Benthic Mapping for Habitat Classification in the Peconic Estuary: Phase II Ground Truth Studies

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ABSTRACT

Benthic habitat maps of the estuary seafloor can increase our knowledge of the range and variability in benthic habitats, assist managers in their efforts to protect and/or restore commercially and recreationally important finfish and shellfish, link land usage (e.g. developed vs. undeveloped areas) and water quality data to benthic habitat quality, and make it possible to utilize faunal data as a long-term indicator of the overall “health” of the estuary. We are combining high-resolution remote sensing techniques with detailed study of the physical and faunal characteristics at point locations in different seafloor environments. In Phase II, five regions (Great Peconic West, South Race, Jessup Neck, Pipes Cove, and Orient Delta) were acoustically mapped and sampled. Sonar mapping used multibeam swath bathymetry to generate backscatter images that allowed classification of the sea bed into provinces. Samples for macrofauna and sediment properties were collected within each province to provide "ground truth" for the acoustic maps. Each area was sampled at 16-28 locations with no replication. Results suggest that the acoustic provinces identified represent areas of similar faunal and sedimentary characteristics. Phase III benthic habitat studies will extend mapping across different reaches of the Peconic Estuary.

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. Maps generated by acoustic surveys alone are not sufficient for characterizing bottom type or the distribution of benthic communities, and at least one stage of ground truthing, i.e., linking the acoustic maps with benthic environmental and biological assemblages, is required. 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 fine-grained muds, 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, features detected by acoustic surveys, and 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 and faunal ground truth samples at five regions in the Peconic Estuary System (Figure 1). These areas were distributed throughout the Peconics and included the western part of Great Peconic Bay (referred to as Great Peconic West in this report), South Race, Jessup Neck, Pipes Cove, and the region southeast of Orient Harbor (referred to as Orient Delta in this report). Ground truth sampling locations were determined by visual examination of high resolution backscatter maps created by multibeam sonar surveys.

METHODS

Sampling Locations

Stratification of the regions into initial acoustic provinces was conducted by visual examination of multibeam backscatter data. In this process, backscatter was taken as a proxy for bottom type, and our goal was to subdivide or stratify each region into separate provinces, each consisting of a homogeneous bottom type (Figures 2-6). Sampling stations were randomly positioned within each acoustic province, although we did modify target positions such that sampling stations were at least 100 meters from any boundary or any other station if possible. Great Peconic West was subdivided into five initial acoustic provinces (A-E) and was sampled on May 4, 2007. Eleven initial acoustic provinces (A-K) were identified for South Race, and sampling was carried out on November 13, 2006. Jessup Neck was subdivided into fourteen provinces (A-N) and sampled on November 13-14, 2006. Pipes Cove was the smallest region sampled. It had six provinces (A-F) and was sampled on April 11 & 13, 2007. Nine initial provinces (A-I) were identified for Orient Delta, and this area was sampled on April 11, 2007. In all these regions, one bottom sample was collected at each sampling station. It should be noted that letters associated with acoustic provinces are for identification purposes only and were arbitrarily assigned, i.e., there is no correspondence between provinces labeled A among regions.

Faunal and Sediment sampling

Faunal and sediment sampling was conducted aboard the R/V Pritchard operated by Stony Brook University. Bottom water temperature and salinity were measured at each sampling site. Bottom samples were collected using a modified van Veen grab (0.04 m^2). Subsamples of sediments for grain size and organic content 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 samples were processed for organic content and grain-size. Sediment organic content was estimated by weight loss on ignition (LOI) when dry sediment samples were combusted at 450^o C for at least 4 hours. 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 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 1000ml total volume in a graduated cylinder, mixed thoroughly, and subsampled with a 20 ml pipette at a depth of 20 cm, 20 seconds after mixing (Folk 1964). 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 fraction. The remaining water containing the <63 micron fraction (silt-clay) was reserved for later grain-size analysis in 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 1 mm-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 settle 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 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 and sorting (standard deviation) measures were computed from the cumulative distribution.

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, PO Box 129, Gleneden Beach, Oregon 97388) 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 GIS geodatabase was created in ArcEditor version 9.3 (ESRI, 380 New York Street, Redlands, CA 92373-8100) to display the data in the appropriate geographic context. Because the number of taxa collected in the combined Phase I and Phase II data sets exceeded the table size limit of 256 columns in Access, faunal data were split into four groups (crustacea, molluscs, polychaetes, and other fauna) to import into the geodatabase

Multivariate Analysis

Redundancy analysis (RDA) was used to examine the relationship between benthic community variation and environmental data. RDA is a direct gradient ordination technique that combines ordination of sample sites based on species abundance data with regression on the environmental data (Jongman *et al.*, 1995). 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). Significance of environmental variables in explaining community variation was determined through permutation tests.

An initial set of significant environmental variables was identified by forward selection using RDA (Jongman et al., 1995). With this method, the variable that explains the greatest fraction of community variation is added first, and subsequent variables are added in order until the permutation test is nonsignificant. All environmental variables added prior to the one being tested are treated as covariates and their effect on community structure removed. Environmental variables consisted of both nominal (categorical) variables and continuous variables. Season and region were treated as nominal variables. Water depth, salinity, temperature, grab penetration depth, depth of the RPD, percent gravel, percent sand, percent silt, percent clay, mean grain size, sorting, and organic content were treated as continuous variables. Analyses were carried out using Canoco 4.5 (Microcomputer Power, 111 Cove Lane, Ithaca, NY 14850).

Variables identified by forward selection were trimmed by the AICc stopping criterion (Burnham and Anderson 1998) to create a final parsimonious set. This set was identified as the forward selection stage with the smallest AICc value. Use of this trimming procedure avoids family error rate problems associated with multiple significance tests. To produce a final ordination diagram, the multivariate analysis was re-calculated with just those variables retained by the AICc selection criterion and their nonindependent counterparts, if clearly evident. 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.

Nematodes generally do not provide substantial information about macrofaunal community structure, but because they are so abundant, they can dominate multivariate analyses and obscure contributions of other species. This can occur even when transformations such as the Hellinger transformation are used to down-weight the influence of highly abundant species. Therefore, all multivariate analyses were carried out without nematode abundance data.

RESULTS

General description of the sediments and faunal community

Sediments in the study area were primarily sand and gravel (with shell included), and only 22 of the 100 samples collected had >50% silt-clay (Figure 7). Pipes Cove had no samples with >50% silt-clay, while the other regions had between 3 and 7 samples with >50% silt-clay content. Great Peconic West had a mean grain size in the coarse silt range (0.05 mm). Mean grain sizes for three of the regions, South Race (0.13 mm), Jessup Neck (0.18 mm), and Orient Delta (0.10 mm) were in the fine to very fine sand range. Mean grain size for Pipes Cove (0.38 mm) was in the medium sand range. Field data and grain size summary data tabulated by sample are contained in Appendices 1 and 2. Grain size data for each sample expressed as percent by weight in half phi intervals are given in Appendix 3.

A total of 20,700 animals representing 141 taxa were collected in the 100 samples. Average abundance was 207 individuals per sample. Of the 141 taxa, 47.5% were polychaetes, 23.4% were molluscs, 23.4% were crustaceans, and the remainder (5.7%) were distributed among other groups (Table 1). Numerical dominants included nematodes (63 per sample), the capitellid polychaete *Capitella* sp (23 per sample), the cirratulid polychaete *Tharyx* sp (15 per sample), and the paraonid polychaete *Aricidea catherinae* (10 per sample). These four taxa represented about 53% of the total number of individuals collected. All other taxa were represented by less than 10 individuals per sample on average. Faunal summary statistics by sample are contained in Appendix 4.

Average faunal abundances in each region were 121 individuals per sample for Great Peconic West, 198 individuals per sample for South Race, 273 individuals per sample for Jessup Neck, 155 individuals per sample for Pipes Cove, and 223 individuals per sample for Orient Delta. Faunal data tabulated by sample and region are contained in Appendix 5.

a) Great Peconic West

Sixteen samples were collected in Great Peconic West. They were collected within 5 acoustic provinces. Water depths ranged from 4.4 to 7.1 meters, and this region was the shallowest on average of those sampled during Phase II. No samples had >25% gravel (and shell). Percent silt-clay ranged from <10% to >95%, and 7 of the 16 samples had >50% silt-clay. Organic content varied from 1 to almost 9%.

Abundances ranged from 32 to 300 individuals per sample and species richness varied from 7 to 30 species per sample. We collected 68 species in this region. Nematodes were the most abundant taxa and represented 24.0% of the total number of individuals collected (Table 2). Other abundant species included the capitellid polychaete *Capitella* sp (10.7%), the spionid polychaete *Minuspio* sp (10.0%), and the spionid polychaete *Polydora* sp (18.6%). One commercial bivalve species was collected in this region, the razor clam *Ensis directus* (PEC190).

b) South Race

Twenty-two samples were collected in the South Race region. These were distributed among 11 acoustic provinces. Water depths ranged from 5.0 to 15.3 meters. Gravel (and shell) in this region ranged from <1 to 73%, the widest range of any region. Percent silt-clay ranged from about 4 to 90%. Only 5 of the 22 samples contained more than 50% silt-clay. Organic content ranged from 0.5 to 5.9%.

Faunal abundances varied from 76 to 575 individuals per sample, and species richness ranged from 9 to 36 species per sample. A total of 84 species were collected. Numerically abundant species included the capitellid polychaete *Capitella* sp (19.6%), the bivalve *Macoma tenta* (4.5%), the spionid polychaete *Minuspio* sp (4.6%), nematodes (17.2%), an unidentified ostracod (6.4%), and the cirratulid polychaete *Tharyx* sp (3.9%). The only commercial shellfish species collected in this area was the hard clam *Mercenaria mercenaria* (PEC140).

c) Jessup Neck

Twenty eight samples were distributed among 14 acoustic provinces in Jessup Neck. Water depths ranged from 4.1 to 21.6 m. Most samples were sandy or a mixture of sand and gravel (primarily shell). Silt-clay content ranged from 2-95%, but only 3 of 28 samples had more than 50% silt-clay. These muddy samples were restricted to provinces B and L. Organic content ranged from 0.1 to 5.3%.

Abundances varied from 39 to 713 individuals per sample, and species richness ranged from 5 to 42 species per sample. Samples had an average abundance of 273 individuals per sample and an average species richness of 23 species per sample, the largest values of any Phase II site. A total of 100 species were collected. Abundant species included the polychaete *Aricidea catherinae* (5.0%), the amphipod *Batea catharinensis* (4.3%), the capitellid polychaete *Capitella* sp (11.6%), the bivalve *Macoma tenta* (2.8%), nematodes (36.8%), oligochaetes (3.1%), an unidentified ostracod (4.9%), the spionid polychaete *Polydora* sp (2.7%), and the cirratulid polychaete *Tharyx* sp (5.0%) (Table 2). Commercial species collected in this region included the hard clam *Mercenaria mercenaria* (PEC148, PEC116, PEC110) and the surf clam *Spisula solidissima* (PEC116).

d) Pipes Cove

Twelve samples were collected in the 6 acoustic provinces. Samples were primarily sandy, with the exception of two high gravel samples in province E. No samples had silt-clay contents exceeding 40%. Organic contents varied between 0.3 and 4.2%. Water depths ranged from 3.1 to 25.1 m.

Faunal abundances ranged from 8 to 386 individuals per sample. Number of species per sample varied between 6 and 34. A total of 77 species were collected. Nematodes represented 36.2% of all the individuals collected (Table 2). Other abundant taxa included the polychaete *Aricidea catherinae* (9.1%), barnacles *Balanus* sp (5.6%), the capitellid polychaete *Capitella* sp (7.4%), the polychaete *Nepthys picta* (3.2%), oligochaetes (6.7%), and the spionid polychaete *Polydora* sp (3.4%). Commercial shellfish found in this region included the razor clam *Ensis directus* (PEC176, PEC178) and the blue mussel *Mytilus edulis* (PEC173, PEC174, PEC176, PEC177, PEC180, PEC181).

e) Orient Delta

Within Orient Delta, 22 samples were collected at 9 acoustic provinces. Water depths at the sampling stations varied between 4.6 and 19.4 m. Most samples were sandy. Silt-clay content ranged from 2 to 85%, but only 7 samples contained >50% silt-clay. Organic contents varied between 0.3 to 5.5%.

Abundances ranged from 39 to 547 individuals per sample, and species richness varied from 11 to 35 species per sample. A total of 103 species were collected. Abundant species included the amphipod *Ampelisca vadorum* (2.2%), the polychaetes *Amparete arctica* (2.3%) and *Aricidea catherinae* (6.1%), the capitellid polychaete *Capitella* sp (3.4%), the common slipper shell

Crepidula fornicata (5.1%), nematodes (32.0%), oligochaetes (2.6%), the polychaete *Paraonis gracilis* (3.5%), and the cirratulid polychaete *Tharyx* sp (18.5%) (Table 2). Four commercial shellfish were collected in this region, the razor clam *Ensis directus* (PEC160, PEC171), the hard clam *Mercenaria mercenaria* (PEC171), the blue mussel *Mytilus edulis* (PEC151, PEC155, PEC165, PEC168) and surf clams *Spisula solidissima* (PEC152).

Distribution of commercial shellfish species

The 0.04 m^2 van Veen grab sampler used in the current study is too small to provide quantitative abundance estimates of commercially important shellfish. Nevertheless, the occurrence of commercial shellfish is worth noting. Commercial shellfish species were found in all regions but increased in frequency from west to east (Table 3).

Multivariate analysis

Forward selection RDA resulted in identifying 11 significant environmental variables, but final results were trimmed to 7 variables using the AICc stopping criterion (Figure 8). The final set environmental variables explained 22.8% of the variance in community structure. Of the nominal environmental variables, both season and region were selected. Fall was the variable displayed in Figure 8, but because Spring is collinear (i.e., linearly dependent on Fall), it was actually selected as well. For the same reason, the nominal variables SouthRace and PipesCove do not appear on the plot but were selected when their collinear variables (OrientDelta, Jessup Neck, GrtPecWest) entered the forward selection analysis. Of the quantitative sediment variables, percent composition and sorting explained community variation, but mean grain size and organic content did not. Organic content was highly correlated to %clay (r=0.96) and was probably not selected once %clay was chosen. Both salinity and water depth were retained after applying the AICc stopping criterion but grab penetration depth and depth of the RPD did not survive the AICc cut.

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, blue points represent the community structure at each station; those that plot close to one another have similar species composition and points far apart are dissimilar. The red points and arrows represent nominal and quantitative environmental variables, respectively. The red points are located at the centroid of the samples with the characteristic of the nominal variable (e.g., the centroid of the spring or fall samples for season). 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 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 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.

Because of the complexity of the RDA triplot, the next several figures will reproduce the plot with some details emphasized and others removed for clarity. In Figure 10, envelopes are drawn

around the samples representing the two nominal variables Region and Season. Envelopes for each region, except Great Peconic West with its low gravel (and shell) content, are broad because each region was a mixture of habitats that together covered a wide range of sediment types. The envelopes enclosing seasonal samples are broad for the same reason. Region and Season are somewhat confounded as indicated by a similar shift of envelopes along the second ordination axis. This confounding occurred because Jessup Neck and South Race were sampled solely in the fall, while samples for Great Peconic West, Pipes Cove, and Orient Delta were collected completely in the spring. Distributions of selected quantitative environmental variables and species are given in Figures 11 and 12, respectively.

DISCUSSION

As suggested by the acoustic survey maps, variation in sediment and faunal characteristics within regions was substantial. With the exception of Pipes Cove, all regions had a mixture of bottom types ranging from mud to sand. Sediments generally varied from >85% silt-clay to <5% silt-clay within a region. Pipes Cove stations were primarily sand or a combination of sand and gravel (with shell). Of the five regions, Great Peconic West had the most restricted gravel (shell) content. Faunal abundances typically differed by about an order of magnitude among stations within a region, while species richness per sample varied by a factor of 3 to 8 times among stations within a region. This high degree of variation in both sediments and fauna within a region highlights the importance of acoustic mapping of the estuary seafloor as a critical foundation for habitat and biotope characterization. It also underscores the continued need for ground truth sampling in future studies.

The sediment grain-size results (Figure 7) and the RDA analysis (Figure 8) confirmed our original interpretation of the sonar maps (Figures 2-6) that each region was a heterogeneous mixture of habitats. The Phase II data set did not allow us to carry out a biotope analysis to examine the variability in province-level, within-region characteristics, as was done for the Shelter Island and Robins Island regions in Phase I (Cerrato and Maher 2007). Biotope analysis requires about 10 samples per province to test whether homogeneous environmental and biological properties are present within and among provinces (Cerrato and Maher 2007). Unfortunately, the Phase II data set had no province with more than four samples, and only 2 samples were collected in 80% of the provinces (Figures 2-6). In addition, the sampling effort was not intensive enough to identify most of the rare species present, so we could not estimate the total species richness for provinces within regions or for the regions themselves. Therefore, the results of the present study, while providing important ground truth information, should not be interpreted as being sufficient to fully characterizing the habitats and community structure of the regions sampled.

The final set environmental variables identified in the RDA analysis explained 22.8% of the variance in community structure (Figure 8). This is a very modest result. Cerrato and Maher (2007), with more intensive sampling in regions off Robins Island and Shelter Island (10 samples per province), were able to take the initial provinces identified in the sonar data and, through the biotope process outlined in their report, arrive at a set of province-level nominal, environmental variables that when added to grain-size and other environmental data explained > 50% of the variation in community structure. This two-fold difference in explained variation highlights the

value of being able to subdivide regions into provinces consisting of homogeneous environmental and faunal characteristics (i.e., biotopes). It also clearly indicates that the appropriate spatial unit for management decisions should be the biotope and not the region.

Faunal comparisons among the five regions or between Phase I and II regions should be carried out with caution. The RDA analysis clearly indicated that Region and Season were confounded (Figure 10). Jessup Neck and South Race were sampled solely in the fall, while samples for Great Peconic West, Pipes Cove, and Orient Delta were collected completely in the spring. Seasonal changes in the benthic community can be quite large (Cerrato 2006), so comparisons of regions with samples collected in different seasons will be problematic. The original plan was to carry out all sampling in the fall. Unfortunately, the timing of the funding, combined with the dependence of the ground truth survey on the availability of completed sonar maps, placed practical limitations on when sampling could be carried out. Similarly, benthic communities in near shore areas can vary greatly between years (Cerrato 2006), inter-annual differences would be expected and limit Phase I and Phase II comparisons.

No west to east spatial gradient in species richness was apparent when number of species per sample results were examined for the Phase I and Phase II data (Figure 13). To test for west to east trends in species richness, we carried out linear regressions of the data against the latitude of the stations. In view of the potential for seasonal and inter-annual variability (see previous paragraph), we first tested for a difference in the slopes of the species per sample vs. longitude regressions between the Phase I and II data. No difference was found ($t=1.17$, $df=273$, $p=0.24$). Pooling the Phase I and II data together, number of species per sample did not vary with longitude, i.e., the slope of the pooled data was not significantly different from zero ($t=0.17$, $df=274$, $p=0.86$). This outcome contrasts with a clear west to east gradient found in Long Island Sound (Figure 13). Zajac (1998) attributed the spatial gradient in species richness in Long Island Sound to a combination of a reduced species pool, lower habitat heterogeneity, and long-term environmental deterioration in the western portion of the Sound. No such problems were apparent in the Peconics Estuary System.

With the completion of the Phase I and Phase II ground truth studies, the benthic fauna at a number of representative regions throughout the Peconic estuary System have now been examined. Phase III benthic habitat studies will extend mapping to much of the remaining regions west of Shelter Island. Sampling in Phase III will include the eastern half of Great Peconic Bay, Little Peconic Bay, Noyak Bay, and Southold Bay.

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Table 1. List of taxa collected during Phase II sampling.

Code	Phylum	Class	Order	Family	Species
177	Mollusca	Gastropoda		Acteonidae	*Acteocina canaliculata*
30	Arthropoda	Crustacea	Amphipoda	Ampeliscidae	*Ampelisca vadorum*
32	Arthropoda	Crustacea	Amphipoda	Ampeliscidae	*Ampelisca verrilli*
143	Annelida	Polychaeta		Ampharetidae	*Ampharete arctica*
167	Echinoderma	Stelleroidea			*Amphioplus abditus*
62	Mollusca	Bivalvia		Arcidae	*Anadara transversa*
61	Mollusca	Bivalvia		Animiidae	*Anomia simplex*
204	Arthropoda	Pycnogonida			*Anoplodactylus lentus*
29	Annelida	Polychaeta		Arabellidae	*Arabella iricolor*
11	Annelida	Polychaeta		Paraonidae	*Aricidea catherinae*
86	Annelida	Polychaeta		Ampharetidae	*Asabellides oculata*
153	Annelida	Polychaeta		Maldanidae	*Asychis elongata*
119	Annelida	Polychaeta		Syllidae	*Autolytus cornutus*
300	Annelida	Polychaeta		Syllidae	*Autolytus sp*
289	Arthropoda	Crustacea			*Balanus amphitrite*
79	Arthropoda	Crustacea			*Balanus sp*
46	Arthropoda	Crustacea	Amphipoda	Pontogeneiidae	*Batea catharinensis*
295	Mollusca	Gastropoda		Cerithiidae	*Bittium alternatum*
189	Annelida	Polychaeta		Syllidae	*Brania clavata*
19	Annelida	Polychaeta		Syllidae	*Brania wellfleetensis*
2	Annelida	Polychaeta		Capitellidae	*Capitellidae sp*
35	Arthropoda	Crustacea	Amphipoda	Caprellidae	*Caprella penantis*
180	Mollusca	Gastropoda	Cephalaspidea		*Cephalaspidea sp*
78	Mollusca	Polyplacophora			*Chaetopleura apiculata*
292	Annelida	Polychaeta		Maldanidae	*Clymenella zonalis*
290	Mollusca	Bivalvia		Corbulidae	*Corbula contracta*
234	Annelida	Polychaeta		Cirratulidae	*Cossura longocirrata*
214	Arthropoda	Crustacea	Decapoda	Crangonidae	*Crangon septemspinosa*
89	Mollusca	Bivalvia		Crassatellidae	*Crassinella mactracea*
75	Mollusca	Gastropoda		Calyptraeidae	*Crepidula fornicata*
76	Mollusca	Gastropoda		Calyptraeidae	*Crepidula plana*
158	Mollusca	Bivalvia		Semelidae	*Cumingia tellinoides*
48	Arthropoda	Crustacea	Tanaidacea		*Cyathura polita*
284	Arthropoda	Crustacea	Decapoda		*Decapoda megalopa*
122	Annelida	Polychaeta		Arabellidae	*Drilonereis longa*
297	Annelida	Polychaeta		Arabellidae	*Drilonereis magna*
52	Arthropoda	Crustacea	Decapoda	Xanthidae	*Dyspanopeus sayi*
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*
13	Annelida	Polychaeta		Phyllodocidae	*Eumida sanguinea*
20	Annelida	Polychaeta		Syllidae	*Exogone dispar*
140	Annelida	Polychaeta		Glyceridae	*Glycera americana*
114	Annelida	Polychaeta		Glyceridae	*Glycera dibranchiata*
238	Annelida	Polychaeta		Gonianidae	*Glycinde solitaria*
95	Chordata	Osteichthyes		Gobiidae	*Gobiosoma sp*
115	Annelida	Polychaeta		Gonianidae	*Goniadella gracilis*
145	Annelida	Polychaeta		Hesionidae	*Gyptis vittata*

Table 1. List of taxa collected during Phase II sampling.

