Jamaica Bay Benthic Mapping:
Ground Truth Study

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November 2013

MSRC Special Report # 139

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ABSTRACT

High-resolution backscatter and bathymetric maps created by multibeam sonar surveys were used to identify different seafloor environments within Jamaica Bay. Grab samples were collected within these different habitats to characterize macrofauna and sediment properties. Samples were concentrated in three principal areas: Rockaway Inlet, Nova Scotia Bar, and Grassy Bay, with 27, 34, and 22 locations, respectively. Samples were also collected at three locations in Pumpkin Patch Channel. Sampling locations were revisited and seafloor images were collected with an HD underwater camera. These images were used to estimate percent cover of surficial features such as gravel, sand, mud, shell, seaweed, bacterial mat, and mussels. Multivariate analysis was used to identify the most important factors explaining variations in community structure. Results indicated that geographic area, the depth of the apparent RPD, grain-size, and water depth can explain about 30% of community structure variation. Of the three principal areas, anthropogenic stress was clearly evident in Grassy Bay.

INTRODUCTION

Acoustic surveys of marine areas have become the underwater analog of aerial photography, enabling relatively large areas to be surveyed at fine resolution in relatively short periods of time. The acoustic remote sensing tools currently employed in geophysical surveys (side scan sonar, multibeam bathymetry, etc.) have the potential/ability to characterize variations in bottom type at a level of resolution well beyond traditional discrete bottom sampling methods (e.g., cores, grab samples, etc.) (Ryan and Flood 1996). This capability enables the application of techniques commonly used in landscape ecology to marine benthic environments (Robbins and Bell, 1994). The strengths of a landscape ecology approach are evident in terrestrial and small stream ecosystems (e.g., Forman 1995).

Maps generated by acoustic surveys alone are not sufficient for characterizing bottom type or the distribution of benthic communities, and at least one ground truth stage is required linking the acoustic maps with benthic environmental and biological assemblages. Acoustic surveys can identify sites of different bottom character, but determining that those sites are, for example, sea-grass beds, rocky substrates, rippled sands, or muddy surfaces, requires verification by direct sampling. Knowing the type of bottom present is an important indicator of the benthic community that may be present, but benthic communities are highly variable and cannot be accurately predicted based on bottom type alone. In addition, geophysical features detectable by acoustic surveys that appear to characterize distinct sedimentary regions are not necessarily biologically relevant (Brown *et al.*, 2002).

The principal goal of this study was to collect and analyze sediment, percent cover, and faunal ground truth samples at three principal areas in Jamaica Bay: Rockaway Inlet, Nova Scotia Bar, and Grassy Bay. In addition, several samples were collected in Pumpkin Patch Channel. Ground truth sampling locations were determined by visual examination of high resolution backscatter and bathymetric maps created by multibeam sonar surveys. The sonar surveys were conducted as part of a separate study, and these maps are not part of the current report. Support for the collection and analysis of the benthic samples in this report was obtained from New York Sea Grant and the National Park Service. Data were analyzed in order to describe the

environment and fauna in Jamaica Bay and to determine how well collected environmental data can explain benthic community structure.

METHODS

Study Area and Sampling Locations

This study was carried out in three principal locations in Jamaica Bay: Rockaway Inlet, Nova Scotia Bar, and Grassy Bay (Figure 1). Additionally, several locations in Pumpkin Patch Channel were sampled. For brevity, these areas will be referred to as Inlet, NvScBr, Grassy, and PknPch in tables and figures. Variations in bottom type were identified by visual examination of multibeam bathymetry and backscatter data collected by Roger Flood. Sampling stations were randomly positioned within the various bottom types identified.

Faunal and Sediment Sampling

Faunal and sediment sampling was conducted aboard the R/V Pritchard operated by Stony Brook University. Bottom samples were collected between 6/17/2009 and 6/30/2009 using a modified van Veen grab (0.04 m^2). A total of 27 samples were collected in Rockaway Inlet (JB001-027), 34 in Nova Scotia Bar (JB028-059 and JB085-086), 22 in Grassy Bay (JB060-072 and JB076-084), and 3 Pumpkin Patch Channel (JB073-075). Subsamples of sediments for grain size were drawn from each grab sample. The remaining sediment was washed through a 0.5 mm sieve for fauna. All material left on the sieve was preserved in 10% buffered formalin and stained with rose bengal. Faunal samples were rewashed in the lab and transferred to 70% ethanol before sorting and identification. Individual organisms were identified to species level whenever possible and the total for each taxon enumerated. Unless otherwise noted, all abundances are expressed as the number of individuals per sample (i.e., per 0.04 m^2).

Sediment grain-size analyses were used to measure percent composition by weight of major size-fractions (gravel, sand, silt, clay), as well as the detailed grain-size distribution in ½ phi intervals. We used a combination of dry sieve, settling column, and sedigraph analyses for the gravel, sand, and silt-clay fractions, respectively. Samples were initially partitioned into three size-fractions by adding 50 ml of a 1% Calgon solution to the sample, mixing to disaggregate the particles in the sample, and wet sieving with distilled water through a combination of 1 mm and 63 micron sieves. The >1 mm and 1 mm-63 micron fractions were placed in a drying oven at 60^o C for at least 48 hours to obtain dry weights. Water containing the <63 micron fraction (silt-clay) was brought up to 1000 ml total volume by adding distilled water in a graduated cylinder, mixed thoroughly, and subsampled with a 20 ml pipette at a depth of 20 cm, 20 seconds after mixing to obtain an estimate of silt-clay (Folk 1974). A clay sample was obtained from a second 20 ml pipette sample collected at a depth of 10 cm, 2 hours and 3 minutes after mixing (Folk 1974). Pipette samples were placed in a drying oven at 60^o C for at least 48 hours to obtain dry weight estimates of the silt-clay and clay fractions. Silt content was estimated from the difference in weight between these two samples. The remaining water containing the <63 micron fraction (silt-clay) was reserved for later grain-size analysis on the sedigraph.

The detailed grain-size distribution of the >1 mm fraction was determined by dry sieving samples through a stack of sieves with the following sizes: 12.5 mm, 9.5 mm, 6.3 mm, 4.75 mm, 3.35 mm, 2 mm, 1.42 mm, and 1mm. Material remaining on each sieve was weighed.

The grain-size distribution of the 1mm-63 micron fraction was determined by settling column analysis. The settling column consisted of a 193.5 cm tall PVC tube with an internal diameter of 15.2 cm filled with distilled water. Samples were introduced at the top of the column and a collecting pan connected to a balance registered weight as particles settled through the water. A computer connected to the balance recorded cumulative weight and elapsed time for each sample. Weight-time data were converted to sedimentation diameter using an empirical equation in Gibbs et al. (1971). A particle roughness correction suggested by Baba and Komar (1981) was also applied.

A Micromeritics SediGraph 5100 (Micrometrics Instrument Corp., Norcross GA) was used to analyze the <63 micron (silt-clay) fraction. Water containing the <63 micron fraction was centrifuged for approximately ten minutes. Water was decanted from the sample, and the sedimented material was rewetted with a 0.5% Calgon solution to reduce coagulation of clay particles. Samples were run using standard techniques obtained from the manufacturer. As a final step in the sediment analysis, results from the dry sieve, settling column, and sedigraph analyses were combined, and grain-size distribution in ½ phi intervals was obtained by linear interpolation. Mean grain-size, median grain-size, sorting (standard deviation), skewness, and kurtosis measures were computed from the cumulative distribution.

Percent Cover

Bottom images were collected by revisiting sampling locations on 7/24/12 - 7/25/12 and deploying a Seatrex HD (Ocean Systems Inc., Everett WA) industrial grade underwater point of view camera mounted on a tripod. Distance from the camera to the sediment surface was 50 cm, and image size was 17.5 x 30 cm, comparable in size to the dimensions of the modified van Veen grab used to collect faunal and grain-size samples. For each video, VLC Media Player (VideoLAN, Paris, France) was used to extract a still frame for analysis, and a supervised maximum likelihood image classification algorithm in ArcGIS 10 (ESRI, Redlands, CA) was used to estimate percent cover of surface sediment/biogenic features. Occasionally, when the spectral properties between different bottom types were too similar for the classification algorithm to distinguish (e.g., sand and live slipper snails, *Crepidula fornicata*, are the same color), manual corrections were made using the measuring tool in ArcGIS. To determine the accuracy of the classified images, Cohen's kappa was used to assess the agreement between the original and classified images.

Data Entry and Summary

Data were entered into either Microsoft Excel spreadsheets or a Microsoft Access database. Faunal data were summarized by converting Access tables to a format compatible with PC-ORD (MJM Software Design, Gleneden Beach, OR) and using summary commands within this program. Transferring data to PC-ORD required assigning a unique 8-character code for each species. This was created by using the first 4 characters in both the genus and species name. A

geodatabase was created in ArcGIS version 10.1 (ESRI, Redlands CA) to display the data. Data were imported into the GIS directly from the Excel spreadsheets or Access database.

Multivariate Analysis

Data were analyzed by redundancy analysis (RDA), a direct gradient technique. RDA, first suggested by Rao (1964), is a technique that combines ordination of sample sites based on species abundance data with regression on the environmental data in order to examine the relationship between community structure and environmental variables (Jongman *et al.*, 1995). Significance of environmental variables in explaining community variation is determined through permutation tests. By examining the environmental and biological data simultaneously, this analysis depicts the trends in the species data that are related to the selected environmental data. RDA is based on Euclidean distance, which is not the most appropriate resemblance measure for species data, since it incorrectly interprets shared species absences between samples as similarities. In order to circumvent this shortcoming, a Hellinger transformation was applied to species abundances as recommended by Legendre and Gallagher (2001).

A parsimonious set of significant environmental variables was identified by sequentially adding variables in a forward selection process (Jongman et al., 1995). Variables identified by forward selection were trimmed by the AICc stopping criterion (Burnham and Anderson, 2002). RDA was then re-calculated using just those variables retained by the AICc model selection criterion and their natural counterparts. For example, when % gravel, sand, silt or clay was selected by the model, the remaining variables in that set (the four variables are not independent and sum to 100%) were also included in the analysis.

RESULTS

General Description of the Sediments and Faunal Community

Sediments in the study areas were diverse in terms of sand and mud content, but only 4 of 86 samples contained more than 25% gravel (with shell) (Figure 2). Mean grain-size for Rockaway Inlet (0.116 mm) was in the very fine sand range. Mean grain-size for the remaining areas were in the silt range, with coarse silt in Nova Scotia Bar (0.049 mm), fine silt in Grassy Bay (0.011 mm), and medium silt in Pumpkin Patch Channel (0.024 mm). As expected, muddy stations tended to be located further into Jamaica Bay. Of the 29 samples with more than 50% silt-clay, 1 was in Rockaway Inlet (3.7% of 27 samples), 10 in Nova Scotia Bar (29.4% of 34 samples), 15 in Grassy Bay (68.2% of 22 samples), and 2 in Pumpkin Patch Channel (66.7% of 3 samples). Field data and grain size summary data tabulated by sample are contained in Appendices 1 and 2, respectively.

A total of 89,564 animals representing 136 taxa were collected in the 86 samples. Average abundance in the 86 samples was 1,041 individuals per sample (26,025 per m^2). Of the 136 taxa, 22.1% were polychaetes, 41.2% were molluscs, 33.8% were crustaceans, and the remainder (2.9%) was distributed among other groups (Table 1). Numerical dominants included the tubicolous amphipod Ampelisca sp (mean = 542 per sample), the spionid polychaete *Streblospio benedicti* (127 per sample), the tubicolous amphipod *Corophium* sp (60 per sample), the

capitellid polychaete Capitellidae sp (46 per sample), the blue mussel *Mytilus edulis* (45 per sample), oligochaetes (32 per sample), the polychaete *Tharyx* sp (18 per sample), the capitellid polychaete *Capitella capitata* (18 per sample), the tubicolous amphipod *Microdeutopus gryllotalpa* (17 per sample), the bivalve *Tellina agilis* (16 per sample), the polychaete *Polygordius* sp (16 per sample), the tubicolous polychaete *Polydora ligni* (15 per sample), and the polychaete *Eteone heteropoda* (12 per sample). These 13 taxa represented about 93% of the total number of individuals collected, and no other taxon had an average abundance greater than 10 per sample. Average faunal abundances in each geographic area were 1,235 individuals per sample for Rockaway Inlet, 777 individuals per sample for Nova Scotia Bar, 1,218 individuals per sample for Grassy Bay, and 1,002 individuals per sample for Pumpkin Patch Channel (Table 2). Faunal summary data tabulated by sample and geographic area are contained in Appendices 3 and 4.

a) Rockaway Inlet

Twenty-seven samples were collected in Rockaway Inlet. Water depths ranged from 2.9 to 14.0 meters. Only one sample consisted of greater than 50% gravel. Samples were widely distributed in sand and silt-clay content, ranging from 6.1-99.9% and 0.1-70.8%, respectively (Figure 2). Surficial sediments were primarily sandy in appearance, and occasionally had substantial numbers of blue mussels (Figures 3-4).

Abundances ranged from 44 to 9,382 individuals per sample and species richness varied from 9 to 31 species per sample. A total of 105 species were collected. The most abundant taxa was the tubicolous amphipod *Ampelisca* sp and represented 60.5% of the total number of individuals in the samples. Other abundant species included the blue mussel *Mytilus edulis* (11.6%), the capitellid polychaete *Capitellidae* sp (4.8%), the polychaete *Polygordius* sp (4.0%), oligochaetes (3.3%), the polychaete *Tharyx* sp (2.3%), the tubicolous polychaete *Polydora ligni* (1.7%), the deposit feeding bivalve *Tellina agilis* (1.7%), the spionid polychaete *Streblospio benedicti* (1.4%), the scale worm *Harmothoe* sp (0.9%), and the clam worm *Nereis succinea* (0.8%) (Table 2). Five commercial bivalve species were collected in this area, the razor clam *Ensis directus* (2 stations), the hard clam *Mercenaria mercenaria* (12 stations), the soft shell clam *Mya arenaria* (2 stations), the blue mussel *Mytilus edulis* (15 stations), and the surf clam *Spisula solidissima* (7 stations) (Table 3).

b) Nova Scotia Bar

Thirty-four samples were collected in the Nova Scotia Bar region. Water depths ranged from 2.3 to 15.8 meters. This area had two samples with 26% gravel, but no other samples had gravel contents exceeding 10%. Samples had diverse sand and silt-clay contents, ranging from 5.2-99.5% sand and 0.4-94.8% silt-clay (Figure 2). Surface sediments were sandy at stations leading from Rockaway Inlet, and tended to grade into more muddy sediments along Runway Channel (Figures 5-6). The stations in Runway Channel often had live/dead seaweed cover.

Faunal abundances varied from 10 to 7,540 individuals per sample. Species richness ranged from 2 to 39 species per sample. A total of 101 species were collected. Numerically abundant taxa included the tubicolous amphipod *Ampelisca* sp (48.6%), the spionid polychaete *Streblospio*

benedicti (9.1%), the capitellid polychaete Capitellidae sp (7.2%), the capitellid polychaete *Capitella capitata* (4.4%), the tubicolous amphipod *Microdeutopus gryllotalpa* (4.3%), oligochaetes (4.1%), the tubicolous amphipod *Corophium* sp (3.3%), the bivalve Tellina agilis (2.8%), the polychaete Tharyx sp (2.3%), the tubicolous polychaete *Polydora ligni* (1.9%), and the amphipod *Lysianopsis alba* (1.3%) (Table 2). Four commercial bivalve species were collected in this area, the hard clam *Mercenaria mercenaria* (13 stations), the soft shell clam *Mya arenaria* (1 station), the blue mussel *Mytilus edulis* (3 stations), and the surf clam *Spisula solidissima* (7 stations) (Table 3).

c) Grassy Bay

Twenty-two samples were collected in Grassy Bay. Water depths ranged from 2.5 to 12.5 m. With the exception of one location with 96% gravel, samples generally had < 5% gravel. This area had sampling locations with diverse sand and mud contents, ranging from 3.4-94.5% sand and 0-96.6% silt-clay (Figure 2). Bacterial mats characterized the surface sediment cover at most locations (Figures 7-8).

Abundances ranged from 0 to 5,643 individuals per sample, and species richness ranged from 0 to 31 species per sample. A total of 60 species were collected, considerably less than the number of species collected in Rockaway Inlet or Nova Scotia Bar. The most abundant taxa included the tubicolous amphipod *Ampelisca* sp (43.5%), the spionid polychaete *Streblospio benedicti* (28.3%), the tubicolous amphipod *Corophium* sp (15.5%), the paddle worm *Eteone heteropoda* (2.1%), oligochaetes (1.6%), the capitellid polychaete Capitellidae sp (1.3%), the capitellid polychaete *Capitella capitata* (1.1%), the clam worm *Nereis succinea* (1.0%), and the tubicolous amphipod *Microdeutopus gryllotalpa* (0.9%) (Table 2). Commercial species collected in this region included the hard clam *Mercenaria mercenaria* and the soft shell clam *Mya arenaria*. Both species were present at 8 sampling stations (Table 3).

d) Pumpkin Patch Channel

Three samples were collected in Pumpkin Patch Channel. Water depths ranged from 3.2 to 5.9 meters. Gravel content ranged from 0.0-3.8%. Samples had widely varying sand and silt-clay content, ranging from 15.2-86.8% and 11.7-81.0%, respectively. No bottom images were collected in Pumpkin Patch Channel.

Faunal abundances varied from 11 to 2,947 individuals per sample. Species richness ranged from 5 to 27 species per sample. A total of 29 species were collected, a reasonable number for 3 samples. Numerically abundant taxa included the tubicolous amphipod *Ampelisca* sp (65.4%), the spionid polychaete *Streblospio benedicti* (16.9%), oligochaetes (4.1%), the capitellid polychaete Capitellidae sp (3.8%), the mud snail *Ilyanassa obsoleta* (2.6%), a species often found on mud flats bordering intertidal salt marshes, and the tubicolous amphipod *Corophium* sp (1.6%) (Table 2). No commercial bivalve species were collected in this area (Table 3).

Multivariate Analysis

Forward selection RDA resulted in identifying 6 significant environmental variables (Grassy, RPD, % Sand, Inlet, % Silt, and Water Depth), and all were retained based on the AICc stopping criterion (Figure 9). These environmental variables explained 26.7% of the variability in community structure. The complementary variables NvScBr, PknPch, % Gravel, and % Clay were added to the figure for completeness. Because only 3 samples were collected in Pumpkin Patch Channel, it was unlikely that this nominal environmental variable would be selected. Ignoring Pumpkin Patch Channel, and recognizing that in a set of *n* nominal variables there are only *n-1* independent ones, the selection of two area variables (Inlet and Grassy) indicates that community structure differs among all three principal areas (i.e., Inlet, Grassy, and NvScBr).

Of the quantitative sediment variables, % Sand and % Silt explained 6.9% of the faunal variation. High gravel content was rare in samples (Figure 2), so its selection was not anticipated. % Sand and % Clay were highly correlated ($r = 0.93$), and the latter was not selected because of the high degree of association (Figure 9).

The RDA ordination triplot in Figure 9 shows the relationship between community structure and the final set of environmental variables (and their complementary, collinear counterparts). In this ordination diagram, points represent the community structure at each station; those that plot close to one another have similar species composition while points far apart are dissimilar. The larger blue triangles and blue arrows represent nominal and quantitative environmental variables, respectively. The blue triangles are located at the centroid of the samples with the characteristic of the nominal variable (e.g., the triangle labeled Inlet is the centroid of the Rockaway Inlet samples). The arrows represent the direction of steepest increase for the quantitative environmental variables. The origin is the mean of the variable and decreasing values for the quantitative environmental variable extend through the origin in the direction opposite the head of the arrow. The black arrows represent the abundances of selected species whose variances are well explained (> 15%) by the first two ordination axes. Sample points can be orthogonally projected onto the arrow of a species or environmental variable (i.e., the direction of the projected point is perpendicular to the arrow); this projection approximately orders the samples from the largest to the smallest values for that variable.

In Figure 9, envelopes are drawn around the samples representing each of the four areas. Envelopes for each region are broad because each region was a mixture of habitats. In general, though, Grassy Bay and Pumpkin Patch Channel tended to be muddier, shallower, and with a shallower RPD than Rockaway Inlet and Nova Scotia Bar. The distributions of selected quantitative environmental variables and species are given in Figures 10-16.

DISCUSSION

General Description of the Sediments and Faunal Community

Both sediment and faunal characteristics varied within and among areas sampled. A broad range of sand and silt-clay was found within each area, but few samples contained substantial amounts of gravel. Faunal abundances differed widely from 0 to 9,382 individuals per sample. Species richness was also highly variable, ranging from 0 to 39 species per sample. Of the 136 taxa, 53

(39%) were found in only one of the areas, and only 24 were found in all 4 areas. The latter result reflects the low number of samples collected in Pumpkin Patch Channel.

Multivariate Analysis

Multivariate analysis revealed significant faunal-environmental relationships but with modest explained variance (26.7%). This result agrees well with our prior studies in the Peconics Estuary, North Shore Bays, and Hudson River (Cerrato and Holt 2008, Cerrato and Maher 2007, Maher and Cerrato 2004). Those studies found that variables derived from sonar data were more effective at explaining community variation than traditional variables such as grain-size and water depth.

Evidence of Stress

Several characteristics of the benthic community relating to species richness, dominance by opportunists, anomalously low abundances, and the presence of bacterial mats indicated that stress was present in Jamaica Bay. We review these observations in this section but warn that a single sampling period with limited spatial coverage is not sufficient to fully identify the source of the stress or its spatial and temporal extent.

Samples collected in the inner parts of the bay, i.e., Pumpkin Patch Channel and Grassy Bay, had lower species richness than those collected closer to the inlet (Figure 17). A planned comparison of species richness between these regions (inner vs. outer) was significant ($F=7.1$, $df=1, 82$, $p<0.01$). This geographic pattern and the ~ 50% difference in species richness per sample is similar to that found in comparing inner vs. outer (i.e., west to east) parts of Long Island Sound. In contrast, a comparable decline in species richness is not apparent in the Peconics Estuary.

Zajac (1998), in analyzing the benthic data collected by Pellegrino and Hubbard (1983), noted that decreased species richness in Western Long Island Sound might be attributed to a combination of a reduced species pool, lower habitat heterogeneity, and long-term environmental deterioration in the western portion of the Sound. While not enough is known about conditions in Jamaica Bay to exclude any of these factors, the presence of bacterial mats strongly indicates deteriorated environmental conditions in Grassy Bay.

Many of the dominant species in the present study were opportunists, i.e., species often associated with areas that had been recently disturbed or were held at a low successional stage by frequent or chronic disturbances. These include *Ampelisca* sp, *Capitella capitata, Polydora ligni*, and *Streblospio benedicti*. The most abundant species in each area was *Ampelisca* sp, and more than 63% of all individuals collected in each area belonged to one of the four early colonizing opportunistic species (Table 2).

Finally, a number stations in Grassy Bay had anomalously low abundance and species richness and could be considered depauperate areas. Four stations had no macrofauna present (JB09-74, JB09-77, JB09-78, and JB09-83). Three additional stations had very few individuals: 1

individual at JB09-66, 2 individuals from 2 species at JB09-71, and 4 individuals from 3 species at JB09-73.

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Table 1. List of taxa collected during Jamaica Bay sampling.

Code	Phylum	Class	Order	Family	Species
124	Arthropoda	Crustacea	Amphipoda	Haustoriidae	*Acanthohaustorius millsi*
177	Mollusca	Gastropoda		Acteonidae	*Acteocina canaliculata*
334	Chordata	Actinopterygii		Ammodytidae	*Ammodytes dubius*
219	Arthropoda	Crustacea	Amphipoda	Ampeliscidae	*Ampelisca sp*
331	Annelida	Polychaeta		Terebellidae	*Amphitrite ornata*
62	Mollusca	Bivalvia		Arcidae	*Anadara transversa*
61	Mollusca	Bivalvia		Animiidae	*Anomia simplex*
29	Annelida	Polychaeta		Arabellidae	*Arabella iricolor*
335	Annelida	Polychaeta		Paraonidae	*Aricidae sp*
11	Annelida	Polychaeta		Paraonidae	*Aricidea catherinae*
86	Annelida	Polychaeta		Ampharetidae	*Asabellides oculata*
119	Annelida	Polychaeta		Syllidae	*Autolytus cornutus*
300	Annelida	Polychaeta		Syllidae	*Autolytus sp*
289	Arthropoda	Crustacea			*Balanus amphitrite*
79	Arthropoda	Crustacea			*Balanus sp*
60	Mollusca	Bivalvia			*Bivalvia sp*
201	Annelida	Polychaeta		Capitellidae	*Capitella capitata*
2	Annelida	Polychaeta		Capitellidae	*Capitellidae sp*
308	Arthropoda	Crustacea	Amphipoda	Caprellidae	*Caprellidae sp*
339	Arthropoda	Crustacea	Decapoda	Portunidae	*Carcinus maenas*
229	Arthropoda	Crustacea			*Caridea sp*
319	Mollusca	Bivalvia		Cardiidae	*Cerastoderma pinnulatum*
6	Annelida	Polychaeta		Maldanidae	*Clymenella sp*
233	Annelida	Polychaeta		Maldanidae	*Clymenella torquata*
85	Arthropoda	Crustacea	Amphipoda	Corophiidae	*Corophium sp*
214	Arthropoda	Crustacea	Decapoda	Crangonidae	*Crangon septemspinosa*
235	Mollusca	Gastropoda		Calyptraeidae	*Crepidula convexa*
75	Mollusca	Gastropoda		Calyptraeidae	*Crepidula fornicata*
76	Mollusca	Gastropoda		Calyptraeidae	*Crepidula plana*
48	Arthropoda	Crustacea	Tanaidacea		*Cyathura polita*
284	Arthropoda	Crustacea	Decapoda		*Decapoda megalopa*
332	Arthropoda	Crustacea	Decapoda		*Decapoda sp*
330	Arthropoda	Crustacea	Decapoda		*Decapoda zoea*
122	Annelida	Polychaeta		Arabellidae	*Drilonereis longa*
52	Arthropoda	Crustacea	Decapoda	Xanthidae	*Dyspanopeus sayi*
325	Arthropoda	Crustacea	Isopoda		*Edotea sp*
41	Arthropoda	Crustacea	Amphipoda	Meltiidae	*Elasmopus levis*
68	Mollusca	Bivalvia		Solenidae	*Ensis directus*
111	Arthropoda	Crustacea	Amphipoda	Corophiidae	*Erichthonius brasiliensis*
39	Arthropoda	Crustacea	Amphipoda	Corophiidae	*Erichthonius sp*
213	Annelida	Polychaeta		Phyllodocidae	*Eteone heteropoda*
133	Annelida	Polychaeta		Phyllodocidae	*Eteone lactea*
13	Annelida	Polychaeta		Phyllodocidae	*Eumida sanguinea*
20	Annelida	Polychaeta		Syllidae	*Exogone dispar*
315	Arthropoda	Crustacea	Amphipoda	Gammaridae	*Gammarus mucronatus*
71	Mollusca	Bivalvia		Veneridae	*Gemma gemma*
140	Annelida	Polychaeta		Glyceridae	*Glycera americana*
114	Annelida	Polychaeta		Glyceridae	*Glycera dibranchiata*
238	Annelida	Polychaeta		Gonianidae	*Glycinde solitaria*

Table 1. List of taxa collected during Jamaica Bay sampling.

Code	Phylum	Class	Order	Family	Species
95	Chordata	Osteichthyes		Gobiidae	*Gobiosoma sp*
115	Annelida	Polychaeta		Gonianidae	*Goniadella gracilis*
145	Annelida	Polychaeta		Hesionidae	*Gyptis vittata*
277	Annelida	Polychaeta		Polynoidae	*Harmothoe imbricata*
291	Annelida	Polychaeta		Polynoidae	*Harmothoe sp*
338	Annelida	Polychaeta		Capitellidae	*Heteromastus filiformis*
55	Arthropoda	Crustacea	Mysidacea		*Heteromysis formosa*
168	Annelida	Polychaeta		Serpulidae	*Hydroides dianthus*
316	Arthropoda	Crustacea		Idoteidae	*Idotea balthica*
191	Mollusca	Gastropoda		Nassariidae	*Ilyanassa obsoleta*
161	Mollusca	Gastropoda		Nassariidae	*Ilyanassa trivittata*
15	Annelida	Polychaeta		Polynoidae	*Lepidonotus squamatus*
125	Arthropoda	Crustacea	Tanaidacea		*Leptochelia savignyi*
147	Arthropoda	Crustacea	Decapoda		*Libinia sp*
333	Arthropoda	Crustacea	Xyphosurida	Limulidae	*Limulus polyphemus*
64	Mollusca	Bivalvia		Lyonsiidae	*Lyonsia hyalina*
150	Arthropoda	Crustacea	Amphipoda	Lysianassidae	*Lysianopsis alba*
42	Arthropoda	Crustacea	Amphipoda	Meltiidae	*Melita nitida*
70	Mollusca	Bivalvia		Veneridae	*Mercenaria mercenaria*
253	Arthropoda	Crustacea	Amphipoda	Aoridae	*Microdeutopus gryllotalpa*
34	Arthropoda	Crustacea	Amphipoda	Aoridae	*Microdeutopus sp*
154	Annelida	Polychaeta		Hesionidae	*Microphthalmus aberrans*
157	Mollusca	Gastropoda		Collumbellidae	*Mitrella lunata*
327	Chordata	Ascidiacea			*Mogula manhattensis*
137	Mollusca	Bivalvia		Mactridae	*Mulinia lateralis*
171	Mollusca	Bivalvia		Myidae	*Mya arenaria*
313	Mollusca	Bivalvia		Lasaeidae	*Mysella planulata*
329	Arthropoda	Crustacea	Mysidacea		*Mysidopsis bigelowi*
296	Mollusca	Bivalvia		Mytilidae	*Mytilus edulis*
7	Annelida	Polychaeta		Nephtyidae	*Nephtys picta*
210	Annelida	Polychaeta		Nephtyidae	*Nepthys incisa*
102	Annelida	Polychaeta		Nereidae	*Nereis arenaceodonta*
323	Annelida	Polychaeta		Nereidae	*Nereis sp*
8	Annelida	Polychaeta		Nereidae	*Nereis succinea*
66	Mollusca	Bivalvia		Nuculidae	*Nucula proxima*
321	Mollusca	Bivalvia		Nuculidae	*Nucula sp*
104	Mollusca	Bivalvia		Nuculidae	*Nucula tenuis*
1	Annelida	Oligochaeta			*Oligochaeta sp*
50	Arthropoda	Crustacea	Cumacea		*Oxyurostylis smithi*
311	Arthropoda	Crustacea	Decapoda	Paguridae	*Pagurus acadianus*
43	Arthropoda	Crustacea	Decapoda	Paguridae	*Pagurus longicarpus*
259	Arthropoda	Crustacea	Decapoda	Paguridae	*Pagurus sp*
314	Arthropoda	Crustacea	Decapoda		*Palaemonetes vulgaris*
53	Arthropoda	Crustacea	Decapoda	Xanthidae	*Panopeus herbstii*
322	Arthropoda	Crustacea	Amphipoda	Haustoriidae	*Parahaustorius attenuatus*
337	Arthropoda	Crustacea	Amphipoda	Haustoriidae	*Parahaustorius longimerus*
174	Annelida	Polychaeta		Phyllodocidae	*Paranaitis speciosa*
96	Arthropoda	Crustacea	Amphipoda	Phoxocephalidae	*Paraphoxus spinosus*
107	Annelida	Polychaeta		Pectinariidae	*Pectinaria gouldii*

Table 1. List of taxa collected during Jamaica Bay sampling.

