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A SPATIAL AND SEASONAL STUDY
OF THE BENTHIC FAUNA OF THE LOWER BAY
OF NEW YORK HARBOR

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January 1989

Sponsored by the
New York District,
U.S. Army Corps of Engineers

Special Report 84

Reference 89-1

Approved for Distribution


J.R. Schubel, Dean

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BBN 7643

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Acknowledgements

This work was supported through contracts with the New York District of the U.S. Army Corps of Engineers. We would like to thank R. Muller, M. Anders, C. Arnold, L. Benson, C. Jones, and M. Zimmerman-Berger for carrying out the field and laboratory analyses. In addition, we are grateful to B. Malione, M. Beristain, M. Dornblaser, R. Eppi, J. Hennessy, M.A. O'Hare, E. Osking, and A. Subramanian for their help in the field and to C. Decker, M. Jacobson, W.S. Kim, and K. Swider for their assistance in the lab.

Introduction

In Bokuniewicz and Cerrato (1985), an empirical procedure was developed to identify potential sites in the Lower Bay for a large containment island. This procedure was used to evaluate areas by incorporating benthos and finfish data under a variety of different relative weighting schemes. As a result of this analysis, three areas of the Lower Bay persistently emerged as likely sites for a containment facility (Figure 1A).

In carrying out this empirical analysis, we felt that further progress toward identifying a site for a containment island was limited in part by inadequacies in the benthic data base available at that time. To eliminate these inadequacies, we have carried out a regional benthic survey of the Lower Bay and site specific sampling within each of the three potential containment island areas during 1986-87. The goals of this study were to 1) test the siting predictions made in Bokuniewicz and Cerrato (1985) and 2) provide detailed, seasonal information on the current state of the benthic resources within the Lower Bay and at each potential containment island site.

To date, the results of the 1986-87 survey have been incorporated into the site selection procedure, and the conclusions reached from that analysis are given in Cerrato et al. (1988) (Figure 1B). The purpose of this current report will be to address the second goal of the study. This report will describe in quantitative detail the distribution and abundance of the benthos, the nature and characteristics of the surficial sediments, and the distribution of other relevant environmental variables such as depth, temperature, and salinity in the Lower Bay.

Background

1. Regional Coverage

The critical component in the empirical selection procedure developed by Bokuniewicz and Cerrato (1985) was the use of regional or "mappable" sets of biological data. It was assumed that valid comparisons of the biological resources in the Lower Bay could only be carried out using data sets which covered a large portion of the Bay and which were adequate enough in their coverage to see gradients in the data.

The Lower Bay has been perhaps the most extensively studied area of the Hudson River estuary. Previous studies reporting on the benthos in this region include Walford (1971), McGrath (1974), Dean (1975), Woodward and Clyde (1975a,b), Gandarillas and Brinkhuis (1981), Cerrato and Scheier (1984), and Stainken, et al. (1984). Most of these studies involved limited spatial sampling. Walford (1971), for example, sampled at only eight stations on the West Bank. Woodward and Clyde (1975a,b) collected benthic samples at eleven stations on the East Bank south of Coney Island. Gandarillas and Brinkhuis (1981) carried out an intensive seasonal survey at 74 stations, but it was limited to two proposed mining sites on the East Bank and near Old Orchard Shoal and a control area near Romer Shoal. The study by Cerrato and Scheier (1984) was restricted to examining the benthic fauna at two sand borrow areas and one control site on the West Bank.

In only three of the previous benthic surveys (Dean, 1975; McGrath, 1974; Stainken, et al., 1984) were attempts made to cover substantial portions of the Lower Bay. Dean (1975) collected benthic samples during each summer from 1957 to 1960. Samples were collected using a 0.1 m² Peterson or van Veen grab and sieved through a 1.5 mm mesh screen. A total of 73 stations were sampled during this study. Most of these stations were concentrated in Raritan Bay and only 25% of the locations were east of a transect running from Great Kills to Point Comfort. Significant portions of the Lower Bay such as Flynns Knoll, Romer Shoal, and the East Bank were not sampled by Dean, and only one station was established in Sandy Hook Bay.

In McGrath's (1974) survey, benthic samples were taken with a 0.1 m² Smith-McIntyre grab. All samples were sieved on a 1.0 mm mesh screen. McGrath collected samples at 65 stations during January-February 1973. Additionally, seasonal samples were also collected at stations in Sandy Hook Bay. Station locations for the January-February 1973 survey were for the most part uniformly distributed throughout the Lower Bay and were spaced approximately 1 km apart. Despite the extensive nature of this survey, several important areas (i.e., the East Bank and Gravesend Bay) were not included, while other areas (e.g., Flynns Knoll and Romer Shoal) received minimal coverage. In terms of spatial coverage, McGrath's survey was the most complete of all prior benthic studies in the Lower Bay. For this reason, the results of this survey were included in the original site selection analysis conducted by Bokuniewicz and Cerrato (1985).

Stainken, et al. (1984) reoccupied McGrath's stations during a benthic survey conducted from June 1979 to May 1980. Samples were collected with a 0.1 m² Smith-McIntyre grab and sieved through a 10 mm mesh screen. Because of the large sieve size, this study does not provide results which can be used to analyze community structure.

2. Temporal Changes

Aside from inadequacies in spatial coverage noted above, a second major weakness in the data base for the Lower Bay was that the existing regional surveys could not be used to adequately assess temporal changes in the benthic fauna. Attempts to evaluate long term changes have been made by Berg and Levinton (1984) and Diaz and Boesch (1984). Both of these studies concentrated on comparing the regional surveys of Dean (1975) and McGrath (1974). The two surveys, however, differ notably in terms of sampling location, season of collection (summer vs. winter), and the screen sizes used to sieve the samples (1.5 mm vs. 1.0 mm). Both Diaz and Boesch (1984) and Berg and Levinton (1984) emphasized that differences in sampling design and methods limited the conclusions that could be reached from a comparison of the two surveys. Diaz and Boesch, for example, noted that only "substantial changes in community structure and near eliminations of populations of common species" could be detected because of these differences. Additionally, the more recent of these two surveys (i.e., McGrath, 1974) was carried out well over a decade ago, and substantial changes in the benthos may have taken place over time.

On a shorter time scale, little is known of the seasonal variations in benthic distributions on a bay-wide basis (Berg and Levinton, 1984). The two regional surveys by Dean and McGrath were static surveys (Berg and Levinton, 1984); each were done in only one season. Seasonal variations are known to be quite substantial in some areas of the Lower Bay. Cerrato and Scheier (1984), for example, found highly variable seasonal patterns in the benthic fauna within borrow pits on the West Bank. In one pit, benthic abundances changed by over two orders of magnitude in a span of only three months (Cerrato and Scheier, 1984). During this same period of time, a three-fold change in the average number of species per sample was observed (Cerrato and Scheier, 1984). While borrow pits are not representative of typical habitats within the Lower Bay, these results show the potential for large scale seasonal changes and illustrate the shortcomings in comparing surveys which differ in season of collection. They also point out the need to collect and assess seasonal data as part of the site selection process.

3. Availability of Site Specific Data

Specific information on the benthic fauna at the three potential containment island sites identified by Bokuniewicz and Cerrato (1985) was for the most part limited. At the Raritan Bay site, only two stations sampled by Dean (1975) and one taken by McGrath (1974) were located within the designated area.

Neither Dean nor McGrath collected samples at the East Bank area. The only recorded sampling at this location was reported in Brinkhuis (1980). During February and March 1978, Brinkhuis collected benthic samples at nine stations located within the southern half of the East Bank site. Samples were collected using a 0.04 m² Shipek grab and sieved through a 1 mm mesh screen.

For the West Bank area, McGrath (1974) collected benthic samples at only one location within and at two adjacent stations. None of Dean's sampling stations were in the immediate vicinity of this site. However, the northernmost 250 acres of the West Bank site, representing about 15% of the designated area, along with immediately adjacent locations, has been extensively surveyed by Gandarillas and Brinkhuis (1981) and later by Cerrato and Scheier (1984). Gandarillas and Brinkhuis collected benthic samples on a seasonal basis at 25 stations on Old Orchard Shoal between May 1979 and May 1980. Cerrato and Scheier obtained seasonal benthic samples in this same area between October 1980 and July 1983. Both studies used comparable methods; samples were collected with a 0.04 m² Shipek grab and washed through a 1 mm mesh screen. Combining the results of the two studies, Cerrato and Scheier assembled a contiguous, four year long, seasonal record of the benthic fauna in this area.

The overall usefulness of the existing site specific data was limited by a number of factors. With the exception of the northernmost portion of the West Bank site, the existing information was fairly old, spatial coverage within each site was not extensive, and seasonal variations in the benthic fauna had not been documented. Furthermore, the data in the surveys were not collected synoptically and each study utilized somewhat different sampling

methodologies. As a result, an assessment of the benthic fauna within each potential containment island site, among sites, or even between sites and the Lower Bay as a whole could not be made with confidence.

Methods

1. Sampling Procedures

Sampling methods in the 1986-87 benthic survey were designed to eliminate existing inadequacies in the benthic data base. The survey consisted of both a regional study of the Lower Bay and site specific sampling within the three potential containment island areas. Benthic samples were collected during four seasonal cruises (spring, summer, fall, and winter) aboard the R/V ONRUST. A total of 114 stations were sampled on each of the seasonal cruises. The exact sampling dates were 28 April-2 May, 21-25 July, 6-10 October 1986, and 12-16 January 1987.

The regional survey consisted of seasonal sampling at 84 stations (Figure 2). This part of the study was designed to provide representation from all of the major environments in the Lower Bay and to yield mappable data sets which could be incorporated into the site selection procedure. The sampling scheme (and station numbering scheme) was based on McGrath's (1974) survey with several notable exceptions. Several stations (designated by McGrath as stations 20, 22, 23, 29, 44, and 45) falling within or adjacent to the potential containment island sites on the West Bank and Raritan Bay were deleted since these areas received extensive coverage in the site specific part of the study. Three stations in western Raritan Bay (designated by McGrath as stations 33, 61, and 64) were also eliminated to maintain spatial coverage at a level comparable in density to the rest of the Lower Bay. Seven locations, identified as stations 38, 39, 53, 54, 55, 59, 60, and 84, apparently not sampled by McGrath (1974) were included in the 1986-87 survey. Seventeen additional sampling locations, identified as stations 89 to 105 in Figure 2, were included to provide coverage within Gravesend Bay, Flynn's Knoll, Romer Shoal, and the East Bank. Minor adjustments in some of McGrath's original station locations were made to insure that the sampling reflected the distribution of major sediment types as mapped by Coch (1986).

For the three potential containment island sites, seasonal benthic samples were collected at 10 stations per site. This part of the study was designed to provide detailed site specific data that would allow comparisons to be made of the benthos within a site, among sites, and between sites and the rest of the Lower Bay. According to Coch (1986), all three sites consisted of two or more distinct sediment types. Therefore, sampling was stratified to reflect both bathymetry and sediment composition.

Sampling stations were located using a Texas Instruments 9900 II Loran C. This instrument provides a direct readout of latitude and longitude, and the unit was calibrated using a local reference point of known location during each cruise. Radar fixes and local landmarks were used to double check station locations. The latitude and longitude of each station is given in Table 1.

Benthic samples were taken using a 0.1 square meter Smith-McIntyre grab. Two replicate grabs per station were collected on each cruise for biological study. During the spring and winter cruises, a portion of a third grab was saved untreated for sediment analysis. A Martek MK VI multiparameter analyzer was used to obtain measurements of depth, bottom temperature, and conductivity at each station. Salinity was later calculated from recorded parameters based on the Practical Salinity Scale of 1978.

Grab samples for biological study were wet-sieved onboard immediately after collection. Sieves were constructed of 1 mm diameter Nitex screening. After washing, all material retained on the screen (e.g., animals, detritus, sand, gravel, shell fragments, etc.) was transferred to labeled sample jars. These samples were preserved in 10% buffered formalin and stained with rose bengal.

2. Laboratory Procedures

With the exception of the summer cruise, biological samples were rewashed in the laboratory using a 1 mm screen and transferred to 70% ethyl alcohol. To obtain compatibility with Dean's (1975) study, samples collected in summer were partitioned into two subsamples by sieving through both a 1.5 and 1.0 mm mesh screen. Samples were then analyzed using a two stage process. In the first stage, animals were picked from the sediments, detritus, etc. under an illuminated magnifier and sorted to phylum level. In the second stage, individual organisms were identified to species level whenever possible, and the total for each taxa enumerated. All data were initially entered on log sheets and later transferred to a computer.

For the sediment analysis, each sample was homogenized, and a subsample of approximately 10 g was taken. Particle size distributions were determined by wet sieving and pipette analysis (Folk, 1964). Subsamples were dispersed with a 1% Calgon solution (sodium hexametaphosphate) and mechanically agitated for one hour to disaggregate the particles. The subsample was wet sieved into a 1000 ml graduated cylinder using a combination of a 2 mm mesh sieve and a 63 micron mesh sieve to separate the gravel, sand, and mud fractions. The mud fraction in the graduated cylinder was separated into silt and clay by taking two pipette withdrawals. Sediment fractions separated during this process were dried in an oven at 80-90 degrees C, cooled to room temperature, and weighed. Weights of the silt and clay fractions were corrected for the amount of Calgon added. Mass percentages of the four particle size categories were calculated as percentages of the total subsample weight. No correction was made for salt content in the pipetted samples because the error introduced was considered insignificant. Organic content of the samples was measured as the weight loss after combustion at 450 degrees C for at least four hours. All data were initially entered on log sheets and later transferred to a computer.

3. Data Analysis

A number of derived parameters or indices (abundance, species richness, Shannon-Wiener diversity, and equitability) were computed from the biological data. Nonenumerable species (e.g., colonial organisms such as hydrozoans)

were tabulated in calculating species richness but were excluded from all other computations. The occurrence of these taxa is reported on the data sheets at the end of this report.

Abundances are reported as the number of individuals per square meter. These estimates were obtained by dividing the sample results by the sampling unit area (0.1 m^2). Species richness is presented as the number of species per 0.1 m^2 . Because the relationship between the number of species and sampling unit area is nonlinear, normalization to a standard unit such as number per square meter is not possible for this parameter. Station maps in the results section represent per sample values of abundance and species richness averaged for each station.

Two indices of diversity were used to analyze the biological data. The first index is the Shannon-Wiener information function:

$$H'(s) = -\sum_{i=1}^s p_i \log_2 p_i$$

where s is the total number of species and p_i is the proportion of individuals in the sample belonging to the i th species ($i = 1, 2, 3, \dots, s$). Shannon-Wiener diversity measures both species richness (i.e., the number of species in a sample) and the distribution of individuals among species (termed evenness or equitability). This index has a minimum value of 0. High values of H' represent diverse assemblages. Diversity was computed for each sample in the study. Station maps in the results section represent average per sample values for that station.

The second index of diversity is the equitability or evenness function:

$$V' = H'(s)/H'_{\max}$$

where $H'_{\max} = \log_2 s$. This index has a range from 0 to 1. The higher the value of V' , the more evenly individuals in a sample are distributed among the s species. Equitability was computed for each sample, and station maps in the results section represent average per sample values for that station.

Station maps in the results section were created using a software package called SURFER (Golden Software, Inc.). SURFER is a flexible computer program which can present distributional data in a variety of two and three dimensional formats. Contour lines were produced within SURFER by first generating a regularly spaced grid of interpolated values from the irregularly spaced distributional data. Each element in the regularly spaced grid was computed as a weighted mean of the three nearest data points. The weighting factor was based on the inverse squared distance between the grid element and the location of each data point. With this algorithm, data points nearest the location of the grid element carry greater weight than points further away. The resulting grid was next smoothed using a cubic spline interpolation algorithm. This procedure serves to reduce the angular appearance of the

contour lines. In the last step, contour lines were drawn based on the gridded values, and land areas and data values were overlaid to produce the final plot.

The locations of the three original potential containment island sites, channels, and the 18 foot depth contour are plotted in Figure 3. This figure, if copied onto a transparency, may be overlaid on the maps in the results section to examine the data in relation to these features.

Results

1. Hydrographic Parameters

Data on depth, temperature, and salinity were collected on every seasonal cruise at each station. A tabular listing of these parameters is given in Appendix A.

a. Depth

Station depths for each seasonal cruise are presented in Figures 4-7. Depths ranged from 2 to 21 meters. The average depth of the stations in this study was 7 meters.

b. Temperature

During the spring cruise, bottom temperatures in the study area ranged from 8.9° to 12.9°C (Figure 8). The average temperature for all stations was 10.7°C . Lowest temperatures were found in the eastern section of the Lower Bay, including an area associated with Chapel Hill Channel and a second area within Sandy Hook Bay. Highest temperatures were in Raritan Bay, especially in the shallow areas bordering New Jersey.

For the summer cruise, bottom temperatures ranged from 19.7° to 24.4°C (Figure 9). This is the largest temperature range observed during the study. The average temperature for all stations was 22.5°C . A fairly clear east-west gradient in temperature is evident, with the lowest temperatures found along the Sandy Hook - Rockaway Point transect and with temperatures gradually increasing to the west.

In the fall, bottom temperatures ranged from 14.6° to 18.2° and averaged 16.8° for the entire study area (Figure 10). Temperatures were for the most part fairly uniform throughout the Lower Bay, with the exception of a slightly colder area associated with Chapel Hill Channel. The highest temperatures were again observed in Raritan Bay.

During the winter cruise, the average bottom temperature in the Bay was 4.5°C , and temperatures at individual stations ranged from 3° to 6.3°C (Figure 11). Highest temperatures were found along the Sandy Hook - Rockaway Point transect. An east-west gradient of decreasing bottom water temperatures is evident at this time, and lowest temperatures were observed in Raritan Bay.

c. Salinity

For the spring cruise, bottom salinities ranged from 18.4 to 30.9 ppt (Figure 12). This was the largest range found during the study. The average salinity for all stations was 24.6 ppt. Salinities were highest off Rockaway Point and declined to the northwest in the direction of the Narrows and also westward towards Raritan Bay. Lowest salinities were found in Raritan Bay in the shallow areas along the New Jersey shoreline.

Bottom salinities in the summer ranged from 24.4 to 30.9 ppt (Figure 13) and averaged 27.1 ppt for the entire study area. Salinities were for the most part fairly uniform throughout the Bay. Highest values occurred off Rockaway Point and in an area associated with Chapel Hill Channel. Lowest salinities were observed in Raritan Bay along the shore of New Jersey.

During the fall cruise, the range in bottom salinity was from 18.2 to 29.3 ppt (Figure 14). The average salinity for all stations was 25.8 ppt. Like the summer cruise, salinities were again fairly uniform throughout the Bay. There was, however, a slight north-south gradient in salinity at this time. Lowest salinities were found along the entire New Jersey shoreline, and values gradually increased to the north. A second area of low salinity was also found in the northern area of the Lower Bay along the shoreline of Staten Island.

In the winter, salinity values ranged from 18.8 to 30.9 ppt (Figure 15). The average salinity for all stations was 24.7 ppt. Highest values occurred off Rockaway Point, and like the spring cruise, salinity declined to the northwest in the direction of the Narrows and also westward towards Raritan Bay. Lowest salinities were observed along the New Jersey shoreline within Raritan Bay. Low salinities were also found in Sandy Hook and Gravesend Bay.

2. Sediment Characteristics

Sediment samples were collected at each station during the spring and winter cruises. Grain-size analysis was carried out on both sets of samples. The organic content of the sediments was determined only for the set taken in the spring. Results are tabulated in Appendix B.

The general distribution of sediments within the Lower Bay is most clearly seen by examining plots of percent silt-clay given in Figures 16-17. Muddy sediments are found in a band running in a southeast to northwest direction from Sandy Hook Bay to Staten Island. Fine-grained sediments are also characteristic of the inner portion of Raritan Bay. In the north, muddy sediments are for the most part associated with borrow pits on the East and West Bank.

a. Percent Gravel

Gravel content in the surficial sediments ranged from 0 to 52.2% based on results from the spring cruise and from 0 to 74.8% as determined from the winter cruise samples (Figures 18 and 19). Despite the wide range of values, gravel content was generally low at most stations within the study area.

Exceptions to this include patches of high percent gravel off Rockaway Point, off the western end of Coney Island, and to the southwest of Great Kills Harbor. Average percent gravel for all stations was 4.5% in the spring and 4.8% for the winter cruise.

b. Percent Sand

Sand content in the surficial sediments ranged from 1.9 to 99.3% in the spring and from 0.4 to 100.0% during the winter cruise (Figures 20 and 21). Areas with sand values exceeding 90% include Old Orchard Shoal, Flynn's Knoll, Romer Shoal, the East Bank, and an area along the New Jersey Shoreline between Raritan Bay and Sandy Hook Bay. The average for all stations was 62.4% and 60.3% for the spring and winter cruises, respectively.

c. Percent Silt

During the spring cruise, percent silt in the surficial sediments ranged from 0 to 60.8% (Figure 22) and averaged 17.8% for the entire study area. From the results of the winter cruise, silt content ranged from 0 to 99.5% (Figure 23), and the overall average for the study area was 18.6%. Areas of high silt include the borrow pits on the East and West Bank, the band of muddy sediments running from Sandy Hook Bay to Staten Island, and inner Raritan Bay.

d. Percent Clay

High clay content sediments were distributed in a manner similar to that found for percent silt. Values of high percent clay were found within the borrow pits on the East and West Bank, the muddy region from Sandy Hook Bay to Staten Island, and within Raritan Bay. Clay contents ranged from 0 to 49.7% in the spring and 0 to 62.2% during the winter cruises (Figures 24 and 25). The average value for all stations was 15.4% and 16.3% for the spring and winter cruises, respectively.

e. Organic Content

High organic content sediments correspond fairly well to the muddy regions within the Lower Bay (Figure 26). The areas of high organic content include the borrow pits on the East and West Bank, inner Raritan Bay, and the band of muddy sediments running from Sandy Hook Bay to Staten Island. Organic content in the surficial sediments collected during the spring cruise ranged from 0.1% to 15.5%. The average for the entire study area was 4.9%.

3. Biological Characteristics

Two replicate grabs at each of the sampling stations were collected and analyzed for all four seasonal cruises. A total of 521072 animals representing 213 taxa were taken. A composite species list is given in Table 2. Of the 213 taxa, 69 (32%) were Polychaetes, 39 (18%) were Molluscs, and 65 (31%) were Crustaceans. The remaining taxa were distributed among ten other groups: Porifera, Cnidaria, Platyhelminthes, Rhynchocoela, Aschelminthes, Ectoprocta, Phoronida, Oligochaeta, Echinodermata, and Chordata.

Station and study area summaries are reported in detail in this section. Data for each grab sample are tabulated in Appendix C. Abundance, species richness, diversity, and equitability results for each sample may be found in Appendix D. One other data set is also included in the appendices. In Appendix E, the results for the summer cruise based on a 1.5 mm mesh sieve are presented. This data set, using the larger sieve size, is directly comparable to the results of Dean's (1975) study.

a. Species Composition

Numerically dominate fauna were identified by pooling the data from all samples and ranking species by abundance. A listing of the most abundant species in the study area is given in Table 3. The 78 taxa appearing in this table represent 99.75% of all individuals collected. The tubicolous amphipod, Ampelisca abdita, was by far the most abundant species found in the samples. This species alone accounted for 55.8% of the total fauna. The blue mussel, Mytilus edulis, was also numerically dominant, representing 18.6% of all individuals taken. Other dominants included the polychaetes Asabellides oculata (2.8%) and Heteromastus filiformis (1.7%), the gastropod Crepidula fornicata (1.1%), the bivalve Mya arenaria (1.3%), and the amphipods Corophium tuberculatum (4.5%) and Elasmopus levis (1.0%). All other species individually represented less than 1% of the total fauna. The distribution of these species, along with several bivalves of commercial importance, will be presented in the remainder of this section.

The tubicolous amphipod Ampelisca abdita (Figures 27-30) was found in high numbers throughout the year within the band of muddy sediments which runs in a southeast to northwest direction from Sandy Hook Bay to Staten Island. It was also collected in moderate numbers in the northern portion of the study area, especially along Staten Island and within Gravesend Bay. It was conspicuously low in abundance or entirely absent in the sandy areas of Old Orchard Shoal, Flynn's Knoll, Romer Shoal, and the East Bank. During the spring cruise, A. abdita was collected in low numbers within the inner portion of Raritan Bay. However, it was fairly common in this area during the remainder of the year.

The blue mussel, Mytilus edulis, was the second most abundant species taken in this study (Figures 31-34). However, unlike A. abdita, it was found mostly in the northern portion of the study area. Mussels were most abundant in an area west of Rockaway Point and in a second area both west and south of the tip of Coney Island. Most of the individuals collected in the spring were small juveniles, and abundances steadily declined throughout the year in both of these areas. Mussels were also consistently taken in moderate numbers within Sandy Hook Bay during all cruises.

The distribution of Corophium tuberculatum during the four seasonal cruises is given in Figures 35-38. Like A. abdita, this species is a tubicolous amphipod which was most abundant in the band of muddy sediments running from Sandy Hook Bay to Staten Island. Abundances in this area peaked in the summer, and this species appeared to decline in numbers throughout the rest of the year. By the winter cruise, it was rare or absent from most stations within Sandy Hook Bay. C. tuberculatum was conspicuously absent in

much of the northern half of the study area with the exception of nearshore areas along Staten Island and within Gravesend Bay. It was also rarely taken within the inner portion of Raritan Bay.

Asabellides oculata is a tubicolous, surface deposit feeding polychaete (Figures 39-42). Peak abundances of this species were found during the spring cruise, and high numbers were probably the result of recruitment during the previous fall. During the spring, it was abundant primarily in the eastern half of the Bay, especially within the channels, several borrow pits, and other deeper areas. By summer, this species declined substantially at most stations in the eastern portion of the Bay. It did, however, appear to recruit in the western half of the Bay. In fall and winter, A. oculata declined and was found in low numbers only in isolated patches.

The distribution of Heteromastus filiformis is shown in Figures 43-46. This species is a tubicolous, infaunal, deposit feeding polychaete. H. filiformis tended to be rare or absent from the entrance of the Lower Bay (i.e., just west of the Sandy Hook to Rockaway Point transect) and within the inner portion of Raritan Bay. The general distribution of this species did not change substantially over time, and it was a consistent member of the fauna along the shorelines of Staten Island and New Jersey. It was also abundant within the muddy band of sediments running from Sandy Hook Bay to Staten Island.

The distribution of the soft shell clam Mya arenaria, is presented in Figures 47-50. Soft shell clams were most abundant in Raritan Bay, although they were not consistently taken within the inner reaches. Peak abundances occurred in the summer, when Mya was collected at almost all stations south of a line running from the tip of Sandy Hook to Great Kills Harbor. With the exception of the dense population within Raritan Bay, abundances tended to remain low or decline in the fall and winter.

The distribution of the slipper shell, Crepidula fornicata, during the four seasonal cruises is presented in Figures 51-54. During the spring and summer, this species was taken along the central portion of Staten Island southward to New Jersey. Peak abundances occurred in the fall. By this time, recruitment appears to have taken place and its range extended into Raritan and Sandy Hook Bays. Moderately high numbers were also found in the winter cruise.

The distribution of the amphipod Elasmopus levis is given in Figures 55-58. During the spring and summer, it was found in moderate numbers along Staten Island, in Gravesend Bay, to the west of Rockaway Point, and to the northwest of the tip of Sandy Hook. Abundances peaked in the fall, and this species was taken throughout the Bay with the exception of portions of the East Bank and Old Orchard Shoal. By winter, E. levis declined in abundance, and it was absent from a broad area north of Sandy Hook.

In addition to Mytilus edulis and Mya arenaria, three bivalve species of commercial value also occurred within the Lower Bay. The hard clam Mercenaria mercenaria was patchily distributed throughout much of the Bay with the exception of the southern half of Raritan Bay and the East Bank (Figures

59-62). The surf clam Spisula solidissima was consistently taken west of the Sandy Hook to Rockaway Point transect (Figures 63-66). During the summer and fall cruises, it was also found in sandy areas along the Staten Island and New Jersey shorelines. Oysters, Crassostrea virginica, were rare and were only collected in isolated patches during the spring and summer cruises (Figures 67-70).

b. Abundance

The spatial pattern in abundance for the spring cruise is given in Figure 71. Average station abundances ranged from 5 to 71605 animals per square meter. The average abundance for the entire study area was 7264 individuals per m^2 . Abundances were high in the band of muddy sediments running from Sandy Hook Bay to Staten Island. Values were also high west of Rockaway Point and in the northern portion of the study area surrounding the tip of Coney Island. Low abundances were found in Raritan Bay, along the New Jersey shoreline, and in the sandy areas of Old Orchard Shoal, Flynn's Knoll, the southern half of Romer Shoal, and the East Bank.

During the summer cruise, abundances ranged from 25 to 65995 individuals per m^2 (Figure 72). The overall average for the study area was 5502 animals per square meter. Abundances were generally high throughout the southern half of the study area. Exceptions to this include the inner portion of Raritan Bay and an area along the central New Jersey shoreline. Within the northern portion of the study area, high abundances were found in areas to the west of Rockaway Point, to the south and west of the tip of Coney Island, and along northern Staten Island.

In the fall, the overall average abundance for the study area was 5778 individuals per square meter, and station values ranged from 15 to 34120 individuals per m^2 (Figure 73). High abundances were again observed at most stations in the southern half of the Bay. The northern portion of the study area was generally lower in abundance, with the exception of areas to the west of Rockaway Point, to the west and south of the tip of Coney Island, and along the Staten Island shoreline.

By winter, the north-south pattern in abundance was still evident, although notable declines at some of the high abundance stations were observed (Figure 74). The average abundance for all stations also declined to 4309 animals per square meter. Station averages ranged from 5 to 50545 individuals per m^2 .

c. Species Richness

The spatial pattern of species richness, expressed as the average number of species per $0.1 m^2$, was somewhat more complicated than that observed for abundance. High values of species richness appeared to be associated with the shallow nearshore regions (Figures 75-78). There were, however, several notable exceptions to this pattern. Low values of species richness tended to occur consistently in the shallow areas of Raritan Bay, Flynn's Knoll, Romer

Shoal, and the East Bank. High values in deep water included Gravesend Bay, an area to the west and south of Coney Island, and a region in the central portion of the Bay.

During the spring cruise, values of species richness ranged 0.5 to 37 species per 0.1 m^2 . The average for all stations was 14.2 species per 0.1 m^2 . High values were found within Gravesend Bay, south and west of the tip of Coney Island, along the central portion of Staten Island, and within Sandy Hook Bay.

In summer, values for this parameter ranged from 2 to 39.5 species per 0.1 m^2 . High values were found primarily in nearshore areas along New Jersey, Staten Island, Gravesend Bay, and south of Coney Island. The average for the entire study area was 16.0 species per 0.1 m^2 .

The general pattern of high values in nearshore areas was again apparent during the fall cruise. The average for the Bay as a whole was 15.6 species per 0.1 m^2 . Values for individual stations ranged from 1.5 to 36 species per 0.1 m^2 .

In winter, values of species richness declined slightly, and the pattern of high numbers of species inshore was not as well defined as it had been during the two previous seasonal cruises. Values for this parameter ranged from 0.5 to 31.5 species per 0.1 m^2 . The average for all stations within the study area was 13.9 species per 0.1 m^2 .

d. Diversity

The distribution of Shannon-Wiener diversity values during the spring cruise is presented in Figure 79. Values ranged from 0 to 3.97 and averaged 1.70 for all stations within the study area. In the south, diversity was high in the shoreline areas along New Jersey and low in the band of muddy sediments running from Sandy Hook Bay northwest to Staten Island. In the northern portion of the study area, diversity was high on Old Orchard Shoal, Flynn's Knoll, Gravesend Bay, and to the southwest of the tip of Coney Island. Low values were found on Romer Shoal, portions of the East Bank, and within the borrow pits on the West Bank.

During the summer cruise, the same general pattern was observed (Figure 80). In the southern half of the Bay, diversity was low in the band of muddy sediments running from Sandy Hook Bay to Staten Island. High values were observed along the shorelines of New Jersey and the southern tip of Staten Island. In the northern half of the study area, high diversities were found on Old Orchard Shoal, Gravesend Bay, west and south of the tip of Coney Island, and parts of Flynn's Knoll and Romer Shoal. Diversity was low on the East Bank and within several borrow pits on the West Bank. Diversity values at individual stations ranged from 0.28 to 3.87 and averaged 1.94 for the bay as a whole.

The distribution of diversity values for the fall cruise is given in Figure 81. Diversity values tended to be low in general throughout the southern half of the study area, with exception of several patches within

Raritan Bay and along the New Jersey shoreline. Diversities were relatively higher in the northern portion of the Bay, except for an area which included Romer Shoal and part of the West Bank. Average station values ranged from 0.29 to 3.90. The average for all stations was 1.76.

For the winter cruise, a distinct north-south pattern in diversity was evident (Figure 82). Low diversities were generally found in the southern portion of the Bay, while high values were observed in the north. Values ranged from 0 to 3.91. The average for all stations during this season was 1.95.

e. Equitability

Spatial patterns in equitability are presented in Figures 83-86. In general, trends in equitability were similar to that of diversity, with a fairly complex pattern gradually simplifying to a distinct north-south gradient during the course of the survey. In the spring, equitability values ranged from 0 to 0.96 and averaged 0.50 for the entire study area. Within the southern half of the Bay, equitability values were high along the New Jersey shoreline and low within the band of muddy sediments running from Sandy Hook Bay to Staten Island. In the north, equitability was high on Old Orchard Shoal, Flynn's Knoll, and on portions of Romer Shoal and the East Bank. Low values for this parameter were observed in Gravesend Bay, on the West Bank, and at several stations south of Coney Island.

By the summer cruise, the area of high equitability within the southern portion of the study area appeared to have broken up into several patches. Conversely, fewer stations within the northern portion of the study area had low values for this parameter. Equitability values ranged from 0.07 to 0.92 at this time. Average equitability for all stations in the study was 0.54.

During the fall cruise, equitability values ranged from 0.08 to 0.90 and averaged 0.49 for the entire study area. Equitability values were generally low within the southern half of the Bay. In the north, equitability values were high at most stations.

In winter, the north-south trend in equitability was still clearly evident. Values at this time ranged from 0 to 1. The average for all stations was 0.57.

Discussion

The most striking feature of this study concerns the state of the benthic fauna in the Lower Bay. Abundance averaged 5714 individuals per m^2 during the year long period examined. Table 4 compares this result to other nearshore benthic habitats. Average abundance in the present study was higher than that found in most local areas including Newark Bay, Flushing Bay, Bowery Bay, the south shore of Long Island, and the New York Bight. In addition, average abundance was high in relation to prior studies of the Lower Bay, with the exception of Woodward and Clyde (1975a,b). Even excluding the two

dominant species, Ampelisca abdita and Mytilis edulis, the abundance of the remaining fauna averaged 1466 individuals per m^2 . This value is still comparable to many of the studies listed in this table.

Steimle and Caracciolo-Ward (in review) have completed a reanalysis of samples archived from McGrath's (1974) survey. Their work indicates that 156 species were taken from the 65 stations in the study. In addition, they estimated an average abundance of 660 animals per square meter and an average species richness value of 6 per $0.1 m^2$ grab. From the results of the present study, 213 taxa were taken. Abundance averaged 5714 individuals per m^2 , and the average number of species per $0.1 m^2$ grab was 14.9. This abundance estimate is over eight times higher than the estimate based on McGrath's sample set. The average number of species per grab is more than a factor of two higher. Given these substantial differences, it is clear that considerable changes have taken place in the Lower Bay since 1973.

Summary

This report presents the results of a bay-wide, seasonal benthic study of the Lower Bay of New York Harbor. A total of 912 biological and 228 sediment samples were collected along with information on depth, temperature, and salinity during the period from April 1986 to January 1987. Biological data are presented in terms of species composition, abundance, species richness, Shannon-Wiener diversity, and equitability. The principal results and conclusions of this study are:

1) Spatial gradients in temperature and salinity were apparent during several of the seasonal cruises. In particular, bottom temperatures showed a distinct east-west trend during the spring, summer, and winter cruises. Bottom salinities were highest off Rockaway Point and declined in the direction of the Narrows and Raritan Bay. Salinity gradients were most apparent during the spring and winter cruises.

2) As expected, surficial sediments were quite variable, ranging from 100% sand and gravel to 100% silt-clay. Muddy sediments were found in a band running in a southeast to northwest direction from Sandy Hook Bay to Staten Island. Fine-grained sediments were also characteristic of the inner portion of Raritan Bay and borrow pits on the East and West Bank.

3) A total of 521072 animals representing 213 distinct taxa were obtained from the biological samples. There were two particularly abundant species, the amphipod Ampelisca abdita and the blue mussel Mytilus edulis. Ampelisca abdita represented 55.8% and Mytilus edulis 18.6% of the total number of animals collected. Other abundant species included the polychaetes Asabellides oculata and Heteromastus filiformis, the soft shell clam Mya arenaria, the slipper shell Crepidula fornicata, and the amphipods Corophium tuberculatum and Elasmopus levis.

4) Benthic abundance averaged 5714 animals per m² and species richness averaged 14.9 species per 0.1 m².

5) Average abundance was high and exceeded comparable values found in many local nearshore environments. Abundance and species richness were on the average substantially higher than that found for the 1973 regional survey conducted by McGrath. These observations, combined with the fact that 213 separate taxa were identified, suggest that the Lower Bay had a rich and diverse benthic fauna during 1986-87.

6) This data set was used in the place of older, less complete data sets in a procedure to select potential sites for large containment islands in the Lower Bay (Figure 1B).

References

- Berg, D.L. and J.S. Levinton (1984) The Biology of the Hudson-Raritan Estuary with Special Emphasis on Fishes. NOAA Tech. Memo. NOS OMA 16. 170 pp.
- Bokuniewicz, H.J. and R.M. Cerrato (1985) Containment Islands in New York Harbor. Marine Sciences Research Center Special Report No. 61. State University of New York, Stony Brook, New York. 44 pp.
- Brinkhuis, B.H. (1980) Biological Effects of Sand and Gravel Mining in the Lower Bay of New York Harbor: An Assessment from the Literature. Marine Sciences Research Center Special Report No. 34. State University of New York, Stony Brook, New York. 193 pp.
- Cerrato, R.M. (1983) Benthic Borrow Area Investigations, South Shore of Long Island, New York. Marine Sciences Research Center Special Report No. 51. State University of New York, Stony Brook, New York. 654 pp.
- Cerrato, R.M. (1986a) The Benthic Fauna of Newark Bay. Marine Sciences Research Center Special Report No. 68. State University of New York, Stony Brook, New York. 105 pp.
- Cerrato, R.M. (1986b) A Seasonal Study of the Benthic Fauna in Moriches Bay. Marine Sciences Research Center Special Report No. 72. State University of New York, Stony Brook, New York. 160 pp.
- Cerrato, R.M. and H.J. Bokuniewicz (1986) The Benthic Fauna at Four Potential Containment/Wetlands Stabilization Areas. Marine Sciences Research Center Special Report No. 73. State University of New York, Stony Brook, New York. 117 pp.
- Cerrato, R.M., H.B. Bokuniewicz, and J. Ellsworth (1988) Siting Containment Islands in New York Harbor. U.S. Army Corps of Engineers. 27 pp.
- Cerrato, R.M. and F.T. Scheier (1984) The Effect of Borrow Pits on the Distribution and Abundance of Benthic Fauna in the Lower Bay of New York Harbor. Marine Sciences Research Center Special Report No. 59. State University of New York, Stony Brook, New York. 315 pp.
- Coch, N.K. (1986) Sediment characteristics and facies distributions in the Hudson system. NE Geol. 8: 109-129.
- Dean, D. (1975) Raritan Bay Macrobenthos Survey, 1957-60. NOAA NMFS Data Rept. 99. 51 pp.
- Diaz, R.J. and D.F. Boesch (1984) The macrobenthos of the Hudson-Raritan Estuary. In: Proc. 4th Symp. Hudson R. Ecol., D.F. Boesch (ed.). Ch. VI, NOAA Tech. Rept.
- Folk, R.L. (1964) Petrology of Sedimentary Rocks. Hemphill Publishing Co., Austin, Texas. 170 pp.

- Gandarillas, E.F. and B.H. Brinkhuis (1981) Benthic Faunal Assemblages in the Lower Bay of New York Harbor. Mar. Sci. Res. Center Spec. Rpt. 44. State Univ. of NY, Stony Brook, NY. 129 pp.
- McGrath, R.A. (1974) Benthic macrofaunal census of Raritan Bay - Preliminary results. In: Proc. 3rd Symp. Hudson R. Ecol. 27 pp.
- O'Connor, J.S. (1972) The benthic macrofauna of Moriches Bay, New York. Biol. Bull. 14: 84-102.
- Stainken, D.M., J.M. McCormick, and H.G. Multer (1984) Seasonal survey of the macrobenthos of Raritan Bay. Bull. NJ Acad. Sci 29: 121-132.
- Steimle, F.W. and J. Caracciolo-Ward (in review) The Benthic Macrofauna of Raritan-Lower New York Bay Estuary: Community Structure, Biomass, and Environmental Relationships. National Marine Fisheries Service. Sandy Hook, New Jersey.
- Steimle, F.W. and R.B. Stone (1973) Abundance and Distribution of Inshore Benthic Fauna Off Southwestern Long Island, New York. NOAA Tech. Rpt. NMFS SSFS-673. 50 pp.
- Walford, L.A. (1971) Review of aquatic resources and hydrodynamic characteristics of Raritan Bay, Lower New York and Sandy Hook Bays. Rept. for Battelle Mem. Inst. by Sandy Hook Sport Fish. Mar. Lab., NMFS, 80 pp.
- Wigley, R. and R. Theroux (1981) Macrobenthic Invertebrate Fauna of the Middle Atlantic Bight Region. U.S. Geol. Survey Prof. Paper No. 529.
- Woodward and Clyde Consultants (1975a) Rockaway Beach Erosion Control Project Dredge Material Research Program - Offshore Borrow Area: Results of Phase I - Predredging Studies. Prepared for New York District, Army Corps of Engineers.
- Woodward and Clyde Consultants (1975b) Rockaway Beach Erosion Control Project Dredge Material Research Program - Offshore Borrow Area: Results of Phase II - Dredging Studies. Prepared for New York District, Army Corps of Engineers.

Table 1. Station Locations

Station	Latitude	Longitude	Station	Latitude	Longitude
1	40° 30.23'	74° 9.86'	73	40° 25.71'	74° 0.68'
2	40° 30.45'	74° 8.63'	80	40° 29.43'	74° 13.66'
3	40° 30.68'	74° 7.35'	81	40° 31.31'	74° 7.37'
4	40° 30.90'	74° 6.10'	82	40° 27.98'	74° 7.20'
5	40° 32.05'	74° 5.28'	83	40° 27.37'	74° 6.17'
6	40° 32.28'	74° 4.08'	84	40° 33.91'	74° 4.54'
7	40° 32.50'	74° 2.71'	85	40° 27.50'	74° 2.71'
8	40° 32.66'	74° 1.61'	86	40° 25.50'	74° 2.00'
9	40° 31.75'	74° 1.45'	87	40° 26.50'	74° 3.31'
10	40° 31.25'	74° 2.91'	88	40° 25.83'	74° 3.31'
11	40° 30.56'	74° 2.13'	89	40° 29.63'	74° 0.39'
12	40° 29.61'	74° 1.86'	90	40° 30.23'	73° 59.56'
13	40° 28.65'	74° 1.56'	91	40° 30.53'	74° 0.43'
14	40° 27.70'	74° 1.28'	92	40° 30.85'	73° 59.22'
15	40° 26.73'	74° 0.98'	93	40° 31.25'	73° 58.25'
16	40° 26.50'	74° 2.31'	94	40° 31.63'	73° 59.72'
17	40° 28.41'	74° 2.90'	95	40° 31.88'	73° 58.40'
18	40° 29.38'	74° 3.18'	96	40° 32.53'	74° 0.07'
19	40° 30.33'	74° 3.46'	97	40° 32.65'	73° 58.72'
21	40° 31.06'	74° 5.03'	98	40° 32.20'	73° 57.11'
24	40° 28.20'	74° 4.16'	99	40° 32.75'	73° 57.40'
25	40° 28.96'	74° 5.53'	100	40° 33.69'	73° 56.83'
26	40° 29.93'	74° 5.81'	101	40° 33.60'	73° 58.56'
27	40° 29.73'	74° 7.08'	102	40° 33.43'	74° 0.05'
28	40° 29.51'	74° 8.33'	103	40° 34.95'	74° 0.67'
29	40° 33.00'	74° 4.21'	104	40° 35.52'	74° 0.44'
30	40° 30.66'	74° 11.00'	105	40° 35.54'	74° 1.56'
31	40° 30.33'	74° 12.43'	A1	40° 29.24'	74° 11.30'
32	40° 29.46'	74° 14.75'	A2	40° 29.44'	74° 11.28'
34	40° 30.10'	74° 15.53'	A3	40° 29.16'	74° 10.56'
36	40° 35.23'	74° 3.53'	A4	40° 29.42'	74° 10.53'
37	40° 34.23'	74° 3.61'	A5	40° 29.64'	74° 10.50'
38	40° 33.20'	74° 2.81'	A6	40° 29.97'	74° 10.51'
40	40° 33.00'	74° 5.56'	A7	40° 29.20'	74° 9.84'
41	40° 31.86'	74° 6.38'	A8	40° 29.40'	74° 9.81'
42	40° 32.88'	74° 5.68'	A9	40° 29.19'	74° 9.03'
43	40° 31.21'	74° 10.15'	A10	40° 29.41'	74° 9.01'
46	40° 28.35'	74° 9.33'	B1	40° 30.97'	74° 4.05'
47	40° 28.56'	74° 8.06'	B2	40° 30.73'	74° 4.13'
48	40° 28.75'	74° 6.09'	B3	40° 30.38'	74° 4.10'
49	40° 28.03'	74° 5.23'	B4	40° 30.01'	74° 4.10'
50	40° 27.25'	74° 3.86'	B5	40° 29.59'	74° 4.24'
51	40° 27.08'	74° 4.93'	B6	40° 29.26'	74° 4.24'
52	40° 27.81'	74° 6.50'	B7	40° 29.34'	74° 4.78'
53	40° 27.48'	74° 8.81'	B8	40° 29.65'	74° 4.78'
54	40° 27.97'	74° 10.11'	B9	40° 29.94'	74° 4.79'
55	40° 27.95'	74° 11.75'	B10	40° 30.42'	74° 4.76'
56	40° 28.90'	74° 12.00'	C1	40° 32.42'	74° 0.92'
57	40° 29.86'	74° 12.26'	C2	40° 32.68'	74° 0.96'
58	40° 28.63'	74° 13.50'	C3	40° 32.90'	74° 0.99'
59	40° 27.63'	74° 13.16'	C4	40° 33.19'	74° 0.99'
60	40° 28.54'	74° 14.75'	C5	40° 33.54'	74° 0.96'
62	40° 29.38'	74° 16.16'	C6	40° 33.80'	74° 0.99'
68	40° 35.75'	74° 3.08'	C7	40° 34.09'	74° 1.00'
69	40° 35.16'	74° 2.41'	C8	40° 34.11'	74° 1.31'
70	40° 34.10'	74° 2.42'	C9	40° 33.80'	74° 1.28'
71	40° 33.50'	74° 1.91'	C10	40° 33.54'	74° 1.31'

Table 2. Species List

Porifera	Capitellidae
Unidentified sp.	<i>Capitella capitata</i>
Clionidae	<i>Heteromastus filiformis</i>
<i>Cliona</i> sp.	Chaetopteridae
Cnidaria	<i>Spiochaetoperus oculatus</i>
Anthozoa	Cirratulidae
Unidentified anemone	<i>Cirratulus grandis</i>
Actinidae	<i>Dodecaceria coralii</i>
<i>Tealia felina</i> (tent.)	<i>Tharyx acutus</i>
Ceriantharidae	Flabelligeridae
<i>Ceriantheopsis americanus</i>	<i>Pherusa affinis</i>
Metridiidae	Glyceridae
<i>Metridium senile</i> (tent.)	<i>Glycera americana</i>
Hydrozoa	<i>Glycera capitata</i>
Unidentified hydroid	<i>Glycera dibranchiata</i>
Campanulariidae	Goniadidae
<i>Campanularia flexuosa</i> (tent.)	<i>Goniadella gracilis</i>
Sertularidae	Hesionidae
<i>Abietinaria abietina</i> (tent.)	<i>Microphthalmus aberrans</i>
Hydractiniidae	<i>Podarke obscura</i>
<i>Hydractinia echinata</i>	Lumbrinereidae
<i>Stylactis hooperi</i>	<i>Lumbrineris acuta</i>
Tubulariidae	<i>Lumbrineris fragilis</i>
<i>Hybocodon prolifer</i>	<i>Lumbrineris impatiens</i>
Platyhelminthes	<i>Lumbrineris tenuis</i>
Unidentified flatworm	Maldanidae
Rhynchocoela	<i>Maldanopsis elongata</i>
Unidentified nemertean	Magelonidae
Aschelminthes	<i>Magelona rosea</i>
Unidentified nematoda	Nephtyidae
Ectoprocta	<i>Nephtys bucera</i>
Unidentified ectoproct	<i>Nephtys incisa</i>
Alcyoniidae	<i>Nephtys picta</i>
<i>Alcyonidium</i> sp.	Nereidae
Calloporidae	<i>Nereis arenaceodonta</i>
<i>Callopora</i> sp.	<i>Nereis succinea</i>
Cheiloporinidae	Onuphidae
<i>Cryptosula</i> sp.	<i>Diopatra cuprea</i>
Electridae	Opheliidae
<i>Electra</i> sp.	<i>Ophelia bicornis</i>
Membraniporidae	<i>Travisia carnea</i>
<i>Conopeum</i> sp.	Orbiniidae
Schizoporellidae	<i>Haploscleroplos fragilis</i>
<i>Schizoporella</i> sp.	<i>Haploscleroplos robustus</i>
Walkeridae	<i>Orbinia ornata</i>
<i>Aeverrillia</i> sp.	Orbiniidae sp.
Phoronida	Paraonidae
<i>Phoronis architecta</i>	<i>Aricidea catherinae</i>
Annelida	Pectinariidae
Oligochaeta	<i>Pectinaria gouldii</i>
Unidentified sp.	Phyllodocidae
Polychaeta	<i>Eteone heteropoda</i>
Ampharetidae	<i>Eteone lactea</i>
<i>Asabellides oculata</i>	<i>Eumida sanguinea</i>
Arabellidae	<i>Paranaitis speciosa</i>
<i>Drilonereis longa</i>	<i>Phyllodoce arenae</i>

Table 2. Species List (continued)

Polynoidae	Onchidoridae
Harmothoe extenuata	Onchidoris aspera
Harmothoe imbricata	Pryamidellidae
Lepidonotus squamatus	Odostomia producta
Sabellaridae	Retusidae
Sabellaria vulgaris	Retusa obtusa
Sabellidae	Melongenidae
Sabellid sp.	Busycon canaliculatum -
Potamilla neglecta	Bivalvia
Potamilla reniformis	Arcidae
Sabella microphthalmia	Anadara transversa
Serpulidae	Anomiidae
Hydroides dianthus	Anomia simplex
Sigalionidae	Cardiidae
Sigalion arenicola	Cerastoderma pinnulatum
Sthenelais boa	Lyonsiidae
Sthenelais limicola	Lyonsia hyalina
Spionidae	Mactridae
Laonice cirrata	Mulinia lateralis
Polydora ligni	Spisula solidissima
Scolelepis squamata	Myidae
Spiophanes bombyx	Mya arenaria
Spio setosa	Mytilidae
Streblospio benedicti	Mytilus edulis
Syllidae	Modiolus demissus
Autolytus cornutus	Nuculanidae
Autolytus prolifer	Yoldia limatula
Autolytus sp.	Yoldia sapotilla
Brania wellfleetensis	Nuculidae
Exogone hebes	Nucula proxima
Exogone dispar	Ostreidae
Syllis gracilis	Crassostrea virginica
Terebellidae	Pandoridae
Amphitrite ornata	Pandora gouldiana
Amphitrite sp.	Petricolidae
Polycirrus eximius	Petricola pholadiformis
Mollusca	Solenidae
Gastropoda	Ensis directus
Unidentified nudibrach	Siliqua costata
Corambidae	Solen viridis
Corambella sp.	Tellinidae
Acteonidae	Macoma balthica
Acteon punctostriatus	Tellina agilis
Calyptraeidae	Veneridae
Crepidula fornicata	Gemma gemma
Crepidula plana	Mercenaria mercenaria
Columbellidae	Pitar morrhuana
Mitrella lunata	Arthropoda
Muricidae	Amphipoda
Eupleura caudata	Ampeliscidae
Urosalpinx cinereus	Ampelisca abdita
Nassariidae	Ampelisca vadorum
Ilyanassa obsoleta	
Nassarius trivittata	
Naticidae	
Lunatia heros	
Lunatia triseriata	

Table 2. Species List (continued)

Aoridae	Cirripedia
<i>Microdeutopus gryllotalpa</i>	Balanidae
<i>Unciola dissimilis</i>	<i>Balanus amphitrite</i>
<i>Unciola irrorata</i>	<i>Balanus balanus</i>
<i>Unciola serrata</i>	<i>Balanus eburneus</i>
<i>Unciola</i> sp.	<i>Balanus improvisus</i>
Calliopidae	Mysidacea
<i>Calliopius laeviusculus</i>	Mysidae
Caprellidae	<i>Heteromysis formosa</i>
Unidentified caprellidae	Mysid sp.
Corophiidae	<i>Neomysis americana</i>
<i>Ceropus tubularis</i>	Cumacea
<i>Corophium tuberculatum</i>	Diastylidae
<i>Erichthonius brasiliensis</i>	Unidentified cumacean
Gammaridae	<i>Diastylis polita</i>
<i>Gammarus lawrencianus</i>	<i>Oxyurostylis smithi</i>
<i>Gammarus mucronatus</i>	Decapoda
Haustoriidae	Decapod larva
<i>Acanthohaustorius intermedius</i>	Caridea post larvae
<i>Acanthohaustorius millsii</i>	Brachyurea larva
<i>Acanthohaustorius similis</i>	Canceridae
<i>Acanthohaustorius</i> sp.	<i>Cancer irroratus</i>
<i>Bathyporeia parkeri</i>	Crangonidae
<i>Parahaustorius attenuatus</i>	<i>Crangon septemspinosa</i>
<i>Parahaustorius holmesi</i>	Majidae
<i>Parahaustorius longimerus</i>	<i>Libinia emarginata</i>
<i>Protohaustorius deichmannae</i>	Paguridae
<i>Protohaustorius wigleyi</i>	<i>Pagurus longicarpus</i>
Lysianassidae	Palaemonidae
<i>Lysianopsis alba</i>	<i>Palaemonetes pugio</i>
Melitidae	Portunidae
<i>Elasmopus levis</i>	<i>Callinectes sapidus</i>
<i>Melita nitida</i>	<i>Ovalipes ocellatus</i>
Melitid sp.	Xanthidae
Oedicerotidae	<i>Neopanope texana</i>
<i>Monoculodes edwardsii</i>	<i>Panopeus herbstii</i>
<i>Synchelidium americanum</i>	Isopoda
Phoxocephalidae	Idoteidae
<i>Paraphoxus spinosus</i>	<i>Edotea triloba</i>
<i>Phoxocephalus holbolli</i>	<i>Idotea balthica</i>
<i>Harpinia propinqua</i>	Anthuridae
<i>Rhepoxynus epistomus</i>	<i>Cyathura polita</i>
Stenothoidae	Echinodermata
<i>Parametopella cypris</i>	Asteriidae
<i>Stenothoe minuta</i>	<i>Asterias forbesii</i>
Merostomata	Echinasteridae
Limulidae	<i>Henricia</i> sp.
<i>Limulus polyphemus</i>	Echinarachnidae
Ostrocooda	<i>Echinarachnius parma</i>
Unidentified ostrocooda	Arbaciidae
Copepoda	<i>Arbacia punctulata</i>
Unidentified copepod	Synaptidae
<i>Labidocra aestiva</i>	<i>Leptosynapta inhaerens</i>
	Chordata
	Molgulidae
	Unidentified tunicate
	<i>Molgula manhattensis</i>

Table 2. Species List (continued)

Vertebrata

Lepophidium cervinum (cusk eel)
Pholis gunnellus (rock eel)
Syngnathus fuscus (pipefish)
Pseudopleuronectes americanus
Ammodytes sp.
Blenny-like larval fish
Pronotus evolans (sea robin)
Myoxocephalus aeneus (sculpin)

Table 3. Dominant Fauna

	Cruise I		Cruise II		Cruise III		Cruise IV		All Cruises	
	Indiv.	Percent	Indiv.	Percent	Indiv.	Percent	Indiv.	Percent	Indiv.	Percent
Rhynchocoela										
Unidentified nemertean	86	0.05	67	0.05	66	0.05	75	0.08	294	0.06
Aschelminthes										
Unidentified nematoda	24	0.01	46	0.04	22	0.02	15	0.02	107	0.02
Annelida										
Polychaeta										
Asabellides oculata	11767	7.10	2916	2.32	48	0.04	26	0.03	14757	2.83
Capitella capitata	1208	0.73	34	0.03	10	0.01	73	0.07	1325	0.25
Neteromastus filiformis	2561	1.55	2047	1.63	1342	1.02	2911	2.96	8861	1.70
Cirratulus grandis	690	0.42	1182	0.94	1497	1.14	1134	1.15	4503	0.86
Tharyx acutus	521	0.31	134	0.11	418	0.32	630	0.64	1703	0.33
Pherusa affinis	63	0.04	426	0.34	53	0.04	64	0.07	606	0.12
Glycera americana	858	0.52	548	0.44	472	0.36	500	0.51	2378	0.46
Glycera dibranchiata	400	0.24	659	0.53	730	0.55	632	0.64	2421	0.46
Podarke obscura	38	0.02	51	0.04	15	0.01	12	0.01	116	0.02
Magelona rosea	43	0.03	35	0.03	18	0.01	21	0.02	117	0.02
Nephtys picta	629	0.38	559	0.45	264	0.20	415	0.42	1867	0.36
Nereis arenaceodonta	9	0.01	4	0.00	67	0.05	5	0.01	85	0.02
Nereis succinea	265	0.16	215	0.17	248	0.19	396	0.40	1124	0.22
Haploscoloplos fragilis	7	0.00	11	0.01	45	0.03	53	0.05	116	0.02
Haploscoloplos robustus	103	0.06	105	0.08	43	0.03	62	0.06	313	0.06
Aricidea catherinae	35	0.02	72	0.06	76	0.06	38	0.04	221	0.04
Pectinaria gouldii	63	0.04	325	0.26	659	0.50	270	0.27	1317	0.25
Eteone lactea	1453	0.88	228	0.18	26	0.02	176	0.18	1883	0.36
Eumida sanguinea	168	0.10	233	0.19	75	0.06	46	0.05	522	0.10
Paranaitis speciosa	81	0.05	17	0.01	10	0.01	118	0.12	226	0.04
Phyllodoce arenae	30	0.02	2	0.00	36	0.03	20	0.02	88	0.02
Harmothoe extenuata	676	0.41	985	0.79	656	0.50	137	0.14	2454	0.47
Lepidonotus squamatus	74	0.04	270	0.22	597	0.45	211	0.21	1152	0.22
Sabellaria vulgaris	157	0.09	607	0.48	579	0.44	982	1.00	2325	0.45
Hydroides dianthus	62	0.04	71	0.06	457	0.35	355	0.36	945	0.18
Polydora ligni	11	0.01	127	0.10	17	0.01	18	0.02	173	0.03
Spiophanes bombyx	123	0.07	84	0.07	23	0.02	97	0.10	327	0.06
Spio setosa	375	0.23	733	0.58	101	0.08	48	0.05	1257	0.24
Streblospio benedicti	1186	0.72	472	0.38	310	0.24	411	0.42	2379	0.46
Autolytus cornutus	41	0.02	20	0.02	27	0.02	5	0.01	93	0.02
Mollusca										
Gastropoda										
Acteon punctostriatus	11	0.01	3	0.00	125	0.09	84	0.09	223	0.04
Crepidula fornicata	434	0.26	968	0.77	2293	1.74	1894	1.93	5589	1.07
Crepidula plana	212	0.13	619	0.49	1290	0.98	685	0.70	2806	0.54
Urosalpinx cinereus	15	0.01	19	0.02	43	0.03	41	0.04	118	0.02
Ilyanassa obsoleta	108	0.07	187	0.15	261	0.20	253	0.26	809	0.16
Nassarius trivittata	387	0.23	585	0.47	651	0.49	802	0.82	2425	0.47
Bivalvia										
Lyonsia hyalina	51	0.03	51	0.04	181	0.14	41	0.04	324	0.06
Mulinia lateralis	921	0.56	186	0.15	1914	1.45	1440	1.47	4461	0.86
Spisula solidissima	197	0.12	993	0.79	1143	0.87	231	0.24	2564	0.49
Mya arenaria	523	0.32	2849	2.27	2007	1.52	1323	1.35	6702	1.29
Mytilus edulis	52671	31.80	26042	20.76	15782	11.98	2173	2.21	96668	18.55
Nucula proxima	78	0.05	120	0.10	36	0.03	148	0.15	382	0.07
Petricola pholadiformis	150	0.09	50	0.04	40	0.03	63	0.06	303	0.06
Ensis directus	59	0.04	153	0.12	65	0.05	37	0.04	314	0.06
Tellina agilis	893	0.54	971	0.77	634	0.48	851	0.87	3349	0.64
Gemma gemma	214	0.13	1406	1.12	121	0.09	342	0.35	2083	0.40
Mercenaria mercenaria	116	0.07	104	0.08	122	0.09	120	0.12	462	0.09
Arthropoda										
Amphipoda										
Ampelisca abdita	80165	48.40	52894	42.16	86631	65.76	71060	72.33	290750	55.80
Unciola dissimilis	91	0.05	163	0.13	84	0.06	58	0.06	396	0.08
Unciola irrorata	21	0.01	68	0.05	3	0.00	13	0.01	105	0.02
Unciola serrata	542	0.33	490	0.39	582	0.44	528	0.54	2142	0.41
Unidentified caprellidae	44	0.03	34	0.03	86	0.07	374	0.38	538	0.10
Corophium tuberculatum	1090	0.66	19114	15.24	1897	1.44	1273	1.30	23374	4.49
Erichthonius brasiliensis	9	0.01	31	0.02	60	0.05	22	0.02	122	0.02
Acanthohaustorius millsii	58	0.04	18	0.01	29	0.02	48	0.05	153	0.03
Acanthohaustorius similis	20	0.01	10	0.01	23	0.02	21	0.02	74	0.01
Parahaustorius longimerus	38	0.02	32	0.03	40	0.03	58	0.06	168	0.03
Protohaustorius wigleyi	66	0.04	26	0.02	47	0.04	48	0.05	187	0.04
Elasmopus levis	251	0.15	433	0.35	3148	2.39	1381	1.41	5213	1.00
Melita nitida	33	0.02	87	0.07	163	0.12	42	0.04	325	0.06

Table 3. Dominant Fauna (continued)

<i>Paraphoxus spinosus</i>	998	0.60	495	0.39	929	0.71	1320	1.34	3742	0.72
<i>Phoxocephalus holbolli</i>	36	0.02	2	0.00	22	0.02	38	0.04	98	0.02
<i>Rhepoxynus epistomus</i>	86	0.05	35	0.03	260	0.20	105	0.11	486	0.09
Cirripedia										
<i>Balanus amphitrite</i>	77	0.05	134	0.11	19	0.01	9	0.01	239	0.05
<i>Balanus balanus</i>	60	0.04	33	0.03	3	0.00	0	0.00	96	0.02
<i>Balanus improvisus</i>	126	0.08	1307	1.04	41	0.03	99	0.10	1573	0.30
Mysidacea										
<i>Heteromysis formosa</i>	8	0.00	57	0.05	490	0.37	13	0.01	568	0.11
<i>Neomysis americana</i>	12	0.01	56	0.04	30	0.02	12	0.01	110	0.02
Cumacea										
<i>Oxyurostylis smithi</i>	147	0.09	77	0.06	68	0.05	119	0.12	411	0.08
Decapoda										
<i>Cancer irroratus</i>	7	0.00	372	0.30	114	0.09	40	0.04	533	0.10
<i>Crangon septemspinosa</i>	12	0.01	118	0.09	12	0.01	22	0.02	164	0.03
<i>Pagurus longicarpus</i>	41	0.02	35	0.03	66	0.05	98	0.10	240	0.05
<i>Ovalipes ocellatus</i>	11	0.01	99	0.08	5	0.00	4	0.00	119	0.02
<i>Neopanope texana</i>	89	0.05	171	0.14	489	0.37	292	0.30	1041	0.20
Isopoda										
<i>Edotea triloba</i>	144	0.09	24	0.02	34	0.03	64	0.07	266	0.05
<i>Cyathura polita</i>	141	0.09	114	0.09	277	0.21	373	0.38	905	0.17
Total Dominants	165270	99.78	125120	99.74	131367	99.72	98018	99.77	519775	99.75

All Fauna	Cruise I		Cruise II		Cruise III		Cruise IV		All Cruises	
	Indiv.	Percent	Indiv.	Percent	Indiv.	Percent	Indiv.	Percent	Indiv.	Percent
Dominants (Excluding <i>A. abdita</i> and <i>M. edulis</i>)	32434	19.58	46184	36.81	28954	21.98	24785	25.23	132357	25.40
<i>Ampelisca abdita</i>	80165	48.40	52894	42.16	86631	65.76	71060	72.33	290750	55.80
<i>Mytilus edulis</i>	52671	31.80	26042	20.76	15782	11.98	2173	2.21	96668	18.55
All Other Fauna	366	0.22	330	0.26	371	0.28	230	0.23	1297	0.25
Total	165636	100.00	125450	100.00	131738	100.00	98248	100.00	521072	100.00

Table 4. Abundances of Benthic Invertebrates Compared to Some Local Nearshore Environments

	Average Abundance (number/m ²)	Comments	Reference
Current Study	5714		
Newark Bay	1670	Spring and Summer 1985	Cerrato (1986a)
Newark Bay	273	Fall 1984 - Shoal off Port Newark Terminal	Cerrato and Bokuniewicz (1986)
Raritan Bay	795	Fall 1984 - Shoal off South Amboy	"
Flushing Bay	590	Fall 1984	"
Bowery Bay	127	Fall 1984	"
Moriches Bay	5402	Spring 1969 - Summer 1970	O'Connor (1972)
Moriches Bay	14398	Seasonal 1981-82	Cerrato (1986b)
New York Harbor			
West Bank	536	Seasonal 1980-83 - Borrow Pits and Several Control Sites	Cerrato and Scheier (1984)
Old Orchard Shoal	400	Seasonal 1979-80	Gandarillas and Brinkhuis (1981)
Romer Shoal	400	Seasonal 1979-80	"
East Bank	250	Seasonal 1979-80	"
East Bank	16205	0.5 mm Sieve - Southwest of Rockaway Point	Woodward and Clyde (1975a,b)
Lower Bay	660	Winter 1973 - Regional Study	McGrath (1974) revised by Steimle and Caracciolo-Ward (in review)
Lower Bay	766	West Bank, Old Orchard Shoal, and Nearby Areas	Walford (1971)
South Shore of Long Island	1630	Spring, Summer, and Fall 1981	Cerrato (1983)
South Shore of Long Island	1521	Monthly during 1966-67	Steimle and Stone (1973)
Southern New England	2429	0 to 24 meters	Wigley and Theroux (1981)
New York Bight	2430	0 to 24 meters	"
Chesapeake Bight	1742	0 to 24 meters	"

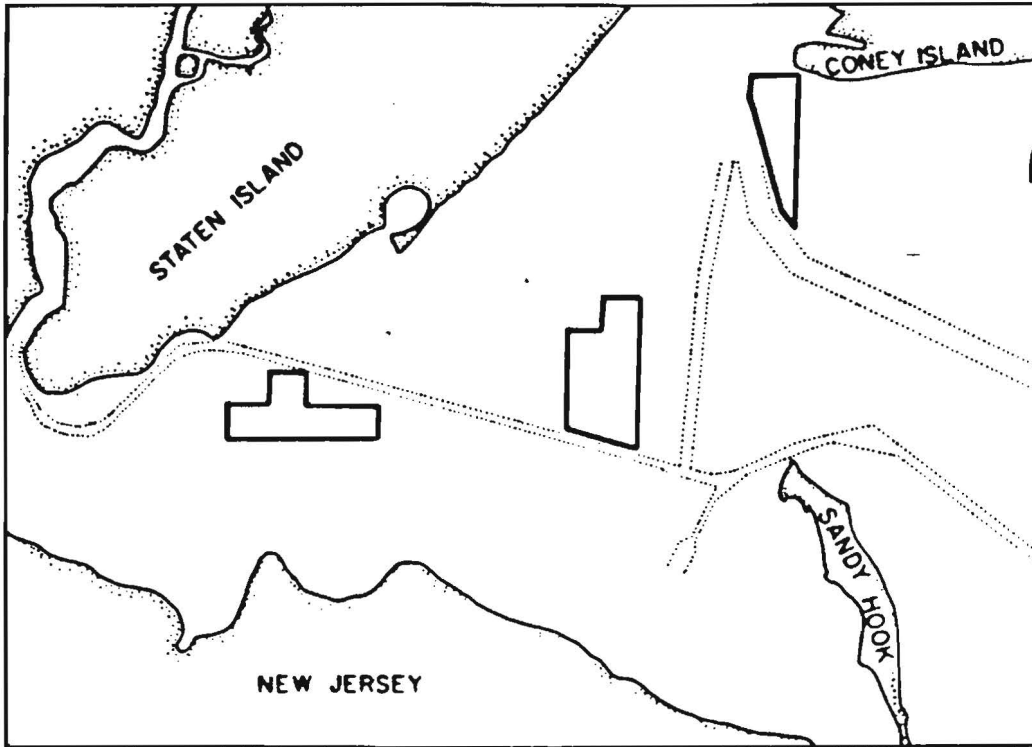


Figure 1A. Potential containment area sites based on data available in 1985 on biological resources and populations (Bokuniewicz and Cerrato, 1985).

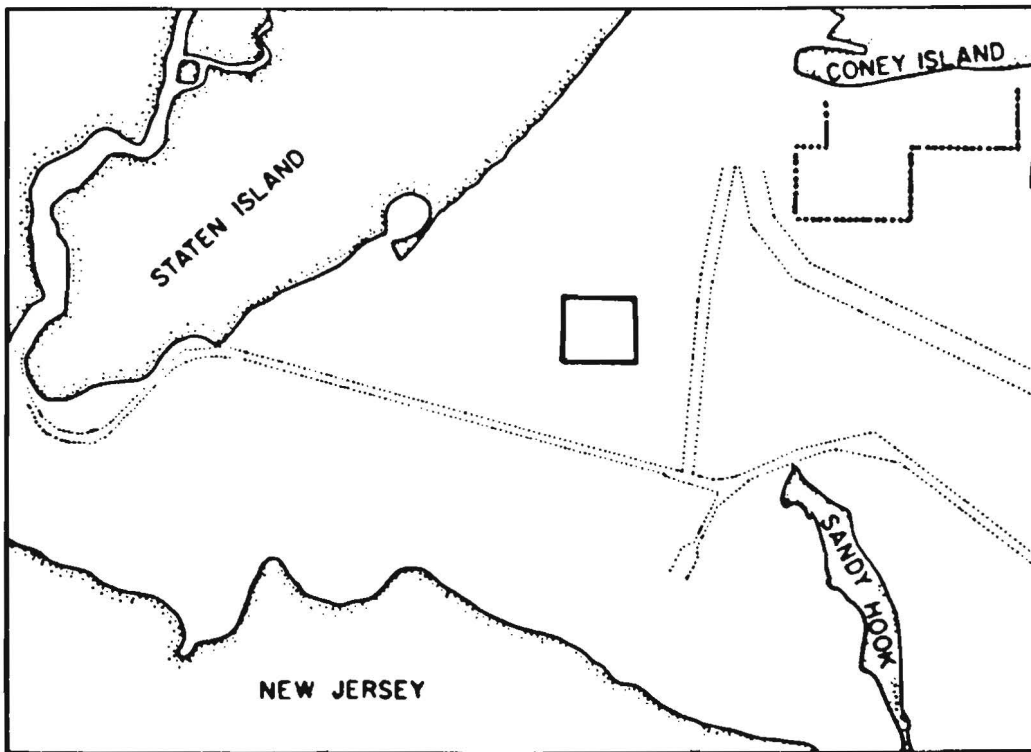


Figure 1B. Potential containment area site (solid line) based on data available in 1988 on biological resources and populations. The area bordered by the dotted line is another low use area but one in shallower water (Cerrato, et al., 1988).

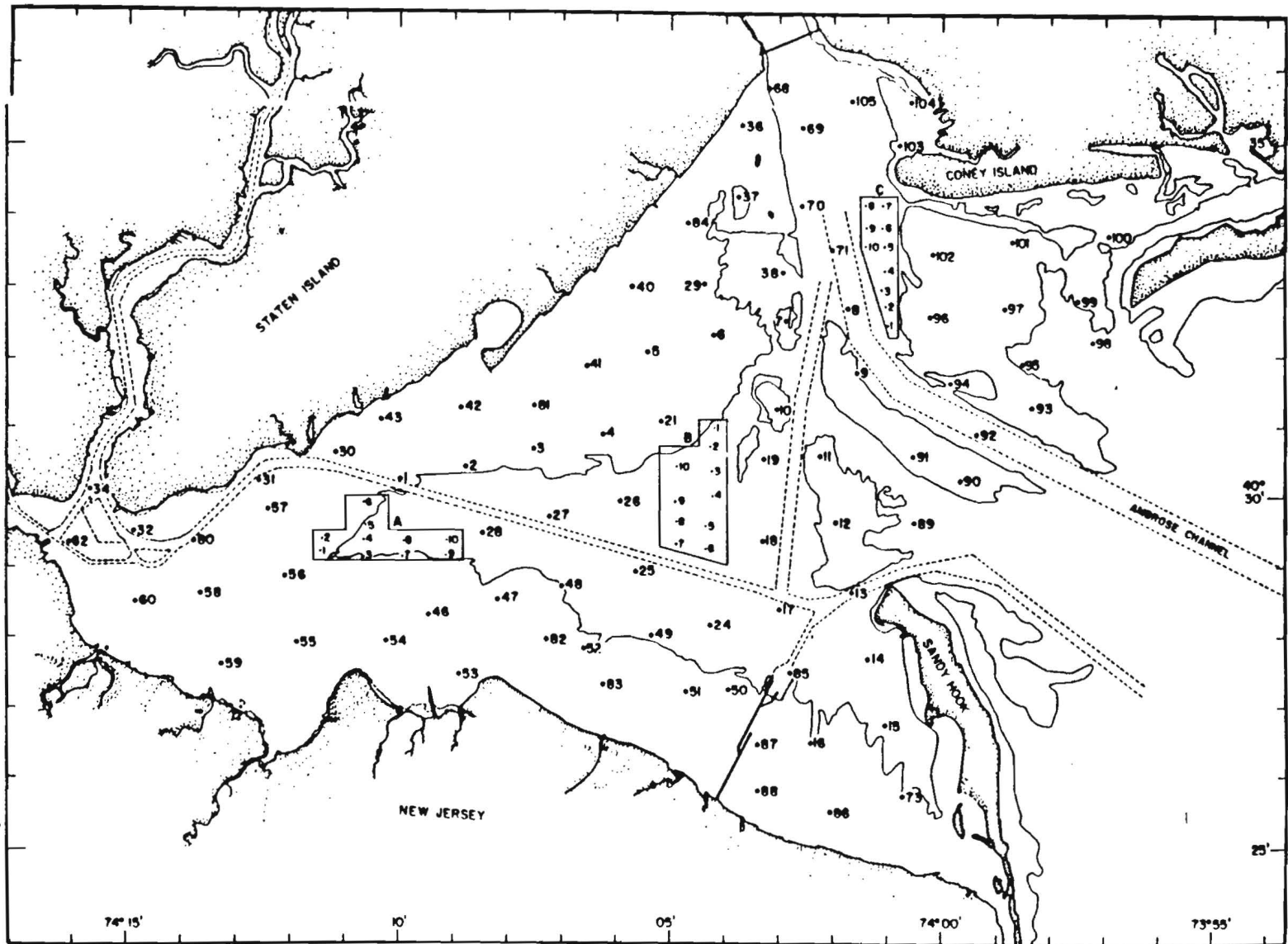


Figure 2.



Figure 3.

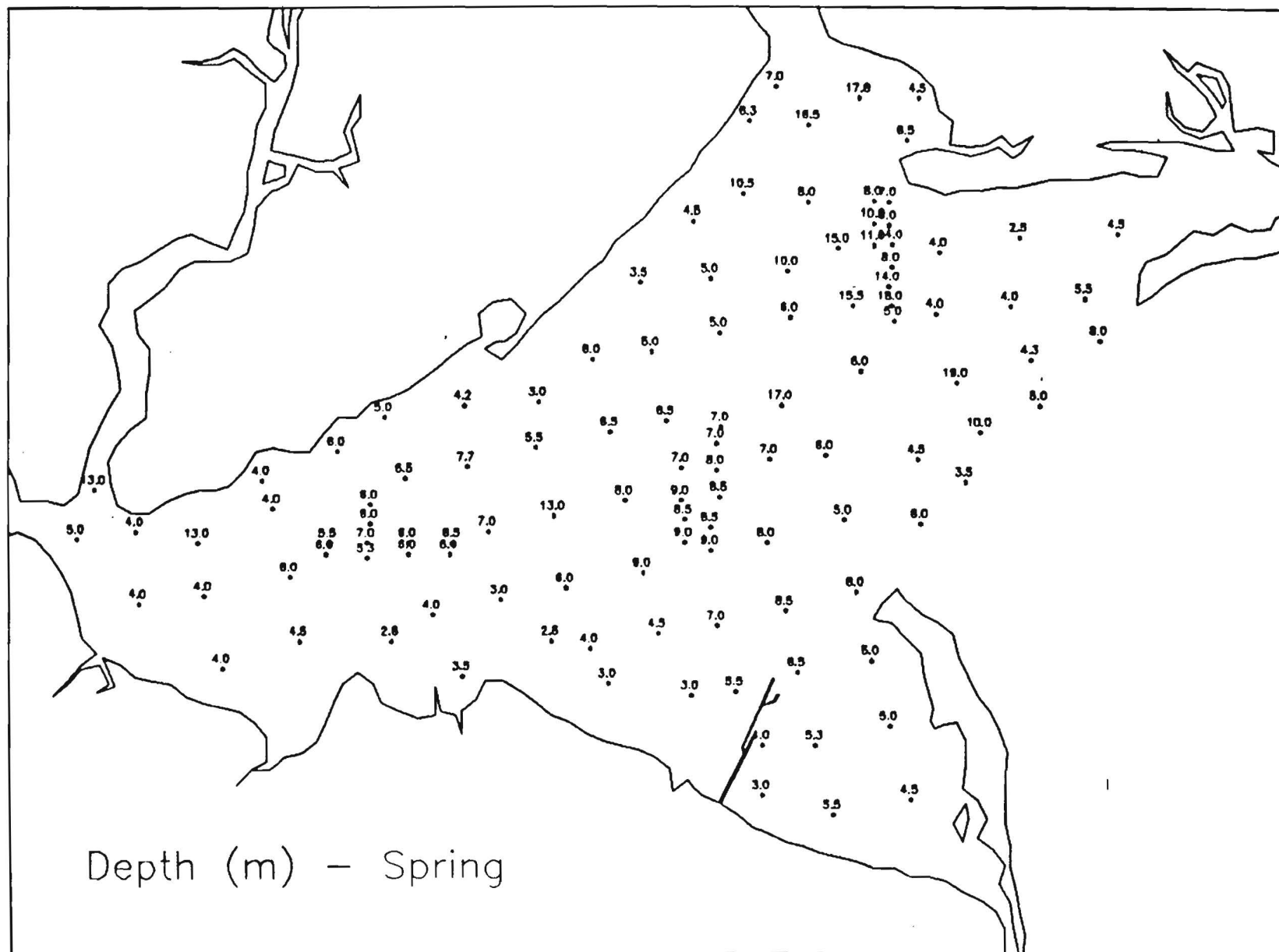


Figure 4.

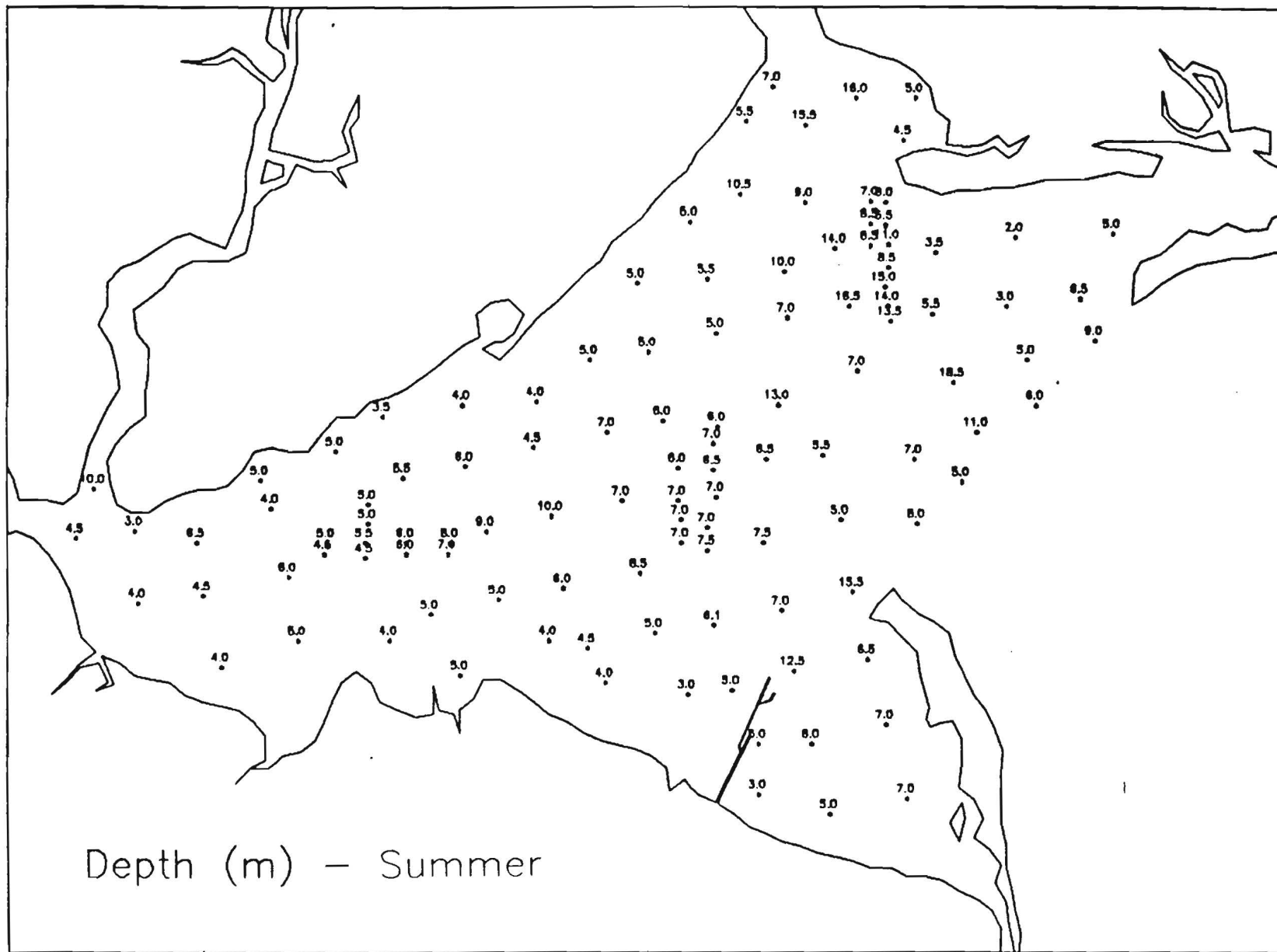


Figure 5.

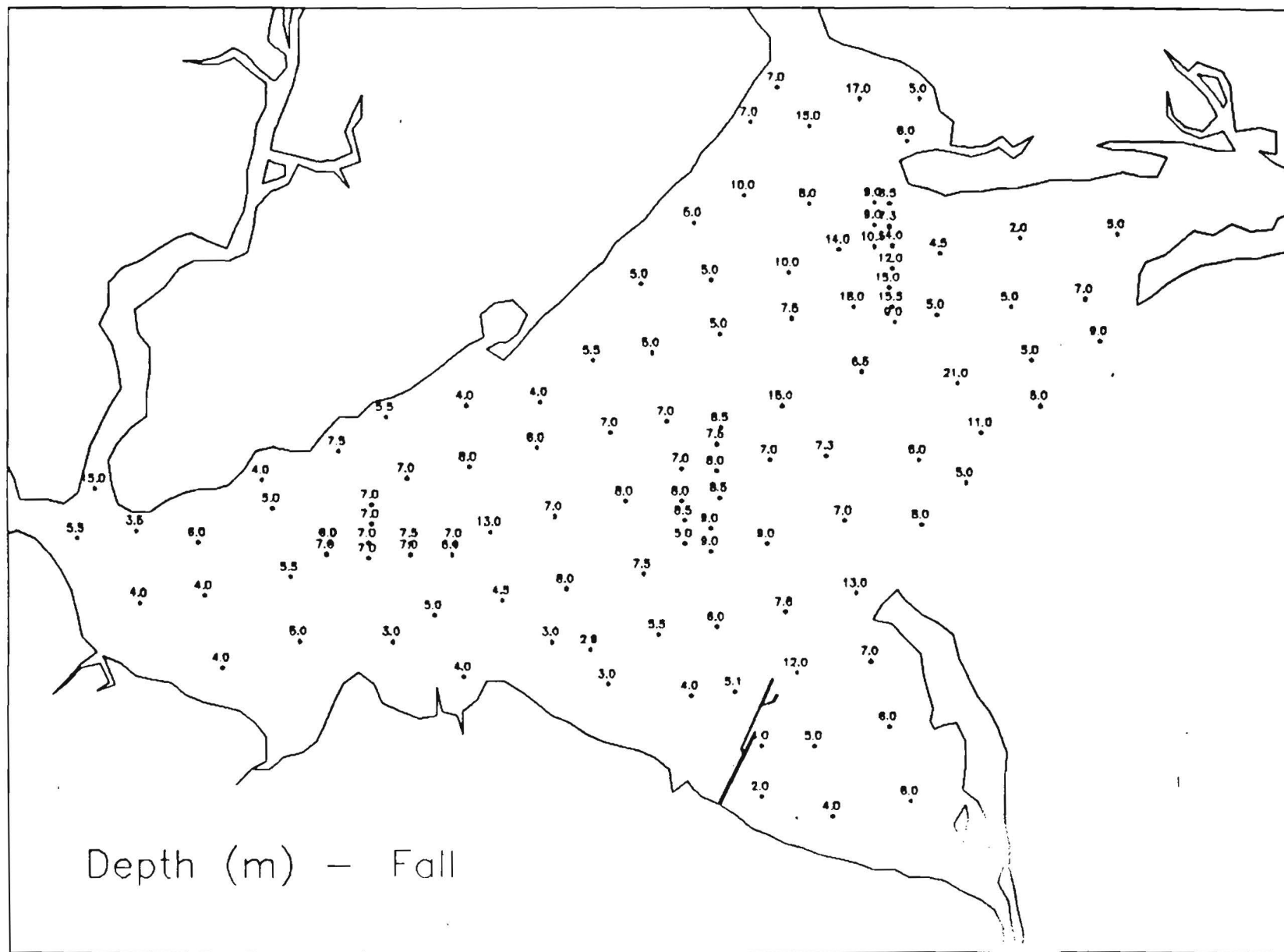


Figure 6.