Code	Phylum	Class	Order	Family	Species
291	Annelida	Polychaeta		Polynoidae	*Harmothoe sp*
55	Arthropoda	Crustacea	Mysidacea		*Heteromysis formosa*
168	Annelida	Polychaeta		Serpulidae	*Hydroides dianthus*
191	Mollusca	Gastropoda		Nassariidae	*Ilyanassa obsoleta*
161	Mollusca	Gastropoda		Nassariidae	*Ilyanassa trivittata*
138	Arthropoda	Crustacea	Isopoda		*Isopoda sp*
186	Arthropoda	Crustacea	Amphipoda	Ischyroceridae	*Jassa falcata*
33	Arthropoda	Crustacea	Amphipoda	Aoridae	*Lembos smithi*
125	Arthropoda	Crustacea	Tanaidacea		*Leptochelia savignyi*
173	Arthropoda	Crustacea	Cumacea		*Leucon americanus*
200	Annelida	Polychaeta		Lumbrineridae	*Lumbrineris fragilis*
64	Mollusca	Bivalvia		Lyonsiidae	*Lyonsia hyalina*
244	Mollusca	Bivalvia		Tellinidae	*Macoma tenta*
301	Annelida	Polychaeta		Magelonidae	*Magelona sp*
160	Annelida	Polychaeta		Ampharetidae	*Melinna cristata*
70	Mollusca	Bivalvia		Veneridae	*Mercenaria mercenaria*
293	Annelida	Polychaeta		Hesionidae	*Microphthalmus sczelkowii*
283	Arthropoda	Crustacea	Amphipoda	Oedicerotidae	*Monoculodes sp*
137	Mollusca	Bivalvia		Mactridae	*Mulinia lateralis*
212	Annelida	Polychaeta		Spionidae	*Minuspio sp*
296	Mollusca	Bivalvia		Mytilidae	*Mytilus edulis*
109	Mollusca	Gastropoda		Naticidae	*Naticidae sp*
80	Nematoda	Nematoda			*Nematoda sp*
285	Arthropoda	Crustacea	Mysidacea		*Neomysis americana*
7	Annelida	Polychaeta		Nephtyidae	*Nephtys picta*
210	Annelida	Polychaeta		Nephtyidae	*Nepthys incisa*
102	Annelida	Polychaeta		Nereidae	*Nereis arenaceodonta*
298	Annelida	Polychaeta		Nereidae	*Nereis grayi*
8	Annelida	Polychaeta		Nereidae	*Nereis succinea*
132	Annelida	Polychaeta		Terebellidae	*Nicolea sp*
66	Mollusca	Bivalvia		Nuculidae	*Nucula proxima*
104	Mollusca	Bivalvia		Nuculidae	*Nucula tenuis*
4	Annelida	Polychaeta		Syllidae	*Odontosyllis fulgurans*
1	Annelida	Oligochaeta			*Oligochaeta sp*
146	Annelida	Polychaeta		Orbiniidae	*Orbinia sp*
82	Ostracoda	Crustacea			*Ostracod A*
83	Ostracoda	Crustacea			*Ostracod B*
258	Annelida	Polychaeta		Oweniidae	*Owenia fusiformis*
50	Arthropoda	Crustacea	Cumacea		*Oxyurostylis smithi*
43	Arthropoda	Crustacea	Decapoda	Paguridae	*Pagurus longicarpus*
51	Mollusca	Bivalvia		Pandoridae	*Pandora gouldiana*
53	Arthropoda	Crustacea	Decapoda	Xanthidae	*Panopeus herbstii*
37	Arthropoda	Crustacea	Amphipoda	Caprellidae	*Paracaprella tenius*
117	Annelida	Polychaeta		Paraonidae	*Paraonis gracilis*
96	Arthropoda	Crustacea	Amphipoda	Phoxocephalidae	*Paraphoxus spinosus*
21	Annelida	Polychaeta		Syllidae	*Parapionosyllis longicirrata*
107	Annelida	Polychaeta		Pectinariidae	*Pectinaria gouldii*
67	Mollusca	Bivalvia		Periplomatidae	*Periploma leanum*
216	Annelida	Polychaeta		Flabelligeridae	*Pherusa sp*

Table 1. List of taxa collected during Phase II sampling.

Code	Phylum	Class	Order	Family	Species
113	Annelida	Polychaeta		Phyllodocidae	*Phyllodoce arenae*
59	Arthropoda	Crustacea	Decapoda		*Pinnixa sp*
63	Annelida	Polychaeta		Terebellidae	*Pista palmata*
302	Annelida	Polychaeta		Nereidae	*Platynereis dumerilii*
123	Annelida	Polychaeta		Hesionidae	*Podarke obscura*
205	Annelida	Polychaeta		Spionidae	*Polydora ligni*
16	Annelida	Polychaeta		Spionidae	*Polydora sp*
14	Annelida	Polychaeta		Polygordiidae	*Polygordius sp*
131	Annelida	Polychaeta		Spionidae	*Prionospio heterobranchia*
97	Annelida	Polychaeta		Spionidae	*Prionospio pinnata*
209	Mollusca	Gastropoda		Acteonidae	*Rictaxis punctostriatus*
105	Arthropoda	Crustacea	Amphipoda	Aoridae	*Rudilemboides naglei*
148	Annelida	Polychaeta		Sabellidae	*Sabella microphthalma*
270	Annelida	Polychaeta		Sabellaridae	*Sabellaria vulgaris*
142	Annelida	Polychaeta		Scalibregmidae	*Scalibregma inflatum*
134	Annelida	Polychaeta		Dorvilleidae	*Schistomeringos caecus*
135	Annelida	Polychaeta		Dorvilleidae	*Schistomeringos rudolphi*
182	Annelida	Polychaeta		Spionidae	*Scolelepis squamata*
264	Annelida	Polychaeta		Orbiniidae	*Scoloplos sp*
74	Mollusca	Gastropoda		Cerithiopsidae	*Seila adamsi*
178	Annelida	Polychaeta		Pilgariidae	*Sigambra sp*
151	Mollusca	Bivalvia		Solemyidae	*Solemya velum*
172	Mollusca	Bivalvia		Solenidae	*Solen viridis*
217	Arthropoda	Crustacea	Isopoda	Sphaeromatidae	*Sphaeromatidae sp*
22	Annelida	Polychaeta		Syllidae	*Sphaerosyllis erinaceus*
23	Annelida	Polychaeta		Syllidae	*Sphaerosyllis hystrix*
156	Annelida	Polychaeta		Spionidae	*Spio sp*
18	Annelida	Polychaeta		Spionidae	*Spiophanes bombyx*
103	Mollusca	Bivalvia		Mactridae	*Spisula solidissima*
121	Arthropoda	Crustacea	Amphipoda	Stenothoidae	*Stenothoe minuta*
139	Annelida	Polychaeta		Sigalionidae	*Sthenelais boa*
110	Annelida	Polychaeta		Syllidae	*Syllides setosa*
24	Annelida	Polychaeta		Syllidae	*Syllis gracilis*
69	Mollusca	Bivalvia		Tellinidae	*Tellina agilis*
25	Annelida	Polychaeta		Cirratulidae	*Tharyx sp*
9	Annelida	Polychaeta		Opheliidae	*Travisia carnea*
99	Platyhelminthes	Turbellaria			*Turbellaria sp*
175	Mollusca	Gastropoda		Pyramidellidae	*Turbonilla sp*
129	Arthropoda	Crustacea	Amphipoda	Aoridae	*Unciola irrorata*
299	Arthropoda	Crustacea	Amphipoda	Aoridae	*Unciola serrata*
280	Arthropoda	Crustacea	Amphipoda	Aoridae	*Unciola sp*
294	Mollusca	Gastropoda		Muricidae	*Urosalpinx cinerea*
211	Mollusca	Bivalvia		Nuculanidae	*Yoldia limatula*

Table 2. Taxa within top 95% of the fauna in at least one region.

		Average Abundance (per sample)					Percent of Fauna				
Species	IDCode	Great Peconic West	South Race	Jessup Neck	Pipes Cove	Orient Delta	Great Peconic West	South Race	Jessup Neck	Pipes Cove	Orient Delta
Acteocina canaliculata	Actecana	0.0	0.9	0.9	0.6	0.5	0.0	0.4	0.3	0.4	0.2
Ampelisca vadorum	Ampevado	0.6	2.7	3.1	2.3	5.0	0.5	1.4	1.1	1.5	2.2
Ampelisca verrilli	Ampeverr	0.1	0.5	2.1	3.9	0.8	0.1	0.3	0.8	2.5	0.4
Ampharete arctica	Ampharct	0.1	0.0	0.0	0.9	5.2	0.1	0.0	0.0	0.6	2.3
Amphioplus abditus	Amphabdi	3.1	2.8	1.0	0.3	0.3	2.6	1.4	0.4	0.2	0.1
Aricidea catherinae	Ariccath	0.5	4.8	13.7	14.1	13.7	0.4	2.4	5.0	9.1	6.1
Asychis elongata	Asycelon	1.1	0.0	0.6	0.2	1.8	0.9	0.0	0.2	0.1	0.8
Autolytus sp	Autosp	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.3	0.0
Balanus sp	Balasp	0.3	0.0	0.0	8.8	3.2	0.3	0.0	0.0	5.6	1.4
Batea catharinensis	Batecath	0.0	2.2	11.6	0.0	0.0	0.0	1.1	4.3	0.0	0.0
Bittium alternatum	Bittalte	0.1	1.4	0.0	0.0	0.1	0.1	0.7	0.0	0.0	0.0
Brania wellfleetensis	Branwell	0.1	0.5	0.4	0.5	0.0	0.1	0.2	0.1	0.3	0.0
Capitellidae sp	Capisp	12.9	38.8	31.5	11.5	7.5	10.7	19.6	11.6	7.4	3.4
Clymenella zonalis	Clymzona	1.7	1.5	2.6	0.4	1.1	1.4	0.7	0.9	0.3	0.5
Cossura longocirrata	Cosslong	1.1	0.6	3.6	0.7	0.4	0.9	0.3	1.3	0.4	0.2
Crassinella mactracea	Crasmact	0.1	0.1	0.7	1.1	0.1	0.1	0.1	0.3	0.7	0.1
Crepidula fornicata	Crepforn	1.1	3.4	1.1	1.2	11.5	0.9	1.7	0.4	0.8	5.1
Crepidula plana	Crepplan	0.0	0.0	0.0	0.2	1.1	0.0	0.0	0.0	0.1	0.5
Elasmopus levis	Elaslevi	0.0	2.0	0.0	0.0	0.2	0.0	1.0	0.0	0.0	0.1
Erichthonius brasiliensis	Ericbras	0.1	2.1	0.7	0.0	0.0	0.1	1.1	0.3	0.0	0.0
Eumida sanguinea	Eumisang	0.7	0.6	1.8	0.9	0.8	0.6	0.3	0.7	0.6	0.3
Exogone dispar	Exogdisp	0.9	1.0	3.3	1.8	1.5	0.8	0.5	1.2	1.2	0.7
Glycera americana	Glycamer	0.8	0.5	0.8	0.4	0.5	0.6	0.3	0.3	0.3	0.2
Glycinde solitaria	Glycsoli	4.2	7.1	2.0	0.4	0.1	3.4	3.6	0.7	0.3	0.0
Harmothoe sp	Harmsp	0.9	1.4	0.4	1.7	3.3	0.8	0.7	0.2	1.1	1.5
Lembos smithi	Lembsmit	0.0	0.8	0.8	0.2	0.4	0.0	0.4	0.3	0.1	0.2
Lumbrineris fragilis	Lumbfrag	0.0	0.0	0.0	0.2	1.0	0.0	0.0	0.0	0.1	0.4
Lyonsia hyalina	Lyonhyal	0.0	1.0	0.9	0.4	0.3	0.0	0.5	0.3	0.3	0.1
Macoma tenta	Macotent	4.7	9.0	7.7	0.9	0.4	3.9	4.5	2.8	0.6	0.2
Melinna cristata	Melicris	0.4	1.0	2.3	0.2	0.0	0.4	0.5	0.8	0.1	0.0
Minuspio sp	Munisp	12.2	9.1	2.0	0.0	0.3	10.0	4.6	0.7	0.0	0.1
Mytilus edulis	Mytiedul	0.0	0.0	0.0	0.8	0.9	0.0	0.0	0.0	0.5	0.4
Naticidae sp	Natisp	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nematoda sp	Nemasp	29.1	34.0	100.3	56.1	71.4	24.0	17.2	36.8	36.2	32.0
Nephtys picta	Nephpict	1.8	1.9	3.3	5.0	3.0	1.4	0.9	1.2	3.2	1.3
Nepthys incisa	Neptinci	0.7	1.0	0.1	0.0	1.8	0.6	0.5	0.1	0.0	0.8
Nicolea sp	Nicosp	0.1	0.1	0.9	0.3	1.5	0.1	0.1	0.3	0.2	0.7

Table 2. Taxa within top 95% of the fauna in at least one region.

		Average Abundance (per sample)					Percent of Fauna				
Species	IDCode	Great Peconic West	South Race	Jessup Neck	Pipes Cove	Orient Delta	Great Peconic West	South Race	Jessup Neck	Pipes Cove	Orient Delta
Nucula proxima	Nucuprox	0.1	2.1	2.3	2.7	3.0	0.1	1.1	0.8	1.7	1.4
Odontosyllis fulgurans	Odonfulg	0.0	1.0	1.9	0.8	0.2	0.0	0.5	0.7	0.5	0.1
Oligochaeta sp	Oligsp	3.1	1.9	8.5	10.3	5.9	2.5	1.0	3.1	6.7	2.6
Ostracod A	OstrA	1.3	12.7	13.4	0.9	0.1	1.0	6.4	4.9	0.6	0.0
Panopeus herbstii	Panoherb	0.6	0.9	0.7	0.7	0.9	0.5	0.4	0.2	0.4	0.4
Paracaprella tenius	Parateni	0.0	3.8	0.3	0.1	0.9	0.0	1.9	0.1	0.1	0.4
Paraonis gracilis	Paragrac	0.0	0.0	0.0	0.0	7.9	0.0	0.0	0.0	0.0	3.5
Paraphoxus spinosus	Paraspin	0.0	1.5	0.9	0.3	0.1	0.0	0.7	0.3	0.2	0.0
Parapionosyllis longicirrata	Paralong	0.1	0.4	1.6	0.8	2.3	0.1	0.2	0.6	0.5	1.0
Pectinaria gouldii	Pectgoul	0.4	1.1	0.7	0.1	0.0	0.3	0.6	0.3	0.1	0.0
Podarke obscura	Podaobsc	0.3	0.8	0.3	0.1	0.0	0.3	0.4	0.1	0.1	0.0
Polydora ligni	Polylign	0.4	0.0	0.0	2.7	0.1	0.3	0.0	0.0	1.7	0.1
Polydora sp	Polydora	22.6	4.5	7.3	5.3	2.2	18.6	2.3	2.7	3.4	1.0
Prionospio heterobranchia	Priohete	0.1	0.2	1.0	0.3	0.2	0.1	0.1	0.4	0.2	0.1
Prionospio pinnata	Priopinn	4.3	9.5	3.4	0.0	0.3	3.6	4.8	1.3	0.0	0.1
Scalibregma inflatum	Scalinfl	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.5
Schistomeringos caecus	Schicaec	0.0	0.0	0.3	0.4	1.1	0.0	0.0	0.1	0.3	0.5
Scolelepis squamata	Scolsqua	0.2	0.3	1.0	0.0	0.1	0.2	0.2	0.4	0.0	0.0
Sphaerosyllis erinaceus	Sphaerin	0.2	0.6	1.9	0.2	0.1	0.2	0.3	0.7	0.1	0.0
Sphaerosyllis hystrix	Sphahyst	3.9	4.7	3.2	0.7	0.1	3.2	2.4	1.2	0.4	0.0
Spiophanes bombyx	Spiobomb	0.1	2.5	0.9	2.1	1.9	0.1	1.3	0.3	1.3	0.8
Stenothoe minuta	Stenminu	0.0	0.5	0.0	0.1	4.4	0.0	0.3	0.0	0.1	2.0
Syllides setosa	Syllseto	0.0	0.0	1.1	0.3	0.0	0.0	0.0	0.4	0.2	0.0
Tellina agilis	Tellagil	0.3	1.9	1.1	4.3	0.8	0.2	1.0	0.4	2.7	0.4
Tharyx sp	Tharsp	1.1	7.7	13.6	1.8	41.3	0.9	3.9	5.0	1.2	18.5
Turbonilla sp	Turbonsp	0.3	0.0	0.0	0.1	1.0	0.2	0.0	0.0	0.1	0.5
Unciola irrorata	Unciirro	0.3	0.0	0.1	0.0	1.5	0.2	0.0	0.0	0.0	0.7
Fraction of Fauna							97.92	96.77	97.49	97.42	97.28
Average Abundance		121.4	197.7	272.6	155.0	223.4					

Table 3. Occurrence of commerial shellfish

Region	Common Name	Species Name	Number of Stations
Great Peconic West	Razor Clam	*Ensis directus*	1
South Race	Hard Clam	*Mercenaria mercenaria*	1
Jessup Neck	Hard Clam	*Mercenaria mercenaria*	3
	Surf Clam	*Spisula solidissima*	1
Pipes Cove	Razor Clam	*Ensis directus*	2
	Blue Mussel	*Mytilus edulis*	6
Orient Delta	Razor Clam	*Ensis directus*	2
	Hard Clam	*Mercenaria mercenaria*	1
	Blue Mussel	*Mytilus edulis*	4
	Surf Clam	*Spisula solidissima*	1

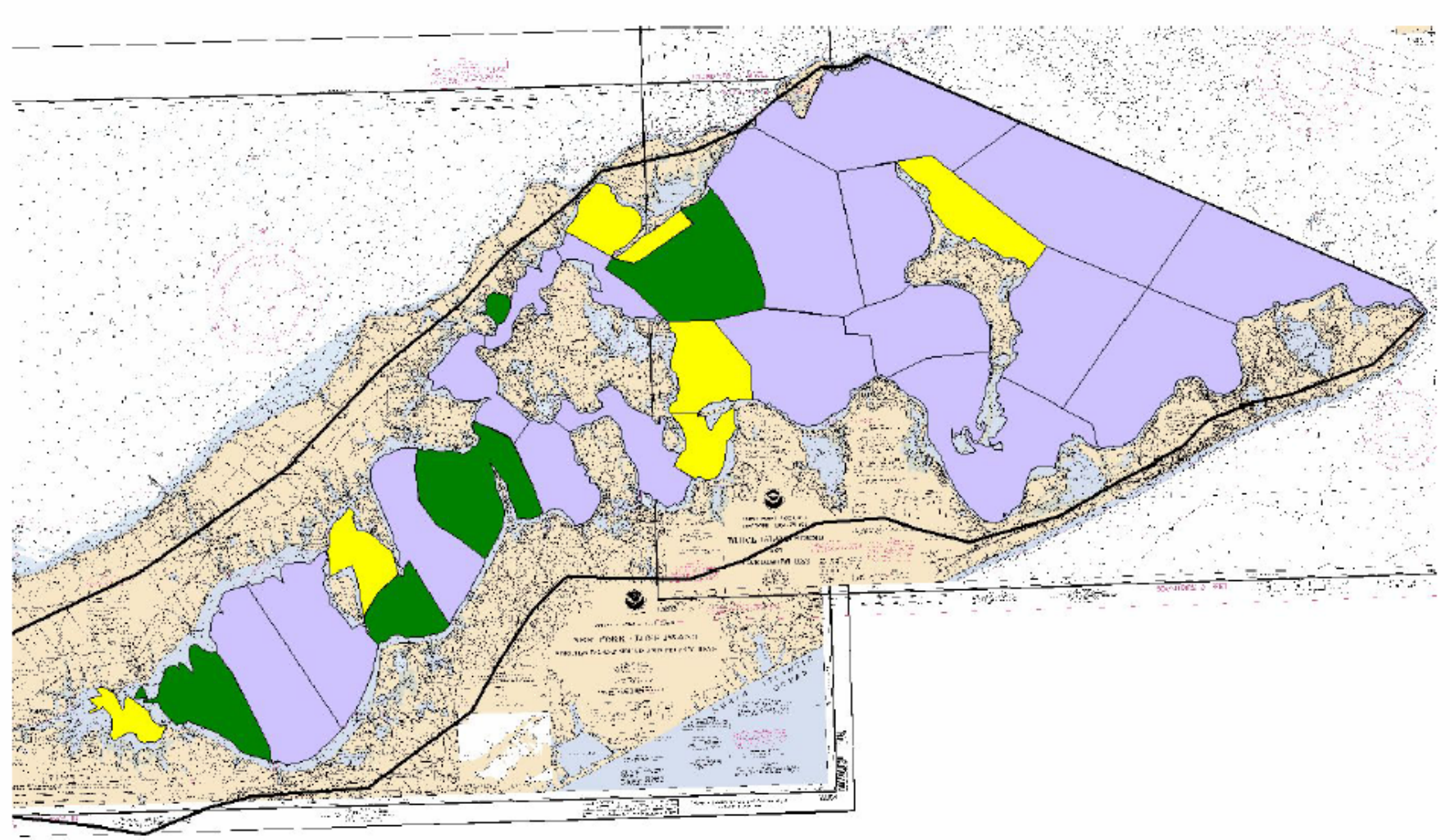


Figure 1. The Peconic Estuary System with Phase I (yellow) and Phase II (green) sites indicated.

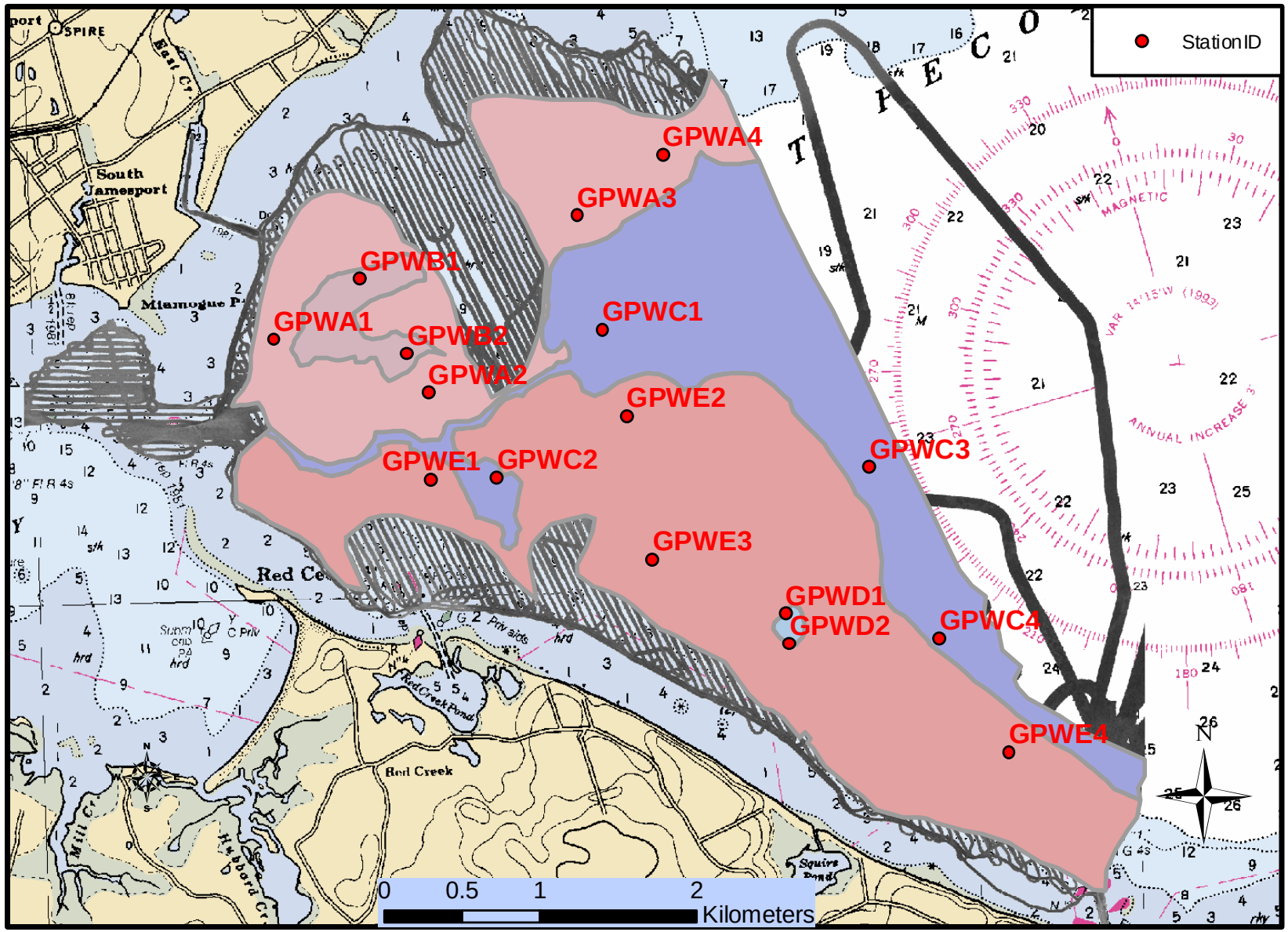


Figure 2. Great Peconic West initial acoustic provinces and sampling station locations.