Code	Phylum	Class	Order	Family	Species
312	Mollusca	Bivalvia		Petricolidae	*Petricola pholadiformis*
336	Annelida	Polychaeta		Flabelligeridae	*Pherusa plumosa*
246	Annelida	Polychaeta		Pholoidae	*Pholoe minuta*
320	Annelida	Polychaeta		Phyllodocidae	*Phyllodocidae sp*
59	Arthropoda	Crustacea	Decapoda		*Pinnixa sp*
123	Annelida	Polychaeta		Hesionidae	*Podarke obscura*
205	Annelida	Polychaeta		Spionidae	*Polydora ligni*
16	Annelida	Polychaeta		Spionidae	*Polydora sp*
14	Annelida	Polychaeta		Polygordiidae	*Polygordius sp*
17	Annelida	Polychaeta		Spionidae	*Prionospio sp*
248	Arthropoda	Crustacea	Amphipoda	Haustoriidae	*Protohaustorius wigleyi*
328	Mollusca	Gastropoda		Pyramidellidae	*Pyramidella producta*
44	Arthropoda	Crustacea	Amphipoda	Phoxocephalidae	*Rhepoxynius epistomus*
318	Mollusca	Gastropoda		Rissoidae	*Rissoidae sp*
270	Annelida	Polychaeta		Sabellaridae	*Sabellaria vulgaris*
135	Annelida	Polychaeta		Dorvilleidae	*Schistomeringos rudolphi*
275	Annelida	Polychaeta		Spionidae	*Scolecolepides viridis*
10	Annelida	Polychaeta		Orbiniidae	*Scoloplos fragilis*
276	Annelida	Polychaeta		Orbiniidae	*Scoloplos robustus*
264	Annelida	Polychaeta		Orbiniidae	*Scoloplos sp*
127	Annelida	Polychaeta		Sigalionidae	*Sigalion arenicola*
151	Mollusca	Bivalvia		Solemyidae	*Solemya velum*
309	Annelida	Polychaeta		Chaetopteridae	*Spiochaetopterus oculatus*
18	Annelida	Polychaeta		Spionidae	*Spiophanes bombyx*
103	Mollusca	Bivalvia		Mactridae	*Spisula solidissima*
121	Arthropoda	Crustacea	Amphipoda	Stenothoidae	*Stenothoe minuta*
166	Annelida	Polychaeta		Spionidae	*Streblospio benedicti*
110	Annelida	Polychaeta		Syllidae	*Syllides setosa*
24	Annelida	Polychaeta		Syllidae	*Syllis gracilis*
69	Mollusca	Bivalvia		Tellinidae	*Tellina agilis*
326	Mollusca	Bivalvia		Tellinidae	*Tellinidae sp*
306	Annelida	Polychaeta		Terebellidae	*Terebellidae sp*
25	Annelida	Polychaeta		Cirratulidae	*Tharyx sp*
175	Mollusca	Gastropoda		Pyramidellidae	*Turbonilla sp*
324	Arthropoda	Crustacea	Amphipoda	Aoridae	*Unciola dissimillis*
299	Arthropoda	Crustacea	Amphipoda	Aoridae	*Unciola serrata*
280	Arthropoda	Crustacea	Amphipoda	Aoridae	*Unciola sp*
56	Arthropoda	Crustacea	Decapoda	Xanthidae	*Xanthidae sp*

Table 2. Taxa within top 99% of the fauna in at least one region.

		Average Abundance (per sample)				Percent of Fauna			
Species	IDCode	Inlet	Nova Scotia Bar	Grassy Bay	Pmpkin Patch Channel	Inlet	Nova Scotia Bar	Grassy Bay	Pmpkin Patch Channel
Acanthohaustorius millsi	Acanmill	3.3	0.4	0.0	0.0	0.27	0.05	0.00	0.00
Ampelisca sp	Ampesp	746.6	377.6	530.4	655.7	60.47	48.59	43.54	65.41
Aricidea catherinae	Ariccath	0.4	2.4	3.7	0.0	0.04	0.31	0.31	0.00
Balanus amphitrite	Balaamph	1.7	0.0	0.0	0.3	0.14	0.00	0.00	0.03
Balanus sp	Balasp	7.7	0.2	0.0	0.0	0.62	0.02	0.00	0.00
Capitella capitata	Capicapi	3.4	34.0	13.0	1.0	0.28	4.38	1.06	0.10
Capitellidae sp	Capisp	59.2	56.0	15.6	38.0	4.79	7.21	1.28	3.79
Caprellidae sp	Caprsp	0.0	2.4	0.0	0.0	0.00	0.30	0.00	0.00
Carcinus maenas	Carcmaen	1.1	0.2	0.0	0.0	0.09	0.02	0.00	0.00
Corophium sp	Corosp	2.9	25.7	188.5	16.0	0.23	3.30	15.48	1.60
Crepidula fornicata	Crepforn	1.5	4.8	7.7	6.7	0.12	0.62	0.63	0.67
Crepidula plana	Crepplan	0.8	1.5	0.5	0.0	0.06	0.19	0.04	0.00
Cyathura polita	Cyatpoli	0.0	0.0	2.5	0.0	0.00	0.00	0.21	0.00
Dyspanopeus sayi	Dyspsayi	1.3	0.4	0.1	0.0	0.11	0.05	0.01	0.00
Elasmopus levis	Elaslevi	0.2	0.8	0.2	0.7	0.01	0.11	0.02	0.07
Erichthonius brasiliensis	Ericbras	0.0	2.1	0.0	0.0	0.00	0.28	0.00	0.00
Eteone heteropoda	Eteohete	6.3	7.3	25.0	7.3	0.51	0.93	2.06	0.73
Eumida sanguinea	Eumisang	0.6	1.1	2.4	5.3	0.05	0.14	0.19	0.53
Gammarus mucronatus	Gammmucr	0.0	1.2	0.1	0.7	0.00	0.16	0.01	0.07
Gemma gemma	Gemmgemm	0.4	0.6	0.4	0.0	0.03	0.07	0.03	0.00
Glycera americana	Glycamer	1.1	0.5	0.4	0.3	0.09	0.06	0.03	0.03
Harmothoe imbricata	Harmimbr	7.1	0.3	0.0	0.3	0.57	0.04	0.00	0.03
Harmothoe sp	Harmsp	11.0	3.1	0.5	0.3	0.89	0.39	0.04	0.03
Heteromysis formosa	Heteform	0.6	0.9	0.1	0.0	0.05	0.11	0.01	0.00
Hydroides dianthus	Hydrdian	0.5	2.5	0.0	0.0	0.04	0.33	0.00	0.00
Ilyanassa obsoleta	Ilyaobso	0.0	7.2	2.5	26.3	0.00	0.92	0.21	2.63
Lysianopsis alba	Lysialba	1.8	10.0	1.5	4.3	0.14	1.28	0.12	0.43
Melita nitida	Meliniti	2.5	5.6	2.5	7.0	0.20	0.72	0.20	0.70
Mercenaria mercenaria	Mercmerc	2.0	1.3	0.8	0.0	0.16	0.17	0.07	0.00
Microphthalmus aberrans	Micraber	7.8	0.1	0.0	0.0	0.63	0.01	0.00	0.00
Microdeutopus gryllotalpa	Micrgryl	1.6	33.6	11.5	0.3	0.13	4.32	0.94	0.03
Mytilus edulis	Mytiedul	143.2	0.2	0.0	0.0	11.60	0.03	0.00	0.00

Table 2. Taxa within top 99% of the fauna in at least one region.

		Average Abundance (per sample)				Percent of Fauna			
Species	IDCode	Inlet	Nova Scotia Bar	Grassy Bay	Pmpkin Patch Channel	Inlet	Nova Scotia Bar	Grassy Bay	Pmpkin Patch Channel
Nephtys picta	Nephpict	0.7	0.9	0.0	0.0	0.05	0.11	0.00	0.00
Nereis succinea	Neresucc	10.2	5.0	11.8	4.3	0.83	0.64	0.97	0.43
Nucula proxima	Nucuprox	1.4	4.7	0.0	0.0	0.11	0.61	0.00	0.00
Nucula sp	Nucusp	1.0	0.0	0.0	0.0	0.08	0.00	0.00	0.00
Oligochaeta sp	Oligsp	40.7	31.9	19.7	41.0	3.29	4.10	1.62	4.09
Pagurus longicarpus	Pagulong	0.1	0.6	0.2	0.0	0.01	0.08	0.02	0.00
Pagurus sp	Pagusp	0.4	0.6	0.2	0.0	0.03	0.08	0.02	0.00
Panopeus herbstii	Panoherb	0.3	0.8	0.0	0.0	0.03	0.11	0.00	0.00
Paranaitis speciosa	Paraspec	0.6	0.6	0.0	0.0	0.04	0.08	0.00	0.00
Paraphoxus spinosus	Paraspin	3.1	4.6	0.1	0.0	0.25	0.60	0.01	0.00
Pholoe minuta	Pholminu	0.4	0.6	0.0	0.0	0.04	0.08	0.00	0.00
Podarke obscura	Podaobsc	0.1	0.4	3.5	0.0	0.01	0.05	0.29	0.00
Polydora sp	Polydora	4.3	0.0	0.0	0.0	0.35	0.00	0.00	0.00
Polygordius sp	Polygord	50.0	1.3	0.0	0.0	4.05	0.17	0.00	0.00
Polydora ligni	Polylign	21.2	14.8	8.9	1.0	1.72	1.91	0.73	0.10
Protohaustorius wigleyi	Protwigl	2.0	0.1	0.0	0.0	0.16	0.01	0.00	0.00
Rhepoxynius epistomus	Rhepepis	3.3	1.8	0.0	0.0	0.27	0.23	0.00	0.00
Sabellaria vulgaris	Sabevulg	0.1	2.4	0.1	0.0	0.01	0.31	0.01	0.00
Scoloplos robustus	Scolrobu	0.3	1.0	0.5	6.3	0.02	0.13	0.04	0.63
Scolecolepides viridis	Scolviri	1.4	0.7	1.3	1.3	0.12	0.09	0.10	0.13
Spisula solidissima	Spissoli	0.7	0.2	0.0	0.0	0.06	0.02	0.00	0.00
Stenothoe minuta	Stenminu	0.0	2.3	0.0	0.0	0.00	0.29	0.00	0.00
Streblospio benedicti	Strebene	16.9	71.0	344.3	169.0	1.37	9.13	28.26	16.86
Tellina agilis	Tellagil	21.0	21.4	4.9	2.7	1.70	2.75	0.40	0.27
Tellinidae sp	Tellsp	0.7	0.0	0.0	0.0	0.06	0.00	0.00	0.00
Tharyx sp	Tharsp	28.1	18.1	8.0	4.3	2.27	2.34	0.65	0.43
Unciola dissimillis	Uncidiss	0.7	0.6	0.0	0.0	0.06	0.07	0.00	0.00
Unciola serrata	Unciserr	0.0	1.7	0.0	0.0	0.00	0.22	0.00	0.00
Unciola sp	Uncisp	1.1	0.3	0.5	0.0	0.09	0.04	0.04	0.00
Xanthidae sp	Xantsp	1.4	0.4	0.2	0.3	0.11	0.05	0.01	0.03
Fraction of Fauna						**99.51**	**99.41**	**99.69**	**99.87**
Average Abundance		**1235**	**777**	**1218**	**1002**				

Table 3. Occurrence of commerial shellfish

Region	Common Name	Species Name	Occurrence (Number of Stations)
Inlet (27 stations)	Razor Clam	Ensis directus	2
	Hard Clam	Mercenaria mercenaria	12
	Soft Shell Clam	Mya arenaria	2
	Blue Mussel	Mytilus edulis	15
	Surf Clam	Spisula solidissima	7
Nova Scotia Bar (34 stations)	Razor Clam	Ensis directus	0
	Hard Clam	Mercenaria mercenaria	13
	Soft Shell Clam	Mya arenaria	1
	Blue Mussel	Mytilus edulis	3
	Surf Clam	Spisula solidissima	7
Grassy Bay (22 stations)	Razor Clam	Ensis directus	0
	Hard Clam	Mercenaria mercenaria	8
	Soft Shell Clam	Mya arenaria	8
	Blue Mussel	Mytilus edulis	0
	Surf Clam	Spisula solidissima	0
Pumpkin Patch Ch. (3 stations)	Razor Clam	Ensis directus	0
	Hard Clam	Mercenaria mercenaria	0
	Soft Shell Clam	Mya arenaria	0
	Blue Mussel	Mytilus edulis	0
	Surf Clam	Spisula solidissima	0

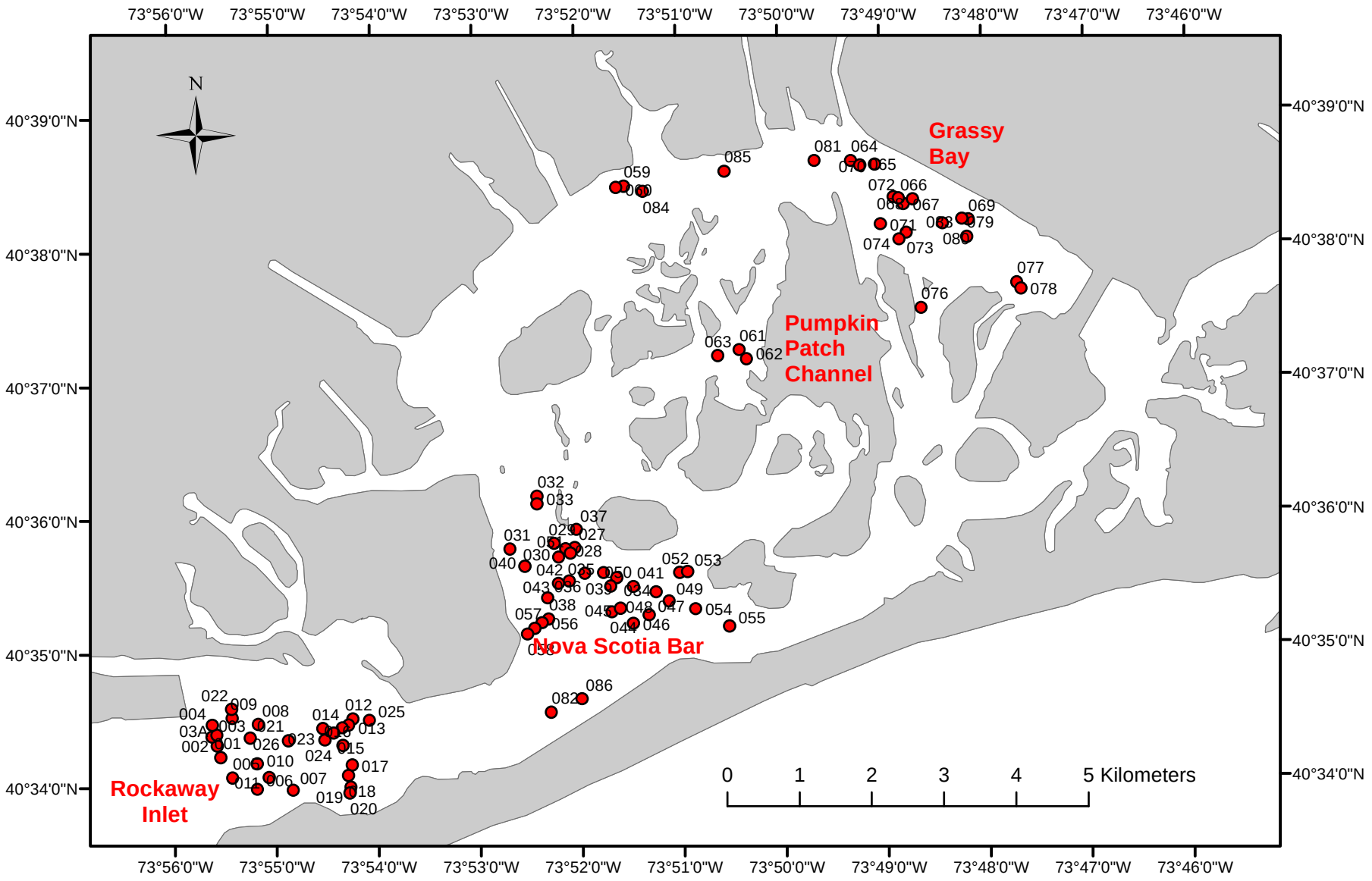


Figure 1. Jamaica Bay sampling locations.

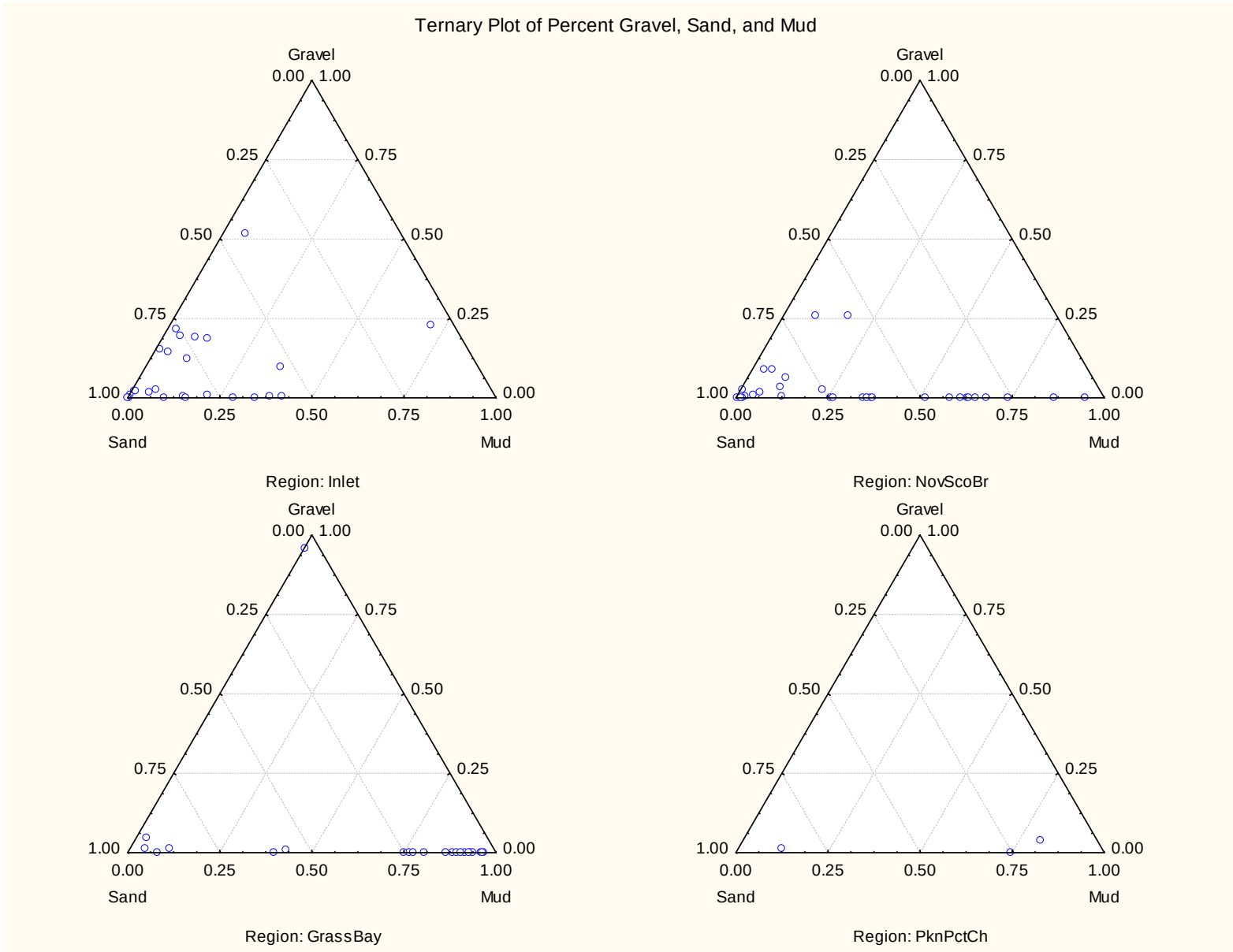


Figure 2. Ternary plots of sediment data.

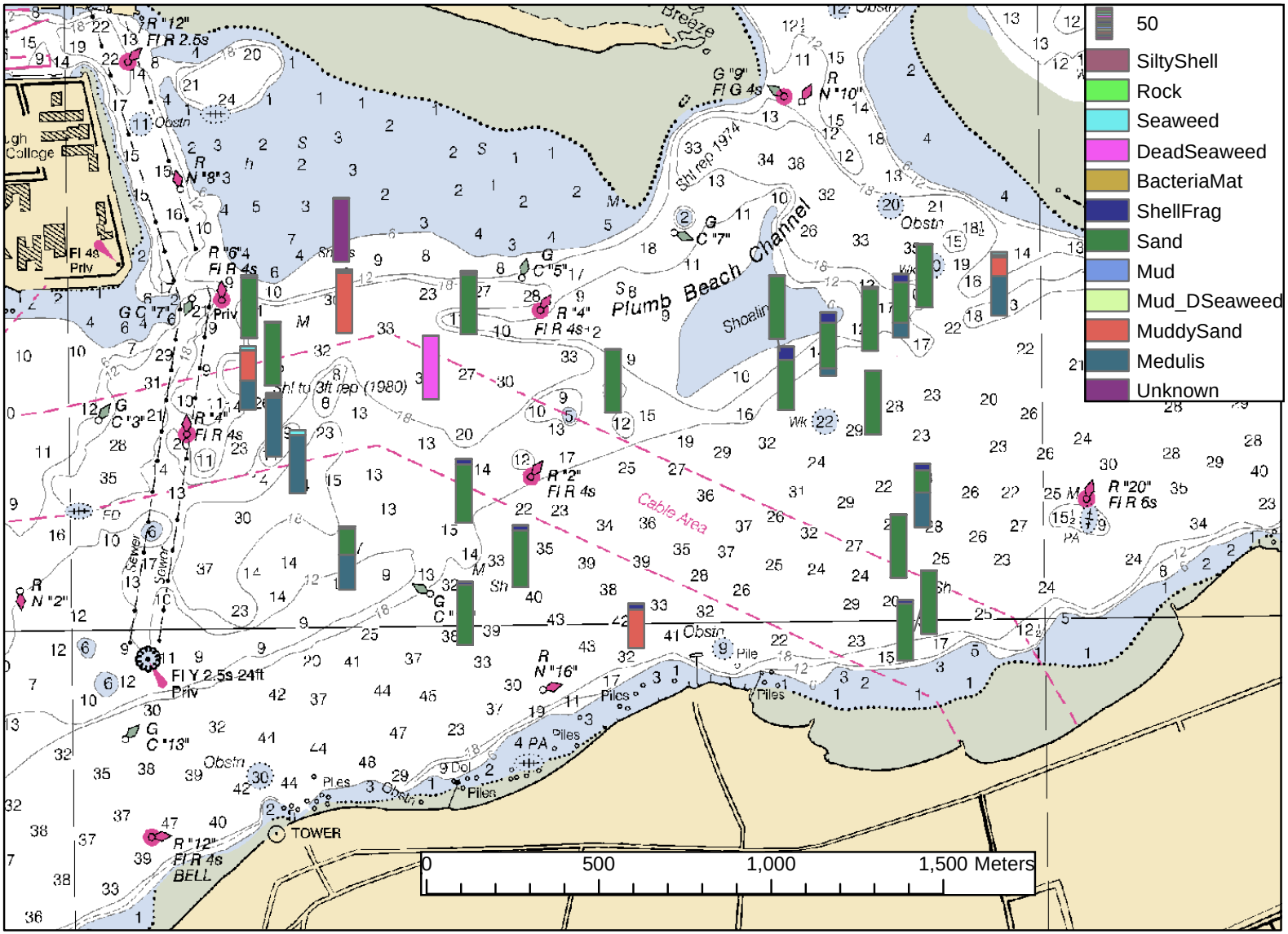
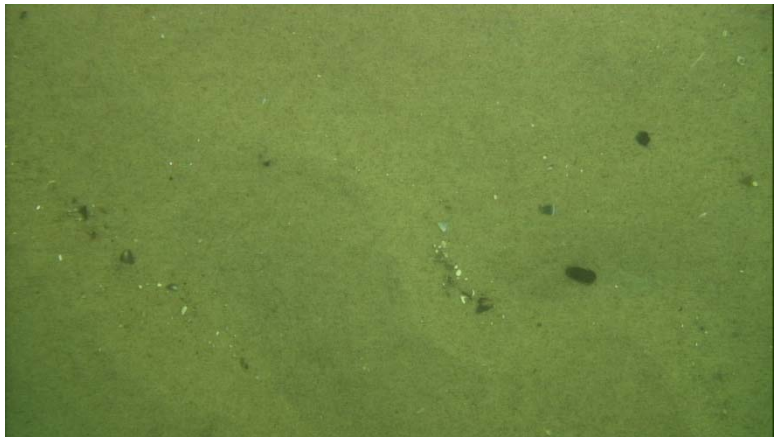


Figure 3. Rockaway Inlet surficial sediment cover.

JB09-01

JB09-25

JB09-26



JB09-09

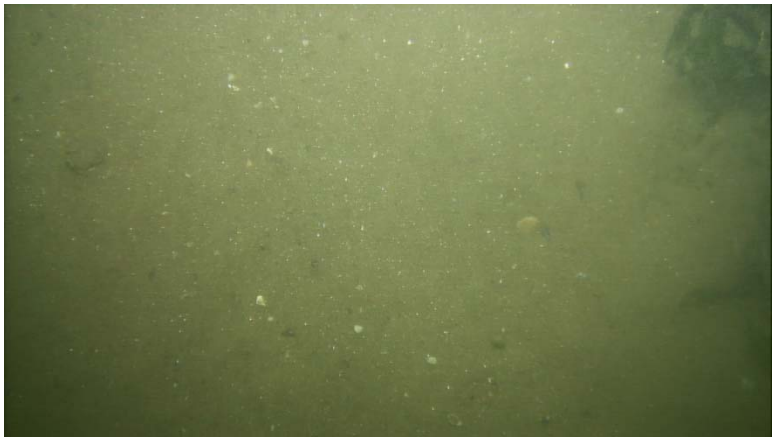


Figure 4. Representative bottom images for Rockaway Inlet.

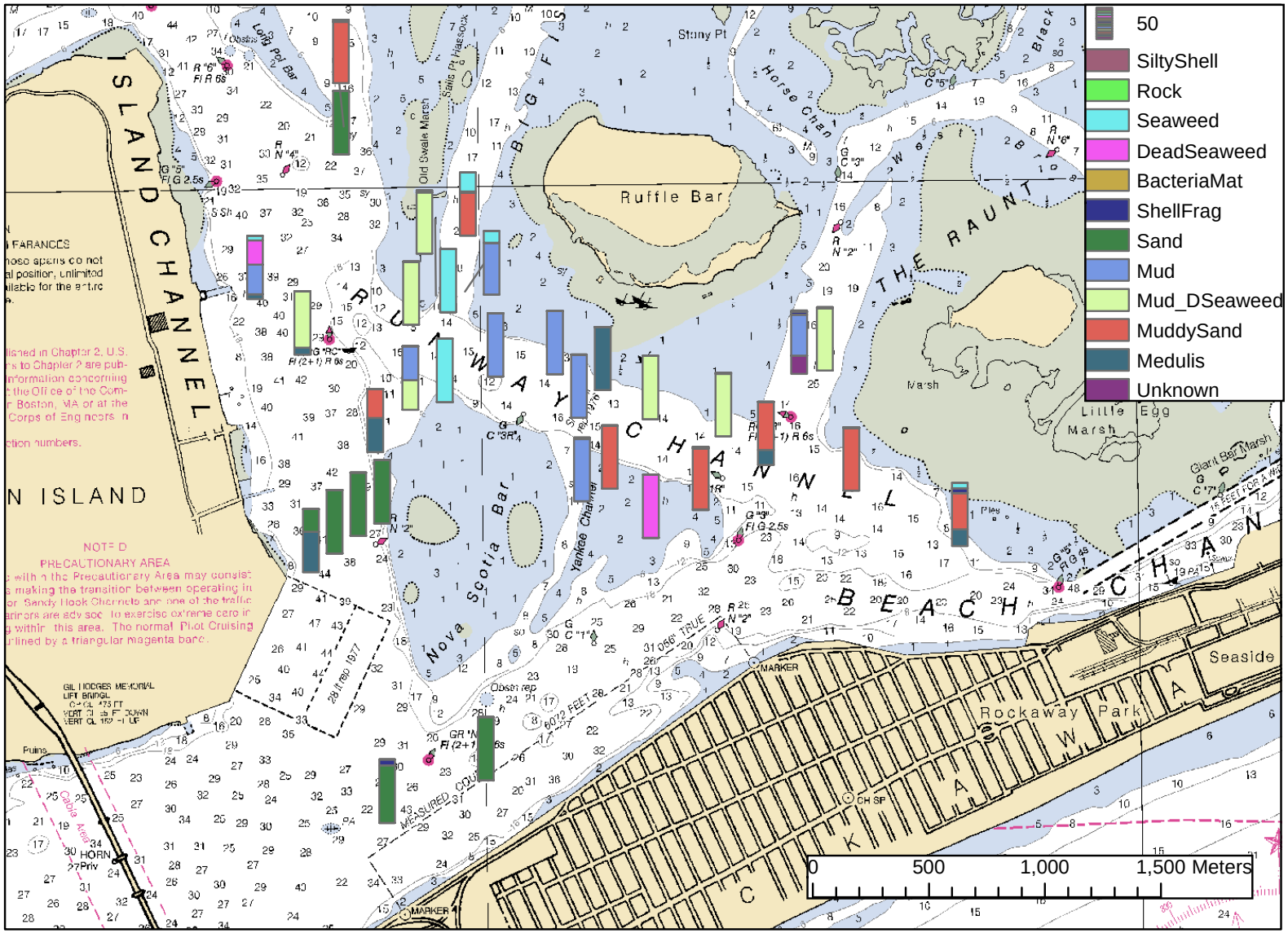
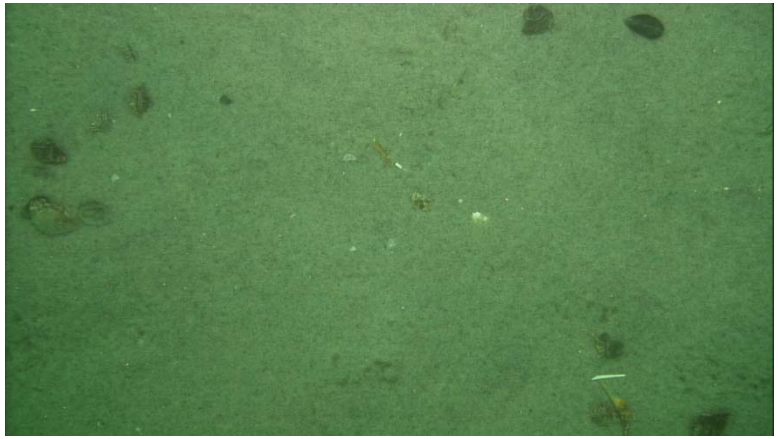
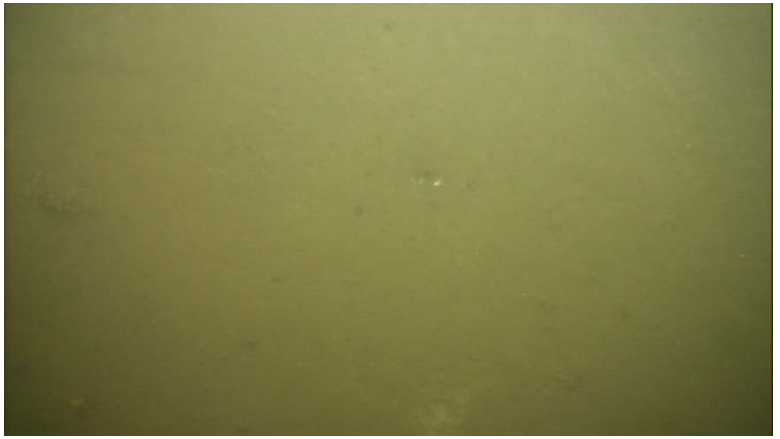


Figure 5. Nova Scotia Bar surficial sediment cover.

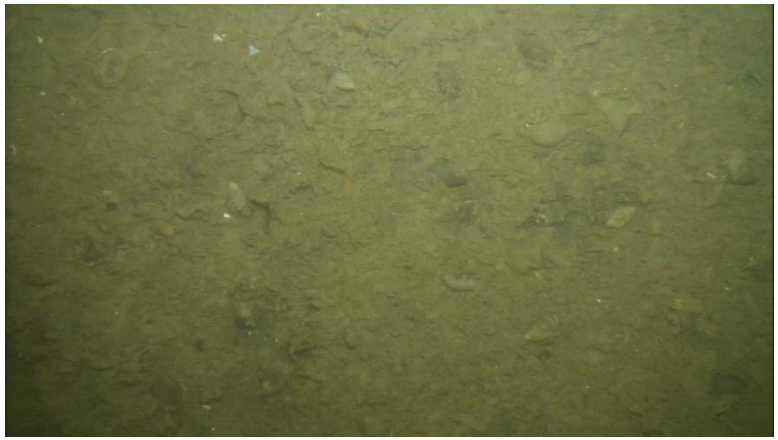


JB09-86



JB09-39

JB09-46



JB09-37

Figure 6. Representative bottom images for Nova Scotia Bar.

