312	82	7	410	169	1190	360	82
LIFE STAGE: NO DETERMINATION												
COELESIA SPP.	1	22	195	195	65	300	1	25	172	172	65	265
ORDER ROTIFERA	7	8941	758	16793	7485	84	4	8685	181	30208	14460	166
HYDROCOMES HYDROCOMA	1	130	1172	1172	391	300	0	-	-	-	-	-
HYDROCOMES HYDROCOMA	3	629	417	2299	1146	132	0	-	-	-	-	-
ACARTIA SPP.	7	6844	379	22826	9540	139	3	876	362	5093	1678	214
ACARTIA TIGRA	9	6173	521	14063	4789	78	5	3018	507	9138	3965	131
PSEUDOCYPRIDUS	-	-	-	-	-	-	-	-	-	-	-	-
COELESIA	5	229	172	725	275	120	2	54	172	208	93	172
PARACALANUS	-	-	-	-	-	-	-	-	-	-	-	-
CAEPIIDAE	4	1241	290	5797	2290	185	2	54	172	208	93	172
OTITHUS SPP.	8	1502	379	3621	1172	78	5	1093	169	3276	1408	129
OTITHUS OFFICINARIS	9	9361	391	26412	8600	103	5	1821	1268	5000	1797	99
OTITHUS SIMILIS	2	41	172	195	61	199	0	-	-	-	-	-
UNIDENTIFIED	-	-	-	-	-	-	-	-	-	-	-	-
HYDROCOMES	2	64	362	391	166	199	2	73	169	345	135	164
PARASITIC CYCLOPOIDA	8	547	195	1563	481	85	4	285	169	1449	521	133
	9	81491	-	-	-	-	7	35256	-	-	-	-

a. Density ( $n/m^3$ )

b. Stations are shown in Figure 4

c. Copepods from the condenser discharge were separated by life stage (copepodite and adult). Cenal and plume copepods were combined in the life stage no determination. *Eurytemora* spp. and *Nauplius* spp. were not identified at the condenser discharge but were included with the group polychaete larvae.

TABLE 26. MEAN DENSITIES<sup>a</sup> OF MICROZOOPLANKTON COLLECTED AT THE CONDENSER DISCHARGE (11), THE DISCHARGE CANAL (14, 15, 16, 17), AND THE THERMAL PLUME (19)<sup>b</sup>, FOR THE THERMAL PLUME PASSAGE STUDY FROM SEPTEMBER 1975 THROUGH 2 SEPTEMBER 1976<sup>c</sup>.

SPECIES	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
CLASS POLYCHAETA	31	1756	236	14825	2789	159
TROCHOPHORES	24	457	202	3145	707	155
LIFE STAGE: LARVAL						
CYPHONAUTE LARVAE	3	29	325	674	120	420
CLASS GASTROPODA	39	1133	202	4043	1062	94
NASSARIUS SPP.	2	18	162	721	104	589
MELAMPUS BIDENTATUS	8	109	295	1179	278	256
CLASS POLYCHAETA	48	6949	162	29245	7688	111
BARNACLE CYPRIIS	1	12	590	590	83	707
PHYLUM ECHINODERMATA	1	13	674	674	95	707
CLASS ASCIDIACEA	1	4	202	202	29	707
UNIDENTIFIED INVERTEBRATE	2	18	162	721	104	589
LIFE STAGE: HINGE						
CLASS BIVALVIA	23	840	240	13707	2221	265
AEQUIPECTEN IRRADIANS	6	354	517	6724	1327	375
MERCENARIA MERCENARIA	2	34	405	1293	190	561
LIFE STAGE: UMBO						
CLASS BIVALVIA	31	665	194	3538	910	137
AEQUIPECTEN IRRADIANS	4	55	259	1034	213	390
MERCENARIA MERCENARIA	2	20	404	614	103	506
MULINIA LATERALIS	9	107	203	1258	270	252
	50	12572				

TABLE 26. (CONT.)

SPECIES	LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	50	37294	1031	123103	25632	69
BARNACLE NAUPLIUS	34	11707	194	68017	19552	167
LIFE STAGE: COPEPODITE						
ACARTIA SPP	48	7808	325	33019	6969	89
ACARTIA TONSA	1	7	325	325	46	707
CENTROPAGES SPP	1	4	216	216	31	707
PSEUDODIAPYOMUS						
CORONATUS	14	304	295	2695	649	213
PARACALANUS SPP.	6	410	307	7547	1472	359
EURYTEMORA SPP.	16	495	203	3448	956	193
EURYTEMORA AFFINIS	1	5	236	236	33	707
PSEUDOCALANUS MINUTUS	2	11	194	337	55	513
ORDER CYCLOPOIDA	1	4	216	216	31	707
OITHONA SPP	28	1961	295	13930	3337	170
UNIDENTIFIED						
COPEPODITES	18	830	194	10108	1904	229
LIFE STAGE: ADULT						
ACARTIA CLAUSI	17	2293	393	19811	5325	232
ACARTIA TONSA	31	2177	157	14151	3485	160
CENTROPAGES HAMATUS	1	4	194	194	27	707
PSEUDODIAPYOMUS						
CORONATUS	14	287	157	2358	651	227
PARACALANUS						
CRASSIROSTRIS	12	468	260	4717	1051	224
EURYTEMORA SPP.	2	31	583	943	155	509
EURYTEMORA AFFINIS	8	265	259	4567	863	325
EURYTEMORA AMERICANA	1	5	236	236	33	707
TEMORA LONGICORNIS	1	5	236	236	33	707
PSEUDOCALANUS MINUTUS	2	11	236	337	58	503
OITHONA SPP	1	7	354	354	50	707
OITHONA BREVICORNIS	24	825	162	5391	1284	156
OITHONA SIMILIS	1	4	203	203	29	707
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	17	322	257	4127	708	220
OBELIA SPP	1	7	325	325	46	707
ORDER ROTIFERA	33	6503	314	53459	10087	155
SUBCLASS OSTRACODA	1	7	367	367	52	707
ORDER CYCLOPOIDA	1	5	259	259	37	707
UNIDENTIFIED						
HARPACTICOIDES	40	1550	194	10849	2149	139
UNIDENTIFIED						
INVERTEBRATE	1	4	216	216	31	707
PARASITIC CYCLOPOIDA	31	647	236	2358	731	113
SUBORDER AEOLIDACEA	1	5	240	240	34	707
	50	76271				

TABLE 26. (CONT.)

SPECIES	LOCATION 14						LOCATION 15					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	49	38159	2865	113766	29376	77	1	116	5693	5693	813	700
BAKAPLE NAUPLIUS	35	10164	83	63300	16865	166	39	8816	211	49156	13625	155
LIFE STAGE: COPEPODITE												
ACARTIA SPP	3	94	619	2344	417	442	1	14	705	705	101	700
ACARTIA TONSA	0	-	-	-	-	-	1	15	740	740	106	700
PSEUDODIAPYCNUS												
CORONATUS	1	1	52	52	7	-	2	1	18	40	6	-
PAPACALANUS SPP.	2	15	313	438	75	502	0	-	-	-	-	-
OITHONA SPP	3	34	71	1150	174	516	2	3	72	80	15	490
OITHONA SIMILIS	0	-	-	-	-	-	1	1	54	54	8	-
UNIDENTIFIED												
COPEPODITES	1	1	71	71	10	-	2	4	60	145	22	532
PAPASITIC CYCLOPOIDA	0	-	-	-	-	-	2	38	900	958	186	490
LIFE STAGE: ADULT												
ORDER ROTIFERA	0	-	-	-	-	-	1	48	2367	2367	338	700
ACARTIA TONSA	2	18	417	493	90	497	2	9	140	307	48	524
PSEUDODIAPYCNUS												
CORONATUS	2	2	52	55	11	495	0	-	-	-	-	-
OITHONA BREVICORNIS	2	7	164	208	37	498	2	4	72	100	17	497
OITHONA SIMILIS	0	-	-	-	-	-	1	1	60	60	9	-
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	6	72	63	1531	282	390	0	-	-	-	-	-
OBELIA SPP	3	21	313	391	86	402	0	-	-	-	-	-
ORDER ROTIFERA	34	8557	85	126666	19913	233	1	59	2900	2900	414	700
CLASS CRUSTACEA	1	0	24	24	3	-	0	-	-	-	-	-
POLYDOR SPP	4	28	313	371	96	343	0	-	-	-	-	-
SUBCLASS OSTRACODA	1	1	71	71	10	-	2	3	60	72	13	492
SUBCLASS BRACHYPODA	21	1809	65	71321	10058	556	0	-	-	-	-	-
ACARTIA SPP	40	5320	362	25283	6315	119	0	-	-	-	-	-
ACARTIA CLAUSI	17	4890	137	74500	14779	302	0	-	-	-	-	-
ACARTIA TONSA	27	2408	254	14054	3726	155	0	-	-	-	-	-
CENTROPAGES SPP	1	5	254	254	36	707	0	-	-	-	-	-
PSEUDODIAPYCNUS												
CORONATUS	18	326	156	3846	667	205	0	-	-	-	-	-
PAPACALANUS												
CRASSIPSTRIS	21	1422	254	14851	3043	214	0	-	-	-	-	-
EURYTEMORA SPP.	19	579	137	6000	1290	223	0	-	-	-	-	-
TEMORA LONGICORNIS	1	5	266	266	38	707	0	-	-	-	-	-
PSEUDOCALANUS MINUTUS	4	38	259	896	151	393	0	-	-	-	-	-
ORDER CYCLOPOIDA	1	1	55	55	8	-	0	-	-	-	-	-
OITHONA SPP	17	427	255	5660	989	232	0	-	-	-	-	-
OITHONA BREVICORNIS	27	1791	260	18438	3586	200	0	-	-	-	-	-
OITHONA SIMILIS	7	94	71	2449	375	398	0	-	-	-	-	-
UNIDENTIFIED												
RAPPACTICIDS	31	925	254	5785	1348	146	2	6	100	181	29	511
UNIDENTIFIED												
INVERTEBRATE	0	-	-	-	-	-	1	7	322	322	46	700
PAPASITIC CYCLOPOIDA	35	570	85	2740	648	114	0	-	-	-	-	-
PHYLUM PLATYHELMINTHES	3	48	260	1333	220	460	2	28	546	833	141	501
	50	77838					49	9173				

TABLE 26. (CONT.)

SPECIES	LOCATION 14						LOCATION 15					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	33	849	21	5313	1065	125	32	1259	18	7031	1771	141
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	36	2778	22	20049	3732	134	36	2979	289	13636	3638	122
CLASS GASTROPODA	32	980	24	4110	1127	115	37	1335	18	4545	1255	94
NASSARIUS SPP.	9	59	21	685	150	254	6	44	181	810	140	321
ILYANASSA OBSOLETA	0	-	-	-	-	-	1	1	60	60	9	-
MELAMPUS BIDENTATUS	1	9	429	429	61	707	2	15	300	416	73	496
CLASS BIVALVIA	1	3	143	143	20	707	3	9	18	253	44	477
AEQUIPECTEN IRRADIANS	1	0	24	24	3	-	0	-	-	-	-	-
LAEVICARDIUM MORTONI	1	0	24	24	3	-	0	-	-	-	-	-
MULINIA LATERALIS	1	5	238	238	34	707	2	6	54	240	35	583
CLASS POLYCHAETA	46	3701	83	20666	4524	122	48	4029	208	23188	4527	112
NEREIS SPP.	7	46	137	431	122	263	5	64	236	909	207	324
POLYDORA SPP	32	2759	170	15600	3907	142	33	5782	294	82031	14907	258
SUBCLASS COPEPODA	0	-	-	-	-	-	1	131	6440	6440	920	700
BARNACLE CYPRIS	3	16	24	400	79	480	0	-	-	-	-	-
CLASS ASCIDIACEA	0	-	-	-	-	-	4	14	20	377	60	434
UNIDENTIFIED												
INVERTEBRATE	23	457	362	2143	658	144	13	345	244	2656	709	206
LIFE STAGE: HINGE												
CLASS BIVALVIA	29	1025	22	13247	2215	216	31	1277	211	14141	2708	212
AEQUIPECTEN IRRADIANS	0	-	-	-	-	-	1	0	18	18	3	-
MULINIA LATERALIS	1	22	1094	1094	155	707	4	91	357	2143	362	395
LIFE STAGE: UMBO												
CLASS BIVALVIA	28	1018	63	5600	1467	144	28	1015	208	8333	1573	155
MODIOLUS DEMISSUS	0	-	-	-	-	-	1	10	469	469	67	700
MULINIA LATERALIS	3	34	66	1094	172	502	5	152	357	3333	579	382
	50	13761					49	18558				



TABLE 26. (CONT.)

SPECIES	LOCATION 16						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	32	1043	19	7328	1422	136	33	1355	166	6250	1630	120
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	38	3001	15	16415	3820	127	33	3539	313	10156	3409	96
CLASS GASTROPODA	40	1158	53	4891	1173	101	34	1365	176	6756	1462	107
NASSARIUS SPP.	10	76	15	813	188	248	7	76	225	1013	209	275
MELAMPUS BIDENTATUS	2	14	247	475	74	525	0	-	-	-	-	-
CLASS BIVALVIA	2	7	133	212	35	513	0	-	-	-	-	-
MULINIA LATERALIS	1	2	124	124	17	714	0	-	-	-	-	-
CLASS POLYCHAETA	45	2491	175	12923	2703	108	42	3796	238	14800	3707	98
NEREIS SPP.	10	106	270	1115	260	244	5	80	400	1495	266	334
POLYDORA SPP.	35	2504	75	17143	3942	157	33	3576	195	24118	5377	150
BARNACLE CYPRIS	1	8	431	431	60	714	2	11	195	294	52	479
CLASS ASCIDIACEA	2	5	88	174	27	527	1	4	166	166	25	671
UNIDENTIFIED												
INVERTEBRATE	22	509	17	4722	862	169	20	482	225	5072	909	189
LIFE STAGE: HINGE												
CLASS BIVALVIA	33	1147	28	13194	2603	227	30	1449	238	14017	2780	192
AEQUIPECTEN IRRADIANS	1	3	141	141	20	714	0	-	-	-	-	-
MULINIA LATERALIS	5	29	19	725	118	404	5	51	195	690	155	306
LIFE STAGE: UMBO												
CLASS BIVALVIA	32	705	75	4444	1058	150	29	880	166	4103	1114	127
MODIOLUS DEMISSUS	2	49	1081	1415	247	505	0	-	-	-	-	-
AEQUIPECTEN IRRADIANS	2	1	14	29	4	-	0	-	-	-	-	-
MERCENARIA MERCENARIA	1	14	727	727	102	714	1	11	481	481	72	671
MULINIA LATERALIS	13	175	44	1956	411	235	4	117	391	2070	435	373
TELLINA SPP.	1	1	28	28	4	-	0	-	-	-	-	-
	51	13049					45	16789				

TABLE 26. (CONT.)

SPECIES	LOCATION 16						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	51	37172	3925	90278	25260	68	45	45455	1974	123600	28333	62
BARNACLE NAUPLIUS	38	9798	75	65473	16417	168	35	10642	345	56299	15571	146
LIFE STAGE: COPEPODITE												
ACARTIA SPP	3	81	582	1788	353	438	0	-	-	-	-	-
ACARTIA TONSA	1	16	816	816	114	714	0	-	-	-	-	-
PSEUDOCALANUS												
CORONATUS	2	1	19	35	6	-	0	-	-	-	-	-
PARACALANUS SPP.	2	12	219	417	65	525	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	1	0	19	19	3	-	0	-	-	-	-	-
PSEUDOCALANUS MINUTUS	1	0	18	18	3	-	0	-	-	-	-	-
OITHONA SPP	3	41	106	1007	195	475	0	-	-	-	-	-
UNIDENTIFIED												
COPEPODITES	2	3	57	88	15	512	0	-	-	-	-	-
PARASITIC CYCLOPOIDA	2	42	1076	1082	212	500	0	-	-	-	-	-
LIFE STAGE: ADULT												
ACARTIA TONSA	6	31	37	486	105	348	0	-	-	-	-	-
PARACALANUS SPP.	1	1	69	69	10	-	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	1	1	73	73	10	-	0	-	-	-	-	-
OITHONA BREVICORNIS	4	11	35	243	46	414	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	5	21	58	398	77	372	4	102	238	3235	496	487
OBELLIA SPP	2	10	181	308	50	517	2	12	195	333	57	485
ELPOE SPP	1	0	3	3	0	-	0	-	-	-	-	-
ORDER FOTIFERA	38	6141	139	44021	9820	160	33	8588	273	42264	12096	141
CLASSOIDA CRUSTACEA	1	3	141	141	20	714	0	-	-	-	-	-
PODUM SPP	4	33	263	727	125	380	4	40	313	729	139	345
SUBCLASS CESTRACODA	3	9	35	377	53	580	1	26	1172	1172	175	671
SUBCLASS COPEPODA	18	319	253	3056	627	197	18	411	176	2899	697	170
ACARTIA SPP	38	4159	377	23889	5435	131	37	5199	364	22826	6010	116
ACARTIA CLAUSI	16	4180	141	57447	12909	309	18	7392	166	72250	18678	253
ACARTIA TONSA	25	3815	168	62264	9863	259	25	2832	238	14063	3989	141
CERITHIOPAGES SPP	0	-	-	-	-	-	1	10	461	461	69	671
PSEUDOCALANUS												
CORONATUS	17	263	75	1981	494	188	18	311	172	2364	534	172
PARACALANUS SPP.	1	21	1081	1081	151	714	2	25	391	729	122	491
PARACALANUS												
CRASSIROSTRIS	18	1229	213	8773	2444	199	22	1732	290	11036	3047	176
EURYTEMORA SPP.	11	469	348	5063	1222	261	15	1266	166	23846	3901	308
TEMORA LONGICORNIS	1	13	638	638	89	714	1	8	373	373	56	671
PSEUDOCALANUS MINUTUS	2	17	426	439	85	500	4	28	250	461	95	336
OITHONA SPP	11	247	181	4340	775	314	17	529	273	4000	1044	197
OITHONA BREVICORNIS	29	2342	76	24167	4625	198	28	2946	254	26812	5134	174
OITHONA SIMILIS	8	101	57	2699	418	412	3	16	172	342	63	398
UNIDENTIFIED												
HAPTICOCIDS	38	946	35	7075	1299	137	31	1145	166	5104	1441	126
BARNACLE CYPRIS	1	24	1219	1219	171	714	0	-	-	-	-	-
PARASITIC CYCLOPOIDA	33	727	186	3461	898	124	32	683	176	2967	803	118
PHYLUM PLATYHELMINTHES	1	10	489	489	68	714	1	15	694	694	103	671
	51	72309					45	89414				

TABLE 26. (CONT.)

SPECIES	LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	29	1298	222	6756	1657	128
LIFE STAGE: LARVAL						
CYPHONAUTE LARVAE	31	3036	17	45556	7051	232
CLASS GASTROPODA	34	1511	35	7692	1718	114
NASSARIUS SPP.	11	63	17	769	148	235
LYONSIA HYALINA	1	4	158	158	24	671
CLASS POLYCHAETA	43	3836	86	14423	3946	103
NEREIS SPP.	11	107	130	1025	237	221
POLYDORA SPP	36	3995	250	19711	5522	138
BARNACLE CYPRIS	2	8	156	208	38	474
CLASS ASCIDIACEA	3	24	17	621	114	467
UNIDENTIFIED INVERTEBRATE	15	275	124	2619	570	208
LIFE STAGE: HINGE						
CLASS BIVALVIA	30	1213	17	9483	2264	187
MERCENARIA MERCENARIA	1	10	463	463	69	671
MULINIA LATERALIS	3	17	172	417	71	416
LIFE STAGE: UMBO						
CLASS BIVALVIA	29	1185	52	10613	2192	185
MODIOLUS DEMISSUS	1	14	652	652	97	671
MULINIA LATERALIS	6	79	169	1389	247	315
	45	16675				

TABLE 26. (CONT.)

SPECIES	LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NAUPLIAR						
SUBCLASS COPEPODA	14	15009	3087	124519	30404	203
BARNACLE NAUPLIUS	40	7613	17	50235	11765	155
LIFE STAGE: COPEPODITE						
ACARTIA SPP	2	62	1261	1543	294	471
PARACALANUS SPP.	1	0	22	22	3	-
PSEUDOCALANUS MINUTUS	2	5	87	152	26	487
OITHONA SPP	2	23	522	530	110	469
LIFE STAGE: ADULT						
ACARTIA TONSA	6	21	44	464	77	375
PSEUDODIAPTOMUS						
CORONATUS	2	1	22	44	7	-
PARACALANUS SPP.	1	1	44	44	7	-
OITHONA BREVICORNIS	1	2	111	111	17	671
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	1	0	17	17	3	-
OBELIA SPP	5	24	66	326	76	313
ORDER ROTIFERA	10	1430	152	30208	6206	434
EVADNE SP	1	19	870	870	130	671
SUBCLASS OSTRACODA	1	0	21	21	3	-
SUBCLASS COPEPODA	2	31	240	1148	174	564
ACARTIA SPP	11	1051	326	14344	3015	287
ACARTIA CLAUSI	4	3339	1724	78156	15091	452
ACARTIA TONSA	10	1188	507	12222	2972	250
PSEUDODIAPTOMUS						
CORONATUS	7	156	172	2381	499	319
PARACALANUS						
CRASSIROSTRIS	7	196	172	2381	607	310
EURYTEMORA SPP.	4	376	1149	8033	1486	395
TEMORA LONGICORNIS	1	6	287	287	43	671
OITHONA SPP	7	315	169	3611	922	292
OITHONA BREVICORNIS	10	733	265	9444	1941	265
OITHONA SIMILIS	4	24	240	287	78	325
UNIDENTIFIED						
HARPACTICOIDS	8	117	66	1429	336	288
UNIDENTIFIED MYSIOS	1	0	21	21	3	-
PARASITIC CYCLOPOIDA	11	131	43	1449	345	263
PHYLUM PLATYHELMINTHES	1	18	793	793	118	671
UNIDENTIFIED AMPHIPODA	1	0	21	21	3	-
	45	31896				

a Density (n/m<sup>3</sup>)

b Stations are shown in Figure 4 .

c Copepoda from the condenser discharge were separated by life stage (copepodite and adult). Other canal and plume copepods were combined in the life stage no determination. Polydora spp. and Nereis spp. were not identified at the condenser discharge but were included with the group polychaete larvae.

Table 27 . Monthly mean densities (n/m<sup>3</sup>) of the most abundant micromeroplankton at the condenser discharge (11), canal stations, (14,15,16,17) and off the mouth of Oyster Creek (19).<sup>a</sup>

Month	March 1976						April 1976						May 1976					
Location	11	14	15	16	17	19	11	14	15	16	17	19	11	14	15	16	17	19
Gastropod larvae	36	0	0	73	77	0	1080	564	806	873	782	498	1765	1571	888	954	1426	2703
Barnacle nauplii	5124	6970	7264	6750	10800	2415	38570	34802	22299	29556	26502	23192	34071	22871	24340	26859	22182	16679
Polychaete larvae	469	747	969	553	927	617	19571	19735	34665	12267	16325	14615	13291	11902	13538	9870	12477	22477
Bivalve (umbo)	112	0	0	0	0	0	953	2949	2779	1793	2202	3623	539	340	632	674	504	758
Bivalve (hinge)	0	167	0	0	0	0	3173	4182	4713	3965	3246	3306	238	707	635	471	499	848
Cyphonaute larvae	0	0	0	0	0	21	0	1663	1013	1763	2345	492	0	1207	2225	3198	4234	2193

Month	June 1976						July 1976						August 1976					
Location	11	14	15	16	17	19	11	14	15	16	17	19	11	14	15	16	17	19
Gastropod larvae	920	1301	2328	1765	2280	2537	1693	1413	2129	1620	1662	1872	962	1145	1621	1656	1624	1771
Barnacle nauplii	3203	5345	6096	6880	7471	4472	6221	189	694	598	725	477	166	365	197	268	378	410
Polychaete larvae	5279	8189	6266	5898	7992	5249	3505	1545	2527	1980	2275	3330	3010	2746	4815	3593	4232	3372
Bivalve (umbo)	1974	1342	1130	742	1204	1944	348	479	487	405	316	213	377	1047	1113	808	755	457
Bivalve (hinge)	543	424	1540	1706	2178	2277	334	313	143	235	516	145	646	657	882	873	1638	513
Cyphonaute larvae	0	3608	1969	3963	2637	564	61	5076	4741	4697	6861	10373	43	4245	6752	4805	5234	4559

<sup>a</sup> Polychaete larvae at all locations include unidentified polychaete, Polydora spp., and Nereis spp. larvae.

TABLE 28. FREQUENCY OF OCCURRENCE AND MEAN DENSITIES (n/100cm<sup>3</sup>) OF MACROZOOPLANKTON COLLECTED AT THE CONDENSER INTAKE (7) AND DISCHARGE (11), IN CYSTER CREEK (14, 15, 16, 17) AND IN BARNEGAT BAY OFF THE MOUTH OF CYSTER CREEK (19) FOR THE PLUME PASSAGE STUDY FROM MARCH THROUGH 2 SEPTEMBER 1976.

SPECIES	MARCH 1976											
	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROICA	2	287	833	889	443	155	1	69	411	411	163	245
MACROFLIPSIS GIBBESII	0	-	-	-	-	-	2	55	119	209	83	163
CAESIA SPP	6	9201	3636	19556	7313	79	5	7028	3048	12356	3346	56
OBOLIA SPP	1	113	800	800	327	245	0	-	-	-	-	-
CLASS BIVALVIA	1	148	889	889	363	245	1	127	762	762	311	245
FAMILY POLYDORIDE	1	148	889	889	363	245	1	20	119	119	49	245
FAMILY SYLLIDAE	0	-	-	-	-	-	1	20	119	119	49	245
ACICULUS SPP	2	430	800	1778	734	171	0	-	-	-	-	-
CLASS HIRUDINEA	5	2246	702	7200	2626	117	5	566	119	1440	523	104
SUBPHYLUM PHRYGONIDA	0	-	-	-	-	-	1	34	206	206	84	245
ORDER CANACRA	1	121	727	727	297	245	0	-	-	-	-	-
CYCLOPSIS VARIANS	2	309	800	1053	485	157	0	-	-	-	-	-
LEPTODIA MINOR	1	139	833	833	340	245	0	-	-	-	-	-
LEUCO AMERICANUS	4	1091	702	2400	1005	92	5	620	359	1482	503	81
CRUSTACEUS SMITHI	3	399	702	889	441	111	4	516	239	1404	550	197
CRUSTACEUS	0	-	-	-	-	-	1	20	119	119	49	245
CRUSTACEUS	0	-	-	-	-	-	1	40	239	239	83	245
MONOCULUS EDWARDSI	0	-	-	-	-	-	4	1116	119	4730	1035	164
ORDER CAPPELLIDEA	2	272	800	833	422	155	0	-	-	-	-	-
UNIDENTIFIED MYSID	6	157325	18772	312889	119671	76	0	-	-	-	-	-
MEGALIS AMERICANA	0	-	-	-	-	-	6	75697	19791	113289	39942	53
PARACALANUS VULGARIS	2	54	100	222	92	171	5	124	77	239	84	63
CHIRONOM SEPTENSPINOSA	4	969	546	2500	1020	105	6	516	175	1238	401	78
SALICIA ELEGANS	0	-	-	-	-	-	5	12957	762	24070	10062	79
SALICIA SPP	6	17342	351	38400	15647	90	0	-	-	-	-	-
ORDER ISOPODA	1	121	727	727	297	245	0	-	-	-	-	-
CIRRIUM CORNIGERUM	0	-	-	-	-	-	1	20	119	119	49	245
ISOPODA PACIFICA	0	-	-	-	-	-	2	17	26	78	31	182
ISOPODA PACIFICA	1	59	351	351	143	245	4	363	119	762	361	90
UNIDENTIFIED AMPHIPODA	6	6496	727	19167	6740	104	2	69	119	239	121	175
AMPHISCIA SPP.	0	-	-	-	-	-	3	5504	382	31754	12865	234
LIFE STAGE: JUVENILES												
CALLINectes RAPIDUS	0	-	-	-	-	-	2	90	191	351	149	165
	6	197289					6	105538				
LIFE STAGE: GRAVID												
OKYTOSTYLIS SMITHI	0	-	-	-	-	-	1	117	702	702	287	245
MONOCULUS EDWARDSI	0	-	-	-	-	-	1	49	296	296	121	245
UNIDENTIFIED MYSID	6	3168	526	7200	2854	90	0	-	-	-	-	-
MEGALIS AMERICANA	0	-	-	-	-	-	6	1848	762	3121	937	51
CHIRONOM SEPTENSPINOSA	2	165	100	889	357	217	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	1	59	351	351	143	245	0	-	-	-	-	-
AMPHISCIA SPP.	0	-	-	-	-	-	1	1521	9123	9123	3724	245
LIFE STAGE: LARVAL												
ORDER CERIASTHARIA	6	6454	351	16727	7133	111	5	1177	119	3291	1313	112
CLASS POLYCHAETA	4	833	351	2152	910	109	2	247	239	823	330	134
LIFE STAGE: ADULT												
CHIRONOM SEPTENSPINOSA	6	6475	2105	13333	4328	57	6	8185	1524	14602	4992	61
	6	17154					6	13164				

TABLE 28. (CONT.)

MONTH	MARCH 1976											
	LOCATION 14						LOCATION 15					
	SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	62	179	191	96	155	1	113	340	340	196	173
SARZIA SPP	6	9152	5561	15311	3692	40	3	7715	2651	10894	4433	57
HAIRY OCTOPUNCTATA	2	82	191	300	131	161	1	119	356	356	206	173
CLASS BIVALVIA	3	120	100	440	173	144	0	-	-	-	-	-
ANTINOELLA SF	1	32	193	193	79	245	0	-	-	-	-	-
FAMILY SYLLIDAE	1	67	400	400	163	245	1	80	241	241	139	173
NEREIS SPP	1	8	50	50	20	245	0	-	-	-	-	-
FAMILY CAPITELLIDAE	2	143	359	500	226	158	1	80	241	241	139	173
CLASS OLIGOCHAETA	0	-	-	-	-	-	1	80	241	241	139	173
CLASS NEREUINAE	4	295	179	1200	453	153	1	59	178	178	103	173
CYCLASPIS VARIANS	2	167	400	600	266	159	0	-	-	-	-	-
LEPTOCOMA MINOR	1	90	538	538	220	245	0	-	-	-	-	-
LEUCON AMERICANUS	3	227	179	800	319	141	1	402	1205	1205	696	173
DAYROSTYLIS SMITHI	4	305	191	700	289	95	3	253	179	340	82	32
MOROCULODES EDWARDSI	1	200	1200	1200	490	245	0	-	-	-	-	-
UNIDENTIFIED MYDID	6	18365	7534	35024	10950	60	3	9729	4800	13494	4462	46
PALAEONETES VULGARIS	3	116	48	505	199	171	0	-	-	-	-	-
PALAEONETES SPP	0	-	-	-	-	-	1	40	120	120	69	173
CRANGON SEPTENSPINOSA	5	264	48	800	305	116	2	173	170	340	170	90
SAGITTAE ELEGANS	6	20478	3946	48791	16979	83	3	19955	5542	28622	12567	63
TOMOPTERIS HELGOLANDICA	1	33	200	200	82	245	2	137	170	241	124	90
IDOTEA BALTICA	2	16	48	50	25	155	1	14	43	43	25	173
IDOTEA TRILOBA	2	97	179	400	165	171	0	-	-	-	-	-
CHIRIDOTEA SPP.	1	8	48	48	20	245	0	-	-	-	-	-
ORDER AMPHIPODA	0	-	-	-	-	-	2	1113	851	2489	1265	114
UNIDENTIFIED AMPHIPODA	6	2895	400	7100	2422	84	1	1928	5783	5783	3349	173
AMPELLISCA SPP.	1	200	1200	1200	490	245	0	-	-	-	-	-
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	1	8	45	45	18	245	1	20	60	60	35	173
	6	53427					3	42012				
LIFE STAGE: GRAVID												
UNIDENTIFIED MYSIDS	4	270	179	800	305	113	1	80	241	241	139	173
UNIDENTIFIED AMPHIPODA	1	83	500	500	204	245	1	161	482	482	278	173
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	4	1331	179	3672	1809	136	2	985	1422	1532	855	87
CLASS POLYCHAETA	3	321	200	1148	464	144	2	1454	1872	2489	1296	89
LIFE STAGE: ZOEAL												
CRANGON SEPTENSPINOSA	6	13438	5381	17582	5187	39	3	13112	6506	17362	5799	44
	6	15444					3	15791				

TABLE 28. (CONT.)

MONTH	MARCH 1976											
	LOCATION 16						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	4	3197	227	17920	7218	226	5	595	225	1727	630	106
MARGELOPSIS GIBBESI	0	-	-	-	-	-	1	40	237	237	97	245
SARSIA SPP	5	9668	3409	19010	7382	76	6	7151	1818	11511	4526	63
RATHKEA OCTOPUNCTATA	1	89	533	533	218	245	3	157	225	478	194	124
OBELIA SPP	0	-	-	-	-	-	1	92	553	553	226	245
CLASS BIVALVIA	3	254	152	976	386	152	1	75	449	449	183	245
FAMILY SYLLIDAE	1	25	152	152	62	245	1	38	226	226	92	245
AUTOLYTUS SPP	1	76	455	455	186	245	1	38	225	225	92	245
FAMILY CAPITELLIDAE	3	183	244	455	211	116	1	38	225	225	92	245
FAMILY NIDAE SPIONIDAE	0	-	-	-	-	-	1	38	225	225	92	245
CLASS HIRUDINEA	1	66	396	396	162	245	0	-	-	-	-	-
ORDER CUMACEA	2	209	455	800	342	163	0	-	-	-	-	-
CYCLASPIS VARIANS	1	81	488	488	199	245	0	-	-	-	-	-
LEPTOCUMA MINOR	1	38	227	227	93	245	0	-	-	-	-	-
LEUCON AMERICANUS	3	340	396	909	407	120	4	248	79	956	362	146
OXYUROSTYLIS SMITHI	2	104	227	396	170	163	3	130	79	478	192	147
MONOCULODES EDWARDSI	1	89	533	533	218	245	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	6	17479	12046	23467	4901	28	6	23123	10988	33147	7452	32
FAMILY PALAEMONIDAE	0	-	-	-	-	-	1	9	55	55	22	245
PALAEMONETES VULGARIS	0	-	-	-	-	-	2	58	119	226	95	166
PALAEMONETES SPP	1	41	244	244	100	245	0	-	-	-	-	-
CRANGON SEPTemspINOSA	0	-	-	-	-	-	6	223	40	576	197	88
SAGITTA ELEGANS	6	24107	2500	53465	20378	85	6	18501	5393	43956	14453	78
ORDER ISOPODA	1	25	152	152	62	245	0	-	-	-	-	-
IDOTEA BALTICA	2	79	227	244	122	155	2	36	56	158	64	179
IDOTEA TRILOBA	2	515	1136	1951	838	163	3	410	674	904	456	111
UNIDENTIFIED AMPHIPODA	5	4491	606	12500	5759	128	6	3286	553	8588	3075	94
AMPELISCA SPP.	1	89	533	533	218	245	0	-	-	-	-	-
	6	61243					6	54283				
LIFE STAGE: GRAVID												
AUTOLYTUS SPP	1	41	244	244	100	245	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	3	246	455	533	271	110	3	566	237	1808	803	142
UNIDENTIFIED AMPHIPODA	1	366	2195	2195	896	245	4	405	79	1582	605	149
LIFE STAGE: LARVAL												
CLASS SCYPHOZOA	1	27	160	160	65	245	1	27	159	159	65	245
ORDER CERIANTHARIA	3	513	800	1212	577	113	4	421	440	870	354	84
CLASS POLYCHAETA	3	535	244	1600	744	139	3	694	1116	1897	810	117
LIFE STAGE: ZOEAL												
CRANGON SEPTemspINOSA	5	16052	10732	24480	9330	58	6	13782	2293	27050	8631	63
	6	17779					6	15894				



TABLE 28. (CONT.)

MONTH	MARCH 1976					
-----						
LOCATION 19						
-----						
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
-----						
LIFE STAGE: NO DETERMINATION						
-----						
CLASS HYDROZOA	2	106	189	444	182	173
NONE NONE	1	608	3647	3647	1489	245
SARSIA SPP	5	11127	3657	23111	8654	78
RATHKEA OCTOPUNCTATA	3	147	189	457	185	126
OBELIA COMMISSURALIS	1	24	144	144	59	245
CLASS BIVALVIA	1	19	114	114	47	245
FAMILY POLYNOIDAE	1	19	114	114	47	245
ANTINOELLA SP	1	39	235	235	96	245
CLASS HIRUDINEA	4	133	47	444	169	127
CYCLASPIS VARIANS	1	19	114	114	47	245
LEPTOCUMA MINOR	1	19	114	114	47	245
LEUCON AMERICANUS	6	642	118	1932	665	104
OXYUROSTYLIS SMITHI	5	250	189	444	151	60
UNIDENTIFIED MYSIDS	6	35613	8588	65769	25292	71
CRANGON SEPTemspINOSA	1	16	96	96	39	245
SAGITTA ELEGANS	6	17006	2470	40889	15758	93
GLYCERA CAPITATA	1	8	47	47	19	245
IDOTEA BALTICA	2	27	48	114	47	173
UNIDENTIFIED AMPHIPODA	6	4354	377	16000	5979	137
-----						
	6	70175				
-----						
LIFE STAGE: GRAVID						
-----						
FAMILY SYLLIDAE	1	19	114	114	47	245
UNIDENTIFIED MYSIDS	6	403	118	889	270	67
UNIDENTIFIED AMPHIPODA	2	193	571	588	299	155
-----						
LIFE STAGE: LARVAL						
-----						
CLASS SCYPHOZOA	1	16	96	96	39	245
ORDER CERIANTHARIA	6	803	189	1298	503	63
CLASS POLYCHAETA	2	143	289	566	238	167
-----						
LIFE STAGE: ZOEAL						
-----						
CRANGON SEPTemspINOSA	6	14036	2514	26087	9201	66
-----						
	6	15613				
-----						

TABLE 28. (CONT.)

MONTH	APRIL 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	86	143	546	192	223	0	-	-	-	-	-
SARGIA SPP	5	745	273	3333	1114	150	4	214	288	582	251	117
RATHKEA OCTOPUNCTATA	0	-	-	-	-	-	3	80	136	294	118	148
OBELIA SPP	0	-	-	-	-	-	2	57	194	258	106	188
ORDER ACTINIARIA	0	-	-	-	-	-	1	26	208	208	74	283
MNEMIOSIS LEIDYI	1	4	34	34	12	283	0	-	-	-	-	-
CLASS BIVALVIA	1	18	143	143	51	283	1	37	294	294	104	283
CLASS POLYCHAETA	1	31	245	245	87	283	2	85	288	388	159	188
FAMILY PHYLLODOCIDAE	0	-	-	-	-	-	1	26	208	208	74	283
FAMILY POLYNOIDAE	0	-	-	-	-	-	1	24	194	194	63	283
FAMILY SYLLIDAE	4	591	430	2687	932	158	2	391	516	2614	916	234
AUTOLYTUS SPP	2	79	298	333	146	186	6	520	258	1500	512	98
AUTOLYTUS FASCIATUS	0	-	-	-	-	-	1	121	971	971	343	283
FAMILY CAPITELLIDAE	3	401	273	2388	827	206	2	101	288	516	196	195
POLIDORA SPP	1	75	597	597	211	283	1	26	208	208	74	283
CLASS HIRUDINEA	0	-	-	-	-	-	1	26	208	208	74	283
SUBPHYLUM PYCNOGONIDA	1	37	298	298	105	283	1	24	194	194	69	283
CALIGUS SPP	0	-	-	-	-	-	1	23	186	186	66	283
CYCLASPIS VARIANS	3	184	245	895	316	172	1	65	523	523	185	283
LEUCON AMERICANUS	4	503	273	1791	694	138	4	159	186	588	209	131
OKYUROSTYLIS SMITHI	6	384	245	1096	358	93	8	1601	294	3660	1235	77
GLYKODEUTOPUS	0	-	-	-	-	-	7	1203	582	3609	1093	91
GRYLLOTALPA	0	-	-	-	-	-	2	77	294	323	143	185
BATEA CATHARINENSIS	0	-	-	-	-	-	1	26	208	208	74	283
COGOPHUM SPP	0	-	-	-	-	-	2	123	208	774	273	222
GAMMARUS MUCRONATUS	0	-	-	-	-	-	1	52	417	417	147	283
MARINOGAMMARUS SPP	0	-	-	-	-	-	2	147	186	625	234	160
JASSA FALCATA	0	-	-	-	-	-	6	453	194	1666	544	120
ELASMOPUS LEVIS	0	-	-	-	-	-	1	26	208	208	74	283
MONOCULODES EDWARDSI	0	-	-	-	-	-	1	121	968	968	342	283
FAMILY STENOPODIDAE	0	-	-	-	-	-	3	101	136	417	159	157
STENOPODE MINUTA	0	-	-	-	-	-	7	213	136	323	106	50
ORDER CAPRELLIDEA	4	186	245	548	220	118	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	8	15150	3836	47304	14804	98	0	-	-	-	-	-
MYSIDOESIS BIGELOWI	0	-	-	-	-	-	2	57	136	323	117	205
MYSIDOESIS AMERICANA	0	-	-	-	-	-	8	7415	1941	13072	4124	56
FAMILY PALAEMONIDAE	4	35	32	137	49	142	0	-	-	-	-	-
PALAEMONETES VULGARIS	1	5	36	36	13	283	6	129	65	302	127	98
PALAEMONETES SPP	1	92	736	736	260	283	2	35	97	186	70	197
CRANGON SEPTENTRIONALIS	4	275	42	1472	519	189	8	202	65	365	112	55
FAMILY XANTHIDAE	0	-	-	-	-	-	1	3	20	20	7	283
SAGITTIA ELEGANS	0	-	-	-	-	-	1	32	258	258	91	283
SAGITTIA SPP	1	37	298	298	105	283	0	-	-	-	-	-
SUBORDER AEOLIDACEA	0	-	-	-	-	-	1	36	288	288	102	283
HYDROIDES DIANTHUS	0	-	-	-	-	-	1	12	97	97	34	283
SCOLOPLOS SPP	1	37	298	298	105	283	0	-	-	-	-	-
LIRONECA OVALIS	0	-	-	-	-	-	1	8	65	65	23	283
IDONEA BALTICA	3	173	273	597	256	147	1	52	417	417	147	283
IDONEA TRILOBA	1	18	143	143	51	283	3	132	194	588	213	162
BRICHSONELLA SP	0	-	-	-	-	-	1	32	258	258	91	283
UNIDENTIFIED AMPHIPODA	8	3417	1000	5333	1643	48	3	1196	523	7865	2728	228
AMPELISCA SPP.	0	-	-	-	-	-	8	3305	417	9387	2902	88
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	2	9	36	37	17	185	5	60	40	221	74	123
	8	22571					8	18853				

TABLE 28. (CONT.)

MONTH	APRIL 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	206	1644	1644	581	283	1	24	194	194	69	283
AUTOLYTUS SPP	1	34	273	273	97	283	0	-	-	-	-	-
LEUCON AMERICANUS	0	-	-	-	-	-	1	37	294	294	104	283
NEOMYSIS AMERICANA	0	-	-	-	-	-	2	36	74	212	76	212
CRANGON SEPTEMPINOSA	2	66	36	491	172	261	2	6	20	26	11	187
AMPELISCA SPP.	0	-	-	-	-	-	1	37	294	294	104	283
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	0	-	-	-	-	-	1	12	97	97	34	283
CLASS POLYCHAETA	8	5063	895	21000	6714	133	7	1909	194	5588	1948	102
LIFE STAGE: ZOEAL												
CRANGON SEPTEMPINOSA	8	31973	8000	70666	24554	77	8	18043	4387	47500	15056	83
PAGURUS SP	0	-	-	-	-	-	1	26	208	208	74	283
LIFE STAGE: EPITOKES												
NEREIS SPP	2	626	97	4908	1731	277	2	206	786	859	381	185
	8	37968					8	20335				

TABLE 28. (CONT.)

SPECIES	APRIL 1976											
	LOCATION 14						LOCATION 15					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	116	171	526	190	163	2	48	190	193	89	185
SARASIA SPP	3	146	233	2281	790	228	1	190	1517	1517	556	283
NATHKEA OCTOPUNCTATA	0	-	-	-	-	-	1	24	193	193	69	283
CLASS BIVALVIA	1	10	80	80	28	283	1	24	193	193	68	283
CLASS POLYCHAETA	1	29	233	233	82	283	1	24	193	193	68	283
FAMILY PALLASIDAE	1	24	195	195	69	283	0	-	-	-	-	-
FAMILY SYLLIDAE	3	65	92	253	99	153	2	65	58	460	161	249
AULIDIUS SPP	1	10	80	80	28	283	3	115	153	386	173	151
FAMILY CAPITELLIDAE	3	106	159	513	181	171	4	212	153	1159	333	185
POLYDORA SPP	1	10	80	80	28	283	0	-	-	-	-	-
SOEPHILUM PYCNOGONIDA	0	-	-	-	-	-	1	29	233	233	82	283
CALIGUS SPP	0	-	-	-	-	-	1	24	193	193	68	283
ORFILA CUMACEA	1	10	80	80	28	283	1	58	465	465	164	283
CYCLASPID VARIANS	1	12	92	92	33	283	1	48	386	386	136	283
LEUCUS AMERICANUS	1	24	194	194	69	283	1	24	190	190	57	283
FAMILY DIASINIDAE	1	29	233	233	82	283	0	-	-	-	-	-
CYTHOCESTIS SMITHI	8	584	233	1366	364	62	6	638	190	3218	1055	170
CELEN CAPRELLIDAE	4	88	80	276	108	122	1	15	119	119	42	283
UNIDENTIFIED MYSID	6	922	239	2558	955	104	5	850	159	2319	979	114
NOCTYSIS AMERICANA	2	73	194	390	145	199	2	155	523	714	291	188
FAMILY PALAEMONIDAE	0	-	-	-	-	-	2	20	40	119	42	213
PALAEMONES VULGARIS	2	41	97	233	85	205	0	-	-	-	-	-
CRANGON SEPTENSPINOSA	1	7	58	58	21	283	4	218	40	1461	507	233
SAGITTIA SPP	1	20	159	159	56	283	0	-	-	-	-	-
SCOLLOPS SPP	0	-	-	-	-	-	2	13	48	58	25	186
ORFILA ISOPODA	3	172	159	1026	354	205	1	29	233	233	82	283
ISOPODA BALTICA	1	49	390	390	138	283	3	59	119	193	84	142
LEUCIA TRILOBA	3	93	175	319	135	144	2	101	193	613	218	215
ENICOSPHELLA SP	0	-	-	-	-	-	1	7	59	59	21	283
CAPITIDIDEA SPP	1	22	175	175	62	283	1	15	119	119	42	283
UNIDENTIFIED AMPHIPODA	8	4177	526	10341	3110	74	7	3449	2464	5756	1732	50
LIFE STAGE: JUVENILES												
CALLINectes RAPIDUS	4	41	46	126	50	122	4	40	38	145	54	136
	8	7082					8	6503				
LIFE STAGE: GRAVID												
CLASS POLYCHAETA	1	12	92	92	33	283	0	-	-	-	-	-
UNIDENTIFIED MYSID	1	58	455	465	164	283	2	48	190	193	89	185
CRANGON SEPTENSPINOSA	1	6	49	49	17	283	1	7	59	59	21	283
ISOPODA BALTICA	1	8	63	63	22	283	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	2	29	63	171	61	210	2	65	58	460	161	249
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	7	2743	319	8070	2651	97	6	2756	239	8828	3742	136
ORDER CEPHALOTRACHARIA	0	-	-	-	-	-	1	5	40	40	14	283
LIFE STAGE: ZOEAL												
ORDER DECAPODA	0	-	-	-	-	-	1	24	193	193	68	283
PALAEMONES SPP	1	24	194	194	69	283	2	236	698	1190	456	193
CRANGON SEPTENSPINOSA	9	8830	2326	20683	7073	80	7	5820	1905	16279	5343	92
PAULUS SP	1	73	585	585	207	283	1	24	193	193	68	283
FAMILY XANTHIDAE	6	2251	233	6244	2419	107	5	2604	193	6190	2776	107
LIFE STAGE: EPITOKES												
HELEIS SPP	2	730	2634	3204	1360	185	4	301	145	1250	445	148
	8	14743					8	11390				

TABLE 28. (CONT.)

MONTH	APRIL 1976											
	LOCATION 16						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	100	182	419	172	172	2	177	295	591	264	149
SARSA SPP	3	286	172	995	408	142	3	497	159	2033	867	174
RATHKEA OCTOPUNCTATA	1	61	364	364	149	245	0	-	-	-	-	-
CLASS POLYCHAETA	2	46	106	172	75	161	1	41	203	203	91	224
FAMILY SYLLIDAE	2	47	98	182	77	165	0	-	-	-	-	-
AUTOLYTUS SPP	4	137	105	364	137	100	2	438	159	2033	894	204
NEREIS SPP	1	18	106	106	43	245	2	20	49	50	27	137
FAMILY CAPITELLIDAE	4	159	91	545	205	129	3	571	318	1355	652	114
FAMILY STICHIIDAE	0	-	-	-	-	-	1	41	203	203	91	224
CLASS HIRUDINEA	0	-	-	-	-	-	1	10	49	49	22	224
ORDER CUNACEA	1	15	91	91	37	245	0	-	-	-	-	-
CYCLASPIS VARIANS	4	109	91	209	93	85	0	-	-	-	-	-
LEPIDOCOMA MINOR	0	-	-	-	-	-	1	136	678	678	303	224
LEUCON AMERICANUS	4	212	183	517	203	96	3	382	159	1356	568	149
ONCHOSTYLIS SMITHI	4	164	182	319	136	83	4	439	203	1379	540	123
ORDER CAPILLIDAE	0	-	-	-	-	-	1	136	678	678	303	224
UNIDENTIFIED NYSIDS	3	1148	1284	4138	1613	141	3	2486	2698	6780	2787	112
NYSIDOPSIS BIGELOWI	1	18	106	106	43	245	0	-	-	-	-	-
NEONYSIS AMERICANA	2	236	195	1223	490	207	2	2756	5862	7919	3844	139
FAMILY PALAEMONIDAE	0	-	-	-	-	-	1	15	73	73	33	224
PALAEMONETES VULGARIS	4	62	46	172	66	107	3	64	49	152	69	108
CRANGON SEPTENSPINOSA	2	44	49	213	85	195	2	59	42	254	110	186
CALLINECTES SAPIDUS	1	18	105	105	43	245	0	-	-	-	-	-
FAMILY XANTHIDAE	1	58	345	345	141	245	0	-	-	-	-	-
LINONECA OVALIS	2	15	43	46	23	155	1	10	49	49	22	224
IDCTEA BALTICA	2	44	49	213	85	195	1	39	197	197	88	224
IDCTEA TILLOBA	1	58	345	345	141	245	3	249	155	678	292	117
ERICHSONELLA SP	0	-	-	-	-	-	1	10	49	49	22	224
UNIDENTIFIED AMPHIPODA	6	2932	1099	4727	1476	50	5	2109	1356	3248	792	38
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	4	70	46	216	82	118	1	7	37	37	17	224
	6	6054					5	10691				
LIFE STAGE: GRAVID												
AUTOLYTUS SPP	1	18	105	105	43	245	1	32	159	159	71	224
UNIDENTIFIED NYSIDS	2	63	105	275	112	177	0	-	-	-	-	-
CRANGON SEPTENSPINOSA	1	8	49	49	20	245	1	20	101	101	45	224
UNIDENTIFIED AMPHIPODA	2	46	106	172	75	161	0	-	-	-	-	-
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	5	4711	106	15000	5812	123	5	8383	1015	25092	9968	119
LIFE STAGE: ZOEAL												
CRANGON SEPTENSPINOSA	6	11642	5517	21376	7042	60	5	16130	4670	54915	21744	135
PAUDURUS SP	0	-	-	-	-	-	1	81	406	406	182	224
FAMILY XANTHIDAE	2	1521	4149	4976	2371	156	2	679	1624	1773	932	137
LIFE STAGE: EPITOKES												
NEREIS SPP	4	1246	345	4575	1808	145	4	1663	40	5279	2220	133
	6	19255					6	26007				

TABLE 28. (CONT.)

SPECIES	APRIL 1976					
	LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	2	38	80	227	81	212
SARSIA SPP	4	174	103	821	281	162
RATHKEA OCTOPUNCTATA	1	49	390	390	138	283
OBELIA SPP	1	10	80	80	28	283
PHYLUM ANNELIDA	1	10	80	80	28	283
CLASS POLYCHAETA	2	58	76	390	137	235
FAMILY PHYLLODOCIDAE	2	16	52	78	31	190
FAMILY SYLLIDAE	2	16	52	78	31	190
AUTOLYTUS SPP	1	10	78	78	28	283
FAMILY NYDIAE SPIONIDAE	1	10	78	78	28	283
CLASS HIRUDINEA	1	7	52	52	18	283
SUBPHYLUM PYCNOGONIDA	2	19	52	101	38	197
CYCLASPIS VARIANS	3	96	152	410	151	158
LEUCON AMERICANUS	3	100	101	390	160	159
UXYUROSTYLIS SMITHI	8	544	260	820	210	39
ORDER CAPRELLIDEA	1	13	101	101	36	283
UNIDENTIFIED MYSIDS	7	2983	410	7959	2814	94
NEOMYSIS AMERICANA	2	925	3660	3737	1712	185
PALAEONETES VULGARIS	3	16	32	52	22	142
CRANGON SEPTEMSPINOSA	6	65	38	260	83	128
SAGITTA SPP	2	29	80	152	57	197
LEPTOSYNAPTA SPP	1	5	40	40	14	283
LIRONECA OVALIS	1	7	52	52	18	283
IDOTEA BALTICA	4	628	825	2231	798	127
EDOTEA TRILOBA	1	5	38	38	13	283
CHIRIDOTEA SPP.	1	10	76	76	27	283
UNIDENTIFIED AMPHIPODA	8	3218	937	11394	3604	112
LIFE STAGE: JUVENILES						
CALLINECTES SAPIDUS	2	10	32	50	20	191
	8	9068				
LIFE STAGE: GRAVID						
FAMILY SYLLIDAE	1	10	76	76	27	283
AUTOLYTUS SPP	2	26	76	130	50	193
UNIDENTIFIED MYSIDS	1	10	78	78	28	283
NEOMYSIS AMERICANA	1	19	155	155	55	283
CRANGON SEPTEMSPINOSA	2	13	51	52	24	185
UNIDENTIFIED AMPHIPODA	2	19	52	101	38	197
LIFE STAGE: LARVAL						
CLASS POLYCHAETA	8	2134	76	6015	2300	108
LIFE STAGE: ZOEAL						
CRANGON SEPTEMSPINOSA	8	5891	1484	20513	6705	114
PAGURUS SP	1	13	103	103	36	283
FAMILY XANTHIDAE	4	489	202	2652	915	187
LIFE STAGE: EPITOKES						
NEREIS SPP	3	30	39	151	53	175

TABLE 28. (CONT.)