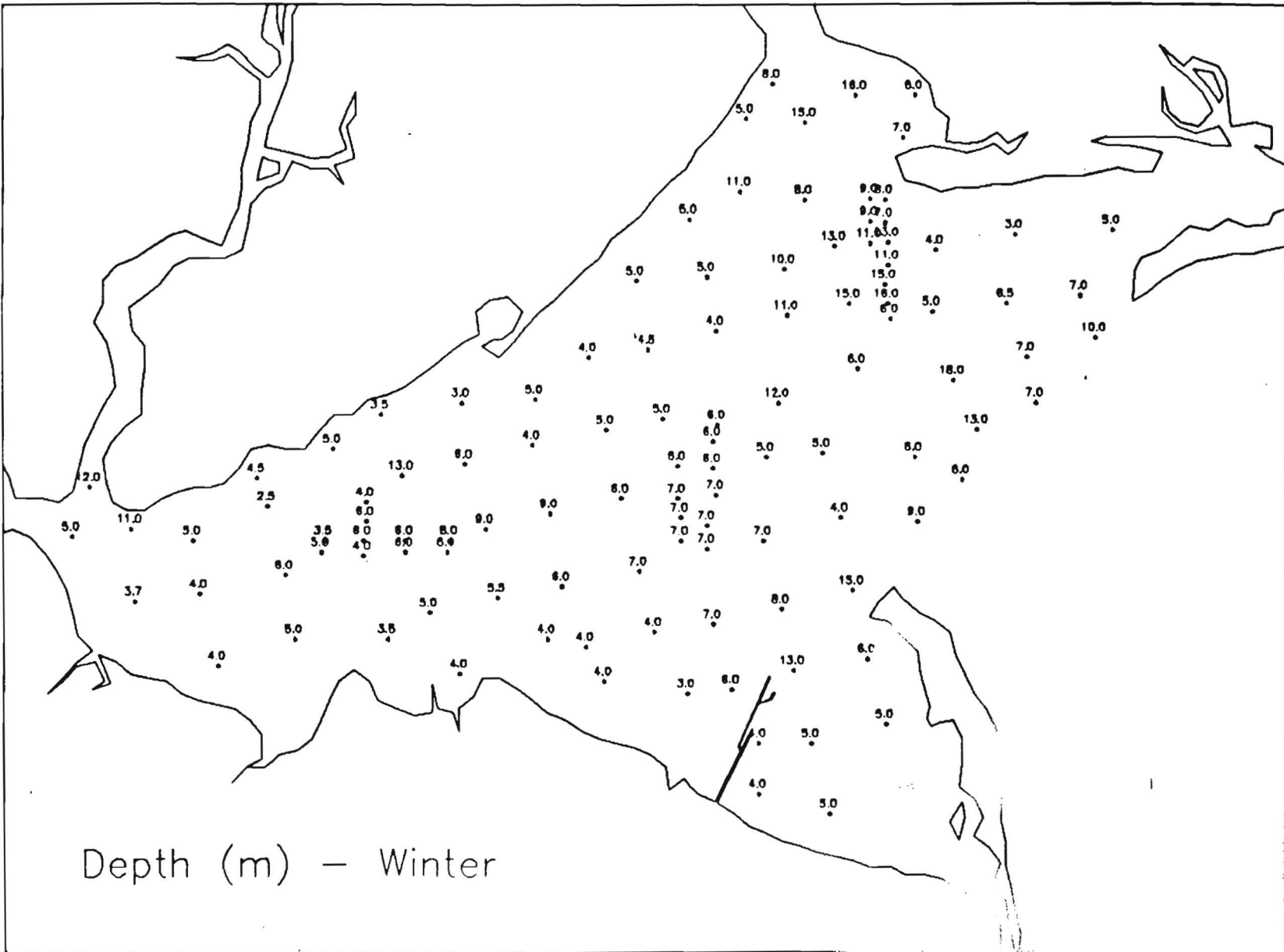


Figure 7.

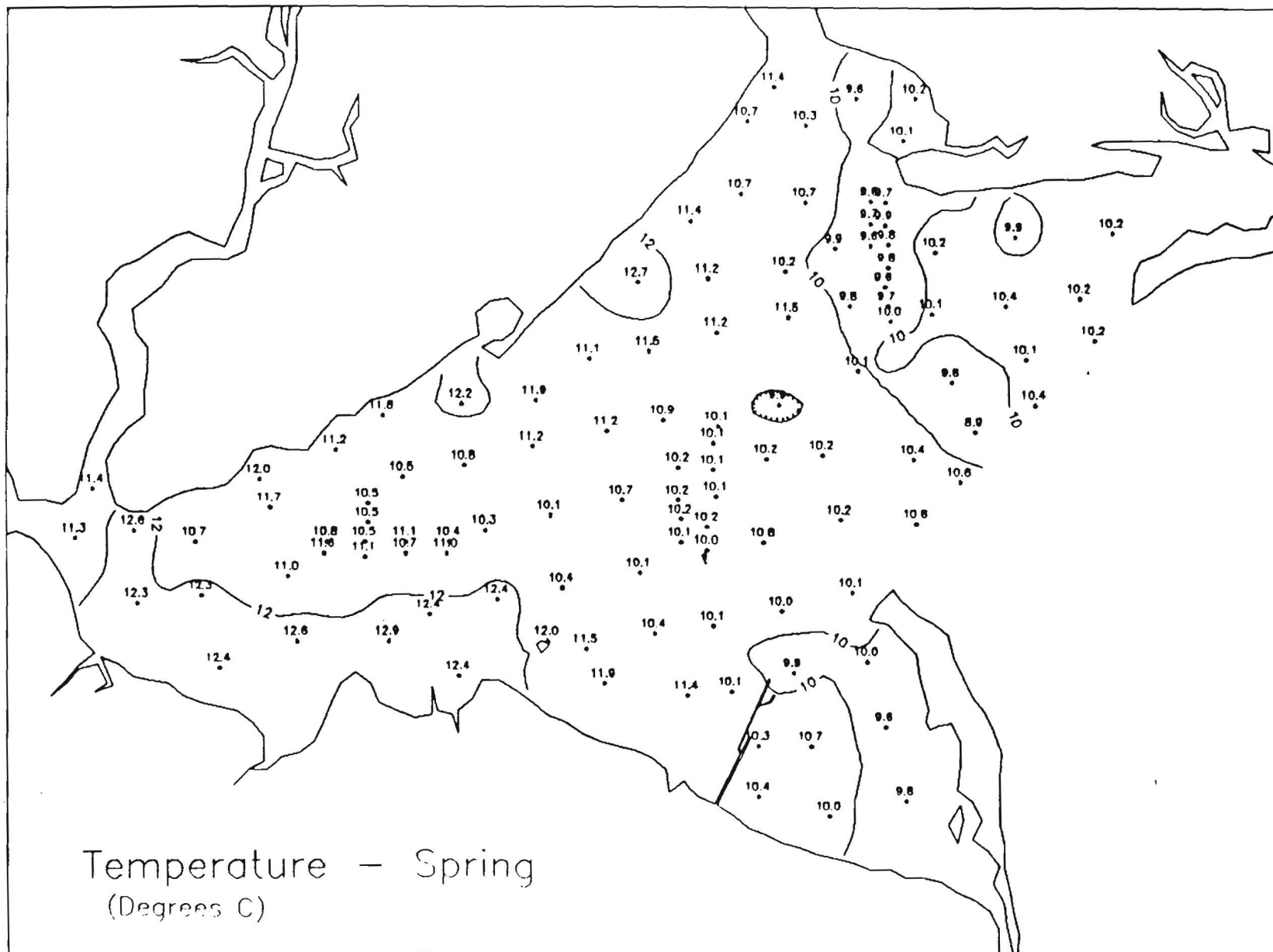


Figure 8.

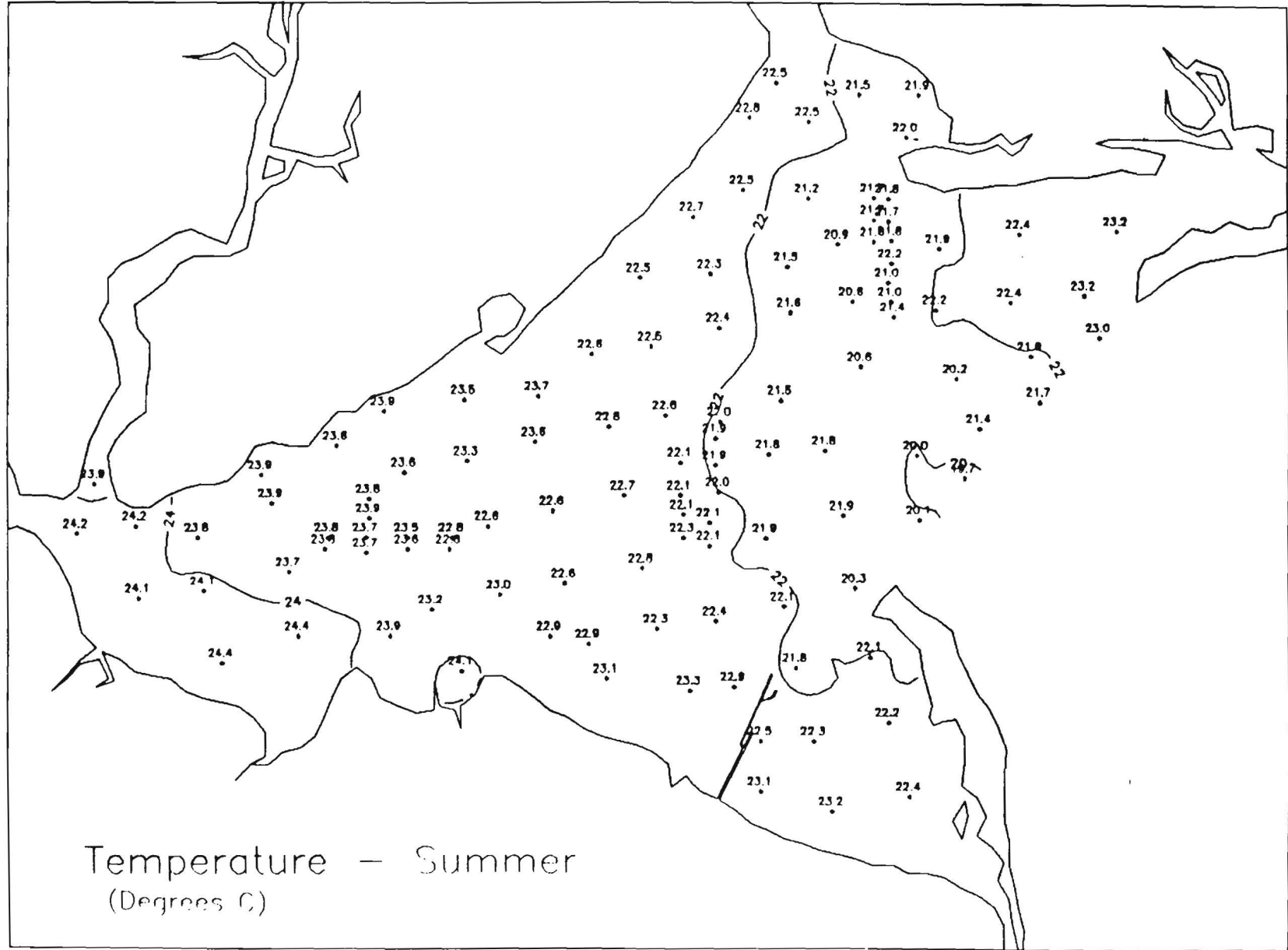


Figure 9.

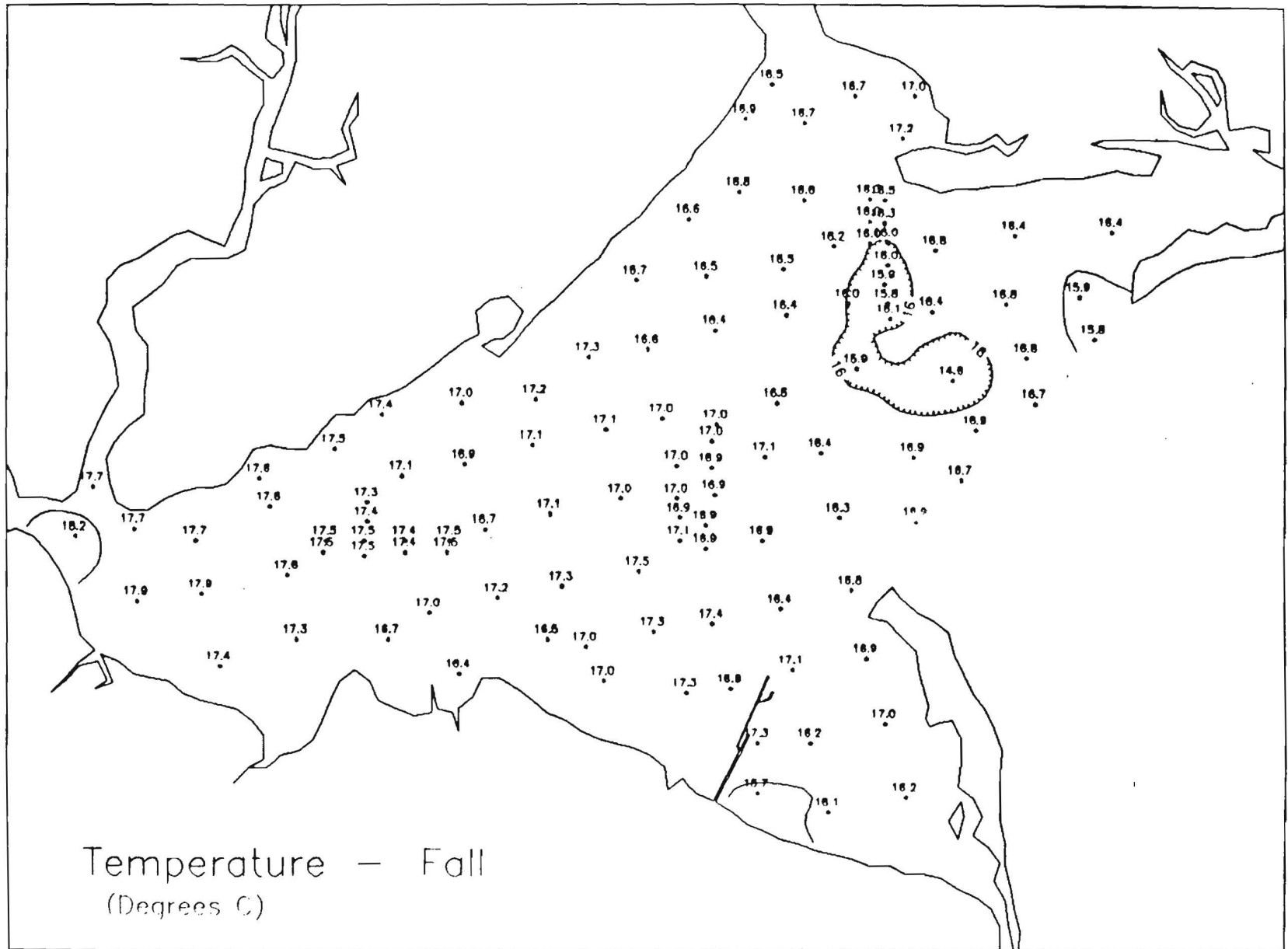


Figure 10.

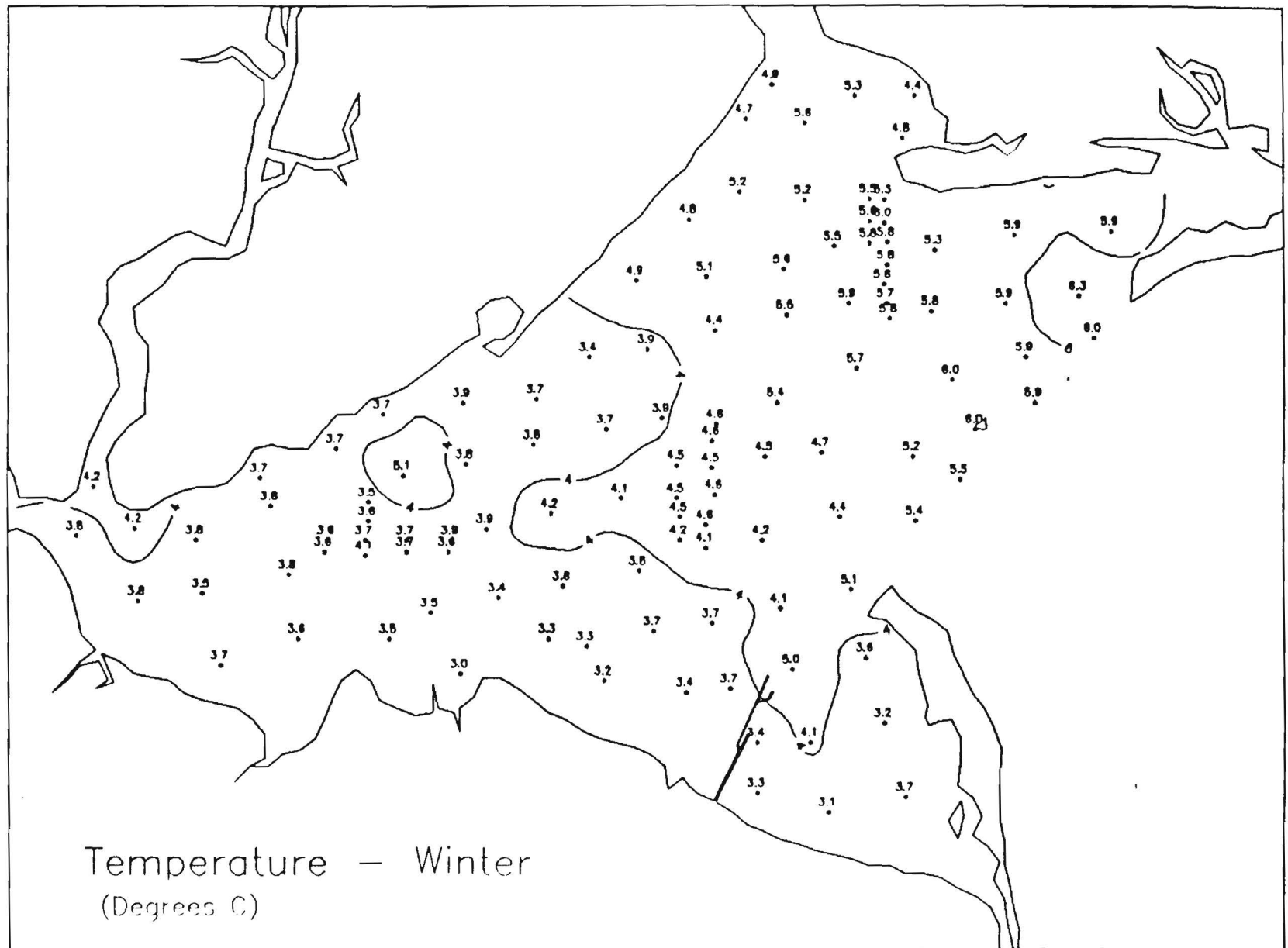


Figure 11.

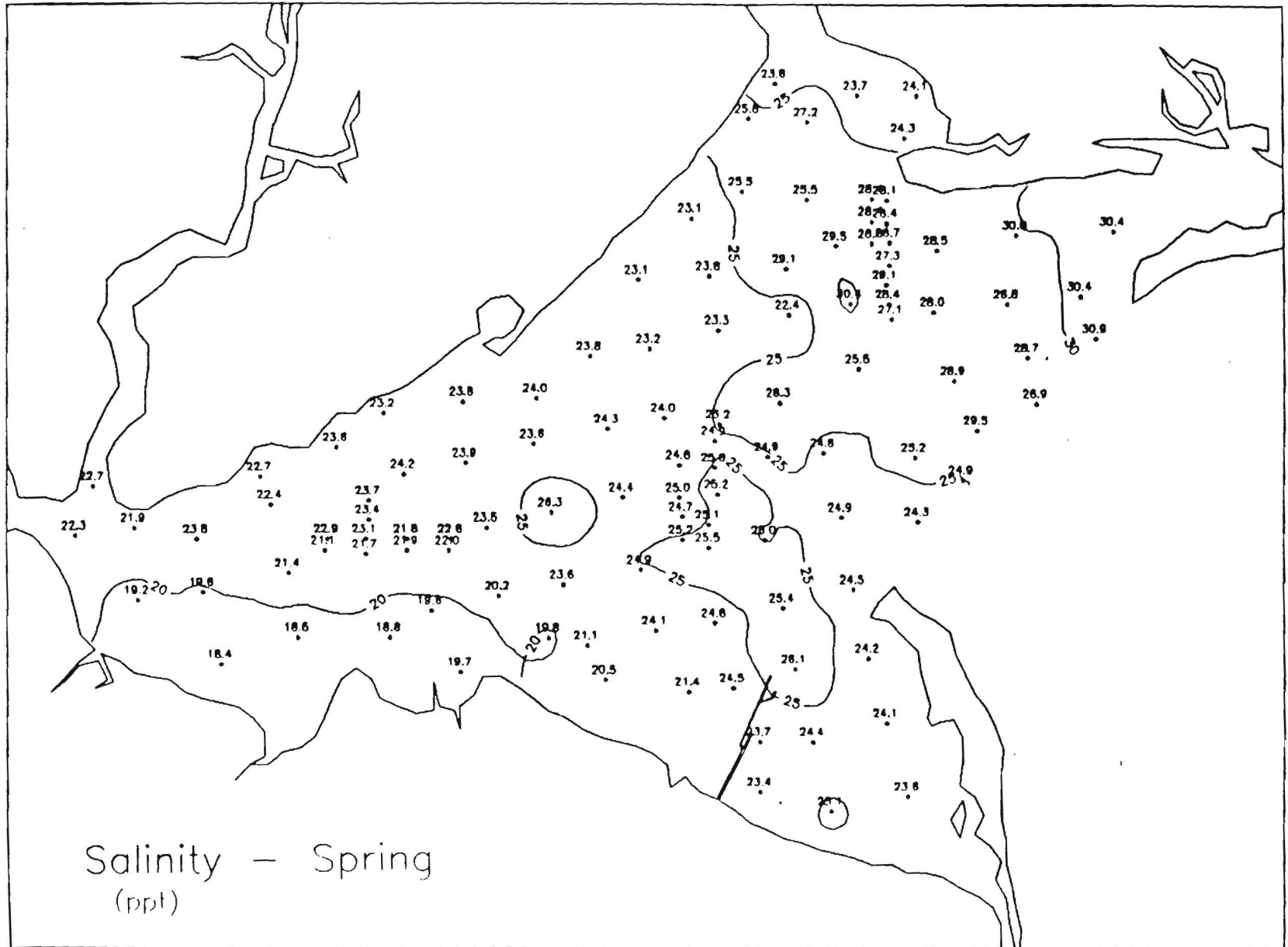


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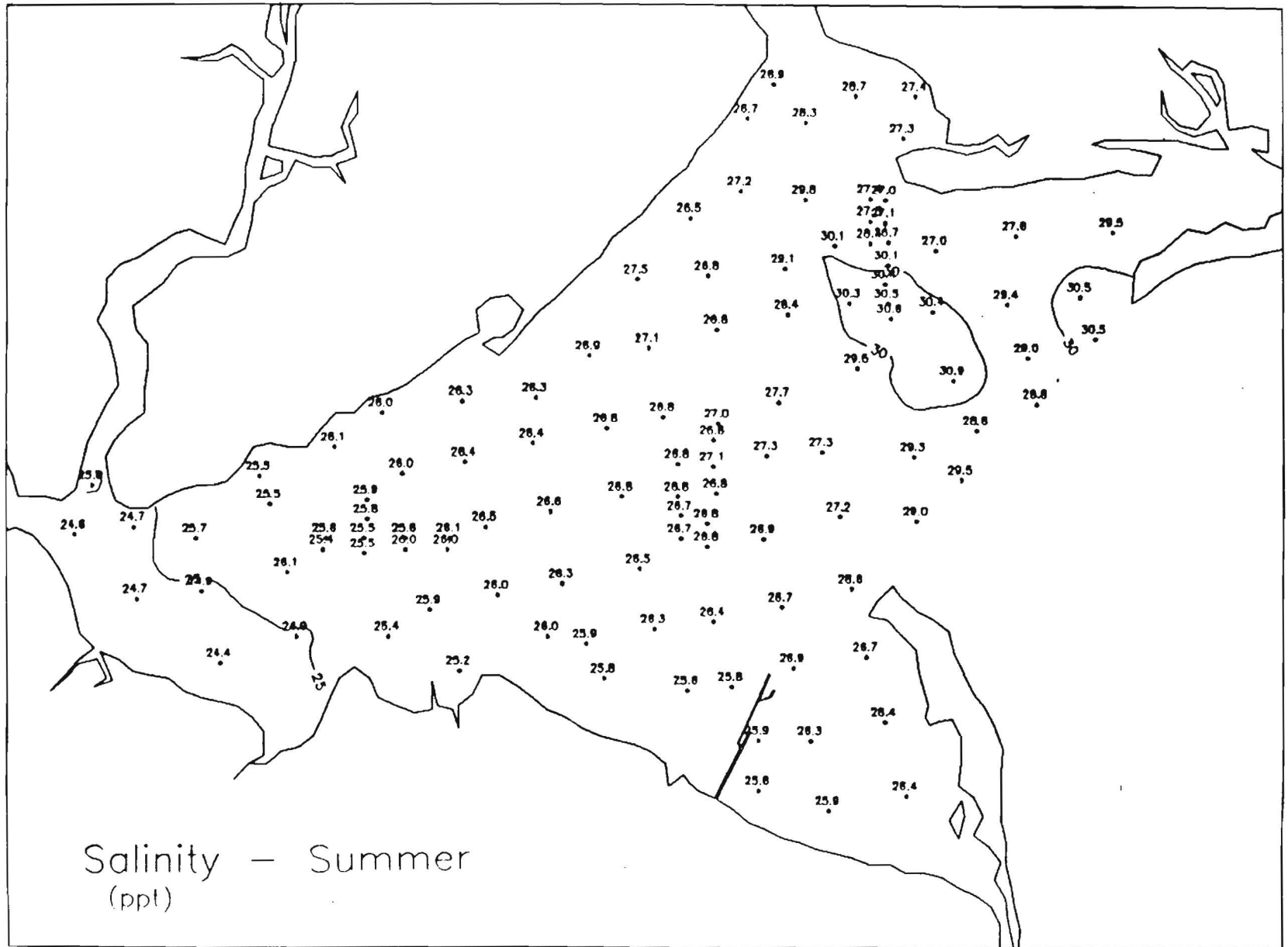


Figure 13.

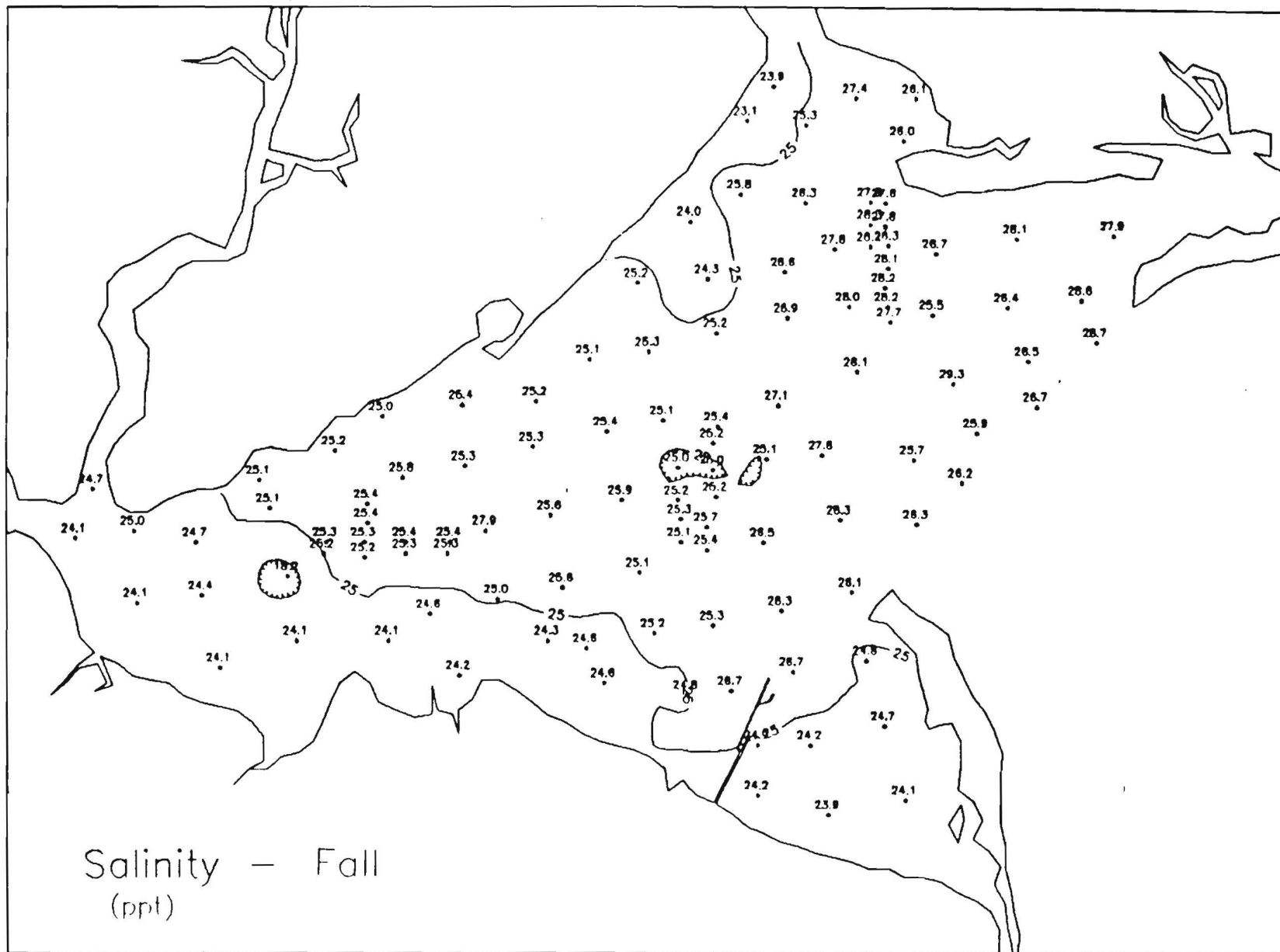


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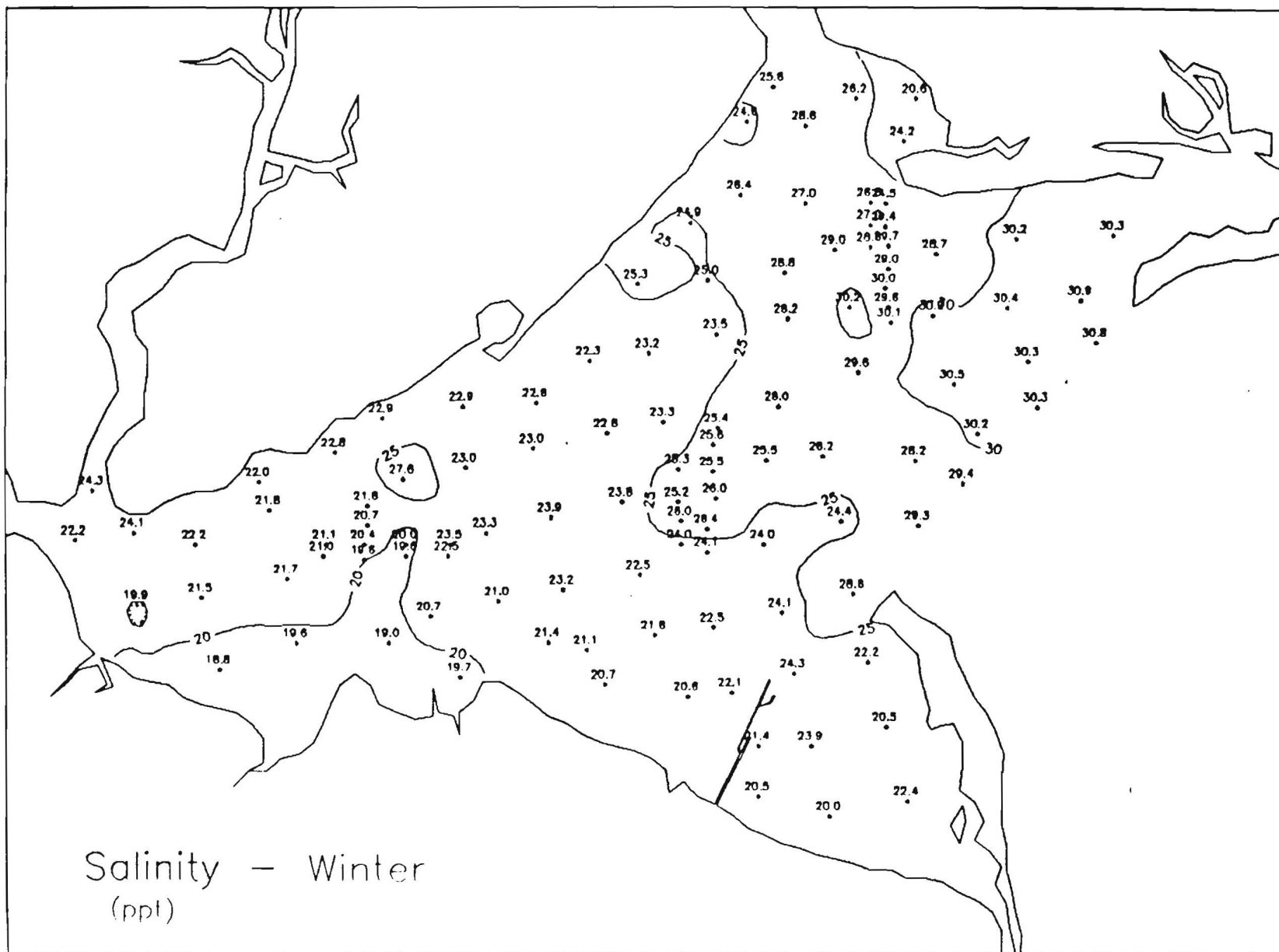


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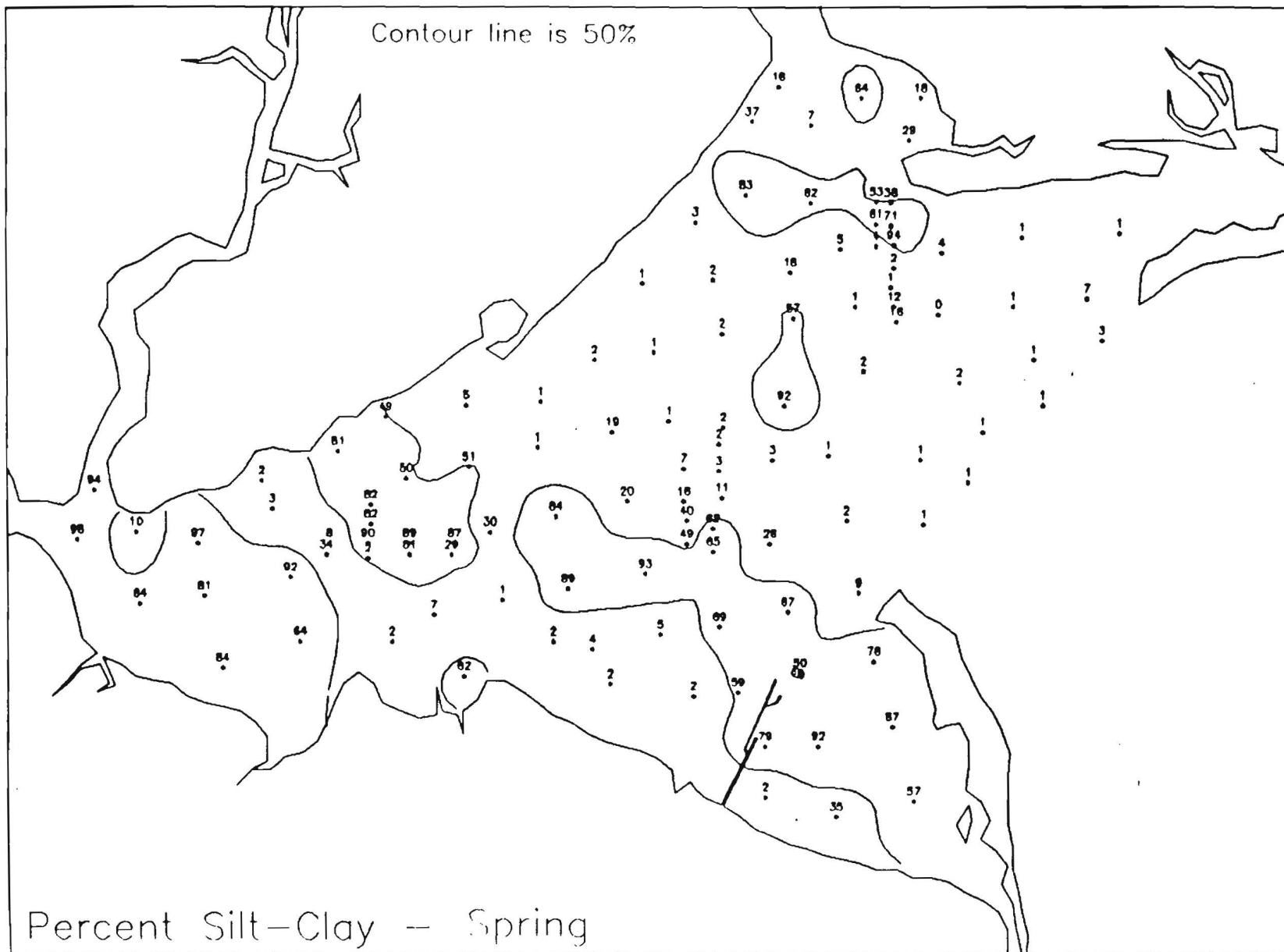


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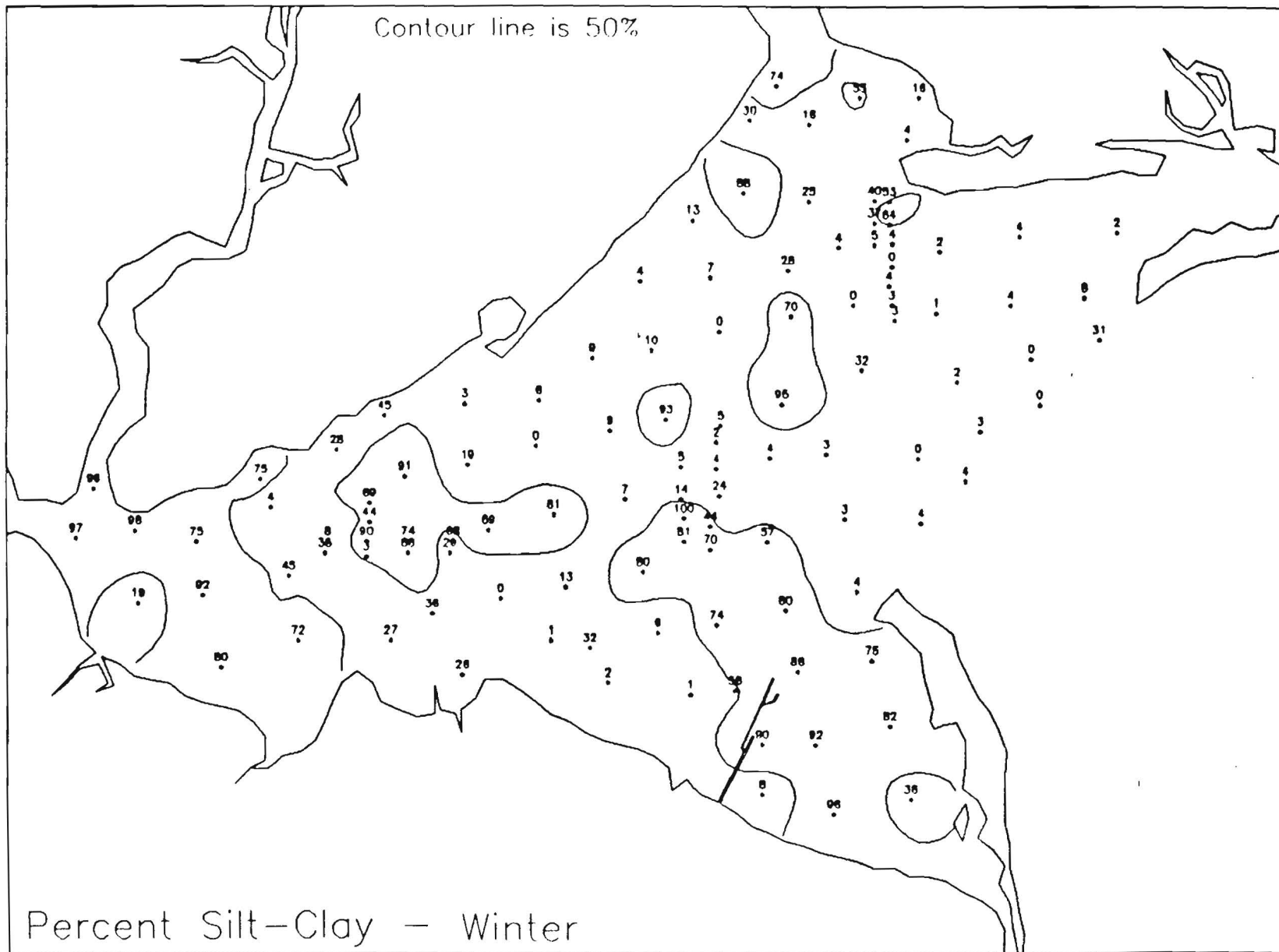


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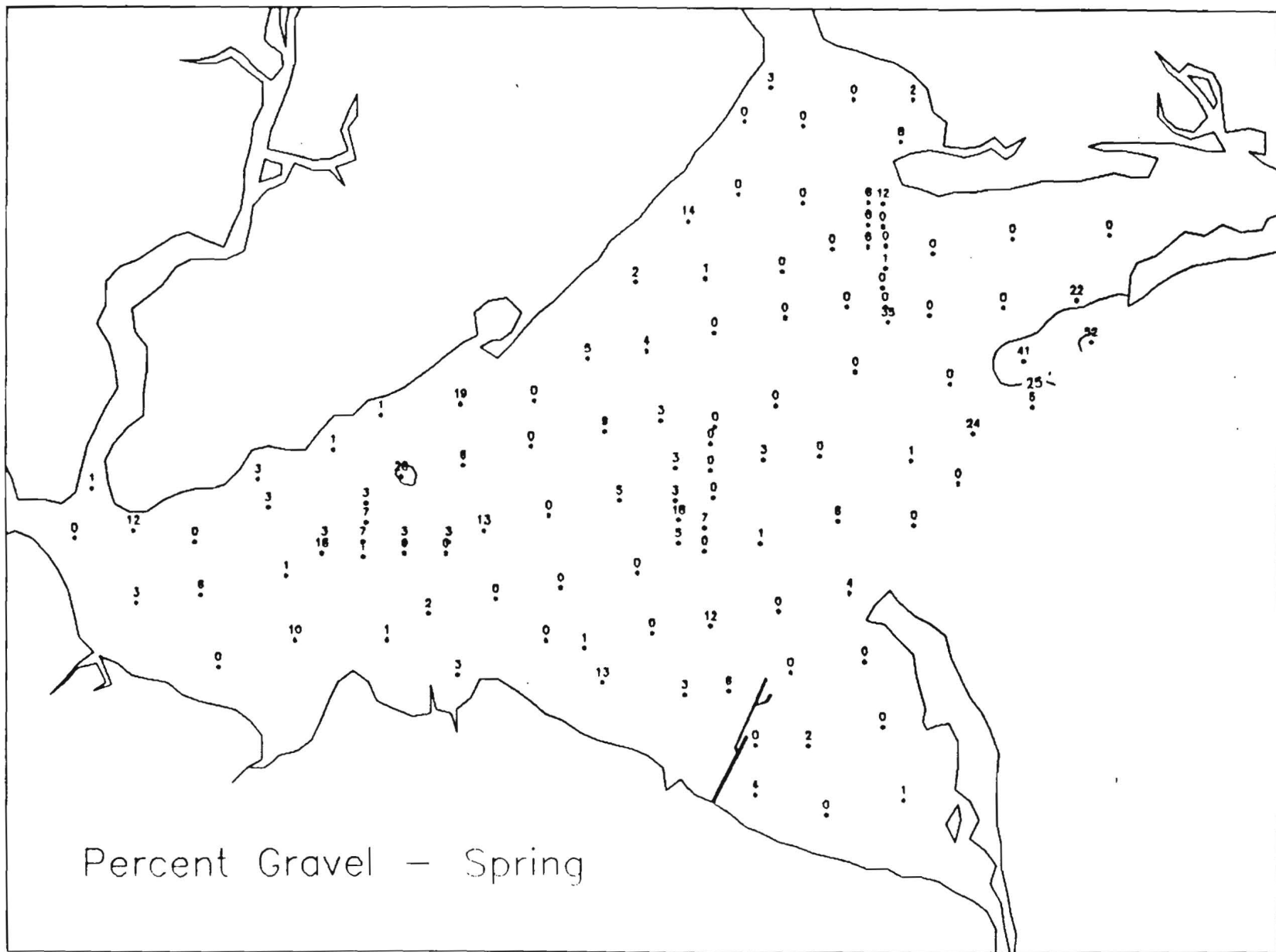


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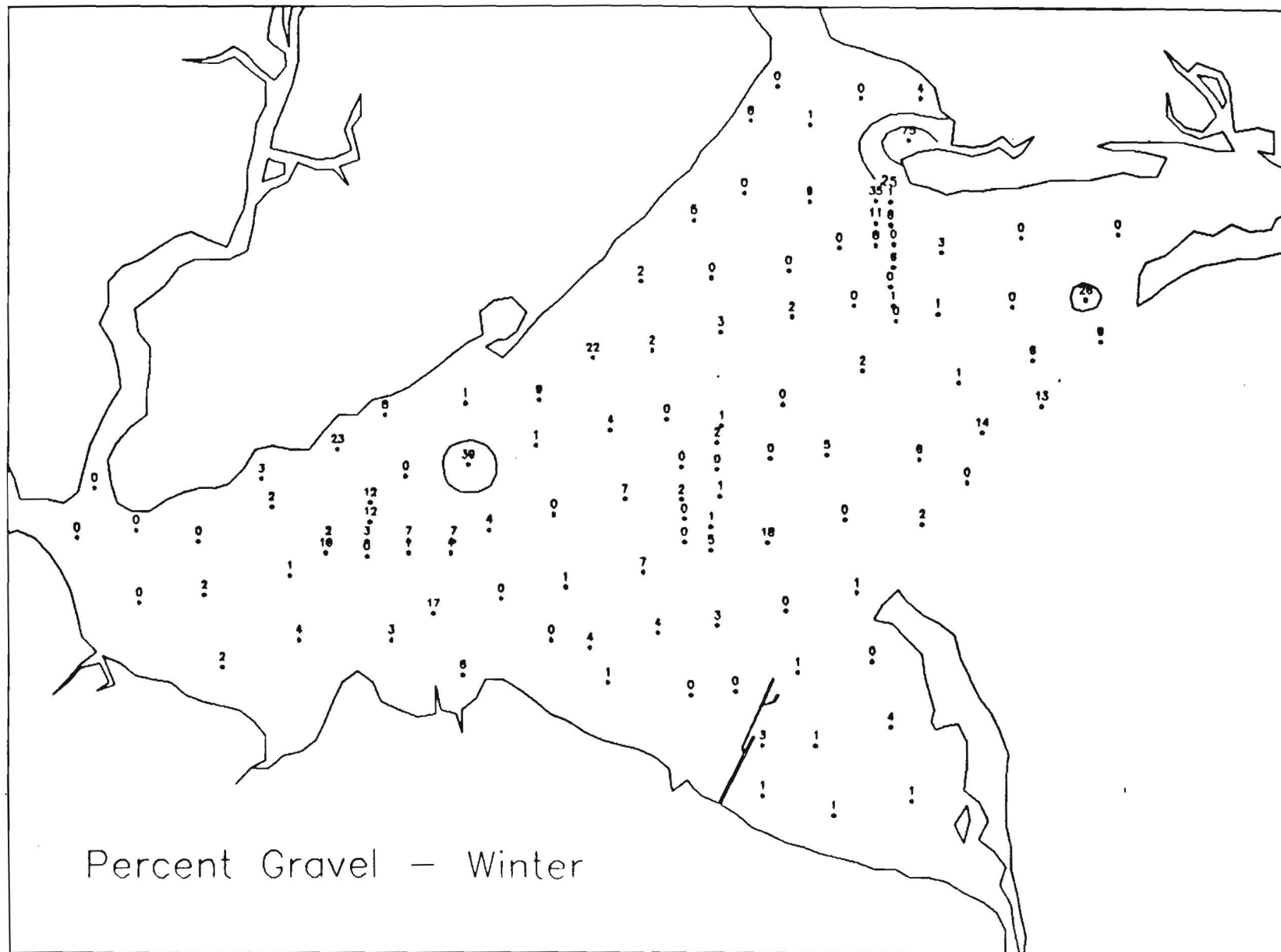


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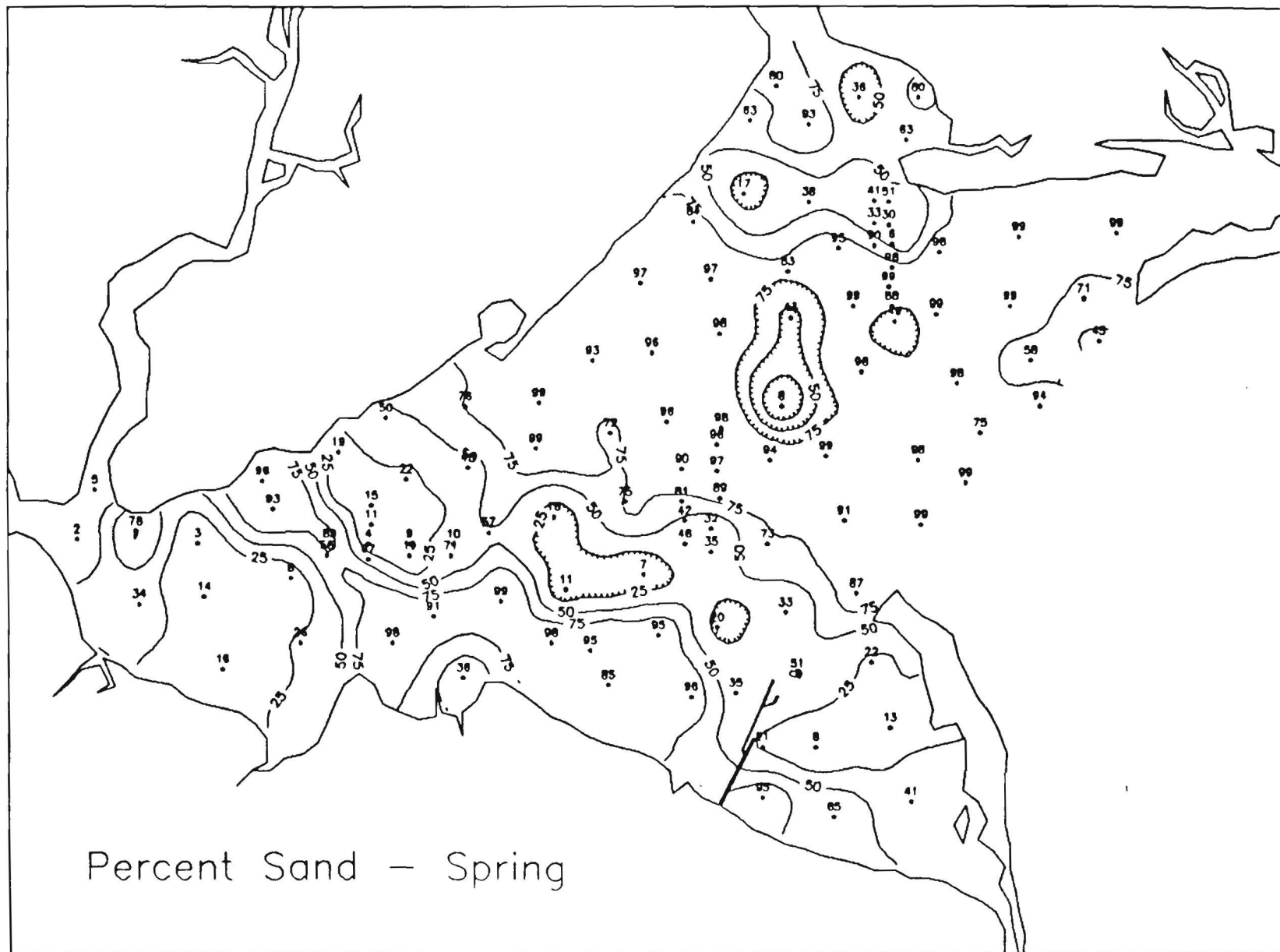


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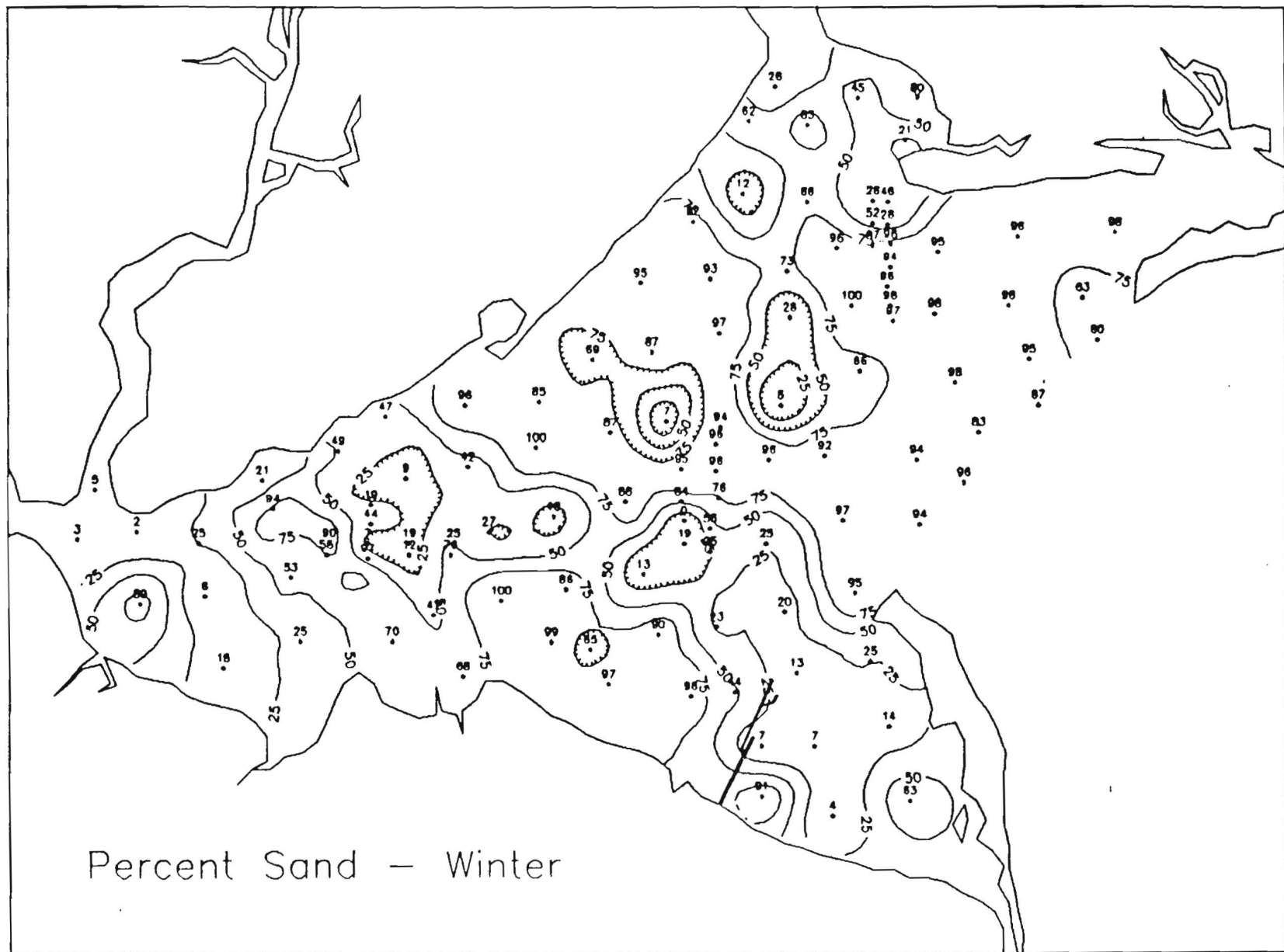


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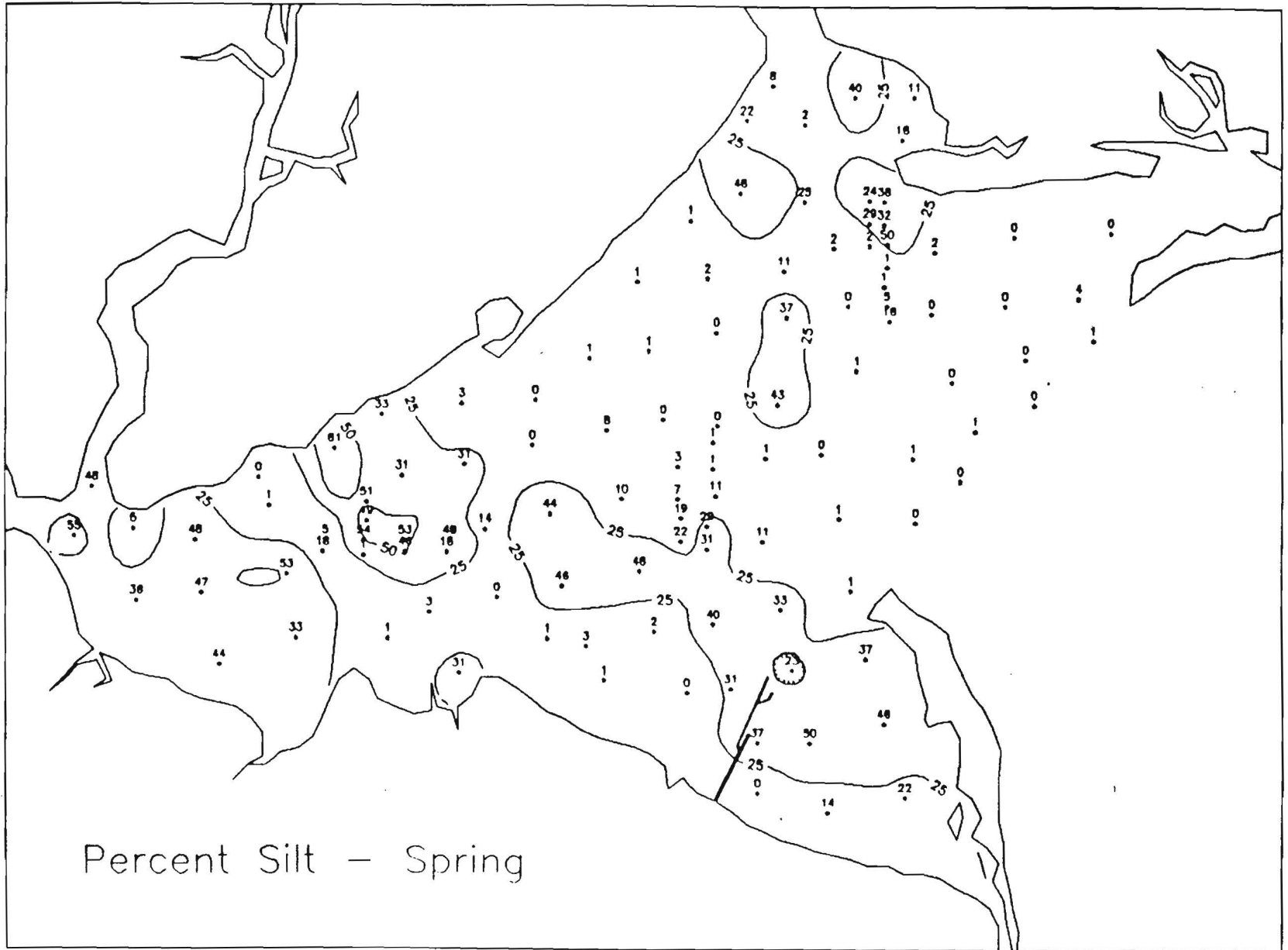


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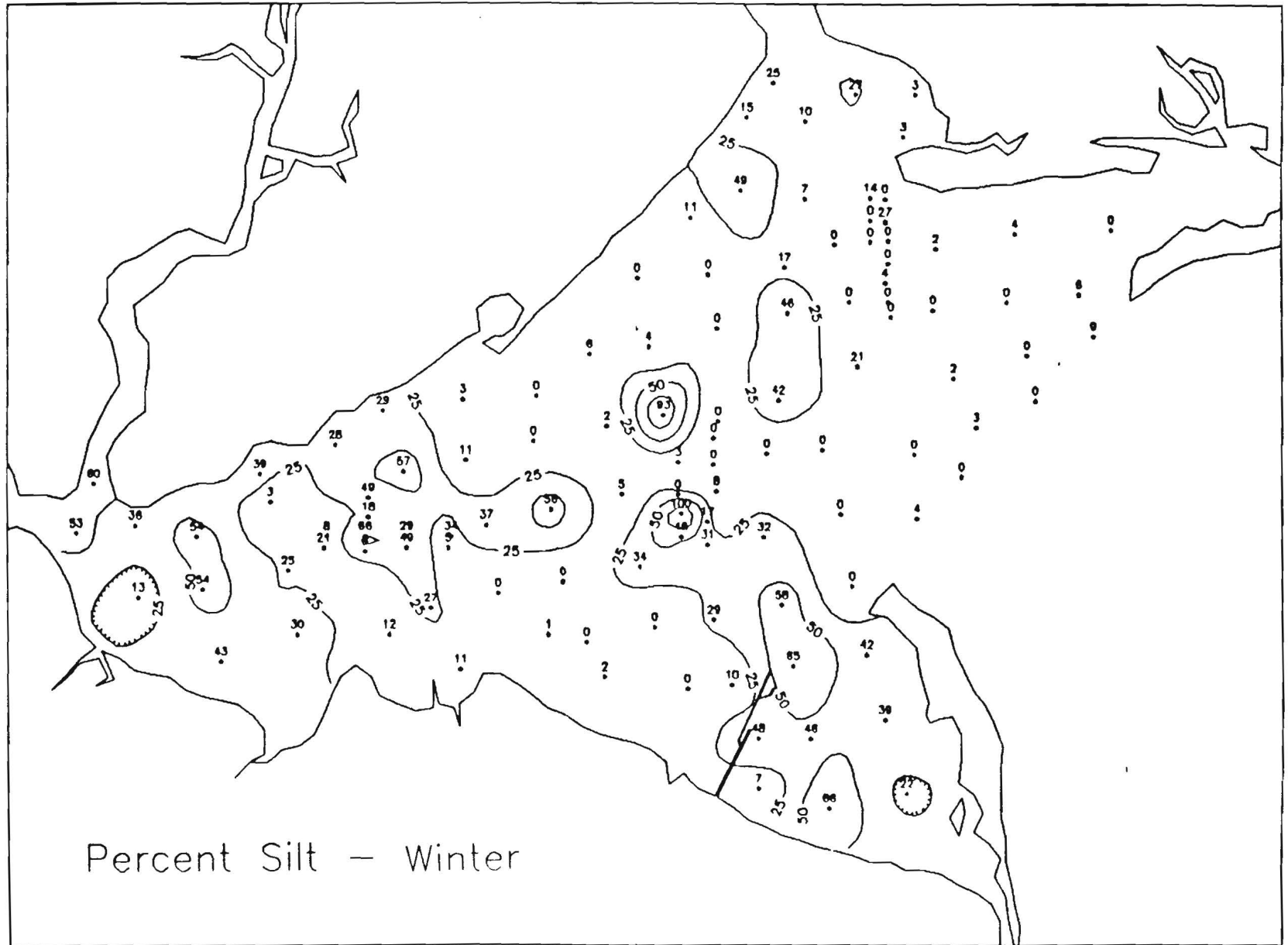


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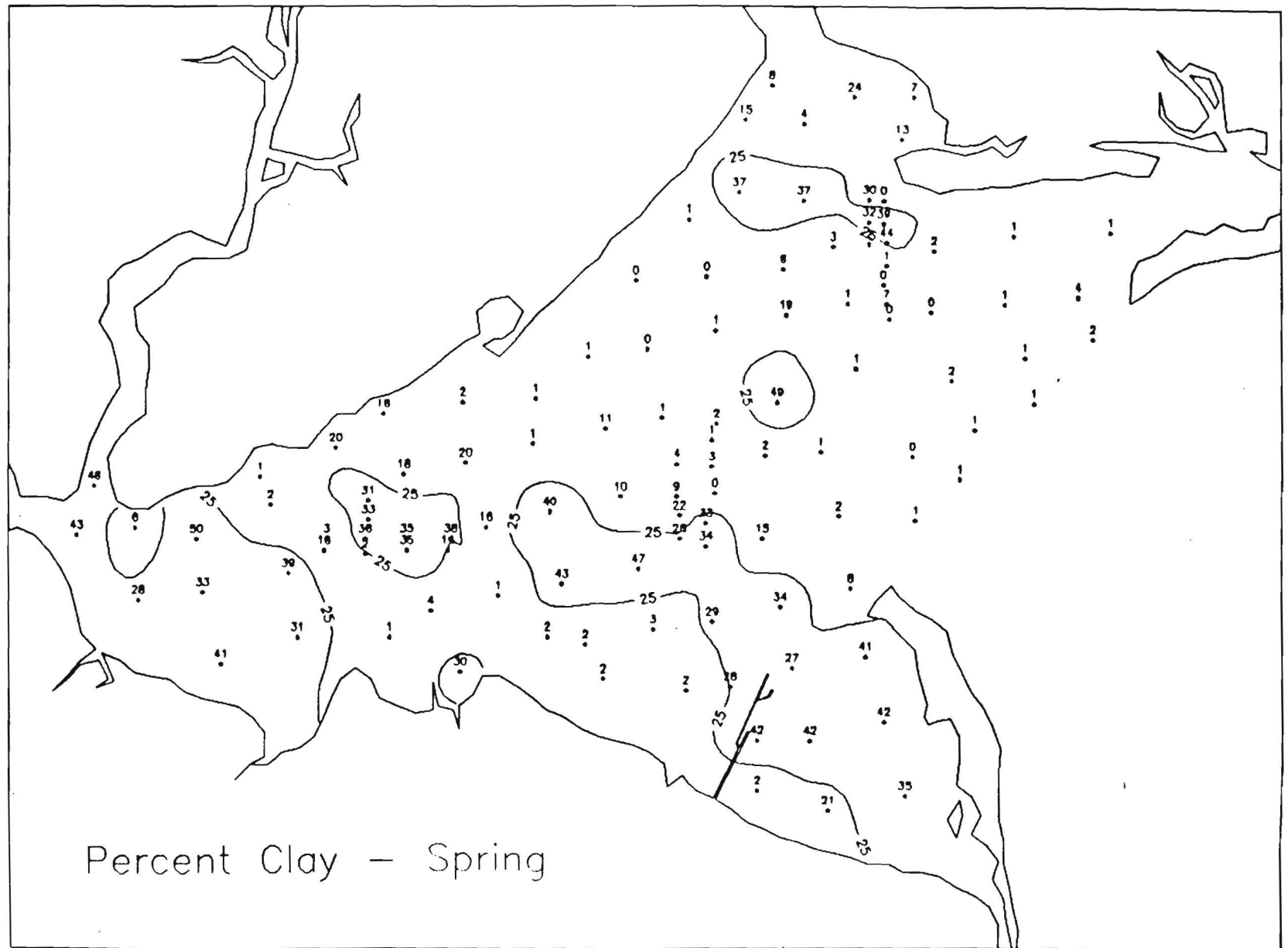


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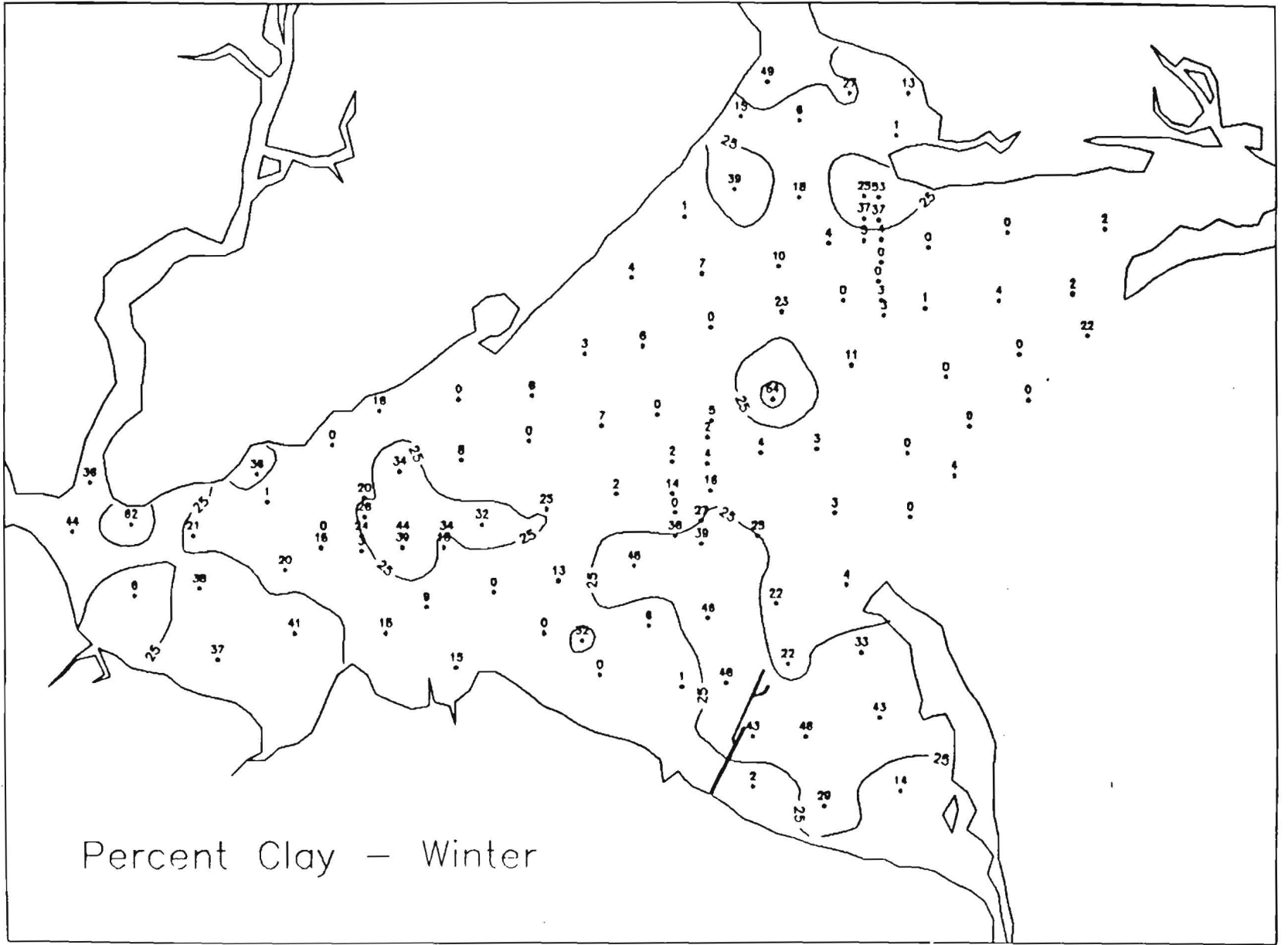


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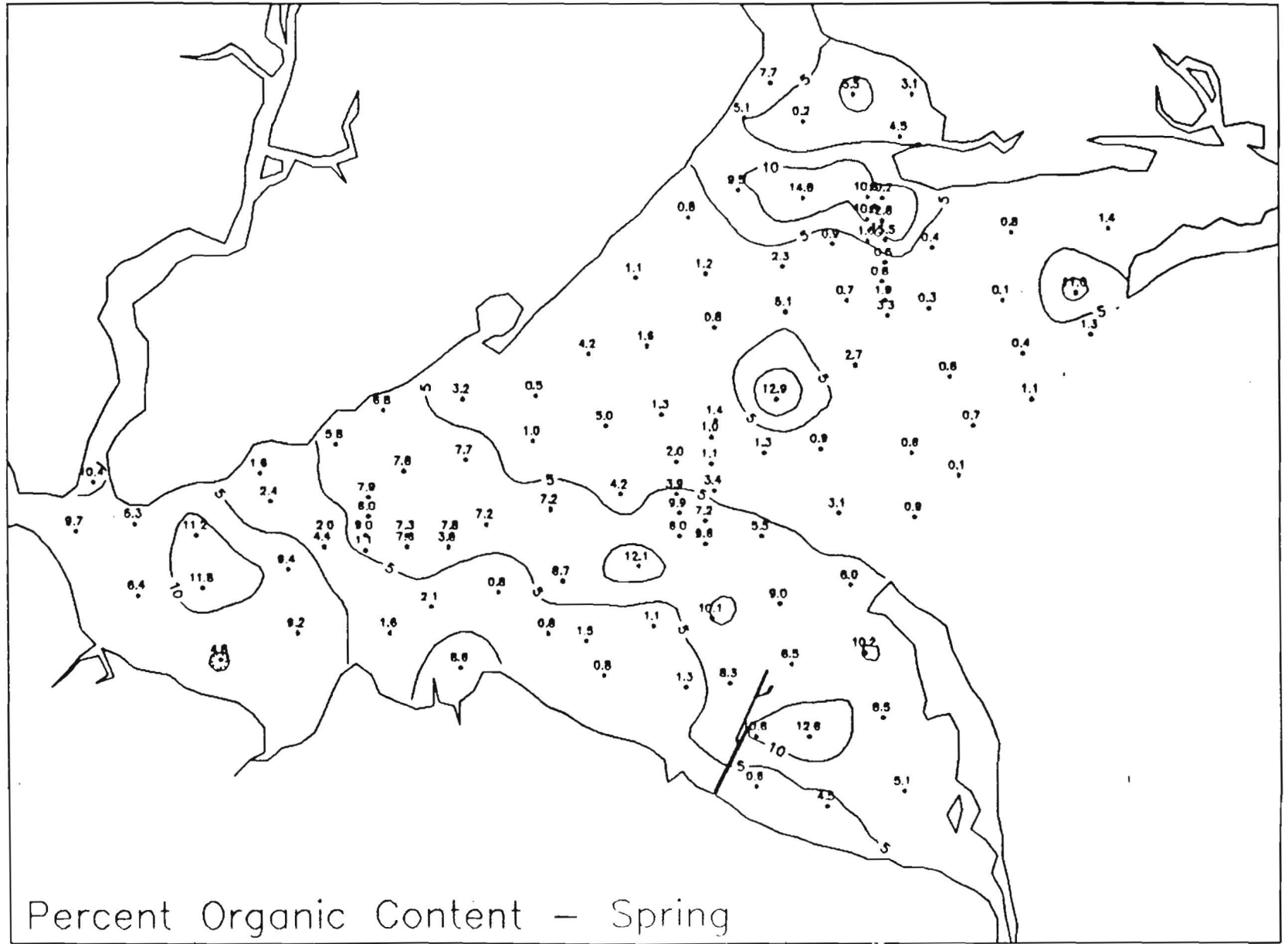


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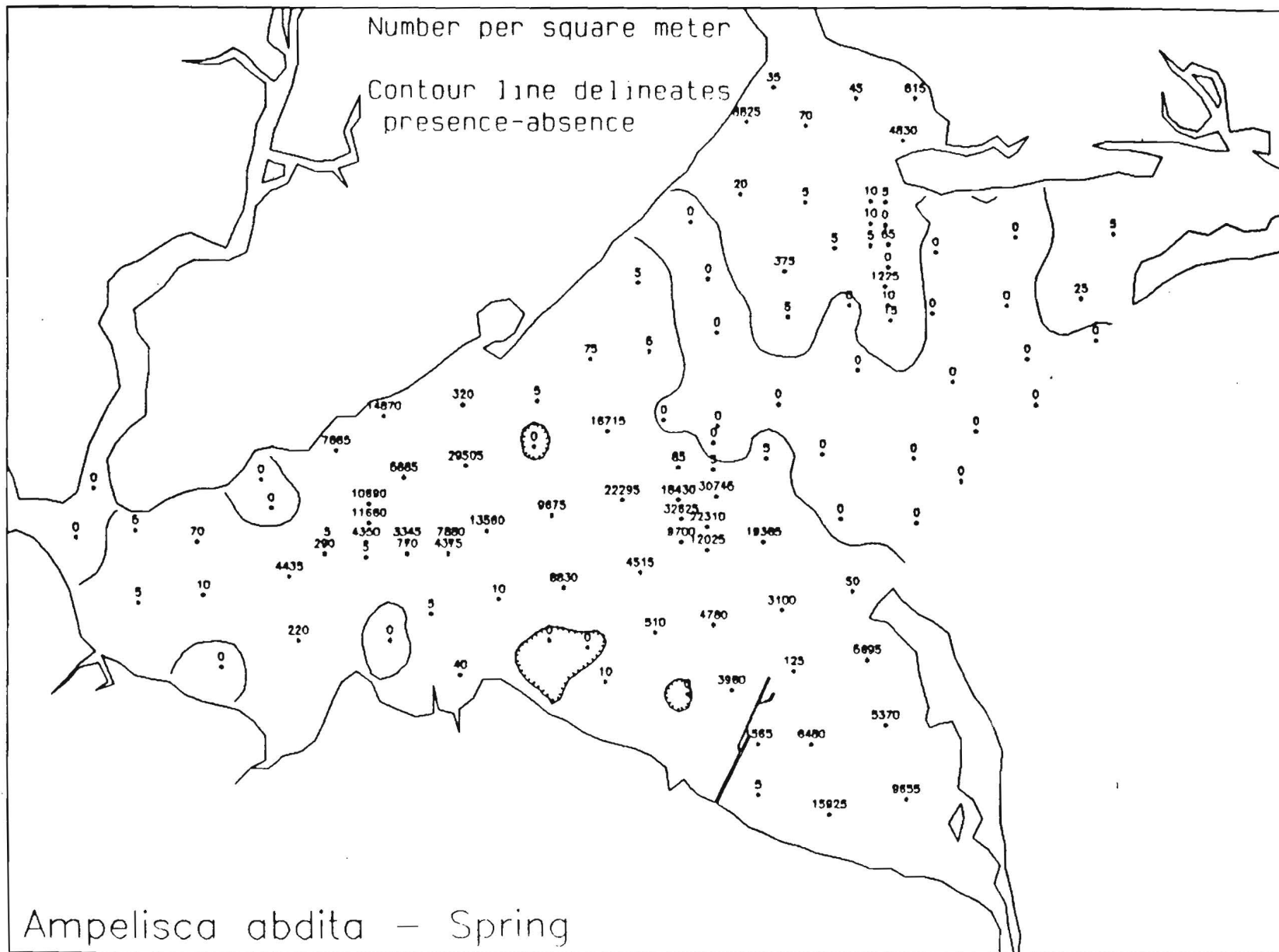


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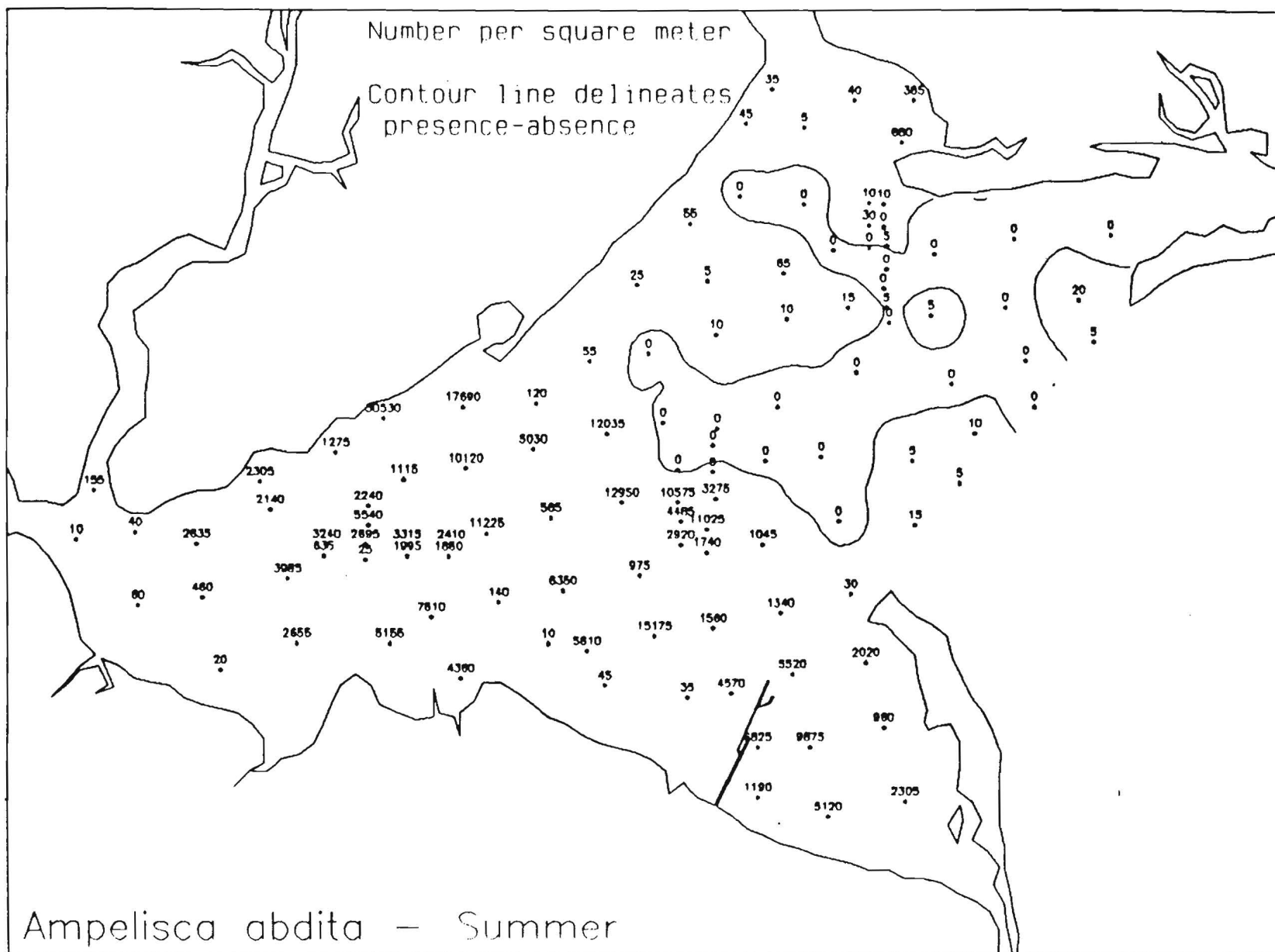


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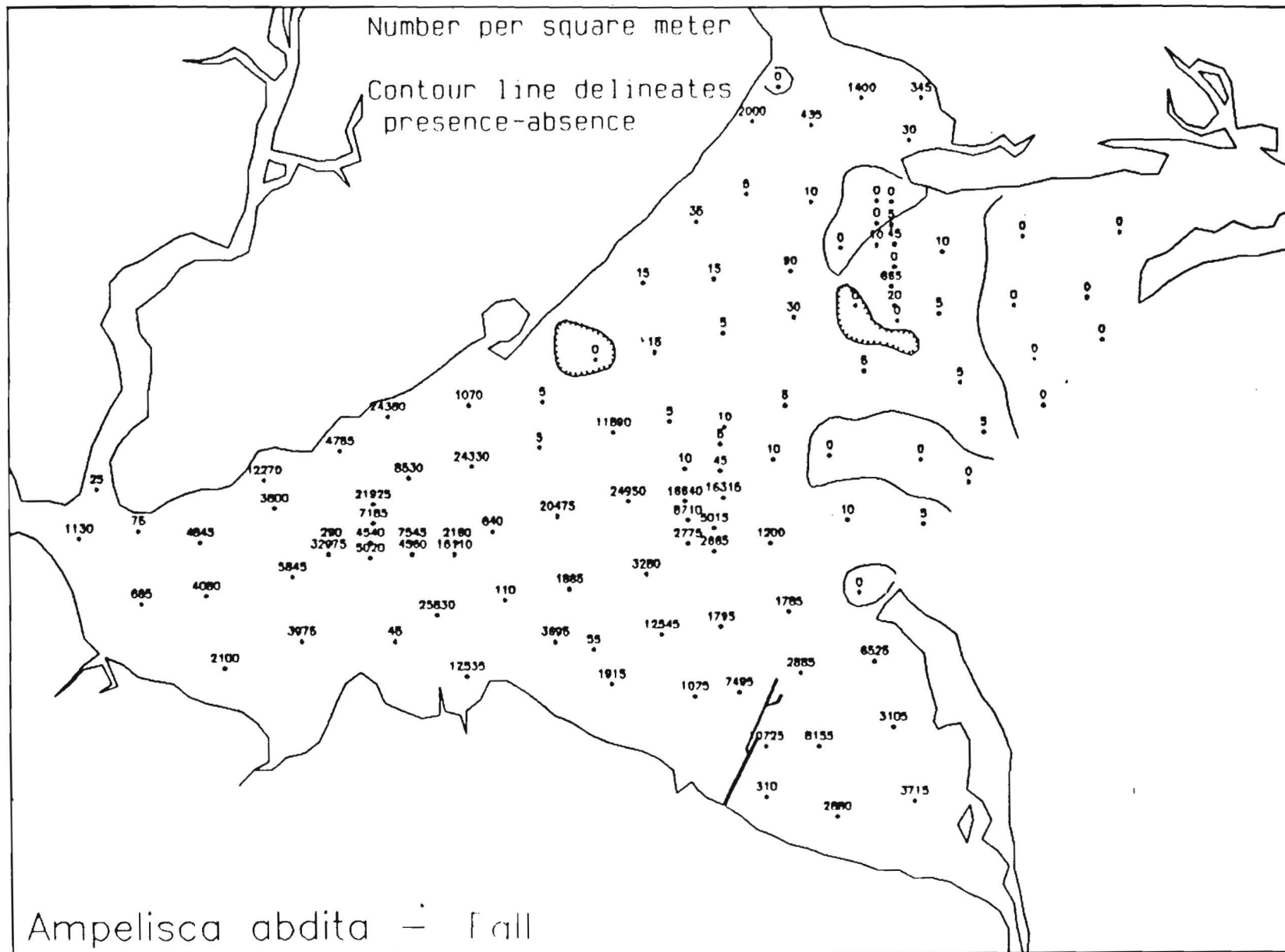


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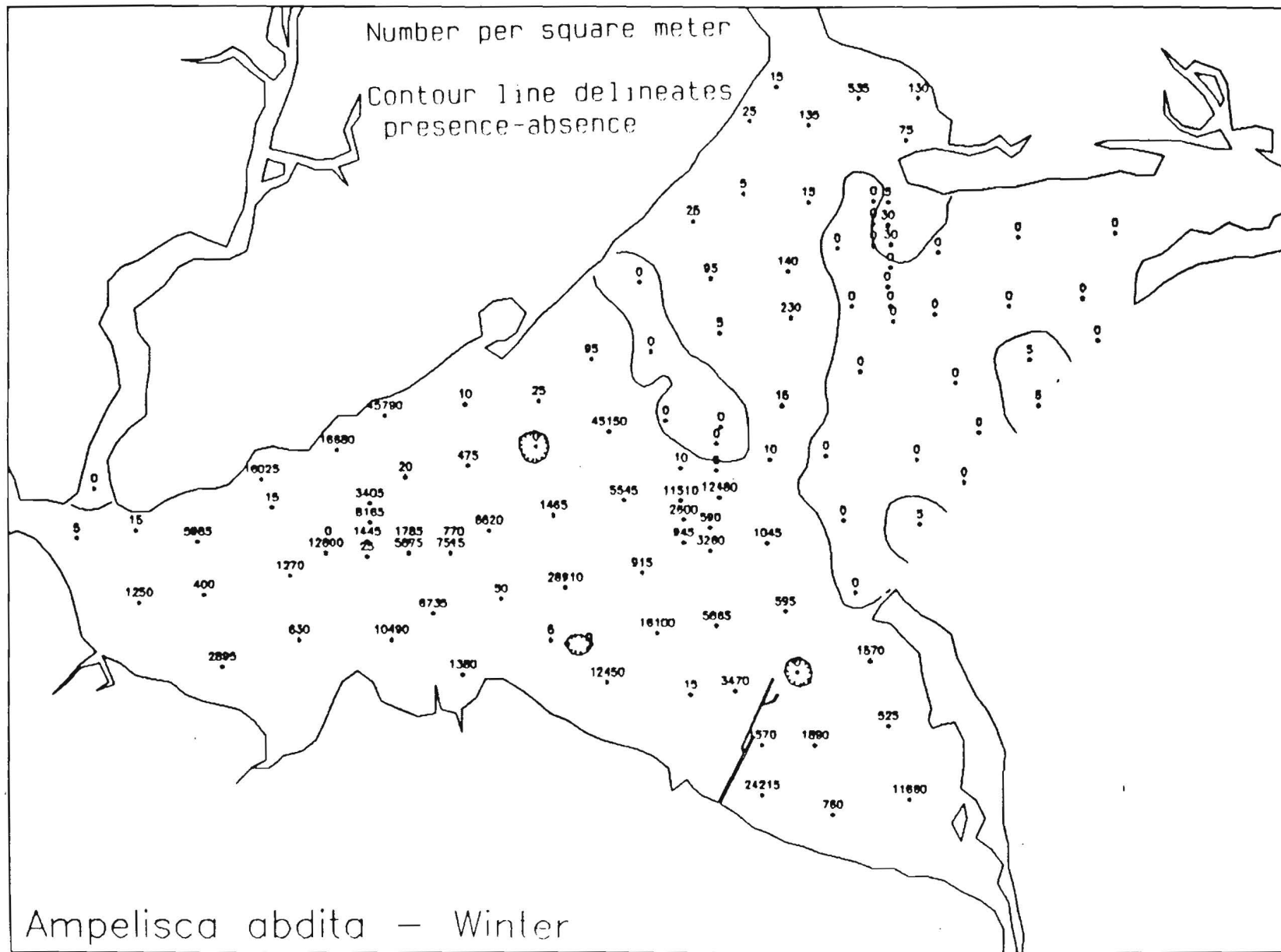