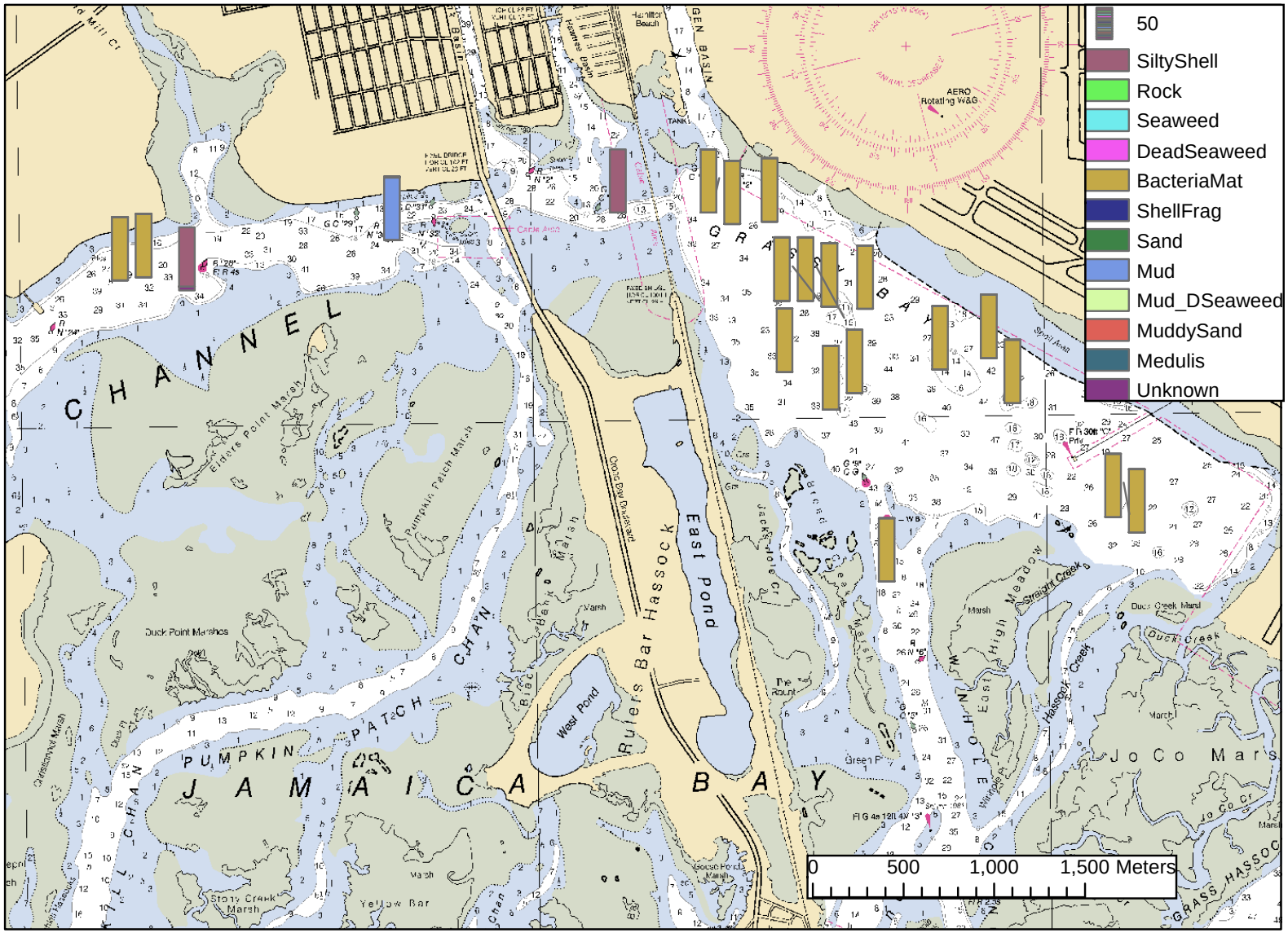


Figure 7. Grassy Bay surficial sediment cover.

JB09-71

JB09-74

JB09-81

JB09-73

Figure 8. Representative bottom images for Grassy Bay.

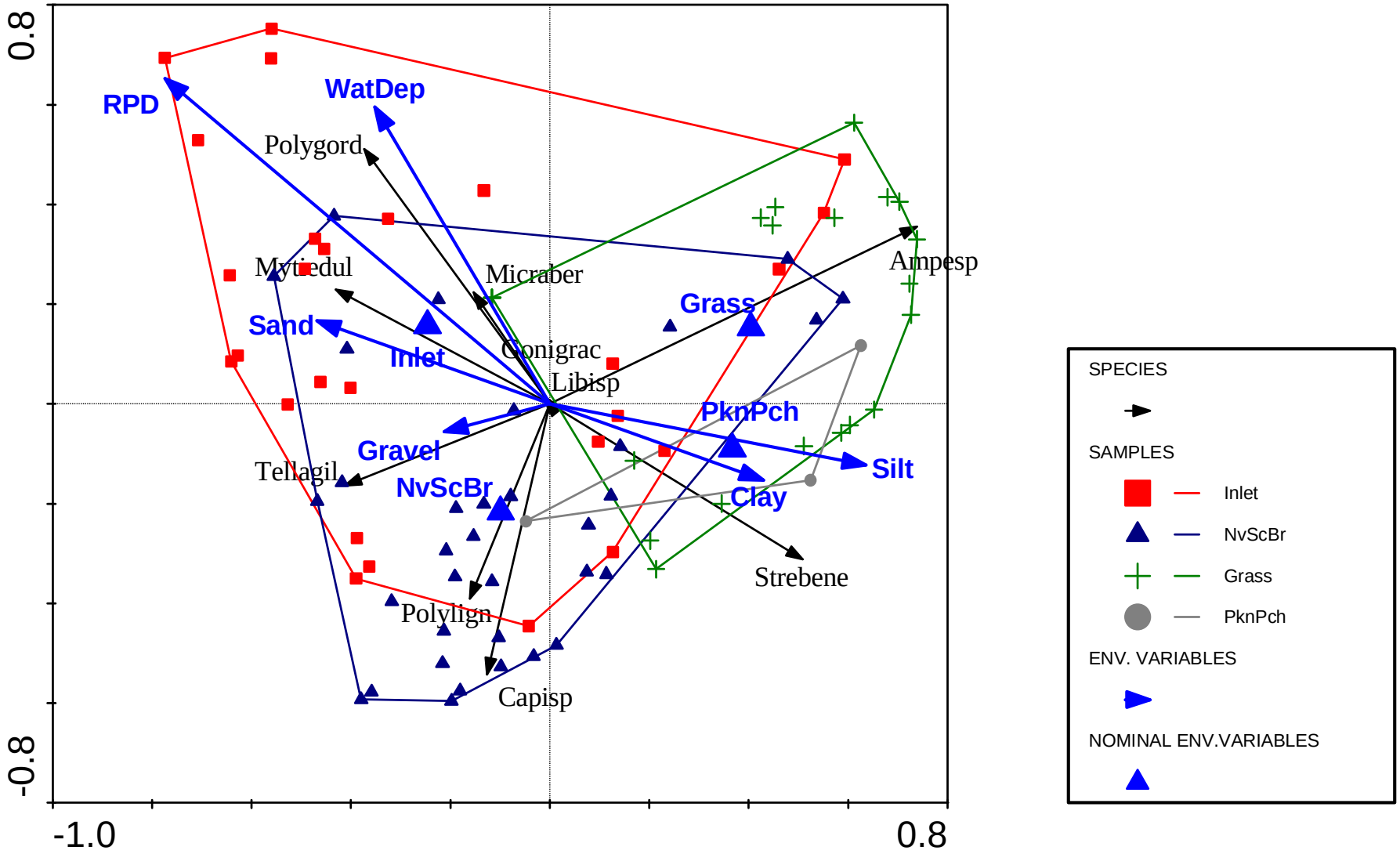


Figure 9. RDA analysis in Jamaica Bay. Samples are colored and enclosed in envelopes based on membership in each geographic area. Sample proximity implies similarity. See Table 2 for species abbreviation codes.

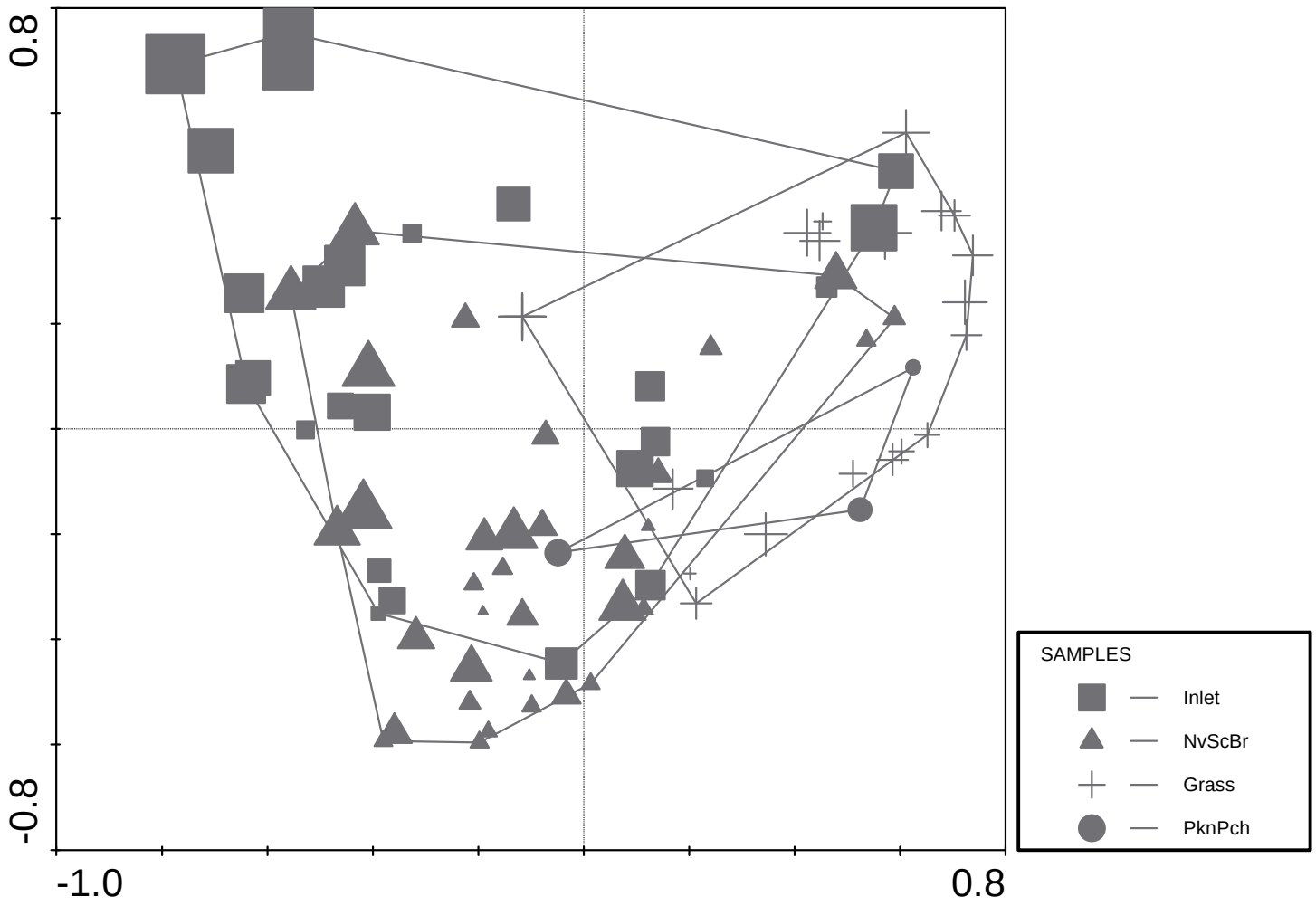


Figure 10. Water depth. Points represent samples and size of the point is proportional to value.

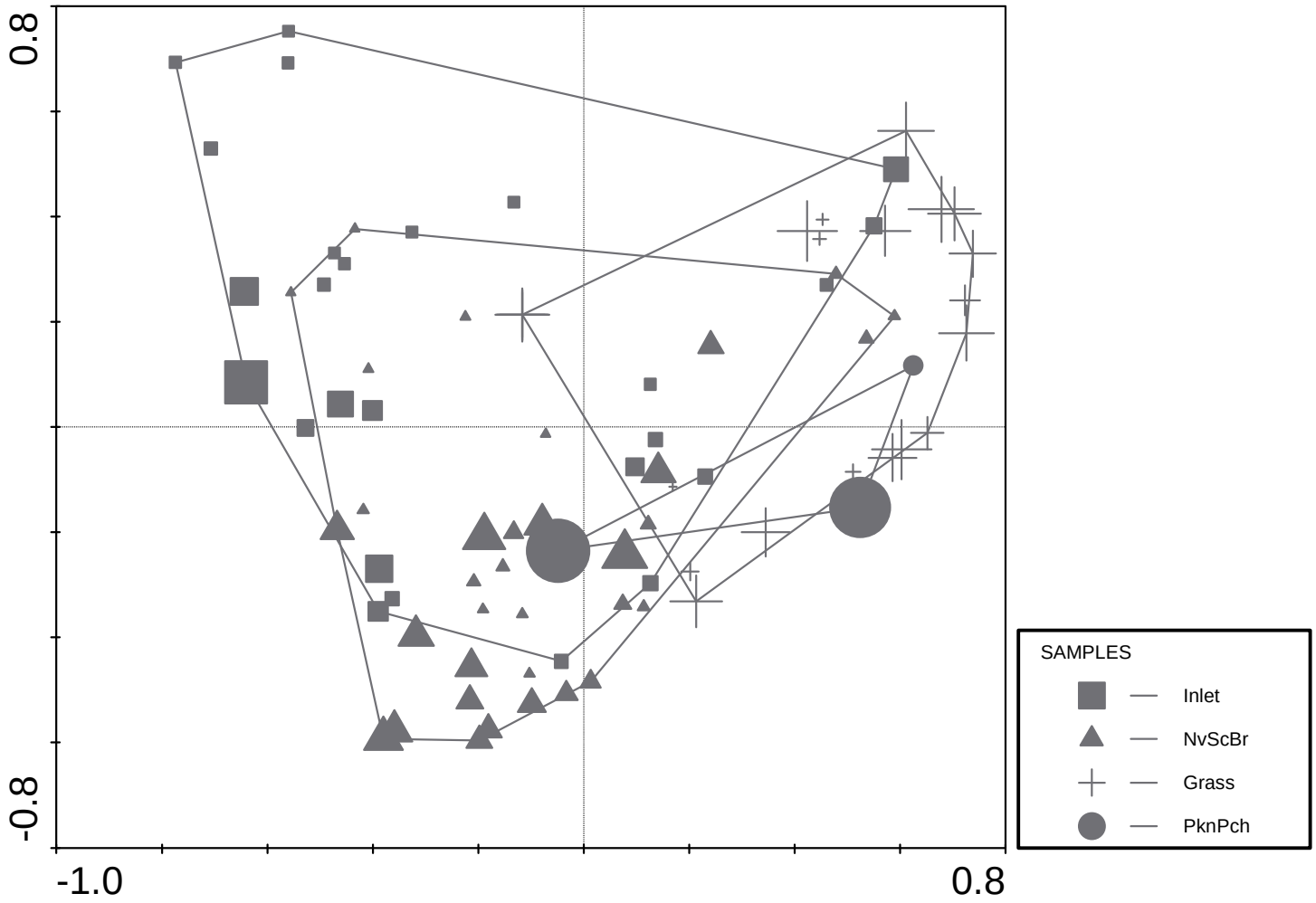


Figure 11. Silt content in samples. Points represent samples and size of the point is proportional to value.

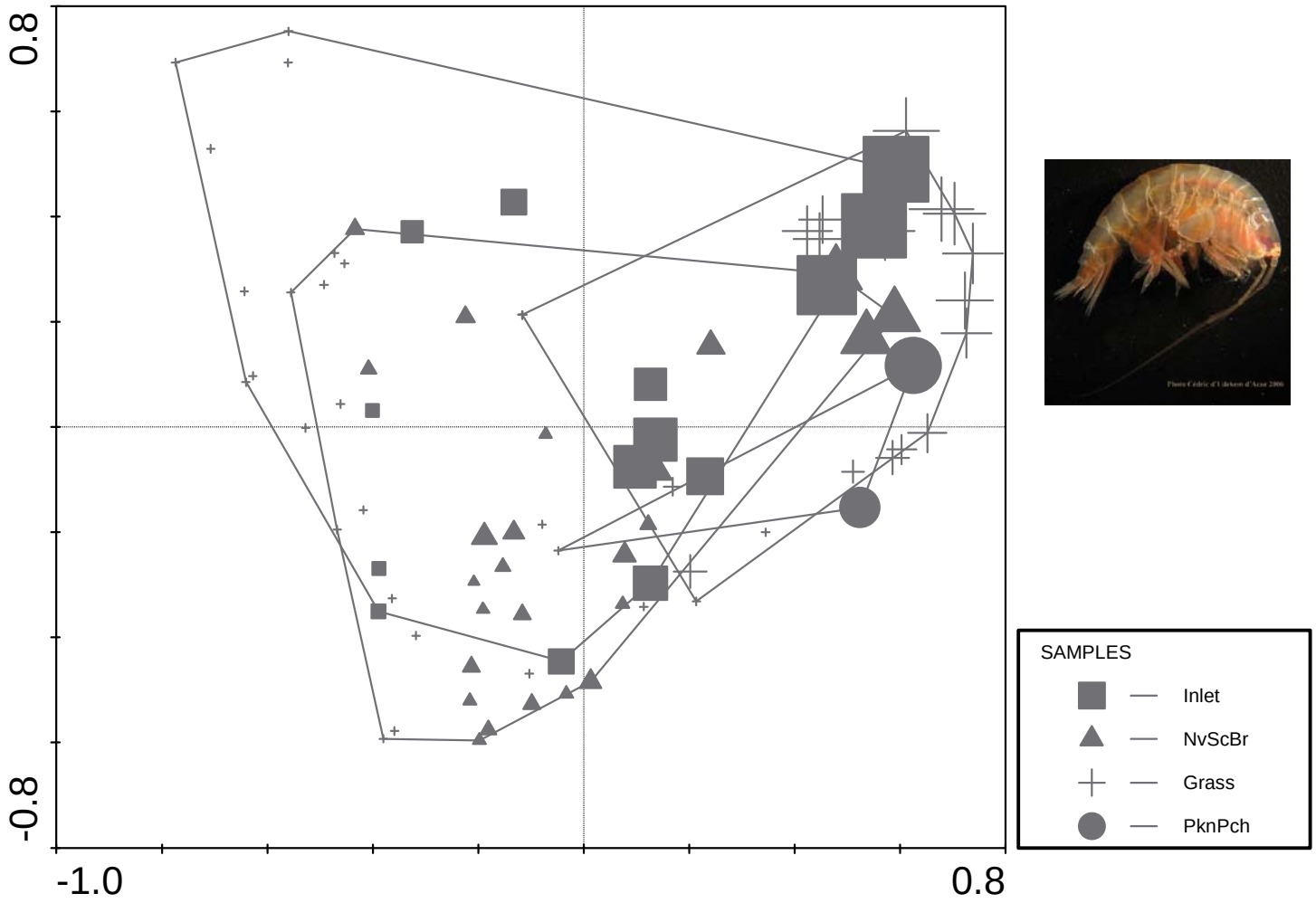


Figure 12. Relative abundance of the tubicolous amphipod *Ampelisca* sp. Points represent samples. Symbol diameters are proportional to relative abundance.

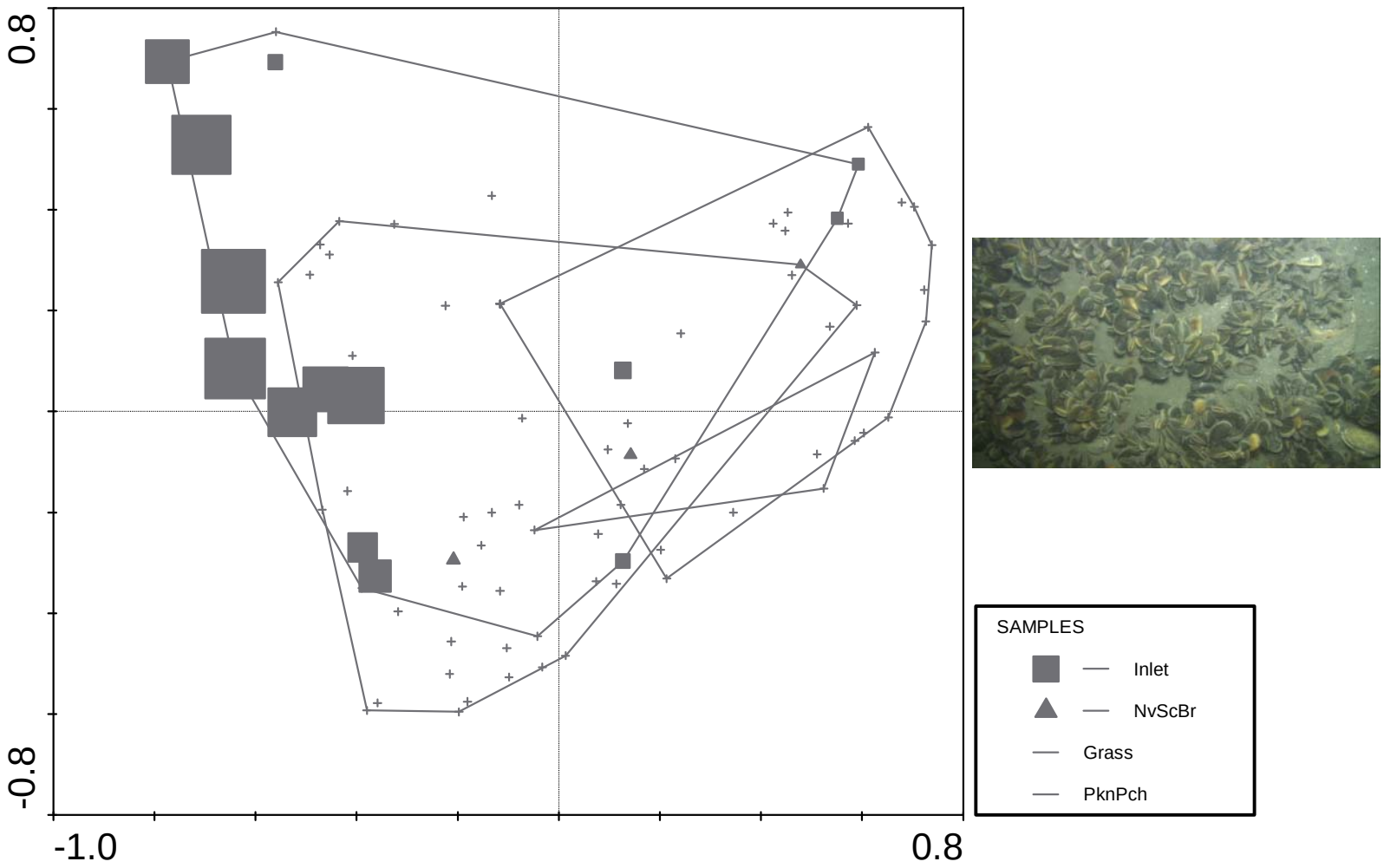


Figure 13. Relative abundance of the blue mussel *Mytilus edulis*. Points represent samples. Symbol diameters are proportional to relative abundance.

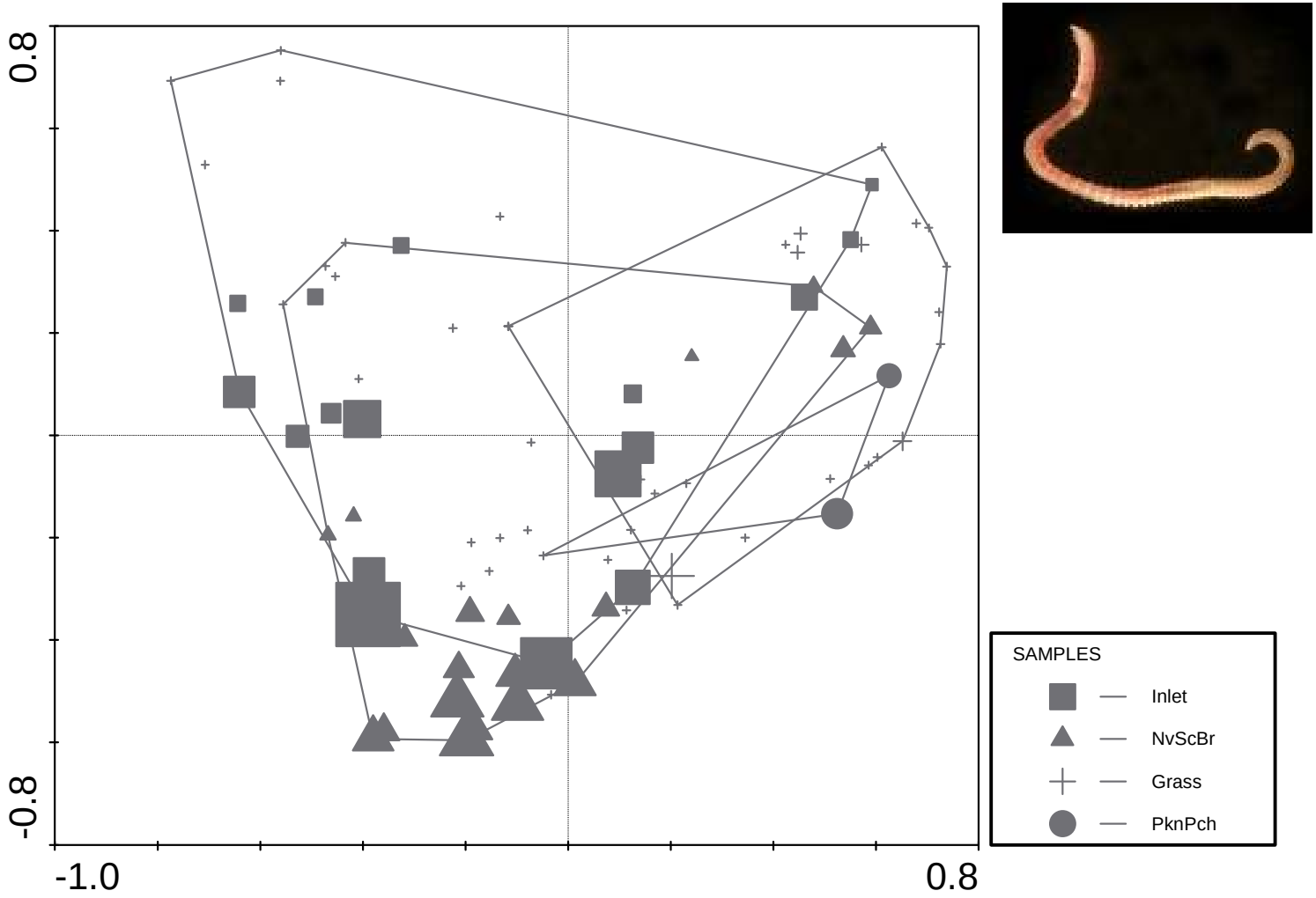


Figure 14. Relative abundance of the capitellid polychaete, *Capitella* sp. Points represent samples. Symbol diameters are proportional to relative abundance.

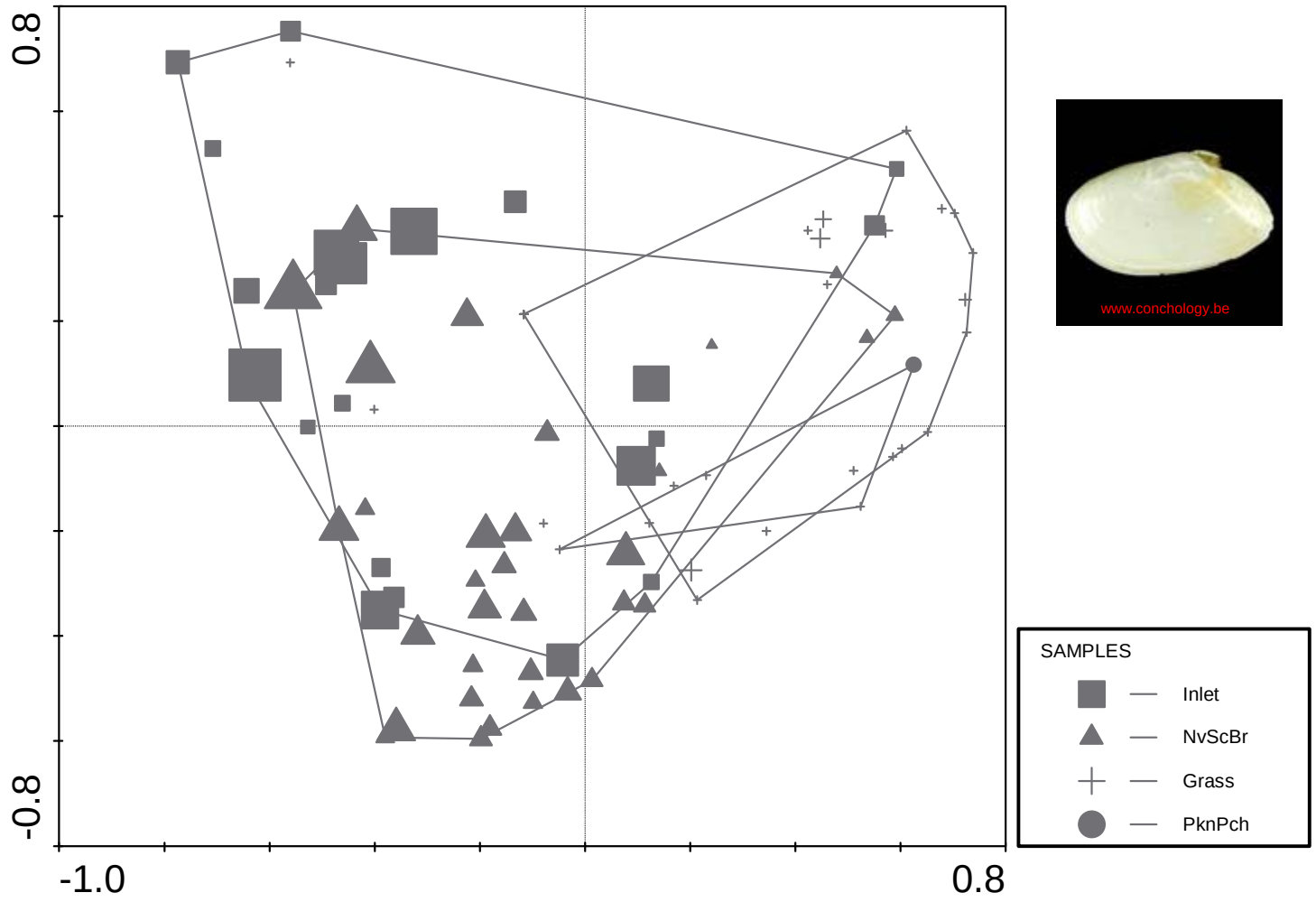


Figure 15. Relative abundance of the bivalve, *Tellina agilis.* Points represent samples. Symbol diameters are proportional to relative abundance.