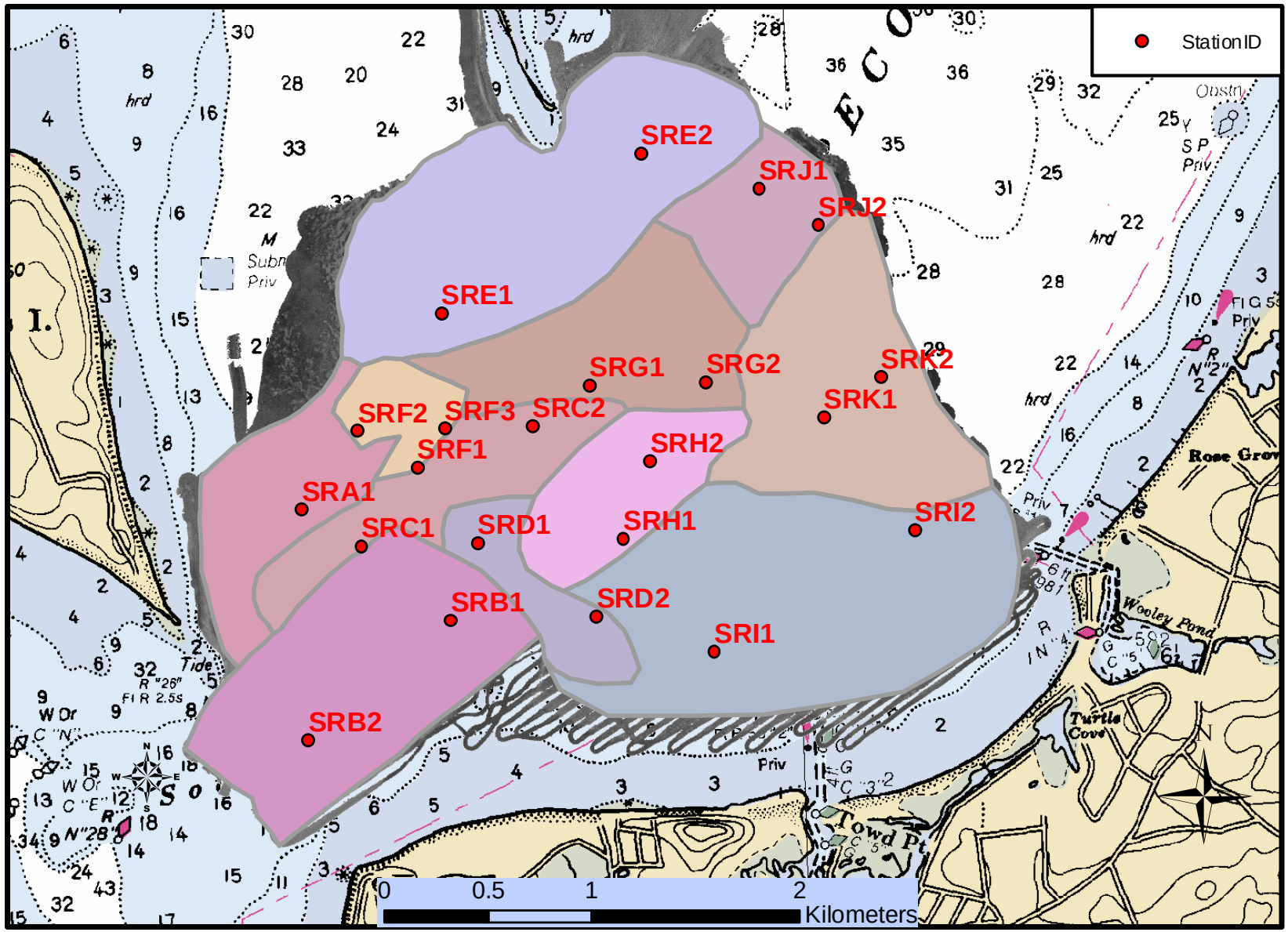


Figure 3. South Race initial acoustic provinces and sampling station locations.

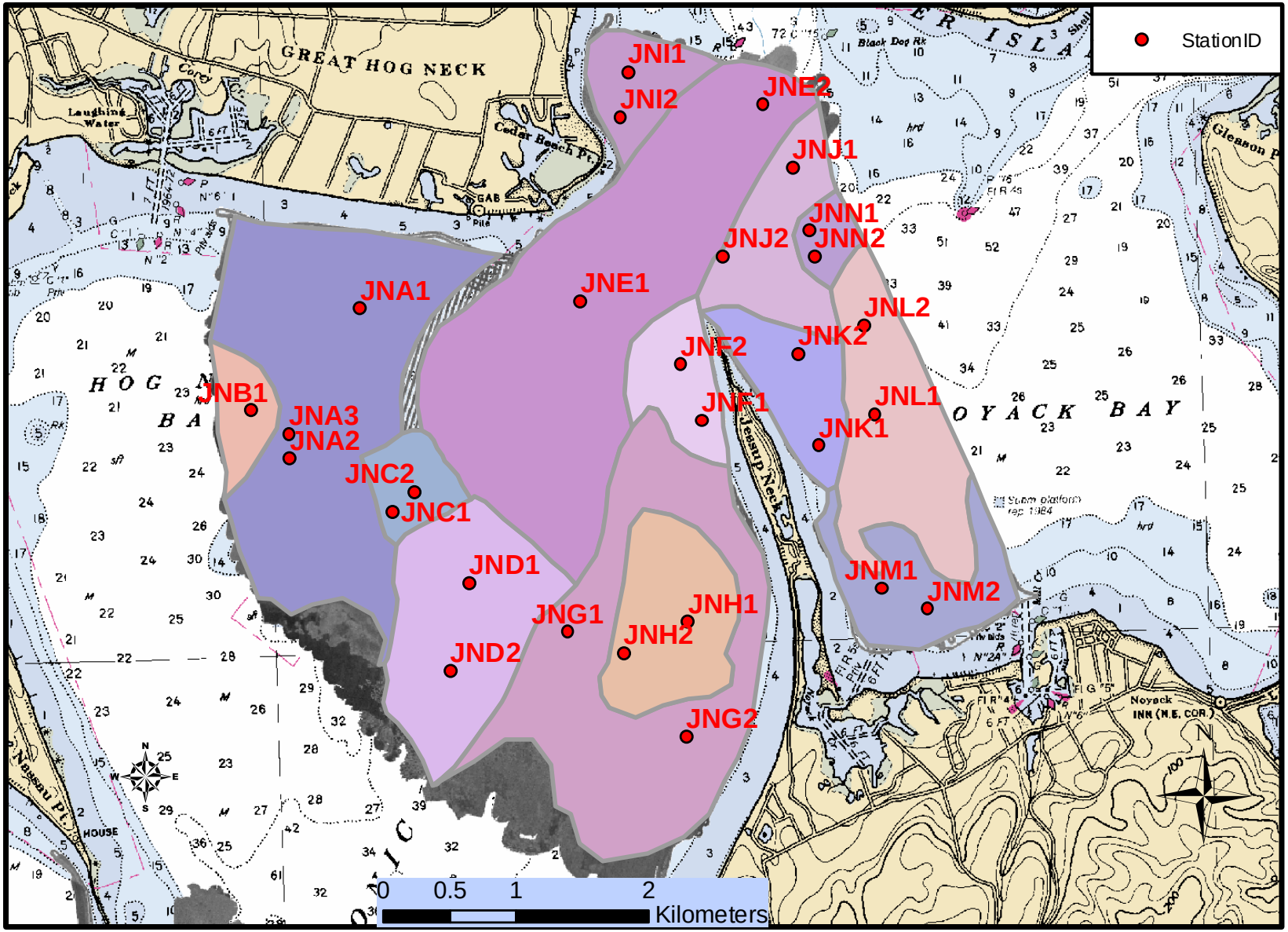


Figure 4. Jessup Neck initial acoustic provinces and sampling station locations.

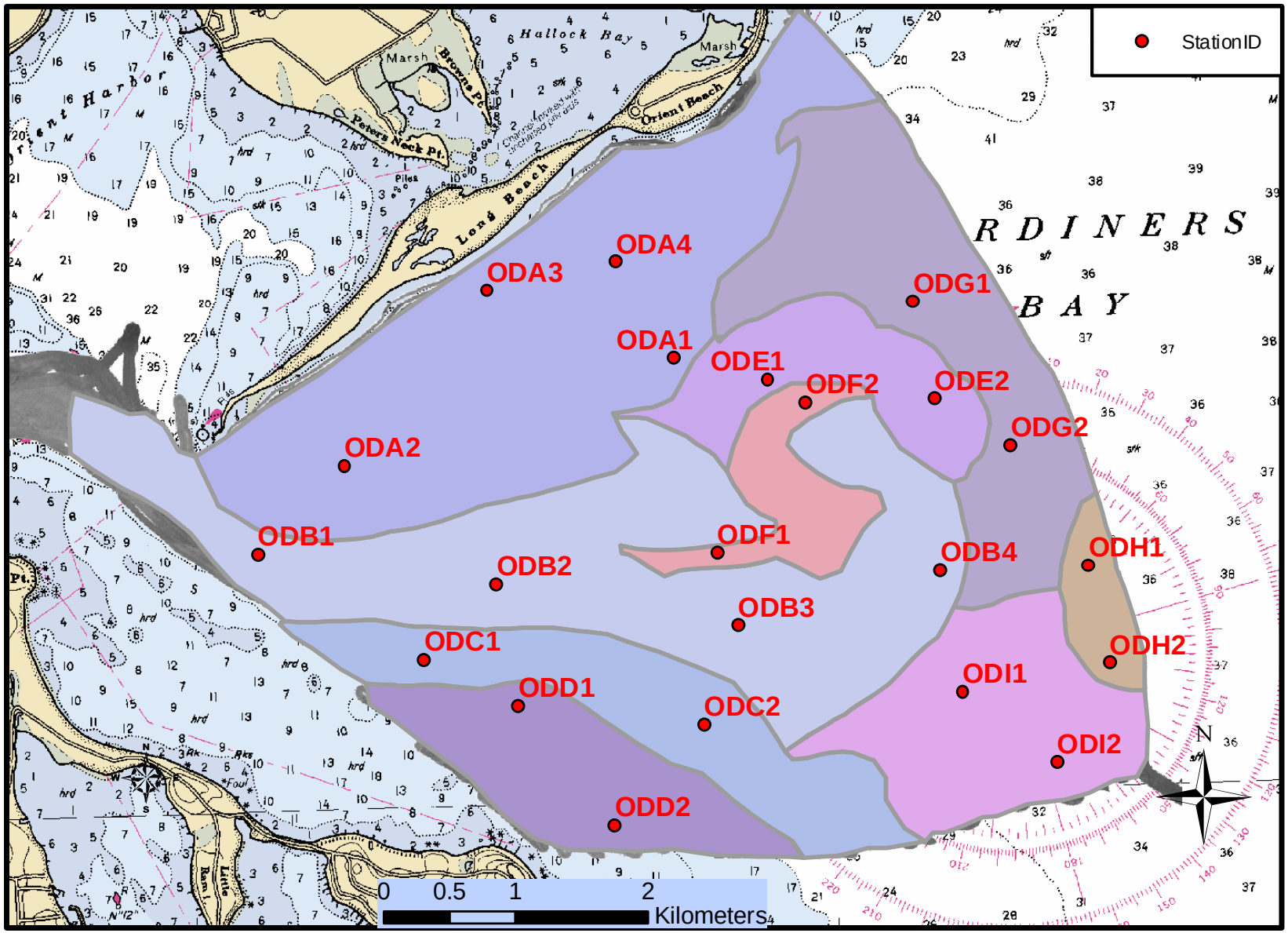


Figure 5. Orient Delta initial acoustic provinces and sampling station locations.

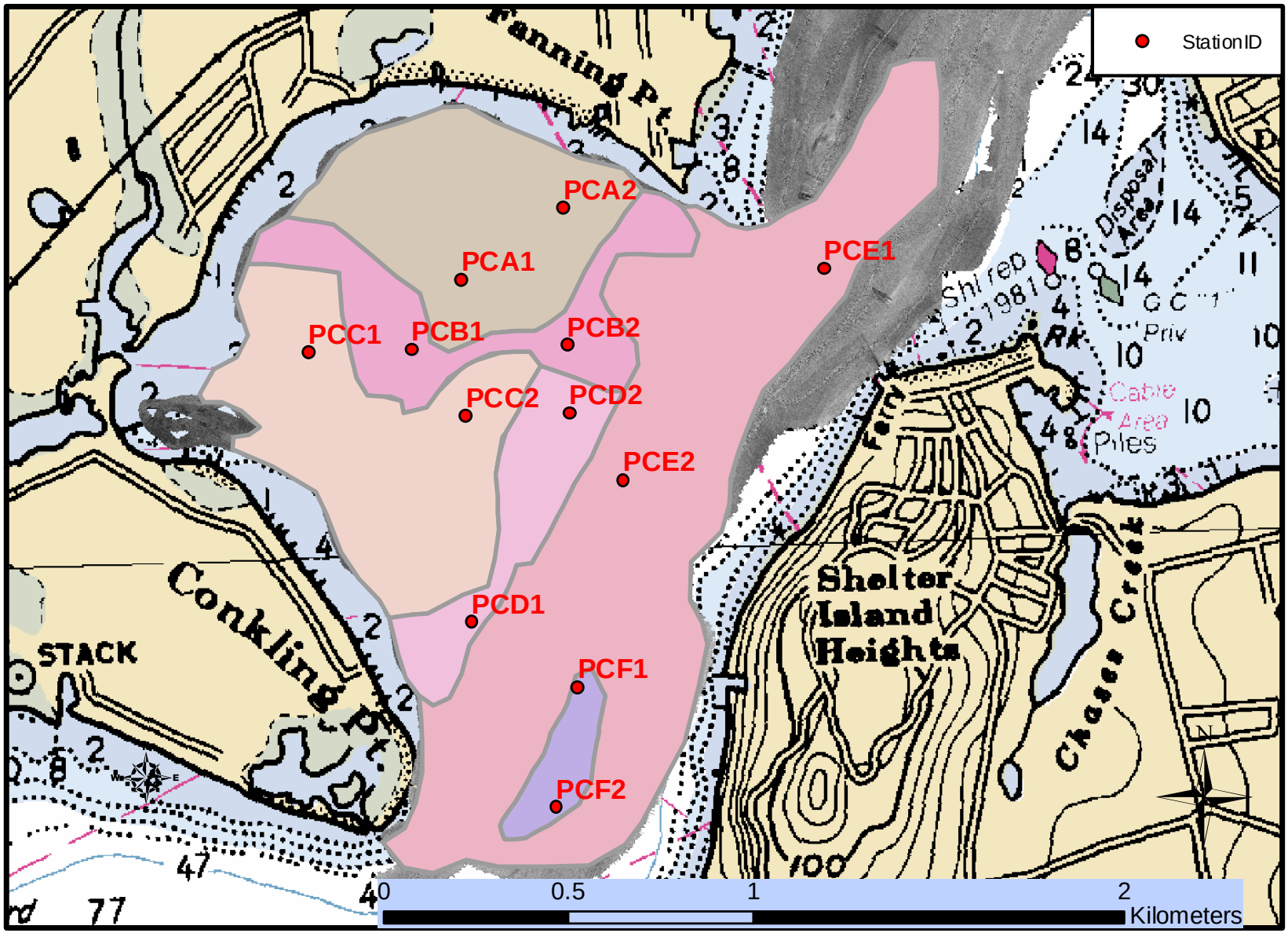


Figure 6. Pipes Cove initial acoustic provinces and sampling station locations.

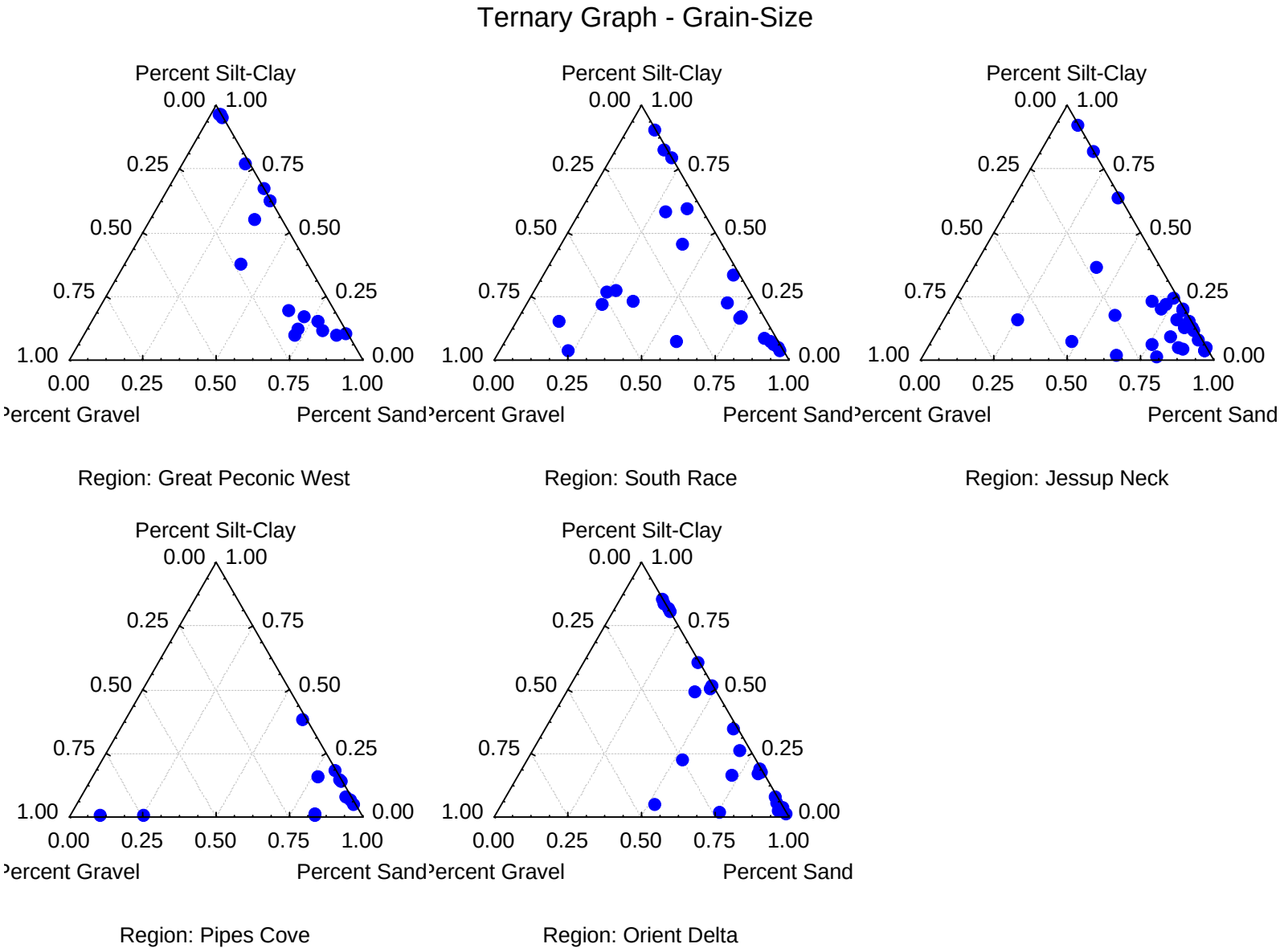


Figure 7. Ternary plots of sediment data for all Phase II Sites.

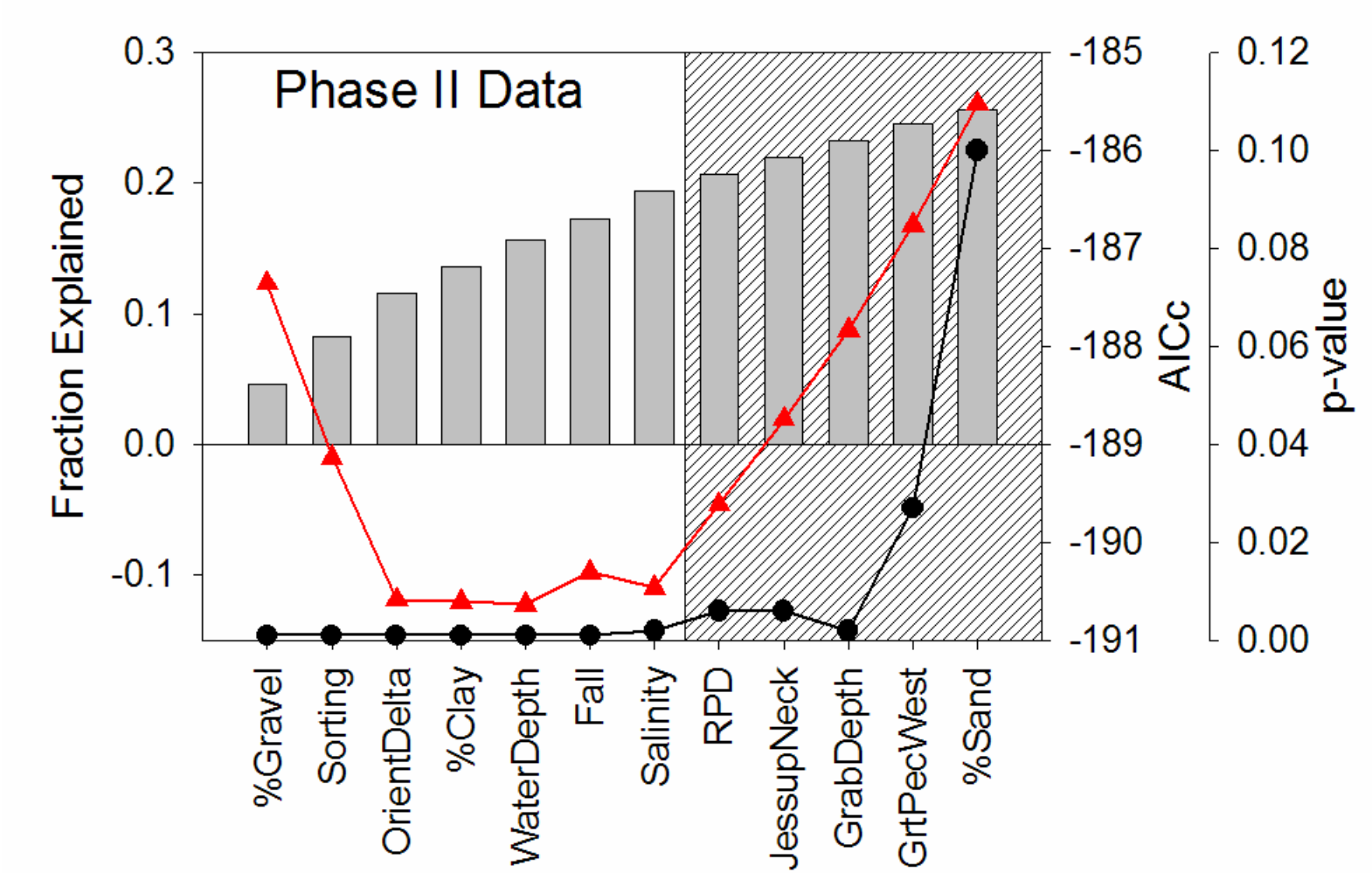


Figure 8. Cumulative fraction of explained variance, AICc values, and significance level results from forward selection redundancy analysis (RDA) using the Phase II data set. Histogram is the cumulative fraction of faunal variance explained by adding environmental variables sequentially during the forward selection process. Triangles are AICc values and circles are p-values from permutation tests carried out on each environmental variable. Environmental variables in the hatched area were removed from final results because they were added after the minimum AICc value was reached.

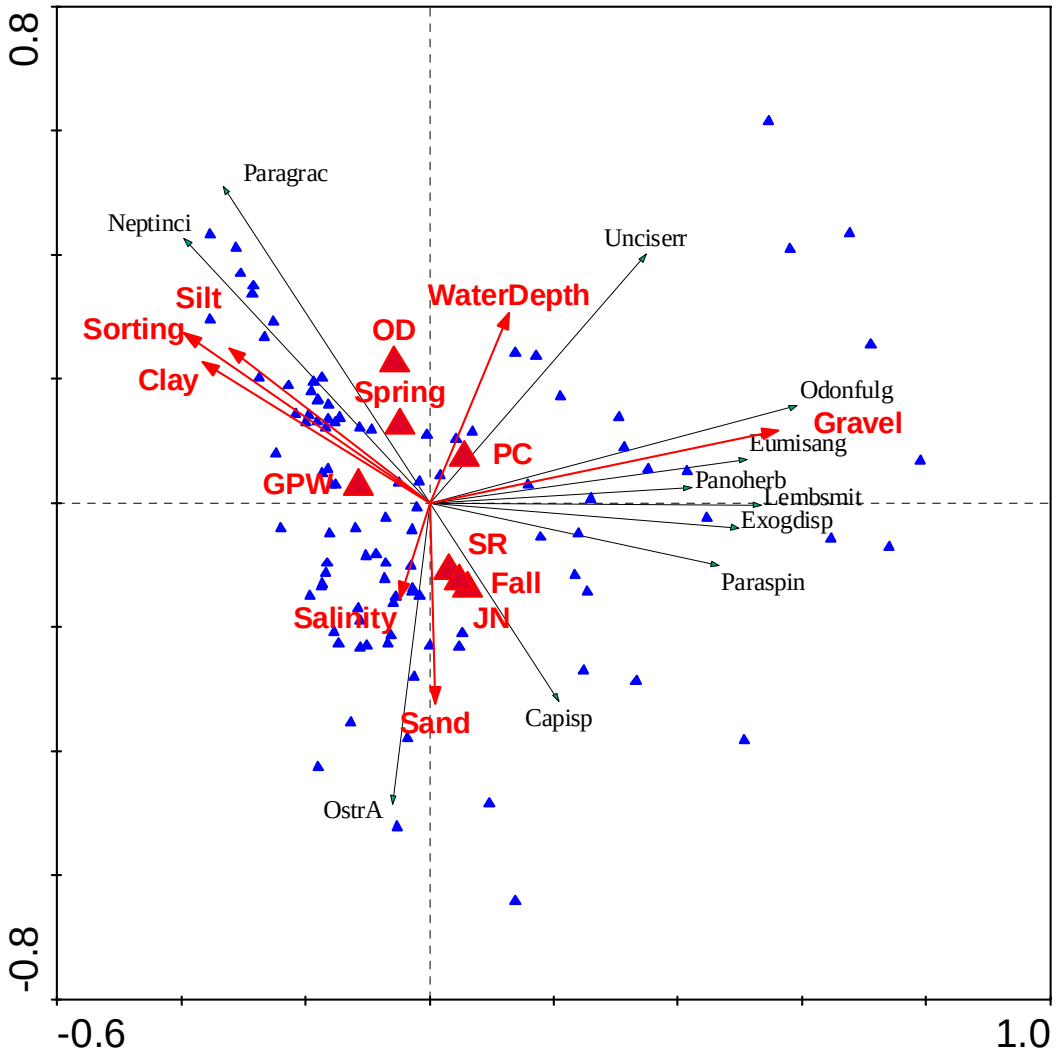


Figure 9. Redundancy analysis (RDA) ordination triplot for the Phase II data set, displaying station, species, and environmental relationships. Arrows represent the direction of maximum change in the species abundance (black) or the environmental variable (red). Red triangles are centroids of nominal environmental variables, and blue triangles are sampling stations. The 11 species listed have greater than 25% of their variance displayed in the first two ordination axes.