MONTH	MAY 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	324	519	1422	577	178	1	44	352	352	124	283
MARJELLOPSIS GIBBESI	0	-	-	-	-	-	1	46	369	369	130	283
OBELIA SPP	1	237	1422	1422	581	245	0	-	-	-	-	-
ORDER ACTINIARIA	0	-	-	-	-	-	1	125	1000	1000	354	283
MNEMIOPSIS LEIDYI	3	35	32	138	53	155	0	-	-	-	-	-
CLASS BIVALVIA	2	107	46	593	239	224	2	109	369	505	206	188
ENSIS DIRECTUS	0	-	-	-	-	-	1	44	352	352	124	283
CLASS POLYCHAETA	3	430	296	1762	686	160	2	136	352	737	272	200
FAMILY PHYLLODOCIDAE	1	87	519	519	212	245	2	100	352	444	186	187
FAMILY SYLLIDAE	2	359	593	1558	634	177	4	874	437	3000	1228	141
NEREIS SPP	0	-	-	-	-	-	1	8	63	63	22	283
FAMILY CAPITELLIDAE	6	1100	352	1558	503	46	7	1773	737	4000	1361	78
FAMILY SPIONIDAE	1	51	303	303	124	245	2	214	444	1270	454	212
POLYDORA SPP	3	1097	46	3939	1734	158	5	1217	437	6349	2175	179
SCOLECOLEPIDES VIRIDIS	0	-	-	-	-	-	1	44	352	352	124	283
CLASS OLIGOCHAETA	1	59	352	352	144	245	0	-	-	-	-	-
CLASS HIRUDINEA	0	-	-	-	-	-	1	8	63	63	22	283
CYCLASPIS VARIANS	2	397	303	2078	832	210	1	44	352	352	124	283
LEPTOCUMA MINOR	1	59	352	352	144	245	0	-	-	-	-	-
LEUCON AMERICANUS	1	198	1185	1185	484	245	7	1121	352	2949	976	87
JAYDROSTYLIS SMITHI	5	1062	303	3117	1142	108	7	2790	1013	6057	2121	79
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	8	21159	4424	34000	11844	56
COROPHUM SPP	0	-	-	-	-	-	4	2271	1410	12698	4323	190
ERICHTHONIUS RUBICORNIS	0	-	-	-	-	-	2	270	889	1270	510	189
GAMMARUS NUCKONATUS	0	-	-	-	-	-	3	384	369	2000	702	183
JASSA FALCATA	0	-	-	-	-	-	2	109	369	506	206	188
LYSIANOPSIS ALBA	0	-	-	-	-	-	2	205	369	1270	449	219
ELASNOPUS LEVIS	0	-	-	-	-	-	4	604	705	1843	718	119
MELITA NITIDA	0	-	-	-	-	-	1	125	1000	1000	354	283
MONOCULODES EDWARDSI	0	-	-	-	-	-	1	63	506	506	179	283
MICROPHOTOPUS RANEYI	0	-	-	-	-	-	1	125	1000	1000	354	283
FAMILY STENOCHOIDAE	0	-	-	-	-	-	1	56	444	444	157	283
STENOCHOE BREVICORNIS	0	-	-	-	-	-	2	213	705	1000	402	189
ORDER CAPRELLIDAE	5	1415	606	3117	1273	90	8	2065	444	5000	1638	79
UNIDENTIFIED MYSIDS	6	6396	2630	13348	4015	63	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	1	4	28	28	10	283
NEOMYSIS AMERICANA	0	-	-	-	-	-	8	5554	2000	11139	3441	62
PALAEONETES VULGARIS	4	94	44	352	132	140	5	103	40	506	170	164
PALAEONETES SPP	0	-	-	-	-	-	3	83	55	392	146	175
CRANGON SEPTEMPINOSA	4	419	38	2116	836	200	8	288	119	461	132	46
LEPTOSYNAPTA SPP	2	13	32	44	20	158	2	151	132	1076	377	249
SUBORDER AEOLIDACEA	0	-	-	-	-	-	2	144	444	705	275	191
INVERTEBRATE	0	-	-	-	-	-	1	159	1270	1270	449	283
SCOLOPUS SPP	1	49	296	296	121	245	1	63	505	505	179	283
FAMILY AMPHARETIDAE	1	51	303	303	124	245	1	44	352	352	124	283
ORDER ISOPODA	0	-	-	-	-	-	1	55	437	437	155	283
LIRONECA OVALIS	0	-	-	-	-	-	1	4	29	29	10	283
IDOTEA BALTICA	1	49	296	296	121	245	2	170	352	1010	361	212
IDOTEA TRILOBA	1	49	296	296	121	245	5	673	352	2581	877	130
ERICHSONELLA SP	1	62	369	369	151	245	1	7	55	55	19	283
UNIDENTIFIED AMPHIPODA	6	24524	7512	38400	12851	52	4	1318	1270	4051	1607	122
AMPELISCA SPP.	0	-	-	-	-	-	8	13691	1803	34286	12653	92
LIFE STAGE: JUVENILES												
CALLINECTES SAPIOUS	4	57	37	152	58	102	6	75	31	190	67	89
	6	38775					8	58929				

TABLE 28. (CONT.)

MONTH	MAY 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
CLASS POLYCHAETA	0	-	-	-	-	-	1	46	369	369	130	283
AUTOLYTUS SPP	2	120	352	369	186	155	0	-	-	-	-	-
FAMILY SPIONIDAE	0	-	-	-	-	-	1	44	352	352	124	283
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	6	656	369	2222	716	109
ELASMOPUS LEVIS	0	-	-	-	-	-	1	56	444	444	157	283
ORDER CAPRELLIDEA	1	87	519	519	212	245	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	1	69	415	415	169	245	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	3	184	28	1270	443	240
PALAEONETES SPP	0	-	-	-	-	-	1	4	31	31	11	283
CRANGON SEPTEMSPINOSA	1	118	705	705	288	245	4	30	28	127	44	147
UNIDENTIFIED AMPHIPODA	3	511	296	1558	695	136	1	220	1762	1762	623	283
AMPELISCA SPP.	0	-	-	-	-	-	2	205	369	1270	449	219
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	6	2101	593	5689	1879	89	6	2606	437	10000	3427	132
ORDER CERIANTHARIA	0	-	-	-	-	-	1	92	737	737	261	283
LIFE STAGE: ZOEAL												
PALAEONETES SPP	3	161	296	369	179	111	4	347	352	1475	505	146
CRANGON SEPTEMSPINOSA	6	70030	27532	155455	48498	69	8	24721	11556	40000	11078	45
PAGURUS SP	4	248	296	519	208	84	1	273	2186	2186	773	283
FAMILY XANTHIDAE	6	5636	352	12444	4543	81	1	127	1013	1013	358	283
PANOPEUS HERBSTII	0	-	-	-	-	-	2	2168	8458	8889	4017	185
NEOPANOPE TEXANA	0	-	-	-	-	-	5	6467	3000	23963	8176	126
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	4	839	369	3524	1263	151
INFRAORDER BRACHYURA	1	87	519	519	212	245	1	126	1010	1010	357	283
LIFE STAGE: EPITOKES												
NEREIS SPP	4	2052	32	10308	4101	200	7	318	31	1266	479	150
	6	81219					8	39530				



TABLE 28. (CONT.)

MONTH	MAY 1976											
	LOCATION 14						LOCATION 15					
	FREQ	MEAN	MIN	MAX	SDIV	CVAR	FREQ	MEAN	MIN	MAX	SDIV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	52	313	313	128	245	1	12	93	93	33	283
ORDER BRIDDERMACHIA	1	7	39	39	16	245	0	-	-	-	-	-
CLASS BIVALVIA	1	13	78	78	32	245	1	102	816	816	280	283
CLASS BIVALVIA	0	-	-	-	-	-	3	144	93	816	287	193
CLASS BIVALVIA	0	-	-	-	-	-	1	18	144	144	51	283
CLASS POLYCHAETA	1	77	460	460	188	245	1	51	408	408	144	283
FAMILY PHYLLOPODIDAE	1	33	199	199	81	245	1	6	47	47	17	283
FAMILY SYLLIDAE	1	49	295	295	120	245	1	51	408	408	144	283
AUTOLYTUS SPP	2	105	230	398	171	163	1	12	93	93	33	283
NEAREIS SPP	0	-	-	-	-	-	1	6	47	47	17	283
FAMILY CAPITILLIDAE	2	444	597	2069	831	167	4	390	385	1209	509	130
FAMILY SPIONIDAE	1	7	40	40	16	245	0	-	-	-	-	-
POLYCHAETA SPP	2	323	650	1765	538	167	3	511	93	2512	958	188
CALIGUS SPP	1	54	321	321	131	245	1	40	323	323	114	283
CYCLASPID VARIANS	2	103	295	321	159	155	3	89	93	323	140	157
LEPTOCURA EIKOR	1	13	78	78	32	245	0	-	-	-	-	-
LUCCON AMERICANUS	1	49	295	295	120	245	5	411	93	1129	460	312
OXYURUS SPP	6	2756	325	5625	2303	84	7	1524	187	4231	1577	103
ORDER CAPITILLIDAE	2	131	325	460	207	158	7	1057	187	4615	1533	145
UNIDENTIFIED MYDUS	4	1738	1592	3678	1616	93	5	771	769	2233	777	101
NECHYSIS AMERICANA	2	203	590	625	314	155	1	40	323	323	114	283
PALAEONETES VULGARIS	1	19	115	115	47	245	6	51	36	140	48	94
PALAEONETES SPP	2	31	37	149	60	192	1	5	37	37	13	283
CRANGON SEPTENTRIONALIS	1	10	58	58	24	245	3	24	37	103	38	160
PAGURUS SP	0	-	-	-	-	-	1	37	296	296	105	283
LEPTOSYNAPTA SPP	0	-	-	-	-	-	1	6	51	51	18	283
SUBORDER UCIRIDAE	0	-	-	-	-	-	1	192	1538	1538	544	283
SUBORDER AEGIDIDAE	1	38	230	230	94	245	1	40	323	323	114	283
INVERTEBRATE	1	7	40	40	16	245	0	-	-	-	-	-
FAMILY AMPHARIDIDAE	0	-	-	-	-	-	2	297	1154	1225	551	165
LYRONECA OVALIS	1	7	41	41	17	245	5	44	36	140	51	176
LYRONECA BALTICA	1	98	590	590	241	245	2	110	74	806	282	257
LYRONECA TRILUNA	3	170	295	398	189	111	6	421	93	1538	503	120
LYRONECA SP	1	7	40	40	16	245	1	12	93	93	33	283
CHILIDOTEA SPP	0	-	-	-	-	-	1	12	93	93	33	283
UNIDENTIFIED AMPHIPODA	6	16326	4766	26269	8664	53	8	22730	5630	70000	24499	108
LIFE STAGE: JUVENILES												
CALLINectes SAPIBUS	6	173	37	325	131	76	6	134	74	323	115	86
	6	23040					8	29353				
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	1	48	385	385	136	283
AUTOLYTUS SPP	0	-	-	-	-	-	1	12	93	93	33	283
ORDER CAPITILLIDAE	0	-	-	-	-	-	1	6	48	48	17	283
UNIDENTIFIED MYDUS	1	54	321	321	131	245	2	63	93	408	143	229
PALAEONETES VULGARIS	0	-	-	-	-	-	1	6	51	51	18	283
CRANGON SEPTENTRIONALIS	1	19	115	115	47	245	2	10	47	93	35	198
UNIDENTIFIED AMPHIPODA	5	707	199	2759	1027	145	7	640	280	1225	439	69
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	5	1414	295	4878	1769	125	6	3371	323	12653	4232	126
LIFE STAGE: ZOEAL												
PALAEONETES SPP	6	6248	625	14458	5967	96	8	5719	2512	11259	3028	53
HIPPOLYTE SPP	0	-	-	-	-	-	1	48	385	385	136	283
CRANGON SEPTENTRIONALIS	5	3175	391	10115	3858	122	6	6220	1482	16729	5706	92
PAGURUS SP	1	163	976	976	398	245	0	-	-	-	-	-
FAMILY AMPHARIDAE	6	12837	1609	24924	9813	76	8	7746	748	25000	7823	101
INVERTEBRATE BRACHYURA	1	54	321	321	131	245	1	61	484	484	171	283
LIFE STAGE: EPITOKES												
NEAREIS SPP	3	67	49	210	43	119	6	85	71	202	66	80
	6	24786					8	24042				

TABLE 20. (CONT.)

MAY 1976												
SPECIES	LOCATION 16						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	1	62	437	437	165	265
CLASS BIVALVIA	2	75	292	309	139	185	1	66	460	460	174	265
GENUS DIRECTUS	1	40	321	321	113	283	4	97	31	437	162	166
CLASS POLYCHAETA	0	-	-	-	-	-	1	98	687	687	260	265
FAMILY PHYLLODOCIDAE	2	174	149	1243	435	250	1	66	460	460	174	265
FAMILY SYLLIDAE	0	-	-	-	-	-	1	36	251	251	95	265
GENUS SPP	1	5	39	39	14	283	0	-	-	-	-	-
FAMILY CAPITELLIDAE	5	2877	876	12851	4286	149	5	2639	1749	5058	2212	84
FAMILY SPIGIDAE	0	-	-	-	-	-	1	25	172	172	65	265
POLYDORA SPP	1	110	876	876	310	283	0	-	-	-	-	-
CLASS NEREIDAE	1	19	154	154	54	283	0	-	-	-	-	-
SUBPHYLUM PYGOSPORIDA	0	-	-	-	-	-	1	25	172	172	65	265
CYCLASPIS VARIANS	2	90	154	567	200	222	2	128	437	460	219	171
LEUCON AMERICANUS	2	210	595	1081	409	195	2	736	2324	2827	1265	172
OSYUROSTYLIS SMITHI	5	475	321	1583	537	113	5	485	251	1120	432	89
ORDER CAPRELLIDAE	3	216	314	829	328	152	5	841	515	1994	804	96
UNIDENTIFIED MYSID	6	1107	204	2891	1189	107	4	1567	460	8743	3196	204
MYSIOPSIS BIGELOWI	0	-	-	-	-	-	1	6	41	41	15	265
NEOMYSIS AMERICANA	1	19	154	154	54	283	2	57	70	332	124	216
PALAEOMONTES VULGARIS	2	10	37	39	18	185	2	24	41	129	49	200
PALAEOMONTES SPP	2	72	52	522	183	255	2	88	164	450	171	195
CRANGON SEPTENTRIONALIS	3	39	37	201	71	183	2	26	55	124	48	188
CALLINectes SAPIDUS	0	-	-	-	-	-	1	16	112	112	42	265
LEPTOSYNAPTE SPP	2	69	193	361	136	196	1	8	55	55	23	265
FAMILY AMPHIPODA	1	52	415	415	147	263	2	196	450	920	361	184
LIROMICA OVALIS	0	-	-	-	-	-	1	6	41	41	15	265
EDOTEA BALTICA	3	142	149	829	286	202	2	100	251	450	180	180
EDOTEA TRILOBATA	5	356	106	941	426	120	5	661	450	1808	643	97
UNIDENTIFIED AMPHIPODA	7	10372	2825	19598	7132	69	7	10822	2827	18712	5942	55
LIFE STAGE: JUVENILES												
CALLINectes SAPIDUS	6	106	39	201	79	75	6	96	31	230	90	93
	8	16632					7	18975				
LIFE STAGE: GRAVID												
AUTOLYTUS SPP	1	19	154	154	54	283	0	-	-	-	-	-
CYCLASPIS VARIANS	1	36	284	284	100	283	0	-	-	-	-	-
ORDER CAPRELLIDAE	1	19	154	154	54	283	0	-	-	-	-	-
UNIDENTIFIED MYSID	0	-	-	-	-	-	1	62	437	437	165	265
PALAEOMONTES VULGARIS	1	5	37	37	13	183	0	-	-	-	-	-
CRANGON SEPTENTRIONALIS	2	14	40	71	27	195	1	4	31	31	12	265
UNIDENTIFIED AMPHIPODA	3	569	730	2570	935	164	4	769	687	2006	814	106
LIFE STAGE: LARVAL												
ORDER CLANNATHARIA	1	37	292	292	103	283	0	-	-	-	-	-
CLASS POLYCHAETA	6	1011	154	5106	1696	168	3	2210	1003	10707	4015	182
LIFE STAGE: ZOEAL												
PALAEOMONTES SPP	7	3479	567	6218	2583	74	7	9115	5246	13000	2990	33
CRANGON SEPTENTRIONALIS	7	4764	1933	8996	3230	68	7	11516	6520	16680	3296	29
PAGURUS SPP	2	313	321	584	221	195	3	505	251	2827	1039	206
LIBinia SPP	0	-	-	-	-	-	1	81	565	565	214	265
FAMILY AMPHIPODA	7	9455	2891	23784	7918	84	7	18617	6994	33983	10431	56
INFRAORDER BRACHYURA	2	57	149	309	114	200	0	-	-	-	-	-
LIFE STAGE: EPITOQUES												
GENUS SPP	5	73	37	281	99	135	5	98	43	382	132	135
	8	15651					7	42977				

TABLE 28. (CONT.)

MONTH	MAY 1976					
	LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	2	31	61	185	66	214
MNEMIOPSIS LEIDYI	1	5	41	41	14	283
CLASS BIVALVIA	1	70	556	556	197	283
ENSIS DIRECTUS	1	5	36	36	13	283
CLASS POLYCHAETA	2	35	39	244	85	241
FAMILY PHYLLODOCIDAE	1	430	3441	3441	1217	283
NEREIS SPP	1	5	41	41	14	283
FAMILY CAPITELLIDAE	2	880	122	6918	2440	277
FAMILY SPIONIDAE	1	23	183	183	65	283
CLASS OLIGOCHAETA	1	8	61	61	22	283
CLASS HIRUDINEA	2	15	57	61	27	185
CYCLASPIS VARIANS	1	43	340	340	120	283
LEUCON AMERICANUS	5	546	61	2294	831	152
OXYUROSTYLIS SMITHI	7	2516	170	12500	4118	164
ORDER CAPRELLIDAE	2	320	61	2500	881	275
UNIDENTIFIED MYSIDS	6	1689	854	3404	1383	82
NEOMYSIS AMERICANA	2	405	732	2510	888	219
PALAEONETES VULGARIS	3	22	41	72	31	143
CRANGON SEPTemspINOSA	6	81	41	340	111	137
LEPTOSYNAPTA SPP	3	25	36	122	43	174
INVERTEBRATE	1	43	340	340	120	283
SCOLOPLOS SPP	1	5	42	42	15	283
IDOTEA BALTICA	3	811	183	5000	1751	216
EDOTEA TRILOBA	6	2187	340	7500	2614	119
ERICHSONELLA SP	2	15	57	61	27	185
UNIDENTIFIED AMPHIPODA	8	50745	14972	142500	46295	91
LIFE STAGE: JUVENILES						
PORTUNUS SPINIMANUS	1	9	72	72	25	283
CALLINECTES SAPIDUS	6	93	39	298	98	106
	8	61060				
LIFE STAGE: GRAVID						
OXYUROSTYLIS SMITHI	1	313	2500	2500	884	283
ORDER CAPRELLIDAE	1	8	61	61	22	283
CRANGON SEPTemspINOSA	3	20	41	61	28	141
EDOTEA TRILOBA	1	5	39	39	14	283
UNIDENTIFIED AMPHIPODA	6	2147	185	8029	3485	162
LIFE STAGE: LARVAL						
CLASS POLYCHAETA	5	1424	170	5735	2444	172
LIFE STAGE: ZOEAL						
INFRAORDER CARIDEA	1	8	61	61	22	283
PALAEONETES SPP	7	4741	226	12500	3988	84
CRANGON SEPTemspINOSA	8	13916	678	47500	15685	113
PAGURUS SP	4	334	122	1301	482	144
LIBINIA SPP	2	236	650	1235	463	197
FAMILY XANTHIDAE	7	39375	12425	115000	37716	96
INFRAORDER BRACHYURA	1	113	904	904	320	283
LIFE STAGE: EPITOKES						
NEREIS SPP	4	47	46	122	55	118
	8	62685				

TABLE 28. (CONT.)

MONTH	JUNE 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	1387	2051	6202	2247	162	0	-	-	-	-	-
UBELLA SPP	1	96	769	769	272	283	0	-	-	-	-	-
ORDER ACTINARIA	0	-	-	-	-	-	1	9	72	72	25	283
HALMOPSIS LINDYI	4	104	45	476	165	159	0	-	-	-	-	-
ORDER RUGOSANACHIA	0	-	-	-	-	-	2	406	947	2302	835	206
CLASS BIVALVIA	2	202	671	947	382	189	1	8	65	65	23	283
CLASS DIAPYCNUS	2	9	4	64	22	264	2	160	274	1006	355	272
CLASS POLYCHAETA	0	-	-	-	-	-	1	15	118	118	42	283
FAMILY PHYLLOPODIAE	0	-	-	-	-	-	1	118	947	947	335	283
FAMILY POLYPODIAE	0	-	-	-	-	-	1	126	1006	1006	356	283
FAMILY SYLLIDAE	3	380	335	1435	613	161	3	462	494	2192	789	171
FAMILY CAPITELLIDAE	2	168	669	671	310	185	6	875	294	2963	967	110
FAMILY SPIONIDAE	0	-	-	-	-	-	1	126	1006	1006	356	283
POLYDORA SPP	0	-	-	-	-	-	2	127	494	523	236	185
SIPHONULUM PYCNOGONIDA	0	-	-	-	-	-	1	15	118	118	42	283
CALIGUS SPP	0	-	-	-	-	-	1	122	972	972	344	283
ANGULUS SPP.	1	159	1270	1270	449	283	0	-	-	-	-	-
CYCLASIS VARIANS	2	276	671	1539	562	203	1	144	1151	1151	407	283
LEPTOCOMA MINOR	0	-	-	-	-	-	1	118	947	947	335	283
LEUCON AMERICANUS	8	10186	2683	26192	7503	74	9	13874	2758	31079	10345	75
ORYZOSTYLIS SMITHI	8	6544	1435	19327	6126	94	7	9492	2092	23669	8534	90
CYMBULA COMPTA	0	-	-	-	-	-	1	144	1151	1151	407	283
NICKODEUTOPUS	0	-	-	-	-	-	5	2345	947	8050	2841	121
GRYLLotalpa	0	-	-	-	-	-	6	770	138	2759	920	120
BATFA CATHARINENSIS	0	-	-	-	-	-	8	3364	523	6927	2529	75
CONOPHUM SPP	0	-	-	-	-	-	1	137	1096	1096	367	283
ERICHTHIUS SPP.	0	-	-	-	-	-	1	65	523	523	165	283
GAMMARUS MUCRONATUS	0	-	-	-	-	-	8	6636	1096	12308	3760	55
JASSA FALCATA	0	-	-	-	-	-	1	62	494	494	175	283
LYSIANOPSIS ALBA	0	-	-	-	-	-	5	659	947	1181	551	84
ELASMOPOUS LEVIS	0	-	-	-	-	-	3	223	137	1151	412	185
MELITA NITIDA	0	-	-	-	-	-	5	1166	523	3787	1409	121
MONOCULUS LONARDSI	0	-	-	-	-	-	3	756	494	4604	1553	211
NICKOPOTOPUS KAREYI	0	-	-	-	-	-	4	635	988	1894	733	115
FAMILY STENOPODIAE	0	-	-	-	-	-	2	660	2013	3333	1287	193
STENOPUS BREVICORNIS	0	-	-	-	-	-	7	3769	1096	9468	3628	96
ORDER CAPRELLIDAE	6	938	769	1893	674	72	1	1389	11111	11111	3928	283
UNIDENTIFIED HYDIDS	8	78703	3587	208001	76694	97	2	262	947	1151	429	186
HYDIDOPSIS BIGELOWI	0	-	-	-	-	-	8	45767	16307	151696	45650	100
NEURYSIS AMERICANA	0	-	-	-	-	-	2	122	31	947	333	273
ORDER DECAPODA	0	-	-	-	-	-	0	-	-	-	-	-
PALALONETES VULGARIS	2	17	42	96	35	203	1	4	31	31	11	283
PALALONETES SPP	3	42	90	126	58	140	7	281	31	1101	356	127
CHARGON SEPTEMPINOSA	7	154	21	321	120	78	1	4	33	33	12	283
LEPTOSYNAPIA SPP	1	10	79	79	28	283	1	62	494	494	175	283
SUBORDER DOKIDACEA	0	-	-	-	-	-	1	62	494	494	175	283
SUBORDER AFOLIDACEA	0	-	-	-	-	-	1	411	3288	3288	1162	283
INVERTEBRATE	0	-	-	-	-	-	1	62	494	494	175	283
INFRAORDER BRACHYURA	0	-	-	-	-	-	2	650	2302	2899	1214	187
SCOLOPUS SPP	1	42	335	335	118	283	0	-	-	-	-	-
PECTIGARIA GOULDII	1	42	335	335	118	283	0	-	-	-	-	-
PALANATIS SP	0	-	-	-	-	-	1	17	137	137	48	283
SPIO SPP	1	128	1026	1026	363	283	0	-	-	-	-	-
GLYCERA CAPITATA	1	10	79	79	28	283	0	-	-	-	-	-
POLARKE OBSCURA	1	24	192	352	68	283	2	270	1006	1151	501	186
LIROICA OVALIS	1	118	947	947	335	283	0	-	-	-	-	-
IDOTEA BALTICA	6	660	118	1539	640	97	3	507	118	2931	1039	205
IDOTEA TILLOSA	5	1500	671	7692	2575	172	8	3161	1481	5681	1299	41
ENICOSPONELLA SP	1	90	769	769	272	283	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	8	17078	7175	36984	12253	72	7	3440	988	6038	2120	62
AMPELICA SPP.	0	-	-	-	-	-	8	14109	3692	24208	7575	54
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	6	75	4	192	70	93	3	21	31	69	31	148
	8	119149					8	118394				

TABLE 28 . (CONT.)

MONTH	JUNE 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	2	471	1006	2759	989	210
LEUCON AMERICANUS	1	179	1435	1435	507	283	3	641	1038	2192	940	147
OXYUROSTYLIS SMITHI	0	-	-	-	-	-	1	118	947	947	335	283
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	2	471	1006	2759	989	210
JASSA FALCATA	0	-	-	-	-	-	2	161	138	1151	403	250
MICROPROTOPUS RANEYI	0	-	-	-	-	-	1	118	947	947	335	283
STENOTHOE BREVICORNIS	0	-	-	-	-	-	1	65	523	523	185	283
UNIDENTIFIED MYSIDS	1	96	769	769	272	283	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	5	1427	274	5517	2169	152
PALAEONETES VULGARIS	0	-	-	-	-	-	2	20	72	86	37	186
CRANGON SEPTemspINOSA	4	24	4	79	33	140	2	15	31	86	31	211
IDOTEA BALTICA	1	84	669	669	237	283	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	2	456	1339	2308	883	194	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	3	279	172	1111	469	168
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	1	192	1539	1539	544	283	3	1423	1096	5681	2345	165
LIFE STAGE: ZOEAL												
PALAEONETES SPP	8	7070	671	16202	5217	74	7	2787	494	11034	3539	127
CRANGON SEPTemspINOSA	7	23360	79	42500	16020	69	8	17332	947	33973	12763	74
UPOGEBIA AFFINIS	5	1584	717	6349	2118	134	4	731	988	2759	965	132
PAGURUS SP	4	801	717	3077	1097	137	1	139	1111	1111	393	283
LIBINIA SPP.	3	1204	669	7692	2663	221	3	644	947	2192	959	149
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	629	5031	5031	1779	283
FAMILY XANTHIDAE	8	150613	16771	285873	100946	67	0	-	-	-	-	-
PANOPEUS HERBSTII	0	-	-	-	-	-	6	7593	2759	21775	7564	100
NEOPANOPE TEXANA	0	-	-	-	-	-	8	77939	11250	162013	65948	85
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	6	2042	494	5833	2327	114
INFRAORDER BRACHYURA	5	2386	1435	10159	3351	140	1	62	494	494	175	283
LIFE STAGE: EPITOKES												
NEREIS SPP	7	344	90	1202	418	122	5	256	65	1301	443	173
	8	188392					8	115361				

TABLE 28. (CONT.)

MONTH	JUNE 1976											
	LOCATION 14						LOCATION 15					
SPECIES	FNLO	MEAN	MIN	MAX	SDEV	CVAR	FNLO	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DEFLAMINATION												
CLASS HYDROZEA	1	91	724	724	256	283	1	89	711	711	251	283
MYRIONOPSIS LEIDYI	0	-	-	-	-	-	1	11	84	84	20	283
CLASS EIVALVIA	1	45	362	362	128	283	1	91	727	727	257	283
FAMILY SYLLIDAE	3	417	597	1441	625	150	1	364	2909	2909	1076	283
AUTOLYTUS SPP	0	-	-	-	-	-	1	45	356	356	126	283
NEREIS SPP	0	-	-	-	-	-	1	21	170	170	60	283
FAMILY CAPITELLIDAE	1	144	1155	1155	408	283	1	1018	14545	14545	5142	283
STREBLONEMO NERDICTI	0	-	-	-	-	-	1	455	3636	3636	1266	283
CYCLAMPIS VARIANS	2	147	577	597	272	185	2	428	727	2700	952	222
LEUCON AMERICANUS	7	3096	280	9819	3285	106	5	2000	362	5424	2420	120
OXYDROSITYLLIS SMITHI	8	5599	1081	13003	4278	76	7	5245	3376	9432	3034	58
GAMMARUS HUCKENRATUS	0	-	-	-	-	-	1	10	76	76	27	283
ORDER CAPRELLIDAE	8	3261	1441	5970	1746	54	5	788	606	1538	711	99
UNIDENTIFIED MYSID	6	2448	280	7207	2630	107	7	2029	676	5018	1755	88
PALAEONETES VULGARIS	0	-	-	-	-	-	1	17	136	136	48	283
PALAEONETES SPP	0	-	-	-	-	-	2	81	44	606	213	207
CRANGON SEPTENTRIONALIS	0	-	-	-	-	-	1	9	74	74	26	283
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	11	85	85	30	283
LEPTOSYNGIA SPP	0	-	-	-	-	-	1	6	45	45	16	283
SCOLOPLOS SPP	0	-	-	-	-	-	1	10	76	76	27	283
PECTINARIA GULDII	1	180	1441	1441	509	283	1	91	727	727	257	283
FAMILY AMPHARETIIDAE	0	-	-	-	-	-	1	45	362	362	126	283
LEUCONEA OVALIS	2	15	45	75	29	193	3	24	45	85	25	145
IDOTEA BALTICA	2	208	362	1301	459	221	3	110	64	602	236	214
LEUTEA TRILOBA	7	1942	280	7005	2562	133	7	1021	606	6154	1875	103
ERICHSONELLA SP	2	149	45	1149	404	271	1	6	45	45	16	283
UNIDENTIFIED AMPHIPODA	8	21560	5035	44685	13063	61	8	16532	10803	30545	6366	39
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	6	92	45	226	87	95	7	165	45	444	152	92
	8	29395					8	32327				
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	5	36	36	13	283	1	45	362	362	126	283
LEUCON AMERICANUS	0	-	-	-	-	-	1	45	362	362	128	283
ORDER CAPRELLIDAE	1	163	1301	1301	460	283	1	76	606	606	214	283
PALAEONETES SPP	0	-	-	-	-	-	1	6	44	44	16	283
CRANGON SEPTENTRIONALIS	1	6	45	45	16	283	0	-	-	-	-	-
IDOTEA BALTICA	0	-	-	-	-	-	1	6	45	45	16	283
UNIDENTIFIED AMPHIPODA	4	1167	1100	3902	1510	129	1	89	711	711	251	283
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	1	75	597	597	211	283	4	484	711	1350	555	115
ORDER CERATOPHAKIA	0	-	-	-	-	-	1	76	606	606	214	283
LIFE STAGE: ZOEAL												
ORDER DECAPODA	1	45	362	362	128	283	0	-	-	-	-	-
PALAEONETES SPP	8	9917	2797	16378	5712	58	8	10596	724	36923	11408	108
HIPPOLYTE SPP.	1	72	577	577	204	283	0	-	-	-	-	-
CRANGON SEPTENTRIONALIS	7	7459	1155	23415	5074	122	6	6595	2700	26667	8937	136
UPOGEBIA AFFINIS	3	287	280	1441	511	170	1	85	676	676	239	283
PARAGURUS SP	2	206	362	1301	459	221	2	175	676	727	325	105
LIRIA SPP.	1	180	1441	1441	509	283	1	45	362	362	126	283
FAMILY XANTHIDAE	8	97663	38807	181622	58633	60	8	91039	30222	244103	75168	70
INTEGRODORUS BRACHYURA	6	2622	597	9106	3091	118	5	1357	727	6154	2446	151
LIFE STAGE: EPITOOLS												
NEREIS SPP	5	568	360	1341	543	96	6	349	42	1037	356	102
	8	120436					8	116066				

TABLE 28. (CONT.)

MONTH	JUNE 1976											
	LOCATION 16						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDIV	CVAR	FREQ	MEAN	MIN	MAX	SDIV	CVAR
LIFE STAGE: NO DETERMINATION												
CHEPIDULA SPP.	1	6	45	45	36	283	0	-	-	-	-	-
CLASS LIVALVIA	1	45	359	359	127	283	1	152	1212	1212	429	283
CLASS POLYCHAETA	2	123	404	576	231	189	0	-	-	-	-	-
FAMILY PHYLLOCOCCIDAE	0	-	-	-	-	-	2	85	114	567	199	233
FAMILY SYLLIDAE	2	173	576	809	327	189	2	61	47	441	154	253
NEKEIS SPP.	2	13	41	66	26	192	2	16	47	82	31	194
FAMILY CAPITELLIDAE	3	345	359	1810	633	104	4	524	751	1212	575	116
DIOPATKA	2	300	144	2252	791	264	1	148	1185	1185	419	283
CYCLASPIS VARIANS	4	385	362	1666	464	120	0	-	-	-	-	-
LEUCON AMERICANUS	7	2723	994	6906	2526	93	6	5385	984	14345	4178	78
OXYURUS STYLIS SMITHI	7	2705	1060	4604	1675	62	8	6058	326	16471	5049	83
FAMILY PARAPARIDAE	0	-	-	-	-	-	1	41	328	328	116	283
GAMMARUS HUCRUSATUS	0	-	-	-	-	-	1	6	47	47	17	283
ONCH. CAPRELLIDAE	6	177	362	1727	648	83	4	425	375	1639	579	136
UNIDENTIFIED MYSID	8	3544	994	8477	2505	71	8	3057	709	7724	2225	73
PALAEONETES VULGARIS	1	22	179	179	63	283	1	17	94	94	33	263
PALAEONETES SPP.	0	-	-	-	-	-	1	6	47	47	17	283
CHIRONOMUS SEPTENTRIONALIS	1	8	67	67	24	283	2	47	140	235	90	193
CALLINECTES SAPIIDUS	1	8	67	67	24	283	1	5	41	41	14	283
LEPTOSYRAPHIA SPP.	0	-	-	-	-	-	1	14	114	114	40	283
SCOLOPLOS SPP.	2	51	45	359	176	249	1	12	94	94	33	283
PLACINARIA GOULDII	2	163	588	718	304	186	0	-	-	-	-	-
LIABOCHA OVALIS	1	8	66	66	23	283	2	14	41	74	26	195
EDOTIA BALIGA	5	176	41	661	234	133	3	224	38	1103	421	168
EDOTIA BALIGA	6	894	317	2941	968	108	3	328	141	1364	570	174
LEICHTSOMELLA SP.	1	9	74	74	26	283	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	8	20896	3346	43444	14835	71	8	27094	7588	78222	24921	92
LIFE STAGE: JUVENILES												
CALLINECTES SAPIIDUS	6	286	74	852	339	118	4	317	142	1176	444	140
	8	33663	-	-	-	-	8	44032	-	-	-	-
LIFE STAGE: GRAVID												
LEUCON AMERICANUS	0	-	-	-	-	-	1	140	1122	1122	397	283
OXYURUS STYLIS SMITHI	1	6	45	45	16	283	1	47	374	374	132	283
PALAEONETES VULGARIS	1	6	45	45	16	283	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	5	481	41	1727	630	131	3	735	374	4848	1680	229
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	3	302	359	1660	465	154	1	296	2370	2370	838	283
LIFE STAGE: ZADAL												
PALAEONETES SPP.	8	11842	3967	20132	5679	46	6	15741	3404	37926	12349	78
CHIRONOMUS SEPTENTRIONALIS	7	4914	576	11765	4111	64	5	7021	2629	24242	8531	120
DIOPATKA AFFINIS	2	155	576	661	287	106	2	195	374	1185	421	216
PAGURUS SP.	2	146	576	568	269	105	0	-	-	-	-	-
LIBINIA SPP.	1	133	1066	1066	377	283	2	115	328	588	223	195
CANCER SPP.	0	-	-	-	-	-	1	41	328	328	116	283
CALLINECTES SAPIIDUS	1	533	4767	4767	1504	283	1	41	328	328	116	283
FAMILY AMPHIPODA	8	68731	16425	147661	36600	56	8	129476	76293	504242	163546	125
INFERNOUS BRACHYURA	4	1215	994	4664	1671	138	3	1082	1212	5234	1866	177
LIFE STAGE: EPITOKES												
MULLIS SPP.	5	569	45	2333	614	143	5	207	71	956	374	155
SCOLOPLOS SPP.	0	-	-	-	-	-	1	6	47	47	17	283
	8	89031	-	-	-	-	8	155253	-	-	-	-

TABLE 28. (CONT.)

MONTH	JUNE 1976					
	LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION						
ORDER NEMATODA	1	187	1495	1495	529	283
CLASS BIVALVIA	1	89	711	711	251	283
FAMILY PHYLLODOCIDAE	1	47	374	374	132	283
NEREIS SPP	1	5	37	39	14	283
FAMILY CAPITELLIDAE	1	89	711	711	251	283
DIOPATRA	1	47	374	374	132	283
CYCLASPIS VARIANS	2	175	684	714	324	185
LEPTOCUMA MINOR	1	157	1255	1255	444	283
LEUCON AMERICANUS	9	4709	1373	7111	1837	39
OXYUROSTYLIS SMITHI	8	7571	1422	18224	5826	77
ORDER CAPRELLIDEA	5	1164	687	4786	1609	138
UNIDENTIFIED MYSIDS	8	8990	2844	24286	6839	76
MYSIDOPSIS BIGELOWI	1	10	78	78	28	283
PALAEMONETES SPP	1	11	89	99	31	283
CRANGON SEPTHEMSPINOSA	7	94	66	178	52	56
PAGURUS SP	1	11	89	89	31	283
CALLINECTES SAPIDUS	1	61	489	489	173	283
LEPTOSYNAPTA SPP	1	10	78	78	28	283
PECTINARIA GOULDII	1	89	711	711	251	283
SPIO SETOSA	1	34	748	748	264	283
PODARKE OBSCURA	1	47	374	374	132	283
LIRONECA OVALIS	1	47	374	374	132	283
IDOTEA BALTICA	6	1873	687	5647	2113	113
EDOTEA TRILOBA	4	976	711	3419	1322	135
UNIDENTIFIED AMPHIPODA	8	60419	7822	187895	67854	112
LIFE STAGE: JUVENILES						
CALLINECTES SAPIDUS	5	283	157	1495	500	177
	8	87253				
LIFE STAGE: GRAVID						
LEUCON AMERICANUS	1	172	1373	1373	485	283
UNIDENTIFIED MYSIDS	3	339	627	1373	516	152
CRANGON SEPTHEMSPINOSA	1	6	47	47	17	283
UNIDENTIFIED AMPHIPODA	2	350	684	2118	753	215
LIFE STAGE: LARVAL						
CLASS POLYCHAETA	1	89	711	711	251	283
LIFE STAGE: ZOEAL						
PALAEMONETES SPP	8	8203	3137	11429	2733	33
HIPPOLYTE SPP.	1	86	587	687	243	283
CRANGON SEPTHEMSPINOSA	7	3315	711	6275	2374	72
UPOGEBIA AFFINIS	5	436	627	748	362	83
PAGURUS SP	3	475	1053	1495	667	140
LIBINIA SPP.	3	308	374	1373	504	164
FAMILY XANTHIDAE	8	93799	20000	200515	68377	73
INFRAORDER BRACHYURA	3	342	627	1422	528	154
LIFE STAGE: EPITOKES						
NEREIS SPP	5	493	44	2051	739	150
	8	108413				



TABLE 28. (CONT.)

SPECIES	JULY 1976											
	LOCATION 7						LOCATION 11					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	3107	1871	7069	2259	204	1	147	1468	1468	464	316
TURKIDOPSIS ROTUNDICOLA	4	784	63	7442	2340	298	4	428	412	2500	785	103
OBOLIA SPP	1	49	494	491	156	316	0	-	-	-	-	-
ONDEA ACTINARIA	1	22	222	222	70	316	1	10	96	96	30	316
HEMEROPSIS LEUCY	8	2208	443	11683	3906	177	4	377	160	2530	791	210
LEGIS EURETUS	1	51	506	506	160	316	0	-	-	-	-	-
CLASS POLYCHAETA	0	-	-	-	-	-	2	71	351	360	150	211
FAMILY PHYLLOCCIDAE	1	20	198	198	63	316	5	371	120	1468	524	141
PHYLLOCCIDAE ANAGAE	0	-	-	-	-	-	2	141	645	769	300	212
FAMILY SYLLIDAE	1	211	2105	2105	666	316	2	251	351	2162	680	271
FAMILY CAPITILLIDAE	4	673	998	2352	930	138	5	510	721	1468	583	114
POLYDORA SPP	1	23	234	234	74	316	0	-	-	-	-	-
SCOLICOLLIPIDES VIRIDIS	1	235	2352	2352	744	316	0	-	-	-	-	-
DIOPATRA	3	282	99	2352	737	261	2	87	103	769	242	277
SUEPHYLLA PYCNOGONIDA	5	1420	1461	4444	1700	120	5	1013	351	5301	1657	164
CYCLASPIS VARIANS	2	244	234	2207	694	284	3	134	412	482	216	161
LEPTOCOMA HINOKI	1	221	2207	2207	698	316	1	412	4124	4124	1304	316
ELUCON AMERICANUS	9	8803	1188	31859	10199	116	9	7791	1441	35088	11242	144
OXYUNOSTYLIS SMITHI	6	1356	356	5581	1968	145	9	3378	825	10275	3173	94
FAMILY PARAPARALIDAE	1	40	356	396	125	316	0	-	-	-	-	-
CYRADUSA CUMPTA	0	-	-	-	-	-	1	10	103	103	33	316
MICRODUTOPUS	0	-	-	-	-	-	5	2015	426	13211	4072	202
CHYLLOLALPA	0	-	-	-	-	-	6	841	96	2979	988	118
BATEA CATHARINENSIS	0	-	-	-	-	-	9	1756	426	10090	3026	172
CURONOPHUM SPP	0	-	-	-	-	-	2	235	412	1936	612	260
CERAPUS TUBULARIS	0	-	-	-	-	-	1	144	1441	1441	456	316
GAMMARUS LAWRENCEANUS	0	-	-	-	-	-	10	7930	4021	13617	2719	34
JASSA FALCATA	0	-	-	-	-	-	8	549	103	1290	423	77
LYSIANOPSIS ALBA	0	-	-	-	-	-	8	1704	702	3373	1298	76
ELASMOPIUS LEVIS	0	-	-	-	-	-	4	426	88	3604	1125	264
HELITA NITIDA	0	-	-	-	-	-	2	191	439	1468	470	246
MUNICULODUS LUNARUS	0	-	-	-	-	-	3	313	412	1754	596	190
MICROPHOTOPUS FANEYI	0	-	-	-	-	-	4	910	1277	3871	1355	149
PARAHOTOPHILA CYPRIS	0	-	-	-	-	-	2	410	1938	2162	866	211
STENOTHOE MINUTA	0	-	-	-	-	-	7	729	351	1702	674	92
STENOTHOE BREVICORNIS	0	-	-	-	-	-	10	3765	1237	8511	1977	53
ORDER CAPRELLIDAE	8	2677	396	5432	2233	83	3	1159	426	9231	2900	250
UNIDENTIFIED MYSTUS	10	34591	4752	68837	22187	64	9	4063	1635	13153	3579	88
MYSTIDOPSIS BIGLOWI	0	-	-	-	-	-	10	28138	14949	50631	10267	36
MEGALYSIS AMERICANA	0	-	-	-	-	-	1	18	180	180	57	316
MEGALYSIS FURCOSA	1	6	63	63	20	316	1	24	241	241	76	316
PALAEONETES VULCANIS	2	37	147	222	60	216	2	213	351	1778	561	263
PALAEONETES SPP	0	-	-	-	-	-	1	72	721	721	228	316
HIPPOLYTE SPP	5	236	61	1186	384	163	7	272	106	1333	357	146
CHANGON SEPTENTRIONALIS	1	13	132	132	42	316	1	12	120	120	38	316
LEPTOSYNAPTIS SPP	0	-	-	-	-	-	1	48	482	482	152	316
SUBORDER ALULIDAE	0	-	-	-	-	-	1	36	361	361	114	316
INVENTURATE	0	-	-	-	-	-	3	142	426	516	230	162
LITINELLA BARNARDI	3	70	59	494	156	223	3	40	103	175	66	167
SCOLOPIOS SPP	1	51	506	506	160	316	0	-	-	-	-	-
PECTINARIA GIBBII	0	-	-	-	-	-	1	65	645	645	204	316
PARAHOTOPHILA SPP	0	-	-	-	-	-	1	147	1468	1468	464	316
LEUCO LACTEA	0	-	-	-	-	-	1	10	103	103	33	316
UNCIOLE TROKATA	0	-	-	-	-	-	1	129	1290	1290	408	316
THARYX SPP	1	6	59	59	19	316	2	188	412	1468	468	249
PODARKE USCUKA	0	-	-	-	-	-	3	77	769	769	243	316
FAMILY THERIDULIDAE	1	22	222	222	70	316	3	141	103	825	284	201
LINOMELA OVALIS	3	161	117	988	331	205	4	244	351	851	350	144
LEOTHA BATHICA	6	824	506	3721	1123	136	10	7163	444	5867	1675	75
UNIDENTIFIED AMPHIPODA	10	26757	6732	64810	21802	82	6	4164	444	14774	5389	129
AMPELISCA SPP	0	-	-	-	-	-	10	11240	1702	36697	12444	111
LIFE STAGE: JUVENILES												
CALLINectes RAPIDUS	2	36	61	284	93	261	0	-	-	-	-	-
	10	61236					10	69854				

TABLE 28. (CONT.)

MONTH	JULY 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	1	49	494	494	156	316	2	78	351	426	165	212
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	1	48	482	482	152	316
LEUCON AMERICANUS	3	507	936	2106	872	172	2	384	1468	2368	836	218
MICRODEUTOPUS												
GRYLLOTALPA	0	-	-	-	-	-	1	147	1468	1468	464	316
COROPHIUM SPP	0	-	-	-	-	-	2	81	103	702	221	274
JASSA FALCATA	0	-	-	-	-	-	6	701	482	2936	911	130
ELASNOPUS LEVIS	0	-	-	-	-	-	2	232	851	1468	510	220
MICROPROTOPUS RANEYI	0	-	-	-	-	-	3	196	103	1446	458	233
ORDER CAPRELLIDEA	0	-	-	-	-	-	2	189	426	1468	469	248
UNIDENTIFIED MYSIDS	4	866	99	7059	2201	254	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	9	1090	161	2936	959	88
IDOTEA BALTICA	0	-	-	-	-	-	2	27	96	175	60	222
UNIDENTIFIED AMPHIPODA	7	1925	396	8101	2636	137	1	9	88	88	28	316
AMPELISCA SPP.	0	-	-	-	-	-	2	765	3246	4404	1636	214
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	3	437	988	1860	733	168	2	519	790	4404	1387	267
LIFE STAGE: ZOEAL												
ORDER DECAPODA	0	-	-	-	-	-	1	105	1053	1053	333	316
PALAEONETES SPP	10	13643	1980	31628	10705	78	10	3936	645	9123	2585	66
HIPPOLYTE SPP.	1	51	506	506	160	316	1	147	1468	1468	464	316
CRANGON SEPTemspINOSA	2	237	494	1871	595	252	2	150	645	851	319	213
UPOGEBIA AFFINIS	4	1007	982	5581	1772	176	6	755	825	1936	737	98
PAGURUS SP	6	607	494	1860	626	103	3	233	444	1404	454	195
LIBINIA SPP.	1	23	234	234	74	316	4	418	444	2128	693	166
FAMILY XANTHIDAE	10	107893	25743	292093	73600	68	1	184	1835	1835	580	316
PANOPEUS HERBSTII	0	-	-	-	-	-	8	2841	412	8807	2937	103
NEOPANOPE TEXANA	0	-	-	-	-	-	10	50459	20619	101284	30213	60
RHITHROPANOPEUS HARRISI	0	-	-	-	-	-	4	473	412	2308	778	164
INFRAORDER BRACHYURA	2	476	1013	3743	1191	250	4	759	426	4337	1421	187
LIFE STAGE: EPITOKES												
HEREIS' SPP	6	135	61	588	185	137	8	327	81	1468	447	137
	10	127855					10	65251				

TABLE 28. (CONT.)

MONTH	JULY 1976											
	LOCATION 14						LOCATION 15					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	62	146	282	105	169	1	162	1616	1616	511	316
TURRITOPSIS NUTRICOLA	3	258	58	1846	596	231	2	105	349	698	236	225
MNEMIOPSIS LEIDYI	5	891	75	4927	1703	191	4	641	112	3756	1313	205
ORDER NEMATODA	0	-	-	-	-	-	1	81	808	808	256	316
CLASS BIVALVIA	1	46	462	462	146	316	0	-	-	-	-	-
CLASS POLYCHAETA	2	99	377	615	217	218	0	-	-	-	-	-
FAMILY PHYLLODOCIDAE	0	-	-	-	-	-	1	71	714	714	226	316
FAMILY SYLLIDAE	1	45	449	449	142	316	0	-	-	-	-	-
AUTOLYTUS SPP	0	-	-	-	-	-	2	44	184	252	93	214
NEREIS SUCCINEA	1	7	70	70	22	316	0	-	-	-	-	-
NEREIS SPP	1	9	94	94	30	316	0	-	-	-	-	-
FAMILY CAPITELLIDAE	1	38	377	377	119	316	0	-	-	-	-	-
SCOLECOLEPIDES VIRIDIS	0	-	-	-	-	-	1	9	86	86	27	316
SUBPHYLUM PYCNOGONIDA	3	108	291	449	177	165	1	239	2385	2385	754	316
ORDER CUMACEA	0	-	-	-	-	-	1	360	3596	3596	1137	316
CYCLASPIS VARIANS	0	-	-	-	-	-	2	49	233	252	102	211
LEUCON AMERICANUS	9	1166	377	3099	1116	96	7	1373	349	5517	1732	126
OXYUROSTYLIS SMITHI	9	1871	383	6479	1973	105	7	1241	367	3232	1200	97
ORDER CAPRELLIDEA	9	2120	602	7547	2211	104	6	709	252	2759	962	136
UNIDENTIFIED MYSIDS	8	2781	727	9091	3346	120	6	3009	233	13034	4420	147
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	2	152	714	808	322	211
NEOMYSIS AMERICANA	2	305	1203	1850	661	217	2	509	808	4286	1351	265
ORDER DECAPODA	1	113	1132	1132	358	316	1	5	46	46	15	316
PALAEONETES PUGIO	1	77	766	766	242	316	0	-	-	-	-	-
PALAEONETES SPP	5	159	94	615	222	139	3	174	229	808	315	181
CRANGON SEPTEMSPINOSA	1	38	377	377	119	316	4	61	46	349	110	181
UPOGEBIA AFFINIS	2	66	195	462	152	232	0	-	-	-	-	-
LEPTOSYNAPTA SPP	1	19	191	191	60	316	1	10	101	101	32	316
SUBORDER DORIDACEA	1	62	615	615	194	316	0	-	-	-	-	-
SCOLOPLOS SPP	1	7	70	70	22	316	0	-	-	-	-	-
PODARKE OBSCURA	5	75	75	239	93	125	1	20	202	202	64	316
ORDER ISOPODA	0	-	-	-	-	-	2	533	1735	3596	1206	226
CIROLANA CONCHARUM	1	11	109	109	34	316	0	-	-	-	-	-
LIRONECA OVALIS	3	93	94	449	174	188	1	5	46	46	15	316
IDOTEA BALTICA	6	136	70	472	162	120	3	169	58	1379	432	256
EDOTEA TRILOBA	9	698	48	2105	656	94	4	248	184	1258	436	175
ERICHSONELLA SP	3	196	462	899	333	170	1	71	714	714	226	316
UNIDENTIFIED AMPHIPODA	10	8553	5854	11077	1815	21	10	8816	4541	16531	3884	44
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	5	29	36	84	34	115	4	30	46	102	41	138
	10	20135					10	18894				

TABLE 28 . (CONT.)

MONTH	JULY 1976											
	LOCATION 14						LOCATION 15					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
LEUCON AMERICANUS	0	-	-	-	-	-	2	49	233	252	102	211
ORDER CAPRELLIDEA	1	62	615	615	194	316	1	81	808	808	256	316
UNIDENTIFIED MYSIDS	0	-	-	-	-	-	4	90	112	349	130	145
EDOTEA TRILOBA	1	38	377	377	119	316	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	6	667	634	1846	664	100	4	320	184	1861	601	188
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	6	503	191	2462	757	151	3	284	233	1798	590	208
LIFE STAGE: ZOEAL												
PALAEMONETES SPP	10	5611	195	8679	2853	51	10	7099	1284	16279	5481	77
CRANGON SEPTemspINOSA	4	127	146	462	182	143	1	37	367	367	116	316
UPOGEBIA AFFINIS	3	277	615	1309	476	172	1	138	1379	1379	436	316
PAGURUS SP	6	178	146	462	185	104	1	23	233	233	74	316
LIBINIA SPP.	1	30	301	301	95	316	3	242	252	1468	486	201
FAMILY XANTHIDAE	10	37265	9888	70141	20142	54	10	45974	21224	76768	18351	40
INFRAORDER BRACHYURA	2	187	336	1531	484	259	3	382	808	2096	701	184
LIFE STAGE: EPITOKES												
CLASS POLYCHAETA	0	-	-	-	-	-	1	18	183	183	58	316
NEREIS SPP	8	803	75	3868	1253	156	7	821	172	2921	1031	126
	10	45745					10	55558				

TABLE 28. (CONT.)