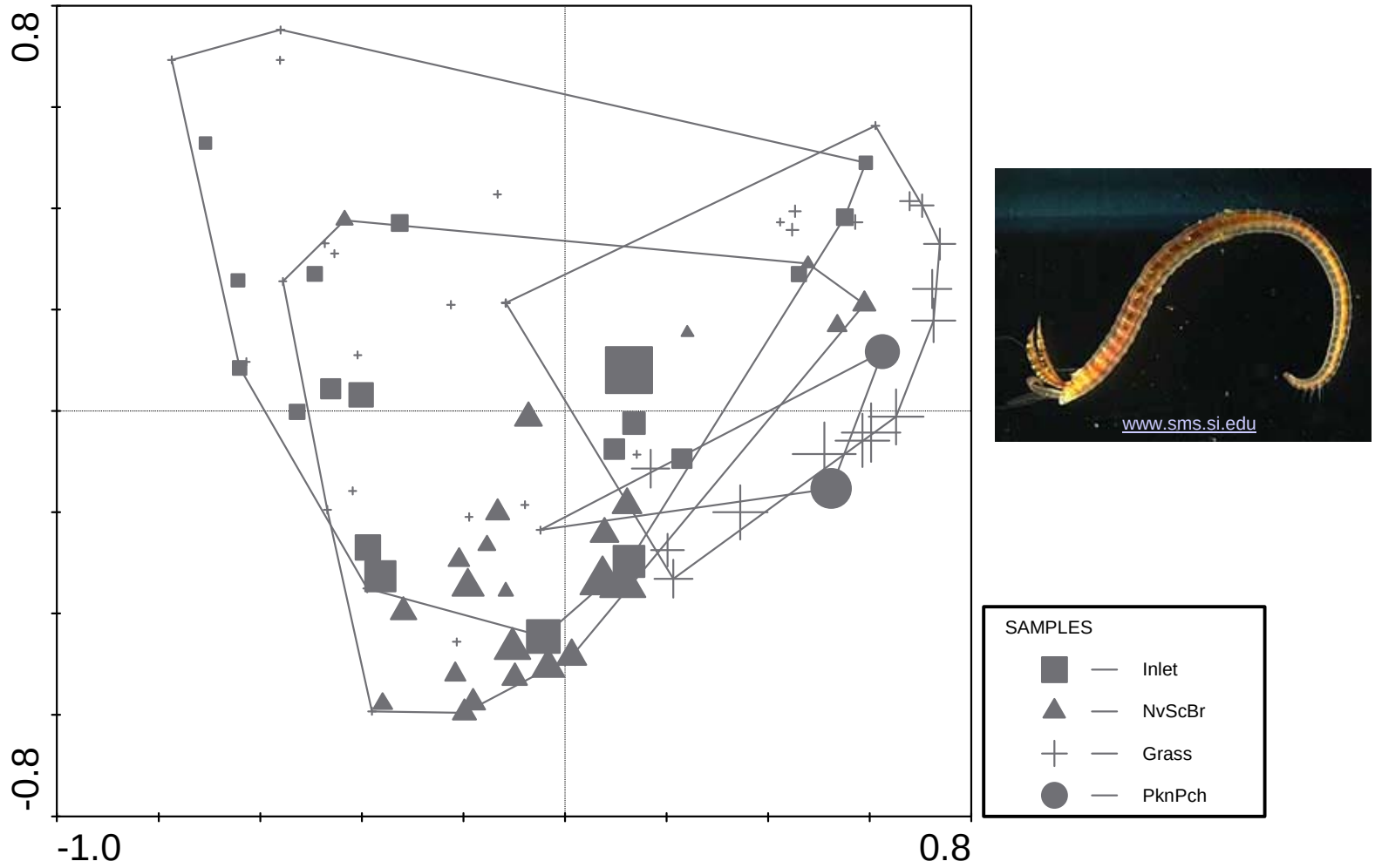
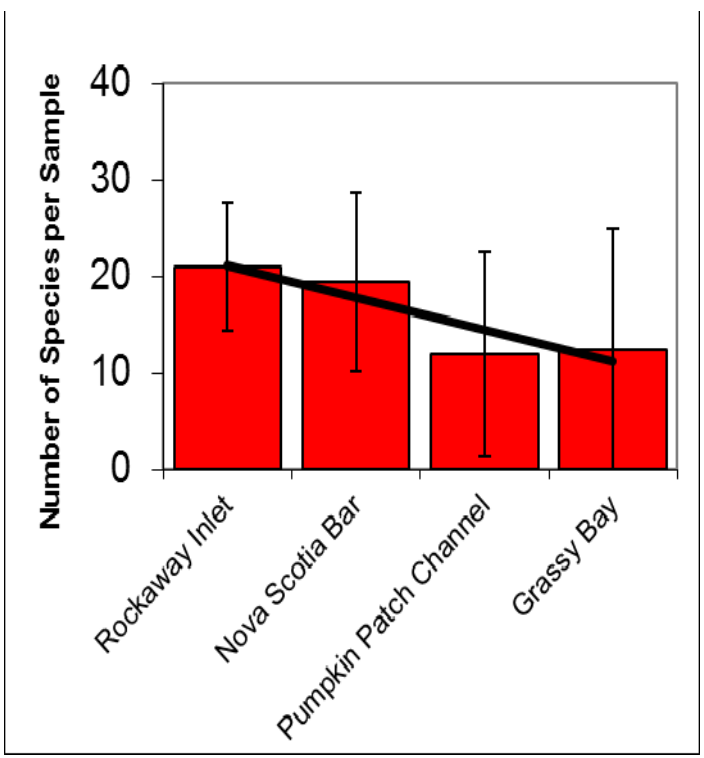
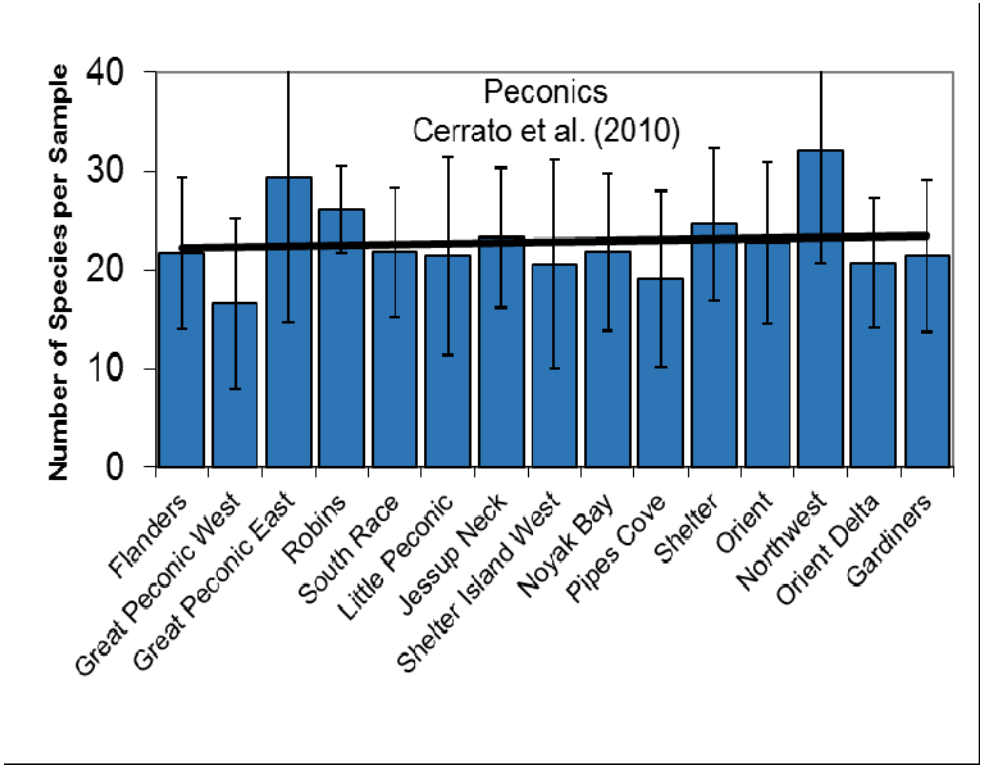


Figure 16. Relative abundance of the polychaete worm, *Streblospio benedicti.* Points represent samples. Symbol diameters are proportional to relative abundance.





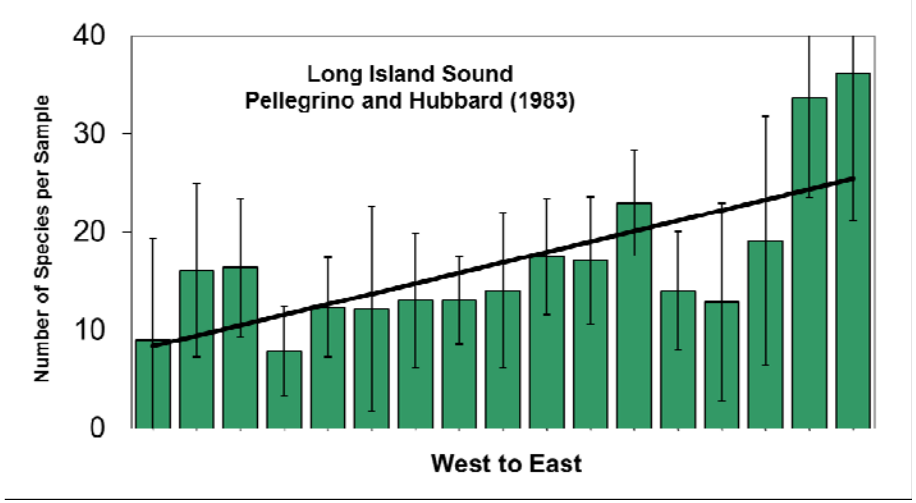


Figure 17. West to east trends in species richness per sample in Jamaica Bay compared to the Peconics Estuary System and Long island Sound.

Appendix 1 - Field Data

SampleID	StatID	Region	Date	Latitude	Longitude	Water Depth (m)	RPD (cm)	Grab Depth (cm)
JB001	004	Inlet	06/17/2009	40.574353	-73.927033	7.2	2.0	5.0
JB002	003	Inlet	06/17/2009	40.572847	-73.927090	5.9	1.0	5.0
JB003	002	Inlet	06/17/2009	40.571772	-73.926227	3.8	1.0	7.0
JB004	001	Inlet	06/17/2009	40.570288	-73.925688	9.1	3.0	10.0
JB005	03A	Inlet	06/17/2009	40.573120	-73.926288	9.0	0.0	10.0
JB006	005	Inlet	06/18/2009	40.567755	-73.923778	3.5	1.0	8.0
JB007	006	Inlet	06/18/2009	40.566272	-73.919750	14.0	8.0	6.0
JB008	007	Inlet	06/18/2009	40.566132	-73.913892	10.4	4.0	6.0
JB009	011	Inlet	06/18/2009	40.567763	-73.917833	12.0	10.0	10.0
JB010	010	Inlet	06/18/2009	40.569470	-73.919747	6.4	0.5	6.0
JB011	019	Inlet	06/18/2009	40.566417	-73.904447	7.7	3.0	8.0
JB012	020	Inlet	06/18/2009	40.565717	-73.904673	6.6	0.5	7.0
JB013	018	Inlet	06/18/2009	40.567890	-73.904863	11.8	10.0	8.0
JB014	017	Inlet	06/18/2009	40.569198	-73.904232	9.6	2.0	6.0
JB015	016	Inlet	06/18/2009	40.571647	-73.905685	9.4	4.0	8.0
JB016	009	Inlet	06/19/2009	40.575205	-73.923753	8.4	2.0	8.0
JB017	022	Inlet	06/19/2009	40.576330	-73.923842	2.9	1.5	6.0
JB018	008	Inlet	06/19/2009	40.574395	-73.919500	4.4	2.5	6.0
JB019	021	Inlet	06/19/2009	40.572710	-73.920825	8.3	1.5	6.5
JB020	025	Inlet	06/19/2009	40.574710	-73.901305	5.8	1.5	9.0
JB021	012	Inlet	06/19/2009	40.574948	-73.904028	8.0	1.5	8.5
JB022	013	Inlet	06/19/2009	40.574168	-73.904688	5.1	10.0	6.0
JB023	014	Inlet	06/19/2009	40.573837	-73.905745	8.0	2.5	11.0
JB024	015	Inlet	06/19/2009	40.573188	-73.907192	6.7	1.0	7.5
JB025	023	Inlet	06/19/2009	40.573782	-73.908937	4.2	1.5	5.5
JB026	024	Inlet	06/19/2009	40.572308	-73.908650	10.8	1.0	10.0
JB027	026	Inlet	06/19/2009	40.572300	-73.914587	4.0	4.0	8.5
JB028	044	NvScBr	06/24/2009	40.587862	-73.861445	2.8	2.0	6.5
JB029	045	NvScBr	06/24/2009	40.588325	-73.860022	2.3	2.0	8.0
JB030	046	NvScBr	06/24/2009	40.586395	-73.857960	7.7	0.5	11.0
JB031	047	NvScBr	06/24/2009	40.587438	-73.855403	3.4	0.5	6.5
JB032	055	NvScBr	06/24/2009	40.585917	-73.842230	5.1	0.5	5.0
JB033	054	NvScBr	06/24/2009	40.588125	-73.847720	5.1	0.5	8.0
JB034	049	NvScBr	06/24/2009	40.589163	-73.852055	5.0	1.0	5.5
JB035	053	NvScBr	06/24/2009	40.592805	-73.848992	7.3	3.5	7.0
JB036	052	NvScBr	06/24/2009	40.592692	-73.850298	5.8	0.5	11.0
JB037	048	NvScBr	06/24/2009	40.590305	-73.854203	4.8	0.5	10.0
JB038	041	NvScBr	06/24/2009	40.591005	-73.857903	4.5	1.0	10.0
JB039	050	NvScBr	06/24/2009	40.591093	-73.861542	4.9	0.5	10.0
JB040	034	NvScBr	06/24/2009	40.592157	-73.860578	4.9	0.5	10.0
JB041	035	NvScBr	06/24/2009	40.592795	-73.862735	5.5	0.5	10.0
JB042	039	NvScBr	06/24/2009	40.592740	-73.865760	4.8	0.5	10.0
JB043	051	NvScBr	06/24/2009	40.595262	-73.868133	8.0	0.0	10.0
JB044	037	NvScBr	06/24/2009	40.598220	-73.867082	5.7	1.5	5.0

Appendix 1 - Field Data

SampleID	StatID	Region	Date	Latitude	Longitude	Water Depth (m)	RPD (cm)	Grab Depth (cm)
JB045	036	NvScBr	06/24/2009	40.589693	-73.871937	11.5	1.5	5.0
JB046	033	NvScBr	06/25/2009	40.601452	-73.873478	11.3	1.0	10.0
JB047	032	NvScBr	06/25/2009	40.602412	-73.873473	8.3	1.0	4.5
JB048	031	NvScBr	06/25/2009	40.595868	-73.877960	12.6	1.0	10.0
JB049	040	NvScBr	06/25/2009	40.593692	-73.875583	13.2	0.0	10.0
JB050	030	NvScBr	06/25/2009	40.594790	-73.870028	9.5	0.5	10.0
JB051	029	NvScBr	06/25/2009	40.596503	-73.870768	9.9	0.5	10.0
JB052	028	NvScBr	06/25/2009	40.595805	-73.868890	7.4	0.0	10.0
JB053	027	NvScBr	06/25/2009	40.595943	-73.867402	4.9	0.5	5.5
JB054	042	NvScBr	06/25/2009	40.591775	-73.868365	10.7	0.5	11.0
JB055	043	NvScBr	06/25/2009	40.591493	-73.870122	10.0	0.5	11.0
JB056	038	NvScBr	06/25/2009	40.587097	-73.871800	7.4	1.0	6.5
JB057	056	NvScBr	06/25/2009	40.586618	-73.872900	13.7	5.0	9.0
JB058	057	NvScBr	06/25/2009	40.585950	-73.874105	14.5	1.0	9.0
JB059	058	NvScBr	06/25/2009	40.585232	-73.875292	15.8	0.0	4.0
JB060	069	Grassy	06/26/2009	40.636293	-73.802355	10.1	0.0	10.0
JB061	083	Grassy	06/26/2009	40.636375	-73.803378	11.3	0.0	10.0
JB062	079	Grassy	06/26/2009	40.634128	-73.802638	6.2	0.5	3.5
JB063	078	Grassy	06/26/2009	40.627600	-73.793882	11.2	0.0	10.0
JB064	077	Grassy	06/26/2009	40.628375	-73.794530	8.6	0.0	10.0
JB065	080	Grassy	06/26/2009	40.635835	-73.806570	5.7	0.5	10.0
JB066	068	Grassy	06/26/2009	40.638898	-73.811397	7.3	0.5	10.0
JB067	067	Grassy	06/26/2009	40.638323	-73.812957	5.7	0.5	10.0
JB068	072	Grassy	06/26/2009	40.639030	-73.813722	7.1	0.5	10.0
JB069	066	Grassy	06/26/2009	40.639188	-73.814553	10.9	0.0	10.0
JB070	071	Grassy	06/26/2009	40.635820	-73.816705	11.1	0.0	10.0
JB071	073	Grassy	06/26/2009	40.634722	-73.812497	7.2	0.0	10.0
JB072	074	Grassy	06/26/2009	40.633923	-73.813718	10.8	0.0	10.0
JB073	063	PknPch	06/30/2009	40.619668	-73.843617	3.2	0.5	5.0
JB074	062	PknPch	06/30/2009	40.619218	-73.838922	5.3	0.0	10.0
JB075	061	PknPch	06/30/2009	40.620348	-73.840075	5.9	0.0	7.0
JB076	085	Grassy	06/30/2009	40.642637	-73.842180	3.7	5.0	9.0
JB077	084	Grassy	06/30/2009	40.640252	-73.855585	2.5	1.0	3.5
JB078	060	Grassy	06/30/2009	40.640805	-73.859950	12.5	0.5	10.0
JB079	059	Grassy	06/30/2009	40.640940	-73.858675	9.4	1.5	9.0
JB080	081	Grassy	06/30/2009	40.643835	-73.827425	9.4	0.0	4.0
JB081	064	Grassy	06/30/2009	40.643777	-73.821470	10.5	0.5	10.0
JB082	065	Grassy	06/30/2009	40.643202	-73.819978	9.4	0.5	10.0
JB083	070	Grassy	06/30/2009	40.643293	-73.817540	7.3	0.5	10.0
JB084	076	Grassy	06/30/2009	40.625335	-73.810223	9.3	0.0	10.0
JB085	086	NvScBr	06/30/2009	40.577068	-73.866520	12.9	1.0	10.0
JB086	082	NvScBr	06/30/2009	40.575458	-73.871577	13.3	3.5	6.5

Appendix 2 - Grain Size Summary

SampleID	StatID	Gravel	Sand	Mud	Silt	Clay	Median phi	Mean phi	Standard Deviation	Skewness	Kurtosis
JB001	004	1.9	94.7	5.2	2.1	3.0	2.9	2.9	0.6	1.4	0.6
JB002	003	51.6	42.1	6.3	2.4	3.9	3.0	3.2	1.4	22.2	1.6
JB003	002	18.6	68.8	12.6	5.0	7.6	3.0	3.5	1.8	20.0	2.1
JB004	001	9.7	53.4	36.9	15.9	21.0	3.4	5.2	3.0	54.0	18.7
JB005	03A	23.1	6.1	70.8							
JB006	005	19.1	72.0	8.9	3.3	5.6	2.9	3.0	1.3	16.0	1.5
JB007	006	15.4	83.5	1.1	0.3	0.7	0.9	0.9	0.6	0.8	0.6
JB008	007	19.5	75.8	4.8	1.6	3.2	2.1	2.2	1.3	14.7	2.0
JB009	011	2.1	97.0	0.9	0.3	0.6	1.0	1.0	0.5	-0.1	0.4
JB010	010	2.6	90.9	6.5	2.4	4.0	2.9	2.9	1.0	12.8	1.0
JB011	019	0.0	99.5	0.4	0.2	0.3	2.1	2.1	0.3	0.0	0.1
JB012	020	2.2	96.9	1.0	0.4	0.6	2.2	2.2	0.5	0.2	0.4
JB013	018	0.7	99.0	0.3	0.1	0.1	1.3	1.3	0.4	-0.1	0.3
JB014	017	14.6	81.8	3.6	1.3	2.2	1.8	1.8	0.6	0.8	0.6
JB015	016	0.1	99.6	0.3	0.2	0.1	1.8	1.8	0.4	0.1	0.2
JB016	009	0.5	84.8	14.7	6.3	8.4	3.1	3.2	1.3	18.6	1.5
JB017	022	0.0	84.2	15.8	8.1	7.7	3.1	3.4	1.6	26.1	1.9
JB018	008	21.6	75.8	2.6	0.9	1.8	2.1	2.1	0.7	0.3	0.8
JB019	021	1.0	77.8	21.1	7.9	13.2	3.2	4.6	2.4	33.1	3.1
JB020	025	0.0	65.5	34.5	13.9	20.6	3.3	4.8	3.1	51.4	19.4
JB021	012	0.3	58.0	41.8	15.8	26.0	3.5	5.6	3.5	67.9	23.0
JB022	013	0.6	60.9	38.4	15.3	23.1	3.3	4.9	3.1	53.1	20.9
JB023	014	0.0	71.3	28.7	12.5	16.2	3.2	4.8	2.7	49.7	9.9
JB024	015	12.3	77.6	10.2	3.1	7.0	3.0	3.0	1.4	16.2	1.8
JB025	023	0.1	99.4	0.5	0.2	0.3	1.9	1.9	0.4	0.0	0.2
JB026	024	0.0	90.2	9.8	4.0	5.8	3.0	3.0	1.2	18.0	1.2
JB027	026	0.0	99.9	0.1	0.1	0.1	2.1	4.3	3.6	73.0	25.8
JB028	044	0.4	97.1	2.5	1.1	1.4	2.5	2.4	0.7	-0.2	1.0
JB029	045	0.0	98.1	1.9	0.8	1.1	2.2	2.2	0.6	0.4	0.5
JB030	046	0.1	64.1	35.7	14.8	20.9	3.3	5.2	3.3	63.0	18.7
JB031	047	26.1	56.5	17.4	6.4	11.0	3.1	4.5	3.1	51.7	7.9
JB032	055	26.0	65.4	8.6	4.0	4.6	2.8	2.8	1.6	18.4	3.1
JB033	054	1.8	92.6	5.7	2.9	2.8	2.8	2.8	0.9	5.3	1.3
JB034	049	6.6	83.1	10.4	4.6	5.7	2.9	2.9	1.3	15.1	1.9
JB035	053	0.1	98.9	1.0	0.5	0.5	2.2	2.2	0.4	0.4	0.2
JB036	052	0.0	63.0	37.0	18.5	18.5	3.3	4.9	3.0	54.0	13.9
JB037	048	0.0	73.7	26.3	12.4	13.9	3.3	4.6	2.8	47.7	6.9
JB038	041	0.1	63.0	36.9	19.4	17.4	3.4	4.9	2.7	44.2	12.7
JB039	050	0.0	64.1	35.9	18.7	17.2	3.6	5.1	2.9	48.9	12.2
JB040	034	0.0	48.5	51.5	20.9	30.6	4.3	6.1	3.5	57.2	25.1
JB041	035	0.0	65.4	34.6	19.9	14.7	3.4	4.7	2.5	36.5	8.5
JB042	039	0.0	35.0	65.0	33.0	32.0	5.7	6.6	3.4	32.2	23.3
JB043	051	0.0	38.9	61.1	29.6	31.5	5.5	6.5	3.5	35.2	24.5
JB044	037	0.7	94.9	4.4	2.2	2.2	2.3	2.4	0.7	2.2	0.7
JB045	036	0.6	87.3	12.1	4.2	7.9	2.2	2.4	1.7	28.7	3.9
JB046	033	0.0	36.8	63.2	25.7	37.4	6.6	7.1	3.7	21.0	29.7
JB047	032	9.0	87.8	3.1	1.6	1.5	1.7	1.9	0.8	1.9	1.1
JB048	031	0.0	36.9	63.1	26.9	36.2	6.2	6.9	3.6	25.4	27.3
JB049	040	0.0	74.2	25.8	11.3	14.4	3.1	4.4	2.6	41.5	6.3
JB050	030	0.0	26.1	73.9	30.2	43.7	7.3	7.5	3.7	10.6	28.9
JB051	029	0.0	5.2	94.8	36.9	57.9	8.6	8.8	3.1	2.7	18.9
JB052	028	0.0	42.0	58.0	28.4	29.6	5.3	6.1	3.3	29.0	22.2

Appendix 2 - Grain Size Summary

SampleID	StatID	Gravel	Sand	Mud	Silt	Clay	Median phi	Mean phi	Standard Deviation	Skewness	Kurtosis
JB053	027	3.4	86.3	10.3	5.8	4.5	2.3	2.5	1.4	15.5	2.9
JB054	042	0.0	13.5	86.5	39.7	46.8	7.7	8.0	3.3	7.7	21.1
JB055	043	0.0	32.1	67.9	29.2	38.7	6.6	7.1	3.7	19.2	28.6
JB056	038	0.0	98.0	2.0	0.8	1.1	2.3	2.3	0.4	0.2	0.2
JB057	056	0.0	99.5	0.5	0.2	0.3	1.6	1.6	0.5	0.1	0.3
JB058	057	0.2	98.3	1.4	0.7	0.7	2.0	2.1	0.5	1.1	0.4
JB059	058	8.7	85.9	5.4	2.1	3.4	2.8	2.7	1.1	8.6	1.4
JB060	069	0.0	7.0	93.0	36.3	56.7	8.5	8.9	3.1	1.7	19.1
JB061	083	0.0	3.8	96.2	33.3	63.0	9.4	9.4	2.9	-0.5	17.3
JB062	079	0.0	92.0	8.0	3.7	4.4	2.9	2.9	1.0	10.9	1.1
JB063	078	0.0	10.5	89.5	39.9	49.7	8.0	8.4	3.2	6.8	20.2
JB064	077	0.0	13.6	86.4	37.8	48.6	7.9	8.2	3.3	7.1	21.4
JB065	080	0.0	9.5	90.5	47.4	43.1	7.5	7.7	2.9	6.1	16.1
JB066	068	0.0	24.9	75.1	36.1	39.1	7.4	7.5	3.5	5.4	23.7
JB067	067	0.9	56.4	42.7	21.0	21.7	3.6	5.2	3.5	55.5	21.3
JB068	072	0.0	11.6	88.4	43.4	45.0	7.6	8.0	3.3	11.4	20.7
JB069	066	0.0	8.4	91.6	44.3	47.3	7.8	8.0	3.0	7.4	16.6
JB070	071	0.0	3.9	96.1	47.7	48.4	7.9	8.1	2.6	8.8	13.3
JB071	073	0.0	6.3	93.7	39.9	53.8	8.4	8.7	3.3	5.8	22.5
JB072	074	0.0	3.4	96.6	41.7	54.9	8.4	8.8	2.9	9.0	16.8
JB073	063	1.5	86.8	11.7	7.5	4.2	2.7	3.0	1.6	21.2	3.2
JB074	062	3.8	15.2	81.0	47.6	33.4	6.5	7.1	3.1	18.9	17.7
JB075	061	0.0	25.4	74.6	50.2	24.4	5.4	6.1	2.7	20.8	13.7
JB076	085	4.8	92.6	2.6	0.8	1.8	1.6	1.6	0.7	1.5	0.8
JB077	084	1.3	88.1	10.6	6.7	3.9	2.8	2.8	1.3	8.1	2.4
JB078	060	0.0	19.4	80.6	38.5	42.1	7.4	7.6	3.7	6.1	24.7
JB079	059	1.3	94.5	4.3	1.9	2.4	1.9	1.8	1.0	0.7	1.7
JB080	081	96.0	4.0	0.0	0.0	0.0	2.6	2.6	0.9	0.3	1.4
JB081	064	0.0	60.1	39.9	18.3	21.6	3.2	5.0	3.6	62.9	22.5
JB082	065	0.0	23.6	76.4	34.6	41.9	7.2	7.4	3.8	6.3	26.7
JB083	070	0.0	22.3	77.7	41.2	36.5	6.7	6.9	3.4	8.7	22.2
JB084	076	0.0	7.3	92.7	53.2	39.4	7.5	7.9	3.0	12.5	16.3
JB085	086	2.6	75.1	22.3	8.2	14.1	2.9	4.4	3.0	55.0	6.8
JB086	082	2.6	96.9	0.4	0.1	0.3	1.7	1.6	0.5	-0.3	0.4

Appendix 3 - Faunal Summary by Sample

```
************************ Output from program SUMMARY ************************
PC-ORD, 6.11
 1 Mar 2013,  9:13:48

Matrix size:    86 samples  (rows)
               136 species  (columns)
```

Summary of 86 samples N= 136 species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	JB001	3.463	19.07	471.0	0.00	183.	25	0.578	1.861
2	JB002	2.360	8.955	321.0	0.00	51.0	20	0.807	2.418
3	JB003	6.213	36.61	845.0	0.00	382.	27	0.565	1.861
4	JB004	3.971	40.15	540.0	0.00	468.	22	0.232	0.718
5	JB005	4.772	43.02	649.0	0.00	498.	20	0.343	1.029
6	JB006	1.566	7.521	213.0	0.00	62.0	14	0.751	1.982
7	JB007	4.500	33.51	612.0	0.00	333.	20	0.413	1.238
8	JB008	16.36	143.2	2225.	0.00	0.162E+04	26	0.295	0.961
9	JB009	3.478	28.71	473.0	0.00	300.	13	0.347	0.889
10	JB010	5.000	25.23	680.0	0.00	230.	27	0.635	2.093
11	JB011	0.3235	1.943	44.00	0.00	17.0	9	0.725	1.592
12	JB012	0.7721	4.185	105.0	0.00	44.0	18	0.705	2.037
13	JB013	1.074	8.460	146.0	0.00	90.0	9	0.492	1.080
14	JB014	7.956	54.83	1082.	0.00	591.	24	0.463	1.473
15	JB015	0.4632	2.379	63.00	0.00	20.0	10	0.793	1.826
16	JB016	1.287	7.001	175.0	0.00	56.0	13	0.698	1.790
17	JB017	7.456	61.01	1014.	0.00	696.	30	0.370	1.259
18	JB018	27.65	247.8	3760.	0.00	0.286E+04	31	0.284	0.976
19	JB019	5.162	39.74	702.0	0.00	449.	29	0.418	1.406
20	JB020	2.169	10.98	295.0	0.00	106.	19	0.695	2.047
21	JB021	0.4044	1.930	55.00	0.00	20.0	19	0.782	2.304
22	JB022	4.875	17.07	663.0	0.00	116.	29	0.770	2.593
23	JB023	68.99	787.7	9382.	0.00	0.919E+04	21	0.050	0.151
24	JB024	2.051	7.520	279.0	0.00	47.0	22	0.805	2.487
25	JB025	0.7647	4.823	104.0	0.00	50.0	16	0.619	1.716
26	JB026	60.58	658.2	8239.	0.00	0.768E+04	30	0.128	0.437
27	JB027	1.478	8.425	201.0	0.00	81.0	20	0.629	1.884
28	JB028	5.750	30.37	782.0	0.00	244.	20	0.633	1.895
29	JB029	4.294	19.96	584.0	0.00	143.	20	0.676	2.026
30	JB030	1.206	4.823	164.0	0.00	39.0	23	0.779	2.443
31	JB031	0.7647	3.402	104.0	0.00	30.0	17	0.792	2.243
32	JB032	2.831	11.53	385.0	0.00	114.	29	0.769	2.590
33	JB033	7.926	56.24	1078.	0.00	619.	18	0.497	1.437
34	JB034	5.801	25.58	789.0	0.00	217.	31	0.694	2.384
35	JB035	5.728	18.56	779.0	0.00	109.	38	0.753	2.737
36	JB036	12.61	80.83	1715.	0.00	745.	25	0.465	1.495
37	JB037	3.132	16.33	426.0	0.00	147.	25	0.623	2.007
38	JB038	1.860	8.103	253.0	0.00	68.0	23	0.739	2.316
39	JB039	1.537	11.47	209.0	0.00	131.	16	0.532	1.474
40	JB040	2.419	17.19	329.0	0.00	193.	18	0.524	1.513
41	JB041	3.640	26.11	495.0	0.00	298.	26	0.507	1.650
42	JB042	0.6765	3.326	92.00	0.00	30.0	13	0.782	2.006
43	JB043	0.7353E-01	0.7759	10.00	0.00	9.00	2	0.469	0.325
44	JB044	29.51	272.8	4013.	0.00	0.317E+04	29	0.285	0.960
45	JB045	55.44	531.3	7540.	0.00	0.619E+04	39	0.246	0.901
46	JB046	0.2574	1.271	35.00	0.00	13.0	14	0.809	2.135
47	JB047	3.235	20.98	440.0	0.00	237.	28	0.565	1.882
48	JB048	0.5221	4.385	71.00	0.00	48.0	7	0.469	0.913
49	JB049	0.2500	1.228	34.00	0.00	10.0	9	0.867	1.904
50	JB050	0.1838	0.9043	25.00	0.00	7.00	8	0.892	1.856
51	JB051	0.2721	1.177	37.00	0.00	9.00	13	0.855	2.193
52	JB053	30.06	264.9	4088.	0.00	0.308E+04	34	0.328	1.157
53	JB054	0.9559E-01	0.4850	13.00	0.00	4.00	7	0.914	1.778
54	JB055	0.4412	2.890	60.00	0.00	31.0	8	0.713	1.483
55	JB056	1.029	4.387	140.0	0.00	40.0	23	0.760	2.382
56	JB057	0.4706	3.676	64.00	0.00	42.0	11	0.554	1.330
57	JB058	0.4559	2.713	62.00	0.00	28.0	12	0.700	1.739