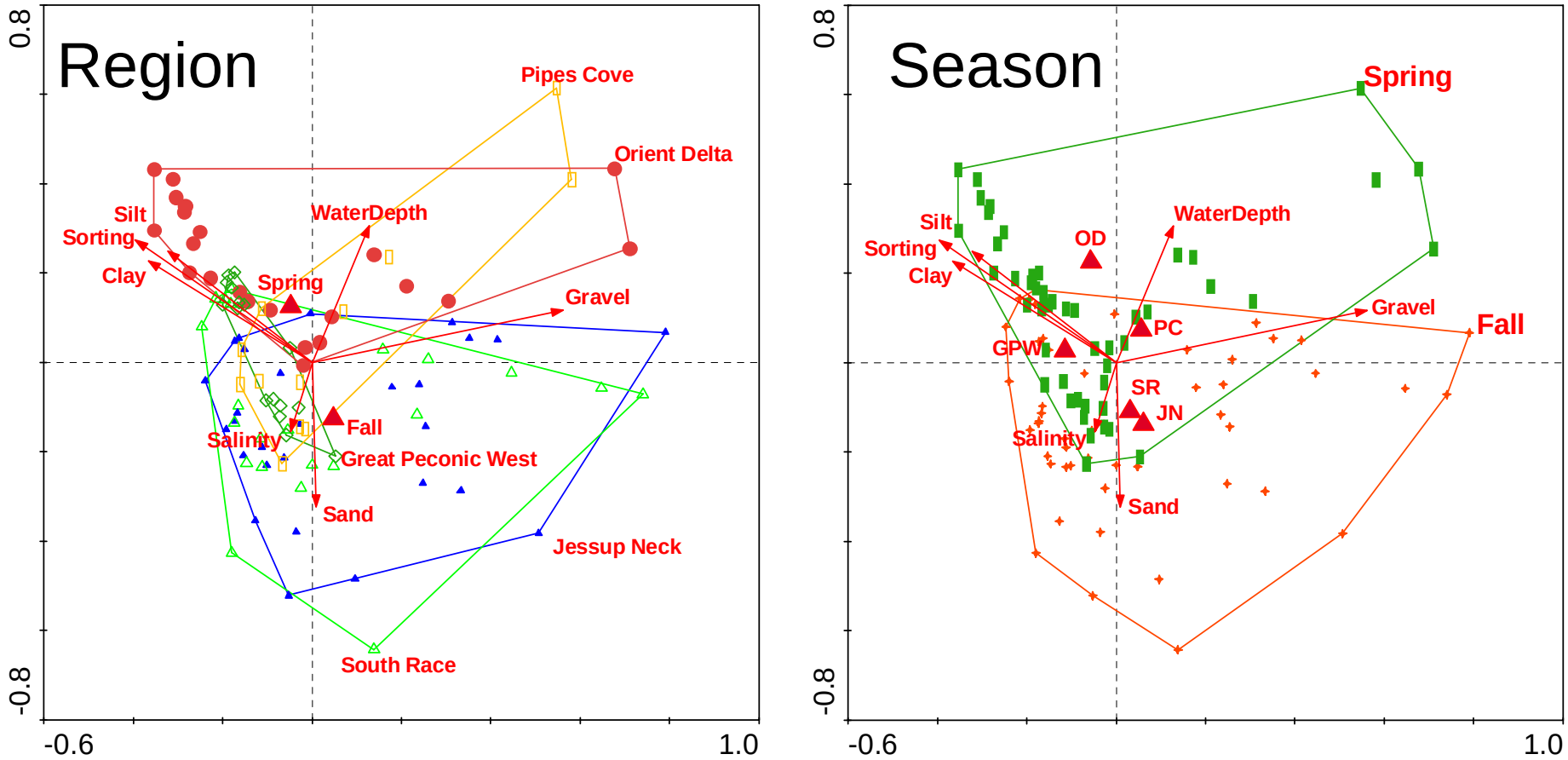


Figure 10. Redundancy analysis (RDA) ordination plot for the Phase II data set, emphasizing the two nominal environmental variables Region and Season. Envelopes enclose stations belonging to each group.

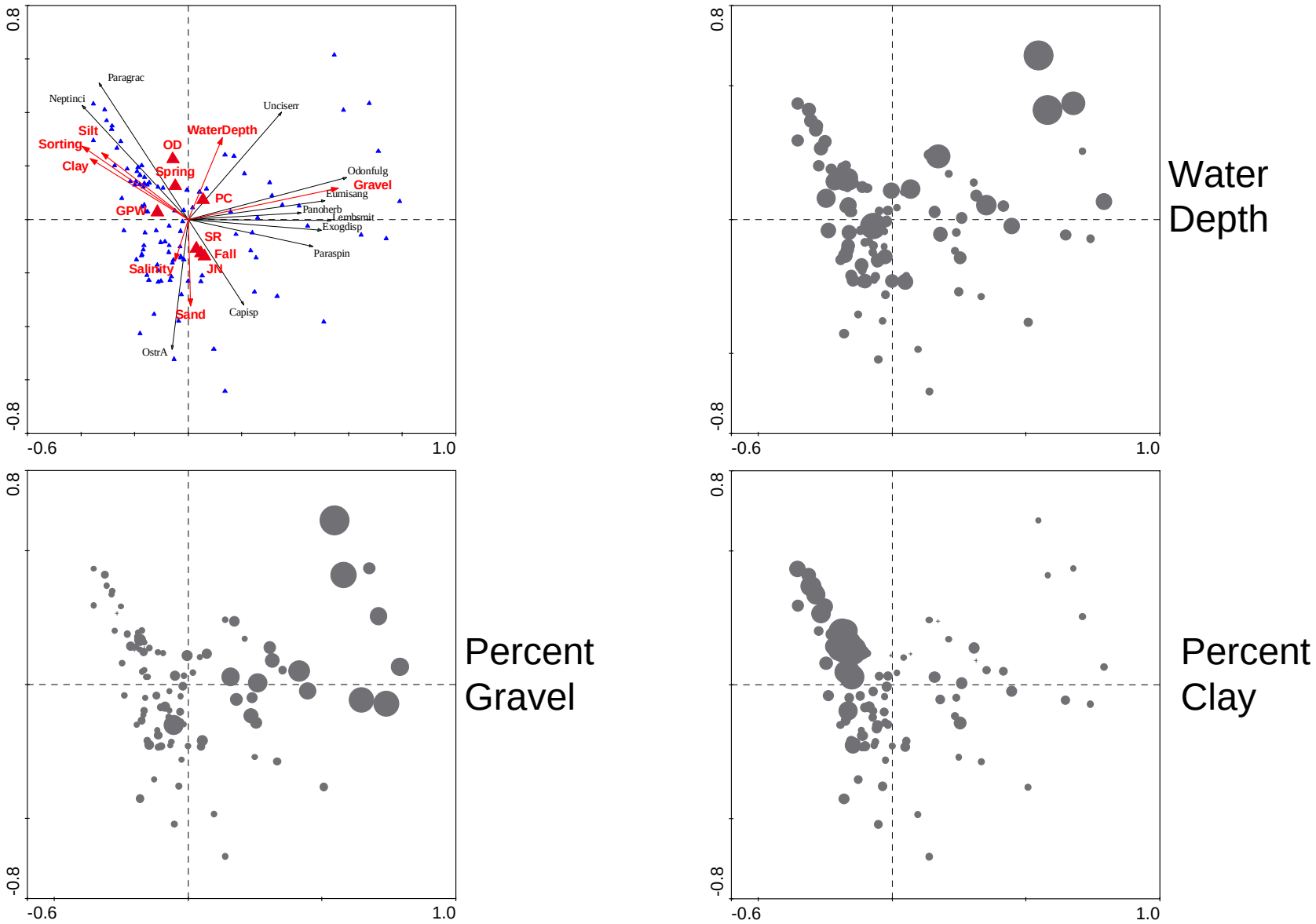
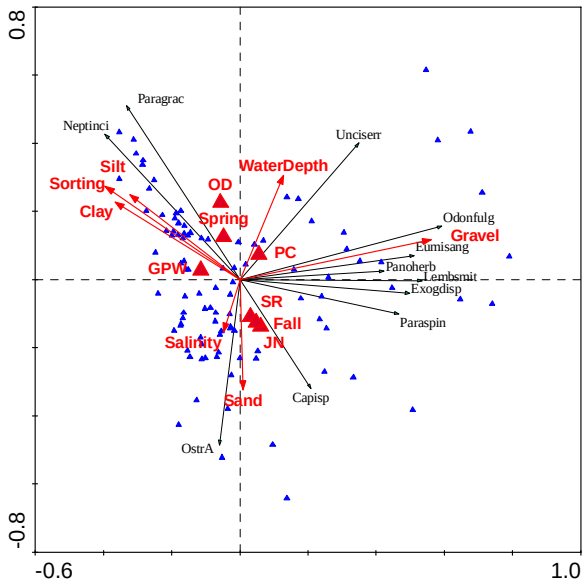
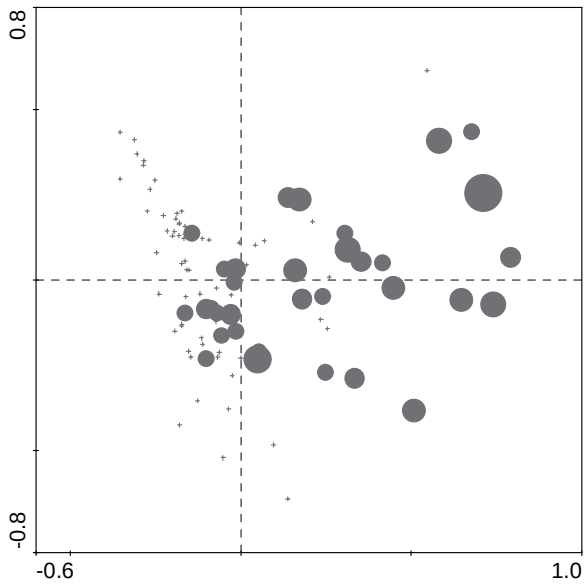
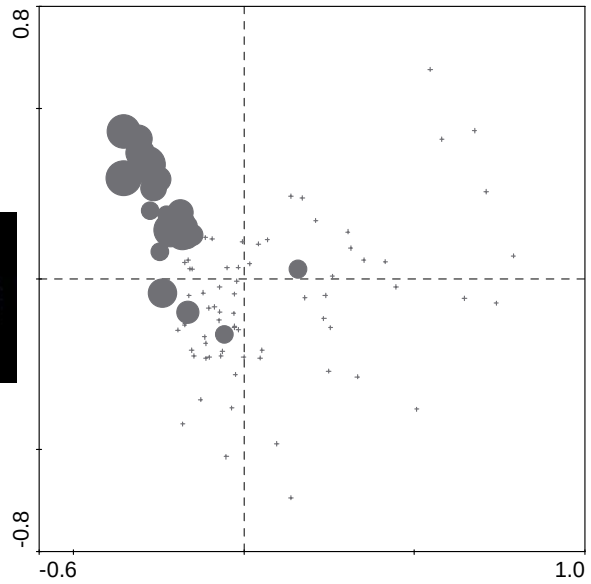


Figure 11. Redundancy analysis (RDA) ordination plots for the Phase II data set, emphasizing several quantitative environmental variables. Symbol diameters are proportional to the magnitude of the variable

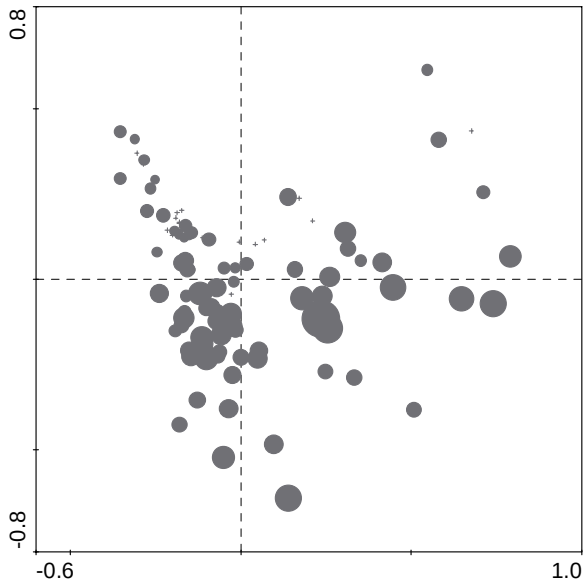




Panopeus herbstii



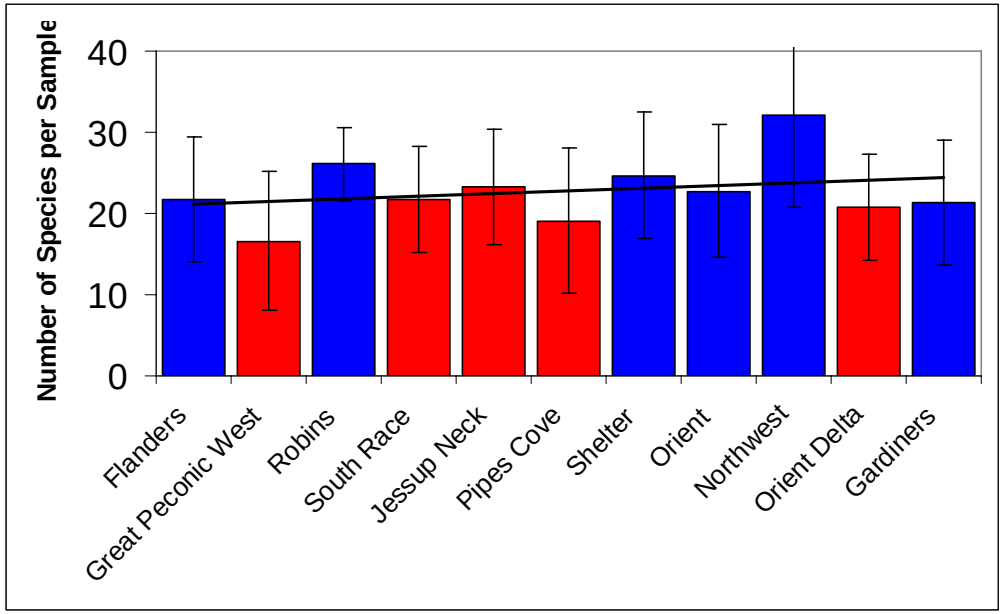
Nepthys incisa



Capitella spp.

Figure 12. Redundancy analysis (RDA) ordination plots for the Phase II data set, emphasizing abundances of several species. Symbol diameters are proportional to relative abundance. Photos from www.sms.si.edu and species.wikimedia.org

Peconics:



Long Island Sound:

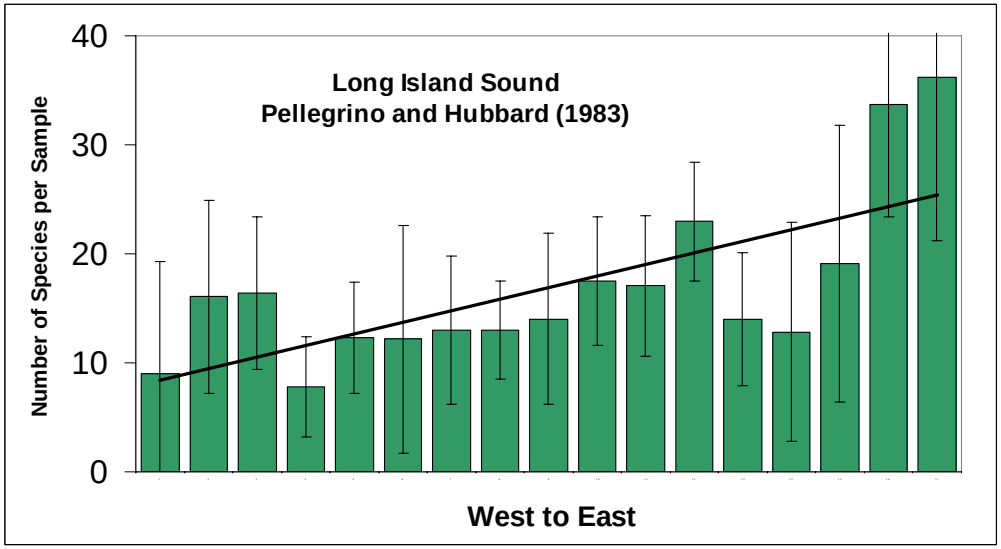


Figure 13. West to east trends in species richness per sample in the Peconics Estuary System compared to Long island Sound. The Peconics plot combines Phase I data in blue (Cerrato and Maher 2007) and Phase II data in red (present study). Long Island Sound data from Pelligrino and Hubbard (1983)

SampleID	Region	Province	Station	Replicate	Date	Phase	Temperature (°C)	Salinity	Water Depth (m)	Latitude (Degrees)	Latitude (Minutes)	Longitude (Degrees)	Longitude (Minutes)	RPD (cm)	Grab Depth (cm)	Penetrometer (cm)	Sediment (from field notes)
PEC101	JN	JNE	JNE2	JNE2	11/13/2006	II	11.70	25.80	13.00	41	2.18	-72	-22.31	10.00	6.00		sand, shell
PEC102	JN	JNJ	JNJ1	JNJ1	11/13/2006	II	11.70	26.50	16.40	41	1.92	-72	-22.16	10.00	5.00		sand, shell
PEC103	JN	JNN	JNN1	JNN1	11/13/2006	II	11.70	26.60	6.00	41	1.66	-72	-22.08	2.00	6.00		sand, mud
PEC104	JN	JNN	JNN2	JNN2	11/13/2006	II	11.70	26.70	7.30	41	1.56	-72	-22.05	3.00	10.00		sand
PEC105	JN	JNL	JNL2	JNL2	11/13/2006	II	11.80	26.80	12.50	41	1.27	-72	-21.80	3.00	10.00		fine sand, mud
PEC106	JN	JNL	JNL1	JNL1	11/13/2006	II	12.00	26.90	7.50	41	0.91	-72	-21.76	3.00	10.00		fine sand, mud
PEC107	JN	JNM	JNM2	JNM2	11/13/2006	II	11.90	26.70	5.10	41	0.11	-72	-21.51	4.00	10.00		sand, mud
PEC108	JN	JNM	JNM1	JNM1	11/13/2006	II	11.90	26.90	4.50	41	0.20	-72	-21.75	3.00	6.00		sand, mud, shell
PEC109	JN	JNK	JNK1	JNK1	11/13/2006	II	12.10	26.90	4.90	41	0.80	-72	-22.06	2.00	5.00		sand, mud, shell
PEC110	JN	JNK	JNK2	JNK2	11/13/2006	II	11.90	26.90	6.10	41	1.16	-72	-22.16	10.00	6.00		sand, mud, shell
PEC111	JN	JNJ	JNJ2	JNJ2	11/13/2006	II	11.80	26.80	21.60	41	1.57	-72	-22.55	10.00	6.00		sand, mud, shell
PEC112	JN	JNE	JNE1	JNE1	11/13/2006	II	11.80	26.80	8.50	41	1.40	-72	-23.32	10.00	3.00		gravel, shell
PEC113	JN	JNF	JNF2	JNF2	11/13/2006	II	11.70	26.90	5.60	41	1.14	-72	-22.79	2.00	5.00		sand, shell
PEC114	JN	JNF	JNF1	JNF1	11/13/2006	II	11.80	26.90	4.50	41	0.90	-72	-22.69	1.00	5.00		sand, shell
PEC115	JN	JNH	JNH1	JNH1	11/13/2006	II	11.80	26.90	9.20	41	0.09	-72	-22.79	10.00	1.00		sand, shell
PEC116	JN	JNG	JNG2	JNG2	11/13/2006	II	11.70	26.20	8.30	40	59.62	-72	-22.82	1.00	9.00		sand
PEC117	JN	JNH	JNH2	JNH2	11/13/2006	II	11.70	26.80	7.80	40	59.97	-72	-23.14	10.00	1.00		shell
PEC118	JN	JNG	JNG1	JNG1	11/13/2006	II	11.70	26.80	11.40	41	0.06	-72	-23.44	10.00	6.00		sand, mud
PEC119	JN	JND	JND2	JND2	11/13/2006	II	11.70	26.70	11.10	40	59.92	-72	-24.07	10.00	2.00		sand, shell
PEC120	JN	JND	JND1	JND1	11/13/2006	II	11.80	26.70	12.60	41	0.27	-72	-23.97	10.00	4.00		sand, mud, shell
PEC121	JN	JNC	JNC1	JNC1	11/13/2006	II	11.80	26.80	11.90	41	0.57	-72	-24.36	1.00	8.00		sand, mud
PEC122	JN	JNC	JNC2	JNC2	11/13/2006	II	11.80	26.80	10.80	41	0.65	-72	-24.24	1.00	3.00		sand, mud, shell
PEC123	JN	JNI	JNI2	JNI2	11/13/2006	II	11.80	26.90	6.10	41	2.14	-72	-23.08	2.00	3.00		sand, mud
PEC124	JN	JNI	JNI1	JNI1	11/13/2006	II	11.80	26.90	6.00	41	2.33	-72	-23.03	2.00	5.00		sand, mud, shell
PEC125	SR	SRB	SRB2	SRB2	11/14/2006	II	12.00	26.30	5.40	40	57.10	-72	-26.70	10.00	5.00		gravel, shell
PEC126	SR	SRB	SRB1	SRB1	11/14/2006	II	12.00	26.30	5.00	40	57.40	-72	-26.20	3.00	5.00		sand, shell
PEC127	SR	SRC	SRC1	SRC1	11/14/2006	II	12.00	26.30	10.10	40	57.60	-72	-26.50	4.00	6.00		sand
PEC128	SR	SRA	SRA1	SRA1	11/14/2006	II	12.10	26.20	7.30	40	57.70	-72	-26.70	1.00	6.00		sand, mud, shell
PEC129	SR	SRF	SRF2	SRF2	11/14/2006	II	12.00	26.30	14.90	40	57.90	-72	-26.50	1.00	10.00		mud
PEC130	SR	SRF	SRF1	SRF1	11/14/2006	II	12.00	26.30	14.00	40	57.80	-72	-26.30	1.00	10.00		mud
PEC131	SR	SRD	SRD1	SRD1	11/14/2006	II	12.10	26.20	10.30	40	57.60	-72	-26.10	3.00	5.00		muddy sand
PEC132	SR	SRD	SRD2	SRD2	11/14/2006	II	12.10	26.40	5.70	40	57.40	-72	-25.70	3.00	3.00		muddy sand
PEC133	SR	SRI	SRI1	SRI1	11/14/2006	II	12.30	26.50	4.80	40	57.30	-72	-25.30	1.00	5.00		sand, shell
PEC134	SR	SRH	SRH1	SRH1	11/14/2006	II	12.00	26.30	8.10	40	57.60	-72	-25.60	10.00	4.00		sand, mud, shell
PEC135	SR	SRC	SRC2	SRC2	11/14/2006	II	12.00	26.40	12.10	40	57.90	-72	-25.90	1.00	5.00		sand, mud, shell
PEC136	SR	SRF	SRF3	SRF3	11/14/2006	II	12.00	26.50	15.30	40	57.90	-72	-26.20	3.00	10.00		sand, mud
PEC137	SR	SRE	SRE1	SRE1	11/14/2006	II	12.00	26.60	8.80	40	58.20	-72	-26.20	3.00	10.00		sand, mud, shell
PEC138	SR	SRG	SRG1	SRG1	11/14/2006	II	12.10	26.40	11.00	40	58.00	-72	-25.70	2.00	6.00		sand, mud, shell
PEC139	SR	SRH	SRH2	SRH2	11/14/2006	II	12.10	26.50	8.50	40	57.80	-72	-25.50	10.00	1.00		sand, mud, shell
PEC140	SR	SRI	SRI2	SRI2	11/14/2006	II	12.00	26.50	6.80	40	57.60	-72	-24.60	2.00	8.00		muddy sand
PEC141	SR	SRK	SRK1	SRK1	11/14/2006	II	12.00	26.60	8.30	40	57.90	-72	-24.90	5.00	10.00		mud
PEC142	SR	SRG	SRG2	SRG2	11/14/2006	II	12.00	26.60	9.40	40	58.00	-72	-25.30	1.00	5.00		sand, mud, shell
PEC143	SR	SRK	SRK2	SRK2	11/14/2006	II	11.90	26.70	8.90	40	58.00	-72	-24.70	1.00	10.00		mud
PEC144	SR	SRJ	SRJ2	SRJ2	11/14/2006	II	12.00	26.60	10.20	40	58.40	-72	-24.90	2.00	6.00		muddy sand
PEC145	SR	SRJ	SRJ1	SRJ1	11/14/2006	II	12.00	26.60	10.40	40	58.50	-72	-25.10	2.00	6.00		mud, shell
PEC146	SR	SRE	SRE2	SRE2	11/14/2006	II	12.00	26.60	12.60	40	58.60	-72	-25.50	10.00	4.00		sand, mud, shell
PEC147	JN	JNA	JNA2	JNA2	11/14/2006	II	11.00	26.80	5.30	41	0.80	-72	-24.90	2.00	7.00		muddy sand
PEC148	JN	JNA	JNA3	JNA3	11/14/2006	II	11.90	26.90	9.80	41	0.90	-72	-24.90	1.00	10.00		muddy sand
PEC149	JN	JNB	JNB1	JNB1	11/14/2006	II	11.90	27.00	9.10	41	1.00	-72	-25.10	3.00	10.00		mud
PEC150	JN	JNA	JNA1	JNA1	11/14/2006	II	12.10	27.10	4.10	41	1.40	-72	-24.50	1.00	5.00		sand
PEC151	OD	ODB	ODB1	ODB1	4/11/2007	II	6.20	19.30	19.40	41	6.05	-72	-18.08	10.00	5.00		sand, gravel