SPECIES	JULY 1976											
	LOCATION 16						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	1	360	2883	2883	1019	283
FORNITOPSIS KUTRICOLA	3	181	345	777	311	172	2	599	1818	2973	1151	192
MAENOPSIS LUTZI	4	749	225	3687	1463	195	3	101	208	364	146	145
CLASS POLYCHAETA	2	52	175	741	235	256	1	118	941	941	333	283
FAMILY POLYCHAETA	0	-	-	-	-	-	1	90	721	721	255	283
NEREIS SUCCINLA	0	-	-	-	-	-	1	10	76	76	27	283
NEREIS SPP.	1	11	114	114	36	316	0	-	-	-	-	-
FAMILY CAPITELLIDAE	0	-	-	-	-	-	1	79	630	630	223	283
DIOPATRA	3	66	84	485	152	229	4	143	382	403	166	116
SUBPHYLUM PYCNOGONIDA	3	410	666	2222	757	185	2	131	323	721	264	202
ORDER CUNACLA	0	-	-	-	-	-	1	59	471	471	167	283
CYCLASPIS VARIANS	4	229	175	777	335	146	2	176	417	992	361	205
LEPTOCOMA MINOR	1	35	345	345	109	316	0	-	-	-	-	-
LEUCON AMERICANUS	6	920	524	2602	1022	111	6	2031	727	4839	1865	92
QYXOSTYLIS SCITAI	6	636	172	1739	757	119	4	1054	833	3604	1459	136
ORDER CAPRELLIDAE	8	761	388	2222	679	87	3	1207	2424	4324	1748	145
UNIDENTIFIED AYSIUS	8	3084	672	8869	2863	93	6	4067	323	9697	4162	102
MYSTICOPSIS BISCUMI	1	67	666	666	211	316	2	144	315	833	300	209
NEOMYSIS AMERICANA	2	223	699	1333	402	216	2	339	630	2083	738	218
PALAEOMETES SPP.	2	96	431	524	203	212	1	90	721	721	255	283
HIPPOLYTE SPP.	0	-	-	-	-	-	1	40	323	323	114	283
CRANGON SEPTENTRIONALIS	1	4	44	44	14	316	0	-	-	-	-	-
LEPTOSTYPIA SPP.	2	13	44	83	28	223	2	31	81	165	61	199
SUBORDER ALLOIDACEA	1	17	172	172	54	316	0	-	-	-	-	-
SCOLOPUS SPP.	2	47	84	388	123	260	0	-	-	-	-	-
GLYCERA CAPITATA	0	-	-	-	-	-	1	10	76	76	27	283
POGONIA OBSOLETE	1	17	172	172	54	316	1	52	417	417	147	283
ORDER ISOPODA	1	17	172	172	54	316	1	59	471	471	167	283
LIPODECA OVALIS	1	8	83	83	26	316	0	-	-	-	-	-
IDOTEA BALTICA	3	65	81	345	122	187	4	1211	331	5856	2076	171
IDOTEA THALASSA	5	442	172	2222	736	166	4	527	315	1441	653	124
ENICOSPALLA SP.	2	94	43	699	261	301	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	10	8217	3843	15610	3952	48	8	10469	1890	29677	8603	82
LIFE STAGE: JUVENILES												
CALLINECTES RAPIDUS	6	68	43	278	99	112	2	16	40	90	33	203
	10	16610					8	23212				
LIFE STAGE: GRAVID												
LEUCON AMERICANUS	0	-	-	-	-	-	2	130	315	721	263	203
UNIDENTIFIED AYSIUS	1	10	97	97	31	316	2	135	471	606	252	167
IDOTEA BALTICA	1	4	44	44	14	316	1	5	40	40	14	283
UNIDENTIFIED AMPHIPODA	4	399	777	1333	534	134	3	609	323	3604	1255	206
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	1	90	699	899	284	316	2	145	323	833	300	208
LIFE STAGE: ZOTAL												
PALAEOMETES SPP.	10	7985	1552	15534	5209	65	8	14518	3150	30545	8971	62
HIPPOLYTE SPP.	1	17	172	172	54	316	1	52	417	417	147	283
CRANGON SEPTENTRIONALIS	3	139	175	870	202	203	2	242	721	1212	466	193
UPOGONIA AFFINIS	3	221	690	777	356	161	2	131	323	727	266	233
PAGURUS SP.	2	92	175	741	235	256	2	545	721	3636	1274	234
LIBinia SPP.	2	52	172	345	116	225	3	137	47	727	261	292
FAMILY KATHIDAL	10	36204	18621	59160	11034	30	8	46981	23417	103276	27433	58
DECAPODEK BRACHYURA	3	376	175	2609	860	228	2	646	331	4839	1690	263
LIFE STAGE: EPITOMES												
NEREIS SPP.	7	630	43	1957	747	119	8	596	161	2235	677	114
	10	46219					8	64690				

TABLE 2B. (CONT.)

MONTH	JULY 1976					
	LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION						
TURRITOPSIS NUTRICOLA	4	761	471	4000	1358	178
MEGALOPSIS LEIDYI	4	268	269	667	310	116
CLASS POLYCHAETA	1	82	659	659	233	283
FAMILY PHYLLODOCIDAE	3	93	93	471	166	179
DIOPATRA	2	26	93	111	47	186
SUBPHYLUM PYCNOGONIDA	3	191	95	741	326	171
CYCLASPIS VARIANS	2	268	762	1379	522	195
LEUCON AMERICANUS	6	1357	359	3704	1321	97
OXYUROSTYLIS SMITHI	8	3277	471	10222	3470	106
ORDER CAPRELLIDEA	6	3507	879	7407	2937	84
UNIDENTIFIED MYSIDS	6	7858	1059	16389	7493	95
MYSIDOPSIS BIGELOWI	2	286	762	1524	567	198
NEOMYSIS AMERICANA	2	2438	1121	18381	6454	265
PALAEONETES SPP	3	260	93	1524	535	206
CRANGON SEPTemspINOSA	4	54	56	190	69	128
LEPTOSYNAPTA SPP	1	23	185	185	65	283
SUBORDER AEOLIDACEA	1	185	1481	1481	524	283
INVERTEBRATE	1	93	741	741	262	283
SCOLOPLOS SPP	1	12	93	93	33	283
THARYX SPP	1	55	440	440	156	283
PODARKE OBSCURA	2	34	86	185	68	201
ORDER ISOPODA	1	22	179	179	63	283
LIRONCA OVALIS	1	7	56	56	20	283
IDOTEA BALTICA	6	3209	45	11529	4295	134
EDOTEA TRILOBA	8	2729	538	5185	1847	68
ERICHSONELLA SP	1	286	2286	2286	808	283
UNIDENTIFIED AMPHIPODA	8	41278	1794	94765	34410	83
LIFE STAGE: JUVENILES						
CALLINECTES SAPIDUS	5	101	45	463	158	157
	8	68758				
LIFE STAGE: GRAVID						
LEUCON AMERICANUS	1	28	220	220	78	283
UNIDENTIFIED MYSIDS	1	93	741	741	262	283
NEOMYSIS AMERICANA	1	95	762	762	269	283
PALAEONETES VULGARIS	1	12	93	93	33	283
IDOTEA BALTICA	1	6	45	45	16	283
UNIDENTIFIED AMPHIPODA	5	914	179	2824	1094	120
LIFE STAGE: LARVAL						
CLASS POLYCHAETA	1	93	741	741	262	283
LIFE STAGE: ZOEAL						
PALAEONETES SPP	8	10358	538	27407	9865	95
DIPPOLYTE SPP	1	222	1778	1778	629	283
CRANGON SEPTemspINOSA	5	636	220	2222	815	128
UPOGEBIA AFFINIS	5	500	179	1481	624	125
PAGURUS SP	5	475	220	1481	534	112
LIBINIA SPP	4	673	179	2222	990	147
FAMILY XANTHIDAE	8	60927	12197	177778	51202	84
INFRAORDER BRACHYURA	3	367	690	1481	557	152
LIFE STAGE: EPITOKES						
MEGALIS SPP	8	286	93	444	142	50
	6	75683				

TABLE 28. (CONT.)

MONTH	AUGUST AND 2 SEPTEMBER 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
USURIPOPSIS NUTRICOLA	2	111	416	696	244	219	4	344	348	1600	548	159
ORDER ACTINARIA	0	-	-	-	-	-	1	60	597	597	189	316
USURIPOPSIS LEIOYI	9	3294	208	7652	2925	89	6	333	100	1224	441	132
ORDER SPP	4	406	465	1607	613	151	1	9	87	87	28	316
ORDER NUDIBRANCHIA	1	40	396	396	125	316	1	53	533	533	169	316
CLASS POLYCHAETA	1	258	2576	2576	815	316	1	107	1066	1066	337	316
FAMILY PHYLLOSCIDAE	2	70	105	597	108	268	6	582	128	2257	815	140
FAMILY SYLLIDAE	1	36	357	357	113	316	4	281	396	1286	430	153
NOTOLYDUS SPP	0	-	-	-	-	-	1	13	133	133	42	316
NEKUS SPP	1	42	421	421	133	316	1	35	348	348	110	316
DIOPATRA	0	-	-	-	-	-	3	50	99	300	97	194
SUBPHYLUM PSYCHOGONIDA	7	915	465	2985	1017	111	5	828	696	2667	1032	125
CYCLASIS VARIANS	0	-	-	-	-	-	2	141	597	816	302	214
LEUCON AMERICANUS	6	397	357	1194	415	105	8	1136	533	3333	981	86
ONYXOSTYLIS SMITHI	2	77	357	416	164	212	1	122	1224	1224	387	316
MICRODEUTOPUS												
GRYLLotalpa	0	-	-	-	-	-	4	326	104	2133	670	205
BATIA CATHARINENSIS	0	-	-	-	-	-	4	180	149	696	268	149
COGROPHIUM SPP	0	-	-	-	-	-	5	565	348	3200	997	176
CERAFUS TUBULARIS	0	-	-	-	-	-	3	153	408	696	258	169
ERICHTHONIUS SPP.	0	-	-	-	-	-	3	242	348	1667	525	217
JASSA FALCATA	0	-	-	-	-	-	10	12214	533	25373	7002	57
LYSIANOPSIS ALBA	0	-	-	-	-	-	3	298	667	1286	502	163
CLASOPUS LEVIS	0	-	-	-	-	-	8	987	348	3429	1087	110
HELITA NITIDA	0	-	-	-	-	-	5	402	348	1600	559	139
FAMILY STENOHOIDEAE	0	-	-	-	-	-	4	419	597	1600	595	142
SILVERIA BRIVIGORNI	0	-	-	-	-	-	3	215	396	1224	405	188
ORDER CAPRELLIDAE	7	1066	357	3582	1252	117	8	2893	128	12571	4909	170
UNIDENTIFIED MYSIDUS	10	37011	10268	108696	33323	90	0	-	-	-	-	-
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	9	3106	1026	10000	3221	104
MEOMYSIS AMERICANA	0	-	-	-	-	-	10	55774	10532	150600	47624	85
PALAEOMNETES VOLGARIS	1	9	89	89	28	316	2	41	106	299	97	239
PALAEOMNETES SPP	6	376	109	1478	487	130	7	236	87	816	283	120
CRANGON SEPTENSPINOSA	10	597	104	1393	533	89	7	583	87	1633	602	103
SAGITTA SPP	1	45	446	446	141	316	0	-	-	-	-	-
LEPTOSYNAPIA SPP	2	19	62	105	40	213	0	-	-	-	-	-
SUBORDER AEOLIDACEA	0	-	-	-	-	-	2	117	143	1026	323	276
INVERTEBRATE	0	-	-	-	-	-	2	208	408	1657	529	255
LISIAELLA BARNARDI	0	-	-	-	-	-	2	142	348	1067	343	242
PECTINARIA GOULDII	0	-	-	-	-	-	2	45	104	348	111	246
THARYX SPP	1	33	328	328	104	316	0	-	-	-	-	-
LITHONECA OVALIS	0	-	-	-	-	-	2	23	106	128	50	212
LODGEA BALTICA	2	51	116	396	127	247	1	53	533	533	169	316
LODGEA TRILOBA	3	235	357	1391	456	194	6	588	408	1600	604	103
UNIDENTIFIED AMPHIPODA	9	3693	1512	14545	4272	116	7	1535	348	5333	1811	118
AMPELISCA SPP.	0	-	-	-	-	-	9	1323	128	3200	1058	80
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	1	26	261	261	83	316	1	10	104	104	33	316
	10	48805					10	86773				

TABLE 28. (CONT.)

MONTH	AUGUST AND 2 SEPTEMBER 1976											
	LOCATION 7						LOCATION 11					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	3	241	533	1282	435	180
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	1	114	1143	1143	361	316
COROPHIUM SPP	0	-	-	-	-	-	1	53	533	533	169	316
JASSA FALCATA	0	-	-	-	-	-	8	830	104	2286	786	95
ORDER CAPRELLIDEA	0	-	-	-	-	-	1	229	2286	2286	723	316
UNIDENTIFIED MYSIDS	7	775	421	1818	660	85	0	-	-	-	-	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	7	1235	174	4800	1670	135
UNIDENTIFIED AMPHIPODA	2	75	328	421	159	213	0	-	-	-	-	-
AMPELISCA SPP.	0	-	-	-	-	-	3	98	149	426	174	177
AMPHITHOE LONGIMANA	0	-	-	-	-	-	1	60	597	597	189	316
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	5	479	357	2388	748	156	6	710	256	3733	1154	163
LIFE STAGE: ZOEAL												
PALAEONETES SPP	7	1770	421	4848	1818	103	6	749	426	1980	794	106
HIPPOLYTE SPP.	2	268	1250	1429	566	211	0	-	-	-	-	-
CRANGON SEPTemspINOSA	1	60	597	597	189	316	1	103	1026	1026	324	316
FAMILY CALLIANASSIDAE	1	242	2424	2424	767	316	0	-	-	-	-	-
UPOGEBIA AFFINIS	1	42	421	421	133	316	2	173	533	1194	396	229
PAGURUS SP	3	214	597	833	350	163	4	365	533	1277	514	141
LIBINIA SPP.	0	-	-	-	-	-	1	53	533	533	169	316
FAMILY XANTHIDAE	10	22186	2500	77576	27618	124	0	-	-	-	-	-
PANOPEUS HERBSTII	0	-	-	-	-	-	4	948	348	4571	1655	175
NEOPANOPE TEXANA	0	-	-	-	-	-	10	8477	1683	27200	7772	92
FAMILY PINNOTHERIDAE	1	60	597	597	189	316	0	-	-	-	-	-
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	1	137	1368	1368	433	316	0	-	-	-	-	-
CALLINECTUS SPP.	1	71	714	714	226	316	0	-	-	-	-	-
INFRAORDER BRACHYURA	4	463	396	2424	817	176	1	114	1143	1143	361	316
LIFE STAGE: EPITOKES												
NEREIS SPP	6	166	109	465	167	101	6	97	87	400	122	125
	10	27009					10	14650				



TABLE 28 . (CONT.)

MONTH	AUGUST AND 2 SEPTEMBER 1976											
	LOCATION 14						LOCATION 15					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
TURRITOPSIS NUTRICOLA	6	388	145	1176	423	109	5	326	104	1074	459	141
ORDER ACTINIARIA	1	9	86	86	27	316	0	-	-	-	-	-
MNEMIOPSIS LEIDYI	8	2413	1400	5682	1916	79	8	1633	247	5283	1758	108
BEROE SPP	2	147	690	777	310	211	2	250	413	2088	659	263
CLASS BIVALVIA	0	-	-	-	-	-	1	20	196	196	62	316
LOLIGO PEALEI	0	-	-	-	-	-	1	11	110	110	35	316
CLASS POLYCHAETA	1	10	100	100	32	316	0	-	-	-	-	-
FAMILY PHYLLODOCIDAE	3	76	97	488	156	206	2	35	94	256	83	237
FAMILY SYLLIDAE	5	210	172	690	270	129	4	170	94	1000	330	194
FAMILY CAPITELLIDAE	1	9	86	86	27	316	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	7	883	86	2927	1149	130	6	144	83	494	167	116
LEUCON AMERICANUS	7	629	86	3415	1112	177	5	113	104	342	138	122
ORYZOSTYLIS SMITHI	9	548	97	1951	597	109	5	242	283	769	282	117
JASSA PALCATA	0	-	-	-	-	-	1	217	2174	2174	687	316
FAMILY STENOTHOIDAE	0	-	-	-	-	-	1	65	652	652	206	316
ORDER CAPRELLIDEA	10	1787	114	5000	2072	116	10	1517	94	8000	2487	164
UNIDENTIFIED MYSIDS	8	1780	600	6118	1964	110	7	1361	171	6042	2098	154
MYSIDOPSIS BIGELOWI	1	49	488	488	154	316	1	22	217	217	69	316
NEOMYSIS AMERICANA	2	1595	5366	10588	3582	224	2	258	652	1923	620	241
ORDER DECAPODA	2	79	97	690	217	276	0	-	-	-	-	-
PALAEMONETES SPP	8	229	51	862	266	116	5	184	83	543	237	129
HIPPOLYTE SPP.	1	41	406	406	128	316	0	-	-	-	-	-
CRANGON SEPTENSPINOSA	3	110	51	824	261	237	1	28	283	283	89	316
SAGITTA SPP	2	46	172	291	102	219	1	17	165	165	52	316
LEPTOSYNAPTA SPP	1	49	488	488	154	316	0	-	-	-	-	-
SUBORDER DORIDACEA	1	10	97	97	31	316	0	-	-	-	-	-
SUBORDER AEOLIDACEA	0	-	-	-	-	-	1	10	104	104	33	316
PHYLUM NEMERTEA	1	29	294	294	93	316	0	-	-	-	-	-
PODARKE OBSCURA	3	160	145	862	308	193	3	84	128	494	162	193
STAURONEREIS RUDOLPHI	1	9	86	86	27	316	2	35	128	220	77	220
LIRONECA OVALIS	2	24	97	145	52	216	1	8	83	83	26	316
IDOTEA BALTICA	2	33	100	227	75	230	0	-	-	-	-	-
EDOTEA TRILOBA	8	589	100	2759	877	149	3	75	110	435	144	192
ERICHSONELLA SP	1	9	86	86	27	316	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	10	7468	1900	13177	3867	52	9	3246	1538	8395	2516	78
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	4	68	114	294	100	148	0	-	-	-	-	-
	10	19483					10	10072				

TABLE 28. (CONT.)

MONTH	AUGUST AND 2 SEPTEMBER 1976											
	LOCATION 14						LOCATION 15					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE-STAGE: GRAVID												
FAMILY SYLLIDAE	6	219	100	976	303	138	2	38	165	217	81	213
UNIDENTIFIED MYSIDS	1	69	690	690	218	316	1	52	521	521	165	316
NEOMYSIS AMERICANA	0	-	-	-	-	-	1	51	513	513	162	316
UNIDENTIFIED AMPHIPODA	5	161	86	776	253	157	3	67	128	330	117	176
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	5	691	172	3249	1234	179	3	54	104	248	94	173
POLYDORA SPP	1	69	690	690	218	316	0	-	-	-	-	-
FAMILY ASTERIIDAE	1	17	172	172	54	316	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
PALAEMONETES SPP	10	3113	725	9340	3001	96	10	7753	784	32099	10530	136
HIPPOLYTE SPP.	1	26	259	259	82	316	3	46	110	189	77	166
CRANGON SEPTemspINOSA	0	-	-	-	-	-	5	122	94	494	170	140
UPOGEBIA AFFINIS	3	122	235	690	228	187	1	148	1481	1481	468	316
PAGURUS SP	2	27	97	172	59	221	3	53	94	220	92	173
LIBINIA SPP.	2	140	588	812	300	214	2	115	494	652	244	213
FAMILY XANTHIDAE	8	10805	1810	43046	15148	140	8	29319	2549	148148	52413	179
PANOPEUS HERBSTII	1	390	3902	3902	1234	316	2	259	1282	1304	545	211
NEOPANOPE TEXANA	2	5528	22927	32353	11864	215	2	4416	21087	23077	9322	211
UCA SPP.	1	49	488	488	154	316	0	-	-	-	-	-
INFRAORDER BRACHYURA	2	36	97	259	84	237	5	541	217	3457	1083	200
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	5	258	86	1624	505	196	1	25	248	248	78	316
INFRAORDER BRACHYURA	4	150	86	1218	378	252	5	123	94	435	158	129
LIFE STAGE: EPITOKES												
FAMILY SYLLIDAE	1	41	406	406	128	316	0	-	-	-	-	-
NEKEIS SPP	8	1051	118	3707	1258	120	10	1022	109	4902	1557	152
PODANKE OBSCURA	1	10	102	102	32	316	1	50	500	500	158	316
	10	22971					10	44254				

TABLE 28. (CONT.)

MONTH	AUGUST AND 2 SEPTEMBER 1976											
	LOCATION 16						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	1	29	286	286	90	316
TURRITOPSIS NUTRICOLA	4	103	96	388	152	148	4	301	185	1212	484	161
PHYLUM CTENOPHORA	0	-	-	-	-	-	1	22	215	215	68	316
MNEMIOPSIS LEIDYI	7	1456	680	4698	1542	106	8	1582	1000	3203	1083	68
HEROE SPP	3	157	97	820	309	197	2	114	484	660	245	214
CLASS BIVALVIA	0	-	-	-	-	-	1	9	94	94	30	316
CLASS POLYCHAETA	0	-	-	-	-	-	1	6	63	63	20	316
FAMILY PHYLLODOCIDAE	1	10	97	97	31	316	2	17	78	93	36	212
FAMILY SYLLIDAE	4	112	192	388	155	138	2	141	660	753	299	211
NEREIS SPP	1	10	96	96	30	316	1	9	93	93	29	316
POLYDORA SPP	1	39	388	388	123	316	0	-	-	-	-	-
DIOPATRA	4	81	67	360	134	164	4	93	63	556	177	191
SUBPHYLUM PYCNOGONIDA	6	245	96	1078	338	138	6	180	63	656	256	142
CYCLASIS VARIANS	2	42	180	238	89	213	3	44	63	286	91	206
LEUCON AMERICANUS	8	461	108	1190	491	107	8	560	93	3636	1096	196
OKYUOSTYLIS SMITHI	6	215	96	988	303	141	4	114	108	656	206	181
COHOPIUM SPP	1	24	238	238	75	316	0	-	-	-	-	-
CERAPUS TUBULARIS	1	24	238	238	75	316	0	-	-	-	-	-
JASSA FALCATA	1	191	1905	1905	602	316	0	-	-	-	-	-
ELASMOPUS LEVIS	1	71	714	714	226	316	0	-	-	-	-	-
FAMILY STENOHOIDEAE	1	48	476	476	151	316	0	-	-	-	-	-
PARAMETOPELLA CYPRI	0	-	-	-	-	-	1	66	656	656	207	316
ORDER CAPRELLIDEA	10	1039	108	5369	1546	149	8	676	161	2315	841	124
UNIDENTIFIED MYSID	7	2272	901	10485	3270	144	8	3421	741	14259	4510	132
MYSIDOPSIS BIGELOWI	1	286	2857	2857	903	316	0	-	-	-	-	-
NEOMYSIS AMERICANA	2	926	3333	5926	2045	221	2	2801	12273	15738	5961	213
PALAEONETES SPP	8	257	54	988	310	121	8	241	54	606	217	90
CRANGON SEPTEMSPINOSA	2	78	192	583	188	242	4	316	164	1500	516	163
PAGURUS SP	0	-	-	-	-	-	1	19	189	189	60	316
SAGITTA SPP	0	-	-	-	-	-	1	19	189	189	60	316
SUBORDER OORIDACEA	1	18	180	180	57	316	0	-	-	-	-	-
SUBORDER AEOLIDACEA	2	28	96	180	61	223	0	-	-	-	-	-
INVERTEBRATE	0	-	-	-	-	-	1	7	71	71	22	316
PHYLUM NEMERTEA	0	-	-	-	-	-	1	66	656	656	207	316
SCOLOPLOS SPP	0	-	-	-	-	-	1	121	1212	1212	383	316
GLYCERA CAPITATA	1	12	123	123	39	316	0	-	-	-	-	-
PODARKE OBSCURA	1	10	97	97	31	316	6	79	54	185	80	102
LIRONECA OVALIS	0	-	-	-	-	-	1	5	54	54	17	316
IDOTEA BALTICA	7	154	54	680	235	153	6	282	71	1212	397	141
EDOTEA TRILOBA	5	189	67	952	303	160	4	226	94	1212	417	184
ERICHSONELLA SP	1	7	67	67	21	316	5	117	63	656	209	178
UNIDENTIFIED AMPHIPODA	9	1962	940	3495	1013	52	9	3020	1328	5849	1794	59
AMPELISCA SPP.	0	-	-	-	-	-	1	66	656	656	207	316
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	4	77	117	289	111	144	1	8	78	78	25	316
INFRAORDER BRACHYURA	0	-	-	-	-	-	1	5	54	54	17	316
	10	10599					10	14782				

TABLE 28 . (CONT.)

MONTH	AUGUST AND 2 SEPTEMBER 1976											
	LOCATION 16						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
CLASS POLYCHAETA	1	18	180	180	57	316	0	-	-	-	-	-
FAMILY SYLLIDAE	2	83	388	437	174	211	0	19	93	94	39	211
SUBPHYLUM PYCNOGONIDA	1	22	219	219	69	316	0	-	-	-	-	-
LEUCON AMERICANUS	2	131	238	1074	340	259	1	9	93	93	29	316
JASSA FALCATA	1	71	714	714	226	316	0	-	-	-	-	-
MICROPROTOPUS RANEYI	1	24	238	238	75	316	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	3	45	67	289	92	204	3	37	93	185	65	175
NEOMYSIS AMERICANA	1	49	494	494	156	316	1	121	1212	1212	383	316
IDOTEA BALTICA	0	-	-	-	-	-	1	8	78	78	25	316
UNIDENTIFIED AMPHIPODA	2	78	109	673	212	271	3	47	93	286	92	195
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	4	161	192	874	278	173	5	201	93	1250	388	193
LIMULUS POLYPHEMUS	0	-	-	-	-	-	1	5	54	54	17	316
FAMILY ASTERIIDAE	1	11	109	109	34	316	0	-	-	-	-	-
LIFE STAGE: ZOEAL												
PALAEMONETES SPP	10	5092	1539	23624	6935	136	10	5033	1429	23125	6578	131
HIPPOLYTE SPP.	0	-	-	-	-	-	2	25	93	161	56	220
CRANGON SEPTHEMSPINOSA	1	11	109	109	34	316	2	19	93	94	39	211
UPOGEBIA AFFINIS	3	373	180	3221	1007	270	4	97	93	625	194	200
PAGURUS SP	2	20	96	108	43	211	3	49	93	269	90	185
LIBINIA SPP.	2	248	1074	1404	528	213	2	131	93	1212	381	292
FAMILY XANTHIDAE	8	18105	4541	71946	24412	135	8	18167	2581	82266	24156	133
PANOPEUS HERBSTII	1	167	1667	1667	527	316	2	252	1212	1311	532	211
NEOPANOPE TEXANA	2	4145	14286	27160	9249	223	2	7982	21639	58182	18904	237
INFRAORDER BRACHYURA	2	48	97	385	122	254	1	185	1852	1852	586	316
PINNIXA CHAETOPTERANA	0	-	-	-	-	-	1	9	94	94	30	316
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	1	39	388	388	123	316	3	143	93	1212	378	264
CALLINECTUS SPP.	1	11	108	108	34	316	2	39	108	283	92	236
INFRAORDER BRACHYURA	4	465	219	3275	1018	219	7	1342	93	8485	2632	196
LIFE STAGE: EPITOKES												
NEREIS SPP	10	886	216	2346	692	78	9	465	94	1212	403	87
PODARKE OBSCURA	1	7	67	67	21	316	0	-	-	-	-	-
	10	30309					10	34387				

TABLE 28. (CONT.)

MONTH	AUGUST AND 2 SEPTEMBER 1976					
	LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION						
CLASS HYDROZOA	1	21	171	171	60	283
TURRITOPSIS NUTRICOLA	1	49	388	388	137	283
MNEMIOPSIS LEIDYI	8	4254	1307	6949	2335	55
BEROE SPP	1	7	57	57	20	283
CLASS POLYCHAETA	1	11	91	91	32	283
FAMILY SYLLIDAE	1	21	171	171	60	283
DIOPATRA	2	48	138	248	94	195
SUBPHYLUM PYCNOGONIDA	3	291	485	1026	427	147
ORDER CUMACEA	2	190	339	1182	418	220
CYCLASPIS VARIANS	2	91	227	497	182	202
LEUCON AMERICANUS	4	492	97	2483	910	185
OXYUROSTYLIS SMITHI	4	101	114	272	118	117
ORDER CAPRELLIDEA	6	288	85	909	304	106
UNIDENTIFIED MYSIDS	8	17650	2500	39000	12093	69
ORDER DECAPODA	1	35	276	276	98	283
PALAEONETES SPP	6	253	68	852	295	116
CRANGON SEPTemspINOSA	8	284	57	828	252	89
FAMILY CALLIANASSIDAE	1	11	91	91	32	283
PAGURUS SP	1	9	68	68	24	283
LEPTOSYNAPTA SPP	2	43	69	272	96	225
SUBORDER AEOLIDACEA	1	14	114	114	40	283
INVERTEBRATE	1	34	272	272	96	283
PODARKE OBSCURA	4	46	62	136	53	117
ORDER ISOPODA	2	117	91	847	297	253
IDOTEA BALTICA	3	102	136	511	179	175
EDOTEA TRILOBA	5	334	248	1197	416	125
ERICHSONELLA SP	2	21	68	97	39	189
UNIDENTIFIED AMPHIPODA	8	1583	171	3230	1040	66
LIFE STAGE: JUVENILES						
CALLINECTES SAPIDUS	2	32	62	194	69	215
	8	26432				
LIFE STAGE: GRAVID						
UNIDENTIFIED MYSIDS	6	376	171	1186	384	102
UNIDENTIFIED AMPHIPODA	1	34	272	272	96	283
LIFE STAGE: LARVAL						
LIFE STAGE: ZOEAL						
PALAEONETES SPP	7	2357	855	7797	2744	116
CRANGON SEPTemspINOSA	1	12	97	97	34	283
UPOGEBIA AFFINIS	1	182	1455	1455	514	283
PAGURUS SP	2	50	171	227	93	188
FAMILY KANTHIDAE	8	9395	1103	19145	5798	62
INFRAORDER BRACHYURA	4	297	194	816	364	123
LIFE STAGE: MAEGALOPAL						
CALLINECTES SAPIDUS	4	913	1136	2993	1125	123
INFRAORDER BRACHYURA	7	1150	763	2175	675	59
LIFE STAGE: EPITOKES						
NEREIS SPP	8	226	85	455	123	55
	8	14990				

Table 29. Percentage of live, dead, and damaged macrozooplankton collected at OCGS, canal stations and Bay off Oyster Creek. Collection dates were 22 April, 27 May, 17 June, 15 July and 12 August 1978.

		Condenser Intake	Condenser Discharge	Canal Station 14	Canal Station 15	Canal Station 16	Canal Station 17	Bay off Oyster Creek (19)
	Number of collections <sup>a</sup>	10	10	5	2	5	5	9
Mysids	% Live	99.7	99.4	99.6	100	98.2	99	93.1
	% Dead	0.3	0.1	0.4	0	1.2	0.4	4.7
	% Damaged	0	0.5	0	0	0.6	0.6	2.2
	Number of organisms	80	56	0	0	6	14	15
Adult and juvenile sand shrimp	% Live	100	13	-	-	100	100	80
	% Dead	0	88	-	-	0	0	20
	% Damaged	0	21	-	-	0	0	0
	Number of collections	6	8	10	8	10	9	5
Amphipods	% Live	99.8	85.6	100	100	100	99.3	99.2
	% Dead	0.2	14.1	0	0	0	0.4	0.6
	% Damaged	0	0.3	0	0	0	0.2	0.2
	Number of organisms	46	31	4	14	14	9	17
Adult and juvenile grass shrimp	% Live	100	77	100	100	100	100	100
	% Dead	0	13	0	0	0	0	0
	% Damaged	0	10	0	0	0	0	0
	Number of organisms	98	2	29	23	38	29	143
<i>Mnemiopsis leidyi</i>	% Live	21.4	0	10	0	5	24	7
	% Dead	56.1	50	40	39	29	10	12
	% Damaged	22.5	50	50	61	66	66	81
	Number of organisms	47	94	149	44	187	178	16
<i>Nereis</i> spp. epirotes	% Live	98	32	100	77	96.8	98.8	100
	% Dead	2	64	0	14	0.6	0.6	0
	% Damaged	0	4	0	9	2.7	0.6	0
	Number of organisms	0	0	4	0	0	8	0
<i>Callinectes sapidus</i> megalopae	% Live	-	-	100	-	-	100	-
	% Dead	-	-	0	-	-	0	-
	% Damaged	-	-	0	-	-	0	-

<sup>a</sup> Only collections containing 25 or more individuals of mysids or amphipods were used to compute the means. All others based on number of individuals collected.

Table 30. Mean densities (n/m<sup>3</sup>) and biomass (mg/m<sup>3</sup>) of ichthyoplankton by year collected at four stations in Oyster Creek east of Route 9 highway bridge, one station off the mouth of Oyster Creek and at the discharge (11) of O.C.S.

LOCATION <sup>a</sup>	11	14	15	16	17	19
TEMPERATURE: AIR	-1.5 - 24.0	2.0 - 27.0	2.0 - 26.0	2.5 - 26.5	2.0 - 24.0	3.0 - 25.0
SURFACE	4.5 - 37.7	7.0 - 32.2	6.5 - 32.1	6.0 - 32.0	6.0 - 31.6	6.0 - 31.0
BOTTOM	7.0 - 36.0	7.0 - 32.0	6.5 - 29.0	6.0 - 28.8	6.0 - 30.0	5.7 - 31.0
SALINITY: SURFACE	19.0 - 27.0	18.0 - 26.0	18.0 - 27.5	18.0 - 28.0	18.0 - 28.5	19.0 - 28.0
BOTTOM	20.0 - 27.0	18.0 - 28.5	20.5 - 25.0	20.0 - 24.5	20.0 - 25.0	19.5 - 28.0
OXYGEN: SURFACE	5.2 - 15.0	6.3 - 11.4	6.1 - 12.5	6.2 - 12.2	6.0 - 12.4	6.1 - 12.6
BOTTOM	6.1 - 11.6	6.3 - 12.2	6.4 - 11.9	6.2 - 12.4	6.2 - 12.6	6.4 - 12.4
PH: SURFACE	7.6 - 8.4	7.2 - 8.5	6.9 - 8.4	7.0 - 8.6	6.6 - 8.3	7.0 - 8.4
BOTTOM	7.7 - 8.4	6.8 - 8.4	7.3 - 8.3	7.1 - 8.3	7.3 - 8.3	7.0 - 8.3
	DENSITY BIOMASS	DENSITY BIOMASS	DENSITY BIOMASS	DENSITY BIOMASS	DENSITY BIOMASS	DENSITY BIOMASS
JUVENILES						
ANGUILLA ROSTRATA	-	-	0.002	-	-	0.002
ALOSA SP.	-	-	-	-	-	0.001
CLUPEA HARENGUS	-	0.001	-	-	-	-
OPSANUS TAU	0.002	-	0.002	-	-	-
STRONGYLURA MARINA	-	-	-	0.003	0.003	0.001
FAMILY ATHERINIDAE	-	-	0.001	-	-	-
MEMBRAS MARTINICA	-	0.002	-	-	0.005	-
MENIDIA MENIDIA	-	0.001	0.004	0.003	0.003	0.001
APELTES QUADRATUS	0.001	-	-	-	-	-
HIPPOCAMPUS ERECTUS	0.000	-	-	-	-	-
SYNGNATHUS FUSCUS	0.101	0.1	0.013	0.0	0.055	0.1
POMATOMUS SALTATRIX	-	-	0.001	-	-	0.001
ASTROSCOPUS GUTTATUS	-	-	-	-	0.001	-
GOBIOSOMA SP.	0.001	-	0.002	-	0.002	-
GOBIOSOMA BOSCI	0.004	0.3	-	-	-	-
GOBIOSOMA GINSBURGI	0.006	-	-	0.002	-	0.002
LARVAE						
ANGUILLA ROSTRATA	0.121	-	0.046	-	0.051	-
BREVOORTIA TYRANNUS	0.004	0.2	-	0.002	0.1	0.001
CLUPEA HARENGUS	0.002	-	0.003	-	0.003	-
ANCHOA MITCHELLI	2.945	24.9	0.872	2.9	1.228	2.7
ENCHELYOPUS CINEBRUS	0.000	-	-	-	-	-
POLLACHIUS VIRENS	0.003	-	-	-	-	-
FAMILY ATHERINIDAE	0.058	-	0.011	-	0.013	-
CYNOSSION REGALIS	0.025	-	-	-	-	-
ASTROSCOPUS GUTTATUS	-	-	0.002	-	-	-
FAMILY BLINNIDAE	0.039	-	0.002	-	0.018	-
AMMODYTES SP.	0.063	-	0.225	-	0.265	-
FAMILY GOBIIDAE	1.363	-	0.594	-	0.756	-
MYOXOCEPHALUS SP.	0.003	-	0.001	-	-	-
PARALICHTHYS DENTATUS	-	-	-	-	0.003	-
SCOPHTHALMUS AQUOSUS	-	-	-	-	-	0.001
PSEUDOPLEURONECTES						
AMERICANUS	0.343	0.1	0.651	0.1	0.480	0.1
TRINECTES MACULATUS	-	-	-	-	-	0.001
SPHOERODES MACULATUS	-	-	-	-	-	-
UNIDENTIFIED FISH	-	-	-	0.013	0.601	-
EGGS						
ANCHOA MITCHELLI	28.074	-	7.530	-	23.805	-
ENCHELYOPUS CINEBRUS	0.002	-	0.018	-	0.129	-
MENIDIA MENIDIA	0.002	-	-	-	-	-
TAUTOGA ONTIS	0.035	-	0.015	-	0.029	-
TAUTOGLABRUS ADSPERSUS	0.036	-	0.067	-	0.028	-
PERILUS TRIACANTHUS	-	-	0.073	-	-	-
SCOPHTHALMUS AQUOSUS	0.015	-	0.024	-	0.002	-
TRINECTES MACULATUS	0.146	-	0.432	-	0.583	-
UNIDENTIFIED FISH	0.151	-	1.372	-	0.510	-
TOTAL LARVAE & JUVENILES	5.064	25.5	2.721	2.7	2.347	2.9
TOTAL EGGS	28.463	0.0	9.431	0.0	25.080	0.0
TOTAL COLLECTIONS	68		55		57	

<sup>a</sup> See Figure 4.

TABLE 31. MONTHLY MEAN DENSITIES ( $n/m^3$ ) AND BIOMASS ( $mg/m^3$ ) OF ICHTHYOPLANKTON COLLECTED AT FOUR LOCATIONS IN OYSTER CREEK EAST OF ROUTE 9 HIGHWAY BRIDGE, AT ONE LOCATION OFF THE MOUTH OF OYSTER CREEK, AND AT THE DISCHARGE AT OCGS FROM SEPTEMBER 1975 THROUGH 2 SEPTEMBER 1976.

MONTH

SEPTEMBER 1975

LOCATION <sup>a</sup>		11		14		15		16	
TEMPERATURE:	AIR	19.0 - 19.0		- - -		- - -		- - -	
	SURFACE	31.5 - 32.0		27.0 - 27.0		26.8 - 26.8		26.0 - 26.5	
	BOTTOM	28.6 - 30.5		27.0 - 27.2		26.5 - 26.5		26.0 - 26.2	
SALINITY:	SURFACE	22.0 - 22.0		22.0 - 22.0		22.0 - 22.0		22.0 - 22.0	
	BOTTOM	22.0 - 22.0		23.0 - 23.0		22.0 - 23.0		23.0 - 23.0	
OXYGEN:	SURFACE	7.4 - 7.4		7.6 - 7.7		7.5 - 7.8		7.3 - 7.6	
	BOTTOM	7.4 - 8.0		7.6 - 7.6		7.6 - 7.6		7.4 - 7.5	
PH:	SURFACE	8.0 - 8.0		7.9 - 7.9		8.0 - 8.0		8.0 - 8.0	
	BOTTOM	8.0 - 8.0		7.9 - 7.9		8.0 - 8.0		8.0 - 8.0	
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES									
HIPPOCAMPUS ERECTUS		0.014	-	-	-	-	-	-	-
SYNGNATHUS FUSCUS		-	-	0.008	0.0	-	-	-	-
LARVAE									
ANCHOA MITCHILLI		0.723	34.1	-	-	-	-	0.022	0.1
FAMILY ATHERINIDAE		-	-	0.023	-	-	-	-	-
FAMILY BLENNIIDAE		-	-	0.046	-	0.022	-	-	-
FAMILY GOBIIDAE		-	-	-	-	-	-	0.022	-
TOTAL LARVAE & JUVENILES		0.737	34.1	0.077	0.0	0.022	0.0	0.043	0.1
TOTAL EGGS		0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS			2		2		2		2



TABLE 31 (CONT.)

MONTH

OCTOBER 1975

LOCATION	11		14		15		16		17		19	
TEMPERATURE: AIR	3.5	- 3.5	3.5	- 3.5	2.0	- 2.0	2.5	- 2.5	2.8	- 2.8	3.0	- 3.0
SURFACE	22.5	- 22.5	16.1	- 16.1	17.0	- 17.0	16.0	- 16.0	15.4	- 15.4	15.3	- 15.4
BOTTOM	-	-	17.0	- 17.0	16.5	- 16.5	15.3	- 15.3	15.2	- 15.2	15.2	- 15.2
SALINITY: SURFACE	19.4	- 19.4	19.0	- 19.0	20.0	- 20.0	20.0	- 20.0	20.0	- 20.0	19.0	- 19.0
BOTTOM	-	-	20.0	- 20.0	20.5	- 20.5	20.0	- 20.0	20.0	- 20.0	19.5	- 19.5
OXYGEN: SURFACE	7.3	- 7.3	9.9	- 9.9	10.0	- 10.0	10.0	- 10.0	9.4	- 9.4	10.5	- 10.5
BOTTOM	-	-	12.2	- 12.2	10.5	- 10.5	9.8	- 9.8	9.2	- 9.2	10.6	- 10.6
PH: SURFACE	7.8	- 7.8	8.3	- 8.3	8.3	- 8.3	8.3	- 8.3	8.3	- 8.3	8.2	- 8.2
BOTTOM	-	-	8.3	- 8.3	8.3	- 8.3	8.3	- 8.3	8.3	- 8.3	8.2	- 8.2
-----												
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES												
GOBIOSOMA BOSCI	0.021	7.5	-	-	-	-	-	-	-	-	-	-
LARVAE												
BREVOORTIA TYRANNUS	-	-	-	-	-	-	-	-	0.023	0.2	0.024	0.2
ANCHOA MITCHILLI	0.021	0.4	0.026	1.0	0.070	6.1	0.040	3.2	0.075	7.8	0.163	27.1
-----												
TOTAL LARVAE & JUVENILES	0.041	7.9	0.026	1.0	0.070	6.1	0.040	3.2	0.098	8.0	0.186	27.3
TOTAL EGGS	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS		2		2		2		2		2		2

TABLE 31 (CONT.)

MONTH

NOVEMBER 1975

LOCATION	11		14		15		16		17		19	
TEMPERATURE: AIR	-	-	8.0	- 8.0	8.0	- 8.0	6.0	- 8.0	7.0	- 7.0	8.0	- 8.0
SURFACE	24.0	- 24.0	18.8	- 18.8	18.0	- 18.0	17.5	- 17.5	17.5	- 17.5	18.0	- 18.0
BOTTOM	-	-	18.8	- 18.8	-	-	-	-	-	-	-	-
SALINITY: SURFACE	19.5	- 19.5	18.0	- 18.0	18.0	- 18.0	18.0	- 18.0	18.0	- 18.0	18.0	- 18.0
BOTTOM	-	-	18.0	- 18.0	-	-	-	-	-	-	-	-
OXYGEN: SURFACE	9.1	- 9.1	8.2	- 8.7	8.8	- 8.8	9.2	- 9.2	8.6	- 8.6	8.7	- 8.7
BOTTOM	-	-	8.4	- 8.4	-	-	-	-	-	-	-	-
PH: SURFACE	7.6	- 7.6	7.4	- 7.4	7.3	- 7.3	7.3	- 7.3	7.3	- 7.3	7.6	- 7.6
BOTTOM	-	-	7.4	- 7.4	-	-	-	-	-	-	-	-
DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS												
LARVAE												
BREVOORTIA TYRANNUS	-	-	-	-	-	-	0.025	1.4	-	-	-	-
ANCHOA MITCHILLI	0.037	2.8	-	-	-	-	-	-	-	-	0.025	1.7
TOTAL LARVAE & JUVENILES	0.037	2.8	0.000	0.0	0.000	0.0	0.025	1.4	0.000	0.0	0.025	1.7
TOTAL EGGS	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS		2		2		2		2		2		2

TABLE 31 (CONT.)

MONTH

DECEMBER 1975

LOCATION		11		14		15		16		17		19	
TEMPERATURE:	AIR	16.0	- 16.0	16.0	- 16.0	16.0	- 16.0	16.0	- 16.0	14.0	- 14.0	13.5	- 13.5
	SURFACE	22.5	- 22.5	15.0	- 15.0	15.0	- 15.0	14.5	- 14.5	14.0	- 14.0	10.5	- 10.5
	BOTTOM	23.0	- 23.0	-	- -	-	- -	-	- -	-	- -	-	- -
SALINITY:	SURFACE	22.0	- 22.0	21.0	- 21.0	21.0	- 21.0	-	- -	21.0	- 21.0	-	- -
	BOTTOM	22.0	- 22.0	-	- -	-	- -	-	- -	-	- -	-	- -
OXYGEN:	SURFACE	8.6	- 8.6	9.7	- 9.7	9.6	- 9.6	9.6	- 9.6	9.6	- 9.6	10.0	- 10.0
	BOTTOM	8.6	- 8.6	-	- -	-	- -	-	- -	-	- -	-	- -
PH:	SURFACE	8.4	- 8.4	7.5	- 7.5	7.8	- 7.8	7.2	- 7.2	7.8	- 7.8	8.0	- 8.0
	BOTTOM	8.4	- 8.4	-	- -	-	- -	-	- -	-	- -	-	- -
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		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
<hr/>													
JUVENILES													
GOBIOSOMA GINSBURGI		0.027	-	-	-	-	-	-	-	-	-	-	-
LARVAE													
ANGUILLA ROSTRATA		-	-	-	-	-	-	-	-	0.026	-	-	-
BREVOORTIA TYRANNUS		0.079	5.8	-	-	0.029	1.0	-	-	0.051	4.2	0.029	1.1
ANCHOA MITCHILLI		-	-	0.028	1.0	0.056	2.5	0.067	2.7	0.028	2.0	0.029	2.8
PARALICHTHYS DENTATUS		-	-	-	-	-	-	0.022	-	-	-	-	-
SCOPHTHALMUS AQUOSUS		-	-	-	-	-	-	-	-	-	-	0.029	-
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TOTAL LARVAE & JUVENILES		0.105	5.8	0.028	1.0	0.085	3.4	0.089	2.7	0.104	6.2	0.086	3.9
TOTAL EGGS		0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS			2		2		2		2		2		2

TABLE 31 (CONT.)

MONTH

MARCH 1976

LOCATION	11		14		15		16		17		19	
TEMPERATURE: AIR	-1.5	- 13.0	2.0	- 14.0	2.5	- 14.0	2.5	- 13.0	2.0	- 11.0	4.0	- 9.0
SURFACE	4.5	- 19.5	7.0	- 17.0	6.5	- 16.0	6.0	- 16.0	6.0	- 15.5	6.0	- 14.0
BOTTOM	7.0	- 19.5	7.0	- 16.0	6.5	- 16.0	6.0	- 16.0	6.0	- 15.0	5.7	- 10.0
SALINITY: SURFACE	20.0	- 23.0	20.5	- 22.0	20.5	- 22.0	21.0	- 22.0	20.5	- 22.0	20.5	- 22.0
BOTTOM	20.0	- 23.0	20.5	- 22.0	20.5	- 22.0	21.5	- 22.0	20.5	- 22.0	22.5	- 24.5
OXYGEN: SURFACE	10.4	- 13.0	9.8	- 11.4	10.2	- 12.5	10.2	- 12.2	10.6	- 12.4	10.6	- 12.6
BOTTOM	10.2	- 11.6	9.8	- 11.4	10.0	- 11.9	10.0	- 12.4	10.6	- 12.6	10.8	- 12.4
PH: SURFACE	7.9	- 8.0	7.6	- 8.1	7.6	- 8.0	7.3	- 7.6	7.3	- 7.5	7.5	- 7.6
BOTTOM	7.9	- 8.0	7.5	- 8.0	7.6	- 7.8	7.1	- 7.6	7.3	- 7.5	7.5	- 7.8
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	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
-----												
LARVAE												
ANGUILLA ROSTRATA	0.934	-	0.234	-	0.125	-	0.377	-	0.209	-	0.154	-
BREVOORTIA TYRANNUS	0.005	-	-	-	-	-	-	-	-	-	0.010	0.5
CLUPEA HARENGUS	0.017	-	0.026	-	-	-	0.025	-	0.028	-	0.010	-
ANCHOA MITCHILLI	-	-	-	-	-	-	-	-	-	-	0.039	-
POLLACHIUS VIRENS	0.025	-	-	-	-	-	-	-	-	-	-	-
AMMODYTES SP.	0.592	-	2.103	-	0.578	-	2.504	-	1.876	-	1.480	-
MYOXOCEPHALUS SP.	0.030	-	0.008	-	-	-	-	-	-	-	0.019	-
PSEUDOPLEURONECTES AMERICANUS	3.277	0.5	6.048	1.0	2.166	0.5	4.549	0.7	5.160	0.9	7.696	0.8
EGGS												
ENCHELYOPUS CIMBRIUS	-	-	0.064	-	0.007	-	-	-	-	-	-	-
-----												
TOTAL LARVAE & JUVENILES	4.881	0.5	8.418	1.0	2.868	0.5	7.454	0.7	7.273	0.9	9.407	1.2
TOTAL EGGS	0.000	0.0	0.064	0.0	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS	6		6		6		6		6		6	

TABLE 31 (CONT.)

MONTH

APRIL 1976

LOCATION	11	14	15	16	17	19
TEMPERATURE: AIR	7.0 - 22.0	5.0 - 19.0	15.0 - 18.5	5.0 - 19.0	5.0 - 19.0	5.0 - 18.5
SURFACE	16.0 - 30.5	14.4 - 27.7	16.2 - 26.7	13.4 - 27.2	13.0 - 27.3	13.0 - 23.7
BOTTOM	21.0 - 29.0	13.8 - 26.7	- - -	- - -	- - -	12.2 - 18.7
SALINITY: SURFACE	19.0 - 22.5	20.0 - 23.0	20.5 - 22.5	20.0 - 22.5	20.0 - 22.5	20.0 - 23.0
BOTTOM	21.0 - 22.5	20.0 - 23.0	- - -	- - -	- - -	20.0 - 24.0
OXYGEN: SURFACE	7.0 - 11.7	7.4 - 10.6	7.4 - 10.2	7.1 - 11.0	7.2 - 11.0	7.9 - 10.6
BOTTOM	8.7 - 10.4	7.6 - 10.2	- - -	- - -	- - -	8.4 - 10.7
PH: SURFACE	7.6 - 8.2	7.5 - 8.5	7.6 - 7.6	7.4 - 8.4	7.5 - 8.3	7.3 - 8.4
BOTTOM	8.0 - 8.2	7.8 - 8.4	- - -	- - -	- - -	7.3 - 8.3
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	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES						
CLUPEA HARENGUS	-	-	0.007	-	-	-
SYNGNATHUS FUSCUS	0.027	0.0	-	-	-	0.008 0.0 - -
LARVAE						
ANGUILLA ROSTRATA	0.150	-	0.138	-	0.086	-
BREVOORTIA TYRANNUS	0.002	0.2	-	-	0.008	0.3
ANCHOA MITCHILLI	0.420	9.6	-	-	-	-
ENCHELIOPOUS CIMBRIUS	0.002	-	-	-	-	-
FAMILY ATHERINIDAE	0.032	-	-	-	0.045	-
FAMILY BLENIIIDAE	0.021	-	-	-	-	-
AMMODYTES SP.	0.012	-	-	-	-	-
FAMILY GOBIIDAE	0.053	0.0	-	-	-	0.013
PSEUDOPLEURONECTES AMERICANUS	0.026	0.0	0.022	0.0	-	-
					0.012	0.0
					0.113	0.1
EGGS						
ANCHOA MITCHILLI	0.005	-	-	-	-	0.037
ENCHELIOPOUS CIMBRIUS	0.005	-	-	-	-	0.355
MENIDIA MENIDIA	0.014	-	-	-	-	0.033
TAUTOGA ONITIS	0.061	-	0.064	-	0.179	-
TAUTOGOLABRUS ADSPERSUS	0.009	-	0.128	-	0.059	-
SCOPHTHALMUS AQUOSUS	0.014	-	0.050	-	-	0.012
UNIDENTIFIED FISH	0.072	-	0.090	-	0.165	-
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TOTAL LARVAE & JUVENILES	0.745	9.8	0.167	0.0	0.139	0.3
TOTAL EGGS	0.178	0.0	0.331	0.0	0.402	0.0
TOTAL COLLECTIONS		9		8		6
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TABLE 31 (CONT.)

MONTH

MAY 1976

LOCATION	11	14	15	16	17	19						
TEMPERATURE: AIR	13.5 - 17.5	14.5 - 19.0	14.5 - 19.0	14.5 - 19.0	14.0 - 19.0	14.0 - 19.0						
SURFACE	28.0 - 31.0	23.0 - 25.7	23.0 - 25.6	22.0 - 25.4	22.0 - 25.4	20.1 - 22.5						
BOTTOM	28.0 - 30.0	23.0 - 25.7	24.0 - 24.0	23.6 - 23.6	23.1 - 23.1	17.5 - 22.0						
SALINITY: SURFACE	21.0 - 23.0	22.0 - 24.0	21.5 - 24.0	22.0 - 24.0	21.0 - 25.0	22.0 - 24.0						
BOTTOM	21.0 - 24.0	21.5 - 24.0	24.0 - 24.0	24.0 - 24.0	24.0 - 24.0	22.5 - 24.0						
OXYGEN: SURFACE	7.2 - 10.4	8.8 - 9.2	8.7 - 9.4	8.8 - 9.0	8.7 - 8.8	8.6 - 9.6						
BOTTOM	7.0 - 10.3	8.4 - 9.3	8.8 - 8.8	8.9 - 8.9	8.7 - 8.7	8.5 - 9.2						
PH: SURFACE	7.8 - 8.1	7.9 - 8.2	7.9 - 8.2	7.8 - 8.2	7.5 - 7.9	7.0 - 8.2						
BOTTOM	7.8 - 8.1	7.5 - 8.0	7.9 - 7.9	7.9 - 7.9	7.5 - 7.5	7.8 - 8.0						
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	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES												
ANGUILLA ROSTRATA	-	-	-	-	0.005	-	-	-	-	-	0.014	-
ALOSA SP.	-	-	-	-	-	-	-	-	-	-	0.005	-
OPSANUS TAU	-	-	-	-	0.013	-	-	-	-	-	-	-
FAMILY ATERINIDAE	-	-	-	-	0.006	-	-	-	-	-	-	-
SYNGNATHUS FUSCUS	0.199	0.2	0.062	0.0	0.013	0.0	0.105	0.1	0.042	0.0	0.563	0.5
POMATOMUS SALTATRIX	-	-	-	-	0.005	-	-	-	-	-	0.005	-
LARVAE												
ANGUILLA ROSTRATA	0.010	-	0.015	-	0.007	-	0.005	-	0.116	-	0.021	-
FAMILY ATERINIDAE	0.034	-	0.054	-	-	-	0.048	-	0.118	-	0.028	-
FAMILY BLENNIIDAE	-	-	-	-	-	-	0.022	-	-	-	-	-
FAMILY GOBIIDAE	0.150	-	1.446	-	0.674	-	1.321	-	0.558	-	2.053	-
EGGS												
ANCHOA MITCHILLI	7.390	-	3.324	-	5.619	-	9.233	-	6.104	-	6.974	-
ENCHELYOPUS CIMBRIUS	-	-	0.107	-	0.020	-	0.641	-	0.591	-	0.143	-
TAUTOGA ONITIS	0.184	-	0.054	-	0.058	-	0.160	-	-	-	2.294	-
TAUTOGOLABRUS ADSPERSUS	-	-	-	-	0.041	-	0.230	-	0.272	-	0.641	-
PEPRILUS TRIACANTHUS	-	-	0.677	-	-	-	-	-	-	-	-	-
SCOPHTHALMUS AQUOSUS	0.092	-	0.161	-	0.027	-	-	-	-	-	-	-
TKINECTES MACULATUS	0.092	-	0.175	-	-	-	0.046	-	-	-	-	-
UNIDENTIFIED FISH	-	-	-	-	-	-	-	-	-	-	0.374	-
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TOTAL LARVAE & JUVENILES	0.392	0.2	1.576	0.0	0.723	0.0	1.501	0.1	0.833	0.0	2.688	0.5
TOTAL EGGS	7.758	0.0	4.498	0.0	5.765	0.0	10.310	0.0	6.966	0.0	10.425	0.0
TOTAL COLLECTIONS	8		6		7		7		7		8	

TABLE 31 (CONT.)