58	JB059	0.5882	2.020	80.00	0.00	15.0	21	0.872	2.654
59	JB060	0.8088E-01	0.6331	11.00	0.00	7.00	4	0.746	1.034
60	JB061	is empty							
61	JB062	24.75	263.0	3366.	0.00	0.306E+04	19	0.154	0.452
62	JB063	is empty							
63	JB064	is empty							
64	JB065	4.221	38.65	574.0	0.00	445.	8	0.389	0.808
65	JB066	14.05	106.3	1911.	0.00	0.118E+04	8	0.558	1.161
66	JB067	14.01	114.2	1906.	0.00	0.124E+04	14	0.381	1.005
67	JB068	5.882	42.86	800.0	0.00	407.	10	0.490	1.128
68	JB069	0.7353E-02	0.8575E-01	1.000	0.00	1.00	1	0.000	0.000
69	JB070	0.1471E-01	0.1208	2.000	0.00	1.00	2	1.000	0.693
70	JB071	0.2941E-01	0.2087	4.000	0.00	2.00	3	0.946	1.040
71	JB072	is empty							
72	JB073	21.67	173.9	2947.	0.00	0.196E+04	27	0.378	1.245
73	JB074	0.8088E-01	0.4398	11.00	0.00	3.00	5	0.961	1.547
74	JB075	0.3603	3.457	49.00	0.00	40.0	5	0.427	0.688
75	JB076	41.49	312.9	5643.	0.00	0.270E+04	31	0.330	1.133
76	JB077	7.728	36.70	1051.	0.00	298.	30	0.623	2.118
77	JB078	14.05	125.5	1911.	0.00	0.144E+04	26	0.296	0.963
78	JB079	26.31	195.1	3578.	0.00	0.199E+04	29	0.373	1.256
79	JB080	4.412	22.18	600.0	0.00	156.	20	0.647	1.939
80	JB081	23.62	204.1	3212.	0.00	0.224E+04	21	0.276	0.840
81	JB082	8.191	78.54	1114.	0.00	903.	12	0.266	0.662
82	JB083	5.515	56.68	750.0	0.00	660.	13	0.220	0.564
83	JB084	2.669	29.07	363.0	0.00	339.	11	0.157	0.376
84	JB085	6.199	40.98	843.0	0.00	459.	13	0.635	1.628
85	JB086	0.8971	3.914	122.0	0.00	34.0	15	0.813	2.201
86	JB052	4.125	21.36	561.0	0.00	215.	24	0.634	2.014
AVERAGES:		7.66	65.5	1041.	0.00	722.	17.7	0.537	1.447

Number of cells in main matrix = 11696
Percent of cells empty = 86.996
Matrix total = 8.9564E+04
Matrix mean = 7.6577E+00
Variance of totals of samples = 3.2512E+06

S = Richness = number of non-zero elements in row
E = Evenness = H / ln (Richness)
H = Diversity = - sum (Pi*ln(Pi))
where Pi = importance probability in element i (element i relativized by row total)

Summary of 136 species N= 86 samples

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Acanmill	0.119E+01	0.880E+01	0.1020E+03	0.000E+00	0.810E+02	8
2	Actecana	0.930E-01	0.662E+00	0.8000E+01	0.000E+00	0.600E+01	3
3	Ammodubi	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
4	Ampesp	0.542E+03	0.156E+04	0.4663E+05	0.000E+00	0.919E+04	57
5	Amphorna	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
6	Anadtran	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
7	Anomsimp	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
8	Arabiric	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
9	Aricsp	0.105E+00	0.575E+00	0.9000E+01	0.000E+00	0.400E+01	3
10	Ariccath	0.206E+01	0.105E+02	0.1770E+03	0.000E+00	0.800E+02	10
11	Asabocul	0.465E-01	0.303E+00	0.4000E+01	0.000E+00	0.200E+01	2
12	Autocorn	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
13	Autosp	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
14	Balaamph	0.570E+00	0.266E+01	0.4900E+02	0.000E+00	0.180E+02	7
15	Balasp	0.248E+01	0.113E+02	0.2130E+03	0.000E+00	0.710E+02	7
16	Bivasp	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
17	Capicapi	0.179E+02	0.500E+02	0.1536E+04	0.000E+00	0.237E+03	38
18	Capisp	0.461E+02	0.102E+03	0.3961E+04	0.000E+00	0.696E+03	44
19	Caprsp	0.953E+00	0.769E+01	0.8200E+02	0.000E+00	0.710E+02	5
20	Carcmaen	0.407E+00	0.180E+01	0.3500E+02	0.000E+00	0.160E+02	14
21	Carisp	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
22	Cerapinn	0.349E-01	0.185E+00	0.3000E+01	0.000E+00	0.100E+01	3

23	Clymsp	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
24	Clymtorq	0.465E-01	0.212E+00	0.4000E+01	0.000E+00	0.100E+01	4
25	Corosp	0.598E+02	0.323E+03	0.5145E+04	0.000E+00	0.270E+04	33
26	Cransept	0.186E+00	0.564E+00	0.1600E+02	0.000E+00	0.300E+01	10
27	Crepconv	0.233E-01	0.216E+00	0.2000E+01	0.000E+00	0.200E+01	1
28	Crepforn	0.458E+01	0.185E+02	0.3940E+03	0.000E+00	0.156E+03	29
29	Crepplan	0.942E+00	0.378E+01	0.8100E+02	0.000E+00	0.300E+02	14
30	Cyatpoli	0.640E+00	0.443E+01	0.5500E+02	0.000E+00	0.380E+02	3
31	Decamega	0.151E+00	0.584E+00	0.1300E+02	0.000E+00	0.400E+01	7
32	Decasp	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
33	Decazoea	0.465E-01	0.262E+00	0.4000E+01	0.000E+00	0.200E+01	3
34	Drillong	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
35	Dyspsayi	0.605E+00	0.171E+01	0.5200E+02	0.000E+00	0.110E+02	16
36	Edotsp	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
37	Elaslevi	0.465E+00	0.147E+01	0.4000E+02	0.000E+00	0.900E+01	13
38	Ensidire	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
39	Ericbras	0.849E+00	0.766E+01	0.7300E+02	0.000E+00	0.710E+02	3
40	Ericsp	0.465E-01	0.303E+00	0.4000E+01	0.000E+00	0.200E+01	2
41	Eteohete	0.115E+02	0.252E+02	0.9890E+03	0.000E+00	0.165E+03	53
42	Eteolact	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
43	Eumisang	0.142E+01	0.405E+01	0.1220E+03	0.000E+00	0.270E+02	26
44	Exogdisp	0.116E+00	0.418E+00	0.1000E+02	0.000E+00	0.200E+01	7
45	Gammmucr	0.547E+00	0.443E+01	0.4700E+02	0.000E+00	0.410E+02	4
46	Gemmgemm	0.453E+00	0.197E+01	0.3900E+02	0.000E+00	0.120E+02	7
47	Glycamer	0.628E+00	0.116E+01	0.5400E+02	0.000E+00	0.500E+01	28
48	Glycdibr	0.698E-01	0.336E+00	0.6000E+01	0.000E+00	0.200E+01	4
49	Glycsoli	0.372E+00	0.109E+01	0.3200E+02	0.000E+00	0.700E+01	14
50	Gobisp	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
51	Gonigrac	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
52	Gyptvitt	0.140E+00	0.512E+00	0.1200E+02	0.000E+00	0.300E+01	7
53	Harmimbr	0.236E+01	0.174E+02	0.2030E+03	0.000E+00	0.161E+03	15
54	Harmsp	0.480E+01	0.145E+02	0.4130E+03	0.000E+00	0.116E+03	35
55	Hetefili	0.349E-01	0.185E+00	0.3000E+01	0.000E+00	0.100E+01	3
56	Heteform	0.558E+00	0.172E+01	0.4800E+02	0.000E+00	0.110E+02	14
57	Hydrdian	0.115E+01	0.591E+01	0.9900E+02	0.000E+00	0.500E+02	9
58	Idotbalt	0.233E-01	0.216E+00	0.2000E+01	0.000E+00	0.200E+01	1
59	Ilyaobso	0.440E+01	0.985E+01	0.3780E+03	0.000E+00	0.550E+02	37
60	Ilyatriv	0.116E+00	0.357E+00	0.1000E+02	0.000E+00	0.200E+01	9
61	Lepisqua	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
62	Leptsavi	0.233E+00	0.157E+01	0.2000E+02	0.000E+00	0.140E+02	3
63	Libisp	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
64	Limupoly	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
65	Lyonhyal	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
66	Lysialba	0.503E+01	0.206E+02	0.4330E+03	0.000E+00	0.163E+03	29
67	Meliniti	0.386E+01	0.967E+01	0.3320E+03	0.000E+00	0.620E+02	33
68	Mercmerc	0.136E+01	0.263E+01	0.1170E+03	0.000E+00	0.140E+02	33
69	Micrgryl	0.167E+02	0.720E+02	0.1438E+04	0.000E+00	0.532E+03	28
70	Micrsp	0.581E-01	0.539E+00	0.5000E+01	0.000E+00	0.500E+01	1
71	Micraber	0.247E+01	0.169E+02	0.2120E+03	0.000E+00	0.151E+03	5
72	Mitrluna	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
73	Mogumanh	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
74	Mulilate	0.465E-01	0.212E+00	0.4000E+01	0.000E+00	0.100E+01	4
75	Myaaren	0.279E+00	0.100E+01	0.2400E+02	0.000E+00	0.700E+01	11
76	Myseplan	0.814E-01	0.350E+00	0.7000E+01	0.000E+00	0.200E+01	5
77	Mysibige	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
78	Mytiedul	0.451E+02	0.198E+03	0.3875E+04	0.000E+00	0.162E+04	18
79	Nephpict	0.558E+00	0.178E+01	0.4800E+02	0.000E+00	0.100E+02	12
80	Neptinci	0.349E-01	0.323E+00	0.3000E+01	0.000E+00	0.300E+01	1
81	Nerearen	0.930E-01	0.364E+00	0.8000E+01	0.000E+00	0.200E+01	6
82	Neresp	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
83	Neresucc	0.836E+01	0.172E+02	0.7190E+03	0.000E+00	0.131E+03	56
84	Nucuprox	0.229E+01	0.711E+01	0.1970E+03	0.000E+00	0.480E+02	21
85	Nucusp	0.326E+00	0.160E+01	0.2800E+02	0.000E+00	0.130E+02	6
86	Nucutenu	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
87	Oligsp	0.318E+02	0.649E+02	0.2739E+04	0.000E+00	0.436E+03	50
88	Oxyusmit	0.581E-01	0.281E+00	0.5000E+01	0.000E+00	0.200E+01	4
89	Paguacad	0.140E+00	0.706E+00	0.1200E+02	0.000E+00	0.600E+01	6
90	Pagulong	0.326E+00	0.110E+01	0.2800E+02	0.000E+00	0.700E+01	10
91	Pagusp	0.430E+00	0.121E+01	0.3700E+02	0.000E+00	0.900E+01	17
92	Palavulg	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
93	Panoherb	0.430E+00	0.200E+01	0.3700E+02	0.000E+00	0.150E+02	8

94	Paraatte	0.349E-01	0.323E+00	0.3000E+01	0.000E+00	0.300E+01	1
95	Parahaus	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
96	Paraspec	0.430E+00	0.888E+00	0.3700E+02	0.000E+00	0.400E+01	21
97	Paraspin	0.283E+01	0.127E+02	0.2430E+03	0.000E+00	0.950E+02	18
98	Pectgoul	0.105E+00	0.435E+00	0.9000E+01	0.000E+00	0.300E+01	6
99	Petrphol	0.244E+00	0.685E+00	0.2100E+02	0.000E+00	0.300E+01	12
100	Pherplum	0.198E+00	0.481E+00	0.1700E+02	0.000E+00	0.300E+01	15
101	Pholminu	0.395E+00	0.102E+01	0.3400E+02	0.000E+00	0.500E+01	16
102	Phylsp	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
103	Pinnixa	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
104	Podaobsc	0.107E+01	0.462E+01	0.9200E+02	0.000E+00	0.390E+02	18
105	Polylign	0.148E+02	0.225E+02	0.1275E+04	0.000E+00	0.910E+02	57
106	Polydora	0.137E+01	0.892E+01	0.1180E+03	0.000E+00	0.700E+02	5
107	Polygord	0.162E+02	0.675E+02	0.1395E+04	0.000E+00	0.400E+03	15
108	Priosp	0.698E-01	0.299E+00	0.6000E+01	0.000E+00	0.200E+01	5
109	Protwigl	0.651E+00	0.294E+01	0.5600E+02	0.000E+00	0.170E+02	7
110	Pyraprod	0.233E-01	0.152E+00	0.2000E+01	0.000E+00	0.100E+01	2
111	Rhepepis	0.174E+01	0.743E+01	0.1500E+03	0.000E+00	0.500E+02	9
112	Risssp	0.465E-01	0.303E+00	0.4000E+01	0.000E+00	0.200E+01	2
113	Sabevulg	0.102E+01	0.780E+01	0.8800E+02	0.000E+00	0.720E+02	5
114	Schirudo	0.698E-01	0.455E+00	0.6000E+01	0.000E+00	0.400E+01	3
115	Scolviri	0.110E+01	0.280E+01	0.9500E+02	0.000E+00	0.150E+02	23
116	Scolfrag	0.140E+00	0.129E+01	0.1200E+02	0.000E+00	0.120E+02	1
117	Scolrobu	0.849E+00	0.263E+01	0.7300E+02	0.000E+00	0.190E+02	17
118	Scolsp	0.163E+00	0.810E+00	0.1400E+02	0.000E+00	0.700E+01	7
119	Sigaaren	0.233E-01	0.216E+00	0.2000E+01	0.000E+00	0.200E+01	1
120	Solevelu	0.233E-01	0.216E+00	0.2000E+01	0.000E+00	0.200E+01	1
121	Spioocul	0.581E-01	0.387E+00	0.5000E+01	0.000E+00	0.300E+01	2
122	Spiobomb	0.349E-01	0.323E+00	0.3000E+01	0.000E+00	0.300E+01	1
123	Spissoli	0.291E+00	0.106E+01	0.2500E+02	0.000E+00	0.600E+01	9
124	Stenminu	0.907E+00	0.830E+01	0.7800E+02	0.000E+00	0.770E+02	2
125	Strebene	0.127E+03	0.392E+03	0.1095E+05	0.000E+00	0.306E+04	61
126	Syllseto	0.221E+00	0.846E+00	0.1900E+02	0.000E+00	0.600E+01	9
127	Syllgrac	0.116E-01	0.108E+00	0.1000E+01	0.000E+00	0.100E+01	1
128	Tellagil	0.164E+02	0.248E+02	0.1410E+04	0.000E+00	0.148E+03	61
129	Tellsp	0.221E+00	0.146E+01	0.1900E+02	0.000E+00	0.110E+02	2
130	Teresp	0.698E-01	0.369E+00	0.6000E+01	0.000E+00	0.300E+01	4
131	Tharsp	0.182E+02	0.678E+02	0.1563E+04	0.000E+00	0.591E+03	49
132	Turbonsp	0.349E-01	0.323E+00	0.3000E+01	0.000E+00	0.300E+01	1
133	Uncidiss	0.442E+00	0.215E+01	0.3800E+02	0.000E+00	0.140E+02	5
134	Unciserr	0.674E+00	0.615E+01	0.5800E+02	0.000E+00	0.570E+02	2
135	Uncisp	0.593E+00	0.232E+01	0.5100E+02	0.000E+00	0.160E+02	13
136	Xantsp	0.628E+00	0.234E+01	0.5400E+02	0.000E+00	0.160E+02	15
AVERAGES:		0.766E+01	0.242E+02	0.6586E+03	0.000E+00	0.165E+03	11.2

Data Summary for All Samples

Sample unit: JB001

Value	Code	Species	Code Name
1.00	177	Acteocina canaliculata	Actecana
31.00	219	Ampelisca sp	Ampesp
183.00	2	Capitellidae sp	Capisp
1.00	68	Ensis directus	Ensidire
8.00	213	Eteone heteropoda	Eteohete
1.00	71	Gemma gemma	Gemmgemm
1.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
3.00	291	Harmothoe sp	Harmsp
1.00	161	Ilyanassa trivittata	Ilyatriv

6.00	70	Mercenaria mercenaria	Mercmerc
1.00	137	Mulinia lateralis	Mulilate
1.00	313	Mysella planulata	Myseplan
2.00	66	Nucula proxima	Nucuprox
9.00	1	Oligochaeta sp	Oligsp
2.00	259	Pagurus sp	Pagusp
1.00	336	Pherusa plumosa	Pherplum
91.00	205	Polydora ligni	Polylign
1.00	17	Prionospio sp	Priosp
2.00	318	Rissoidae sp	Risssp
1.00	276	Scoloplos robustus	Scolrobu
1.00	275	Scolecolepides viridis	Scolviri
77.00	166	Streblospio benedicti	Strebene
1.00	110	Syllides setosa	Syllseto
43.00	69	Tellina agilis	Tellagil

Sample unit: JB002

Value	Code	Species	Code Name
43.00	2	Capitellidae sp	Capisp
14.00	213	Eteone heteropoda	Eteohete
10.00	291	Harmothoe sp	Harmsp
1.00	161	Ilyanassa trivittata	Ilyatriv
51.00	1	Oligochaeta sp	Oligsp
49.00	205	Polydora ligni	Polylign
1.00	275	Scolecolepides viridis	Scolviri
41.00	166	Streblospio benedicti	Strebene
5.00	69	Tellina agilis	Tellagil
18.00	289	Balanus amphitrite	Balaamph
2.00	339	Carcinus maenas	Carcmaen
1.00	6	Clymenella sp	Clymsp
8.00	75	Crepidula fornicata	Crepforn
1.00	76	Crepidula plana	Crepplan
8.00	277	Harmothoe imbricata	Harmimbr
3.00	55	Heteromysis formosa	Heteform
46.00	296	Mytilus edulis	Mytiedul
10.00	8	Nereis succinea	Neresucc
6.00	53	Panopeus herbstii	Panoherb
3.00	25	Tharyx sp	Tharsp

Sample unit: JB003

Value	Code	Species	Code Name
25.00	2	Capitellidae sp	Capisp
2.00	213	Eteone heteropoda	Eteohete
8.00	291	Harmothoe sp	Harmsp
83.00	1	Oligochaeta sp	Oligsp
69.00	205	Polydora ligni	Polylign
5.00	166	Streblospio benedicti	Strebene
1.00	69	Tellina agilis	Tellagil

14.00	289	Balanus amphitrite	Balaamph
4.00	75	Crepidula fornicata	Crepforn
2.00	76	Crepidula plana	Crepplan
161.00	277	Harmothoe imbricata	Harmimbr
5.00	55	Heteromysis formosa	Heteform
382.00	296	Mytilus edulis	Mytiedul
36.00	8	Nereis succinea	Neresucc
7.00	25	Tharyx sp	Tharsp
1.00	61	Anomia simplex	Anomsimp
1.00	119	Autolytus cornutus	Autocorn
1.00	201	Capitella capitata	Capicapi
1.00	308	Caprellidae sp	Caprsp
5.00	85	Corophium sp	Corosp
7.00	52	Dyspanopeus sayi	Dyspsayi
1.00	13	Eumida sanguinea	Eumisang
1.00	95	Gobiosoma sp	Gobisp
3.00	168	Hydroides dianthus	Hydrdian
1.00	253	Microdeutopus gryllotalpa	Micrgryl
3.00	246	Pholoe minuta	Pholminu
16.00	56	Xanthidae sp	Xantsp

Sample unit: JB004

Value	Code	Species	Code Name
3.00	2	Capitellidae sp	Capisp
5.00	140	Glycera americana	Glycamer
9.00	291	Harmothoe sp	Harmsp
1.00	70	Mercenaria mercenaria	Mercmerc
3.00	66	Nucula proxima	Nucuprox
2.00	1	Oligochaeta sp	Oligsp
1.00	336	Pherusa plumosa	Pherplum
1.00	205	Polydora ligni	Polylign
1.00	166	Streblospio benedicti	Strebene
21.00	69	Tellina agilis	Tellagil
468.00	296	Mytilus edulis	Mytiedul
10.00	8	Nereis succinea	Neresucc
1.00	25	Tharyx sp	Tharsp
5.00	52	Dyspanopeus sayi	Dyspsayi
1.00	319	Cerastoderma pinnulatum	Cerapinn
1.00	145	Gyptis vittata	Gyptvitt
1.00	64	Lyonsia hyalina	Lyonhyal
1.00	150	Lysianopsis alba	Lysialba
1.00	171	Mya arenaria	Myaaren
1.00	107	Pectinaria gouldii	Pectgoul
2.00	312	Petricola pholadiformis	Petrphol
1.00	320	Phyllodocidae sp	Phylsp

Sample unit: JB005

Value	Code	Species	Code Name

63.00	2	Capitellidae sp	Capisp
2.00	213	Eteone heteropoda	Eteohete
4.00	140	Glycera americana	Glycamer
15.00	291	Harmothoe sp	Harmsp
3.00	70	Mercenaria mercenaria	Mercmerc
4.00	66	Nucula proxima	Nucuprox
18.00	1	Oligochaeta sp	Oligsp
1.00	336	Pherusa plumosa	Pherplum
4.00	205	Polydora ligni	Polylign
1.00	275	Scolecolepides viridis	Scolviri
2.00	166	Streblospio benedicti	Strebene
13.00	69	Tellina agilis	Tellagil
1.00	339	Carcinus maenas	Carcmaen
498.00	296	Mytilus edulis	Mytiedul
11.00	8	Nereis succinea	Neresucc
3.00	25	Tharyx sp	Tharsp
1.00	246	Pholoe minuta	Pholminu
1.00	56	Xanthidae sp	Xantsp
2.00	171	Mya arenaria	Myaaren
2.00	321	Nucula sp	Nucusp

Sample unit: JB006

Value	Code	Species	Code Name
44.00	219	Ampelisca sp	Ampesp
18.00	213	Eteone heteropoda	Eteohete
3.00	291	Harmothoe sp	Harmsp
62.00	205	Polydora ligni	Polylign
3.00	275	Scolecolepides viridis	Scolviri
5.00	166	Streblospio benedicti	Strebene
1.00	339	Carcinus maenas	Carcmaen
16.00	8	Nereis succinea	Neresucc
32.00	201	Capitella capitata	Capicapi
3.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	246	Pholoe minuta	Pholminu
23.00	42	Melita nitida	Meliniti
1.00	174	Paranaitis speciosa	Paraspec
1.00	280	Unciola sp	Uncisp

Sample unit: JB007

Value	Code	Species	Code Name
2.00	291	Harmothoe sp	Harmsp
2.00	259	Pagurus sp	Pagusp
2.00	205	Polydora ligni	Polylign
19.00	69	Tellina agilis	Tellagil
9.00	289	Balanus amphitrite	Balaamph
1.00	75	Crepidula fornicata	Crepforn
1.00	76	Crepidula plana	Crepplan
207.00	296	Mytilus edulis	Mytiedul

6.00	25	Tharyx sp	Tharsp
2.00	150	Lysianopsis alba	Lysialba
1.00	115	Goniadella gracilis	Gonigrac
1.00	147	Libinia sp	Libisp
5.00	154	Microphthalmus aberrans	Micraber
2.00	7	Nephtys picta	Nephpict
2.00	102	Nereis arenaceodonta	Nerearen
9.00	96	Paraphoxus spinosus	Paraspin
333.00	14	Polygordius sp	Polygord
4.00	270	Sabellaria vulgaris	Sabevulg
1.00	103	Spisula solidissima	Spissoli
3.00	306	Terebellidae sp	Teresp

Sample unit: JB008

Value	Code	Species	Code Name
8.00	213	Eteone heteropoda	Eteohete
35.00	291	Harmothoe sp	Harmsp
36.00	205	Polydora ligni	Polylign
15.00	275	Scolecolepides viridis	Scolviri
1.00	166	Streblospio benedicti	Strebene
9.00	69	Tellina agilis	Tellagil
1.00	289	Balanus amphitrite	Balaamph
1.00	339	Carcinus maenas	Carcmaen
2.00	55	Heteromysis formosa	Heteform
1624.00	296	Mytilus edulis	Mytiedul
14.00	8	Nereis succinea	Neresucc
55.00	25	Tharyx sp	Tharsp
1.00	201	Capitella capitata	Capicapi
1.00	52	Dyspanopeus sayi	Dyspsayi
4.00	13	Eumida sanguinea	Eumisang
1.00	246	Pholoe minuta	Pholminu
4.00	150	Lysianopsis alba	Lysialba
2.00	174	Paranaitis speciosa	Paraspec
1.00	147	Libinia sp	Libisp
1.00	102	Nereis arenaceodonta	Nerearen
3.00	96	Paraphoxus spinosus	Paraspin
400.00	14	Polygordius sp	Polygord
1.00	122	Drilonereis longa	Drillong
1.00	41	Elasmopus levis	Elaslevi
2.00	114	Glycera dibranchiata	Glycdibr
2.00	123	Podarke obscura	Podaobsc

Sample unit: JB009

Value	Code	Species	Code Name
1.00	213	Eteone heteropoda	Eteohete
1.00	291	Harmothoe sp	Harmsp
9.00	1	Oligochaeta sp	Oligsp
2.00	205	Polydora ligni	Polylign

2.00	296	Mytilus edulis	Mytiedul
1.00	201	Capitella capitata	Capicapi
1.00	115	Goniadella gracilis	Gonigrac
151.00	154	Microphthalmus aberrans	Micraber
300.00	14	Polygordius sp	Polygord
1.00	124	Acanthohaustorius millsi	Acanmill
1.00	334	Ammodytes dubius	Ammodubi
1.00	248	Protohaustorius wigleyi	Protwigl
2.00	127	Sigalion arenicola	Sigaaren

Sample unit: JB010

Value	Code	Species	Code Name
230.00	219	Ampelisca sp	Ampesp
67.00	2	Capitellidae sp	Capisp
6.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
9.00	291	Harmothoe sp	Harmsp
4.00	70	Mercenaria mercenaria	Mercmerc
159.00	1	Oligochaeta sp	Oligsp
2.00	259	Pagurus sp	Pagusp
49.00	205	Polydora ligni	Polylign
28.00	166	Streblospio benedicti	Strebene
2.00	69	Tellina agilis	Tellagil
1.00	339	Carcinus maenas	Carcmaen
2.00	277	Harmothoe imbricata	Harmimbr
16.00	8	Nereis succinea	Neresucc
1.00	53	Panopeus herbstii	Panoherb
49.00	25	Tharyx sp	Tharsp
2.00	85	Corophium sp	Corosp
2.00	52	Dyspanopeus sayi	Dyspsayi
3.00	150	Lysianopsis alba	Lysialba
3.00	42	Melita nitida	Meliniti
4.00	174	Paranaitis speciosa	Paraspec
2.00	280	Unciola sp	Uncisp
1.00	96	Paraphoxus spinosus	Paraspin
7.00	14	Polygordius sp	Polygord
1.00	300	Autolytus sp	Autosp
24.00	79	Balanus sp	Balasp
5.00	34	Microdeutopus sp	Micrsp

Sample unit: JB011

Value	Code	Species	Code Name
3.00	219	Ampelisca sp	Ampesp
1.00	213	Eteone heteropoda	Eteohete
1.00	1	Oligochaeta sp	Oligsp
1.00	259	Pagurus sp	Pagusp
1.00	69	Tellina agilis	Tellagil
1.00	150	Lysianopsis alba	Lysialba

5.00	7	Nephtys picta	Nephpict
17.00	248	Protohaustorius wigleyi	Protwigl
14.00	44	Rhepoxynius epistomus	Rhepepis

Sample unit: JB012

Value	Code	Species	Code Name
15.00	219	Ampelisca sp	Ampesp
1.00	2	Capitellidae sp	Capisp
1.00	140	Glycera americana	Glycamer
2.00	161	Ilyanassa trivittata	Ilyatriv
5.00	205	Polydora ligni	Polylign
1.00	17	Prionospio sp	Priosp
44.00	166	Streblospio benedicti	Strebene
13.00	69	Tellina agilis	Tellagil
5.00	289	Balanus amphitrite	Balaamph
2.00	76	Crepidula plana	Crepplan
1.00	296	Mytilus edulis	Mytiedul
1.00	61	Anomia simplex	Anomsimp
1.00	52	Dyspanopeus sayi	Dyspsayi
3.00	42	Melita nitida	Meliniti
2.00	174	Paranaitis speciosa	Paraspec
1.00	280	Unciola sp	Uncisp
1.00	7	Nephtys picta	Nephpict
6.00	14	Polygordius sp	Polygord

Sample unit: JB013

Value	Code	Species	Code Name
2.00	69	Tellina agilis	Tellagil
41.00	154	Microphthalmus aberrans	Micraber
90.00	14	Polygordius sp	Polygord
3.00	103	Spisula solidissima	Spissoli
2.00	248	Protohaustorius wigleyi	Protwigl
1.00	44	Rhepoxynius epistomus	Rhepepis
1.00	133	Eteone lactea	Eteolact
3.00	125	Leptochelia savignyi	Leptsavi
3.00	322	Parahaustorius attenuatus	Paraatte

Sample unit: JB014

Value	Code	Species	Code Name
5.00	2	Capitellidae sp	Capisp
2.00	140	Glycera americana	Glycamer
2.00	291	Harmothoe sp	Harmsp
142.00	1	Oligochaeta sp	Oligsp
2.00	259	Pagurus sp	Pagusp
2.00	205	Polydora ligni	Polylign

2.00	276	Scoloplos robustus	Scolrobu
4.00	275	Scolecolepides viridis	Scolviri
5.00	166	Streblospio benedicti	Strebene
4.00	110	Syllides setosa	Syllseto
20.00	69	Tellina agilis	Tellagil
1.00	339	Carcinus maenas	Carcmaen
1.00	55	Heteromysis formosa	Heteform
591.00	25	Tharyx sp	Tharsp
11.00	42	Melita nitida	Meliniti
1.00	280	Unciola sp	Uncisp
13.00	154	Microphthalmus aberrans	Micraber
65.00	96	Paraphoxus spinosus	Paraspin
200.00	14	Polygordius sp	Polygord
2.00	103	Spisula solidissima	Spissoli
2.00	114	Glycera dibranchiata	Glycdibr
1.00	11	Aricidea catherinae	Ariccath
1.00	323	Nereis sp	Neresp
3.00	18	Spiophanes bombyx	Spiobomb

Sample unit: JB015

Value	Code	Species	Code Name
12.00	69	Tellina agilis	Tellagil
1.00	55	Heteromysis formosa	Heteform
6.00	25	Tharyx sp	Tharsp
1.00	42	Melita nitida	Meliniti
2.00	7	Nephtys picta	Nephpict
1.00	103	Spisula solidissima	Spissoli
6.00	124	Acanthohaustorius millsi	Acanmill
13.00	248	Protohaustorius wigleyi	Protwigl
20.00	44	Rhepoxynius epistomus	Rhepepis
1.00	11	Aricidea catherinae	Ariccath

Sample unit: JB016

Value	Code	Species	Code Name
56.00	219	Ampelisca sp	Ampesp
51.00	2	Capitellidae sp	Capisp
5.00	140	Glycera americana	Glycamer
3.00	238	Glycinde solitaria	Glycsoli
1.00	291	Harmothoe sp	Harmsp
3.00	70	Mercenaria mercenaria	Mercmerc
15.00	1	Oligochaeta sp	Oligsp
1.00	276	Scoloplos robustus	Scolrobu
5.00	166	Streblospio benedicti	Strebene
28.00	69	Tellina agilis	Tellagil
1.00	85	Corophium sp	Corosp
5.00	321	Nucula sp	Nucusp
1.00	59	Pinnixa sp	Pinnixa

Sample unit: JB017

Value	Code	Species	Code Name
6.00	177	Acteocina canaliculata	Actecana
3.00	219	Ampelisca sp	Ampesp
696.00	2	Capitellidae sp	Capisp
10.00	71	Gemma gemma	Gemmgemm
3.00	140	Glycera americana	Glycamer
7.00	238	Glycinde solitaria	Glycsoli
1.00	161	Ilyanassa trivittata	Ilyatriv
13.00	70	Mercenaria mercenaria	Mercmerc
1.00	313	Mysella planulata	Myseplan
5.00	66	Nucula proxima	Nucuprox
32.00	1	Oligochaeta sp	Oligsp
1.00	259	Pagurus sp	Pagusp
1.00	17	Prionospio sp	Priosp
1.00	275	Scolecolepides viridis	Scolviri
148.00	69	Tellina agilis	Tellagil
1.00	6	Clymenella sp	Clymsp
1.00	76	Crepidula plana	Crepplan
1.00	55	Heteromysis formosa	Heteform
1.00	8	Nereis succinea	Neresucc
1.00	25	Tharyx sp	Tharsp
13.00	321	Nucula sp	Nucusp
1.00	11	Aricidea catherinae	Ariccath
1.00	214	Crangon septemspinosa	Cransept
1.00	325	Edotea sp	Edotsp
1.00	50	Oxyurostylis smithi	Oxyusmit
45.00	16	Polydora sp	Polydora
12.00	10	Scoloplos fragilis	Scolfrag
2.00	151	Solemya velum	Solevelu
3.00	175	Turbonilla sp	Turbonsp
2.00	324	Unciola dissimillis	Uncidiss

Sample unit: JB018

Value	Code	Species	Code Name
2855.00	219	Ampelisca sp	Ampesp
200.00	2	Capitellidae sp	Capisp
24.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
1.00	238	Glycinde solitaria	Glycsoli
6.00	291	Harmothoe sp	Harmsp
5.00	70	Mercenaria mercenaria	Mercmerc
436.00	1	Oligochaeta sp	Oligsp
3.00	276	Scoloplos robustus	Scolrobu
6.00	275	Scolecolepides viridis	Scolviri
21.00	166	Streblospio benedicti	Strebene
1.00	339	Carcinus maenas	Carcmaen
1.00	75	Crepidula fornicata	Crepforn