SampleID	Region	Province	Station	Replicate	Date	Phase	Temperature (°C)	Salinity	Water Depth (m)	Latitude (Degrees)	Latitude (Minutes)	Longitude (Degrees)	Longitude (Minutes)	RPD (cm)	Grab Depth (cm)	Penetrometer (cm)	Sediment (from field notes)
PEC152	OD	ODC	ODC1	ODC1	4/11/2007	II	6.10	24.10	4.70	41	5.60	-72	-17.20	10.00	7.00		sand
PEC153	OD	ODD	ODD1	ODD1	4/11/2007	II	6.00	25.20	4.60	41	5.40	-72	-16.70	1.00	4.00		sand, shell
PEC154	OD	ODD	ODD2	ODD2	4/11/2007	II	5.90	25.50	5.10	41	4.90	-72	-16.20	1.00	4.00		sand, shell
PEC155	OD	ODC	ODC2	ODC2	4/11/2007	II	5.90	25.60	7.50	41	5.30	-72	-15.70	2.00	6.00		sand, some shell
PEC156	OD	ODI	ODI1	ODI1	4/11/2007	II	5.40	26.20	9.70	41	5.40	-72	-14.30	1.00	10.00		muddy sand
PEC157	OD	ODI	ODI2	ODI2	4/11/2007	II	6.20	26.10	10.00	41	5.10	-72	-13.80	1.00	10.00		mostly mud
PEC158	OD	ODH	ODH2	ODH2	4/11/2007	II	5.90	26.50	10.70	41	5.50	-72	-13.50	1.00	10.00		mostly mud
PEC159	OD	ODH	ODH1	ODH1	4/11/2007	II	5.30	26.60	10.50	41	5.90	-72	-13.60	1.00	10.00		mud
PEC160	OD	ODB	ODB4	ODB4	4/11/2007	II	5.80	26.60	6.90	41	5.90	-72	-14.40	2.00	7.00		sand, some mud
PEC161	OD	ODG	ODG2	ODG2	4/11/2007	II	5.50	26.70	10.40	41	6.40	-72	-14.00	3.00	10.00		mud
PEC162	OD	ODE	ODE2	ODE2	4/11/2007	II	6.00	26.60	8.90	41	6.60	-72	-14.40	1.00	9.00		muddy sand
PEC163	OD	ODG	ODG1	ODG1	4/11/2007	II	5.50	26.40	10.30	41	7.00	-72	-14.50	1.00	10.00		mud
PEC164	OD	ODF	ODF2	ODF2	4/11/2007	II	5.80	26.70	8.90	41	6.60	-72	-15.10	1.00	10.00		mostly mud
PEC165	OD	ODE	ODE1	ODE1	4/11/2007	II	6.00	26.60	7.90	41	6.70	-72	-15.30	1.00	8.00		muddy sand
PEC166	OD	ODB	ODB3	ODB3	4/11/2007	II	6.30	26.50	8.00	41	5.70	-72	-15.50	1.00	8.00		muddy sand
PEC167	OD	ODF	ODF1	ODF1	4/11/2007	II	6.30	26.50	14.90	41	6.00	-72	-15.60	2.00	10.00		mud
PEC168	OD	ODA	ODA1	ODA1	4/11/2007	II	5.70	26.90	7.60	41	6.80	-72	-15.80	1.00	7.00		muddy sand
PEC169	OD	ODA	ODA4	ODA4	4/11/2007	II	5.50	26.90	6.70	41	7.20	-72	-16.10	1.00	5.00		muddy sand, some shell
PEC170	OD	ODA	ODA3	ODA3	4/11/2007	II	6.80	26.90	4.60	41	7.10	-72	-16.80	6.00	7.00		sand
PEC171	OD	ODB	ODB2	ODB2	4/11/2007	II	6.40	26.50	8.00	41	5.90	-72	-16.80	2.00	6.00		mud, sand, shell
PEC172	OD	ODA	ODA2	ODA2	4/11/2007	II	6.20	26.70	4.90	41	6.40	-72	-17.60	10.00	5.00		sand, shell
PEC173	PC	PCE	PCE1	PCE1	4/11/2007	II	6.50	26.40	25.10	41	5.40	-72	-21.60	10.00	2.00		gravel, sand
PEC174	PC	PCE	PCE2	PCE2	4/11/2007	II	6.40	26.30	25.10	41	5.10	-72	-22.00	10.00	4.00		gravel, sand
PEC175	PC	PCD	PCD1	PCD1	4/11/2007	II	6.40	26.30	4.00	41	4.90	-72	-22.30	10.00	9.00		sand
PEC176	PC	PCC	PCC2	PCC2	4/11/2007	II	6.50	26.50	4.60	41	5.20	-72	-22.30	3.00	6.00		muddy sand
PEC177	PC	PCD	PCD2	PCD2	4/11/2007	II	6.40	26.30	7.70	41	5.20	-72	-22.10	2.00	5.00		muddy sand
PEC178	PC	PCC	PCC1	PCC1	4/11/2007	II	6.70	26.40	6.00	41	5.30	-72	-22.60	1.00	7.00		muddy sand, some shell
PEC179	PC	PCB	PCB1	PCB1	4/11/2007	II	6.40	26.40	8.40	41	5.30	-72	-22.40	1.00	10.00		mostly mud
PEC180	PC	PCA	PCA1	PCA1	4/11/2007	II	6.40	26.50	3.30	41	5.40	-72	-22.30	2.00	6.00		muddy sand
PEC181	PC	PCA	PCA2	PCA2	4/11/2007	II	6.50	26.40	3.10	41	5.50	-72	-22.10	2.00	7.00		muddy sand
PEC182	PC	PCB	PCB2	PCB2	4/11/2007	II	6.40	26.40	11.40	41	5.30	-72	-22.10	2.00	8.00		muddy sand
PEC183	PC	PCF	PCF1	PCF1	4/13/2007	II	6.40	22.90	15.50	41	4.80	-72	-22.10	10.00	9.00		sand, shell
PEC184	PC	PCF	PCF2	PCF2	4/13/2007	II	6.30	25.20	19.60	41	4.63	-72	-22.15	10.00	8.00		sand, shell
PEC185	GPW	GPWE	GPWE4	GPWE4	5/4/2007	II	13.30	21.80	5.20	40	54.40	-72	-30.60	1.00	5.00		mud, sand, shell
PEC186	GPW	GPWD	GPWD2	GPWD2	5/4/2007	II	13.20	23.50	6.20	40	54.83	-72	-31.59	0.00	10.00		mud
PEC187	GPW	GPWD	GPWD1	GPWD1	5/4/2007	II	13.20	23.70	6.50	40	54.90	-72	-31.60	0.00	10.00		mud
PEC188	GPW	GPWE	GPWE3	GPWE3	5/4/2007	II	13.20	24.00	4.40	40	55.10	-72	-32.20	1.00	6.00		mud, sand, shell
PEC189	GPW	GPWC	GPWC2	GPWC2	5/4/2007	II	13.50	23.70	6.50	40	55.40	-72	-32.90	0.00	10.00		mud
PEC190	GPW	GPWE	GPWE1	GPWE1	5/4/2007	II	13.60	23.60	5.30	40	55.40	-72	-33.20	1.00	8.00		mud, sand, shell
PEC191	GPW	GPWA	GPWA2	GPWA2	5/4/2007	II	13.40	23.90	5.40	40	55.70	-72	-33.20	1.00	7.00		mud, sand, shell
PEC192	GPW	GPWB	GPWB2	GPWB2	5/4/2007	II	13.60	24.00	6.80	40	55.84	-72	-33.29	0.00	10.00		mud
PEC193	GPW	GPWA	GPWA1	GPWA1	5/4/2007	II	13.30	24.60	4.40	40	55.90	-72	-33.90	1.00	5.00		mud, sand, shell
PEC194	GPW	GPWB	GPWB1	GPWB1	5/4/2007	II	13.50	24.10	6.30	40	56.10	-72	-33.50	0.00	10.00		muddy sand
PEC195	GPW	GPWA	GPWA3	GPWA3	5/4/2007	II	13.40	24.50	5.60	40	56.30	-72	-32.50	1.00	7.00		mud, sand, shell
PEC196	GPW	GPWA	GPWA4	GPWA4	5/4/2007	II	13.40	24.90	6.00	40	56.50	-72	-32.10	1.00	6.00		mud, sand, shell
PEC197	GPW	GPWC	GPWC1	GPWC1	5/4/2007	II	13.50	24.50	7.00	40	55.90	-72	-32.40	0.00	10.00		mud
PEC198	GPW	GPWE	GPWE2	GPWE2	5/4/2007	II	13.60	24.30	5.80	40	55.60	-72	-32.30	1.00	10.00		mud, sand, shell
PEC199	GPW	GPWC	GPWC3	GPWC3	5/4/2007	II	13.50	24.80	6.90	40	55.40	-72	-31.20	0.00	10.00		mud
PEC200	GPW	GPWC	GPWC4	GPWC4	5/4/2007	II	13.60	24.80	7.10	40	54.80	-72	-30.90	0.00	10.00		mud

Appendix 2 - Grain-size Summary

SampleID	Percent Gravel	Percent Sand	Percent Silt	Percent Clay	Percent Silt-Clay	Mean (phi)	Sorting	Percent LOI
PEC101	18.647	79.782	1.572	0.000	1.572	0.439	1.549	0.496
PEC102	9.786	80.892	3.537	5.784	9.321	1.699	3.125	1.593
PEC103	9.528	67.245	11.531	11.696	23.227	3.085	4.539	2.435
PEC104	1.004	87.491	5.938	5.567	11.505	2.363	3.090	1.118
PEC105	0.528	35.521	25.436	38.515	63.951	6.796	7.426	4.656
PEC106	0.062	7.821	45.766	46.350	92.116	7.946	8.008	5.108
PEC107	1.047	79.618	10.452	8.883	19.335	2.740	3.847	1.198
PEC108	4.855	79.285	7.634	8.226	15.860	2.425	3.701	0.940
PEC109	1.014	86.237	6.124	6.625	12.749	2.393	3.338	1.149
PEC110	1.212	90.970	3.781	4.036	7.817	1.850	2.608	0.766
PEC111	0.739	84.355	6.975	7.932	14.906	2.902	3.695	1.817
PEC112	32.393	65.844	1.763	0.000	1.763	-0.541	2.007	0.087
PEC113	18.258	75.754	1.948	4.039	5.988	0.844	2.730	1.187
PEC114	8.407	87.205	2.159	2.228	4.387	1.013	2.044	0.483
PEC115	21.999	41.608	19.635	16.757	36.392	3.235	5.547	3.519
PEC116	5.154	72.726	11.870	10.250	22.120	2.809	4.110	1.806
PEC117	58.789	25.640	8.986	6.584	15.571	-0.295	4.542	1.785
PEC118	0.351	95.045	1.783	2.820	4.604	1.813	2.237	0.686
PEC119	24.924	57.317	8.629	9.130	17.759	1.805	4.334	2.018
PEC120	44.779	48.113	3.266	3.842	7.108	-0.099	3.530	1.551
PEC121	1.642	74.242	11.743	12.373	24.116	3.404	4.507	2.095
PEC122	7.907	72.260	10.672	9.161	19.833	2.751	3.919	2.443
PEC123	1.193	94.904	1.692	2.212	3.903	1.650	2.144	0.527
PEC124	9.529	85.334	2.437	2.700	5.137	1.234	2.445	0.623
PEC125	72.703	23.373	1.092	2.831	3.923	-2.010	3.886	1.457
PEC126	34.672	58.018	2.327	4.983	7.310	0.363	3.184	1.511
PEC127	1.188	93.735	2.325	2.752	5.078	1.442	2.128	0.545
PEC128	4.019	87.356	4.118	4.507	8.625	2.366	3.006	1.067
PEC129	0.125	20.227	36.384	43.263	79.647	7.570	8.054	4.833
PEC130	12.751	29.145	27.409	30.695	58.104	5.357	6.873	4.083
PEC131	1.411	94.825	1.307	2.457	3.764	2.368	2.501	1.125
PEC132	1.890	91.732	2.664	3.714	6.378	1.855	2.523	0.503
PEC133	2.739	90.190	3.069	4.002	7.071	1.705	2.620	0.612
PEC134	70.498	14.066	7.000	8.435	15.435	-0.896	5.005	2.121
PEC135	8.571	75.042	7.333	9.055	16.388	2.181	3.847	1.459
PEC136	2.034	64.735	14.986	18.244	33.230	4.258	5.429	2.888
PEC137	45.081	27.718	12.531	14.670	27.201	1.430	5.490	2.475
PEC138	7.764	75.030	7.269	9.937	17.206	2.788	4.133	1.908
PEC139	48.699	24.874	11.996	14.431	26.427	1.196	5.477	2.961
PEC140	9.452	67.862	11.227	11.459	22.686	2.822	4.506	1.459
PEC141	1.392	16.058	37.700	44.851	82.550	7.802	8.246	5.472
PEC142	13.351	41.169	19.775	25.705	45.480	4.814	6.395	3.571
PEC143	0.569	9.336	42.837	47.259	90.095	8.188	8.440	5.898
PEC144	5.008	35.638	27.298	32.057	59.354	5.905	7.006	4.814
PEC145	46.497	31.616	10.697	11.191	21.888	0.997	5.027	4.072
PEC146	41.182	35.851	10.814	12.154	22.968	1.347	4.873	3.854
PEC147	3.418	83.844	6.618	6.120	12.738	2.011	3.137	1.003
PEC148	0.342	79.708	9.602	10.349	19.951	3.121	4.146	1.472
PEC149	0.445	17.955	41.098	40.502	81.600	7.513	7.960	5.275
PEC150	1.162	95.115	1.564	2.159	3.723	1.297	1.914	0.622

Appendix 2 - Grain-size Summary

SampleID	Percent Gravel	Percent Sand	Percent Silt	Percent Clay	Percent Silt-Clay	Mean (phi)	Sorting	Percent LOI
PEC151	22.391	75.469	0.947	1.194	2.140	0.448	2.192	0.637
PEC152	0.133	98.452	0.650	0.765	1.415	1.615	1.471	0.300
PEC153	43.331	51.896	1.918	2.855	4.773	-0.547	3.207	2.056
PEC154	24.851	52.618	9.641	12.890	22.531	2.067	4.668	2.420
PEC155	1.544	93.097	2.830	2.528	5.359	1.535	2.185	0.500
PEC156	0.574	38.940	36.023	24.463	60.486	5.386	6.150	2.906
PEC157	1.567	48.321	28.576	21.536	50.111	4.600	5.857	3.428
PEC158	7.202	43.896	28.362	20.541	48.902	4.257	5.895	3.184
PEC159	0.023	17.941	49.446	32.589	82.036	6.955	7.411	4.399
PEC160	0.766	91.141	3.747	4.346	8.093	1.723	2.650	0.715
PEC161	0.613	16.007	47.898	35.482	83.380	7.217	7.644	4.820
PEC162	1.750	63.835	20.014	14.401	34.415	3.589	4.963	1.898
PEC163	0.083	19.509	47.698	32.710	80.408	6.893	7.361	4.556
PEC164	0.267	48.106	26.334	25.293	51.627	5.243	6.295	3.746
PEC165	0.255	81.945	8.894	8.907	17.800	2.493	3.747	1.556
PEC166	3.710	70.034	12.723	13.533	26.256	2.802	4.502	1.973
PEC167	0.091	14.505	41.665	43.739	85.404	7.809	8.163	5.544
PEC168	0.495	80.639	10.049	8.817	18.866	2.589	3.750	1.279
PEC169	2.015	80.849	8.974	8.162	17.135	2.663	3.721	1.710
PEC170	2.397	95.106	1.416	1.080	2.497	0.842	1.465	0.645
PEC171	10.735	72.641	6.378	10.246	16.624	2.133	4.034	2.121
PEC172	0.445	96.018	1.583	1.953	3.536	1.448	1.858	0.571
PEC173	88.940	10.465	0.270	0.324	0.594	-3.084	3.964	0.322
PEC174	74.594	24.998	0.204	0.203	0.408	-2.405	3.480	0.329
PEC175	0.490	94.683	2.111	2.716	4.827	1.684	2.196	0.706
PEC176	0.815	92.288	2.994	3.903	6.897	2.019	2.689	1.125
PEC177	0.527	84.808	7.087	7.578	14.665	3.335	3.845	1.979
PEC178	7.597	76.628	7.501	8.273	15.775	2.116	3.794	1.470
PEC179	1.591	60.428	18.163	19.818	37.981	4.851	5.760	4.182
PEC180	0.509	85.683	6.875	6.933	13.808	2.475	3.491	1.755
PEC181	2.059	90.228	3.908	3.806	7.714	1.902	2.624	0.930
PEC182	0.234	81.289	8.432	10.045	18.477	3.581	4.194	2.552
PEC183	16.033	82.956	1.011	0.000	1.011	0.226	1.404	0.682
PEC184	15.993	83.268	0.740	0.000	0.740	0.109	1.369	1.024
PEC185	3.766	86.485	3.471	6.277	9.749	1.900	3.149	1.114
PEC186	0.000	37.286	24.478	38.237	62.714	6.551	7.463	5.307
PEC187	0.000	4.651	38.182	57.167	95.349	9.136	9.218	8.153
PEC188	18.151	72.290	3.245	6.315	9.559	1.265	3.432	1.597
PEC189	0.000	3.477	37.909	58.614	96.523	9.188	9.234	8.680
PEC190	15.664	64.768	7.402	12.167	19.569	2.066	4.589	2.139
PEC191	11.569	71.409	6.488	10.535	17.023	2.152	4.110	1.855
PEC192	9.316	35.514	21.569	33.602	55.170	5.386	6.939	4.683
PEC193	7.678	80.642	4.317	7.363	11.681	2.138	3.451	1.565
PEC194	22.601	39.970	14.054	23.375	37.429	3.251	6.131	3.180
PEC195	15.918	72.075	5.360	6.647	12.007	1.442	3.580	1.590
PEC196	0.711	88.677	4.701	5.911	10.612	2.151	3.011	1.019
PEC197	0.603	2.851	42.672	53.874	96.546	8.733	8.757	7.208
PEC198	7.563	77.400	5.429	9.608	15.037	2.157	3.787	1.631
PEC199	1.694	21.605	34.889	41.813	76.701	7.099	7.937	5.643
PEC200	0.312	32.514	29.675	37.499	67.174	6.705	7.490	5.255