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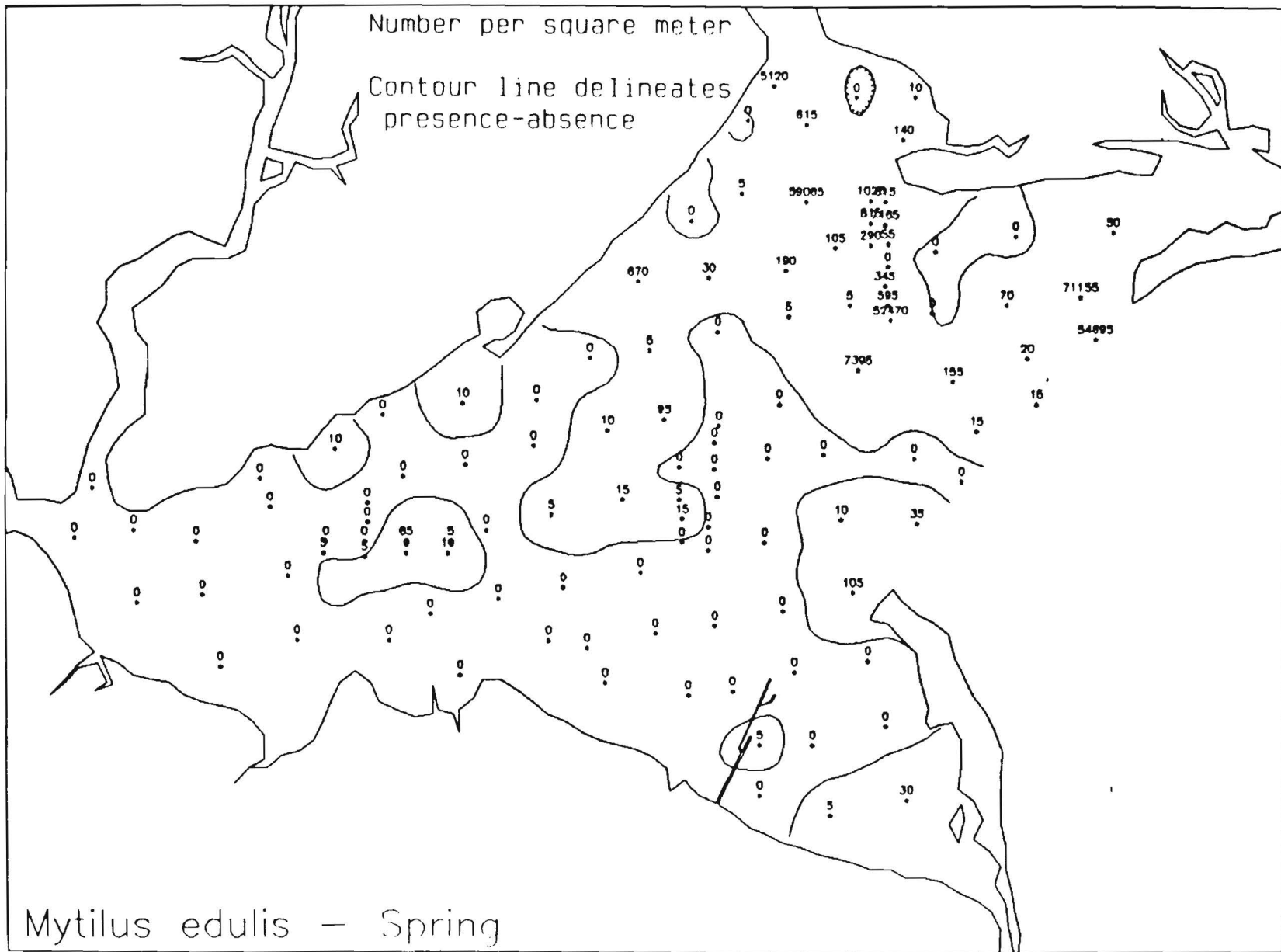


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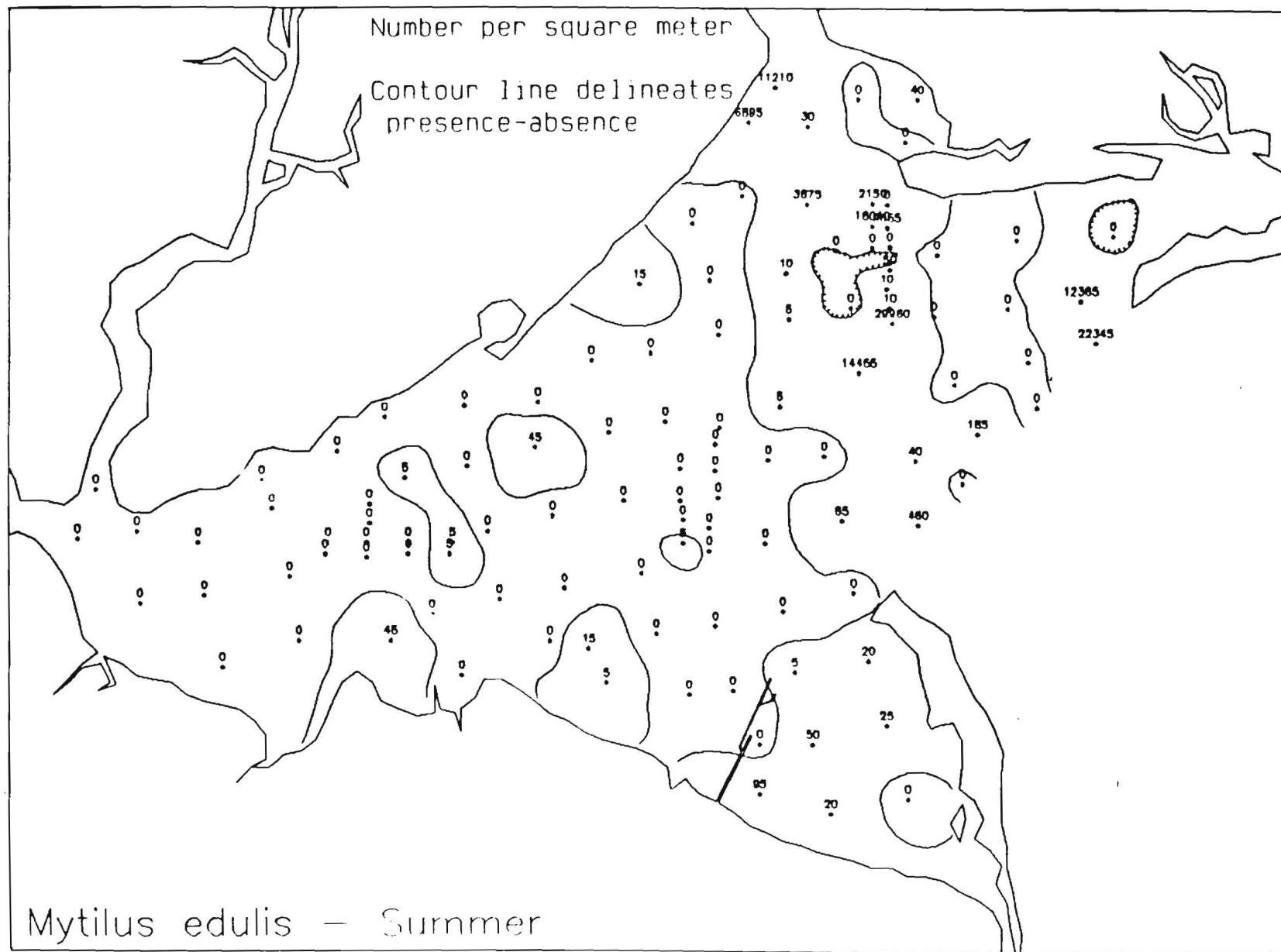


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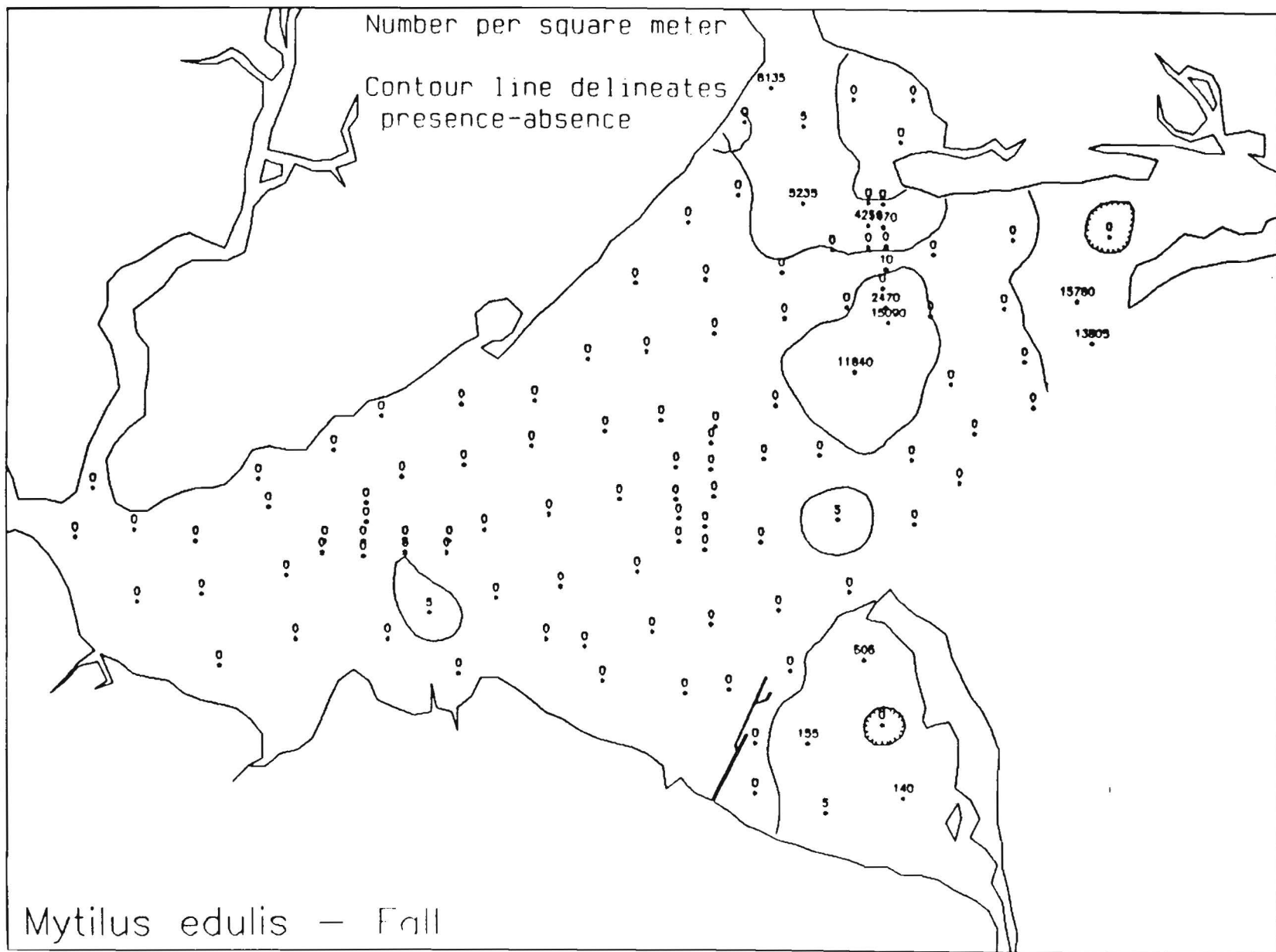


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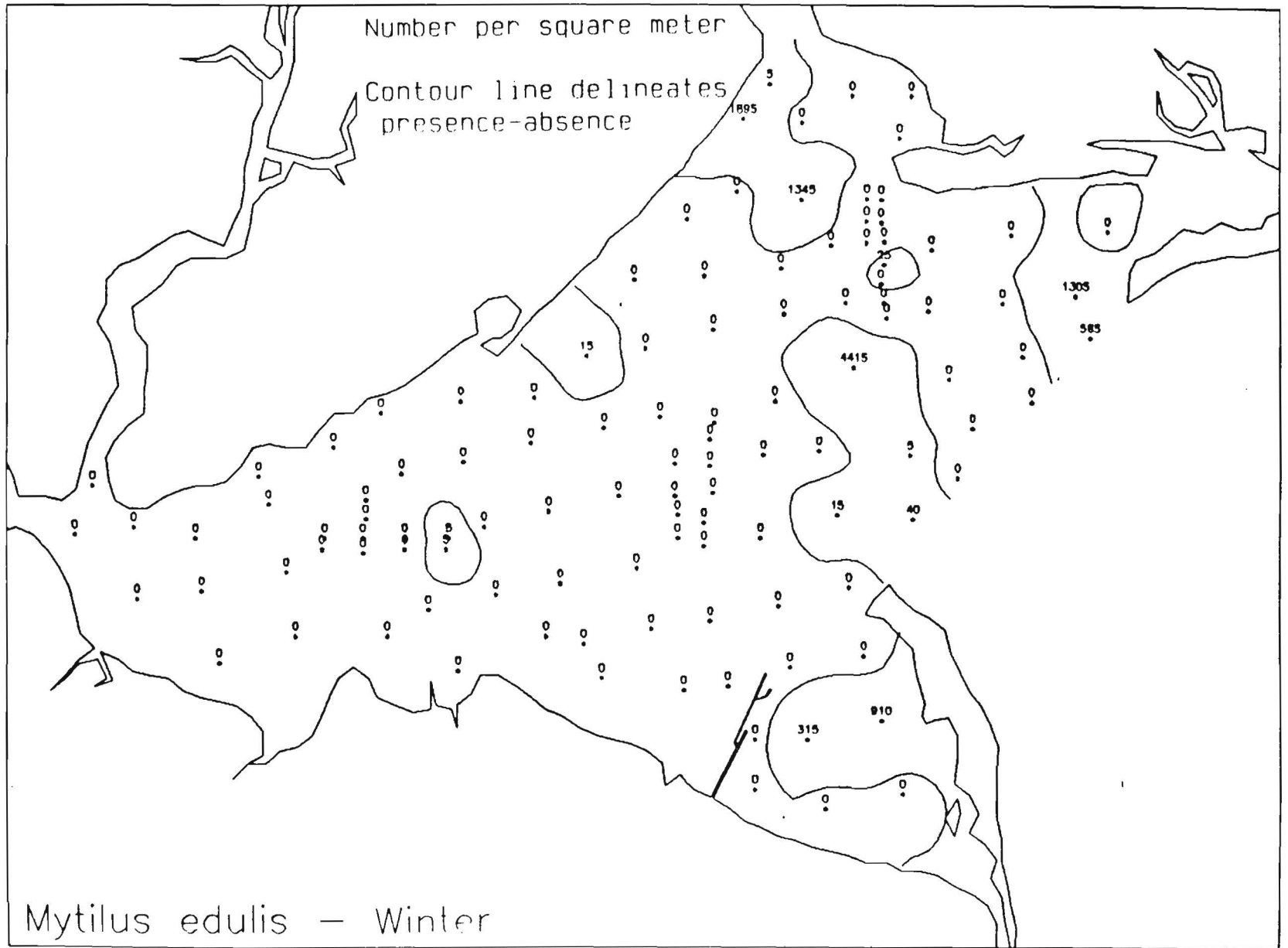


Figure 34.

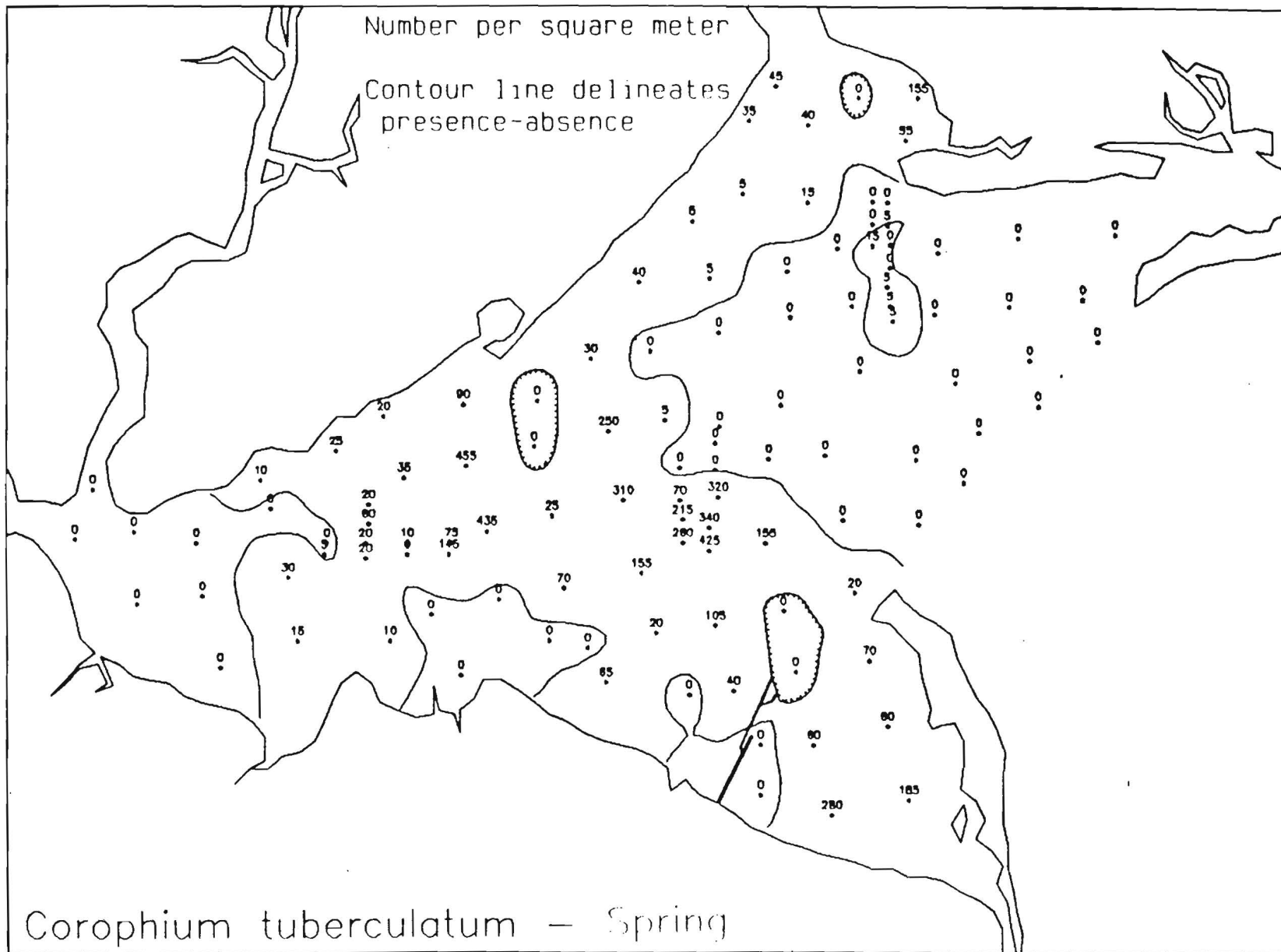


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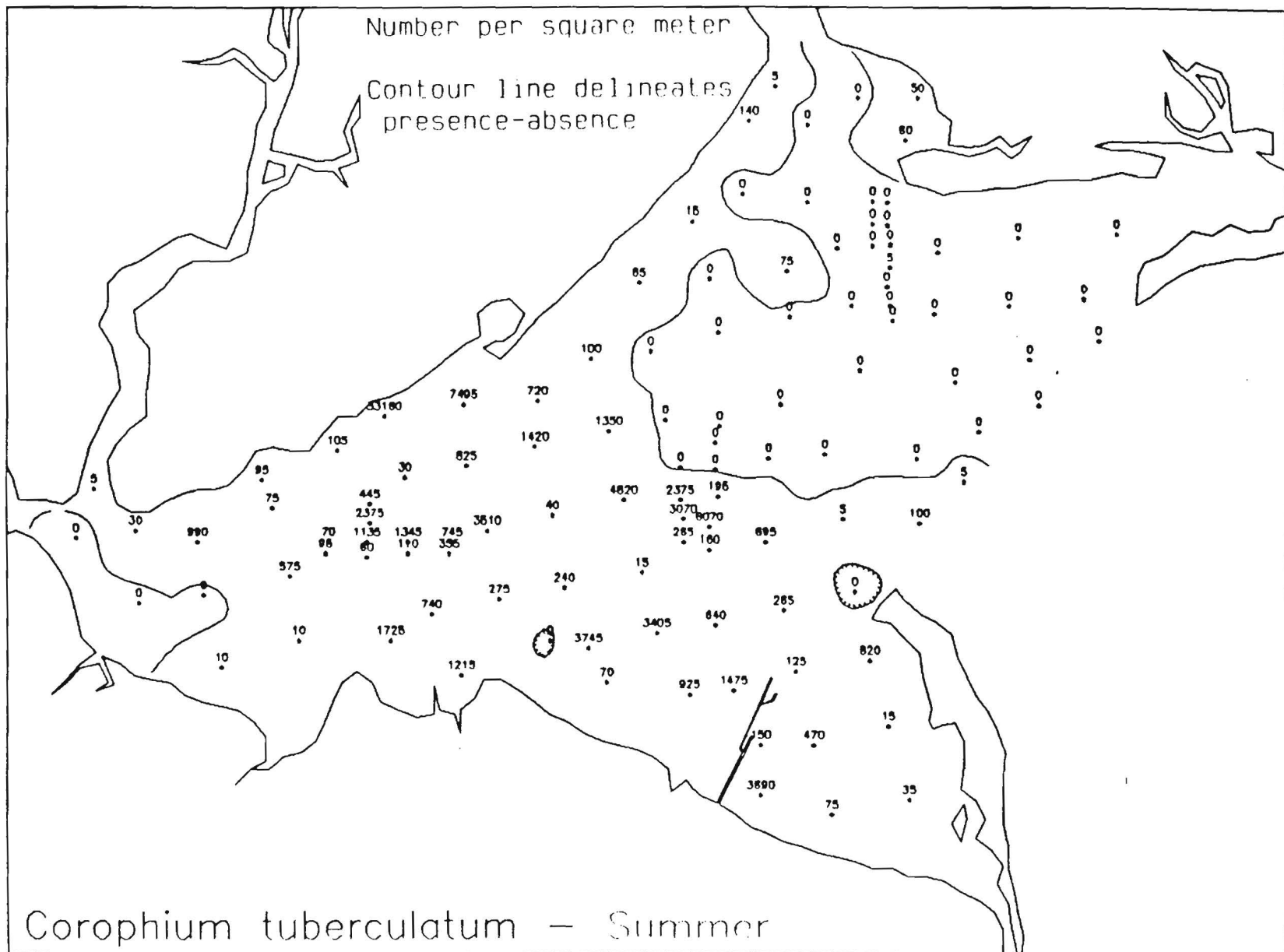


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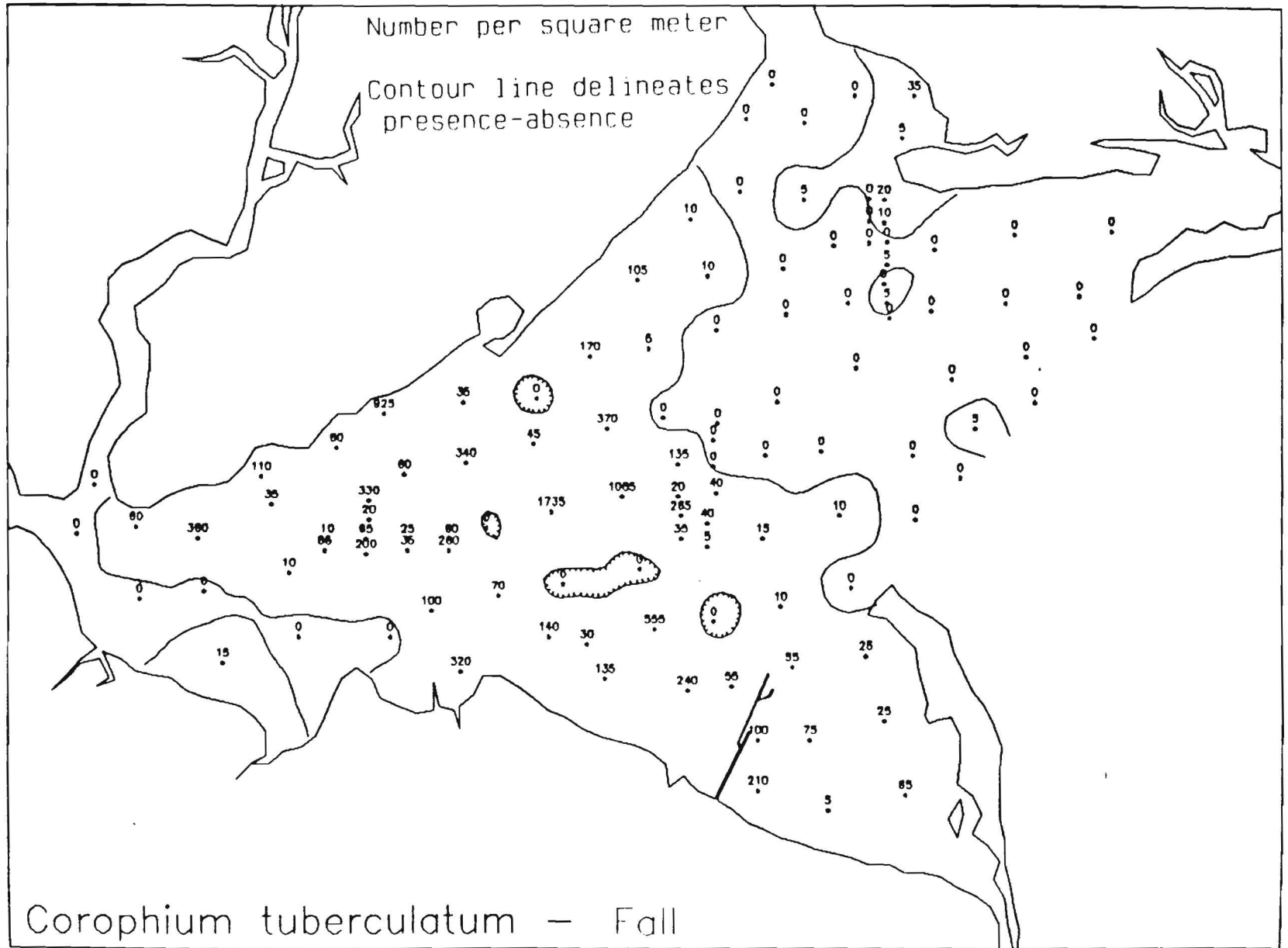


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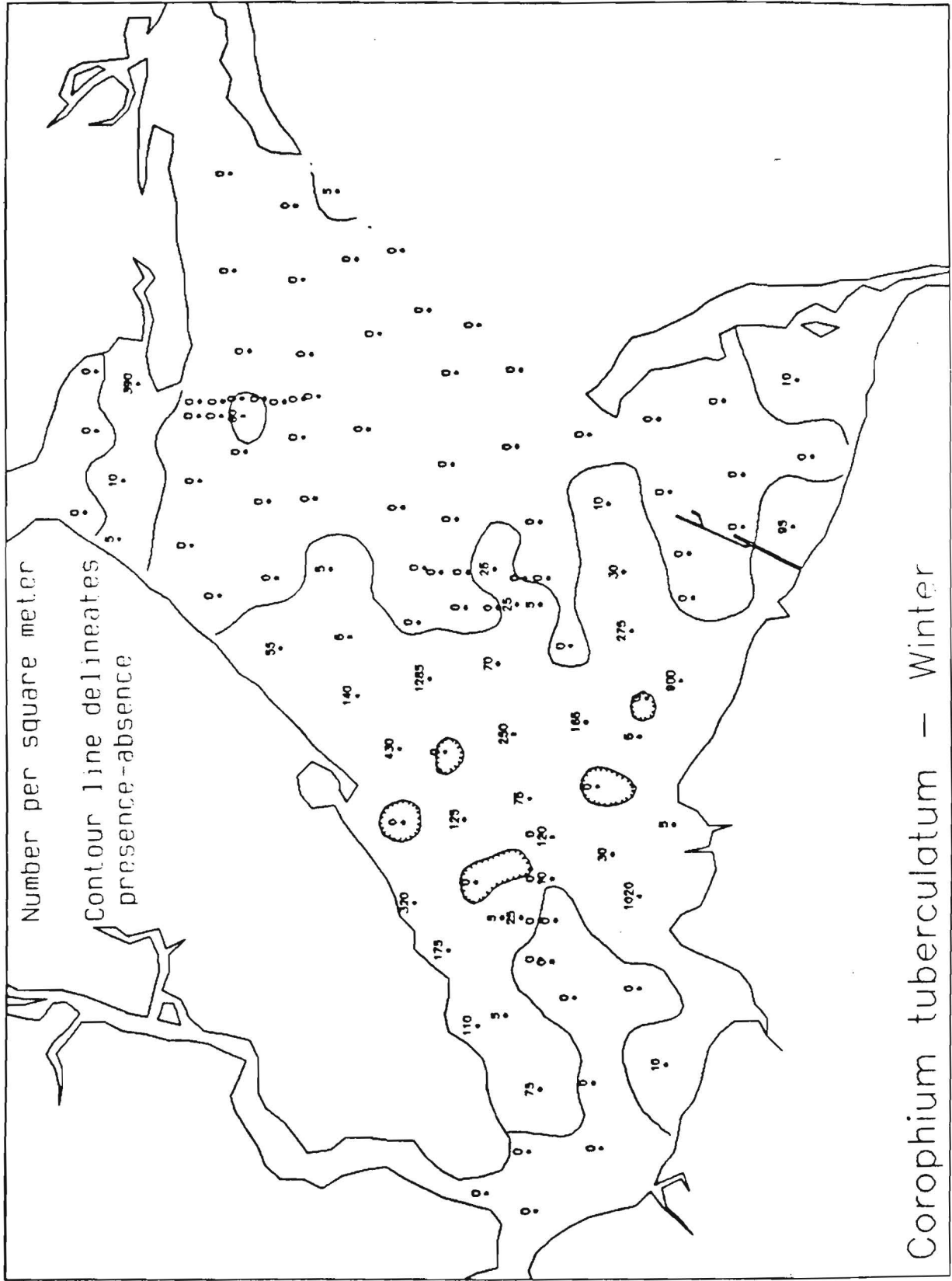
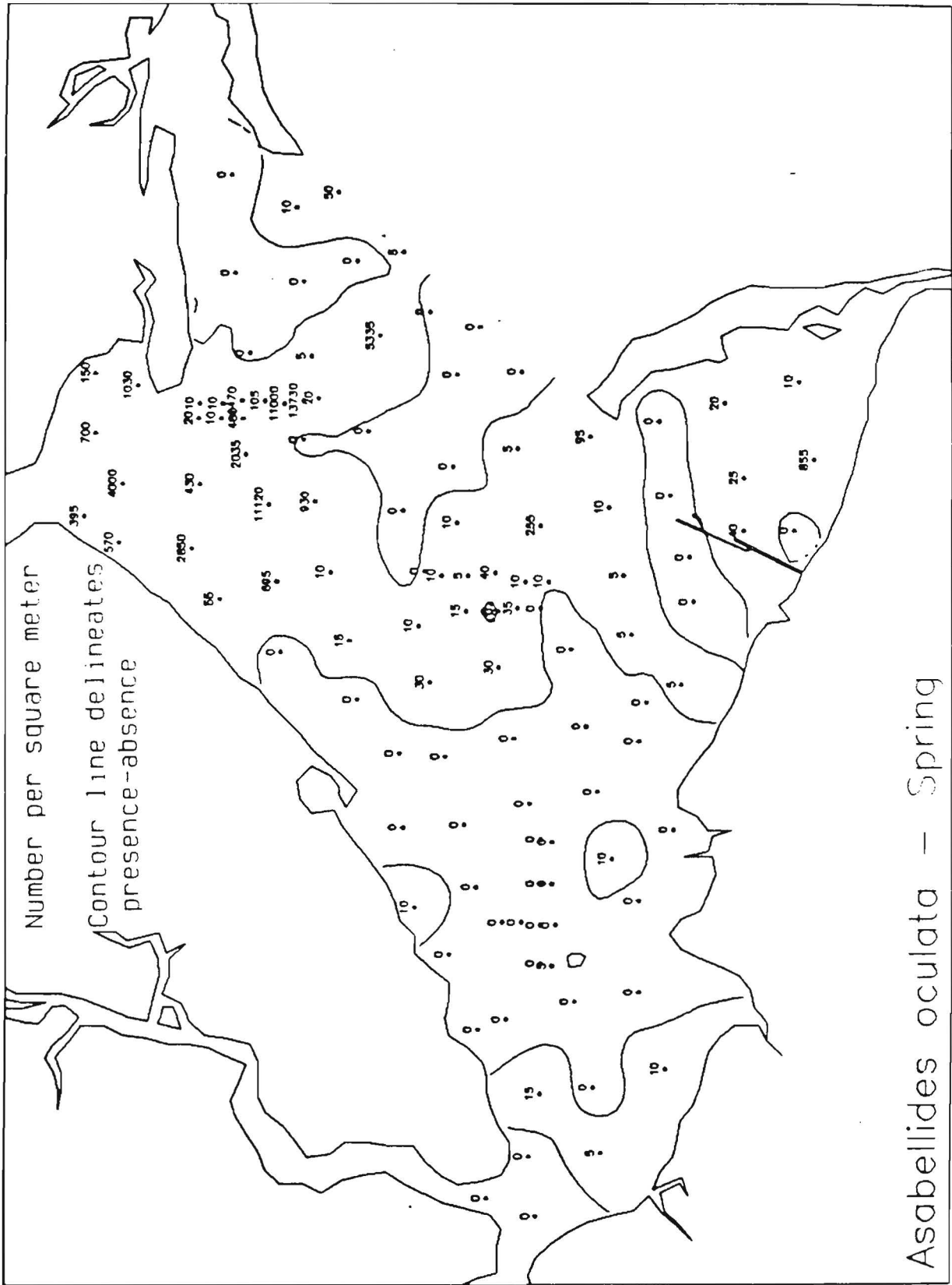


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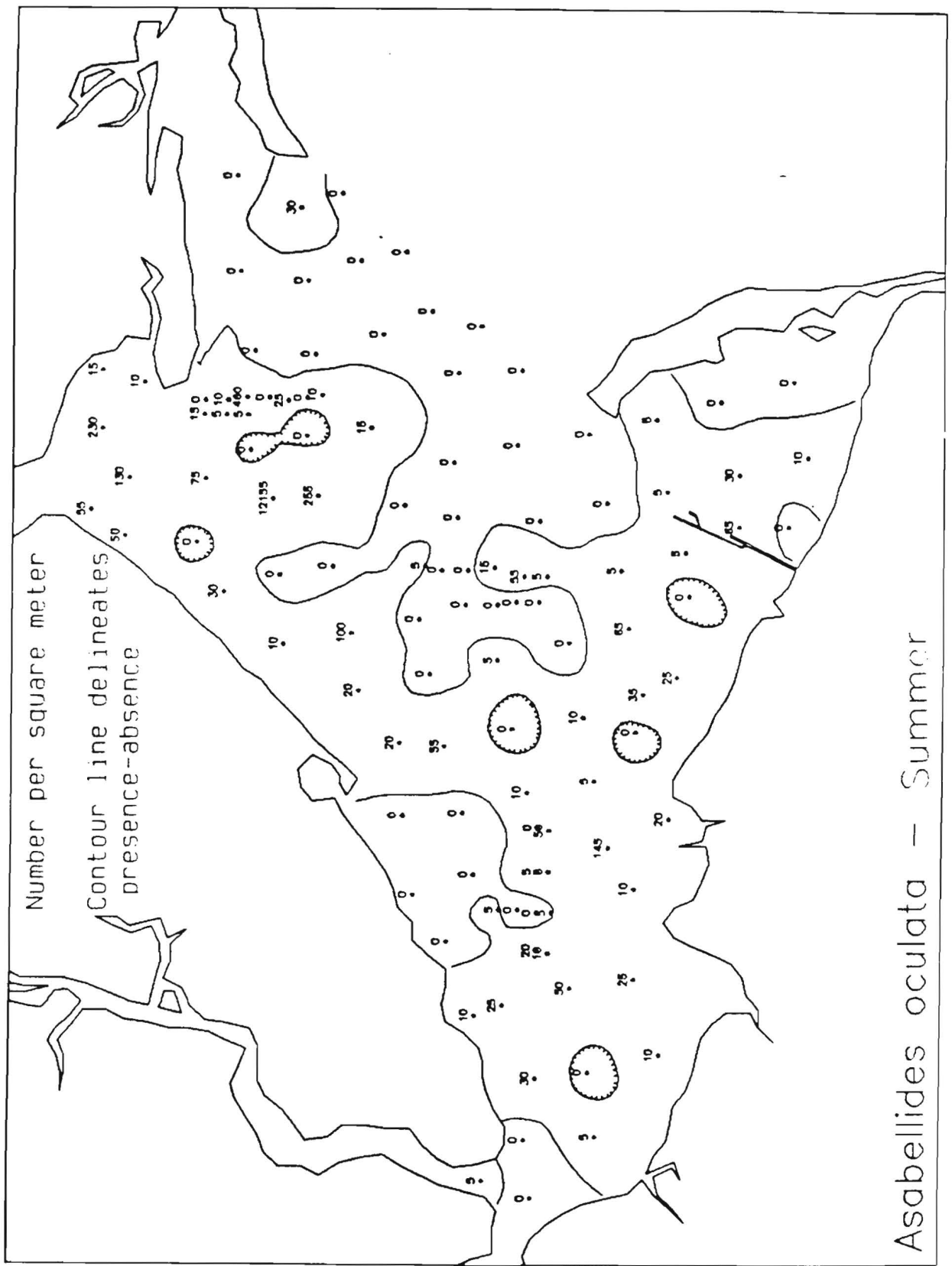


Figure 40.

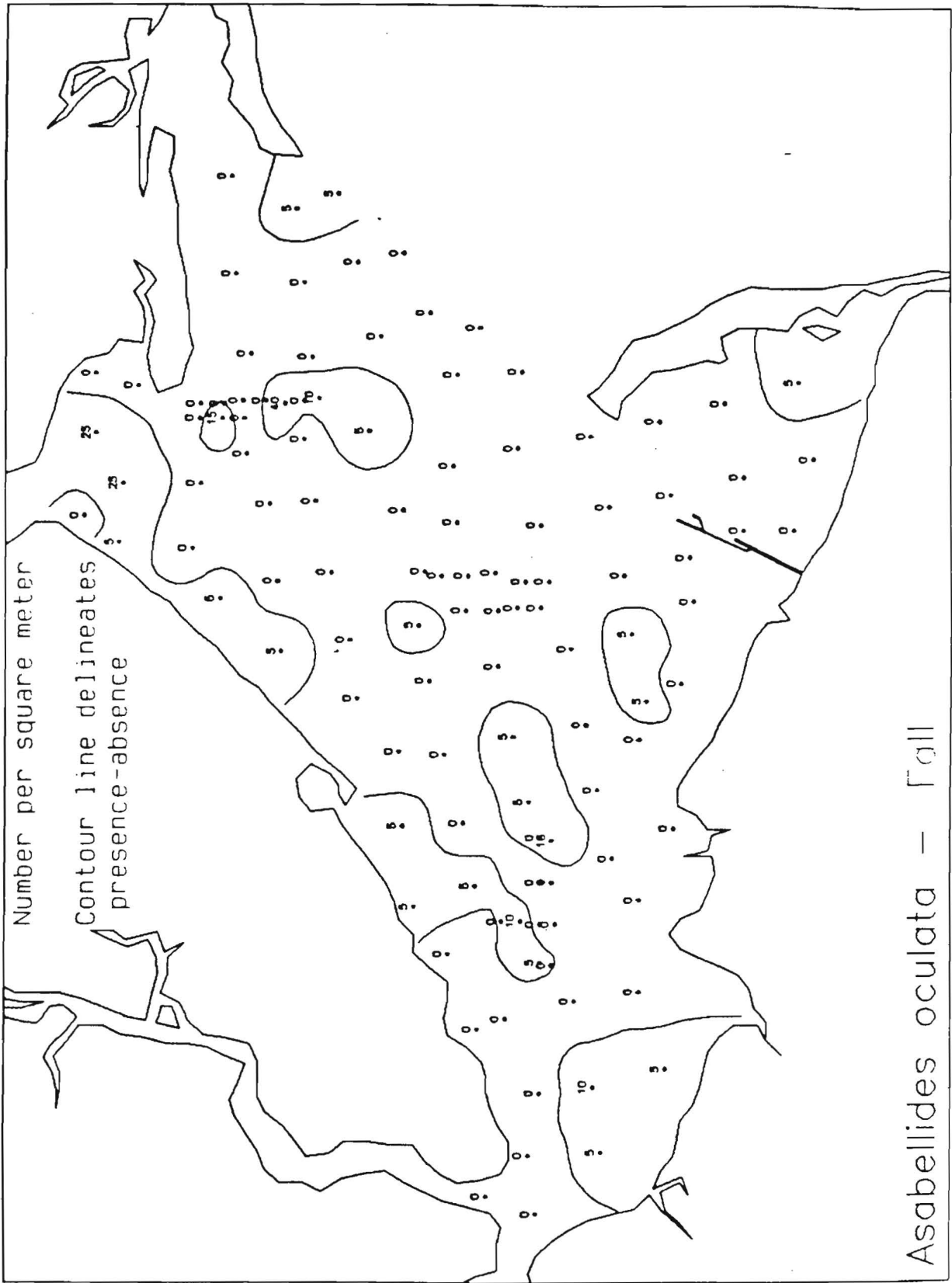


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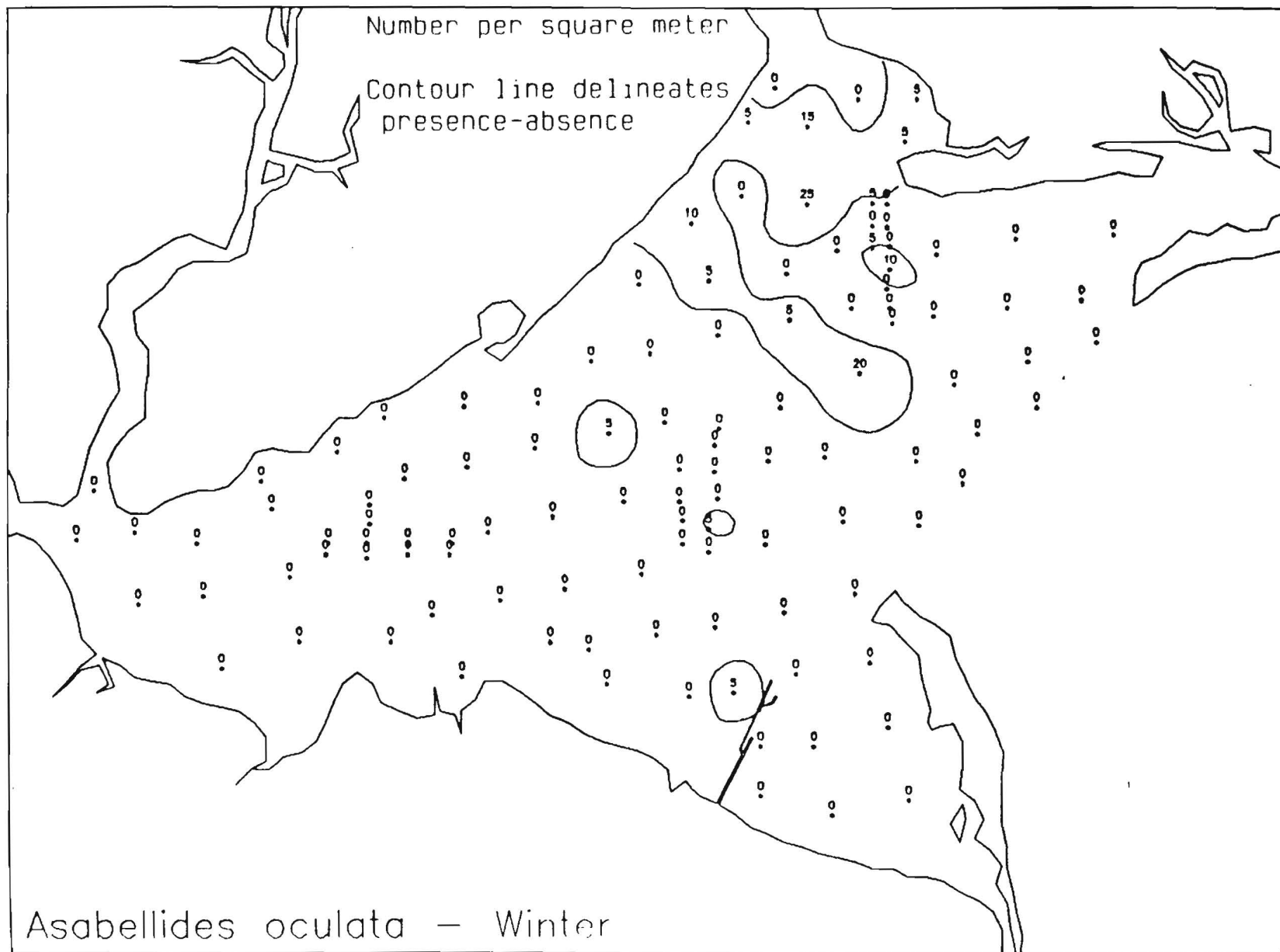


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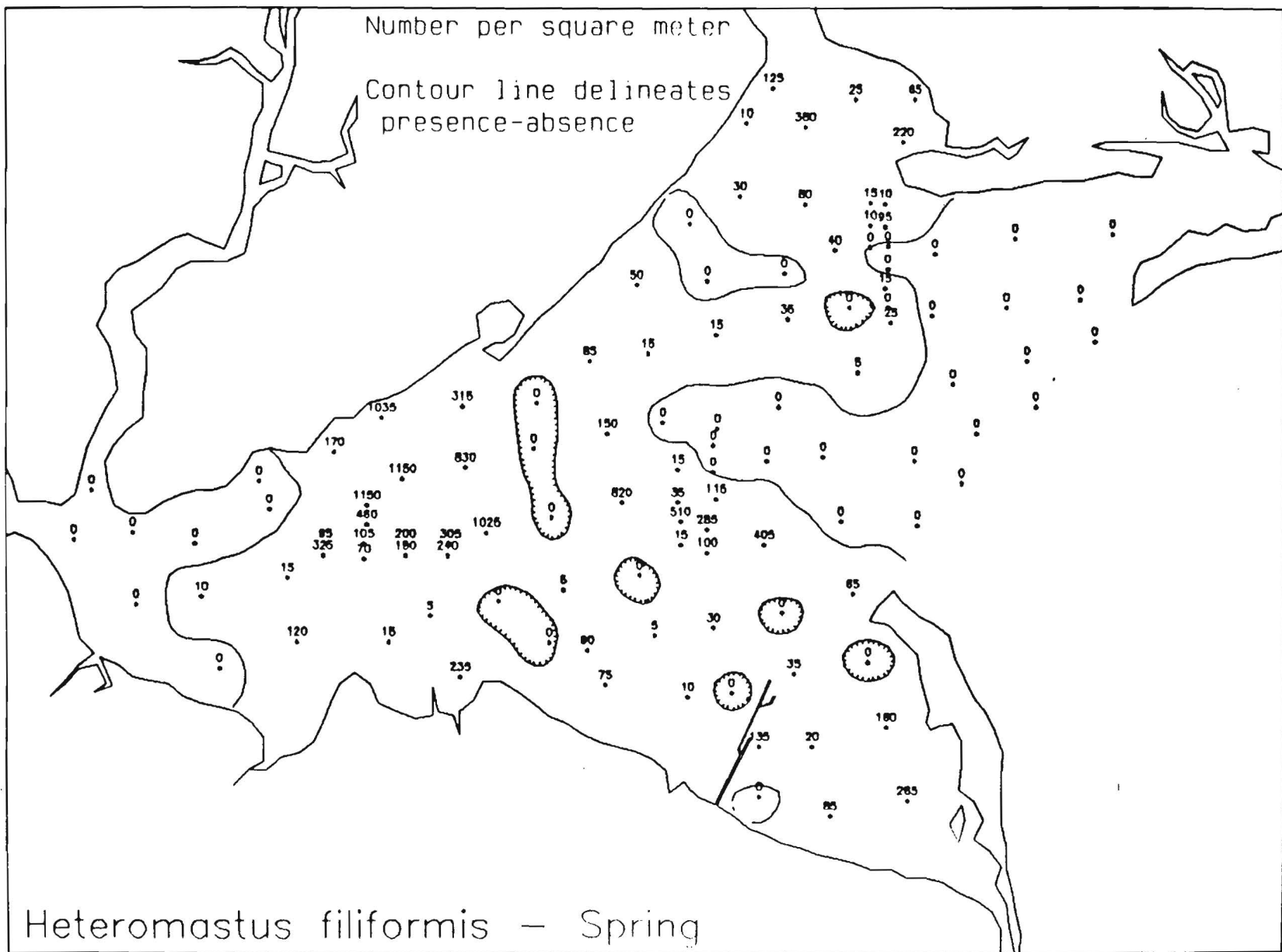


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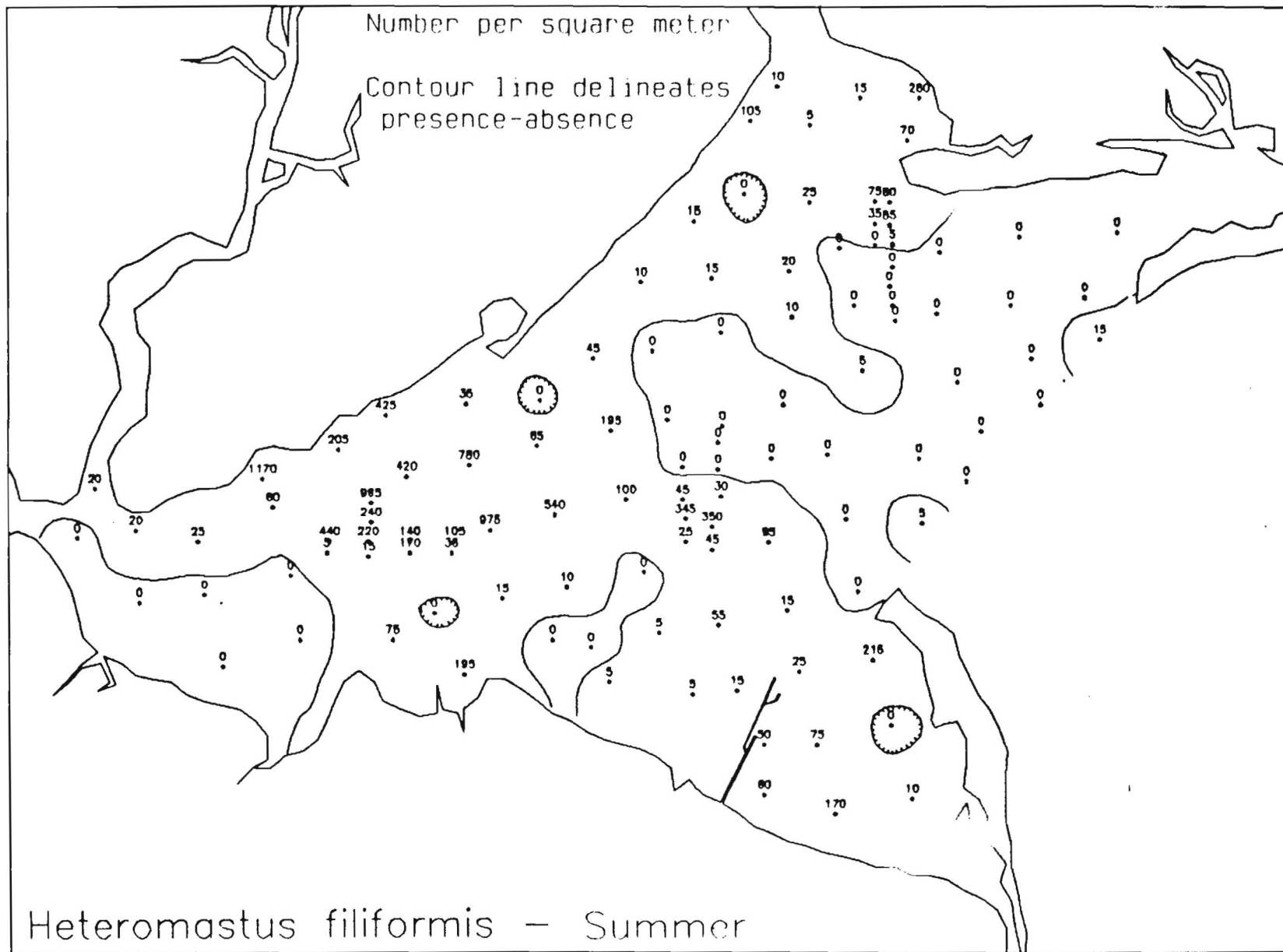


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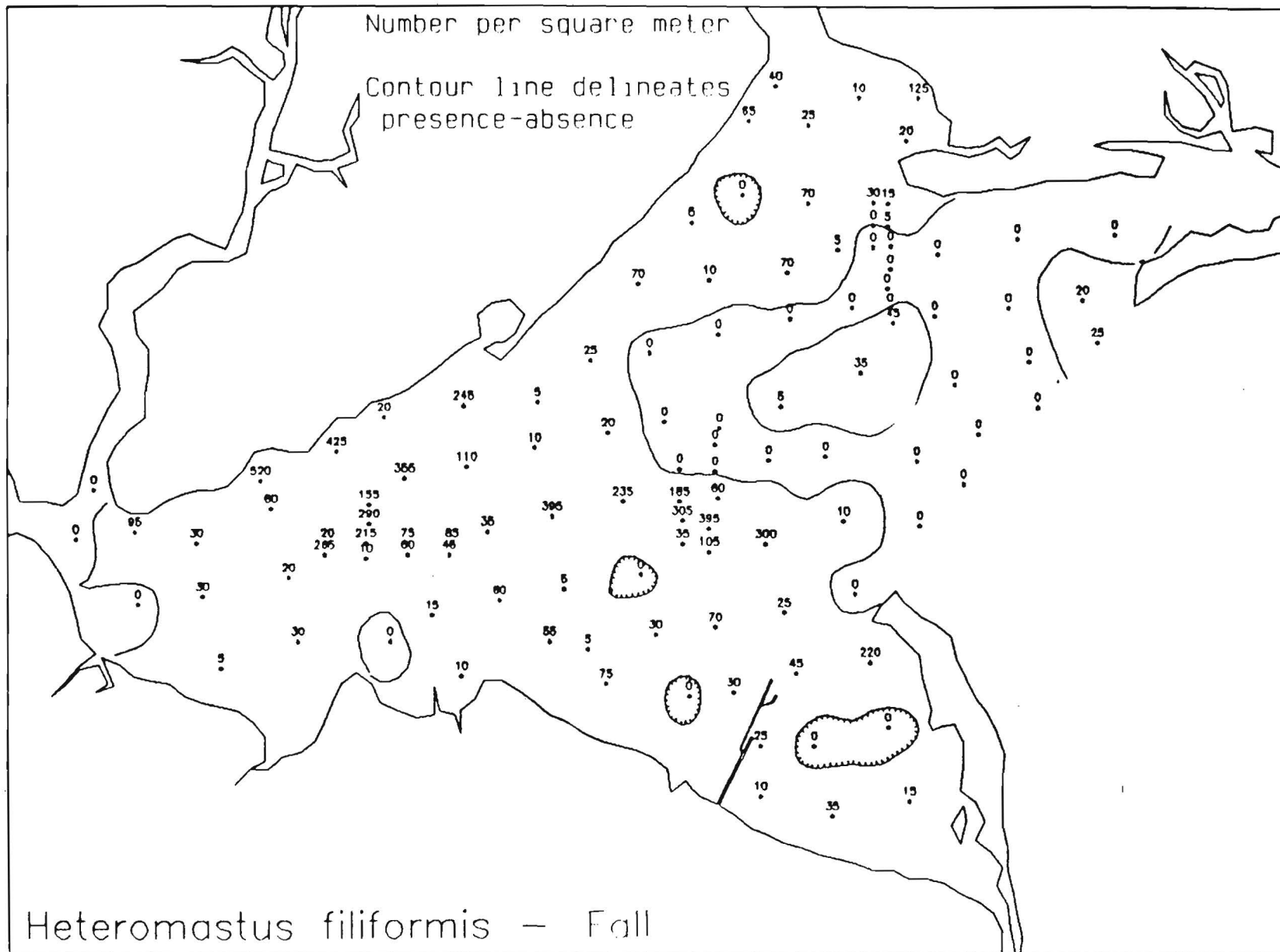


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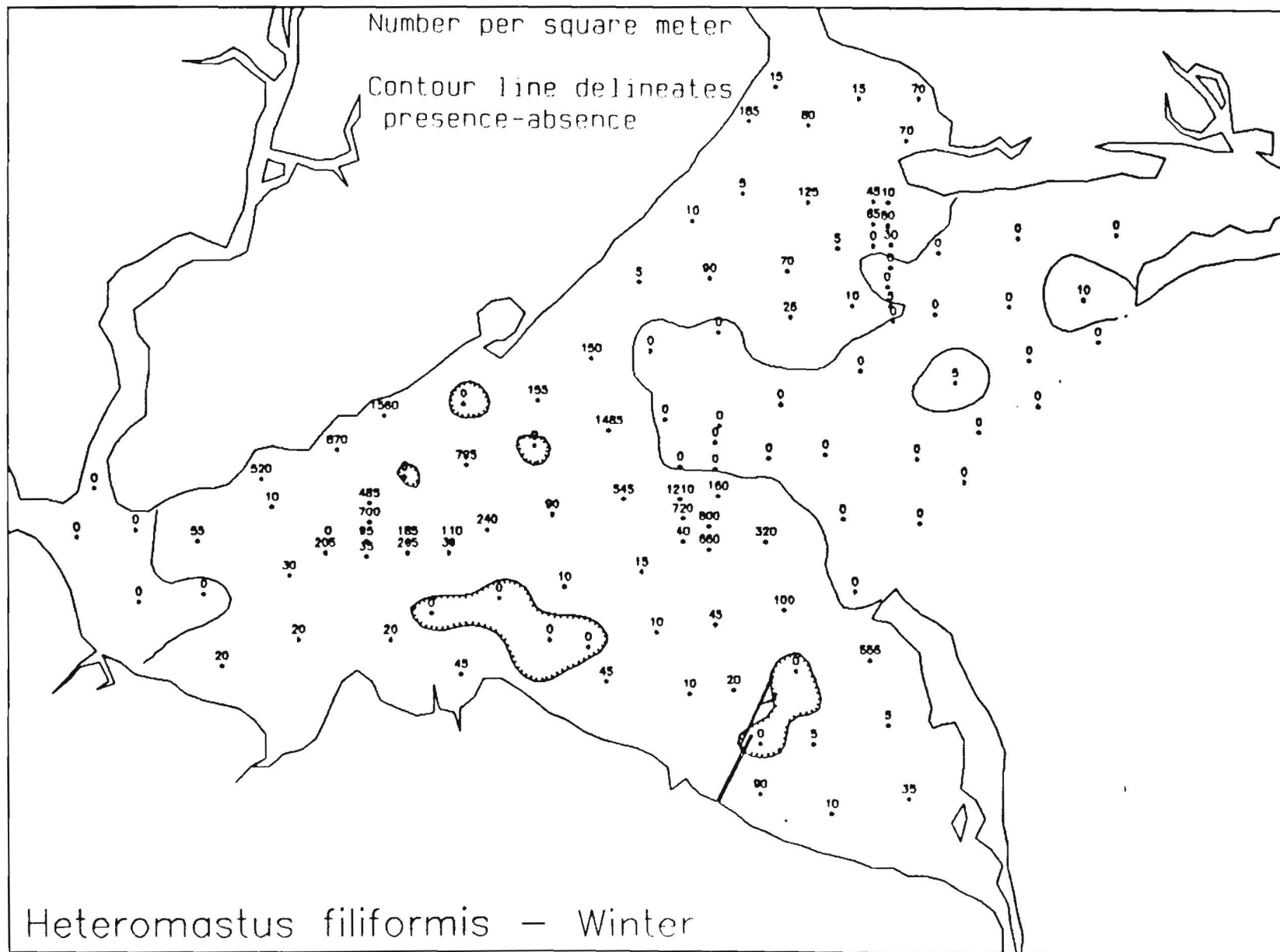
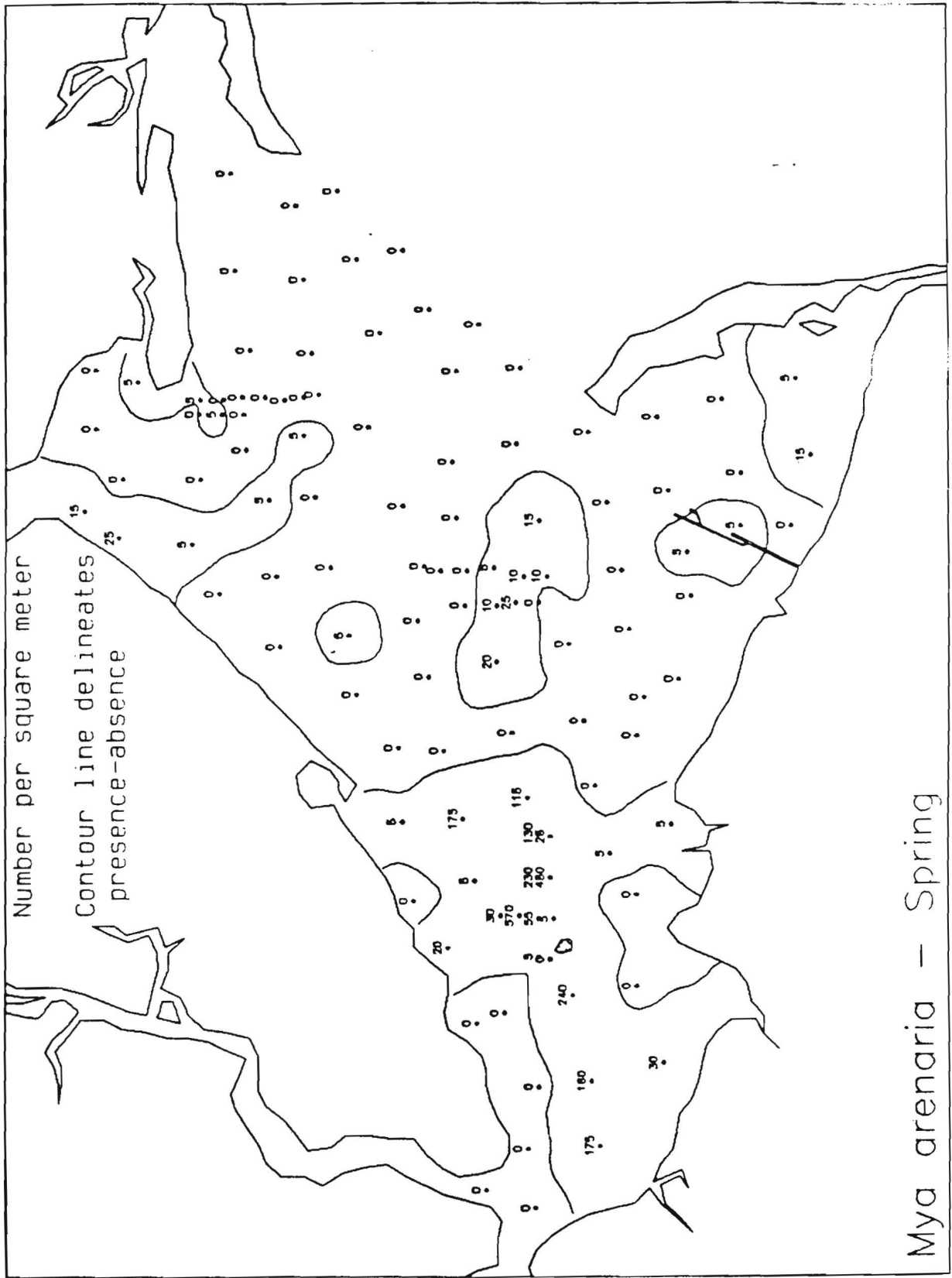


Figure 46.



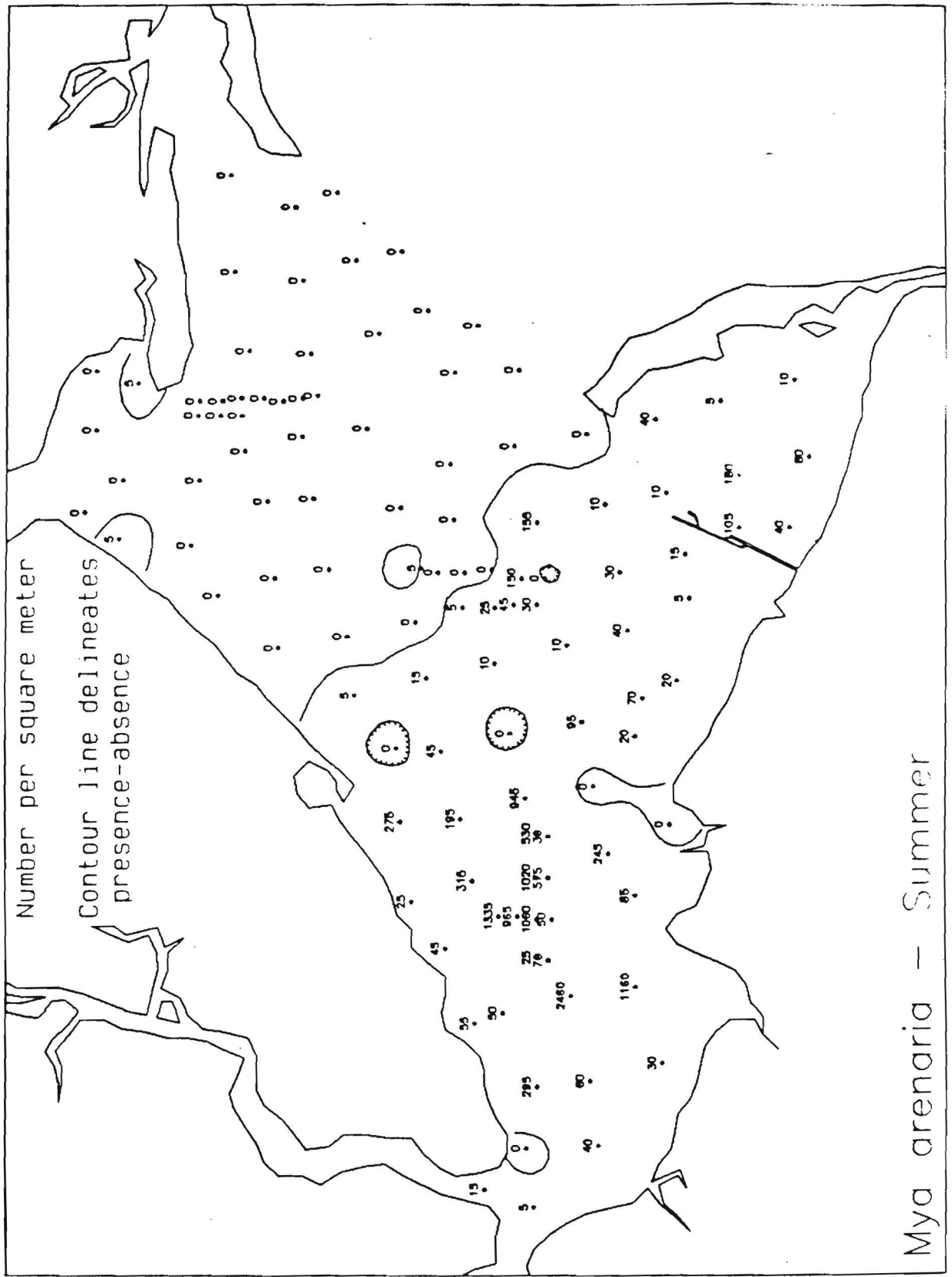


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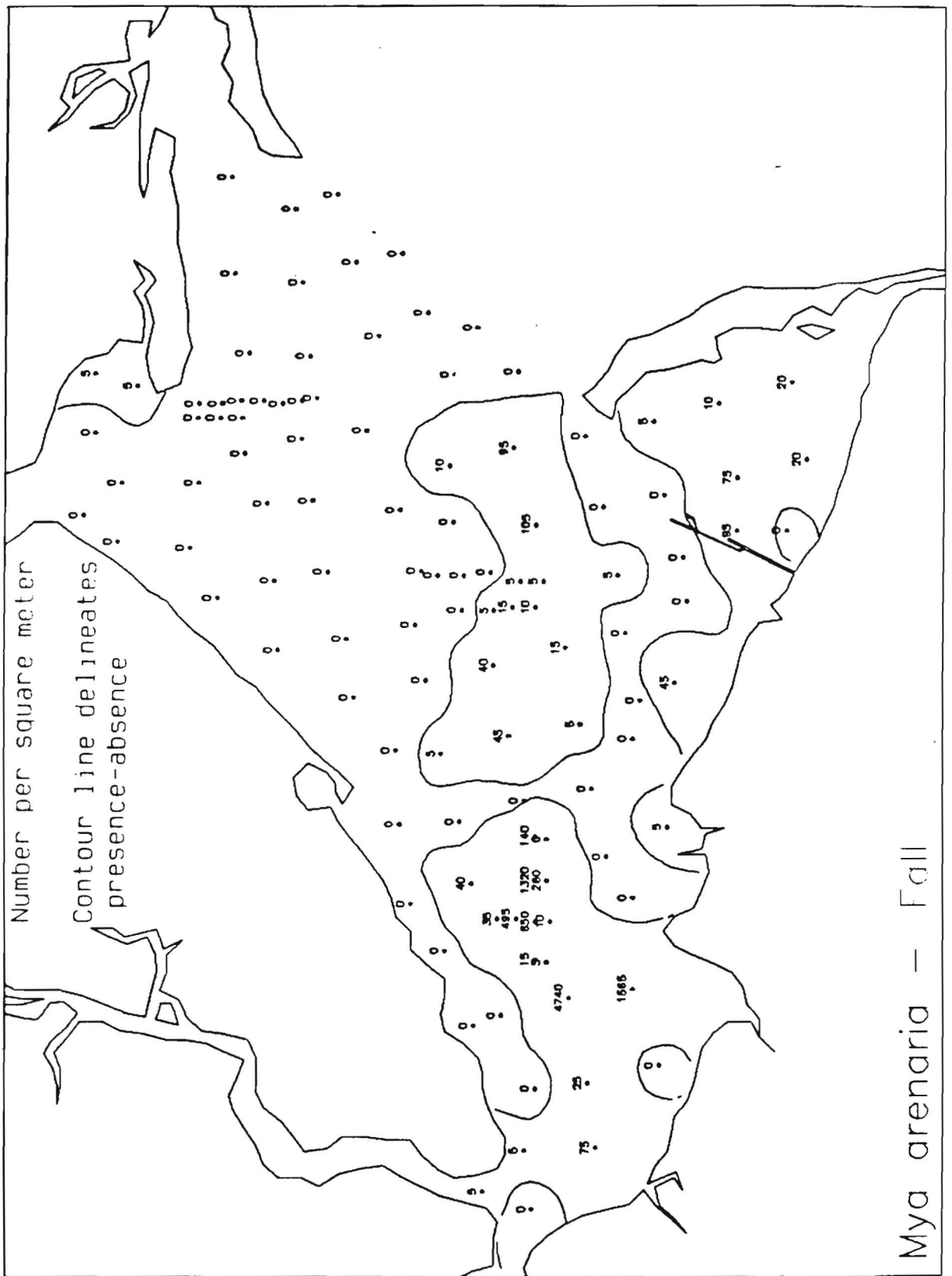


Figure 49.

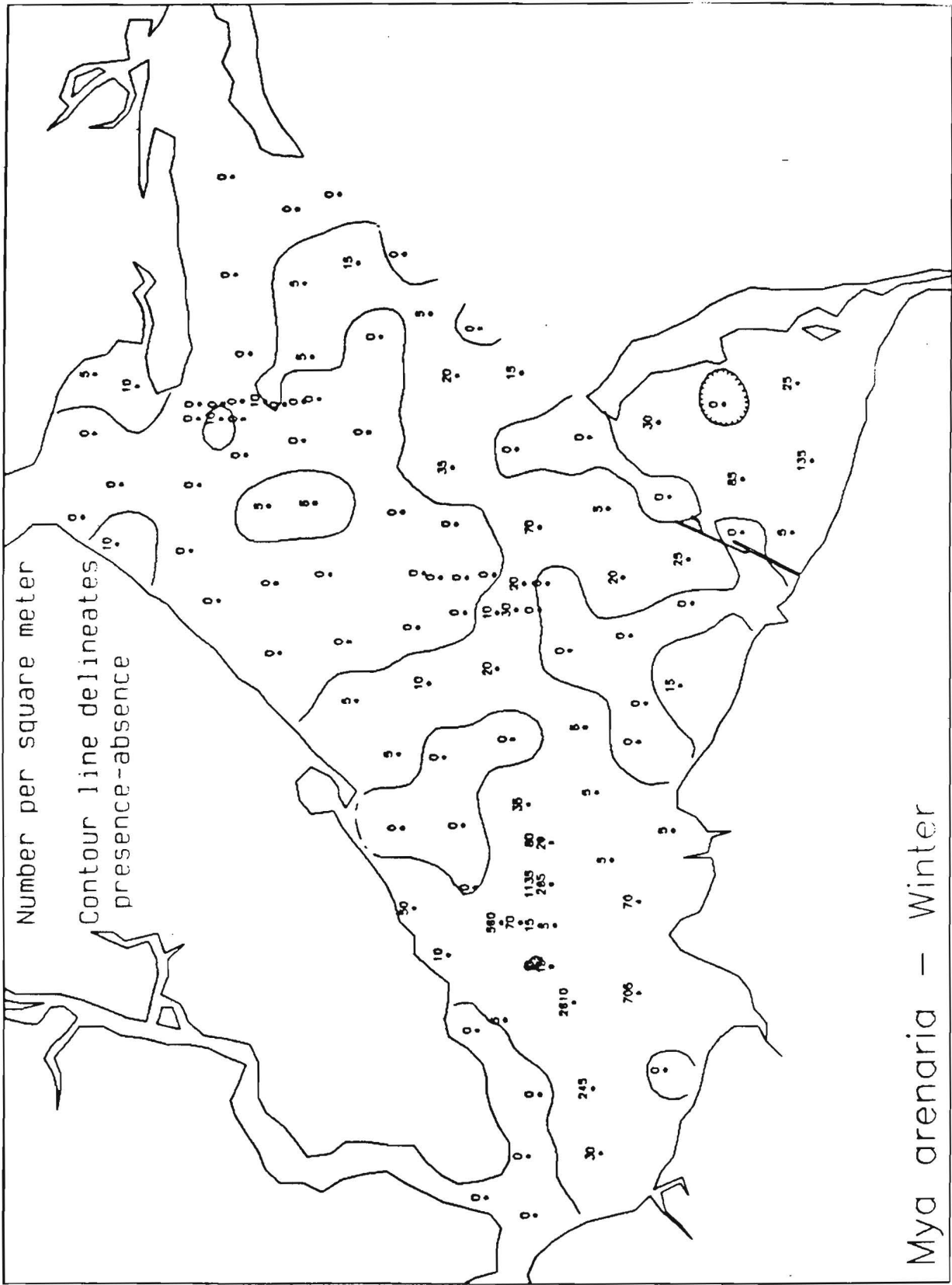


Figure 50.

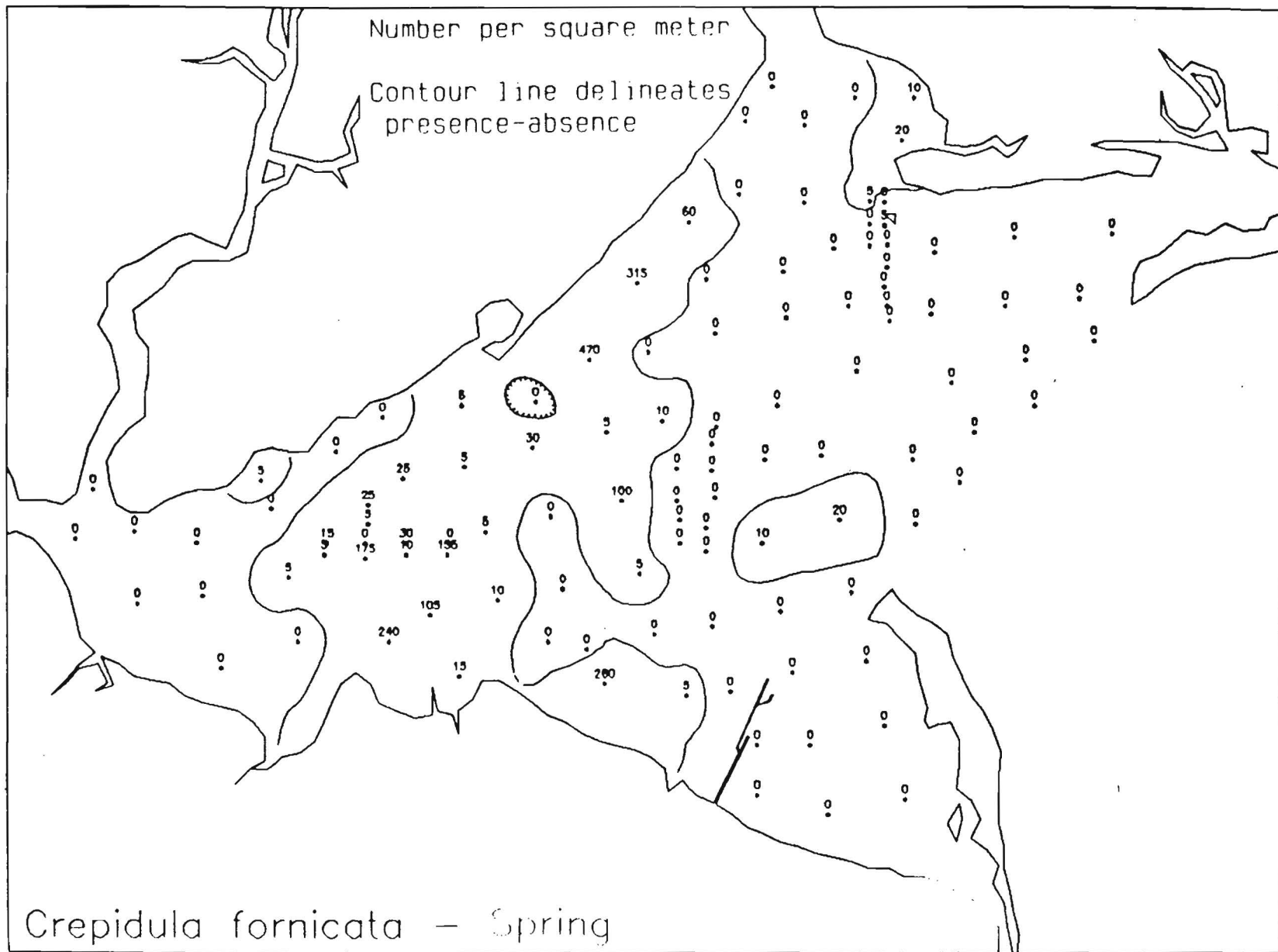


Figure 51.

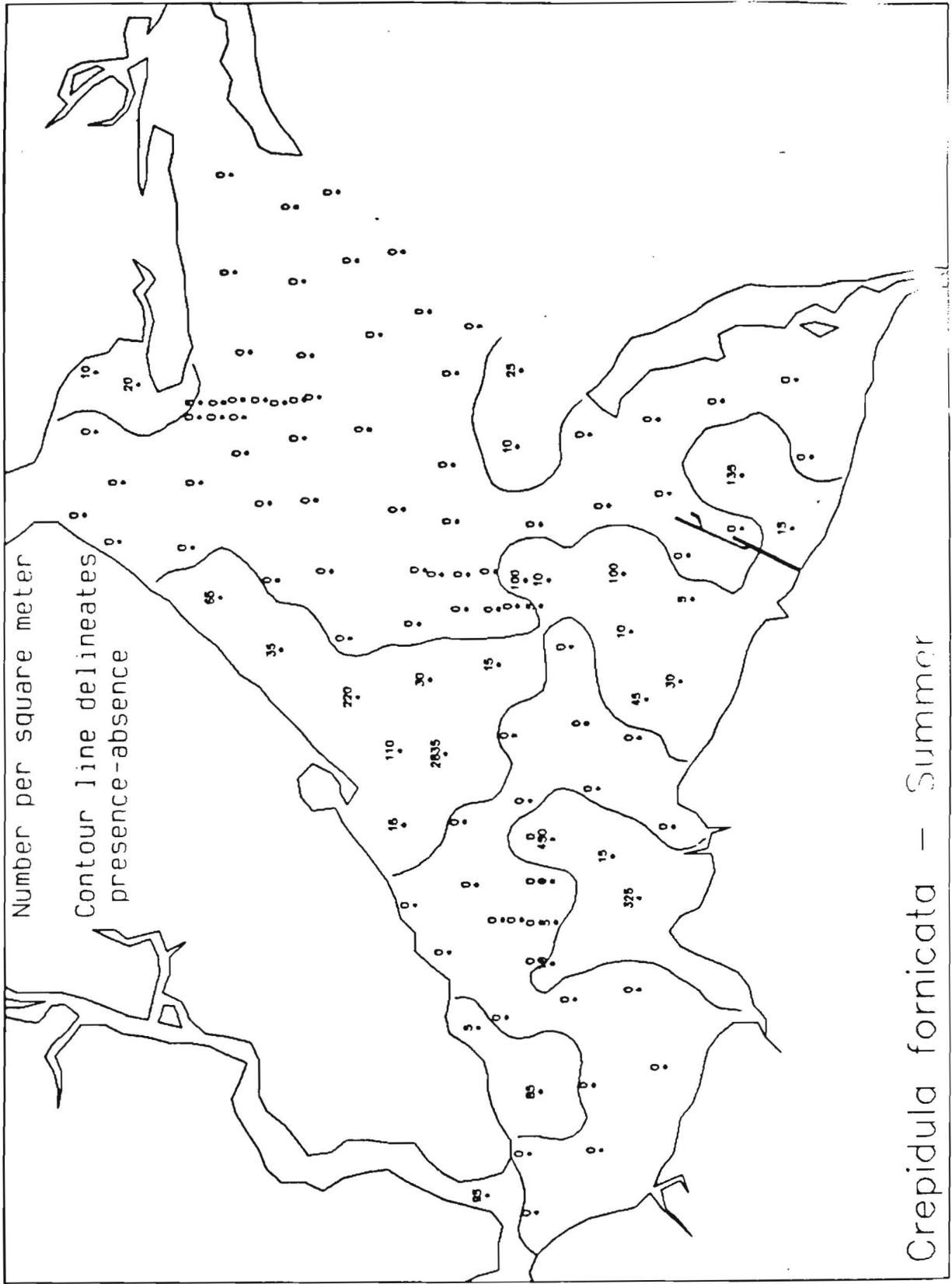


Figure 52.

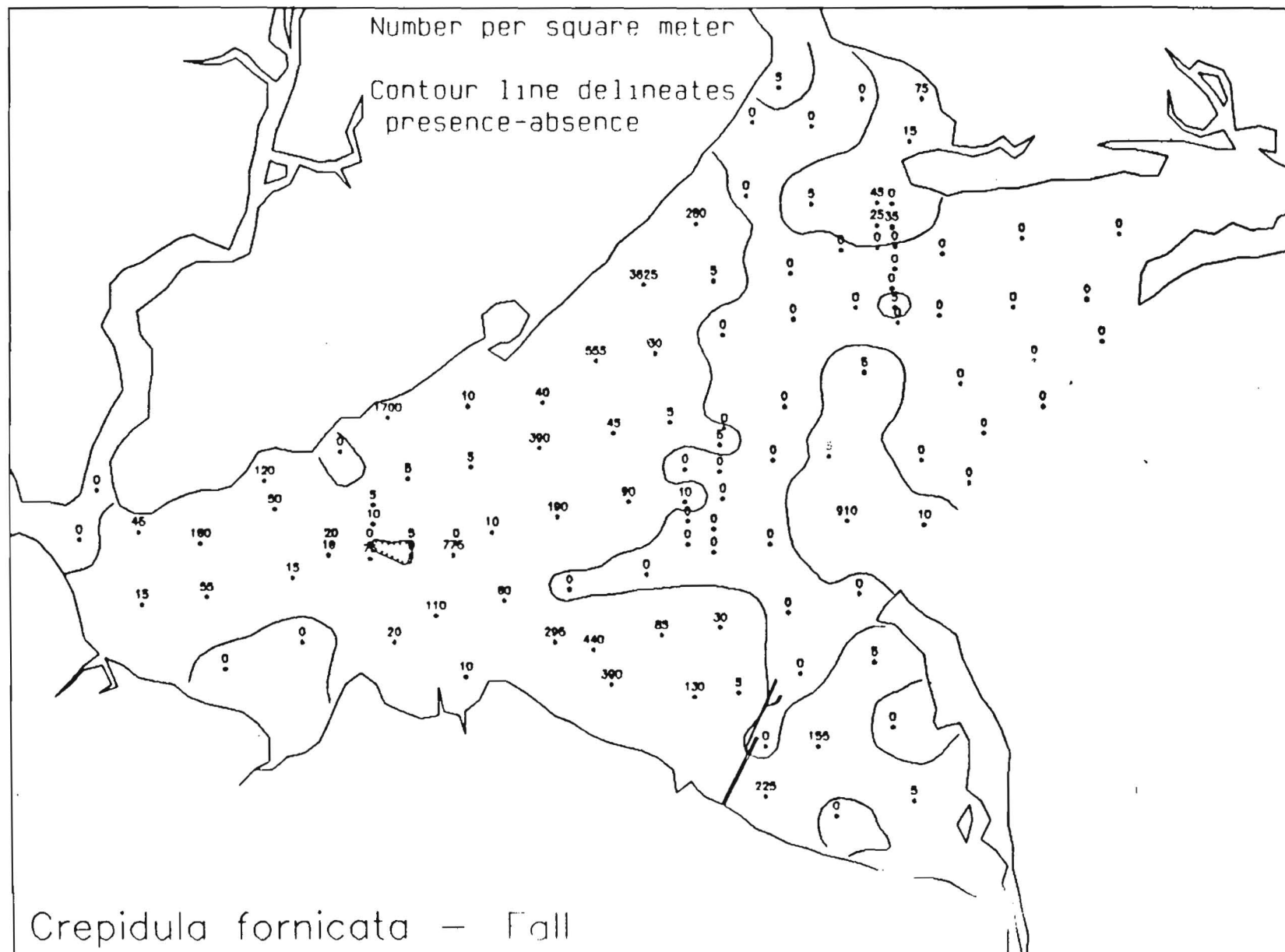


Figure 53.

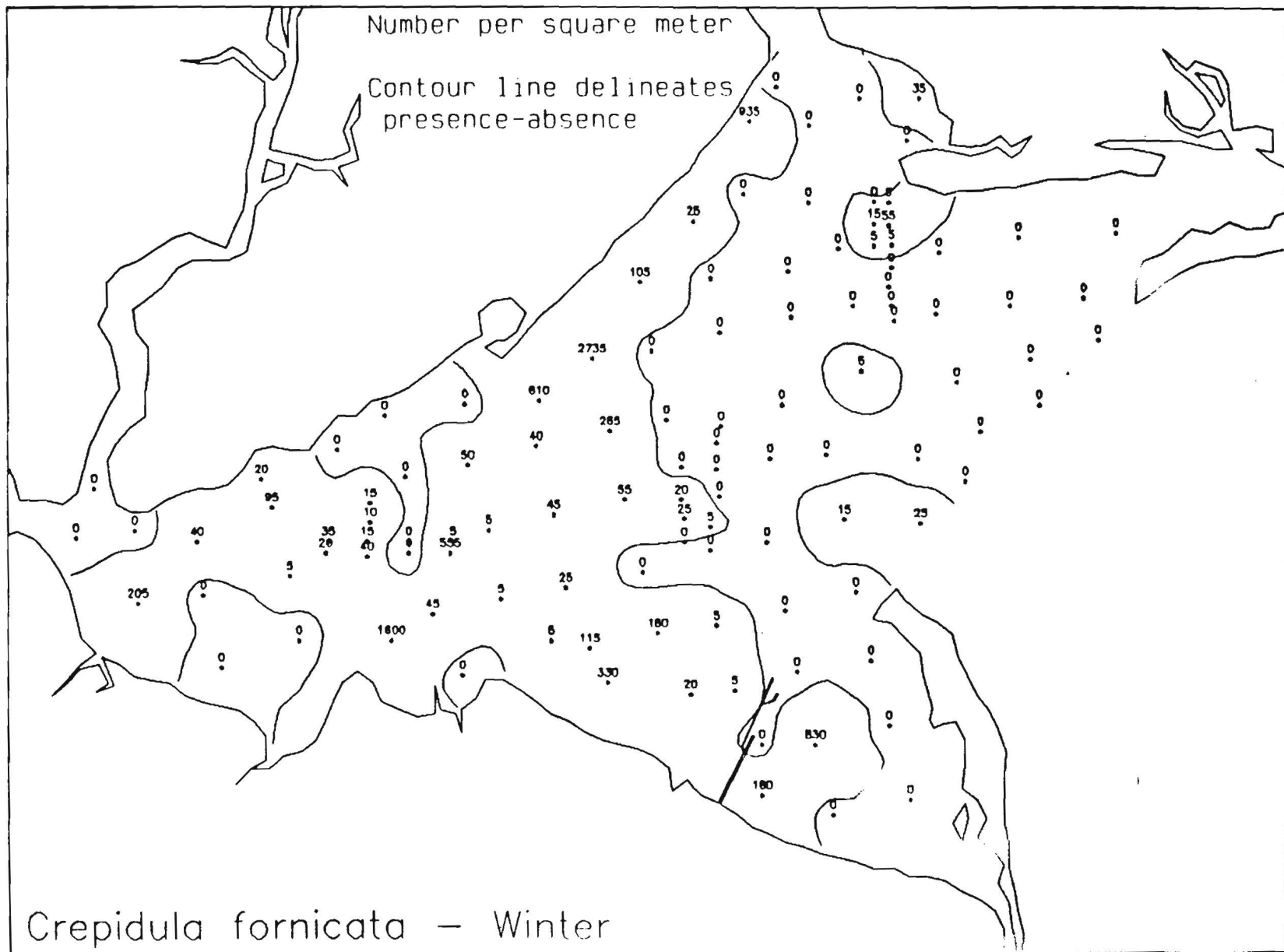


Figure 54.