7.00	8	Nereis succinea	Neresucc
1.00	53	Panopeus herbstii	Panoherb
5.00	25	Tharyx sp	Tharsp
4.00	85	Corophium sp	Corosp
1.00	52	Dyspanopeus sayi	Dyspsayi
3.00	13	Eumida sanguinea	Eumisang
2.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	246	Pholoe minuta	Pholminu
1.00	56	Xanthidae sp	Xantsp
2.00	150	Lysianopsis alba	Lysialba
8.00	42	Melita nitida	Meliniti
9.00	280	Unciola sp	Uncisp
1.00	103	Spisula solidissima	Spissoli
67.00	79	Balanus sp	Balasp
9.00	11	Aricidea catherinae	Ariccath
70.00	16	Polydora sp	Polydora
1.00	233	Clymenella torquata	Clymtorq
8.00	326	Tellinidae sp	Tellsp

Sample unit: JB019

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
112.00	2	Capitellidae sp	Capisp
11.00	213	Eteone heteropoda	Eteohete
2.00	140	Glycera americana	Glycamer
1.00	238	Glycinde solitaria	Glycsoli
18.00	291	Harmothoe sp	Harmsp
1.00	161	Ilyanassa trivittata	Ilyatriv
3.00	70	Mercenaria mercenaria	Mercmerc
1.00	137	Mulinia lateralis	Mulilate
3.00	1	Oligochaeta sp	Oligsp
1.00	336	Pherusa plumosa	Pherplum
1.00	276	Scoloplos robustus	Scolrobu
1.00	275	Scolecolepides viridis	Scolviri
40.00	166	Streblospio benedicti	Strebene
1.00	339	Carcinus maenas	Carcmaen
5.00	277	Harmothoe imbricata	Harmimbr
449.00	296	Mytilus edulis	Mytiedul
19.00	8	Nereis succinea	Neresucc
1.00	201	Capitella capitata	Capicapi
2.00	52	Dyspanopeus sayi	Dyspsayi
1.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	246	Pholoe minuta	Pholminu
2.00	56	Xanthidae sp	Xantsp
3.00	312	Petricola pholadiformis	Petrphol
5.00	321	Nucula sp	Nucusp
3.00	42	Melita nitida	Meliniti
2.00	174	Paranaitis speciosa	Paraspec
1.00	233	Clymenella torquata	Clymtorq
11.00	326	Tellinidae sp	Tellsp

Sample unit: JB020

Value	Code	Species	Code Name
5.00	2	Capitellidae sp	Capisp
1.00	140	Glycera americana	Glycamer
40.00	291	Harmothoe sp	Harmsp
1.00	70	Mercenaria mercenaria	Mercmerc
1.00	336	Pherusa plumosa	Pherplum
8.00	205	Polydora ligni	Polylign
7.00	166	Streblospio benedicti	Strebene
1.00	69	Tellina agilis	Tellagil
10.00	75	Crepidula fornicata	Crepforn
2.00	76	Crepidula plana	Crepplan
5.00	277	Harmothoe imbricata	Harmimbr
106.00	296	Mytilus edulis	Mytiedul
49.00	8	Nereis succinea	Neresucc
3.00	52	Dyspanopeus sayi	Dyspsayi
1.00	168	Hydroides dianthus	Hydrdian
9.00	253	Microdeutopus gryllotalpa	Micrgryl
10.00	56	Xanthidae sp	Xantsp
1.00	145	Gyptis vittata	Gyptvitt
35.00	79	Balanus sp	Balasp

Sample unit: JB021

Value	Code	Species	Code Name
1.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
4.00	291	Harmothoe sp	Harmsp
1.00	161	Ilyanassa trivittata	Ilyatriv
1.00	66	Nucula proxima	Nucuprox
1.00	336	Pherusa plumosa	Pherplum
20.00	69	Tellina agilis	Tellagil
8.00	296	Mytilus edulis	Mytiedul
3.00	8	Nereis succinea	Neresucc
1.00	53	Panopeus herbstii	Panoherb
1.00	319	Cerastoderma pinnulatum	Cerapinn
1.00	145	Gyptis vittata	Gyptvitt
4.00	150	Lysianopsis alba	Lysialba
2.00	321	Nucula sp	Nucusp
2.00	96	Paraphoxus spinosus	Paraspin
1.00	41	Elasmopus levis	Elaslevi
1.00	214	Crangon septemspinosa	Cransept
1.00	327	Mogula manhattensis	Mogumanh
1.00	104	Nucula tenuis	Nucutenu

Sample unit: JB022

Value	Code	Species	Code Name

1.00	219	Ampelisca sp	Ampesp
66.00	2	Capitellidae sp	Capisp
25.00	213	Eteone heteropoda	Eteohete
116.00	291	Harmothoe sp	Harmsp
1.00	70	Mercenaria mercenaria	Mercmerc
74.00	1	Oligochaeta sp	Oligsp
1.00	336	Pherusa plumosa	Pherplum
69.00	205	Polydora ligni	Polylign
2.00	17	Prionospio sp	Priosp
44.00	166	Streblospio benedicti	Strebene
6.00	69	Tellina agilis	Tellagil
15.00	75	Crepidula fornicata	Crepforn
12.00	76	Crepidula plana	Crepplan
7.00	277	Harmothoe imbricata	Harmimbr
71.00	296	Mytilus edulis	Mytiedul
33.00	8	Nereis succinea	Neresucc
9.00	25	Tharyx sp	Tharsp
3.00	201	Capitella capitata	Capicapi
11.00	52	Dyspanopeus sayi	Dyspsayi
2.00	13	Eumida sanguinea	Eumisang
8.00	168	Hydroides dianthus	Hydrdian
2.00	253	Microdeutopus gryllotalpa	Micrgryl
3.00	246	Pholoe minuta	Pholminu
7.00	56	Xanthidae sp	Xantsp
1.00	150	Lysianopsis alba	Lysialba
1.00	174	Paranaitis speciosa	Paraspec
1.00	96	Paraphoxus spinosus	Paraspin
1.00	123	Podarke obscura	Podaobsc
71.00	79	Balanus sp	Balasp

Sample unit: JB023

Value	Code	Species	Code Name
9187.00	219	Ampelisca sp	Ampesp
4.00	2	Capitellidae sp	Capisp
2.00	213	Eteone heteropoda	Eteohete
1.00	161	Ilyanassa trivittata	Ilyatriv
1.00	66	Nucula proxima	Nucuprox
12.00	1	Oligochaeta sp	Oligsp
42.00	205	Polydora ligni	Polylign
12.00	166	Streblospio benedicti	Strebene
15.00	69	Tellina agilis	Tellagil
3.00	339	Carcinus maenas	Carcmaen
2.00	296	Mytilus edulis	Mytiedul
17.00	8	Nereis succinea	Neresucc
44.00	85	Corophium sp	Corosp
6.00	13	Eumida sanguinea	Eumisang
8.00	253	Microdeutopus gryllotalpa	Micrgryl
4.00	150	Lysianopsis alba	Lysialba
4.00	42	Melita nitida	Meliniti
1.00	41	Elasmopus levis	Elaslevi

2.00	214	Crangon septemspinosa	Cransept
13.00	324	Unciola dissimillis	Uncidiss
2.00	284	Decapoda megalopa	Decamega

Sample unit: JB024

Value	Code	Species	Code Name
47.00	219	Ampelisca sp	Ampesp
37.00	2	Capitellidae sp	Capisp
10.00	213	Eteone heteropoda	Eteohete
2.00	140	Glycera americana	Glycamer
15.00	291	Harmothoe sp	Harmsp
1.00	66	Nucula proxima	Nucuprox
18.00	1	Oligochaeta sp	Oligsp
41.00	205	Polydora ligni	Polylign
38.00	166	Streblospio benedicti	Strebene
1.00	69	Tellina agilis	Tellagil
1.00	75	Crepidula fornicata	Crepforn
3.00	277	Harmothoe imbricata	Harmimbr
3.00	55	Heteromysis formosa	Heteform
1.00	296	Mytilus edulis	Mytiedul
17.00	8	Nereis succinea	Neresucc
8.00	25	Tharyx sp	Tharsp
19.00	201	Capitella capitata	Capicapi
1.00	85	Corophium sp	Corosp
3.00	52	Dyspanopeus sayi	Dyspsayi
2.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	300	Autolytus sp	Autosp
10.00	79	Balanus sp	Balasp

Sample unit: JB025

Value	Code	Species	Code Name
1.00	68	Ensis directus	Ensidire
1.00	213	Eteone heteropoda	Eteohete
1.00	70	Mercenaria mercenaria	Mercmerc
25.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
1.00	168	Hydroides dianthus	Hydrdian
4.00	7	Nephtys picta	Nephpict
1.00	14	Polygordius sp	Polygord
6.00	103	Spisula solidissima	Spissoli
1.00	124	Acanthohaustorius millsi	Acanmill
3.00	248	Protohaustorius wigleyi	Protwigl
50.00	44	Rhepoxynius epistomus	Rhepepis
1.00	50	Oxyurostylis smithi	Oxyusmit
1.00	16	Polydora sp	Polydora
4.00	324	Unciola dissimillis	Uncidiss
3.00	335	Aricidae sp	Aricsp

Sample unit: JB026

Value	Code	Species	Code Name
7678.00	219	Ampelisca sp	Ampesp
36.00	2	Capitellidae sp	Capisp
35.00	213	Eteone heteropoda	Eteohete
14.00	70	Mercenaria mercenaria	Mercmerc
1.00	137	Mulinia lateralis	Mulilate
20.00	66	Nucula proxima	Nucuprox
34.00	1	Oligochaeta sp	Oligsp
40.00	205	Polydora ligni	Polylign
2.00	318	Rissoidae sp	Risssp
6.00	275	Scolecolepides viridis	Scolviri
78.00	166	Streblospio benedicti	Strebene
110.00	69	Tellina agilis	Tellagil
16.00	339	Carcinus maenas	Carcmaen
2.00	296	Mytilus edulis	Mytiedul
16.00	8	Nereis succinea	Neresucc
12.00	25	Tharyx sp	Tharsp
34.00	201	Capitella capitata	Capicapi
20.00	85	Corophium sp	Corosp
16.00	253	Microdeutopus gryllotalpa	Micrgryl
26.00	150	Lysianopsis alba	Lysialba
2.00	312	Petricola pholadiformis	Petrphol
12.00	42	Melita nitida	Meliniti
2.00	174	Paranaitis speciosa	Paraspec
16.00	280	Unciola sp	Uncisp
2.00	7	Nephtys picta	Nephpict
2.00	96	Paraphoxus spinosus	Paraspin
2.00	41	Elasmopus levis	Elaslevi
2.00	214	Crangon septemspinosa	Cransept
1.00	60	Bivalvia sp	Bivasp
2.00	43	Pagurus longicarpus	Pagulong

Sample unit: JB027

Value	Code	Species	Code Name
8.00	219	Ampelisca sp	Ampesp
1.00	2	Capitellidae sp	Capisp
1.00	259	Pagurus sp	Pagusp
2.00	166	Streblospio benedicti	Strebene
52.00	69	Tellina agilis	Tellagil
1.00	339	Carcinus maenas	Carcmaen
1.00	8	Nereis succinea	Neresucc
1.00	25	Tharyx sp	Tharsp
1.00	246	Pholoe minuta	Pholminu
1.00	174	Paranaitis speciosa	Paraspec
2.00	7	Nephtys picta	Nephpict
13.00	14	Polygordius sp	Polygord
5.00	103	Spisula solidissima	Spissoli

81.00	124	Acanthohaustorius millsi	Acanmill
17.00	248	Protohaustorius wigleyi	Protwigl
5.00	44	Rhepoxynius epistomus	Rhepepis
3.00	125	Leptochelia savignyi	Leptsavi
1.00	16	Polydora sp	Polydora
1.00	284	Decapoda megalopa	Decamega
4.00	335	Aricidae sp	Aricsp

Sample unit: JB028

Value	Code	Species	Code Name
205.00	2	Capitellidae sp	Capisp
8.00	213	Eteone heteropoda	Eteohete
6.00	71	Gemma gemma	Gemmgemm
1.00	238	Glycinde solitaria	Glycsoli
8.00	70	Mercenaria mercenaria	Mercmerc
150.00	1	Oligochaeta sp	Oligsp
1.00	259	Pagurus sp	Pagusp
10.00	205	Polydora ligni	Polylign
1.00	17	Prionospio sp	Priosp
13.00	275	Scolecolepides viridis	Scolviri
244.00	166	Streblospio benedicti	Strebene
51.00	69	Tellina agilis	Tellagil
2.00	75	Crepidula fornicata	Crepforn
32.00	25	Tharyx sp	Tharsp
3.00	7	Nephtys picta	Nephpict
28.00	11	Aricidea catherinae	Ariccath
8.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	328	Pyramidella producta	Pyraprod
7.00	264	Scoloplos sp	Scolsp
3.00	309	Spiochaetopterus oculatus	Spioocul

Sample unit: JB029

Value	Code	Species	Code Name
2.00	219	Ampelisca sp	Ampesp
65.00	2	Capitellidae sp	Capisp
1.00	71	Gemma gemma	Gemmgemm
8.00	70	Mercenaria mercenaria	Mercmerc
75.00	1	Oligochaeta sp	Oligsp
1.00	259	Pagurus sp	Pagusp
3.00	205	Polydora ligni	Polylign
10.00	276	Scoloplos robustus	Scolrobu
126.00	166	Streblospio benedicti	Strebene
1.00	110	Syllides setosa	Syllseto
91.00	69	Tellina agilis	Tellagil
2.00	339	Carcinus maenas	Carcmaen
2.00	75	Crepidula fornicata	Crepforn
143.00	25	Tharyx sp	Tharsp
1.00	312	Petricola pholadiformis	Petrphol

1.00	42	Melita nitida	Meliniti
5.00	14	Polygordius sp	Polygord
5.00	324	Unciola dissimillis	Uncidiss
40.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	309	Spiochaetopterus oculatus	Spioocul

Sample unit: JB030

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
2.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
2.00	291	Harmothoe sp	Harmsp
11.00	66	Nucula proxima	Nucuprox
10.00	1	Oligochaeta sp	Oligsp
1.00	336	Pherusa plumosa	Pherplum
16.00	205	Polydora ligni	Polylign
39.00	166	Streblospio benedicti	Strebene
14.00	69	Tellina agilis	Tellagil
1.00	339	Carcinus maenas	Carcmaen
2.00	8	Nereis succinea	Neresucc
29.00	201	Capitella capitata	Capicapi
1.00	85	Corophium sp	Corosp
5.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	246	Pholoe minuta	Pholminu
3.00	150	Lysianopsis alba	Lysialba
2.00	312	Petricola pholadiformis	Petrphol
4.00	42	Melita nitida	Meliniti
15.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	86	Asabellides oculata	Asabocul
1.00	20	Exogone dispar	Exogdisp
1.00	311	Pagurus acadianus	Paguacad

Sample unit: JB031

Value	Code	Species	Code Name
2.00	219	Ampelisca sp	Ampesp
5.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
2.00	291	Harmothoe sp	Harmsp
4.00	205	Polydora ligni	Polylign
18.00	166	Streblospio benedicti	Strebene
1.00	75	Crepidula fornicata	Crepforn
1.00	277	Harmothoe imbricata	Harmimbr
14.00	8	Nereis succinea	Neresucc
3.00	53	Panopeus herbstii	Panoherb
2.00	25	Tharyx sp	Tharsp
11.00	201	Capitella capitata	Capicapi
3.00	52	Dyspanopeus sayi	Dyspsayi
1.00	150	Lysianopsis alba	Lysialba

30.00	42	Melita nitida	Meliniti
1.00	123	Podarke obscura	Podaobsc
5.00	79	Balanus sp	Balasp

Sample unit: JB032

Value	Code	Species	Code Name
5.00	219	Ampelisca sp	Ampesp
5.00	213	Eteone heteropoda	Eteohete
38.00	291	Harmothoe sp	Harmsp
3.00	70	Mercenaria mercenaria	Mercmerc
9.00	1	Oligochaeta sp	Oligsp
16.00	205	Polydora ligni	Polylign
10.00	166	Streblospio benedicti	Strebene
22.00	69	Tellina agilis	Tellagil
44.00	75	Crepidula fornicata	Crepforn
8.00	76	Crepidula plana	Crepplan
4.00	277	Harmothoe imbricata	Harmimbr
11.00	55	Heteromysis formosa	Heteform
14.00	8	Nereis succinea	Neresucc
30.00	25	Tharyx sp	Tharsp
114.00	201	Capitella capitata	Capicapi
1.00	85	Corophium sp	Corosp
4.00	13	Eumida sanguinea	Eumisang
13.00	253	Microdeutopus gryllotalpa	Micrgryl
3.00	246	Pholoe minuta	Pholminu
9.00	56	Xanthidae sp	Xantsp
3.00	150	Lysianopsis alba	Lysialba
1.00	171	Mya arenaria	Myaaren
1.00	107	Pectinaria gouldii	Pectgoul
1.00	42	Melita nitida	Meliniti
2.00	174	Paranaitis speciosa	Paraspec
1.00	96	Paraphoxus spinosus	Paraspin
3.00	270	Sabellaria vulgaris	Sabevulg
2.00	123	Podarke obscura	Podaobsc
8.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB033

Value	Code	Species	Code Name
13.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
2.00	291	Harmothoe sp	Harmsp
2.00	70	Mercenaria mercenaria	Mercmerc
2.00	313	Mysella planulata	Myseplan
20.00	66	Nucula proxima	Nucuprox
90.00	1	Oligochaeta sp	Oligsp
25.00	205	Polydora ligni	Polylign
2.00	276	Scoloplos robustus	Scolrobu
619.00	166	Streblospio benedicti	Strebene

46.00	69	Tellina agilis	Tellagil
4.00	25	Tharyx sp	Tharsp
196.00	201	Capitella capitata	Capicapi
3.00	246	Pholoe minuta	Pholminu
1.00	174	Paranaitis speciosa	Paraspec
1.00	123	Podarke obscura	Podaobsc
50.00	11	Aricidea catherinae	Ariccath
1.00	311	Pagurus acadianus	Paguacad

Sample unit: JB034

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
30.00	213	Eteone heteropoda	Eteohete
2.00	140	Glycera americana	Glycamer
19.00	291	Harmothoe sp	Harmsp
217.00	1	Oligochaeta sp	Oligsp
40.00	205	Polydora ligni	Polylign
48.00	166	Streblospio benedicti	Strebene
1.00	110	Syllides setosa	Syllseto
17.00	69	Tellina agilis	Tellagil
40.00	75	Crepidula fornicata	Crepforn
30.00	76	Crepidula plana	Crepplan
1.00	277	Harmothoe imbricata	Harmimbr
8.00	55	Heteromysis formosa	Heteform
5.00	296	Mytilus edulis	Mytiedul
22.00	8	Nereis succinea	Neresucc
9.00	53	Panopeus herbstii	Panoherb
69.00	25	Tharyx sp	Tharsp
179.00	201	Capitella capitata	Capicapi
1.00	52	Dyspanopeus sayi	Dyspsayi
2.00	13	Eumida sanguinea	Eumisang
13.00	168	Hydroides dianthus	Hydrdian
10.00	253	Microdeutopus gryllotalpa	Micrgryl
2.00	42	Melita nitida	Meliniti
1.00	174	Paranaitis speciosa	Paraspec
7.00	96	Paraphoxus spinosus	Paraspin
7.00	270	Sabellaria vulgaris	Sabevulg
1.00	123	Podarke obscura	Podaobsc
1.00	79	Balanus sp	Balasp
2.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	20	Exogone dispar	Exogdisp
3.00	210	Nepthys incisa	Neptinci

Sample unit: JB035

Value	Code	Species	Code Name
3.00	219	Ampelisca sp	Ampesp
2.00	213	Eteone heteropoda	Eteohete
12.00	71	Gemma gemma	Gemmgemm

5.00	291	Harmothoe sp	Harmsp
31.00	1	Oligochaeta sp	Oligsp
5.00	205	Polydora ligni	Polylign
109.00	166	Streblospio benedicti	Strebene
2.00	110	Syllides setosa	Syllseto
43.00	69	Tellina agilis	Tellagil
3.00	75	Crepidula fornicata	Crepforn
1.00	55	Heteromysis formosa	Heteform
2.00	8	Nereis succinea	Neresucc
1.00	53	Panopeus herbstii	Panoherb
94.00	25	Tharyx sp	Tharsp
2.00	201	Capitella capitata	Capicapi
71.00	308	Caprellidae sp	Caprsp
46.00	85	Corophium sp	Corosp
4.00	13	Eumida sanguinea	Eumisang
18.00	168	Hydroides dianthus	Hydrdian
12.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	150	Lysianopsis alba	Lysialba
2.00	42	Melita nitida	Meliniti
1.00	174	Paranaitis speciosa	Paraspec
1.00	7	Nephtys picta	Nephpict
10.00	96	Paraphoxus spinosus	Paraspin
3.00	14	Polygordius sp	Polygord
72.00	270	Sabellaria vulgaris	Sabevulg
1.00	114	Glycera dibranchiata	Glycdibr
1.00	123	Podarke obscura	Podaobsc
5.00	11	Aricidea catherinae	Ariccath
2.00	50	Oxyurostylis smithi	Oxyusmit
1.00	20	Exogone dispar	Exogdisp
6.00	311	Pagurus acadianus	Paguacad
71.00	111	Erichthonius brasiliensis	Ericbras
1.00	314	Palaemonetes vulgaris	Palavulg
77.00	121	Stenothoe minuta	Stenminu
1.00	24	Syllis gracilis	Syllgrac
57.00	299	Unciola serrata	Unciserr

Sample unit: JB036

Value	Code	Species	Code Name
242.00	219	Ampelisca sp	Ampesp
7.00	2	Capitellidae sp	Capisp
1.00	213	Eteone heteropoda	Eteohete
1.00	291	Harmothoe sp	Harmsp
3.00	70	Mercenaria mercenaria	Mercmerc
1.00	66	Nucula proxima	Nucuprox
23.00	1	Oligochaeta sp	Oligsp
11.00	205	Polydora ligni	Polylign
6.00	166	Streblospio benedicti	Strebene
1.00	69	Tellina agilis	Tellagil
1.00	277	Harmothoe imbricata	Harmimbr
2.00	8	Nereis succinea	Neresucc
745.00	85	Corophium sp	Corosp

532.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	56	Xanthidae sp	Xantsp
2.00	145	Gyptis vittata	Gyptvitt
70.00	150	Lysianopsis alba	Lysialba
1.00	42	Melita nitida	Meliniti
1.00	280	Unciola sp	Uncisp
28.00	96	Paraphoxus spinosus	Paraspin
9.00	41	Elasmopus levis	Elaslevi
1.00	123	Podarke obscura	Podaobsc
23.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	20	Exogone dispar	Exogdisp
1.00	331	Amphitrite ornata	Amphorna

Sample unit: JB037

Value	Code	Species	Code Name
29.00	219	Ampelisca sp	Ampesp
147.00	2	Capitellidae sp	Capisp
1.00	213	Eteone heteropoda	Eteohete
1.00	291	Harmothoe sp	Harmsp
6.00	66	Nucula proxima	Nucuprox
10.00	1	Oligochaeta sp	Oligsp
90.00	205	Polydora ligni	Polylign
1.00	276	Scoloplos robustus	Scolrobu
78.00	166	Streblospio benedicti	Strebene
18.00	69	Tellina agilis	Tellagil
2.00	8	Nereis succinea	Neresucc
4.00	25	Tharyx sp	Tharsp
4.00	85	Corophium sp	Corosp
2.00	13	Eumida sanguinea	Eumisang
12.00	253	Microdeutopus gryllotalpa	Micrgryl
5.00	246	Pholoe minuta	Pholminu
3.00	150	Lysianopsis alba	Lysialba
3.00	312	Petricola pholadiformis	Petrphol
1.00	174	Paranaitis speciosa	Paraspec
1.00	306	Terebellidae sp	Teresp
2.00	41	Elasmopus levis	Elaslevi
1.00	214	Crangon septemspinosa	Cransept
2.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	20	Exogone dispar	Exogdisp
1.00	311	Pagurus acadianus	Paguacad

Sample unit: JB038

Value	Code	Species	Code Name
5.00	219	Ampelisca sp	Ampesp
50.00	2	Capitellidae sp	Capisp
4.00	213	Eteone heteropoda	Eteohete
2.00	140	Glycera americana	Glycamer
3.00	70	Mercenaria mercenaria	Mercmerc

1.00	313	Mysella planulata	Myseplan
17.00	66	Nucula proxima	Nucuprox
30.00	1	Oligochaeta sp	Oligsp
1.00	336	Pherusa plumosa	Pherplum
68.00	205	Polydora ligni	Polylign
4.00	276	Scoloplos robustus	Scolrobu
24.00	166	Streblospio benedicti	Strebene
14.00	69	Tellina agilis	Tellagil
2.00	75	Crepidula fornicata	Crepforn
11.00	8	Nereis succinea	Neresucc
2.00	25	Tharyx sp	Tharsp
1.00	85	Corophium sp	Corosp
4.00	246	Pholoe minuta	Pholminu
1.00	312	Petricola pholadiformis	Petrphol
1.00	123	Podarke obscura	Podaobsc
2.00	43	Pagurus longicarpus	Pagulong
5.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	62	Anadara transversa	Anadtran

Sample unit: JB039

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
131.00	2	Capitellidae sp	Capisp
4.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
5.00	66	Nucula proxima	Nucuprox
10.00	1	Oligochaeta sp	Oligsp
18.00	205	Polydora ligni	Polylign
18.00	166	Streblospio benedicti	Strebene
10.00	69	Tellina agilis	Tellagil
2.00	8	Nereis succinea	Neresucc
1.00	25	Tharyx sp	Tharsp
3.00	201	Capitella capitata	Capicapi
1.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	86	Asabellides oculata	Asabocul
1.00	311	Pagurus acadianus	Paguacad
1.00	338	Heteromastus filiformis	Hetefili

Sample unit: JB040

Value	Code	Species	Code Name
1.00	177	Acteocina canaliculata	Actecana
8.00	219	Ampelisca sp	Ampesp
193.00	2	Capitellidae sp	Capisp
1.00	238	Glycinde solitaria	Glycsoli
3.00	70	Mercenaria mercenaria	Mercmerc
1.00	137	Mulinia lateralis	Mulilate
2.00	313	Mysella planulata	Myseplan
29.00	1	Oligochaeta sp	Oligsp

35.00	205	Polydora ligni	Polylign
2.00	276	Scoloplos robustus	Scolrobu
35.00	166	Streblospio benedicti	Strebene
8.00	69	Tellina agilis	Tellagil
1.00	75	Crepidula fornicata	Crepforn
3.00	8	Nereis succinea	Neresucc
2.00	25	Tharyx sp	Tharsp
1.00	246	Pholoe minuta	Pholminu
2.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	311	Pagurus acadianus	Paguacad

Sample unit: JB041

Value	Code	Species	Code Name
3.00	219	Ampelisca sp	Ampesp
298.00	2	Capitellidae sp	Capisp
3.00	213	Eteone heteropoda	Eteohete
3.00	140	Glycera americana	Glycamer
4.00	238	Glycinde solitaria	Glycsoli
1.00	291	Harmothoe sp	Harmsp
2.00	70	Mercenaria mercenaria	Mercmerc
24.00	1	Oligochaeta sp	Oligsp
3.00	336	Pherusa plumosa	Pherplum
17.00	205	Polydora ligni	Polylign
29.00	166	Streblospio benedicti	Strebene
26.00	69	Tellina agilis	Tellagil
1.00	75	Crepidula fornicata	Crepforn
1.00	76	Crepidula plana	Crepplan
4.00	8	Nereis succinea	Neresucc
5.00	25	Tharyx sp	Tharsp
3.00	201	Capitella capitata	Capicapi
50.00	168	Hydroides dianthus	Hydrdian
4.00	246	Pholoe minuta	Pholminu
3.00	312	Petricola pholadiformis	Petrphol
1.00	321	Nucula sp	Nucusp
2.00	174	Paranaitis speciosa	Paraspec
2.00	43	Pagurus longicarpus	Pagulong
4.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	264	Scoloplos sp	Scolsp
1.00	229	Caridea sp	Carisp

Sample unit: JB042

Value	Code	Species	Code Name
30.00	2	Capitellidae sp	Capisp
2.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
4.00	70	Mercenaria mercenaria	Mercmerc
1.00	66	Nucula proxima	Nucuprox
15.00	1	Oligochaeta sp	Oligsp

1.00	336	Pherusa plumosa	Pherplum
16.00	205	Polydora ligni	Polylign
4.00	276	Scoloplos robustus	Scolrobu
2.00	69	Tellina agilis	Tellagil
2.00	8	Nereis succinea	Neresucc
2.00	145	Gyptis vittata	Gyptvitt
11.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB043

Value	Code	Species	Code Name
1.00	56	Xanthidae sp	Xantsp
9.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB044

Value	Code	Species	Code Name
3166.00	219	Ampelisca sp	Ampesp
187.00	2	Capitellidae sp	Capisp
31.00	213	Eteone heteropoda	Eteohete
1.00	238	Glycinde solitaria	Glycsoli
4.00	70	Mercenaria mercenaria	Mercmerc
80.00	1	Oligochaeta sp	Oligsp
5.00	275	Scolecolepides viridis	Scolviri
308.00	166	Streblospio benedicti	Strebene
55.00	69	Tellina agilis	Tellagil
1.00	75	Crepidula fornicata	Crepforn
5.00	8	Nereis succinea	Neresucc
17.00	25	Tharyx sp	Tharsp
6.00	201	Capitella capitata	Capicapi
37.00	85	Corophium sp	Corosp
1.00	13	Eumida sanguinea	Eumisang
37.00	253	Microdeutopus gryllotalpa	Micrgryl
17.00	150	Lysianopsis alba	Lysialba
5.00	42	Melita nitida	Meliniti
4.00	174	Paranaitis speciosa	Paraspec
1.00	102	Nereis arenaceodonta	Nerearen
5.00	96	Paraphoxus spinosus	Paraspin
1.00	306	Terebellidae sp	Teresp
6.00	41	Elasmopus levis	Elaslevi
1.00	233	Clymenella torquata	Clymtorq
7.00	43	Pagurus longicarpus	Pagulong
20.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	264	Scoloplos sp	Scolsp
2.00	330	Decapoda zoea	Decazoea
1.00	157	Mitrella lunata	Mitrluna

Sample unit: JB045

Value	Code	Species	Code Name
6186.00	219	Ampelisca sp	Ampesp
191.00	2	Capitellidae sp	Capisp
5.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
18.00	291	Harmothoe sp	Harmsp
111.00	1	Oligochaeta sp	Oligsp
4.00	259	Pagurus sp	Pagusp
1.00	336	Pherusa plumosa	Pherplum
34.00	205	Polydora ligni	Polylign
3.00	276	Scoloplos robustus	Scolrobu
3.00	275	Scolecolepides viridis	Scolviri
48.00	166	Streblospio benedicti	Strebene
2.00	110	Syllides setosa	Syllseto
22.00	69	Tellina agilis	Tellagil
3.00	339	Carcinus maenas	Carcmaen
11.00	75	Crepidula fornicata	Crepforn
8.00	76	Crepidula plana	Crepplan
2.00	277	Harmothoe imbricata	Harmimbr
3.00	55	Heteromysis formosa	Heteform
1.00	296	Mytilus edulis	Mytiedul
5.00	8	Nereis succinea	Neresucc
113.00	25	Tharyx sp	Tharsp
72.00	201	Capitella capitata	Capicapi
3.00	85	Corophium sp	Corosp
5.00	52	Dyspanopeus sayi	Dyspsayi
2.00	168	Hydroides dianthus	Hydrdian
382.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	56	Xanthidae sp	Xantsp
163.00	150	Lysianopsis alba	Lysialba
1.00	312	Petricola pholadiformis	Petrphol
27.00	42	Melita nitida	Meliniti
2.00	174	Paranaitis speciosa	Paraspec
1.00	280	Unciola sp	Uncisp
1.00	102	Nereis arenaceodonta	Nerearen
95.00	96	Paraphoxus spinosus	Paraspin
5.00	41	Elasmopus levis	Elaslevi
2.00	123	Podarke obscura	Podaobsc
1.00	43	Pagurus longicarpus	Pagulong
2.00	20	Exogone dispar	Exogdisp

Sample unit: JB046

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
5.00	2	Capitellidae sp	Capisp
1.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
2.00	66	Nucula proxima	Nucuprox
4.00	1	Oligochaeta sp	Oligsp
1.00	205	Polydora ligni	Polylign

1.00	276	Scoloplos robustus	Scolrobu
1.00	69	Tellina agilis	Tellagil
1.00	246	Pholoe minuta	Pholminu
1.00	312	Petricola pholadiformis	Petrphol
2.00	43	Pagurus longicarpus	Pagulong
13.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	338	Heteromastus filiformis	Hetefili