phi	< -3.5	-3	-2.5	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	> 11
PEC101	3.60	2.98	2.91	2.73	3.17	3.26	4.12	4.56	2.37	12.13	42.37	12.85	1.26	0.04	0.04	0.04	1.57 *														
PEC102	0.00	0.31	1.12	2.02	2.73	3.61	8.18	10.02	2.26	9.27	11.82	11.87	18.66	6.19	2.11	0.52	0.65	0.40	0.41	0.43	0.39	0.40	0.39	0.46	0.52	0.44	0.52	0.41	0.43	0.44	3.02
PEC103	0.89	2.33	1.36	1.54	1.80	1.61	3.51	4.70	1.63	5.83	7.55	6.04	5.27	14.16	12.87	5.70	2.84	1.76	1.61	1.33	1.01	1.05	1.04	0.89	0.96	0.94	0.84	0.91	1.03	0.81	6.21
PEC104	0.00	0.30	0.40	0.01	0.11	0.18	0.54	1.40	1.44	6.16	24.50	36.29	9.68	3.39	2.92	1.17	1.48	0.93	0.84	0.70	0.46	0.57	0.44	0.52	0.44	0.45	0.42	0.43	0.43	0.44	2.96
PEC105	0.00	0.00	0.00	0.00	0.18	0.35	0.46	0.83	0.74	1.56	1.79	2.06	2.34	7.62	12.44	5.69	1.81	2.47	3.50	3.48	3.63	3.73	3.48	3.33	3.73	2.98	2.93	2.93	2.75	2.49	20.70
PEC106	0.00	0.00	0.00	0.00	0.02	0.04	0.05	0.05	0.03	0.08	0.23	0.63	0.77	0.88	2.71	2.40	4.03	5.14	6.95	6.78	6.08	6.09	5.70	4.99	5.13	4.69	4.20	4.02	3.90	3.96	20.45
PEC107	0.00	0.00	0.23	0.44	0.18	0.20	1.19	3.37	4.87	13.32	20.76	17.08	10.41	5.90	2.26	0.45	1.02	1.06	1.48	1.59	1.50	1.36	1.30	1.14	0.91	0.75	0.61	0.62	0.63	0.65	4.71
PEC108	0.19	0.49	0.47	0.84	1.25	1.62	1.93	4.74	6.49	15.74	15.09	9.53	10.78	10.92	3.25	0.80	0.69	0.84	1.16	1.15	1.08	1.01	0.91	0.79	0.77	0.66	0.65	0.53	0.58	0.59	4.44
PEC109	0.00	0.13	0.17	0.01	0.24	0.46	1.05	2.26	3.44	10.32	22.04	30.73	11.53	2.82	1.27	0.78	0.73	0.81	0.91	0.89	0.73	0.73	0.61	0.70	0.55	0.59	0.42	0.46	0.42	0.37	3.82
PEC110	0.00	0.00	0.00	0.07	0.43	0.72	1.90	3.75	4.96	13.63	29.45	28.15	4.48	2.07	1.54	1.03	0.72	0.57	0.55	0.47	0.39	0.37	0.33	0.38	0.32	0.37	0.29	0.31	0.31	0.34	2.09
PEC111	0.00	0.15	0.21	0.06	0.14	0.18	0.42	1.92	2.92	8.00	13.28	16.04	16.91	15.17	7.02	2.67	1.61	1.07	0.92	0.81	0.66	0.69	0.62	0.60	0.68	0.64	0.54	0.57	0.57	0.46	4.46
PEC112	10.09	3.89	6.85	4.30	3.66	3.59	6.52	11.21	15.89	21.47	7.88	1.74	0.62	0.26	0.17	0.10	1.76 *														
PEC113	1.91	2.61	3.06	3.13	3.61	3.94	4.79	7.23	6.64	20.91	21.31	8.37	4.16	1.74	0.42	0.18	0.27	0.21	0.25	0.21	0.22	0.28	0.24	0.27	0.34	0.35	0.29	0.27	0.30	0.28	2.20
PEC114	0.00	0.78	1.53	1.70	2.11	2.30	4.29	7.40	8.16	23.29	26.64	11.36	4.88	0.58	0.58	0.03	1.17	0.20	0.16	0.13	0.10	0.13	0.14	0.13	0.18	0.18	0.18	0.16	0.18	0.18	1.17
PEC115	12.86	5.55	1.25	0.60	0.63	1.11	2.15	2.35	0.71	1.82	3.38	2.81	2.64	7.81	11.89	6.05	3.77	3.76	2.79	2.33	1.88	1.71	1.62	1.76	1.38	1.26	1.48	1.30	0.96	1.29	9.07
PEC116	0.00	1.72	2.33	0.01	0.37	0.72	1.07	3.79	5.25	12.64	15.93	10.85	5.72	8.41	6.33	2.75	2.65	1.93	1.76	1.29	1.28	1.04	0.98	0.96	1.07	0.64	0.81	0.77	0.71	0.77	5.46
PEC117	51.44	1.47	1.72	1.94	0.99	1.23	1.26	1.46	0.29	1.30	1.78	1.71	2.04	6.61	6.52	2.66	1.97	1.72	1.32	1.11	0.86	0.77	0.55	0.69	0.62	0.55	0.60	0.54	0.60	0.57	3.11
PEC118	0.00	0.00	0.00	0.01	0.12	0.22	1.13	3.53	4.69	13.27	22.10	28.25	16.63	3.76	1.06	0.62	0.21	0.23	0.25	0.20	0.24	0.20	0.24	0.21	0.24	0.23	0.23	0.24	0.22	0.22	1.45
PEC119	11.77	3.26	3.07	2.38	1.89	2.55	5.20	4.78	1.39	4.82	6.19	5.16	5.00	13.84	8.59	2.34	1.74	1.28	1.26	1.00	0.86	0.87	0.85	0.76	0.74	0.68	0.62	0.69	0.64	0.64	5.11
PEC120	24.20	5.81	4.36	3.62	3.48	3.30	4.63	5.48	0.82	5.47	6.47	6.06	8.04	8.27	1.92	0.95	0.60	0.45	0.46	0.41	0.32	0.40	0.30	0.33	0.36	0.31	0.35	0.32	0.28	0.30	1.93
PEC121	0.00	0.26	0.42	0.09	0.29	0.58	0.99	1.99	2.65	8.79	13.79	13.98	12.75	9.29	6.61	3.40	2.08	1.98	1.75	1.36	1.19	1.18	1.05	1.16	1.08	0.86	0.86	1.19	0.83	0.78	6.79
PEC122	0.62	2.54	2.28	0.61	0.67	1.19	1.22	1.76	1.49	5.91	13.93	12.14	13.36	12.97	7.69	1.79	3.70	1.53	1.23	1.02	0.88	0.73	0.86	0.72	0.87	0.79	0.89	0.69	0.84	0.72	4.36
PEC123	0.12	0.22	0.03	0.24	0.32	0.27	0.84	4.43	7.15	19.84	23.91	13.21	15.58	6.82	0.89	2.24	0.75	0.15	0.17	0.11	0.08	0.14	0.12	0.15	0.18	0.14	0.18	0.13	0.11	0.16	1.30
PEC124	3.68	1.00	1.50	0.96	1.14	1.25	2.56	4.38	8.42	18.47	21.64	13.13	8.70	5.74	0.85	1.44	1.03	0.25	0.21	0.20	0.20	0.13	0.21	0.20	0.22	0.23	0.17	0.22	0.19	0.17	1.50
PEC125	53.33	4.76	2.97	3.11	4.22	4.31	6.19	5.98	4.03	4.11	1.88	0.74	0.28	0.11	0.03	0.03	0.10	0.11	0.11	0.13	0.14	0.12	0.19	0.20	0.20	0.21	0.20	0.20	0.16	0.17	1.70
PEC126	2.53	9.97	8.34	4.08	5.00	4.75	4.78	6.13	3.67	8.88	17.60	14.51	1.69	0.52	0.02	0.22	0.29	0.19	0.22	0.20	0.31	0.35	0.35	0.42	0.46	0.49	0.50	0.41	0.42	0.40	2.30
PEC127	0.00	0.00	0.06	0.20	0.38	0.55	2.40	6.55	10.17	21.20	27.33	14.71	8.26	2.27	0.47	0.37	0.70	0.26	0.28	0.20	0.22	0.23	0.20	0.24	0.21	0.23	0.24	0.20	0.22	0.20	1.46
PEC128	0.00	0.20	0.65	1.08	1.02	1.07	1.32	1.75	0.61	5.01	12.95	18.82	27.71	14.26	3.78	1.15	0.91	0.55	0.54	0.46	0.44	0.44	0.32	0.47	0.35	0.25	0.34	0.31	0.27	0.24	2.73
PEC129	0.00	0.00	0.05	0.08	0.00	0.00	0.25	0.55	1.12	1.84	2.20	1.62	1.76	4.26	4.39	2.24	3.02	3.78	5.24	5.45	5.03	4.92	4.31	4.63	3.98	3.40	2.97	3.04	2.42	2.72	24.74
PEC130	4.50	8.03	0.00	0.03	0.09	0.11	0.20	0.58	0.49	1.02	1.52	2.27	5.52	9.53	5.52	2.50	2.51	2.90	3.58	3.61	3.65	3.51	4.04	3.60	3.27	2.76	2.30	2.34	2.38	2.19	15.46
PEC131	0.00	0.06	0.09	0.05	0.44	0.77	1.43	2.21	0.57	2.54	4.42	13.73	42.76	22.65	3.60	0.92	0.15	0.12	0.14	0.18	0.19	0.17	0.16	0.21	0.23	0.19	0.20	0.19	0.19	0.20	1.26
PEC132	0.00	0.26	0.48	0.36	0.37	0.42	1.35	2.46	3.22	13.28	30.97	22.37	9.87	6.44	1.64	0.13	0.55	0.33	0.37	0.29	0.28	0.26	0.30	0.28	0.34	0.29	0.30	0.27	0.25	0.29	1.97
PEC133	0.06	0.47	0.61	0.46	0.56	0.58	1.11	3.16	5.62	15.06	35.51	24.13	3.32	1.46	0.23	0.60	0.43	0.37	0.43	0.41	0.37	0.35	0.37	0.35	0.31	0.36	0.25	0.27	0.23	0.24	2.35
PEC134	67.16	0.30	0.65	0.85	0.83	0.71	0.80	0.60	0.21	0.64	1.14	1.04	0.92	2.83	4.28	1.59	0.86	1.01	1.05	0.89	0.82	0.87	0.78	0.72	0.80	0.64	0.63	0.57	0.48	0.54	4.78
PEC135	5.54	0.22	0.44	0.54	0.82	1.01	1.85	3.73	4.74	14.46	21.08	13.80	7.90	4.96	1.94	0.58	0.52	0.96	1.07	1.01	1.03	0.96	0.85	0.93	0.91	0.76	0.69	0.79	0.72	0.82	4.37
PEC136	0.00	0.00	0.06	0.60	0.80	0.58	0.97	1.82	2.17	5.94	8.67	8.94	13.64	12.61	7.06	2.92	1.23	1.80	2.20	2.15	2.05	1.90	1.89	1.76	1.69	1.60	1.27	1.07	1.20	1.10	10.31
PEC137	35.61	3.05	1.71	1.39	2.00	1.31	2.38	1.91	0.27	1.22	2.03	1.89	2.43	8.18	5.50	1.90	1.81	1.56	1.69	1.75	1.50	1.46	1.36	1.41	1.11	1.06	1.09	0.84	0.90	0.81	8.86
PEC138	0.24	0.68	1.01	1.65	1.81	2.37	4.16	5.36	0.78	5.24	8.44	7.49	17.93	19.41	4.76	1.44	1.37	0.71	0.90	0.86	0.78	0.91	0.88	0.87	0.90	0.72	0.70	0.62	0.64	0.54	5.81
PEC139	39.98	1.32	1.89	1.82	1.80	1.88	1.89	1.85	0.23	1.15	1.75	1.94	1.60	4.86	6.82	2.78	1.65	1.64	1.73	1.64	1.51	1.21	1.27	1.35	1.33	1.04	1.10	0.97	0.74	0.85	8.41
PEC140	3.10	5.53	0.00	0.03	0.28	0.51	0.95	2.56	3.84	10.96	11.34	10.51	9.54	10.05	6.22	1.89	2.16	1.23	1.38	1.41	1.33	1.37	1.16	1.18	1.12	0.97	0.90	0.69	0.69	0.81	6.29
PEC141	0.00	0.00	0.54	0.85	0.00	0.00	0.15	0.23	0.09	0.55	1.20	2.00	2.12	2.75	4.19	2.78	2.89	4.29	4.42	5.06	5.62	5.00	5.41	5.00	4.00	3.66	3.71	2.80	3.07	2.79	24.83
PEC142	0.00	1.01	2.11	3.65	3.87	2.70	2.34	2.90	0.22	1.20	3.01	2.48	2.50	10.42	11.90	4.20	2.21	2.46	2.51	2.59	2.59	2.57	2.40	2.44	2.22	1.96	1.92	1.76	1.59	1.63	14.61
PEC143	0.00	0.00	0.11	0.27	0.13	0.06	0.19	0.26	0.08	0.29	0.45	0.44	0.66	0.74	3.59	2.65	3.67	5.43	6.05	5.76	5.92	5.35	5.55	5.11	4.71	4.22	3.73	3.50	2.68	3.21	25.21
PEC144	0.00	0.56	1.27	1.10	0.90	1.18	2.50	2.22	0.76	2.37	3.54	2.84	3.30	6.68	8.41	3.02	2.62	3.34	3.74	3.61	3.76	3.48	3.43	3.31	2.67	2.89	2.32	2.15	2.01	2.06	17.95
PEC145	37.70	1.64	1.63	2.17	1.77	1.59	1.90	1.80	0.30	0.88	1.94	2.15	3.32	9.66	7.02	2.63	1.13	1.34	1.54	1.48	1.37	1.37	1.30	1.17	1.19	0.91	0.94	0.88	0.68	0.75	5.84
PEC146	12.72	5.60	6.08	6.02	5.73	5.03	4.99	5.07	1.13	3.97	5.88	3.77	3.10	4.31	2.17	1.46	1.24	1.56	1.69	1.52	1.47	1.12	1.13	1.09	1.19	0.98	0.79	0.82	0.75	0.74	6.89
PEC147	0.00	0.00	0.59	1.23	0.74	0.86	1.58	4.02	6.49	16.50	28.02	16.06	6.77	3.61	0.39	0.41	1.90	0.90	0.88	0.69	0.70	0.56	0.44	0.55	0.48	0.51	0.42	0.43	0.50	0.39	3.40
PEC148	0.00	0.00	0.00	0.04	0.13	0.18	0.50	1.94	3.99	10.90	14.64	16.50	14.60	9.63	4.42	2.59	1.67	1.26	1.30	1.18	1.12	1.14	0.94	1.01	0.89	0.84	0.77	0.66	0.64	0.69	5.85
PEC149	0.00	0.00	0.00	0.00	0.15	0.30	0.48	0.58	0.36	0.76	0.99	1.54	1.63	2.72	5.49	3.40	4.39	5.93	6.24	5.68	5.31	4.72	4.41	4.43	3.69	3.46	3.03	2.58	2.82	2.98	21.94
PEC150	0.00	0.00	0.03	0.13	0.39	0.61	1.57	5.54	10.45	29.16	29.99	11.56	3.75	1.63	0.35	1.13	0.31	0.23	0.21	0.17	0.17	0.17	0.13	0.17	0.19	0.17	0.17	0.14	0.12	0.16	1.22
PEC151	4.68	4.50	5.02	2.23	2.67	3.29	4.67	6.55	4.69	11.91	18.60	18.72	8.23	1.63	0.22	0.25	0.31	0.06	0.10	0.12	0.07	0.09	0.09	0.11	0.10	0.10	0.11	0.08	0.09	0.07	0.64
PEC152	0.00	0.00	0.00	0.01	0.05	0.08	0.21	0.36	0.86	11.70	36.11	33.71	12.21	3.01	0.18	0.11	0.40	0.04	0.04	0.06	0.05	0.01	0.02	0.03	0.04	0.03	0.05	0.06	0.06	0.05	0.48
PEC153	25.10	4.81	3.72	2.23	3.53	3.94	4.67	7.24	7.05	13.18	10.78	6.46	1.53	0.41	0.26	0.32	0.31	0.25	0.25	0.22	0.24	0.20	0.23	0.22	0.25	0.25	0.21	0.24	0.17	0.17	1.57
PEC154	4.07	4.92	6.03	3.88	2.73	3.23	2.98	3.47	2.93	7.83	11.23	12.87	7.53	2.32	0.97	0.48	1.05	1.18	1.54	1.26	1.14	1.18	1.16	1.12	1.06	1.13	1.05	0.96	0.78	0.84	7.07
PEC155	0.00	0.00	0.03	0.34	0.58	0.59	2.24	6.45	7.39	16.12	26.43	24.54	6.98	1.71	0.57	0.67	0.89	0.29	0.36	0.28	0.29	0.24	0.24	0.24	0.17	0.28	0.18	0.16	0.14	0.16	1.44
PEC156	0.00	0.00	0.00	0.00	0.19	0.38	1.22	2.69	2.41	4.46	6.08	6.66	4.92	5.78	3.07	1.63	3.30	4.61	6.17	5.90	4.85	4.40	3.42	3.38	2.70	2.69	2.14	1.81	2.09	1.84	11.19
PEC157	0.00	0.00	0.00	0.00	0.52	1.04	2.16	4.48	5.37	9.97	12.23	8.28	2.59	1.31	1.15	0.79	1.92	3.38	4.94	4.98	4.28	3.42	2.99	2.67	2.22	1.95	1.74	1.51	1.53	1.29	11.28
PEC158	0.00	0.78	1.07	0.23	1.86	3.26	5.98	6.15	4.75	8.65	7.08	5.08	2.50	1.25	1.49	0.97	2.24	4.14	4.96	4.60	3.88	3.65	2.52	2.37	1.98	1.63	1.67	1.27	1.09	1.42	11.49
PEC159	0.00	0.00	0.00	0.00	0.01	0.02	0.73	0.59	0.64	1.76	2.50	2.46	1.73	2.13	3.05	2.35	5.47	6.76	8.50	8.11	6.69	5.37	4.62	3.92	3.34	2.84	2.41	2.18	2.55	2.07	17.20
PEC160	0.11	0.19	0.00	0.00	0.16	0.31	1.29	3.94	7.43	19.56	36.05	19.24	3.11	0.09	0.09	0.33	0.68	0.22	0.38	0.52	0.50	0.56	0.47	0.42	0.43	0.37	0.33	0.31	0.25	0.27	2.37
PEC161	0.00	0.00	0.22	0.35	0.01	0.03	0.44	0.82	0.24	0.73	1.43	1.55	1.45	3.49	3.65	2.22	4.39	6.06	8.52	7.95	6.76	5.69	4.67	3.85	3.67	2.89	3.20	2.12	2.34	2.37	18.90
PEC162	0.00	0.00	0.00	0.19	0.65	0.91	1.12	3.88	6.23	16.49	17.18	8.36	2.67	2.93	2.49	2.49	2.38	2.90	3.40	2.84	2.65	2.38	1.85	1.61	1.27	1.34	0.77	1.06	1.03	0.91	8.02
PEC163	0.00	0.00	0.00	0.04	0.04	0.00	0.49	0.68	0.31	1.87	3.32	2.93	2.05	2.30	2.76	2.80	4.78	6.61	8.85	7.78	6.07	5.39	4.28	3.93	3.11	2.80	2.55	2.02	2.54	1.80	17.89
PEC164	0.00	0.00	0.00	0.00	0.09	0.18	0.63	1.26	1.78	5.42	11.75	12.00	7.31	5.04	1.61	1.31	1.66	2.95	4.33	4.30	3.88	3.50	3.05	2.67	2.53	2.19	2.07	1.82	1.52	1.61	13.57
PEC165	0.00	0.00	0.00	0.00	0.08	0.17	0.86	2.87	7.10	22.94	27.89	12.09	4.13	1.77	1.33	0.96	0.70	1.05	1.42	1.37	1.24	1.20	0.95	0.96	0.75	0.73	0.76	0.59	0.62	0.56	4.89

phi	< -3.5	-3	-2.5	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	> 11
PEC166	0.00	0.00	0.00	0.49	1.40	1.82	4.14	9.67	9.51	17.72	14.85	7.79	3.86	2.03	0.29	0.19	0.73	1.15	1.86	2.01	1.91	1.85	1.63	1.58	1.54	1.27	1.16	0.96	0.95	0.96	6.69
PEC167	0.00	0.00	0.00	0.05	0.05	0.00	0.39	0.32	0.28	0.69	1.13	1.65	2.51	3.85	2.27	1.42	2.54	4.15	6.86	7.23	6.22	5.15	5.03	4.48	3.96	4.04	3.28	3.45	2.99	2.92	23.10
PEC168	0.00	0.00	0.00	0.00	0.17	0.33	0.54	2.53	5.64	19.12	28.26	15.06	5.03	1.95	1.82	0.68	0.91	1.17	1.69	1.53	1.31	1.29	1.06	1.09	0.91	0.87	0.76	0.67	0.59	0.54	4.49
PEC169	0.00	0.00	0.29	0.73	0.52	0.47	1.47	3.47	2.92	8.53	16.74	26.22	14.79	3.75	1.76	1.19	1.67	1.10	1.20	1.16	1.04	0.95	0.94	0.91	0.78	0.67	0.73	0.54	0.44	0.50	4.51
PEC170	0.00	0.00	0.20	0.43	0.67	1.10	5.25	12.12	17.61	29.78	16.93	8.70	2.83	0.68	0.61	0.58	0.66	0.09	0.10	0.12	0.12	0.13	0.07	0.12	0.09	0.12	0.08	0.09	0.06	0.07	0.57
PEC171	0.60	1.82	1.58	1.93	2.30	2.50	4.47	5.51	5.01	12.27	19.21	19.60	5.02	1.19	0.08	0.29	0.39	0.32	0.74	1.00	0.98	0.96	0.92	1.05	0.81	0.92	0.89	0.67	0.71	0.64	5.60
PEC172	0.00	0.00	0.00	0.01	0.15	0.28	1.34	3.97	6.05	19.95	39.86	17.62	3.57	1.85	1.24	0.57	0.47	0.08	0.15	0.18	0.16	0.19	0.17	0.19	0.18	0.19	0.15	0.17	0.13	0.14	0.99
PEC173	80.85	3.02	1.35	0.55	1.10	2.07	1.43	1.78	0.76	1.46	1.96	1.72	0.80	0.36	0.17	0.02	0.06	0.01	0.03	0.04	0.03	0.04	0.02	0.03	0.02	0.03	0.02	0.01	0.02	0.02	0.20
PEC174	55.19	6.30	5.97	3.26	2.07	1.80	2.49	3.86	4.90	7.86	3.94	1.38	0.38	0.06	0.06	0.08	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.00	0.01	0.01	0.14
PEC175	0.00	0.00	0.00	0.01	0.17	0.31	1.68	5.83	5.79	17.14	22.52	20.00	16.56	4.06	0.74	0.37	0.60	0.18	0.20	0.21	0.23	0.23	0.25	0.21	0.25	0.23	0.21	0.23	0.27	0.21	1.31
PEC176	0.00	0.00	0.00	0.09	0.30	0.42	1.66	4.67	4.43	14.45	19.40	15.01	20.98	8.81	2.40	0.49	0.53	0.35	0.40	0.35	0.40	0.32	0.34	0.30	0.36	0.29	0.26	0.30	0.29	0.24	2.16
PEC177	0.00	0.00	0.18	0.27	0.03	0.05	0.38	0.87	0.54	1.09	1.62	6.57	29.45	35.36	7.02	1.91	1.83	0.70	0.91	0.85	0.83	0.60	0.74	0.62	0.64	0.57	0.60	0.50	0.54	0.42	4.29
PEC178	0.53	1.51	1.26	1.34	1.37	1.59	3.60	7.63	8.00	15.25	15.15	11.28	7.62	4.95	2.15	1.01	0.90	1.08	1.13	1.08	0.85	0.86	0.79	0.81	0.71	0.57	0.59	0.55	0.51	0.49	4.85
PEC179	0.00	0.00	0.27	0.55	0.35	0.42	0.67	1.44	1.31	2.67	3.25	3.24	4.26	22.52	15.75	5.33	2.52	2.51	2.74	2.15	2.33	2.10	1.68	2.14	1.78	1.52	1.70	1.27	1.32	1.21	11.03
PEC180	0.00	0.00	0.00	0.00	0.17	0.34	1.94	1.15	7.86	15.22	19.52	14.06	13.24	8.61	2.23	1.87	1.68	0.70	0.83	0.77	0.75	0.82	0.62	0.71	0.58	0.60	0.44	0.48	0.36	0.45	4.02
PEC181	0.00	0.00	0.00	0.09	0.72	1.25	3.97	6.70	5.28	11.69	13.16	19.38	21.74	6.01	1.87	0.44	0.82	0.38	0.42	0.53	0.40	0.46	0.48	0.42	0.37	0.41	0.36	0.30	0.26	0.28	1.82
PEC182	0.00	0.00	0.00	0.03	0.09	0.11	0.12	0.62	1.55	2.11	2.48	8.71	24.17	30.22	8.96	2.34	0.56	1.07	1.36	1.30	1.24	1.00	0.92	0.97	0.90	0.95	0.87	0.79	0.85	0.67	5.02
PEC183	3.94	1.14	2.06	2.30	2.94	3.64	5.57	9.66	14.23	28.74	17.83	2.61	2.49	0.28	0.28	1.26	1.01 *														
PEC184	4.76	0.63	1.99	3.07	2.71	2.83	5.48	11.11	18.04	27.99	16.58	2.23	0.96	0.32	0.14	0.42	0.74 *														
PEC185	0.16	0.38	0.76	1.32	0.61	0.55	0.78	2.25	5.58	17.43	36.03	19.51	3.80	0.86	0.10	0.15	0.23	0.19	0.44	0.42	0.45	0.57	0.58	0.60	0.60	0.48	0.55	0.45	0.39	0.35	3.46
PEC186	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.69	1.65	4.12	6.46	10.10	8.42	3.59	1.61	0.40	1.28	1.30	2.07	3.79	3.42	3.78	4.26	4.59	3.36	3.15	3.00	2.62	2.62	2.09	21.38
PEC187	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.09	0.05	0.14	0.50	0.81	0.67	0.70	1.08	0.51	0.89	2.00	4.48	5.13	5.41	7.03	5.51	7.74	4.51	4.94	4.37	3.94	3.82	3.39	32.20
PEC188	5.74	4.30	3.06	1.93	1.42	1.70	2.47	5.04	4.37	12.60	20.71	18.02	7.29	1.58	0.19	0.02	0.23	0.19	0.27	0.41	0.50	0.58	0.51	0.55	0.53	0.47	0.50	0.40	0.40	0.33	3.69
PEC189	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.08	0.28	0.37	0.35	0.48	1.19	0.70	1.35	1.91	3.99	5.03	6.51	6.52	6.11	6.50	6.43	4.89	5.02	3.84	4.62	3.67	30.15
PEC190	13.78	0.75	0.82	0.08	0.11	0.12	1.39	3.60	4.95	15.70	21.23	9.29	3.45	3.14	1.72	0.30	0.60	0.57	0.93	1.07	0.99	1.13	1.00	1.11	1.15	0.83	0.95	0.69	0.69	0.62	7.25
PEC191	5.88	1.35	0.89	1.15	1.18	1.11	1.54	2.70	3.23	13.19	26.26	16.43	4.26	3.08	0.37	0.36	0.54	0.47	0.81	0.85	0.88	1.00	0.99	0.94	1.04	0.90	0.63	0.77	0.70	0.65	5.84
PEC192	0.00	3.18	4.32	0.00	0.60	1.21	1.30	2.22	2.30	6.01	7.30	5.20	4.28	4.15	2.05	0.70	0.41	1.22	2.75	2.99	3.50	3.51	3.72	3.47	3.58	3.12	2.75	2.11	2.60	2.20	17.24
PEC193	4.94	0.85	0.31	0.36	0.58	0.64	0.67	0.95	1.33	6.59	23.05	30.56	9.72	6.87	0.45	0.45	0.25	0.29	0.48	0.54	0.71	0.60	0.67	0.78	0.72	0.49	0.54	0.54	0.61	0.59	3.86
PEC194	17.87	0.00	1.15	1.86	0.61	1.11	2.27	3.37	3.83	7.94	10.12	5.62	2.48	2.59	1.37	0.38	0.38	0.84	1.45	1.88	2.19	2.48	2.36	2.47	2.36	1.92	1.94	1.71	1.70	1.39	12.36
PEC195	15.42	0.00	0.00	0.05	0.18	0.26	0.39	0.81	2.22	12.98	33.12	15.30	4.84	1.56	0.50	0.36	0.96	0.36	0.53	0.69	0.61	0.85	0.71	0.66	0.58	0.54	0.49	0.47	0.40	0.40	3.75
PEC196	0.00	0.09	0.12	0.15	0.22	0.14	0.21	0.76	1.88	12.85	39.43	25.98	6.64	0.86	0.03	0.03	0.19	0.38	0.69	0.71	0.75	0.70	0.63	0.65	0.66	0.51	0.55	0.45	0.50	0.45	2.78
PEC197	0.00	0.00	0.00	0.00	0.20	0.40	0.00	0.19	0.07	0.28	0.55	0.49	0.31	0.40	0.37	0.21	0.66	1.64	4.08	6.53	7.76	7.62	6.86	7.51	6.32	5.41	4.64	4.13	3.70	3.81	25.87
PEC198	5.47	0.00	0.00	0.45	0.85	0.80	0.70	1.73	2.89	14.52	32.26	18.95	5.04	0.72	0.55	0.02	0.07	0.26	0.64	0.75	0.89	0.85	0.99	0.97	0.98	0.86	0.81	0.73	0.66	0.59	4.97
PEC199	0.00	0.72	0.98	0.00	0.00	0.00	4.64	0.49	0.71	2.75	5.85	4.17	1.26	0.42	0.74	0.56	1.18	2.80	3.98	4.76	5.99	5.63	5.34	5.21	4.58	3.71	3.53	2.90	2.58	2.28	22.23
PEC200	0.00	0.00	0.00	0.00	0.10	0.21	0.16	1.21	0.82	2.97	5.45	8.14	7.62	3.28	1.77	1.10	1.27	1.63	3.23	4.04	4.45	5.19	4.86	5.00	3.79	3.66	3.30	2.93	2.38	1.87	19.56