MONTH

JUNE 1976

LOCATION	11		14		15		16		17		19	
TEMPERATURE: AIR	14.0 -	24.0	17.0 -	27.0	17.0 -	25.0	16.0 -	25.0	16.0 -	24.0	16.0 -	25.0
SURFACE	28.7 -	37.7	23.0 -	32.1	22.1 -	32.1	22.0 -	32.0	22.0 -	31.6	22.0 -	30.1
BOTTOM	28.7 -	28.7	22.5 -	32.0	22.1 -	29.0	28.8 -	28.8	30.0 -	30.0	22.0 -	30.1
SALINITY: SURFACE	23.0 -	24.0	23.0 -	24.5	22.0 -	24.5	23.0 -	25.0	24.0 -	24.5	23.5 -	25.0
BOTTOM	23.0 -	23.0	22.5 -	25.0	22.5 -	25.0	24.5 -	24.5	25.0 -	25.0	23.0 -	25.0
OXYGEN: SURFACE	6.0 -	8.0	6.3 -	9.5	6.3 -	9.0	6.2 -	9.7	6.0 -	9.0	6.4 -	8.6
BOTTOM	7.6 -	7.6	6.4 -	9.6	6.4 -	9.0	6.2 -	6.2	6.2 -	6.2	6.4 -	8.7
PH: SURFACE	7.9 -	8.4	7.3 -	8.3	7.0 -	8.3	7.3 -	8.4	6.6 -	8.3	7.2 -	8.4
BOTTOM	8.4 -	8.4	7.5 -	8.3	7.3 -	7.9	7.3 -	7.3	7.3 -	7.3	7.2 -	8.3
-----												
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES												
ANGUILLA ROSTRATA	-	-	-	-	0.011	-	-	-	-	-	-	-
STRONGYLURA MARINA	-	-	-	-	-	-	-	-	0.011	-	0.006	-
MENIDIA MENIDIA	-	-	0.004	-	0.029	-	0.019	-	0.020	-	-	-
APELTES QUADRACUS	0.011	-	-	-	-	-	-	-	-	-	-	-
SYNGNATHUS FUSCUS	0.261	0.2	-	-	0.006	0.0	0.015	0.0	0.088	0.0	0.256	0.6
FAMILY GOBIIDAE	-	-	-	-	-	-	0.017	-	-	-	-	-
GOBIOSOMA SP.	0.007	-	-	-	-	-	-	-	-	-	-	-
LARVAE												
ANGUILLA ROSTRATA	-	-	-	-	0.006	-	-	-	-	-	0.005	-
ANCHOA MITCHILLI	3.523	0.8	0.138	0.0	1.387	0.2	0.778	0.0	0.784	0.0	0.400	0.2
FAMILY ATHERINIDAE	0.271	-	-	-	-	-	-	-	0.031	-	0.005	-
FAMILY BLENNIIDAE	0.139	-	-	-	-	-	-	-	-	-	-	-
FAMILY GOBIIDAE	6.030	-	1.873	-	1.126	-	1.651	-	1.912	-	4.152	-
SPHOEROIDES MACULATUS	-	-	-	-	-	-	-	-	-	-	0.172	-
EGGS												
ANCHOA MITCHILLI	141.986	-	44.431	-	84.941	-	130.862	-	181.760	-	255.413	-
TAUTOGA ONITIS	-	-	-	-	-	-	0.045	-	0.161	-	0.221	-
TAUTOGOLABRUS ADSPERSUS	0.252	-	0.271	-	0.091	-	-	-	1.073	-	0.136	-
PEPRILUS TRIACANTHUS	-	-	-	-	-	-	-	-	-	-	0.086	-
TRINECTES MACULATUS	0.802	-	2.248	-	2.682	-	3.710	-	3.239	-	2.419	-
UNIDENTIFIED FISH	0.916	-	7.564	-	2.474	-	2.246	-	0.802	-	0.086	-
-----												
TOTAL LARVAE & JUVENILES	10.242	0.9	2.015	0.0	2.564	0.2	2.479	0.0	2.845	0.1	4.996	0.8
TOTAL EGGS	143.953	0.0	54.514	0.0	90.188	0.0	136.861	0.0	187.034	0.0	258.356	0.0
TOTAL COLLECTIONS		8		8		8		8		7		8

TABLE 31 (CONT.)

MONTH		JULY 1976											
LOCATION		11		14		15		16		17		19	
TEMPERATURE:	AIR	21.0 - 24.0		20.0 - 26.0		20.0 - 26.0		19.0 - 26.5		19.0 - 24.0		18.5 - 24.0	
	SURFACE	25.2 - 37.0		26.2 - 32.2		26.2 - 32.0				26.8 - 30.0		26.5 - 31.0	
	BOTTOM	25.2 - 33.0		26.0 - 32.0		- - -		25.9 - 32.0		- - -		26.2 - 31.0	
SALINITY:	SURFACE	26.0 - 26.5		25.5 - 28.0		26.0 - 27.5		26.0 - 28.0		27.0 - 28.5		26.5 - 28.0	
	BOTTOM	26.0 - 26.5		26.0 - 28.5		- - -		- - -		- - -		26.5 - 28.0	
OXYGEN:	SURFACE	5.2 - 7.4		6.5 - 8.3		6.4 - 8.2		6.6 - 8.0		6.4 - 7.7		6.1 - 7.8	
	BOTTOM	6.2 - 6.3		6.6 - 8.1		- - -		- - -		- - -		6.4 - 7.5	
PH:	SURFACE	7.8 - 8.0		7.2 - 7.7		6.9 - 7.7		7.0 - 7.4		6.8 - 7.0		7.0 - 7.3	
	BOTTOM	7.7 - 7.8		6.8 - 7.4		- - -		- - -		- - -		7.0 - 7.2	
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES													
OPSANUS TAU		0.009	-	-	-	-	-	-	-	-	-	-	-
STRONGYLURA MARINA		-	-	-	-	-	-	0.017	-	0.013	-	-	-
MENIDIA MENIDIA		-	-	-	-	-	-	-	-	-	-	0.007	-
SYNGNATHUS FUSCUS		0.197	0.1	-	-	0.332	0.2	0.178	0.2	0.137	0.4	0.263	0.2
ASTROSCOPUS GUTTATUS		-	-	-	-	-	-	-	-	0.010	-	-	-
GOBIOSOMA GINSBURGI		-	-	-	-	-	-	-	-	-	-	0.012	-
LARVAE													
ANGUILLA ROSTRATA		-	-	-	-	-	-	-	-	-	-	0.006	-
ANCHOA MITCHILLI		11.528	34.4	3.927	13.2	4.739	10.1	3.845	9.4	2.808	14.0	8.061	15.8
FAMILY Atherinidae		0.043	-	-	-	-	-	0.018	-	0.010	-	0.006	-
Cynoscion regalis		0.147	-	-	-	-	-	-	-	-	-	0.012	-
ASTROSCOPUS GUTTATUS		-	-	0.013	-	-	-	-	-	-	-	0.026	-
FAMILY Blenniidae		-	-	-	-	-	-	0.078	-	0.058	-	0.055	-
FAMILY Gobiidae		1.923	-	1.008	-	1.198	-	0.719	-	0.872	-	2.975	-
Trinectes maculatus		-	-	-	-	-	-	-	-	0.005	-	-	-
UNIDENTIFIED FISH		-	-	-	-	0.069	-	0.004	-	-	-	-	-
EGGS													
ANCHOA MITCHILLI		42.035	-	4.180	-	12.157	-	21.198	-	54.363	-	193.691	-
TAUTOGOLABRUS ADSPERSUS		-	-	0.056	-	0.023	-	-	-	-	-	-	-
Trinectes maculatus		0.130	-	0.436	-	0.070	-	0.325	-	0.544	-	-	-
UNIDENTIFIED FISH		0.096	-	0.979	-	1.094	-	0.677	-	0.248	-	0.179	-
TOTAL LARVAE & JUVENILES		13.847	34.5	4.948	13.2	6.338	10.2	4.859	9.6	3.913	14.4	11.420	15.9
TOTAL EGGS		42.261	0.0	5.651	0.0	13.343	0.0	22.200	0.0	55.155	0.0	193.870	0.0
TOTAL COLLECTIONS		10		10		10		10		8		8	



TABLE 31 (CONT.)

MONTH		AUGUST TO 2 SEPTEMBER 1976											
LOCATION		11		14		15		16		17		19	
TEMPERATURE:	AIR	14.0 - 23.0		19.0 - 25.5		19.0 - 25.5		19.0 - 25.5		19.0 - 24.0		20.0 - 25.0	
	SURFACE	31.7 - 35.5		27.0 - 31.0		27.3 - 31.3		26.9 - 31.3		26.6 - 31.0		27.2 - 30.1	
	BOTTOM	35.5 - 36.0		27.0 - 31.3		- - -		- - -		- - -		26.2 - 27.0	
SALINITY:	SURFACE	20.5 - 27.0		21.0 - 27.0		21.5 - 27.0		21.5 - 27.0		21.5 - 27.0		21.5 - 28.0	
	BOTTOM	22.0 - 27.0		21.0 - 27.0		- - -		- - -		- - -		21.0 - 28.0	
OXYGEN:	SURFACE	6.2 - 9.2		6.4 - 7.7		6.1 - 7.5		6.2 - 7.8		6.2 - 7.6		6.5 - 7.3	
	BOTTOM	6.1 - 6.4		6.3 - 7.8		- - -		- - -		- - -		6.4 - 7.8	
PH:	SURFACE	7.7 - 8.2		8.1 - 8.3		7.9 - 8.3		7.8 - 8.6		7.8 - 8.3		7.7 - 8.3	
	BOTTOM	7.7 - 8.2		8.0 - 8.3		- - -		- - -		- - -		7.5 - 8.1	
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES													
MEMBRAS MARTINICA		-	-	0.014	-	-	-	-	-	0.026	-	-	-
SYNGNATHUS FUSCUS		-	-	0.032	0.0	0.064	0.1	0.052	0.0	0.030	0.1	0.052	0.0
FAMILY GOBIIDAE		-	-	0.011	-	-	-	-	-	0.007	-	-	-
GOBIOSOMA BOSCI		0.020	-	-	-	-	-	-	-	-	-	-	-
GOBIOSOMA GINSBURGI		0.030	-	-	-	-	-	0.010	-	-	-	-	-
LARVAE													
ANCHOA MITCHILLI		2.580	101.9	0.835	2.9	0.880	2.7	0.925	4.7	1.056	5.7	1.865	4.4
FAMILY ATHERINIDAE		0.020	-	0.023	-	0.041	-	0.023	-	0.020	-	0.089	-
FAMILY BLENNIIDAE		0.112	-	-	-	0.041	-	0.011	-	0.054	-	0.012	-
FAMILY GOBIIDAE		1.037	-	1.633	-	1.149	-	1.339	-	1.615	-	0.685	-
EGGS													
ANCHOA MITCHILLI		1.299	-	0.450	-	1.915	-	3.319	-	14.174	-	40.536	-
TRINECTES MACULATUS		-	-	0.081	-	0.025	-	-	-	-	-	-	-
UNIDENTIFIED FISH		-	-	0.358	-	0.138	-	0.434	-	-	-	-	-
TOTAL LARVAE & JUVENILES		3.800	101.9	2.547	2.9	2.176	2.8	2.360	4.7	2.806	5.8	2.703	4.5
TOTAL EGGS		1.299	0.0	0.889	0.0	2.077	0.0	3.753	0.0	14.174	0.0	40.536	0.0
TOTAL COLLECTIONS			10		10		10		10		10		8

a See Figure 1.

Table 32 . Monthly totals of live, dead and damaged ichthyoplankton collected at four stations in Oyster Creek east of Route 9 highway bridge, one station off the mouth of Oyster Creek and at the discharge (11) of OCGS from April through August 1976.

Date (Day, Month)		22 April				22 April				22 April				22 April					
Location		11				14				16				17					
Temperature: (C),	air	19.0				19.0 C				18.5				19.0					
	surface	30.8				27.7 C				28.7				27.2					
	bottom	-				26.7 C				-				-					
Salinity: (ppt),	surface	19.0				20.0				20.5				20.0					
	bottom	-				20.5				-				-					
Oxygen: (ppm),	surface	7.0				7.4				7.4				7.2					
	bottom	-				7.6				-				-					
pH:	surface	7.6				-				-				-					
	bottom	-				-				-				-					
		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
FISH LARVAE																			
Anguilla rostrata		10	90.9	1	9.1	0	-	10	100.0	0	-	0	-	3	100.0	0	-	0	-
JUVENILES																			
Syngnathus fuscus		0	-	8	100.0	0	-	-	-	-	-	-	-	0	-	1	100.0	0	-

Samples from 22 April and 27 May lost at station 15.

Table 32 . (cont.)

Date (Day, Month)	22 April						27 May						27 May						27 May					
Location	19						11						14						16					
Temperature: (C), air	18.5						13.5						18.0						18.0					
	surface						30.8						25.0						23.8					
Salinity: (ppt), surface	18.7						30.0						24.0						23.8					
	bottom						23.0						24.0						24.0					
Oxygen: (ppm), surface	24.0						24.0						24.0						24.0					
	bottom						7.9						9.1						8.8					
pH: surface	8.4						10.4						9.1						8.9					
	bottom						-						8.1						7.9					
	-						8.1						7.9						7.9					
	Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
FISH LARVAE																								
Anguilla rostrata	2	100.0	0	-	0	-	0	-	1	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Atherinidae	-	-	-	-	-	-	3	33.3	8	66.7	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Gobiidae	-	-	-	-	-	-	0	-	35	100.0	0	-	0	-	58	100.0	0	-	12	32.4	25	67.6	0	-
JUVENILES																								
Syngnathus fuscus	-	-	-	-	-	-	5	83.3	1	16.7	0	-	1	10.0	9	90.0	0	-	0	-	4	100.0	0	-

Table 32. (cont.)

Date		27 May		27 May		17 June		17 June						
Location		17		19		11		14						
Temperature: (C), at		17.0		17.0		22.0		22.5						
	surface	24.1		22.5		36.0		29.0						
	bottom	23.1		18.0		-		28.9						
Salinity: (ppt), surface		25.0=		24.0		24.0		24.5						
	bottom	24.0		24.0		-		24.8						
Oxygen: (ppm), surface		8.8		8.6		6.2		6.3						
	bottom	8.7		8.8		-		6.5						
pH: surface		7.9		7.5		8.0		7.4						
	bottom	7.5		7.9		-		7.6						
		Alive	Dead	Damaged	Alive	Dead	Damaged	Alive	Dead	Damaged	Alive	Dead	Damaged	
		# %	# %	# %	# %	# %	# %	# %	# %	# %	# %	# %	# %	
FISH LARVAE														
Anchoa mitchilli	-	-	-	-	-	-	-	0	-	160	100.0	0	-	
Atherinidae	0	-	3	100.0	0	-	4	100.0	0	-	-	-	-	
Gobiidae	0	-	42	100.0	0	-	1	2.3	43	97.7	0	-	80	100.0
JUVENILES														
Syngnathus fuscus	0	-	1	100.0	0	-	4	80.0	1	20.0	0	-	2	100.0

Table 32. (cont.)

Date	17 June				17 June				17 June				17 June					
Location	15				16				17				19					
Temperature: (C), air	22.0				22.0				22.0				21.0					
	surface				28.8				28.0				28.0					
	bottom				29.0				28.8				30.0					
Salinity: (ppt), surface	24.5				25.0				24.5				24.8					
	bottom				25.0				24.5				25.0					
Oxygen: (ppm), surface	7.5				6.2				6.0				6.3					
	bottom				6.4				6.2				6.3					
pH: surface	7.0				7.3				7.3				7.2					
	bottom				7.3				7.3				7.2					
	Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
FISH LARVAE																		
Anchoa mitchilli	0	-	144	100.0	0	-	0	-	48	100.0	0	-	0	-	80	100.0	0	-
Gobiidae	0	-	141	100.0	0	-	0	-	12	100.0	0	-	0	-	89	97.8	2	2.2
JUVENILES																		
Syngnathus fuscus	1	100.0	0	-	0	-	0	-	0	-	1	100.0	1	33.3	1	33.3	10	32.2
																	18	58.1
																	3	9.7

Table 32 . (cont.)

Date	15 July						15 July						15 July						15 July					
Location	11						14						15						16					
Temperature: (C), air	23.0						25.0						22.6						22.0					
surface	33.0						28.2						28.0						28.1					
bottom	-						29.1						-						-					
Salinity: (ppt), surface	28.0						28.0						27.6						28.0					
bottom	-						28.3						-						-					
Oxygen: (ppm), surface	7.4						8.2						8.2						7.9					
bottom	-						8.1						-						-					
pH: surface	8.0						-						-						-					
bottom	-						-						-						-					
	Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
FISH LARVAE																								
<i>Anchoa mitchilli</i>	0	-	70	100.0	0	-	0	-	77	100.0	0	-	0	-	61	100.0	0	-	0	-	91	100.0	0	-
Gobiidae	1	33.3	2	66.7	0	-	-	-	-	-	-	-	3	15.0	17	85.0	0	-	0	-	8	100.0	0	-

Table 32. (cont.)

Date		15 July						15 July						12 August						12 August					
Location		17						19						11						14					
Temperature: (C), at		21.0						20.0						18.0						24.5					
	surface	28.1						27.0						35.3						29.7					
	bottom	-						28.4						36.0						29.7					
Salinity: (ppt),	surface	28.5						28.0						22.5						24.0					
	bottom	-						28.0						22.3						24.0					
Oxygen: (ppm),	surface	7.7						7.7						6.2						6.6					
	bottom	-						7.5						6.1						6.8					
pH:	surface	-						-						7.7						-					
	bottom	-						-						7.7						-					
		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged		Alive		Dead		Damaged	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%		
FISH LARVAE																									
Anchoa mitchilli		0	-	61	100.0	0	-	0	-	178	100.0	0	-	0	-	64	100.0	0	-	0	-	9	100.0	0	-
Gobiidae		0	-	5	83.0	1	17.0	120	67.4	58	32.6	0	-	0	-	13	100.0	0	-	0	-	58	100.0	0	-
JUVENILES																									
Syngnathus fuscus		-	-	-	-	-	-	5	22.7	17	77.3	0	-	-	-	-	-	-	-	-	-	-	-	-	

Table 32. (cont.)

Date		12 August		12 August		12 August		12 August					
Location		15		16		17		19					
Temperature: (C), air		24.0		24.0		23.0		23.0					
	surface	30.2		30.2		29.5		28.7					
	bottom	-		-		-		26.2					
Salinity: (ppt), surface		23.0		23.0		23.0		24.0					
	bottom	-		-		-		25.8					
Oxygen: (ppm), surface		7.0		6.9		6.8		6.8					
	bottom	-		-		-		7.1					
pH: surface		-		-		-		-					
	bottom	-		-		-		-					
		Alive	Dead	Damaged	Alive	Dead	Damaged	Alive	Dead	Damaged			
		# %	# %	# %	# %	# %	# %	# %	# %	# %			
FISH LARVAE													
Anchoa mitchilli		0 -	3 100.0	0 -	0 -	1 100.0	0 -	0 -	6 100.0	0 -	0 -	28 100.0	0 -
Gobiidae		0 -	21 100.0	0 -	0 -	20 100.0	0 -	2 6.7	28 93.3	0 -	1 20.0	4 80.0	0 -
JUVENILES													
Syngnathus fuscus		- -	- -	- -	- -	- -	- -	1 100.0	0 -	0 -	0 -	1 100.0	0 -

■ See Figure 1.



TABLE 33. MEAN DIVERSITY OF MICROZOOPLANKTON COLLECTED IN WESTERN BAHAMAS BAY (1, 2, 3, 4, 17, 18, 19, 20, 21, 22)<sup>b</sup> FOR THE THERMAL EFFECTS STUDY FROM SEPTEMBER, 1975 THROUGH AUGUST, 1976.

SPECIES	LOCATION 1						LOCATION 21					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORE	21	1849	10	37500	6282	340	21	1029	9	8043	1715	167
LIFE STAGE: LARVAL												
OPHELIA CLIPACANTARIA	0	-	-	-	-	-	2	2	27	34	7	-
CYTHODONT LARVAL	23	865	16	5769	1381	160	20	666	27	5682	1146	202
CLASS GASTROPODA	25	1678	38	14054	3311	197	26	1641	19	10400	2518	156
NASSARIUS SPP.	11	59	53	571	120	203	7	34	30	454	105	306
MELANOPSIS BILGATATUS	1	3	94	94	16	600	0	-	-	-	-	-
CLASS BIVALVIA	8	110	34	1403	328	297	6	99	81	1371	285	268
LYGIDIA HYALINA	5	52	96	735	161	310	0	-	-	-	-	-
CLASS POLYCHAETA	33	2455	20	9552	2947	120	31	3211	78	15208	4155	129
NEPHEIS SPP.	10	227	53	3547	720	317	8	86	93	1596	260	325
POLYCHAETA SPP.	22	3614	21	22775	6812	169	22	2477	35	14706	4710	190
NAUPACIA CYPRIS	1	0	13	13	2	-	6	13	12	204	40	299
CLASS ANCIPIALIA	0	-	-	-	-	-	4	4	9	86	15	404
UNIDENTIFIED INVERTEBRATE	27	4561	13	157692	26241	529	25	313	28	1474	403	129
LIFE STAGE: JUVENILE												
CLASS BIVALVIA	18	295	53	1523	485	165	17	863	24	6087	1645	191
ALQUIPECTEN IRADIANUS	1	11	397	397	66	600	1	14	490	490	84	583
LIFE STAGE: UREO												
CLASS BIVALVIA	18	728	63	6593	1507	207	20	917	19	10294	2177	237
NOTIOLUS DEISSUS	1	2	63	63	11	-	0	-	-	-	-	-
ALQUIPECTEN IRADIANUS	3	16	63	365	65	415	0	-	-	-	-	-
MELICARIA MELICARIA	1	11	397	397	66	600	1	6	208	208	36	583
MELICARIA LATIPALIS	15	535	53	9104	1063	199	10	65	13	714	145	222
FAMILY TROCHIDINAE	0	-	-	-	-	-	1	6	209	209	36	583
	36	17468	-	-	-	-	34	11447	-	-	-	-
LIFE STAGE: NAUPLIIAN												
SUBCLASS COPEPODA	12	23047	12188	151923	42510	184	16	31933	6726	268747	64204	201
NAUPLIUS CAUDATUS	26	2668	16	23641	4941	185	23	750	27	5400	1336	178
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	1	2	55	55	9	-
ORDER ROTIFERA	8	8666	420	126005	25839	298	14	14140	45	227064	43085	305
POICIL SPP.	3	56	96	1261	236	417	3	66	106	1531	275	424
SUBCLASS COPEPODA	5	116	104	1739	368	317	11	266	36	2733	605	227
ORDER CALANOIDA	0	-	-	-	-	-	2	46	588	587	194	420
ACARTIA SPP.	12	2408	304	14550	4530	182	14	5134	591	75555	13957	273
ACARTIA CLAUSI	4	1430	96	45657	16125	417	6	1507	166	19956	4893	325
ACARTIA TUNSA	7	475	313	7692	1409	296	9	463	60	5306	1168	252
PRENANTAPTONUS												
CORONATUS	1	9	336	336	56	600	3	18	600	600	103	583
PARACALANUS SPP.	1	96	3445	3445	574	600	3	300	72	10860	1874	493
PARACALANUS												
CLASSTHOSUS	6	161	182	2857	532	331	6	490	50	14400	2474	505
EURYTEMORA SPP.	2	1586	4300	52707	8794	555	4	259	98	5465	1066	411
TEMORA LONGICORNIS	0	-	-	-	-	-	3	28	208	462	95	347
ESTHERIA LONGICORNIS	1	9	313	313	52	600	2	6	37	165	29	485
ORDER CYCLOPOIDA	0	-	-	-	-	-	2	9	112	146	36	422
UTERUS SPP.	9	2447	191	72115	12082	494	11	291	56	5700	923	317
UTERUS BENTICORNIS	7	1194	97	35577	5475	500	8	298	149	4200	821	275
UTERUS SIMILIS	1	1	31	31	5	-	7	12	95	308	55	450
UNIDENTIFIED												
NAUPLIUS	5	56	193	540	148	266	7	61	37	860	183	240
PARASITIC CYCLOPOIDA	11	243	175	3382	611	252	14	439	200	2575	747	170
POYLA FLATULINIDUS	4	111	20	2616	508	411	4	30	24	440	108	361
	36	47460	-	-	-	-	34	56627	-	-	-	-

TABLE 33. (CONT.)

SPECIES	LOCATION 3						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	31	2098	20	5444	2684	137	26	1660	22	15116	2902	173
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	0	-	-	-	-	-	1	2	97	97	14	678
CYPRIONAUTE LARVAL	37	886	35	9167	1470	166	35	2491	32	15701	4135	166
CLASS GASTROPODA	37	1306	24	6091	1419	109	37	1155	19	6541	1407	122
NASSARIUS SPP.	3	10	111	162	36	391	9	29	63	224	64	221
CLASS BIVALVIA	8	207	257	2327	564	273	8	94	39	1103	259	274
LYONSIA HYALINA	5	27	182	333	81	300	3	10	110	201	41	394
CLASS POLYCHAETA	43	2069	84	9444	2249	109	44	3162	68	21970	4314	136
NEREIS SPP.	13	124	39	613	262	195	13	121	50	1217	254	210
POLYDORA SPP.	29	3282	52	23103	5775	176	36	4508	50	66414	11059	241
BARNACLE CYPRIS	3	6	35	142	27	425	6	7	17	110	24	324
PHYLUS ECHINODERMATA	0	-	-	-	-	-	2	4	93	101	20	475
CLASS ASCIDIACEA	4	9	22	203	36	388	6	13	20	227	42	329
UNIDENTIFIED	36	632	70	2976	778	123	38	601	17	3095	685	114
INVERTIBRATE	1	1	26	26	4	-	0	-	-	-	-	-
PLAULIA LARVAL	1	1	26	26	4	-	0	-	-	-	-	-
LIFE STAGE: NINCE												
CLASS BIVALVIA	29	668	35	5299	1198	179	24	457	26	6791	1068	234
	46	11326					46	14434				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	44	40369	2677	122500	34277	85	46	42066	1854	147854	36923	80
BARNACLE NAUPLIUS	40	3426	51	31095	6750	197	40	10722	13	130841	25015	245
LIFE STAGE: NO DETERMINATION												
CLASS HYDROCA	2	3	47	79	13	490	3	9	72	185	38	406
ORDER ROTIFERA	36	9870	36	47766	13275	135	44	18548	67	145455	33296	170
POGON SPP.	8	171	103	2371	494	289	6	209	195	3865	786	376
SUBCLASS OSTACODIA	2	4	35	149	22	561	4	8	20	153	29	346
SUBCLASS COPEPODA	20	164	36	1075	296	181	16	125	97	1250	242	194
ORDER CALANOIDA	4	75	315	1559	205	391	4	49	67	1247	208	422
ACANTIA SPP.	40	5714	203	26733	6579	115	43	7302	174	94852	16399	230
ACANTIA CLAUSI	21	2561	18	27982	6247	244	25	3521	56	30993	8045	248
ACANTIA TORJA	24	1388	79	10139	2620	189	31	969	97	7122	1659	171
CENTROPAGES BASATUS	1	5	248	246	37	678	0	-	-	-	-	-
CENTROPAGES SPP.	2	4	87	106	20	477	3	5	56	94	20	391
PSEUDODIAPTOMUS												
COPEPODUS	12	400	101	5471	1239	310	14	350	50	4401	926	265
PALACALANUS SPP.	13	1309	59	12749	3368	257	11	533	20	4734	1258	236
PALACALANUS												
CHASIMODON	29	1339	39	13235	3207	240	24	747	50	5607	1596	214
PALACALANUS PAVUS	0	-	-	-	-	-	1	1	56	56	8	-
LOXOGON SPP.	11	256	103	5313	836	326	14	470	93	6000	1215	259
TEMORA LONGICORNIS	1	3	156	156	23	678	3	34	56	1306	194	573
PSEUDOCALANUS MINUTUS	4	25	104	649	109	435	7	28	84	409	80	284
ORDER CYCLOPOIDA	4	11	99	184	39	338	3	12	133	260	49	399
UTIDIA SPP.	28	2345	109	22071	4797	205	35	1500	82	13868	3078	205
UTIDIA BREVICORNIS	25	1210	111	10118	2218	183	26	976	65	6830	1689	173
UTIDIA STILLES	6	19	87	225	53	279	9	30	45	333	75	247
UNIDENTIFIED												
HYPERCALANUS	23	520	39	8138	1414	272	29	644	20	10743	1807	281
PALACALANUS CYCLOPOIDA	13	281	52	2786	375	133	38	462	84	2333	511	131
PHYLUS PLATYHELMINTHES	0	46	134	443	109	239	6	57	97	1838	274	476
	46	71518					46	90378				

TABLE 33. (CONT.)

SPECIES	LOCATION 4						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDLV	CVAR	FREQ	MEAN	MIN	MAX	SDLV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	27	4020	87	20792	5107	127	22	1796	103	10084	2760	154
LIFE STAGE: LARVAL												
CYPRID LARVAE	29	1646	190	7407	1984	121	26	1729	107	9441	2181	126
CLASS GASTROPODA	26	1755	258	6669	1606	92	25	901	142	3750	1608	112
NASSARIUS SPP.	5	40	128	473	111	277	4	17	103	208	51	293
NEREIS SPP.	1	6	198	198	34	583	0	-	-	-	-	-
LYDIA HYALINA	5	56	92	765	164	294	2	10	153	170	39	407
CLASS POLYCHAETA	32	4343	90	16568	4262	98	30	2911	154	12185	2732	94
NEREIS SPP.	18	326	90	1217	421	129	9	49	94	347	94	192
POLYDORA SPP.	26	5486	90	21188	6757	123	21	3293	278	13782	4326	131
BAKACLE CYPRIS	4	19	90	198	56	289	2	8	98	168	36	427
PHYLUS ECHINOJERATA	1	6	194	194	33	583	0	-	-	-	-	-
CLASS ASCIDIACEA	3	12	128	153	40	328	2	6	103	111	26	406
UNIDENTIFIED INVERTEBRATE	29	1114	78	3704	1103	99	24	766	103	3158	887	117
LIFE STAGE: HINGE												
CLASS BIVALVIA	26	1293	86	11419	2332	180	22	486	94	3497	705	145
ACQUIPECTEN IRRADIANS	0	-	-	-	-	-	2	15	170	347	65	431
NEREIS SPP.	1	27	920	920	158	583	0	-	-	-	-	-
MULINIA LATERALIS	1	5	183	183	31	583	0	-	-	-	-	-
LIFE STAGE: U-480												
CLASS BIVALVIA	27	1313	86	3851	1265	96	26	732	186	3497	845	115
CRASSOSTREA VIRGINICA	1	5	153	153	26	583	0	-	-	-	-	-
NEREIS SPP.	1	11	307	307	66	583	1	5	174	174	30	583
MULINIA LATERALIS	22	717	71	6154	1304	182	16	291	103	1444	438	150
TELLINA SPP.	1	6	203	203	35	583	0	-	-	-	-	-
	34	22207					34	13011				
LIFE STAGE: NAUPLIIAR												
SUBCLASS COPEPODA	31	63143	9571	200367	43161	68	30	46522	6545	124167	36073	78
BRANCHIO NAUPLIUS	23	10185	92	126020	27657	272	29	22367	98	150850	37509	160
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	3	16	140	203	53	331	5	50	111	1000	178	354
ORDER ROTIFERA	26	16859	71	93667	24204	144	25	6080	108	50100	11182	184
PODUA SPP.	7	393	197	3556	904	230	4	253	556	4750	896	355
SUBCLASS OSTROCOCA	0	-	-	-	-	-	1	6	208	208	36	583
SUBCLASS COPEPODA	13	1834	65	54615	9334	509	14	191	103	1722	335	176
ACARTIA SPP.	32	8166	435	27058	7623	96	29	4231	90	11309	3841	91
ACARTIA CLAUSI	13	3795	111	35476	9474	250	8	1316	107	14447	3709	282
ACARTIA TONSA	19	1284	190	8111	1949	153	17	919	142	10600	2044	222
PSUDODIPLOPODUS												
CORCAPIUS	11	287	71	2838	641	223	8	281	98	4167	860	396
PARACALANUS SPP.	12	1759	90	11720	3405	194	8	832	1765	6719	1702	205
PARACALANUS												
CHARTINOTIS	22	1316	87	7509	2131	163	14	972	160	5833	1787	184
ERYTHROA SPP.	13	444	194	4971	950	223	8	312	107	4905	1023	328
TEMORA LONGICORNIS	0	-	-	-	-	-	2	10	174	178	42	406
ESCUICALANUS HIRATUS	1	7	226	226	19	583	3	74	192	356	62	337
OTIROA SPP.	23	4908	128	34348	8309	169	22	2299	103	17031	4148	180
OTIROA HAVICORNIS	19	2177	226	10943	3073	141	18	1811	153	9444	2042	157
OTIROA STABILIS	3	22	108	452	65	381	1	6	215	215	37	583
UNIDENTIFIED												
HYDROCOLES	18	861	167	8514	1796	158	20	645	94	4545	1096	156
PARACALANUS CYCLOPOIDA	28	521	71	2635	645	124	21	399	116	2694	457	125
PHYLUS FLATYDIPLOPODUS	16	221	93	3667	644	304	4	43	54	1176	202	467
	34	118193					34	89621				

TABLE 33. (CONT.)

SPECIES	LOCATION 18						LOCATION 20					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	15	844	12	5764	1519	180	6	844	22	7391	1998	237
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	1	2	47	47	9	-	0	-	-	-	-	-
CYPHONAUTE LARVAE	19	1003	50	5438	1528	152	11	285	25	1071	384	135
CLASS GASTROPODA	23	816	26	3037	847	104	14	673	13	5135	1273	189
NASSARIUS SPP.	8	29	13	330	69	242	3	23	48	297	71	308
CLASS BIVALVIA	8	263	135	2046	537	204	7	409	63	2424	709	173
CLASS POLYCHAETA	27	1407	44	8865	1904	135	18	995	44	6487	1592	160
NEREIS SPP.	9	157	59	2039	439	280	2	61	440	652	180	297
POLYDORA SPP	18	1143	14	7890	2353	206	9	1805	25	14557	4270	237
BARNACLE CYPRIS	3	4	12	55	13	331	6	24	8	217	59	247
PHYLUM ECHINODERMATA	1	7	203	203	38	529	0	-	-	-	-	-
CLASS ASCIDIACEA	1	0	12	12	2	-	4	6	18	40	13	204
UNIDENTIFIED INVERTEBRATE	21	337	40	2375	579	172	12	191	25	2143	497	260
LIFE STAGE: HINGE												
CLASS BIVALVIA	11	395	55	5980	1204	305	5	83	146	652	171	206
LIFE STAGE: UMBO												
CLASS BIVALVIA	15	894	49	6028	1448	162	7	193	88	714	280	145
	28	7302					18	5590				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	1	34	940	940	178	529	0	-	-	-	-	-
BARNACLE NAUPLIUS	26	11013	55	153030	31326	284	16	5059	86	30063	9699	192
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	20	108	447	86	435	3	6	22	56	15	257
PHYLUM PLATYHELMINTHES	4	18	55	253	53	303	0	-	-	-	-	-
	28	11084					18	5064				

TABLE 33. (CONT.)

SPECIES	LOCATION 2						LOCATION 21					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	20	25	114	35	180	19	1525	11	12713	2912	191
LIFE STAGE: LARVAL												
CYPHONAUTIE LARVAE	7	102	13	593	185	181	25	715	41	6226	1350	189
CLASS GASTROPODA	10	333	15	947	339	102	26	662	22	4151	859	130
NASSARIUS SPP.	4	152	15	1083	343	225	5	13	47	122	34	263
CLASS BIVALVIA	8	736	45	2611	862	117	6	69	196	379	191	277
LYONSIA HYALINA	0	-	-	-	-	-	1	3	101	101	17	600
CLASS POLYCHAETA	10	273	149	556	170	62	34	3118	21	29649	5027	161
NEBEIS SPP.	0	-	-	-	-	-	9	125	91	1558	320	255
POLYDORA SPP.	4	36	28	294	85	235	21	3970	33	25034	7271	183
BARNACLE CYPRIS	0	-	-	-	-	-	6	17	25	208	45	263
PHYLUM ECHINODERMATA	0	-	-	-	-	-	1	3	91	91	15	600
CLASS ASCIDIACEA	2	2	14	15	6	234	3	3	18	48	11	359
UNIDENTIFIED												
INVERTEBRATE	9	169	27	746	230	136	27	395	33	3191	669	169
PHYLUM PLATYHELMINTHES	0	-	-	-	-	-	1	0	10	10	2	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	1	4	43	43	12	346	19	532	55	5444	1126	211
MODIOLUS DEMISSUS	1	4	43	43	12	346	0	-	-	-	-	-
LIFE STAGE: UNBO												
CLASS BIVALVIA	2	22	107	162	54	239	19	628	17	3144	966	154
MOLLUSCA LATERALIS	0	-	-	-	-	-	1	3	91	91	15	600
	12	1854					36	11780				
LIFE STAGE: NAUPLIAN												
SUBCLASS COPEPODA	5	13241	1969	117500	33908	256	0	-	-	-	-	-
BARNACLE NAUPLIUS	9	173	39	1361	424	114	23	1643	10	15605	3687	224
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	2	6	13	63	18	288	1	0	14	14	2	-
ORDER ROTIFERA	4	14626	866	91503	30651	210	0	-	-	-	-	-
SUBCLASS COPEPODA	3	33	56	186	66	201	0	-	-	-	-	-
ORDER CALANOIDA	2	109	191	1114	321	295	0	-	-	-	-	-
ACARTIA SPP.	3	1887	444	12309	4335	230	0	-	-	-	-	-
ACARTIA CLAUSI	2	1558	226	18464	5325	342	0	-	-	-	-	-
ACARTIA TONSA	2	203	28	2406	694	342	0	-	-	-	-	-
PARACALANUS												
CFASSIROSTRIS	2	11	56	75	26	236	0	-	-	-	-	-
EURYTEMORA SPP.	1	31	373	373	108	346	0	-	-	-	-	-
ORDER CYCLOPOIDA	2	30	32	322	93	314	0	-	-	-	-	-
OITHONA SPP.	2	24	38	250	72	300	0	-	-	-	-	-
OITHONA EREVICORNIS	2	43	75	444	128	296	0	-	-	-	-	-
OITHONA SIMILIS	1	2	28	28	8	346	0	-	-	-	-	-
UNIDENTIFIED												
NEPACICOIDES	2	19	38	186	54	288	0	-	-	-	-	-
PARASITIC CYCLOPOIDA	4	217	75	1694	493	220	0	-	-	-	-	-
PHYLUM PLATYHELMINTHES	0	-	-	-	-	-	6	49	17	608	138	282
	12	32410					36	1692				

a Density (n/m<sup>3</sup>)

b Stations are shown in Figure 4.

Table 34. Ranks of yearly mean densities ( $\bar{X}/m^3$ ) of microzooplankton collected at all the locations sampled for the thermal effects study from September, 1975 through August, 1976.

Location: Cedar Creek mouth (1)

Organism	Density
Total Organisms	63350
Subclass Copepoda (naupliar)	23047
Order Rotifera (no determination)	8666
Unidentified invertebrate (larval)	4961
<i>Polydora</i> spp. (larval)	3614
Barnacle (naupliar)	2668
<i>Acartia</i> spp. (no determination)	2488
Class Polychaeta (larval)	2455
<i>Oithona</i> spp. (no determination)	2447
<i>Acartia clausi</i> (no determination)	2430
Trochophores (trochophore)	1849
Class Gastropoda (larval)	1678
<i>Eurytemora</i> spp. (no determination)	1586
<i>Oithona brevicornis</i> (no determination)	1194
Cyphonaute (larval)	865
Class Bivalvia (umbo)	728
<i>Mulina lateralis</i> (umbo)	535
<i>Acartia tonsa</i> (no determination)	475
Class Bivalvia (hinge)	295
Parasitic Cyclopoids (no determination)	243
<i>Nereis</i> spp. (larval)	227
<i>Paracalanus crassirostris</i> (no determination)	161
Phylum Platyhelminthes (no determination)	131
Subclass Copepoda (no determination)	116
Class Bivalvia (larval)	110
<i>Paracalanus</i> spp. (no determination)	96
<i>Nassarius</i> sp. (larval)	59
Unidentified harpacticoids (no determination)	56
<i>Podon</i> spp. (no determination)	56
<i>Lyonsia hyalina</i> (larvae)	52
<i>Aequipecten irradians</i> (umbo)	16
<i>Aequipecten irradians</i> (hinge)	11
<i>Mercenaria mercenaria</i> (umbo)	11
<i>Pseudodiaptomus coronatus</i> (no determination)	9
<i>Pseudocalanus minutus</i> (no determination)	9
<i>Melampus bidentatus</i> (larval)	3
<i>Modiolus demissus</i> (umbo)	2
<i>Oithona similis</i> (no determination)	1
Barnacle cypris (larval)	<1
Total number of forms	38

Table 34 . (cont.)

Location: Stouts Creek mouth (2)

Organism	Density
Total number	34266
Order Rotifera (no determination)	14626
Subclass Copepoda (naupliar)	13241
<u>Acartia</u> spp. (no determination)	1887
<u>Acartia clausi</u> (no determination)	1558
Class Bivalvia (larval)	736
Barnacle (naupliar)	373
Class Gastropoda (larval)	333
Class Polychaeta (larval)	273
Parasitic Cyclopoida (no determination)	217
<u>Acartia tonsa</u> (no determination)	203
Unidentified invertebrate (larval)	169
<u>Nassarius</u> spp. (larval)	152
Order Calanoida (no determination)	109
Cyphonaute (larval)	102
<u>Oithona brevicornis</u> (no determination)	43
<u>Polydora</u> spp. (larval)	36
Subclass Copepoda (no determination)	33
<u>Eurytemora</u> spp. (no determination)	31
Order Cyclopoida (no determination)	30
<u>Oithona</u> spp. (no determination)	24
Class Bivalvia (umbo)	22
Trochophores (Trochophore)	20
Unidentified harpacticoids (no determination)	19
<u>Paracalanus crassirostris</u> (no determination)	11
Class Hydrozoa (no determination)	6
Class Bivalvia (hinge)	4
<u>Modiolus demissus</u> (hinge)	4
<u>Oithona similis</u> (no determination)	2
Class Ascidiacea (larval)	2
Total number of forms	29

Table 34. (cont.)

Location: Off the mouth of Forked River (3)

Organism	Density
Total number	82843
Subclass Copepoda (naupliar)	40369
Order Rotifera (no determination)	9870
<u>Acartia</u> spp. (no determination)	5714
Barnacle (naupliar)	3426
<u>Polydora</u> spp. (larval)	3282
<u>Acartia clausi</u> (no determination)	2561
<u>Oithona</u> spp. (no determination)	2345
Trochophores (Trochophore)	2098
Class Polychaeta (larval)	2069
<u>Acartia tonsa</u> (no determination)	1388
<u>Paracalanus crassirostris</u> (no determination)	1339
<u>Paracalanus</u> spp. (no determination)	1309
Class Gastropoda (larval)	1306
<u>Oithona brevicornis</u> (no determination)	1210
Cyphonaute larvae (larval)	886
Class Bivalvia (hinge)	668
Unidentified invertebrate (larval)	632
Unidentified harpacticoids (no determination)	520
<u>Pseudodiaptomus coronatus</u> (no determination)	400
Parasitic Cyclopoida (no determination)	281
<u>Eurytemora</u> spp. (no determination)	256
Class Bivalvia (larval)	207
<u>Podon</u> spp. (no determination)	171
Subclass Copepoda (no determination)	164
<u>Nereis</u> spp. (larval)	124
Order Calanoida (no determination)	75
Phylum Platyhelminthes (no determination)	46
<u>Lyonsia hyalina</u> (larval)	27
<u>Pseudocalanus minutus</u> (no determination)	25
<u>Oithona similis</u> (no determination)	19
Order Cyclopoida (no determination)	11
<u>Nassarius</u> spp. (larval)	10
Class Ascidiacea (larval)	9
Barnacle cypris (larval)	6
<u>Centropages hamatus</u> (no determination)	5
Subclass Ostracoda (no determination)	4
<u>Centropages</u> spp. (no determination)	4
<u>Temora longicornis</u> (no determination)	3
Class Hydrozoa (no determination)	3
Planula (larvae)	1
Total number of forms	40



Table 34. (cont.)

Location: Forked River mouth (4)

Organism	Density
Total number	140398
Subclass Copepoda (naupliar)	63143
Order Rotifera (no determination)	16859
Barnacle (naupliar)	10185
<u>Acartia</u> spp. (no determination)	8166
<u>Polydora</u> spp. (larval)	5486
<u>Oithona</u> spp. (no determination)	4908
Class Polychaeta (larval)	4343
Trochophores (Trochophore)	4020
<u>Acartia clausi</u> (no determination)	3795
<u>Oithona brevicornis</u> (no determination)	2177
Subclass Copepoda (no determination)	1834
<u>Paracalanus</u> spp. (no determination)	1759
Class Gastropoda (larval)	1755
Cyphonaute (larval)	1646
Class Bivalvia (umbo)	1313
<u>Paracalanus crassirostris</u> (no determination)	1310
Class Bivalvia (hinge)	1293
<u>Acartia tonsa</u> (no determination)	1284
Unidentified invertebrate (larval)	1114
Unidentified harpacticoids (no determination)	861
<u>Mulinia lateralis</u> (umbo)	717
Parasitic Cyclopoida (no determination)	521
<u>Eurytemora</u> spp. (no determination)	444
<u>Podon</u> spp. (no determination)	393
<u>Nereis</u> spp. (larval)	326
<u>Pseudodiaptomus coronatus</u> (no determination)	287
Phylum Platyhelminthes (no determination)	221
<u>Lyonsia hyalina</u> (larval)	56
<u>Nassarius</u> spp. (larval)	40
<u>Mercenaria mercenaria</u> (hinge)	27
<u>Oithona similis</u> (no determination)	22
Barnacle cypris (larval)	19
Class Hydrozoa (no determination)	16
Class Ascidiacea (larval)	12
<u>Mercenaria mercenaria</u> (umbo)	11
<u>Pseudocalanus minutus</u> (no determination)	7
<u>Tellina</u> spp. (umbo)	6
Phylum Echinodermata (larval)	6
<u>Mercenaria mercenaria</u> (larval)	6
<u>Crassostrea virginica</u> (umbo)	5
<u>Mulinia lateralis</u> (hinge)	5
Total number of forms	41

Table 34. (cont.)

Location: Oyster Creek mouth (17)

Organism	Density
Total number	102628
Subclass Copepoda (naupliar)	46522
Barnacle (naupliar)	22367
Order Rotifera (no determination)	6080
<u>Acartia</u> spp. (no determination)	4231
<u>Polydora</u> spp. (larval)	3293
Class Polychaeta (larval)	2911
<u>Oithona</u> spp. (no determination)	2299
<u>Oithona brevicornis</u> (no determination)	1811
Trochophores (Trochophore)	1796
Cyphonaute (larval)	1729
<u>Acartia clausi</u> (no determination)	1316
<u>Paracalanus crassirostris</u> (no determination)	972
<u>Acartia tonsa</u> (no determination)	919
Class Gastropoda (larval)	901
<u>Paracalanus</u> spp. (no determination)	832
Unidentified invertebrate (larval)	760
Class Bivalvia (umbo)	732
Unidentified harpacticoids (no determination)	695
Class Bivalvia (hinge)	486
Parasitic Cyclopoida (no determination)	399
<u>Eurytemora</u> spp. (no determination)	312
<u>Mulinia lateralis</u> (umbo)	291
<u>Pseudodiaptomus coronatus</u> (no determination)	281
<u>Podon</u> spp. (no determination)	253
Subclass Copepoda (no determination)	191
Class Hydrozoa (no determination)	50
<u>Nereis</u> spp. (larval)	49
Phylum Platyhelminthes (no determination)	43
<u>Pseudocalanus minutus</u> (no determination)	24
<u>Nassarius</u> spp. (larval)	17
<u>Aequipecten irradians</u> (hinge)	15
<u>Lyonsia hyalina</u> (larval)	10
<u>Temora longicornis</u> (no determination)	10
Barnacle cypris (larval)	8
<u>Oithona similis</u> (no determination)	6
Subclass Ostracoda (no determination)	6
Class Ascidiacea (larval)	6
<u>Mercenaria mercenaria</u> (umbo)	5
Total number of forms	38

Table 34 . (cont.)

Location: Off the mouth of Oyster Creek (19)

Organism	Density
Total number	104811
Subclass Copepoda (naupliar)	42066
Order Rotifera (no determination)	19548
Barnacle (naupliar)	10222
<u>Acartia</u> spp. (no determination)	7802
<u>Polydora</u> spp. (larval)	4588
<u>Acartia clausi</u> (no determination)	3521
Class Polychaeta (larval)	3182
Cyphonaute (larval)	2491
Trochophores (Trochophore)	1680
<u>Oithona</u> spp. (no determination)	1500
Class Gastropoda (larval)	1155
<u>Oithona brevicornis</u> (no determination)	976
<u>Acartia tonsa</u> (no determination)	969
<u>Paracalanus crassirostris</u> (no determination)	747
Unidentified harpacticoids (no determination)	644
Unidentified invertebrate (larval)	601
<u>Paracalanus</u> spp. (no determination)	533
<u>Eurytemora</u> spp. (no determination)	470
Parasitic Cyclopoida (no determination)	462
Class Bivalvia (hinge)	457
<u>Pseudodiaptomus coronatus</u> (no determination)	350
<u>Podon</u> spp. (no determination)	209
Subclass Copepoda (no determination)	125
<u>Nereis</u> spp. (larval)	121
Class Bivalvia (larval)	94
Phylum Platyhelminthes (no determination)	57
Order Calanoida (no determination)	49
<u>Temora longicornis</u> (no determination)	34
<u>Oithona similis</u> (no determination)	30
<u>Nassarius</u> spp. (larval)	29
<u>Pseudocalanus minutus</u> (no determination)	28
Class Ascidiacea (larval)	13
Order Cyclopoida (no determination)	12
<u>Lyonsia hyalina</u> (larval)	10
Class Hydrozoa (no determination)	9
Subclass Ostracoda (no determination)	8
Barnacle cypris (larval)	7
<u>Centropages</u> spp. (no determination)	5
Phylum Echinodermata (larval)	4
Order Ceriantharia (larval)	2
<u>Paracalanus parvus</u> (no determination)	1
Total number of forms	41

Table 34. (cont.)

Location: Northern plume (18)

Organism	Density
Total number	18386
Barnacle (naupliar)	11013
Class Polychaeta (larval)	1407
<u>Polydora</u> spp. (larval)	1143
Cyphonaute (larvae)	1003
Class Bivalvia (umbo)	894
Trochophores (Trochophore)	844
Class Gastropoda (larval)	816
Class Bivalvia (hinge)	395
Unidentified invertebrate (larval)	337
Class Bivalvia (larval)	263
<u>Nereis</u> spp. (larval)	157
Subclass Copepoda (naupliar)	34
<u>Nassarius</u> spp. (larval)	29
Class Hydrozoa (no determination)	20
Phylum Platyhelminthes (no determination)	18
Phylum Echinodermata (larval)	7
Barnacle cypris (larval)	4
Order Ceriantharia (larval)	2
Class Ascidiacea (larval)	<1
Total number of forms	19

Location: Southern plume (20)

Organism	Density
Total number	10658
Barnacle (naupliar)	5059
<u>Polydora</u> spp. (larval)	1805
Class Polychaeta (larval)	995
Trochophores (Trochophore)	844
Class Gastropoda (larval)	673
Class Bivalvia (larval)	409
Cyphonaute (larval)	285
Class Bivalvia (umbo)	193
Unidentified invertebrate (larval)	191
Class Bivalvia (hinge)	83
<u>Nereis</u> spp. (larval)	61
Barnacle cypris (larval)	24
<u>Nassarius</u> spp. (larval)	23
Class Ascidiacea (larval)	6
Class Hydrozoa (no determination)	6
Total number of forms	15

Table 34. (cont.)

Location: Off the mouth of Waretown Creek (21)

Organism	Density
Total number	13473
<u>Polydora</u> spp. (larval)	3970
Class Polychaeta (larval)	3118
Barnacle (naupliar)	1643
Trochophores (Trochophore)	1525
Cyphonaute (larval)	715
Class Gastropoda (larval)	662
Class Bivalvia (umbo)	628
Class Bivalvia (hinge)	532
Unidentified invertebrate (larval)	395
Nereis spp. (larval)	125
Class Bivalvia (larval)	69
Phylum Platyhelminthes (no determination)	49
Barnacle cypris (larval)	17
<u>Nassarius</u> spp. (larval)	13
Phylum Echinodermata (larval)	3
<u>Mulinia</u> <u>lateralis</u> (umbo)	3
<u>Lyonsia</u> <u>hyalina</u> (larval)	3
Class Ascidiacea (larval)	3
Class Hydrozoa (no determination)	<1
Phylum Platyhelminthes (no determination)	<1
Total number of forms	20

Table 34. (cont.)

Location: Double Creek mouth (23)

Organism	Density
Total Organisms	68074
Subclass Copepoda (naupliar)	31933
Order Rotifera (no determination)	14140
<u>Acartia</u> spp. (no determination)	5134
Class Polychaeta (larval)	3211
<u>Polydora</u> spp. (larval)	2477
Class Gastropoda (larval)	1641
<u>Acartia clausi</u> (no determination)	1507
Trochophores (Trochophore)	1029
Class Bivalvia (umbo)	917
Class Bivalvia (hinge)	863
Barnacle (naupliar)	750
Cyphonaute (larval)	666
<u>Paracalanus crassirostris</u> (no determination)	490
<u>Acartia tonsa</u> (no determination)	463
Parasitic Cyclopoida (no determination)	439
<u>Paracalanus</u> spp. (no determination)	380
Unidentified invertebrate (larval)	313
<u>Oithona brevicornis</u> (no determination)	298
<u>Oithona</u> spp. (no determination)	291
Subclass Copepoda (no determination)	266
<u>Eurytemora</u> spp. (no determination)	259
Class Bivalvia (larvae)	99
<u>Nereis</u> spp. (larvae)	86
<u>Podon</u> spp. (no determination)	66
<u>Mulinia lateralis</u> (umbo)	65
Unidentified harpacticoids (no determination)	61
Order Calanoida (no determination)	46
<u>Nassarius</u> spp. (larval)	34
Phylum Platyhelminthes (no determination)	30
<u>Temora longicornis</u> (no determination)	28
<u>Pseudodiaptomus coronatus</u> (no determination)	18
<u>Aequipecten irradians</u> (larval)	14
Barnacle cypris (larval)	13
<u>Oithona similis</u> (no determination)	12
Order Cyclopoida (no determination)	9
<u>Pseudocalanus minutus</u> (no determination)	6
<u>Mercenaria mercenaria</u> (umbo)	6
Family Teredinidae (umbo)	6
Class Ascidiacea (larval)	6
Class Hydrozoa (no determination)	2
Order Ceriantharia (larval)	2
Total number of forms	42

TABLE 35. MEAN DENSITIES<sup>a</sup> OF MICROZOOPLANKTON DAY AND NIGHT COLLECTIONS IN WESTERN BARNEGAT BAY (1, 3, 4, 17, 18, 19, 20, 21, 23)<sup>b</sup> FOR THE THERMAL EFFECTS STUDY FROM APRIL THROUGH AUGUST 1976.