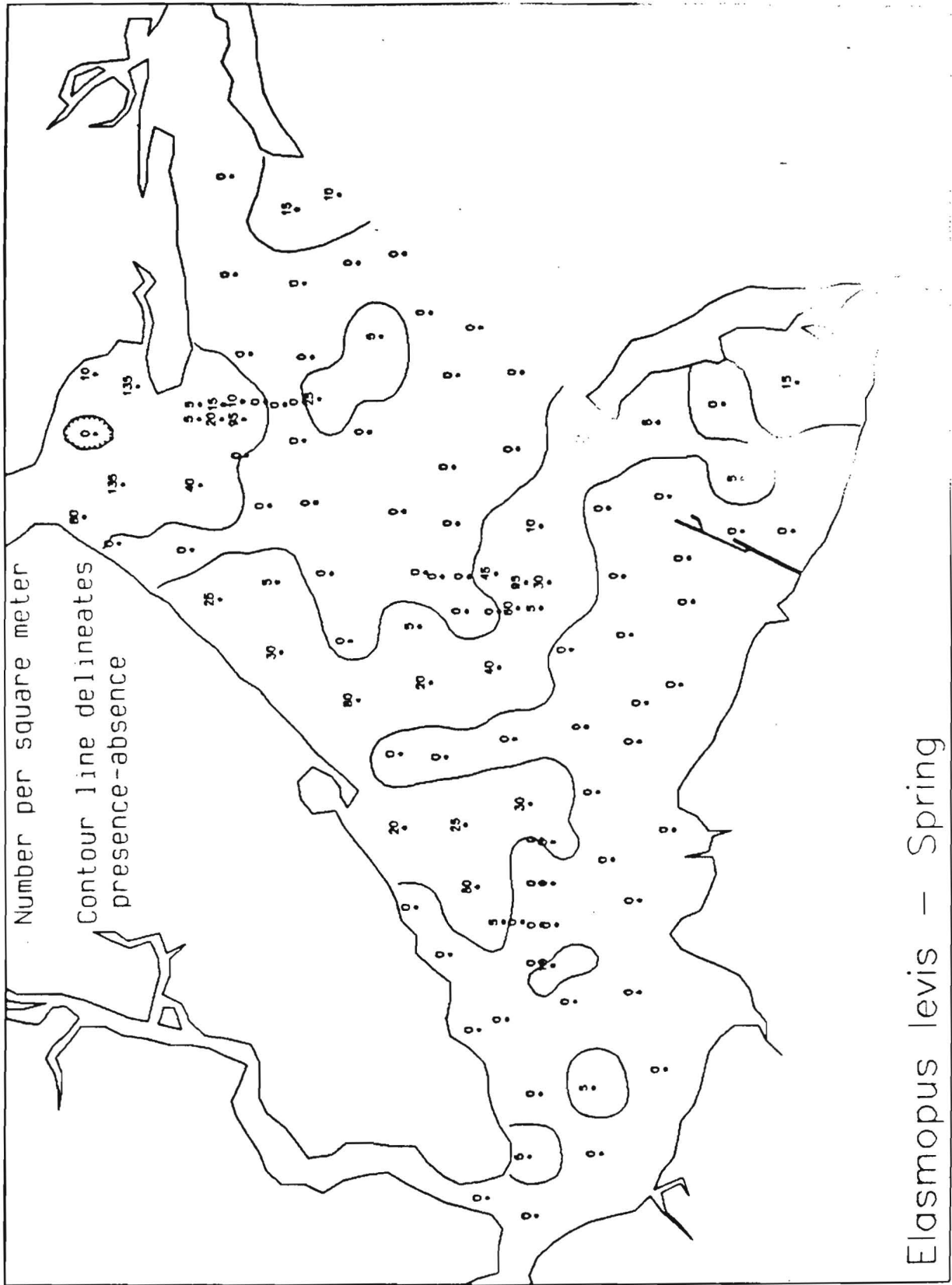
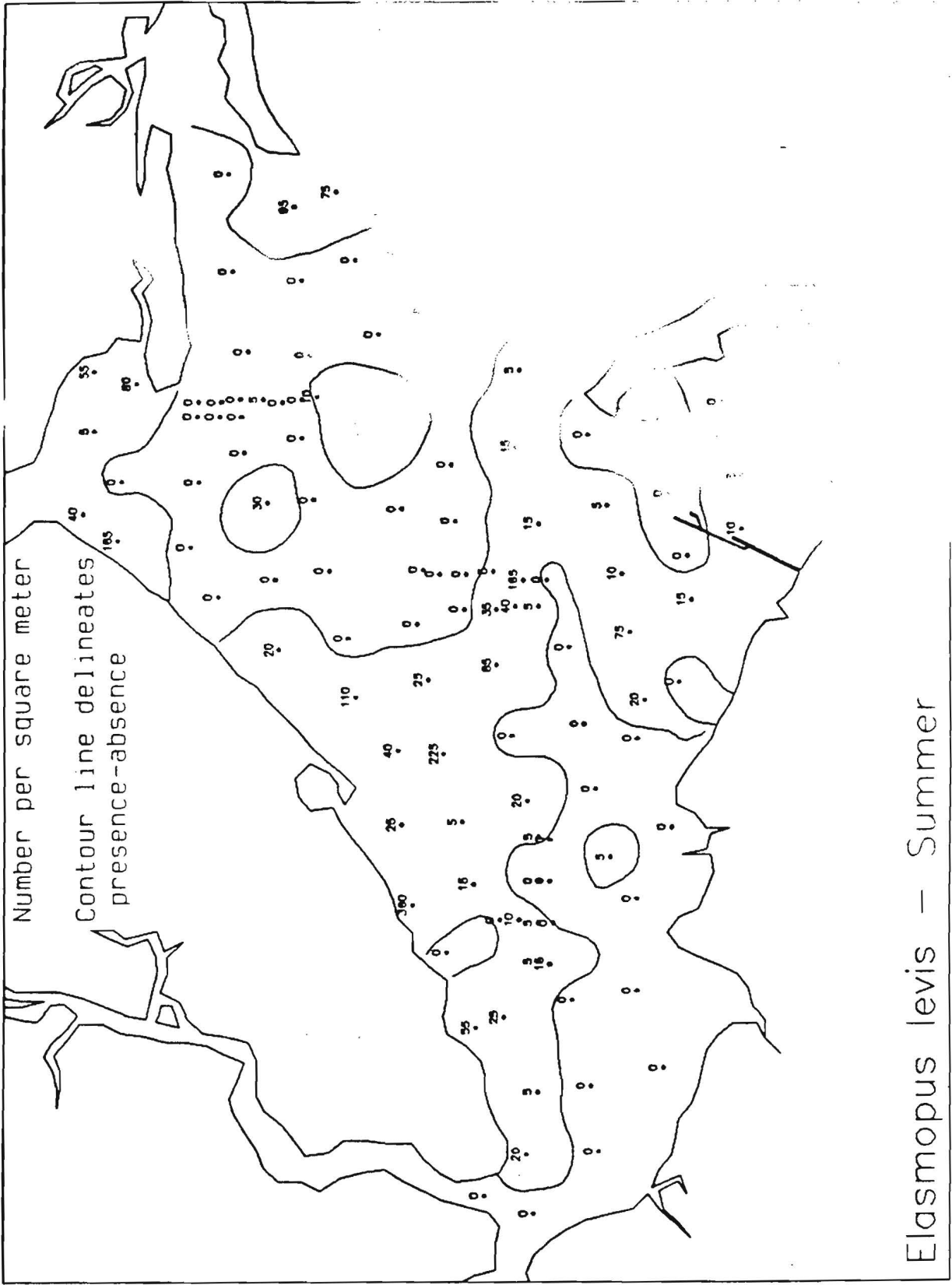


Figure 55.



Elasmopus levis – Summer

Figure 56.

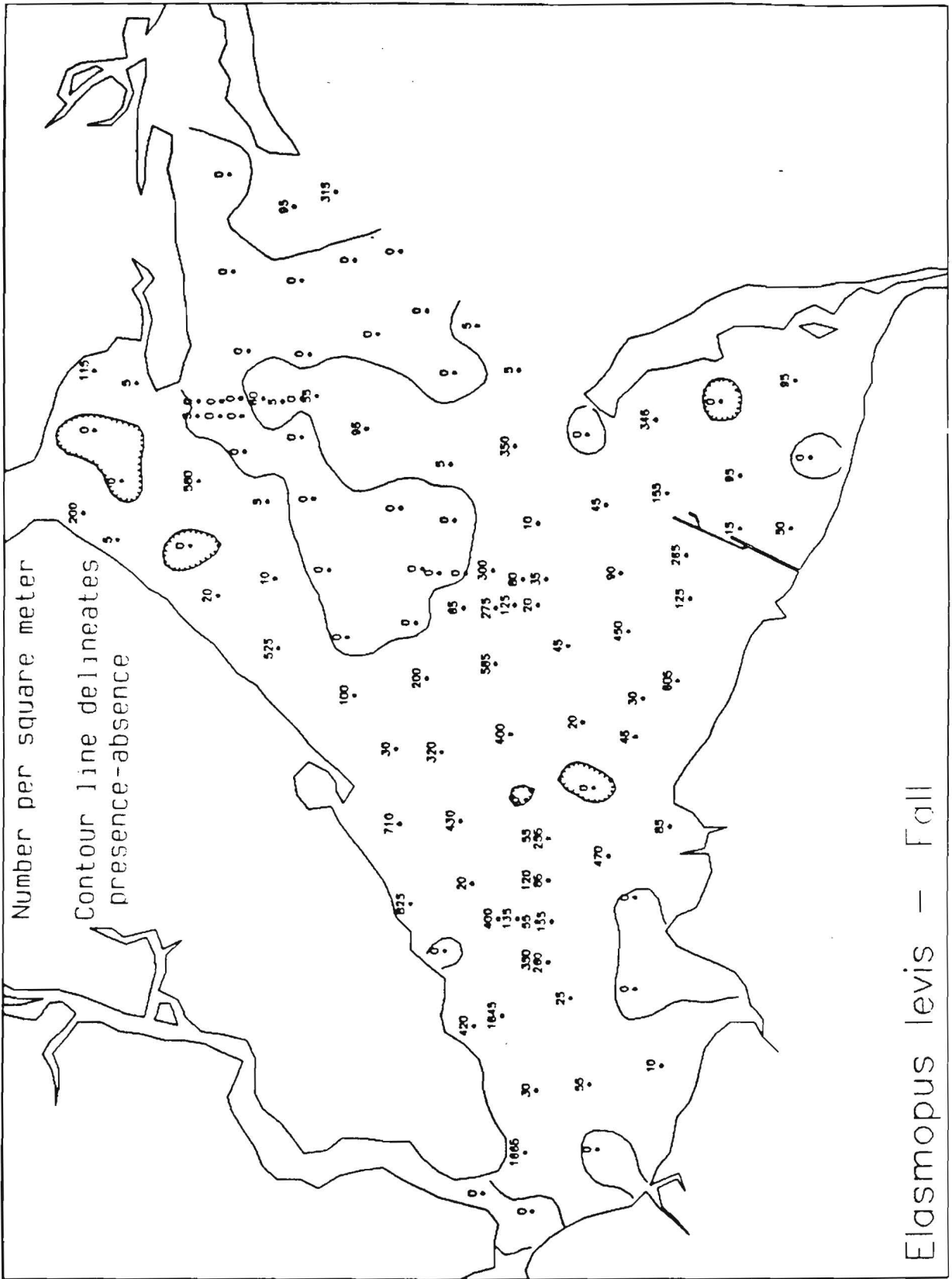


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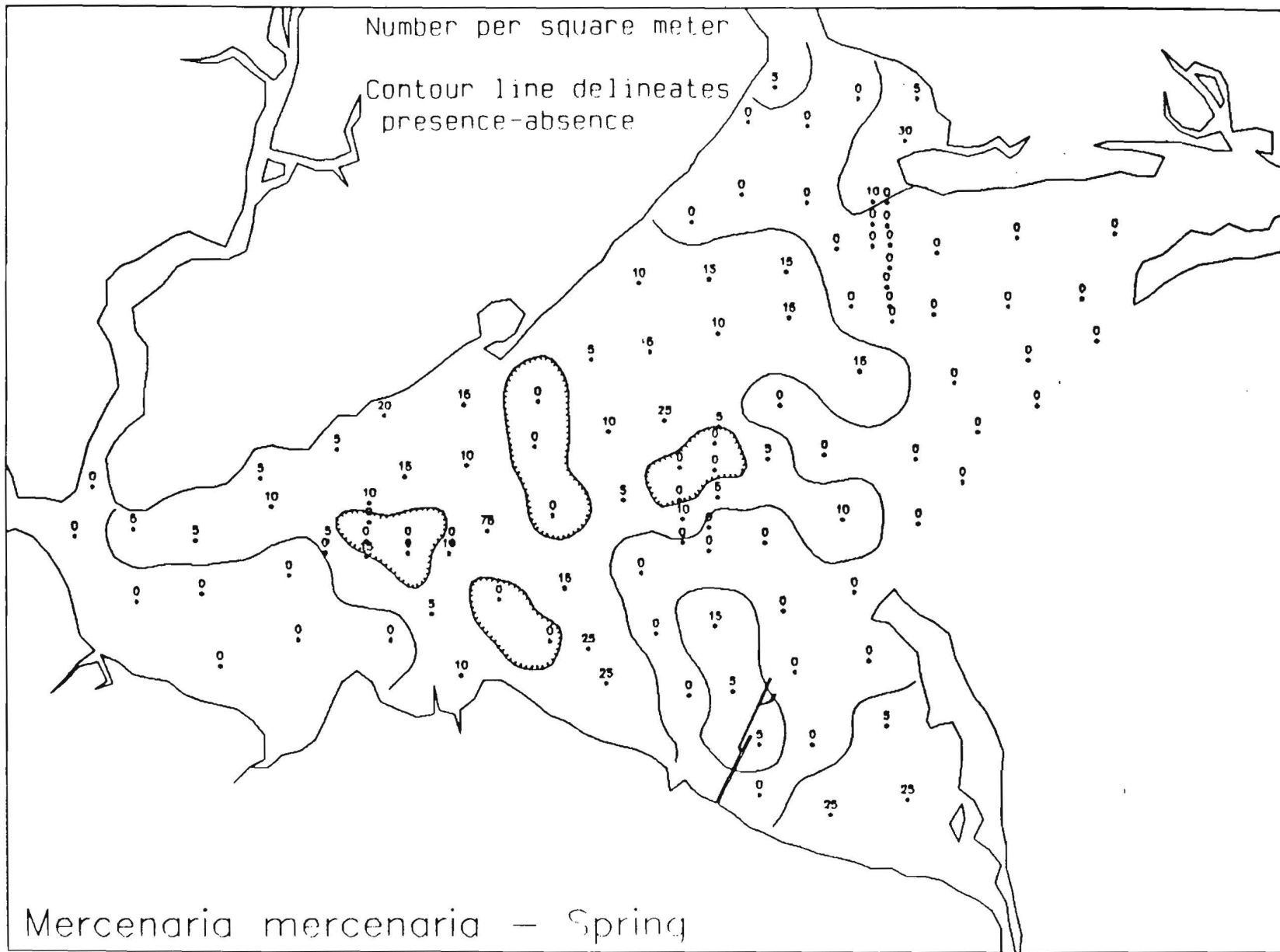
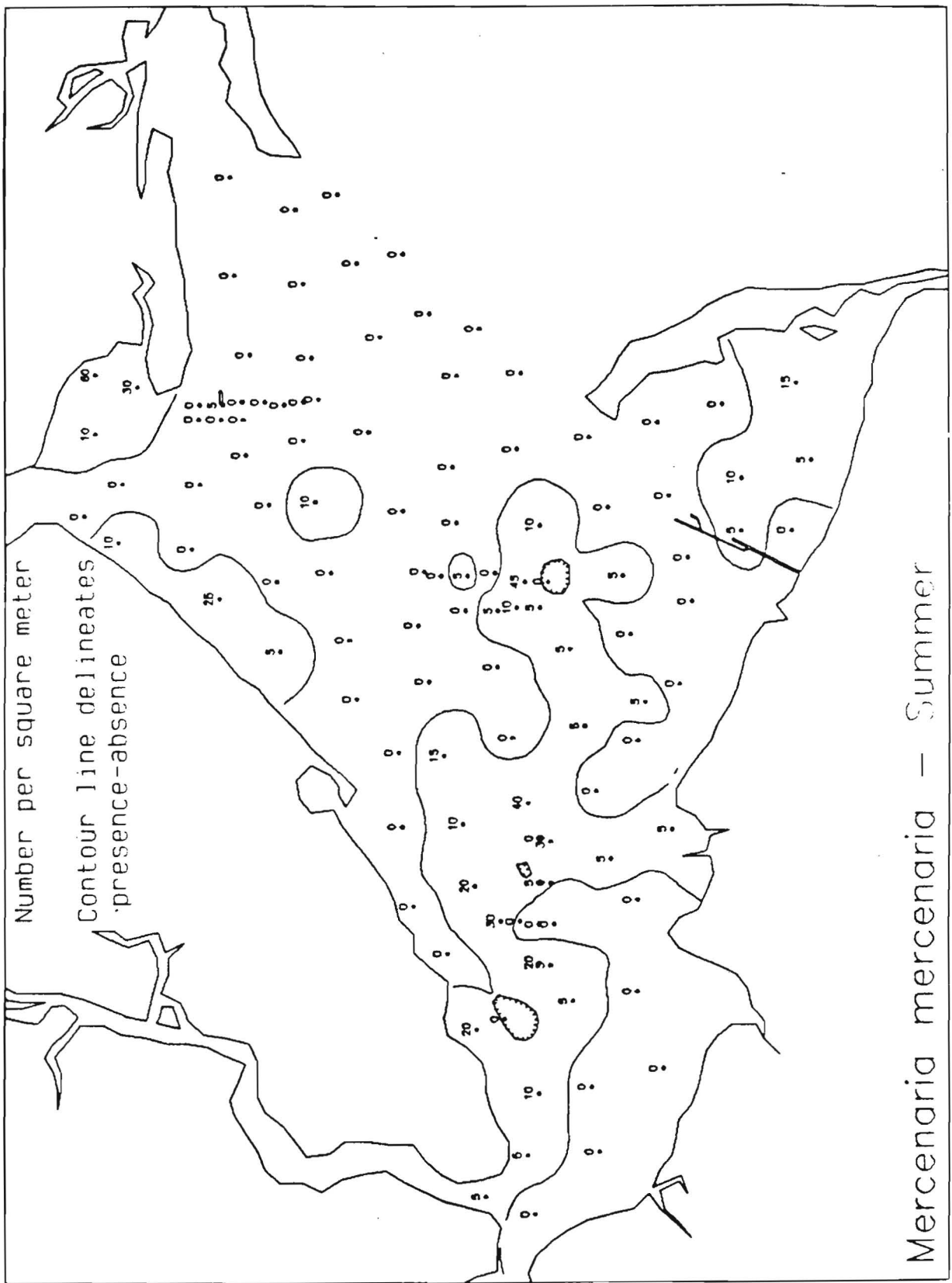
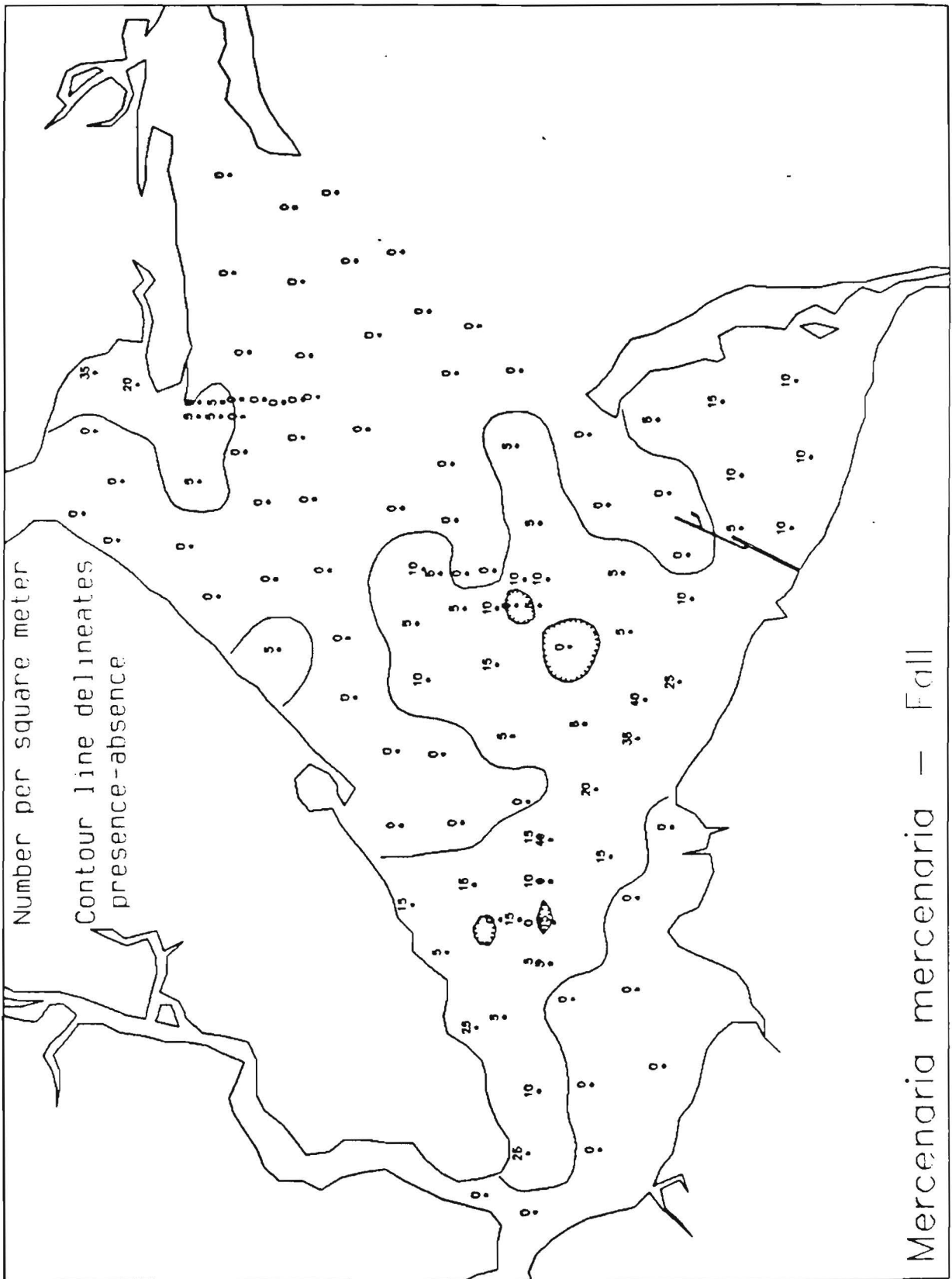


Figure 59.





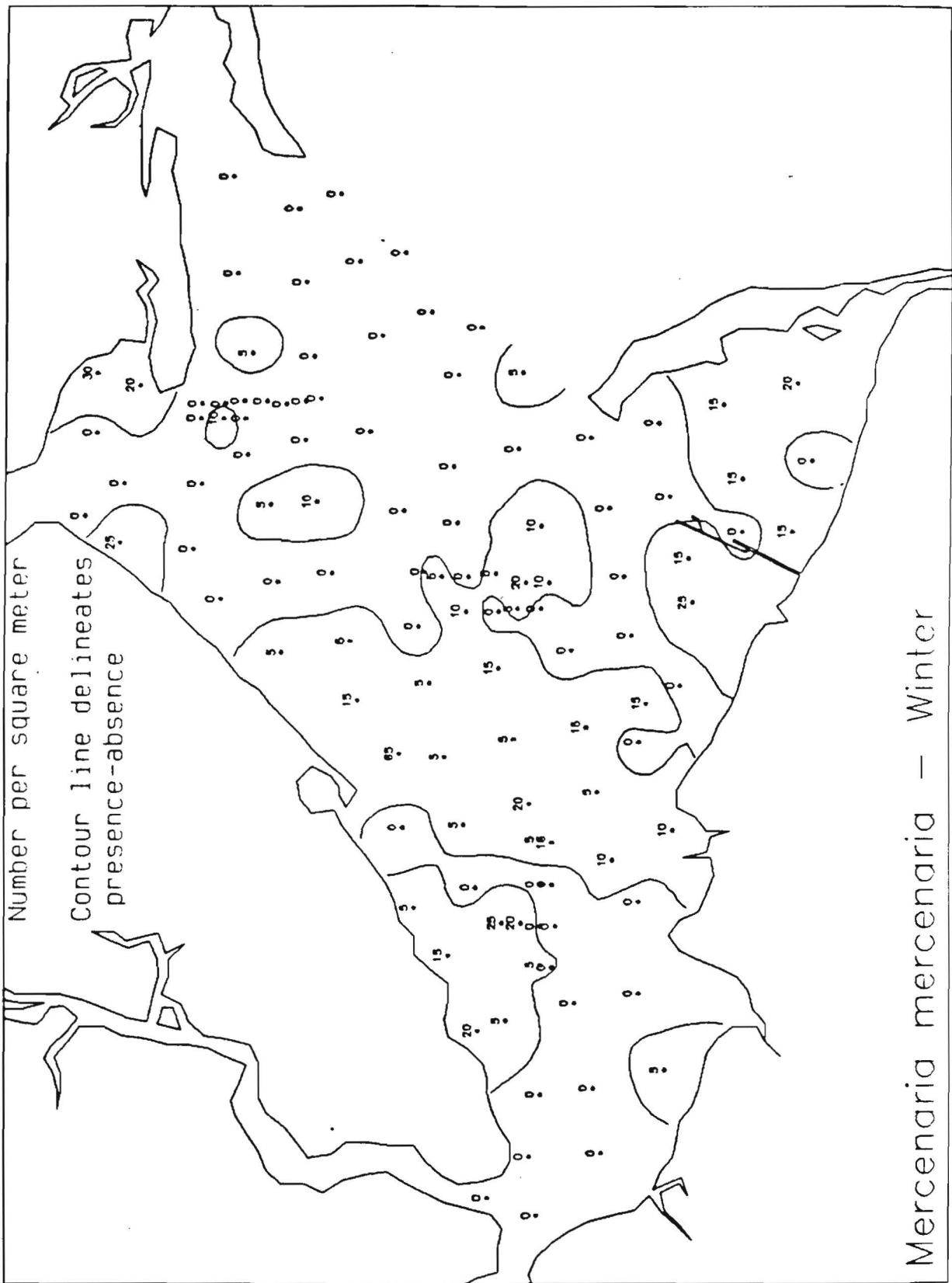


Figure 62.

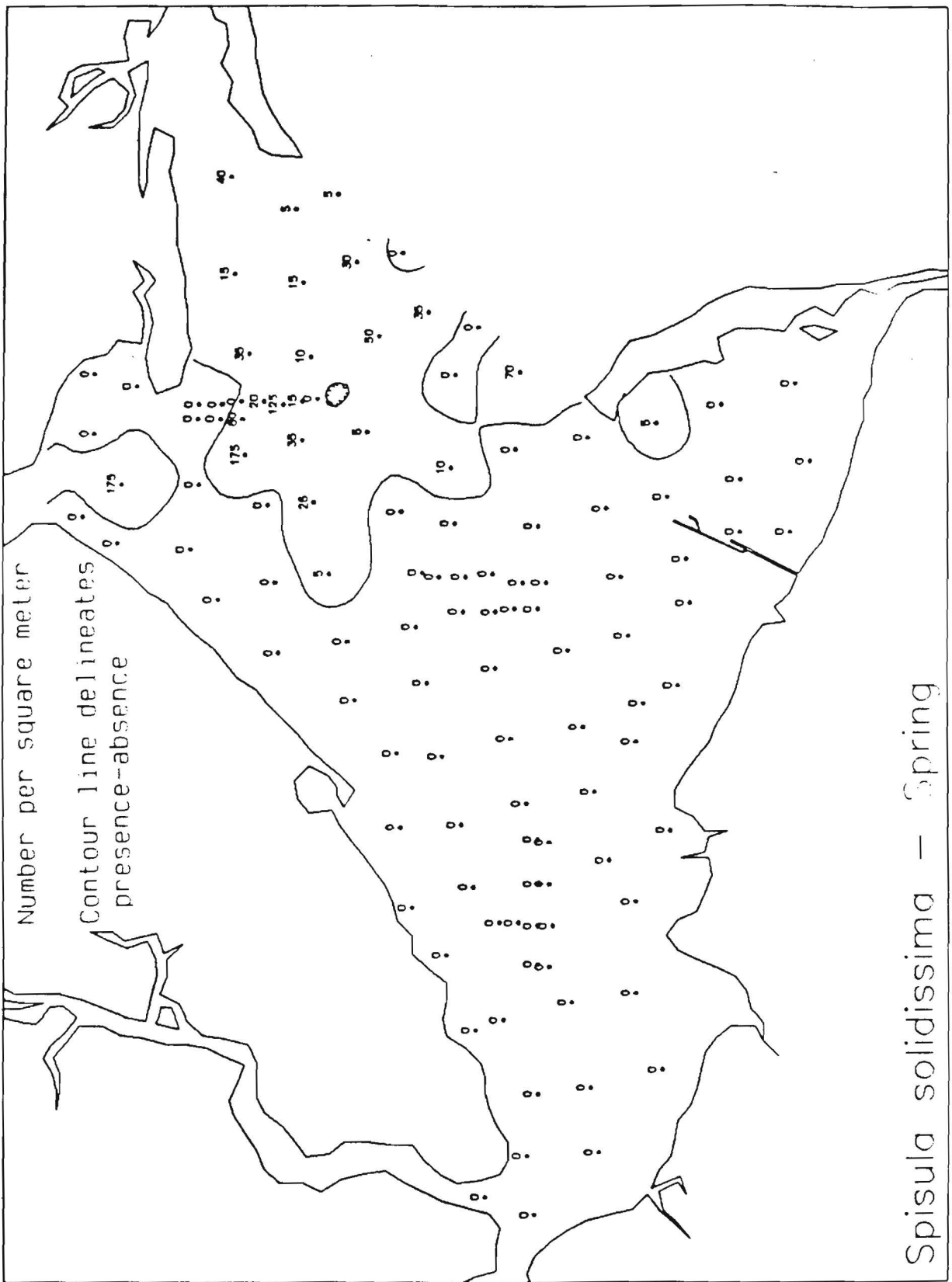


Figure 63.

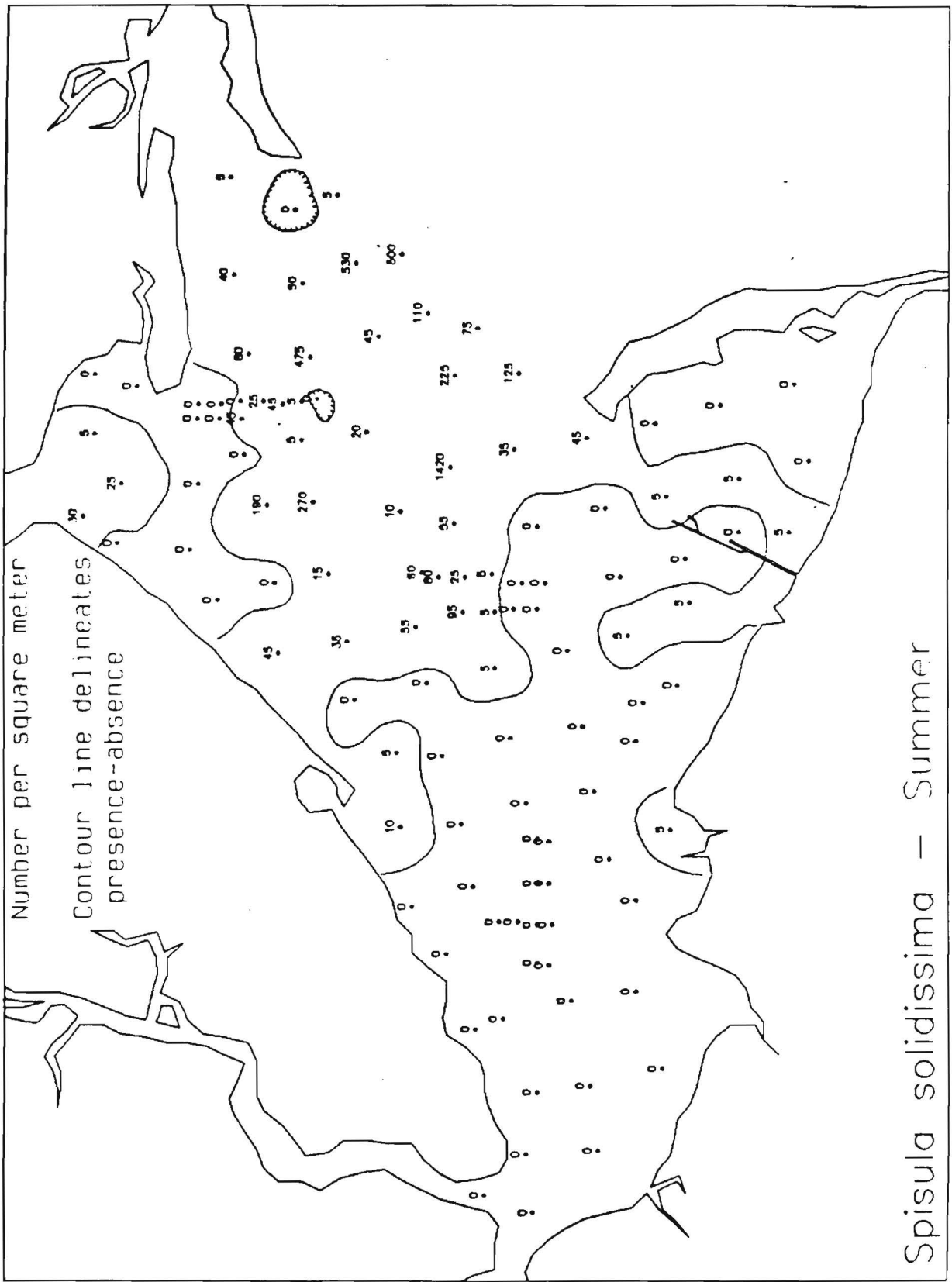


Figure 64.

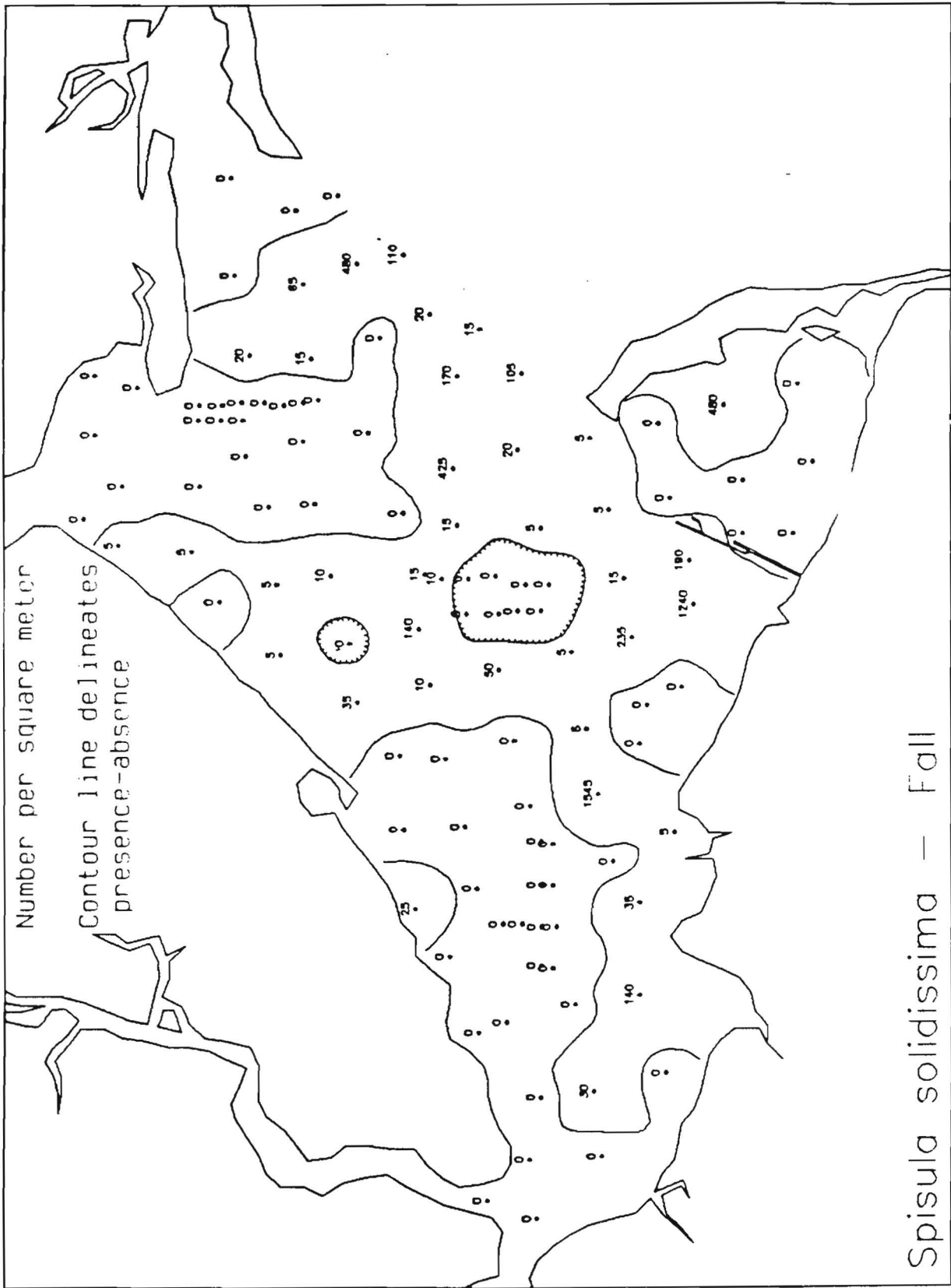


Figure 65.

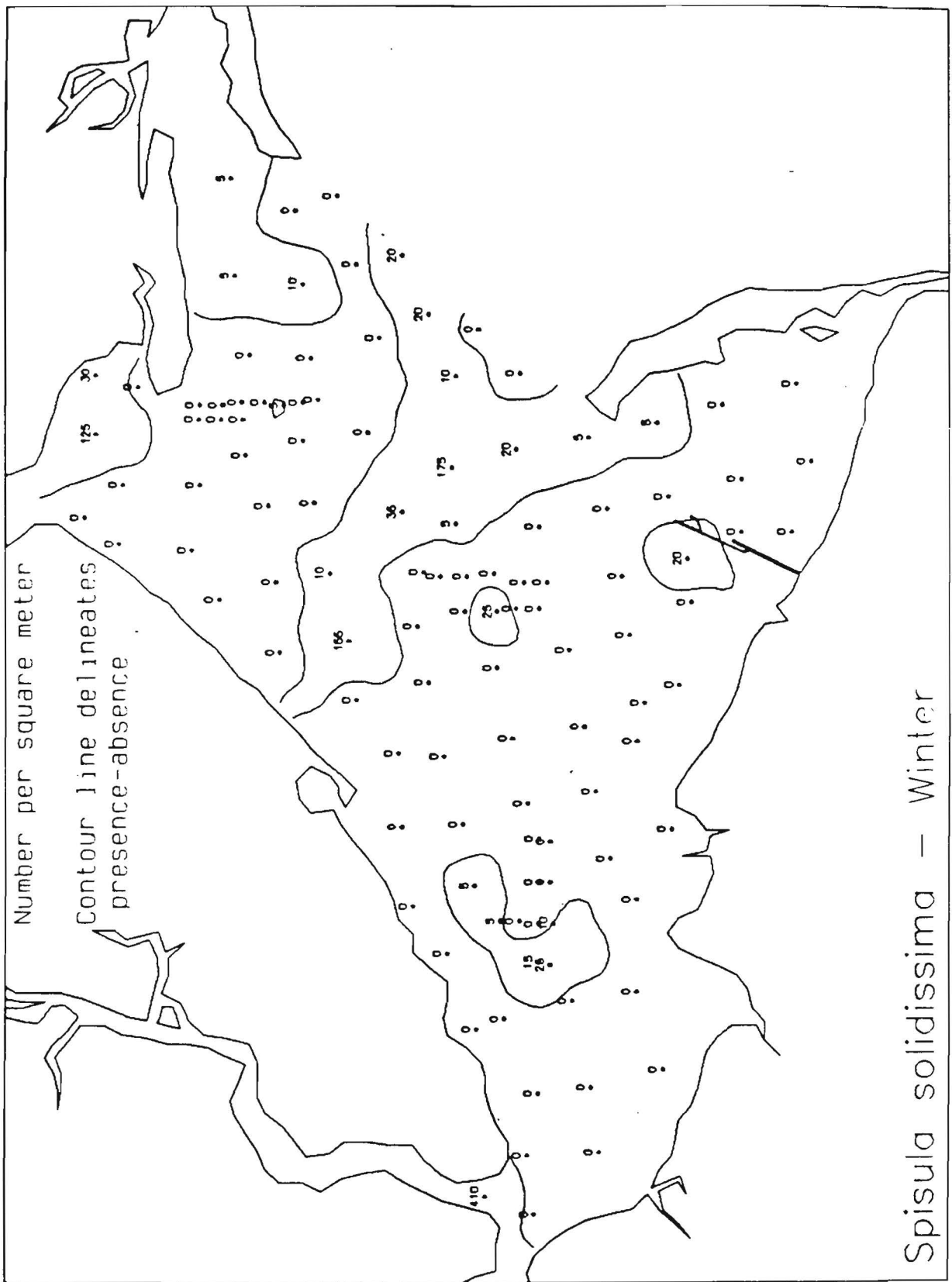


Figure 66.

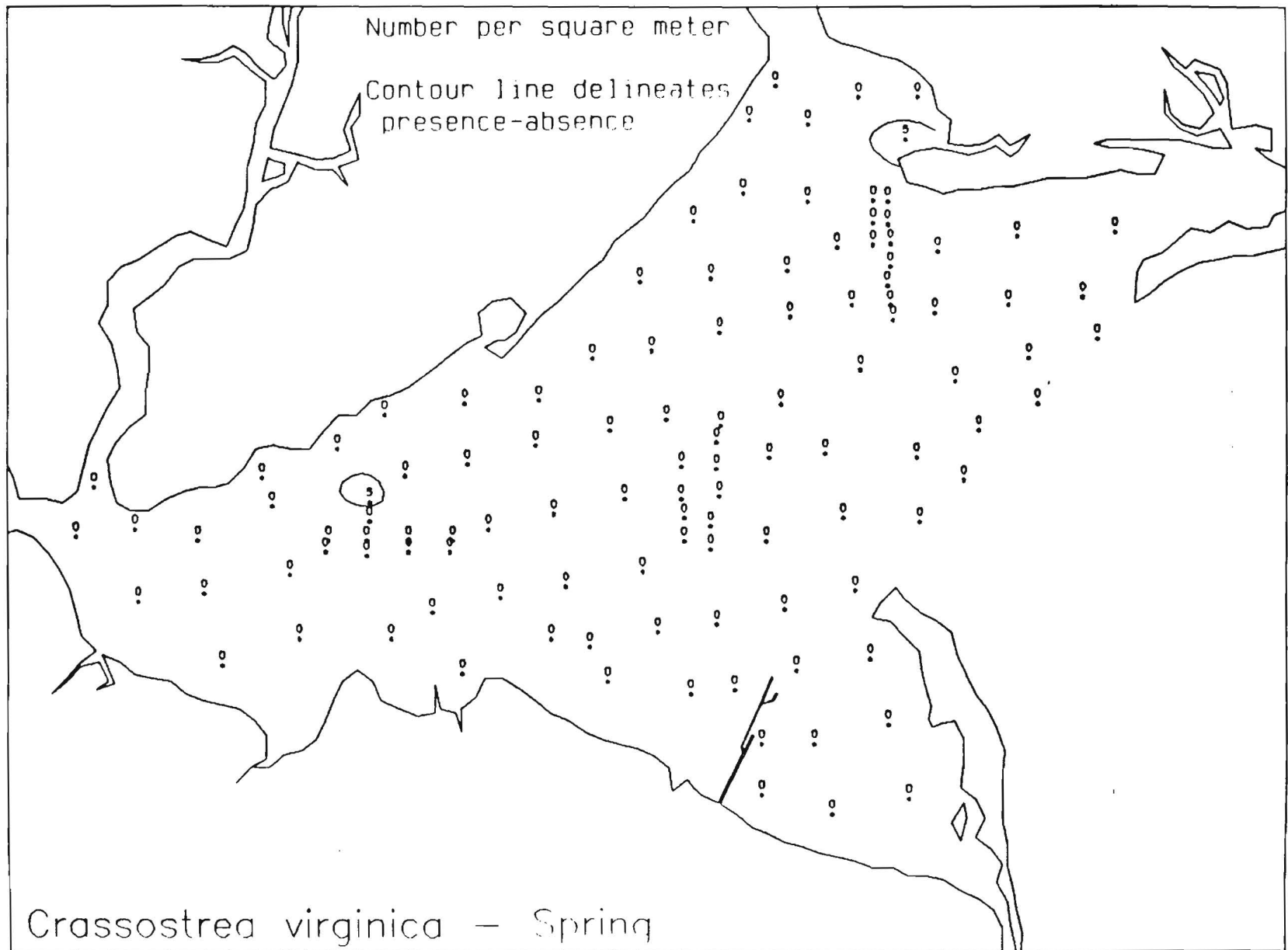


Figure 67.

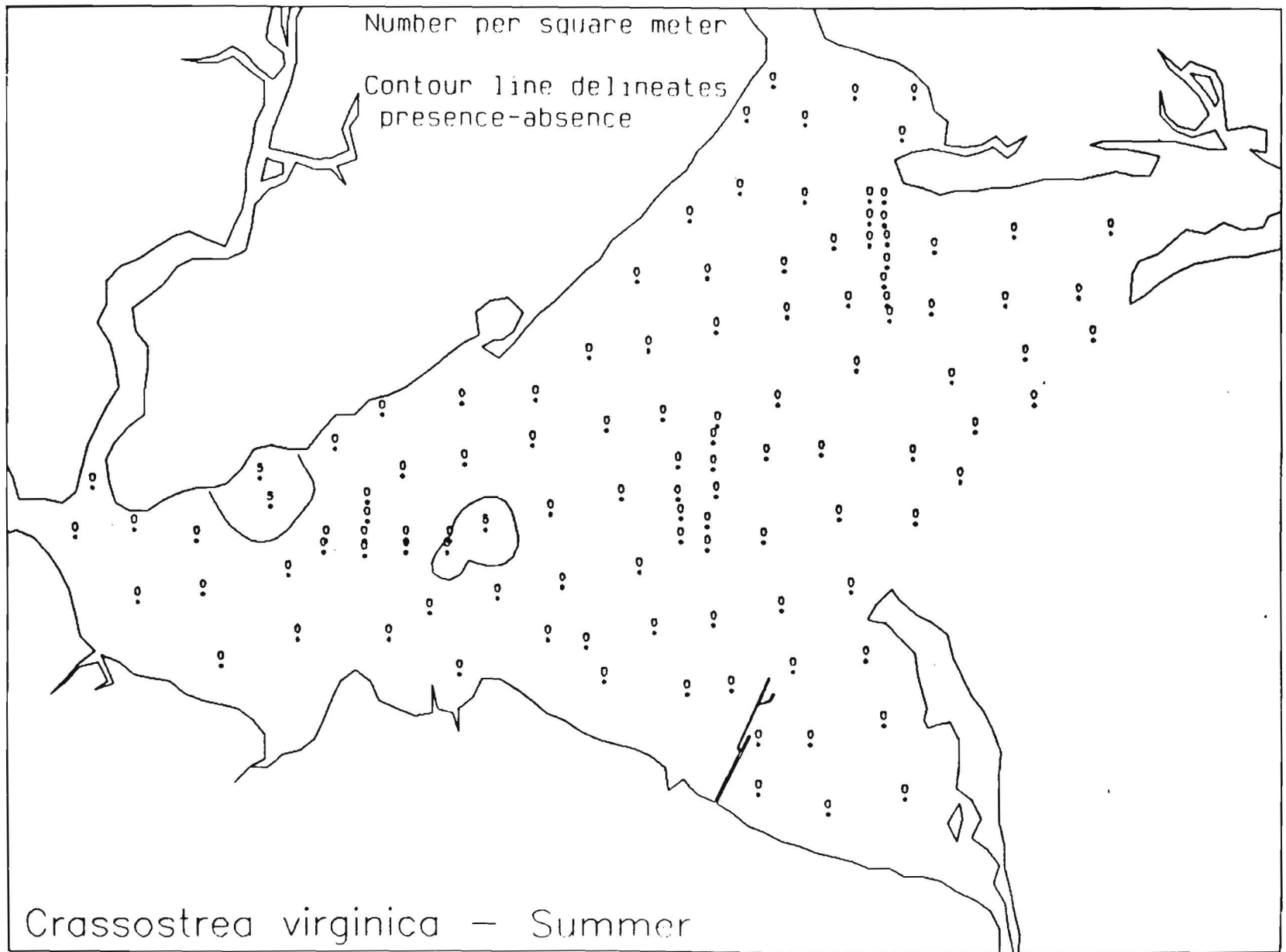


Figure 68.

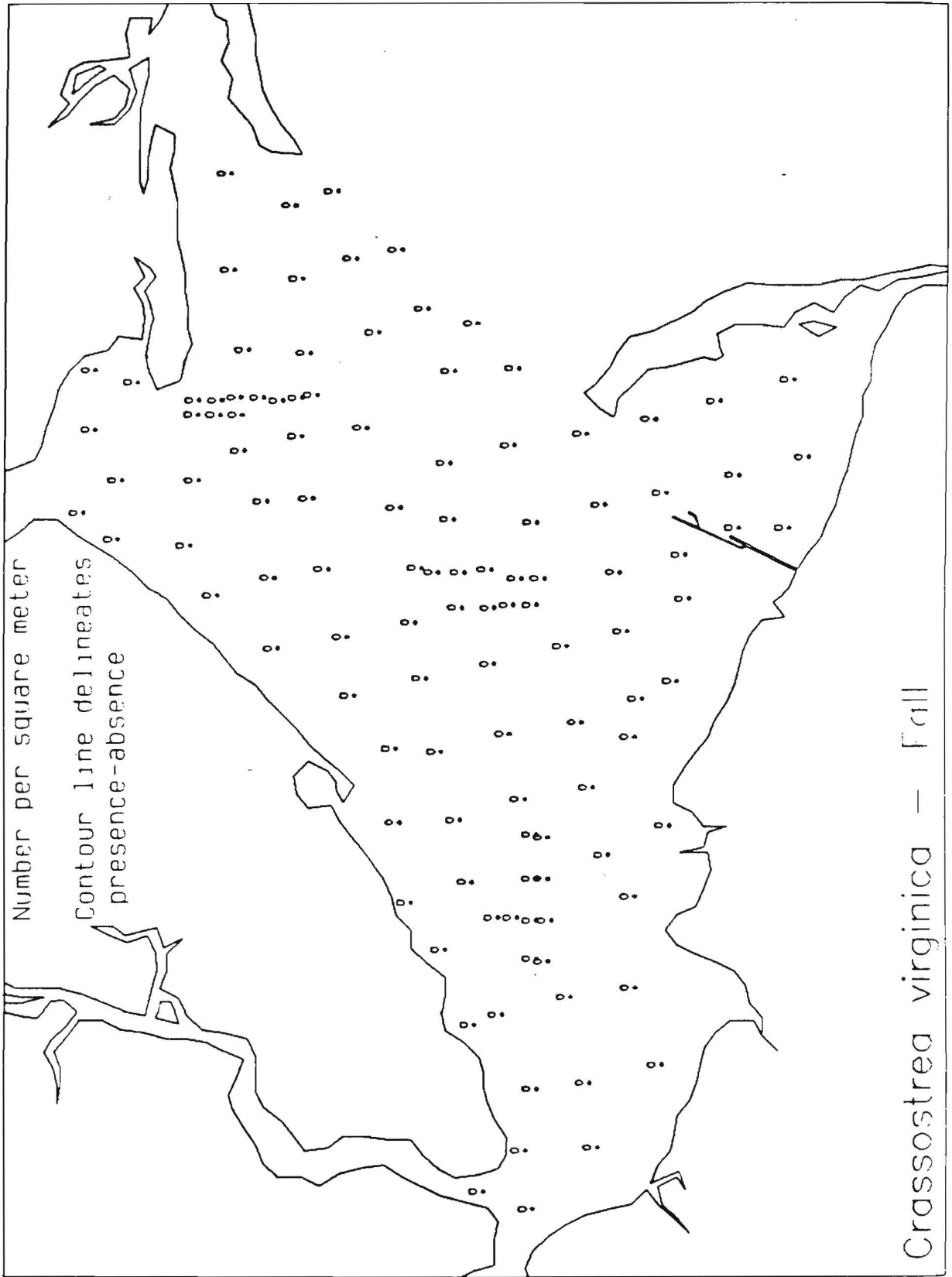


Figure 69.

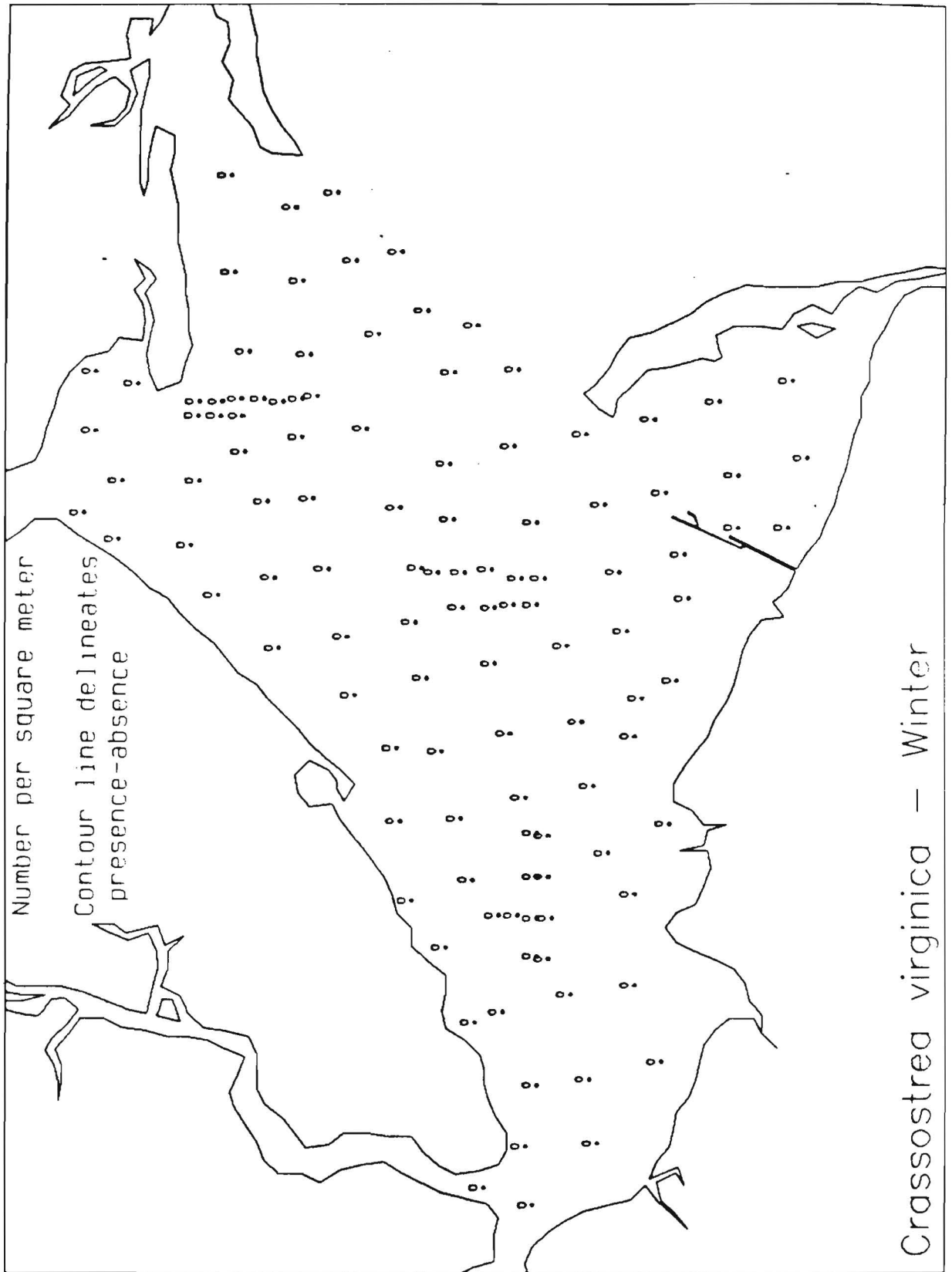


Figure 70.

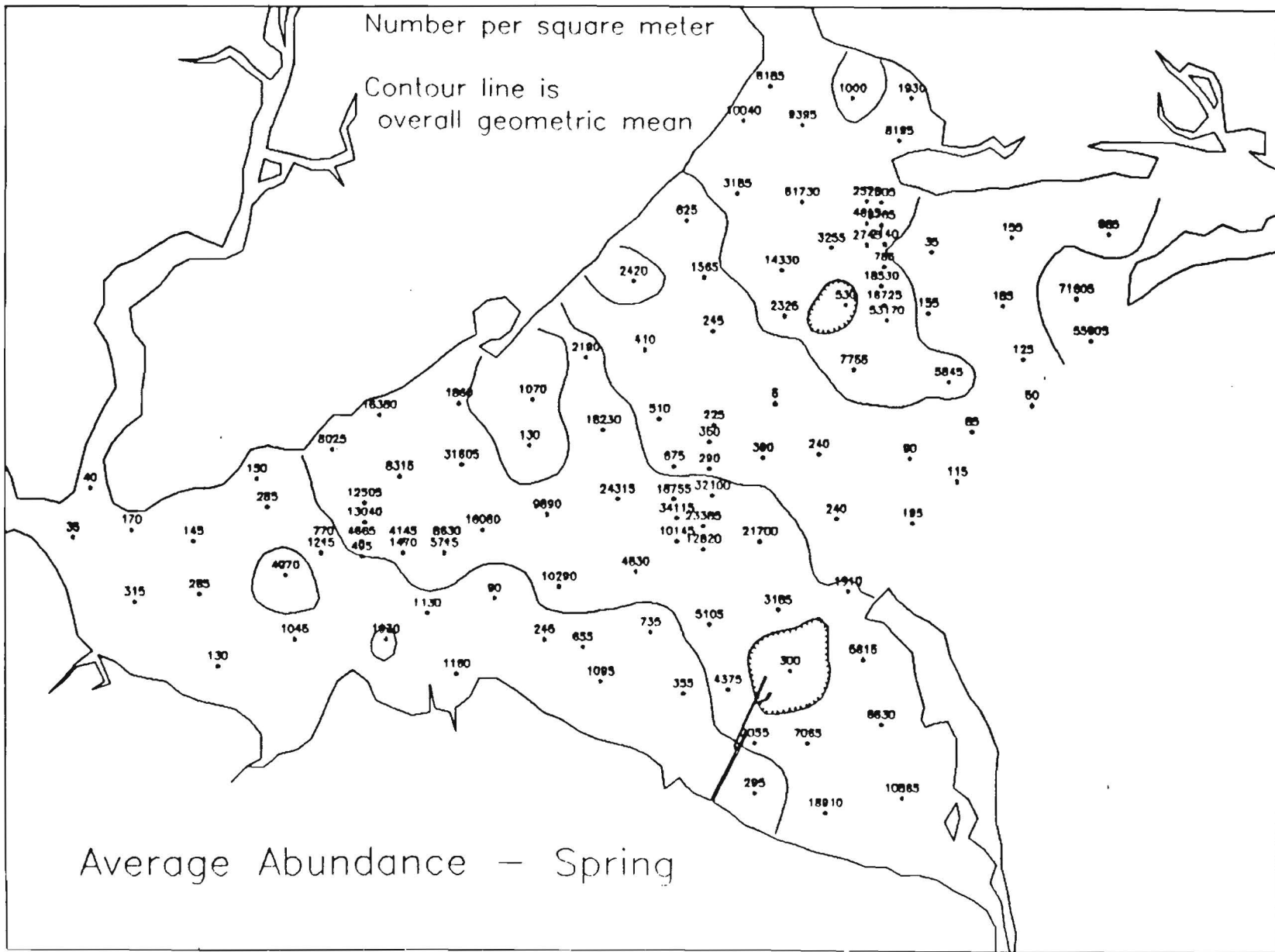


Figure 71.

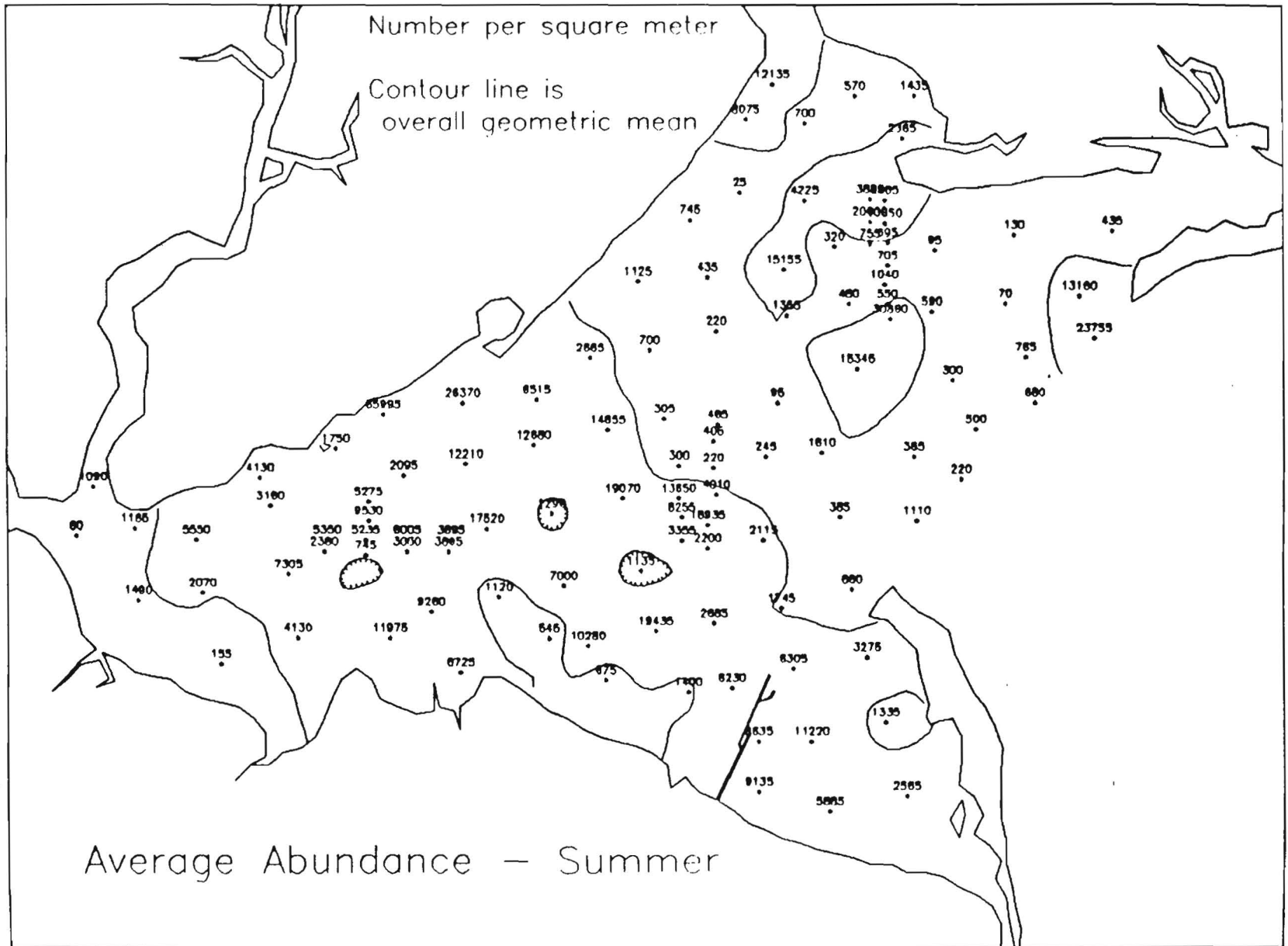


Figure 72.

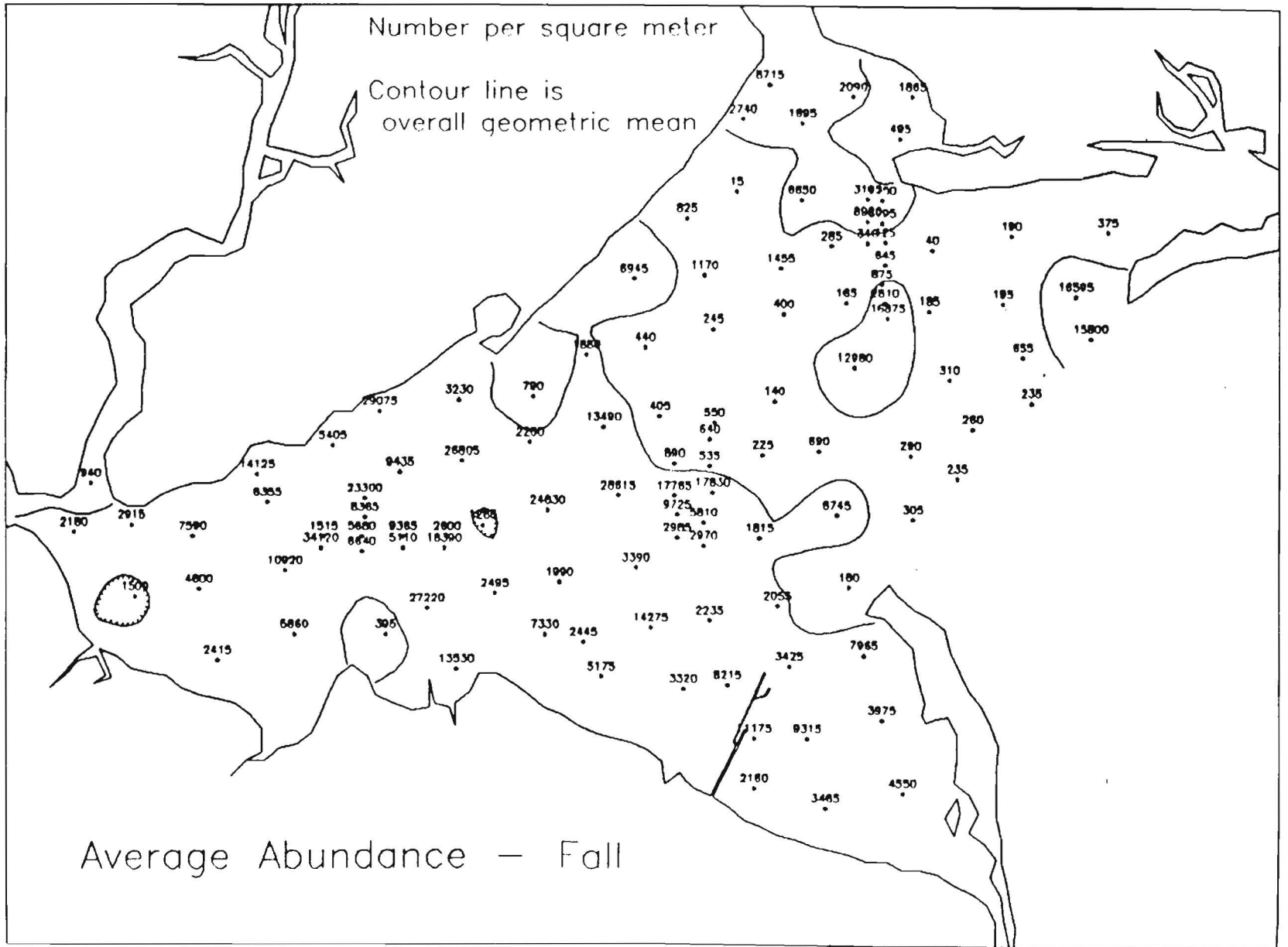


Figure 73.

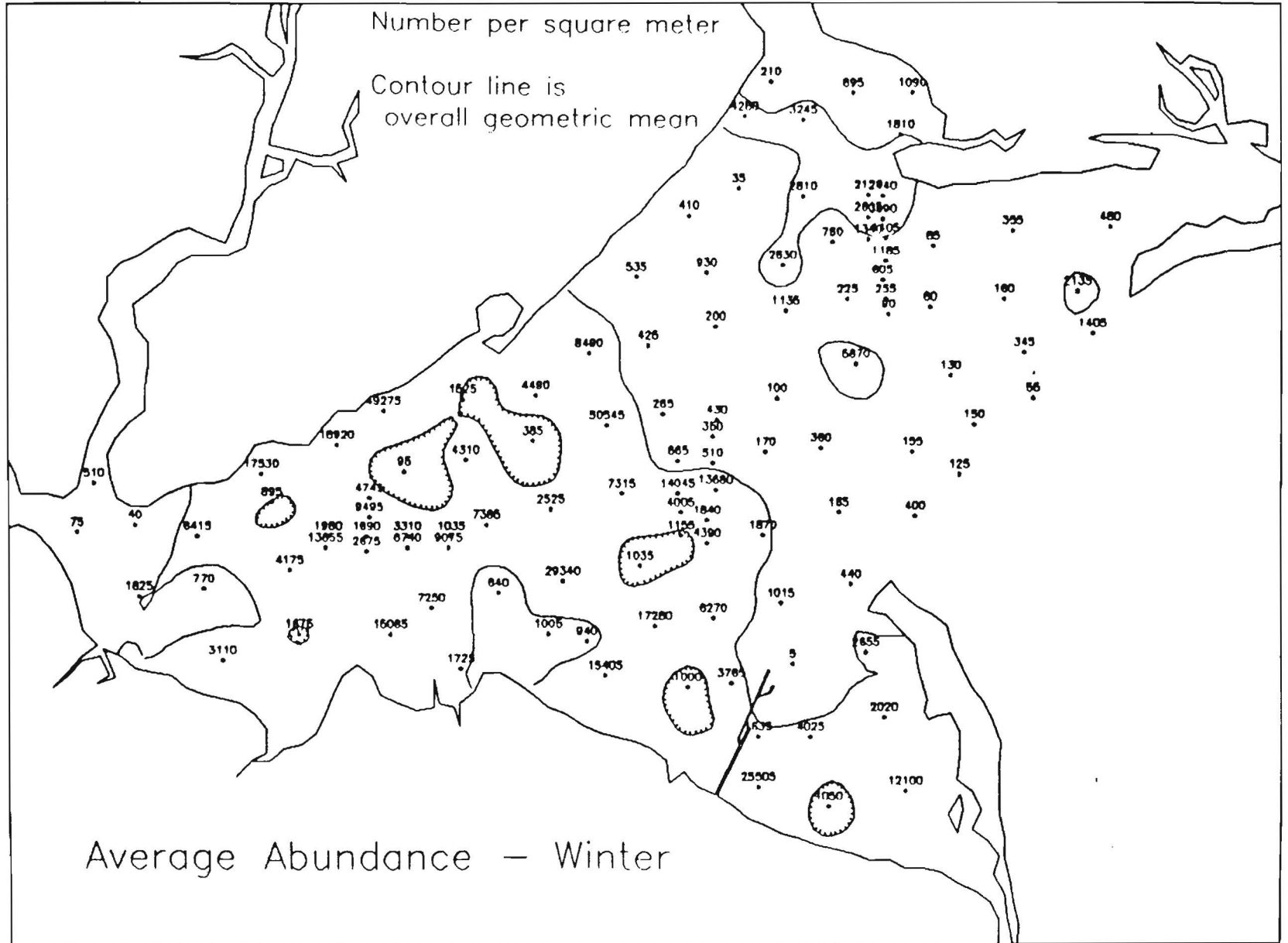


Figure 74.

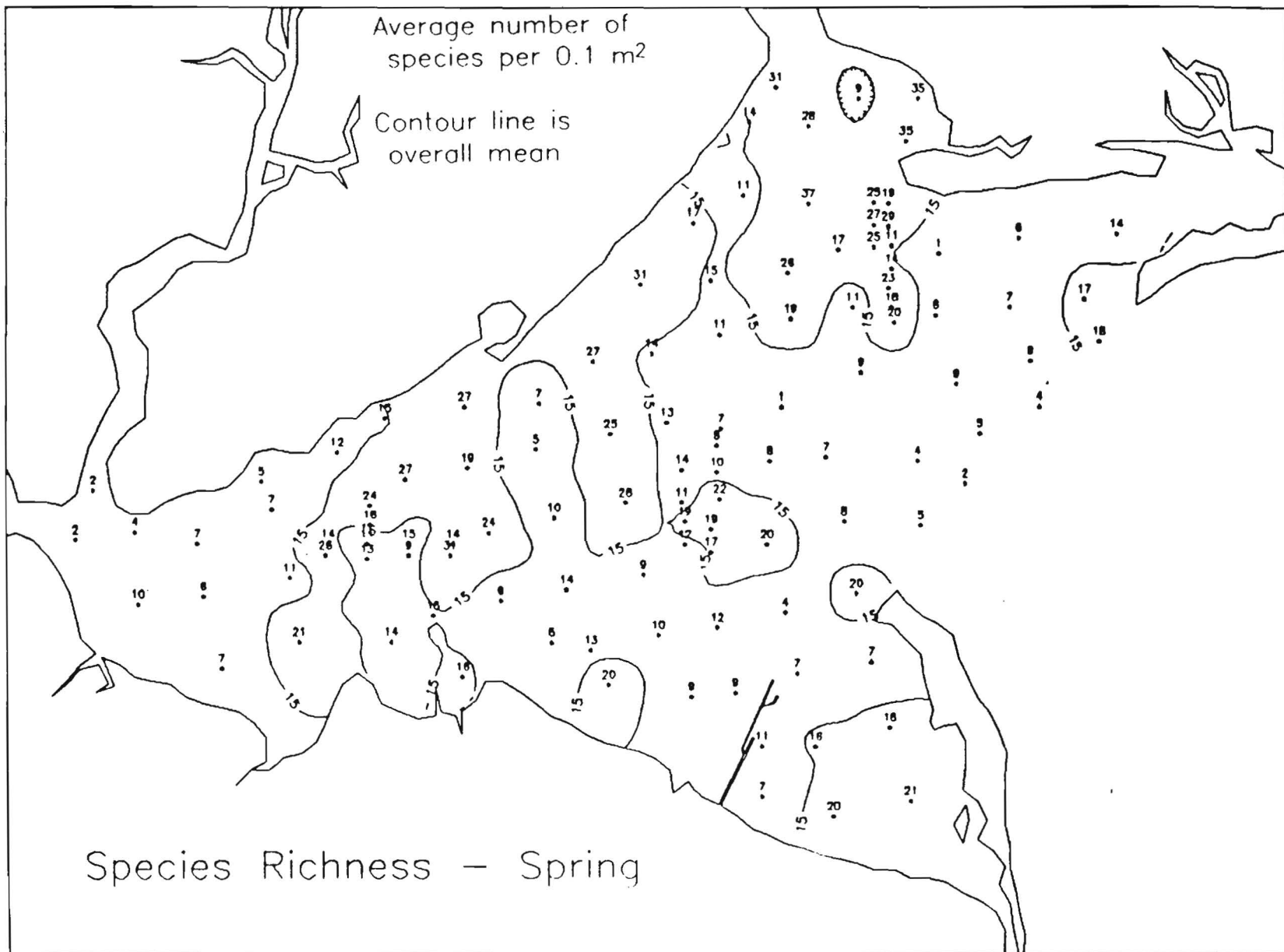


Figure 75.

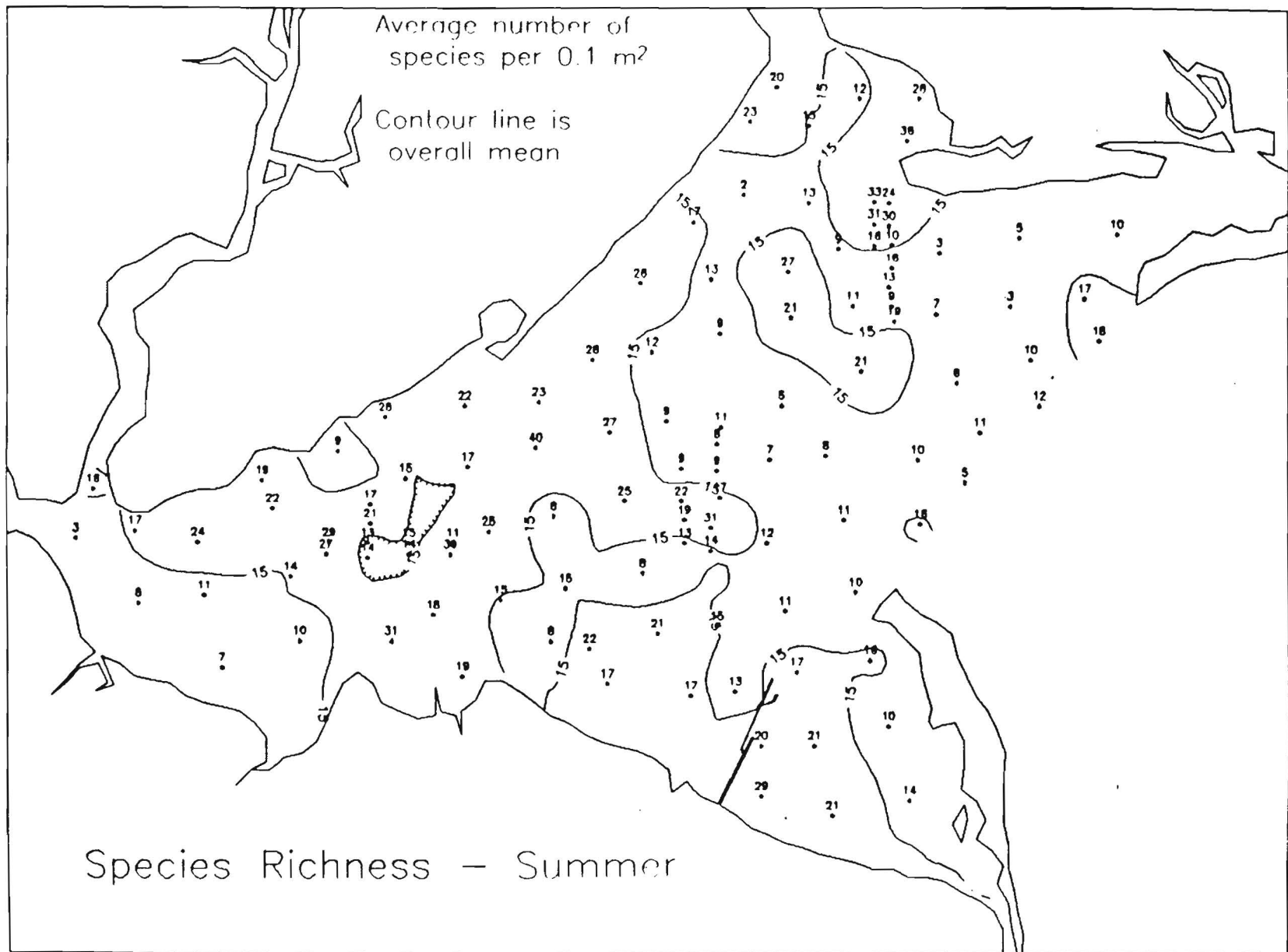


Figure 76.

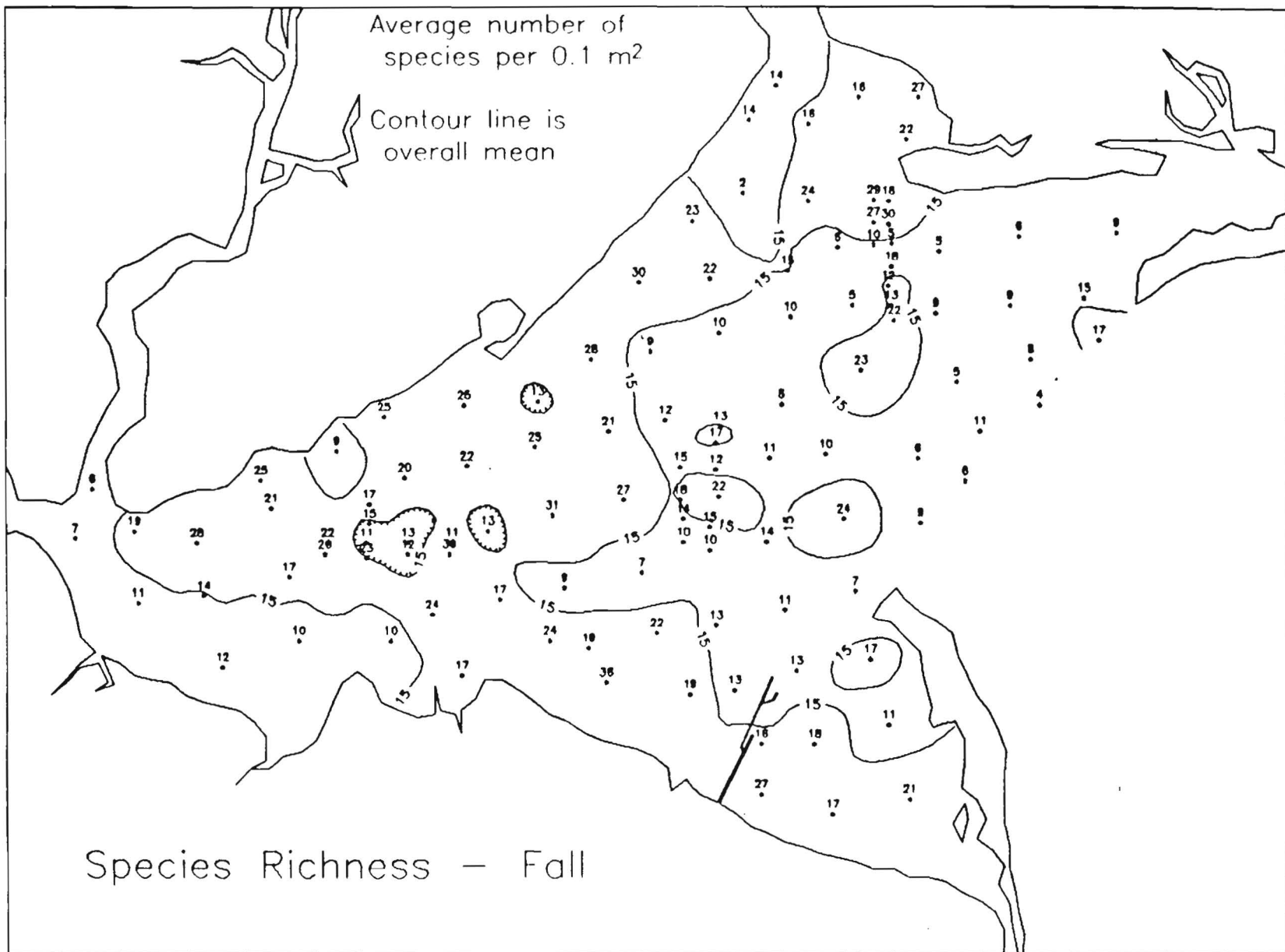


Figure 77.

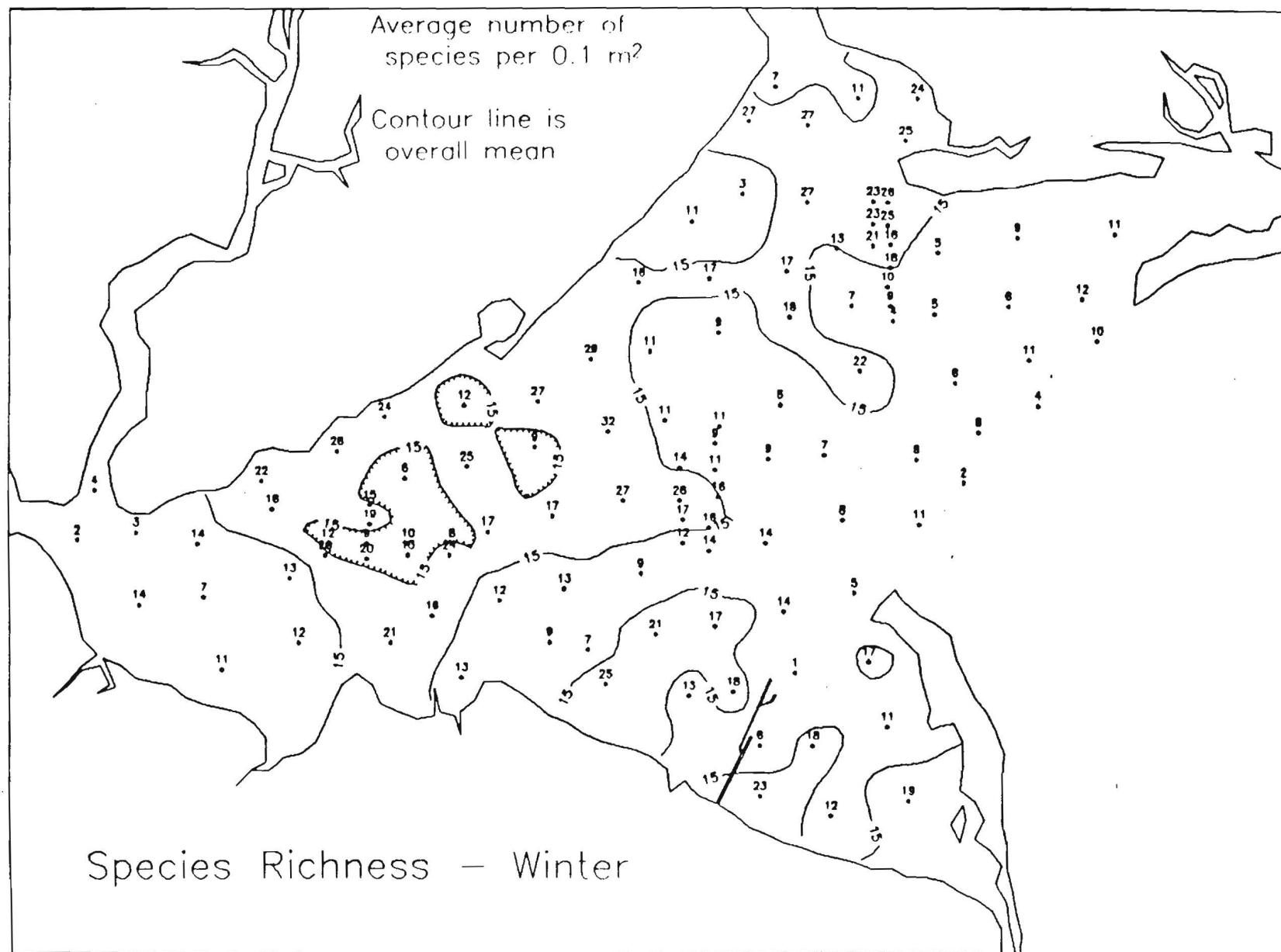


Figure 78.

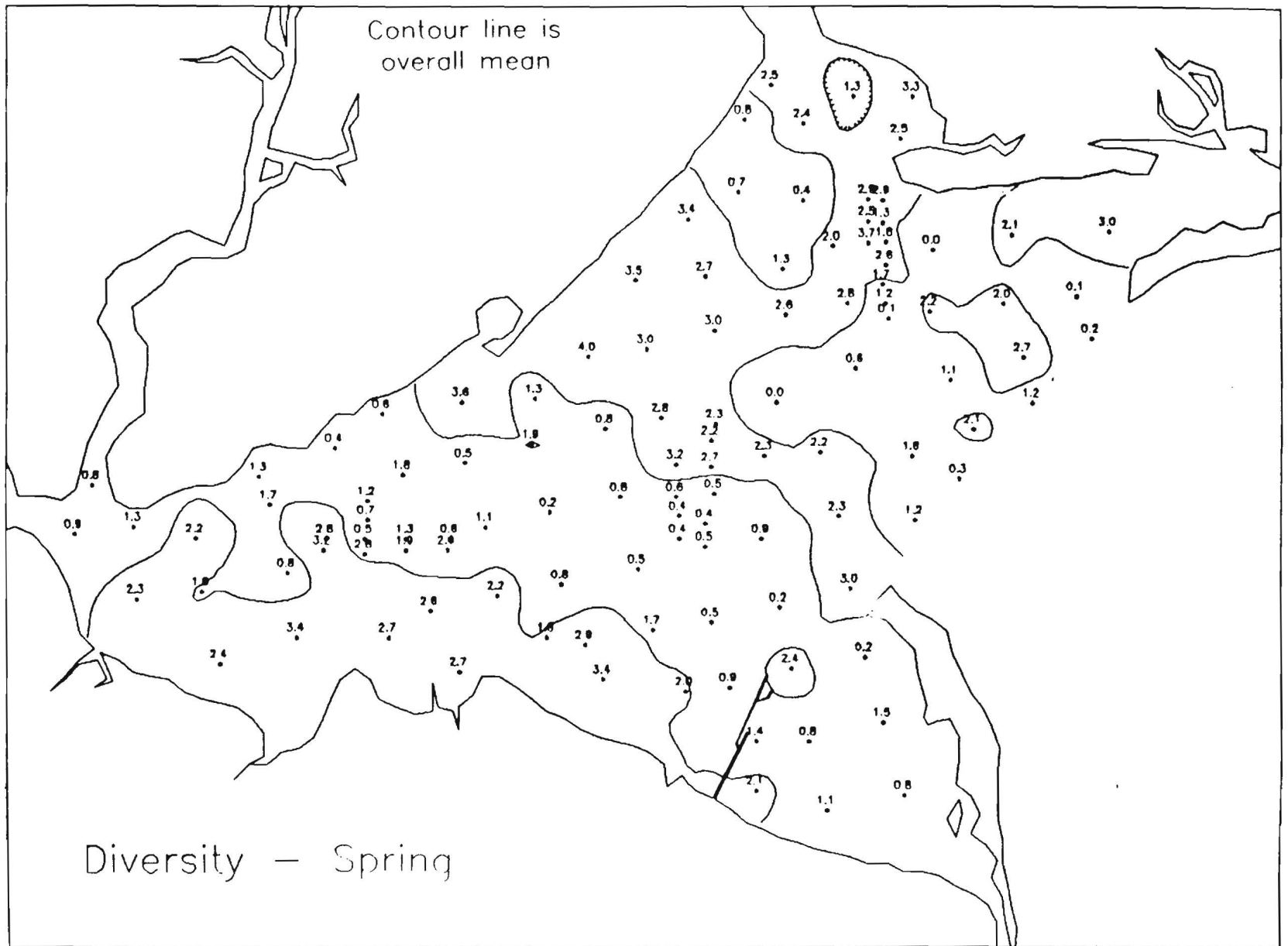


Figure 79.