Sample unit: JB047

Value	Code	Species	Code Name
11.00	219	Ampelisca sp	Ampesp
27.00	2	Capitellidae sp	Capisp
5.00	213	Eteone heteropoda	Eteohete
3.00	291	Harmothoe sp	Harmsp
15.00	1	Oligochaeta sp	Oligsp
2.00	259	Pagurus sp	Pagusp
1.00	336	Pherusa plumosa	Pherplum
18.00	205	Polydora ligni	Polylign
2.00	275	Scolecolepides viridis	Scolviri
6.00	166	Streblospio benedicti	Strebene
1.00	110	Syllides setosa	Syllseto
32.00	69	Tellina agilis	Tellagil
45.00	75	Crepidula fornicata	Crepforn
2.00	76	Crepidula plana	Crepplan
2.00	55	Heteromysis formosa	Heteform
6.00	8	Nereis succinea	Neresucc
2.00	25	Tharyx sp	Tharsp
237.00	201	Capitella capitata	Capicapi
3.00	13	Eumida sanguinea	Eumisang
3.00	168	Hydroides dianthus	Hydrdian
4.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	150	Lysianopsis alba	Lysialba
1.00	42	Melita nitida	Meliniti
1.00	102	Nereis arenaceodonta	Nerearen
6.00	96	Paraphoxus spinosus	Paraspin
1.00	123	Podarke obscura	Podaobsc
2.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	329	Mysidopsis bigelowi	Mysibige

Sample unit: JB048

Value	Code	Species	Code Name
1.00	2	Capitellidae sp	Capisp
1.00	161	Ilyanassa trivittata	Ilyatriv
1.00	70	Mercenaria mercenaria	Mercmerc
48.00	66	Nucula proxima	Nucuprox
18.00	69	Tellina agilis	Tellagil
1.00	8	Nereis succinea	Neresucc
1.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB049

Value	Code	Species	Code Name
2.00	219	Ampelisca sp	Ampesp
1.00	140	Glycera americana	Glycamer
10.00	66	Nucula proxima	Nucuprox
1.00	259	Pagurus sp	Pagusp
8.00	205	Polydora ligni	Polylign
3.00	166	Streblospio benedicti	Strebene
5.00	69	Tellina agilis	Tellagil
2.00	253	Microdeutopus gryllotalpa	Micrgryl
2.00	214	Crangon septemspinosa	Cransept

Sample unit: JB050

Value	Code	Species	Code Name
4.00	2	Capitellidae sp	Capisp
7.00	66	Nucula proxima	Nucuprox
2.00	205	Polydora ligni	Polylign
1.00	166	Streblospio benedicti	Strebene
6.00	69	Tellina agilis	Tellagil
2.00	8	Nereis succinea	Neresucc
1.00	201	Capitella capitata	Capicapi
2.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB051

Value	Code	Species	Code Name
4.00	219	Ampelisca sp	Ampesp
1.00	66	Nucula proxima	Nucuprox
1.00	336	Pherusa plumosa	Pherplum
7.00	205	Polydora ligni	Polylign
9.00	69	Tellina agilis	Tellagil
1.00	8	Nereis succinea	Neresucc
1.00	150	Lysianopsis alba	Lysialba
1.00	312	Petricola pholadiformis	Petrphol
2.00	42	Melita nitida	Meliniti
1.00	174	Paranaitis speciosa	Paraspec
1.00	16	Polydora sp	Polydora
2.00	43	Pagurus longicarpus	Pagulong
6.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB053

Value	Code	Species	Code Name

3075.00	219	Ampelisca sp	Ampesp
274.00	2	Capitellidae sp	Capisp
92.00	213	Eteone heteropoda	Eteohete
1.00	238	Glycinde solitaria	Glycsoli
2.00	291	Harmothoe sp	Harmsp
1.00	70	Mercenaria mercenaria	Mercmerc
73.00	1	Oligochaeta sp	Oligsp
1.00	259	Pagurus sp	Pagusp
6.00	205	Polydora ligni	Polylign
7.00	276	Scoloplos robustus	Scolrobu
1.00	275	Scolecolepides viridis	Scolviri
173.00	166	Streblospio benedicti	Strebene
6.00	110	Syllides setosa	Syllseto
34.00	69	Tellina agilis	Tellagil
4.00	75	Crepidula fornicata	Crepforn
1.00	277	Harmothoe imbricata	Harmimbr
7.00	8	Nereis succinea	Neresucc
6.00	25	Tharyx sp	Tharsp
18.00	201	Capitella capitata	Capicapi
8.00	308	Caprellidae sp	Caprsp
26.00	85	Corophium sp	Corosp
4.00	52	Dyspanopeus sayi	Dyspsayi
19.00	13	Eumida sanguinea	Eumisang
111.00	253	Microdeutopus gryllotalpa	Micrgryl
71.00	150	Lysianopsis alba	Lysialba
39.00	42	Melita nitida	Meliniti
3.00	174	Paranaitis speciosa	Paraspec
3.00	280	Unciola sp	Uncisp
2.00	96	Paraphoxus spinosus	Paraspin
6.00	41	Elasmopus levis	Elaslevi
2.00	284	Decapoda megalopa	Decamega
10.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	328	Pyramidella producta	Pyraprod
1.00	111	Erichthonius brasiliensis	Ericbras

Sample unit: JB054

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
1.00	213	Eteone heteropoda	Eteohete
1.00	205	Polydora ligni	Polylign
2.00	166	Streblospio benedicti	Strebene
3.00	69	Tellina agilis	Tellagil
1.00	214	Crangon septemspinosa	Cransept
4.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB055

Value	Code	Species	Code Name
5.00	2	Capitellidae sp	Capisp

31.00	66	Nucula proxima	Nucuprox
4.00	1	Oligochaeta sp	Oligsp
1.00	336	Pherusa plumosa	Pherplum
7.00	166	Streblospio benedicti	Strebene
10.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
1.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB056

Value	Code	Species	Code Name
5.00	219	Ampelisca sp	Ampesp
2.00	205	Polydora ligni	Polylign
20.00	69	Tellina agilis	Tellagil
1.00	75	Crepidula fornicata	Crepforn
2.00	25	Tharyx sp	Tharsp
1.00	308	Caprellidae sp	Caprsp
3.00	85	Corophium sp	Corosp
2.00	13	Eumida sanguinea	Eumisang
16.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	150	Lysianopsis alba	Lysialba
11.00	42	Melita nitida	Meliniti
1.00	96	Paraphoxus spinosus	Paraspin
10.00	124	Acanthohaustorius millsi	Acanmill
3.00	248	Protohaustorius wigleyi	Protwigl
40.00	44	Rhepoxynius epistomus	Rhepepis
1.00	50	Oxyurostylis smithi	Oxyusmit
14.00	324	Unciola dissimillis	Uncidiss
2.00	335	Aricidae sp	Aricsp
1.00	264	Scoloplos sp	Scolsp
1.00	20	Exogone dispar	Exogdisp
1.00	315	Gammarus mucronatus	Gammmucr
1.00	15	Lepidonotus squamatus	Lepisqua
1.00	337	Parahaustorius longimerus	Parahaus

Sample unit: JB057

Value	Code	Species	Code Name
1.00	213	Eteone heteropoda	Eteohete
2.00	259	Pagurus sp	Pagusp
1.00	110	Syllides setosa	Syllseto
42.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
1.00	85	Corophium sp	Corosp
8.00	7	Nephtys picta	Nephpict
2.00	14	Polygordius sp	Polygord
1.00	124	Acanthohaustorius millsi	Acanmill
3.00	44	Rhepoxynius epistomus	Rhepepis
2.00	235	Crepidula convexa	Crepconv

Sample unit: JB058

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
12.00	1	Oligochaeta sp	Oligsp
28.00	69	Tellina agilis	Tellagil
4.00	25	Tharyx sp	Tharsp
1.00	201	Capitella capitata	Capicapi
2.00	85	Corophium sp	Corosp
8.00	7	Nephtys picta	Nephpict
1.00	103	Spisula solidissima	Spissoli
1.00	124	Acanthohaustorius millsi	Acanmill
2.00	44	Rhepoxynius epistomus	Rhepepis
1.00	43	Pagurus longicarpus	Pagulong
1.00	338	Heteromastus filiformis	Hetefili

Sample unit: JB059

Value	Code	Species	Code Name
1.00	2	Capitellidae sp	Capisp
5.00	213	Eteone heteropoda	Eteohete
8.00	291	Harmothoe sp	Harmsp
2.00	70	Mercenaria mercenaria	Mercmerc
15.00	1	Oligochaeta sp	Oligsp
3.00	205	Polydora ligni	Polylign
2.00	69	Tellina agilis	Tellagil
5.00	75	Crepidula fornicata	Crepforn
1.00	76	Crepidula plana	Crepplan
5.00	55	Heteromysis formosa	Heteform
6.00	8	Nereis succinea	Neresucc
12.00	25	Tharyx sp	Tharsp
1.00	52	Dyspanopeus sayi	Dyspsayi
1.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	150	Lysianopsis alba	Lysialba
2.00	174	Paranaitis speciosa	Paraspec
1.00	280	Unciola sp	Uncisp
3.00	96	Paraphoxus spinosus	Paraspin
1.00	214	Crangon septemspinosa	Cransept
4.00	43	Pagurus longicarpus	Pagulong
1.00	264	Scoloplos sp	Scolsp

Sample unit: JB060

Value	Code	Species	Code Name
1.00	213	Eteone heteropoda	Eteohete
7.00	166	Streblospio benedicti	Strebene
1.00	8	Nereis succinea	Neresucc
2.00	201	Capitella capitata	Capicapi

Sample unit: JB061

No species encountered in this sample unit.

Sample unit: JB062

Value	Code	Species	Code Name
145.00	219	Ampelisca sp	Ampesp
76.00	213	Eteone heteropoda	Eteohete
4.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
1.00	291	Harmothoe sp	Harmsp
6.00	70	Mercenaria mercenaria	Mercmerc
16.00	205	Polydora ligni	Polylign
13.00	275	Scolecolepides viridis	Scolviri
3065.00	166	Streblospio benedicti	Strebene
5.00	75	Crepidula fornicata	Crepforn
13.00	8	Nereis succinea	Neresucc
1.00	25	Tharyx sp	Tharsp
3.00	201	Capitella capitata	Capicapi
6.00	13	Eumida sanguinea	Eumisang
2.00	171	Mya arenaria	Myaaren
1.00	107	Pectinaria gouldii	Pectgoul
2.00	42	Melita nitida	Meliniti
1.00	114	Glycera dibranchiata	Glycdibr
4.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB063

No species encountered in this sample unit.

Sample unit: JB064

No species encountered in this sample unit.

Sample unit: JB065

Value	Code	Species	Code Name
67.00	219	Ampelisca sp	Ampesp
26.00	213	Eteone heteropoda	Eteohete
3.00	205	Polydora ligni	Polylign
445.00	166	Streblospio benedicti	Strebene
2.00	8	Nereis succinea	Neresucc

29.00	201	Capitella capitata	Capicapi
1.00	85	Corophium sp	Corosp
1.00	13	Eumida sanguinea	Eumisang

Sample unit: JB066

Value	Code	Species	Code Name
317.00	219	Ampelisca sp	Ampesp
165.00	213	Eteone heteropoda	Eteohete
2.00	1	Oligochaeta sp	Oligsp
52.00	205	Polydora ligni	Polylign
2.00	275	Scolecolepides viridis	Scolviri
1176.00	166	Streblospio benedicti	Strebene
195.00	201	Capitella capitata	Capicapi
2.00	13	Eumida sanguinea	Eumisang

Sample unit: JB067

Value	Code	Species	Code Name
496.00	219	Ampelisca sp	Ampesp
27.00	2	Capitellidae sp	Capisp
78.00	213	Eteone heteropoda	Eteohete
3.00	70	Mercenaria mercenaria	Mercmerc
21.00	205	Polydora ligni	Polylign
3.00	275	Scolecolepides viridis	Scolviri
1239.00	166	Streblospio benedicti	Strebene
16.00	8	Nereis succinea	Neresucc
6.00	25	Tharyx sp	Tharsp
5.00	201	Capitella capitata	Capicapi
5.00	85	Corophium sp	Corosp
1.00	171	Mya arenaria	Myaaren
3.00	107	Pectinaria gouldii	Pectgoul
3.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB068

Value	Code	Species	Code Name
407.00	219	Ampelisca sp	Ampesp
67.00	213	Eteone heteropoda	Eteohete
6.00	205	Polydora ligni	Polylign
286.00	166	Streblospio benedicti	Strebene
1.00	8	Nereis succinea	Neresucc
1.00	25	Tharyx sp	Tharsp
26.00	201	Capitella capitata	Capicapi
1.00	85	Corophium sp	Corosp
3.00	13	Eumida sanguinea	Eumisang
2.00	171	Mya arenaria	Myaaren

Sample unit: JB069

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp

Sample unit: JB070

Value	Code	Species	Code Name
1.00	219	Ampelisca sp	Ampesp
1.00	8	Nereis succinea	Neresucc

Sample unit: JB071

Value	Code	Species	Code Name
1.00	166	Streblospio benedicti	Strebene
2.00	201	Capitella capitata	Capicapi
1.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB072

No species encountered in this sample unit.

Sample unit: JB073

Value	Code	Species	Code Name
1964.00	219	Ampelisca sp	Ampesp
113.00	2	Capitellidae sp	Capisp
22.00	213	Eteone heteropoda	Eteohete
1.00	140	Glycera americana	Glycamer
1.00	291	Harmothoe sp	Harmsp
123.00	1	Oligochaeta sp	Oligsp
3.00	205	Polydora ligni	Polylign
19.00	276	Scoloplos robustus	Scolrobu
4.00	275	Scolecolepides viridis	Scolviri
504.00	166	Streblospio benedicti	Strebene
8.00	69	Tellina agilis	Tellagil
20.00	75	Crepidula fornicata	Crepforn
1.00	277	Harmothoe imbricata	Harmimbr
6.00	8	Nereis succinea	Neresucc
13.00	25	Tharyx sp	Tharsp
2.00	201	Capitella capitata	Capicapi
48.00	85	Corophium sp	Corosp
16.00	13	Eumida sanguinea	Eumisang
1.00	253	Microdeutopus gryllotalpa	Micrgryl

1.00	56	Xanthidae sp	Xantsp
13.00	150	Lysianopsis alba	Lysialba
21.00	42	Melita nitida	Meliniti
2.00	102	Nereis arenaceodonta	Nerearen
2.00	41	Elasmopus levis	Elaslevi
1.00	233	Clymenella torquata	Clymtorq
1.00	284	Decapoda megalopa	Decamega
37.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB074

Value	Code	Species	Code Name
3.00	219	Ampelisca sp	Ampesp
1.00	2	Capitellidae sp	Capisp
3.00	166	Streblospio benedicti	Strebene
2.00	8	Nereis succinea	Neresucc
2.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB075

Value	Code	Species	Code Name
1.00	289	Balanus amphitrite	Balaamph
5.00	8	Nereis succinea	Neresucc
1.00	201	Capitella capitata	Capicapi
40.00	191	Ilyanassa obsoleta	Ilyaobso
2.00	315	Gammarus mucronatus	Gammmucr

Sample unit: JB076

Value	Code	Species	Code Name
2477.00	219	Ampelisca sp	Ampesp
6.00	2	Capitellidae sp	Capisp
8.00	213	Eteone heteropoda	Eteohete
8.00	71	Gemma gemma	Gemmgemm
1.00	140	Glycera americana	Glycamer
1.00	70	Mercenaria mercenaria	Mercmerc
23.00	1	Oligochaeta sp	Oligsp
3.00	259	Pagurus sp	Pagusp
1.00	275	Scolecolepides viridis	Scolviri
2.00	166	Streblospio benedicti	Strebene
30.00	69	Tellina agilis	Tellagil
8.00	8	Nereis succinea	Neresucc
53.00	25	Tharyx sp	Tharsp
2.00	201	Capitella capitata	Capicapi
2700.00	85	Corophium sp	Corosp
2.00	13	Eumida sanguinea	Eumisang
94.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	56	Xanthidae sp	Xantsp

10.00	150	Lysianopsis alba	Lysialba
7.00	171	Mya arenaria	Myaaren
20.00	42	Melita nitida	Meliniti
11.00	280	Unciola sp	Uncisp
1.00	306	Terebellidae sp	Teresp
1.00	122	Drilonereis longa	Drillong
1.00	41	Elasmopus levis	Elaslevi
39.00	123	Podarke obscura	Podaobsc
80.00	11	Aricidea catherinae	Ariccath
4.00	284	Decapoda megalopa	Decamega
9.00	191	Ilyanassa obsoleta	Ilyaobso
38.00	48	Cyathura polita	Cyatpoli
2.00	39	Erichthonius sp	Ericsp

Sample unit: JB077

Value	Code	Species	Code Name
171.00	219	Ampelisca sp	Ampesp
298.00	2	Capitellidae sp	Capisp
50.00	213	Eteone heteropoda	Eteohete
4.00	238	Glycinde solitaria	Glycsoli
2.00	70	Mercenaria mercenaria	Mercmerc
193.00	1	Oligochaeta sp	Oligsp
2.00	259	Pagurus sp	Pagusp
16.00	205	Polydora ligni	Polylign
7.00	276	Scoloplos robustus	Scolrobu
3.00	275	Scolecolepides viridis	Scolviri
171.00	166	Streblospio benedicti	Strebene
25.00	69	Tellina agilis	Tellagil
5.00	75	Crepidula fornicata	Crepforn
5.00	8	Nereis succinea	Neresucc
19.00	25	Tharyx sp	Tharsp
35.00	85	Corophium sp	Corosp
6.00	13	Eumida sanguinea	Eumisang
7.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	56	Xanthidae sp	Xantsp
1.00	171	Mya arenaria	Myaaren
4.00	42	Melita nitida	Meliniti
2.00	96	Paraphoxus spinosus	Paraspin
2.00	41	Elasmopus levis	Elaslevi
1.00	123	Podarke obscura	Podaobsc
14.00	125	Leptochelia savignyi	Leptsavi
2.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	121	Stenothoe minuta	Stenminu
1.00	330	Decapoda zoea	Decazoea
1.00	48	Cyathura polita	Cyatpoli
2.00	39	Erichthonius sp	Ericsp

Sample unit: JB078

Value	Code	Species	Code Name

1440.00	219	Ampelisca sp	Ampesp
6.00	2	Capitellidae sp	Capisp
3.00	70	Mercenaria mercenaria	Mercmerc
6.00	1	Oligochaeta sp	Oligsp
10.00	205	Polydora ligni	Polylign
8.00	166	Streblospio benedicti	Strebene
3.00	69	Tellina agilis	Tellagil
2.00	75	Crepidula fornicata	Crepforn
4.00	8	Nereis succinea	Neresucc
2.00	25	Tharyx sp	Tharsp
1.00	201	Capitella capitata	Capicapi
262.00	85	Corophium sp	Corosp
1.00	13	Eumida sanguinea	Eumisang
97.00	253	Microdeutopus gryllotalpa	Micrgryl
1.00	56	Xanthidae sp	Xantsp
3.00	145	Gyptis vittata	Gyptvitt
17.00	150	Lysianopsis alba	Lysialba
3.00	42	Melita nitida	Meliniti
2.00	41	Elasmopus levis	Elaslevi
12.00	123	Podarke obscura	Podaobsc
1.00	11	Aricidea catherinae	Ariccath
8.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	264	Scoloplos sp	Scolsp
16.00	48	Cyathura polita	Cyatpoli
1.00	333	Limulus polyphemus	Limupoly
1.00	135	Schistomeringos rudolphi	Schirudo

Sample unit: JB079

Value	Code	Species	Code Name
1992.00	219	Ampelisca sp	Ampesp
7.00	2	Capitellidae sp	Capisp
53.00	213	Eteone heteropoda	Eteohete
1.00	71	Gemma gemma	Gemmgemm
3.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
1.00	70	Mercenaria mercenaria	Mercmerc
142.00	1	Oligochaeta sp	Oligsp
5.00	276	Scoloplos robustus	Scolrobu
5.00	275	Scolecolepides viridis	Scolviri
3.00	166	Streblospio benedicti	Strebene
49.00	69	Tellina agilis	Tellagil
7.00	8	Nereis succinea	Neresucc
87.00	25	Tharyx sp	Tharsp
17.00	201	Capitella capitata	Capicapi
1108.00	85	Corophium sp	Corosp
2.00	13	Eumida sanguinea	Eumisang
54.00	253	Microdeutopus gryllotalpa	Micrgryl
5.00	150	Lysianopsis alba	Lysialba
16.00	42	Melita nitida	Meliniti
1.00	14	Polygordius sp	Polygord

5.00	123	Podarke obscura	Podaobsc
1.00	124	Acanthohaustorius millsi	Acanmill
1.00	11	Aricidea catherinae	Ariccath
5.00	43	Pagurus longicarpus	Pagulong
3.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	135	Schistomeringos rudolphi	Schirudo
1.00	29	Arabella iricolor	Arabiric
1.00	332	Decapoda sp	Decasp

Sample unit: JB080

Value	Code	Species	Code Name
10.00	219	Ampelisca sp	Ampesp
17.00	213	Eteone heteropoda	Eteohete
10.00	291	Harmothoe sp	Harmsp
65.00	1	Oligochaeta sp	Oligsp
1.00	205	Polydora ligni	Polylign
148.00	166	Streblospio benedicti	Strebene
156.00	75	Crepidula fornicata	Crepforn
10.00	76	Crepidula plana	Crepplan
1.00	277	Harmothoe imbricata	Harmimbr
2.00	55	Heteromysis formosa	Heteform
131.00	8	Nereis succinea	Neresucc
1.00	308	Caprellidae sp	Caprsp
1.00	85	Corophium sp	Corosp
2.00	52	Dyspanopeus sayi	Dyspsayi
27.00	13	Eumida sanguinea	Eumisang
3.00	42	Melita nitida	Meliniti
9.00	123	Podarke obscura	Podaobsc
1.00	284	Decapoda megalopa	Decamega
1.00	330	Decapoda zoea	Decazoea
4.00	135	Schistomeringos rudolphi	Schirudo

Sample unit: JB081

Value	Code	Species	Code Name
2242.00	219	Ampelisca sp	Ampesp
4.00	213	Eteone heteropoda	Eteohete
1.00	70	Mercenaria mercenaria	Mercmerc
2.00	1	Oligochaeta sp	Oligsp
61.00	205	Polydora ligni	Polylign
1.00	275	Scolecolepides viridis	Scolviri
817.00	166	Streblospio benedicti	Strebene
1.00	69	Tellina agilis	Tellagil
2.00	75	Crepidula fornicata	Crepforn
33.00	8	Nereis succinea	Neresucc
5.00	25	Tharyx sp	Tharsp
1.00	201	Capitella capitata	Capicapi
3.00	85	Corophium sp	Corosp
2.00	145	Gyptis vittata	Gyptvitt

5.00	171	Mya arenaria	Myaaren
1.00	107	Pectinaria gouldii	Pectgoul
2.00	270	Sabellaria vulgaris	Sabevulg
11.00	123	Podarke obscura	Podaobsc
2.00	214	Crangon septemspinosa	Cransept
2.00	284	Decapoda megalopa	Decamega
14.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB082

Value	Code	Species	Code Name
903.00	219	Ampelisca sp	Ampesp
3.00	213	Eteone heteropoda	Eteohete
1.00	1	Oligochaeta sp	Oligsp
4.00	205	Polydora ligni	Polylign
160.00	166	Streblospio benedicti	Strebene
28.00	8	Nereis succinea	Neresucc
3.00	85	Corophium sp	Corosp
1.00	13	Eumida sanguinea	Eumisang
1.00	56	Xanthidae sp	Xantsp
1.00	171	Mya arenaria	Myaaren
2.00	107	Pectinaria gouldii	Pectgoul
7.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB083

Value	Code	Species	Code Name
660.00	219	Ampelisca sp	Ampesp
2.00	213	Eteone heteropoda	Eteohete
1.00	70	Mercenaria mercenaria	Mercmerc
5.00	205	Polydora ligni	Polylign
38.00	166	Streblospio benedicti	Strebene
6.00	8	Nereis succinea	Neresucc
1.00	25	Tharyx sp	Tharsp
27.00	85	Corophium sp	Corosp
1.00	13	Eumida sanguinea	Eumisang
1.00	150	Lysianopsis alba	Lysialba
1.00	171	Mya arenaria	Myaaren
5.00	42	Melita nitida	Meliniti
2.00	191	Ilyanassa obsoleta	Ilyaobso

Sample unit: JB084

Value	Code	Species	Code Name
339.00	219	Ampelisca sp	Ampesp
1.00	213	Eteone heteropoda	Eteohete
1.00	205	Polydora ligni	Polylign
8.00	166	Streblospio benedicti	Strebene

4.00	8	Nereis succinea	Neresucc
2.00	201	Capitella capitata	Capicapi
1.00	85	Corophium sp	Corosp
1.00	42	Melita nitida	Meliniti
1.00	174	Paranaitis speciosa	Paraspec
2.00	191	Ilyanassa obsoleta	Ilyaobso
3.00	315	Gammarus mucronatus	Gammmucr

Sample unit: JB085

Value	Code	Species	Code Name
6.00	219	Ampelisca sp	Ampesp
84.00	2	Capitellidae sp	Capisp
28.00	213	Eteone heteropoda	Eteohete
32.00	1	Oligochaeta sp	Oligsp
44.00	205	Polydora ligni	Polylign
459.00	166	Streblospio benedicti	Strebene
40.00	69	Tellina agilis	Tellagil
62.00	25	Tharyx sp	Tharsp
69.00	201	Capitella capitata	Capicapi
1.00	13	Eumida sanguinea	Eumisang
1.00	319	Cerastoderma pinnulatum	Cerapinn
1.00	312	Petricola pholadiformis	Petrphol
16.00	14	Polygordius sp	Polygord

Sample unit: JB086

Value	Code	Species	Code Name
4.00	219	Ampelisca sp	Ampesp
1.00	161	Ilyanassa trivittata	Ilyatriv
15.00	1	Oligochaeta sp	Oligsp
3.00	166	Streblospio benedicti	Strebene
34.00	69	Tellina agilis	Tellagil
9.00	25	Tharyx sp	Tharsp
1.00	42	Melita nitida	Meliniti
3.00	280	Unciola sp	Uncisp
2.00	154	Microphthalmus aberrans	Micraber
10.00	7	Nephtys picta	Nephpict
18.00	14	Polygordius sp	Polygord
5.00	103	Spisula solidissima	Spissoli
15.00	44	Rhepoxynius epistomus	Rhepepis
1.00	264	Scoloplos sp	Scolsp
1.00	299	Unciola serrata	Unciserr

Sample unit: JB052

Value	Code	Species	Code Name
74.00	219	Ampelisca sp	Ampesp

2.00	291	Harmothoe sp	Harmsp
9.00	259	Pagurus sp	Pagusp
4.00	205	Polydora ligni	Polylign
3.00	69	Tellina agilis	Tellagil
1.00	289	Balanus amphitrite	Balaamph
1.00	75	Crepidula fornicata	Crepforn
2.00	296	Mytilus edulis	Mytiedul
57.00	8	Nereis succinea	Neresucc
15.00	53	Panopeus herbstii	Panoherb
215.00	201	Capitella capitata	Capicapi
3.00	85	Corophium sp	Corosp
4.00	253	Microdeutopus gryllotalpa	Micrgryl
3.00	150	Lysianopsis alba	Lysialba
62.00	42	Melita nitida	Meliniti
1.00	174	Paranaitis speciosa	Paraspec
1.00	280	Unciola sp	Uncisp
1.00	123	Podarke obscura	Podaobsc
3.00	214	Crangon septemspinosa	Cransept
55.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	111	Erichthonius brasiliensis	Ericbras
1.00	314	Palaemonetes vulgaris	Palavulg
41.00	315	Gammarus mucronatus	Gammmucr
2.00	316	Idotea balthica	Idotbalt

Total number of species occurrences in data = 1521
1 Mar 2013, 9:13:48

********** End of Data Summarization **********

Appendix 4 - Faunal Summary by Geographic Area

********** Output from program SUMMARY **********
PC-ORD, 6.11
1 Mar 2013, 10:55:12

Matrix size: 86 samples (rows)
136 species (columns)

Subgroup: Inlet

Summary of 27 samples N= 105 species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	JB001	4.486	19.10	471.0	0.00	183.	25	0.578	1.861
2	JB002	3.057	8.982	321.0	0.00	51.0	20	0.807	2.418
3	JB003	8.048	36.65	845.0	0.00	382.	27	0.565	1.861
4	JB004	5.143	40.16	540.0	0.00	468.	22	0.232	0.718
5	JB005	6.181	43.04	649.0	0.00	498.	20	0.343	1.029
6	JB006	2.029	7.535	213.0	0.00	62.0	14	0.751	1.982
7	JB007	5.829	33.54	612.0	0.00	333.	20	0.413	1.238
8	JB008	21.19	143.3	2225.	0.00	0.162E+04	26	0.295	0.961
9	JB009	4.505	28.73	473.0	0.00	300.	13	0.347	0.889
10	JB010	6.476	25.28	680.0	0.00	230.	27	0.635	2.093
11	JB011	0.4190	1.946	44.00	0.00	17.0	9	0.725	1.592
12	JB012	1.000	4.191	105.0	0.00	44.0	18	0.705	2.037
13	JB013	1.390	8.466	146.0	0.00	90.0	9	0.492	1.080
14	JB014	10.30	54.88	1082.	0.00	591.	24	0.463	1.473
15	JB015	0.6000	2.383	63.00	0.00	20.0	10	0.793	1.826
16	JB016	1.667	7.012	175.0	0.00	56.0	13	0.698	1.790
17	JB017	9.657	61.05	1014.	0.00	696.	30	0.370	1.259
18	JB018	35.81	247.9	3760.	0.00	0.286E+04	31	0.284	0.976
19	JB019	6.686	39.77	702.0	0.00	449.	29	0.418	1.406
20	JB020	2.810	11.00	295.0	0.00	106.	19	0.695	2.047
21	JB021	0.5238	1.934	55.00	0.00	20.0	19	0.782	2.304
22	JB022	6.314	17.13	663.0	0.00	116.	29	0.770	2.593
23	JB023	89.35	787.9	9382.	0.00	0.919E+04	21	0.050	0.151
24	JB024	2.657	7.545	279.0	0.00	47.0	22	0.805	2.487
25	JB025	0.9905	4.828	104.0	0.00	50.0	16	0.619	1.716
26	JB026	78.47	658.4	8239.	0.00	0.768E+04	30	0.128	0.437
27	JB027	1.914	8.436	201.0	0.00	81.0	20	0.629	1.884
AVERAGES:		11.8	85.6	1235.	0.00	972.	20.9	0.533	1.560

Number of cells in main matrix = 2835
Percent of cells empty = 80.141
Matrix total = 3.3338E+04
Matrix mean = 1.1759E+01
Variance of totals of samples = 5.3886E+06

S = Richness = number of non-zero elements in row
E = Evenness = H / ln (Richness)
H = Diversity = - sum (Pi*ln(Pi))
where Pi = importance probability in element i (element i relativized by row total)

Summary of 105 species N= 27 samples

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Acanmill	0.330E+01	0.156E+02	0.8900E+02	0.000E+00	0.810E+02	4
2	Actecana	0.259E+00	0.116E+01	0.7000E+01	0.000E+00	0.600E+01	2
3	Ammodubi	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
4	Ampesp	0.747E+03	0.229E+04	0.2016E+05	0.000E+00	0.919E+04	14
7	Anomsimp	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2