MONTH/TIME PERIOD	APRIL 1976/DAY											
	LOCATION 1						LOCATION 23					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	1	33	132	132	66	200	2	907	833	990	-	-
LIFE STAGE: LARVAL												
CYPRONAUTAE LARVAE	4	1791	365	4121	1656	93	2	3879	1875	5682	-	-
CLASS GASTROPODA	1	34	137	137	69	200	2	680	625	735	-	-
LYONSIA HYALINA	2	316	529	735	374	118	0	-	-	-	-	-
CLASS POLYCHAETA	4	6221	5474	6731	576	9	2	14099	12990	15203	-	-
POLYDORA SPP	4	14790	8577	20450	5082	34	2	12249	9792	14706	-	-
UNIDENTIFIED INVERTEBRATE	3	325	275	661	272	84	2	435	245	625	-	-
LIFE STAGE: NINCE												
CLASS BIVALVIA	4	1167	735	1642	373	32	2	1048	625	1471	-	-
ACQUIPECTEN IRRADIANS	1	99	337	397	199	200	1	245	490	490	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	3907	182	6593	2749	70	2	6606	2917	10294	-	-
ACQUIPECTEN IRRADIANS	2	124	132	365	172	139	0	-	-	-	-	-
MERCENARIA MERCENARIA	1	99	397	397	199	200	1	104	208	298	-	-
	4	28896					2	40251				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	45070	68783	111496	54886	122	1	38334	76667	76667	-	-
BAFNACLE NAUPLIUS	4	12143	3467	21841	9790	72	2	1967	1225	2708	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	1	21501	126005	126005	63002	200	1	11250	22500	22500	-	-
LYONSIA HYALINA	1	102	412	412	296	200	0	-	-	-	-	-
SUBCLASS COPEPODA	1	165	661	561	331	200	1	417	833	833	-	-
ACARTIA SPP	2	6192	10219	14550	7366	119	1	4479	8958	8958	-	-
ACARTIA CLAUSI	1	10356	41423	41423	20711	200	1	104	208	208	-	-
PARACALANUS												
CRASSINOSIRIS	1	45	182	182	71	200	0	-	-	-	-	-
CORYTOMORPHA SPP.	1	1095	4380	4389	2190	200	0	-	-	-	-	-
LEMOHA LONGICORNIS	0	-	-	-	-	-	1	104	208	208	-	-
UNIDENTIFIED												
PARACALANUS	1	91	365	365	193	200	0	-	-	-	-	-
PARASITIC COPEPODA	2	249	265	730	344	138	1	417	833	833	-	-
PHYLUM PLATYHELMINTHES	2	1149	1984	2620	1351	118	2	454	417	420	-	-
	4	108153					2	57524				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	APRIL 1976/DAY											
	LOCATION 3						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	147	103	485	231	157	1	29	114	114	57	200
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	1207	158	2612	1213	101	4	839	467	1515	466	56
CLASS GASTROPODA	1	26	103	103	52	200	2	218	265	607	288	132
CLASS POLYCHAETA	4	2296	1754	2848	585	25	4	8806	1402	21970	9384	107
POLYDORA SPP	4	16537	5046	23103	8444	51	4	26570	6869	66414	27891	105
CLASS ASCIDIACEA	1	28	112	112	56	200	0	-	-	-	-	-
UNIDENTIFIED												
INVERTEBRATE	3	331	158	793	344	104	2	230	126	794	381	166
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	797	345	1147	343	43	2	329	379	935	442	135
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	1926	229	3448	1385	72	4	683	253	1262	438	64
	4	23293					4	37703				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	84215	75688	93196	7976	9	4	69771	20455	147854	60486	87
BARNACLE NAUPLIUS	4	12863	4128	19759	7548	59	4	71932	25460	130841	54160	75
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	3	14482	475	31966	16660	115	3	2668	758	6174	2840	106
PODON SPP	1	26	103	103	52	200	0	-	-	-	-	-
SUBCLASS COPEPODA	2	201	345	459	237	118	4	247	114	467	158	64
ACARTIA SPP	4	12752	5275	22069	8711	68	4	3842	3411	4280	432	11
ACARTIA CLAUSI	4	12722	485	27982	14294	112	4	5650	114	12423	6297	111
ACARTIA TONSA	1	40	158	158	79	200	1	32	126	126	63	200
PARACALANUS												
CRASSIROSTRIS	3	400	103	1266	585	146	2	73	140	153	85	116
EURYTEMORA SPP.	4	586	103	949	416	71	4	972	114	2525	1090	112
PSEUDOCALANUS MINUTUS	1	40	158	158	79	200	1	32	126	126	63	200
OITHONA SPP	1	40	158	158	79	200	3	215	153	379	173	80
OITHONA BREVICORNIS	0	-	-	-	-	-	2	108	126	307	145	134
OITHONA SIMILIS	1	57	229	229	115	200	2	102	153	253	124	122
UNIDENTIFIED												
HARPACTICIDS	3	203	112	459	197	97	3	95	114	140	64	68
PARASITIC CYCLOPOIDA	3	182	112	459	196	108	4	697	114	1840	779	112
PHYLUM PLATYHELMINTHES	1	112	448	448	224	200	1	29	114	114	57	200
	4	138918					4	156461				



TABLE 35. (CONT.)

MONTH/TIME PERIOD	APRIL 1976/DAY											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	119	167	307	148	125	0	-	-	-	-	-
LIFE STAGE: LARVAL												
CYPRID LARVAE	4	1371	360	2667	1027	75	4	1163	568	2083	710	61
CLASS GASTROPODA	0	-	-	-	-	-	3	173	142	340	141	82
NERITID SPP.	1	38	153	153	77	200	1	52	208	208	104	200
LYONIA HYALINA	1	115	460	460	230	200	1	43	170	170	85	200
CLASS POLYCHAETA	4	2995	2115	4141	894	30	4	4606	542	9233	3796	82
POLYCHAETA SPP.	4	12965	8654	17500	3621	28	4	11035	7625	13782	2954	27
CLASS ASCIDIACEA	1	38	153	153	77	200	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	3	455	180	1333	599	132	1	43	170	170	85	200
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	951	385	1500	570	60	3	393	321	852	352	88
AQUIDUCTEN LIRADIANS	0	-	-	-	-	-	1	43	170	170	85	200
MERCENARIA MERCENARIA	1	230	920	920	460	200	0	-	-	-	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	3	1745	719	3500	1654	95	4	1711	852	2500	773	45
CRASSOSTREA VIRGINICA	1	38	153	153	77	200	0	-	-	-	-	-
	4	21051	-	-	-	-	4	19266	-	-	-	-
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	3	56522	59724	88667	39525	70	4	39317	15136	69602	26985	69
BARNAACLE NAUPLIUS	4	11138	2878	18865	8467	76	4	109810	60256	150850	45732	42
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	40158	66963	93667	47634	119	3	2817	142	6875	3348	119
SUBCLASS OSTRACODA	0	-	-	-	-	-	1	52	208	208	104	200
SUBCLASS COPEPODA	0	-	-	-	-	-	1	36	142	142	71	200
ACARTIA SPP.	4	10724	5385	18000	5912	55	4	2974	2131	3958	854	29
ACARTIA CLAUSI	4	13796	333	28237	15496	112	3	4391	208	9943	5049	115
ACARTIA TONSA	0	-	-	-	-	-	1	36	142	142	71	200
PARACALANUS												
CRASSIROSTRIS	1	197	769	769	385	200	2	182	160	568	268	147
EURYTHERA SPP.	4	921	307	1439	493	54	2	227	426	481	263	116
PERIDOCALANUS MINUTUS	0	-	-	-	-	-	1	71	284	284	142	200
OLITHOEA SPP.	1	45	180	180	90	200	1	36	142	142	71	200
UNIDENTIFIED												
HARPACTICOIDES	2	119	167	307	148	125	2	147	170	417	197	134
PARATITIS CYCLOPOIDA	4	439	153	667	230	52	2	222	321	568	276	124
PHYLUM PLATYHELMINTHES	2	1339	1687	3667	1744	130	0	-	-	-	-	-
	4	135632	-	-	-	-	4	160306	-	-	-	-

TABLE 35. (CONT.)

MONTH/TIME PERIOD	APRIL 1976/DAY											
	LOCATION 18						LOCATION 20					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	1	2525	2525	2525	-	-	2	475	158	791	-	-
CLASS POLYCHAETA	1	1010	1010	1010	-	-	2	4905	3323	6487	-	-
POLYDORA SPP	1	6818	6818	6818	-	-	2	13133	11709	14557	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	0	-	-	-	-	-	2	237	158	316	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	1	1263	1263	1263	-	-	2	554	475	633	-	-
	1	11616					2	19304				
LIFE STAGE: NAUPLIAR												
BARNACLE NAUPLIUS	1	153030	153030	153030	-	-	2	28481	26899	30063	-	-
LIFE STAGE: NO DETERMINATION												
PHYLUM PLATYHELMINTHES	1	253	253	253	-	-	0	-	-	-	-	-
	1	153283					2	28481				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	APRIL 1976/DAY					
	LOCATION 21					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: LARVAL						
CYPHONAUTE LARVAE	4	1174	1049	1452	187	16
CLASS GASTROPODA	1	90	360	360	180	200
CLASS POLYCHAETA	4	6958	5323	9395	1739	25
POLYDORA SPP	4	15756	8916	22482	6579	42
UNIDENTIFIED INVERTEBRATE	2	130	161	360	171	131
LIFE STAGE: HINGE						
CLASS BIVALVIA	4	702	175	1592	636	91
LIFE STAGE: UMBO						
CLASS BIVALVIA	3	1325	180	3344	1565	118
	4	26135				
LIFE STAGE: NAUPLIAR						
BARNACLE NAUPLIUS	4	10926	5594	15605	4628	42
LIFE STAGE: NO DETERMINATION						
PHYLUM PLATYHELMINTHES	2	170	318	360	196	116
	4	11095				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	APRIL 1976/NIGHT												
	LOCATION 3						LOCATION 19						
	SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE													
TROCHOPHORES	2	610	476	743	-	-	1	55	110	110	-	-	
LIFE STAGE: LARVAL													
CYTHONAUTE LARVAE	2	1881	1238	2524	-	-	2	1011	625	1396	-	-	
CLASS GASTROPODA	2	414	333	495	-	-	2	1256	1213	1299	-	-	
NASSARIUS SPP.	0	-	-	-	-	-	1	55	110	110	-	-	
LYONSIA HYALINA	1	167	333	333	-	-	1	55	110	110	-	-	
CLASS POLYCHAETA	2	2895	1980	3810	-	-	2	2917	2684	3149	-	-	
POLYDORA SPP	2	12107	9857	14356	-	-	2	11574	10390	12757	-	-	
BARNAACLE CYPRIS	0	-	-	-	-	-	1	55	110	110	-	-	
CLASS ASCIDIACEA	0	-	-	-	-	-	2	169	110	227	-	-	
UNIDENTIFIED INVERTEBRATE	2	691	143	1238	-	-	2	692	649	735	-	-	
LIFE STAGE: HINGE													
CLASS BIVALVIA	2	1005	248	1762	-	-	2	545	97	993	-	-	
LIFE STAGE: UMBO													
CLASS BIVALVIA	2	3833	3713	3952	-	-	2	291	257	325	-	-	
	2	23601					2	18673					
LIFE STAGE: NAUPLIAR													
SUBCLASS COPEPODA	2	74532	64905	84158	-	-	2	42581	37110	48051	-	-	
BARNAACLE NAUPLIUS	2	27305	23515	31095	-	-	2	25804	20357	31250	-	-	
LIFE STAGE: NO DETERMINATION													
ORDER ROTIFERA	2	8089	7762	8416	-	-	2	50672	43734	57610	-	-	
PODON SPP	1	167	333	333	-	-	0	-	-	-	-	-	
SUBCLASS COPEPODA	1	72	143	143	-	-	1	49	97	97	-	-	
ACARTIA SPP	2	25200	23667	26733	-	-	2	8449	6494	10404	-	-	
ACARTIA CLAUSI	2	6861	6436	7286	-	-	2	1569	1299	1838	-	-	
ACARTIA TONSA	0	-	-	-	-	-	1	49	97	97	-	-	
CENTROPAGES HAMATUS	1	124	248	248	-	-	0	-	-	-	-	-	
EURYTEMORA SPP.	2	610	476	743	-	-	2	502	257	747	-	-	
OTHONA BREVICORNIS	1	72	143	143	-	-	0	-	-	-	-	-	
UNIDENTIFIED HARPACTICOIDES	2	529	248	810	-	-	2	589	552	625	-	-	
PARASITIC CYCLOPOIDA	0	-	-	-	-	-	2	288	97	478	-	-	
PHYLUM PLATYHELMINTHES	1	72	143	143	-	-	2	968	97	1838	-	-	
	2	143630					2	131516					

a Density ( $n/m^3$ )

b Stations are shown in Figure 7.

TABLE 35. (CONT.)

MONTH/TIME PERIOD	APRIL 1976/NIGHT											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	1	64	128	128	-	-	1	77	153	153	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	1986	1675	2296	-	-	2	2989	2604	3374	-	-
CLASS GASTROPODA	2	321	258	383	-	-	1	87	174	174	-	-
NASSARIUS SPP.	1	64	128	128	-	-	0	-	-	-	-	-
LYONSIA HYALINA	2	576	387	765	-	-	1	77	153	153	-	-
CLASS POLYCHAETA	2	2629	2423	2835	-	-	2	1779	1563	1994	-	-
POLYDORA SPP	2	7435	7088	7781	-	-	2	8073	6944	9202	-	-
CLASS ASCIDIACEA	2	129	128	129	-	-	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	2	513	387	638	-	-	1	261	521	521	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	1280	902	1658	-	-	2	317	174	460	-	-
AQUIPECTEN IRRADIANS	0	-	-	-	-	-	1	174	347	347	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	1344	902	1786	-	-	2	1395	1227	1563	-	-
MERCENARIA MERCENARIA	0	-	-	-	-	-	1	87	174	174	-	-
MULINIA LATERALIS	1	64	128	128	-	-	0	-	-	-	-	-
	2	16403					2	15314				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	69377	65816	72938	-	-	2	25511	25153	25868	-	-
BARNACLE NAUPLIUS	2	117198	108376	126020	-	-	2	44810	37883	51736	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	28208	27679	28737	-	-	2	11150	9722	12577	-	-
ACARTIA SPP	2	22010	17730	26289	-	-	2	2606	2604	2607	-	-
ACARTIA CLAUSI	2	5967	4974	6959	-	-	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	1	65	129	129	-	-	0	-	-	-	-	-
EURYTEMORA SPP.	2	899	638	1160	-	-	2	394	174	614	-	-
OITHONA SPP	2	129	128	129	-	-	0	-	-	-	-	-
OITHONA BREVICORNIS	0	-	-	-	-	-	1	77	153	153	-	-
UNIDENTIFIED												
HARPACTICOIDS	2	961	902	1020	-	-	2	1211	1042	1380	-	-
PARASITIC CYCLOPOIDA	2	193	128	258	-	-	1	384	767	767	-	-
PHYLUM PLATYHELMINTHES	2	257	255	258	-	-	0	-	-	-	-	-
	2	245262					2	86140				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	MAY 1976/DAY											
	LOCATION 1						LOCATION 23					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	1327	912	1563	292	22	4	2126	187	4787	2115	99
LIFE STAGE: LARVAL												
CYPRID LARVAE	2	1431	1771	3953	1877	131	4	234	93	319	101	43
CLASS GASTROPODA	4	1928	466	3041	1081	56	4	1595	653	2553	1014	64
PASSAPIUS SPP.	2	118	191	280	141	120	3	245	98	454	230	94
LYONSIA HYALINA	2	50	96	104	58	116	0	-	-	-	-	-
CLASS POLYCHAETA	4	7341	5311	9952	2081	28	4	7170	3265	12447	4215	59
NEREIS SPP.	4	1606	186	3547	1692	105	3	472	93	1596	754	160
POLYDORA SPP.	4	14817	6892	22775	8694	59	4	7065	1679	12553	4478	63
UNIDENTIFIED INVERTEBRATE	4	873	373	1926	713	82	4	600	93	1277	513	86
LIFE STAGE: RINGE												
CLASS BIVALVIA	4	475	280	811	251	53	4	1684	93	4043	1939	115
LIFE STAGE: UMBO												
CLASS BIVALVIA	3	560	383	1250	524	94	4	463	113	1064	417	90
MULINIA LATERALIS	4	2698	1025	5104	1789	66	3	104	106	197	81	78
	4	33223					4	21755				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	7615	12823	17635	9009	118	6	26088	10610	45883	12867	49
BARNACLE NAUPLIUS	4	6777	4658	10439	2505	38	6	5559	2660	9162	2488	45
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	15012	24880	35169	17836	119	6	29533	17818	47766	10196	35
PODUM SPP.	1	24	96	96	48	200	0	-	-	-	-	-
SUBCLASS COPEPODA	0	-	-	-	-	-	4	125	90	364	139	111
ACANTIA SPP.	2	339	304	1053	497	146	6	1543	203	4467	1612	105
ACANTIA CLAUSI	1	24	96	96	48	200	4	159	90	406	180	113
PARACALANUS												
CRASSIROSTRIS	1	48	191	191	96	200	2	76	90	364	146	193
EURYTEMORA SPP.	0	-	-	-	-	-	3	196	203	609	251	128
OITHONA SPP.	2	124	191	304	150	121	3	174	100	539	221	127
OITHONA BREVICORNIS	0	-	-	-	-	-	1	36	213	213	87	245
UNIDENTIFIED												
PARACTICOIDES	1	101	405	405	203	200	4	540	539	1218	490	91
PARASITIC CYCLOPOIDA	2	220	304	574	276	126	4	263	182	629	273	104
PHYLLA PLATYHELMINTHES	1	25	101	101	51	200	2	87	203	319	140	161
	4	30309					6	64378				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	MAY 1976/DAY											
	LOCATION 3						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	3	2279	425	5030	2457	108	4	2243	1453	3041	654	29
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	508	203	1277	514	101	4	850	93	1624	813	96
CLASS GASTROPODA	4	2409	1221	2872	795	33	4	1004	278	1624	588	59
NASSARIUS SPP.	0	-	-	-	-	-	2	65	87	171	82	127
LYONSIA HYALINA	2	131	203	319	158	121	1	43	171	171	86	200
CLASS POLYCHAETA	4	4252	2553	6647	2004	47	4	5675	3953	6609	1248	22
NEREIS SPP.	3	479	359	813	377	79	4	549	101	1217	491	89
POLYDORA SPP	4	4995	3830	6301	1098	22	4	4105	1296	6752	2246	55
PHYLUM ECHINODERMATA	0	-	-	-	-	-	2	49	93	101	56	116
CLASS ASCIDIACEA	1	23	90	90	45	200	1	22	87	87	44	200
UNIDENTIFIED INVERTEBRATE	3	745	539	1221	592	79	4	890	278	1391	535	60
LIFE STAGE: HINGE												
CLASS BIVALVIA	3	2398	532	5299	2550	106	4	1965	174	6791	3224	164
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	4104	3511	4581	510	12	4	2797	1520	4188	1096	39
	4	22320					4	20254				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	19251	10610	28085	7997	42	4	14597	8611	19391	5055	35
BARNACLE NAUPLIUS	4	5287	2660	9162	3125	59	4	17687	6486	31624	12592	71
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	4	31926	23944	47766	10879	34	4	37197	13889	58803	22229	60
SUBCLASS COPEPODA	2	46	90	94	53	116	1	51	203	203	102	200
ACARTIA SPP	4	606	203	851	297	49	4	372	174	507	149	40
ACARTIA CLAUSI	2	46	90	94	53	116	2	49	93	101	56	116
PARACALANUS												
CRASSIROSTRIS	1	23	90	90	45	200	1	21	85	85	43	200
EURYTEMORA SPP.	1	51	203	203	102	200	2	67	93	174	84	126
OITHONA SPP	3	262	188	539	227	87	3	191	87	507	222	116
OITHONA BREVICORNIS	1	53	213	213	107	200	0	-	-	-	-	-
OITHONA SIMILIS	0	-	-	-	-	-	2	43	85	87	50	115
UNIDENTIFIED												
HARPACTICOIDS	2	370	539	939	457	124	3	142	85	278	123	87
PARASITIC CYCLOPOIDA	3	349	203	629	299	86	4	692	435	1111	302	44
PHYLUM PLATYHELMINTHES	2	131	203	319	158	121	0	-	-	-	-	-
	4	58398					4	71106				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	MAY 1976/DAY											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	3498	87	9290	4329	124	4	555	103	1073	408	73
LIFE STAGE: LARVAL												
CYPRID LARVAE	4	413	194	696	257	62	3	285	107	723	319	112
CLASS GASTROPODA	4	1966	435	2559	1026	52	4	561	207	991	362	65
NASSARIUS SPP.	0	-	-	-	-	-	2	52	103	103	59	115
LYONSIA HYALINA	1	47	189	189	95	200	0	-	-	-	-	-
CLASS POLYCHAETA	4	5904	4340	8129	1651	28	4	3162	2575	3874	542	17
NEREIS SPP.	4	1075	968	1217	120	11	1	27	107	107	54	200
POLYDORA SPP.	4	6822	4724	10258	2566	38	4	2949	1395	5165	1602	54
PHYLUS ECHINODERMATA	1	49	194	194	97	200	0	-	-	-	-	-
CLASS ASCIDIACEA	0	-	-	-	-	-	1	26	103	103	52	200
UNIDENTIFIED INVERTEBRATE	4	1804	660	3150	1313	73	4	393	103	721	336	86
LIFE STAGE: JINSE												
CLASS BIVALVIA	4	4979	348	11419	5493	110	4	984	310	1712	676	69
LIFE STAGE: UMCO												
CLASS BIVALVIA	4	1785	348	3290	1371	77	4	444	215	631	213	48
MERCENARIA MERCENARIA	1	97	387	387	194	200	0	-	-	-	-	-
MULINIA LATERALIS	4	890	581	1181	272	31	4	447	103	1261	552	123
	4	29328					4	9883				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	24380	17736	31742	5788	24	4	7961	6545	10434	1733	22
BAFNACLE NAUPLIUS	4	4607	2957	5906	1273	28	4	25488	18348	36674	8077	32
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	3	151	180	215	101	67
ORDER ROTIFERA	4	32251	24213	38000	6412	20	4	7987	3326	14773	4954	62
PODOPH SPP.	1	49	197	197	99	200	0	-	-	-	-	-
SUBCLASS COPEPODA	1	97	387	387	194	200	3	97	103	180	74	77
ACARTIA SPP.	4	1811	435	3150	1413	78	3	101	90	207	85	84
ACARTIA CLAUSI	0	-	-	-	-	-	1	27	107	107	54	200
PARACALANUS												
CRASSIROSTRIS	3	142	87	387	169	119	0	-	-	-	-	-
EURYTEMORA SPP.	2	98	194	197	113	115	1	27	107	107	54	200
OTHORA SPP.	1	97	387	387	194	200	3	120	103	270	112	93
UNIDENTIFIED												
PARACALANUS	2	146	197	387	106	127	4	666	107	1343	617	73
PARASITIC CYCLOPOIDA	4	552	197	070	314	57	4	329	270	413	60	11
PHYLLUM PLATYHELMINTHES	2	67	94	174	84	125	1	26	103	103	52	200
	4	64297					4	42978				



TABLE 35. (CONT.)

MONTH/TIME PERIOD	MAY 1976/DAY											
	LOCATION 18						LOCATION 21					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	3	1047	798	2230	926	88	4	6310	912	12713	6155	98
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	438	203	659	236	54	4	217	58	608	262	121
CLASS GASTROPODA	4	1577	709	2527	1002	64	4	1247	912	1556	295	24
NASSARIUS SPP.	3	139	101	330	138	100	0	-	-	-	-	-
LYONSIA HYALINA	0	-	-	-	-	-	1	25	101	101	51	200
CLASS POLYCHAETA	4	4495	2027	8865	3210	71	4	13763	5889	20649	7394	54
NEREIS SPP.	3	834	89	2039	974	117	4	698	91	1558	647	93
POLYDORA SPP	4	5235	2411	7890	3020	58	4	15309	7134	25034	9365	61
PHYLUM ECHINODERMATA	1	51	203	203	102	200	1	23	91	91	46	200
UNIDENTIFIED INVERTEBRATE	4	294	89	709	288	98	4	649	274	1169	390	60
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	2361	220	5980	2623	111	4	2421	195	5444	2648	109
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	3528	1696	6028	1914	54	4	2116	1364	3333	856	40
	4	19999					4	42777				
LIFE STAGE: NAUPLIAR												
BARNACLE NAUPLIUS	4	32772	8209	65957	26247	80	4	1879	222	3604	1740	93
LIFE STAGE: NO DETERMINATION												
PHYLUM PLATYHELMINTHES	1	28	110	110	55	200	1	152	608	608	304	200
	4	32800					4	2031				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	MAY 1976/NIGHT											
	LOCATION 3						LOCATION 19					
SPECIES	PREQ	MEAN	MIN	MAX	SDEV	CVAR	PREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	1491	545	2437	-	-	1	325	649	649	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	599	182	1015	-	-	2	5940	5819	6061	-	-
CLASS GASTROPODA	2	5409	4727	6091	-	-	2	425	201	649	-	-
NASSARIUS SPP.	0	-	-	-	-	-	1	108	216	216	-	-
LYONSIA HYALINA	2	193	182	203	-	-	1	101	201	201	-	-
CLASS POLYCHAETA	2	6623	6545	6701	-	-	2	13258	9632	16883	-	-
NEREIS SPP.	2	668	609	727	-	-	1	201	401	401	-	-
POLYDORA SPP	2	10777	10182	11371	-	-	2	20404	15050	25758	-	-
CLASS ASCIDIACEA	1	102	203	203	-	-	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	2	903	182	1624	-	-	2	951	602	1299	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	2085	1624	2545	-	-	1	217	433	433	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	3015	2030	4000	-	-	2	2418	1806	3030	-	-
	2	31863					2	44345				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	39762	33636	45888	-	-	2	22733	21873	23593	-	-
BARNACLE NAUPLIUS	2	6105	5482	6727	-	-	2	7384	7143	7625	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	24747	17818	31675	-	-	2	126908	108361	145455	-	-
SUBCLASS COPEPODA	2	284	203	364	-	-	0	-	-	-	-	-
ACARTIA SPP	2	3416	2364	4467	-	-	2	835	803	866	-	-
ACARTIA CLAUSII	2	385	364	406	-	-	2	209	201	216	-	-
PARACALANUS												
CRASSIROSTRIS	1	182	364	364	-	-	0	-	-	-	-	-
EURYTEMORA SPP.	2	487	364	609	-	-	2	409	216	602	-	-
OITHONA SPP	0	-	-	-	-	-	2	209	201	216	-	-
UNIDENTIFIED												
HARPACTICOIDS	2	882	545	1218	-	-	2	1661	1515	1806	-	-
PARASITIC CYCLOPOIDA	1	91	182	182	-	-	2	1268	803	1732	-	-
PHYLUM PLATYHELMINTHES	0	-	-	-	-	-	2	209	201	216	-	-
	2	76338					2	161822				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	MAY 1976/NIGHT											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	1362	237	2486	-	-	2	267	186	347	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	915	473	1356	-	-	2	1079	1042	1115	-	-
CLASS GASTROPODA	2	3126	2938	3314	-	-	2	719	694	743	-	-
NASSARIUS SPP.	2	350	226	473	-	-	1	87	174	174	-	-
CLASS POLYCHAETA	2	14499	12429	16568	-	-	2	1172	1042	1301	-	-
NEREIS SPP.	2	1044	904	1183	-	-	1	174	347	347	-	-
POLYDORA SPP	2	18916	17041	20791	-	-	2	5697	4275	7118	-	-
UNIDENTIFIED INVERTEBRATE	2	1265	947	1582	-	-	2	447	372	521	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	2889	2840	2938	-	-	2	620	372	868	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	1630	1130	2130	-	-	2	354	186	521	-	-
MULINIA LATERALIS	2	5563	4972	6154	-	-	2	788	186	1389	-	-
	2	51556					2	11400				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	46978	45198	48757	-	-	2	14969	14312	15625	-	-
BARNACLE NAUPLIUS	2	7151	6391	7910	-	-	2	21756	20074	23438	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	59874	59408	60339	-	-	2	7556	7118	7993	-	-
ACARTIA SPP	2	1152	947	1356	-	-	2	267	186	347	-	-
ACARTIA CLAUSI	1	119	237	237	-	-	1	93	186	186	-	-
EURYTEMORA SPP.	2	458	237	678	-	-	1	174	347	347	-	-
TEMORA LONGICORNIS	0	-	-	-	-	-	1	87	174	174	-	-
OITHONA SPP	1	113	226	226	-	-	2	180	174	186	-	-
UNIDENTIFIED HARPACTICOID	2	1372	710	2034	-	-	2	1767	929	2604	-	-
PARASITIC CYCLOPOIDA	1	226	452	452	-	-	2	354	186	521	-	-
	2	117440					2	47200				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JUNE 1976/DAY												
	LOCATION 1						LOCATION 23						
	SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE													
TROCHOPHORES	4	3843	1449	7238	2639	69	4	3509	1361	8043	3106	89	
LIFE STAGE: LARVAL													
CYPHONAUTE LARVAE	2	99	97	299	141	142	4	435	209	714	261	60	
CLASS GASTROPODA	4	9699	5217	14054	3683	38	4	5008	1600	10408	4207	84	
NASSARIUS SPP.	3	265	199	571	237	90	0	-	-	-	-	-	
CLASS POLYCHAETA	4	3009	2252	3809	657	22	4	5467	3665	9130	2575	47	
HEREIS SPP.	3	166	193	270	116	70	3	158	102	314	137	86	
POLYDORA SPP	4	2340	386	4762	2142	92	4	7284	1047	14565	7212	99	
BARNACLE CYPRIS	0	-	-	-	-	-	1	51	204	204	102	200	
UNIDENTIFIED INVERTEBRATE	2	309	270	966	456	148	3	204	200	408	167	82	
LIFE STAGE: HINGE													
CLASS BIVALVIA	3	219	190	386	166	76	4	4490	3000	6087	1343	30	
LIFE STAGE: UMBO													
CLASS BIVALVIA	3	858	360	2687	1232	144	3	2888	200	6327	3264	113	
MULINIA LATERALIS	3	801	180	2029	926	116	3	285	209	714	303	106	
FAMILY TEREDINIDAE	0	-	-	-	-	-	1	52	209	209	105	200	
	4	21606					4	29832					
LIFE STAGE: NAUPLIAR													
SUBCLASS COPEPODA	2	38395	38068	77117	38560	100	2	55512	54600	167449	78939	142	
BARNACLE NAUPLIUS	3	2296	290	5405	2730	119	4	2348	209	5400	2539	108	
LIFE STAGE: NO DETERMINATION													
ORDER ROTIFERA	1	28648	85945	85945	49620	173	1	1800	7200	7200	3600	200	
PODON SPP	2	646	676	1261	631	98	2	533	600	1531	723	136	
SUBCLASS COPEPODA	2	1000	1261	1739	898	90	2	680	918	1800	863	127	
ACARTIA SPP	2	3279	4234	5604	2921	89	2	7655	4600	26020	12434	162	
ACARTIA TONSA	2	1043	810	2319	1177	113	2	1377	200	5306	2621	190	
PARACALANUS SPP.	0	-	-	-	-	-	1	510	2041	2041	1020	200	
PARACALANUS													
CRASSIROSTRIS	1	419	1256	1256	725	173	1	408	1633	1633	816	200	
OITHONA SPP	2	375	450	676	344	92	1	128	510	510	255	200	
OITHONA BREVICORNIS	1	32	97	97	56	173	1	485	1939	1939	969	200	
UNIDENTIFIED													
HARPACTICIDS	2	244	193	540	274	112	2	379	714	800	438	116	
PARASITIC CYCLOPOIDA	2	1337	630	3382	1799	134	2	688	200	2551	1246	181	
	3	77716					4	72501					

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JUNE 1976/DAY											
	LOCATION 3						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	5185	2222	8812	3392	65	4	3627	1256	5818	2492	69
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	3	515	99	1183	564	109	2	197	290	498	243	123
CLASS GASTROPODA	4	1300	889	2277	656	50	4	1686	545	2488	936	56
NASSARIUS SPP.	1	28	111	111	56	200	1	46	185	185	93	200
CLASS POLYCHAETA	4	1951	1398	2376	440	23	4	2595	1836	3582	765	29
NEREIS SPP.	1	28	111	111	56	200	1	25	100	100	50	200
POLYDORA SPP	4	2567	1075	4752	1577	61	4	3558	1990	5454	1483	42
BARNACLE CYPRIIS	0	-	-	-	-	-	1	25	100	100	50	200
UNIDENTIFIED INVERTEBRATE	3	888	333	2475	1101	124	3	349	299	727	299	86
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	576	111	1277	507	88	4	1334	926	2222	598	45
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	811	213	1444	646	80	4	1648	556	3085	1216	74
	4	13849					4	15089				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	52526	43830	58416	6870	13	4	44711	37818	58408	9358	21
BARNACLE NAUPLIUS	4	877	745	1111	163	19	2	4860	9259	10182	5625	116
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	1	46	185	185	93	200
ORDER ROTIFERA	3	11540	111	30198	14497	126	3	18966	100	38727	21853	115
PODON SPP	4	1007	323	1881	800	79	4	2253	556	3865	1763	78
SUBCLASS COPEPODA	4	880	594	1075	212	24	4	375	199	545	141	38
ACARTIA SPP	4	2165	1277	3441	1029	48	4	2281	1296	2727	662	29
ACARTIA CLAUSI	1	27	108	108	54	200	3	119	100	193	89	75
ACARTIA TONSA	2	818	1444	1828	957	117	4	215	182	299	56	26
CENTROPAGES SPP	1	27	106	106	53	200	0	-	-	-	-	-
PARACALANUS SPP.	2	977	1111	2796	1321	135	2	2179	3980	4734	2534	116
PARACALANUS												
CRASSIROSTRIS	4	917	198	2151	895	98	4	1240	182	2319	1120	90
OITHONA SPP	4	402	213	667	198	49	4	630	182	1159	520	81
OITHONA BREVICORNIS	2	135	111	430	203	150	2	344	580	796	407	118
OITHONA SIMILIS	1	28	111	111	56	200	0	-	-	-	-	-
UNIDENTIFIED												
HARPACTICOIDS	4	470	222	693	198	42	4	639	498	773	132	21
PARASITIC CYCLOPOIDA	4	293	198	333	64	22	4	381	182	556	153	40
	4	73087					4	79237				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JUNE 1976/DAY											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	11252	4000	20792	7462	66	4	5623	1075	10084	5104	91
LIFE STAGE: LARVAL												
CYPRID LARVAE	3	538	190	1183	543	101	3	528	250	1000	479	91
CLASS GASTROPODA	4	3074	1980	4556	1075	35	4	2264	1261	3750	1054	47
MUSKIEUS SPP.	1	95	381	381	191	200	0	-	-	-	-	-
MUSKIEUS MERCENARIA	1	50	198	198	99	200	0	-	-	-	-	-
CLASS POLYCHAETA	4	8343	3000	14455	4796	57	4	5667	2151	12185	4693	83
NEPES SPP.	4	301	111	571	200	67	4	170	108	250	71	42
POLYDORA SPP.	4	10302	1333	21188	9822	95	4	6287	2667	12750	4743	75
BARNACLE CYPRIS	2	97	190	198	112	116	0	-	-	-	-	-
CLASS ASCIDIACEA	0	-	-	-	-	-	1	28	111	111	56	200
UNIDENTIFIED	-	-	-	-	-	-	-	-	-	-	-	-
INVESTIGATE	4	834	323	1584	534	64	3	578	430	1250	520	90
LIFE STAGE: HINGE												
CLASS BIVALVIA	4	1249	190	2889	1309	105	4	797	210	1333	482	60
LIFE STAGE: UNDO												
CLASS BIVALVIA	3	1684	594	3667	1691	100	4	474	210	1222	499	105
MULINIA LATERALIS	3	537	396	1000	436	81	3	621	500	1444	601	97
	4	38355	-	-	-	-	4	23035	-	-	-	-
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	98116	80778	111881	12929	13	4	79443	70548	84500	6118	8
BARNACLE NAUPLIUS	4	1420	1188	1935	349	25	4	13897	5161	21000	7630	55
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	2	278	111	1000	484	174
CEPHALOPODA	2	17642	33143	37426	20446	116	4	23532	108	50000	27160	115
FOUCH SPP.	4	2530	1714	3556	763	30	4	2148	556	4750	1847	86
SUBCLASS COPEPODA	4	874	667	1075	191	22	4	908	500	1222	310	34
ACARTIA SPP.	4	3191	2476	4516	909	28	4	2826	840	4667	1652	58
ACARTIA CLAUSI	2	82	111	215	103	127	1	53	210	210	105	200
ACARTIA TONSA	4	1264	190	2444	1051	83	3	458	323	840	373	82
PARACALANUS SPP.	2	5791	11444	11720	6688	115	2	1418	2444	3226	1668	118
PARACALANUS	-	-	-	-	-	-	-	-	-	-	-	-
CHASSIROSTIS	3	2360	396	5376	2597	110	4	1737	420	3556	1327	76
OTHONA SPP.	4	1783	762	2889	1164	65	4	432	210	750	233	54
OTHONA BREVICORNIS	3	749	594	1290	580	77	3	434	210	860	398	92
OTHONA STIMULI	2	77	108	198	96	123	1	54	215	215	108	200
UNIDENTIFIED	-	-	-	-	-	-	-	-	-	-	-	-
NAUPLIICOIDS	4	1638	571	2376	761	46	4	1209	889	1500	288	24
PARASITIC CYCLOPOIDA	4	1144	190	1689	735	61	4	651	250	1050	368	57
	4	138659	-	-	-	-	4	129476	-	-	-	-

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JUNE 1976/DAY											
	LOCATION 18						LOCATION 20					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	1101	696	1505	-	-	2	5784	4176	7391	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	1400	1294	1505	-	-	0	-	-	-	-	-
CLASS GASTROPODA	2	1230	968	1492	-	-	2	765	659	870	-	-
CLASS POLYCHAETA	2	1218	645	1791	-	-	2	1092	879	1304	-	-
NEREIS SPP.	0	-	-	-	-	-	2	546	440	652	-	-
POLYDORA SPP	2	605	215	995	-	-	2	2834	1538	4130	-	-
BARNACLE CYPRIS	0	-	-	-	-	-	1	109	217	217	-	-
UNIDENTIFIED INVERTEBRATE	2	253	108	398	-	-	0	-	-	-	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	311	298	323	-	-	2	436	220	652	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	1587	1183	1990	-	-	1	220	440	440	-	-
	2	7703					2	11784				
LIFE STAGE: NAUPLIAR												
BARNACLE NAUPLIUS	2	6599	4839	8358	-	-	2	14188	10549	17826	-	-
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	1	54	108	108	-	-	0	-	-	-	-	-
	2	6653					2	14188				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JUNE 1976/DAY					
	LOCATION 21					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	4	3191	1094	5234	1775	56
LIFE STAGE: LARVAL						
CYPHONAUTE LARVAE	3	255	222	497	205	81
CLASS GASTROPODA	4	622	398	935	226	36
CLASS POLYCHAETA	4	3913	1222	7662	3109	79
NEREIS SPP.	3	100	100	187	77	77
POLYDORA SPP	4	4227	556	6965	2713	64
BARNACLE CYPRIS	1	28	111	111	56	200
UNIDENTIFIED INVERTEBRATE	2	287	398	748	360	126
LIFE STAGE: HINGE						
CLASS BIVALVIA	4	982	444	1495	459	47
LIFE STAGE: UMBO						
CLASS BIVALVIA	2	547	1094	1095	632	115
	4	14150				
LIFE STAGE: NAUPLIAR						
BARNACLE NAUPLIUS	4	863	100	1556	770	89
	4	863				



TABLE 35. (CONT.)

MONTH/TIME PERIOD	JUNE 1976/NIGHT											
	LOCATION 3						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	4242	3543	4941	-	-	2	2085	2027	2143	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	868	706	1029	-	-	2	8882	6818	10946	-	-
CLASS GASTROPODA	2	3806	3200	4412	-	-	2	2385	2338	2432	-	-
CLASS POLYCHAETA	2	4684	3543	5824	-	-	2	6352	6081	6623	-	-
NEREIS SPP.	2	525	343	706	-	-	1	102	203	203	-	-
POLYDORA SPP	2	2404	2294	2514	-	-	2	2296	1753	2838	-	-
BARNACLE CYPRIS	1	57	114	114	-	-	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	2	717	176	1257	-	-	2	503	195	811	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	3375	2514	4235	-	-	2	998	779	1216	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	6293	4114	8471	-	-	2	3484	3117	3851	-	-
	2	26968					2	27086				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	94687	94059	95314	-	-	2	120028	103636	136419	-	-
BARNACLE NAUPLIUS	2	1382	706	2057	-	-	2	2487	2338	2635	-	-
LIFE STAGE: NO DETERMINATION												
PODON SPP	2	1703	1235	2171	-	-	2	300	195	405	-	-
ORDER ROTIFERA	0	-	-	-	-	-	2	199	195	203	-	-
SUBCLASS COPEPODA	1	515	1029	1029	-	-	1	195	390	390	-	-
ACARTIA SPP	2	10359	9600	11118	-	-	2	6189	4675	7703	-	-
ACARTIA CLAUSI	1	286	571	571	-	-	2	199	195	203	-	-
ACARTIA TONSA	2	6268	4765	7771	-	-	2	3395	2532	4257	-	-
PSEUDODIAPTOMUS												
CORONATUS	2	5250	5029	5471	-	-	2	4268	4054	4481	-	-
PARACALANUS SPP.	2	9591	9353	9829	-	-	2	2584	2532	2635	-	-
PARACALANUS												
CRASSIROSTRIS	2	10732	8229	13235	-	-	2	3741	2027	5455	-	-
OITHONA SPP	2	925	706	1143	-	-	2	1006	390	1622	-	-
OITHONA BREVICORNIS	2	2114	1941	2286	-	-	2	791	608	974	-	-
UNIDENTIFIED												
HARPACTICOIDS	2	6745	5371	8118	-	-	2	8489	6234	10743	-	-
PARABITIC CYCLOPOIDA	2	1408	529	2286	-	-	2	1777	1216	2338	-	-
PHYLUM PLATYHELMINTHES	1	172	343	343	-	-	0	-	-	-	-	-
	2	152133					2	155645				

TABLE 35. (CONT.)

MONTH/ TIME PERIOD	JUNE 1976/NIGHT											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	2636	1622	3649	-	-	2	592	350	833	-	-
LIFE STAGE: LARVAL												
CYPRONAUTE LARVAE	2	4764	4662	4865	-	-	2	7915	6389	9441	-	-
CLASS GASTROPODA	2	4764	2838	6689	-	-	2	1954	1111	2797	-	-
CLASS POLYCHAETA	2	9730	7703	11757	-	-	2	5750	5556	5944	-	-
NEPHEIS SPP.	2	710	608	811	-	-	0	-	-	-	-	-
POLYDORA SPP	2	5372	3649	7095	-	-	2	978	556	1399	-	-
UNIDENTIFIED INVERTEBRATE	1	102	203	203	-	-	2	1152	556	1748	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	2027	1419	2635	-	-	1	1749	3497	3497	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	3750	3649	3851	-	-	2	2721	1944	3497	-	-
MULINIA LATERALIS	2	507	405	608	-	-	2	453	350	556	-	-
	2	34359					2	23262				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	115946	103581	128311	-	-	2	104307	88333	120280	-	-
BAKACULE NAUPLIUS	2	9932	7905	11959	-	-	2	3626	3056	4196	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	1	203	405	405	-	-	0	-	-	-	-	-
CLASS HYDROZOA	2	203	203	203	-	-	0	-	-	-	-	-
TELLINA SPP.	1	102	203	203	-	-	0	-	-	-	-	-
FORON SPP	2	1520	1216	1824	-	-	0	-	-	-	-	-
SUBCLASS COPEPODA	1	304	608	608	-	-	1	350	699	699	-	-
ACARTIA SPP	2	8919	6892	10946	-	-	2	7467	4444	10490	-	-
ACARTIA CLAUSI	2	304	203	405	-	-	0	-	-	-	-	-
ACARTIA TONSA	2	6487	4662	8311	-	-	2	4186	2778	5594	-	-
PSEUCODIAPTOMUS												
CORONATUS	2	2433	2027	2838	-	-	2	3482	2797	4167	-	-
PARACALANUS SPP.	2	4764	4257	5270	-	-	2	2474	2448	2500	-	-
PARACALANUS												
CRASSIPESTRIS	2	6689	5878	7500	-	-	2	3353	1111	5594	-	-
LUKYTEMORA SPP.	1	304	608	608	-	-	0	-	-	-	-	-
OTHONA SPP	2	1318	1216	1419	-	-	2	457	350	556	-	-
OTHONA BREVICORNIS	2	1014	608	1419	-	-	2	628	556	699	-	-
UNIDENTIFIED												
HARPACTICIDS	2	6791	5068	8514	-	-	2	4217	3889	4545	-	-
PARASITIC CYCLOPOIDA	2	2433	2230	2635	-	-	2	1466	833	2098	-	-
	2	169662					2	136007				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JULY 1976/DAY												
	LOCATION 1						LOCATION 23						
	SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE													
TROCHOPHORES	4	10549	1008	37500	17972	170	2	934	1000	2737	1291	138	
LIFE STAGE: LARVAL													
CYPHONAUTE LARVAE	4	2667	754	5769	2207	83	2	1205	400	4421	2152	179	
CLASS GASTROPODA	4	2307	670	6731	2952	128	2	3574	5895	8400	4251	119	
NASSARIUS SPP.	1	21	84	84	42	200	0	-	-	-	-	-	
CLASS POLYCHAETA	4	3429	1118	8654	3535	103	2	3376	6105	7400	3934	117	
NEREIS SPP.	2	262	84	962	469	179	2	103	200	211	119	116	
POLYDORA SPP	3	324	84	962	438	135	2	155	200	421	201	129	
UNIDENTIFIED INVERTEBRATE	4	42143	168	157692	77184	183	2	619	1000	1474	740	120	
LIFE STAGE: HINGE													
CLASS BIVALVIA	2	502	84	1923	948	189	2	555	421	1800	853	154	
LIFE STAGE: UMBO													
CLASS BIVALVIA	3	599	132	1676	761	127	2	361	600	842	428	119	
MULINIA LATERALIS	3	954	962	1760	725	76	1	50	200	200	100	200	
	4	63756					4	10932					
LIFE STAGE: NAUPLIAR													
SUBCLASS COPEPODA	2	68800	123277	151923	80299	117	1	25450	101800	101800	50900	200	
BARNACLE NAUPLIUS	3	999	66	3846	1898	190	2	574	400	1895	901	157	
LIFE STAGE: NO DETERMINATION													
ORDER ROTIFERA	1	105	420	420	210	200	0	-	-	-	-	-	
SUBCLASS COPEPODA	1	105	420	420	210	200	1	250	1000	1000	500	200	
ACARTIA SPP	2	5639	9615	12941	6651	118	1	6350	25400	25400	12700	200	
ACARTIA TONSA	2	2301	1513	7692	3664	159	1	650	2600	2600	1300	200	
PSEUDODIAPTOMUS													
CORONATUS	1	84	336	336	168	200	1	150	600	600	300	200	
PARACALANUS SPP.	1	861	3445	3445	1722	200	1	2700	10800	10800	5400	200	
PARACALANUS													
CRASSIROSTRIS	2	955	962	2857	1347	141	1	3600	14400	14400	7200	200	
OITHONA SPP	2	20760	10924	72115	34622	167	1	1300	5200	5200	2600	200	
OITHONA BREVICORNIS	2	10365	5882	35577	17035	164	1	1050	4200	4200	2100	200	
UNIDENTIFIED													
HARPACTICIDS	1	126	504	504	252	200	0	-	-	-	-	-	
PARASITIC CYCLOPOIDA	1	241	962	962	481	200	1	550	2200	2200	1100	200	
	4	111340					4	42624					

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JULY 1976/DAY											
	LOCATION 3						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	3471	630	6493	3061	88	4	1830	176	3645	1845	101
LIFE STAGE: LARVAL												
CYPRONAUTAE LARVAE	4	1337	1045	1575	219	16	4	13507	11647	15701	1682	12
CLASS GASTROPODA	4	1942	1357	3226	867	45	4	2327	1071	4766	1665	72
CLASS POLYCHAETA	4	715	448	1210	339	47	4	3216	1412	6589	2414	75
NEREIS SPP.	2	85	39	299	144	171	2	245	417	561	288	118
POLYDORA SPP.	3	84	75	143	63	75	4	441	153	701	239	54
UNIDENTIFIED INVERTEBRATE	4	868	433	1371	431	50	4	1020	561	1389	342	34
LIFE STAGE: HINGE												
CLASS BIVALVIA	3	243	161	597	253	104	1	140	561	561	281	200
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	778	81	1571	789	101	3	987	176	2383	1117	113
	4	9523					4	23712				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	49909	6299	99851	48141	96	4	46884	9176	92383	43303	92
BARNACLE NAUPLIUS	3	74	75	143	58	79	3	1435	153	3224	1608	112
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	400	672	929	474	118	4	504	176	841	314	62
SUBCLASS OSTRACODA	0	-	-	-	-	-	1	38	153	153	77	200
SUBCLASS COPEPODA	1	18	71	71	36	200	1	313	1250	1250	625	200
ACARTIA SPP.	4	5377	236	11143	5701	106	4	7820	529	15278	8372	107
ACARTIA TONSA	4	503	79	1119	459	91	4	2227	153	5000	2300	103
PSEUDODIAPTOMUS												
CORONATUS	1	93	373	373	187	200	3	855	765	1542	652	76
PARACALANUS SPP.	2	5347	10672	10714	6174	115	2	979	1250	2664	1269	130
PARACALANUS												
CRASSIROSTRIS	4	3934	39	8429	4337	110	2	2200	3194	5607	2725	124
OITHONA SPP.	4	11583	1378	22071	10587	91	3	3947	153	8551	4509	114
OITHONA BREVICORNIS	4	2696	472	4357	1893	70	4	2570	765	5047	1912	74
UNIDENTIFIED												
HARPACTICOIDS	3	283	39	643	314	111	3	596	153	1250	613	103
PARASITIC CYCLOPOIDA	3	93	79	149	69	75	3	393	176	701	359	91
PHYLUM PLATYHELMINTHES	0	-	-	-	-	-	1	44	176	176	88	200
	4	80309					4	70803				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JULY 1976/DAY											
	LOCATION 4						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	2865	1425	5413	1748	61	2	3030	5556	6563	3523	116
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	2461	354	6514	2854	116	2	681	781	1944	919	135
CLASS GASTROPODA	4	2414	1803	3628	836	35	2	1211	2344	2500	1400	116
LYONSIA HYALINA	1	23	92	92	46	200	0	-	-	-	-	-
CLASS POLYCHAETA	4	1001	429	1651	542	54	2	2170	3125	5556	2695	124
NEREIS SPP.	1	92	367	367	184	200	2	109	156	278	135	124
POLYDORA SPP.	2	181	172	550	259	144	2	148	278	313	171	116
UNIDENTIFIED INVERTEBRATE	4	1225	343	2301	844	69	2	1063	2031	2222	1230	116
LIFE STAGE: HINGE												
CLASS BIVALVIA	3	226	86	642	286	127	2	178	156	556	263	147
MULINIA LATERALIS	1	46	183	183	92	200	0	-	-	-	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	3	227	86	734	340	150	2	265	278	781	368	139
MULINIA LATERALIS	3	480	71	1116	537	112	2	395	469	1111	526	133
	4	11239					4	9250				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	78888	9571	200367	90642	115	2	53893	91406	124167	63651	118
BARNACLE NAUPLIUS	1	23	92	92	46	200	2	590	1111	1250	684	116
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	4	947	71	3028	1409	149	2	295	556	625	342	116
SUBCLASS COPEPODA	1	22	86	86	43	200	2	265	278	781	368	139
ACARTIA SPP.	4	7775	442	19358	9103	117	2	4957	8438	11389	5849	118
ACARTIA TONSA	4	677	286	1376	479	71	2	907	1406	2222	1099	121
PSEUDODIAPYCNUS												
CORONATUS	2	41	71	92	48	117	1	117	469	469	235	200
PARACALANUS SPP.	2	3059	6055	6180	3532	115	2	2791	4444	6719	3354	120
PARACALANUS												
CRASSIROSTRIS	3	1461	88	4037	1890	129	2	2904	5781	5833	3353	115
OITHONA SPP.	4	17903	6143	39358	15703	88	2	7800	14167	17031	9082	116
OITHONA BREVICORNIS	4	5125	4034	8073	1968	38	2	4041	6719	9444	4797	119
UNIDENTIFIED												
HARPACTICOIDS	2	563	601	1651	779	138	1	70	278	278	139	200
PARASITIC CYCLOPOIDA	4	240	71	459	192	80	1	78	313	313	157	200
	4	116722					4	78707				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JULY 1976/DAY											
	LOCATION 18						LOCATION 21					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	3139	750	5764	2725	87	4	2560	330	6038	2595	101
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	4084	1882	5438	1599	39	4	3716	989	6226	2380	64
CLASS GASTROPODA	4	1139	1000	1375	168	15	4	1946	943	4151	1510	78
NASSARIUS SPP.	1	15	59	59	30	200	0	-	-	-	-	-
CLASS POLYCHAETA	4	2252	1118	3077	823	37	4	1492	638	3208	1163	78
NEREIS SPP.	4	201	59	347	161	80	2	330	566	755	389	118
POLYDORA SPP	4	410	235	694	199	48	2	283	377	755	361	128
UNIDENTIFIED INVERTEBRATE	4	1385	401	2375	951	69	4	1811	377	3191	1155	64
PHYLUM PLATYHELMINTHES	0	-	-	-	-	-	1	94	377	377	189	200
LIFE STAGE: HINGE												
CLASS BIVALVIA	3	219	59	468	225	103	3	572	213	1321	592	103
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	1107	59	2431	1229	111	3	1079	165	2453	1193	111
	4	13948					4	13883				
LIFE STAGE: NAUPLIAR												
BARNACLE NAUPLIUS	4	577	59	1003	393	68	1	47	189	189	95	200
	4	577					4	47				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JULY 1976/NIGHT											
	LOCATION 3						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	8889	8333	9444	-	-	2	12520	9923	15116	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	5923	2679	9167	-	-	2	4018	3093	4942	-	-
CLASS GASTROPODA	2	1950	1667	2232	-	-	2	5655	4768	6541	-	-
NASSARIUS SPP.	0	-	-	-	-	-	1	65	129	129	-	-
CLASS POLYCHAETA	2	7401	5357	9444	-	-	2	2219	1675	2762	-	-
NEREIS SPP.	2	432	417	446	-	-	2	621	515	727	-	-
POLYDORA SPP	2	1156	972	1339	-	-	2	686	644	727	-	-
UNIDENTIFIED INVERTEBRATE	2	2877	2778	2976	-	-	2	1751	1031	2471	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	1	149	298	298	-	-	2	702	387	1017	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	1102	417	1786	-	-	2	1992	1804	2180	-	-
	2	29876					2	30226				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	107604	92708	122500	-	-	2	51558	31314	71802	-	-
BARNACLE NAUPLIUS	2	635	298	972	-	-	2	806	581	1031	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	1062	595	1528	-	-	2	339	291	387	-	-
SUBCLASS OSTRACODA	1	75	149	149	-	-	0	-	-	-	-	-
SUBCLASS COPEPODA	0	-	-	-	-	-	1	65	129	129	-	-
ACARTIA SPP	2	12892	11944	13839	-	-	2	16139	14691	17587	-	-
ACARTIA TONSA	2	9757	9375	10139	-	-	2	6010	4897	7122	-	-
PSEUDODIAPTOMUS												
CORONATUS	2	3135	2381	3889	-	-	2	1008	727	1289	-	-
PARACALANUS SPP.	2	7302	1806	12798	-	-	2	3220	1933	4506	-	-
PARACALANUS												
CRASSIROSTRIS	2	7862	2778	12946	-	-	2	5202	5026	5378	-	-
OITHONA SPP	2	8140	7500	8780	-	-	2	12897	11985	13808	-	-
OITHONA BREVICORNIS	2	5685	5417	5952	-	-	2	6395	5959	6830	-	-
UNIDENTIFIED												
WARPACTICIDS	2	1012	833	1190	-	-	2	686	644	727	-	-
PARASITIC CYCLOPOIDA	2	362	278	446	-	-	2	355	129	581	-	-
PHYLUM PLATYHELMINTHES	2	219	139	298	-	-	0	-	-	-	-	-
	2	165739					2	104677				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	JULY 1976/NIGHT											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	13408	9259	17556	-	-	1	790	1579	1579	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	6583	5758	7407	-	-	2	4102	2941	5263	-	-
CLASS GASTROPODA	2	3172	2949	3395	-	-	2	1641	1176	2105	-	-
CLASS POLYCHAETA	2	4071	3086	5056	-	-	2	2199	1765	2632	-	-
NEREIS SPP.	2	576	309	843	-	-	0	-	-	-	-	-
POLYDORA SPP.	2	449	281	617	-	-	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	2	3061	2469	3652	-	-	2	3050	2941	3158	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	449	281	617	-	-	0	-	-	-	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	969	702	1235	-	-	0	-	-	-	-	-
MULINIA LATERALIS	2	758	281	1235	-	-	0	-	-	-	-	-
	2	33494					2	11780				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	92953	82253	103652	-	-	2	69133	64737	73529	-	-
BARNACLE NAUPLIUS	2	1186	983	1389	-	-	2	4226	3158	5294	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	864	463	1264	-	-	1	263	526	526	-	-
CLASS HYDROZOA	1	70	140	140	-	-	0	-	-	-	-	-
ACARTIA SPP.	2	13511	13117	13904	-	-	2	8948	7895	10000	-	-
ACARTIA TONSA	2	4850	4784	4916	-	-	2	7106	4211	10000	-	-
PSEUDODIAPTOMUS												
CORONATUS	2	1018	772	1264	-	-	1	588	1176	1176	-	-
PARACALANUS SPP.	2	6955	6039	7870	-	-	2	3251	1765	4737	-	-
PARACALANUS												
CRASSIROSTRIS	2	4955	4354	5556	-	-	2	3081	2632	3529	-	-
OITHONA SPP.	2	16340	15123	17556	-	-	2	6037	4706	7368	-	-
OITHONA BREVICORNIS	2	6674	5478	7870	-	-	2	5016	4737	5294	-	-
UNIDENTIFIED												
HARPACTICIDS	2	583	463	702	-	-	1	294	588	588	-	-
PARASITIC CYCLOPOIDA	2	590	562	617	-	-	1	883	1765	1765	-	-
PHYLUM PLATYHELMINTHES	2	519	421	617	-	-	1	588	1176	1176	-	-
	2	151065					2	109412				



TABLE 35. (CONT.)