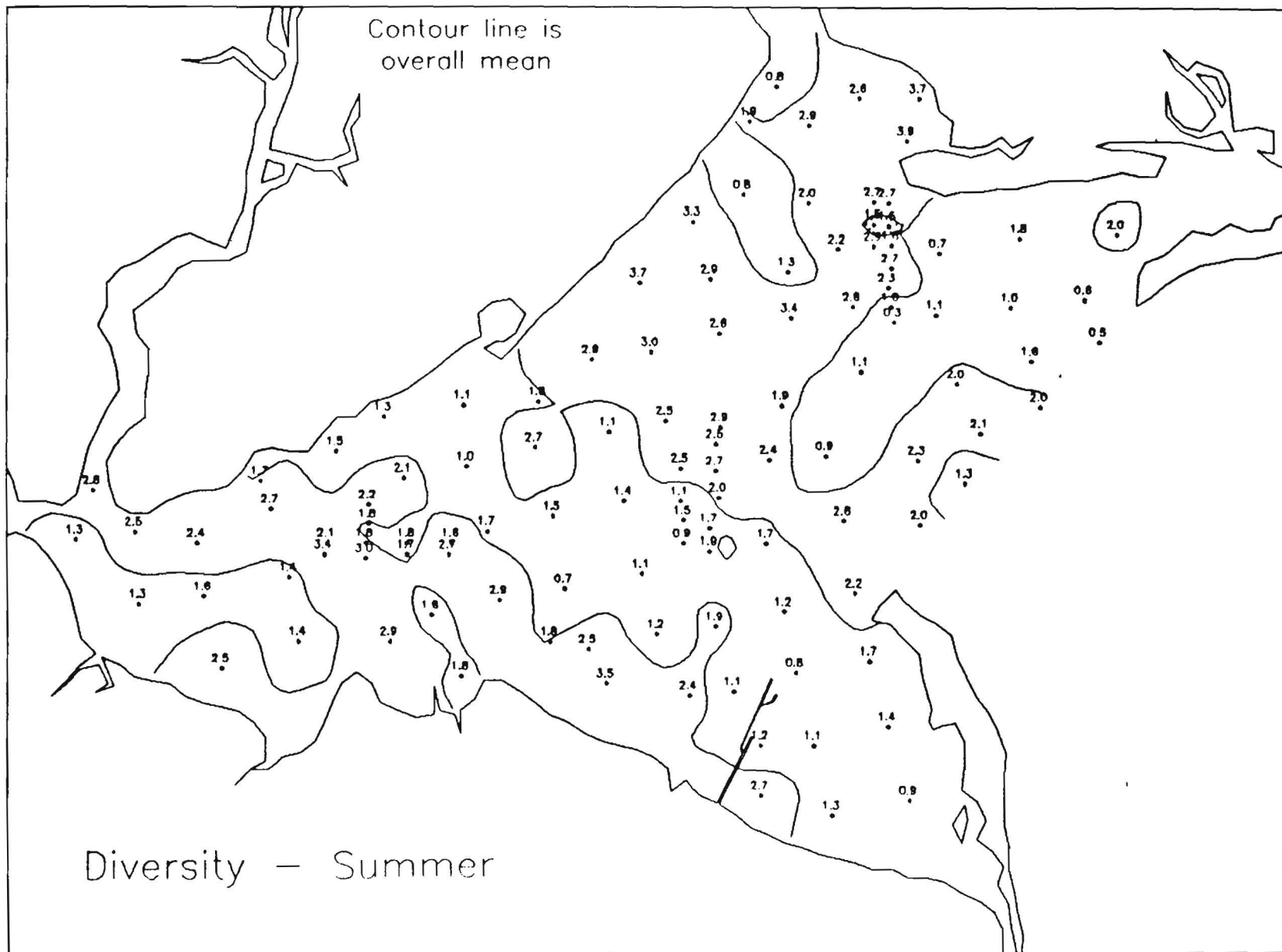


Figure 80.

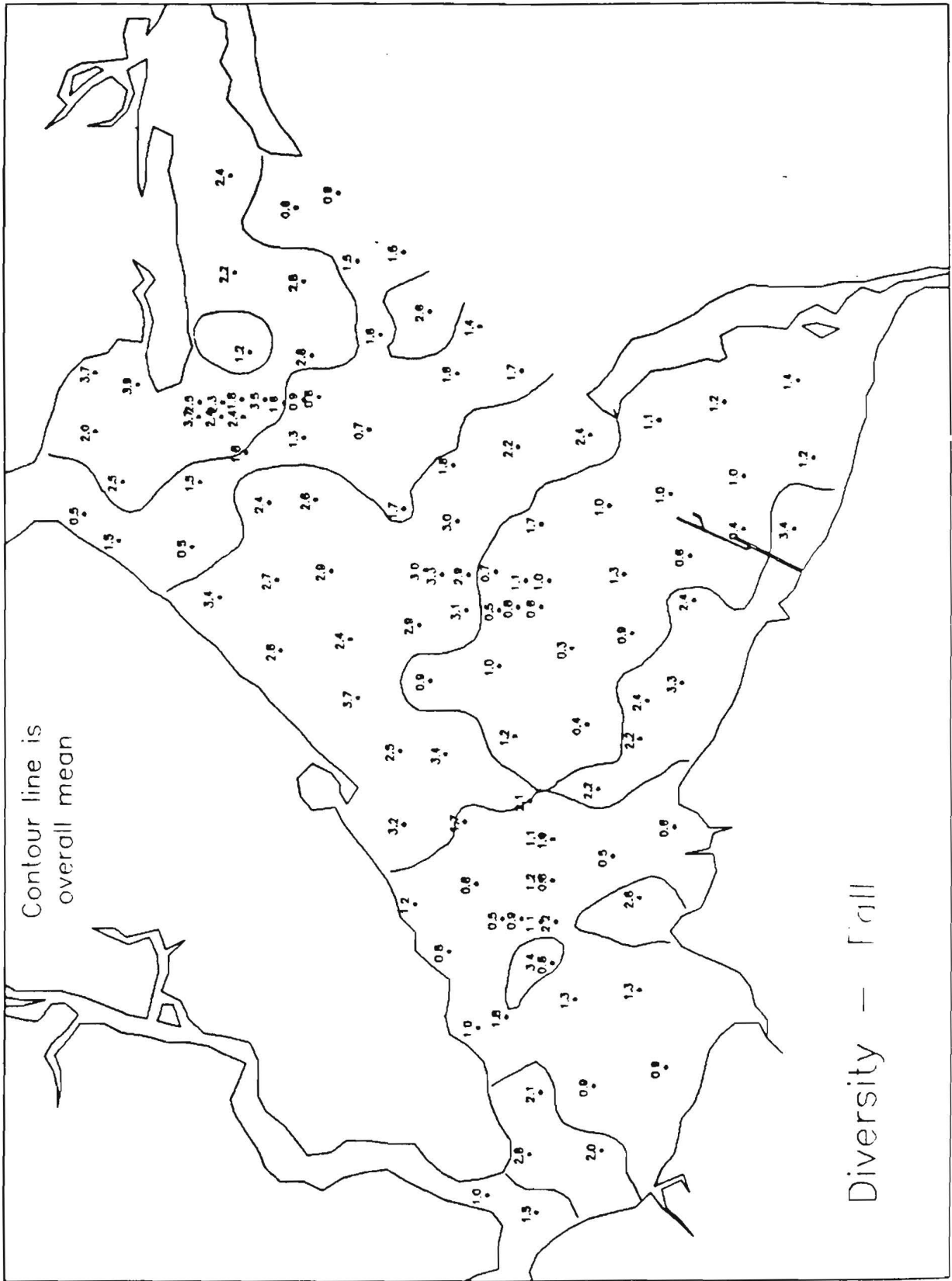


Figure 81.

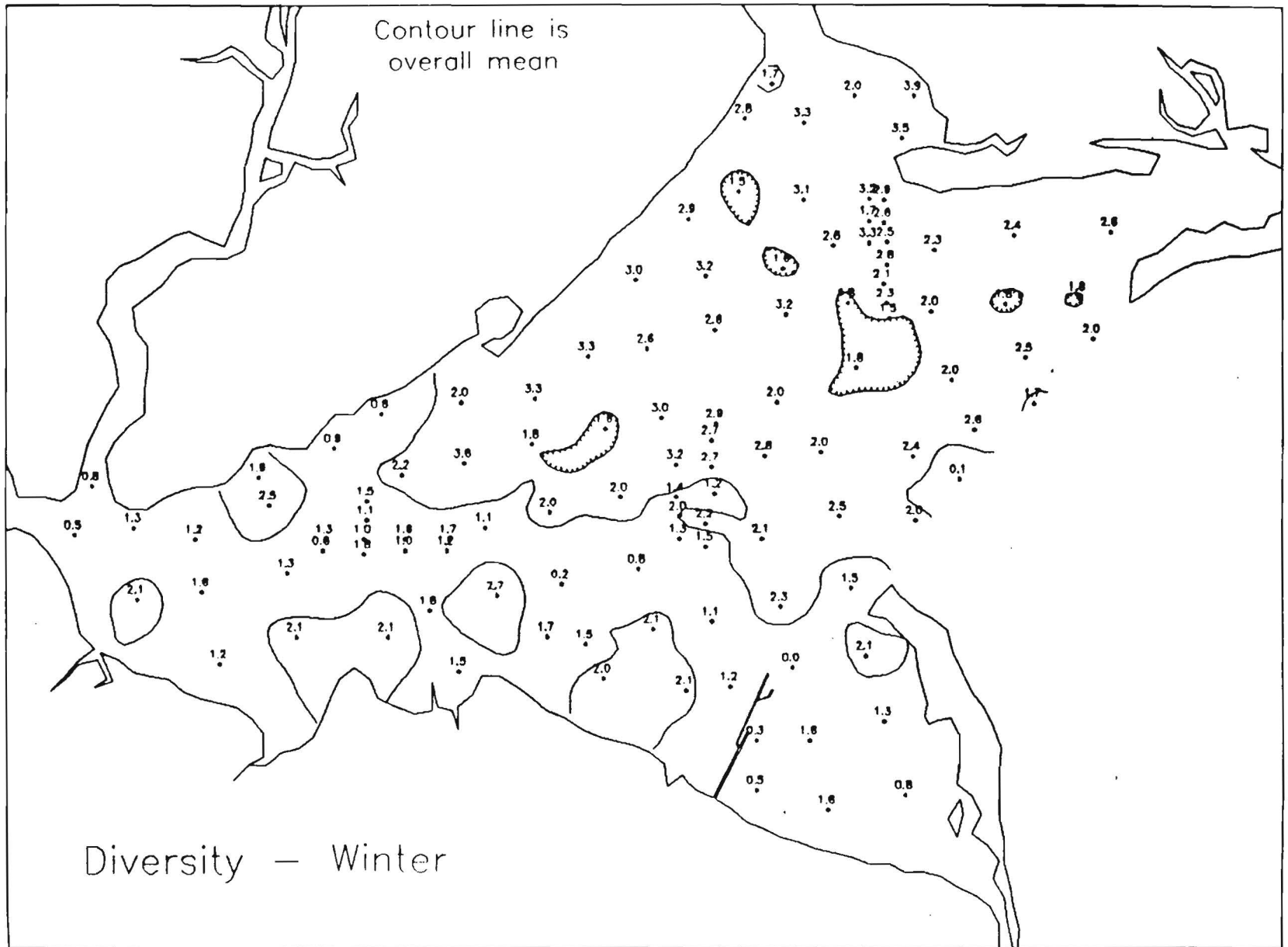


Figure 82.

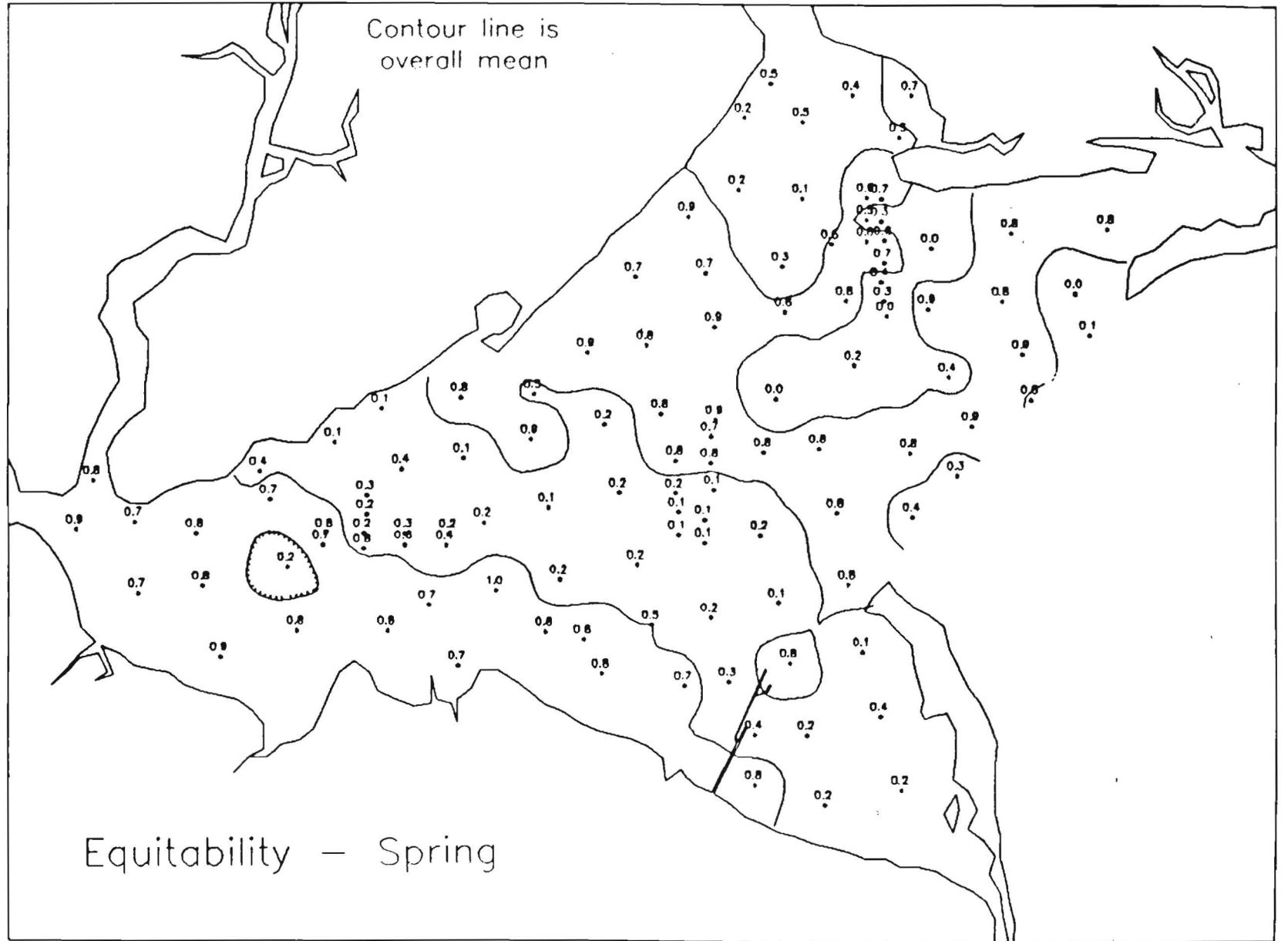


Figure 83.

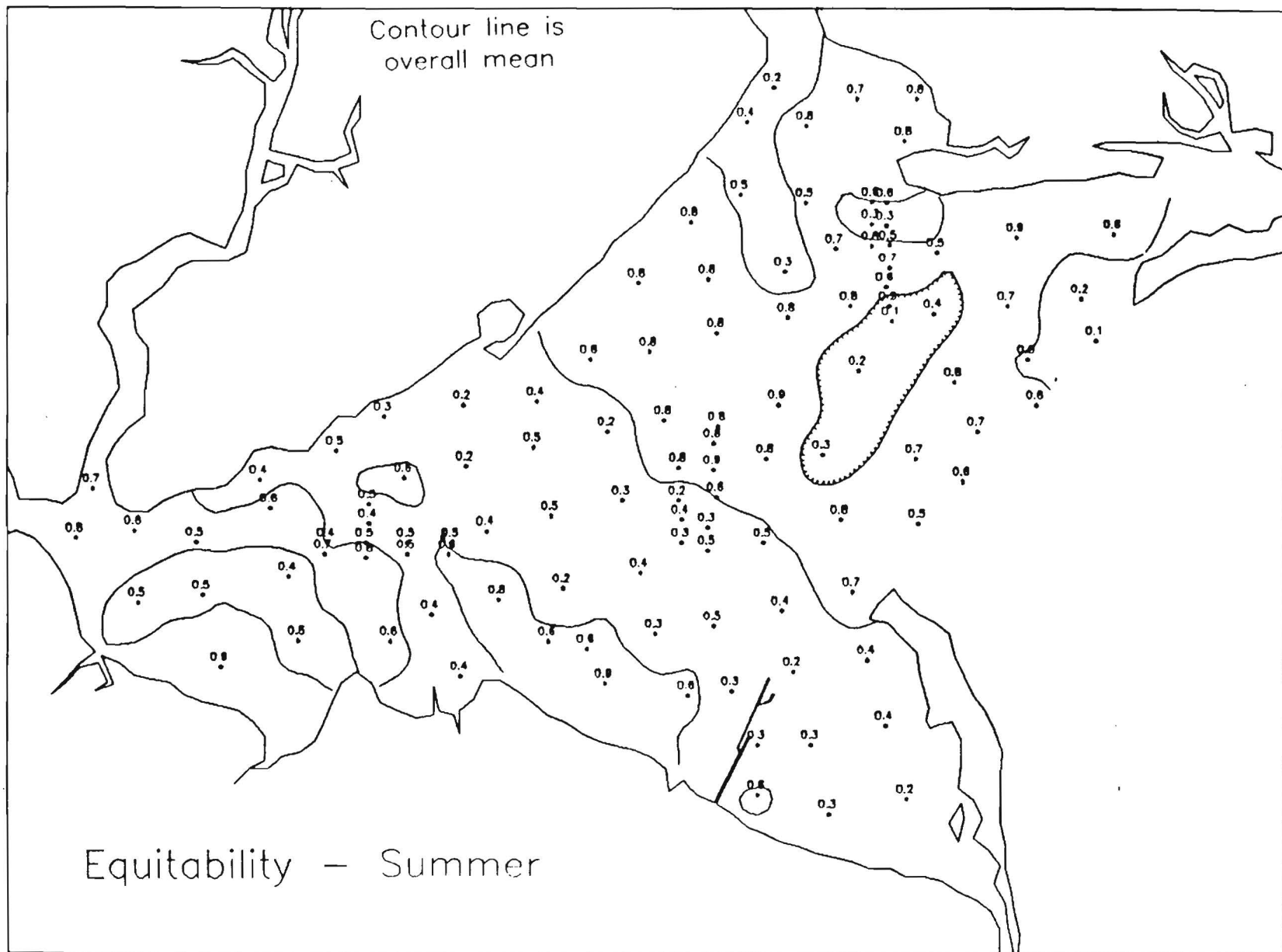


Figure 84.

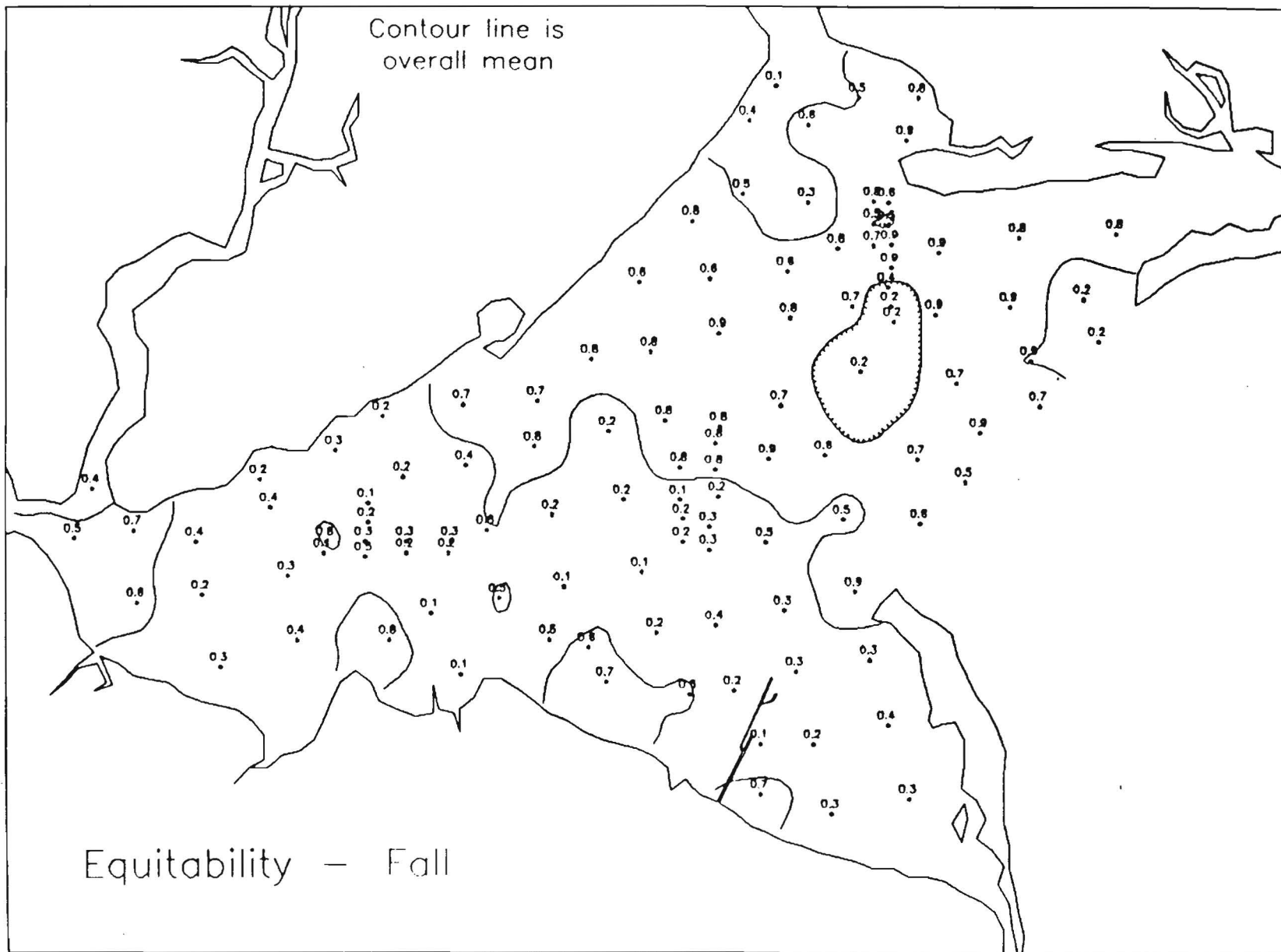


Figure 85.

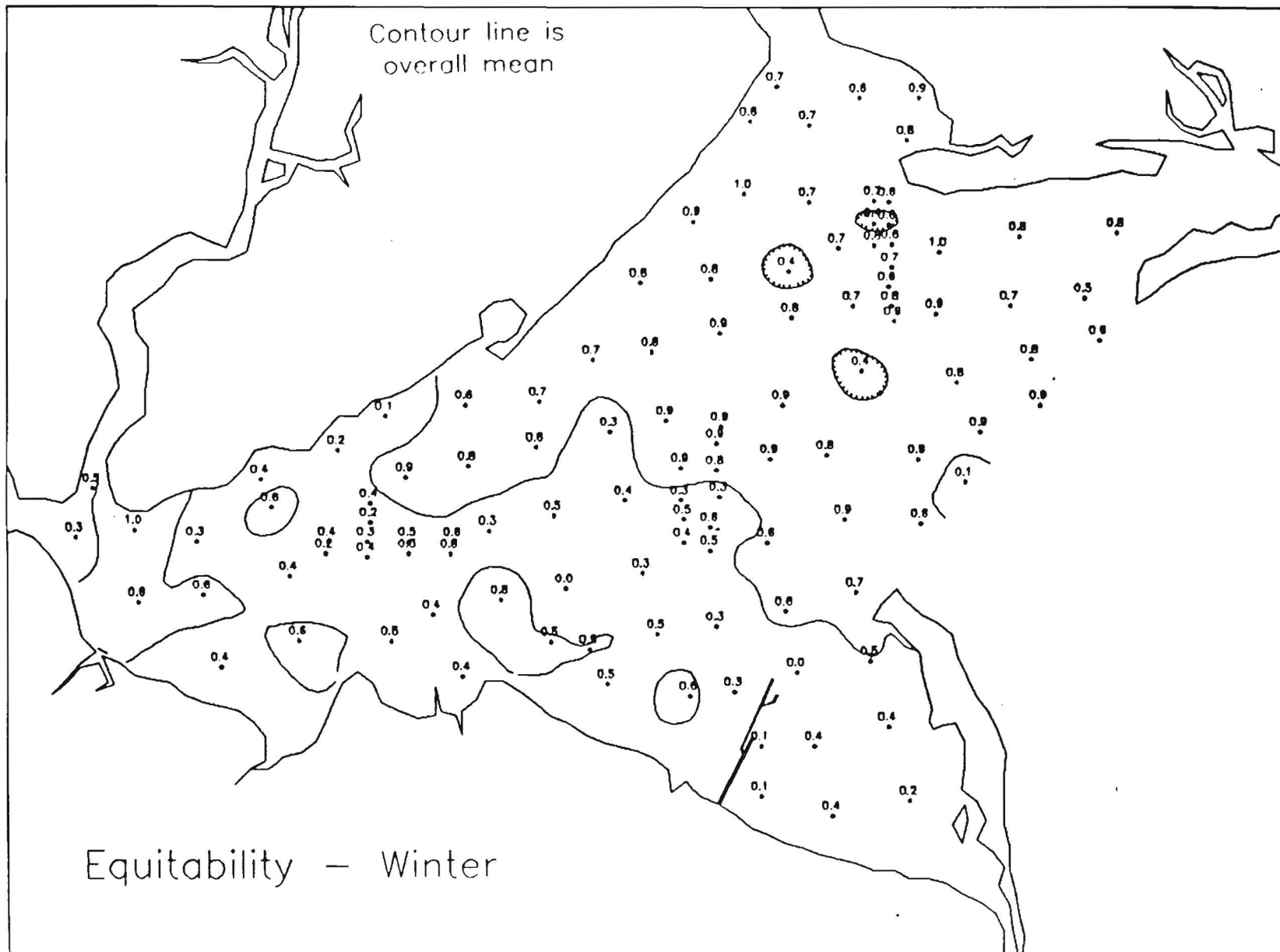


Figure 86.

Appendix A. Hydrographic Parameters

Cruise: I Spring (4/86)
 II Summer (7/86)
 III Fall (10/86)
 IV Winter (1/87)

STATION #	NYH 1986-87 CRUISE I			NYH 1986-87 CRUISE II		
	DEPTH m	TEMP C	SALINITY ppt	DEPTH m	TEMP C	SALINITY ppt
1	6.5	10.52	24.20	5.5	23.57	26.01
2	7.7	10.76	23.87	6.0	23.34	26.43
3	5.5	11.24	23.63	4.5	23.63	26.42
4	6.5	11.16	24.33	7.0	22.75	26.75
5	5.0	11.54	23.15	5.0	22.46	27.05
6	5.0	11.23	23.33	5.0	22.43	26.84
7	6.0	11.53	22.44	7.0	21.58	28.39
8	15.5	9.75	30.36	16.5	20.64	30.26
9	6.0	10.05	25.50	7.0	20.55	29.48
10	17.0	9.92	28.32	13.0	21.53	27.73
11	6.0	10.24	24.64	5.5	21.81	27.28
12	5.0	10.24	24.87	5.0	21.87	27.19
13	8.0	10.06	24.54	15.5	20.31	28.58
14	5.0	9.98	24.17	6.5	22.06	26.65
15	5.0	9.60	24.10	7.0	22.19	26.37
16	5.3	10.68	24.41	6.0	22.29	26.28
17	8.5	10.04	25.41	7.0	22.13	26.73
18	8.0	10.84	25.00	7.5	21.90	26.91
19	7.0	10.22	24.88	6.5	21.78	27.25
21	6.5	10.93	23.98	6.0	22.61	26.76
24	7.0	10.06	24.78	6.1	22.36	26.38
25	9.0	10.07	24.88	8.5	22.75	26.47
26	8.0	10.68	24.41	7.0	22.70	26.76
27	13.0	10.12	26.29	10.0	22.59	26.57
28	7.0	10.28	23.50	9.0	22.59	26.48
29	5.0	11.24	23.77	5.5	22.30	26.78
30	6.0	11.19	23.61	5.0	23.55	26.06
31	4.0	12.01	22.73	5.0	23.87	25.47
32	4.0	12.61	21.86	3.0	24.20	24.74
34	13.0	11.41	22.66	10.0	23.91	25.04
36	6.3	10.70	25.75	5.5	22.75	26.65
37	10.5	10.70	25.50	10.5	22.49	27.17
38	10.0	10.15	29.05	10.0	21.48	29.11
40	3.5	12.73	23.05	5.0	22.47	27.49
41	6.0	11.07	23.79	5.0	22.60	26.92
42	4.2	12.18	23.76	4.0	23.46	26.30
43	5.0	11.80	23.19	3.5	23.93	26.03
46	4.0	12.43	19.64	5.0	23.18	25.93
47	3.0	12.43	20.22	5.0	23.04	25.95
48	6.0	10.36	23.60	6.0	22.61	26.27
49	4.5	10.44	24.09	5.0	22.31	26.27
50	5.5	10.05	24.45	5.0	22.91	25.82
51	3.0	11.39	21.39	3.0	23.27	25.60
52	4.0	11.51	21.08	4.5	22.92	25.89

STATION #	NYH 1986-87 CRUISE I			NYH 1986-87 CRUISE II		
	DEPTH m	TEMP C	SALINITY ppt	DEPTH m	TEMP C	SALINITY ppt
53	3.5	12.42	19.66	5.0	24.13	25.15
54	2.8	12.90	18.84	4.0	23.94	25.41
55	4.5	12.61	18.54	5.0	24.43	24.92
56	6.0	10.98	21.38	6.0	23.71	26.08
57	4.0	11.65	22.42	4.0	23.85	25.53
58	4.0	12.34	19.62	4.5	24.06	24.85
59	4.0	12.38	18.39	4.0	24.40	24.35
60	4.0	12.27	19.18	4.0	24.12	24.70
62	5.0	11.33	22.29	4.5	24.19	24.57
68	7.0	11.39	23.57	7.0	22.54	26.92
69	16.5	10.32	27.22	15.5	22.47	28.27
70	8.0	10.69	25.50	9.0	21.15	29.75
71	15.0	9.85	29.48	14.0	20.86	30.12
73	4.5	9.61	23.57	7.0	22.42	26.37
80	13.0	10.69	23.76	6.5	23.82	25.68
81	3.0	11.86	23.96	4.0	23.65	26.26
82	2.5	12.02	19.78	4.0	22.89	25.97
83	3.0	11.86	20.53	4.0	23.06	25.77
84	4.5	11.44	23.09	5.0	22.68	26.53
85	6.5	9.90	26.05	12.5	21.83	26.92
86	5.5	10.04	25.13	5.0	23.23	25.88
87	4.0	10.31	23.69	5.0	22.53	25.88
88	3.0	10.41	23.41	3.0	23.10	25.58
89	6.0	10.58	24.26	8.0	20.07	29.03
90	3.5	10.58	24.87	5.0	19.69	29.52
91	4.5	10.42	25.24	7.0	19.99	29.26
92	10.0	8.89	29.54	11.0	21.37	28.60
93	5.0	10.44	26.92	6.0	21.71	28.77
94	19.0	9.58	28.87	18.5	20.23	30.94
95	4.3	10.06	28.65	5.0	21.92	28.99
96	4.0	10.09	28.04	5.5	22.18	30.39
97	4.0	10.43	26.78	3.0	22.35	29.35
98	8.0	10.19	30.90	9.0	22.97	30.45
99	5.5	10.20	30.44	6.5	23.23	30.50
100	4.5	10.24	30.36	5.0	23.16	29.49
101	2.5	9.93	30.04	2.0	22.40	27.62
102	4.0	10.17	28.46	3.5	21.89	27.03
103	6.5	10.13	24.28	4.5	22.00	27.26
104	4.5	10.18	24.10	5.0	21.88	27.43
105	17.8	9.64	23.68	16.0	21.50	28.69
A-1	6.0	11.57	21.07	4.5	23.82	25.42
A-2	5.5	10.81	22.89	5.0	23.80	25.57
A-3	5.3	11.13	21.69	4.5	23.68	25.45
A-4	7.0	10.52	23.05	5.5	23.70	25.52

STATION #	NYH 1986-87 CRUISE I			NYH 1986-87 CRUISE II		
	DEPTH m	TEMP C	SALINITY ppt	DEPTH m	TEMP C	SALINITY ppt
A-5	6.0	10.47	23.40	5.0	23.90	25.79
A-6	6.0	10.46	23.72	5.0	23.76	25.87
A-7	6.0	10.73	21.93	6.0	23.59	26.00
A-8	6.0	11.07	21.83	6.0	23.46	25.62
A-9	6.0	10.95	22.01	7.0	22.83	26.04
A-10	6.5	10.44	22.58	8.0	22.76	26.12
B-1	7.0	10.07	25.17	6.0	21.95	26.98
B-2	7.0	10.12	24.94	7.0	21.91	26.83
B-3	8.0	10.07	25.03	6.5	21.94	27.05
B-4	8.5	10.05	25.16	7.0	22.00	26.84
B-5	8.5	10.15	25.05	7.0	22.14	26.76
B-6	9.0	10.02	25.45	7.5	22.05	26.81
B-7	9.0	10.08	25.20	7.0	22.32	26.70
B-8	8.5	10.19	24.71	7.0	22.13	26.69
B-9	9.0	10.15	25.00	7.0	22.12	26.75
B-10	7.0	10.21	24.62	6.0	22.11	26.79
C-1	5.0	10.04	27.13	13.5	21.41	30.58
C-2	18.0	9.71	28.43	14.0	20.96	30.51
C-3	14.0	9.56	29.06	15.0	21.04	30.58
C-4	8.0	9.84	27.27	8.5	22.17	30.06
C-5	14.0	9.81	28.70	11.0	21.84	26.66
C-6	8.0	9.95	28.43	5.5	21.74	27.05
C-7	7.0	9.68	28.07	8.0	21.79	27.01
C-8	8.0	9.55	28.44	7.0	21.66	27.41
C-9	10.0	9.69	28.42	8.5	21.73	27.28
C-10	11.0	9.64	28.57	8.5	21.58	28.36

STATION #	NYH 1986-87 CRUISE III				NYH 1986-87 CRUISE IV		
	DEPTH m	TEMP C	SALINITY ppt	D.O. ug/l	DEPTH m	TEMP C	SALINITY ppt
1	7.0	17.09	25.84	5.70	13.0	5.06	27.56
2	8.0	16.90	25.32	6.96	6.0	3.77	22.98
3	6.0	17.13	25.32	7.46	4.0	3.78	22.99
4	7.0	17.13	25.37	6.61	5.0	3.65	22.83
5	5.0	16.57	25.26	5.98	4.5	3.85	23.23
6	5.0	16.44	25.24	6.00	4.0	4.44	23.47
7	7.5	16.37	26.89	5.71	11.0	5.52	28.23
8	18.0	15.98	27.95	5.90	15.0	5.90	30.23
9	6.5	15.94	28.14	5.60	6.0	5.74	29.63
10	15.0	16.54	27.06	5.43	12.0	5.35	27.99
11	7.3	16.44	27.56	6.57	5.0	4.68	26.20
12	7.0	16.32	28.34	5.80	4.0	4.40	24.38
13	13.0	16.76	26.14	5.20	15.0	5.12	28.55
14	7.0	16.94	24.84	6.42	6.0	3.58	22.16
15	6.0	16.97	24.70	6.64	5.0	3.17	20.52
16	5.0	16.24	24.21	6.67	5.0	4.09	23.92
17	7.6	16.43	28.34	6.95	8.0	4.14	24.12
18	9.0	16.93	26.53	6.06	7.0	4.20	24.03
19	7.0	17.08	25.05	6.81	5.0	4.51	25.54
21	7.0	17.03	25.08	6.19	5.0	3.85	23.32
24	6.0	17.37	25.33	6.89	7.0	3.73	22.54
25	7.5	17.48	25.12	8.67	7.0	3.81	22.54
26	8.0	17.01	25.88	5.50	6.0	4.12	23.84
27	7.0	17.11	25.60	6.39	9.0	4.20	23.86
28	13.0	16.71	27.94	6.72	9.0	3.90	23.29
29	5.0	16.51	24.29	5.54	5.0	5.05	25.00
30	7.5	17.46	25.23	6.41	5.0	3.69	22.78
31	4.0	17.55	25.10	5.71	4.5	3.67	21.98
32	3.5	17.73	24.98	5.84	11.0	4.19	24.06
34	15.0	17.72	24.73	7.41	12.0	4.24	24.28
36	7.0	16.85	23.06	4.67	5.0	4.67	24.58
37	10.0	16.76	25.84	5.17	11.0	5.22	26.39
38	10.0	16.48	26.57	5.95	10.0	5.57	28.84
40	5.0	16.66	25.21	5.79	5.0	4.93	25.27
41	5.5	17.29	25.14	7.57	4.0	3.36	22.34
42	4.0	17.03	25.37	7.29	3.0	3.89	22.89
43	5.5	17.39	25.00	7.88	3.5	3.74	22.92
46	5.0	17.00	24.63	6.28	5.0	3.49	20.74
47	4.5	17.17	25.03	6.00	5.5	3.42	20.95
48	8.0	17.31	25.84	9.72	6.0	3.79	23.20
49	5.5	17.32	25.19	6.88	4.0	3.68	21.62
50	5.1	16.87	26.68	6.68	6.0	3.68	22.11
51	4.0	17.34	24.84	8.11	3.0	3.38	20.58
52	2.9	17.00	24.63	7.24	4.0	3.30	21.05

STATION #	NYH 1986-87 CRUISE III				NYH 1986-87 CRUISE IV		
	DEPTH m	TEMP C	SALINITY ppt	D.O. ug/l	DEPTH m	TEMP C	SALINITY ppt
53	4.0	16.37	24.17	7.21	4.0	3.04	19.73
54	3.0	16.70	24.13	6.66	3.5	3.46	18.98
55	5.0	17.32	24.08	5.37	5.0	3.57	19.58
56	5.5	17.57	18.15	5.44	6.0	3.75	21.68
57	5.0	17.60	25.14	5.11	2.5	3.63	21.77
58	4.0	17.85	24.35	5.91	4.0	3.46	21.52
59	4.0	17.41	24.05	6.65	4.0	3.70	18.75
60	4.0	17.86	24.14	4.93	3.7	3.78	19.93
62	5.5	18.18	24.05	4.55	5.0	3.78	22.20
68	7.0	16.50	23.87	5.30	8.0	4.94	25.58
69	15.0	16.71	25.34	4.90	15.0	5.63	28.57
70	8.0	16.55	26.30	5.84	8.0	5.15	26.97
71	14.0	16.18	27.58	5.97	13.0	5.53	28.97
73	6.0	16.17	24.13	5.57	5.0	3.68	22.37
80	6.0	17.68	24.66	5.74	5.0	3.82	22.16
81	4.0	17.20	25.21	7.13	5.0	3.67	22.62
82	3.0	16.48	24.29	6.83	4.0	3.34	21.36
83	3.0	17.00	24.58	7.67	4.0	3.20	20.69
84	5.0	16.62	24.03	5.40	5.0	4.84	24.92
85	12.0	17.09	26.73	5.54	13.0	4.99	24.25
86	4.0	16.05	23.88	6.11	5.0	3.09	19.98
87	4.0	17.32	24.94	5.43	4.0	3.39	21.35
88	2.0	15.70	24.22	5.82	4.0	3.33	20.45
89	8.0	16.88	26.33	5.92	9.0	5.42	29.30
90	5.0	16.65	26.21	5.52	6.0	5.50	29.35
91	6.0	16.86	25.66	6.01	6.0	5.23	28.19
92	11.0	16.92	25.89	6.92	13.0	6.00	30.17
93	5.0	16.65	26.69	6.92	7.0	5.93	30.32
94	21.0	14.64	29.26	5.56	18.0	5.95	30.46
95	5.0	16.77	26.48	6.76	7.0	5.93	30.28
96	5.0	16.40	25.51	6.01	5.0	5.78	30.19
97	5.0	16.83	26.40	6.72	6.5	5.93	30.35
98	9.0	15.78	28.71	6.21	10.0	6.01	30.81
99	7.0	15.89	28.55	5.12	7.0	6.31	30.87
100	5.0	16.36	27.91	5.50	5.0	5.93	30.27
101	2.0	16.43	28.08	5.30	3.0	5.90	30.24
102	4.5	16.82	26.68	6.62	4.0	5.28	28.70
103	6.0	17.21	25.96	6.45	7.0	4.80	24.24
104	5.0	17.04	26.08	6.63	6.0	4.43	20.63
105	17.0	16.66	27.37	6.24	16.0	5.31	26.20
A-1	7.0	17.54	25.24	6.26	5.0	3.59	20.97
A-2	6.0	17.54	25.30	6.41	3.5	3.56	21.11
A-3	7.0	17.50	25.23	6.11	4.0	4.05	19.58
A-4	7.0	17.45	25.32	6.04	6.0	3.67	20.42

STATION #	NYH 1986-87 CRUISE III				NYH 1986-87 CRUISE IV		
	DEPTH m	TEMP C	SALINITY ppt	D.O. ug/l	DEPTH m	TEMP C	SALINITY ppt
A-5	7.0	17.39	25.41	6.02	6.0	3.63	20.73
A-6	7.0	17.29	25.36	7.13	4.0	3.53	21.57
A-7	7.0	17.42	25.34	5.74	6.0	3.66	19.62
A-8	7.5	17.38	25.42	5.48	6.0	3.66	19.99
A-9	6.0	17.45	25.27	7.06	6.0	3.61	22.51
A-10	7.0	17.47	25.36	7.80	8.0	3.89	23.54
B-1	8.5	16.97	25.38	8.49	6.0	4.59	25.39
B-2	7.5	17.00	25.15	6.76	6.0	4.61	25.63
B-3	8.0	16.94	24.96	6.97	6.0	4.51	25.45
B-4	8.5	16.89	25.16	6.26	7.0	4.55	25.95
B-5	9.0	16.90	25.66	6.67	7.0	4.56	26.43
B-6	9.0	16.91	25.41	6.16	7.0	4.14	24.12
B-7	5.0	17.12	25.06	6.84	7.0	4.15	24.03
B-8	8.5	16.91	25.32	6.24	7.0	4.46	26.04
B-9	8.0	16.98	25.16	7.69	7.0	4.49	25.21
B-10	7.0	17.04	24.95	6.20	6.0	4.53	25.31
C-1	9.0	16.08	27.65	5.66	6.0	5.81	30.05
C-2	15.5	15.75	28.16	6.16	16.0	5.70	29.55
C-3	15.0	15.88	28.19	5.72	15.0	5.81	30.01
C-4	12.0	15.95	28.05	5.51	11.0	5.77	28.97
C-5	14.0	15.95	28.31	8.23	13.0	5.79	29.67
C-6	7.3	16.26	27.80	7.29	7.0	5.99	29.38
C-7	8.5	16.48	27.64	6.57	8.0	5.26	24.49
C-8	9.0	16.33	27.88	6.46	9.0	5.47	26.60
C-9	9.0	15.99	28.30	7.77	9.0	5.62	27.04
C-10	10.5	15.97	28.22	7.16	11.0	5.80	28.83

Appendix B. Sediment Analysis Data

Cruise: I Spring (4/86)
 IV Winter (1/87)

NYH 1986-87 SEDIMENT ANALYSIS

STATION #	CRUISE I					CRUISE IV			
	% GRAVEL	% SAND	% SILT	% CLAY	% LOI	% GRAVEL	% SAND	% SILT	% CLAY
1	28.1	22.4	31.4	18.1	7.8	0.0	8.6	57.1	34.3
2	6.1	42.7	31.0	20.3	7.7	39.3	41.7	10.9	8.1
3	0.4	98.5	0.0	1.1	1.0	0.5	99.5	0.0	0.0
4	8.8	72.4	7.9	10.9	5.0	3.8	87.2	2.2	6.7
5	3.7	95.7	0.7	0.0	1.6	2.4	87.2	4.2	6.3
6	0.2	98.4	0.2	1.2	0.8	2.8	97.2	0.0	0.0
7	0.0	43.4	37.4	19.2	5.1	2.1	28.3	46.4	23.2
8	0.0	98.7	0.1	1.1	0.7	0.2	99.8	0.0	0.0
9	0.0	98.1	0.7	1.2	2.7	2.3	65.8	21.3	10.7
10	0.0	8.1	43.0	48.9	12.9	0.0	4.8	41.7	53.6
11	0.2	98.9	0.1	0.8	0.9	4.5	92.2	0.0	3.2
12	6.2	91.4	0.7	1.8	3.1	0.0	97.3	0.0	2.7
13	4.3	87.0	1.2	7.5	6.0	0.8	95.3	0.0	4.0
14	0.0	21.7	37.4	40.9	10.2	0.0	25.0	42.2	32.8
15	0.0	12.7	45.7	41.6	8.5	3.7	14.4	38.6	43.4
16	2.4	5.9	49.7	42.0	12.6	0.9	6.8	46.1	46.1
17	0.0	32.7	33.0	34.3	9.0	0.0	19.7	58.0	22.3
18	1.3	72.6	11.2	14.8	5.5	18.1	25.1	31.9	24.8
19	2.7	94.4	0.8	2.2	1.3	0.1	95.5	0.0	4.3
21	3.0	95.6	0.2	1.1	1.3	0.0	6.5	93.2	0.2
24	11.7	19.5	39.5	29.3	10.1	2.7	23.2	28.5	45.6
25	0.0	7.4	46.0	46.7	12.1	6.6	13.3	34.3	45.8
26	5.2	74.9	10.3	9.6	4.2	7.1	86.3	4.5	2.2
27	0.0	15.9	44.0	40.0	7.2	0.3	18.3	56.4	25.0
28	12.9	57.1	14.3	15.7	7.2	4.1	27.0	37.1	31.8
29	0.6	97.1	2.2	0.1	1.2	0.1	92.7	0.0	7.2
30	0.5	19.1	60.8	19.7	5.8	23.0	49.4	27.5	0.0
31	2.5	95.9	0.4	1.3	1.6	3.3	21.4	38.9	36.4
32	11.6	78.2	4.6	5.6	5.3	0.0	2.3	35.5	62.2
34	0.5	5.2	48.4	45.9	10.4	0.0	4.5	59.7	35.8
36	0.2	63.1	21.8	15.0	5.1	7.7	62.4	15.0	15.0
37	0.0	17.0	45.7	37.2	9.5	0.0	12.2	48.8	39.0
38	0.0	82.5	11.1	6.4	2.3	0.1	72.5	17.2	10.3
40	2.0	97.2	0.6	0.2	1.1	1.7	94.5	0.0	3.9
41	4.9	93.1	0.7	1.4	4.2	22.3	68.6	6.1	3.0
42	19.0	76.2	2.6	2.2	3.2	1.2	95.5	3.3	0.0
43	1.1	50.0	32.8	16.1	6.8	7.9	46.9	29.0	16.1
46	1.6	91.3	3.3	3.8	2.1	16.5	47.1	27.3	9.1
47	0.0	98.6	0.2	1.2	0.8	0.0	100.0	0.0	0.0
48	0.0	10.7	46.4	42.9	8.7	1.0	86.4	0.0	12.6
49	0.0	94.7	2.0	3.3	1.1	3.6	90.1	0.0	6.3
50	6.0	35.4	30.5	28.1	8.3	0.0	44.2	10.2	45.7
51	3.0	95.5	0.0	1.5	1.3	0.2	98.4	0.0	1.4

NYH 1986-87 SEDIMENT ANALYSIS

STATION #	CRUISE I					CRUISE IV			
	% GRAVEL	% SAND	% SILT	% CLAY	% LOI	% GRAVEL	% SAND	% SILT	% CLAY
52	0.6	95.0	2.7	1.7	1.5	3.5	64.7	0.0	31.8
53	2.7	35.7	31.4	30.2	8.6	5.8	67.8	11.3	15.0
54	0.8	97.5	0.5	1.3	1.6	2.6	70.2	12.4	14.9
55	10.3	26.2	33.1	30.5	9.2	3.9	24.6	30.1	41.4
56	0.6	7.5	52.8	39.1	9.4	1.4	53.4	24.9	20.4
57	3.4	93.4	1.2	2.0	2.4	2.4	93.9	2.5	1.3
58	5.8	13.6	47.4	33.2	11.8	2.3	5.8	54.1	37.8
59	0.0	15.6	43.9	40.5	4.8	2.0	18.4	42.5	37.2
60	2.5	33.5	35.7	28.3	6.4	0.4	80.4	12.8	6.4
62	0.0	1.9	54.8	43.3	9.7	0.0	3.3	52.7	43.9
68	3.2	80.4	8.4	8.0	7.7	0.0	25.9	24.7	49.4
69	0.0	93.3	2.4	4.4	0.2	0.9	82.7	10.3	6.2
70	0.0	38.4	25.1	36.5	14.6	8.8	66.0	7.2	18.0
71	0.0	95.2	1.8	3.0	0.9	0.0	96.3	0.0	3.7
73	1.3	41.3	22.0	35.3	5.1	1.4	62.8	21.5	14.3
80	0.0	2.6	47.7	49.7	11.2	0.0	24.7	54.2	21.1
81	0.1	98.9	0.0	1.0	0.5	9.2	84.5	0.0	6.3
82	0.0	97.6	0.5	2.0	0.8	0.0	98.7	1.3	0.0
83	12.6	85.0	0.6	1.8	0.8	1.0	97.1	1.8	0.0
84	14.0	83.5	1.1	1.4	0.8	5.2	82.0	11.4	1.4
85	0.0	50.5	23.0	26.5	6.5	0.9	12.9	64.7	21.6
86	0.0	64.8	13.8	21.4	4.5	0.6	3.8	66.2	29.4
87	0.0	21.3	36.8	41.9	10.6	3.1	6.6	47.5	42.8
88	3.6	94.7	0.1	1.5	0.6	0.6	91.2	6.5	1.6
89	0.0	99.0	0.1	0.9	0.9	1.9	94.1	4.0	0.0
90	0.0	99.3	0.1	0.6	0.1	0.0	95.9	0.0	4.1
91	0.8	98.0	1.3	0.0	0.6	5.9	94.1	0.0	0.0
92	23.8	75.0	0.5	0.7	0.7	13.7	83.2	3.1	0.0
93	5.3	93.5	0.1	1.1	1.1	13.1	86.9	0.0	0.0
94	0.0	98.1	0.3	1.6	0.6	0.7	97.5	1.8	0.0
95	41.1	57.9	0.2	0.7	0.4	5.5	94.5	0.0	0.0
96	0.4	99.3	0.2	0.0	0.3	0.5	98.1	0.0	1.4
97	0.0	99.0	0.1	0.9	0.1	0.1	95.7	0.0	4.2
98	52.2	44.9	1.1	1.8	1.3	9.1	59.8	9.3	21.7
99	21.8	70.9	3.8	3.6	11.0	28.4	63.4	6.2	2.1
100	0.0	98.7	0.1	1.2	1.4	0.0	97.9	0.0	2.1
101	0.0	98.8	0.3	0.8	0.8	0.0	96.3	3.7	0.0
102	0.0	96.4	2.0	1.6	0.4	3.1	95.4	1.5	0.0
103	7.9	62.8	16.4	12.9	4.5	74.8	21.2	2.7	1.4
104	2.1	80.0	10.7	7.1	3.1	3.9	79.8	3.3	13.1
105	0.0	35.8	39.9	24.4	5.5	0.0	45.3	27.4	27.4
A-1	12.5	53.1	18.3	16.0	4.4	9.5	55.2	20.5	14.9
A-2	3.3	88.8	5.0	2.9	2.0	2.0	89.8	8.2	0.0

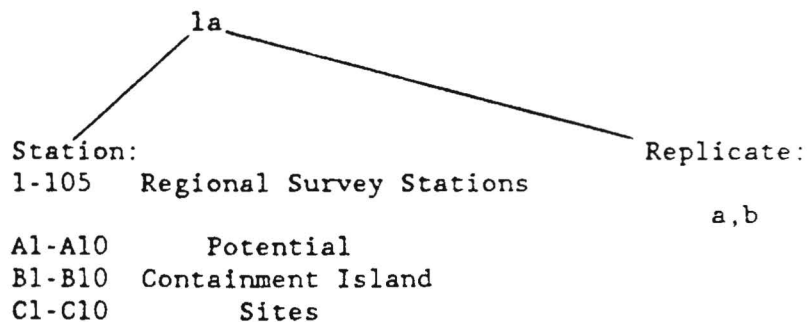
NYH 1986-87 SEDIMENT ANALYSIS

STATION #	CRUISE I					CRUISE IV			
	% GRAVEL	% SAND	% SILT	% CLAY	% LOI	% GRAVEL	% SAND	% SILT	% CLAY
A-3	1.3	96.6	0.6	1.5	1.1	0.2	96.5	0.0	3.2
A-4	6.6	3.7	54.2	35.5	9.0	3.3	6.5	65.9	24.3
A-5	7.2	10.5	49.3	33.0	6.0	12.0	44.3	17.5	26.2
A-6	2.9	15.4	51.1	30.6	7.9	11.8	18.7	49.0	20.4
A-7	0.0	18.9	46.3	34.8	7.6	0.5	11.6	48.8	39.1
A-8	2.9	8.5	53.3	35.3	7.3	7.3	19.2	29.4	44.1
A-9	0.0	71.2	15.1	13.7	3.8	4.1	76.2	4.9	14.8
A-10	2.8	10.1	49.2	38.0	7.8	7.2	24.7	34.1	34.1
B-1	0.0	98.1	0.4	1.5	1.4	0.5	94.1	0.0	5.4
B-2	0.4	97.6	0.8	1.2	1.0	2.2	96.0	0.0	1.8
B-3	0.0	96.7	0.9	2.5	1.1	0.4	95.6	0.0	4.0
B-4	0.0	89.0	11.0	0.0	3.4	0.8	75.5	7.9	15.8
B-5	6.7	31.7	28.6	33.0	7.2	1.3	54.7	16.8	27.3
B-6	0.0	34.8	31.4	33.8	9.6	5.2	24.6	31.2	39.0
B-7	4.9	45.8	21.5	27.9	6.0	0.4	18.8	44.5	36.4
B-8	17.9	41.9	18.6	21.6	9.9	0.0	0.4	99.5	0.1
B-9	3.1	80.6	7.2	9.1	3.9	2.3	83.7	0.0	14.0
B-10	2.8	90.0	3.1	4.1	2.0	0.0	94.9	3.4	1.7
C-1	34.7	49.3	16.0	0.0	3.3	0.2	97.1	0.0	2.7
C-2	0.0	88.3	4.8	6.8	1.9	1.2	95.5	0.0	3.3
C-3	0.0	98.6	1.1	0.3	0.8	0.1	96.3	3.5	0.0
C-4	0.9	97.5	0.5	1.1	0.5	6.2	93.8	0.0	0.0
C-5	0.0	6.3	49.5	44.1	15.5	0.1	96.0	0.0	3.9
C-6	0.0	29.5	31.9	38.5	12.8	8.1	27.8	26.7	37.4
C-7	11.8	50.8	37.5	0.0	10.2	1.1	46.4	0.0	52.5
C-8	6.0	40.6	23.8	29.6	10.6	34.7	25.7	14.1	25.4
C-9	5.8	33.3	28.7	32.2	10.8	11.4	51.7	0.0	36.8
C-10	6.4	89.7	1.6	2.2	1.0	8.2	87.3	0.0	4.6

Appendix C. Biological Data Tabulated by Sample

Cruise: I Spring (4/86)
 II Summer (7/86)
 III Fall (10/86)
 IV Winter (1/87)

Sample Identification Code Key



CRUISE I (4/86)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	5a	6b
Porifera												
Cliona sp.	*											
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean					2	2					2	4
Aschelminthes												
Unidentified nematoda	-1											
Ectoprocta												
Electra sp.	*											
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata							6		2	1	2	
Heteromastus filiformis	74	156	73	93			24	6		3	3	
Tharyx acutus	12	39	5	1			6	1	2			
Glycera americana	3	4	6	6	3		18	15	4	16	3	2
Glycera dibranchiata							1					
Lumbrineris tenuis		1					1					
Nephtys bucera									1	2		
Nephtys picta											1	5
Nereis succinea	16	11	13	7			2					
Pectinaria gouldii	2	1					2					
Eteone lactea	27	25	20	8			20	11	1			
Eumida sanguinea	8	4	5				8					
Harmothoe extenuata	5	12					2	9				
Lepidonotus squamatus			2					1				
Sabellaria vulgaris		1										
Polydora ligni									2			
Scolelepis squamata		1										
Spiophanes bombyx									2	1	1	1
Spio setosa					1		6	5	16			
Streblospio benedicti	1						1	1	6			
Mollusca												
Gastropoda												
Crepidula fornicata	3	2		1			6		1			
Crepidula plana							4		7			
Urosalpinx cinereus	1											
Ilyanassa obsoleta	1		1						1			
Massarius trivittata	4	3	1	1			2	4	1	1		1
Bivalvia												
Lyonsia hyalina				2								1
Mulinia lateralis			2	2				1	2	1	2	
Spisula solidissima												1
Mya arenaria	1		15	20						1		
Mytilus edulis							1	1		1		
Petricola pholadiformis	3	1	4	4			10	3				
Ensis directus	1						1	5				
Tellina agilis					5		4	1	6	3	6	
Mercenaria mercenaria	1	2		2			2			1	1	
Arthropoda												
Amphipoda												
Ampelisca abdita	858	319	3422	2479			2468	875		1		
Ampelisca vadorum				1								
Unciola dissimilis			2	7	4		2	20	2	1		
Unciola serrata	7	8	13				5					
Unciola sp.	1											
Corophium tuberculatum	4	3	47	44			19	31				
Elasmopus levis	7	3	2	3			4					
Paraphoxus spinosus	1	1		1			9	12				
Merostomata												
Limulus polyphemus				1								
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Neomysis americana	1	4										
Cumacea												

CRUISE I (4/86)

	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
<i>Oxyurostylis smithi</i>							2		2	1		
Decapoda												
<i>Pagurus longicarpus</i>		4	3									
<i>Ovalipes ocellatus</i>											1	
<i>Neopanope texana</i>	3	9				1						
Isopoda												
<i>Edotea triloba</i>	1						8	2				
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Chordata												
Vertebrata												
<i>Pseudopleuronectes americanus</i>		1										

CRUISE I (4/86)	13a	13b	14a	14b	15a	15b	16a	16b	17a	17b	18a	18b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean												1
Aschelminthes												
Unidentified nematoda		*										
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	19				4		1	4	2		24	27
Capitella capitata	9					1						8
Heteromastus filiformis	9	4			24	8		4			81	
Spirochaetoperus oculatus											1	
Cirratulus grandis											1	
Tharyx acutus	60	4			1	1						
Glycera americana	15		1	2	5	4	3	4		1	12	9
Glycera capitata	1							1				
Glycera dibranchiata		6										
Maldanopsis elongata					3	1						
Nephtys incisa						1						
Nephtys picta		1										
Nereis succinea	4				4	1	5	6			4	3
Aricidea catherinae	2											
Pectinaria gouldii						2		1				
Eteone heteropoda										1		
Eteone lactea	6				14	26		17				6
Eumida sanguinea			1		4			4				
Paranaitis speciosa								3			2	
Phyllococe arenae	5											
Harmothoe extenuata	7	2			3	1		3			4	1
Spio setosa	2											
Streblospio benedicti					9	1		2				
Mollusca												
Gastropoda												
Acteon punctostriatus						1		1				
Crepidula fornicata												2
Crepidula plana	1							4				1
Ilyanassa obsoleta						1						
Nassarius trivittata	5	1	1								10	66
Bivalvia												
Lyonsia hyalina			1			1	1				1	
Mulinia lateralis					43	57	6	17				
Spisula solidissima				1								
Mya arenaria												3
Mytilus edulis	21											
Nucula proxima											14	6
Petricola pholadiformis					3	1	2	5				3
Ensis directus			1		2	3		2			1	
Tellina agilis	9	17						1		3	1	6
Mercenaria mercenaria					1							
Arthropoda												
Amphipoda												
Ampelisca abdita	9	1	485	654	239	835	825	471	111	509	1238	2635
Ampelisca vadorum	5											
Unciola dissimilis					7		1	3		5	5	2
Unciolairrorata	8											
Unciola serrata	5	1	1								49	1
Corophium tuberculatum	4		8	6	12		1	11			15	16
Elasmopus levis	4			1				1				2
Melita nitida	2							1				
Paraphoxus spinosus	124	3								5	52	22
Merostomata												
Ostrococha												
Copepoda												
Cirripedia												
Mysidacea												

CRUISE I (4/86)	13a	13b	14a	14b	15a	15b	16a	16b	17a	17b	18a	18b
Cumacea												
<i>Oxyurostylis smithi</i>	2											
Decapoda												
<i>Crangon septemspinosa</i>	1											
<i>Libinia emarginata</i>	1											
<i>Pagurus longicarpus</i>	1											
Isopoda												
<i>Edotea triloba</i>	1				2		2				4	1
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone									1		1	
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1											
Aschelminthes												
Ectoprocta												
Electra sp.								*				
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	2		2		1				2	4		
Capitella capitata												1
Heteromastus filiformis					2	4			101	63		
Tharyx acutus	1	2								1		
Pherusa affinis									1			
Glycera americana			5	12	6	3	3		8	3	2	6
Glycera dibranchiata									1	1		
Lumbrineris acuta			1						1			
Magelona rosea		1										
Nephtys picta	16	20	1									
Nereis succinea						1			4	1		2
Neploscoloplos robustus					1							
Pectinaria gouldii									2		1	
Eteone lactea						1					1	11
Eumida sanguinea											2	
Paranaitis speciosa					1		1				1	
Karmothoe extenuata								1	2	1		
Lepidonotus squamatus									1			
Leonice cirrata			18	2								
Scolelepis squamata										3		
Spiophanes bombyx	2	7										
Mollusca												
Gastropoda												
Crepidula fornicata				2				1	20			
Crepidula plana									2	1		
Nassarius trivittata	3	4	2	1				4	4	1		
Bivalvia												
Lyonsia hyalina			2						1		1	
Mulinia lateralis			1	2	5	1	2	13				5
Mya arenaria									3	1		
Mytilus edulis			19						2	1		1
Nucula proxima									5			
Petricola pholadiformis					2	3	1		1	2	1	
Ensis directus								1	1			
Siliqua costata									1			
Tellina agilis	5	11	10	7	2	1			1			
Mercenaria mercenaria	1		4	1	2	1			1	1		1
Arthropoda												
Amphipoda												
Ampelisca abdita		1			659	297	530	373	1282	3177	387	1548
Unciola dissimilis		1	1	3					3	2		
Unciola serrata				1					8			
Corophium tuberculatum			1		14	7	6	25	43	19		5
Elasmopus levis			1						2	6		
Paraphoxus spinosus									35	31	1	1
Rhepoxynus epistomus							1					
Merostomata												
Ostrocoata												
Copepoda												
Labidocra aestiva						1						
Cirripedia												
Balanus eburneus									3			
Mysidacea												
Neomysis americana					1							
Cumacea												
Oxyurostylis smithi		2								1		

CRUISE 1 (4/86)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
Decapoda												
<i>Ovalipes ocellatus</i>			1							1		
Isopoda												
<i>Edotea triloba</i>					5					1	1	1
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean						2	1				1	1
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				3	136							
Capitella capitata							1					
Meteromastus filiformis	105	100			34							
Tharyx acutus	2	6	3									
Glycera americana	11	8	11	8	5	1	7	13	9	15		
Podarke obscura	2	1										
Lumbrineris acuta									2			
Nereis succinea	5	15										
Pectinaria gouldii											1	5
Eteone lactea	12	21			1							
Eumida sanguinea	3	1	1				1					
Paranaitis speciosa	2	1										
Phyllodoce arenae			1									
Lepidonotus squamatus	4											
Leonice cirrata				15	4							
Scoelelepis squamata				18	12	1						
Streblospio benedicti				15	36				2	3		
Mollusca												
Gastropoda												
Crepidula fornicata	1							1				
Ilyanassa obsoleta	2	6			2	1		2				
Nassarius trivittata	8	6	2	1	1	1	2					
Bivalvia												
Lyonsia hyalina			1									
Mulinia lateralis			2	8		1						
Mya arenaria	14	9			3	1						
Mytilus edulis			2	4		2						
Petricola pholadiformis	7	7				2						
Siliqua costata						1						
Tellina agilis	1	5	4	7		3						
Mercenaria mercenaria	4	11	2	1	1		1			1		
Pitar morrhuana						3						
Arthropoda												
Amphipoda												
Ampelisca abdita	1315	1397			816	717			1			
Unciola serrata	4	1										
Corophium tuberculatum	53	34		1		5	2					
Elasmopus levis	3	3		1					1			
Melita nitida	1											
Paraphoxus spinosus	1	3		1								
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi			2	8								
Decapoda												
Pagurus longicarpus	1											
Ovalipes ocellatus			1									
Neopanope texana	1											
Isopoda												
Edotea triloba	12	5		4								
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid							*					
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1			1	1	1					
Aschelminthes												
Unidentified nematoda						1	2					
Ectoprocta												
Electra sp.							*	*	*	*	*	*
Phoronida												
Phoronis architecta						2						
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	41	73	365	205	737	1487						
Drilonereis longa									1		2	
Capitella capitata					2	9						
Heteromastus filiformis		2	6				8	2	9	8	56	7
Spiochaetoperus oculatus					1	3	1					
Tharyx acutus						7	14	2	19	17	6	1
Pherusa affinis												
Glycera americana	5	2			4	6	10	14	7	3	8	4
Glycera dibranchiata							2	3	5	11	9	14
Nephtys incisa			3	2	1	4						
Nephtys picta					2					1		
Nereis succinea	1	7					1		1			1
Diopatra cuprea												1
Haploscoloplos fragilis						2						
Aricidea catherinae							22	1				
Pectinaria gouldii	1										2	
Eteone lactea	6	56	1		7	153	4	1	6	2	7	1
Eumida sanguinea						2	6		9	3	9	2
Paranaitis speciosa			2	3	1	7						
Phyllodoce arenae					1	1						
Harmothoe extenuata	1				1	7	3	2	10			1
Lepidonotus squamatus								1			1	
Sabellaria vulgaris							3		7	13		
Scolelepis squamata							4	1				
Spiophanes bombyx						3						
Spio setosa					1		5		2	12	8	6
Streblospio benedicti	3	9	31	2	6	177	4		2	5	2	
Exogone hebes											1	
Mollusca												
Gastropoda												
Crepidula fornicata							15	48	60	34		1
Crepidula plana							9	10	14	8		
Urosalpinx cinereus											1	
Ilyanassa obsoleta										2	7	3
Massarius trivittata		2				1	7		21	17	4	
Odostomia producta											1	
Bivalvia												
Anadara transversa								1				
Lyonsia hyalina		1					1	2				
Mulinia lateralis	1	5	3	2	16	35		2				
Mya arenaria		5	1			1						1
Mytilus edulis				1	3	35	132	2			2	
Yoldia limatula				1	4							
Yoldia sapotilla						1						
Nucula proxima												1
Petricola pholadiformis							1	1	1	1	1	
Ensis directus	1				1	1	1		1			
Siliqua costata					1							
Tellina agilis	3	2	2		20	20	2	4	2		1	1
Gemma gemma							10	9				
Mercenaria mercenaria					2	1	2		1		2	1
Arthropoda												
Amphipoda												
Ampelisca abdita	473	1292	3	1	45	30		1	14	1	27	37

CRUISE I (4/86)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Unciola irrorata						1						
Unciola serrata							10		13	14	16	2
Unidentified caprellidae							5	1				
Corophium tuberculatum	2	5	1				5	3	6		18	
Elasmopus levis							5	1	8	8	2	2
Melita nitida									1			
Melitid sp.						1						
Paraphoxus spinosus							22	21	10	8	16	45
Rhepoxynus epistomus	3											
Parametopella cypris							1					
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus amphitrite							23		7	23		
Mysidacea												
Heteromysis formosa										1		
Cumacea												
Oxyurostylis smithi							1			4	6	3
Decapoda												
Pagurus longicarpus									1			12
Ovalipes ocellatus										1		
Neopanope texana							1		3		2	6
Isopoda												
Edotea triloba		5	1	1		5	11	1			2	
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
Porifera												
Cliona sp.					*							
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean			1		1				1			
Aschelminthes												
Ectoprocta												
Electra sp.										*		
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	2		1	1							1	
Drilonereis longa	1										2	
Meteromastus filiformis	171	36	1				1		1			
Tharyx acutus	2		3						1			
Glycera americana	13	1	1		3	2	14	3	3		3	1
Glycera capitata			1									
Glycera dibranchiata	7	3	2	1		2			5	7		
Maldanopsis elongata	3											
Nereis succinea	2											
Haploscleros fragilis							1					
Haploscleros robustus	3	1	1			1	4	2				
Pectinaria gouldii			1									
Eteone lactea	15		12	2			7	5	1		9	26
Eumida sanguinea								1				
Paranaitis speciosa			2				5					
Phyllococe arenae	1											
Sabellaria vulgaris			3									
Spio setosa	9		1	2					8	4		
Streblospio benedicti			97	1			2	2		2	7	4
Mollusca												
Gastropoda												
Crepidula fornicata			19	2	2							
Crepidula plana			1									
Ilyanassa obsoleta	13	4	5					1		1		
Nassarius trivittata			14					3	3			
Bivalvia												
Lyonsia hyalina	1						3				1	
Mulinia lateralis			40	7			168	43			10	9
Mya arenaria			1									1
Petricola pholadiformis	1	1					5					
Ensis directus							1	2				
Tellina agilis					3	1				1		1
Gemma gemma											1	
Mercenaria mercenaria	1	3		1			2	1			1	
Arthropoda												
Amphipoda												
Ampelisca abdita	1830	1144	1		2		853	913	41	61	122	670
Unciola dissimilis							1					
Unciola serrata			1				1					
Corophium tuberculatum		4					7	7	3	1		8
Paraphoxus spinosus	1											
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi	1											
Decapoda												
Pagurus longicarpus			1		1							
Isopoda												
Edotea triloba		1										1
Echinodermata												
Chordata												
Vertebrata												

CRUISE 1 (4/86)	51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
Porifera												
Cliona sp.					*							
Cnidaria												
Anthozoa												
Metridium senile (tent.)									1			
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1					1		1				1
Aschelminthes												
Ectoprocta												
Electra sp.	*	*					*	*	*			
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Capitella capitata						2						
Heteromastus filiformis	1	1	3	15	9	38	3		20	4		
Spirochaetoperus oculatus									1			
Tharyx acutus	12	3		1		1			1		1	
Glycera americana	6				1	1	22	29	6	3	4	2
Glycera dibranchiata	20	13	9	16	6	11	9	2	1	1		
Podarke obscura									13	1		
Nephtys picta		1										
Nereis succinea								3	4	2	1	
Haploscoloplos robustus	1				24	5			9	21		
Pectinaria gouldii				1					1	5		
Eteone lactea			1	3	2	3			10		2	1
Eumida sanguinea				1				1				
Paranaitis speciosa									1			
Phyllodoce arenae				1					1			
Sabellaria vulgaris							32	56				
Spio setosa			2	3		1			1	1		
Streblospio benedicti	4		14	25	1	11		1	7	7	1	
Mollusca												
Gastropoda												
Crepidula fornicata	1					3	15	33			1	
Crepidula plana							16	48	2			
Ilyanassa obsoleta									2	4	9	3
Nassarius trivittata			2	1	9	5		1				6
Bivalvia												
Lyonsia hyalina										1		
Mulinia lateralis			7	11	29	53				4	4	13
Mya arenaria						1					18	30
Modiolus demissus					1							
Petricola pholadiformis												1
Tellina agilis	3		2	1	1	1	4	1				
Mercenaria mercenaria			1	4		2						
Arthropoda												
Amphipoda												
Ampelisca abdita					2	6			27	17	347	540
Unciola dissimilis	1									1		
Unciola serrata	2		2				2					
Corophium tuberculatum							2		1	2	5	1
Melita nitida									2			
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus improvisus							34	67	19			
Mysidacea												
Neomysis americana	1											
Cumacea												
Oxyurostylis smithi			2	2			2	1				
Decapoda												
Pagurus longicarpus						1			1			
Neopanope texana					1				2	1		
Isopoda												
Edotea triloba				1				1	1			
Echinodermata												
Chordata												

CRUISE I (4/86)
Vertebrata

51a 51b 52a 52b 53a 53b 54a 54b 55a 55b 56a 56b

CRUISE I (4/86)	57a	57b	58a	58b	59a	59b	60a	60b	62a	62b	68a	68b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone											1	
Hydrozoa												*
Unidentified hydroid												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean					1						1	
Aschelminthes												
Ectoprocta												
Alcyonidium sp.											*	
Electra sp.	*	*									*	
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata					2		1				40	39
Drilonereis longa			2									
Capitella capitata											50	2
Heteromastus filiformis				2							24	1
Tharyx acutus	2											
Glycera americana	2	11	7	4	2	3	1	1			6	4
Glycera dibranchiata	14	19				2	1	2	1			5
Nephtys incisa	1											
Nereis arenaceodonta											1	
Nereis succinea					2							
Kaploscoplos robustus					4	1	3					
Pectinaria gouldii				1			4	3	3	2		
Eteone lactea								1			38	8
Eumida sanguinea											11	1
Paranaitis speciosa							1	1			3	2
Phyllodoce arenae											1	
Harmothoe extenuata											65	49
Sabellaria vulgaris											1	
Spio setosa												8
Streblospio benedicti							3	2				4
Mollusca												
Gastropoda												
Cormabella sp.											1	
Ilyanassa obsoleta				1								
Nassarius trivittata											8	
Bivalvia												
Lyonsia hyalina		1									2	1
Mulinia lateralis					1			1		1	8	2
Mya arenaria			15	17	5	1	23	12			2	1
Mytilus edulis											823	201
Petricola pholadiformis											2	1
Esis directus								1				
Tellina agilis	2										14	14
Mercenaria mercenaria	1	1									1	
Arthropoda												
Amphipoda												
Ampelisca abdita				2			1				2	5
Unciola dissimilis											1	
Unciola serrata											60	55
Corophium tuberculatum											8	1
Erichthonius brasiliensis											3	
Elasmopus levis				1							13	3
Paraphoxus spinosus												2
Rhepoxynuis epistomus											8	
Merostomata												
Ostrocooda												
Unidentified ostrocooda											1	
Copepoda												
Cirripedia												
Balanus balanus					1							
Balanus improvisus			4									1
Mysidacea												
Cumacea												
Oxyurostylis smithi											5	13

CRUISE 1 (4/86)	57a	57b	58a	58b	59a	59b	60a	60b	62a	62b	68a	68b
Decapoda												
Pagurus longicarpus	1											
Ovalipes ocellatus												1
Neopanope texana			3		1							
Isopoda												
Edotea triloba								1			6	3
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Porifera												
Unidentified sponge										*		
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid			*	*								
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1	1	1				1				
Aschelminthes												
Unidentified nematoda							2					
Ectoprocta												
Cryptosula sp.			*									
Electra sp.			*	*						*		
Phoronida												
Phoronis architecta		1										
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	262	538	38	48	238	169		2	2	1		
Capitella capitata	1	32	3	1	2	4		4				
Heteromastus filiformis		76	5	11	2	6		53				
Spirochaetoperus oculatus			1									
Tharyx acutus			6	12								
Pherusa affinis		1		1								
Glycera americana		5	8	13				6	1		2	2
Glycera dibranchiata		2			1	1		1				3
Maldanopsis elongata								2				
Nephtys picta	30	6		1	31	47						
Nereis succinea				1			1	7				
Diopatra cuprea				1			1	1				
Maploscoloplos robustus							2	1				
Aricidea catherinae				1								
Pectinaria gouldii							2	1				
Eteone lactea	1	283	1				7	31				
Eumida sanguinea		5	6	9				2				
Paranaitis speciosa	1	7	1						1			
Phyllodoce arenae		1		1								
Harmothoe extenuata		4	28	31				1				
Lepidonotus squamatus			2									
Hydroides dianthus				6								
Sthenelais limicola					1							
Spiophanes bombyx	1		1	1							1	
Spio setosa	2	8	8	7	3	1						
Streblospio benedicti	2	168	2	3			1	15				
Autolytus cornutus		10		3								
Autolytus prolifer		1										
Mollusca												
Gastropoda												
Cormabella sp.			1	2								
Acteon punctostriatus		1						3				
Crepidula plana				1								
Massarius trivittata		15	6	6		5		1	2			
Retusa obtusa		1										
Bivalvia												
Lyonsia hyalina		1						1				
Mulinia lateralis	4	19	1	2			10	21	2	2		
Spisula solidissima	7	28			28	7						
Mya arenaria								1				
Mytilus edulis	5	118	5770	6043	11	10	2	4				
Yoldia sapotilla		1				1						
Nucula proxima		32										
Petricola pholadiformis	1			1		1	1	1		1		
Ensis directus		3		1	3	2						
Siliqua costata						7						
Solen viridis	1											
Tellina agilis	70	44	5	12	36	22						
Gemma gemma											148	27
Mercenaria mercenaria								5		1		
Arthropoda												
Amphipoda												

CRUISE 1 (4/86)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
<i>Ampelisca abdita</i>	1	13	1			1	841	1090	12	2	1	
<i>Ampelisca vadorum</i>						1						
<i>Unciola dissimilis</i>								1				
<i>Unciola irrorata</i>		2			1							
<i>Unciola serrata</i>	4		13	25	1		1	4				
Unidentified caprellidae		2	5	13								
<i>Corophium tuberculatum</i>		8	1	2			7	30				
<i>Erichthonius brasiliensis</i>				4								
<i>Acanthohaustorius intermedius</i>												5
<i>Acanthohaustorius similis</i>												2
<i>Bathyporeia parkeri</i>											1	1
<i>Elasmopus levis</i>		27		8				3				
<i>Paraphoxus spinosus</i>	1	4	32	104								
<i>Phoxocephalus holbolli</i>			1									
<i>Rhepoxynus epistomus</i>											13	5
Merostomata												
Ostrocooda												
Unidentified ostrocooda			1									
Copepoda												
Cirripedia												
<i>Balanus improvisus</i>			1									
Mysidacea												
Cumacea												
<i>Oxyurostylis smithi</i>	2	4	9	4		2						
Decapoda												
Caridea post larvae						1						
<i>Cancer irroratus</i>				1								
<i>Crangon septemspinosa</i>			2	1								
<i>Pagurus longicarpus</i>				1								
<i>Callinectes sapidus</i>		1										
Isopoda												
<i>Edotea triloba</i>		10	2	1	1	2	1	3		2		
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Stylactis hooperi				*								
Platyhelminthes												
Rhynchozoela												
Aschelminthes												
Unidentified nematoda							3					
Ectoprocta												
Electra sp.					*							
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				1	9	2			89	82	3	5
Drilonereis longa			1		1							
Capitella capitata			2							1		
Heteromastus filiformis			15				1	6	3	14		
Spirochaetoperus oculatus				1								
Tharyx acutus		1	1		1							1
Glycera americana	9	10			2	5	3	4	1			2
Glycera dibranchiata		14	4	15	6	10			1			
Maldanopsis elongata							5	2	4			1
Nephtys picta					1	1						
Nereis succinea				9					3	1		
Haploscoloplos fragilis	2											
Haploscoloplos robustus									1	4		
Aricidea catherinae					1							
Pectinaria gouldii			1									
Eteone lactea					2				71	58	7	12
Eumida sanguinea				3	2					2		
Paranaitis speciosa				2	1							
Harmothoe extenuata				1	1						1	
Lepidonotus squamatus				1								
Sabellaria vulgaris				2								
Hydroides dianthus				3								
Spio setosa	1		1		16	1						
Streblospio benedicti	1	8	11	7	11					29	1	11
Mollusca												
Gastropoda												
Acteon punctostriatus										2		
Crepidula fornicata			8	44	6	6						
Crepidula plana				21		1		3				
Urosalpinx cinereus				1								
Ilyanassa obsoleta									2			
Nassarius trivittata				2	1	1			1	2		
Bivalvia												
Mulinia lateralis	1			5	2				39	105	9	9
Mya arenaria									2	1	1	
Mytilus edulis										1		1
Petricola pholadiformis							3	1	2	3		
Ensis directus						1	1					
Tellina agilis	2			4	5	4		3				
Gemma gemma			3	6								
Mercenaria mercenaria			1	4					1	4	1	
Arthropoda												
Amphipoda												
Ampelisca abdita				2			4	21	1817	1368	204	109
Unciola dissimilis									4			
Unciola serrata			2	9						1		
Corophium tuberculatum				13	1				44	12		
Elasmopus levis					5							
Melita nitida				7						1		1
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi					5	3				1		

CRUISE I (4/86)

	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Decapoda												
Pagurus longicarpus				2								
Neopanope texana				3								
Isopoda												
Edotea triloba				1	2				1	4		3
Echinodermata												
Chordata												
Vertebrata												

CRUISE 1 (4/86)	88a	88b	89a	89b	90a	90b	91a	91b	92a	92b	93a	97
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid			*									
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean											1	
Aschelminthes												
Unidentified nematoda			5				1	1				
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata											1	
Capitella capitata			1									
Tharyx acutus	1										1	
Glycera americana		1										
Glycera dibranchiata	6	5										
Lumbrineris fragilis								1				2
Magelona rosea							1					
Nephtys buceru					1		1					
Nephtys picta										1	1	
Sigalion arenicola										2		
Scolelepis squamata	1								1			
Spiophanes bombyx							2					
Spio setosa		2										
Streblospio benedicti	8	18										
Mollusca												
Gastropoda												
Crepidula plana			9									
Ilyanassa obsoleta	5											
Bivalvia												
Mulinia lateralis		1										
Spisula solidissima			10	4					4	3		
Mytilus edulis			7						2	1	3	
Tellina agilis	3								1			
Gemma gemma	7										1	
Arthropoda												
Amphipoda												
Ampelisca abdita	1											
Unciola serrata			1									
Parahaustorius longimerus					8	14	9	2				
Paraphoxus spinosus			1									
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi			1									
Decapoda												
Crangon septemspinosa									1			
Isopoda												
Echinodermata												
Chordata												
Vertebrata												
Lepophidium cervinum (cusk eel)									1			

CRUISE I (4/86)	94a	94b	95a	95b	96a	96b	97a	97b	98a	98b	99a	99b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid									*			
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean	4	1					1					
Aschelminthes												
Unidentified nematoda			1	1			*					
Ectoprocta												
Cryptosula sp.												*
Electra sp.												*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata		1067				1			1	9	1	1
Capitella capitata									8			
Spiochaetoperus oculatus											1	
Cirratulus grandis									33	10		
Tharyx acutus									2	3	2	2
Pherusa affinis		1										
Glycera americana									2	1	1	4
Glycera capitata				1								
Podarke obscura										1		
Magelona rosea	1	1			1		2			1	3	
Nephtys picta	15	15									3	3
Nereis arenaceodonta												6
Nereis succinea									7	5		
Eunida sanguinea												1
Harmothoe extenuata				2					1		5	
Sthenelais limicola				1								
Scolelepis squamata										3		
Spiophanes bombyx											4	1
Spio setosa									7	6	1	
Autolytus cornutus									3	5		
Mollusca												
Gastropoda												
Bivalvia												
Spisula solidissima		10	2	4		2	1	2	1		1	
Mytilus edulis	1	30	3	1			14		4353	6586	6428	7803
Petricola pholadiformis										5		
Siliqua costata		2										
Tellina agilis	1	16	1	1					2		9	1
Arthropoda												
Amphipoda												
Ampelisca abdita											2	3
Unciola serrata				1					1	4		1
Calliopius laeviusculus										2		
Unidentified caprellidae									3	10		
Gammarus lawrencianus		1										
Acanthohaustorius millsii					4	4	4	4				
Acanthohaustorius similis			2		9		1					
Bathyporeia parkeri							1	1				
Parahaustorius attenuatus						2						
Parahaustorius longimerus					4	1						
Protohaustorius deichmannae						1	1					
Protohaustorius wigleyi	1		1	1			4					
Elasmopus levis		1							2		2	1
Melita nitida										3		
Paraphoxus spinosus			1						18	24	10	11
Rhepoxynus epistomus			1			2	1				1	6
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus balanus										59		
Mysidacea												
Cumacea												
Decapoda												

CRUISE I (4/86)
Cancer irroratus
Isopoda
Edotea triloba
Echinodermata
Chordata
Vertebrata

94a	94b	95a	95b	96a	96b	97a	97b	98a	98b	99a	99b
										2	
			1							1	

CRUISE I (4/86)

100a 100b 101a 101b 102a 102b 103a 103b 104a 104b 105a 105b

Porifera												
Cliona sp.							*		*			
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid							*		*			
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1	1										
Aschelminthes												
Ectoprocta												
Electra sp.			*						*			
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata						77	129	7	23	92	48	
Capitella capitata							1		1	13		
Heteromastus filiformis						27	17	11	2	5		
Spirochaetoperus oculatus							1	1				
Cirratulus grandis						3	1					
Tharyx acutus		2					1	1				
Glycera americana						8	11	3	3	1	1	
Glycera dibranchiata								1	2			
Magelona rosea			6		1							
Nephtys bucera	2											
Nephtys incisa												1
Nephtys picta	6	9										
Nereis succinea						2	1		7	1		
Diopatra cuprea						1			1	1		
Pectinaria gouldii							1					
Eteone lactea						4		2	4	1		
Eumida sanguinea						1	2	1	2			
Paranaitis speciosa								1	3			
Phyllodoce arenae		1								1		
Harmothoe extenuata						10	8	5	2			
Lepidonotus squamatus									4			
Sabellaria vulgaris						2	1		1			
Sabella microphthalma									1			
Hydroides dianthus						2	6		3			
Scolelepis squamata	2				1							
Spiophanes bombyx	7	14										1
Spio setosa						16		14	3			
Streblospio benedicti						51	2	64	7	13		
Autolytus cornutus						1		2				
Mollusca												
Gastropoda												
Cornabella sp.						2				1		
Crepidula fornicata						3	1	2				
Crepidula plana						2	5		1			
Urosalpinx cinereus							6					
Massarius trivittata							3		2			
Bivalvia												
Lyonsia hyalina							1	1				
Mulinia lateralis								1	1	2		
Spicula solidissima	1	7		3	1	6						
Mya arenaria							1					
Mytilus edulis	8	2				14	14		2			
Crassostrea virginica							1					
Petricola pholadiformis							1	1		2		
Tellina agilis	5	2				6	9	2	1	8		
Gemma gemma								1	1			
Mercenaria mercenaria						3	3		1			
Arthropoda												
Amphipoda												
Ampelisca abdita		1				397	569	19	104	8	1	
Microdeutopus gryllotalpa							16	1				
Unciola dissimilis							1		3			
Unciola serrata						20	15	4	7			
Unidentified caprellidae							1		1			
Corophium tuberculatum						6	5	5	26			