Appendix 4 - Faunal Summary Data

SampleID	Number of individuals per sample	Abundance per square meter	Number of species per sample	Equitability	Diversity
PEC101	404	10100	5	0.126	0.203
PEC102	205	5125	21	0.587	1.788
PEC103	206	5150	22	0.790	2.442
PEC104	120	3000	19	0.840	2.473
PEC105	317	7925	14	0.493	1.302
PEC106	39	975	12	0.702	1.743
PEC107	129	3225	27	0.810	2.668
PEC108	379	9475	27	0.746	2.458
PEC109	306	7650	22	0.767	2.370
PEC110	221	5525	24	0.700	2.225
PEC111	170	4250	21	0.699	2.127
PEC112	273	6825	19	0.454	1.337
PEC113	713	17825	20	0.241	0.721
PEC114	623	15575	27	0.421	1.386
PEC115	203	5075	26	0.572	1.864
PEC116	244	6100	28	0.717	2.388
PEC117	149	3725	25	0.691	2.223
PEC118	235	5875	19	0.728	2.142
PEC119	195	4875	27	0.724	2.386
PEC120	316	7900	31	0.766	2.630
PEC121	140	3500	24	0.831	2.639
PEC122	210	5250	26	0.732	2.384
PEC123	424	10600	28	0.426	1.419
PEC124	295	7375	42	0.763	2.851
PEC125	266	6650	22	0.665	2.055
PEC126	291	7275	16	0.429	1.190
PEC127	133	3325	23	0.843	2.644
PEC128	192	4800	22	0.702	2.169
PEC129	114	2850	9	0.716	1.574
PEC130	155	3875	11	0.660	1.584
PEC131	142	3550	21	0.763	2.324
PEC132	277	6925	25	0.636	2.047
PEC133	575	14375	36	0.724	2.594
PEC134	235	5875	32	0.621	2.154
PEC135	233	5825	27	0.651	2.144
PEC136	137	3425	18	0.676	1.955
PEC137	76	1900	23	0.807	2.531
PEC138	98	2450	18	0.894	2.584
PEC139	116	2900	22	0.655	2.024
PEC140	287	7175	28	0.712	2.372
PEC141	130	3250	17	0.735	2.082
PEC142	247	6175	25	0.684	2.202
PEC143	87	2175	13	0.750	1.924
PEC144	170	4250	20	0.695	2.082
PEC145	172	4300	22	0.763	2.359
PEC146	216	5400	29	0.734	2.473
PEC147	422	10550	33	0.695	2.429
PEC148	240	6000	22	0.775	2.394
PEC149	128	3200	14	0.829	2.189
PEC150	327	8175	28	0.727	2.421

Appendix 4 - Faunal Summary Data

SampleID	Number of individuals per sample	Abundance per square meter	Number of species per sample	Equitability	Diversity
PEC151	325	8125	35	0.698	2.482
PEC152	70	1750	14	0.807	2.130
PEC153	370	9250	27	0.652	2.148
PEC154	439	10975	25	0.513	1.652
PEC155	447	11175	30	0.606	2.061
PEC156	133	3325	14	0.422	1.113
PEC157	54	1350	17	0.865	2.452
PEC158	65	1625	14	0.846	2.234
PEC159	124	3100	14	0.758	2.000
PEC160	289	7225	23	0.617	1.934
PEC161	112	2800	15	0.599	1.622
PEC162	127	3175	24	0.825	2.623
PEC163	48	1200	11	0.761	1.826
PEC164	94	2350	17	0.691	1.957
PEC165	466	11650	31	0.482	1.654
PEC166	113	2825	25	0.854	2.748
PEC167	39	975	12	0.888	2.208
PEC168	300	7500	21	0.410	1.247
PEC169	181	4525	23	0.743	2.329
PEC170	397	9925	20	0.529	1.585
PEC171	175	4375	21	0.692	2.107
PEC172	547	13675	23	0.410	1.286
PEC173	63	1575	20	0.800	2.397
PEC174	235	5875	29	0.664	2.236
PEC175	139	3475	19	0.610	1.797
PEC176	386	9650	29	0.547	1.841
PEC177	103	2575	17	0.738	2.092
PEC178	225	5625	17	0.643	1.822
PEC179	8	200	6	0.967	1.733
PEC180	291	7275	34	0.684	2.412
PEC181	247	6175	25	0.444	1.429
PEC182	80	2000	16	0.850	2.358
PEC183	10	250	7	0.898	1.748
PEC184	73	1825	10	0.495	1.139
PEC185	143	3575	20	0.616	1.844
PEC186	52	1300	9	0.783	1.720
PEC187	119	2975	7	0.617	1.200
PEC188	123	3075	30	0.843	2.869
PEC189	77	1925	7	0.517	1.007
PEC190	300	7500	28	0.611	2.036
PEC191	276	6900	30	0.737	2.505
PEC192	135	3375	11	0.547	1.312
PEC193	106	2650	23	0.688	2.158
PEC194	38	950	11	0.835	2.001
PEC195	130	3250	16	0.447	1.240
PEC196	198	4950	23	0.659	2.068
PEC197	82	2050	10	0.655	1.509
PEC198	70	1750	24	0.843	2.678
PEC199	32	800	8	0.879	1.828
PEC200	62	1550	9	0.786	1.728

Appendix 5 – Faunal Data Summaries by Region and Sample

********** Output from program SUMMARY **********
PC-ORD, Version 4.41
 9 Mar 2009, 13:57

Data Summary - By Region

Compact format data file:
C:\Documents and Settings\Bob\My Documents\Peconics - Phase II Mapping\PC-Ord Analysis\PCOrdDataCompact.txt
Species file:
C:\Documents and Settings\Bob\My Documents\Peconics - Phase II Mapping\PC-Ord Analysis\PCOrdSpe.txt

Matrix size: 100 Sample (rows)
              141 Species (columns)

Subgroup: JessNeck

Summary of 28 Sample N= 100 Species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	PEC101	4.040	32.70	404.0	0.00	388.	5	0.126	0.203
2	PEC102	2.050	10.21	205.0	0.00	119.	21	0.587	1.788
3	PEC103	2.060	6.203	206.0	0.00	51.0	22	0.790	2.442
4	PEC104	1.200	3.337	120.0	0.00	27.0	19	0.840	2.473
5	PEC105	3.170	18.15	317.0	0.00	212.	14	0.493	1.302
6	PEC106	0.390	1.781	39.00	0.00	20.0	12	0.702	1.743
7	PEC107	1.290	3.490	129.0	0.00	26.0	27	0.810	2.668
8	PEC108	3.790	11.99	379.0	0.00	121.	27	0.746	2.458
9	PEC109	3.060	9.758	306.0	0.00	96.0	22	0.767	2.370
10	PEC110	2.210	7.598	221.0	0.00	66.0	24	0.700	2.225
11	PEC111	1.700	6.708	170.0	0.00	72.0	21	0.699	2.127
12	PEC112	2.730	16.02	273.0	0.00	188.	19	0.454	1.337
13	PEC113	7.130	51.57	713.0	0.00	611.	20	0.241	0.721
14	PEC114	6.230	35.37	623.0	0.00	409.	27	0.421	1.386
15	PEC115	2.030	10.16	203.0	0.00	119.	26	0.572	1.864
16	PEC116	2.440	7.632	244.0	0.00	60.0	28	0.717	2.388
17	PEC117	1.490	5.361	149.0	0.00	51.0	25	0.691	2.223
18	PEC118	2.350	7.799	235.0	0.00	63.0	19	0.728	2.142
19	PEC119	1.950	6.393	195.0	0.00	62.0	27	0.724	2.386
20	PEC120	3.160	8.410	316.0	0.00	66.0	31	0.766	2.630
21	PEC121	1.400	3.610	140.0	0.00	29.0	24	0.831	2.639
22	PEC122	2.100	6.964	210.0	0.00	68.0	26	0.732	2.384
23	PEC123	4.240	23.66	424.0	0.00	270.	28	0.426	1.419
24	PEC124	2.950	8.420	295.0	0.00	88.0	42	0.763	2.851
25	PEC147	4.220	13.42	422.0	0.00	121.	33	0.695	2.429
26	PEC148	2.400	7.280	240.0	0.00	63.0	22	0.775	2.394
27	PEC149	1.280	3.922	128.0	0.00	30.0	14	0.829	2.189
28	PEC150	3.270	9.915	327.0	0.00	73.0	28	0.727	2.421
AVERAGES:		2.73	12.1	272.6	0.00	127.	23.3	0.655	2.057

Number of cells in main matrix =   2800
Percent of cells empty =   76.679
Matrix total =   7.6330E+03
Matrix mean =   2.7261E+00
Variance of totals of Sample   =   2.1908E+04

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 100 Species N= 28 Sample

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Actecana	0.857E+00	0.196E+01	0.2400E+02	0.000E+00	0.800E+01	6
2	Ampevado	0.307E+01	0.321E+01	0.8600E+02	0.000E+00	0.130E+02	19
3	Ampeverr	0.214E+01	0.539E+01	0.6000E+02	0.000E+00	0.250E+02	11
5	Amphabdi	0.964E+00	0.208E+01	0.2700E+02	0.000E+00	0.900E+01	8
6	Anadtran	0.107E+00	0.315E+00	0.3000E+01	0.000E+00	0.100E+01	3
7	Anomsimp	0.393E+00	0.110E+01	0.1100E+02	0.000E+00	0.400E+01	4
8	Anoplent	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
9	Arabiric	0.714E-01	0.262E+00	0.2000E+01	0.000E+00	0.100E+01	2
10	Ariccath	0.137E+02	0.223E+02	0.3830E+03	0.000E+00	0.930E+02	20
11	Asabocul	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
12	Asycelon	0.643E+00	0.128E+01	0.1800E+02	0.000E+00	0.500E+01	7
13	Autocorn	0.214E+00	0.686E+00	0.6000E+01	0.000E+00	0.300E+01	3
15	Balaamph	0.321E+00	0.152E+01	0.9000E+01	0.000E+00	0.800E+01	2
17	Batecath	0.116E+02	0.511E+02	0.3260E+03	0.000E+00	0.270E+03	7
19	Branclav	0.107E+00	0.416E+00	0.3000E+01	0.000E+00	0.200E+01	2
20	Branwell	0.357E+00	0.989E+00	0.1000E+02	0.000E+00	0.400E+01	4
21	Capisp	0.315E+02	0.247E+02	0.8820E+03	0.000E+00	0.119E+03	27
22	Caprpena	0.250E+00	0.114E+01	0.7000E+01	0.000E+00	0.600E+01	2
23	Cephsp	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
24	Chaeapic	0.107E+00	0.315E+00	0.3000E+01	0.000E+00	0.100E+01	3
25	Clymzona	0.257E+01	0.411E+01	0.7200E+02	0.000E+00	0.150E+02	14
26	Corbcont	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
27	Cosslong	0.357E+01	0.664E+01	0.1000E+03	0.000E+00	0.250E+02	11
28	Cransept	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
29	Crasmact	0.714E+00	0.229E+01	0.2000E+02	0.000E+00	0.110E+02	4
30	Crepforn	0.114E+01	0.391E+01	0.3200E+02	0.000E+00	0.200E+02	5
32	Cumitell	0.714E-01	0.378E+00	0.2000E+01	0.000E+00	0.200E+01	1
35	Drillong	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
40	Ericbras	0.714E+00	0.221E+01	0.2000E+02	0.000E+00	0.110E+02	5
41	Ericsp	0.714E-01	0.378E+00	0.2000E+01	0.000E+00	0.200E+01	1
42	Eumisang	0.182E+01	0.440E+01	0.5100E+02	0.000E+00	0.210E+02	10
43	Exogdisp	0.332E+01	0.516E+01	0.9300E+02	0.000E+00	0.220E+02	16
44	Glycamer	0.821E+00	0.863E+00	0.2300E+02	0.000E+00	0.300E+01	17
46	Glycsoli	0.200E+01	0.313E+01	0.5600E+02	0.000E+00	0.140E+02	17
47	Gobisp	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
49	Gyptvitt	0.250E+00	0.585E+00	0.7000E+01	0.000E+00	0.200E+01	5
50	Harmsp	0.429E+00	0.114E+01	0.1200E+02	0.000E+00	0.500E+01	5
51	Heteform	0.714E-01	0.262E+00	0.2000E+01	0.000E+00	0.100E+01	2
52	Hydrdian	0.357E+00	0.142E+01	0.1000E+02	0.000E+00	0.700E+01	2
54	Ilyatriv	0.107E+00	0.567E+00	0.3000E+01	0.000E+00	0.300E+01	1
55	Isopsp	0.357E+00	0.119E+01	0.1000E+02	0.000E+00	0.500E+01	3
57	Lembsmit	0.786E+00	0.267E+01	0.2200E+02	0.000E+00	0.140E+02	6
61	Lyonhyal	0.893E+00	0.173E+01	0.2500E+02	0.000E+00	0.700E+01	9
62	Macotent	0.768E+01	0.120E+02	0.2150E+03	0.000E+00	0.530E+02	15
64	Melicris	0.225E+01	0.626E+01	0.6300E+02	0.000E+00	0.330E+02	12
65	Mercmerc	0.107E+00	0.315E+00	0.3000E+01	0.000E+00	0.100E+01	3
66	Micrscze	0.143E+00	0.448E+00	0.4000E+01	0.000E+00	0.200E+01	3
67	Monosp	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
69	Munisp	0.200E+01	0.500E+01	0.5600E+02	0.000E+00	0.180E+02	5
71	Natisp	0.714E-01	0.378E+00	0.2000E+01	0.000E+00	0.200E+01	1
72	Nemasp	0.100E+03	0.141E+03	0.2808E+04	0.000E+00	0.611E+03	24
74	Nephpict	0.325E+01	0.443E+01	0.9100E+02	0.000E+00	0.170E+02	21
75	Neptinci	0.143E+00	0.756E+00	0.4000E+01	0.000E+00	0.400E+01	1
79	Nicosp	0.857E+00	0.209E+01	0.2400E+02	0.000E+00	0.900E+01	8
80	Nucuprox	0.229E+01	0.302E+01	0.6400E+02	0.000E+00	0.100E+02	16
81	Nucutenu	0.393E+00	0.208E+01	0.1100E+02	0.000E+00	0.110E+02	1
82	Odonfulg	0.193E+01	0.541E+01	0.5400E+02	0.000E+00	0.240E+02	4
83	Oligsp	0.854E+01	0.142E+02	0.2390E+03	0.000E+00	0.640E+02	18
84	Orbinia	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
85	OstrA	0.134E+02	0.234E+02	0.3760E+03	0.000E+00	0.121E+03	21
86	OstrB	0.357E+00	0.780E+00	0.1000E+02	0.000E+00	0.300E+01	6
87	Owenfusi	0.107E+00	0.315E+00	0.3000E+01	0.000E+00	0.100E+01	3
88	Oxyusmit	0.214E+00	0.568E+00	0.6000E+01	0.000E+00	0.200E+01	4
89	Pagulong	0.107E+00	0.315E+00	0.3000E+01	0.000E+00	0.100E+01	3
90	Pandgoul	0.714E-01	0.262E+00	0.2000E+01	0.000E+00	0.100E+01	2
91	Panoherb	0.679E+00	0.109E+01	0.1900E+02	0.000E+00	0.400E+01	10

92	Parateni	0.250E+00	0.114E+01	0.7000E+01	0.000E+00	0.600E+01	2
94	Paraspin	0.857E+00	0.156E+01	0.2400E+02	0.000E+00	0.600E+01	8
95	Paralong	0.157E+01	0.366E+01	0.4400E+02	0.000E+00	0.170E+02	9
96	Pectgoul	0.714E+00	0.176E+01	0.2000E+02	0.000E+00	0.900E+01	9
97	Perilean	0.214E+00	0.957E+00	0.6000E+01	0.000E+00	0.500E+01	2
99	Phylaren	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
100	Pinnixa	0.179E+00	0.772E+00	0.5000E+01	0.000E+00	0.400E+01	2
101	Pistpalm	0.107E+00	0.315E+00	0.3000E+01	0.000E+00	0.100E+01	3
103	Podaobsc	0.321E+00	0.723E+00	0.9000E+01	0.000E+00	0.300E+01	6
105	Polydora	0.729E+01	0.108E+02	0.2040E+03	0.000E+00	0.440E+02	20
106	Polygord	0.714E-01	0.378E+00	0.2000E+01	0.000E+00	0.200E+01	1
107	Priohete	0.104E+01	0.290E+01	0.2900E+02	0.000E+00	0.150E+02	9
108	Priopinn	0.343E+01	0.671E+01	0.9600E+02	0.000E+00	0.260E+02	13
110	Rudinagl	0.571E+00	0.114E+01	0.1600E+02	0.000E+00	0.300E+01	6
112	Sabevulg	0.143E+00	0.591E+00	0.4000E+01	0.000E+00	0.300E+01	2
114	Schicaec	0.321E+00	0.133E+01	0.9000E+01	0.000E+00	0.700E+01	3
116	Scolsqua	0.104E+01	0.179E+01	0.2900E+02	0.000E+00	0.700E+01	11
117	Scolsp	0.321E+00	0.670E+00	0.9000E+01	0.000E+00	0.300E+01	7
118	Seiladam	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
121	Soleviri	0.250E+00	0.585E+00	0.7000E+01	0.000E+00	0.200E+01	5
122	Sphasp	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
123	Sphaerin	0.186E+01	0.604E+01	0.5200E+02	0.000E+00	0.290E+02	6
124	Sphahyst	0.321E+01	0.613E+01	0.9000E+02	0.000E+00	0.300E+02	16
126	Spiobomb	0.857E+00	0.196E+01	0.2400E+02	0.000E+00	0.800E+01	6
127	Spissoli	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
129	Stheboa	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
130	Syllseto	0.114E+01	0.256E+01	0.3200E+02	0.000E+00	0.900E+01	6
131	Syllgrac	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
132	Tellagil	0.107E+01	0.196E+01	0.3000E+02	0.000E+00	0.900E+01	11
133	Tharsp	0.136E+02	0.401E+02	0.3810E+03	0.000E+00	0.212E+03	23
135	Turbelsp	0.714E-01	0.262E+00	0.2000E+01	0.000E+00	0.100E+01	2
136	Turbonsp	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
137	Unciirro	0.107E+00	0.315E+00	0.3000E+01	0.000E+00	0.100E+01	3
140	Uroscine	0.357E-01	0.189E+00	0.1000E+01	0.000E+00	0.100E+01	1
AVERAGES:		0.273E+01	0.487E+01	0.7633E+02	0.000E+00	0.223E+02	6.5

Subgroup: SouthRce

Summary of 22 Sample N= 84 Species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	PEC125	3.167	9.822	266.0	0.00	87.0	22	0.665	2.055
2	PEC126	3.464	18.24	291.0	0.00	215.	16	0.429	1.190
3	PEC127	1.583	3.357	133.0	0.00	22.0	23	0.843	2.644
4	PEC128	2.286	7.269	192.0	0.00	78.0	22	0.702	2.169
5	PEC129	1.357	5.070	114.0	0.00	51.0	9	0.716	1.574
6	PEC130	1.845	6.689	155.0	0.00	57.0	11	0.660	1.584
7	PEC131	1.690	5.005	142.0	0.00	54.0	21	0.763	2.324
8	PEC132	3.298	12.13	277.0	0.00	138.	25	0.636	2.047
9	PEC133	6.845	16.07	575.0	0.00	121.	36	0.724	2.594
10	PEC134	2.798	9.219	235.0	0.00	80.0	32	0.621	2.154
11	PEC135	2.774	9.168	233.0	0.00	97.0	27	0.651	2.144
12	PEC136	1.631	5.393	137.0	0.00	48.0	18	0.676	1.955
13	PEC137	0.905	2.290	76.00	0.00	19.0	23	0.807	2.531
14	PEC138	1.167	2.489	98.00	0.00	18.0	18	0.894	2.584
15	PEC139	1.381	4.666	116.0	0.00	39.0	22	0.655	2.024
16	PEC140	3.417	10.18	287.0	0.00	108.	28	0.712	2.372
17	PEC141	1.548	4.661	130.0	0.00	37.0	17	0.735	2.082
18	PEC142	2.940	8.352	247.0	0.00	72.0	25	0.684	2.202
19	PEC143	1.036	3.515	87.00	0.00	37.0	13	0.750	1.924
20	PEC144	2.024	6.444	170.0	0.00	66.0	20	0.695	2.082
21	PEC145	2.048	5.330	172.0	0.00	44.0	22	0.763	2.359
22	PEC146	2.571	7.412	216.0	0.00	81.0	29	0.734	2.473
AVERAGES:		2.35	7.40	197.7	0.00	71.3	21.8	0.705	2.139

Number of cells in main matrix = 1848

Percent of cells empty = 74.080
Matrix total = 4.3490E+03
Matrix mean = 2.3534E+00
Variance of totals of Sample = 1.1663E+04

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 84 Species N= 22 Sample

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Actecana	0.864E+00	0.208E+01	0.1900E+02	0.000E+00	0.800E+01	6
2	Ampevado	0.268E+01	0.373E+01	0.5900E+02	0.000E+00	0.160E+02	15
3	Ampeverr	0.500E+00	0.119E+01	0.1100E+02	0.000E+00	0.400E+01	5
5	Amphabdi	0.277E+01	0.521E+01	0.6100E+02	0.000E+00	0.180E+02	9
6	Anadtran	0.136E+00	0.351E+00	0.3000E+01	0.000E+00	0.100E+01	3
8	Anoplent	0.273E+00	0.550E+00	0.6000E+01	0.000E+00	0.200E+01	5
9	Arabiric	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
10	Ariccath	0.482E+01	0.681E+01	0.1060E+03	0.000E+00	0.250E+02	13
13	Autocorn	0.227E+00	0.612E+00	0.5000E+01	0.000E+00	0.200E+01	3
17	Batecath	0.223E+01	0.753E+01	0.4900E+02	0.000E+00	0.350E+02	4
18	Bittalte	0.136E+01	0.640E+01	0.3000E+02	0.000E+00	0.300E+02	1
19	Branclav	0.227E+00	0.685E+00	0.5000E+01	0.000E+00	0.300E+01	3
20	Branwell	0.455E+00	0.150E+01	0.1000E+02	0.000E+00	0.600E+01	2
21	Capisp	0.388E+02	0.489E+02	0.8530E+03	0.000E+00	0.215E+03	20
24	Chaeapic	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
25	Clymzona	0.145E+01	0.258E+01	0.3200E+02	0.000E+00	0.900E+01	8
26	Corbcont	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
27	Cosslong	0.636E+00	0.902E+00	0.1400E+02	0.000E+00	0.300E+01	9
28	Cransept	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
29	Crasmact	0.136E+00	0.640E+00	0.3000E+01	0.000E+00	0.300E+01	1
30	Crepforn	0.336E+01	0.139E+02	0.7400E+02	0.000E+00	0.650E+02	3
34	Decamega	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
38	Elaslevi	0.200E+01	0.615E+01	0.4400E+02	0.000E+00	0.270E+02	5
40	Ericbras	0.214E+01	0.732E+01	0.4700E+02	0.000E+00	0.340E+02	4
42	Eumisang	0.636E+00	0.147E+01	0.1400E+02	0.000E+00	0.600E+01	5
43	Exogdisp	0.955E+00	0.153E+01	0.2100E+02	0.000E+00	0.500E+01	9
44	Glycamer	0.545E+00	0.912E+00	0.1200E+02	0.000E+00	0.300E+01	7
46	Glycsoli	0.709E+01	0.848E+01	0.1560E+03	0.000E+00	0.290E+02	15
47	Gobisp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
48	Gonigrac	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
49	Gyptvitt	0.591E+00	0.854E+00	0.1300E+02	0.000E+00	0.300E+01	9
50	Harmsp	0.136E+01	0.234E+01	0.3000E+02	0.000E+00	0.100E+02	10
51	Heteform	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
52	Hydrdian	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
57	Lembsmit	0.773E+00	0.218E+01	0.1700E+02	0.000E+00	0.100E+02	6
61	Lyonhyal	0.105E+01	0.168E+01	0.2300E+02	0.000E+00	0.500E+01	8
62	Macotent	0.895E+01	0.148E+02	0.1970E+03	0.000E+00	0.570E+02	14
64	Melicris	0.955E+00	0.165E+01	0.2100E+02	0.000E+00	0.500E+01	7
65	Mercmerc	0.273E+00	0.128E+01	0.6000E+01	0.000E+00	0.600E+01	1
68	Mulilate	0.136E+00	0.351E+00	0.3000E+01	0.000E+00	0.100E+01	3
69	Munisp	0.909E+01	0.165E+02	0.2000E+03	0.000E+00	0.510E+02	11
72	Nemasp	0.340E+02	0.461E+02	0.7490E+03	0.000E+00	0.138E+03	18
74	Nephpict	0.186E+01	0.232E+01	0.4100E+02	0.000E+00	0.800E+01	13
75	Neptinci	0.955E+00	0.176E+01	0.2100E+02	0.000E+00	0.600E+01	7
79	Nicosp	0.136E+00	0.468E+00	0.3000E+01	0.000E+00	0.200E+01	2
80	Nucuprox	0.209E+01	0.313E+01	0.4600E+02	0.000E+00	0.110E+02	12
81	Nucutenu	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
82	Odonfulg	0.100E+01	0.227E+01	0.2200E+02	0.000E+00	0.900E+01	5
83	Oligsp	0.191E+01	0.326E+01	0.4200E+02	0.000E+00	0.130E+02	9
84	Orbinia	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
85	OstrA	0.127E+02	0.217E+02	0.2800E+03	0.000E+00	0.720E+02	12
86	OstrB	0.318E+00	0.149E+01	0.7000E+01	0.000E+00	0.700E+01	1
87	Owenfusi	0.364E+00	0.109E+01	0.8000E+01	0.000E+00	0.500E+01	4
88	Oxyusmit	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
90	Pandgoul	0.636E+00	0.100E+01	0.1400E+02	0.000E+00	0.300E+01	8