MONTH/TIME PERIOD	AUGUST 1976/DAY											
	LOCATION 1						LOCATION 23					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	860	521	1316	361	42	4	1652	781	2830	862	52
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	1462	474	2188	731	50	3	460	72	977	496	108
CLASS GASTROPODA	4	407	217	625	169	41	4	946	496	1628	521	55
NASSARIUS SPP.	2	41	53	109	52	129	1	18	72	72	36	200
CLASS POLYCHAETA	4	380	109	938	382	101	4	2166	1367	3185	853	39
NEREIS SPP.	1	13	53	53	27	200	0	-	-	-	-	-
POLYDORA SPP.	3	93	53	208	89	96	3	218	283	294	145	67
BARNACLE CYPRIS	0	-	-	-	-	-	2	36	72	72	42	115
UNIDENTIFIED INVERTEBRATE	4	798	217	1563	591	74	4	677	355	1172	357	53
LIFE STAGE: HINGE												
CLASS BIVALVIA	3	78	53	156	67	86	3	61	72	98	42	70
LIFE STAGE: UMBO												
CLASS BIVALVIA	4	608	211	1146	431	71	4	751	391	1345	429	57
MULINIA LATEFALIS	4	343	53	729	304	88	2	113	98	355	168	148
	4	5081					4	7097				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	44532	60938	117188	56315	126	2	12529	18962	31153	15299	122
BARNACLE NAUPLIUS	1	26	105	105	53	200	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	9740	9688	29271	13799	142	2	3697	6934	7855	4286	116
SUBCLASS COPEPODA	1	26	104	104	52	200	1	18	72	72	36	200
ACARTIA SPP.	2	1797	2813	4375	2171	121	2	997	1840	2148	1158	116
ACARTIA TONSA	2	625	313	2188	1052	168	2	280	142	977	470	168
PARACALANUS SPP.	0	-	-	-	-	-	1	18	72	72	36	200
OITHONA SPP.	2	664	938	1719	831	125	2	494	489	1487	701	142
OITHONA BREVICORNIS	2	196	313	469	235	120	2	427	294	1415	673	158
UNIDENTIFIED HARPACTICOIDS	0	-	-	-	-	-	1	49	195	195	98	200
PARASITIC CYCLOPOIDA	2	157	313	313	181	115	2	268	294	779	368	137
	4	57762					4	18777				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	AUGUST 1976/DAY											
	LOCATION 3						LOCATION 19					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	4	2037	405	4710	1861	91	4	2101	755	3095	978	47
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	4	594	101	1884	862	145	4	1531	755	2970	982	64
CLASS GASTROPODA	4	565	203	942	325	58	4	1506	396	3095	1244	83
CLASS POLYCHAETA	4	497	152	801	269	54	3	897	842	1584	671	75
NEREIS SPP.	0	-	-	-	-	-	2	110	50	388	187	171
POLYDORA SPP.	2	72	52	235	112	155	4	229	50	388	179	78
BARNACLE CYPRI	1	36	142	142	71	200	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	4	967	152	2118	858	89	4	1485	644	3095	1144	77
LIFE STAGE: BINGE												
CLASS BIVALVIA	3	192	51	613	284	148	3	122	50	388	179	147
LIFE STAGE: UNBO												
CLASS BIVALVIA	4	1054	102	2588	1147	109	4	439	377	545	77	18
MULINIA LATERALIS	1	25	101	101	51	200	0	-	-	-	-	-
	4	6037					4	8419				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	4	32959	9578	62033	25202	76	4	38776	29405	53564	10148	27
BARNACLE NAUPLIUS	2	48	51	142	67	139	3	251	99	755	342	136
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	4	2625	820	5176	2071	79	4	4369	2321	6485	1763	40
SUBCLASS COPEPODA	2	177	235	471	225	128	1	97	388	388	194	200
ACARTIA SPP.	4	6938	3638	10833	3610	52	4	4406	3465	5743	1021	23
ACARTIA TONSA	4	4166	608	7867	3305	79	4	1196	248	2642	1131	95
PSEUDODIAPTOMUS												
CORONATUS	4	192	101	330	111	58	3	119	50	377	173	145
PARACALANUS SPP.	2	100	142	257	124	125	1	37	149	149	75	200
PARACALANUS												
CRASSIROSTRIS	4	277	152	471	154	56	3	134	50	388	174	130
OITHONA SPP.	4	4883	3142	7059	1672	34	4	2466	1887	3267	671	27
OITHONA BREVICORNIS	4	1969	1622	2968	666	34	4	2050	1162	2723	685	33
PARASITIC CYCLOPOIDA	3	225	52	706	326	145	2	87	149	198	102	118
	4	54558					4	53988				

TABLE 35. (CONT.)

MONTH/TIME PERIOD		AUGUST 1976/DAY											
		LOCATION 4						LOCATION 17					
SPECIES		FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE													
TROCHOPHORES		4	5498	2793	7619	2059	37	4	2919	1797	3346	749	26
LIFE STAGE: LARVAL													
CYPHONAUTE LARVAE		4	1735	541	2963	1001	58	4	1966	1172	2854	690	35
CLASS GASTROPODA		4	689	541	901	167	24	3	1100	752	2270	962	87
CLASS POLYCHAETA		4	1950	1481	2432	390	20	4	2689	1172	4232	1727	64
NEREIS SPP.		1	23	90	90	45	200	1	24	94	94	47	200
POLYDORA SPP		2	68	90	180	86	128	1	203	811	811	406	200
BARNACLE CYPRIS		2	68	90	180	86	128	2	72	98	188	90	126
UNIDENTIFIED INVERTEBRATE		4	2311	811	3704	1186	51	4	1087	625	1622	504	46
LIFE STAGE: HINGE													
CLASS BIVALVIA		1	143	571	571	286	200	2	278	94	1016	494	178
LIFE STAGE: UMBO													
CLASS BIVALVIA		3	724	180	1905	861	119	4	382	234	658	198	52
MULINIA LATERALIS		3	388	270	741	323	83	2	242	188	781	370	153
		4	13595					4	10960				
LIFE STAGE: NAUPLIAR													
SUBCLASS COPEPODA		4	69909	51351	97143	21010	30	4	61147	50000	68985	8760	14
BARNACLE NAUPLIUS		0	-	-	-	-	-	3	322	98	625	318	99
LIFE STAGE: NO DETERMINATION													
ORDER ROTIFERA		4	6324	4324	8018	1526	24	4	6462	3906	8957	2866	44
SUBCLASS COPEPODA		2	519	741	1333	646	125	0	-	-	-	-	-
ACARTIA SPP		4	7244	5143	11712	3094	43	4	5900	4622	7087	1038	18
ACARTIA TONSA		4	1577	741	2793	867	55	4	467	197	811	256	55
PSEUDODIAPTOMUS													
CORONATUS		3	233	90	571	252	108	3	132	98	243	107	81
PARACALANUS SPP.		2	68	90	180	86	128	0	-	-	-	-	-
PARACALANUS													
CRASSIROSTRIS		3	233	90	571	252	108	1	71	282	282	141	200
OITHONA SPP		4	7916	2222	12523	4607	58	4	4119	3243	4699	685	17
OITHONA BREVICORNIS		4	3635	1892	5135	1332	37	4	3922	3516	4865	632	16
UNIDENTIFIED													
HARPACTICOIDS		0	-	-	-	-	-	1	24	94	94	47	200
PARASITIC CYCLOPOIDA		1	90	360	360	180	200	2	265	470	591	310	117
PHYLUM PLATYHELMINTHES		0	-	-	-	-	-	2	48	94	98	55	116
		4	97746					4	82877				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	AUGUST 1976/DAY											
	LOCATION 18						LOCATION 20					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	2296	1903	2689	-	-	2	1774	690	2857	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	1456	1142	1770	-	-	2	1053	1034	1071	-	-
CLASS GASTROPODA	2	838	543	1132	-	-	2	351	345	357	-	-
NASSARIUS SPP.	1	28	55	55	-	-	0	-	-	-	-	-
CLASS POLYCHAETA	2	2522	2283	2760	-	-	2	1404	1379	1429	-	-
NEREIS SPP.	2	126	109	142	-	-	0	-	-	-	-	-
POLYDORA SPP.	2	444	109	779	-	-	0	-	-	-	-	-
BARNACLE CYPRIS	1	28	55	55	-	-	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	2	569	217	921	-	-	2	1244	345	2143	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	64	55	72	-	-	0	-	-	-	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	939	816	1062	-	-	2	702	690	714	-	-
	2	9307					2	6527				
LIFE STAGE: NAUPLIAR												
BARNACLE NAUPLIUS	2	64	55	72	-	-	0	-	-	-	-	-
LIFE STAGE: NO DETERMINATION												
PHYLUM PLATYHELMINTHES	2	64	55	72	-	-	0	-	-	-	-	-
	2	127					2	0				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	AUGUST 1976/DAY					
	LOCATION 21					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE						
TROCHOPHORES	4	1623	1179	2155	414	25
LIFE STAGE: LARVAL						
CYPHONAUTE LARVAE	4	870	521	1402	379	44
CLASS GASTROPODA	4	1108	283	2371	967	87
NASSARIUS SPP.	1	12	47	47	24	200
CLASS POLYCHAETA	4	775	417	1833	705	91
POLYDORA SPP	1	12	47	47	24	200
BARNACLE CYPRIS	2	79	109	208	100	126
UNIDENTIFIED INVERTEBRATE	4	429	47	755	293	68
LIFE STAGE: HINGE						
CLASS BIVALVIA	2	79	109	208	100	126
LIFE STAGE: UMBO						
CLASS BIVALVIA	4	471	283	729	205	44
	4	5457				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	AUGUST 1976/NIGHT											
	LOCATION 4						LOCATION 17					
SPECIES	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	4412	3765	5059	-	-	2	4561	4459	4662	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	706	353	1059	-	-	2	4054	2027	6081	-	-
CLASS GASTROPODA	2	2177	1765	2588	-	-	2	304	203	405	-	-
CLASS POLYCHAETA	2	2412	2235	2588	-	-	2	1825	1419	2230	-	-
NEREIS SPP.	2	235	235	235	-	-	0	-	-	-	-	-
POLYDORA SPP	2	412	353	471	-	-	0	-	-	-	-	-
UNIDENTIFIED INVERTEBRATE	2	706	235	1176	-	-	2	1622	1622	1622	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	236	118	353	-	-	2	304	203	405	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	1824	1412	2235	-	-	2	1419	1419	1419	-	-
MULINIA LATERALIS	2	706	588	824	-	-	1	304	608	608	-	-
	2	13824					2	14392				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	49353	41647	57059	-	-	2	64257	63041	65473	-	-
BARNACLE NAUPLIUS	0	-	-	-	-	-	2	304	203	405	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	2706	2235	3176	-	-	2	2027	1622	2432	-	-
SUBCLASS COPEPODA	2	236	118	353	-	-	1	102	203	203	-	-
ACARTIA SPP	2	25589	24118	27059	-	-	2	9021	8514	9527	-	-
ACARTIA TONSA	2	3236	2706	3765	-	-	2	507	405	608	-	-
PSEUDODIAPYCNUS												
CORONATUS	2	883	824	941	-	-	1	203	405	405	-	-
PARACALANUS SPP.	2	353	235	471	-	-	0	-	-	-	-	-
PARACALANUS												
CRASSIROSTRIS	2	1471	1412	1529	-	-	1	304	608	608	-	-
OITHONA SPP	2	10059	9176	10941	-	-	2	7399	7297	7500	-	-
OITHONA BREVICORNIS	2	10000	9059	10941	-	-	2	8007	7703	8311	-	-
UNIDENTIFIED												
HARPACTICIDS	0	-	-	-	-	-	1	102	203	203	-	-
PARASITIC CYCLOPOIDA	2	177	118	235	-	-	2	608	405	811	-	-
PHYLUM PLATHYHELMINTHES	2	177	118	235	-	-	0	-	-	-	-	-
	2	104236					2	92838				

TABLE 35. (CONT.)

MONTH/TIME PERIOD	AUGUST 1976/NIGHT											
	LOCATION 3						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: TROCHOPHORE												
TROCHOPHORES	2	6613	5579	7647	-	-	2	3984	2556	5412	-	-
LIFE STAGE: LARVAL												
CYPHONAUTE LARVAE	2	1718	1647	1789	-	-	2	2683	778	4588	-	-
CLASS GASTROPODA	2	1245	842	1647	-	-	2	1262	1111	1412	-	-
CLASS POLYCHAETA	2	3288	2471	4105	-	-	2	2514	2471	2556	-	-
NEREIS SPP.	1	53	105	105	-	-	0	-	-	-	-	-
POLYDORA SPP	2	452	316	588	-	-	2	232	111	353	-	-
UNIDENTIFIED INVERTEBRATE	2	975	421	1529	-	-	2	1379	1111	1647	-	-
LIFE STAGE: HINGE												
CLASS BIVALVIA	2	282	211	353	-	-	1	236	471	471	-	-
LIFE STAGE: UMBO												
CLASS BIVALVIA	2	2421	2000	2842	-	-	2	1154	778	1529	-	-
	2	17046					2	13442				
LIFE STAGE: NAUPLIAR												
SUBCLASS COPEPODA	2	22344	19529	25158	-	-	2	52239	39889	64588	-	-
BARNACLE NAUPLIUS	2	112	105	118	-	-	1	177	353	353	-	-
LIFE STAGE: NO DETERMINATION												
ORDER ROTIFERA	2	1523	941	2105	-	-	2	1948	1778	2118	-	-
SUBCLASS OSTRACODA	0	-	-	-	-	-	1	59	118	118	-	-
ACARTIA SPP	2	6688	5059	8316	-	-	2	9693	8444	10941	-	-
ACARTIA TONSA	2	1672	1579	1765	-	-	2	2931	2333	3529	-	-
PSEUDODIAPTOMUS												
CORONATUS	2	170	105	235	-	-	2	739	588	889	-	-
PARACALANUS SPP.	2	328	235	421	-	-	1	59	118	118	-	-
PARACALANUS												
CRASSIROSTRIS	2	434	235	632	-	-	2	399	353	444	-	-
OITHONA SPP	2	9313	8941	9684	-	-	2	4422	3667	5176	-	-
OITHONA BREVICORNIS	2	8743	7368	10118	-	-	2	3746	2667	4824	-	-
UNIDENTIFIED												
HARPACTICIDS	0	-	-	-	-	-	2	284	235	333	-	-
PARASITIC CYCLOPOIDA	2	223	211	235	-	-	2	526	111	941	-	-
PHYLUM PLATYHELMINTHES	1	106	211	211	-	-	0	-	-	-	-	-
	2	51653					2	77219				

a Density (n/m<sup>3</sup>)

b Stations are shown in Figure 7.

TABLE 36 . FREQUENCY OF OCCURRENCE AND MEAN DENSITIES ( $\bar{x}/1000m^3$ ) FOR DAY COLLECTIONS OF MACROZOOPLANKTON COLLECTED IN WESTERN BARNEGAT BAY (1, 2, 3, 4, 17, 18, 19, 20, 21, 23)\* FROM SEPTEMBER 1975 THROUGH AUGUST 1976.

SPECIES	LOCATION 1						LOCATION 23					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	6	13	42	88	30	225	10	26	40	275	58	222
SARISIA SPP	8	590	65	5404	1600	271	6	2294	7440	21013	5608	245
TURRITOPSIS NUTRICOLA	2	12	33	376	65	537	10	1849	198	30046	5452	295
NEMOPSIS BACHEI	1	1	45	45	8	-	1	1	32	32	5	-
KATHKEA OCTOPUNCTATA	2	32	505	585	131	407	8	99	71	1498	298	301
AEGUOREA SPP	1	4	135	135	23	583	2	34	244	1032	173	502
PHYLUM CTENOPHORA	0	-	-	-	-	-	1	1	40	40	7	-
MMEMIOPSIS LEIDYI	10	1041	167	10738	2402	231	11	2373	44	28689	6658	281
BEKDE SPP	4	18	82	201	51	291	4	24	120	313	73	306
CHEPIDULA SPP.	0	-	-	-	-	-	3	7	40	165	30	400
ORDER NUDIBRANCHIA	1	4	138	138	24	583	1	1	43	43	7	-
FAMILY PHYLLODOCIDAE	0	-	-	-	-	-	1	1	46	46	8	-
FAMILY SYLLIDAE	3	5	40	70	16	336	1	1	55	55	9	-
AUTOLYTUS SPP	1	1	47	47	8	-	1	1	37	37	6	-
FAMILY SPIONIDAE	0	-	-	-	-	-	1	1	41	41	7	-
POLYDORA SPP	1	5	172	172	29	583	3	10	40	285	47	474
CLASS HIRUDINEA	3	5	33	80	16	352	1	1	44	44	7	-
SUBPHYLUM PYCNOGONIDA	6	29	42	669	116	397	1	3	109	109	18	666
ORDER STOMATOPODA	1	1	30	30	5	-	0	-	-	-	-	-
ORDER CUFACEA	1	1	44	44	8	-	1	2	71	71	12	-
CYCLASIS VARIANS	1	1	50	50	9	-	1	1	48	48	8	-
LEUCON AMERICANUS	1	1	30	30	5	-	0	-	-	-	-	-
GYROPOSTYLIS SMITHI	3	7	33	166	29	427	0	-	-	-	-	-
CYHADUSA COMPTA	0	-	-	-	-	-	1	1	40	40	7	-
ELASMOPOUS LEVIS	1	1	30	30	5	-	0	-	-	-	-	-
ORDER CAPRELLIDAE	4	10	38	167	34	329	4	57	134	978	195	243
UNIDENTIFIED MYSIDS	17	114	36	1333	261	228	12	316	41	4176	940	297
MYSIDOPSIS BIGELOWI	0	-	-	-	-	-	1	1	40	40	7	-
NEOMYSIS AMERICANA	0	-	-	-	-	-	2	9	69	269	45	496
ORDER DECAPODA	1	1	34	34	6	-	0	-	-	-	-	-
PALAEMONETES SPP	0	-	-	-	-	-	2	6	40	164	28	506
CRANGON SEPTENSPINOSA	2	4	49	89	17	424	1	19	705	705	116	608
SAGITTA ELEGANS	0	-	-	-	-	-	1	1	32	32	5	-
SAGITTA SPP	9	2069	109	24515	5506	266	11	5383	200	54185	12782	237
CLASS HOLOTUROIDEA	0	-	-	-	-	-	3	9	60	225	39	414
LEPTOSYNAPTA SPP	0	-	-	-	-	-	2	11	198	203	46	424
SUBORDER CORIDACEA	1	1	47	47	8	-	1	1	46	46	8	-
SUBORDER AEULIDACEA	1	10	335	335	57	583	1	4	141	141	23	608
INVERTEBRATE	1	1	33	33	6	-	1	2	84	84	14	608
INFRACORDER BRACHYURA	1	1	42	42	7	-	0	-	-	-	-	-
PHYLUM REMIPEDIA	2	5	49	125	23	445	0	-	-	-	-	-
FAMILY AMPHIARETIDAE	1	1	33	33	6	-	0	-	-	-	-	-
FAMILY PARANIDAE	0	-	-	-	-	-	2	6	48	182	31	494
FAMILY TERESELLIDAE	1	33	1120	1120	192	583	0	-	-	-	-	-
ORDER ISOPODA	0	-	-	-	-	-	4	6	36	92	19	317
LIRONECA OVALIS	4	9	48	108	26	291	6	13	40	172	38	284
IDOTEA BALTICA	6	11	37	167	32	281	12	38	34	429	88	234
EDOTEA TRILONA	9	28	34	335	71	254	1	1	43	43	7	-
ERICHSONELLA SP	1	1	45	45	8	-	3	5	37	91	17	374
ORDER AMPHIPODA	0	-	-	-	-	-	1	10	360	360	59	608
UNIDENTIFIED AMPHIPODA	18	208	37	1069	310	149	10	103	37	1739	304	293
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	1	2	56	56	10	-	2	3	46	61	12	428
	34	4283					37	12737				



TABLE 36 . (CONT.)

SPECIES	LOCATION 1						LOCATION 23					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	1	2	91	91	15	608
POLYDORA SPP	0	-	-	-	-	-	1	1	41	41	7	-
ORDER CAPRELLIDEA	0	-	-	-	-	-	2	7	46	217	36	510
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	1	1	50	50	8	-
LIFE STAGE: LARVAL												
CLASS SCYPHOZOA	3	6	49	83	21	335	3	11	91	193	41	357
ORDER CERIANTHARIA	4	11	80	101	30	280	5	40	138	760	135	336
CLASS POLYCHAETA	7	444	44	9067	1671	376	11	203	37	1895	479	236
UNIDENTIFIED INVERTEBRATE	0	-	-	-	-	-	1	1	40	40	7	-
LIFE STAGE: ZOEAL												
ORDER DECAPODA	1	1	33	33	6	-	0	-	-	-	-	-
PALAEONETES SPP	10	68	56	1004	187	275	11	119	122	987	226	190
HIPPOLYTE SPP.	2	4	54	83	17	416	7	45	41	845	150	337
CRANGON SEPTemspINOSA	24	733	34	6375	1512	206	25	901	40	7488	1884	209
UPOGEBIA AFFINIS	1	1	42	42	7	-	3	7	64	109	24	351
PAGURUS SP	1	3	85	85	15	583	1	2	64	64	11	-
LIBINIA SPP.	0	-	-	-	-	-	2	4	46	109	19	460
FAMILY XANTHIDAE	12	228	33	1373	420	184	14	432	41	4249	903	209
NEOPANOPE TEXANA	0	-	-	-	-	-	2	184	772	6032	996	542
INFRAORDER BRACHYURA	3	10	69	147	33	341	5	44	39	1264	209	475
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	1	41	41	7	-
INFRAORDER BRACHYURA	1	2	56	56	10	-	0	-	-	-	-	-
LIFE STAGE: EPITOKES												
NEREIS SPP.	0	-	-	-	-	-	1	4	141	141	23	608
	34	1511					37	2009				

TABLE 36. (CONT.)

SPECIES	LOCATION 3						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	6	61	37	1558	262	431	12	138	39	1936	408	296
MARGELOPSIS GIBBESI	1	5	173	173	29	600	0	-	-	-	-	-
SAKSIA TUBULOSA	0	-	-	-	-	-	1	1095	41626	41626	6753	616
SAKSIA SPP	7	1009	75	17268	3738	370	5	1079	6174	11984	2940	272
LUKRIOPSIS NUTRICOLA	7	36	48	377	90	249	7	87	12	1613	310	356
BOUGAINVILLEA SPP.	2	3	46	50	11	419	0	-	-	-	-	-
NEMOPSIS BACHEI	0	-	-	-	-	-	2	5	43	158	26	499
NATHREA OCTOPUNCTATA	3	9	46	219	38	435	4	46	33	810	165	361
OBELLIA SPP	2	3	46	46	11	418	0	-	-	-	-	-
PHIALIDIUM SPP	3	5	42	90	18	358	1	2	86	86	14	616
MEQUUREA SPP	2	27	460	500	112	419	4	31	118	362	97	315
ORDER SIPHONOPHORA	1	1	35	35	6	-	1	1	43	43	7	-
PHYLUM CIENOPHORA	2	23	364	455	96	421	0	-	-	-	-	-
MNERIOPSIS LEIDYI	8	569	65	5946	1474	259	6	3971	417	95484	16925	426
BEROE SPP	6	26	45	373	75	290	7	53	37	948	190	358
ORDER NUDIBRANCHIA	0	-	-	-	-	-	1	3	119	119	19	616
CLASS BIVALVIA	0	-	-	-	-	-	2	28	33	1030	167	597
FAMILY LOLIGINIDAE	0	-	-	-	-	-	1	6	213	213	35	616
PHYLUM ANNELIDA	0	-	-	-	-	-	1	1	43	43	7	-
CLASS POLYCHAETA	0	-	-	-	-	-	1	3	119	119	19	616
FAMILY SYLLIDAE	0	-	-	-	-	-	2	4	46	87	16	451
AUTOLYTUS SPP	1	1	46	46	8	-	4	8	38	162	30	356
POLYDORA SPP	1	1	46	46	8	-	3	3	35	45	11	348
CLASS HIRUDINEA	2	2	39	42	9	418	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	1	1	41	41	7	-	4	15	34	262	57	371
ORDER CUMACEA	0	-	-	-	-	-	2	13	133	346	60	473
LEUCON AMERICANUS	0	-	-	-	-	-	2	4	67	85	17	433
OSTEOSITYLIS SMITHI	2	6	45	173	30	489	3	4	31	87	16	390
CYADUSA COMPTA	2	6	50	180	31	484	0	-	-	-	-	-
MICRODEUTOPIUS	1	1	43	43	7	-	0	-	-	-	-	-
GRILLOFALPA	1	1	51	51	9	-	0	-	-	-	-	-
CERAPUS TUBULARIS	1	2	54	54	9	-	0	-	-	-	-	-
JASSA FALCATA	1	2	54	54	9	-	0	-	-	-	-	-
STENOIDE BREVICORNIS	1	2	54	54	9	-	0	-	-	-	-	-
ORDER CAPRELLIDEA	2	10	41	321	54	534	4	33	40	714	128	388
UNIDENTIFIED MYSIDS	8	147	35	2317	445	302	18	424	50	2593	691	163
MISIDOPSIS BIGELOWI	1	1	50	50	8	-	1	1	40	40	6	-
NEOMYSIS AMERICANA	3	19	80	520	88	459	0	-	-	-	-	-
INFRAORDER CARIDEA	0	-	-	-	-	-	1	1	40	40	6	-
FALAEONETES SPP	1	3	112	112	19	600	2	3	50	60	13	432
SAGITTA ELEGANS	2	278	4809	5195	1163	418	3	951	5455	23740	4051	426
SAGITTA SPP	8	1219	81	17344	3479	285	10	4641	85	90136	17726	382
LEPTOSYNAPTA SPP	2	4	43	90	16	445	1	1	40	40	6	-
SUBORDER AEOLIDACEA	0	-	-	-	-	-	1	9	323	323	52	616
INVERTEBRATE	0	-	-	-	-	-	1	2	60	60	10	-
PLCTINARIA GOULDII	1	1	43	43	7	-	1	4	161	161	26	616
FAMILY AMPHARETIDAE	0	-	-	-	-	-	1	9	343	343	56	616
POMOPTERIS HELGOLANDICA	1	1	46	46	8	-	0	-	-	-	-	-
ORDER ISOPODA	1	5	180	180	30	600	2	2	33	43	9	-
LIRONECA OVALIS	2	3	50	51	12	418	1	1	45	45	7	-
IDOTEA BALTICA	15	135	45	1029	256	189	9	148	37	2813	513	346
IDOTEA TRILOBA	2	3	45	51	11	419	3	38	323	699	139	366
ERICHSONELLA SP	0	-	-	-	-	-	1	2	74	74	12	-
UNIDENTIFIED AMPHIPODA	9	26	37	231	59	228	18	216	35	3226	611	283
AMPELISCA SPP.	1	1	50	50	8	-	1	1	40	40	6	-
LIFE STAGE: JUVENILES												
CALLINECTES RAPIDUS	1	1	46	46	8	-	0	-	-	-	-	-
	36	3658					38	13087				

TABLE 36. (CONT.)

SPECIES	LOCATION 3						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
AUTOLYTUS SPP	1	1	33	33	6	-	1	1	41	41	7	-
CALIGUS SPP	0	-	-	-	-	-	1	2	60	60	10	-
IDOTEA BALTICA	3	5	32	108	20	387	1	2	60	60	10	-
ERICHSONELLA SP	0	-	-	-	-	-	1	1	35	35	6	-
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	2	2	31	41	8	-
LIFE STAGE: LARVAL												
ORDER CERIANTHARIA	4	54	97	968	194	361	4	78	325	1515	276	354
CLASS POLYCHAETA	7	39	32	547	124	316	15	263	46	3077	600	228
PARANATIS KOSTERIENSIS	0	-	-	-	-	-	1	26	976	976	158	616
LIFE STAGE: ZOEAL												
ORDER DECAPODA	1	1	46	46	8	-	0	-	-	-	-	-
PALAEONETES SPP	11	89	32	917	216	243	13	308	40	6612	1117	362
HIPPOLYTE SPP.	3	17	108	406	71	410	7	24	43	426	76	322
CRANGON SEPTEMSPINOSA	29	1479	41	9836	2648	179	26	1914	43	7934	2517	131
UPOGEBIA AFFINIS	9	32	48	227	65	202	6	16	40	213	44	279
EMERITAS TALPOIDA	1	1	50	50	8	-	0	-	-	-	-	-
PAGURUS SP	3	9	73	136	33	348	6	52	41	645	148	283
LIBINIA SPP.	4	8	54	129	26	316	4	40	40	1322	214	542
CALLINECTES SAPIDUS	1	8	273	273	46	600	0	-	-	-	-	-
FAMILY XANTHIDAE	8	1450	199	25185	4775	329	17	23868	35	749298	121183	508
PANOPEUS HERBSTII	3	53	48	1674	280	526	0	-	-	-	-	-
NEOPANOPE TEXANA	9	708	540	7229	1626	230	2	17	273	380	75	436
RHITHROPANOPEUS HARRISI	2	10	32	343	57	550	1	1	50	50	8	-
INFRAORDER BRACHYURA	4	24	138	343	74	309	6	1819	152	67438	10933	601
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	3	5	50	90	19	349	1	1	34	34	6	-
LIFE STAGE: EPITOKES												
CLASS POLYCHAETA	1	1	32	32	5	-	0	-	-	-	-	-
NEREIS SPP	1	2	54	54	9	-	0	-	-	-	-	-
	36	3998					38	28433				

TABLE 36. (CONT.)

SPECIES	LOCATION 4						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	5	46	34	625	134	293	6	84	37	1429	294	351
SARSIA SPP	6	1892	2750	14798	4068	215	6	2062	1102	26786	6341	308
TURRITOPSIS NUTRICOLA	2	60	165	1277	261	435	4	67	148	714	187	278
RATHKEA OCTOPUNCTATA	1	2	53	53	11	490	3	33	37	714	146	436
MNEMIOPSIS LEIDYI	6	1841	82	26170	6250	339	6	1116	148	11111	2745	246
CREPIDULA SPP.	1	2	47	47	10	-	0	-	-	-	-	-
ORDER NUDEBRANCHIA	1	6	138	138	28	490	0	-	-	-	-	-
CLASS BIVALVIA	0	-	-	-	-	-	1	6	145	145	30	490
FAMILY LOLLIGINIDAE	0	-	-	-	-	-	1	2	57	57	12	490
CLASS POLYCHAETA	1	2	47	47	10	-	1	12	299	299	61	490
FAMILY PHYLLODOCIDAE	1	2	47	47	10	-	0	-	-	-	-	-
FAMILY SYLLIDAE	2	18	151	276	63	354	2	20	138	351	76	372
NEREIS SPP	0	-	-	-	-	-	1	6	149	149	30	490
FAMILY CAPITELLIDAE	1	19	453	453	92	490	3	47	89	761	163	347
FAMILY SPIONIDAE	0	-	-	-	-	-	1	2	37	37	8	-
POLYDORA SPP	1	4	92	92	19	490	0	-	-	-	-	-
CLASS HIRUDINEA	1	4	106	106	22	490	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	1	2	38	38	8	-	4	32	57	443	96	300
CALIGUS SPP	0	-	-	-	-	-	1	2	36	36	7	-
CYCLASPIS VARIANS	1	2	46	46	9	-	0	-	-	-	-	-
LEUCON AMERICANUS	1	2	46	46	9	-	2	17	50	351	72	431
OXYUROSTYLIS SMITHI	1	6	151	151	31	490	3	28	100	414	90	325
ORDER CAPRELLIDEA	2	10	46	187	39	401	8	137	45	886	264	193
UNIDENTIFIED MYSIDS	7	41	36	317	84	204	14	258	41	1841	462	179
PALAEOMNETES SPP	0	-	-	-	-	-	2	20	128	351	75	377
CRANGON SEPTHEMSPINOSA	1	2	53	53	11	490	1	7	159	159	32	490
SAGITTA SPP	6	1406	2063	9507	2876	205	6	1938	381	24869	6085	314
INVERTEBRATE	1	6	151	151	31	490	0	-	-	-	-	-
PECTINARIA GOULDII	0	-	-	-	-	-	1	15	351	351	72	490
TOMOPTERIS HELGOLANDICA	1	2	53	53	11	490	0	-	-	-	-	-
ORDER ISOPODA	0	-	-	-	-	-	5	48	57	714	149	311
LIRONECA OVALIS	1	2	47	47	10	-	1	16	385	385	79	490
IDOTEA BALTICA	6	45	41	615	130	286	11	196	34	2365	505	258
EDOTEA TRILOBA	1	15	357	357	73	490	4	174	45	3395	694	399
ERICHSONELLA SP	1	2	38	38	8	-	1	6	152	152	31	490
UNIDENTIFIED AMPHIPODA	7	79	63	923	198	252	15	300	34	1771	426	142
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	1	2	38	38	8	-	2	3	37	44	11	340
	24	5521					24	6653				

TABLE 36. (CONT.)

SPECIES	LOCATION 4						LOCATION 17					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
IDOTEA BALTICA	1	3	69	69	14	490	3	25	57	394	85	339
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	1	6	148	148	30	490
LIFE STAGE: LARVAL												
CLASS SCYPHOZOA	4	30	53	308	82	275	0	-	-	-	-	-
ORDER CERANTHARIA	6	264	175	3217	721	274	5	326	370	3632	896	275
CLASS POLYCHAETA	7	413	88	6641	1382	335	8	208	42	1978	477	229
LIFE STAGE: ZOEAL												
PALAEMONETES SPP	10	184	36	1538	378	206	9	162	124	1067	284	175
HIPPOLYTE SPP.	4	31	41	615	125	400	3	50	149	711	160	318
CRANGON SEPTemspINOSA	20	5183	34	20000	6015	116	22	3854	57	14857	4235	110
UPOGEBIA AFFINIS	4	11	38	93	27	244	6	126	114	1576	348	276
PAGURUS SP	7	88	38	1270	265	301	8	145	57	1067	298	205
LIBINIA SPP.	2	10	47	189	39	400	5	50	57	460	118	235
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	2	45	45	9	-
FAMILY XANTHIDAE	17	4446	150	30462	8092	182	17	12578	152	36650	15004	119
NEOPANOPE TEXANA	1	6	151	151	31	490	0	-	-	-	-	-
INFRAORDER BRACHYURA	2	299	3492	3692	1015	339	5	108	57	1391	316	292
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	0	-	-	-	-	-	2	9	57	149	32	374
INFRAORDER BRACHYURA	0	-	-	-	-	-	1	5	128	128	26	490
	24	10968					24	17655				

TABLE 36. (CONT.)

SPECIES	LOCATION 18						LOCATION 20					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	6	105	38	1469	322	306	4	31	35	247	72	234
SARSIA SPP	4	2307	3204	39245	8377	363	2	66	394	794	204	309
TURRITOPSIS MUTRICOLA	4	127	158	2833	521	409	2	7	39	80	20	310
BOUGAINVILLIA SPP.	0	-	-	-	-	-	1	3	47	47	11	424
NEMOPSIS BACHEI	1	1	45	45	8	-	1	4	69	69	16	424
RATHKEA OCTOPUNCTATA	1	4	113	113	20	566	1	7	124	124	29	424
PHIALIDIUM SPP	1	3	90	90	16	566	0	-	-	-	-	-
AEQUOREA SPP	4	14	44	240	48	335	4	101	47	1080	281	278
PHYLUM CTENOPHORA	2	20	303	323	77	394	2	51	362	551	151	298
MNEMIOPSIS LEIDYI	7	2903	247	38615	8230	284	2	591	4000	6641	1779	301
BEROE SPP	6	36	44	480	114	317	6	138	47	1523	371	269
CLASS GASTROPODA	1	7	226	226	40	566	0	-	-	-	-	-
CLASS BIVALVIA	2	18	226	346	72	403	0	-	-	-	-	-
CLASS POLYCHAETA	0	-	-	-	-	-	1	199	3582	3582	844	424
FAMILY SYLLIDAE	2	4	43	83	16	414	1	2	43	43	10	424
AUTOLYTUS SPP	1	1	38	38	7	-	0	-	-	-	-	-
FAMILY SPIONIDAE	0	-	-	-	-	-	1	2	43	43	10	424
CLASS HIRUDINEA	1	1	43	43	8	-	0	-	-	-	-	-
PHYLUM ARTHROPODA	1	3	87	87	15	566	0	-	-	-	-	-
SUBPHYLUM PYCNOGONIDA	4	22	24	479	89	402	1	2	39	39	9	424
ORDER CUMACEA	1	4	113	113	20	566	0	-	-	-	-	-
CYCLASPIS VARIANS	0	-	-	-	-	-	2	8	43	98	25	315
LEUCON AMERICANUS	1	31	1000	1000	177	566	2	4	32	43	12	295
OXYUROSTYLIS SMITHI	1	3	87	87	15	566	0	-	-	-	-	-
CYMADESA COMPTA	0	-	-	-	-	-	1	2	39	39	9	424
ELASMOPUS LEVIS	0	-	-	-	-	-	1	4	78	78	18	424
ORDER CAPRELLIDEA	3	12	41	173	42	354	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	14	465	34	9057	1625	350	7	865	294	6368	1675	194
MYSIDOPSIS BIGELOWI	1	1	30	30	5	-	1	2	39	39	9	424
CRANGON SEPTEMPINOSA	1	4	113	113	20	566	1	5	86	86	20	424
CALLINECTES SAPIDUS	0	-	-	-	-	-	2	4	32	43	12	295
SAGITTA SPP	10	2751	24	21132	6272	228	8	7528	441	49156	15292	203
CLASS HOLOTHUROIDEA	0	-	-	-	-	-	3	8	35	69	20	242
LEPTOSYNAPTA SPP	0	-	-	-	-	-	1	4	69	69	16	424
SUBORDER AEOLIDACEA	0	-	-	-	-	-	1	2	39	39	9	424
INVERTEBRATE	2	7	45	167	30	458	0	-	-	-	-	-
PINNIXA CHAETOPTERANA	0	-	-	-	-	-	1	2	40	40	9	424
PECTINARIA GOULDII	1	1	43	43	8	-	0	-	-	-	-	-
LIRONECA OVALIS	3	5	43	70	17	323	0	-	-	-	-	-
IDOTEA METALLICA	0	-	-	-	-	-	1	2	35	35	8	-
IDOTEA BALTICA	6	18	37	167	43	242	2	15	78	187	47	318
EDOTEA TRILOBA	1	3	85	85	15	566	0	-	-	-	-	-
ERICHSONELLA SP	1	2	67	67	12	566	1	2	39	39	9	424
UNIDENTIFIED AMPHIPODA	10	75	41	693	176	233	2	5	36	50	14	295
AMPELISCA SPP.	2	4	43	83	16	414	3	18	40	195	49	276
LIFE STAGE: JUVENILES												
CREPIDULA SPP.	0	-	-	-	-	-	1	4	64	64	15	424
	32	8961					18	9687				

TABLE 36. (CONT.)

SPECIES	LOCATION 18						LOCATION 20					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
UNIDENTIFIED MYSIDS	1	1	47	47	8	-	0	-	-	-	-	-
IDOTEA BALTICA	2	3	41	43	10	394	1	3	47	47	11	424
AMPELISCA SPP.	1	6	182	182	32	566	0	-	-	-	-	-
LIFE STAGE: LARVAL												
ORDER CERANTHARIA	3	437	1000	6667	1599	366	3	32	42	296	86	271
CLASS POLYCHAETA	9	259	37	3019	698	269	4	365	36	3457	946	259
LIFE STAGE: ZOEAL												
SUBORDER NATANTIA	1	1	30	30	5	-	0	-	-	-	-	-
PALAEONETES SPP	9	56	40	497	120	213	3	75	200	794	209	265
HIPPOLYTE SPP.	4	20	41	497	88	445	1	2	32	32	8	-
CRANGON SEPTHEMSPINOSA	22	1833	70	15094	3669	200	11	1493	41	11776	3023	202
UPOGEBIA AFFINIS	7	37	30	497	100	272	0	-	-	-	-	-
PAGURUS SP	4	11	43	135	33	289	1	4	80	80	19	424
LIBINIA SPP.	3	18	40	497	88	485	0	-	-	-	-	-
FAMILY XANTHIDAE	16	3236	37	18204	4800	148	2	901	5561	10660	2765	307
NEOPANOPE TEXANA	2	76	1210	1220	299	393	2	44	234	560	140	317
INFRAORDER BRACHYURA	4	32	85	479	101	314	1	60	1075	1075	253	424
LIFE STAGE: MEGALOPAL												
CALLINECTES SAPIDUS	0	-	-	-	-	-	3	9	39	80	22	244
LIFE STAGE: EPITOKES												
NEREIS SPP	0	-	-	-	-	-	1	4	78	78	18	424
	32	6026					18	2995				

TABLE 36. (CONT.)

SPECIES	LOCATION 2						LOCATION 21					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	4	43	34	336	97	226	6	29	39	324	78	272
MARGELOPSIS GIBBESI	0	-	-	-	-	-	1	1	39	39	6	-
SARSIA SPP	0	-	-	-	-	-	8	1237	42	14606	3663	296
TURRITOPSIS NUTRICOLA	1	7	80	80	23	346	6	550	258	6685	1644	299
NEMOPSIS BACHEI	0	-	-	-	-	-	2	12	46	415	68	549
RATHKEA OCTOPUNCTATA	0	-	-	-	-	-	4	22	110	332	70	320
PHIALIDIUM SPP	2	6	33	40	14	235	0	-	-	-	-	-
AEQUOREA SPP	4	27	40	150	48	177	3	12	41	359	59	493
PHYLUM CTENOPHORA	2	97	514	654	229	236	2	26	350	630	117	442
MNEMIOPSIS LEIDYI	4	1009	694	5738	2045	203	6	1102	83	20000	4083	370
BEROE SPP	6	94	34	519	187	198	5	19	46	413	71	372
AUTOLYTUS SPP	0	-	-	-	-	-	2	3	38	90	16	460
NEREIS SPP	0	-	-	-	-	-	1	1	38	38	6	-
POLYDORA SPP	0	-	-	-	-	-	2	2	38	42	9	425
CLASS HIRUDINEA	0	-	-	-	-	-	1	1	46	46	8	-
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	4	44	211	718	142	325
ORDER CUMACEA	0	-	-	-	-	-	1	2	90	90	15	608
OXYUROSTYLIS SMITHI	1	4	46	46	-	346	2	7	39	235	39	526
MICRODEUTOPUS	-	-	-	-	-	-	-	-	-	-	-	-
GRYLLOTALPA	1	3	35	35	10	346	0	-	-	-	-	-
COROPHIUM SPP	0	-	-	-	-	-	1	1	41	41	7	-
ORDER CAPRELLIDEA	1	8	96	96	28	346	1	6	221	221	36	608
UNIDENTIFIED MYSIDS	4	268	34	1531	587	219	13	282	42	3259	673	239
NEOMYSIS AMERICANA	1	3	40	40	12	346	1	5	169	169	28	608
PALAEMONETES SPP	0	-	-	-	-	-	2	3	55	56	13	424
CRANGON SEPTemspINOSA	1	56	672	672	194	346	0	-	-	-	-	-
SAGITTA ELEGANS	1	3	35	35	10	346	0	-	-	-	-	-
SAGITTA SPP	4	1143	205	6890	2571	225	13	4790	37	106853	18010	376
CLASS HOLOTHUROIDEA	2	12	46	93	29	249	1	1	41	41	7	-
LEPTOSYNAPTA SPP	2	7	40	46	17	234	0	-	-	-	-	-
FAMILY LILJEBORGIIDAE	0	-	-	-	-	-	1	4	159	159	26	608
TOMOPTERIS HELGOLANDICA	0	-	-	-	-	-	1	4	166	166	27	608
PODARKE OBSCURA	0	-	-	-	-	-	1	2	70	70	12	-
ORDER ISOPODA	0	-	-	-	-	-	1	6	231	231	38	608
IDOTEA BALTICA	3	11	35	50	20	184	6	90	42	1881	327	365
EDOTEA TRILOBA	1	4	47	47	14	346	2	45	744	939	194	427
ERICHSONELLA SP	0	-	-	-	-	-	2	7	42	221	37	518
UNIDENTIFIED AMPHIPODA	2	23	35	236	68	301	20	162	35	1105	268	165
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	2	76	76	12	608
	12	2828					37	8484				



TABLE 36. (CONT.)

SPECIES	LOCATION 2						LOCATION 21					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
AUTOLYTUS SPP	0	-	-	-	-	-	1	2	90	90	15	608
SUBPHYLUM PYCNOGONIDA	0	-	-	-	-	-	1	1	55	55	9	-
IDOTEA BALTICA	0	-	-	-	-	-	2	3	42	55	11	428
LIFE STAGE: LARVAL												
CLASS SCYPHOZOA	0	-	-	-	-	-	2	7	90	185	33	450
ORDER CERIANTHARIA	0	-	-	-	-	-	4	133	879	1852	409	307
CLASS POLYCHAETA	4	488	651	2105	811	166	7	88	42	1922	338	384
LIFE STAGE: ZOEAL												
PALAEONETES SPP	0	-	-	-	-	-	7	64	56	891	200	311
HIPPOLYTE SPP.	0	-	-	-	-	-	2	4	39	93	16	460
CRANGON SEPTESPINOSA	7	324	35	1471	504	156	23	1953	37	15475	3708	190
UPOGEBIA AFFINIS	0	-	-	-	-	-	5	60	79	1056	208	344
PAGURUS SP	0	-	-	-	-	-	4	64	141	1167	234	366
LIBINIA SPP.	0	-	-	-	-	-	4	19	42	339	67	361
FAMILY XANTHIDAE	0	-	-	-	-	-	14	1529	42	13425	3051	200
NEOPANOPE TEXANA	2	14	50	120	36	256	0	-	-	-	-	-
INFRAORDER BRACHYURA	0	-	-	-	-	-	4	36	122	552	116	326
	12	826					37	3964				

<sup>a</sup> See figures 4 and 7. In March location 2 was dropped, 4 and 17 added, and the location of 18 and 20 changed.

Table 37 . Mean abundance (n/1000m<sup>3</sup>) of selected and total macrozooplankton from daytime collections taken at locations along western Barnegat Bay (1, 3, 4, 17, 18, 19, 21, 23)<sup>a</sup> from September through December 1975 and March through August 1976.

	STATION							
	1	3	4	17	18	19	21	23
Sarsia spp.	590	1009	1892	2062	2307	2174	1237	2294
Mnemiopsis leidyi	1041	569	1841	1116	2903	3971	1102	2373
Sagitta spp.	2069	1487	1406	1938	2751	5595	4790	5383
Total <sup>b</sup> : No Determination	4281	3657	5519	6650	8961	13087	8482	12734
Total: Gravid	0	6	3	31	10	8	6	11
Polychaete larvae	444	39	413	208	259	263	88	203
Total: Larvae	451	93	707	534	696	367	228	252
Palaemonetes spp. zoeae	68	89	184	162	56	308	64	119
Crangon septemspinosus zoeae	733	1479	5183	3854	1833	1914	1953	901
Xanthidae zoeae	228	2221	4452	12578	3312	23886	1529	616
Total: Zoeae	1048	3889	10258	17075	5320	28059	3729	1738
Total: Megalopae	2	5	-	14	-	1	-	1
Total: Macrozooplankton	5782	7650	16487	24304	14987	41521	12445	14736

<sup>a</sup> See Figure 4 and 7.

<sup>b</sup> Adult and juvenile stages.

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TABLE 38. FREQUENCY OF OCCURRENCE AND MEAN DENSITIES (n/1000m<sup>3</sup>) FOR NIGHT COLLECTIONS OF MACROZOOPLANKTON COLLECTED IN WESTERN BARNEGAT BAY (3, 4, 17 19)\* FROM APRIL THROUGH AUGUST 1976.

SPECIES	LOCATION 3						LOCATION 4					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
CLASS HYDROZOA	0	-	-	-	-	-	1	4	41	41	13	316
SARSTIA SPP	2	60	286	315	127	211	0	-	-	-	-	-
TUBERITOPSIS NUTRICOLA	3	316	602	1905	617	195	3	380	458	2807	877	231
MYNCTIS BACHEI	0	-	-	-	-	-	1	53	530	530	168	316
MYNCTOPSIS LEIDYI	2	4490	12932	31967	10475	233	0	-	-	-	-	-
ORDER MUDIBRANCHIA	1	6	60	60	19	316	0	-	-	-	-	-
CLASS POLYCHAETA	1	65	645	645	204	316	0	-	-	-	-	-
FAMILY PHYLLODOCIDAE	2	9	33	60	21	222	0	-	-	-	-	-
FAMILY POLYDORAE	0	-	-	-	-	-	1	6	55	55	17	316
FAMILY SYLLIDAE	1	131	1311	1311	415	316	2	395	627	3320	1047	265
MYNCTIS SPP	1	66	656	656	207	316	0	-	-	-	-	-
FAMILY SPIONIDAE	1	3	33	33	10	316	0	-	-	-	-	-
POLYDORA SPP	1	7	66	66	21	316	1	23	234	234	74	316
DICENTRA	0	-	-	-	-	-	1	8	76	76	24	316
DIETHELYM PYCNOGONIDA	2	255	645	1905	614	241	2	125	76	1176	358	295
DIETHELYM VARIANS	2	78	143	634	201	258	2	138	117	1260	396	282
DIETHELYM AMERICANUS	5	1403	964	5714	2106	150	6	1378	444	5380	1839	133
DIETHELYM POLYTHI	1	7	66	66	21	316	0	-	-	-	-	-
DIETHELYM SMITHI	9	11336	429	47097	15586	137	7	4820	63	24567	8348	173
MICROSCUTOPUS	6	5545	2046	21936	7309	132	0	-	-	-	-	-
CEVILLIOTALPA	1	96	964	964	305	316	0	-	-	-	-	-
UNCICOLA IRFORATA	5	4085	693	19048	6894	169	0	-	-	-	-	-
COPOPHIUM SPP	2	1145	1928	9524	3006	262	0	-	-	-	-	-
EPICHTHOMIUS SPP.	1	110	1102	1102	348	316	0	-	-	-	-	-
FAMILY GAMMARIDAE	1	65	645	645	204	316	0	-	-	-	-	-
GAMMARUS HUCRONATUS	1	29	286	286	90	316	0	-	-	-	-	-
MARINOGAMMARUS SPP	1	14	143	143	45	316	0	-	-	-	-	-
JASSA FALCATA	2	112	157	964	303	271	0	-	-	-	-	-
GLASGOPUS LEVIS	3	321	952	1290	524	163	0	-	-	-	-	-
MELITA NITIDA	3	636	952	4444	1396	219	0	-	-	-	-	-
MONOCULODES EDWARDSI	1	14	143	143	45	316	0	-	-	-	-	-
MICROPHOTOPUS PANEYI	1	63	634	634	200	316	0	-	-	-	-	-
PARAPHOXUS SPINOSUS	2	192	952	964	404	211	0	-	-	-	-	-
FAMILY STENOTHOIDAE	5	1220	75	5714	1879	154	4	309	153	1060	467	151
ORDER CAPRELLIDAE	2	7902	27212	51803	17638	223	10	9875	63	21417	8630	87
UNIDENTIFIED MYGIDS	1	95	952	952	301	316	0	-	-	-	-	-
MYNCTOPSIS BIGELOWI	8	13041	1851	33354	14866	114	0	-	-	-	-	-
MYNCTIS AMERICANA	2	20	40	157	50	253	0	-	-	-	-	-
PALAEONETES VULGARIS	2	11	33	75	25	230	2	77	305	468	167	217
PALAEONETES SPP	5	62	107	143	66	106	1	6	58	58	18	316
CRANGON SEPTEMSPINOSA	1	16	164	164	52	316	0	-	-	-	-	-
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	6	63	63	20	316
SAGITTA SPP	1	18	179	179	57	316	0	-	-	-	-	-
LEPTOSYNAPTA SPP	2	7	33	40	15	212	0	-	-	-	-	-
INVERTEBRATE	1	4	40	40	13	316	0	-	-	-	-	-
SCOLEPLOS SPP	0	-	-	-	-	-	1	63	630	630	199	316
PECTINAFIA GOULDII	0	-	-	-	-	-	2	129	630	664	273	211
FAMILY AMPHARETIDAE	1	95	952	952	301	316	0	-	-	-	-	-
UNCICOLA IRFORATA	1	12	119	119	38	316	1	23	234	234	74	316
PODARKE OBSCURA	1	65	645	645	204	316	1	4	41	41	13	316
LIPONECA OVALIS	7	1774	964	4762	1643	93	3	251	409	1575	505	201
IDOTEA BALTICA	6	1054	602	3810	1330	126	5	236	76	1060	407	173
ECOTEA TRILOBA	1	6	60	60	19	316	1	47	458	468	148	316
ERICHSONELLA SP	6	3244	143	16393	5217	161	9	10171	31	37485	14764	145
UNIDENTIFIED AMPHIPODA	6	1597	264	7619	2591	162	0	-	-	-	-	-
AMPELISCA SPP.	10	60947	-	-	-	-	10	28586	-	-	-	-
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	5	47	75	121	52	110	7	60	55	133	48	80

TABLE 38. (CONT.)