CRUISE 1 (4/86)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
<i>Acanthohaustorius millsi</i>			11	2								
<i>Acanthohaustorius similis</i>		1										
<i>Bathyporeia parkeri</i>			3	3								
<i>Protohaustorius deichmannae</i>			2									
<i>Protohaustorius wigleyi</i>	26	20	1	3								
<i>Elasmopus levis</i>							7	20	1		1	
<i>Melita nitida</i>							2				.1	
<i>Paraphoxus spinosus</i>		1					61	24	1			
<i>Rhepoxynuis epistomus</i>	5	3										
Merostomata												
Ostrocooda												
Unidentified ostrocooda							1		1			
Copepoda												
Cirripedia												
Mysidacea												
<i>Neomysis americana</i>							1					
Cumacea												
<i>Oxyurostylis smithi</i>	1						7	4	3		2	
Decapoda												
<i>Pagurus longicarpus</i>												
<i>Ovalipes ocellatus</i>	1		1									
<i>Neopanope texana</i>								3				
Isopoda												
<i>Edotea triloba</i>								2	1		1	
<i>Cyathura polita</i>							3	12			1	
Echinodermata												
<i>Echinarechnius parma</i>	2											
Chordata												
Vertebrata												

CRUISE I (4/86)	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
Porifera												
Cliona sp.												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean											1	
Aschelminthes												
Ectoprocta												
Electra sp.	*											
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1											
Drilonereis longa												
Capitella capitata	1											
Heteromastus filiformis	38	27	5	4	8	6	8	10	45	47	70	160
Spirochaetoperus oculatus												
Tharyx acutus	5	3	3			1		4	2	4	5	10
Glycera americana	2						3	3	5	8	4	5
Glycera dibranchiata	1		3		2	11						
Podarke obscura	1						2				7	2
Nereis succinea	9	2		1				2	3	6	4	13
Haploscoloplos fragilis												1
Haploscoloplos robustus	1	4					1			1	2	
Orbiniidae sp.								1				
Pectinaria gouldii		1		1						1		1
Eteone lactea	22	18		3				4	3	3	9	9
Eumida sanguinea	2									1		1
Paranaitis speciosa	1	4		1								
Phyllodoce arenae				1								
Harmothoe extenuata	1											1
Lepidonotus squamatus				1								
Sabellaria vulgaris			4	29								
Polydora ligni											6	
Scolelepis squamata												1
Spio setosa			6	5	2			1				1
Streblospio benedicti	1	2	10	39	4							
Mollusca												
Gastropoda												
Acteon punctostriatus								1				
Crepidula fornicata	1			3		35				1	3	2
Crepidula plana						7						
Urosalpinx cinereus	1	1										1
Ilyanassa obsoleta	3	6	1			1	1		1		5	2
Nassarius trivittata		2							1	3	1	2
Bivalvia												
Lyonsia hyalina						1		1	2	2		
Mulinia lateralis					1				2			
Mya arenaria				1		1	1	10	39	75	3	3
Mytilus edulis		1				1						
Crassostrea virginica												1
Petricola pholadiformis									3	3	2	
Ensis directus								2				
Tellina agilis								1		1	1	1
Mercenaria mercenaria				1	1	2					2	
Arthropoda												
Amphipoda												
Ampelisca abdita	22	36	1			1	278	592	964	1368	1882	256
Unciola dissimilis		1										
Unciola serrata	1	1		1	1	4						
Corophium tuberculatum	1				3	1		4	3	9	3	1
Elasmopus levis		2										1
Melita nitida	1											
Paraphoxus spinosus		1									1	
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												

CRUISE I (4/86)

	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
Mysidacea												
Mysid sp.	1											
<i>Neomysis americana</i>		1										
Cumacea												
Decapoda												
<i>Cancer irroratus</i>					1							
<i>Pagurus longicarpus</i>	1											
<i>Ovalipes ocellatus</i>												
<i>Neopanope texana</i>	10	1										
Isopoda												
<i>Edotea triloba</i>												
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Porifera												
Cnidaria												
Anthozoa												
Metridium senile (tent.)					7	2						
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean			1							2		3
Aschelminthes												
Ectoprocta												
Alcyonidium sp.					*							
Electra sp.						*						
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata												2
Capitella capitata							2					
Heteromastus filiformis	11	19	15	25	27	21	57	4				
Spirochaetoperus oculatus					1							
Tharyx acutus	1	2	10	4	12	8	5		3		1	1
Glycera americana	5	4	4	7	9	7	5	4		1	3	
Glycera dibranchiata	2					1			4	3	3	10
Podarke obscura				3								
Nephtys bucera										5	1	
Nephtys picta										10	24	8
Nereis succinea		3	1	4	5	4	2	4				
Haploscoloplos fragilis	1											
Haploscoloplos robustus					1	2						
Pectinaria gouldii					2	1	4	1				
Eteone lactea			2	1	7	5	6					
Eumida sanguinea					2	2		1				
Paranaitis speciosa						1						
Phyllodoce arenae					1							
Harmothoe extenuata					1	2						
Lepidonotus squamatus						1						
Sabellaria vulgaris						1						
Spiophanes bombyx									3	1	1	1
Spio setosa			1									
Streblospio benedicti					1							
Mollusca												
Gastropoda												
Acteon punctostriatus				1		1						
Crepidula fornicata	2			6	5	26						
Crepidula plana				2	2	2	1					
Ilyanassa obsoleta				1	1	1	2					
Nassarius trivittata			2	4	3	10						1
Bivalvia												
Lyonsia hyalina		2			1		2					
Mulinia lateralis				1	1		1	1	1			
Mya arenaria	36	50	20	26	5		13	13				
Mytilus edulis			12	1	2		1					
Petricola pholadiformis					2	1	3					
Ensis directus		1					1					
Tellina agilis					1				8	3	6	4
Mercenaria mercenaria					2				1			
Arthropoda												
Amphipoda												
Ampelisca abdita	16	138	312	357	702	173	931	645				
Unciola dissimilis					1	1	1					
Unciola serrata					2	16	1					
Corophium tuberculatum			1	1	26	3	3	12				
Elasmopus levis						1						
Melita nitida						10						
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Decapoda												

CRUISE I (4/86)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Cancer irroratus						1						
Crangon septemspinosus						1						
Pagurus longicarpus	1			1		2						
Neopanope texana				3	1							
Isopoda												
Edotea triloba					1	2						
Echinodermata												
Chordata												
Vertebrata												

CRUISE I (4/86)	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8a	B8b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1	1	1							1	1	
Aschelminthes												
Ectoprocta												
Electra sp.							*					
Phoronida												
Annellida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1		5	3	1	1	1	1			5	2
Drilonereis longa				1								
Meteromastus filiformis			10	13	44	13	14	6		3	48	54
Tharyx acutus		2	3		1		2					1
Pherusa affinis									1	1		
Glycera americana			8	11	8	1	8	7	6	7	4	10
Glycera dibranchiata	4	5	4	2	1		1					
Maldanopsis elongata								1				
Magelona rosea	1	1										
Nephtys picta	2	17	1			1						
Nereis succinea			2	3	3					2	2	5
Naploscloplos robustus										1		
Aricidea catherinae				1								
Pectinaria gouldii					1			1				2
Eteone lactea			12	5	4	1	2	1		4	1	1
Eumida sanguinea			6	6						1		
Phyllodoce arenae						1					1	
Harmothoe extenuata				1		1						
Lepidonotus squamatus							1			1		
Spiophanes bombyx		2										
Spio setosa	1	32	11								1	
Mollusca												
Gastropoda												
Ilyanassa obsoleta								2		2		
Nassarius trivittata		3	5	3	2	1	1			1	1	3
Bivalvia												
Lyonsia hyalina				2							1	
Mulinia lateralis	6			1								
Mya arenaria				1		2	1	1			2	3
Mytilus edulis												3
Nucula proxima					1						2	2
Petricola pholadiformis				13	3	1	1		1		5	
Ensis directus				3	1		2	1				
Siliqua costata	1											
Tellina agilis	4	4	6	8	3	2	1	2			7	9
Mercenaria mercenaria				1							2	
Pitar morrhuana								1				1
Arthropoda												
Amphipoda												
Ampelisca abdita	1	1082	5067	1583	2879	1262	1143	964	976	3234	3291	
Unciola dissimilis					1	1		1				
Unciola serrata			1		2	1	2	1			3	2
Corophium tuberculatum			14	50	26	42	40	45	22	30	22	21
Elasmopus levis				9	4	15	2	4	1		4	8
Paraphoxus spinosus	1	2	7	18	6	2	4	1	1	1	22	37
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi			1									
Decapoda												
Ovalipes ocellatus						1						
Isopoda												
Edotea triloba			2	1								
Cyathura polita						1						

CRUISE I (4/86)

Echinodermata

Chordata

Vertebrata

B3a B3b B4a B4b B5a B5b B6a B6b B7a B7b B8a B8b

CRUISE 1 (4/86)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Hybocodon prolifer											*	
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean						1	4	2		2	4	2
Aschelminthes												
Unidentified nematoda						*						
Ectoprocta												
Electra sp.					*		*					
Phoronida												
Phoronis architecta											1	
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				3	3	1	651	2095	531	1669		21
Drilonereis longa	2	1										
Capitella capitata					16	1	160	161		615		
Heteromastus filiformis		7	3			5			1	2		
Cirratulus grandis					8							
Tharyx acutus			6	2	5							1
Pherusa affinis										38		
Glycera americana	2	7	1	1	2	3				2		1
Glycera dibranchiata			5	12			6	1		5	1	
Lumbrineris impatiens						1	1					
Magelona rosea					1		4	3			3	
Nephtys picta			7	6			52	5	72	15	32	32
Nereis arenaceodonta						2						
Nereis succinea		10										
Kaploscoplos robustus	1											
Aricidea catherinae		1	4									
Eteone lactea		4	4					2	1	205		
Eumida sanguinea			1		2	3				2		
Paranaitis speciosa								1		16		
Phyllodoce arenae								1	2	2		1
Karmothoe extenuata										2		
Karmothoe imbricata											1	
Lepidonotus squamatus					4	30	3	1	1			
Sabella microphthalma		1										
Sthenelais limicola							1					
Spiophanes bombyx				1			3	5	1	2	2	12
Spio setosa			28	4			1		1	2		2
Streblospio benedicti			3	1				4		75		1
Autolytus cornutus					1							
Mollusca												
Gastropoda												
Cormabella sp.						1						
Crepidula plana					1							
Massarius trivittata	4	3	6					1	1	3	4	2
Bivalvia												
Lyonsia hyalina	1		1									
Mulinia lateralis				1			2			5		
Spisula solidissima							3		14	11	4	
Mya arenaria	2											
Mytilus edulis	1				5729	4765	64	55	24	45		
Yoldia limatula										1		
Nucula proxima	1									1		
Petricola pholadiformis					1							
Siliqua costata											1	
Tellina agilis	1		4	9	3	1	44	2	19	41	10	15
Arthropoda												
Amphipoda												
Anpelisca abdita	101	3585	10	7	3		2		5	240		
Unciola serrata			1		2			1	5	14		
Unidentified caprellidae					1							
Corophium tuberculatum	1	13			1			1		1		
Elasmopus levis					4	1						
Paraphoxus spinosus		2				11					1	
Phoxocephalus holbolli					1							

CRUISE 1 (4/86)

	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
<i>Rhepoxynuis epistomus</i>					16						1	
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Mysid sp.			1									
Cumacea												
<i>Oxyurostylis smithi</i>			3				2		1	7		1
Decapoda												
<i>Cancer irroratus</i>						1						
<i>Crangon septemspinosa</i>												1
<i>Libinia emarginata</i>						1						
<i>Pagurus longicarpus</i>					1							
<i>Ovalipes ocellatus</i>											1	
Isopoda												
<i>Edotea triloba</i>							1		1	2		
<i>Cyathura polita</i>						1						
Echinodermata												
Chordata												
Vertebrata												

CRUISE 1 (4/86)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid			*									
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean				1		1		1				1
Aschelminthes												
Ectoprocta												
Cryptosula sp.					*							
Electra sp.				*					*			
Schizoporella sp.									*			
Phoronida												
Annelida												
Oligochaeta												
Unidentified sp.				1								
Polychaeta												
Asabellides oculata	16	278	2		2			4	1	1	40	56
Capitella capitata	8	58	16					9				
Heteromastus filiformis			7	12	2			3	1	1		
Cirratulus grandis			21	1	43	91	5	1	267	205		
Tharyx acutus			1		5				39	33	1	4
Pherusa affinis		3		1				3	2	3		
Glycera americana	1		4	10	4	2	8	5	10	9	2	6
Glycera capitata								1				
Glycera dibranchiata						6	1				7	6
Podarke obscura					1	3	1					
Lumbrineris fragilis												1
Magelona rosea												2
Nephtys incisa	1											
Nephtys picta											28	38
Aricidea catherinae											2	
Pectinaria gouldii							1					
Eteone lactes	1	10										
Eumida sanguinea			1	1		4	1		1		6	
Paranaitis speciosa		1										
Phyllodoce arenae											2	
Harmothoe extenuata		10	70	30	11	49	21	72	40	36	11	20
Lepidonotus squamatus			3	4	2		1	4				
Sabellaria vulgaris					1							
Hydroides dianthus			2	1	5		21	12	1			
Polydora ligni										2		
Spiophanes bombyx											14	11
Spio setosa				1							3	41
Streblospio benedicti	1										1	11
Autolytus cornutus				2	9		2	2	1			
Autolytus sp.			2									
Mollusca												
Gastropoda												
Cormabella sp.			1	2								
Crepidula fornicata			1				1					
Crepidula plana				1							1	
Mitrella lunata			1									
Urosalpinx cinereus				1				1		1		
Nassarius trivittata		7			1			5	3	1		1
Bivalvia												
Lyonsia hyalina				2					1			
Spisula solidissima											9	7
Mya arenaria						1			1			
Mytilus edulis		11	787	646	26	97	149	56	114	49	50	8
Yoldia sapotilla							1					
Nucula proxima		1							4	2		
Petricola pholadiformis				1	1					3		
Ensis directus				2		1			1	1	1	1
Tellina agilis		5	2	1			2	1	4	2	33	35
Mercenaria mercenaria								2				
Pitar morrhuana									1	1		
Arthropoda												
Amphipoda												
Ampelisca abdita	12	1			1			2	2			1

CRUISE 1 (4/86)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Unciola irrorata											5	4
Unciola serrata		1	5	1	5	4	5	11	13	23	3	5
Unidentified caprellidae			1		1							
Corophium tuberculatum			1								3	
Erichthonius brasiliensis							1			1		
Elasmopus levis		2	1	2		1		1	2	2	19	
Paraphoxus spinosus			26	11	3	8	47	28	2	13	16	3
Phoxocephalus holbolli			9	4	1	3	5	3	1	-6	1	1
Merostomata												
Ostrocods												
Copepoda												
Unidentified copepod				1								
Cirripedia												
Balanus amphitrite				24								
Mysidacea												
Heteromysis formosa			1	1			1			4		
Mysid sp.									2			
Cumacea												
Oxyurostylis smithi											11	13
Decapoda												
Cancer irroratus											1	
Crangon septemspinosa											3	1
Pagurus longicarpus							1	1			1	
Neopanope texana			7	4		2	1	1				
Isopoda												
Edotea triloba											2	
Cyathura polita			1	8	53	49	3	4	3		1	1
Echinodermata												
Asterias forbesii			2		2		1					
Henricia sp.									1			
Chordata												
Vertebrata												
Pholis gunnellus (rock eel)			1									
Blenny-like larval fish							1					

CRUISE II (7/86)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean											1	1
Aschelminthes												
Ectoprocta												
Alcyonidium sp.						*						
Cryptosula sp.					*	*						
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata					7	4			4	16		
Drilonereis longa					2			1	1	1		
Heteromastus filiformis	66	18	126	30	6	7	5	34				
Tharyx acutus		1	1		7	13		2				
Pherusa affinis								1				
Glycera americana	6	3	5	4	1		3	3	1			
Glycera dibranchiata					6	10	1	4	7	4	2	
Microphthalmus aberrans					1							
Podarke obscura	1											
Maldanopsis elongata	5											
Nephtys picta											2	8
Nereis succinea	2		9			2	1					
Haploscoloplos robustus	1											
Aricidea catherinae					1			6			2	7
Pectinaria gouldii					5	2		9				
Eteone lactea		1	4		3	2		3		1		
Eumida sanguinea	1		1		1	13		3				
Paranaitis speciosa	2				1				1			
Harmothoe extenuata			1		9	12						
Harmothoe imbricata					1	2						
Lepidonotus squamatus					18	25						
Sabellaria vulgaris					1			2				
Sabella microphthalma								1				
Hydroides dianthus					1							
Polydora ligni			1					1				
Spiophanes bombyx									4	19	2	3
Spio setosa			1	1	3	2	1	8	7	26		
Streblospio benedicti		1				4		18		4		
Autolytus cornutus						2						
Brania wellfleetensis						1						
Mollusca												
Gastropoda												
Crepidula fornicata					159	408	3	3				
Crepidula plana	2				46	198	6	9				
Urosalpinx cinereus						1						
Ilyanassa obsoleta		1	9	2	1	1	3					
Nassarius trivittata	1		4		11	8	5	12	1	3	1	
Odostomia producta			1									
Bivalvia												
Lyonsia hyalina					2	3		2				
Spisula solidissima									2	5	2	1
Mya arenaria	35	28	32	7	4	5	3					
Mytilus edulis	1				2	7						
Ensis directus	1			1	1	2	1	2				
Tellina agilis	1		1	2	1	10	2	5	8	21	8	1
Gemma gemma					2	3						
Mercenaria mercenaria	4			2		3						
Arthropoda												
Amphipoda												
Ampelisca abdita	184	39	1187	837	542	464	882	1525			1	1
Ampelisca vadorum										1		
Unciola dissimilis				2								
Unciola serrata			1	1	6	11						
Unidentified caprellidae					3	2	5	4				
Corophium tuberculatum	6		125	40	56	228	48	222				
Erichthonius brasiliensis					1		6	11				

CRUISE II (7/86)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Elasmopus levis	3			1	13	32		5				
Paraphoxus spinosus					32	54	5	27				
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa								4				
Mysid sp.	1					2						
Neomysis americana									2			
Cumacea												
Decapoda												
Cancer irroratus	3				2	4	12					1
Crangon septemspinose	1		1	1		2	4	1	1			
Pagurus longicarpus				1	1	1		2				
Ovalipes ocellatus								1				
Neopanope texana					7	20		2				
Isopoda												
Echinodermata												
Chordata												
Vertebrata												
Syngnathus fuscus (pipefish)								1				

CRUISE 11 (7/86)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1		3						1		
Aschelminthes												
Unidentified nematoda									3			
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	7	44			2	1						
Drilonereis longa						1						
Neteromastus filiformis		2			1							
Spiochaetoperus oculatus		1										
Cirratulus grandis	1											
Pherusa affinis	1	7			2							
Glycera americana	1	8	1		4							
Glycera dibranchiata											1	
Podarke obscura						4						
Lumbrineris fragilis				1	1							
Magelona rosea				4						2		
Nephtys picta	1		17	19		5	1	5	1			
Nereis succinea		1			6	1						
Aricidea catherinae			1			2			2			
Pectinaria gouldii							1					
Eumida sanguinea					3							
Harmothoe extenuata					23	14						
Lepidonotus squamatus					24	1						
Hydroides dianthus						6						
Polydora ligni					4	3						
Spiophanes bombyx	1	7	3			1						
Spio setosa	2		1		8	11					29	
Mollusca												
Gastropoda												
Crepidula fornicata											1	1
Crepidula plana											1	2
Nassarius trivittata	1	7	3	2		2	3	2	1			4
Bivalvia												
Mulinia lateralis	1	8						3				
Spisula solidissima	15	39		1	1	3		2	97	187	2	5
Mytilus edulis		1			2689	202		1			12	1
Nucula proxima		1										
Petricola pholadiformis									3			
Esis directus	1	11										
Tellina agilis	9	50	15	3	1	1		1	6	4	1	
Mercenaria mercenaria	1	1										
Pitar morrhua		14										
Arthropoda												
Amphipoda												
Ampelisca abdita	1	1	2	1								
Unciola dissimilis									2			
Unciola irrorata	3	7				1					3	
Unciola serrata	2				1	3						
Corophium tuberculatum											1	
Acanthohaustorius millsii									2	3		1
Protohaustorius wigleyi				11								
Elasmopus levis					5	3					3	
Paraphoxus spinosus						4					2	
Rhepoxynus epistomus										8		
Merostomata												
Ostrocooda												
Unidentified ostrocooda		1										
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa						2						
Neomysis americana	2			1							1	

CRUISE II (7/86)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Cumacea												
Decapoda												
<i>Cancer irroratus</i>	2	5			4	4					3	1
<i>Crangon septemspinosa</i>	1											
<i>Pagurus longicarpus</i>						1						
<i>Ovalipes ocellatus</i>	1		2	4								2
<i>Neopanope texana</i>			1									
Isopoda												
<i>Cyathura polita</i>					12	2						
Echinodermata												
Chordata												
Vertebrata												

CRUISE 11 (7/86)	13a	13b	14a	14b	15a	15b	16a	16b	17a	17b	18a	18b
Porifera												
Cnidaria												
Anthozoa												
Ceriantheopsis americanus			1				1			1		
Metridium senile (tent.)			2									
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1	1							2	1		
Aschelminthes												
Unidentified nematoda		1										
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				1			6					
Meteromastus filiformis			10	33			13	2		3	5	14
Tharyx acutus	1						3			1		
Glycera americana	24		1	1		2	4	1	2	3	3	5
Glycera dibranchiata	2											
Podarke obscura							1					
Maldanopsis elongata						1			2	3		
Nephtys picta	2	2										
Nereis succinea			2	1	1	1	2			1		
Haploscoloplos robustus									1			
Pectinaria gouldii								1				
Eteone lactea				2	1		2			1		
Eumida sanguinea			1				5					
Paranaitis speciosa							1					
Harmothoe extenuata							5					1
Lepidonotus squamatus							1					
Polydora ligni			1									
Spio setosa	6											
Streblospio benedicti							1					
Mollusca												
Gastropoda												
Crepidula fornicata							27					
Crepidula plana							16					
Nassarius trivittata			2	1			3		1	1	2	1
Bivalvia												
Mulinia lateralis					4	36	6	1				
Spisula solidissima	5	4					1					
Mya arenaria			5	3		1	17	19		2	1	30
Mytilus edulis			2	2	5		8	2				
Nucula proxima											1	1
Petricola pholadiformis			2	1	1	2	2					
Ensis directus				1	1	4	4	2		1		
Tellina agilis	35	27	3		1	1		1			2	
Mercenaria mercenaria							2				1	1
Arthropoda												
Amphipoda												
Ampelisca abdita	6		208	196	61	131	1843	132	110	158	87	122
Unciola dissimilis			4			10	3	1	1			2
Unciola serrata	6		2				7		1			1
Corophium tuberculatum			103	61	1	2	86	8	18	35	19	120
Acanthohaustorius similis		1										
Elasmopus levis				1			1			1	1	2
Paraphoxus spinosus			1									
Rhepoxynus epistomus	1	6										
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Decapoda												
Cancer irroratus				1								
Crangon septemspinose							1					
Ovalipes ocellatus											1	
Neopanope texana							1					

CRUISE 11 (7/86)

13a 13b 14a 14b 15a 15b 16a 16b 17a 17b 18a 18b

Isopoda

Echinodermata

Echinorachnius perma

1

Chordata

Vertebrata

CRUISE II (7/86)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean			1	1								
Aschelminthes												
Unidentified nematoda			*									
Ectoprocta												
Cryptosula sp.									*			
Electra sp.									*			
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata						1			1			
Drilonereis longa									1			
Heteromastus filiformis					5	6			20		44	64
Tharyx acutus			1									6
Pherusa affinis								2				
Glycera americana					2	3	1	3	2		4	3
Glycera dibranchiata			3	3			2		2	2		
Podarke obscura					1	1						
Lumbrineris fragilis						1						
Nephtys picta	7	7	10	6								
Nereis succinea				1	1				3	1		
Aricidea catherinae				4								
Pectinaria gouldii					3	6			3	1		
Eteone lactea									5			
Eumida sanguinea									4			
Harmothoe extenuata						7	1		4	2		
Lepidonotus squamatus									1			
Polydora ligni									4			
Spiophanes bombyx			1									
Spio setosa									8	3		
Streblospio benedicti												1
Mollusca												
Gastropoda												
Crepidula fornicata						20				3		
Crepidula plana						9			3	4		
Ilyanassa obsoleta									1		1	2
Massarius trivittata	7	7	1	1		13	6		4	15	2	5
Bivalvia												
Mulinia lateralis							1					
Spisula solidissima	6	5	7	4						1		
Mya arenaria					4	2		2	2			
Mucula proxima												2
Ensis directus						1		2	6	8		
Tellina agilis	2	1	4	13		2	1		2	16		1
Gemma gemma										3		
Mercenaria mercenaria					1			1				
Arthropoda												
Amphipoda												
Ampelisca abdita					64	248	161	34	1609	981	6	107
Unciola dissimilis						3			3			2
Unciola serrata							6		6	15		
Corophium tuberculatum					31	97		3	671	293		8
Elasmopus levis					1	1			6	11		
Paraphoxus spinosus									28	16		
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus improvisus									28			
Mysidacea												
Neomysis americana	1						1			3		
Cumacea												
Decapoda												
Cancer irroratus						1			2	3		
Crangon septemspinosa	1								2			

CRUISE II (7/86)

	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
Pagurus longicarpus	1	1										
Ovalipes ocellatus	2	1										
Neopanope texana					1	1			2			
Isopoda												
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (7/86)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Porifera												
Cnidaria												
Anthozoa												
Metridium senile (tent.)		1										
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean			1									
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	2						2				1	
Drilonereis longa			2	1								
Heteromastus filiformis	89	106	3		21	20	18	216	2	2	1	3
Cirratulus grandis		1										
Tharyx acutus		7						2				
Glycera americana	8	8			4	7	4	2			1	1
Glycera dibranchiata			2	3				1	27	17		
Podarke obscura	1				2	1						
Nereis succinea	9	4					2	17		1	1	
Haploscoloplos robustus							1					
Aricidea catherinae			1									
Pectinaria gouldii	23	12		1				2			5	1
Eteone lactea	14	6			2		1	5				
Eumida sanguinea	3									2		
Paranaitis speciosa								1				
Phyllodoce arenae		1										
Harmothoe extenuata		3						1				
Lepidonotus squamatus								5		1		
Sabellaria vulgaris												2
Polydora ligni	1	1	1		1						1	
Spiophanes bombyx			1	1								
Spio setosa	6		12	11		1	2			4		
Streblospio benedicti	7	4	1					1			1	
Mollusca												
Gastropoda												
Cormabella sp.											2	
Crepidula fornicata							1				10	9
Crepidula plana								3			9	4
Urosalpinx cinereus										1		
Ilyanassa obsoleta	3	6				2			5	6		
Massarius trivittata	4	3	1		3				1	1	11	3
Bivalvia												
Lyonsia hyalina	1	1								2		
Mulinia lateralis	2		1									
Mya arenaria	126	63			5	4	5	6			3	
Nucula proxima					1							
Crassostrea virginica			1				1					
Ensis directus		5										
Tellina agilis	1	3	7	6					2	1	1	
Mercenaria mercenaria	4	4					4			1		1
Arthropoda												
Amphipoda												
Ampelisca abdita	1251	994	1		160	95	320	141	3	5	22	9
Microdeutopus gryllotalpa										1		
Unciola dissimilis							2					
Unciola serrata		1					8	1	1	7	1	3
Corophium tuberculatum	458	244			9	12	12	7	1	5	1	
Gammarus mucronatus									1			
Elasmopus levis	2	2						11	1	3		
Melita nitida									1	8		
Merostomata												
Ostrocooda												
Unidentified ostrocooda			1								1	
Copepoda												
Cirripedia												
Balanus balanus							1					
Balanus improvisus				20					72	45	98	7

CRUISE II (7/86)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Mysidacea												
<i>Heteromysis formosa</i>									1			
Mysid sp.				1				3				
<i>Neomysis americana</i>			4									
Cumacea												
Decapoda												
<i>Cancer irroratus</i>				1								
<i>Crangon septemspinosa</i>	2	1	1	2					2		3	1
<i>Neopanope texana</i>	1	4					3	12				
Isopoda												
<i>Edotea triloba</i>											1	
Echinodermata												
<i>Echinarachnius parma</i>							2					
Chordata												
Vertebrata												

CRUISE II (7/86)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Porifera												
Unidentified sponge						*						
Cnidaria												
Anthozoa												
Unidentified anemone						5						
Metridium senile (tent.)					1							
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean							1					
Aschelminthes												
Ectoprocta												
Cryptosula sp.							*	*	*	*		
Electra sp.							*	*	*	*		
Aeverrillia sp.								*	*	*		
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	6	4			1319	1112	2		3	1		
Heteromastus filiformis	21					4	1	1	3	6	7	
Spiochaetoperus oculatus						3						
Tharyx acutus						5	20	10		1	1	
Pherusa affinis	3	1			123	160						
Glycera americana	6	1	1	1	4						9	
Glycera dibranchiata	3						14	15	3	12	1	5
Podarke obscura										1		
Nephtys picta								1				
Nereis succinea	4	1							1	1		
Maploscleros robustus		5								1		
Aricidea catherinae							6			3		
Pectinaria gouldii									1			1
Eteone lactea					1	1					12	
Eumida sanguinea	3	1			2	7		1	1	2	5	1
Harmothoe extenuata	14				7	25				2		
Harmothoe imbricata	1	1										
Lepidonotus squamatus	6				1				1			
Sabellaria vulgaris							1		1			
Potamilla neglecta						1						
Polydora ligni	4	1										1
Spiophanes bombyx						3						
Spio setosa	24	1			26	31	1	1	1	1	5	3
Streblospio benedicti	1						3	2			2	
Mollusca												
Gastropoda												
Cormabella sp.										3		
Crepidula fornicata							2	5	1	43	2	1
Crepidula plana								1	1	22		
Ilyanassa obsoleta											13	3
Nassarius trivittata	4	1			1	5	4	5	1	10	4	5
Bivalvia												
Cerastoderma pinnulatum						1						
Lyonsia hyalina							1		2	4		
Mulinia lateralis					6							
Spisula solidissima					6	32	7	2			2	
Mya arenaria	1										55	
Mytilus edulis	1331	48			1	1	2	1				
Yoldia limatula						1						
Nucula proxima	3											
Petricola pholadiformis	1				2	1			1		3	
Ensis directus						3						
Tellina agilis	17	1		2	2	3	6	4		1	1	2
Gemma gemma							8	19	20	16		1
Mercenaria mercenaria	1	1					1					
Pitar morrhuana					8	10						
Arthropoda												
Amphipoda												
Ampelisca abdita	5	4				13	5		7	4	3111	427
Unciola dissimilis								1			1	
Unciolairrorata					6	25						1
Unciola serrata					2	7	2	4			8	2

CRUISE II (7/86)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Corophium tuberculatum	1	27			7	8	7	6	13	7	1484	15
Elasmopus levis	20	13				6	2	2	3	19	4	1
Paraphoxus spinosus		3			1	10	1	2			60	5
Merostomata												
Limulus polyphemus		1										
Ostrococha												
Copepoda												
Cirripedia												
Balanus improvisus							3	35		293		
Mysidacea												
Neomysis americana						2				3		
Cumacea												
Oxyurostylis smithi							1					
Decapoda												
Cancer irroratus	8	8			5	11				6		1
Crangon septemspinosa		3		1	1			1	2		3	
Pagurus longicarpus							3					2
Ovalipes ocellatus					2	1	2				1	1
Neopanope texana									1	3	1	
Isopoda												
Edotea triloba											1	
Cyathura polita	1											
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (7/86)

	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
Decapod larva								1				
Cancer irroratus		3						1				1
Crangon septemspinosa	6	5		1			2		1		1	
Pagurus longicarpus	1	2					1					
Ovalipes ocellatus	6	3			2	3			1	4		
Neopanope texana	9	19							1	1		1
Isopoda												
Edotea triloba	1								1			
Echinodermata												
Chordata												
Vertebrata												

CRUISE 11 (7/86)	51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm						2	1					
Rhynchocoela												
Unidentified nemertean	1	1			1	1				1	1	
Aschelminthes												
Ectoprocta												
Unidentified ectoproct		*						*				
Electra sp.				*								
Aeverrillia sp.		*										
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata			1	6	3	1		2		5	10	
Capitella capitata												1
Heteromastus filiformis		1			15	24	13	2				
Tharyx acutus	1	2										
Glycera americana	2	4	7		2		8		1	1	1	
Glycera dibranchiata	1	7	8	27	7	4	19	64		1	2	
Podarke obscura					4	1						
Nephtys picta		1										
Nereis succinea				1	1		16	10		3		1
Haploscoloplos fragilis												2
Haploscoloplos robustus					19	16				6	1	
Pectinaria gouldii					68	15	3	5		3		
Eteone lactea				1	12		2	3	1	4	9	1
Eumida sanguinea		8		1	2		22	4				
Paranaitis speciosa					2			4				
Harmothoe extenuata												1
Lepidonotus squamatus				2			2	1				
Sabellaria vulgaris				3			81	54				
Polydora ligni							1					
Spiophanes bombyx											4	
Spio setosa	1			6			17	33			5	
Streblospio benedicti		2			1	1	20	38				
Mollusca												
Gastropoda												
Cormabella sp.				1			2					
Acteon punctostriatus					1							
Crepidula fornicata		1		9			39	26				
Crepidula plana				9			94	25				
Ilyanassa obsoleta	2	2	1	4		1	7	7				3
Massarius trivittata	2		2	16	6		11	10	1	3	5	
Bivalvia												
Lyonsia hyalina				4			1	1				
Mulinia lateralis			2	7					10	20	1	
Spisula solidissima	1				1							
Mya arenaria		1	5	9			9	8	68	164	489	3
Mytilus edulis				3			7	2				
Ensis directus				2		1		1				
Tellina agilis	1		2	4			1	4				
Gemma gemma	14	9										
Mercenaria mercenaria				1		1						1
Arthropoda												
Amphipoda												
Ampelisca abdita	2	5	2	1120	436	436	601	430	38	493	690	107
Unciola dissimilis					1		4					
Unciola serrata		11	2	18	4	8	26	13				
Corophium tuberculatum	5	180	3	746	132	111	200	145		2	110	5
Elasmopus levis		3		4								
Melita nitida				2			5	1				3
Paraphoxus spinosus											1	
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus amphitrite				5			79					

CRUISE 11 (7/86)	51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
Balanus improvisus								196				
Mysidacea												
Heteromysis formosa				1								1
Mysid sp.								1				
Neomysis americana	3		2							1		
Cumacea												
Decapoda												
Crangon septemspinosa				3			1					
Pagurus longicarpus		3					1					
Ovalipes ocellatus		3	2	1			1	3				
Neopanope texana				1	1	1	6	2			2	1
Isopoda												
Edotea trilobe						2						
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (7/86)	57a	57b	58a	58b	59a	59b	60a	60b	62a	62b	68a	68b
Porifera												
Unidentified sponge		*	*									
Cnidaria												
Anthozoa												
Unidentified anemone				1								
Hydrozoa												
Platyhelminthes												
Unidentified flatworm				1								
Rhynchocoela												
Unidentified nemertean	1	1		1								
Aschelminthes												
Ectoprocta												
Electra sp.				*								
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	5					2		1			2	9
Heteromastus filiformis	12										1	1
Cirratulus grandis					1						2	
Tharyx acutus	1											1
Pherusa affinis											2	
Glycera americana	23	1	3		2	1						1
Glycera dibranchiata	9	5		1		2	1	1			1	8
Podarke obscura	1		1									
Lumbrineris acuta		1										
Nereis succinea											1	6
Haploscoloplos robustus						9	3					
Pectinaria gouldii			6	1			17	8	4	4		
Eteone lactea	3											1
Eumida sanguinea	5											1
Harmothoe extenuata	1										11	15
Lepidonotus squamatus	1											4
Sabellaria vulgaris	2										1	
Polydora ligni												2
Spio setosa	18	6					1				1	32
Streblospio benedicti	32						4					3
Mollusca												
Gastropoda												
Acteon punctostriatus										1		
Crepidula plana				1								
Urosalpinx cinereus		1										
Ilyanassa obsoleta	2	2										
Nassarius trivittata	1	7				1					1	9
Bivalvia												
Lyonsia hyalina	3											
Mulinia lateralis				1	1							
Spisula solidissima											5	1
Mya arenaria	5	5	5	7	2	4		8	1			
Mytilus edulis											1549	693
Crassostrea virginica	1											
Ensis directus	1	1					1					
Tellina agilis	2											33
Arthropoda												
Amphipoda												
Ampelisca abdita	427	1	53	39	1	3	2	10	1	1	1	6
Unciola serrata	5		1									
Corophium tuberculatum	10	5			2							1
Elasmopus levis	5										4	4
Melita nitida	1		19									
Merostomata												
Ostrococha												
Copepoda												
Cirripedia												
Balanus improvisus			135	131			55	175				
Mysidacea												
Heteromysis formosa	14											
Cumacea												
Oxyurostylis smithi												1
Decapoda												
Cancer irroratus											5	5

CRUISE 11 (7/86)	57a	57b	58a	58b	59a	59b	60a	60b	62a	62b	68a	68b
Crangon septempinosus		1										2
Neopanope texana	3	1	3	4								
Isopoda												
Echinodermata												
Chordata												
Molgula manhattensis									11			
Vertebrata												
Pseudopleuronectes americanus												1

CRUISE II (7/86)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Porifera												
Unidentified sponge											*	*
Cnidaria												
Anthozoa												
Unidentified anemone							1					
Ceriantheopsis americanus								2				
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1					1			1			
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	17	9	13	2					4	2	4	
Capitella capitata								2				
Heteromastus filiformis		1		5			2		5			
Spiochaetoperus oculatus			1									
Cirratulus grandis	1											
Tharyx acutus												5
Pherusa affinis	1	1	1	3								
Glycera americana	2			3					3		1	
Glycera dibranchiata	1		5						2	7	14	15
Maldanopsis elongata								1				
Magelona rosea						1						
Nephtys incisa	1											
Nephtys picta		3			2	17						
Nereis succinea							1		2	2		
Haploscoloplos robustus							2	4		4		
Pectinaria gouldii				1			1		9	3		1
Eteone lactea			1					2		9		
Eumida sanguinea									8		2	1
Harmothoe extenuata			2		1							
Harmothoe imbricata												1
Lepidonotus squamatus												1
Sabellaria vulgaris									151	11		
Polydora ligni									5			
Spiophanes bombyx		2				2						
Spio setosa	1	1		1	10				1		2	4
Streblospio benedicti							1		1			20
Mollusca												
Gastropoda												
Crepidula fornicata									6	11	15	7
Crepidula plana											3	1
Ilyanassa obsoleta									13	2		
Nassarius trivittata	4	8	7	9	9		1	2	24	2	1	4
Bivalvia												
Lyonsia hyalina									1		3	2
Mulinia lateralis								2		3		
Spisula solidissima	4	1									1	
Mya arenaria								2	33	26		
Mytilus edulis	4	2	721	14								
Mucula proxima	39	2										
Ensis directus							1		3			2
Tellina agilis	5	17	7	8	2	12					14	13
Gemma gemma	6										623	326
Mercenaria mercenaria							1	2	2			
Arthropoda												
Amphipoda												
Ampelisca abdita	1						277	184	130	397	8	16
Unciola dissimilis				1			5	3				1
Unciola irrorata	2		1		1		1	1		6		
Unciola serrata				5						7	3	
Unidentified caprellidae												1
Corophium tuberculatum							5	2	74	124	73	71
Protohaustorius wigleyi						1						
Elasmopus levis									1		5	3
Melita nitida									3			
Paraphoxus spinosus				2							17	12

CRUISE 11 (7/86)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Merostomata												
Ostrocode												
Copepoda												
Cirripedia												
<i>Balanus amphitrite</i>									3			
Mysidacea												
<i>Meteromysis formosa</i>									1			
Cumacea												
<i>Oxyurostylis smithi</i>												1
Decapoda												
<i>Brachyurea larva</i>												1
<i>Cancer irroratus</i>			22	8	1					2		
<i>Crangon septemspinosa</i>				2	1	1			1			1
<i>Pagurus longicarpus</i>									2	1	1	
<i>Ovalipes ocellatus</i>		2		1	1							
<i>Neopanope texana</i>									1		1	2
Isopoda												
<i>Edotea triloba</i>						1	1					
<i>Cyathura polita</i>										1		
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (7/86)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone								3		1		
Ceriantheopsis americanus									3	1	1	
Metridium senile (tent.)									2			
Hydrozoa												
Platyhelminthes												
Unidentified flatworm										1		3
Rhynchocoela												
Unidentified nemertean	-1							1		1		1
Aschelminthes												
Ectoprocta												
Cryptosula sp.							*					
Electra sp.							*					
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata			2	3	5	1	1		2		5	8
Drilonereis longa			1			2						
Heteromastus filiformis				1	2	1	5		13	21	6	4
Cirratulus grandis	1	1										
Tharyx acutus										1		
Pherusa affinis							2	2				
Glycera americana	21		13	5					1	2		1
Glycera dibranchiata	19	35	8	15	2	10						2
Podarke obscura										1		
Maldanopsis elongata									1	1		
Nephtys incisa							2					1
Nephtys picta						1						
Nereis succinea												1
Haploscoloplos fragilis									7			
Haploscoloplos robustus		1								2	3	4
Aricidea catherinae						4						
Pectinaria gouldii				1			1		3	6		
Eteone lactea							6				2	7
Eumida sanguinea							1		1		3	6
Sabellaria vulgaris				1								
Polydora ligni						1		1				
Spio setosa			1		7	30	18	2				
Streblospio benedicti	15			10	1		47	7	3	12	5	11
Mollusca												
Gastropoda												
Acteon punctostriatus									1			
Crepidula fornicata			1	5	5	8						
Crepidula plana						7						
Ilyanassa obsoleta									1	3		
Nassarius trivittata	1		1	4	1		3	1	2	1	2	4
Bivalvia												
Lyonsia hyalina			1									
Mulinia lateralis		2		1						10	4	9
Spisula solidissima								1				
Mya arenaria	4		1	3			2		4	12	77	144
Mytilus edulis				1			1		2	2		
Petricola pholadiformis									5			1
Ensis directus							7		1	1	5	3
Tellina agilis	2		1	2	9	17	5	2				
Gemma gemma	1		1	9			1					
Mercenaria mercenaria					4	1			1			1
Arthropoda												
Amphipoda												
Ampelisca abdita		2	7	2	10	1	742	362	833	191	621	744
Unciola dissimilis								1				1
Unciola irrorata				2			2					
Unciola serrata			6		1		2		5		1	
Corophium tuberculatum			5	9		3	21	4	12	3	16	14
Erichthonius brasiliensis												1
Elasmopus levis												2
Melita nitida									1			1
Paraphoxus spinosus						3						

CRUISE II (7/86)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Merostomata												
Ostrocooda												
Copepoda												
Unidentified copepod								1				
Cirripedia												
Balanus amphitrite						4						
Mysidacea												
Meteromysis formosa						3						
Neomysis americana		2		9								
Cumacea												
Unidentified cumacean												1
Decapoda												
Cancer irroratus		1			1		3					
Crangon septemspinosa			2		2	1						
Ovalipes ocellatus				1								
Neopanope texana						1						
Isopoda												
Edotea triloba							1				1	
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (7/86)	88a	88b	89a	89b	90a	90b	91a	91b	92a	92b	93a	93b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm		3										
Rhynchozoela												
Unidentified nemertean			1			1					2	2
Aschelminthes												
Unidentified nematoda			17	1	1		1			1		
Ectoprocta												
Alcyonidium sp.			*									
Cryptosula sp.										*		
Electra sp.										*		
Aeverillia sp.			*									
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Drilonereis longa							1					
Meteromastus filiformis	12		1									
Tharyx acutus	1									1		
Pherusa affinis			1									
Glycera americana	6						1					
Glycera dibranchiata	24	30					2	1				
Lumbrineris fragilis							1	2		1		
Magelona rosea											2	3
Nephtys picta	1						2	3	5	2		2
Kaploscoplos robustus	3											
Aricidea catherinae												1
Pectinaria gouldii	2	2										
Eteone lactea	1											
Eumida sanguinea		8	1									
Paranaitis speciosa	2											
Karmothoe extenuata			16									
Lepidonotus squamatus			2									
Sabellaria vulgaris	1	50	1									
Hydroides dianthus			1									
Sigalion arenicola									1			
Polydora ligni			3									
Spiophanes bombyx							1	1				1
Spio setosa	2	1	3	1								
Streblospio benedicti	127	1										
Polycirrus eximius		1										
Mollusca												
Gastropoda												
Crepidula fornicata	3		5									
Crepidula plana			14									
Urosalpinx cinereus			1									
Ilyanassa obsoleta	1	4										
Massarius trivittata	2	2										
Bivalvia												
Lyonsia hyalina		5										
Spisula solidissima	1		6	19		15	3	42		22	12	88
Mya arenaria	1	7										
Mytilus edulis	1	18	91	1			7	1	36	1		
Petricola pholadiformis	3								1			
Ensis directus		1										
Tellina agilis	1						1	1	5	6	1	1
Gemma gemma	100	238							2			
Arthropoda												
Amphipoda												
Ampelisca abdita	161	77	3			1		1	2			
Unciola dissimilis		2							3			
Unciola serrata	5	71							4			
Unidentified caprellidae		4										1
Corophium tuberculatum	170	568	20		1							
Acanthohaustorius millsi											1	
Acanthohaustorius similis					1							
Bathyporeia parkeri											2	
Parahaustorius longimerus					13	10		1			1	

CRUISE II (7/86)	88a	88b	89a	89b	90a	90b	91a	91b	92a	92b	93a	93b
Protohaustorius wigleyi									2		2	1
Elasmopus levis	8	3	1									
Melita nitida	1	2										
Paraphoxus spinosus			1								4	1
Rhepoxynuis epistomus								4				5
Merostomata												
Limulus polyphemus		1										
Ostrocooda												
Copepoda												
Unidentified copepod												1
Cirripedia												
Balanus amphitrite			1									
Mysidacea												
Meteromysis formosa			3									
Mysid sp.												1
Neomysis americana	1								4			
Cumacea												
Oxyurostylis smithi	50	20	1									
Decapoda												
Cancer irroratus			5	1								
Crangon septemspinosa	1											1
Ovalipes ocellatus		1				1				1		
Neopanope texana		1										
Isopoda												
Edotea triloba	5	8										
Echinodermata												
Henricia sp.			1									
Chordata												
Vertebrata												

CRUISE II (7/86)	94a	94b	95a	95b	96a	96b	97a	97b	98a	98b	99a	99b	
Porifera													
Cnidaria													
Anthozoa													
Hydrozoa													
Platyhelminthes													
Rhynchozoa													
Unidentified nemertean		3			1						1	1	
Aschelminthes													
Unidentified nematoda			5	8	1								
Ectoprocta													
Alcyonidium sp.										*			
Cryptosula sp.											*		
Electra sp.											*		
Phoronida													
Annelida													
Oligochaeta													
Polychaeta													
Asabellides oculata											3	3	
Drilonereis longa									1				
Capitella capitata									1	3	1	23	
Heteromastus filiformis									2	1			
Cirratulus grandis									107	16			
Tharyx acutus					1								
Pherusa affinis				1					1	1			
Glycera americana				1					6	1	1		
Magelona rosea	5	1										2	
Nephtys picta	8	22	1								7	2	
Nereis arenaceodonta									4				
Nereis succinea										1		3	
Aricidea catherinae					1								
Eteone lactea												2	
Eumida sanguinea									1	2			
Phyllodoce arenae											1		
Harmothoe extenuata									15	23	1	14	
Lepidonotus squamatus												1	
Sigalion arenicola				1									
Polydora ligni				1									
Spiophanes bombyx				2							1	2	
Spio setosa				1					3		1	4	
Streblospio benedicti						1							
Autolytus cornutus									1	1			
Mollusca													
Gastropoda													
Unidentified nudibranch											1		
Crepidula plana					1								
Lunatia triseriata												1	
Bivalvia													
Spisula solidissima	5	4	67	39	38	57	6	4	1				
Mytilus edulis									2272	2197	312	2165	
Petricola pholadiformis										3			
Tellina agilis	4	5	10	9	2	1			1	2	15	11	
Arthropoda													
Amphipoda													
Ampelisca abdita						1					1	2	2
Acanthohaustorius millsii				2			1	1					
Acanthohaustorius similis						4	2						
Parahaustorius longimerus					7								
Protohaustorius wigleyi				1									
Elasmopus levis									12	3		19	
Paraphoxus spinosus						1			24	4			
Merostomata													
Ostrocooda													
Copepoda													
Cirripedia													
Mysidacea													
Cumacea													
Decapoda													
Cancer irroratus									16	14	4	24	
Ovalipes ocellatus		1			2	2							
Isopoda													
Echinodermata													

CRUISE 11 (7/86)
Menricia sp.
Chordata
Vertebrata
Ammodytes sp.

94a 94b 95a 95b 96a 96b 97a 97b 98a 98b 99a 99b
9 3

1

CRUISE II (7/86)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
Porifera												
Cliona sp.								*				
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1		1				1	1				
Aschelminthes												
Unidentified nematoda											*	
Ectoprocta												
Alcyonidium sp.							*					
Cryptosula sp.	*							*				
Electra sp.	*											
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata								2	3		2	44
Drilonereis longa										1		
Capitella capitata								1				
Heteromastus filiformis							4	10	21	35		3
Tharyx acutus							1	1				1
Pherusa affinis					1		5	1				
Glycera americana							2	3	7	5	3	3
Glycera dibranchiata							1	2				
Magelona rosea	3	3										
Nephtys bucera				1								
Nephtys picta	29	14	1									
Nereis succinea								1				
Kaploscoplos robustus									2	1		
Pectinaria gouldii											1	
Eteone lactea											1	
Eumida sanguinea							10	14	3	3		
Harmothoe extenuata							18	5		1		
Lepidonotus squamatus							5	2	1			
Sabella microphthalma							1					
Hydroides dianthus								10				
Polydora ligni									3			
Spiophanes bombyx	5							1				
Spio setosa								6	11	3		3
Streblospio benedicti								2	1	2		9
Mollusca												
Gastropoda												
Crepidula fornicata							3	1		2		
Crepidula plana							1	2	2	1		
Urosalpinx cinereus							1	2				
Nassarius trivittata					1		1	2	1	1	13	7
Busycon canaliculatum							1					
Bivalvia												
Cerastoderma pinnulatum							1	1				
Mulinia lateralis										1		
Spisula solidissima			1	5	3	7	9				1	
Mya arenaria							1					
Mytilus edulis									5	3		
Nucula proxima										2		
Ensis directus	1							3	3	1		1
Tellina agilis	1	19					19	16	5	1	1	3
Gemma gemma									1	1		
Mercenaria mercenaria							3	3	8	4	1	1
Pitar morrhuana								1				
Arthropoda												
Amphipoda												
Ampelisca abdita							112	24	15	62	4	4
Unciola serrata							10	21	6	10	1	3
Unidentified caprellidae							3			1		
Corophium tuberculatum							9	3	4	6		
Erichthonius brasiliensis							2					
Acanthohaustorius millsii				7								
Acanthohaustorius similis				2								
Protohaustorius wigleyi	1	2	2	2								

CRUISE II (7/86)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
<i>Elasmopus levis</i>							6	10	7	4		1
<i>Paraphoxus spinosus</i>							44	20	1	3		
<i>Rhepoxynuis epistomus</i>	1	1										
Merostomata												
Ostrocooda												
Unidentified ostrocooda							1	4	2			
Copepoda												
Cirripedia												
<i>Balanus amphitrite</i>								1				
Mysidacea									1			
<i>Heteromysis formosa</i>									8			
Cumacea												
Decapoda												
<i>Cancer irroratus</i>						1	2	6	5	4		
<i>Crangon septemspinosa</i>	1						1	2	4	4	4	
<i>Pagurus longicarpus</i>									1			
<i>Ovalipes ocellatus</i>	2	2	2									
<i>Neopanope texana</i>							2	1				1
Isopoda												
<i>Cyathura polita</i>							3	5				
Echinodermata												
<i>Asterias forbesii</i>									1			
<i>Leptosynapta inhaerens</i>										1		
Chordata												
Vertebrata												

CRUISE II (7/86)	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean										-1		
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1	1	3	1		1						1
Drilonereis longa											1	
Heteromastus filiformis	1		62	26		3	24	20	27	21	111	82
Spiochaetoperus oculatus			1									
Tharyx acutus	2	4	1				1	1	4	2		1
Glycera americana			3	4	2		2	2	6	4	3	3
Glycera dibranchiata	14	13	4		10	17						
Podarke obscura				2			1					
Nereis succinea	1	1	3	5				4	2	11	3	1
Haploscleroplos fragilis										2		
Haploscleroplos robustus											1	
Pectinaria gouldii	1		4	6			2	2		9	2	
Eteone lactea	1		2	1			1	2	1	6	6	1
Eumida sanguinea	9	1	8	1						2		
Paranaitis speciosa		1										
Neremthoe extenuata		2	2									
Lepidonotus squamatus			2	1					1			
Sabellaria vulgaris	12	73	150		1							
Hydroides dianthus			1									
Polydora ligni		28	8	1		2						1
Spiophanes bombyx			2									
Spio setosa	27	15	12	10	16	37			3	4		
Streblospio benedicti			11						1	1		
Autolytus cornutus										1		
Mollusca												
Gastropoda												
Cormabella sp.	1	2										
Crepidula fornicata		2				1						
Crepidula plana	1	1	1									
Urosalpinx cinereus		1	1	1						1		
Ilyanassa obsoleta	5	10	9	3	4	7			2	1	1	6
Nassarius trivittata	2	6	6	6	2	1	1		1	2		5
Lunatia triseriata										1		
Bivalvia												
Lyonsia hyalina	1	1	2	1		1	1					
Mulinia lateralis							1				1	
Mya arenaria	10	4	1	4	4	6	157	55	114	79	183	84
Petricola pholadiformis									1	1		2
Ensis directus	1	1	3	2		4	1	1	1	1	1	3
Tellina agilis	1	1			1	4				1		2
Mercenaria mercenaria	1		1	3								6
Arthropoda												
Amphipoda												
Ampelisca abdita	103	24	105	543	1	4	318	221	359	749	237	211
Unciola dissimilis			1									
Unciola serrata	5	19	6	2	4	2	1			1		
Corophium tuberculatum	10	9	1	13	9	3	158	69	146	329	55	34
Elasmopus levis		3	1				1			2		
Melita nitida	15	3	5	4					2	2		1
Merostomata												
Ostrocoela												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa	10											
Cumacea												
Decapoda												
Cancer irroratus												1

CRUISE II (7/86)

	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
Crangon septemspinosus		4		1		1				1	1	
Pagurus longicarpus		3										
Ovalipes ocellatus						1						
Neopanope texana	5		5	2								
Isopoda											2	2
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (7/86)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Porifera												
Unidentified sponge												
Cnidaria												
Anthozoa												
Metridium senile (tent.)					6							
Hydrozoa												
Platyhelminthes												
Unidentified flatworm				1								
Rhynchocoela												
Unidentified nemertean				1			1		1			
Aschelminthes												
Unidentified nematoda												2
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata		1		1	2	8				1		
Heteromastus filiformis	11	23	8	20	4	3	9	12				
Spiochaetoperus oculatus											1	
Tharyx acutus		1		6		1				1		
Glycera americana	2	3	1	4	6	1	1	3				
Glycera dibranchiata						2			3	2	3	5
Podarke obscura		1		1				1				
Nephtys picta									4	9	9	15
Nereis succinea	1		1	1	1	1						
Haploscoloplos robustus		1		1	1							
Aricidea catherinae									5	4	1	5
Pectinaria gouldii	2	1		3	1	2		1				
Eteone lactea		2			2	3		1				
Eumida sanguinea					2	3						
Harmothoe extenuata					6			1				
Lepidonotus squamatus					3							
Sabellaria vulgaris						1						
Hydroides dianthus					1							
Polydora ligni		6		1		1						
Spiophanes bombyx										1		3
Spio setosa				1		1				4	1	
Streblospio benedicti					2	1		1				
Autolytus cornutus	1											
Mollusca												
Gastropoda												
Crepidula fornicata					80	10						
Crepidula plana					90	9			1			
Ilyanassa obsoleta	1	5		1	3	3		3				
Nassarius trivittata	2	4		4	1	5		5	4	4		
Bivalvia												
Lyonsia hyalina					1							
Mulinia lateralis		1			1							
Spisula solidissima									9	3	5	11
Mya arenaria	65	50	65	139	5	1	41	65		1		
Mytilus edulis					1		1					
Crassostrea virginica					1							
Ensis directus			1	1		5						
Tellina agilis					2	5			17	15	11	6
Mercenaria mercenaria				1	1	5						
Arthropoda												
Amphipoda												
Ampelisca abdita	81	318	81	582	234	136	131	351				
Unciola dissimilis												2
Unciola serrata				3	2	2						
Unidentified caprellidae						6						
Corophium tuberculatum	7	15	59	210	57	14	63	86				
Erichthonius brasiliensis						3						
Elasmopus levis								1				
Melita nitida				1		1						
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												

CRUISE II (7/86)

	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Heteromysis formosa					1	2						
Neomysis americana									2			1
Cumacea												
Decapoda												
Cancer irroratus	1		1									
Crangon septemspinosus									1			
Libinia emarginata							1					
Pagurus longicarpus							1					
Ovalipes ocellatus									1			
Neopanope texana			1		6	1	1					
Isopoda												
Echinodermata												
Chordata												
Vertebrata												

CRUISE 11 (7/86)	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8a	B8b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean				1	1			1				
Aschelminthes												
Unidentified nematoda		3										
Ectoprocta												
Cryptosula sp.					*							
Electra sp.					*		*				*	
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				3	11			1				
Drilonereis longa												1
Capitella capitata					1							
Heteromastus filiformis				6	40	30	4	5	2	3	36	33
Spirochaetoperus oculatus				1			1					
Tharyx acutus					1							
Pherusa affinis				2	2	2					2	
Glycera americana			3	3	8	11	6	6	1	4	5	4
Glycera dibranchiata		2	2	2	1						1	
Podarke obscura								4		1		1
Maldanopsis elongata							1					
Nephtys picta	8	6										
Nereis succinea					4	1					3	
Aricidea catherinae	1	2	2	3								
Pectinaria gouldii				4	2	2					2	
Eteone lactea					2				1		1	
Eumida sanguinea				1	1	5				1	1	
Harmothoe extenuata					1	6	1		1			
Harmothoe imbricata						1						
Lepidonotus squamatus						1						
Polydora ligni				15	1							
Spiophanes bombyx	1											
Spio setosa			7	7								
Streblospio benedicti			2									
Mollusca												
Gastropoda												
Crepidula fornicata						20	2		1			
Crepidula plana						8					1	
Massarius trivittata	1	1	5	7	2	8	1	2	1	2	2	2
Bivalvia												
Lyonsia hyalina					1						1	
Mulinia lateralis										1		
Spisula solidissima	3	2		1								
Mya arenaria					18	12			4	2	7	2
Mytilus edulis									1			
Nucula proxima					16	12	1	1	1			
Petricola pholadiformis					3	1						2
Esis directus				2	1	1				1	1	
Tellina agilis	5	5	6	11	5	7		1	3		4	2
Mercenaria mercenaria		1			3	6			1		2	
Pitar morrhuana												1
Arthropoda												
Amphipoda												
Ampelisca abdita	1		15	640	1049	1156	15	333	436	148	607	290
Unciola dissimilis								1				
Unciola irrorata			2								2	
Unciola serrata				1	8	17					3	2
Unidentified caprellidae				1								
Corophium tuberculatum				39	630	584	1	31	41	12	370	244
Erichthonius brasiliensis				1								
Elasmopus levis				1	12	21				1	7	1
Paraphoxus spinosus				2	11	23					1	1
Rhepoxynuis epistomus											4	
Merostomata												
Ostrocooda												

CRUISE II (7/86)	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8a	B8b
Unidentified ostracoda					1					1		
Copepoda												
Cirripedia												
<i>Balanus amphitrite</i>							3					
Mysidacea												
<i>Heteromysis formosa</i>						2						
<i>Neomysis americana</i>		1										
Cumacea												
<i>Oxyurostylis smithi</i>					1							
Decapoda												
<i>Cancer irroratus</i>				3	3	1	15	1			2	
<i>Crangon septemspinosa</i>					3	3						
<i>Pagurus longicarpus</i>	1						1					
<i>Ovalipes ocellatus</i>					1			1				
<i>Neopanope texana</i>						1						
Isopoda												
<i>Edotea triloba</i>					1							
Echinodermata												
Chordata												
Vertebrata												
<i>Pronotus evolans</i> (sea robin)						1						

CRUISE II (7/86)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean			1				1	1	1	1		
Aschelminthes												
Ectoprocta												
Alcyonidium sp.						*	*					
Cryptosula sp.						*	*				*	
Electra sp.						*	*				*	
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata					2						5	
Drilonereis longa	2											
Heteromastus filiformis	5	4										
Cirratulus grandis					4	7						
Tharyx acutus		1			2					1		
Pherusa affinis		2			6	1				1		
Glycera americana	4	2	1			1					1	1
Glycera dibranchiata			3	1	5	1	1	2		1	4	1
Lumbrineris fragilis							1					
Magelona rosea				1			2	3	1	1		1
Nephtys picta			1	5	8	3	30	39	44	44	33	25
Nereis succinea	2	1			2	1	1					
Diopatra cuprea						1						
Aricidea catherinae	1	5	1									1
Eteone lactea		1										
Eumida sanguinea		14									1	
Paranaitis speciosa		1										
Harmothoe extenuata		2			25	16					7	
Lepidonotus squamatus											1	
Potamilla reniformis						1						
Polydora ligni		1										
Spiophanes bombyx			1			1			7			
Spio setosa		1			3	1						
Amphitrite ornata						1						
Mollusca												
Gastropoda												
Crepidula plana		1										
Nassarius trivittata	6	5	2	1							1	
Bivalvia												
Spisula solidissima	1		5	14				1	1	8	1	4
Mya arenaria	3	2		1								
Mytilus edulis					3222	2770	1	1		2	9	1
Nucula proxima	2											
Pandora gouldiana						1						
Ensis directus	7	4							5			
Tellina agilis	5	5	8	11	4	5	2	22	21	41	19	8
Mercenaria mercenaria		1										
Pitar morrhuana									3			
Arthropoda												
Amphipoda												
Ampelisca abdita	909	1206					1					
Unciola dissimilis	1										1	
Unciola frorrata										1		
Unciola serrata			3									
Corophium tuberculatum	122	353									1	
Erichthonius brasiliensis	1	2										
Protohaustorius wigleyi							1					
Elasmopus levis	3	4			1	1					1	
Paraphoxus spinosus	7	25									3	2
Rhepoxynuis epistomus											1	
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus amphitrite					14	14						

CRUISE II (7/86)		B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Mysidacea													
<i>Neomysis americana</i>			1							1			
Cumacea													
Decapoda													
<i>Cancer irroratus</i>						16	31				2	3	2
<i>Crangon septemspinosa</i>			1							1		2	
<i>Pagurus longicarpus</i>											1		
<i>Ovalipes ocellatus</i>			1	1	2					11	3	3	1
Isopoda													
Echinodermata													
<i>Asterias forbesii</i>							1					2	
Chordata													
Vertebrata													

CRUISE II (7/86)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone								2				
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1	1				1		1				
Aschelminthes												
Unidentified nematoda								*	1			1
Ectoprocta												
Alcyonidium sp.								*				
Cryptosula sp.			*	*	*	*		*		*		*
Electra sp.				*	*		*	*	*	*		*
Schizoporella sp.							*		*			
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	67	25	2				1	2	1		1	
Drilonereis longa					1							
Capitella capitata								1				
Heteromastus filiformis	1		10	7	2	14	4	11	2	5		
Spirochaetoperus oculatus										1		
Cirratulus grandis			3	9	242	118	143		32	264	229	
Dodecaceria corallii								1		1		
Tharyx acutus			1			1						
Pherusa affinis	7	2	8	12	7	4	2	14	9	17		2
Glycera americana		1	7	7	4	4	2	7	7	5		1
Glycera dibranchiata						3					2	4
Podarke obscura		1		2				6				
Lumbrineris fragilis												1
Nephtys incisa	2											
Nephtys picta									1		44	12
Nereis succinea			4	2						1		
Diopatra cuprea			1									
Pectinaria gouldii								2				
Eteone lactea						3						
Eumida sanguinea			1	2				2				
Paranaitis speciosa						1						
Harmothoe extenuata		2	79	188	16	96	29	68	61	117	3	
Harmothoe imbricata				1			2	1	2	1		
Lepidonotus squamatus			3	30	12	16	4	41	16	29		
Sabellaria vulgaris			1		1					1		
Potamilla reniformis							1	1				
Hydroides dianthus			7	7	6	8	9	9	4	1		
Polydora ligni				2		1		2		4		
Streblospio benedicti											1	
Autolytus cornutus				2		3	1	2		6		
Autolytus sp.			1									
Amphitrite ornata											2	
Mollusca												
Gastropoda												
Crepidula fornicata						1						
Crepidula plana							1	3		1		
Urosalpinx cinereus					2			6				
Massarius trivittata	1	3	2	1	1		2		14	2	2	
Onchidoris aspera										6		
Bivalvia												
Cerastoderma pinnulatum				12				1		2		
Spisula solidissima												9
Mytilus edulis			747	1224			78	352	2557	645		
Nucula proxima	2	15	1	5					1	11		
Pandora gouldiana												1
Petricola pholadiformis				1			1			5		
Ensis directus					1						1	2
Macoma balthica				2								
Tellina agilis	1		5	2	3	10	1	4		5	23	11
Gemma gemma											1	
Mercenaria mercenaria				1								
Pitar morrhua										1		2

CRUISE II (7/86)

Arthropoda

Amphipoda

	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
<i>Ampelisca abdita</i>	1				2			2	2		6	
<i>Unciola dissimilis</i>							2		2			
<i>Unciola irrorata</i>						1						
<i>Unciola serrata</i>				2	10						7	4
Unidentified caprellidae			1	1							1	
<i>Erichthonius brasiliensis</i>								3				
<i>Lysianopsis alba</i>											1	
<i>Paraphoxus spinosus</i>			2	3	4	5	1	2		2		3
<i>Phoxocephalus holbolli</i>							1				1	
<i>Harpinia propinqua</i>								2			2	
<i>Rhepoxynus epistomus</i>							2		2			

Merostomata

Ostrocooda

Copepoda

Cirripedia

<i>Balanus amphitrite</i>			2	4				4				
<i>Balanus balanus</i>							13		19			

Mysidacea

<i>Heteromysis formosa</i>					1			1		2		
Mysid sp.			1									
<i>Neomysis americana</i>						2						6

Cumacea

<i>Oxyurostylis smithi</i>												2
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Decapoda

<i>Cancer irroratus</i>	2	1	5	17	4	3	1	3	14	13	3	1
<i>Crangon septemspinosa</i>					1		2	1			4	
<i>Libinia emarginata</i>											1	
<i>Pagurus longicarpus</i>				1							1	
<i>Ovalipes ocellatus</i>												2
<i>Neopanope texana</i>			5	4	1	1	1	4		4		

Isopoda

<i>Cyathura polita</i>			8	10	26	26	7	11	2			
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Echinodermata

<i>Asterias forbesii</i>					2			4	1			
<i>Arbacia punctulata</i>				2								

Chordata

Vertebrata

Blenny-like larval fish					1						1	
<i>Myoxocephalus aeneus</i> (sculpin)			1									

CRUISE III (10/86)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid					*	*						
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1				3	1	1				1	1
Aschelminthes												
Ectoprocta												
Cryptosula sp.					*	*						
Electra sp.						*						
Aevertillia sp.						*						
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1											
Drilonereis longa						1		2				
Heteromastus filiformis	50	21	4	18		2	1	3				
Cirratulus grandis			1									
Tharyx acutus				1	6	19		4				
Pherusa affinis				1			1					
Glycera americana	6	5	2	7			6					
Glycera dibranchiata					6	7	4	5	4	3		
Maldanopsis elongata	1											
Nephtys incisa					1							
Nephtys picta											2	5
Nereis succinea	2		7	14								
Haploscoloplos robustus		1										
Aricidea catherinae								1			10	3
Pectinaria gouldii				3				2				
Eteone lactea	2			1								
Eumida sanguinea		1		1	2							
Phyllodoce arenae				1	1			1				
Harmothoe extenuata			1	2			1					
Lepidonotus squamatus			1									
Sabellaria vulgaris				1	20	6			2	1		
Hydroides dianthus	2	9	9	24	36	19						
Polydora ligni							1					
Scolelepis squamata						1						
Spiophanes bombyx												3
Spio setosa							2		1	1		
Streblospio benedicti								1				
Autolytus sp.					2							
Mollusca												
Gastropoda												
Acteon punctostriatus	2											
Crepidula fornicata		1		1	26	52	9			6		
Crepidula plana		1		1	4	4	16		3			3
Ilyanassa obsoleta		4		10								
Massarius trivittata	7	12		5	5	2	2	3	3		1	
Odostomia producta	1											
Bivalvia												
Lyonsia hyalina					4	2	1	1		1	2	
Mulinia lateralis	1	3		1		3		4	14	28	2	3
Spisula solidissima							2				2	
Mya arenaria		8				1						
Pandora gouldiana												1
Ensis directus												1
Tellina agilis	2	1		1	3	4	4	5	5	10	2	5
Mercenaria mercenaria		3					1	1				
Arthropoda												
Amphipoda												
Ampelisca abdita	1015	691	15	4851	1		1312	1066		3	1	
Unciola dissimilis	1						4					
Unciola serrata		1	4		8	8		2				
Unidentified caprellidae					1							
Corophium tuberculatum	10	2	3	65	6	3	26	48		1		
Erichthonius brasiliensis				8			1					
Acanthohaustorius sp.							1					

CRUISE III (10/86)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Elasmopus levis	2	2	52	34	8	56	40					
Melita nitida	2	6	3	29								
Paraphoxus spinosus			7		42	62	63	13				
Rhepoxynuis epistomus	2			16								
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa			69	65		4	23			1		
Neomysis americana		1										
Cumacea												
Oxyurostylis smithi										1		1
Decapoda												
Cancer irroratus				5			7					
Pagurus longicarpus				3				2				
Neopanope texana		3	12	2	1	7	7					
Isopoda												
Echinodermata												
Echinarachnius parma		1										
Chordata												
Vertebrata												

CRUISE III (10/86)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid						*						*
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean				1					1			
Aschelminthes												
Ectoprocta												
Alcyonidium sp.		*										
Cryptosula sp.											*	*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata						1						
Capitella capitata					1							
Meteromastus filiformis					6	1		1				2
Cirratulus grandis					2	1						
Tharyx acutus				1	8				3			1
Glycera americana	5	9			1			1	3			
Glycera dibranchiata	1	2			2	1						
Lumbrineris fragilis					1	1						
Magelona rosea				1					1			
Nephtys incisa							2	1				
Nephtys picta		1	6	17						1		
Nereis arenaceodonta					4	2						1
Nereis succinea					4	3						
Diopatra cuprea						1						
Orbinia ornata										2		
Pectinaria gouldii					1	1	1					
Eumida sanguinea		1									1	
Phyllodoce arenae		1										
Karmothoe extenuata					24	13					15	1
Lepidonotus squamatus					50	22		1			2	1
Sabellaria vulgaris											23	15
Sabella microphthalma						1						
Hydroides dianthus						4					5	2
Sigalion arenicola									1			
Polydora ligni											1	
Spiophanes bombyx		1										
Streblospio benedicti		1										
Autolytus cornutus												2
Autolytus sp.											1	
Mollusca												
Gastropoda												
Crepidula fornicata					1				1		139	43
Crepidula plana		1			3	4					513	297
Nassarius trivittata	2	6				2		4	2	1	1	
Bivalvia												
Mulinia lateralis	6	7					11	5				
Spisula solidissima									46	39	4	
Mya arenaria										2	19	
Mytilus edulis					1340	1028						1
Ensis directus		1										
Tellina agilis	9	19	4		1				6	1		2
Mercenaria mercenaria											1	
Arthropoda												
Amphipoda												
Ampelisca abdita		6				1	1				2	
Unciola dissimilis												1
Unciola serrata					1	1					8	4
Unidentified caprellidae												7
Corophium tuberculatum											1	1
Erichthonius brasiliensis												8
Acanthohaustorius similis									1			
Protohaustorius wigleyi				1								
Elasmopus levis					16	3			1			70
Melita nitida											20	7
Paraphoxus spinosus					6	1					2	8

CRUISE III (10/86)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Rhepoxynuis epistomus									7	18		
Merostomata												
Ostrocode												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa					1						51	29
Neomysis americana				1								
Cumacea												
Decapoda												
Cancer irroratus					6	1						4
Libinia emarginata												2
Pagurus longicarpus	1		1						1			
Neopanope texana						2					14	17
Isopoda												
Cyathura polita					10	12						
Echinodermata												
Chordata												
Vertebrata												

CRUISE III (10/86)	13a	13b	14a	14b	15a	15b	16a	16b	17a	17b	18a	18b
Porifera												
Cnidaria												
Anthozoa												
<i>Ceriantheopsis americanus</i>				1								
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean	1	1					1	1				
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
<i>Heteromastus filiformis</i>			13	31					1	4	20	40
<i>Tharyx acutus</i>		1		3							1	
<i>Pherusa affinis</i>							1		7			
<i>Glycera americana</i>	1	3	6	5	1		1	1	2		2	
<i>Glycera dibranchiata</i>							10	3		2		
<i>Maldanopsis elongata</i>				1			1		1			1
<i>Nephtys picta</i>	1	1										
<i>Nereis arenaceodonta</i>					1							
<i>Nereis succinea</i>				9			5					
<i>Haploscoloplos fragilis</i>								1				
<i>Aricidea catherinae</i>		1										
<i>Pectinaria gouldii</i>							2	1				
<i>Eteone lactea</i>												1
<i>Eumida sanguinea</i>				1								
<i>Harmothoe extenuata</i>				4			2		1	1	1	
<i>Lepidonotus squamatus</i>				1								
<i>Sabellaria vulgaris</i>					4		1					
<i>Streblospio benedicti</i>				1								
Mollusca												
Gastropoda												
<i>Crepidula fornicata</i>				1			30	1				
<i>Crepidula plana</i>				3			35					1
<i>Ilyanassa obsoleta</i>							1					
<i>Massarius trivittata</i>	2		3	2	6	1	5	9	1	3	1	2
Bivalvia												
<i>Mulinia lateralis</i>							2	2				
<i>Spisula solidissima</i>		1			31	65				1	1	
<i>Mya arenaria</i>			1		1	1	7	8			9	12
<i>Mytilus edulis</i>				101			31					
<i>Nucula proxima</i>			1						1			1
<i>Petricola pholadiformis</i>						1						
<i>Ensis directus</i>					5	5	2	3				
<i>Tellina agilis</i>	4	3	1	3				1	4	3	10	5
<i>Mercenaria mercenaria</i>			1		1	2		2			1	
<i>Pitar morrhuana</i>			1								1	
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>			655	650	212	409	692	939	159	198	138	102
<i>Unciola dissimilis</i>			6						2			
<i>Unciola irrorata</i>						2						
<i>Unciola serrata</i>			2		6	16		18				
<i>Corophium tuberculatum</i>			5			5	8	7	2		2	1
<i>Elasmopus levis</i>			27	42			19		5	4	2	
<i>Melita nitida</i>				9								
<i>Paraphoxus spinosus</i>				1		1			4	5	3	1
<i>Rhepoxynuis epistomus</i>	4	8										
Merostomata												
Ostrozoada												
Copepoda												
Cirripedia												
Mysidacea												
Mysid sp.											2	
Cumacea												
Decapoda												
<i>Neopanope texana</i>			1	1		19	10					
Isopoda												
<i>Cyathura polita</i>											2	

CRUISE III (10/86)

Echinodermata

Chordata

Vertebrata

13a 13b 14a 14b 15a 15b 16a 16b 17a 17b 18a 18b

CRUISE III (10/86)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Hydractinia echinata												*
Platyhelminthes												
Unidentified flatworm											3	
Rhynchozoela												
Unidentified nemertean	1	1										1
Aschelminthes												
Ectoprocta												
Unidentified ectoproct				*								
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata			1								1	
Drilonereis longa									1	1		1
Meteromastus filiformis					9	5			20	27	21	58
Spiochaetoperus oculatus					1							
Cirratulus grandis				3								
Tharyx acutus		1	6	1					2	3		
Pherusa affinis											1	
Glycera americana					4		3		2	3	2	2
Glycera dibranchiata			3	1		4		1	1			2
Podarke obscura					1							
Magelona rosea	1	1										
Nephtys incisa								1				
Nephtys picta	6	6	6	3								
Nereis succinea					1				2		2	1
Pectinaria gouldii					4				2		5	5
Eteone heteropoda		1										
Eteone lactea		1										
Eumida sanguinea											1	1
Phyllodoce arenae										2	1	
Harmothoe extenuata										3	3	2
Lepidonotus squamatus										1	1	2
Sabellaria vulgaris											1	
Spiophanes bombyx	1											
Spio setosa		1		2								
Mollusca												
Gastropoda												
Acteon punctostriatus									2	6	2	
Crepidula fornicata				1	6				1	17	12	26
Crepidula plana					12				3	6	3	3
Ilyanassa obsoleta						1			1	2		1
Nassarius trivittata	3	1	2	2	1				3	11	6	13
Bivalvia												
Anadara transversa									1			
Lyonsia hyalina			5						1	2	2	
Mulinia lateralis											8	
Spisula solidissima	2	1	11	17	1	2	1		6	4		
Mya arenaria					1		2	1	5	3	9	
Nucula proxima											4	1
Petricola pholadiformis	1											1
Ensis directus	1		1				2	1			1	
Tellina agilis	5	6	4	6		1		1	17	14	13	16
Mercenaria mercenaria			1		1				2	1	1	
Pitar morrhuana											1	
Arthropoda												
Amphipoda												
Ampelisca abdita	2		1		273	86	240	416	2038	2952	2654	1441
Unciola dissimilis										2	5	6
Unciola serrata			3						24	12	18	
Corophium tuberculatum									100	113	251	96
Erichthonius brasiliensis										1		
Elasmopus levis					16	2	3	6	47	70	61	19
Melita nitida					2	3						✓
Synchelidium americanum	1											
Paraphoxus spinosus						1			88	85	79	1
Rhepoxynuis epistomus												44

CRUISE III (10/86)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
Merostomata												
Ostrococha												
Copepoda												
Cirripedia												
<i>Balanus improvisus</i>					1							
Mysidacea												
<i>Heteromysis formosa</i>									1	4		
Mysid sp.											1	5
<i>Neomysis americana</i>				1								
Cumacea												
<i>Oxyurostylis smithi</i>		1										
Decapoda												
<i>Cancer irroratus</i>											1	
<i>Pagurus longicarpus</i>									1	1		1
<i>Neopanope texana</i>					8				1	4	1	
Isopoda												
<i>Edotea triloba</i>											1	
<i>Cyathura polita</i>											1	1
Echinodermata												
Chordata												
Vertebrata												

CRUISE III (10/86)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid			*	*								
Campanularia flexuosa (tent.)									*			
Platyhelminthes												
Unidentified flatworm											1	
Rhynchocoela												
Unidentified nemertean						1					1	1
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1											
Drilonereis longa				1								
Keteromastus filiformis	6	1	1	1	33	52	48	56	3	16		
Tharyx acutus	17	1					3	4				
Glycera americana	6	1			4	3	8	10			1	
Glycera dibranchiata			12	14					20	45		
Podarke obscura					1	1	1	1				
Maldanopsis elongata						1	1					
Nephtys incisa	2											
Nephtys picta			1	1								
Nereis succinea							8	11		2		
Haploscoplos robustus								1				
Aricidea catherinae			3	7								
Pectinaria gouldii	4	1	1		7	6	9	8		1	10	20
Eteone lactea							1		1	1		
Eumida sanguinea							1					
Paranaitis speciosa							1	1				
Phyllodoce arenae					1							
Karmothoe extenuata							1					
Sabellaria vulgaris			1									
Hydroides dianthus								2				
Spiophanes bombyx				2								
Spio setosa				1								
Streblospio benedicti			1	3			2		15			
Autolytus cornutus											1	
Mollusca												
Gastropoda												
Acteon punctostriatus		1	3	4								
Crepidula fornicata		2		1			4	20	1	8		
Crepidula plana				1			1	1		2		
Eupleura caudata								1				
Urosalpinx cinereus								3		6		
Ilyanassa obsoleta		10							3			
Massarius trivittata	3	7	3	1						2		
Bivalvia												
Anadara transversa				1								
Lyonsia hyalina	1		7	4							1	
Mulinia lateralis	7	49	48	75			1	2	6		73	74
Spisula solidissima				1								
Mya arenaria									1			1
Mucula proxima	1											
Petricola pholadiformis		1						1				
Esis directus			1									
Tellina agilis		1	5	8				1				
Mercenaria mercenaria						1	4	1	3	2		
Arthropoda												
Amphipoda												
Ampelisca abdita	78	50		3	707	246	1131	1323	5	10	5	
Unciola dissimilis				1	3							
Unciola serrata			1						4	7		
Unidentified caprellidae				3						4		
Cerupus tubularis				1								
Corophium tuberculatum				2	10	2	7	15	3	9		
Erichthonius brasiliensis				4								
Elasmopus levis				2			35	49	7	326		

CRUISE III (10/86)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Melita nitida									7	12		
Paraphoxus spinosus		1					2					
Merostomata												
Ostrococha												
Unidentified ostrococha				1								
Copepoda												
Cirripedia												
Balanus improvisus							1					
Mysidacea												
Metromysis formosa								7	4	2		
Mysid sp.	1											
Cumacea												
Decapoda												
Crangon septemspinosa								1	1			
Palaeomonetes pugio							1					
Neopanope texana							9	23			24	
Panopeus herbstii							1	1				
Isopoda												
Edotea triloba			1	1	2							
Cyathura polita								1	1	18		
Echinodermata												
Chordata												
Molgula manhattensis			1									
Vertebrata												

CRUISE III (10/86)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Porifera												
Unidentified sponge												*
Cliona sp.									*			
Cnidaria												
Anthozoa												
Hydrozoa												
Abietinaria abietina (tent.)									*			
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1				1						1
Aschelminthes												
Unidentified nematoda		1										
Ectoprocta									*	*		
Cryptosula sp.												
Schizoporella sp.												*
Phoronida												
Phoronis architecta						1						
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata		1						1				1
Capitella capitata										1		
Heteromastus filiformis	10	3				14	7	7	3	2	13	36
Spirochaetoperus oculatus						2						
Cirratulus grandis						1	6			4	5	
Tharyx acutus							4	19	3			4
Glycera americana	9					10	8		1	4		4
Glycera dibranchiata	2	3			4		4	10	13	6	7	5
Nephtys picta				1	2							
Nereis arenaceodonta										2		
Nereis succinea		1			1		2		2			2
Diopatra cuprea									1			
Aricidea catherinae								12	5	2		
Pectinaria gouldii	1	1				3	2	3			1	6
Eumida sanguinea	1					1		13	4			2
Phyllodoce arenae	2					1			1			
Harmothoe extenuata							3		1			
Lepidonotus squamatus								4				
Sabellaria vulgaris							7	25	7	5	12	5
Hydroides dianthus							13	36	1	2	5	3
Polydora ligni								1				1
Spio setosa		1			1							1
Streblospio benedicti	56	5			1	18		2			1	
Autolytus cornutus								1				
Mollusca												
Gastropoda												
Acteon punctostriatus	2				1	45			1	1		
Crepidula fornicata							328	397	70	41	2	
Crepidula plana						3	24	48	1			
Urosalpinx cinereus									1		2	2
Ilyanassa obsoleta											2	15
Massarius trivittata	10	6			8	1	17	13	1	5	2	8
Odostomia producta											1	
Bivalvia												
Lyonsia hyalina									5	10		
Mulinia lateralis	9				32	107	1		18	1		
Spisula solidissima		1	1				1			7		
Nucula proxima											1	
Tellina agilis	11	9				8	2	2	2	1	1	
Gemma gemma							21	26	3	6	1	
Mercenaria mercenaria							1					
Pitar morrhuana	1					3						
Arthropoda												
Amphipoda												
Ampelisca abdita	290	110	1		10	8	1	2			50	164
Unciola serrata							8	22	17	7	5	12
Unidentified caprellidae									30			
Corophium tuberculatum							10	11	32	2	3	4
Erichthonius brasiliensis								1	6			
Elasmopus levis	1					1	19	86	17	3	24	118
Melita nitida											2	9

CRUISE III (10/86)

	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Paraphoxus spinosus							31	48		4	27	
Phoxocephalus holbolli							1					
Rhepoxynuis epistomus									6			58
Merostomata												
Ostrocode									1			
Unidentified ostrocode												
Copepoda												
Cirripedia												
Balanus amphitrite							2		5			
Balanus eburneus							14					
Balanus improvisus												
Mysidacea								36				
Heteromysis formosa									7			
Neomysis americana					1							3
Cumacea												
Oxyurostylis smithi							1	1				
Decapoda												
Cancer irroratus												
Crangon septemspinosa						1	1	2	1			1
Pagurus longicarpus												
Pagurus longicarpus								2				
Ovalipes ocellatus										1		
Neopanope texana							2	10	1		6	8
Isopoda												
Echinodermata												
Chordata												
Vertebrata												

CRUISE 111 (10/86)	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm		2	1	3								
Rhynchocoela												
Unidentified nemertean	1		1	1					1			
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1								1			
Heteromastus filiformis	3	1	3		8	4	1		5	1	3	3
Cirratulus grandis	1								2			
Pherusa affinis										1		
Glycera americana			9	6								
Glycera dibranchiata	14	15			33	28	1	1	10	2	7	2
Podarke obscura				1								
Nereis arenaceodonta								1				
Nereis succinea	5	1	3	4		1	1		2	1		2
Kaploscoplos fragilis										1		1
Kaploscoplos robustus			3	2				1				
Pectinaria gouldii	7	4	45	11	1				5		6	
Eteone lactea									5	2		
Eumida sanguinea		3										
Paranaitis speciosa				1								
Phyllodoce arenae				1								
Marmothoe imbricata						1						
Lepidonotus squamatus				1								
Sabellaria vulgaris	1	29			2	2						
Potamilla reniformis										2		1
Sabella microphthalma				1								
Spio setosa		1										
Streblospio benedicti						1			6			
Mollusca												
Gastropoda												
Acteon punctostriatus	2	3		1					3			
Crepidula fornicata	25	315	4	18	11	1			17		1	
Crepidula plana		4	2	3		6			1			
Urosalpinx cinereus	1	1			1				2			
Ilyanassa obsoleta	4	5	6	2		1			1	3	1	
Massarius trivittata		5	4	1	6	2	4	1	4	3	4	
Odostomia producta	3		1								1	
Bivalvia												
Lyonsia hyalina		2	1		6	12			4	2		
Mulinia lateralis	1	11	3									
Spisula solidissima	5				211	98	1		43	4	36	2
Mya arenaria							1					
Mytilus edulis				1								
Petricola pholadiformis	11			1					2	1		
Ensis directus			1				1					
Tellina agilis				1	3	3			1		3	1
Gemma gemma	4				1							
Mercenaria mercenaria	1	2	1	2	2	2		1	1			
Arthropoda												
Amphipoda												
Ampelisca abdita	3381	1495	2879	2287	19	3	226	151	1521	988	1024	475
Unciola dissimilis		1		1								
Unciola irrorata					1							
Unciola serrata	16	9	1	1	6	4		2	1	1		
Corophium tuberculatum	118	67	7	13	7	7			58	53	4	7
Elasmopus levis	111	54	54	40			3	1	46	44	39	14
Melita nitida		30										
Paraphoxus spinosus	15											
Rhepoxynus epistomus		3										
Merostomata												
Ostrocode												
Copepoda												

CRUISE III (10/86)	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
Cirripedia												
<i>Balanus improvisus</i>										1		
Mysidacea												
<i>Heteromysis formosa</i>		8		3								
Cumacea												
<i>Oxyurostylis smithi</i>					5							
Decapoda												
<i>Pagurus longicarpus</i>									2	-		
<i>Meopanope texana</i>	7	6	3	5						1		2
Isopoda												
<i>Edotea triloba</i>												3
Echinodermata												
<i>Echinarachnius parvus</i>												1
Chordata												
Vertebrata												

CRUISE III (10/86)	51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm			2	2	1							
Rhynchocoela												
Unidentified nemertean					1		1		1		1	1
Aschelminthes												
Ectoprocta												
Electra sp.			*									
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata			1									
Capitella capitata					4							
Heteromastus filiformis			1			2			3	3	3	1
Cirratulus grandis	3											
Glycera americana	3	1	14		1						3	2
Glycera dibranchiata	4	10		16			21	14	6	1		
Nephtys picta								1				
Nereis succinea		2			1	4			3	2	3	1
Haploscoloplos fragilis					7	13		2	3	1		
Pectinaria gouldii					10	15			2	2	7	4
Eteone lactea					2							
Paranaitis speciosa											1	1
Karmothoe extenuata	1					1						
Sabellaria vulgaris			3									
Hydroides dianthus	1											
Spiophanes bombyx	1											
Streblospio benedicti	1											1
Mollusca												
Gastropoda												
Acteon punctostriatus	1		3								1	
Crepidula fornicata	21	5	71	17	1	1	4				1	2
Crepidula plana				2								
Urosalpinx cinereus		1										
Ilyanassa obsoleta		3	2	3	1	8	4	3	7	1	6	4
Massarius trivittata	3	10	5	10	3	22	1		1		5	2
Odostomia producta											3	
Bivalvia												
Lyonsia hyalina	2	13	5	2								
Mulinia lateralis			220	61	1						2	1
Spisula solidissima	169	79				1	4	3	15	13		
Mya arenaria						1			227	86	480	468
Petricola pholadiformis			1		1							
Ensis directus												1
Tellina agilis	4	2	3	1			2					
Gemma gemma	5	5						1				
Mercenaria mercenaria	2		8									
Arthropoda												
Amphipoda												
Ampelisca abdita	48	167	6	5	1075	1432	3	6	631	164	492	677
Unciola dissimilis			1	1	7							
Unciola serrata	2	4				7	2	2				
Unidentified caprellidae		8		1								
Corophium tuberculatum	5	43	5	1	24	40						2
Erichthonius brasiliensis		2										
Elasmopus levis		25	4	2	1	16					1	4
Merostomata												
Ostrocoela												
Copepoda												
Cirripedia												
Balanus balanus			3									
Mysidacea												
Cumacea												
Oxyurostylis smithi	6			1			4	1				
Decapoda												
Cancer irroratus				1								
Pagurus longicarpus	1			1		1						

CRUISE III (10/86)

Neopanope texana

Isopoda

Edotea triloba

Echinodermata

Chordata

Vertebrata

51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
	1									1	2

4

1

CRUISE III (10/86)

	57a	57b	58a	58b	59a	59b	60a	60b	62a	62b	68a	68b
<i>Neopanope texana</i>	5	22	3	10							4	5
Isopoda												
<i>Edotea triloba</i>						1						
Echinodermata												
Chordata												
<i>Molgula manhattensis</i>				1	1	8	3	2				
Vertebrata												

CRUISE III (10/86)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone							1	1				
Hydrozoa												
Stylactis hooperi										•		
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean							1	1				
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	4	1					1					
Drilonereis longa											1	
Meteromastus filiformis	2	3	8	6	1		1	2	3	3		1
Cirratulus grandis			4	2								
Tharyx acutus				3					7	1		
Glycera americana			4	7			1	3	6	1		2
Glycera dibranchiata	15	11			1				6	8		3
Podarke obscura			1									
Maldanopsis elongata								2				
Magelona rosea					2							
Nephtys picta		1			12	20						
Nereis arenaceodonta								1				
Nereis succinea			7	3			1	4		1		
Diopatra cuprea							1					
Naploscloplos fragilis	1											
Naploscloplos robustus	1						6	2				1
Pectinaria gouldii	7	6	3	3			8	5	3	12		
Eteone lactea									1			
Eumida sanguinea									5	2		
Paranaitis speciosa									1			
Narchothoe extenuata			14	11				3				
Narchothoe imbricata								1				
Lepidonotus squamatus			6	4				1		2		
Sabellaria vulgaris				1					105	136		
Hydroides dianthus			1	5								
Sigalion arenicola				1								
Polydora ligni				1								
Spiophanes bombyx												1
Spio setosa	1										1	
Streblospio benedicti	82	30										
Mollusca												
Gastropoda												
Acteon punctostriatus	2								3	2		
Crepidula fornicata			1					1	22	10	4	4
Crepidula plana			5	1						1		
Urosalpinx cinereus										1		
Ilyanassa obsoleta									5	7		
Massarius trivittata	2	1	3	7	3	2			16	15	1	2
Odostomia producta									1			
Bivalvia												
Lyonsia hyalina									2		2	
Mulinia lateralis	28	39					11	3	14	10		
Mya arenaria							3	1				
Mytilus edulis	1		399	648				28				
Yoldia limatula	1	1										
Ensis directus					3	1			1			
Tellina agilis	5	2	6	1	10				1		1	
Gemma gemma											10	34
Mercenaria mercenaria				1			2		1	1		
Arthropoda												
Amphipoda												
Ampelisca abdita	28	59	2				480	263	643	326	1	
Unciola serrata			4	9			2	1	23	4		1
Unidentified caprellidae									1			
Corophium tuberculatum			1				7	6	60	12		
Erichthonius brasiliensis			1				1	1				

CRUISE III (10/86)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Porifera												
<i>Cliona</i> sp.			*	*								
Cnidaria												
Anthozoa												
Unidentified anemone	2						1		2	3		
<i>Tealia felina</i> (tent.)											1	1
<i>Ceriantheopsis americanus</i>									1			
Hydrozoa												
Unidentified hydroid			*		*	*						
<i>Stylactis hooperi</i>	*											
Platyhelminthes												
Unidentified flatworm												2
Rhynchocoela												
Unidentified nemertean		1					1		1		1	
Aschelminthes												
Ectoprocta												
<i>Cryptosula</i> sp.			*		*	*						
<i>Electra</i> sp.		*		*	*	*						
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
<i>Asabellides oculata</i>						1						
<i>Drilonereis longa</i>		1		2								
<i>Heteromastus filiformis</i>	9	2	5	10		1	9		3	4	2	3
<i>Tharyx acutus</i>	4	2	3	11	1		1					
<i>Glycera americana</i>						2	6		1	1	4	3
<i>Glycera dibranchiata</i>	7	20	23	15	7	3						
<i>Podarke obscura</i>				3								
<i>Maldanopsis elongata</i>										1		
<i>Nephtys incisa</i>								1				
<i>Nereis succinea</i>			9	9			2		1	1		1
<i>Diopatra cuprea</i>											1	
<i>Haploscoloplos fragilis</i>												5
<i>Haploscoloplos robustus</i>	1								6	5		
<i>Aricidea catherinae</i>					2							
<i>Pectinaria gouldii</i>	1		1	3		1		2	7	24	1	2
<i>Eteone lactea</i>			3									
<i>Eumida sanguinea</i>			3	7				1				
<i>Phyllodoce arenae</i>						1	1					
<i>Lepidonotus squamatus</i>		1	1	2								
<i>Sabellaria vulgaris</i>	1		10	6	4							
<i>Sabella microphthalmia</i>											1	
<i>Hydroides dianthus</i>			39	108								
<i>Polydora ligni</i>				1								
<i>Scolelepis squamata</i>		2										
<i>Spio setosa</i>			1									
<i>Streblospio benedicti</i>	13		1	6	1		8					
<i>Autolytus cornutus</i>					3							
Mollusca												
Gastropoda												
<i>Acteon punctostriatus</i>	3	1		1							1	
<i>Crepidula fornicata</i>	27	32	29	49	34	22						
<i>Crepidula plana</i>	3			7	6	3						
<i>Urosalpinx cinereus</i>			2	3								
<i>Ilyanassa obsoleta</i>	1	1	5	5								
<i>Nassarius trivittata</i>	10	7	22	9	3		11	1		1	1	3
<i>Odostomia producta</i>			1									
Bivalvia												
<i>Lyonsia hyalina</i>	7	7	6	5								1
<i>Mulinia lateralis</i>	285	183	10	3	5	3		2	18	11	1	2
<i>Mya arenaria</i>			3	6					3	1	11	8
<i>Mytilus edulis</i>									1			
<i>Petricola pholadiformis</i>			1						2			
<i>Ensis directus</i>							1					1
<i>Tellina agilis</i>	2		3		14	11						1
<i>Gemma gemma</i>				2								
<i>Mercenaria mercenaria</i>	4	3	2	3						2		1
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>	577	162	207	176		7	481	96	185	391	564	1581

CRUISE III (10/86)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Unciola dissimilis	2	2					4		1	4		9
Unciola serrata	6	3	6	8	3	2	8	2	3	4	1	
Unidentified caprellidae					1							
Corophium tuberculatum	22	6	12	15	2		6	5	1		2	18
Erichthonius brasiliensis				1								
Elasmopus levis	9		30	91	2	2	31				2	1
Melita nitida				2		2						
Paraphoxus spinosus			1	3	1							
Rhepoxynus epistomus				3								
Merostomata												
Ostrocode												
Unidentified ostrocode						1						
Copepoda												
Cirripedia												
Balanus improvisus					1							
Mysidacea												
Heteromysis formosa				1	6	1						
Cumacea												
Oxyurostylis smithi	12	16										
Decapoda												
Cancer irroratus					1	1	1					
Crangon septemspinosa						1						
Pagurus longicarpus	1	3	5	4	2	1						
Neopanope texana			3	6			1					
Isopoda												
Edotea triloba	1	1	1				2			2		
Echinodermata												
Chordata												
Vertebrata												
Myoxocephalus aeneus (sculpin)				1								

CRUISE III (10/86)	94a	94b	95a	95b	96a	96b	97a	97b	98a	98b	99a	99b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid									*			
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1	1	1						1		1	
Aschelminthes												
Unidentified nematoda			6	5		1	1					
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata										1		1
Capitella capitata									1	1	1	1
Meteromastus filiformis									1	4	3	1
Cirratulus grandis									14	128		
Tharyx acutus			2				1		4			
Pherusa affinis									1			
Glycera americana											1	
Glycera dibranchiata	1											
Goniadella gracilis			6	2							1	
Magelona rosea		7		1								
Nephtys picta	13	23		3			1	1				
Nereis arenaceodonta									19	23	2	5
Nereis succinea									1			
Travisia carnea				1								
Pectinaria gouldii									1			
Harmothoe extenuata									51	40	9	46
Lepidonotus squamatus									8	1	1	
Sigalion arenicola			1			1						
Scolelepis squamata					1							
Spiophanes bombyx			1									
Spio setosa											1	
Amphitrite ornata									1			
Mollusca												
Gastropoda												
Bivalvia												
Spisula solidissima			42	54	1	2	5	8				
Mytilus edulis									1292	1469	373	2783
Tellina agilis	4	9		2	3			1			2	1
Arthropoda												
Amphipoda												
Ampelisca abdita		1				1						
Acanthohaustorius millsii						1	3	5				
Acanthohaustorius similis					4	3	1	1				
Bathyporeia parkeri			1					1				
Parahaustorius holmesi						1						
Parahaustorius longimerus					1	1						
Protohaustorius wigleyi	2		3	3	1	1	3				2	
Lysianopsis alba									3	2		
Elasmopus levis									41	22	8	11
Monoculodes edwardsi								1				
Paraphoxus spinosus									3		17	1
Rhepoxynus epistomus					9	2	2	2				
Merostomata												
Ostrocode												
Copepoda												
Cirripedia												
Mysidacea												
Meteromysis formosa									3			3
Cumacea												
Decapoda												
Cancer irroratus									5	9	3	17
Crangon septemspinosa								1				
Neopanope texana									3	4	2	18
Isopoda												
Echinodermata												
Asterias forbesii									1			

CRUISE III (10/86)

Menricia sp.