9	Aricsp	0.259E+00	0.944E+00	0.7000E+01	0.000E+00	0.400E+01	2
10	Ariccath	0.444E+00	0.174E+01	0.1200E+02	0.000E+00	0.900E+01	4
12	Autocorn	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
13	Autosp	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
14	Balaamph	0.174E+01	0.458E+01	0.4700E+02	0.000E+00	0.180E+02	5
15	Balasp	0.767E+01	0.195E+02	0.2070E+03	0.000E+00	0.710E+02	5
16	Bivasp	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
17	Capicapi	0.341E+01	0.928E+01	0.9200E+02	0.000E+00	0.340E+02	8
18	Capisp	0.592E+02	0.138E+03	0.1598E+04	0.000E+00	0.696E+03	18
19	Caprsp	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
20	Carcmaen	0.107E+01	0.308E+01	0.2900E+02	0.000E+00	0.160E+02	11
22	Cerapinn	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
23	Clymsp	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
24	Clymtorq	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
25	Corosp	0.285E+01	0.912E+01	0.7700E+02	0.000E+00	0.440E+02	7
26	Cransept	0.222E+00	0.577E+00	0.6000E+01	0.000E+00	0.200E+01	4
28	Crepforn	0.148E+01	0.366E+01	0.4000E+02	0.000E+00	0.150E+02	7
29	Crepplan	0.778E+00	0.234E+01	0.2100E+02	0.000E+00	0.120E+02	7
31	Decamega	0.111E+00	0.424E+00	0.3000E+01	0.000E+00	0.200E+01	2
34	Drillong	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
35	Dyspsayi	0.133E+01	0.260E+01	0.3600E+02	0.000E+00	0.110E+02	10
36	Edotsp	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
37	Elaslevi	0.185E+00	0.483E+00	0.5000E+01	0.000E+00	0.200E+01	4
38	Ensidire	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
41	Eteohete	0.626E+01	0.938E+01	0.1690E+03	0.000E+00	0.350E+02	17
42	Eteolact	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
43	Eumisang	0.593E+00	0.147E+01	0.1600E+02	0.000E+00	0.600E+01	5
46	Gemmgemm	0.407E+00	0.193E+01	0.1100E+02	0.000E+00	0.100E+02	2
47	Glycamer	0.107E+01	0.154E+01	0.2900E+02	0.000E+00	0.500E+01	13
48	Glycdibr	0.148E+00	0.534E+00	0.4000E+01	0.000E+00	0.200E+01	2
49	Glycsoli	0.519E+00	0.148E+01	0.1400E+02	0.000E+00	0.700E+01	5
50	Gobisp	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
51	Gonigrac	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
52	Gyptvitt	0.111E+00	0.320E+00	0.3000E+01	0.000E+00	0.100E+01	3
53	Harmimbr	0.707E+01	0.309E+02	0.1910E+03	0.000E+00	0.161E+03	7
54	Harmsp	0.110E+02	0.234E+02	0.2970E+03	0.000E+00	0.116E+03	18
56	Heteform	0.593E+00	0.125E+01	0.1600E+02	0.000E+00	0.500E+01	7
57	Hydrdian	0.481E+00	0.163E+01	0.1300E+02	0.000E+00	0.800E+01	4
60	Ilyatriv	0.296E+00	0.542E+00	0.8000E+01	0.000E+00	0.200E+01	7
62	Leptsavi	0.222E+00	0.801E+00	0.6000E+01	0.000E+00	0.300E+01	2
63	Libisp	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
65	Lyonhyal	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
66	Lysialba	0.178E+01	0.503E+01	0.4800E+02	0.000E+00	0.260E+02	10
67	Meliniti	0.252E+01	0.530E+01	0.6800E+02	0.000E+00	0.230E+02	9
68	Mercmerc	0.204E+01	0.373E+01	0.5500E+02	0.000E+00	0.140E+02	12
69	Micrgryl	0.163E+01	0.368E+01	0.4400E+02	0.000E+00	0.160E+02	9
70	Micrsp	0.185E+00	0.962E+00	0.5000E+01	0.000E+00	0.500E+01	1
71	Micraber	0.778E+01	0.298E+02	0.2100E+03	0.000E+00	0.151E+03	4
73	Mogumanh	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
74	Mulilate	0.111E+00	0.320E+00	0.3000E+01	0.000E+00	0.100E+01	3
75	Myaaren	0.111E+00	0.424E+00	0.3000E+01	0.000E+00	0.200E+01	2
76	Myseplan	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
78	Mytiedul	0.143E+03	0.337E+03	0.3867E+04	0.000E+00	0.162E+04	15
79	Nephpict	0.667E+00	0.133E+01	0.1800E+02	0.000E+00	0.500E+01	7
81	Nerearen	0.111E+00	0.424E+00	0.3000E+01	0.000E+00	0.200E+01	2
82	Neresp	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
83	Neresucc	0.102E+02	0.128E+02	0.2760E+03	0.000E+00	0.490E+02	17
84	Nucuprox	0.137E+01	0.395E+01	0.3700E+02	0.000E+00	0.200E+02	8
85	Nucusp	0.100E+01	0.277E+01	0.2700E+02	0.000E+00	0.130E+02	5
86	Nucutenu	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
87	Oligsp	0.407E+02	0.897E+02	0.1098E+04	0.000E+00	0.436E+03	17
88	Oxyusmit	0.741E-01	0.267E+00	0.2000E+01	0.000E+00	0.100E+01	2
90	Pagulong	0.741E-01	0.385E+00	0.2000E+01	0.000E+00	0.200E+01	1
91	Pagusp	0.407E+00	0.747E+00	0.1100E+02	0.000E+00	0.200E+01	7
93	Panoherb	0.333E+00	0.118E+01	0.9000E+01	0.000E+00	0.600E+01	4
94	Paraatte	0.111E+00	0.577E+00	0.3000E+01	0.000E+00	0.300E+01	1
96	Paraspec	0.556E+00	0.101E+01	0.1500E+02	0.000E+00	0.400E+01	8
97	Paraspin	0.307E+01	0.125E+02	0.8300E+02	0.000E+00	0.650E+02	7
98	Pectgoul	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
99	Petrphol	0.259E+00	0.764E+00	0.7000E+01	0.000E+00	0.300E+01	3
100	Pherplum	0.259E+00	0.447E+00	0.7000E+01	0.000E+00	0.100E+01	7

101	Pholminu	0.444E+00	0.847E+00	0.1200E+02	0.000E+00	0.300E+01	8
102	Phylsp	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
103	Pinnixa	0.370E-01	0.192E+00	0.1000E+01	0.000E+00	0.100E+01	1
104	Podaobsc	0.111E+00	0.424E+00	0.3000E+01	0.000E+00	0.200E+01	2
105	Polylign	0.212E+02	0.283E+02	0.5720E+03	0.000E+00	0.910E+02	17
106	Polydora	0.433E+01	0.157E+02	0.1170E+03	0.000E+00	0.700E+02	4
107	Polygord	0.500E+02	0.115E+03	0.1350E+04	0.000E+00	0.400E+03	9
108	Priosp	0.185E+00	0.483E+00	0.5000E+01	0.000E+00	0.200E+01	4
109	Protwigl	0.196E+01	0.503E+01	0.5300E+02	0.000E+00	0.170E+02	6
111	Rhepepis	0.333E+01	0.104E+02	0.9000E+02	0.000E+00	0.500E+02	5
112	Risssp	0.148E+00	0.534E+00	0.4000E+01	0.000E+00	0.200E+01	2
113	Sabevulg	0.148E+00	0.770E+00	0.4000E+01	0.000E+00	0.400E+01	1
115	Scolviri	0.144E+01	0.323E+01	0.3900E+02	0.000E+00	0.150E+02	10
116	Scolfrag	0.444E+00	0.231E+01	0.1200E+02	0.000E+00	0.120E+02	1
117	Scolrobu	0.296E+00	0.724E+00	0.8000E+01	0.000E+00	0.300E+01	5
119	Sigaaren	0.741E-01	0.385E+00	0.2000E+01	0.000E+00	0.200E+01	1
120	Solevelu	0.741E-01	0.385E+00	0.2000E+01	0.000E+00	0.200E+01	1
122	Spiobomb	0.111E+00	0.577E+00	0.3000E+01	0.000E+00	0.300E+01	1
123	Spissoli	0.704E+00	0.156E+01	0.1900E+02	0.000E+00	0.600E+01	7
125	Strebene	0.169E+02	0.236E+02	0.4560E+03	0.000E+00	0.780E+02	19
126	Syllseto	0.185E+00	0.786E+00	0.5000E+01	0.000E+00	0.400E+01	2
128	Tellagil	0.210E+02	0.343E+02	0.5670E+03	0.000E+00	0.148E+03	23
129	Tellsp	0.704E+00	0.257E+01	0.1900E+02	0.000E+00	0.110E+02	2
130	Teresp	0.111E+00	0.577E+00	0.3000E+01	0.000E+00	0.300E+01	1
131	Tharsp	0.281E+02	0.113E+03	0.7580E+03	0.000E+00	0.591E+03	16
132	Turbonsp	0.111E+00	0.577E+00	0.3000E+01	0.000E+00	0.300E+01	1
133	Uncidiss	0.704E+00	0.260E+01	0.1900E+02	0.000E+00	0.130E+02	3
135	Uncisp	0.111E+01	0.346E+01	0.3000E+02	0.000E+00	0.160E+02	6
136	Xantsp	0.137E+01	0.372E+01	0.3700E+02	0.000E+00	0.160E+02	6
AVERAGES:		0.118E+02	0.331E+02	0.3175E+03	0.000E+00	0.139E+03	5.4

Subgroup: NvScoBar

Summary of 34 samples N= 101 species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	JB028	7.743	30.44	782.0	0.00	244.	20	0.633	1.895
2	JB029	5.782	20.02	584.0	0.00	143.	20	0.676	2.026
3	JB030	1.624	4.841	164.0	0.00	39.0	23	0.779	2.443
4	JB031	1.030	3.412	104.0	0.00	30.0	17	0.792	2.243
5	JB032	3.812	11.57	385.0	0.00	114.	29	0.769	2.590
6	JB033	10.67	56.31	1078.	0.00	619.	18	0.497	1.437
7	JB034	7.812	25.66	789.0	0.00	217.	31	0.694	2.384
8	JB035	7.713	18.67	779.0	0.00	109.	38	0.753	2.737
9	JB036	16.98	80.95	1715.	0.00	745.	25	0.465	1.495
10	JB037	4.218	16.37	426.0	0.00	147.	25	0.623	2.007
11	JB038	2.505	8.129	253.0	0.00	68.0	23	0.739	2.316
12	JB039	2.069	11.48	209.0	0.00	131.	16	0.532	1.474
13	JB040	3.257	17.22	329.0	0.00	193.	18	0.524	1.513
14	JB041	4.901	26.14	495.0	0.00	298.	26	0.507	1.650
15	JB042	0.9109	3.335	92.00	0.00	30.0	13	0.782	2.006
16	JB043	0.9901E-01	0.7763	10.00	0.00	9.00	2	0.469	0.325
17	JB044	39.73	273.0	4013.	0.00	0.317E+04	29	0.285	0.960
18	JB045	74.65	531.6	7540.	0.00	0.619E+04	39	0.246	0.901
19	JB046	0.3465	1.274	35.00	0.00	13.0	14	0.809	2.135
20	JB047	4.356	21.01	440.0	0.00	237.	28	0.565	1.882
21	JB048	0.7030	4.389	71.00	0.00	48.0	7	0.469	0.913
22	JB049	0.3366	1.231	34.00	0.00	10.0	9	0.867	1.904
23	JB050	0.2475	0.9066	25.00	0.00	7.00	8	0.892	1.856
24	JB051	0.3663	1.181	37.00	0.00	9.00	13	0.855	2.193
25	JB052	5.554	21.41	561.0	0.00	215.	24	0.634	2.014
26	JB053	40.48	265.1	4088.	0.00	0.308E+04	34	0.328	1.157
27	JB054	0.1287	0.4862	13.00	0.00	4.00	7	0.914	1.778
28	JB055	0.5941	2.894	60.00	0.00	31.0	8	0.713	1.483
29	JB056	1.386	4.401	140.0	0.00	40.0	23	0.760	2.382
30	JB057	0.6337	3.679	64.00	0.00	42.0	11	0.554	1.330
31	JB058	0.6139	2.718	62.00	0.00	28.0	12	0.700	1.739

32	JB059	0.7921	2.030	80.00	0.00	15.0	21	0.872	2.654
33	JB085	8.347	41.04	843.0	0.00	459.	13	0.635	1.628
34	JB086	1.208	3.927	122.0	0.00	34.0	15	0.813	2.201
AVERAGES:		7.69	44.6	777.1	0.00	493.	19.4	0.651	1.813

Number of cells in main matrix = 3434
Percent of cells empty = 80.810
Matrix total = 2.6422E+04
Matrix mean = 7.6942E+00
Variance of totals of samples = 2.3496E+06

S = Richness = number of non-zero elements in row
E = Evenness = H / ln (Richness)
H = Diversity = - sum (Pi*ln(Pi))
where Pi = importance probability in element i (element i relativized by row total)

Summary of 101 species N= 34 samples

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Acanmill	0.353E+00	0.172E+01	0.1200E+02	0.000E+00	0.100E+02	3
2	Actecana	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
4	Ampesp	0.378E+03	0.127E+04	0.1284E+05	0.000E+00	0.619E+04	25
5	Amphorna	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
6	Anadtran	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
9	Aricsp	0.588E-01	0.343E+00	0.2000E+01	0.000E+00	0.200E+01	1
10	Ariccath	0.244E+01	0.970E+01	0.8300E+02	0.000E+00	0.500E+02	3
11	Asabocul	0.118E+00	0.478E+00	0.4000E+01	0.000E+00	0.200E+01	2
14	Balaamph	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
15	Balasp	0.176E+00	0.869E+00	0.6000E+01	0.000E+00	0.500E+01	2
17	Capicapi	0.340E+02	0.692E+02	0.1156E+04	0.000E+00	0.237E+03	16
18	Capisp	0.560E+02	0.891E+02	0.1905E+04	0.000E+00	0.298E+03	19
19	Caprsp	0.235E+01	0.122E+02	0.8000E+02	0.000E+00	0.710E+02	3
20	Carcmaen	0.176E+00	0.626E+00	0.6000E+01	0.000E+00	0.300E+01	3
21	Carisp	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
22	Cerapinn	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
24	Clymtorq	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
25	Corosp	0.257E+02	0.128E+03	0.8730E+03	0.000E+00	0.745E+03	13
26	Cransept	0.235E+00	0.654E+00	0.8000E+01	0.000E+00	0.300E+01	5
27	Crepconv	0.588E-01	0.343E+00	0.2000E+01	0.000E+00	0.200E+01	1
28	Crepforn	0.482E+01	0.123E+02	0.1640E+03	0.000E+00	0.450E+02	16
29	Crepplan	0.147E+01	0.539E+01	0.5000E+02	0.000E+00	0.300E+02	6
31	Decamega	0.588E-01	0.343E+00	0.2000E+01	0.000E+00	0.200E+01	1
33	Decazoea	0.588E-01	0.343E+00	0.2000E+01	0.000E+00	0.200E+01	1
35	Dyspsayi	0.412E+00	0.118E+01	0.1400E+02	0.000E+00	0.500E+01	5
37	Elaslevi	0.824E+00	0.219E+01	0.2800E+02	0.000E+00	0.900E+01	5
39	Ericbras	0.215E+01	0.122E+02	0.7300E+02	0.000E+00	0.710E+02	3
41	Eteohete	0.726E+01	0.172E+02	0.2470E+03	0.000E+00	0.920E+02	21
43	Eumisang	0.112E+01	0.336E+01	0.3800E+02	0.000E+00	0.190E+02	9
44	Exogdisp	0.294E+00	0.629E+00	0.1000E+02	0.000E+00	0.200E+01	7
45	Gammmucr	0.124E+01	0.703E+01	0.4200E+02	0.000E+00	0.410E+02	2
46	Gemmgemm	0.559E+00	0.227E+01	0.1900E+02	0.000E+00	0.120E+02	3
47	Glycamer	0.471E+00	0.788E+00	0.1600E+02	0.000E+00	0.300E+01	11
48	Glycdibr	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
49	Glycsoli	0.294E+00	0.799E+00	0.1000E+02	0.000E+00	0.400E+01	6
52	Gyptvitt	0.118E+00	0.478E+00	0.4000E+01	0.000E+00	0.200E+01	2
53	Harmimbr	0.294E+00	0.799E+00	0.1000E+02	0.000E+00	0.400E+01	6
54	Harmsp	0.306E+01	0.765E+01	0.1040E+03	0.000E+00	0.380E+02	14
55	Hetefili	0.882E-01	0.288E+00	0.3000E+01	0.000E+00	0.100E+01	3
56	Heteform	0.882E+00	0.245E+01	0.3000E+02	0.000E+00	0.110E+02	6
57	Hydrdian	0.253E+01	0.919E+01	0.8600E+02	0.000E+00	0.500E+02	5
58	Idotbalt	0.588E-01	0.343E+00	0.2000E+01	0.000E+00	0.200E+01	1
59	Ilyaobso	0.718E+01	0.120E+02	0.2440E+03	0.000E+00	0.550E+02	23
60	Ilyatriv	0.588E-01	0.239E+00	0.2000E+01	0.000E+00	0.100E+01	2
61	Lepisqua	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
66	Lysialba	0.997E+01	0.318E+02	0.3390E+03	0.000E+00	0.163E+03	14
67	Meliniti	0.556E+01	0.136E+02	0.1890E+03	0.000E+00	0.620E+02	15
68	Mercmerc	0.129E+01	0.215E+01	0.4400E+02	0.000E+00	0.800E+01	13

69	Micrgryl	0.336E+02	0.111E+03	0.1141E+04	0.000E+00	0.532E+03	14
71	Micraber	0.588E-01	0.343E+00	0.2000E+01	0.000E+00	0.200E+01	1
72	Mitrluna	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
74	Mulilate	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
75	Myaaren	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
76	Myseplan	0.147E+00	0.500E+00	0.5000E+01	0.000E+00	0.200E+01	3
77	Mysibige	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
78	Mytiedul	0.235E+00	0.923E+00	0.8000E+01	0.000E+00	0.500E+01	3
79	Nephpict	0.882E+00	0.253E+01	0.3000E+02	0.000E+00	0.100E+02	5
80	Neptinci	0.882E-01	0.514E+00	0.3000E+01	0.000E+00	0.300E+01	1
81	Nerearen	0.882E-01	0.288E+00	0.3000E+01	0.000E+00	0.100E+01	3
83	Neresucc	0.500E+01	0.105E+02	0.1700E+03	0.000E+00	0.570E+02	21
84	Nucuprox	0.471E+01	0.104E+02	0.1600E+03	0.000E+00	0.480E+02	13
85	Nucusp	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
87	Oligsp	0.319E+02	0.490E+02	0.1084E+04	0.000E+00	0.217E+03	24
88	Oxyusmit	0.882E-01	0.379E+00	0.3000E+01	0.000E+00	0.200E+01	2
89	Paguacad	0.353E+00	0.110E+01	0.1200E+02	0.000E+00	0.600E+01	6
90	Pagulong	0.618E+00	0.146E+01	0.2100E+02	0.000E+00	0.700E+01	8
91	Pagusp	0.618E+00	0.171E+01	0.2100E+02	0.000E+00	0.900E+01	8
92	Palavulg	0.588E-01	0.239E+00	0.2000E+01	0.000E+00	0.100E+01	2
93	Panoherb	0.824E+00	0.298E+01	0.2800E+02	0.000E+00	0.150E+02	4
95	Parahaus	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
96	Paraspec	0.618E+00	0.102E+01	0.2100E+02	0.000E+00	0.400E+01	12
97	Paraspin	0.465E+01	0.168E+02	0.1580E+03	0.000E+00	0.950E+02	10
98	Pectgoul	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
99	Petrphol	0.412E+00	0.821E+00	0.1400E+02	0.000E+00	0.300E+01	9
100	Pherplum	0.294E+00	0.629E+00	0.1000E+02	0.000E+00	0.300E+01	8
101	Pholminu	0.647E+00	0.139E+01	0.2200E+02	0.000E+00	0.500E+01	8
104	Podaobsc	0.353E+00	0.597E+00	0.1200E+02	0.000E+00	0.200E+01	10
105	Polylign	0.148E+02	0.206E+02	0.5040E+03	0.000E+00	0.900E+02	27
106	Polydora	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
107	Polygord	0.129E+01	0.412E+01	0.4400E+02	0.000E+00	0.180E+02	5
108	Priosp	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
109	Protwigl	0.882E-01	0.514E+00	0.3000E+01	0.000E+00	0.300E+01	1
110	Pyraprod	0.588E-01	0.239E+00	0.2000E+01	0.000E+00	0.100E+01	2
111	Rhepepis	0.176E+01	0.724E+01	0.6000E+02	0.000E+00	0.400E+02	4
113	Sabevulg	0.241E+01	0.124E+02	0.8200E+02	0.000E+00	0.720E+02	3
115	Scolviri	0.706E+00	0.241E+01	0.2400E+02	0.000E+00	0.130E+02	5
117	Scolrobu	0.100E+01	0.224E+01	0.3400E+02	0.000E+00	0.100E+02	9
118	Scolsp	0.382E+00	0.126E+01	0.1300E+02	0.000E+00	0.700E+01	6
121	Spioocul	0.147E+00	0.610E+00	0.5000E+01	0.000E+00	0.300E+01	2
123	Spissoli	0.176E+00	0.869E+00	0.6000E+01	0.000E+00	0.500E+01	2
124	Stenminu	0.226E+01	0.132E+02	0.7700E+02	0.000E+00	0.770E+02	1
125	Strebene	0.710E+02	0.140E+03	0.2413E+04	0.000E+00	0.619E+03	24
126	Syllseto	0.412E+00	0.113E+01	0.1400E+02	0.000E+00	0.600E+01	7
127	Syllgrac	0.294E-01	0.171E+00	0.1000E+01	0.000E+00	0.100E+01	1
128	Tellagil	0.214E+02	0.203E+02	0.7270E+03	0.000E+00	0.910E+02	32
130	Teresp	0.588E-01	0.239E+00	0.2000E+01	0.000E+00	0.100E+01	2
131	Tharsp	0.181E+02	0.357E+02	0.6170E+03	0.000E+00	0.143E+03	23
133	Uncidiss	0.559E+00	0.252E+01	0.1900E+02	0.000E+00	0.140E+02	2
134	Unciserr	0.171E+01	0.977E+01	0.5800E+02	0.000E+00	0.570E+02	2
135	Uncisp	0.294E+00	0.760E+00	0.1000E+02	0.000E+00	0.300E+01	6
136	Xantsp	0.353E+00	0.155E+01	0.1200E+02	0.000E+00	0.900E+01	4
AVERAGES:		0.769E+01	0.220E+02	0.2616E+03	0.000E+00	0.106E+03	6.5

Subgroup: GrassBay

Summary of 22 samples N= 60 species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	JB060	0.1833	0.6414	11.00	0.00	7.00	4	0.746	1.034
2	JB061	is empty							
3	JB062	56.10	264.9	3366.	0.00	0.306E+04	19	0.154	0.452
4	JB063	is empty							
5	JB064	is empty							
6	JB065	9.567	39.02	574.0	0.00	445.	8	0.389	0.808
7	JB066	31.85	107.8	1911.	0.00	0.118E+04	8	0.558	1.161

8	JB067	31.77	115.6	1906.	0.00	0.124E+04	14	0.381	1.005
9	JB068	13.33	43.50	800.0	0.00	407.	10	0.490	1.128
10	JB069	0.1667E-01	0.8626E-01	1.000	0.00	1.00	1	0.000	0.000
11	JB070	0.3333E-01	0.1223	2.000	0.00	1.00	2	1.000	0.693
12	JB071	0.6667E-01	0.2121	4.000	0.00	2.00	3	0.946	1.040
13	JB072	is empty							
14	JB076	94.05	317.3	5643.	0.00	0.270E+04	31	0.330	1.133
15	JB077	17.52	37.99	1051.	0.00	298.	30	0.623	2.118
16	JB078	31.85	126.8	1911.	0.00	0.144E+04	26	0.296	0.963
17	JB079	59.63	197.9	3578.	0.00	0.199E+04	29	0.373	1.256
18	JB080	10.00	22.88	600.0	0.00	156.	20	0.647	1.939
19	JB081	53.53	206.3	3212.	0.00	0.224E+04	21	0.276	0.840
20	JB082	18.57	79.23	1114.	0.00	903.	12	0.266	0.662
21	JB083	12.50	57.11	750.0	0.00	660.	13	0.220	0.564
22	JB084	6.050	29.26	363.0	0.00	339.	11	0.157	0.376
AVERAGES:		20.3	74.8	1218.	0.00	776.	11.9	0.357	0.781

Note: empty samples counted as 0 in averages
Number of cells in main matrix = 1320
Percent of cells empty = 80.152
Matrix total = 2.6797E+04
Matrix mean = 2.0301E+01
Variance of totals of samples = 2.3314E+06

S = Richness = number of non-zero elements in row
E = Evenness = H / ln (Richness)
H = Diversity = - sum (Pi*ln(Pi))
where Pi = importance probability in element i (element i relativized by row total)

Summary of 60 species N= 22 samples

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Acanmill	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
4	Ampesp	0.530E+03	0.785E+03	0.1167E+05	0.000E+00	0.248E+04	16
8	Arabiric	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
10	Ariccath	0.373E+01	0.170E+02	0.8200E+02	0.000E+00	0.800E+02	3
17	Capicapi	0.130E+02	0.415E+02	0.2850E+03	0.000E+00	0.195E+03	12
18	Capisp	0.156E+02	0.633E+02	0.3440E+03	0.000E+00	0.298E+03	5
19	Caprsp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
25	Corosp	0.188E+03	0.610E+03	0.4147E+04	0.000E+00	0.270E+04	12
26	Cransept	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
28	Crepforn	0.773E+01	0.332E+02	0.1700E+03	0.000E+00	0.156E+03	5
29	Crepplan	0.455E+00	0.213E+01	0.1000E+02	0.000E+00	0.100E+02	1
30	Cyatpoli	0.250E+01	0.863E+01	0.5500E+02	0.000E+00	0.380E+02	3
31	Decamega	0.318E+00	0.945E+00	0.7000E+01	0.000E+00	0.400E+01	3
32	Decasp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
33	Decazoea	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
34	Drillong	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
35	Dyspsayi	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
37	Elaslevi	0.227E+00	0.612E+00	0.5000E+01	0.000E+00	0.200E+01	3
40	Ericsp	0.182E+00	0.588E+00	0.4000E+01	0.000E+00	0.200E+01	2
41	Eteohete	0.250E+02	0.415E+02	0.5510E+03	0.000E+00	0.165E+03	14
43	Eumisang	0.236E+01	0.579E+01	0.5200E+02	0.000E+00	0.270E+02	11
45	Gammmucr	0.136E+00	0.640E+00	0.3000E+01	0.000E+00	0.300E+01	1
46	Gemmgemm	0.409E+00	0.171E+01	0.9000E+01	0.000E+00	0.800E+01	2
47	Glycamer	0.364E+00	0.105E+01	0.8000E+01	0.000E+00	0.400E+01	3
48	Glycdibr	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
49	Glycsoli	0.364E+00	0.100E+01	0.8000E+01	0.000E+00	0.400E+01	3
52	Gyptvitt	0.227E+00	0.752E+00	0.5000E+01	0.000E+00	0.300E+01	2
53	Harmimbr	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
54	Harmsp	0.500E+00	0.213E+01	0.1100E+02	0.000E+00	0.100E+02	2
56	Heteform	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
59	Ilyaobso	0.250E+01	0.378E+01	0.5500E+02	0.000E+00	0.140E+02	11
62	Leptsavi	0.636E+00	0.298E+01	0.1400E+02	0.000E+00	0.140E+02	1
64	Limupoly	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
66	Lysialba	0.150E+01	0.417E+01	0.3300E+02	0.000E+00	0.170E+02	4
67	Meliniti	0.245E+01	0.529E+01	0.5400E+02	0.000E+00	0.200E+02	8

68	Mercmerc	0.818E+00	0.150E+01	0.1800E+02	0.000E+00	0.600E+01	8
69	Micrgryl	0.115E+02	0.295E+02	0.2520E+03	0.000E+00	0.970E+02	4
75	Myaaren	0.909E+00	0.180E+01	0.2000E+02	0.000E+00	0.700E+01	8
83	Neresucc	0.118E+02	0.281E+02	0.2600E+03	0.000E+00	0.131E+03	15
87	Oligsp	0.197E+02	0.505E+02	0.4340E+03	0.000E+00	0.193E+03	8
90	Pagulong	0.227E+00	0.107E+01	0.5000E+01	0.000E+00	0.500E+01	1
91	Pagusp	0.227E+00	0.752E+00	0.5000E+01	0.000E+00	0.300E+01	2
96	Paraspec	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
97	Paraspin	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
98	Pectgoul	0.318E+00	0.780E+00	0.7000E+01	0.000E+00	0.300E+01	4
104	Podaobsc	0.350E+01	0.879E+01	0.7700E+02	0.000E+00	0.390E+02	6
105	Polylign	0.891E+01	0.166E+02	0.1960E+03	0.000E+00	0.610E+02	12
107	Polygord	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
113	Sabevulg	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
114	Schirudo	0.273E+00	0.883E+00	0.6000E+01	0.000E+00	0.400E+01	3
115	Scolviri	0.127E+01	0.295E+01	0.2800E+02	0.000E+00	0.130E+02	7
117	Scolrobu	0.545E+00	0.179E+01	0.1200E+02	0.000E+00	0.700E+01	2
118	Scolsp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
124	Stenminu	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
125	Strebene	0.344E+03	0.715E+03	0.7574E+04	0.000E+00	0.306E+04	16
128	Tellagil	0.491E+01	0.127E+02	0.1080E+03	0.000E+00	0.490E+02	5
130	Teresp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
131	Tharsp	0.795E+01	0.212E+02	0.1750E+03	0.000E+00	0.870E+02	9
135	Uncisp	0.500E+00	0.235E+01	0.1100E+02	0.000E+00	0.110E+02	1
136	Xantsp	0.182E+00	0.395E+00	0.4000E+01	0.000E+00	0.100E+01	4
AVERAGES:		0.203E+02	0.423E+02	0.4466E+03	0.000E+00	0.168E+03	4.4

Subgroup: PmpkinPC

Summary of 3 samples N= 29 species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	JB073	101.6	191.5	2947.	0.00	0.196E+04	27	0.378	1.245
2	JB074	0.3793	0.5321	11.00	0.00	3.00	5	0.961	1.547
3	JB075	1.690	3.706	49.00	0.00	40.0	5	0.427	0.688
AVERAGES:		34.6	65.2	1002.	0.00	669.	12.3	0.589	1.160

Number of cells in main matrix = 87
Percent of cells empty = 57.471
Matrix total = 3.0070E+03
Matrix mean = 3.4563E+01
Variance of totals of samples = 2.8367E+06

S = Richness = number of non-zero elements in row
E = Evenness = H / ln (Richness)
H = Diversity = - sum (Pi*ln(Pi))
where Pi = importance probability in element i (element i relativized by row total)

Summary of 29 species N= 3 samples

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
4	Ampesp	0.656E+03	0.113E+04	0.1967E+04	0.000E+00	0.196E+04	2
14	Balaamph	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
17	Capicapi	0.100E+01	0.100E+01	0.3000E+01	0.000E+00	0.200E+01	2
18	Capisp	0.380E+02	0.650E+02	0.1140E+03	0.000E+00	0.113E+03	2
24	Clymtorq	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
25	Corosp	0.160E+02	0.277E+02	0.4800E+02	0.000E+00	0.480E+02	1
28	Crepforn	0.667E+01	0.115E+02	0.2000E+02	0.000E+00	0.200E+02	1
31	Decamega	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
37	Elaslevi	0.667E+00	0.115E+01	0.2000E+01	0.000E+00	0.200E+01	1
41	Eteohete	0.733E+01	0.127E+02	0.2200E+02	0.000E+00	0.220E+02	1
43	Eumisang	0.533E+01	0.924E+01	0.1600E+02	0.000E+00	0.160E+02	1
45	Gammmucr	0.667E+00	0.115E+01	0.2000E+01	0.000E+00	0.200E+01	1

47	Glycamer	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
53	Harmimbr	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
54	Harmsp	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
59	Ilyaobso	0.263E+02	0.211E+02	0.7900E+02	0.200E+01	0.400E+02	3
66	Lysialba	0.433E+01	0.751E+01	0.1300E+02	0.000E+00	0.130E+02	1
67	Meliniti	0.700E+01	0.121E+02	0.2100E+02	0.000E+00	0.210E+02	1
69	Micrgryl	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
81	Nerearen	0.667E+00	0.115E+01	0.2000E+01	0.000E+00	0.200E+01	1
83	Neresucc	0.433E+01	0.208E+01	0.1300E+02	0.200E+01	0.600E+01	3
87	Oligsp	0.410E+02	0.710E+02	0.1230E+03	0.000E+00	0.123E+03	1
105	Polylign	0.100E+01	0.173E+01	0.3000E+01	0.000E+00	0.300E+01	1
115	Scolviri	0.133E+01	0.231E+01	0.4000E+01	0.000E+00	0.400E+01	1
117	Scolrobu	0.633E+01	0.110E+02	0.1900E+02	0.000E+00	0.190E+02	1
125	Strebene	0.169E+03	0.290E+03	0.5070E+03	0.000E+00	0.504E+03	2
128	Tellagil	0.267E+01	0.462E+01	0.8000E+01	0.000E+00	0.800E+01	1
131	Tharsp	0.433E+01	0.751E+01	0.1300E+02	0.000E+00	0.130E+02	1
136	Xantsp	0.333E+00	0.577E+00	0.1000E+01	0.000E+00	0.100E+01	1
AVERAGES:		0.346E+02	0.586E+02	0.1037E+03	0.138E+00	0.102E+03	1.3

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********** End of Data Summarization **********