SPECIES	LOCATION 3						LOCATION 4					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
FAMILY SYLLIDAE	0	-	-	-	-	-	1	66	664	664	210	316
MICRODEUTOPUS												
GRYLLOTALPA	3	416	964	1905	707	170	0	-	-	-	-	-
ERICHTHONIUS SPP.	2	192	952	964	404	211	0	-	-	-	-	-
ELASMOPUS LEVIS	1	96	964	964	305	316	0	-	-	-	-	-
MICROPROTOPUS RANEYI	1	95	952	952	301	316	0	-	-	-	-	-
ORDER CAPRELLIDEA	1	129	1290	1290	408	316	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	3	213	472	1000	365	172	1	8	76	76	24	316
NEOMYSIS AMERICANA	1	3	33	33	10	316	1	30	301	301	95	316
CRANGON SEPTEMSPINOSA	1	10	99	99	31	316	0	-	-	-	-	-
IDOTEA BALTICA	2	100	36	964	304	304	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	0	-	-	-	-	-	1	53	530	530	168	316
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	7	104	396	645	227	218	3	237	63	2000	627	264
LIFE STAGE: ZOEAL												
PALAEMONETES SPP	3	1493	3175	8525	2806	188	5	1384	305	9959	3076	222
HIPPOLYTE SPP.	0	-	-	-	-	-	1	31	305	305	96	316
CRANGON SEPTEMSPINOSA	7	5967	645	25143	9356	157	6	4523	3699	12283	4764	105
UPOGEBIA AFFINIS	4	575	952	2540	860	150	3	103	76	702	225	219
PAGURUS SP	2	195	634	1311	440	226	4	474	153	1992	804	170
FAMILY XANTHIDAE	2	1174	2556	9180	2926	249	8	17485	311	84409	29821	171
PANOPEUS HERBSTII	1	127	1269	1269	401	316	0	-	-	-	-	-
NEOPANOPE TEXANA	4	20638	5783	97419	40308	195	1	12	117	117	37	316
RHITHROPANOPEUS HARRISI	1	65	645	645	204	316	0	-	-	-	-	-
INFRAORDER BRACHYURA	1	63	634	634	200	316	2	486	2205	2656	1030	212
LIFE STAGE: MEGALOPAL												
INFRAORDER BRACHYURA	0	-	-	-	-	-	1	25	250	250	79	316
LIFE STAGE: EPITOKES												
HEREIS SPP	2	20	33	164	52	263	2	33	76	250	80	246
	10	31672					10	24949				

TABLE 38. (CONT.)

SPECIES	LOCATION 17						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: NO DETERMINATION												
SARSIA SPP	0	-	-	-	-	-	1	24	240	240	76	316
TURRITOPSIS NUTRICOLA	4	189	39	1000	336	178	2	628	1038	5246	1655	263
NEMOPSIS BACHEI	1	4	39	39	12	316	0	-	-	-	-	-
MNEMIOPSIS LEIDYI	2	2538	12625	12750	5350	211	2	4857	20645	27925	10382	214
ORDER NEMATODA	1	12	120	120	38	316	0	-	-	-	-	-
CLASS BIVALVIA	2	32	106	217	73	226	0	-	-	-	-	-
CLASS POLYCHAETA	0	-	-	-	-	-	2	56	240	323	120	214
FAMILY PHYLLODOCIDAE	0	-	-	-	-	-	1	5	47	47	15	316
NEREIS SPP	1	129	1285	1285	406	316	1	8	82	82	26	316
FAMILY CAPITELLIDAE	5	630	285	4069	1271	202	0	-	-	-	-	-
FAMILY SPIONIDAE	0	-	-	-	-	-	2	48	60	422	133	275
DIOPATRA	2	43	78	352	111	259	1	9	94	94	30	316
CLASS OLIGOCHAETA	0	-	-	-	-	-	1	30	299	299	95	316
SUBPHYLUM PYCNOGONIDA	2	60	250	352	129	215	3	97	82	696	219	227
CALIGUS SPP	1	12	120	120	38	316	0	-	-	-	-	-
ORDER CUMACEA	1	24	240	240	76	316	0	-	-	-	-	-
CYCLASPIS VARIANS	0	-	-	-	-	-	3	115	54	758	249	217
LEUCON AMERICANUS	6	2278	106	15465	4897	215	6	1746	60	9956	3389	194
OXYUROSTYLIS SMITHI	7	2070	71	10281	3176	153	9	2061	215	5689	1980	96
ORDER CAPRELLIDEA	3	630	1190	3855	1242	197	3	437	94	3934	1233	283
UNIDENTIFIED MYSIDS	10	7926	71	32119	11574	146	9	4717	379	18488	5832	124
FAMILY PALAEMONIDAE	0	-	-	-	-	-	1	4	44	44	14	316
PALAEMONETES VULGARIS	4	28	37	120	42	153	2	38	60	323	102	266
PALAEMONETES SPP	1	7	71	71	22	316	1	4	42	42	13	316
CRANGON SEPTemspINOSA	5	38	39	186	58	153	4	30	44	108	41	140
UPOGEBIA AFFINIS	1	31	313	313	99	316	0	-	-	-	-	-
LEPTOSYNAPTA SPP	1	4	37	37	12	316	1	8	82	82	26	316
SUBORDER AEOLIDACEA	1	129	1285	1285	406	316	0	-	-	-	-	-
INFRAORDER BRACHYURA	1	31	313	313	99	316	0	-	-	-	-	-
SCOLOPLOS SPP	1	4	37	37	12	316	1	8	84	84	27	316
PECTINARIA GOULDII	1	35	352	352	111	316	0	-	-	-	-	-
PODARKE OBSCURA	1	31	313	313	99	316	1	9	94	94	30	316
ORDER ISOPODA	1	36	359	359	114	316	2	159	299	1290	408	257
IDOTEA BALTICA	7	430	71	2379	721	168	5	628	42	2787	1057	168
EDOTEA TRILOBA	5	1073	938	5948	1819	170	7	879	42	3934	1303	148
ERICHSONELLA SP	1	3	27	27	9	316	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	10	18809	783	92788	31031	165	9	10305	492	27299	10495	102
LIFE STAGE: JUVENILES												
CALLINECTES SAPIDUS	5	85	54	241	102	121	5	84	42	328	115	137
	10	37348					10	26995				

TABLE 38. (CONT.)

SPECIES	LOCATION 17						LOCATION 19					
	FREQ	MEAN	MIN	MAX	SDEV	CVAR	FREQ	MEAN	MIN	MAX	SDEV	CVAR
LIFE STAGE: GRAVID												
LEUCON AMERICANUS	2	150	313	1190	378	252	1	5	54	54	17	316
OXYUROSTYLIS SMITHI	1	31	313	313	99	316	0	-	-	-	-	-
ORDER CAPRELLIDEA	1	129	1285	1285	406	316	0	-	-	-	-	-
UNIDENTIFIED MYSIDS	2	82	71	749	235	287	2	23	44	189	60	257
CRANGON SEPTemspINOSA	3	21	53	107	37	175	0	-	-	-	-	-
UNIDENTIFIED AMPHIPODA	4	2253	109	15465	5055	224	4	389	54	1967	709	182
LIFE STAGE: LARVAL												
CLASS POLYCHAETA	4	259	120	1190	445	172	1	5	54	54	17	316
LIFE STAGE: ZOEAL												
PALAEMONETES SPP	8	3368	109	10281	3865	115	9	2336	60	11130	3355	144
CRANGON SEPTemspINOSA	7	3080	313	8913	3562	116	6	2785	1013	12395	3948	142
UPOGEBIA AFFINIS	1	212	2115	2115	669	316	3	169	338	696	287	170
PAGURUS SP	2	136	71	1285	404	298	4	331	161	1422	577	174
LIBINIA SPP	0	-	-	-	-	-	2	218	94	2087	657	301
CALLINECTES SAPIDUS	0	-	-	-	-	-	1	44	435	435	138	316
FAMILY XANTHIDAE	10	22935	2994	60402	20622	90	10	18916	719	43130	17660	93
INFRAORDER BRACHYURA	1	129	1285	1285	406	316	1	131	1312	1312	415	316
LIFE STAGE: MEGALOPAL												
INFRAORDER BRACHYURA	1	25	250	250	79	316	2	39	108	283	92	236
LIFE STAGE: EPITOKES												
NEREIS SPP	9	2421	39	15509	4995	206	8	4455	82	32903	10474	235
	10	35230					10	29846				

<sup>a</sup> See Figure 1.<sup>b</sup> Form inadequately preserved at this station.

TABLE 39. MEAN DENSITIES (n/m<sup>3</sup>) AND BIOMASS (mg/m<sup>3</sup>) OF ICHTHYOPLANKTON BY YEAR COLLECTED IN WESTERN BARNEGAT BAY.

LOCATION <sup>a</sup>	1	2	3	4	17	18
TEMPERATURE: AIR	1.5 - 28.0	1.0 - 27.0	1.5 - 30.5	9.0 - 31.0	9.0 - 29.0	1.5 - 28.0
SURFACE	5.2 - 26.7	5.8 - 20.0	4.3 - 26.7	7.4 - 27.2	9.5 - 30.5	6.0 - 29.0
BOTTOM	5.0 - 25.7	6.0 - 20.0	4.2 - 27.0	7.8 - 27.2	10.4 - 30.7	6.3 - 27.7
SALINITY: SURFACE	6.0 - 23.0	19.5 - 22.5	19.0 - 28.5	12.0 - 28.5	18.0 - 28.0	16.0 - 28.5
BOTTOM	12.0 - 27.0	21.0 - 22.0	22.0 - 28.5	22.0 - 28.5	20.5 - 28.6	21.1 - 29.0
OXYGEN: SURFACE	6.4 - 15.0	8.4 - 14.8	6.6 - 14.0	6.6 - 11.6	6.2 - 11.1	6.8 - 14.2
BOTTOM	6.2 - 15.7	8.5 - 14.4	4.8 - 13.6	6.2 - 11.2	6.2 - 11.0	5.8 - 14.1
PH: SURFACE	6.7 - 8.6	7.9 - 8.1	6.5 - 8.5	7.0 - 8.5	6.5 - 8.9	6.8 - 8.3
BOTTOM	6.6 - 8.6	7.8 - 8.1	6.5 - 8.5	7.0 - 8.5	6.5 - 9.0	6.9 - 8.5

	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES												
OPSANUS TAU	-	-	-	-	-	-	-	-	0.001	-	-	-
MENIDIA MENIDIA	-	-	-	-	-	-	0.004	-	0.001	-	-	-
HIPPOCAMPUS ERECTUS	-	-	-	-	-	-	0.001	-	-	-	-	-
SYNGNATHUS FUSCUS	0.005	0.0	-	-	0.016	0.0	0.057	0.0	0.054	0.0	0.013	0.0
CHASMODES BOSQUIANUS	-	-	-	-	-	-	-	-	0.001	-	-	-
LARVAE												
ANGUILLA ROSTRATA	-	-	-	-	0.003	-	0.001	-	0.010	-	0.012	-
BREVOORTIA TYRANNUS	-	-	-	-	-	-	-	-	-	-	0.001	0.0
CLUPEA HARENGUS	-	-	-	-	0.001	-	-	-	0.002	-	-	-
ANCHOA MITCHILLI	1.439	2.3	0.018	0.0	0.450	1.6	1.286	2.4	1.530	1.3	0.320	0.7
FAMILY ATERINIDAE	0.025	-	-	-	0.024	-	0.028	-	0.006	-	0.005	-
CYNOSCION REGALIS	-	-	-	-	-	-	0.002	-	-	-	-	-
TAUTOGA ONITIS	-	-	-	-	-	-	0.003	-	-	-	-	-
FAMILY BLENNIIDAE	0.002	-	-	-	0.002	-	0.011	-	0.036	-	0.001	-
AMMODYTES SP.	0.096	-	0.096	-	0.227	-	0.272	-	0.194	-	0.590	-
FAMILY GOBIIDAE	0.037	-	-	-	0.344	-	0.306	-	0.526	-	0.051	-
PSEUDOPLEURONECTES AMERICANUS	0.561	0.1	0.066	0.0	0.178	0.0	0.385	0.1	0.388	0.1	0.825	0.1
TRINECTES MACULATUS	-	-	-	-	-	-	0.003	-	0.049	-	-	-
SPHOEROIDES MACULATUS	-	-	-	-	-	-	0.002	-	-	-	-	-
UNIDENTIFIED FISH	-	-	-	-	-	-	-	-	0.001	-	-	-
EGGS												
BREVOORTIA TYRANNUS	0.001	-	-	-	-	-	-	-	-	-	-	-
ANCHOA MITCHILLI	11.932	-	-	-	80.260	-	65.795	-	23.911	-	9.286	-
ENCHELYOPUS CIMBRIUS	-	-	-	-	-	-	-	-	0.016	-	-	-
MERLUCCIIUS BILINEARIS	0.003	-	-	-	-	-	-	-	-	-	-	-
TAUTOGA ONITIS	0.094	-	-	-	0.023	-	0.037	-	0.198	-	0.116	-
TAUTOCOLABRUS ADSPERSUS	0.001	-	-	-	0.007	-	0.021	-	0.035	-	0.065	-
PEPRILUS TRIACANTHUS	-	-	-	-	0.021	-	-	-	0.035	-	-	-
SCOPHTHALMUS AQUOSUS	-	-	-	-	0.002	-	0.003	-	-	-	-	-
TRINECTES MACULATUS	0.004	-	-	-	-	-	0.039	-	0.486	-	-	-
UNIDENTIFIED FISH	-	-	-	-	0.220	-	0.001	-	0.265	-	-	-
TOTAL LARVAE & JUVENILES	2.165	2.4	0.179	0.0	1.244	1.7	2.362	2.4	2.800	1.4	1.816	0.8
TOTAL EGGS	12.035	0.0	0.000	0.0	80.533	0.0	65.897	0.0	24.966	0.0	9.467	0.0
TOTAL COLLECTIONS	36		12		45		34		34		32	

TABLE 39. (CONT.)

LOCATION		19		20		21		23	
TEMPERATURE:	AIR	1.5 - 29.0		-1.5 - 24.0		-1.5 - 28.0		-1.5 - 29.0	
	SURFACE	-0.5 - 29.7		-0.5 - 22.3		-1.5 - 28.2		-0.5 - 27.0	
	BOTTOM	-0.5 - 27.1		-0.5 - 22.2		-1.5 - 28.2		-0.5 - 26.7	
SALINITY:	SURFACE	19.0 - 29.0		18.0 - 24.5		20.5 - 29.0		18.5 - 30.5	
	BOTTOM	22.0 - 29.0		22.0 - 25.5		22.5 - 29.0		20.5 - 30.5	
OXYGEN:	SURFACE	6.4 - 14.2		7.2 - 14.2		7.5 - 14.8		7.2 - 13.8	
	BOTTOM	6.7 - 14.0		7.6 - 14.4		7.0 - 15.0		7.4 - 13.6	
PH:	SURFACE	6.7 - 8.5		7.4 - 8.5		6.6 - 8.5		4.5 - 8.5	
	BOTTOM	6.6 - 8.5		7.5 - 8.3		6.5 - 8.5		6.6 - 8.5	
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES									
HIPPOCAMPUS ERECTUS		-	-	0.002	-	-	-	-	-
SYNGNATHUS FUSCUS		0.007	0.0	-	-	0.012	0.0	0.008	0.0
LARVAE									
ANGUILLA ROSTRATA		0.001	-	-	-	-	-	-	-
BREVOORTIA TYRANNUS		0.001	0.0	-	-	0.004	0.3	-	-
CLUPEA HARENGUS		0.001	-	-	-	-	-	-	-
ANCHOA MITCHILLI		0.214	0.7	0.023	0.3	0.288	0.5	0.112	0.5
POLLACHIUS VIRENS		-	-	0.005	-	-	-	-	-
STRONGYLURA MARINA		0.001	-	-	-	-	-	-	-
FAMILY ATHERINIDAE		0.020	-	0.010	-	0.026	-	0.031	-
FAMILY BLENNIIDAE		-	-	0.005	-	0.005	-	0.011	-
AMMODYTES SP.		0.332	-	0.363	-	0.468	-	0.300	-
FAMILY GOBIIDAE		0.330	-	-	-	0.147	-	0.009	-
MYOXOCEPHALUS SP.		0.001	-	-	-	-	-	-	-
PSEUDOPLEURONECTES									
AMERICANUS		0.336	0.1	0.088	0.0	0.290	0.1	0.360	0.1
SPHOEROIDES MACULATUS		-	-	-	-	0.003	-	0.007	-
NONE NONE		0.001	-	-	-	-	-	-	-
EGGS									
ANCHOA MITCHILLI		54.254	-	2.101	-	6.964	-	4.410	-
ENCHELYOPUS CIMBRIUS		0.032	-	-	-	-	-	-	-
TAUTOGA ONITIS		0.063	-	-	-	0.856	-	0.030	-
TAUTOGOLABRUS ADSPERSUS		0.056	-	-	-	0.044	-	0.065	-
AMMODYTES SP.		-	-	-	-	-	-	0.001	-
SCOPHTHALMUS AQUOSUS		0.029	-	0.054	-	0.004	-	0.001	-
TRINECTES MACULATUS		0.131	-	-	-	0.001	-	-	-
UNIDENTIFIED FISH		0.044	-	-	-	0.006	-	0.019	-
TOTAL LARVAE & JUVENILES		1.245	0.8	0.496	0.3	1.243	0.9	0.836	0.6
TOTAL EGGS		54.609	0.0	2.155	0.0	7.874	0.0	4.526	0.0
TOTAL COLLECTIONS			48		18		38		38

a See Figure 4 and 7.



TABLE 40. MONTHLY MEAN DENSITIES ( $n/m^3$ ) AND BIOMASS ( $mg/m^3$ ) OF ICHTHYOPLANKTON COLLECTED IN WESTERN BARNEGAT BAY FROM SEPTEMBER 1975 THROUGH AUGUST 1976.

SEPTEMBER 1975													
MONTH													
LOCATION <sup>a</sup>													
TEMPERATURE: AIR													
SURFACE													
BOTTOM													
SALINITY: SURFACE													
BOTTOM													
OXYGEN: SURFACE													
BOTTOM													
PH: SURFACE													
BOTTOM													
DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS													
JUVENILES													
HIPPOCAMPUS ERECTUS													
LARVAE													
ANCHOA MITCHILLI													
TOTAL LARVAE & JUVENILES													
TOTAL EGGS													
TOTAL COLLECTIONS													
LOCATION													
TEMPERATURE: AIR													
SURFACE													
BOTTOM													
SALINITY: SURFACE													
BOTTOM													
OXYGEN: SURFACE													
BOTTOM													
PH: SURFACE													
BOTTOM													
DENSITY BIOMASS DENSITY BIOMASS													
JUVENILES													
SYNGNATHUS FUSCUS													
LARVAE													
ANCHOA MITCHILLI													
FAMILY ATERINIDAE													
TOTAL LARVAE & JUVENILES													
TOTAL EGGS													
TOTAL COLLECTIONS													

TABLE 40 (CONT.)

MONTH

OCTOBER 1975

LOCATION	1	2	3	18	19	20
TEMPERATURE: AIR	10.0 - 10.0	11.0 - 27.0	12.0 - 25.0	14.0 - 26.0	16.0 - 25.5	17.0 - 24.0
SURFACE	14.3 - 18.0	15.6 - 18.2	17.0 - 17.4	16.9 - 17.4	17.8 - 18.4	17.0 - 17.7
BOTTOM	17.9 - 18.0	17.5 - 17.6	16.6 - 16.8	17.0 - 17.0	17.6 - 17.7	17.4 - 17.4
SALINITY: SURFACE	15.0 - 16.7	19.5 - 21.5	19.0 - 21.0	19.5 - 22.1	19.0 - 21.5	19.0 - 23.7
BOTTOM	17.2 - 20.0	21.0 - 21.0	- -	21.1 - 21.5	22.1 - 22.6	23.2 - 23.2
OXYGEN: SURFACE	9.2 - 9.6	8.4 - 10.2	8.0 - 10.0	8.0 - 9.6	8.2 - 9.6	8.1 - 9.1
BOTTOM	9.4 - 9.5	9.9 - 10.0	9.5 - 9.8	9.8 - 9.8	8.5 - 8.8	9.0 - 9.0
PH: SURFACE	8.0 - 8.0	8.1 - 8.1	8.1 - 8.1	8.1 - 8.1	8.0 - 8.0	8.1 - 8.1
BOTTOM	8.0 - 8.0	8.1 - 8.1	8.1 - 8.1	8.1 - 8.1	8.0 - 8.0	8.1 - 8.1

	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES												
SYNGNATHUS FUSCUS	-	-	-	-	0.011	0.0	0.011	0.0	-	-	-	-
LARVAE												
ANCHOA MITCHILLI	0.066	1.6	-	-	0.010	0.2	-	-	0.021	0.4	0.084	1.5
FAMILY BLENNIIDAE	-	-	-	-	0.010	-	-	-	-	-	-	-
TOTAL LARVAE & JUVENILES	0.066	1.6	0.000	0.0	0.032	0.2	0.011	0.0	0.021	0.4	0.084	1.5
TOTAL EGGS	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS	4		4		4		4		4		4	

LOCATION	21	23
TEMPERATURE: AIR	16.0 - 21.5	16.0 - 21.0
SURFACE	16.4 - 18.0	16.0 - 17.3
BOTTOM	16.8 - 17.0	16.1 - 16.5
SALINITY: SURFACE	20.5 - 23.7	18.5 - 23.2
BOTTOM	23.7 - 23.7	23.2 - 23.4
OXYGEN: SURFACE	8.4 - 8.8	8.3 - 9.5
BOTTOM	8.8 - 9.0	9.2 - 9.4
PH: SURFACE	8.1 - 8.1	8.1 - 8.1
BOTTOM	8.1 - 8.1	8.2 - 8.2

	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES				
SYNGNATHUS FUSCUS	0.021	0.0	-	-
LARVAE				
ANCHOA MITCHILLI	0.040	0.7	0.077	4.4
TOTAL LARVAE & JUVENILES	0.061	0.7	0.077	0.0
TOTAL EGGS	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS	4		4	

TABLE 40: (CONT.)

MONTH

NOVEMBER 1975

LOCATION	1	2	3	18	19	20
TEMPERATURE: AIR	15.0 - 15.0	15.0 - 15.0	15.0 - 15.0	15.0 - 15.0	14.0 - 14.0	14.0 - 14.0
SURFACE	11.8 - 11.8	12.3 - 12.3	12.6 - 12.6	13.0 - 13.0	12.6 - 12.6	12.5 - 12.5
BOTTOM	12.5 - 12.6	- - -	- - -	- - -	- - -	- - -
SALINITY: SURFACE	18.0 - 18.0	20.5 - 20.5	22.0 - 22.0	20.0 - 20.0	22.5 - 22.5	23.0 - 23.0
BOTTOM	18.0 - 18.5	- - -	- - -	- - -	- - -	- - -
OXYGEN: SURFACE	9.4 - 9.7	9.2 - 9.2	9.0 - 9.0	9.0 - 9.0	9.3 - 9.3	9.4 - 9.4
BOTTOM	9.0 - 9.0	- - -	- - -	- - -	- - -	- - -
PH: SURFACE	7.9 - 7.9	8.0 - 8.0	8.0 - 8.0	8.0 - 8.0	8.0 - 8.0	7.7 - 7.7
BOTTOM	7.9 - 7.9	- - -	- - -	- - -	- - -	- - -

DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS DENSITY BIOMASS

LARVAE													
BREVOORTIA TYRANNUS	-	-	-	-	-	0.012	0.3	0.017	1.0	-	-	-	-
TOTAL LARVAE & JUVENILES	0.000	0.0	0.000	0.0	0.000	0.0	0.012	0.3	0.017	1.0	0.000	0.0	0.0
TOTAL EGGS	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.0
TOTAL COLLECTIONS	2	2	2	2	2	2	2	2	2	2	2	2	2

LOCATION	21	23
TEMPERATURE: AIR	15.5 - 15.5	15.5 - 15.5
SURFACE	12.5 - 12.5	13.6 - 13.6
BOTTOM	- - -	- - -
SALINITY: SURFACE	24.0 - 24.0	22.5 - 22.5
BOTTOM	- - -	- - -
OXYGEN: SURFACE	9.2 - 9.2	9.1 - 9.1
BOTTOM	- - -	- - -
PH: SURFACE	7.0 - 7.0	6.0 - 6.0
BOTTOM	- - -	- - -

DENSITY BIOMASS DENSITY BIOMASS

LARVAE				
BREVOORTIA TYRANNUS	0.057	3.4	-	-
ANCHOA MITCHILLI	0.020	1.4	-	-
TOTAL LARVAE & JUVENILES	0.077	4.8	0.000	0.0
TOTAL EGGS	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS	2	2	2	2

TABLE 40. (CONT.)

MONTH

DECEMBER 1975

LOCATION	1	2	3	18	19	20
TEMPERATURE: AIR	1.5 - 1.5	1.0 - 1.0	1.5 - 1.5	1.5 - 1.5	1.5 - 1.5	1.0 - 1.0
SURFACE	6.2 - 6.2	6.0 - 6.0	6.0 - 6.0	6.5 - 6.5	10.5 - 10.5	7.8 - 7.8
BOTTOM	6.2 - 6.2	- - -	- - -	- - -	- - -	- - -
SALINITY: SURFACE	18.0 - 18.0	20.5 - 20.5	22.5 - 22.5	16.0 - 16.0	23.0 - 23.0	18.0 - 18.0
BOTTOM	18.0 - 18.0	- - -	- - -	- - -	- - -	- - -
OXYGEN: SURFACE	11.2 - 11.2	11.5 - 11.5	11.4 - 11.4	11.8 - 11.8	10.8 - 10.8	11.4 - 11.4
BOTTOM	11.0 - 11.0	- - -	- - -	- - -	- - -	- - -
PH: SURFACE	8.0 - 8.0	8.0 - 8.0	8.1 - 8.1	8.1 - 8.1	7.9 - 7.9	8.0 - 8.0
BOTTOM	8.0 - 8.0	- - -	- - -	- - -	- - -	- - -

	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE												
AMMODYTES SP.	-	-	-	-	0.018	-	-	-	0.019	-	0.055	-
UNIDENTIFIED FISH	-	-	-	-	-	-	-	-	0.022	-	-	-
TOTAL LARVAE & JUVENILES	0.000	0.0	0.000	0.0	0.018	0.0	0.000	0.0	0.040	0.0	0.055	0.0
TOTAL EGGS	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS		2		2		2		2		2		2

LOCATION	21	23
TEMPERATURE: AIR	1.0 - 1.0	0.0 - 0.0
SURFACE	6.8 - 6.8	6.0 - 6.0
BOTTOM	- - -	- - -
SALINITY: SURFACE	23.0 - 23.0	24.0 - 24.0
BOTTOM	- - -	- - -
OXYGEN: SURFACE	11.2 - 11.2	11.7 - 11.7
BOTTOM	- - -	- - -
PH: SURFACE	8.0 - 8.0	8.2 - 8.2
BOTTOM	- - -	- - -

	DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE				
BREVOORTIA TYRANNUS	0.018	2.1	-	-
AMMODYTES SP.	0.018	-	0.020	-
EGGS				
AMMODYTES SP.	-	-	0.020	-
TOTAL LARVAE & JUVENILES	0.035	2.1	0.020	0.0
TOTAL EGGS	0.000	0.0	0.020	0.0
TOTAL COLLECTIONS		2		2

TABLE 40. (CONT.)

MONTH

FEBRUARY 1976

LOCATION	1	2	3	18	19	20
TEMPERATURE: AIR	15.0 - 15.0	16.0 - 16.0	15.5 - 15.5	16.5 - 16.5	16.5 - 16.5	17.0 - 17.0
SURFACE	5.2 - 5.2	5.8 - 5.8	6.0 - 6.0	6.0 - 6.0	5.8 - 5.8	6.0 - 6.0
BOTTOM	5.0 - 5.0	6.0 - 6.0	6.8 - 6.8	6.3 - 6.3	6.0 - 6.0	7.1 - 7.1
SALINITY: SURFACE	- - -	- - -	- - -	- - -	- - -	- - -
BOTTOM	- - -	- - -	- - -	- - -	- - -	- - -
OXYGEN: SURFACE	14.8 - 15.0	14.8 - 14.8	14.0 - 14.0	14.2 - 14.2	14.2 - 14.2	14.2 - 14.2
BOTTOM	14.0 - 15.7	14.4 - 14.4	13.6 - 13.6	14.1 - 14.1	14.0 - 14.0	14.4 - 14.4
PH: SURFACE	8.1 - 8.2	7.9 - 7.9	7.8 - 7.8	7.8 - 7.8	7.9 - 7.9	7.7 - 7.7
BOTTOM	8.0 - 8.1	7.8 - 7.8	7.7 - 7.7	7.9 - 7.9	7.8 - 7.8	7.7 - 7.7

	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE												
POLLACHIUS VIRENS	-	-	-	-	-	-	-	-	-	-	0.041	-
AMMODYTES SP.	0.714	-	0.575	-	0.395	-	1.079	-	3.459	-	1.493	-
PSEUDOPLEURONECTES												
AMERICANUS	0.605	0.1	0.396	0.0	0.020	0.0	0.035	0.0	0.176	0.0	0.349	0.1
TOTAL LARVAE & JUVENILES	1.318	0.1	0.971	0.0	0.414	0.0	1.114	0.0	3.635	0.0	1.883	0.1
TOTAL EGGS	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS	2		2		2		2		2		2	

LOCATION	21	23
TEMPERATURE: AIR	17.0 - 17.0	12.0 - 12.0
SURFACE	7.0 - 7.0	5.8 - 5.8
BOTTOM	6.5 - 6.5	5.1 - 5.2
SALINITY: SURFACE	- - -	- - -
BOTTOM	- - -	- - -
OXYGEN: SURFACE	14.8 - 14.8	13.6 - 13.8
BOTTOM	15.0 - 15.0	13.4 - 13.6
PH: SURFACE	7.9 - 7.9	7.9 - 7.9
BOTTOM	7.9 - 7.9	7.9 - 7.9

	DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE				
AMMODYTES SP.	1.723	-	0.695	-
PSEUDOPLEURONECTES				
AMERICANUS	-	-	0.044	0.0
TOTAL LARVAE & JUVENILES	1.723	0.0	0.739	0.0
TOTAL EGGS	0.000	0.0	0.000	0.0
TOTAL COLLECTIONS	2		2	

TABLE 40. (CONT.)

MONTH

MARCH 1976

LOCATION	1	3	4	17	18	19
TEMPERATURE: AIR	13.0 - 14.0	11.0 - 14.0	11.0 - 12.5	12.0 - 14.0	11.5 - 13.0	12.0 - 13.5
SURFACE	5.3 - 9.3	4.3 - 8.5	7.4 - 8.6	9.5 - 10.5	7.5 - 8.7	9.5 - 9.8
BOTTOM	5.0 - 8.4	4.2 - 4.2	7.8 - 7.8	10.4 - 10.4	8.3 - 8.3	8.5 - 8.5
SALINITY: SURFACE	12.0 - 15.5	22.0 - 22.5	12.0 - 22.0	18.0 - 20.5	22.0 - 23.0	21.0 - 23.0
BOTTOM	17.0 - 23.0	22.0 - 22.0	22.0 - 22.0	20.5 - 20.5	22.0 - 22.0	22.0 - 22.0
OXYGEN: SURFACE	9.2 - 12.6	10.0 - 11.0	9.8 - 11.6	9.6 - 11.1	9.9 - 11.5	9.6 - 11.0
BOTTOM	9.4 - 12.0	10.8 - 10.8	11.2 - 11.2	11.0 - 11.0	11.5 - 11.5	11.4 - 11.4
PH: SURFACE	7.9 - 8.2	7.6 - 8.0	7.8 - 7.9	6.5 - 7.8	7.8 - 7.9	6.7 - 7.8
BOTTOM	8.0 - 8.1	7.1 - 7.1	7.9 - 7.9	7.8 - 7.8	7.4 - 7.4	7.9 - 7.9
-----						
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
-----						
LARVAE						
ANGUILLA ROSTRATA	-	-	-	-	0.094	-
CLUPEA HARENGUS	-	-	-	0.019	-	-
AMMODYTES SP.	0.469	-	2.257	-	1.615	-
PSEUDOPLEURONECTES						
AMERICANUS	4.656	0.7	1.819	0.4	3.268	0.8
TOTAL LARVAE & JUVENILES	5.125	0.7	4.076	0.4	5.471	0.5
TOTAL EGGS	0.000	0.0	0.000	0.0	4.901	0.8
TOTAL COLLECTIONS	4		4		4	
-----						
LOCATION	21	23				
TEMPERATURE: AIR	13.0 - 13.0	13.5 - 14.0				
SURFACE	6.1 - 9.2	9.3 - 10.3				
BOTTOM	7.0 - 7.0	8.5 - 8.5				
SALINITY: SURFACE	23.5 - 24.0	23.0 - 24.0				
BOTTOM	24.0 - 24.0	24.0 - 24.0				
OXYGEN: SURFACE	9.5 - 11.8	9.6 - 11.7				
BOTTOM	11.2 - 11.2	11.8 - 11.8				
PH: SURFACE	6.7 - 7.9	4.5 - 7.9				
BOTTOM	7.8 - 7.8	7.8 - 7.8				
-----						
	DENSITY	BIOMASS				
-----						
LARVAE						
AMMODYTES SP.	2.415	-				
PSEUDOPLEURONECTES						
AMERICANUS	2.231	0.5				
TOTAL LARVAE & JUVENILES	4.646	0.5				
TOTAL EGGS	0.000	0.0				
TOTAL COLLECTIONS	4					

TABLE 40. (CONT.)

MONTH

APRIL 1976

LOCATION	1	3	4	17	18	19
TEMPERATURE: AIR	10.0 - 22.5	7.0 - 22.0	9.0 - 23.5	9.0 - 24.0	27.0 - 27.0	10.5 - 27.0
SURFACE	11.5 - 19.0	11.0 - 19.5	11.0 - 19.5	14.5 - 25.0	24.6 - 24.6	13.5 - 25.0
BOTTOM	11.5 - 19.0	10.5 - 17.5	11.0 - 19.0	14.5 - 24.0	22.1 - 22.1	12.5 - 24.0
SALINITY: SURFACE	18.0 - 22.0	22.5 - 24.0	21.0 - 24.0	21.5 - 22.5	23.5 - 23.5	22.0 - 24.0
BOTTOM	18.0 - 22.0	23.5 - 24.0	22.0 - 24.0	21.5 - 22.0	23.5 - 23.5	22.5 - 24.0
OXYGEN: SURFACE	10.5 - 11.4	10.4 - 11.0	10.6 - 10.8	10.0 - 10.4	9.2 - 9.2	10.6 - 10.6
BOTTOM	10.4 - 10.7	10.8 - 11.0	10.5 - 10.6	10.2 - 10.3	9.1 - 9.1	9.8 - 10.4
PH: SURFACE	7.9 - 8.6	8.0 - 8.1	7.9 - 8.0	7.9 - 8.0	8.0 - 8.0	8.0 - 8.1
BOTTOM	8.0 - 8.6	8.0 - 8.2	8.1 - 8.1	7.8 - 7.9	8.1 - 8.1	7.8 - 8.1

	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE												
AMMODYTES SP.	0.038	-	0.092	-	0.058	-	0.031	-	-	-	0.023	-
MYXOCEPHALUS SP.	-	-	-	-	-	-	-	-	-	-	0.008	-
PSEUDOPLEURONECTES AMERICANUS	0.088	0.1	0.173	0.1	0.056	0.0	0.032	0.0	-	-	0.433	0.2
EGGS												
ENCERLYOPUS CIMBRIUS	-	-	-	-	-	-	-	-	-	-	0.008	-
MYXOCEPHALUS BILINEARIS	0.026	-	-	-	-	-	-	-	-	-	-	-
TAUTOGA UNITIS	0.098	-	-	-	0.038	-	0.493	-	1.169	-	0.058	-
TAUTOGOLABRUS ADSPERSUS	-	-	-	-	-	-	0.011	-	0.749	-	0.111	-
SCOPHTHALMUS AQUOSUS	-	-	0.023	-	0.016	-	-	-	-	-	0.472	-
UNIDENTIFIED FISH	-	-	0.020	-	-	-	-	-	-	-	-	-
TOTAL LARVAE & JUVENILES	0.126	0.1	0.266	0.1	0.114	0.0	0.062	0.0	0.000	0.0	0.464	0.2
TOTAL EGGS	0.124	0.0	0.043	0.0	0.054	0.0	0.503	0.0	1.918	0.0	0.649	0.0
TOTAL COLLECTIONS		4		4		4		4		2		5

LOCATION	20		21		23	
TEMPERATURE: AIR	7.0	- 7.0	8.5	- 24.0	6.0	- 23.0
SURFACE	12.5	- 12.5	11.0	- 20.1	11.0	- 21.0
BOTTOM	10.5	- 10.5	10.5	- 19.1	11.0	- 19.5
SALINITY: SURFACE	24.0	- 24.0	24.0	- 24.0	23.0	- 24.5
BOTTOM	25.5	- 25.5	24.0	- 25.0	24.0	- 24.5
OXYGEN: SURFACE	10.4	- 10.4	8.2	- 10.2	9.6	- 10.3
BOTTOM	9.2	- 9.2	9.2	- 9.2	9.2	- 10.4
PH: SURFACE	7.4	- 7.4	7.8	- 8.0	7.3	- 8.1
BOTTOM	7.8	- 7.8	7.8	- 8.0	7.3	- 8.1
-----						
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
-----						
LARVAE						
AMMODYTES SP.	0.140	-	0.161	-	0.228	-
PSEUDOPLEURONECTES						
AMERICANUS	0.234	0.0	0.527	1.2	2.102	1.5
EGGS						
TAUTOGA ONITIS	-	-	0.012	-	-	-
TAUTOGOLABRUS ADSPERSUS	-	-	0.080	-	-	-
SCOPHTHALMUS AQUOSUS	-	-	0.035	-	0.048	-
-----						
TOTAL LARVAE & JUVENILES	0.374	0.0	0.688	0.0	0.000	0.0
TOTAL EGGS	0.000	0.0	0.127	0.0	0.000	0.0
-----						
TOTAL COLLECTIONS		1		4		4

TABLE 40. (CONT.)

MAY 1976												
MONTH												
LOCATION	1	3	4	17	18	19						
TEMPERATURE: AIR	20.0 - 22.0	20.0 - 22.5	20.0 - 24.0	21.0 - 23.0	21.5 - 23.0	20.0 - 21.0						
SURFACE	16.6 - 21.0	17.1 - 21.0	17.1 - 22.0	22.3 - 28.0	20.1 - 26.0	21.0 - 23.0						
BOTTOM	16.6 - 20.0	17.0 - 21.0	16.1 - 21.0	23.0 - 29.0	19.0 - 23.0	18.2 - 23.0						
SALINITY: SURFACE	18.0 - 22.0	23.0 - 24.0	23.0 - 24.0	20.0 - 22.5	24.0 - 24.0	22.5 - 24.0						
BOTTOM	20.0 - 22.0	23.0 - 24.0	23.0 - 24.0	20.5 - 22.2	23.0 - 24.0	24.0 - 24.0						
OXYGEN: SURFACE	7.8 - 8.5	8.4 - 8.4	7.9 - 8.4	6.2 - 8.1	7.9 - 8.2	7.3 - 8.0						
BOTTOM	7.9 - 9.0	8.3 - 8.4	8.0 - 8.4	6.4 - 7.9	7.5 - 8.3	7.9 - 8.0						
PH: SURFACE	6.7 - 8.2	6.5 - 8.2	7.8 - 7.8	8.1 - 8.1	7.7 - 7.7	8.0 - 8.0						
BOTTOM	6.6 - 8.4	6.5 - 8.3	8.1 - 8.1	7.9 - 7.9	7.8 - 7.8	8.0 - 8.0						
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES												
SYNGNATHUS FUSCUS	-	-	0.056	0.0	0.012	0.0	0.044	0.1	0.010	0.0	0.044	0.1
LARVAE												
ANGUILLA ROSTRATA	-	-	0.021	-	-	-	-	-	-	-	-	-
CLUPEA HARENGUS	-	-	0.010	-	-	-	-	-	-	-	-	-
FAMILY ATHERINIDAE	0.034	-	0.169	-	0.030	-	-	-	0.038	-	0.011	-
FAMILY GOBIIDAE	-	-	-	-	-	-	0.169	-	-	-	0.021	-
EGGS												
BREVOORTIA TYRANNUS	0.009	-	-	-	-	-	-	-	-	-	-	-
ANCHOA MITCHILLI	10.682	-	11.575	-	13.030	-	1.090	-	3.891	-	4.753	-
ENCHELYOPUS CIMBRIUS	-	-	-	-	-	-	0.138	-	-	-	-	-
TAUTOGA ONITIS	-	-	0.010	-	0.039	-	1.165	-	0.191	-	0.187	-
TAUTOGOLABRUS ADSPERSUS	0.010	-	0.010	-	0.023	-	0.283	-	0.097	-	0.131	-
TOTAL LARVAE & JUVENILES	0.034	0.0	0.256	0.0	0.042	0.0	0.213	0.1	0.048	0.0	0.076	0.1
TOTAL EGGS	10.700	0.0	11.59	0.0	13.092	0.0	2.676	0.0	4.178	0.0	5.071	0.0
TOTAL COLLECTIONS		4		4		4		4		4		4
LOCATION	21	23										
TEMPERATURE: AIR	17.0 - 21.0	16.0 - 25.0										
SURFACE	16.0 - 22.0	16.0 - 22.0										
BOTTOM	16.0 - 20.0	16.1 - 21.0										
SALINITY: SURFACE	25.0 - 26.0	24.5 - 26.5										
BOTTOM	24.5 - 26.0	25.0 - 26.5										
OXYGEN: SURFACE	8.0 - 8.6	8.2 - 9.6										
BOTTOM	7.9 - 8.8	8.2 - 8.7										
PH: SURFACE	7.8 - 7.8	7.8 - 7.8										
BOTTOM	7.9 - 7.9	7.4 - 8.1										
	DENSITY	BIOMASS	DENSITY	BIOMASS								
JUVENILES												
SYNGNATHUS FUSCUS	0.026	0.0	-	-								
LARVAE												
FAMILY ATHERINIDAE	0.048	-	0.099	-								
EGGS												
ANCHOA MITCHILLI	4.226	-	0.329	-								
TAUTOGA ONITIS	0.315	-	0.042	-								
TAUTOGOLABRUS ADSPERSUS	0.113	-	0.174	-								
TOTAL LARVAE & JUVENILES	0.074	0.0	0.099	0.0								
TOTAL EGGS	4.654	0.0	0.545	0.0								
TOTAL COLLECTIONS		4		4								



TABLE 40. (CONT.)

JUNE 1976													
MONTH													
-----													
LOCATION	1		3		4		17		18		19		
TEMPERATURE: AIR	16.0 - 24.0		17.0 - 25.0		17.5 - 24.0		18.0 - 26.0		26.0 - 26.0		17.5 - 26.0		
SURFACE	17.1 - 21.7		18.3 - 25.7		19.2 - 22.6		23.1 - 27.2		27.0 - 27.0		19.3 - 23.5		
BOTTOM	18.1 - 21.7		18.6 - 25.2		19.1 - 22.5		23.1 - 27.2		22.7 - 22.7		21.1 - 22.5		
SALINITY: SURFACE	5.0 - 21.0		23.5 - 25.0		22.5 - 26.0		21.0 - 24.0		24.5 - 24.5		24.0 - 25.0		
BOTTOM	12.0 - 22.0		24.0 - 24.5		24.0 - 25.0		22.0 - 26.0		24.5 - 25.5		22.0 - 25.5		
OXYGEN: SURFACE	8.4 - 8.8		7.6 - 8.5		7.6 - 7.9		7.7 - 7.9		8.1 - 8.1		8.4 - 8.9		
BOTTOM	8.0 - 8.6		7.1 - 7.8		7.0 - 7.5		7.5 - 8.9		6.9 - 6.9		7.2 - 8.1		
PH: SURFACE	8.2 - 8.6		7.9 - 8.0		8.0 - 8.4		7.6 - 8.0		8.0 - 8.0		7.1 - 7.9		
BOTTOM	7.8 - 8.6		7.7 - 7.8		7.6 - 8.3		7.4 - 7.7		7.9 - 7.9		7.9 - 8.1		
-----													
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	
JUVENILES													
HIPPOCAMPUS ERECTUS	-	-	-	-	0.010	-	-	-	-	-	-	-	
SYNGNATHUS FUSCUS	0.024	0.1	0.011	0.0	0.039	0.0	0.266	0.2	0.045	0.0	-	-	
LARVAE													
ANCHOA MITCHILLI	0.019	0.0	0.112	0.0	0.040	0.0	1.324	0.0	0.158	0.0	0.010	0.0	
STRONGYLUSA MARINA	-	-	-	-	-	-	-	-	-	-	0.010	-	
FAMILY Atherinidae	0.187	-	0.057	-	-	-	-	-	-	-	0.010	-	
FAMILY BLENNIDAE	0.009	-	0.011	-	0.082	-	0.087	-	0.023	-	-	-	
FAMILY COBIIDAE	-	-	0.057	-	0.140	-	1.146	-	0.336	-	0.010	-	
TRINectes MACULATUS	-	-	-	-	0.010	-	-	-	-	-	-	-	
SPHROCEIDES MACULATUS	-	-	-	-	0.019	-	-	-	-	-	-	-	
EGGS													
ANCHOA MITCHILLI	17.991	-	41.615	-	82.198	-	55.930	-	49.785	-	38.560	-	
TANTOGA CRITIS	-	-	0.034	-	0.047	-	-	-	0.313	-	0.154	-	
TANTOGOLABRUS ADSPERSUS	-	-	-	-	-	-	-	-	0.089	-	0.020	-	
TRINectes MACULATUS	0.036	-	-	-	-	-	0.178	-	-	-	-	-	
-----													
TOTAL LARVAE & JUVENILES	0.240	0.1	0.248	0.0	0.339	0.0	2.822	0.2	0.561	0.0	0.041	0.0	
TOTAL EGGS	18.027	0.0	41.648	0.0	82.445	0.0	56.107	0.0	50.187	0.0	38.733	0.0	
TOTAL COLLECTIONS		4		4		4		4		2		4	
-----													
LOCATION	20		21		23								
TEMPERATURE: AIR	18.5 - 18.5		18.5 - 25.0		18.0 - 24.5								
SURFACE	22.1 - 22.1		20.0 - 24.5		20.0 - 22.7								
BOTTOM	21.9 - 21.9		20.1 - 22.2		19.3 - 22.2								
SALINITY: SURFACE	22.0 - 22.0		24.0 - 24.5		24.5 - 26.0								
BOTTOM	22.0 - 22.0		24.0 - 27.5		24.5 - 26.0								
OXYGEN: SURFACE	8.2 - 8.2		8.2 - 9.4		8.4 - 9.9								
BOTTOM	8.1 - 8.3		7.2 - 9.1		8.0 - 9.9								
PH: SURFACE	7.9 - 7.9		7.6 - 8.2		7.7 - 8.0								
BOTTOM	7.5 - 7.5		7.9 - 7.9		8.0 - 8.2								
-----													
	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS							
JUVENILES													
SYNGNATHUS FUSCUS	-	-	0.033	0.0	0.011	0.0							
LARVAE													
ANCHOA MITCHILLI	-	-	0.051	0.0	0.043	0.0							
FAMILY Atherinidae	0.094	-	0.090	-	0.068	-							
FAMILY BLENNIDAE	0.047	-	0.010	-	0.019	-							
FAMILY COBIIDAE	-	-	0.010	-	-	-							
SPHROCEIDES MACULATUS	-	-	0.025	-	0.071	-							
EGGS													
ANCHOA MITCHILLI	18.906	-	34.735	-	30.484	-							
TANTOGA CRITIS	-	-	0.020	-	0.222	-							
TANTOGOLABRUS ADSPERSUS	-	-	0.225	-	0.441	-							
TRINectes MACULATUS	-	-	0.010	-	-	-							
UNIDENTIFIED FISH	-	-	-	-	0.168	-							
-----													
TOTAL LARVAE & JUVENILES	0.141	0.0	0.218	0.0	0.211	0.0							
TOTAL EGGS	18.906	0.0	34.989	0.0	31.314	0.0							
TOTAL COLLECTIONS		2		4		4							

MONTH

JULY 1976

LOCATION	1	3	4	17	18	19
TEMPERATURE: AIR	27.0 - 28.0	29.0 - 30.5	30.5 - 31.0	28.0 - 29.0	26.0 - 28.0	27.0 - 28.0
SURFACE	23.2 - 26.7	25.8 - 26.7	24.5 - 26.8	28.9 - 29.7	26.8 - 27.7	25.9 - 27.7
BOTTOM	23.6 - 25.7	24.6 - 26.7	24.7 - 27.2	29.2 - 30.7	24.9 - 27.7	25.5 - 26.7
SALINITY: SURFACE	22.5 - 23.0	27.0 - 28.0	27.5 - 28.0	27.0 - 27.0	27.5 - 28.0	27.5 - 28.0
BOTTOM	26.0 - 26.5	28.0 - 28.0	27.5 - 28.0	27.0 - 27.0	27.5 - 28.0	28.0 - 28.0
OXYGEN: SURFACE	6.4 - 7.4	7.4 - 7.5	7.0 - 7.5	6.4 - 7.0	6.8 - 7.2	6.4 - 7.5
BOTTOM	6.2 - 6.9	4.8 - 6.9	6.2 - 6.9	6.3 - 6.3	5.8 - 6.6	7.0 - 7.4
PH: SURFACE	7.6 - 7.8	7.0 - 7.0	7.1 - 7.1	6.6 - 6.6	6.8 - 6.8	6.7 - 6.7
BOTTOM	7.3 - 7.3	7.1 - 7.1	7.0 - 7.0	6.5 - 6.5	6.9 - 6.9	6.6 - 6.5

	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES												
SYNGNATHUS FUSCUS	0.021	0.0	-	-	-	-	0.029	0.0	-	-	0.015	0.0
LARVAE												
ANCHOA MITCHILLI	11.858	12.3	0.894	1.0	0.711	0.5	8.512	3.3	0.825	1.3	0.963	1.4
FAMILY ATHERINIDAE	-	-	0.008	-	0.009	-	-	-	-	-	0.050	-
FAMILY BLENNIIDAE	0.010	-	-	-	-	-	0.136	-	-	-	-	-
FAMILY GOBIIDAE	0.332	-	-	-	-	-	1.062	-	0.058	-	0.599	-
INNECTES MACULATUS	-	-	-	-	0.017	-	0.099	-	-	-	-	-
EGGS												
ANCHOA MITCHILLI	74.588	-	55.840	-	63.194	-	28.856	-	40.577	-	40.104	-
TAUTOGA ONITIS	0.747	-	-	-	0.082	-	-	-	-	-	-	-
TOTAL LARVAE & JUVENILES	12.221	12.3	0.902	1.0	0.737	0.5	9.836	3.3	0.883	1.3	1.627	1.4
TOTAL EGGS	75.335	0.0	55.840	0.0	63.276	0.0	28.856	0.0	40.577	0.0	40.104	0.0
TOTAL COLLECTIONS		4		4		4		4		4		4

LOCATION	21	23
TEMPERATURE: AIR	26.0 - 28.0	25.0 - 28.0
SURFACE	26.7 - 26.7	24.7 - 26.7
BOTTOM	26.6 - 26.7	25.6 - 26.7
SALINITY: SURFACE	28.0 - 29.0	29.0 - 30.0
BOTTOM	27.0 - 29.0	28.5 - 30.0
OXYGEN: SURFACE	7.5 - 7.5	7.6 - 8.9
BOTTOM	7.0 - 7.5	7.5 - 8.4
PH: SURFACE	6.6 - 6.6	6.8 - 6.8
BOTTOM	6.5 - 6.5	6.6 - 6.6

	DENSITY	BIOMASS	DENSITY	BIOMASS
LARVAE				
ANCHOA MITCHILLI	1.730	1.1	0.487	5.8
FAMILY ATHERINIDAE	0.071	-	0.014	-
FAMILY BLENNIIDAE	0.035	-	0.034	-
FAMILY GOBIIDAE	1.374	-	0.084	-
EGGS				
ANCHOA MITCHILLI	25.235	-	7.138	-
TAUTOGA ONITIS	7.783	-	0.023	-
UNIDENTIFIED FISH	0.055	-	0.012	-
TOTAL LARVAE & JUVENILES	3.210	1.1	0.618	0.0
TOTAL EGGS	33.074	0.0	7.172	0.0
TOTAL COLLECTIONS		4		4

TABLE 40. (CONT.)

MONTH		AUGUST 1976											
LOCATION		1		3		4		17		18		19	
TEMPERATURE:	AIR	20.0 - 22.0		21.0 - 27.0		22.0 - 27.0		23.0 - 26.0		22.5 - 27.0		22.5 - 29.0	
	SURFACE	23.6 - 23.7		25.0 - 25.5		24.7 - 26.1		28.7 - 29.2		27.7 - 29.0		27.5 - 27.6	
	BOTTOM	23.8 - 25.6		25.1 - 27.0		24.8 - 26.1		28.6 - 29.2		25.9 - 27.5		27.1 - 27.1	
SALINITY:	SURFACE	14.0 - 20.5		23.5 - 28.5		24.0 - 28.5		22.0 - 28.0		24.0 - 28.5		24.0 - 28.5	
	BOTTOM	15.0 - 27.0		24.0 - 28.5		24.0 - 28.5		22.0 - 28.0		23.0 - 29.0		24.0 - 24.0	
OXYGEN:	SURFACE	7.1 - 8.7		7.1 - 8.5		7.0 - 8.6		6.5 - 7.8		7.0 - 7.8		7.1 - 8.0	
	BOTTOM	6.6 - 7.7		7.2 - 8.1		6.7 - 9.3		6.2 - 7.4		6.7 - 6.8		6.7 - 6.7	
PH:	SURFACE	7.8 - 8.2		8.0 - 8.2		8.1 - 8.4		8.0 - 8.1		8.2 - 8.3		7.9 - 8.0	
	BOTTOM	7.9 - 8.3		8.0 - 8.2		8.0 - 8.2		7.9 - 8.3		8.3 - 8.5		8.0 - 8.0	
		DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS	DENSITY	BIOMASS
JUVENILES													
SYNGRATHUS FUSCUS		-	-	0.013	0.0	0.013	0.0	0.064	0.0	0.057	0.0	-	-
LARVAE													
ANCHOA MITCHILLI		0.981	6.8	1.120	3.8	0.604	2.5	0.710	0.9	1.620	2.9	0.451	0.9
FAMILY ATHERINIDAE		-	-	0.014	-	0.051	-	0.014	-	-	-	-	-
FAMILY BLENNIIDAE		-	-	-	-	0.012	-	-	-	-	-	-	-
FAMILY GOBIIDAE		-	-	-	-	-	-	0.202	-	0.179	-	0.092	-
EGGS													
ANCHOA MITCHILLI		4.125	-	29.974	-	11.212	-	8.974	-	4.932	-	3.638	-
TRINECTES MACULATUS		-	-	-	-	-	-	0.037	-	-	-	-	-
UNIDENTIFIED FISH		-	-	-	-	0.012	-	-	-	-	-	-	-
TOTAL LARVAE & JUVENILES		0.981	6.8	1.146	3.8	0.681	2.5	0.991	0.9	1.856	2.9	0.542	0.9
TOTAL EGGS		4.129	0.0	29.974	0.0	11.224	0.0	9.011	0.0	4.932	0.0	3.638	0.0
TOTAL COLLECTIONS			4		4		4		4		4		4
LOCATION		21		23									
TEMPERATURE:	AIR	22.0 - 28.0		22.0 - 29.0									
	SURFACE	25.8 - 28.2		24.9 - 27.0									
	BOTTOM	27.7 - 28.2		24.7 - 26.0									
SALINITY:	SURFACE	24.0 - 28.5		25.0 - 30.5									
	BOTTOM	24.5 - 29.0		24.0 - 30.5									
OXYGEN:	SURFACE	8.1 - 8.6		7.6 - 8.6									
	BOTTOM	7.5 - 7.8		7.4 - 7.6									
PH:	SURFACE	8.2 - 8.5		8.3 - 8.5									
	BOTTOM	8.2 - 8.5		8.3 - 8.4									
		DENSITY	BIOMASS	DENSITY	BIOMASS								
JUVENILES													
SYNGRATHUS FUSCUS		0.039	0.0	0.041	0.0								
LARVAE													
ANCHOA MITCHILLI		0.863	2.0	0.367	1.9								
FAMILY ATHERINIDAE		-	-	0.110	-								
FAMILY BLENNIIDAE		-	-	0.048	-								
FAMILY GOBIIDAE		0.014	-	-	-								
EGGS													
ANCHOA MITCHILLI		1.959	-	3.944	-								
TOTAL LARVAE & JUVENILES		0.915	2.0	0.566	1.9								
TOTAL EGGS		1.959	0.0	3.944	0.0								
TOTAL COLLECTIONS			4		4								

a See Figure 4 and 7.