Chordata

Vertebrata

Ammodytes sp.

94a	94b	95a	95b	96a	96b	97a	97b	98a	98b	99a	99b
									2		4

1

CRUISE III (10/86)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
Porifera												
Cliona sp.										*		
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid									*	*		
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean		1	1	1							1	1
Aschelminthes												
Unidentified nematoda			1				1					
Ectoprocta												
Alcyonidium sp.					*	*						
Cryptosula sp.					*		*	*		*		
Electra sp.					*							
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata											3	2
Heteromastus filiformis								4	2	23	1	2
Spiochaetoperus oculatus											1	3
Cirratulus grandis						1						
Glycera americana								5	8	14	4	10
Glycera dibranchiata							2			1		
Maldanopsis elongata											1	
Magelona rosea		1		1								
Nephtys buccera	14	8		1								
Nephtys picta												
Nereis succinea									2	3		
Neploscoloplos robustus									1	1	1	
Pectinaria gouldii								1		1	2	4
Eumida sanguinea										3		
Phyllodoce arenae										1		
Harmothoe extenuata								2		1		
Lepidonotus squamatus							2					
Sabellaria vulgaris										9		
Hydroides dianthus								1		6		
Polydora ligni					1			1				
Scolelepis squamata	2	1										
Spiophanes bombyx	1											
Spio setosa									1			
Streblospio benedicti											2	20
Autolytus cornutus										1		
Mollusca												
Gastropoda												
Acteon punctostriatus							1			1	3	3
Crepidula fornicata								3		15		
Crepidula plana							2	4	1	70		
Urosalpinx cinereus							1	1				
Massarius trivittata		1					1	3	2	2	12	4
Bivalvia												
Anadara transversa												1
Mulinia lateralis									1	3	19	19
Spisula solidissima					3	1						
Mya arenaria								1		1		
Nucula proxima										1		2
Petricola pholadiformis								1	1			
Ensis directus		2					1		1	1		
Tellina agilis	5	7					8	2	5	10	11	2
Gemma gemma								1		1		
Mercenaria mercenaria							1	3	3	4		
Pitar morrhuana											2	1
Arthropoda												
Amphipoda												
Ampelisca abdita						2	6		4	65	201	79
Unciola dissimilis							1					
Unciola serrata							3	8		17	1	
Unidentified caprellidae							1	1		10		
Corophium tuberculatum								1		7		
Acanthohaustorius millsi		3	5	8								

CRUISE III (10/86)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
<i>Acanthohaustorius similis</i>				3								
<i>Bathyporeia parkeri</i>		1	6									
<i>Parahaustorius longimerus</i>			1					1				
<i>Protohaustorius wigleyi</i>	11	13		4								
<i>Elasmopus levis</i>							1		1		22	
<i>Melita nitida</i>											4	
<i>Paraphoxus spinosus</i>							1				29	
<i>Rhepoxynus epistomus</i>		2		6								
Merostomata												
Ostrocooda												
Unidentified ostrocooda								1	1	2		
Copepoda												
Cirripedia												
Mysidacea												
<i>Meteromysis formosa</i>								3		2		
Cumacea												
<i>Oxyurostylis smithi</i>	2									1		1
Decapoda												
<i>Pagurus longicarpus</i>							1					
<i>Neopanope texana</i>								3		3		
Isopoda												
<i>Cyathura polita</i>							7	7	1			
Echinodermata												
Chordata												
<i>Molgula manhattensis</i>											3	
Vertebrata												

CRUISE III (10/86)	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm								1				
Rhynchozoela												
Unidentified nemertean	1	1										
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata			1						2			
Drilonereis longa			1		1							
Meteromastus filiformis	32	21	2	2	1	1	11	32	45	13	13	18
Tharyx acutus	2		9			2			1			1
Glycera americana	10	10	6	2	1		4	4	5	4		10
Glycera dibranchiata	1		9	13	14	15					6	
Podarke obscura		2										
Maldanopsis elongata												1
Nereis succinea	3	5	2	1	3	5	2	2	2	1	4	3
Haploscoloplos robustus	1	1						1			1	
Pectinaria gouldii	21	9	1				8	3		2	6	5
Eteone lactea	1											
Eumida sanguinea			3	1	1	3						
Paranaitis speciosa		1										
Phyllodoce arenae		1			2							
Lepidonotus squamatus						1						
Sabellaria vulgaris						31						
Hydroides dianthus			26	3								
Spio setosa			17	11	10							
Streblospio benedicti			1									
Mollusca												
Gastropoda												
Crepidula fornicata	2		1	3	1	14			2			1
Crepidula plana												2
Urosalpinx cinereus			1									
Ilyanassa obsoleta		6	4	15	4	2	1		2	2	22	7
Massarius trivittata	1	5	2	1	2	2		4	2	2	1	4
Bivalvia												
Lyonsia hyalina	1	1		1	4	22						
Mulinia lateralis	10	1	2	3	10	10					1	1
Mya arenaria		1	3		1	1	49	81	72	27	3	4
Petricola pholadiformis											1	
Ensis directus								1	2	3		1
Tellina agilis			1	1	5	3						2
Mercenaria mercenaria		1		1	1	2			1	2		
Arthropoda												
Amphipoda												
Ampelisca abdita	3022	3573	34	24	954	50	466	442	866	571	2515	1870
Unciola dissimilis	1				1	7						
Unciola serrata	2	1			5	37						
Corophium tuberculatum	12	5	2		13	27	6	7	2	2	28	38
Elasmopus levis	29	23	27	43	5	26	6	5	10	17	45	35
Melita nitida	1		1						2		2	2
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa	2		5	8		2						
Cumacea												
Decapoda												
Pagurus longicarpus					3	1			1			
Ovalipes ocellatus						1						
Neopanope texana	1		4	5					7	3	5	2
Isopoda												
Echinodermata												
Chordata												

CRUISE III (10/86)
Molgula manhattensis
Vertebrata

A1a A1b A2a A2b A3a A3b A4a A4b A5a A5b A6a A6b
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CRUISE III (10/86)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Porifera												
Cliona sp.					*							
Cnidaria												
Anthozoa												
Metridium senile (tent.)					2							
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean											1	1
Aschelminthes												
Ectoprocta												
Cryptosula sp.										*		*
Electra sp.												*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata					1	2						
Heteromastus filiformis	3	9	7	8	2	7	15	2				
Cirratulus grandis										1		
Tharyx acutus					1						7	1
Glycera americana		1	7		12	4	4	1		2	8	
Glycera dibranchiata	1	4		1	1	3			4	5		4
Nephtys picta									3	5	5	6
Nereis succinea			4			1						
Maploscoloplos robustus		1	1			2						
Aricidea catherinae											10	9
Pectinaria gouldii		3	19	3	4	15	1	1				1
Paranaitis speciosa					1	2						
Phyllodoce arenae					1	4			1			1
Lepidonotus squamatus					2							
Sabellaria vulgaris						2						
Hydroides dianthus					5	2						
Spio setosa					2					32		
Streblospio benedicti			1			2				5	1	1
Mollusca												
Gastropoda												
Acteon punctostriatus					1	4				3		
Crepidula fornicata			1		130	25						1
Crepidula plana					18	1					2	
Urosalpinx cinereus					3	1						
Ilyanassa obsoleta	4	2	7	2		2	2	2				
Nassarius trivittata	1	1	2		1	26	4	1	8	1	2	7
Odostomia producta						1						
Bivalvia												
Lyonsia hyalina					1	3			2	4	3	2
Mulinia lateralis					1	21			3	11	9	15
Spisula solidissima									3			2
Mya arenaria	24	28	183	81			12	16				
Mytilus edulis		1										
Petricola pholadiformis			1		1	2						
Ensis directus					2	1				1		
Tellina agilis						3			6	2	9	14
Mercenaria mercenaria				2	5	3	2	1	2			1
Arthropoda												
Amphipoda												
Ampelisca abdita	455	457	1343	166	1164	2058	204	228	2			1
Unciola serrata	1				4	1						
Corophium tuberculatum	1	6	5		2	50	6	6				
Elasmopus levis	9	8	18	6	22	29	6	5				
Melita nitida			1	1	1							
Merostomata												
Ostrocoela												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa					5							
Mysid sp.												1
Neomysis americana									1			
Cumacea												
Oxyurostylis smithi										3	1	

CRUISE III (10/86)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Decapoda												
<i>Cancer irroratus</i>					1							
<i>Crangon septemspinosa</i>		1										
<i>Pagurus longicarpus</i>			1									
<i>Neopanope texana</i>		1	2		5		1				1	
Isopoda												
Echinodermata												
Chordata												
<i>Molgula manhattensis</i>												1
Vertebrata												

CRUISE III (10/86)	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8a	B8b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1	1	1								1
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Heteromastus filiformis			10	2	29	50	2	19	7		10	51
Tharyx acutus			18	2							1	
Pherusa affinis			2									
Glycera americana		5	12	3	2	1	2	1	4	3	4	1
Glycera dibranchiata	2	1	2	1		3	2	4				1
Nephtys picta	2	8										
Nereis succinea					1							
Aricidea catherinae	2	3	2	1	1							
Pectinaria gouldii				1	1		2		1		1	
Phyllodoce arenae			2	1					1		1	
Narchoetes tenuis				1								
Lepidonotus squamatus					1							
Sabella microphthalmus					1							
Spiophanes bombyx	1											
Spio setosa				1								
Streblospio benedicti	1		2									
Mollusca												
Gastropoda												
Acteon punctostriatus	1											
Crepidula plana				1	1						5	
Massarius trivittata	2	5	10	5	2	1	2		1	3	1	3
Bivalvia												
Lyonsia hyalina		2	1	1								
Mulinia lateralis	26	12	12	6				2	1	3		
Mya arenaria						1		1	2		2	1
Mucula proxima			3					1			2	
Ensis directus		1	2		1		1					1
Tellina agilis	11	8	22	15	3	3					9	1
Mercenaria mercenaria					2			2	1			
Arthropoda												
Amphipoda												
Ampelisca abdita	5	4	1715	1548	866	137	462	71	325	230	562	1180
Unciola dissimilis			1									
Unciola serrata			2	3	1	1	2				2	
Unidentified caprellidae	1											
Corophium tuberculatum			3	5	4	4	1		2	5	6	47
Erichthonius brasiliensis					1							
Elasmopus levis			42	18	13	3	5	2	1	3	10	15
Monoculodes edwardsi	1											
Paraphoxus spinosus			42	41	26	1	10			3	11	11
Merostomata												
Ostrocoela												
Unidentified ostrocoela			2	1								
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi	2											
Decapoda												
Neopanope texana									1		5	
Isopoda												
Cyathura polita						1						
Echinodermata												
Chordata												
Vertebrata												

CRUISE III (10/86)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid			1			*						*
Stylactis hooperi						*						
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean										1		
Aschelminthes												
Ectoprocta												
Alcyonidium sp.						*						
Cryptosula sp.					*							
Electra sp.												*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata						2			4	4		
Heteromastus filiformis	35	2			9							
Spirochaetoperus oculatus										1		
Cirratulus grandis					16	15						
Tharyx acutus	1		4	4	64	2	2					
Glycera americana	2	1	1			3						
Glycera dibranchiata			19	8			2		5	2		2
Nephtys picta			6	1			4	3	1		13	7
Nereis arenaceodonta					5	1						
Nereis succinea				1	2		2	1				
Pectinaria gouldii	1				2	3						
Phyllodoce arenae	1	3									1	
Harmothoe extenuata					62	48	12	5	1		4	1
Harmothoe imbricata					1		1		1			
Lepidonotus squamatus					19	30						
Sabellaria vulgaris							2					12
Hydroides dianthus					1	3						10
Polydora ligni												2
Spiophanes bombyx											1	1
Spio setosa			5	1						2		
Streblospio benedicti				5					1	4		
Autolytus cornutus					1							
Mollusca												
Gastropoda												
Crepidula fornicata			2				1					
Crepidula plana			5		1		3				4	2
Massarius trivittata	4	2	3		2	1	4	1	2	2	6	2
Bivalvia												
Anadara transversa												2
Lyonsia hyalina			1									
Mulinia lateralis	1	3		1					1		1	
Mya arenaria	1											
Mytilus edulis					1814	1204	288	206				2
Nucula proxima	1											
Pandora gouldiana			1									
Ensis directus	1	1	1									2
Tellina agilis	10	10	11	13			2		1	5	5	
Mercenaria mercenaria	1	1	1									
Arthropoda												
Amphipoda												
Ampelisca abdita	1307	2021		2				4	53	80		
Unciola serrata	1	1	2							1	1	
Unidentified caprellidae			12								1	
Corophium tuberculatum	2	2	27					1			1	
Erichthonius brasiliensis			9								9	
Lysianopsis alba						5						
Elasmopus levis	16	39	13		5	6			1		10	2
Paraphoxus spinosus	34	37			3					1	6	1
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus amphitrite					8	3						

CRUISE III (10/86)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Mysidacea												
<i>Heteromysis formosa</i>					2	6	12				13	1
<i>Neomysis americana</i>			22									
Cumacea												
<i>Oxyurostylis smithi</i>			1									
Decapoda												
<i>Cancer irroratus</i>			2		4	4	1	2			1	2
<i>Crangon septemspinosa</i>			1									
<i>Libinia emarginata</i>							1					
<i>Pagurus longicarpus</i>								1				
<i>Neopanope texana</i>			2		4	11					1	
Isopoda												
<i>Cyathura polita</i>	1				2	1						
Echinodermata												
<i>Asterias forbesii</i>								1				
Chordata												
Vertebrata												
<i>Pholis gunnellus</i> (rock eel)									1			

CRUISE III (10/86)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Porifera												
Unidentified sponge					*			*				
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid				*								
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean								3			1	1
Aschelminthes												
Ectoprocta												
Cryptosula sp.			*		*	*	*	*		*	*	
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata									3			
Heteromastus filiformis			1		2	1	1	5				
Cirratulus grandis		289	241	58	69	9	26	187	405			
Dodecaceria coralii					1	2	3	1				
Tharyx acutus			1				1	87			1	
Pherusa affinis			9	7			1	5	5	10		
Glycera americana			7	1			7	11	3	1		
Glycera dibranchiata				2	2	1					1	2
Podarke obscura			1						1			
Nephtys picta	2	1									13	18
Mereis succinea									1			
Pectinaria gouldii			10		2		4	7	7	7		
Eumida sanguinea			1					2	1			
Harmothoe extenuata		1	65	12	20	3	31	49	40	42		
Harmothoe imbricata			1	3				1	1			1
Lepidonotus squamatus			289		5	9	24	27	18	44		
Sabellaria vulgaris			2	1		2	1	1	3			
Potamilla neglecta									1			
Potamilla reniformis									1			
Sabella microphthalma								1				
Hydroides dianthus			9	16	1	2	4	16		6		
Sigalion arenicola			1									
Polydora ligni						7						
Spiophanes bombyx											5	1
Spio setosa				1				1				
Autolytus cornutus			3		4	8	1	2				
Mollusca												
Gastropoda												
Crepidula fornicata				7			2	7	5			
Crepidula plana			17	5	2		4	34	12	14	1	
Mitrella lunata			1									
Urosalpinx cinereus			1				3	4				
Nassarius trivittata	4	6		2		1			8	2		2
Bivalvia												
Anadara transversa										1		
Anomia simplex								1				
Lyonsia hyalina											1	
Mytilus edulis			294						145	705		
Nucula proxima	1		2						8	5		
Petricola pholadiformis			5							2		
Ensis directus				1							1	1
Tellina agilis			4		1			2	2	8	4	10
Mercenaria mercenaria			1				1		1			
Arthropoda												
Amphipoda												
Ampelisca abdita	4	5	1									2
Unciola dissimilis										7		
Unciola serrata				6	5	7	5	11				
Unidentified caprellidae			3									
Corophium tuberculatum				2	2	2						
Erichthonius brasiliensis			5									
Elasmopus levis								1				
Paraphoxus spinosus			2	6	3		7	11	3	1		
Phoxocephalus holbolli									10	9	1	
Rhepoxynus epistomus									1			

CRUISE III (10/86)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Stenothoe minuta			1									
Merostomata												
Ostrococha												
Copepoda												
Cirripedia												
Balanus amphitrite								1				
Nysidacea												
Heteromysis formosa			1	2	2		8	98				
Nysid sp.									1			
Cumacea												
Decapoda												
Cancer irroratus			3	1				3	3	5		
Libinia emarginata			1									
Pagurus longicarpus			2		2		2	1				
Neopanope texana			13	10	5	2	8	20	12	5		
Isopoda												
Edotea triloba			12									
Idotea balthica											4	
Cyathura polita				12	61	58	18	35	24			
Echinodermata												
Asterias forbesii		1	1								1	
Arbacia punctulata			1					1	2	1		
Chordata												
Molgula manhattensis			1									
Vertebrata												

CRUISE IV (1/87)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Porifera												
Cliona sp.			*	*								
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean							1				1	
Aschelminthes												
Ectoprocta												
Alcyonidium sp.			*									
Cryptosula sp.							*					
Schizoporella sp.								*				
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata							1					
Meteromastus filiformis			58	101			241	56				
Tharyx acutus				6			20	9		1		
Glycera americana		1	5		1		9	3				
Glycera dibranchiata			1	5	1		2		11	5		
Nephtys picta	1				1				1	1	7	2
Nereis succinea			9	20			3					
Aricidea catherinae							5	2				
Pectinaria gouldii	1											
Eteone lactea	2		7	35			1	1				
Eumida sanguinea			9				3	1				
Paranaitis speciosa								1				
Phyllodoce arenae							1	1				1
Harmothoe extenuata			1									
Lepidonotus squamatus			2	2			1	2				
Sabellaria vulgaris			20	35			1		2			
Hydroides dianthus			80	27			1					
Polydora ligni							1					
Spiophanes bombyx												1
Spio setosa											7	1
Streblospio benedicti				28			16	1	1		1	
Mollusca												
Gastropoda												
Acteon punctostriatus							1					
Crepidula fornicata			3	7	6	2	9	44				
Crepidula plana							6	14	1			
Urosalpinx cinereus				3				1				
Ilyanassa obsoleta	1	1	8	20						1		
Nassarius trivittata	4	2	8	12	3		4	6	2	8	3	
Bivalvia												
Lyonsia hyalina					1							
Mulinia lateralis		1					8	2				
Spisula solidissima	1								17	14	1	1
Mya arenaria							2					
Nucula proxima				1				1				
Petricola pholadiformis							6					
Ensis directus					1							
Tellina agilis			1		1	2	7		6	7	5	4
Gemma gemma					16	34				1		
Mercenaria mercenaria			1			1	1		1			
Arthropoda												
Amphipoda												
Ampelisca abdita	4		16	79			8685	345			1	
Unciola dissimilis							15	13				
Unciola serrata			7	10	1	1	11	2		1		
Unidentified caprellidae										2		
Corophium tuberculatum			11	14			184	73		1	1	
Erichthonius brasiliensis								1				
Elasmopus levis			27	61			27	20				
Melita nitida			4	16							1	
Paraphoxus spinosus			12	78	4		195	11				
Merostomata												
Ostrocooda												
Copepoda												

CRUISE IV (1/87)

	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Cirripedia												
Mysidacea												
<i>Meteromysis formosa</i>								3				
Cumacea												
<i>Oxyurostylis smithi</i>				1			8	2			1	
Decapoda												
<i>Cancer irroratus</i>				1								
<i>Crangon septemspinosa</i>					5				1		1	
<i>Pagurus longicarpus</i>						1	2					
<i>Neopanope texana</i>				4	1			4				
Isopoda												
<i>Edotea triloba</i>							6	6				
Echinodermata												
Chordata												
Vertebrata												

CRUISE IV (1/87)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
<i>Campanularia flexuosa</i> (tent.)											*	
<i>Stylactis hooperi</i>						*						
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean	1	1	1	1								
Aschelminthes										*		
Unidentified nematoda												
Ectoprocta												
Phoronida												
<i>Phoronis architecta</i>		1										
Annelida												
Oligochaeta												
Polychaeta												
<i>Asabellides oculata</i>		1			2	2						
<i>Capitella capitata</i>					1	20						
<i>Heteromastus filiformis</i>	2	3		2								
<i>Spiochaetopus oculatus</i>	1	1										
<i>Cirratulus grandis</i>					1							
<i>Tharyx acutus</i>			1		11	9					2	2
<i>Pherusa affinis</i>					5							
<i>Glycera americana</i>		11			4	8						
<i>Glycera dibranchiata</i>	7	1			3	1						2
<i>Podarke obscura</i>					1							
<i>Lumbrineris fragilis</i>				1	3							
<i>Maldanopsis elongata</i>		1										
<i>Magelona rosea</i>			1	2								
<i>Nephtys picta</i>		4	2	17				2	2	1		
<i>Nereis arenaceodonta</i>					3							
<i>Nereis succinea</i>					12	25					1	
<i>Haploscoloplos fragilis</i>										1		
<i>Pectinaria gouldii</i>		1										
<i>Eteone lactea</i>						1						
<i>Paranaitis speciosa</i>		1										
<i>Harmothoe extenuata</i>					14	15						
<i>Lepidonotus squamatus</i>					22	13						
<i>Hydroides dianthus</i>	3				1							
<i>Sthenelais boa</i>					1							
<i>Spio setosa</i>	2					1						
Mollusca												
Gastropoda												
<i>Acteon punctostriatus</i>		17										
<i>Crepidula fornicata</i>						1					1	2
<i>Crepidula plana</i>	3				1	1					8	4
<i>Nassarius trivittata</i>	5	4					4	2		4	1	1
Bivalvia												
<i>Lyonsia hyalina</i>		1					1					
<i>Mulinia lateralis</i>		74										
<i>Spisula solidissima</i>							2	5	10	25	4	
<i>Mya arenaria</i>		1							3	4		
<i>Mytilus edulis</i>					641	242					3	
<i>Yoldia sapotilla</i>							1					
<i>Nucula proxima</i>	1											
<i>Ensis directus</i>	1											
<i>Tellina agilis</i>	3	11		4					1		1	
<i>Mercenaria mercenaria</i>	2											
<i>Pitar morrhuana</i>		3										
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>	3	43					1	2				
<i>Unciola irrorata</i>		3										
<i>Unciola serrata</i>						3						
<i>Unciola</i> sp.					1							
Unidentified caprellidae	6											
<i>Acanthohaustorius millsi</i>									6			
<i>Acanthohaustorius similis</i>			11									
<i>Protohaustorius wigleyi</i>				1								
<i>Elaemopus levis</i>					2	18						

CRUISE IV (1/87)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Paraphoxus spinosus					40	5			10	5		
Rhepoxynuis epistomus				1								
Merostomata												
Ostrocode												
Unidentified ostrocode		3										
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Diastylis polita		1										
Oxyurostylis smithi						1						
Decapoda												
Cancer irroratus					2							
Callinectes sapidus												1
Neopanope texana					8	3						
Isopoda												
Cyathura polita					15	10						
Echinodermata												
Asterias forbesii					1							
Chordata												
Vertebrata												

CRUISE IV (1/87)	13a	13b	14a	14b	15a	15b	16a	16b	17a	17b	18a	18b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone						3						
Ceriantheopsis americanus			1	1								
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1					1		1	1	1		
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Heteromastus filiformis			75	36		1		1	6	14	24	40
Cirratulus grandis							1					
Pherusa affinis			1					3		1		1
Glycera americana				7	3	4	9	7	2	4	3	4
Glycera dibranchiata	1	4	8	1					1			
Podarke obscura										1		
Maldanopsis elongata			2		1							
Nephtys picta	4		1									
Nereis succinea			3	3		22	8	3	1	2		
Kaploscoplos robustus								1				1
Pectinaria gouldii			3	1	1	2		3		3		1
Eteone lactea				2			2					1
Paranaitis speciosa							1					
Phyllodoce arenae												1
Harmothoe extenuata							1					
Lepidonotus squamatus						4	3			1		
Mollusca												
Gastropoda												
Acteon punctostriatus			1	1								
Crepidula fornicata							165	1				
Crepidula plana							103					
Ilyanassa obsoleta								2				
Massarius trivittata			5	3		8		1	1	7	14	1
Bivalvia												
Mulinia lateralis					2	24	3	1				
Spisula solidissima	1		1									
Mya arenaria			5	1			6	11		1	1	13
Mytilus edulis						182	61	2				
Nucula proxima			13						7	3	29	5
Petricola pholadiformis								1		1		1
Ensis directus						1		2				
Tellina agilis	25	7	15	5					4	3	8	6
Mercenaria mercenaria						3	1	2			1	1
Arthropoda												
Amphipoda												
Ampelisca abdita			238	76	105		9	369	37	82	3	206
Unciola dissimilis						1			1			
Unciola serrata	1		5	2							2	1
Corophium tuberculatum									1	1		
Elasmopus levis				2		12	4					
Paraphoxus spinosus	19	25	9	2				1	2	14		3
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus amphitrite								1				
Mysidacea												
Cumacea												
Oxyurostylis smithi												1
Decapoda												
Cancer irroratus						2					1	
Neopanope texana						22	15					
Isopoda												
Edotea triloba			2									
Cyathura polita												1
Echinodermata												

CRUISE IV (1/87)
Chordata
Vertebrata

13a 13b 14a 14b 15a 15b 16a 16b 17a 17b 18a 18b

CRUISE IV (1/87)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27b	27b
Porifera												
Cliona sp.										*		
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean	1	1		1				1				
Aschelminthes												
Ectoprocta												
Alcyonidium sp.											*	*
Cryptosula sp.										*		
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Neteromastus filiformis					1	8	2	1	36	73	16	2
Spirochaetoperus oculatus						1						
Tharyx acutus			1	4					1	3		
Pherusa affinis								1		1		
Glycera americana			1		8	6	2	2	11	4	8	4
Glycera dibranchiata			1	3								
Magelona rosea	1	1										
Nephtys picta	3	7	6	1								1
Nereis succinea					1	1			1	3	1	
Kaploscoplos robustus							1					
Aricidea catherinae			10	2						1		
Pectinaria gouldii					1					1	9	1
Eteone lactea					1							
Paranaitis speciosa											2	
Phyllodoce arenae									1	1		
Lepidonotus squamatus										1	1	
Sabellaria vulgaris			1							1		
Hydroides dianthus										1		
Spiophanes bombyx	2	2		1								
Streblospio benedicti			1									
Mollusca												
Gastropoda												
Crepidula fornicata					1				1	10	9	
Crepidula plana			1	1		1			1	11	14	
Ilyanassa obsoleta					1		2	1	1		1	3
Massarius trivittata	2	4			1	1	2	1	10	9	1	
Bivalvia												
Lyonsia hyalina							1			1		
Mulinia lateralis		1	1	5	2	1			1	1	1	
Spisula solidissima		1										
Mya arenaria					2	2			1	3		
Nucula proxima									2	9		
Petricola pholadiformis					3					5		
Ensis directus					1				2	2		
Tellina agilis	1	4	7	2	4	2			3	9		
Mercenaria mercenaria										3	1	
Pitar morrhua										1		
Arthropoda												
Amphipoda												
Ampelisca abdita	1	1			1078	95	90	93	117	992	42	251
Unciola dissimilis					2		2			1	4	
Unciola serrata						1			7		5	3
Unidentified caprellidae											2	
Corophium tuberculatum					5	1			8	6	35	15
Elasmopus levis			1	1	10	1			22	9	62	3
Melita nitida											2	
Paraphoxus spinosus					7	2	4		24	47		2
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi	1		1									
Decapoda												

CRUISE IV (1/87)

	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
<i>Cancer irroratus</i>											1	2
<i>Crangon septemspinosa</i>									1			
<i>Pagurus longicarpus</i>					2				1	1		
<i>Neopanope texana</i>												1
Isopoda												
<i>Cyathura polita</i>									1			
Echinodermata												
Chordata												
Vertebrate												
<i>Ammodytes</i> sp.				1								

CRUISE IV (1/87)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Porifera												
<i>Cliona</i> sp.					*	*						
Cnidaria												
Anthozoa												
Hydrozoa												
<i>Stylactis hooperi</i>						*						
Platyhelminthes												
Unidentified flatworm												5
Rhynchocoela												
Unidentified nemertean	1	1				1		1				1
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
<i>Asabellides oculata</i>					1							
<i>Heteromastus filiformis</i>	31	17	11	7	45	129	41	63				
<i>Spiochaetoperus oculatus</i>					1							
<i>Tharyx acutus</i>			3		2	19						
<i>Glycera americana</i>	1	7	1	3	11	19	11	11				
<i>Glycera dibranchiata</i>	4		6	3			2					
<i>Podarke obscura</i>								6				
<i>Nephtys incisa</i>										1		
<i>Nephtys picta</i>			4	4								
<i>Nereis succinea</i>	2	1			8	9	4	6				
<i>Maploscoloplos robustus</i>				1			1	1				
<i>Aricidea catherinae</i>			1									
<i>Pectinaria gouldii</i>	2		1		2	7	4	7			9	4
<i>Eteone lactea</i>					1	4		2				
<i>Eumida sanguinea</i>		3			1	1	1					
<i>Paranaitis speciosa</i>			1	1	1							
<i>Phyllodoce arenae</i>	1							1				
<i>Spiophanes bombyx</i>			10	3								
<i>Spio setosa</i>			4									
<i>Streblospio benedicti</i>			8	1	4	13		2				
Mollusca												
Gastropoda												
<i>Acteon punctostriatus</i>						2	3					
<i>Crepidula fornicata</i>	1						4					
<i>Crepidula plana</i>							1					
<i>Urosalpinx cinereus</i>					1	1						
<i>Ilyanassa obsoleta</i>	1	17			5			10				
<i>Nassarius trivittata</i>	2	7	1	3	15		1	6			1	
<i>Odostomia producta</i>					4							
Bivalvia												
<i>Lyonsia hyalina</i>								1				
<i>Mulinia lateralis</i>			42	25	1				3	1		
<i>Spisula solidissima</i>											54	28
<i>Mya arenaria</i>	6	1			2							
<i>Petricola pholadiformis</i>	3					2						
<i>Ensis directus</i>		1		1								
<i>Tellina agilis</i>	1		4	5			1	1				
<i>Mercenaria mercenaria</i>	3	1			2	1	1	3				
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>	193	1131	7	12	1919	1417	36	3169	2	1		
<i>Unciola dissimilis</i>					2		1					
<i>Unciola serrata</i>					1	2	1	2				
<i>Corophium tuberculatum</i>	7	8			17	18	5	17				
<i>Elasmopus levis</i>	4	13			29	32	27	11				
<i>Melita nitida</i>		2				1	2					
<i>Paraphoxus spinosus</i>		2			5	1		10				
Merostomata												
Ostrocooda												
Unidentified ostrocooda			8	1								
Copepoda												
Cirripedia												
Mysidacea												
Mysid sp.						1						
<i>Neomysis americana</i>			1	1								

CRUISE IV (1/87)

	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Cumacea												
<i>Oxyurostylis smithi</i>					2			1				
Decapoda												
<i>Pagurus longicarpus</i>	1				2	1	1	1				
<i>Neopanope texana</i>	1				3	5	19	3				
Isopoda												
<i>Edotea triloba</i>								5				
<i>Cyathura polita</i>												
Echinodermata						12						
Chordata												
Vertebrata												

CRUISE IV (1/87)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Porifera												
Unidentified sponge										*		
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid							*					*
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1										
Aschelminthes												
Unidentified nematode												1
Ectoprocta												
Unidentified ectoproct												*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata			1									
Drilonereis longa									1			
Heteromestus filiformis	27	10	1		8	6	1		21	9		
Spiochaetoperus oculatus					1							
Cirratulus grandis	1	1										
Tharyx acutus	9	37					4		125	114		
Pherusa affinis						1						2
Glycera americana	1				6	11	1		5	1	6	1
Glycera dibranchiata	10	5			1		2	5	4	4	1	1
Nephtys incisa			2	1		2						
Nereis succinea	20	7							2	2		
Haploscoloplos robustus											4	3
Aricidea catherinae		1							2			
Pectinaria gouldii					1							
Eteone lactea	3								1	4	1	
Eumida sanguinea		2							8			
Paranaitis speciosa	1	2				6				1		
Phyllodoce arenae									1			
Harmothoe extenuata	1	3								1		
Lepidonotus squamatus	7	7							2	3		
Sabellaria vulgaris							3		15	27	27	
Sabellid sp.								1				
Hydroides dianthus							2		14	42	30	
Sigalion arenicola						1						
Polydora ligni	2	3				1						
Spiophanes bombyx						1						
Spio setosa							1					
Streblospio benedicti		3							3			
Mollusca												
Gastropoda												
Acteon punctostriatus					23	16						
Crepidula fornicata	79	108					21		217	330		
Crepidula plana	7	27					1	2	63	102		
Urosalpinx cinereus								1				
Nassarius trivittata	4	7			2	6	1	7	9	28		
Bivalvia												
Anadara transversa						1						
Lyonsia hyalina											4	
Mulinia lateralis			1	1	140	245	1	1				
Mya arenaria		2			1					1		
Mytilus edulis	276	103							3			
Yoldia limatula						1						
Nucula proxima					1							
Ensis directus						1						
Tellina agilis		4			3	3	1		1			
Gemma gemma	1								2		199	10
Mercenaria mercenaria	4	1				1	1		1	2		
Pitar morrhuana					2	1						
Arthropoda												
Amphipoda												
Ampelisca abdita	2	3		1	2	26			6	13	1	1
Unciola dissimilis											1	
Unciolairrorata										6		
Unciola serrata	1	1					2	2	16	23		

CRUISE IV (1/87)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Unidentified caprellidae							9	1	3			
Corophium tuberculatum	1						11		22	6		
Erichthonius brasiliensis		1					5		1			
Elasmopus levis	1	5					4		122	24		2
Melita nitida									5	5		
Monoculodes edwardsi											1	
Paraphoxus spinosus	10	26					12		122	64		1
Rhepoxynus epistomus											5	3
Merostomata												
Ostrocooda												
Unidentified ostrocooda						2						
Copepoda												
Cirripedia												
Balanus amphitrite							2			5		
Balanus improvisus	1								36	19		
Mysidacea												
Heteromysis formosa							1					
Cumacea												
Oxyurostylis smithi		4					1					
Decapoda												
Neopanope texana	3	6							7	22		
Isopoda												
Edotea triloba						2						
Cyathura polita		2										
Echinodermata												
Asterias forbesii		1										
Chordata												
Vertebrata												
Ammodytes sp.								1				

CRUISE IV (1/87)	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
Porifera												
Cnidaria												
Anthozoa												
<i>Ceriantheopsis americanus</i>												1
Hydrozoa												
Platyhelminthes												
Unidentified flatworm		1										
Rhynchozoela												
Unidentified nemertean				2			1				1	1
Aschelminthes												
Unidentified nematoda											1	
Ectoprocta												
<i>Alcyonidium</i> sp.					*							
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
<i>Asabellides oculata</i>												1
<i>Capitella capitata</i>				5								
<i>Heteromastus filiformis</i>	130	182									2	2
<i>Tharyx acutus</i>	2	3			4	1			2	2		
<i>Pherusa affinis</i>												1
<i>Glycera americana</i>	10	4	3		6	4		2			2	12
<i>Glycera dibranchiata</i>	2	5	10	1	22	7	2		13	5		
<i>Nephtys picta</i>										1		
<i>Nereis succinea</i>	8	13	1	2								1
<i>Naploscoplos robustus</i>				3				3				1
<i>Pectinaria gouldii</i>		2	3									1
<i>Eteone lactea</i>	2		1	7								
<i>Eumida sanguinea</i>	1										3	
<i>Paranaitis speciosa</i>								1	3			
<i>Phyllodoce arenae</i>								1				
<i>Lepidonotus squamatus</i>											1	
<i>Sabellaria vulgaris</i>										1	4	
<i>Hydroides dianthus</i>											8	
<i>Streblospio benedicti</i>	6	10										
<i>Exogone hebes</i>	1	8										
Mollusca												
Gastropoda												
<i>Cornabella</i> sp.											1	
<i>Acteon punctostriatus</i>	1	1								1		
<i>Crepidula fornicata</i>			5	4		1	5		7	29		1
<i>Crepidula plana</i>					1				1	8		
<i>Ilyanassa obsoleta</i>	3		2	11			7	3	2	2	2	1
<i>Nassarius trivittata</i>	5		11	6	8	2	3	2	2	5	2	
Bivalvia												
<i>Lyonsia hyalina</i>					1			1	5			
<i>Mulinia lateralis</i>	1				26	7			17	14		
<i>Spisula solidissima</i>											1	3
<i>Mya arenaria</i>	4	6		1	1			1			4	1
<i>Nucula proxima</i>				1								
<i>Petricola phloediformis</i>	1	2			1				12		1	
<i>Tellina agilis</i>						2	2	1	6	3	1	2
<i>Gemma gemma</i>			1		21				1	2		
<i>Mercenaria mercenaria</i>			1	2	1		3				1	2
<i>Pitar morrhuana</i>												1
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>	4908	4250	32	1315	2	8	2813	2969	3213	7	624	70
<i>Unciola dissimilis</i>											1	
<i>Unciola serrata</i>			2	1				1	3	6	1	2
Unidentified caprellidae	3							1				
<i>Corophium tuberculatum</i>	57	7	3	3			8	25	54	1		
<i>Erichthonius brasiliensis</i>	2											
<i>Elasmopus levis</i>	31	4	2	1			4	7	2	1		2
<i>Melita nitida</i>	1											
<i>Monoculodes edwardsi</i>					1							
<i>Paraphoxus spinosus</i>	91	34	3								1	
Merostomata												
Ostrocooda												
Copepoda												

CRUISE IV (1/87)

	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
Cirripedia												
Mysidacea												
Mysid sp.					1							
Cumacea												
Oxyurostylis smithi	20	17										
Decapoda												
Cancer irroratus					2							
Crangon septemspinosa				1						1		
Pagurus longicarpus	5	2	5							4		2
Neopanope texana	1		4	1						3		1
Isopoda												
Echinodermata												
Chordata												
Vertebrata												

CRUISE IV (1/87)	51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean							1					1
Aschelminthes												
Unidentified nematoda				1		1						
Ectoprocta												
Alcyonidium sp.	*											
Electra sp.	*											
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Heteromastus filiformis	2				4	5	2	2	1	3	2	4
Tharyx acutus	5							1				
Glycera americana					1	4			5	4	5	3
Glycera dibranchiata	5	7	10	7	1	1	2	12			1	
Nereis succinea	1				2		18	6	3	1	1	6
Haploscoloplos fragilis									8	7		1
Haploscoloplos robustus	1				2	9						
Pectinaria gouldii					5	2	1		4	4	11	4
Eteone lactea							8	3		1		1
Eumida sanguinea								1				
Paranaitis speciosa							1					1
Phyllodoce arenae							1					
Spio setosa	1											
Streblospio benedicti										1		
Mollusca												
Gastropoda												
Acteon punctostriatus									3			
Crepidula fornicata	4		5	18			177	143			1	
Crepidula plana							46	26				
Urosalpinx cinereus							6	4				
Ilyanassa obsoleta				1	1	7	49	13	1		3	3
Nassarius trivittata	5	7	2	2	1	7	32	29	4		3	
Odostomia producta								1				
Bivalvia												
Lyonsia hyalina	2	2										
Mulinia lateralis	72	50	118	18	1	1	5	1	8	8	3	1
Mya arenaria					1		14		67	74	231	291
Petricola pholadiformis					3				1			
Tellina agilis	2	1		2								
Gemma gemma	5	17										
Mercenaria mercenaria	4	1	1	2	2							
Arthropoda												
Amphipoda												
Ampelisca abdita	3				77	199	2001	97	16	110	36	218
Unciola dissimilis		1										
Unciola serrata	1		1		6		14	2				
Corophium tuberculatum					1		202	2				
Elasmopus levis							38	1			3	1
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus improvisus							28	12				
Mysidacea												
Cumacea												
Decapoda												
Crangon septemspinosa								1				
Pagurus longicarpus	1											
Neopanope texana					1		10	3				
Isopoda												
Edotea triloba							1		1			
Echinodermata												
Chordata												
Vertebrata												

CRUISE IV (1/87)	57a	57b	58a	58b	59a	59b	60a	60b	62a	62b	68a	68b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean					1							
Aschelminthes												
Ectoprocta												
Electra sp.	*	*										
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Heteromastus filiformis	2				1	3					3	
Glycera americana		2			7	3		4				
Glycera dibranchiata	54	43	1	3		1	1	4				1
Nephtys picta		1										
Nereis succinea	1				4	1		1				
Neploscoloplos fragilis						3						
Neploscoloplos robustus								6				
Pectinaria gouldii			1	14	2	3	9	7	1		1	
Eteone lactea												1
Eumida sanguinea		1										
Lepidonotus squamatus			1					1				
Sabellaria vulgaris		5					2	1				
Hydroides dianthus	8	9										
Streblospio benedicti												1
Mollusca												
Gastropoda												
Crepidula fornicata	6	13					25	16				
Urosalpinx cinereus	5											
Ilyanassa obsoleta	3		1		3		6	4				
Massarius trivittata	4	2			1		4					25
Bivalvia												
Lyonsia hyalina		1										
Mulinia lateralis		1			1	1	1	1	6	7		
Mya arenaria		1	21	28			4	2				
Mytilus edulis												1
Petricola pholadiformis							1					
Tellina agilis	1											
Mercenaria mercenaria	1					1						
Arthropoda												
Amphipoda												
Ampelisca abdita		3	2	78	37	542	16	234	1		2	1
Unciola dissimilis	1											1
Unciola serrata	1						2	2				2
Corophium tuberculatum		1				2						
Elasmopus levis		5						8				1
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus improvisus							1					
Mysidacea												
Cumacea												
Oxyurostylis smithi												1
Decapoda												
Pagurus longicarpus	1											
Neopanope texana		2	1					1				
Isopoda												
Edotea triloba					3			3				1
Cyathura polita		1										
Echinodermata												
Chordata												
Unidentified tunicate			2	1								
Vertebrata												

CRUISE IV (1/87)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Porifera												
Unidentified sponge											*	*
Cnidaria												
Anthozoa												
Unidentified anemone			1									
Hydrozoa											*	
Unidentified hydroid												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1	1		1	1	1			1			
Aschelminthes												
Unidentified nematoda		*		1							*	1
Ectoprocta												
Electra sp.											*	*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1	2	3	2								
Capitella capitata	6	10	2								1	
Heteromastus filiformis	12	4	23	2		1	5	2		11	27	4
Cirratulus grandis			2				1					
Tharyx acutus	1	2	2	20	1					1	9	37
Pherusa affinis		3	5	3		1						
Glycera americana	11		14	1	1	2	1	1				
Glycera dibranchiata		4		6	1	3	1	1	2	3	5	3
Podarke obscura			1									
Magelona rosea	1				2	4						
Nephtys picta	2	13	1		21	37						
Nereis arenaceodonta					1							
Nereis succinea			17	1			3				1	
Diopatra cuprea								1				
Haploscoloplos fragilis							1			1		
Haploscoloplos robustus								2				1
Pectinaria gouldii		3					5		1	1	1	
Eteone lactea	17	2	3				1				2	2
Eumida sanguinea			1									
Paranaitis speciosa	3	11	3	3			2			5	2	
Phyllodoce arenae	1											
Harmothoe extenuata			10	6								
Lepidonotus squamatus		3	3								1	2
Sabellaria vulgaris			1									2
Hydroides dianthus											5	6
Sigalion arenicola		1										
Polydora ligni			1									
Spiophanes bombyx	2				5	19						
Spio setosa		3										
Streblospio benedicti	112	95										4
Amphitrite sp.							1					
Mollusca												
Gastropoda												
Acteon punctostriatus	4	1					1					
Crepidula fornicata									4	4	87	35
Crepidula plana			6	4							5	4
Eupleura caudata												2
Ilyanassa obsoleta							2		7	2		
Massarius trivittata	2	11	1	10	3	8	1		4	8	3	5
Lunatia heros					1							
Bivalvia												
Mulinia lateralis	81	12					15			3		
Mya arenaria							5				1	
Mytilus edulis			201	68								
Nucula proxima	5	10	1									
Ensis directus	1	1			1	1				1		
Tellina agilis	62	59		6	18	16	5	1				
Gemma gemma											5	8
Mercenaria mercenaria							1	3			8	5
Arthropoda												
Amphipoda												
Ampelisca abdita	24	3		3			2262	70	50	1147	5	
Unciola dissimilis							1					

CRUISE IV (1/87)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Unciola serrata		4	17	31			5	1	1	6		2
Unidentified caprellidae											169	
Corophium tuberculatum		2					2		1	14	77	9
Erichthonius brasiliensis							3	1				
Lysianopsis alba								1				
Elasmopus levis		8	17	10			1	1	2		166	37
Melita nitida											2	
Paraphoxus spinosus		10	6	3			6	1			55	47
Phoxocephalus holbolli			1									
Rhepoxymuis epistomus					1						27	7
Merostomata												
Ostrocoada												
Unidentified ostrocoada	1											
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa				5								
Cumacea												
Oxyurostylis smithi												
Decapoda	5	2	15	12		1						
Cancer irroratus			1									
Pagurus longicarpus												1
Neopanope texana										1		
Isopoda		1	1	2			3				8	1
Edotea triloba												
Echinodermata	2	11		1		1			1			1
Asterias forbesii												
Chordata			1									
Unidentified tunicate												
Vertebrata									1			

CRUISE IV (1/87)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Porifera												
Cnidaria												
Anthozoa												
<i>Ceriantheopsis americanus</i>									1			1
Hydrozoa												
Platyhelminthes												
Unidentified flatworm				1								
Rhynchocoela												
Unidentified nemertean									1	1		
Aschelminthes												
Unidentified nematoda	*		*						*			
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
<i>Asabellides oculata</i>						2						
<i>Capitella capitata</i>			1									
<i>Meteromastus filiformis</i>				9	1	1			1	1		
<i>Tharyx acutus</i>				3	1							
<i>Glycera americana</i>												3
<i>Glycera dibranchiata</i>	11	6	16	24	8				2	3	1	1
<i>Maldanopsis elongata</i>									3	1		
<i>Mephtys picta</i>			1		3	3						
<i>Nereis succinea</i>				6					1			
<i>Maploscoplos fragilis</i>									1			
<i>Maploscoplos robustus</i>	2			2								1
<i>Pectinaria gouldii</i>				1							1	
<i>Eteone lactea</i>				4						1		
<i>Eumida sanguinea</i>				6								
<i>Paranaitis speciosa</i>			2									
<i>Sabellaria vulgaris</i>			35	5								
<i>Sabella microphthalmia</i>				1								
<i>Hydroides dianthus</i>			15	5								
<i>Streblospio benedicti</i>	2	1			5							
Mollusca												
Gastropoda												
<i>Crepidula fornicata</i>		1	63	3	5							
<i>Crepidula plana</i>			30		2							
<i>Urosalpinx cinereus</i>			1	3								
<i>Ilyanassa obsoleta</i>		1		3								
<i>Nassarius trivittata</i>	3	4	1	3		2	1		1	2	1	
Bivalvia												
<i>Lyonsia hyalina</i>			2	7								
<i>Mulinia lateralis</i>	148	13	6	22	23	4			5			2
<i>Mya arenaria</i>				3					8	19		
<i>Petricola pholadiformis</i>			1	6								
<i>Ensis directus</i>					1							
<i>Tellina agilis</i>	2		2		8	2						
<i>Gemma gemma</i>			12	2								
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>		1	3	2487	5				66	86	134	180
<i>Unciola dissimilis</i>				1								
<i>Unciola serrata</i>	2		7	81					1	4	1	
Unidentified caprellidae			1									
<i>Corophium tuberculatum</i>		1		180								
<i>Elasmopus levis</i>			1	6	1					1		
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
<i>Neomysis americana</i>		3										
Cumacea												
<i>Oxyurostylis smithi</i>				2	2							
Decapoda												
<i>Crangon septemspinosus</i>						1						
<i>Pagurus longicarpus</i>				2								
<i>Neopanope texana</i>			3									
Isopoda												

CRUISE IV (1/87)
Edotea triloba
Echinodermata
Chordata
Vertebrata

82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
				2						1	

CRUISE IV (1/87)	88a	88b	89a	89b	90a	90b	91a	91b	92a	92b	93a	93b
Crangon septemspinosus				1					1			
Pagurus longicarpus	1											
Neopanope texana	1	1		1								
Isopoda												
Edotea triloba	1	1										
Cyathura polita							1					
Echinodermata												
Chordata												
Vertebrata												

CRUISE IV (1/87)	94a	94b	95a	95b	96a	96b	97a	97b	98a	98b	99a	99b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1					1		1				
Aschelminthes												
Unidentified nematoda			*	*								*
Ectoprocta												
Cryptosula sp.				*								
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Capitella capitata										2	19	
Heteromastus filiformis	1											2
Cirratulus grandis									16	10		
Tharyx acutus		1		5								1
Glycera americana												1
Glycera dibranchiata				4	5							
Magelona rosea							1					
Nephtys picta	11	3	3	3		1	1	1				
Nereis arenaceodonta									1			
Nereis succinea										4	5	17
Diopatra cuprea				1								
Ophelia bicornis					1							
Haploscoloplos fragilis				1								
Eteone lactea												1
Harmothoe extenuata										2		
Sabellaria vulgaris					5							
Hydroides dianthus					1							
Spio setosa				1								1
Mollusca												
Gastropoda												
Crepidula plana					1							
Mitrella lunata					1							
Bivalvia												
Spisula solidissima							1	1				
Mya arenaria				3		1		1				
Mytilus edulis									8	105	47	214
Tellina agilis		2	3	1								
Arthropoda												
Amphipoda												
Ampelisca abdita					1							
Unidentified caprellidae									1			
Corophium tuberculatum									1			
Acanthohaustorius millsii							3	1				
Parahaustorius longimerus	3	1	1		1	1	9	7				
Elasmopus levis					28			1	39	70	32	64
Paraphoxus spinosus										2	3	8
Rhepoxynius epistomus	1	1		1	2	1		7				
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa										3	1	
Cumacea												
Unidentified cumacean										1	1	
Oxyurostylis smithi		1										2
Decapoda												
Cancer irroratus									3	9	3	1
Neopanope texana									2			1
Isopoda												
Edotea triloba												1
Echinodermata												
Asterias forbesii									2		1	1
Chordata												
Vertebrata												

CRUISE IV (1/87)

100a 100b 101a 101b 102a 102b 103a 103b 104a 104b 105a 105b

Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Unidentified hydroid							*					
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1							1		1	
Aschelminthes												
Unidentified nematoda			1	3	3	1	1		*			
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata								1		1		
Capitella capitata							1					
Heteromastus filiformis							7	7	2	12	3	
Spirochaetoperus oculatus											1	
Glycera americana											3	2
Glycera dibranchiata							2	2	10	14	2	
Magelona rosea		1										
Nephtys buccera			1									
Nephtys picta	9	8							1		3	
Nereis succinea							1			2		
Travisia carnea	1											
Haploscoloplos fragilis										1	5	1
Haploscoloplos robustus										6	1	
Aricidea catherinae	2											
Pectinaria gouldii								1				
Eteone lactea									2	2	2	
Paranaitis speciosa								1	3			2
Harmothoe extenuata							1	1				
Lepidonotus squamatus								2	3			1
Sabellaria vulgaris					3			3		15	19	
Hydroides dianthus							10	5			2	
Scolelepis squamata	2		1									
Spiophanes bombyx	1											
Spio setosa		1							2			
Mollusca												
Gastropoda												
Acteon punctostriatus											1	
Crepidula fornicata										1	6	
Crepidula plana					3	1	6			7	5	
Urosalpinx cinereus								2				
Ilyanassa obsoleta		1										
Massarius trivittata					2		2	3	1	3	5	10
Bivalvia												
Anadara transversa							2					
Mulinia lateralis									2			
Spisula solidissima	1		1						4	2	25	
Mya arenaria							1	1		1		
Yoldia sapotilla											1	
Nucula proxima											1	
Petricola pholadiformis												1
Tellina agilis	3	4					4	4	6	2	5	2
Gemma gemma								1		4		
Mercenaria mercenaria							1	1	3	3	3	
Arthropoda												
Amphipoda												
Ampelisca abdita								15	3	23	85	22
Unciola serrata							6	9		19		
Unidentified caprellidae							62	32	2	1		
Corophium tuberculatum							57	21				
Erichthonius brasiliensis							4					
Acanthohaustorius millsi	1		14	19								
Acanthohaustorius similis			3	7								
Bathyporeia parkeri			2	3								
Protohaustorius wigleyi	18	24	4	1								
Elasmopus levis		3		1			1	2	20		6	
Paraphoxus spinosus	2						6	9			2	

CRUISE IV (1/87)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
Rhepoxynus epistomus	3	6	5	4							4	
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Neomysis americana									2	1	2	
Cumacea												
Oxyurostylis smithi	1								10	1	2	
Decapoda												
Cancer irroratus						1						
Crangon septemspinosa												1
Ovalipes ocellatus	3											
Neopanope texana							1	4				
Isopoda												
Edotea triloba							2	2				
Cyathura polita							13	4				
Echinodermata												
Chordata												
Vertebrata												
Ammodytes sp.				1								

CRUISE IV (1/87)	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
Porifera												
Unidentified sponge		*										
Cnidaria												
Anthozoa												
Unidentified anemone						1						
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean	1				1			1		1		
Aschelminthes												
Unidentified nematoda		*										
Ectoprocta												
Electra sp.			*	*	*							
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Capitella capitata		1								2		
Heteromastus filiformis	13	28			1	6	12	7	46	94	31	66
Glycera americana		5					3		8	5	4	6
Glycera dibranchiata	2	4	7	7	11	9				7	2	1
Nereis succinea	5	12	1		2	4			4	5	2	6
Ophelia bicornis										1		
Haploscoloplos fragilis	1											
Pectinaria gouldii	13	30				1	3	9	9	4	2	2
Eteone lactea		9				5			1			1
Paranaitis speciosa		7		4	2	2			1	6		2
Harmothoe imbricata		1										
Lepidonotus squamatus	2											
Sabellaria vulgaris			95	221	73	340						
Hydroides dianthus			4	11		7						
Streblospio benedicti				12	2	3				2		
Mollusca												
Gastropoda												
Acteon punctostriatus		2								1		
Crepidula fornicata	3	1	4	3	1	7		3		2		3
Urosalpinx cinereus		1										
Ilyanassa obsoleta	1		1	1	1	1		3	2	1	4	3
Nassarius trivittata	5	5	5	1	3	5	1	1		2	3	5
Bivalvia												
Lyonsia hyalina		1			3	1						
Mulinia lateralis					1	7	1					
Spisula solidissima		5		3	2						1	
Mya arenaria	2	1				1	2	1	7	7	28	84
Petricola pholadiformis		3								1		
Esis directus	1											1
Tellina agilis				1	4	1					1	
Mercenaria mercenaria				1					1	3	3	2
Arthropoda												
Amphipoda												
Ampelisca abdita	1282	1278			1	4	93	196	1147	486	282	399
Unciola serrata	8	6	2	10	4	15		1		6		
Corophium tuberculatum									2	3		1
Elasmopus levis	12	10				1		1	2	17		3
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Neomysis americana				1								
Cumacea												
Decapoda												
Cancer irroratus										1		
Crangon septemspinosa					1							
Pagurus longicarpus	1					1				1		1
Ovalipes ocellatus				1								
Neopanope texana	9								2	9		
Isopoda												
Echinodermata												
Chordata												
Vertebrata												

CRUISE IV (1/87)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Porifera												
Cnidaria												
Anthozoa												
Metridium senile (tent.)						1						
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean		1				1			1	1	1	
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Heteromastus filiformis	18	23	8	29	4	2	7	15				
Tharyx acutus									1	2		
Glycera americana	2	2	5	3	9		3	4			8	
Glycera dibranchiata	7			1		5			2	9	1	5
Magelona rosea												1
Nephtys picta									6	17	8	11
Nereis succinea	9		7	1	6	2		1				
Ophelia bicornis					1							
Haploscoloplos fragilis	1		2									
Haploscoloplos robustus	2	1										
Aricidea catherinae									1			
Pectinaria gouldii	13	3	3	3	7	1						
Eteone lactea					3	4						
Paranaitis speciosa	1	1	1		1	3						
Lepidonotus squamatus					1							
Sabellaria vulgaris					2	1						
Hydroides dianthus					1	8						
Spiophanes bombyx									1	7	1	2
Spio setosa										2		1
Streblospio benedicti										2		
Mollusca												
Gastropoda												
Crepidula fornicata					4	107	1					
Crepidula plana						21	2					
Urosalpinx cinereus					2	1						
Ilyanassa obsoleta	2	1	6	1		2						
Massarius trivittata	10	1	6	1	9	19	1	1	8	3	4	3
Bivalvia												
Lyonsia hyalina					2	1						
Mulinia lateralis						1			3	5	2	4
Mya arenaria	43	10	129	98	4		7	9				
Mytilus edulis						1		1				
Tellina agilis									7	6	7	9
Mercenaria mercenaria					2	1		1			1	
Arthropoda												
Amphipoda												
Ampelisca abdita	980	195	242	115	931	572	10	144				
Unciola irrorata					1							
Unciola serrata	1				1	6						
Corophium tuberculatum	2				18	6						
Elasmopus levis	18				1	18						
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Decapoda												
Pagurus longicarpus					1							
Neopanope texana	1			1	3	17						
Isopoda												
Echinodermata												
Chordata												
Vertebrata												
Ammodytes sp.									1	1	1	

CRUISE IV (1/87)	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8a	B8b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm											1	
Rhynchocoela												
Unidentified nemertean	1		1	1	1	1	1		1			
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata						1						
Heteromastus filiformis			29	3	78	82	95	37	2	6	69	75
Spiochaetoperus oculatus			1									1
Tharyx acutus	2		13				1				1	
Pherusa affinis			1							1		1
Glycera americana			10	6	4	5	7	2	3	3	4	6
Glycera dibranchiata	5	2									1	
Podarke obscura												1
Maldanopsis elongata								2				
Magelona rosea	1											
Nephtys picta		11										
Nereis succinea												2
Aricidea catherinae			2									1
Pectinaria gouldii				1			1			1		
Eteone lactea							1					
Eumida sanguinea			1				1					
Phyllodoce arenae			2		1							1
Harmothoe extenuata											1	
Spiophanes bombyx	9	5										
Spio setosa	2											
Streblospio benedicti	6					1						
Mollusca												
Gastropoda												
Crepidula fornicata					1							5
Crepidula plana					1	3						13
Ilyanassa obsoleta						1			2	1		
Nassarius trivittata	2	2	28	17	8	5	9		3	4	16	8
Bivalvia												
Mulinia lateralis	19	7	6	2		1	5				1	
Mya arenaria					2	2					1	5
Nucula proxima			1		11	9	22	2			2	3
Petricola pholadiformis							2		1			
Ensis directus			6	2								
Tellina agilis	7	16	21	14	6	9	4	1			6	7
Mercenaria mercenaria			1			4	2					1
Pitar morrhuana							1					
Arthropoda												
Amphipoda												
Ampelisca abdita	1		2397	99	3	115	621	31	68	121	11	509
Unciola dissimilis										1		
Unciola serrata					2	1			1	2		3
Unidentified caprellidae	1											
Corophium tuberculatum			5							1		5
Elasmopus levis			2		4		2		2	1		12
Monoculodes edwardsi		1										
Paraphoxus spinosus			58	4		2	20	4		4	1	26
Merostomata												
Ostrocooda								1				
Unidentified ostrocooda								1				
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Oxyurostylis smithi	1											
Decapoda												
Crangon septemspinosa				1			1					
Libinia emarginata												1

CRUISE IV (1/87)

	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8a	B8b
Pagurus longicarpus			1		2							
Neopanope texana							1		1			
Isopoda												
Cyathura polita					2		1					1
Echinodermata												
Chordata												
Vertebrata												
Ammodytes sp.			1									

CRUISE IV (1/87)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Porifera												
Unidentified sponge								*				
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1	1							1	1	1	
Aschelminthes												
Ectoprocta												
Alcyonidium sp.	*											
Electra sp.												*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata												2
Heteromastus filiformis	86	156					1					
Spirochaetoperus oculatus	1											
Cirratulus grandis												1
Tharyx acutus	1	44	3	5					3	1	3	1
Pherusa affinis	1	1					1					5
Glycera americana	3	2										5
Glycera dibranchiata			1	6	13		1		1	2		2
Podarke obscura	1											
Magelona rosea		2							1			1
Nephtys picta			3	4			11	9	27	22	22	16
Nereis succinea	1	1										
Aricidea catherinae	4		4									
Pectinaria gouldii	2	1										
Paranaitis speciosa			1									
Phyllodoce arenae	4											
Harmothoe extenuata											1	
Lepidonotus squamatus												1
Spiophanes bombyx				2					8	3	2	7
Spio setosa		11		1			1					1
Streblospio benedicti		9	17	12					3			1
Mollusca												
Gastropoda												
Cormabella sp.											1	
Acteon punctostriatus			1									1
Crepidula fornicata	2	2										
Crepidula plana	2	10						4				
Massarius trivittata	7	13	9	9			1	2		1	11	1
Bivalvia												
Lyonsia hyalina				2								
Mulinia lateralis			6	3			1					10
Spisula solidissima	1	4							1			
Mya arenaria	1	1									1	1
Mytilus edulis											5	
Mucula proxima	2	3										
Ensis directus		1										
Tellina agilis	8	7	14	8			3		37	5	7	64
Mercenaria mercenaria			1	1								
Arthropoda												
Amphipoda												
Ampelisca abdita	1927	375	1	1								
Unciola irrorata											1	
Unciola serrata	7	1	1					1				
Unidentified caprellidae			1									4
Erichthonius brasiliensis			3									
Acanthohaustorius millsii					3							
Parahaustorius longimerus					2	1						
Elasmopus levis	36	1				1	1		1			28
Monoculodes edwardsi										1		
Paraphoxus spinosus	50	9										21
Rhepoxynus epistomus					5	5						4
Merostomata												
Ostrococha												
Copepoda												
Cirripedia												

CRUISE IV (1/87)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Mysidacea												
Cumacea												
Decapoda												
<i>Cancer irroratus</i>								1				
<i>Crangon septemspinosa</i>	1									1		
<i>Libinia emarginata</i>				1								
<i>Pagurus longicarpus</i>												
Isopoda												
<i>Edotea triloba</i>	1	1										
<i>Cyathura polita</i>	1										3	2
Echinodermata												
Chordata												
Vertebrata												
<i>Ammodytes</i> sp.								1				

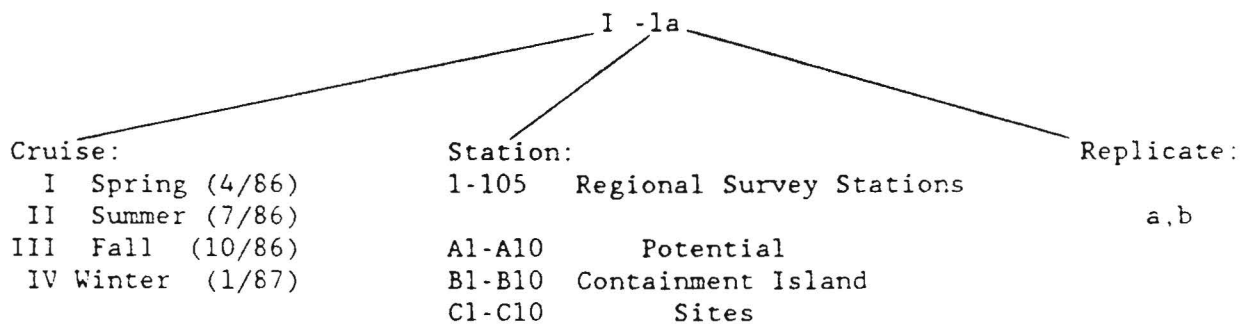
CRUISE IV (1/87)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean		1		1	1	1	1	1	1	1	1	
Aschelminthes												
Ectoprocta												
Cryptosula sp.			*									
Electra sp.			*		*							*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata								1				1
Capitella capitata					1	1						
Heteromastus filiformis	4	2	9	7	2		3	6	7	6		
Cirratulus grandis			228	201	125	64	59	20	191	211		1
Dodecacera coralii						2	20	13				
Tharyx acutus	1	1	23	11				8		4	8	3
Pherusa affinis	4		5		1	1	1	4	2	6		
Glycera americana	2		2	1	2	4	1	4	3	3		
Glycera dibranchiata	3	4		2	1	1				1	10	11
Lumbrineris acuta											1	
Magelona rosea									1			
Nephtys picta	18	13									9	2
Nereis succinea			1					1	5	2		
Pectinaria gouldii	1						1	2	2			
Eteone lactea					2			1				
Paranaitis speciosa			1	2		1	1	2	2	1		
Harmothoe extenuata			20	10	5	8	7	19	7	1	1	1
Lepidonotus squamatus			22	39	3	7	10	24	7	3	2	
Sabellaria vulgaris		1		1		1		3			5	1
Potamilla reniformis				2	1	2		4				
Hydroides dianthus			3	17	4	3	4	5	1	1		9
Polydora ligni				3	1		2	4				
Spiophanes bombyx		1										
Spio setosa	1										2	1
Streblospio benedicti	14	4									1	
Autolytus cornutus						1		4				
Syllis gracilis					1							
Mollusca												
Gastropoda												
Acteon punctostriatus	2											
Crepidula fornicata	1			11	1				1	2		1
Crepidula plana			17	22	12	4	4	4	3			2
Urosalpinx cinereus				1	2	5	1					
Nassarius trivittata		6	2	2	1		1		1	1	1	3
Bivalvia												
Mulinia lateralis	49	2										
Mya arenaria									1	1		
Nucula proxima	1									1		1
Pandora gouldiana											1	
Petricola pholadiformis	1				1							
Esis directus	4	2										1
Tellina agilis	81	48	1		1	1		1			6	5
Mercenaria mercenaria									1	1		
Arthropoda												
Amphipoda												
Ampelisca abdita	6			6		1						
Unciola irrorata		1										
Unciola serrata			5		6	2	7	5			4	1
Unidentified caprellidae									1			72
Corophium tuberculatum												12
Erichthonius brasiliensis												1
Elasmopus levis			1	4						1		7
Paraphoxus spinosus			1	1		3		6		1	14	31
Phoxocephalus holbolli			1						3	3	11	19
Merostomata												
Ostrocooda												

CRUISE IV (1/87)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Copepoda												
Cirripedia												
<i>Balanus amphitrite</i>			1									
<i>Balanus improvisus</i>				2								
Mysidacea												
Mysid sp.			1									
Cumacea												
Decapoda												
<i>Cancer irroratus</i>			1	1		1		2	3			
<i>Crangon septemspinosa</i>	1											1
<i>Libinia emarginata</i>				1								
<i>Pagurus longicarpus</i>	1				28	9						
<i>Neopanope texana</i>			6	23	1	19	1	9	3	1		
Isopoda												
<i>Cyathura polita</i>			22	33	36	45	78	68	10	12		4
Echinodermata												
<i>Asterias forbesii</i>				1		1			1			
<i>Arbacia punctulata</i>						1	1					
Chordata												
Vertebrata												

Appendix D. Biological Parameters for Each Sample

Cruise: I Spring (4/86)
 II Summer (7/86)
 III Fall (10/86)
 IV Winter (1/87)

Sample Identification Code Key



NYH 1986-87 BENTHIC STUDY BIOLOGICAL PARAMETERS

<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (<u>Enumerable</u> <u>Fauna Only</u>)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
I- 1a	10470	27	1.276	0.268	29
I- 1b	6160	24	2.290	0.499	24
I- 2a	36430	20	0.519	0.120	20
I- 2b	26780	17	0.568	0.139	17
I- 3a	110	4	1.790	0.895	4
I- 3b	150	5	2.073	0.893	5
I- 4a	26360	27	0.602	0.127	27
I- 4b	10100	22	1.045	0.234	22
I- 5a	490	14	3.227	0.847	14
I- 5b	330	13	2.756	0.745	13
I- 6a	240	12	3.292	0.918	12
I- 6b	250	9	2.638	0.832	9
I- 7a	2710	22	3.180	0.713	22
I- 7b	1940	16	1.922	0.481	16
I- 8a	520	10	3.017	0.908	10
I- 8b	540	12	2.491	0.695	12
I- 9a	3270	11	1.179	0.341	11
I- 9b	12240	6	0.056	0.022	6
I- 10a	10	1	0.000	0.000	1
I- 10b	0	0	0.000	0.000	0
I- 11a	220	5	1.971	0.849	5
I- 11b	260	8	2.369	0.790	8
I- 12a	380	9	2.360	0.745	9
I- 12b	100	6	2.161	0.836	6
I- 13a	3420	29	3.447	0.710	30
I- 13b	400	10	2.628	0.791	10
I- 14a	4980	7	0.223	0.079	7
I- 14b	6650	6	0.152	0.059	6
I- 15a	3800	18	2.175	0.522	18
I- 15b	9460	18	0.797	0.191	18
I- 16a	8470	10	0.247	0.074	10
I- 16b	5660	22	1.292	0.290	22
I- 17a	1130	2	0.128	0.128	2
I- 17b	5240	6	0.246	0.095	6
I- 18a	15200	20	1.267	0.293	20
I- 18b	28200	20	0.557	0.129	20
I- 19a	310	8	2.233	0.744	8
I- 19b	470	8	2.275	0.758	8
I- 21a	710	16	3.099	0.775	16
I- 21b	310	9	2.586	0.816	9
I- 24a	7010	13	0.507	0.137	13
I- 24b	3200	11	0.582	0.168	11
I- 25a	5440	7	0.230	0.082	7
I- 25b	4220	9	0.751	0.237	10
I- 26a	15380	28	1.156	0.240	28
I- 26b	33250	24	0.388	0.085	24
I- 27a	3960	9	0.223	0.071	9
I- 27b	15820	11	0.209	0.060	11
I- 28a	15740	25	1.149	0.247	25
I- 28b	16420	22	1.075	0.241	22
I- 29a	810	14	3.157	0.829	14
I- 29b	2320	15	2.217	0.567	15

NYH 1986-87 BENTHIC STUDY BIOLOGICAL PARAMETERS

<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (Enumerable Fauna Only)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
I- 30a	8640	9	0.398	0.126	9
I- 30b	7410	14	0.318	0.084	14
I- 31a	170	8	2.579	0.860	8
I- 31b	130	1	0.000	0.000	1
I- 32a	150	5	1.738	0.749	5
I- 32b	190	3	0.913	0.576	3
I- 34a	20	2	1.000	1.000	2
I- 34b	60	2	0.650	0.650	2
I- 36a	5410	13	0.824	0.223	13
I- 36b	14670	15	0.817	0.209	15
I- 37a	4190	12	0.849	0.237	12
I- 37b	2180	9	0.497	0.157	9
I- 38a	8580	22	1.027	0.230	22
I- 38b	20080	30	1.588	0.324	30
I- 40a	3510	36	3.762	0.728	38
I- 40b	1330	23	3.259	0.720	24
I- 41a	2410	28	4.005	0.833	29
I- 41b	1970	23	3.929	0.868	24
I- 42a	2190	28	3.866	0.804	29
I- 42b	1530	23	3.268	0.722	24
I- 43a	20770	19	0.756	0.178	19
I- 43b	11990	11	0.357	0.103	11
I- 46a	2090	22	2.658	0.596	22
I- 46b	170	8	2.579	0.860	8
I- 47a	120	6	2.459	0.951	7
I- 47b	60	4	1.918	0.959	4
I- 48a	10750	16	1.066	0.266	16
I- 48b	9830	12	0.522	0.146	12
I- 49a	670	10	2.043	0.615	10
I- 49b	800	9	1.404	0.443	10
I- 50a	1540	8	1.217	0.406	8
I- 50b	7210	9	0.516	0.163	9
I- 51a	530	12	2.714	0.757	13
I- 51b	180	4	1.233	0.617	5
I- 52a	450	11	2.909	0.841	11
I- 52b	860	15	2.981	0.763	15
I- 53a	860	12	2.618	0.730	13
I- 53b	1460	18	2.866	0.687	18
I- 54a	1410	11	2.877	0.832	12
I- 54b	2450	14	2.574	0.676	15
I- 55a	1340	24	3.659	0.798	25
I- 55b	750	16	3.219	0.805	16
I- 56a	3960	12	0.886	0.247	12
I- 56b	5980	10	0.664	0.200	10
I- 57a	230	7	1.945	0.693	8
I- 57b	340	5	1.536	0.661	6
I- 58a	290	4	1.720	0.860	4
I- 58b	280	7	1.897	0.676	7
I- 59a	190	9	2.900	0.915	9
I- 59b	70	4	1.842	0.921	4
I- 60a	380	9	2.049	0.646	9
I- 60b	250	10	2.573	0.775	10

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<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (<u>Enumerable</u> <u>Fauna Only</u>)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
I- 62a	40	2	0.811	0.811	2
I- 62b	30	2	0.918	0.918	2
I- 68a	12100	32	2.128	0.426	35
I- 68b	4270	26	2.782	0.592	26
I- 69a	3960	18	1.725	0.414	18
I- 69b	14830	38	3.162	0.603	38
I- 70a	59620	31	0.330	0.067	34
I- 70b	63840	38	0.501	0.095	40
I- 71a	3590	14	1.789	0.470	14
I- 71b	2920	20	2.280	0.528	20
I- 73a	8780	14	0.382	0.100	14
I- 73b	12950	28	1.192	0.248	28
I- 80a	200	6	1.871	0.724	8
I- 80b	90	6	2.503	0.968	6
I- 81a	1660	6	0.645	0.250	6
I- 81b	480	7	1.986	0.707	7
I- 82a	160	6	1.967	0.761	6
I- 82b	330	4	1.695	0.848	4
I- 83a	500	12	2.896	0.808	12
I- 83b	1690	26	3.833	0.816	27
I- 84a	900	21	3.829	0.872	22
I- 84b	350	11	2.984	0.862	11
I- 85a	200	7	2.628	0.936	7
I- 85b	400	7	2.140	0.762	7
I- 86a	20860	18	0.881	0.211	18
I- 86b	16960	21	1.241	0.283	21
I- 87a	2310	10	0.830	0.250	10
I- 87b	1800	12	2.037	0.568	12
I- 88a	320	8	2.640	0.880	8
I- 88b	270	5	1.471	0.633	5
I- 89a	350	8	2.472	0.824	9
I- 89b	40	1	0.000	0.000	1
I- 90a	90	2	0.503	0.503	2
I- 90b	140	1	0.000	0.000	1
I- 91a	140	5	1.627	0.701	5
I- 91b	40	3	1.500	0.946	3
I- 92a	100	6	2.322	0.898	6
I- 92b	70	4	1.842	0.921	4
I- 93a	80	6	2.406	0.931	6
I- 93b	20	1	0.000	0.000	1
I- 94a	230	6	1.628	0.630	6
I- 94b	11460	12	0.530	0.148	12
I- 95a	170	12	3.455	0.964	12
I- 95b	80	5	2.000	0.861	5
I- 96a	180	4	1.696	0.848	4
I- 96b	130	7	2.624	0.935	7
I- 97a	300	10	2.530	0.762	11
I- 97b	70	3	1.379	0.870	3
I- 98a	44440	16	0.205	0.051	17
I- 98b	67370	18	0.224	0.054	18
I- 99a	64770	18	0.091	0.022	18
I- 99b	78440	14	0.064	0.017	16

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I- 100a	670	13	2.923	0.790	13
I- 100b	700	14	3.069	0.806	15
I- 101a	180	5	1.681	0.724	5
I- 101b	130	6	2.449	0.948	6
I- 102a	10	1	0.000	0.000	1
I- 102b	60	1	0.000	0.000	1
I- 103a	7400	30	2.694	0.549	30
I- 103b	8990	37	2.282	0.438	39
I- 104a	1570	28	3.317	0.690	29
I- 104b	2290	37	3.307	0.635	40
I- 105a	1480	13	2.074	0.561	13
I- 105b	520	5	0.545	0.235	5
I- A1a	1280	24	3.268	0.713	25
I- A1b	1150	20	3.073	0.711	20
I- A2a	330	8	2.685	0.895	8
I- A2b	1210	18	2.985	0.716	19
I- A3a	240	10	2.887	0.869	10
I- A3b	750	16	2.726	0.681	16
I- A4a	2940	7	0.418	0.149	7
I- A4b	6390	14	0.609	0.160	14
I- A5a	10740	14	0.715	0.188	14
I- A5b	15340	17	0.758	0.185	17
I- A6a	20170	21	0.548	0.125	21
I- A6b	4840	24	1.945	0.424	26
I- A7a	750	9	2.178	0.687	9
I- A7b	2190	8	1.562	0.521	8
I- A8a	3810	12	1.176	0.328	12
I- A8b	4480	18	1.360	0.326	18
I- A9a	8340	30	1.247	0.254	31
I- A9b	3090	30	2.727	0.556	31
I- A10a	10410	19	0.776	0.183	19
I- A10b	6850	9	0.464	0.146	9
I- B1a	200	6	2.246	0.869	6
I- B1b	250	7	2.390	0.851	7
I- B2a	400	8	1.945	0.648	8
I- B2b	300	8	2.508	0.836	8
I- B3a	200	8	2.646	0.882	8
I- B3b	380	11	2.673	0.773	11
I- B4a	11970	19	0.791	0.186	19
I- B4b	52230	24	0.301	0.066	24
I- B5a	17060	18	0.584	0.140	18
I- B5b	29710	19	0.283	0.067	19
I- B6a	13440	18	0.494	0.119	19
I- B6b	12200	15	0.487	0.125	15
I- B7a	9980	9	0.274	0.086	9
I- B7b	10310	14	0.431	0.113	14
I- B8a	33680	20	0.363	0.084	20
I- B8b	34550	18	0.418	0.100	18
I- B9a	1170	11	1.003	0.290	11
I- B9b	36340	11	0.142	0.041	11
I- B10a	880	17	3.410	0.834	17
I- B10b	470	11	2.970	0.859	11

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I- C1a	58050	21	0.148	0.034	22
I- C1b	48290	17	0.138	0.034	18
I- C2a	10040	18	1.776	0.426	19
I- C2b	23410	17	0.662	0.162	17
I- C3a	6800	16	1.291	0.323	16
I- C3b	30260	29	2.162	0.445	29
I- C4a	650	13	2.577	0.696	14
I- C4b	920	13	2.612	0.706	13
I- C5a	400	7	2.046	0.729	7
I- C5b	3880	13	1.540	0.416	14
I- C6a	9780	29	1.364	0.281	29
I- C6b	7750	27	1.262	0.265	28
I- C7a	1790	21	3.119	0.710	22
I- C7b	3220	16	2.580	0.645	16
I- C8a	2820	25	2.506	0.540	25
I- C8b	2320	24	3.198	0.697	24
I- C9a	5180	26	2.324	0.494	28
I- C9b	4050	26	2.666	0.567	26
I- C10a	2750	28	3.849	0.801	28
I- C10b	2740	22	3.567	0.800	22
II- 1a	3270	21	2.148	0.489	21
II- 1b	920	8	1.952	0.651	8
II- 2a	15100	18	1.211	0.290	18
II- 2b	9320	15	0.720	0.184	15
II- 3a	9660	38	2.500	0.476	39
II- 3b	15700	38	2.976	0.567	40
II- 4a	9970	20	0.887	0.205	20
II- 4b	19340	33	1.357	0.269	33
II- 5a	390	12	3.149	0.879	12
II- 5b	1010	11	2.782	0.804	11
II- 6a	210	9	2.773	0.875	9
II- 6b	230	8	2.419	0.806	8
II- 7a	540	20	3.541	0.819	20
II- 7b	2170	21	3.337	0.760	21
II- 8a	460	10	2.445	0.736	10
II- 8b	500	11	2.718	0.786	11
II- 9a	27950	19	0.363	0.085	19
II- 9b	2740	23	1.863	0.412	23
II- 10a	50	3	1.371	0.865	3
II- 10b	140	6	2.353	0.910	6
II- 11a	1190	10	1.238	0.373	10
II- 11b	2030	5	0.532	0.229	5
II- 12a	600	13	2.537	0.686	13
II- 12b	170	8	2.699	0.900	8
II- 13a	900	12	2.584	0.721	12
II- 13b	420	7	1.728	0.616	7
II- 14a	3500	17	1.708	0.418	17
II- 14b	3050	14	1.599	0.420	14
II- 15a	760	9	1.230	0.388	9
II- 15b	1910	11	1.532	0.443	11
II- 16a	20730	30	0.891	0.182	30
II- 16b	1710	12	1.333	0.372	12