Table 41 . Summary of statistics for microzooplankton from replicate Clarke-Bumpus tows in and off the mouth of Forked River and Oyster Creek in 1976.

	Range of densities (n/1000m <sup>3</sup> )	Mean	Standard Deviation	Standard Error of Mean	CV
Mouth of Forked River, 3 July					
Polychaete larvae	3034-8759	5735	2467	872	43%
Oithona spp. (no determination)	11213-17680	13871	2180	771	16%
Mouth of Oyster Creek, 8 July					
Polychaete larvae	1733-4500	2806	993	351	35%
Paracalanus crassirostris (no determination)	12234-37500	22439	8823	3119	39%
Off mouth of Forked River, 28 July					
Gastropod larvae	1172-1935	1386	268	95	19%
Bivalve (umbo)	0-161	70	59	21	84%
Bivalve (hinge)	201-618	449	146	52	33%
Copepod nauplii	8864-12903	10650	1406	497	13%
Off mouth of Oyster Creek, 28 July					
Gastropod larvae	625-1429	1119	261	92	23%
Bivalve (umbo)	0-87	32	38	13	49%
Bivalve (hinge)	172-758	397	212	75	53%
Copepod nauplii	2612-4709	3746	690	244	18%
Off mouth of Forked River, 18 August					
Bivalve (umbo)	779-2588	1417	579	205	41%
Bivalve (hinge)	0-613	358	199	70	56%
Acartia spp. (no determination)	8333-18700	13359	3431	1213	26%
Trochophore	1038-6226	3877	1971	697	51%
Off mouth of Oyster Creek, 18 August					
Bivalve (umbo)	0-2321	640	715	253	112%
Bivalve (hinge)	0-781	237	288	102	122%
Acartia spp. (no determination)	4906-11719	8163	2234	790	27%
Trochophore	405-2838	1466	903	319	67%
Off mouth of Forked River, 23 August					
Bivalve (umbo)	357-3446	1695	902	319	53%
Bivalve (hinge)	403-5326	2679	2101	743	78%
Rotifers	5925-12555	9233	1965	695	21%
Polychaete (larvae)	109-816	479	238	84	50%
Off mouth of Oyster Creek, 23 August					
Bivalve (umbo)	357-2547	1441	708	250	49%
Bivalve (hinge)	357-2143	1460	592	209	41%
Rotifers	15094-28125	20979	4286	1515	20%
Polychaete (larvae)	425-1406	964	415	147	43%



Table 43. Summary of statistics for macrozooplankton from replicate bongo collections in and off of the mouth of Forked River and Oyster Creek during 1976.

	Range	Mean Density (n/m <sup>3</sup> )	Standard Deviation	Standard Error of Mean	CV
Mouth of Forked River, 3 June					
Crangon septemspinosus (zoeae)	0.92-2.89	2.03	0.70	0.25	34%
Palaemonetes spp. (zoeae)	0.47-1.32	0.89	0.26	0.09	29%
Xanthidae (zoeae)	5.30-13.44	9.11	2.42	0.86	27%
Mouth of Oyster Creek, 3 June					
Crangon septemspinosus (zoeae)	1.89-4.35	3.12	0.75	0.27	24%
Palaemonetes spp. (zoeae)	0.34-2.65	1.12	0.76	0.27	68%
Xanthidae (zoeae)	11.53-25.44	20.33	4.30	1.52	21%
Mouth of Forked River, 29 June					
Crangon septemspinosus (zoeae)	0.13-0.97	0.37	0.27	0.09	73%
Palaemonetes spp. (zoeae)	0-0.51	0.29	0.25	0.09	86%
Xanthidae (zoeae)	3.73-12.48	6.95	2.73	0.96	39%
Mouth of Oyster Creek, 29 June					
Crangon septemspinosus (zoeae)	0-0.51	0.20	0.22	0.08	110%
Palaemonetes spp. (zoeae)	0-1.13	0.51	0.35	0.12	69%
Xanthidae (zoeae)	10.85-42.22	24.82	11.43	4.04	46%
Off mouth of Forked River, 28 July					
Mnemiopsis leidyi	9.20-19.65	14.52	3.81	1.35	26%
Palaemonetes spp. (zoeae)	0-1.07	0.45	0.41	0.15	91%
Xanthidae (zoeae)	8.40-37.79	16.72	10.59	3.75	63%
Off mouth of Oyster Creek, 28 July					
Mnemiopsis leidyi	2.42-11.12	6.26	2.44	0.86	39%
Palaemonetes spp. (zoeae)	0-0.34	0.16	0.14	0.05	88%
Xanthidae (zoeae)	1.05-9.36	5.07	2.98	1.05	59%
Off mouth of Forked River, 23 August					
Mnemiopsis leidyi	3.36-5.33	3.90	0.65	0.23	17%
Xanthidae (zoeae)	0.57-2.95	1.92	0.89	0.31	46%
Off mouth of Oyster Creek, 23 August					
Mnemiopsis leidyi	4.49-12.41	6.53	2.99	1.06	46%
Xanthidae (zoeae)	0.92-4.39	2.48	1.02	0.36	41%
Callinectes sapidus (zoeae)	0-0.52	0.10	0.17	0.06	170%

Table 44 . Frequency distributions of macrozooplankton from eight series of replicate bongo collections in and off the mouth of Forked River and Oyster Creek from 3 June through 23 August 1976.

Organisms	Subsample Size	Number of times the subsample mean fell within 25% of the sample mean in 100 trials										Mean
		0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
Crangon septemspinosus (zoeae)	2	-	-	1	-	1	-	1	-	-	1	55.3
Palaemonetes spp. (zoeae)		-	-	1	2	1	1	-	-	1	-	45.3
Mnemiopsis leidyi		-	-	-	-	-	2	-	-	1	1	75.8
Xanthidae (zoeae)		-	-	-	1	1	2	1	1	1	1	62.5
Crangon septemspinosus (zoeae)	3	-	-	1	1	-	-	-	-	1	1	61.3
Palaemonetes spp. (zoeae)		-	-	-	-	3	1	1	-	-	1	58.5
Mnemiopsis leidyi		-	-	-	-	-	-	-	2	1	1	85.0
Xanthidae (zoeae)		-	-	-	-	1	-	-	4	1	2	78.3
Crangon septemspinosus (zoeae)	4	-	-	-	-	-	2	-	-	-	2	78.7
Palaemonetes spp. (zoeae)		-	-	-	-	1	1	2	1	-	1	65.8
Mnemiopsis leidyi		-	-	-	-	-	-	-	-	-	4	98.0
Xanthidae (zoeae)		-	-	-	-	-	-	1	2	1	4	86.3
Crangon septemspinosus (zoeae)	5	-	-	-	-	-	1	-	1	-	2	82.5
Palaemonetes spp. (zoeae)		-	-	-	-	-	-	1	3	1	1	78.2
Mnemiopsis leidyi		-	-	-	-	-	-	-	-	-	4	99.3
Xanthidae (zoeae)		-	-	-	-	-	-	-	-	1	7	95.7
Crangon septemspinosus (zoeae)	6	-	-	-	-	-	-	1	-	1	2	88.5
Palaemonetes spp. (zoeae)		-	-	-	-	-	-	-	1	2	3	88.8
Mnemiopsis leidyi		-	-	-	-	-	-	-	-	-	4	100.0
Xanthidae (zoeae)		-	-	-	-	-	-	-	-	-	8	99.9
Crangon septemspinosus (zoeae)	7	-	-	-	-	-	-	-	-	-	4	100.0
Palaemonetes spp. (zoeae)		-	-	-	-	-	-	-	-	-	6	100.0
Mnemiopsis leidyi		-	-	-	-	-	-	-	-	-	4	100.0
Xanthidae (zoeae)		-	-	-	-	-	-	-	-	-	8	100.0

Table 45. Summary of statistics for ichthyoplankton from replicate bongo collections in and off the mouth of Oyster Creek and Forked River during 1976.

	Range of densities (n/1000m <sup>3</sup> )	Mean	Standard Deviation	Standard Error of Mean	CV
Mouth of Forked River, 3 June					
Anchoa mitchilli eggs	8724-15156	12294	2253	797	18%
Total eggs	8724-15781	12674	2271	803	18%
Total larvae and juveniles	0-1593	542	475	168	88%
Mouth of Oyster Creek, 3 June					
Anchoa mitchilli eggs	7273-21974	12545	5607	2119	45%
Total eggs	10300-23347	16167	4301	1626	27%
Total larvae and juveniles	0-1476	500	503	193	101%
Mouth of Oyster Creek, 29 June					
Anchoa mitchilli eggs	50851-156667	102326	29583	10459	29%
Anchoa mitchilli larvae	230-1111	635	301	107	47%
Total larvae and juveniles	253-3333	1268	969	343	71%
Mouth of Forked River, 29 June					
Anchoa mitchilli eggs	24106-66950	37199	13215	4672	36%
Anchoa mitchilli larvae	1325-4276	2586	1269	449	49%
Total larvae and juveniles	1325-4822	2768	1434	507	52%
Off mouth of Oyster Creek, 28 July					
Anchoa mitchilli eggs	3092-6550	4599	1234	436	27%
Anchoa mitchilli larvae	470-2516	1322	722	255	55%
Total eggs	3092-6550	4633	1247	441	27%
Total larvae and juveniles	537-2642	1355	746	264	55%
Off mouth of Forked River, 28 July					
Anchoa mitchilli eggs	5657-8393	7160	1086	384	15%
Anchoa mitchilli larvae	455-1900	1032	534	189	52%
Total eggs	6121-8393	7606	679	240	9%
Total larvae and juveniles	455-2000	1103	548	194	50%
Off mouth of Oyster Creek, 23 August					
Anchoa mitchilli larvae	0-748	296	268	95	91%
Total larvae and juveniles	86-748	378	232	82	61%
Off mouth of Forked River, 23 August					
Anchoa mitchilli eggs	0-354	178	138	46	78%
Anchoa mitchilli larvae	167-1650	725	586	207	81%
Total larvae and juveniles	190-1650	757	580	206	77%



Table 46. Frequency distributions of ichthyoplankton from eight series of replicate bongo collections in and off the mouth of Oyster Creek and Forked River on 3 June 1976 through 23 August 1976.

Category	Subsample Size	Number of times the subsample mean fell within 25% of the sample mean in 100 trials										Mean
		0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	
Anchoa mitchilli eggs	2	-	-	-	1	-	1	-	2	1	2	74.0
Anchoa mitchilli larvae		-	-	2	-	1	3	-	-	-	-	43.0
Total eggs		-	-	-	1	-	-	-	2	2	2	79.1
Total larvae		-	-	1	2	3	2	-	-	-	-	41.0
Anchoa mitchilli eggs	3	-	-	-	-	-	1	-	1	-	5	89.1
Anchoa mitchilli larvae		-	-	-	-	2	1	2	1	-	-	57.7
Total eggs		-	-	-	-	-	1	-	-	-	6	92.0
Total larvae		-	-	-	1	2	4	1	-	-	-	52.3
Anchoa mitchilli eggs	4	-	-	-	-	-	1	-	-	-	6	93.0
Anchoa mitchilli larvae		-	-	-	-	1	1	-	1	3	-	73.3
Total eggs		-	-	-	-	-	1	-	-	-	6	93.4
Total larvae		-	-	-	-	1	2	-	3	1	1	68.9
Anchoa mitchilli eggs	5	-	-	-	-	-	-	-	1	-	6	96.4
Anchoa mitchilli larvae		-	-	-	-	-	-	1	1	-	4	86.7
Total eggs		-	-	-	-	-	-	-	1	-	6	96.4
Total larvae		-	-	-	-	-	2	-	2	1	3	80.0
Anchoa mitchilli eggs	6	-	-	-	-	-	-	-	1	-	6	97.1
Anchoa mitchilli larvae		-	-	-	-	-	-	-	1	-	5	93.2
Total eggs		-	-	-	-	-	-	-	1	-	6	97.1
Total larvae		-	-	-	-	-	-	-	2	-	6	92.6
Anchoa mitchilli eggs	7	-	-	-	-	-	-	-	-	-	7	100.0
Anchoa mitchilli larvae		-	-	-	-	-	-	-	-	-	6	100.0
Total eggs		-	-	-	-	-	-	-	-	-	7	100.0
Total larvae		-	-	-	-	-	-	-	-	2	6	96.3

Table 47. Comparison of the population estimates for important microzooplankton in Barnegat Bay on 28 May and 8 July 1976 to the mean number entrained per day at OCGS for May 1976 and July 1976.

	MAY			JULY		
	Population on 28 May	Mean Number Entrained Per Day For May	% Of Population Entrained	Population on 8 July	Mean Number Entrained Per Day For July	% Of Population Entrained
Gastropod larvae	$1.51 \times 10^{11} \pm 8.78 \times 10^{10}$	$5.16 \times 10^9 \pm 1.87 \times 10^9$	3.42	$5.99 \times 10^{11} \pm 3.01 \times 10^{11}$	$3.97 \times 10^9 \pm 1.75 \times 10^9$	.66
Polychaete larvae	$6.83 \times 10^{11} \pm 3.88 \times 10^{11}$	$3.65 \times 10^{10} \pm 1.12 \times 10^{10}$	5.34	$1.17 \times 10^{11} \pm 5.79 \times 10^{10}$	$7.9 \times 10^9 \pm 3.20 \times 10^9$	6.75
Nereis spp. larvae	$6.46 \times 10^9 \pm 4.75 \times 10^9$	a		$2.93 \times 10^{10} \pm 2.25 \times 10^{10}$	a	
Polydora spp. larvae	$2.55 \times 10^{12} \pm 1.53 \times 10^{12}$	a		$3.61 \times 10^{10} \pm 2.08 \times 10^{10}$	a	
Trochophores	$5.06 \times 10^{11} \pm 2.76 \times 10^{11}$	a		$1.55 \times 10^{11} \pm 7.87 \times 10^{10}$	a	
Bivalve hinge		a		$5.42 \times 10^{10} \pm 3.16 \times 10^{10}$	$1.04 \times 10^9 \pm 6.70 \times 10^8$	1.92
Bivalve umbo		a		$1.09 \times 10^{11} \pm 6.33 \times 10^{10}$	$9.24 \times 10^8 \pm 5.86 \times 10^8$	.85

a = No estimate for this form because of low abundance.

Table. 48. Comparison of the population estimates for important macrozooplankton in Barnegat Bay on selected dates to the mean number entrained per day at OCGS during the corresponding month.

Date	Form	Estimated Population	No. Entrained	% Population Entrained
10 December 1975	Mysids <sup>a</sup>	$4.6 \times 10^9 \pm 6.0 \times 10^9$	$3.9 \times 10^7$	0.8%
19 February 1976	Mysids <sup>a</sup>	$3.4 \times 10^8 \pm 6.1 \times 10^7$	$6.3 \times 10^7$	15.7%
4 March	Mysids <sup>a</sup>	$1.1 \times 10^9 \pm 1.2 \times 10^9$	$1.2 \times 10^8$	10.7%
	Crangon septemspinosa (zoeae) <sup>b</sup>	$3.6 \times 10^8 \pm 1.4 \times 10^8$	$4.1 \times 10^6 \pm 1.7 \times 10^6$	1.1%
	Sagitta elegans <sup>b</sup>	$6.7 \times 10^8 \pm 3.9 \times 10^8$	$1.1 \times 10^7 \pm 4.3 \times 10^6$	1.6%
16 March	Mysids <sup>a</sup>	$6.9 \times 10^8 \pm 7.4 \times 10^8$	$1.2 \times 10^8$	17.4%
	Crangon septemspinosa (zoeae) <sup>b</sup>	$1.1 \times 10^9 \pm 4.1 \times 10^8$	$4.1 \times 10^6 \pm 1.7 \times 10^6$	0.4%
	Sagitta elegans <sup>b</sup>	$1.1 \times 10^9 \pm 6.4 \times 10^8$	$1.1 \times 10^7 \pm 4.3 \times 10^6$	1.0%
5 April	Crangon septemspinosa (zoeae) <sup>b</sup>	$1.1 \times 10^9 \pm 3.9 \times 10^8$	$2.8 \times 10^7 \pm 1.9 \times 10^7$	2.5%
	Sagitta elegans <sup>b</sup>	$1.1 \times 10^8 \pm 2.2 \times 10^7$	$7.4 \times 10^4 \pm 8.6 \times 10^4$	0.1%
29 May	Xanthidae (zoeae) <sup>b</sup>	$4.3 \times 10^8 \pm 8.0 \times 10^8$	$4.7 \times 10^6 \pm 2.3 \times 10^6$	1.1%
	Crangon septemspinosa (zoeae) <sup>b</sup>	$1.1 \times 10^8 \pm 2.0 \times 10^8$	$7.5 \times 10^5 \pm 2.8 \times 10^6$	6.8%
	Palaeomonetes spp. (zoeae) <sup>b</sup>	$1.5 \times 10^7 \pm 2.1 \times 10^7$	$1.5 \times 10^5 \pm 2.4 \times 10^6$	1.0%
9 June	Crangon septemspinosa (zoeae) <sup>b</sup>	$3.9 \times 10^8 \pm 5.9 \times 10^8$	$1.3 \times 10^7 \pm 5.3 \times 10^6$	3.3%
30 June	Xanthidae (zoeae) <sup>b</sup>	$2.3 \times 10^9 \pm 2.6 \times 10^9$	$4.2 \times 10^7 \pm 3.0 \times 10^7$	1.8%
	Crangon septemspinosa (zoeae) <sup>b</sup>	$1.1 \times 10^8 \pm 1.2 \times 10^8$	$1.3 \times 10^6 \pm 5.3 \times 10^7$	11.8%
	Palaeomonetes spp. (zoeae) <sup>b</sup>	$2.7 \times 10^8 \pm 3.3 \times 10^8$	$1.1 \times 10^6 \pm 1.2 \times 10^6$	0.4%
28 July	Mysids <sup>a</sup>	$1.1 \times 10^{10} \pm 1.8 \times 10^{10}$	$4.1 \times 10^7$	0.4%
26 August	Mnemiopsis leidyi <sup>b</sup>	$1.0 \times 10^8 \pm 1.7 \times 10^8$	$8.1 \times 10^6 \pm 5.2 \times 10^6$	8.1%

<sup>a</sup> Estimated population compared to mean number entrained at OCGS during 24 hour period.

<sup>b</sup> Estimated population compared to mean number entrained at OCGS during daylight hours.

Table 49. Results of Baywide population studies in Barnegat Bay from 4 March 1976 through 26 August 1976, and comparison with daily entrainment estimates.

Species	Date	Number of Samples	Population Estimate	Confidence Interval	Daily Entrainment Estimate	% of Population Entrained
<i>Pseudopleuronectes americanus</i> (larvae)	4 March	12	$2.58 \times 10^8$	$\pm 1.32 \times 10^8$	$4.49 \times 10^6$	1.7%
<i>Pseudopleuronectes americanus</i> (larvae)	16 March	11	$5.62 \times 10^8$	$\pm 3.48 \times 10^8$	$4.49 \times 10^6$	0.8%
<i>Pseudopleuronectes americanus</i> (larvae)	5 April	12	$2.54 \times 10^6$	$\pm 1.29 \times 10^6$	$1.39 \times 10^5$	5.5%
<i>Anchoa mitchilli</i> (eggs)	28 May	25	$2.44 \times 10^8$	$\pm 4.10 \times 10^7$	$2.60 \times 10^7$	10.7%
<i>Anchoa mitchilli</i> (eggs)	4 June	25	$1.83 \times 10^9$	$\pm 3.46 \times 10^8$	$1.24 \times 10^8$	6.8%
<i>Anchoa mitchilli</i> (eggs)	9 June	24	$2.49 \times 10^9$	$\pm 5.17 \times 10^8$	$1.24 \times 10^8$	5.0%
<i>Anchoa mitchilli</i> (eggs)	30 June	24	$1.54 \times 10^{10}$	$\pm 2.41 \times 10^9$	$1.24 \times 10^8$	0.8%
<i>Anchoa mitchilli</i> (eggs)	26 August	25	$2.08 \times 10^7$	$\pm 5.39 \times 10^6$	$1.96 \times 10^7$	94.2%
<i>Anchoa mitchilli</i> (larvae)	9 June	24	$2.08 \times 10^6$	$\pm 8.49 \times 10^5$	$1.06 \times 10^6$	51.0%
<i>Anchoa mitchilli</i> (larvae)	30 June	24	$1.86 \times 10^8$	$\pm 3.45 \times 10^7$	$1.06 \times 10^6$	0.6%
<i>Anchoa mitchilli</i> (larvae)	26 August	25	$6.22 \times 10^7$	$\pm 3.28 \times 10^5$	$2.76 \times 10^6$	4.4%
<i>Syngnathus fuscus</i> (juveniles)	28 May	25	$1.21 \times 10^6$	$\pm 1.03 \times 10^6$	$6.78 \times 10^4$	5.6%
<i>Syngnathus fuscus</i> (juveniles)	4 June	25	$6.10 \times 10^6$	$\pm 4.75 \times 10^6$	$3.71 \times 10^5$	6.1%
<i>Syngnathus fuscus</i> (juveniles)	9 June	24	$2.20 \times 10^6$	$\pm 1.67 \times 10^6$	$3.71 \times 10^5$	16.9%
<i>Syngnathus fuscus</i> (juveniles)	30 June	24	$6.94 \times 10^6$	$\pm 3.61 \times 10^4$	$3.71 \times 10^5$	5.3%
<i>Syngnathus fuscus</i> (juveniles)	26 August	25	$1.09 \times 10^6$	$\pm 1.94 \times 10^4$	$2.44 \times 10^4$	2.2%

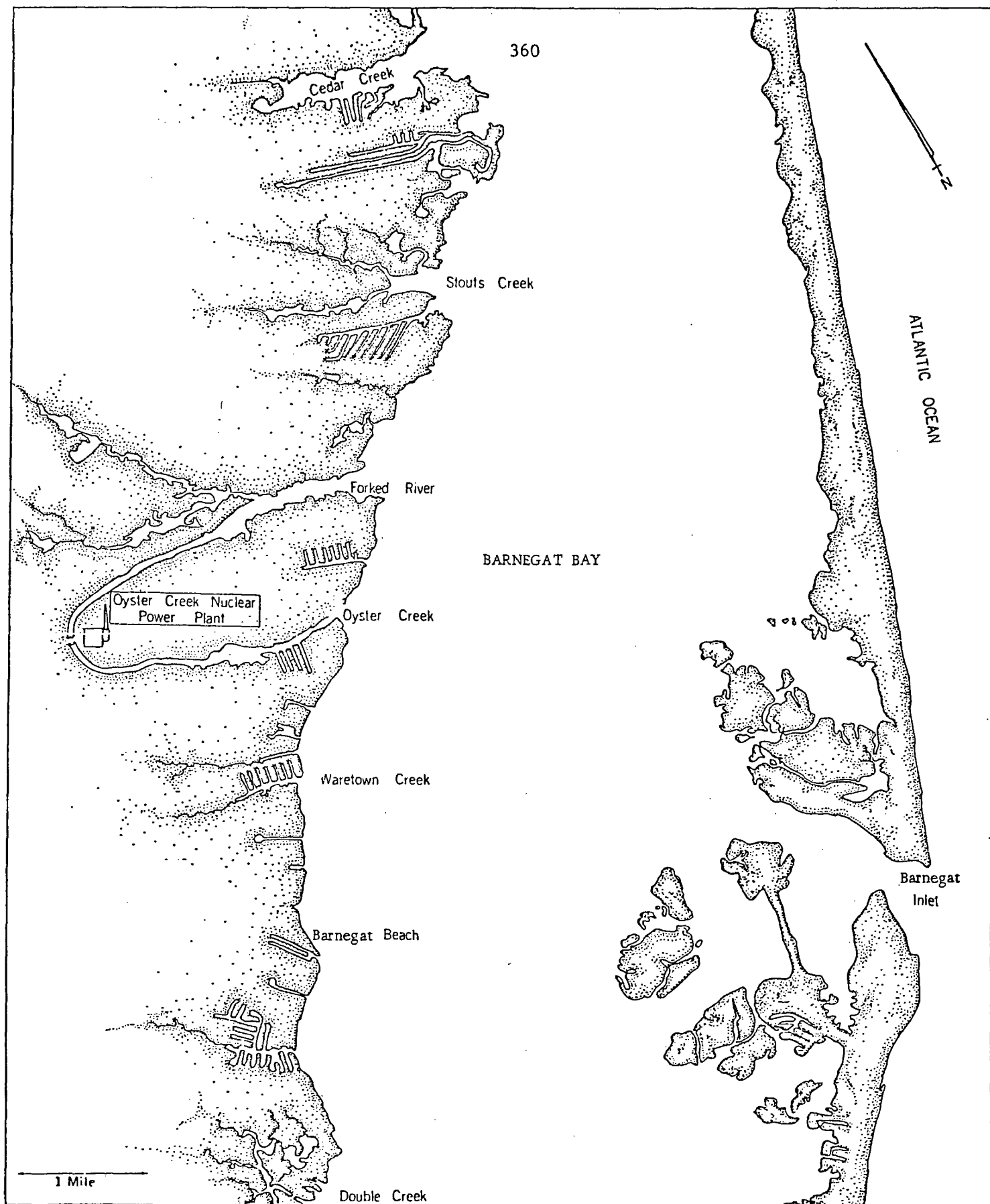


Fig. 1. Location of Oyster Creek Generating Station, Forked River and Oyster Creek in relation to Barnegat Bay from Cedar Creek to Double Creek.

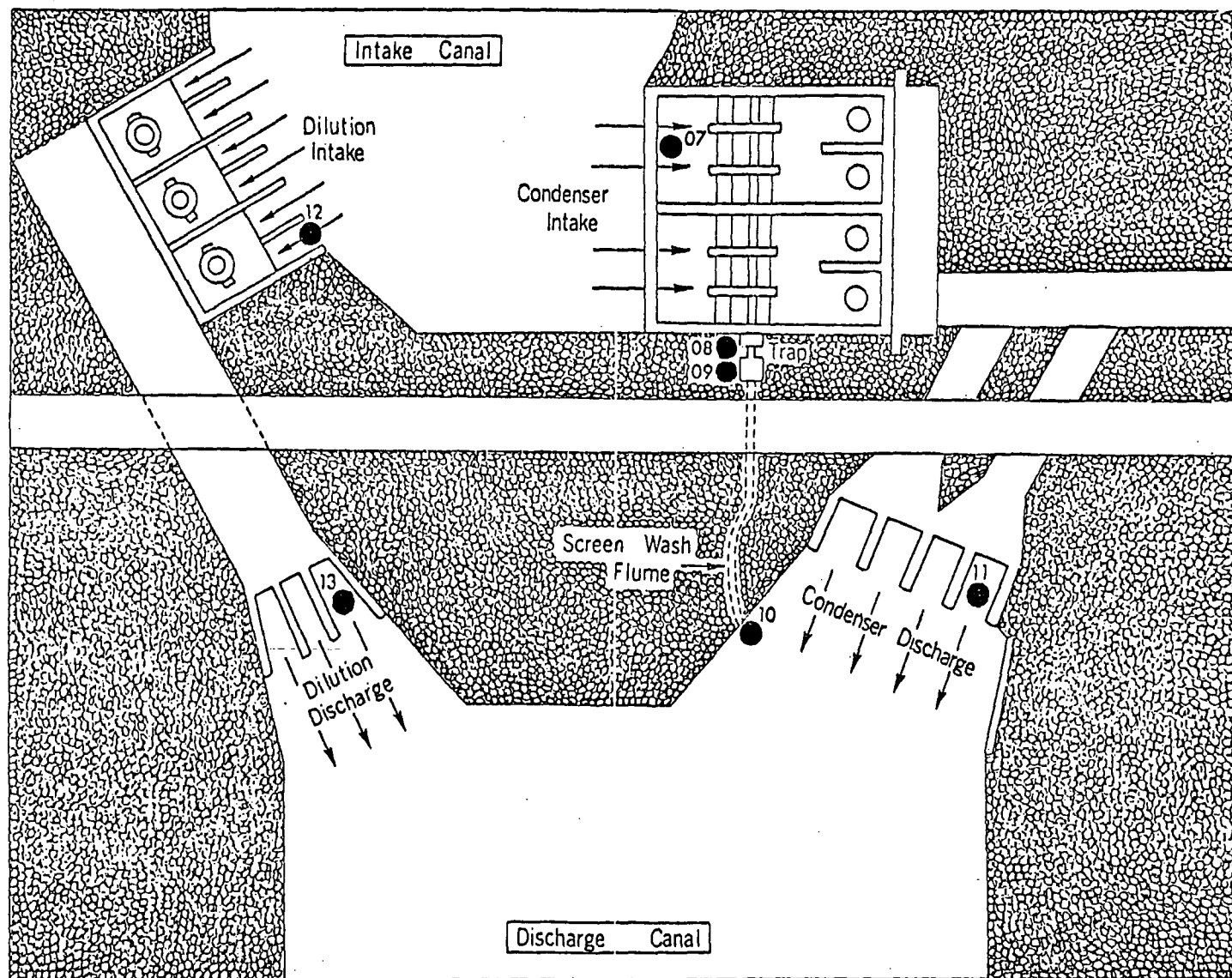


Figure 2 . Sampling locations ( ● ) for biological collections at the Oyster Creek Generating Station.

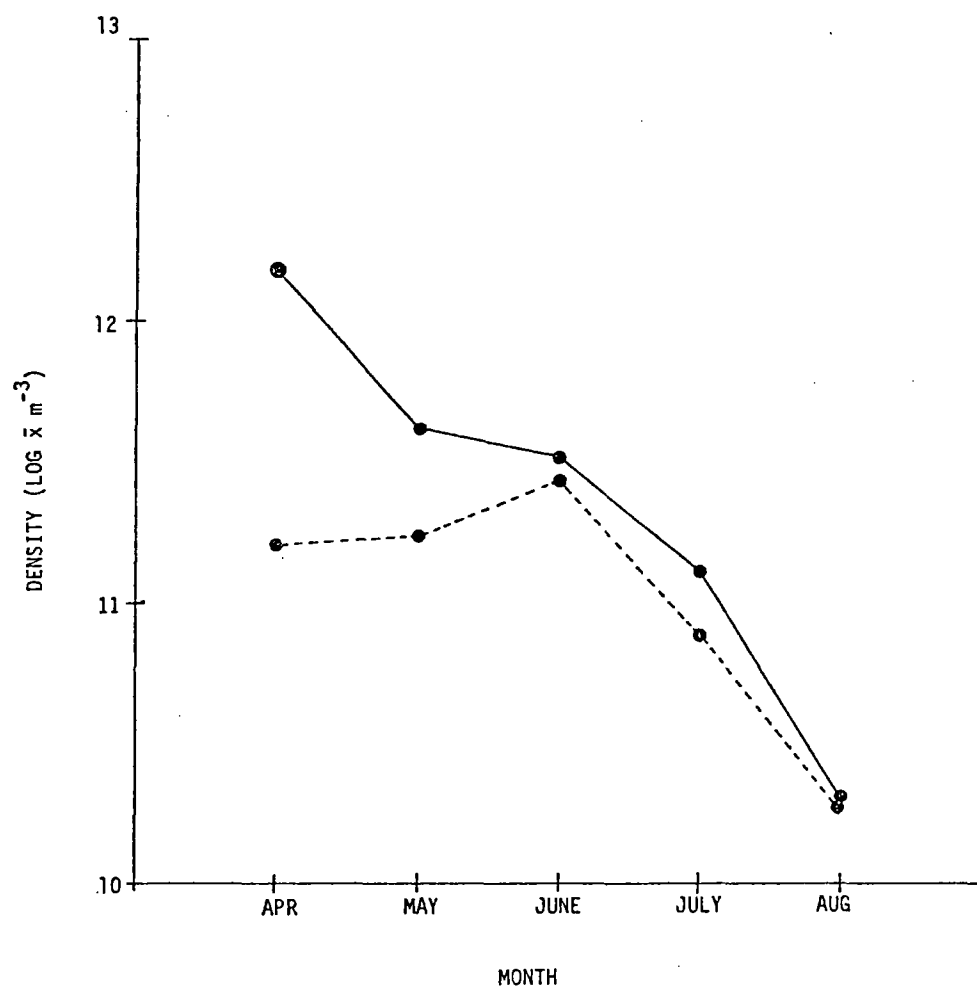


Fig. 3 . Day (—) and night (-----) monthly mean densities of the total number of microzooplankton collected at the condenser discharge from April through August 1976.

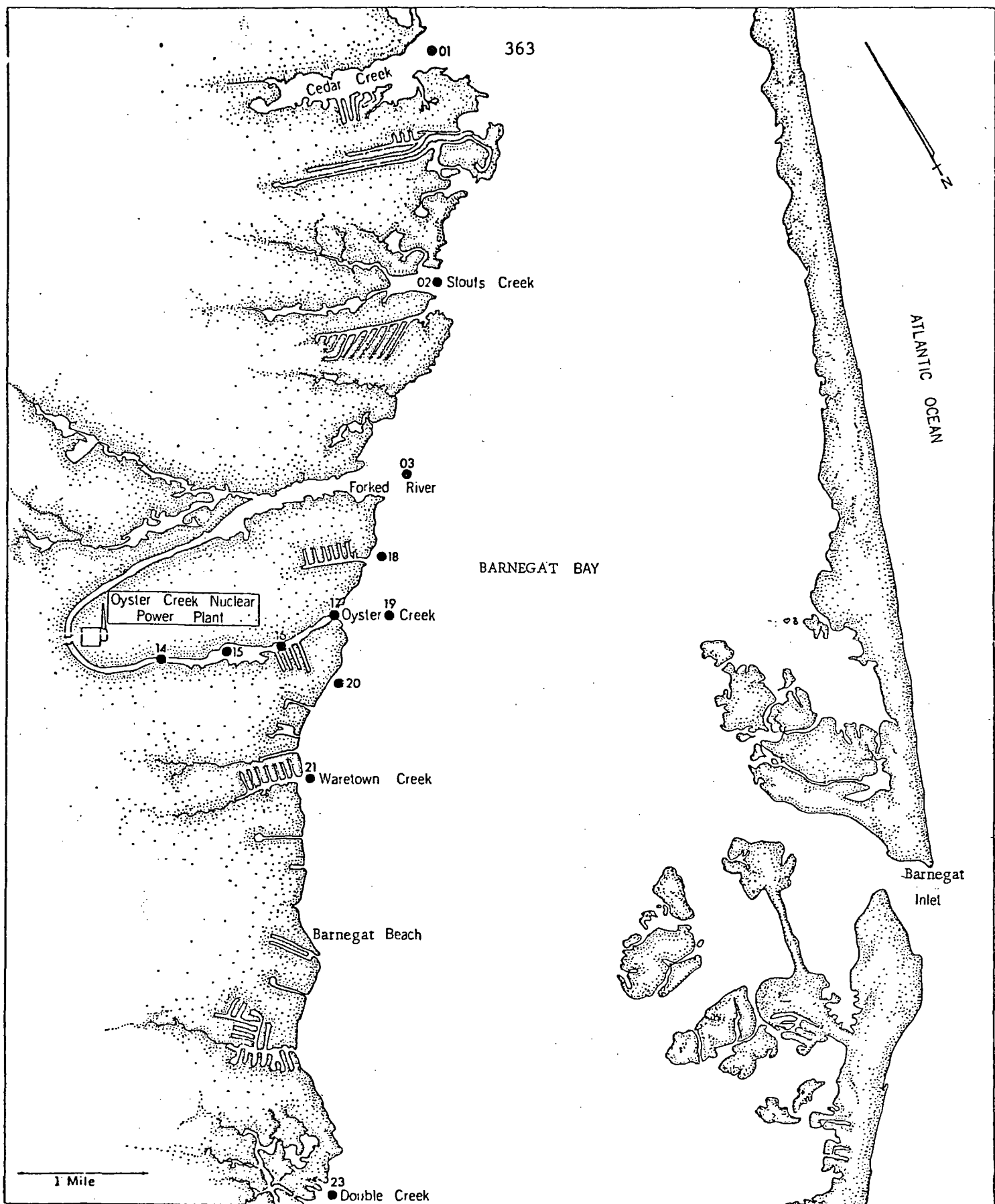


Fig. 4 . Sampling locations for plankton collections in Barnegat Bay from September 1975 through February 1976.



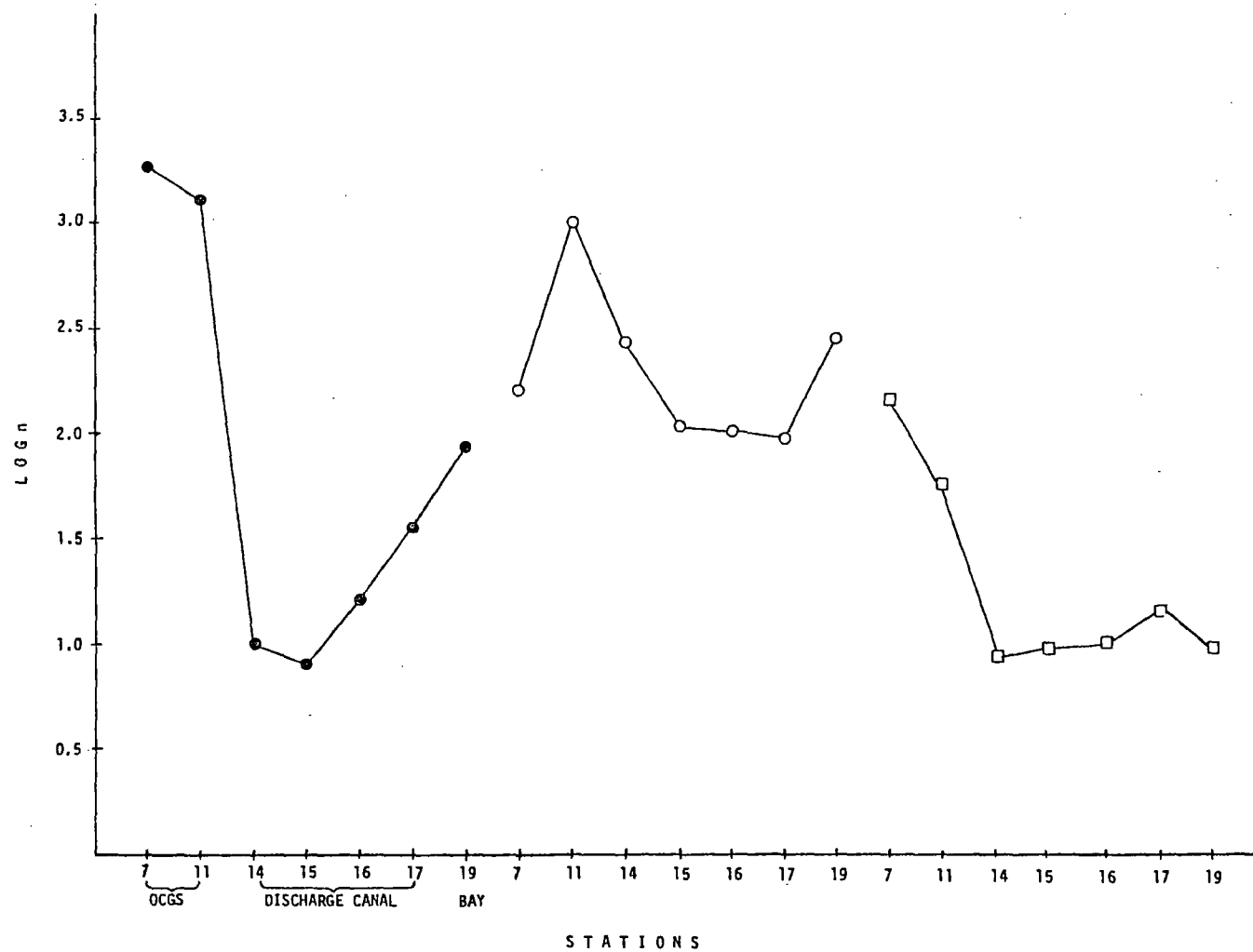


Fig. 5. Log<sub>10</sub> mean density (n/1000m<sup>3</sup>) of mysids (●—●), amphipods (○—○), and cumaceans (□—□) at stations at OCGS and in discharge canal east of the Route 9 bridge from April through August 1976.

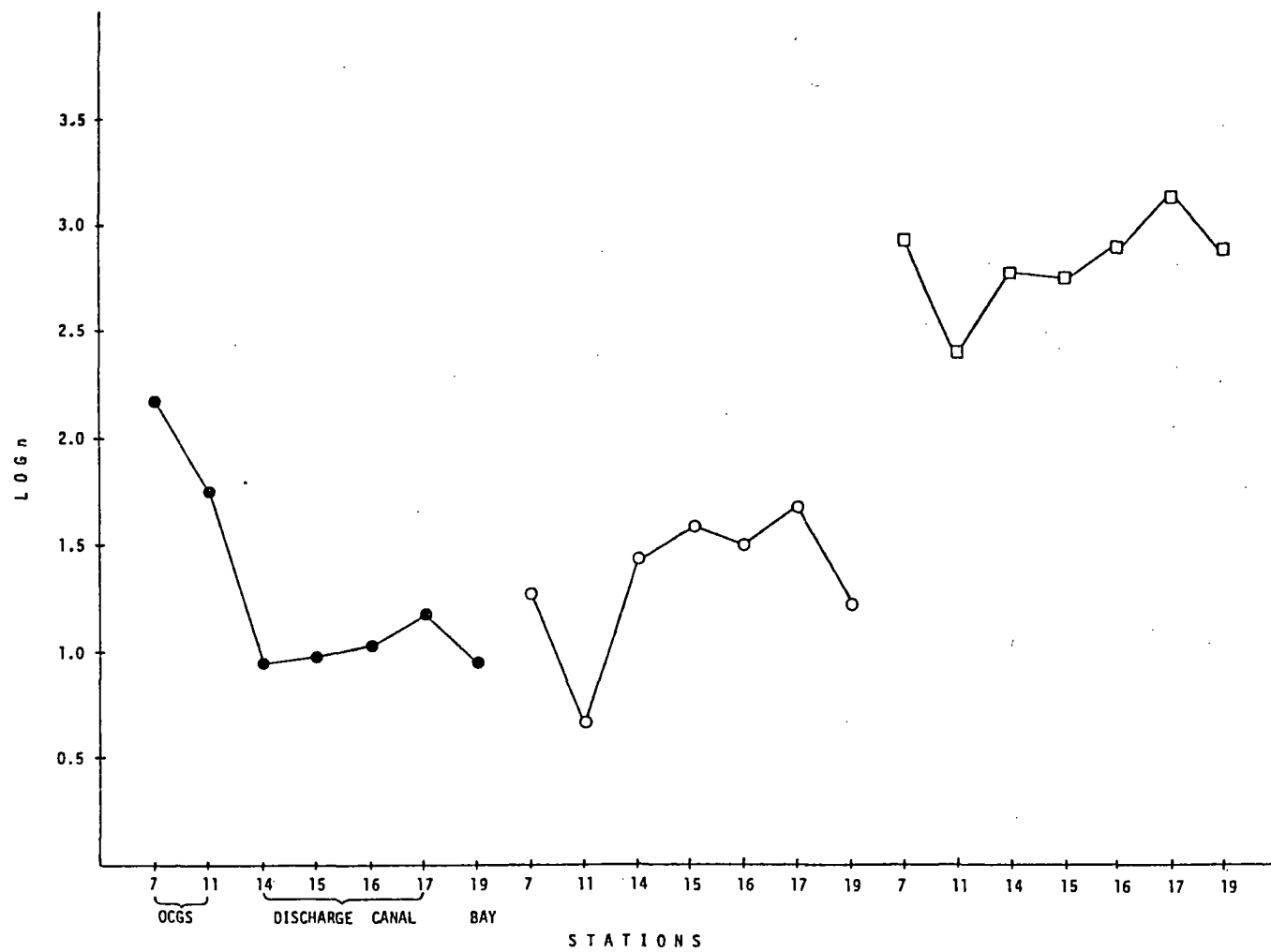


Fig. 6.  $\log_{10}$  mean density ( $n/1000m^3$ ) of sand shrimp (●—●), grass shrimp (○—○), and mud crab zoeae (□—□) at OCGS and in the discharge canal east of the Route 9 bridge from April through August 1976.

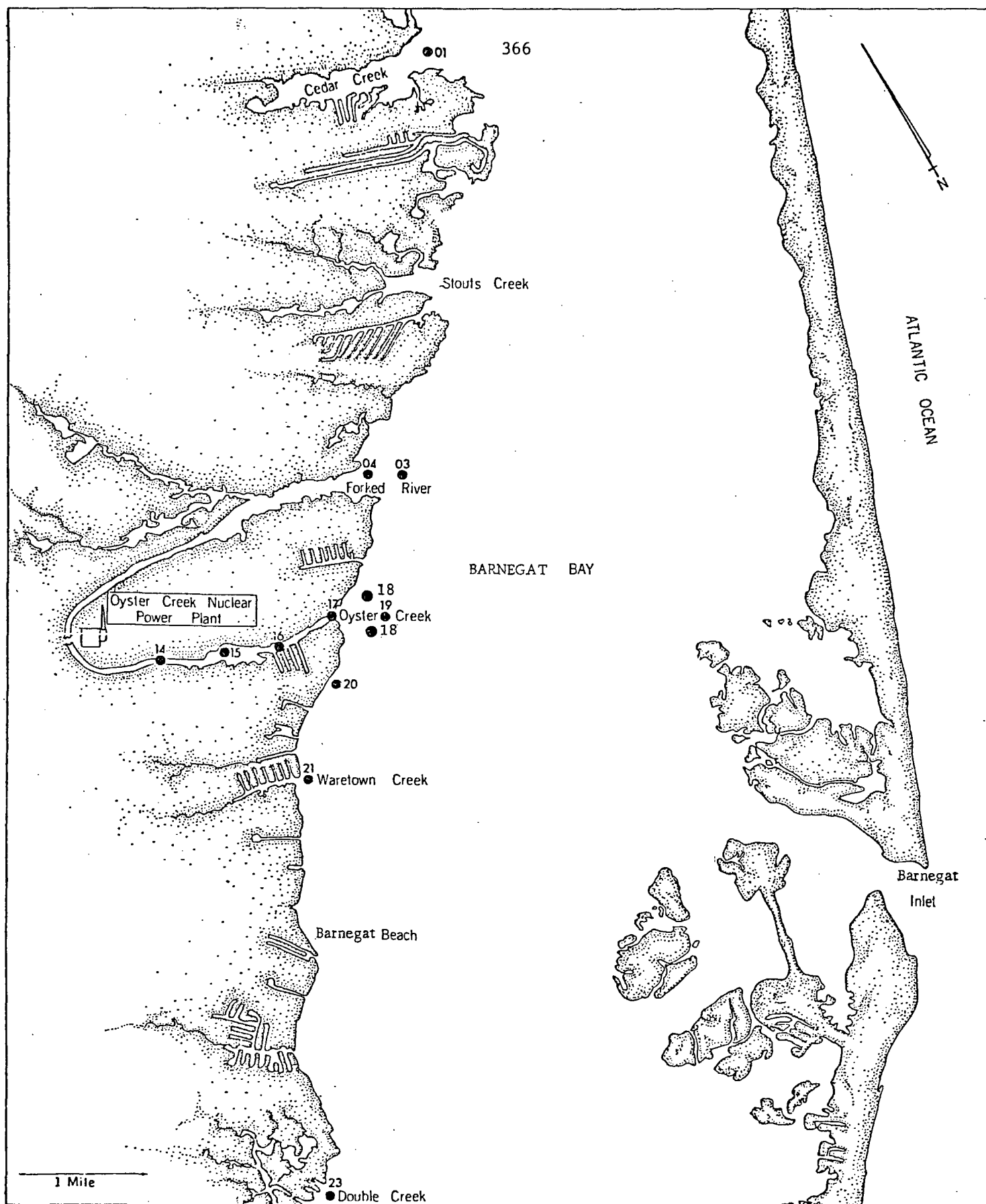


Fig. 7. Sampling locations for plankton collections in Barnegat Bay from March through August 1976.

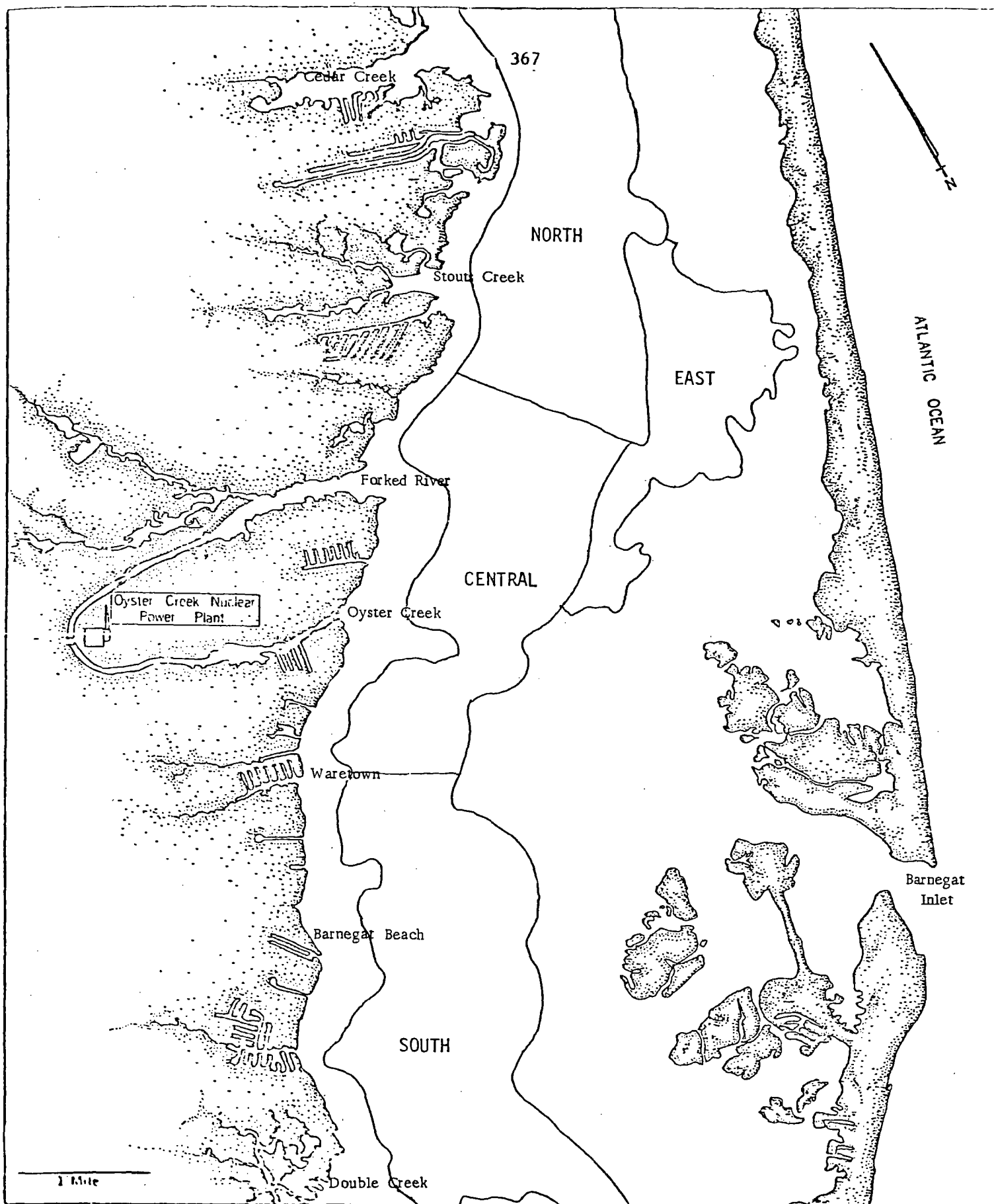


Fig. 8. Sampling strata for macrozoo- and ichthyoplankton population studies in Barnegat Bay from December 1975 through March and July 1976.

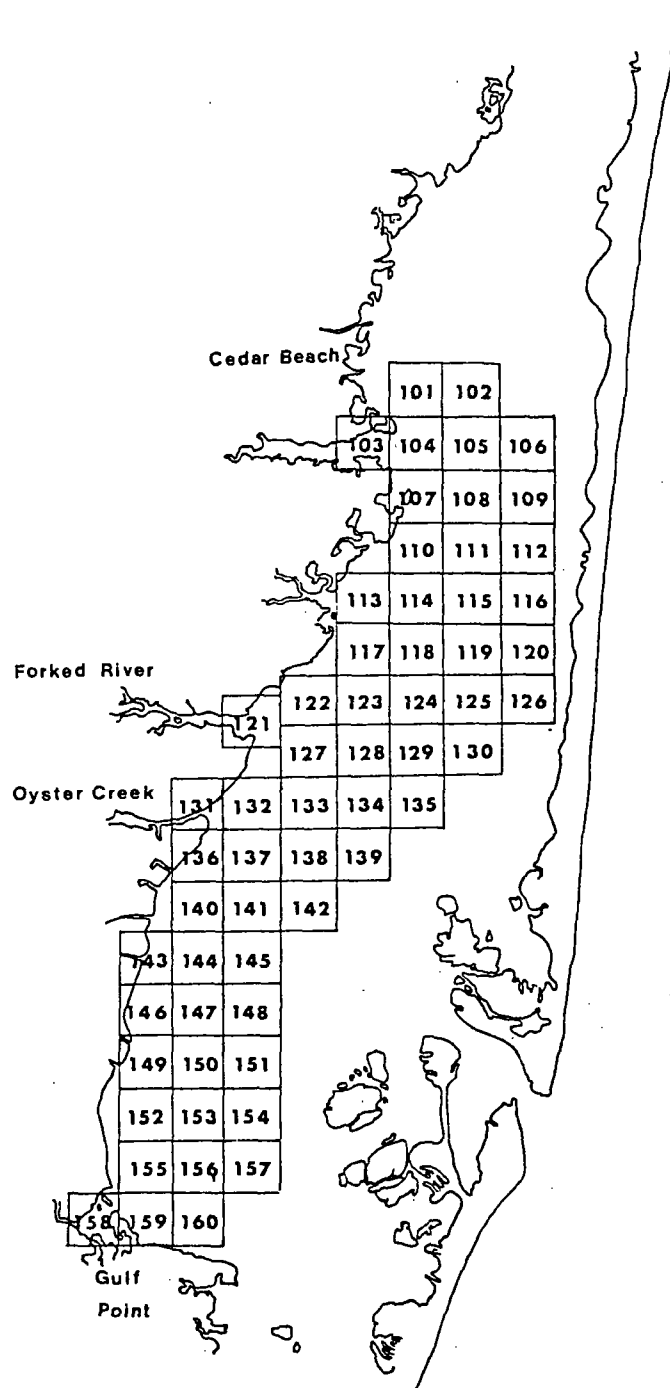


Fig. 9. Quadrates sampled for zooplankton and ichthyoplankton population studies in Barnegat Bay from May 1976 through August 1976.