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II- 17a	1370	8	1.061	0.354	8
II- 17b	2120	14	1.361	0.357	14
II- 18a	1230	11	1.564	0.452	11
II- 18b	3000	12	1.927	0.538	12
II- 19a	270	8	2.577	0.859	8
II- 19b	220	6	2.145	0.830	6
II- 21a	280	8	2.464	0.821	9
II- 21b	330	8	2.488	0.829	8
II- 24a	1140	11	1.886	0.545	11
II- 24b	4230	19	2.010	0.473	19
II- 25a	1800	9	0.751	0.237	9
II- 25b	470	7	1.544	0.550	7
II- 26a	24330	29	1.408	0.290	31
II- 26b	13810	19	1.385	0.326	19
II- 27a	570	5	1.171	0.504	5
II- 27b	2010	11	1.844	0.533	11
II- 28a	20180	23	1.735	0.384	23
II- 28b	14860	26	1.722	0.366	26
II- 29a	400	16	3.336	0.834	16
II- 29b	470	10	2.432	0.732	10
II- 30a	2080	10	1.351	0.407	10
II- 30b	1420	8	1.634	0.545	8
II- 31a	3890	18	1.284	0.308	18
II- 31b	4370	19	2.121	0.499	19
II- 32a	1200	14	1.949	0.512	14
II- 32b	1130	19	3.123	0.735	19
II- 34a	1740	20	2.447	0.566	20
II- 34b	440	12	3.165	0.883	12
II- 36a	14890	25	0.903	0.194	25
II- 36b	1260	20	2.964	0.686	20
II- 37a	10	1	0.000	0.000	1
II- 37b	40	3	1.500	0.946	3
II- 38a	15340	23	0.943	0.209	23
II- 38b	14970	30	1.687	0.344	31
II- 40a	1060	26	4.087	0.869	28
II- 40b	1190	21	3.409	0.776	24
II- 41a	670	20	3.421	0.792	23
II- 41b	4660	26	2.334	0.497	28
II- 42a	47960	25	1.256	0.270	25
II- 42b	4780	19	0.867	0.204	19
II- 43a	84560	24	1.294	0.282	24
II- 43b	47430	27	1.313	0.276	27
II- 46a	15010	18	0.849	0.204	18
II- 46b	3510	18	2.255	0.541	18
II- 47a	1080	13	2.763	0.747	13
II- 47b	1160	16	3.032	0.758	16
II- 48a	10600	17	0.692	0.169	17
II- 48b	3400	13	0.730	0.197	13
II- 49a	32180	24	0.976	0.213	24
II- 49b	6690	18	1.407	0.337	18
II- 50a	4660	12	1.163	0.324	12
II- 50b	7800	13	0.994	0.269	13

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II- 51a	360	13	3.012	0.814	13
II- 51b	2440	18	1.789	0.429	20
II- 52a	390	13	3.388	0.915	13
II- 52b	20170	30	1.592	0.324	31
II- 53a	7190	21	1.964	0.447	21
II- 53b	6260	17	1.549	0.379	17
II- 54a	13000	32	2.917	0.583	32
II- 54b	10950	29	2.968	0.611	30
II- 55a	1190	6	1.461	0.565	6
II- 55b	7070	14	1.326	0.348	14
II- 56a	13310	15	1.574	0.403	15
II- 56b	1300	13	1.259	0.340	13
II- 57a	5940	28	1.964	0.409	28
II- 57b	380	14	3.353	0.881	15
II- 58a	2280	11	1.797	0.519	13
II- 58b	1860	9	1.329	0.419	9
II- 59a	90	6	2.503	0.968	6
II- 59b	220	7	2.401	0.855	7
II- 60a	840	8	1.604	0.535	8
II- 60b	2140	7	1.091	0.389	7
II- 62a	60	3	1.252	0.790	3
II- 62b	60	3	1.252	0.790	3
II- 68a	15870	15	0.241	0.062	15
II- 68b	8400	24	1.294	0.282	24
II- 69a	900	16	2.817	0.704	16
II- 69b	500	13	2.948	0.797	13
II- 70a	7800	10	0.576	0.173	10
II- 70b	650	15	3.429	0.878	15
II- 71a	280	9	2.459	0.776	9
II- 71b	360	8	1.989	0.663	8
II- 73a	3000	14	0.646	0.170	14
II- 73b	2130	14	1.063	0.279	14
II- 80a	4900	28	2.985	0.621	28
II- 80b	6200	19	1.859	0.438	19
II- 81a	7910	19	1.370	0.322	20
II- 81b	5120	25	2.132	0.459	26
II- 82a	650	9	2.306	0.728	9
II- 82b	440	7	1.243	0.443	7
II- 83a	510	15	3.263	0.835	15
II- 83b	840	19	3.724	0.877	19
II- 84a	500	13	3.271	0.884	13
II- 84b	990	19	3.338	0.786	21
II- 85a	8730	21	1.085	0.247	21
II- 85b	3880	13	0.571	0.154	13
II- 86a	9040	22	0.698	0.157	22
II- 86b	2730	20	1.903	0.440	20
II- 87a	7520	15	1.070	0.274	15
II- 87b	9750	25	1.369	0.295	25
II- 88a	6970	30	2.971	0.606	30
II- 88b	11300	28	2.444	0.508	28
II- 89a	1990	24	2.987	0.652	26
II- 89b	230	5	1.014	0.437	5

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II- 90a	160	4	0.993	0.497	4
II- 90b	280	5	1.528	0.658	5
II- 91a	200	10	2.902	0.873	10
II- 91b	570	10	1.601	0.482	10
II- 92a	650	11	2.390	0.691	11
II- 92b	350	8	1.826	0.609	10
II- 93a	270	9	2.569	0.810	9
II- 93b	1090	14	1.366	0.359	14
II- 94a	240	5	2.201	0.948	5
II- 94b	360	6	1.768	0.684	6
II- 95a	900	10	1.456	0.438	10
II- 95b	630	9	1.840	0.580	9
II- 96a	520	7	1.411	0.502	7
II- 96b	660	6	0.855	0.331	6
II- 97a	90	3	1.224	0.773	3
II- 97b	50	2	0.722	0.722	2
II- 98a	24680	17	0.589	0.144	17
II- 98b	22830	18	0.353	0.085	19
II- 99a	3500	13	0.800	0.216	15
II- 99b	22820	18	0.461	0.110	18
II- 100a	450	10	1.953	0.588	12
II- 100b	420	7	1.993	0.710	7
II- 101a	210	8	2.618	0.873	8
II- 101b	50	2	0.971	0.971	2
II- 102a	90	3	0.986	0.622	3
II- 102b	100	2	0.469	0.469	2
II- 103a	2740	31	3.255	0.657	32
II- 103b	1990	38	4.486	0.855	40
II- 104a	1230	26	4.149	0.883	26
II- 104b	1640	28	3.296	0.686	29
II- 105a	310	10	2.668	0.803	10
II- 105b	830	13	2.518	0.680	13
II- A1a	2430	26	3.218	0.685	26
II- A1b	2330	27	3.549	0.746	27
II- A2a	4270	33	3.082	0.611	33
II- A2b	6430	24	1.209	0.264	24
II- A3a	540	11	2.908	0.841	11
II- A3b	950	17	3.045	0.745	17
II- A4a	6700	15	1.841	0.471	15
II- A4b	3770	10	1.765	0.531	10
II- A5a	6710	16	1.881	0.470	16
II- A5b	12350	26	1.684	0.358	26
II- A6a	6080	15	2.100	0.537	15
II- A6b	4470	19	2.275	0.536	19
II- A7a	1740	11	1.876	0.542	12
II- A7b	4320	15	1.509	0.386	15
II- A8a	2180	9	1.915	0.604	9
II- A8b	9830	21	1.719	0.391	21
II- A9a	5230	29	2.592	0.534	29
II- A9b	2380	31	2.867	0.579	31
II- A10a	2480	8	1.720	0.573	8
II- A10b	5310	13	1.565	0.423	13

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<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (Enumerable Fauna Only)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
II- B1a	480	11	2.827	0.817	11
II- B1b	450	11	2.872	0.830	11
II- B2a	310	7	2.278	0.812	7
II- B2b	500	9	2.761	0.871	9
II- B3a	210	8	2.470	0.823	8
II- B3b	230	9	2.877	0.908	9
II- B4a	450	10	2.867	0.863	10
II- B4b	7570	24	1.164	0.254	24
II- B5a	18450	33	1.662	0.329	35
II- B5b	19420	27	1.720	0.362	27
II- B6a	520	13	2.864	0.774	14
II- B6b	3880	13	0.917	0.248	13
II- B7a	4940	13	0.735	0.199	13
II- B7b	1770	12	1.102	0.307	12
II- B8a	10650	23	1.565	0.346	24
II- B8b	5860	14	1.530	0.402	14
II- B9a	10810	17	0.938	0.229	17
II- B9b	16490	27	1.242	0.261	27
II- B10a	240	10	2.820	0.849	10
II- B10b	360	8	2.254	0.751	8
II- C1a	33140	14	0.270	0.071	16
II- C1b	28580	19	0.290	0.068	22
II- C2a	410	10	1.670	0.503	10
II- C2b	690	7	1.601	0.570	7
II- C3a	960	11	2.350	0.679	11
II- C3b	1120	14	2.305	0.605	14
II- C4a	940	19	3.133	0.738	21
II- C4b	470	11	2.318	0.670	11
II- C5a	850	10	1.326	0.399	10
II- C5b	540	10	2.270	0.683	10
II- C6a	9140	26	1.266	0.269	27
II- C6b	17960	30	1.714	0.349	32
II- C7a	2260	23	2.747	0.607	25
II- C7b	3470	22	2.671	0.599	23
II- C8a	1680	24	2.884	0.629	26
II- C8b	6080	35	2.596	0.506	39
II- C9a	29800	20	0.887	0.205	22
II- C9b	11400	37	2.211	0.424	39
II- C10a	1060	17	2.850	0.697	17
II- C10b	450	13	3.034	0.820	15
III- 1a	11100	19	0.654	0.154	19
III- 1b	7770	21	0.903	0.206	21
III- 2a	1900	15	2.755	0.705	15
III- 2b	51710	28	0.557	0.116	28
III- 3a	1860	21	3.470	0.790	23
III- 3b	2660	23	3.279	0.725	27
III- 4a	15340	23	1.077	0.238	23
III- 4b	11640	18	0.653	0.157	18
III- 5a	320	7	2.362	0.841	7
III- 5b	560	11	2.364	0.683	11
III- 6a	230	9	2.644	0.834	9
III- 6b	260	10	3.076	0.926	10

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<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (Enumerable Fauna Only)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
III- 7a	240	6	2.183	0.844	6
III- 7b	560	13	2.916	0.788	14
III- 8a	110	3	1.322	0.834	3
III- 8b	220	6	1.301	0.503	6
III- 9a	14890	22	0.799	0.179	22
III- 9b	11070	23	0.621	0.137	24
III- 10a	150	4	1.237	0.618	4
III- 10b	130	6	2.192	0.848	6
III- 11a	740	13	2.145	0.580	13
III- 11b	640	7	1.544	0.550	7
III- 12a	8230	20	1.993	0.461	21
III- 12b	5260	24	2.415	0.527	26
III- 13a	130	6	2.316	0.896	6
III- 13b	190	8	2.484	0.828	8
III- 14a	7240	15	0.724	0.185	15
III- 14b	8690	19	1.456	0.343	19
III- 15a	2680	10	1.191	0.359	10
III- 15b	5270	12	1.239	0.346	12
III- 16a	8660	21	1.408	0.321	21
III- 16b	9970	15	0.500	0.128	15
III- 17a	1900	13	1.170	0.316	13
III- 17b	2210	9	0.776	0.245	9
III- 18a	1960	16	1.778	0.445	16
III- 18b	1670	11	1.695	0.490	11
III- 19a	240	11	3.090	0.893	11
III- 19b	210	11	2.915	0.843	11
III- 21a	440	12	3.182	0.888	12
III- 21b	370	10	2.547	0.767	11
III- 24a	3420	17	1.393	0.341	17
III- 24b	1050	9	1.181	0.372	9
III- 25a	2510	6	0.357	0.138	6
III- 25b	4270	7	0.225	0.080	7
III- 26a	23720	26	1.004	0.214	26
III- 26b	33510	28	0.911	0.190	28
III- 27a	31760	34	1.108	0.218	34
III- 27b	17500	26	1.231	0.262	27
III- 28a	1270	12	2.066	0.576	12
III- 28b	1260	13	2.119	0.573	13
III- 29a	900	16	2.529	0.632	17
III- 29b	1440	26	2.945	0.627	27
III- 30a	7680	9	0.566	0.179	9
III- 30b	3130	9	1.029	0.325	9
III- 31a	12810	24	0.901	0.197	24
III- 31b	15440	25	1.072	0.231	25
III- 32a	850	17	3.510	0.859	18
III- 32b	4980	20	2.133	0.494	20
III- 34a	920	7	1.125	0.401	7
III- 34b	960	4	0.898	0.449	4
III- 36a	4060	15	1.609	0.412	15
III- 36b	1420	12	1.438	0.401	12
III- 37a	20	2	1.000	1.000	2
III- 37b	10	1	0.000	0.000	1

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III- 38a	610	10	2.206	0.664	10
III- 38b	2300	20	2.653	0.614	20
III- 40a	5400	28	2.567	0.534	28
III- 40b	8490	31	3.120	0.630	32
III- 41a	2590	30	3.730	0.760	33
III- 41b	1170	22	3.578	0.802	22
III- 42a	1730	22	3.409	0.764	22
III- 42b	4730	25	2.964	0.638	27
III- 43a	37380	24	0.733	0.160	24
III- 43b	20770	26	1.579	0.336	26
III- 46a	30320	21	0.436	0.099	21
III- 46b	24120	27	0.477	0.100	27
III- 47a	3230	17	2.066	0.506	17
III- 47b	1760	17	2.388	0.584	17
III- 48a	2390	9	0.453	0.143	9
III- 48b	1590	8	0.426	0.142	8
III- 49a	17440	25	0.969	0.209	25
III- 49b	11110	18	0.758	0.182	18
III- 50a	11350	15	0.721	0.185	15
III- 50b	5080	10	0.510	0.153	10
III- 51a	2830	20	2.187	0.506	20
III- 51b	3810	18	2.639	0.633	18
III- 52a	3620	20	2.104	0.487	21
III- 52b	1270	17	2.636	0.645	17
III- 53a	11420	18	0.505	0.121	18
III- 53b	15640	15	0.670	0.171	15
III- 54a	460	10	2.632	0.792	10
III- 54b	330	9	2.550	0.804	9
III- 55a	8990	11	1.185	0.343	11
III- 55b	2730	9	1.440	0.454	9
III- 56a	10100	16	1.324	0.331	16
III- 56b	11740	17	1.210	0.296	17
III- 57a	7580	19	1.499	0.353	21
III- 57b	5130	19	2.088	0.492	20
III- 58a	3760	13	0.865	0.234	13
III- 58b	5440	15	0.892	0.228	15
III- 59a	2550	12	0.689	0.192	12
III- 59b	2280	12	1.181	0.329	12
III- 60a	1190	12	2.135	0.595	12
III- 60b	1810	9	1.899	0.599	9
III- 62a	2320	7	1.508	0.537	7
III- 62b	2040	6	1.439	0.557	6
III- 68a	7660	8	0.282	0.094	8
III- 68b	9770	19	0.752	0.177	19
III- 69a	1820	17	2.594	0.635	17
III- 69b	1570	14	2.449	0.643	14
III- 70a	5080	22	1.542	0.346	22
III- 70b	8220	25	1.391	0.300	25
III- 71a	330	8	2.385	0.795	8
III- 71b	240	4	0.900	0.450	4
III- 73a	5440	17	0.921	0.225	17
III- 73b	3660	24	1.836	0.400	24

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III- 80a	9480	29	1.967	0.405	30
III- 80b	5700	26	2.165	0.461	26
III- 81a	600	13	2.481	0.670	13
III- 81b	980	13	2.513	0.679	13
III- 82a	10100	25	1.950	0.420	26
III- 82b	4560	21	2.359	0.537	22
III- 83a	4480	31	3.171	0.640	34
III- 83b	5870	36	3.485	0.674	38
III- 84a	990	20	3.409	0.789	23
III- 84b	660	19	3.346	0.788	22
III- 85a	5760	19	1.189	0.280	19
III- 85b	1090	7	0.807	0.287	7
III- 86a	2360	16	1.434	0.359	16
III- 86b	4570	17	1.047	0.256	17
III- 87a	5920	13	0.414	0.112	13
III- 87b	16430	18	0.359	0.086	18
III- 88a	2200	24	3.359	0.733	24
III- 88b	2120	27	3.513	0.739	29
III- 89a	380	5	1.444	0.622	7
III- 89b	230	8	1.999	0.666	10
III- 90a	180	7	1.780	0.634	7
III- 90b	290	5	0.995	0.428	5
III- 91a	260	5	1.880	0.810	6
III- 91b	320	6	1.386	0.536	6
III- 92a	450	16	3.234	0.808	17
III- 92b	70	4	1.950	0.975	4
III- 93a	160	4	1.592	0.796	4
III- 93b	310	4	1.327	0.664	4
III- 94a	210	5	1.625	0.700	5
III- 94b	410	5	1.645	0.708	5
III- 95a	590	7	1.484	0.529	7
III- 95b	720	9	1.505	0.475	9
III- 96a	220	7	2.367	0.843	7
III- 96b	150	11	3.323	0.961	11
III- 97a	150	8	2.683	0.894	8
III- 97b	240	10	2.820	0.849	10
III- 98a	14540	20	0.837	0.194	21
III- 98b	17060	13	0.880	0.238	13
III- 99a	4270	16	0.949	0.237	16
III- 99b	28920	13	0.327	0.088	13
III- 100a	350	6	2.073	0.802	6
III- 100b	400	11	2.809	0.812	11
III- 101a	150	6	2.099	0.812	6
III- 101b	230	6	2.251	0.871	6
III- 102a	40	2	0.811	0.811	5
III- 102b	40	3	1.500	0.946	4
III- 103a	410	18	3.652	0.876	19
III- 103b	580	23	4.150	0.918	25
III- 104a	350	16	3.576	0.894	16
III- 104b	3380	35	3.901	0.761	38
III- 105a	2640	15	1.517	0.388	15
III- 105b	1540	16	2.514	0.629	16

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III- A1a	31560	21	0.390	0.089	21
III- A1b	36680	19	0.259	0.061	19
III- A2a	1650	25	3.653	0.787	25
III- A2b	1380	18	3.181	0.763	18
III- A3a	10420	22	0.740	0.166	22
III- A3b	2860	24	3.736	0.815	24
III- A4a	5530	9	0.958	0.302	9
III- A4b	5830	12	1.277	0.356	12
III- A5a	10240	17	0.994	0.243	17
III- A5b	6490	13	0.864	0.233	13
III- A6a	26540	16	0.449	0.112	16
III- A6b	20060	18	0.565	0.136	18
III- A7a	4990	9	0.608	0.192	9
III- A7b	5230	14	0.894	0.235	14
III- A8a	16030	17	0.934	0.229	17
III- A8b	2700	9	1.462	0.461	9
III- A9a	14010	30	1.128	0.230	31
III- A9b	22770	29	0.813	0.167	29
III- A10a	2570	11	1.322	0.382	11
III- A10b	2630	10	0.887	0.267	10
III- B1a	350	11	3.193	0.923	11
III- B1b	750	13	2.837	0.767	14
III- B2a	590	13	3.267	0.883	13
III- B2b	690	18	3.390	0.813	20
III- B3a	570	13	2.642	0.714	13
III- B3b	500	11	3.064	0.886	11
III- B4a	19080	22	0.819	0.184	22
III- B4b	16580	21	0.557	0.127	21
III- B5a	9560	18	0.716	0.172	18
III- B5b	2060	12	1.488	0.415	12
III- B6a	4910	11	0.495	0.143	11
III- B6b	1030	9	1.528	0.482	9
III- B7a	3470	12	0.532	0.148	12
III- B7b	2500	7	0.606	0.216	7
III- B8a	6320	16	0.887	0.222	16
III- B8b	13130	12	0.691	0.193	12
III- B9a	14200	18	0.618	0.148	18
III- B9b	21330	17	0.437	0.107	17
III- B10a	1420	20	3.567	0.825	20
III- B10b	360	9	2.567	0.810	9
III- C1a	20270	21	0.802	0.183	22
III- C1b	13480	18	0.822	0.197	21
III- C2a	3380	16	1.094	0.273	16
III- C2b	2240	9	0.621	0.196	9
III- C3a	720	12	1.653	0.461	12
III- C3b	1030	11	1.450	0.419	11
III- C4a	1060	22	3.909	0.877	24
III- C4b	230	11	3.147	0.910	11
III- C5a	110	4	1.823	0.912	4
III- C5b	140	5	1.870	0.805	5
III- C6a	10680	38	2.691	0.513	39
III- C6b	3310	19	1.829	0.431	20

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III- C7a	1770	17	2.668	0.653	19
III- C7b	1730	15	2.430	0.622	16
III- C8a	1440	22	3.692	0.828	23
III- C8b	4770	32	3.778	0.756	34
III- C9a	5170	31	3.003	0.606	31
III- C9b	12790	22	1.825	0.409	23
III- C10a	320	11	2.759	0.797	12
III- C10b	360	8	2.051	0.684	8
IV- 1a	140	7	2.522	0.898	7
IV- 1b	50	4	1.922	0.961	4
IV- 2a	2950	23	3.513	0.777	25
IV- 2b	5670	23	3.722	0.823	24
IV- 3a	370	12	2.716	0.758	12
IV- 3b	400	5	0.898	0.387	5
IV- 4a	94840	34	0.664	0.131	35
IV- 4b	6250	27	2.506	0.527	28
IV- 5a	430	10	2.472	0.744	10
IV- 5b	420	11	2.760	0.798	11
IV- 6a	310	13	3.158	0.854	13
IV- 6b	90	5	2.059	0.887	5
IV- 7a	400	14	3.527	0.926	14
IV- 7b	1870	22	2.876	0.645	22
IV- 8a	160	5	1.497	0.645	5
IV- 8b	290	8	2.048	0.683	8
IV- 9a	7950	24	1.403	0.306	24
IV- 9b	3790	19	2.208	0.520	20
IV- 10a	90	5	2.059	0.887	5
IV- 10b	110	4	1.859	0.929	4
IV- 11a	320	6	2.228	0.862	7
IV- 11b	400	6	1.729	0.669	6
IV- 12a	210	8	2.547	0.849	9
IV- 12b	120	6	2.418	0.936	6
IV- 13a	520	7	1.762	0.628	7
IV- 13b	360	3	1.177	0.743	3
IV- 14a	3880	18	2.018	0.484	18
IV- 14b	1430	15	2.197	0.562	15
IV- 15a	1120	5	0.452	0.195	5
IV- 15b	2920	16	2.131	0.533	16
IV- 16a	3930	17	2.408	0.589	17
IV- 16b	4120	18	0.855	0.205	18
IV- 17a	640	12	2.251	0.628	12
IV- 17b	1390	16	2.286	0.571	16
IV- 18a	860	10	2.476	0.745	10
IV- 18b	2880	18	1.627	0.390	18
IV- 19a	120	8	2.855	0.952	8
IV- 19b	220	9	2.748	0.867	9
IV- 21a	320	12	2.863	0.799	12
IV- 21b	210	10	3.042	0.916	10
IV- 24a	11220	19	0.385	0.091	19
IV- 24b	1320	14	1.720	0.452	14
IV- 25a	1070	10	1.113	0.335	10
IV- 25b	1000	7	0.542	0.193	7

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IV- 26a	2530	22	2.759	0.619	22
IV- 26b	12100	29	1.291	0.266	31
IV- 27b	2180	21	3.185	0.725	22
IV- 27b	2870	11	0.891	0.257	12
IV- 28a	2650	19	1.689	0.398	19
IV- 28b	12120	15	0.564	0.144	15
IV- 29a	1130	17	3.195	0.782	17
IV- 29b	730	17	3.212	0.786	17
IV- 30a	20850	25	0.683	0.147	26
IV- 30b	16990	24	1.137	0.248	26
IV- 31a	1710	21	3.272	0.745	21
IV- 31b	33350	23	0.452	0.100	23
IV- 32a	50	2	0.971	0.971	2
IV- 32b	30	3	1.585	1.000	3
IV- 34a	700	5	1.116	0.481	5
IV- 34b	320	2	0.544	0.544	2
IV- 36a	4730	25	2.301	0.495	25
IV- 36b	3830	29	3.267	0.672	29
IV- 37a	40	3	1.500	0.946	3
IV- 37b	30	3	1.585	1.000	3
IV- 38a	1910	13	1.544	0.417	13
IV- 38b	3350	21	1.743	0.397	21
IV- 40a	890	23	3.732	0.825	24
IV- 40b	180	7	2.322	0.827	7
IV- 41a	8400	31	3.385	0.683	31
IV- 41b	8580	26	3.169	0.674	27
IV- 42a	2830	14	1.641	0.431	16
IV- 42b	220	8	2.426	0.809	8
IV- 43a	52970	26	0.595	0.127	26
IV- 43b	45580	21	0.521	0.119	21
IV- 46a	880	16	3.192	0.798	16
IV- 46b	13620	16	0.336	0.084	16
IV- 47a	960	14	2.813	0.739	15
IV- 47b	320	8	2.647	0.882	8
IV- 48a	28490	11	0.136	0.039	11
IV- 48b	30190	14	0.165	0.043	14
IV- 49a	33450	18	0.358	0.086	18
IV- 49b	1110	23	3.778	0.835	23
IV- 50a	6480	18	0.374	0.090	18
IV- 50b	1050	17	2.059	0.504	17
IV- 51a	1140	16	2.294	0.574	18
IV- 51b	860	8	1.857	0.619	8
IV- 52a	1370	6	0.828	0.320	6
IV- 52b	510	8	2.226	0.742	8
IV- 53a	1090	16	1.920	0.480	16
IV- 53b	2360	10	1.064	0.320	10
IV- 54a	26570	22	1.550	0.348	22
IV- 54b	3600	20	2.658	0.615	20
IV- 55a	1220	13	2.377	0.642	13
IV- 55b	2130	10	1.773	0.534	10
IV- 56a	3000	12	1.327	0.370	12
IV- 56b	5350	13	1.369	0.370	13

NYH 1986-87 BENTHIC STUDY BIOLOGICAL PARAMETERS

<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (Enumerable Fauna Only)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
IV- 57a	880	13	2.179	0.589	14
IV- 57b	910	16	2.728	0.682	17
IV- 58a	300	8	1.699	0.566	8
IV- 58b	1240	5	1.447	0.623	5
IV- 59a	600	10	2.042	0.615	10
IV- 59b	5620	11	0.335	0.097	11
IV- 60a	700	11	2.670	0.772	11
IV- 60b	2950	16	1.433	0.358	16
IV- 62a	80	3	1.061	0.670	3
IV- 62b	70	1	0.000	0.000	1
IV- 68a	60	3	1.459	0.921	3
IV- 68b	360	11	1.889	0.546	11
IV- 69a	3570	23	2.975	0.658	23
IV- 69b	2920	29	3.539	0.729	30
IV- 70a	3610	30	2.781	0.567	30
IV- 70b	2010	23	3.399	0.751	23
IV- 71a	570	13	2.576	0.696	13
IV- 71b	950	13	2.610	0.705	13
IV- 73a	23340	25	0.324	0.070	25
IV- 73b	860	13	1.336	0.361	13
IV- 80a	750	12	1.938	0.540	12
IV- 80b	12080	15	0.454	0.116	15
IV- 81a	6720	24	3.086	0.673	28
IV- 81b	2260	24	3.503	0.764	26
IV- 82a	1700	7	0.834	0.297	8
IV- 82b	310	9	2.491	0.786	9
IV- 83a	2030	20	3.135	0.725	21
IV- 83b	28780	28	0.962	0.200	28
IV- 84a	670	14	3.116	0.819	14
IV- 84b	150	7	2.657	0.946	7
IV- 85a	10	1	0.000	0.000	1
IV- 85b	0	0	0.000	0.000	0
IV- 86a	910	12	1.658	0.463	13
IV- 86b	1190	10	1.448	0.436	10
IV- 87a	1390	6	0.307	0.119	6
IV- 87b	1880	6	0.346	0.134	6
IV- 88a	24830	23	0.479	0.106	23
IV- 88b	26180	22	0.471	0.106	23
IV- 89a	170	5	1.258	0.542	5
IV- 89b	630	16	2.740	0.685	17
IV- 90a	50	1	0.000	0.000	1
IV- 90b	200	2	0.286	0.286	3
IV- 91a	220	11	3.021	0.873	11
IV- 91b	90	4	1.837	0.918	5
IV- 92a	160	10	3.108	0.936	10
IV- 92b	140	6	2.118	0.819	6
IV- 93a	60	3	1.459	0.921	3
IV- 93b	50	4	1.922	0.961	4
IV- 94a	170	5	1.569	0.676	5
IV- 94b	90	6	2.419	0.936	6
IV- 95a	160	7	2.608	0.929	8
IV- 95b	530	12	2.441	0.681	14

NYH 1986-87 BENTHIC STUDY BIOLOGICAL PARAMETERS

<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (<u>Enumerable</u> <u>Fauna Only</u>)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
IV- 96a	50	4	1.922	0.961	4
IV- 96b	70	5	2.128	0.917	5
IV- 97a	120	4	1.208	0.604	4
IV- 97b	200	8	2.357	0.786	8
IV- 98a	730	9	2.041	0.644	9
IV- 98b	2080	10	1.861	0.560	10
IV- 99a	1120	9	2.139	0.675	9
IV- 99b	3150	14	1.511	0.397	15
IV- 100a	470	13	2.919	0.789	13
IV- 100b	490	9	2.302	0.726	9
IV- 101a	320	9	2.510	0.792	9
IV- 101b	390	8	2.263	0.754	8
IV- 102a	110	4	1.981	0.990	4
IV- 102b	60	6	2.585	1.000	6
IV- 103a	1980	25	3.175	0.684	26
IV- 103b	1640	24	3.883	0.847	24
IV- 104a	710	20	3.755	0.869	21
IV- 104b	1470	27	4.055	0.853	27
IV- 105a	1380	14	2.019	0.530	14
IV- 105b	410	8	2.008	0.669	8
IV- A1a	13610	17	0.520	0.127	18
IV- A1b	14100	20	0.774	0.179	21
IV- A2a	1190	8	1.236	0.412	9
IV- A2b	2770	14	1.354	0.356	15
IV- A3a	1130	17	2.188	0.535	18
IV- A3b	4220	21	1.454	0.331	21
IV- A4a	1150	7	1.083	0.386	7
IV- A4b	2230	10	0.849	0.256	10
IV- A5a	12340	14	0.543	0.143	14
IV- A5b	6650	23	1.605	0.355	23
IV- A6a	3630	12	1.300	0.363	12
IV- A6b	5860	17	1.607	0.393	17
IV- A7a	11100	16	0.874	0.219	16
IV- A7b	2380	10	1.057	0.318	10
IV- A8a	4090	10	1.552	0.467	10
IV- A8b	2530	10	1.715	0.516	10
IV- A9a	10140	23	0.725	0.160	23
IV- A9b	8010	24	1.701	0.371	24
IV- A10a	310	7	2.397	0.854	7
IV- A10b	1760	8	1.053	0.351	8
IV- B1a	310	10	2.828	0.851	10
IV- B1b	550	11	2.953	0.854	11
IV- B2a	340	10	2.804	0.844	10
IV- B2b	360	8	2.588	0.863	8
IV- B3a	570	13	2.991	0.808	13
IV- B3b	450	8	2.440	0.813	8
IV- B4a	25860	20	0.606	0.140	20
IV- B4b	1500	11	1.820	0.526	11
IV- B5a	1260	15	2.243	0.574	15
IV- B5b	2420	16	2.111	0.528	16
IV- B6a	7990	21	1.326	0.302	21
IV- B6b	790	7	1.743	0.621	7

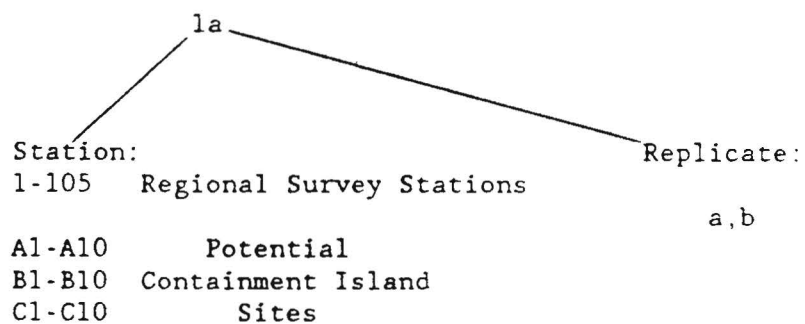
NYH 1986-87 BENTHIC STUDY BIOLOGICAL PARAMETERS

<u>Sample</u>	<u>Abundance</u>	<u># Species</u> (Enumerable Fauna Only)	<u>Diversity</u>	<u>Equitability</u>	<u>Total #</u> <u>of</u> <u>Species</u>
IV- B7a	840	10	1.280	0.385	10
IV- B7b	1470	13	1.244	0.336	13
IV- B8a	1330	15	2.478	0.634	15
IV- B8b	6680	19	1.445	0.340	19
IV- B9a	21510	25	0.778	0.167	26
IV- B9b	6580	25	2.070	0.446	25
IV- B10a	720	16	3.328	0.832	16
IV- B10b	610	12	3.111	0.868	12
IV- C1a	100	3	1.485	0.937	3
IV- C1b	80	4	1.549	0.774	4
IV- C2a	320	9	2.318	0.731	10
IV- C2b	190	7	2.220	0.791	7
IV- C3a	850	12	2.237	0.624	12
IV- C3b	360	8	1.935	0.645	8
IV- C4a	1270	20	3.485	0.806	20
IV- C4b	1100	14	2.173	0.571	15
IV- C5a	1950	19	2.657	0.626	19
IV- C5b	860	13	2.314	0.625	13
IV- C6a	3730	22	2.328	0.522	24
IV- C6b	4050	26	2.861	0.609	26
IV- C7a	2390	24	2.535	0.553	25
IV- C7b	1890	26	3.186	0.678	26
IV- C8a	2030	19	2.645	0.623	19
IV- C8b	2210	26	3.694	0.786	26
IV- C9a	2570	23	1.854	0.410	23
IV- C9b	2640	22	1.493	0.335	22
IV- C10a	780	17	3.513	0.860	18
IV- C10b	1900	23	3.144	0.695	23

Appendix E. Biological Data for Summer Cruise - ≥ 1.5 mm Fraction

Cruise: II Summer (7/86)

Sample Identification Code Key



CRUISE 11 (>1.5 MM SIZE FRACTION)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean											1	1
Aschelminthes												
Ectoprocta												
Alcyonidium sp.						*						
Cryptosula sp.					*	*						
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata					7	4			4	16		
Drilonereis longa					2			1	1	1		
Heteromastus filiformis	66	17	122	30	6	7	5	18				
Tharyx acutus		1	1		7	8		2				
Pherusa affinis								1				
Glycera americana	6	3	5	4	1		3	3	1			
Glycera dibranchiata					6	10	1	4	7	4	2	
Microphthalmus aberrans					1							
Podarke obscura	1											
Maldanopsis elongata	5											
Nephtys picta											1	7
Nereis succinea	2		9			2	1					
Haploscoloplos robustus	1											
Aricidea catherinae					1			3			1	0
Pectinaria gouldii					5	2		9				
Eteone lactea		1	3		3	2		1		1		
Eumida sanguinea	1		1		0	8		1				
Paranaitis speciosa	2				1				0			
Harmothoe extenuata			1		7	12						
Harmothoe imbricata					1	2						
Lepidonotus squamatus					18	25						
Sabellaria vulgaris					1			2				
Sabella microphthalma								1				
Hydroides dianthus					1							
Polydora ligni			0					1				
Spiophanes bombyx									0	7	2	3
Spio setosa			1	1	2	2	1	7	3	11		
Streblospio benedicti		0				2		11		0		
Autolytus cornutus						0						
Brania wellfleetensis						0						
Mollusca												
Gastropoda												
Crepidula fornicata					158	408	3	3				
Crepidula plana	2				46	198	6	9				
Urosalpinx cinereus						1						
Ilyanassa obsoleta		1	9	2	1	1	3					
Massarius trivittata	1		4		11	8	5	12	1	3	1	
Odostomia producta			1									
Bivalvia												
Lyonsia hyalina					2	3		2				
Spisula solidissima									1	3	1	1
Mya arenaria	32	28	18	1	3	5	3					
Mytilus edulis	0				2	6						
Ensis directus	1			1	1	2	1	2				
Tellina agilis	1		1	2	1	10	2	5	6	15	7	1
Gemma gemma					2	3						
Mercenaria mercenaria	4			2		3						
Arthropoda												
Amphipoda												
Ampelisca abdita	163	39	931	793	439	283	802	979			0	0
Ampelisca vadorum										1		
Unciola dissimilis				2				1				
Unciola serrata			0	1	3	8						
Unidentified caprellidae					3	0	5	2				
Corophium tuberculatum	4		96	37	38	129	42	124				
Erichthonius brasiliensis					1		6	5				

CRUISE II (>1.5 MM SIZE FRACTION)	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
Elasmopus levis	3			1	12	25		2				
Parapoxus spinosus					25	28	2	13				
Merostomata												
Ostrocooda												
Copepoda												
Cirripectida												
Mysidacea												
Heteromysis formosa								4				
Mysid sp.	1					2						
Neomysis americana									2			
Cumacea												
Decapoda												
Cancer irroratus	3				2	4	12					
Crangon septemspinosa	1		1	1		2	4	1	1			1
Pagurus longicarpus				1	1	1		2				
Ovalipes ocellatus								1				
Neopanope texana					7	20		2				
Isopoda												
Echinodermata												
Chordata												
Vertebrata												
Syngnathus fuscus (pipefish)									1			

CRUISE II (>1.5 MM SIZE FRACTION)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean		1		3								
Aschelminthes												
Unidentified nematoda									2	*		
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	7	44			2	1						
Drilonereis longa						1						
Heteromastus filiformis		2			0							
Spiochaetoperus oculatus		1										
Cirratulus grandis	0											
Pherusa affinis	1	7			2							
Glycera americana	1	8	1		4							
Glycera dibranchiata											1	
Podarke obscura					3							
Lumbrineris fragilis				1	1							
Magelona rosea				4						2		
Nephtys picta	1		16	19		5	1	5	1			
Nereis succinea		1			6	0						
Aricidea catherinae			1			1			2			
Pectinaria gouldii							0					
Eumida sanguinea					3							
Harmothoe extenuata					19	12						
Lepidonotus squamatus					24	1						
Hydroides dianthus						6						
Polydora ligni					3	2						
Spiophanes bombyx	0	6	3			1						
Spio setosa	1		1		8	9					29	
Mollusca												
Gastropoda												
Crepidula fornicata											1	1
Crepidula plana											1	2
Massarius trivittata	1	7	3	2		2	3	2	1			4
Bivalvia												
Mulinia lateralis	1	8						3				
Spisula solidissima	15	39		1	1	3		2	73	81	2	5
Mytilus edulis		1			2689	202		1			12	1
Nucula proxima		1										
Petricola pholadiformis									3			
Ensis directus	1	11										
Tellina agilis	8	42	15	2	1	1		1	5	4	1	
Mercenaria mercenaria	1	1										
Pitar morrhuana		14										
Arthropoda												
Amphipoda												
Ampelisca abdita	1	0	0	0								
Unciola dissimilis									2			
Unciola irrorata	3	6				1					1	
Unciola serrata	1				1	3						
Corophium tuberculatum											1	
Acanthohaustorius millsi									0	3		0
Protohaustorius wigleyi				11								
Elasmopus levis					4	3					2	
Paraphoxus spinosus						4					1	
Rhepoxynuis epistomus										8		
Merostomata												
Ostrocooda												
Unidentified ostrocooda		0										
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa						2						
Neomysis americana	1			1							1	

CRUISE II (>1.5 MM SIZE FRACTION)	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b
Cumacea												
Decapoda												
<i>Cancer irroratus</i>	2	5			4	4					3	1
<i>Crangon septemspinosa</i>	1											
<i>Pagurus longicarpus</i>						1						
<i>Ovalipes ocellatus</i>	1		2	4								2
<i>Neopanope texana</i>			1									
Isopoda												
<i>Cyathura polita</i>					12	2						
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	13a	13b	14a	14b	15a	15b	16a	16b	17a	17b	18a	18b
Porifera												
Cnidaria												
Anthozoa												
<i>Ceriantheopsis americanus</i>				1			1			1		
<i>Metridium senile</i> (tent.)				2								
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	0	1							2	1		
Aschelminthes												
Unidentified nematoda			0									
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
<i>Asabellides oculata</i>				1			6					
<i>Heteromastus filiformis</i>			10	33			10	2		3	5	13
<i>Tharyx acutus</i>	1						3			1		
<i>Glycera americana</i>	24		1	1		2	4	1	2	3	3	5
<i>Glycera dibranchiata</i>	2											
<i>Podarke obscura</i>							0					
<i>Maldanopsis elongata</i>						1			2	3		
<i>Nephtys picta</i>	2	2										
<i>Nereis succinea</i>			2	1	1	1	2			1		
<i>Kaploscoplos robustus</i>								1				
<i>Pectinaria gouldii</i>								1				
<i>Eteone lactea</i>				2	1		2			1		
<i>Eumida sanguinea</i>			1				4					
<i>Paranaitis speciosa</i>							1					
<i>Harmothoe extenuata</i>							5					1
<i>Lepidonotus squamatus</i>							1					
<i>Polydora ligni</i>			1									
<i>Spio setosa</i>	6											
<i>Streblospio benedicti</i>								1				
Mollusca												
Gastropoda												
<i>Crepidula fornicata</i>							27					
<i>Crepidula plana</i>							16					
<i>Nassarius trivittata</i>			2	1			3		1	1	2	1
Bivalvia												
<i>Mulinia lateralis</i>					4	36	6	1				
<i>Spisula solidissima</i>	5	2					1					
<i>Mya arenaria</i>			5	3		1	15	19		2	1	27
<i>Mytilus edulis</i>			2	2	5		8	2				
<i>Nucula proxima</i>											1	1
<i>Petricola pholadiformis</i>			2	1	1	2	2					
<i>Ensis directus</i>				1	1	4	4	2		1		
<i>Tellina agilis</i>	35	21	3		0	1		1			2	
<i>Mercenaria mercenaria</i>							2				1	1
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>	3		200	183	55	90	1274	93	110	108	58	105
<i>Unciola dissimilis</i>			4			10	3	1	1			2
<i>Unciola serrata</i>	6		2				6		1			1
<i>Corophium tuberculatum</i>			96	59	1	2	68	6	18	27	16	101
<i>Acanthohaustorius similis</i>		1										
<i>Elasmopus levis</i>				1			1			1	1	0
<i>Paraphoxus spinosus</i>			1									
<i>Rhepoxynus epistomus</i>	1	5										
Merostomata												
Ostrocoata												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Decapoda												
<i>Cancer irroratus</i>				1								
<i>Crangon septemspinosa</i>							1					
<i>Ovalipes ocellatus</i>											1	
<i>Neopanope texana</i>							1					

CRUISE II (>1.5 MM SIZE FRACTION)	13a	13b	14a	14b	15a	15b	16a	16b	17a	17b	18a	18b
Isopoda												
Echinodermata												
Echinorachnius perma						1						
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean				1	1							
Aschelminthes												
Unidentified nematoda				*								
Ectoprocta												
Cryptosula sp.									*			
Electra sp.									*			
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata							1			1		
Drilonereis longa										1		
Heteromastus filiformis					4	6			20		44	64
Tharyx acutus				1								3
Pherusa affinis								2				
Glycera americana					2	3	1	3	2		4	3
Glycera dibranchiata				3	3		2		2	2		
Podarke obscura					1	1						
Lumbrineris fragilis							1					
Nephtys picta	6	7	10	6								
Nereis succinea				1	1				3	1		
Aricidea catherinae				1								
Pectinaria gouldii					2	6			3	1		
Eteone lactea									5			
Eumida sanguinea									4			
Karmothoe extenuata							7	1	4	2		
Lepidonotus squamatus									1			
Polydora ligni									4			
Spiophanes bombyx				1								
Spio setosa									8	3		
Streblospio benedicti												1
Mollusca												
Gastropoda												
Crepidula fornicata						20				3		
Crepidula plana						9			3	4		
Ilyanassa obsoleta									1		1	2
Massarius trivittata	7	7	1	1		13	6		4	15	2	5
Bivalvia												
Mulinia lateralis							1					
Spisula solidissima	5	5	7	4						1		
Mya arenaria					4	2		2	1			
Nucula proxima												2
Ensis directus						1		2	6	8		
Tellina agilis	2	0	4	9		2	1		2	15		1
Gemma gemma										3		
Mercenaria mercenaria					1			1				
Arthropoda												
Amphipoda												
Ampelisca abdita					53	178	131	23	1113	565	4	66
Unciola dissimilis						3			3			2
Unciola serrata							3		5	10		
Corophium tuberculatum					27	69		2	498	144		7
Elasmopus levis					1	1			5	11		
Paraphoxus spinosus									22	11		
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus improvisus									28			
Mysidacea												
Neomysis americana	1						1			3		
Cumacea												
Decapoda												
Cancer irroratus						1			2	3		
Crangon septemspinosa	1								2			

CRUISE II (>1.5 MM SIZE FRACTION)	19a	19b	21a	21b	24a	24b	25a	25b	26a	26b	27a	27b
<i>Pagurus longicarpus</i>	1	1										
<i>Ovalipes ocellatus</i>	2	1										
<i>Neopanope texana</i>												
Isopoda					1	1				2		
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Porifera												
Cnidaria												
Anthozoa												
Metridium senile (tent.)			1									
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean				0								
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata		2					2				1	
Drilonereis longa				2	1							
Heteromastus filiformis	87	105	3		21	20	17	209	1	2	0	3
Cirratulus grandis												
Tharyx acutus		1						0				
Glycera americana	8	8			4	7	4	2			1	1
Glycera dibranchiata			2	3				1	26	17		
Podarke obscura	1				2	0						
Nereis succinea	9	3					2	17		1	0	
Maploscoloplos robustus							1					
Aricidea catherinae			0									
Pectinaria gouldii	21	11		1				2			5	1
Eteone lactea	8	1			2		1	4				
Eumida sanguinea	2									0		
Paranaitis speciosa								1				
Phyllodoce arenae												
Harmothoe extenuata		3						1				
Lepidonotus squamatus								4		1		
Sabellaria vulgaris												2
Polydora ligni	1	1	0		1						1	
Spiophanes bombyx			1	1								
Spio setosa	0		4	11		1	1			4		
Streblospio benedicti	3	3	0					0			0	
Mollusca												
Gastropoda												
Cormabella sp.												1
Crepidula fornicata							1				9	9
Crepidula plana								3			9	4
Urosalpinx cinereus										1		
Ilyanassa obsoleta	3	6				2			5	6		
Nassarius trivittata	4	3	1		3				1	1	11	3
Bivalvia												
Lyonsia hyalina	0	0									2	
Mulinia lateralis	2		1									
Mya arenaria	80	47			5	4	3	4			2	
Nucula proxima					1							
Crassostrea virginica			1				1					
Ensis directus		5										
Tellina agilis	1	3	3	6					2	1	1	
Mercenaria mercenaria	4	4					4			1		1
Arthropoda												
Amphipoda												
Ampelisca abdita	928	695	0		144	95	220	109	3	4	5	7
Microdeutopus gryllotalpa										0		
Unciola dissimilis							2					
Unciola serrata		1					7	0	1	7	1	2
Corophium tuberculatum	310	160			7	12	8	7	1	4	1	
Gammarus mucronatus									1			
Elasmopus levis	2	0						11	1	1		
Melita nitida									1	8		
Merostomata												
Ostrocooda												
Unidentified ostrocooda				1							0	
Copepoda												
Cirripedia												
Balanus balanus							1					
Balanus improvisus				20					72	45	98	7

CRUISE II (>1.5 MM SIZE FRACTION)	28a	28b	29a	29b	30a	30b	31a	31b	32a	32b	34a	34b
Mysidacea												
<i>Heteromysis formosa</i>									1			
Mysid sp.				1				1				
<i>Neomysis americana</i>			2									
Cumacea												
Decapoda												
<i>Cancer irroratus</i>				1								
<i>Crangon septemspinosa</i>	2	1	1	2					2		0	1
<i>Neopanope texana</i>	1	4					3	12				
Isopoda												
<i>Edotea triloba</i>											0	
Echinodermata												
<i>Echinarachnius parma</i>							2					
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Porifera												
Unidentified sponge						*						
Cnidaria												
Anthozoa												
Unidentified anemone						5						
Metridium senile (tent.)					1							
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean							1					
Aschelminthes												
Ectoprocta												
Cryptosula sp.							*	*	*	*		
Electra sp.							*	*	*	*		
Aeverrillia sp.								*	*	*		
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	6	4			1303	1106	1		1	1		
Heteromastus filiformis	21					4	1	1	3	6	2	
Spiochaetoperus oculatus						3						
Tharyx acutus						4	15	6		1	1	
Pherusa affinis	3	1			123	160						
Glycera americana	6	1	1	1	4						9	
Glycera dibranchiata	3						13	15	3	12	1	4
Podarke obscura										0		
Nephtys picta								1				
Nereis succinea	4	1							1	1		
Haploscoloplos robustus		5								1		
Aricidea catherinae							4			2		
Pectinaria gouldii									1			1
Eteone lactea					1	1					10	
Eumida sanguinea	3	1			2	7		1	1	1	4	0
Harmothoe extenuata	14				7	23				2		
Harmothoe imbricata	1	1										
Lepidonotus squamatus	6				0				1			
Sabellaria vulgaris							1		1			
Potamilla neglecta						1						
Polydora ligni	4	1										0
Spiophanes bombyx						3						
Spio setosa	24	1			26	30	1	1	1	1	4	3
Streblospio benedicti	1						2	0			2	
Mollusca												
Gastropoda												
Comabella sp.										3		
Crepidula fornicata							2	5	1	42	2	1
Crepidula plana								1	1	22		
Ilyanassa obsoleta											13	3
Nassarius trivittata	4	1			1	5	4	5	1	10	4	5
Bivalvia												
Cerastoderma pinnulatum						1						
Lyonsia hyalina							1		2	3		
Mulinia lateralis					6							
Spisula solidissima					6	32	6	2			0	
Mya arenaria	1									1	23	
Mytilus edulis	1331	48			1	1	2	1				
Yoldia limatula						1						
Mucula proxima	2											
Petricola pholadiformis	1				2	1			1		2	
Ensis directus						3						
Tellina agilis	17	0		2	2	3	6	4		1	1	2
Gemma gemma							8	19	20	15		1
Mercenaria mercenaria	1	1					1					
Pitar morrhuana					8	9						
Arthropoda												
Amphipoda												
Ampelisca abdita	5	3				10	3		5	3	1033	162
Unciola dissimilis								1			1	
Unciola irrorata					4	17						0
Unciola serrata					2	5	2	4			5	2

CRUISE II (>1.5 MM SIZE FRACTION)	36a	36b	37a	37b	38a	38b	40a	40b	41a	41b	42a	42b
Corophium tuberculatum	1	26			4	6	3	2	9	6	579	5
Elasmopus levis	18	13				5	1	1	3	15	3	1
Paraphoxus spinosus		3			1	10	1	0			37	3
Merostomata												
Limulus polyphemus		1										
Ostrocooda												
Copepoda												
Cirripedia												
Balanus improvisus							3	35		293		
Mysidacea												
Neomysis americana						2				1		
Cumacea												
Oxyurostylis smithi							1					
Decapoda												
Cancer irroratus	8	8			5	11				6		1
Crangon septemspinosa		3		1	1			1	2		3	
Pagurus longicarpus							3					2
Ovalipes ocellatus					2	1	2				1	1
Neopanope texana									1	3	1	
Isopoda												
Edotea triloba												1
Cyathura polita	1											
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm			4									
Rhynchozoela												
Unidentified nemertean			1				1	1				
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata			10	19	1		1	1	10	1		1
Heteromastus filiformis	45	27			1		0		1		1	1
Tharyx acutus	1	0										
Pherusa affinis											1	
Glycera americana	1	2			41	17	6	3	3	4	3	1
Glycera dibranchiata	3	2	3	5	7	12				1		
Podarke obscura	2	2										1
Nephtys picta										2		
Nereis succinea	18	9	1		1							1
Haploscoloplos robustus	1		3	5			1				2	
Pectinaria gouldii	10	24							1			
Eteone lactea	26	13	3	1				1	2			
Eumida sanguinea	4	4							1	2		
Harmothoe extenuata			1									
Lepidonotus squamatus	1											
Sabellaria vulgaris					2	2						
Polydora ligni				1				1	3	1		
Spio setosa					12	9		13	21	27		
Streblospio benedicti	0	1	0		4	4	1		1			
Exogone dispar						0						
Mollusca												
Gastropoda												
Cormabella sp.						1						
Crepidula fornicata				3					2			
Crepidula plana		1	1	1		1						
Ilyanassa obsoleta		1		4		1	1			2		
Nassarius trivittata			1	9	3	2	3	3	10	6	1	2
Bivalvia												
Lyonsia hyalina						1			1			
Mulinia lateralis			14	9			7	1			4	1
Spisula solidissima										1		
Mya arenaria	1	3	20	14			5		6	2	2	1
Petricola pholadiformis			1									
Esis directus				1				1	1			
Tellina agilis						3	3		6	1		
Mercenaria mercenaria			1				1					
Arthropoda												
Amphipoda												
Ampelisca abdita	3250	1686	909	191	2	2	628	209	1352	233	287	433
Unciola dissimilis	63	12		9		1						
Unciola serrata			1	7	1				1		1	8
Unciola sp.							0					
Corophium tuberculatum	3283	2229	85	41	14	15	25	3	369	74	95	132
Elasmopus levis	45	10	1						12	1		
Melita nitida			5									
Paraphoxus spinosus	5	1										
Merostomata												
Limulus polyphemus			1									
Ostrocooda												
Copepoda												
Cirripedia												
Balanus improvisus			8	6								
Mysidacea												
Mysid sp.	1											
Cumacea												
Decapoda												
Decapod larva								1				

CRUISE II (>1.5 MM SIZE FRACTION)	43a	43b	46a	46b	47a	47b	48a	48b	49a	49b	50a	50b
<i>Cancer irroratus</i>		3						1				1
<i>Crangon septemspinosus</i>	6	5		1			2		1		1	
<i>Pagurus longicarpus</i>	1	2					1					
<i>Ovalipes ocellatus</i>	6	3			2	3			1	4		
<i>Neopanope texana</i>	9	19							1	1		1
Isopoda												
<i>Edotea triloba</i>	1								1			
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm						2	1					
Rhynchocoela												
Unidentified nemertean	1	1			1	1				.1	1	
Aschelminthes												
Ectoprocta												
Unidentified ectoproct		*							*			
Electra sp.				*								
Aeverrillia sp.		*										
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				1	6	3	1		2		5	10
Capitella capitata												1
Heteromastus filiformis						14	24	2	2			
Tharyx acutus	1	2										
Glycera americana	2	4	7		2		8		1	1	1	
Glycera dibranchiata	1	7	8	27	7	4	19	64		1	2	
Podarke obscura					4	1						
Nephtys picta		1										
Nereis succinea				1	1		15	9		3		1
Haploscoloplos fragilis												2
Haploscoloplos robustus					19	16				6	1	
Pectinaria gouldii					68	15	3	5		3		
Eteone lactea				1	11			3	1	3	9	1
Eumida sanguinea		8			2		15	2				
Paranaitis speciosa					2			4				
Harmothoe extenuata												1
Lepidonotus squamatus				2			2	1				
Sabellaria vulgaris				3			79	52				
Polydora ligni							1					
Spiophanes bombyx											4	
Spio setosa	1			3			15	31			5	
Streblospio benedicti		2			1	1	6	19				
Mollusca												
Gastropoda												
Cormabella sp.				1			2					
Acteon punctostriatus					1							
Crepidula fornicata		1		9			39	25				
Crepidula plana				9			94	25				
Ilyanassa obsoleta	2	2	1	4		1	7	7				3
Nassarius trivittata	2		2	16	6		11	10	1	3	5	
Bivalvia												
Lyonsia hyalina				4			1	1				
Mulinia lateralis			2	7					10	20	1	
Spisula solidissima	1				1							
Mya arenaria		1	2	8			8	8	68	164	486	1
Mytilus edulis				3			7	2				
Ensis directus				2		1		1				
Tellina agilis	1		2	4			1	4				
Gemma gemma	14	7										
Mercenaria mercenaria				1		1						1
Arthropoda												
Amphipoda												
Anpelisca abdita	2	4	1	731	378	384	363	253	34	467	571	82
Unciola dissimilis					1		4					
Unciola irrorata								12				
Unciola serrata		7	1	8	4	7	15					
Corophium tuberculatum	5	153	2	537	125	104	117	99		1	96	3
Elasmopus levis		3		4								
Melita nitida				2			4	1				3
Paraphoxus spinosus											1	
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												

CRUISE 11 (>1.5 MM SIZE FRACTION)	51a	51b	52a	52b	53a	53b	54a	54b	55a	55b	56a	56b
Balanus amphitrite				5			79					
Balanus improvisus								196				
Mysidacea												
Heteromysis formosa				1								1
Mysid sp.												
Neomysis americana	3		1					1		1		
Cumacea												
Decapoda												
Crangon septemspinosa				3			1					
Pagurus longicarpus		3					1					
Ovalipes ocellatus		3	2	1			1	3				
Neopanope texana				1	1	1	6	2			2	1
Isopoda												
Edotea triloba						2						
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	57a	57b	58a	58b	59a	59b	60a	60b	62a	62b	68a	68b
Crangon septemspinosus		1										1
Neopanope texana	3	1	3	4								
Isopoda												
Echinodermata												
Chordata												
Molgula manhattensis								11				
Vertebrata												
Pseudopleuronectes americanus												1

CRUISE II (>1.5 MM SIZE FRACTION)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Porifera											*	*
Unidentified sponge												
Cnidaria												
Anthozoa												
Unidentified anemone							1					
Ceriantheopsis americanus								2				
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1					1			1			
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	17	9	13	2					4	2	4	
Capitella capitata								2				
Heteromastus filiformis		0		5			2		5			
Spirochaetoperus oculatus		1										
Cirratulus grandis	0											
Tharyx acutus												3
Pherusa affinis	1	1	1	3								
Glycera americana	2			3					3		1	
Glycera dibranchiata	1		5						4	2	7	14
Maldanopsis elongata								1				
Magelona rosea						1						
Nephtys incisa	1											
Nephtys picta		3			2	15						
Nereis succinea							1		2	2		
Kaploscoplos robustus							2	2		4		
Pectinaria gouldii				1			1		9	3		1
Eteone lactea			1					2		6		
Eumida sanguinea									8		1	1
Harmothoe extenuata			2		1							
Harmothoe imbricata												1
Lepidonotus squamatus												1
Sabellaria vulgaris									151	11		
Polydora ligni									5			
Spiophanes bombyx		2				1						
Spio setosa	1	1		1	7				1		1	3
Streblospio benedicti							1		1			16
Mollusca												
Gastropoda												
Crepidula fornicata									6	11	15	7
Crepidula plana											3	1
Ilyanassa obsoleta									13	2		
Nassarius trivittata	4	8	7	9	9		1	2	24	2	1	4
Bivalvia												
Lyonsia hyalina									1		3	2
Mulinia lateralis								2		3		
Spisula solidissima	4	1									1	
Mya arenaria								2	32	23		
Mytilus edulis	4	2	721	14								
Nucula proxima	17	1										
Ensis directus							1		3			2
Tellina agilis	3	7	7	8	2	10					14	13
Gemma gemma	5										193	64
Mercenaria mercenaria							1	2	2			
Arthropoda												
Amphipoda												
Ampelisca abdita	1						196	144	126	250	4	9
Unciola dissimilis				1			5	3				1
Unciola irrorata	2		0		0		1	1		5		
Unciola serrata				4						5	3	
Unidentified caprellidae												1
Corophium tuberculatum							4	0	73	79	42	38
Protohaustorius wigleyi						1						
Elasmopus levis									1		5	3
Melita nitida									3			
Paraphoxus spinosus				2							12	8

CRUISE II (>1.5 MM SIZE FRACTION)	69a	69b	70a	70b	71a	71b	73a	73b	80a	80b	81a	81b
Merostomata												
Ostrococha												
Copepoda												
Cirripedia												
<i>Balanus amphitrite</i>									3			
Mysidacea												
<i>Heteromysis formosa</i>									1			
Cumacea												
<i>Oxyurostylis smithi</i>												1
Decapoda												
Brachyurea larva												1
<i>Cancer irroratus</i>			22	8	1					2		
<i>Crangon septemspinosa</i>				2	1	1			1			1
<i>Pagurus longicarpus</i>									2	1	1	
<i>Ovalipes ocellatus</i>		2		1	1							
<i>Neopanope texana</i>									1		1	2
Isopoda												
<i>Edotea triloba</i>						0	1					
<i>Cyathura polita</i>										1		
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone								3			1	
Ceriantheopsis americanus									3		1	1
Metridium senile (tent.)									2			
Hydrozoa												
Platyhelminthes												
Unidentified flatworm											1	3
Rhynchocoela												
Unidentified nemertean		1						1		1		1
Aschelminthes												
Ectoprocta												
Cryptosula sp.							*					
Electra sp.							*					
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				2	5	1	1		2		5	8
Drilonereis longa			1				2					
Heteromastus filiformis				1	1	1	5		13	21	5	3
Cirratulus grandis	0	1										
Pherusa affinis							2	2				
Glycera americana	21		12	4					1	2		1
Glycera dibranchiata	19	34	8	11	2	10						
Podarke obscura										1		1
Maldanopsis elongata									1	1		
Nephtys incisa							2					1
Nephtys picta						1						
Nereis succinea												1
Kaploscloplos fragilis									7			
Kaploscloplos robustus		1								2	3	4
Aricidea catherinae						3						
Pectinaria gouldii				1			1		3	6		
Eteone lactea							5				2	6
Eumida sanguinea							1		1		3	6
Sabellaria vulgaris				1								
Polydora ligni						1		0				
Spio setosa			1		7	29	17	0				
Streblospio benedicti	8			3	0		38	5	1	7	5	5
Mollusca												
Gastropoda												
Acteon punctostriatus									1			
Crepidula fornicata			1	5	5	8						
Crepidula plana						6						
Ilyanassa obsoleta									1	3		
Messarius trivittata	1		1	4	1		3	1	2	1	2	4
Bivalvia												
Lyonsia hyalina			1									
Mulinia lateralis		2		1						10	4	9
Spisula solidissima								1				
Mya arenaria	2		0	2			2		4	10	76	141
Mytilus edulis				1			1		2	1		
Petricola pholadiformis									5			1
Ensis directus							7		1	1	5	3
Tellina agilis	1		1	2	8	17	5	2				
Gemma gemma	0		1	9			1					
Mercenaria mercenaria					4	1			1			1
Arthropoda												
Amphipoda												
Ampelisca abdita		2	2	1	3	0	436	101	768	114	496	502
Unciola dissimilis								1				1
Unciola irrorata				0			2					
Unciola serrata			3		1		1		5		1	
Corophium tuberculatum			2	2		2	18	2	10	1	12	10
Erichthonius brasiliensis												1
Elasmopus levis												2
Melita nitida									1			1
Paraphoxus spinosus						3						
Merostomata												

CRUISE II (>1.5 MM SIZE FRACTION)	82a	82b	83a	83b	84a	84b	85a	85b	86a	86b	87a	87b
Ostrococha												
Copepoda												
Unidentified copepod								0				
Cirripedia												
Balanus amphitrite						4						
Mysidacea							3					
Heteromysis formosa							3					
Neomysis americana		2		6								
Cumacea												
Unidentified cumacean												1
Decapoda												
Cancer irroratus		1			1		3					
Crangon septemspinosa			2		2	1						
Ovalipes ocellatus				1								
Neopanope texana						1						
Isopoda												
Edotea triloba							0					1
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	88a	88b	89a	89b	90a	90b	91a	91b	92a	92b	93a	93b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Unidentified flatworm		3										
Rhynchozoela												
Unidentified nemertean			1			1					2	2
Aschelminthes												
Unidentified nematoda			16	1	0		1			0		
Ectoprocta												
Alcyonidium sp.			*									
Cryptosula sp.										*		
Electra sp.										*		
Aeверrillia sp.			*									
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Drilonereis longa							1					
Heteromastus filiformis	12		1									
Tharyx acutus	1									1		
Pherusa affinis			1									
Glycera americana	6						1					
Glycera dibranchiata	24	25					2	1				
Lumbrineris fragilis							1	2		1		
Magelona rosea											2	3
Nephtys picta	1						2	3	4	2		1
Haploscoloplos robustus	2											
Aricidea catherinae												0
Pectinaria gouldii	2	2										
Eteone lactea	1											
Eumida sanguinea		6	0									
Paranaitis speciosa	2											
Harmothoe extenuata			14									
Lepidonotus squamatus			2									
Sabellaria vulgaris	1	50	1									
Hydroides dianthus			1									
Sigalion arenicola									1			
Polydora ligni			1									
Spiophanes bombyx							1	1				1
Spio setosa	2	1	3	1								
Streblospio benedicti	104	1										
Polycirrus eximius		1										
Mollusca												
Gastropoda												
Crepidula fornicata	2		5									
Crepidula plana			14									
Urosalpinx cinereus		1										
Ilyanassa obsoleta	1	4										
Massarius trivittata	2	2										
Bivalvia												
Lyonsia hyalina		5										
Spisula solidissima	1		6	19		9	3	30		8	9	33
Mya arenaria		7										
Mytilus edulis	1	18	91	1			7	1	33	1		
Petricola pholadiformis	3								1			
Ensis directus		1										
Tellina agilis	1						1	1	3	6	0	0
Gemma gemma	100	234							1			
Arthropoda												
Amphipoda												
Ampelisca abdita	103	63	2			1		0	0			
Unciola dissimilis		2							2			
Unciola serrata	5	62							4			
Unidentified caprellidae		4										0
Corophium tuberculatum	137	486	6		0							
Acanthohaustorius millsii											1	
Acanthohaustorius similis					1							
Bathyporeia parkeri											2	
Parahaustorius longimerus					12	10		1			1	

CRUISE II (>1.5 MM SIZE FRACTION)	94a	94b	95a	95b	96a	96b	97a	97b	98a	98b	99a	99b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean		3			1						1	1
Aschelminthes												
Unidentified nematoda			5	5	1							
Ectoprocta												
Alcyonidium sp.										*		
Cryptosula sp.											*	
Electra sp.											*	
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata											3	3
Drilonereis longa									1			
Capitella capitata									0	1	0	18
Heteromastus filiformis									2	1		
Cirratulus grandis									107	16		
Tharyx acutus					1							
Pherusa affinis				1					1	1		
Glycera americana				1					6	1	1	
Magelona rosea	5	1										2
Nephtys picta	8	21	1								7	2
Nereis arenaceodonta									3			
Nereis succinea										0		2
Eteone lactea												2
Eumida sanguinea									0	2		
Phyllodoce arenae											1	
Harmothoe extenuata									14	20	1	11
Lepidonotus squamatus												1
Sigalion arenicola				1								
Polydora ligni				1								
Spiophanes bombyx				1							1	2
Spio setosa	1		1						3		1	4
Streblospio benedicti					1							
Autolytus cornutus									1	1		
Mollusca												
Gastropoda												
Unidentified nudibranch											0	
Crepidula plana				1								
Lunatia triseriata												1
Bivalvia												
Spisula solidissima		2	33	14	23	7	2	4	1			
Mytilus edulis									2272	2196	312	2165
Petricola pholadiformis										0		
Tellina agilis	2	2	8	8	1	1			1	1	15	7
Arthropoda												
Amphipoda												
Ampelisca abdita						1					1	2
Acanthohaustorius millsii				2			1	1				
Acanthohaustorius similis						4	2					
Parahaustorius longimerus					7							
Protohaustorius wigleyi				1								
Elasmopus levis									12	1		18
Paraphoxus spinosus						1			21	2		
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Cumacea												
Decapoda												
Cancer irroratus									16	14	4	24
Ovalipes ocellatus		1			2	2						
Isopoda												
Echinodermata												
Henricia sp.											0	0

CRUISE II (>1.5 MM SIZE FRACTION) 94a 94b 95a 95b 96a 96b 97a 97b 98a 98b 99a 99b
Chordata
Vertebrata
Amodytes sp. 1

CRUISE II (>1.5 MM SIZE FRACTION)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
Porifera												
Cliona sp.								*				
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean	1		1				1	1				
Aschelminthes												
Ectoprocta												
Alcyonidium sp.								*				
Cryptosula sp.								*				
Electra sp.												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata								2	2		2	44
Drilonereis longa										0		
Capitella capitata								1				
Heteromastus filiformis							4	7	12	35		3
Tharyx acutus							1	1				1
Pherusa affinis					1		5	1				
Glycera americana							2	3	7	4	3	3
Glycera dibranchiata							1	2				
Magelona rosea	3	3										
Nephtys bucera				1								
Nephtys picta	29	14	1									
Nereis succinea								1				
Kaploscoplos robustus									2	1		
Pectinaria gouldii										1		
Eteone lactea										0		
Eumida sanguinea							10	12	2	3		
Harmothoe extenuata							16	4		1		
Lepidonotus squamatus							4	2	1			
Sabella microphthalma							1					
Hydroides dianthus								10				
Polydora ligni									0			
Spiophanes bombyx	5							1				
Spio setosa								6	6	3		3
Streblospio benedicti								1	0	1		9
Mollusca												
Gastropoda												
Crepidula fornicata							3	1		2		
Crepidula plana							1	2	2	1		
Urosalpinx cinereus							1	2				
Massarius trivittata					1		1	2	1	1	13	7
Busycon canaliculatum							1					
Bivalvia												
Cerastoderma pinnulatum							1	1				
Mulinia lateralis										1		
Spisula solidissima		1	2	2	7	9					1	
Mya arenaria							1					
Mytilus edulis									5	3		
Nucula proxima										2		
Ensis directus	1							3	3	1		1
Tellina agilis	1	14					16	13	5	1	1	3
Gemma gemma									1	1		
Mercenaria mercenaria							3	3	8	4	1	1
Pitar morrhuana								1				
Arthropoda												
Amphipoda												
Ampelisca abdita							81	13	2	41	0	4
Unciola serrata							9	18	2	10	0	3
Unidentified caprellidae							3			0		
Corophium tuberculatum							9	2	2	3		
Erichthonius brasiliensis							2					
Acanthohaustorius millsi				6								
Acanthohaustorius similis				2								
Protohaustorius wigleyi	1	2	2	2								
Elasmopus levis							5	7	7	4		1

CRUISE II (>1.5 MM SIZE FRACTION)	100a	100b	101a	101b	102a	102b	103a	103b	104a	104b	105a	105b
Paraphoxus spinosus							30	17	1	3		
Rhepoxynus epistomus	1	1										
Merostomata												
Ostrocooda												
Unidentified ostrocooda							0	1	1			
Copepoda												
Cirripedia												
Balanus amphitrite								1				
Mysidacea												
Heteromysis formosa								6				
Cumacea												
Decapoda												
Cancer irroratus						1	2	6	5	4		
Crangon septemspinosa	1						1	1	3	4	4	
Pagurus longicarpus									1			
Ovalipes ocellatus	2	2	2									1
Neopanope texana							2	1				
Isopoda												
Cyathura polita							3	2				
Echinodermata												
Asterias forbesii								1				
Leptosynapta inhaerens									1			
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean										1		
Aschelminthes												
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	1	1	3	1		1						1
Drilonereis longa											1	
Heteromastus filiformis	1		62	25		1	24	20	27	20	107	82
Spiochaetoperus oculatus			1									
Tharyx acutus	2	2	0				1	1	3	1		1
Glycera americana			3	4	2		2	2	5	4	3	3
Glycera dibranchiata	14	13	4		10	16						
Podarke obscura				2			1					
Nereis succinea	1	1	3	5				4	2	10	2	1
Kaploscoplos fragilis										2		
Kaploscoplos robustus												1
Pectinaria gouldii	1		4	6			2	2		4	2	
Eteone lactea	1		2	1			1	0	1	4	5	1
Eumida sanguinea	8		8	1						2		
Paranaitis speciosa		1										
Harmothoe extenuata		2	2									
Lepidonotus squamatus	3		2	1					1			
Sabellaria vulgaris	12	73	150		1							
Hydroides dianthus			1									
Polydora ligni		27	8	1		1						0
Spiophanes bombyx			2									
Spio setosa	27	14	11	10	9	31			1	4		
Streblospio benedicti			11						1	0		
Autolytus cornutus										0		
Mollusca												
Gastropoda												
Cormabella sp.	1	1										
Crepidula fornicata		2				1						
Crepidula plana	1	1	1									
Urosalpinx cinereus		1	1	1						1		
Ilyanassa obsoleta	5	10	9	3	4	7			2	1	1	6
Massarius trivittata	2	6	6	6	2	1	1		1	2		5
Lunatia triseriata										1		
Bivalvia												
Lyonsia hyalina	1	1	2	1		1	1					
Mulinia lateralis							1				1	
Mya arenaria	8	3	1	3	2	5	156	54	114	77	183	84
Petricola pholadiformis									1	1		2
Ensis directus	1	1	3	2		4	1	1	1	1	1	3
Tellina agilis	1	1			1	3				1		2
Mercenaria mercenaria	1		1	3								6
Arthropoda												
Amphipoda												
Ampelisca abdita	93	17	86	449	0	1	293	178	242	527	214	187
Unciola dissimilis			1									
Unciola serrata	5	18	4	2	2	2	1			1		
Corophium tuberculatum	10	8	1	9	0	2	148	52	94	289	49	19
Elasmopus levis		3	1							1		
Melita nitida	14	2	5	3					2	2		1
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												
Heteromysis formosa	9											
Cumacea												
Decapoda												
Cancer irroratus												1

CRUISE II (>1.5 MM SIZE FRACTION)	A1a	A1b	A2a	A2b	A3a	A3b	A4a	A4b	A5a	A5b	A6a	A6b
<i>Crangon septemspinosa</i>		4		1		1				0	1	
<i>Pagurus longicarpus</i>		3										
<i>Ovalipes ocellatus</i>						1						
<i>Neopanope texana</i>	5		5	2							2	2
Isopoda												
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
Porifera												
Unidentified sponge	*											
Cnidaria												
Anthozoa												
Metridium senile (tent.)					6							
Hydrozoa												
Platyhelminthes												
Unidentified flatworm				1								
Rhynchocoela												
Unidentified nemertean				1			1		1			
Aschelminthes												
Unidentified nematoda												1
Ectoprocta												
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata		1		1	2	8				1		
Heteromastus filiformis	11	23	8	20	4	3	9	12				
Spirochaetoperus oculatus												1
Tharyx acutus		0		6		0				1		
Glycera americana	2	3	1	4	6	1	1	3				
Glycera dibranchiata						2			3	2	3	4
Podarke obscura		1		1				1				
Nephtys picta									4	8	9	15
Nereis succinea	1		1	1	1	1						
Haploscoloplos robustus		1		1	1							
Aricidea catherinae									2	3	1	3
Pectinaria gouldii	2	1		3	1	2		1				
Eteone lactea		1			2	1		1				
Eumida sanguinea					2	3						
Karmothoe extenuata					6			1				
Lepidonotus squamatus					3							
Sabellaria vulgaris						1						
Hydroides dianthus					1							
Polydora ligni		3		0		1						
Spiophanes bombyx										1		3
Spio setosa				1		1				3	1	
Streblospio benedicti					2	1		1				
Autolytus cornutus	1											
Mollusca												
Gastropoda												
Crepidula fornicata					80	10						
Crepidula plana					89	9			1			
Ilyanassa obsoleta	1	5		1	3	3		3				
Nassarius trivittata	2	4		4	1	5		5	4	4		
Bivalvia												
Lyonsia hyalina					1							
Mulinia lateralis		1			1							
Spisula solidissima									9	3	5	9
Mya arenaria	65	47	65	135	3	1	38	64		1		
Mytilus edulis					1		1					
Crassostrea virginica					1							
Ensis directus				1	1		5					
Tellina agilis					2	4			16	14	11	6
Mercenaria mercenaria				1	1	5						
Arthropoda												
Amphipoda												
Ampelisca abdita	79	209	68	483	176	77	108	186				
Unciola dissimilis												2
Unciola serrata				3	2	2						
Unidentified caprellidae						2						
Corophium tuberculatum	7	5	49	184	39	7	57	34				
Erichthonius brasiliensis						1						
Elasmopus levis								1				
Melita nitida				1		1						
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Mysidacea												

CRUISE 11 (>1.5 MM SIZE FRACTION)	A7a	A7b	A8a	A8b	A9a	A9b	A10a	A10b	B1a	B1b	B2a	B2b
<i>Heteromysis formosa</i>					1	1						
<i>Neomysis americana</i>									2			1
Cumacea												
Decapoda												
<i>Cancer irroratus</i>	1		1									
<i>Crangon septemspinosa</i>									1			
<i>Libinia emarginata</i>							1					
<i>Pagurus longicarpus</i>							1					
<i>Ovalipes ocellatus</i>									1			
<i>Neopanope texana</i>			1		6	1	1					
Isopoda												
Echinodermata												
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8b	B8b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean				1	1			1				
Aschelminthes												
Unidentified nematoda		3										
Ectoprocta												
Cryptosula sp.					*							
Electra sp.					*		*				*	
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata				2	11			1				
Drilonereis longa												1
Capitella capitata					1							
Heteromastus filiformis				4	40	30	4	5	1	2	36	33
Spirochaetoperus oculatus				1			1					
Tharyx acutus					1							
Pherusa affinis				2	2	2					2	
Glycera americana			3	3	8	11	6	6	1	4	5	4
Glycera dibranchiata		2	2	2	1						1	
Podarke obscura								3		0		1
Malidanopsis elongata							1					
Nephtys picta	8	5										
Nereis succinea					4	1					2	
Aricidea catherinae	0	2	2	3								
Pectinaria gouldii				3	2	1					1	
Eteone lactea					2				1		0	
Eumida sanguinea				1	1	2				0	1	
Harmothoe extenuata					1	5	1		1			
Harmothoe imbricata						1						
Lepidonotus squamatus						1						
Polydora ligni				9	1							
Spiophanes bombyx	1											
Spio setosa			7	7								
Streblospio benedicti			2									
Mollusca												
Gastropoda												
Crepidula fornicata						20	2		1			
Crepidula plana						8					1	
Massarius trivittata	1	1	5	7	2	8	1	2	1	2	2	2
Bivalvia												
Lyonsia hyalina					1						1	
Mulinia lateralis										1		
Spisula solidissima	3	2										
Mya arenaria					18	10			3	2	6	2
Mytilus edulis									1			
Nucula proxima					16	12	1	1	1			
Petricola pholadiformis					3	1						2
Ensis directus				2	1	1				1	1	
Tellina agilis	2	5	6	10	5	7		1	3		4	2
Mercenaria mercenaria		1			3	6			1		2	
Pitar morrhua												1
Arthropoda												
Amphipoda												
Ampelisca abdita	0		7	352	1049	643	7	149	274	69	182	222
Unciola dissimilis								1				
Unciola irrorata											2	
Unciola serrata			2	1	8	13					2	1
Unidentified caprellidae				1								
Corophium tuberculatum				22	630	272	0	18	25	7	147	201
Elasmopus levis				1	12	13				0	4	1
Paraphoxus spinosus				2	11	16					1	1
Rhepoxynuis epistomus											2	
Merostomata												
Ostrocooda												
Unidentified ostrocooda					1					0		

CRUISE 11 (>1.5 MM SIZE FRACTION)	B3a	B3b	B4a	B4b	B5a	B5b	B6a	B6b	B7a	B7b	B8b	B8b
Copepoda												
Cirripedia												
<i>Balanus amphitrite</i>								3				
Mysidacea												
<i>Heteromysis formosa</i>						2						
<i>Neomysis americana</i>		1										
Cumacea												
<i>Oxyurostylis smithi</i>					1							
Decapoda												
<i>Cancer irroratus</i>				3	3	1	15	1			2	
<i>Crangon septemspinosa</i>					3	3						
<i>Pagurus longicarpus</i>	1						1					
<i>Ovalipes ocellatus</i>					1			1				
<i>Neopanope texana</i>						1						
Isopoda												
<i>Edotea triloba</i>					1							
Echinodermata												
Chordata												
Vertebrata												
<i>Pronotus evolans</i> (sea robin)						1						

CRUISE II (>1.5 MM SIZE FRACTION)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Porifera												
Cnidaria												
Anthozoa												
Hydrozoa												
Platyhelminthes												
Rhynchocoela												
Unidentified nemertean				1			1	1	1	1		
Aschelminthes												
Ectoprocta												
Alcyonidium sp.							*					
Cryptosula sp.						*	*					*
Electra sp.						*	*					*
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata						2					5	
Drilonereis longa	2											
Heteromastus filiformis	5	3										
Cirratulus grandis					4	7						
Tharyx acutus			0		0						0	
Pherusa affinis		2			6	1					1	
Glycera americana	4	2	1			1					1	1
Glycera dibranchiata			3	1	5	1	1	2		1	4	1
Lumbrineris fragilis							1					
Magelona rosea				1			2	3	1	1		1
Nephtys picta			1	5	8	3	30	39	43	44	33	25
Nereis succinea	1	1			2	1	1					
Diopatra cuprea						1						
Aricidea catherinae	1	5	1									1
Eteone lactea		1										
Eumida sanguinea		6									1	
Paranaitis speciosa		1										
Harmothoe extenuata		2			24	16						7
Lepidonotus squamatus												1
Potamilla reniformis						1						
Polydora ligni		1										
Spiophanes bombyx			1			1			7			
Spio setosa		1			3	1						
Amphitrite ornata						1						
Mollusca												
Gastropoda												
Crepidula plana		0										
Massarius trivittata	6	5	2	1							1	
Bivalvia												
Spisula solidissima	1		5	14				1	1	8	1	3
Mya arenaria	3	2		0								
Mytilus edulis					3222	2770	1	1		2	9	1
Nucula proxima	1											
Pandora gouldiana						1						
Ensis directus	7	4							5			
Tellina agilis	5	4	7	10	4	5	2	21	19	40	19	4
Mercenaria mercenaria		1										
Pitar morrhuana									3			
Arthropoda												
Amphipoda												
Ampelisca abdita	618	634					1					
Unciola dissimilis	1										1	
Unciola irrorata										1		
Unciola serrata		2										
Corophium tuberculatum	169	201									1	
Erichthonius brasiliensis	1	0										
Protohaustorius wigleyi							1					
Elasmopus levis	2	2			1	0					1	
Paraphoxus spinosus	6	18									3	2
Rhepoxymuis epistomus											1	
Merostomata												
Ostrocooda												
Copepoda												
Cirripedia												
Balanus amphitrite					14	14						

CRUISE II (>1.5 MM SIZE FRACTION)	B9a	B9b	B10a	B10b	C1a	C1b	C2a	C2b	C3a	C3b	C4a	C4b
Mysidacea												
<i>Neomysis americana</i>		1							1			
Cumacea												
Decapoda												
<i>Cancer irroratus</i>					16	31				2	3	2
<i>Crangon septemspinosa</i>		1							1		2	
<i>Pagurus longicarpus</i>										1		
<i>Ovalipes ocellatus</i>		1	1	2					11	3	3	1
Isopoda												
Echinodermata												
<i>Asterias forbesii</i>						1					2	
Chordata												
Vertebrata												

CRUISE II (>1.5 MM SIZE FRACTION)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10a	C10b
Porifera												
Cnidaria												
Anthozoa												
Unidentified anemone								1				
Hydrozoa												
Platyhelminthes												
Rhynchozoela												
Unidentified nemertean	1	1				1		1				
Aschelminthes												
Unidentified nematoda								*	1			1
Ectoprocta												
Alcyonidium sp.								*				
Cryptosula sp.			*	*	*	*		*		*	*	*
Electra sp.				*	*		*	*	*	*	*	*
Schizoporella sp.							*		*			
Phoronida												
Annelida												
Oligochaeta												
Polychaeta												
Asabellides oculata	67	25	2				1	2	1		1	
Drilonereis longa					1							
Capitella capitata								1				
Meteromastus filiformis	1		10	7	2	14	4	11	2	5		
Spirochaetoperus oculatus										1		
Cirratulus grandis		3	9	242	118	143		31	262	229		
Dodecaceria coralii								1		1		
Tharyx acutus			1									
Pherusa affinis	7	2	8	12	7	4	2	14	9	17		2
Glycera americana		1	7	7	4	4	2	7	7	5		1
Glycera dibranchiata						3					2	4
Podarke obscura		1		2				6				
Lumbrineris fragilis												1
Nephtys incisa	2											
Nephtys picta									1		44	12
Nereis succinea			3	2						1		
Diopatra cuprea			1									
Pectinaria gouldii								2				
Eteone lactea						3						
Eumida sanguinea			1	0				2				
Paranaitis speciosa						1						
Harmothoe extenuata		2	74	175	16	88	28	67	60	117	2	
Harmothoe imbricata				1			2	1	2	1		
Lepidonotus squamatus			3	20	11	15	4	38	13	27		
Sabellaria vulgaris			1		1					1		
Potamilla reniformis							1	1				
Hydroides dianthus			7	7	6	8	9	9	4	1		
Polydora ligni				2		1		2		4		
Streblospio benedicti											1	
Autolytus cornutus				2		3	1	2		6		
Autolytus sp.			1									
Amphitrite ornata											2	
Mollusca												
Gastropoda												
Crepidula fornicata						1						
Crepidula plana							1	3		1		
Urosalpinx cinereus					2			6				
Nassarius trivittata	1	3	2	1	1		2		14	2	2	
Onchidoris aspera										6		
Bivalvia												
Cerastoderma pinnulatum				12				1		2		
Spisula solidissima											7	
Mytilus edulis			747	1223			78	352	2557	643		
Nucula proxima	2	13	1	5					1	11		
Pandora gouldiana											1	
Petricola pholadiformis				1			1			4		
Ensis directus					1						1	2
Macoma balthica				2								6
Tellina agilis	1		5	2	2	7	1	4		5	21	6
Gemma gemma											1	
Mercenaria mercenaria				1								
Pitar morrhua										1		1

CRUISE II (>1.5 MM SIZE FRACTION)	C5a	C5b	C6a	C6b	C7a	C7b	C8a	C8b	C9a	C9b	C10	C10b
Arthropoda												
Amphipoda												
<i>Ampelisca abdita</i>	1							2	2		4	
<i>Unciola dissimilis</i>								2		2		
<i>Unciola irrorata</i>						1						
<i>Unciola serrata</i>				0	5						6	3
Unidentified caprellidae			1	0							1	
<i>Erichthonius brasiliensis</i>								2				
<i>Lysianopsis alba</i>											1	
<i>Paraphoxus spinosus</i>			2	1	2	4	1	1			1	2
<i>Phoxocephalus holbolli</i>							1				1	
<i>Harpinia propinqua</i>								1			2	
<i>Rhepoxynuis epistomus</i>							2		1			
Merostomata												
Ostrococha												
Copepoda												
Cirripedia												
<i>Balanus amphitrite</i>			2	4				4				
<i>Balanus balanus</i>							13		19			
Mysidacea												
<i>Heteromysis formosa</i>								1		2		
Mysid sp.			1									
<i>Neomysis americana</i>						2						6
Cumacea												
<i>Oxyurostylis smithi</i>												2
Decapoda												
<i>Cancer irroratus</i>	2	1	5	17	4	3	1	3	14	13	3	1
<i>Crangon septemspinosa</i>					1		2	1			4	
<i>Libinia emarginata</i>												
<i>Pagurus longicarpus</i>				1							1	
<i>Ovalipes ocellatus</i>											2	1
<i>Neopanope texana</i>			5	4	1	1	1	4		4		
Isopoda												
<i>Cyathura polita</i>			8	10	26	26	7	11	2			
Echinodermata												
<i>Asterias forbesii</i>					2			4	1			
<i>Arbacia punctulata</i>				2								
Chordata												
Vertebrata												
Blenny-like larval fish					1						1	
<i>Myoxocephalus aeneus</i> (sculpin)			1									