91	Panoherb	0.864E+00	0.158E+01	0.1900E+02	0.000E+00	0.500E+01	6
92	Parateni	0.377E+01	0.154E+02	0.8300E+02	0.000E+00	0.720E+02	4
94	Paraspin	0.145E+01	0.356E+01	0.3200E+02	0.000E+00	0.150E+02	7
95	Paralong	0.409E+00	0.130E+01	0.9000E+01	0.000E+00	0.600E+01	4
96	Pectgoul	0.114E+01	0.232E+01	0.2500E+02	0.000E+00	0.100E+02	7
99	Phylaren	0.136E+00	0.468E+00	0.3000E+01	0.000E+00	0.200E+01	2
100	Pinnixa	0.136E+00	0.468E+00	0.3000E+01	0.000E+00	0.200E+01	2
101	Pistpalm	0.500E+00	0.119E+01	0.1100E+02	0.000E+00	0.400E+01	5
103	Podaobsc	0.818E+00	0.122E+01	0.1800E+02	0.000E+00	0.400E+01	9
105	Polydora	0.450E+01	0.722E+01	0.9900E+02	0.000E+00	0.310E+02	15
106	Polygord	0.136E+00	0.640E+00	0.3000E+01	0.000E+00	0.300E+01	1
107	Priohete	0.227E+00	0.528E+00	0.5000E+01	0.000E+00	0.200E+01	4
108	Priopinn	0.945E+01	0.134E+02	0.2080E+03	0.000E+00	0.390E+02	14
110	Rudinagl	0.545E+00	0.963E+00	0.1200E+02	0.000E+00	0.300E+01	7
111	Sabemicr	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
112	Sabevulg	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
115	Schirudo	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
116	Scolsqua	0.318E+00	0.780E+00	0.7000E+01	0.000E+00	0.300E+01	4
117	Scolsp	0.364E+00	0.953E+00	0.8000E+01	0.000E+00	0.400E+01	4
118	Seiladam	0.227E+00	0.528E+00	0.5000E+01	0.000E+00	0.200E+01	4
121	Soleviri	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
123	Sphaerin	0.636E+00	0.136E+01	0.1400E+02	0.000E+00	0.500E+01	5
124	Sphahyst	0.473E+01	0.154E+02	0.1040E+03	0.000E+00	0.730E+02	11
126	Spiobomb	0.255E+01	0.555E+01	0.5600E+02	0.000E+00	0.220E+02	5
128	Stenminu	0.500E+00	0.235E+01	0.1100E+02	0.000E+00	0.110E+02	1
132	Tellagil	0.191E+01	0.360E+01	0.4200E+02	0.000E+00	0.120E+02	7
133	Tharsp	0.773E+01	0.140E+02	0.1700E+03	0.000E+00	0.460E+02	14
135	Turbelsp	0.136E+00	0.640E+00	0.3000E+01	0.000E+00	0.300E+01	1
140	Uroscine	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
AVERAGES:		0.235E+01	0.423E+01	0.5177E+02	0.000E+00	0.163E+02	5.7

Subgroup: OrienDel

Summary of 22 Sample N= 103 Species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	PEC151	3.155	10.31	325.0	0.00	96.0	35	0.698	2.482
2	PEC152	0.680	2.330	70.00	0.00	21.0	14	0.807	2.130
3	PEC153	3.592	14.39	370.0	0.00	155.	27	0.652	2.148
4	PEC154	4.262	21.35	439.0	0.00	237.	25	0.513	1.652
5	PEC155	4.340	17.34	447.0	0.00	177.	30	0.606	2.061
6	PEC156	1.291	8.540	133.0	0.00	101.	14	0.422	1.113
7	PEC157	0.524	1.635	54.00	0.00	17.0	17	0.865	2.452
8	PEC158	0.631	2.072	65.00	0.00	20.0	14	0.846	2.234
9	PEC159	1.204	4.488	124.0	0.00	39.0	14	0.758	2.000
10	PEC160	2.806	11.91	289.0	0.00	118.	23	0.617	1.934
11	PEC161	1.087	5.496	112.0	0.00	62.0	15	0.599	1.622
12	PEC162	1.233	3.450	127.0	0.00	31.0	24	0.825	2.623
13	PEC163	0.466	1.931	48.00	0.00	20.0	11	0.761	1.826
14	PEC164	0.913	4.002	94.00	0.00	45.0	17	0.691	1.957
15	PEC165	4.524	25.34	466.0	0.00	297.	31	0.482	1.654
16	PEC166	1.097	2.711	113.0	0.00	21.0	25	0.854	2.748
17	PEC167	0.379	1.176	39.00	0.00	9.00	12	0.888	2.208
18	PEC168	2.913	18.37	300.0	0.00	216.	21	0.410	1.247
19	PEC169	1.757	5.830	181.0	0.00	47.0	23	0.743	2.329
20	PEC170	3.854	18.60	397.0	0.00	188.	20	0.529	1.585
21	PEC171	1.699	6.835	175.0	0.00	74.0	21	0.692	2.107
22	PEC172	5.311	32.29	547.0	0.00	376.	23	0.410	1.286
AVERAGES:		2.17	10.0	223.4	0.00	108.	20.7	0.667	1.973

Number of cells in main matrix = 2266
Percent of cells empty = 79.876
Matrix total = 4.9150E+03
Matrix mean = 2.1690E+00
Variance of totals of Sample = 2.6052E+04

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 103 Species   N=   22 Sample

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Actecana	0.455E+00	0.110E+01	0.1000E+02	0.000E+00	0.400E+01	4
2	Ampevado	0.500E+01	0.919E+01	0.1100E+03	0.000E+00	0.430E+02	18
3	Ampeverr	0.818E+00	0.150E+01	0.1800E+02	0.000E+00	0.500E+01	8
4	Ampharct	0.518E+01	0.737E+01	0.1140E+03	0.000E+00	0.260E+02	14
5	Amphabdi	0.318E+00	0.113E+01	0.7000E+01	0.000E+00	0.500E+01	2
6	Anadtran	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
7	Anomsimp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
8	Anoplent	0.136E+00	0.468E+00	0.3000E+01	0.000E+00	0.200E+01	2
9	Arabiric	0.182E+00	0.395E+00	0.4000E+01	0.000E+00	0.100E+01	4
10	Ariccath	0.137E+02	0.269E+02	0.3020E+03	0.000E+00	0.111E+03	18
12	Asycelon	0.182E+01	0.250E+01	0.4000E+02	0.000E+00	0.800E+01	10
13	Autocorn	0.136E+00	0.640E+00	0.3000E+01	0.000E+00	0.300E+01	1
16	Balasp	0.323E+01	0.135E+02	0.7100E+02	0.000E+00	0.630E+02	2
17	Batecath	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
18	Bittalte	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
19	Branclav	0.182E+00	0.588E+00	0.4000E+01	0.000E+00	0.200E+01	2
20	Branwell	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
21	Capisp	0.750E+01	0.103E+02	0.1650E+03	0.000E+00	0.460E+02	17
22	Caprpena	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
23	Cephsp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
24	Chaeapic	0.136E+00	0.468E+00	0.3000E+01	0.000E+00	0.200E+01	2
25	Clymzona	0.114E+01	0.191E+01	0.2500E+02	0.000E+00	0.800E+01	12
27	Cosslong	0.409E+00	0.110E+01	0.9000E+01	0.000E+00	0.400E+01	3
29	Crasmact	0.136E+00	0.468E+00	0.3000E+01	0.000E+00	0.200E+01	2
30	Crepforn	0.115E+02	0.357E+02	0.2530E+03	0.000E+00	0.155E+03	6
31	Crepplan	0.114E+01	0.338E+01	0.2500E+02	0.000E+00	0.120E+02	3
32	Cumitell	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
35	Drillong	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
36	Drilmagn	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
38	Elaslevi	0.227E+00	0.685E+00	0.5000E+01	0.000E+00	0.300E+01	3
39	Ensidire	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
41	Ericsp	0.182E+00	0.664E+00	0.4000E+01	0.000E+00	0.300E+01	2
42	Eumisang	0.773E+00	0.225E+01	0.1700E+02	0.000E+00	0.100E+02	4
43	Exogdisp	0.145E+01	0.360E+01	0.3200E+02	0.000E+00	0.140E+02	6
44	Glycamer	0.455E+00	0.739E+00	0.1000E+02	0.000E+00	0.300E+01	8
45	Glycdibr	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
46	Glycsoli	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
47	Gobisp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
48	Gonigrac	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
50	Harmsp	0.327E+01	0.798E+01	0.7200E+02	0.000E+00	0.280E+02	9
51	Heteform	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
54	Ilyatriv	0.136E+00	0.351E+00	0.3000E+01	0.000E+00	0.100E+01	3
57	Lembsmit	0.364E+00	0.150E+01	0.8000E+01	0.000E+00	0.700E+01	2
58	Leptsavi	0.500E+00	0.235E+01	0.1100E+02	0.000E+00	0.110E+02	1
60	Lumbfrag	0.955E+00	0.146E+01	0.2100E+02	0.000E+00	0.400E+01	8
61	Lyonhyal	0.318E+00	0.716E+00	0.7000E+01	0.000E+00	0.300E+01	5
62	Macotent	0.409E+00	0.105E+01	0.9000E+01	0.000E+00	0.400E+01	4
65	Mercmerc	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
66	Micrscze	0.318E+00	0.104E+01	0.7000E+01	0.000E+00	0.400E+01	2
69	Munisp	0.273E+00	0.128E+01	0.6000E+01	0.000E+00	0.600E+01	1
70	Mytiedul	0.864E+00	0.261E+01	0.1900E+02	0.000E+00	0.120E+02	5
72	Nemasp	0.714E+02	0.102E+03	0.1571E+04	0.000E+00	0.376E+03	20
73	Neomamer	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
74	Nephpict	0.295E+01	0.510E+01	0.6500E+02	0.000E+00	0.190E+02	11
75	Neptinci	0.182E+01	0.252E+01	0.4000E+02	0.000E+00	0.800E+01	11
77	Neregray	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
78	Neresucc	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
79	Nicosp	0.145E+01	0.392E+01	0.3200E+02	0.000E+00	0.150E+02	3
80	Nucuprox	0.305E+01	0.831E+01	0.6700E+02	0.000E+00	0.390E+02	10
82	Odonfulg	0.227E+00	0.685E+00	0.5000E+01	0.000E+00	0.300E+01	3

83 Oligsp	0.586E+01	0.782E+01	0.1290E+03	0.000E+00	0.310E+02	17
85 OstrA	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
87 Owenfusi	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
88 Oxyusmit	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
89 Pagulong	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
90 Pandgoul	0.136E+00	0.640E+00	0.3000E+01	0.000E+00	0.300E+01	1
91 Panoherb	0.864E+00	0.236E+01	0.1900E+02	0.000E+00	0.110E+02	7
92 Parateni	0.864E+00	0.383E+01	0.1900E+02	0.000E+00	0.180E+02	2
93 Paragrac	0.786E+01	0.117E+02	0.1730E+03	0.000E+00	0.450E+02	12
94 Paraspin	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
95 Paralong	0.232E+01	0.749E+01	0.5100E+02	0.000E+00	0.350E+02	5
98 Phersp	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
100 Pinnixa	0.182E+00	0.501E+00	0.4000E+01	0.000E+00	0.200E+01	3
101 Pistpalm	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
103 Podaobsc	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
104 Polylign	0.136E+00	0.468E+00	0.3000E+01	0.000E+00	0.200E+01	2
105 Polydora	0.223E+01	0.324E+01	0.4900E+02	0.000E+00	0.110E+02	10
106 Polygord	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
107 Priohete	0.182E+00	0.588E+00	0.4000E+01	0.000E+00	0.200E+01	2
108 Priopinn	0.273E+00	0.703E+00	0.6000E+01	0.000E+00	0.300E+01	4
110 Rudinagl	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
113 Scalinfl	0.118E+01	0.248E+01	0.2600E+02	0.000E+00	0.100E+02	7
114 Schicaec	0.114E+01	0.295E+01	0.2500E+02	0.000E+00	0.100E+02	5
116 Scolsqua	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
117 Scolsp	0.182E+00	0.664E+00	0.4000E+01	0.000E+00	0.300E+01	2
119 Sigasp	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
121 Soleviri	0.227E+00	0.685E+00	0.5000E+01	0.000E+00	0.300E+01	3
123 Sphaerin	0.909E-01	0.426E+00	0.2000E+01	0.000E+00	0.200E+01	1
124 Sphahyst	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
125 Spiosp	0.591E+00	0.854E+00	0.1300E+02	0.000E+00	0.200E+01	8
126 Spiobomb	0.186E+01	0.492E+01	0.4100E+02	0.000E+00	0.220E+02	8
127 Spissoli	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
128 Stenminu	0.441E+01	0.205E+02	0.9700E+02	0.000E+00	0.960E+02	2
130 Syllseto	0.455E-01	0.213E+00	0.1000E+01	0.000E+00	0.100E+01	1
132 Tellagil	0.818E+00	0.105E+01	0.1800E+02	0.000E+00	0.300E+01	10
133 Tharsp	0.413E+02	0.672E+02	0.9080E+03	0.000E+00	0.237E+03	21
134 Travcarn	0.273E+00	0.128E+01	0.6000E+01	0.000E+00	0.600E+01	1
135 Turbelsp	0.227E+00	0.107E+01	0.5000E+01	0.000E+00	0.500E+01	1
136 Turbonsp	0.105E+01	0.232E+01	0.2300E+02	0.000E+00	0.900E+01	6
137 Unciirro	0.155E+01	0.213E+01	0.3400E+02	0.000E+00	0.600E+01	9
138 Unciserr	0.136E+00	0.640E+00	0.3000E+01	0.000E+00	0.300E+01	1
139 Uncisp	0.909E-01	0.294E+00	0.2000E+01	0.000E+00	0.100E+01	2
141 Yoldlima	0.545E+00	0.106E+01	0.1200E+02	0.000E+00	0.400E+01	6
AVERAGES:	0.217E+01	0.416E+01	0.4772E+02	0.000E+00	0.165E+02	4.4

Subgroup: PipesCov

Summary of 12 Sample N= 77 Species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	PEC173	0.818	2.108	63.00	0.00	22.0	20	0.800	2.397
2	PEC174	3.052	9.379	235.0	0.00	105.	29	0.664	2.236
3	PEC175	1.805	6.771	139.0	0.00	78.0	19	0.610	1.797
4	PEC176	5.013	16.96	386.0	0.00	157.	29	0.547	1.841
5	PEC177	1.338	3.753	103.0	0.00	37.0	17	0.738	2.092
6	PEC178	2.922	8.967	225.0	0.00	63.0	17	0.643	1.822
7	PEC179	0.104	0.2911	8.000	0.00	2.00	6	0.967	1.733
8	PEC180	3.779	10.17	291.0	0.00	101.	34	0.684	2.412
9	PEC181	3.208	14.71	247.0	0.00	173.	25	0.444	1.429
10	PEC182	1.039	2.318	80.00	0.00	17.0	16	0.850	2.358
11	PEC183	0.130	0.3944	10.00	0.00	4.00	7	0.898	1.748
12	PEC184	0.948	4.459	73.00	0.00	52.0	10	0.495	1.139
AVERAGES:		2.01	6.69	155.0	0.00	67.6	19.1	0.695	1.917

Number of cells in main matrix = 924
Percent of cells empty = 75.216

Matrix total = 1.8600E+03
Matrix mean = 2.0130E+00
Variance of totals of Sample = 1.4366E+04

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 77 Species N= 12 Sample

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
1	Actecana	0.583E+00	0.124E+01	0.7000E+01	0.000E+00	0.400E+01	3
2	Ampevado	0.233E+01	0.328E+01	0.2800E+02	0.000E+00	0.110E+02	7
3	Ampeverr	0.392E+01	0.470E+01	0.4700E+02	0.000E+00	0.140E+02	7
4	Ampharct	0.917E+00	0.156E+01	0.1100E+02	0.000E+00	0.500E+01	4
5	Amphabdi	0.250E+00	0.622E+00	0.3000E+01	0.000E+00	0.200E+01	2
7	Anomsimp	0.167E+00	0.577E+00	0.2000E+01	0.000E+00	0.200E+01	1
10	Ariccath	0.141E+02	0.450E+02	0.1690E+03	0.000E+00	0.157E+03	5
12	Asycelon	0.167E+00	0.389E+00	0.2000E+01	0.000E+00	0.100E+01	2
14	Autosp	0.500E+00	0.173E+01	0.6000E+01	0.000E+00	0.600E+01	1
16	Balasp	0.875E+01	0.303E+02	0.1050E+03	0.000E+00	0.105E+03	1
19	Branclav	0.250E+00	0.452E+00	0.3000E+01	0.000E+00	0.100E+01	3
20	Branwell	0.500E+00	0.905E+00	0.6000E+01	0.000E+00	0.300E+01	4
21	Capisp	0.115E+02	0.173E+02	0.1380E+03	0.000E+00	0.620E+02	8
25	Clymzona	0.417E+00	0.793E+00	0.5000E+01	0.000E+00	0.200E+01	3
26	Corbcont	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
27	Cosslong	0.667E+00	0.231E+01	0.8000E+01	0.000E+00	0.800E+01	1
29	Crasmact	0.108E+01	0.247E+01	0.1300E+02	0.000E+00	0.800E+01	3
30	Crepforn	0.117E+01	0.404E+01	0.1400E+02	0.000E+00	0.140E+02	1
31	Crepplan	0.167E+00	0.577E+00	0.2000E+01	0.000E+00	0.200E+01	1
33	Cyatpoli	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
37	Dyspsayi	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
39	Ensidire	0.333E+00	0.778E+00	0.4000E+01	0.000E+00	0.200E+01	2
42	Eumisang	0.917E+00	0.138E+01	0.1100E+02	0.000E+00	0.300E+01	4
43	Exogdisp	0.183E+01	0.451E+01	0.2200E+02	0.000E+00	0.160E+02	6
44	Glycamer	0.417E+00	0.669E+00	0.5000E+01	0.000E+00	0.200E+01	4
46	Glycsoli	0.417E+00	0.900E+00	0.5000E+01	0.000E+00	0.300E+01	3
48	Gonigrac	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
50	Harmsp	0.167E+01	0.261E+01	0.2000E+02	0.000E+00	0.800E+01	7
55	Isopsp	0.250E+00	0.622E+00	0.3000E+01	0.000E+00	0.200E+01	2
56	Jassfalc	0.250E+00	0.866E+00	0.3000E+01	0.000E+00	0.300E+01	1
57	Lembsmit	0.167E+00	0.389E+00	0.2000E+01	0.000E+00	0.100E+01	2
60	Lumbfrag	0.167E+00	0.389E+00	0.2000E+01	0.000E+00	0.100E+01	2
61	Lyonhyal	0.417E+00	0.900E+00	0.5000E+01	0.000E+00	0.300E+01	3
62	Macotent	0.917E+00	0.202E+01	0.1100E+02	0.000E+00	0.700E+01	4
63	Magesp	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
64	Melicris	0.167E+00	0.389E+00	0.2000E+01	0.000E+00	0.100E+01	2
70	Mytiedul	0.833E+00	0.111E+01	0.1000E+02	0.000E+00	0.300E+01	6
72	Nemasp	0.561E+02	0.541E+02	0.6730E+03	0.000E+00	0.173E+03	10
74	Nephpict	0.500E+01	0.506E+01	0.6000E+02	0.000E+00	0.130E+02	8
76	Nerearen	0.167E+00	0.389E+00	0.2000E+01	0.000E+00	0.100E+01	2
79	Nicosp	0.250E+00	0.622E+00	0.3000E+01	0.000E+00	0.200E+01	2
80	Nucuprox	0.267E+01	0.375E+01	0.3200E+02	0.000E+00	0.100E+02	7
82	Odonfulg	0.833E+00	0.229E+01	0.1000E+02	0.000E+00	0.800E+01	3
83	Oligsp	0.103E+02	0.168E+02	0.1240E+03	0.000E+00	0.580E+02	8
85	OstrA	0.917E+00	0.183E+01	0.1100E+02	0.000E+00	0.600E+01	4
86	OstrB	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
88	Oxyusmit	0.250E+00	0.866E+00	0.3000E+01	0.000E+00	0.300E+01	1
91	Panoherb	0.667E+00	0.137E+01	0.8000E+01	0.000E+00	0.400E+01	3
92	Parateni	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
94	Paraspin	0.250E+00	0.622E+00	0.3000E+01	0.000E+00	0.200E+01	2
95	Paralong	0.833E+00	0.199E+01	0.1000E+02	0.000E+00	0.700E+01	4
96	Pectgoul	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
99	Phylaren	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
101	Pistpalm	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
103	Podaobsc	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
104	Polylign	0.267E+01	0.636E+01	0.3200E+02	0.000E+00	0.190E+02	2

105	Polydora	0.525E+01	0.160E+02	0.6300E+02	0.000E+00	0.560E+02	6
106	Polygord	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
107	Priohete	0.250E+00	0.622E+00	0.3000E+01	0.000E+00	0.200E+01	2
110	Rudinagl	0.250E+00	0.452E+00	0.3000E+01	0.000E+00	0.100E+01	3
112	Sabevulg	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
114	Schicaec	0.417E+00	0.900E+00	0.5000E+01	0.000E+00	0.300E+01	3
117	Scolsp	0.333E+00	0.492E+00	0.4000E+01	0.000E+00	0.100E+01	4
120	Solevelu	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
121	Soleviri	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
123	Sphaerin	0.167E+00	0.577E+00	0.2000E+01	0.000E+00	0.200E+01	1
124	Sphahyst	0.667E+00	0.115E+01	0.8000E+01	0.000E+00	0.300E+01	4
125	Spiosp	0.167E+00	0.389E+00	0.2000E+01	0.000E+00	0.100E+01	2
126	Spiobomb	0.208E+01	0.360E+01	0.2500E+02	0.000E+00	0.120E+02	5
128	Stenminu	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
130	Syllseto	0.250E+00	0.622E+00	0.3000E+01	0.000E+00	0.200E+01	2
132	Tellagil	0.425E+01	0.483E+01	0.5100E+02	0.000E+00	0.130E+02	7
133	Tharsp	0.183E+01	0.221E+01	0.2200E+02	0.000E+00	0.700E+01	8
134	Travcarn	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
136	Turbonsp	0.833E-01	0.289E+00	0.1000E+01	0.000E+00	0.100E+01	1
138	Unciserr	0.250E+00	0.866E+00	0.3000E+01	0.000E+00	0.300E+01	1
139	Uncisp	0.250E+00	0.622E+00	0.3000E+01	0.000E+00	0.200E+01	2
AVERAGES:		0.201E+01	0.351E+01	0.2416E+02	0.000E+00	0.116E+02	3.0

Subgroup: GPecWest

Summary of 16 Sample N= 68 Species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	PEC185	2.103	6.604	143.0	0.00	73.0	20	0.616	1.844
2	PEC186	0.765	2.058	52.00	0.00	17.0	9	0.783	1.720
3	PEC187	1.750	6.163	119.0	0.00	54.0	7	0.617	1.200
4	PEC188	1.809	3.102	123.0	0.00	27.0	30	0.843	2.869
5	PEC189	1.132	4.764	77.00	0.00	55.0	7	0.517	1.007
6	PEC190	4.412	12.21	300.0	0.00	118.	28	0.611	2.036
7	PEC191	4.059	8.164	276.0	0.00	67.0	30	0.737	2.505
8	PEC192	1.985	7.044	135.0	0.00	75.0	11	0.547	1.312
9	PEC193	1.559	4.288	106.0	0.00	46.0	23	0.688	2.158
10	PEC194	0.559	1.351	38.00	0.00	11.0	11	0.835	2.001
11	PEC195	1.912	8.029	130.0	0.00	94.0	16	0.447	1.240
12	PEC196	2.912	8.600	198.0	0.00	97.0	23	0.659	2.068
13	PEC197	1.206	4.037	82.00	0.00	44.0	10	0.655	1.509
14	PEC198	1.029	1.888	70.00	0.00	14.0	24	0.843	2.678
15	PEC199	0.471	1.187	32.00	0.00	10.0	8	0.879	1.828
16	PEC200	0.912	2.502	62.00	0.00	22.0	9	0.786	1.728
AVERAGES:		1.79	5.12	121.4	0.00	51.5	16.6	0.691	1.856

Number of cells in main matrix = 1088
Percent of cells empty = 75.551
Matrix total = 1.9430E+03
Matrix mean = 1.7858E+00
Variance of totals of Sample = 6.1397E+03

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 68 Species N= 16 Sample

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S
2	Ampevado	0.625E+00	0.115E+01	0.1000E+02	0.000E+00	0.400E+01	5
3	Ampeverr	0.125E+00	0.342E+00	0.2000E+01	0.000E+00	0.100E+01	2
4	Ampharct	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1

5	Amphabdi	0.312E+01	0.324E+01	0.5000E+02	0.000E+00	0.900E+01	10
10	Ariccath	0.500E+00	0.137E+01	0.8000E+01	0.000E+00	0.400E+01	2
12	Asycelon	0.112E+01	0.189E+01	0.1800E+02	0.000E+00	0.700E+01	8
16	Balasp	0.312E+00	0.125E+01	0.5000E+01	0.000E+00	0.500E+01	1
18	Bittalte	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
20	Branwell	0.125E+00	0.500E+00	0.2000E+01	0.000E+00	0.200E+01	1
21	Capisp	0.129E+02	0.160E+02	0.2070E+03	0.000E+00	0.460E+02	10
25	Clymzona	0.169E+01	0.285E+01	0.2700E+02	0.000E+00	0.100E+02	7
27	Cosslong	0.112E+01	0.175E+01	0.1800E+02	0.000E+00	0.500E+01	7
28	Cransept	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
29	Crasmact	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
30	Crepforn	0.106E+01	0.272E+01	0.1700E+02	0.000E+00	0.100E+02	3
39	Ensidire	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
40	Ericbras	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
42	Eumisang	0.688E+00	0.154E+01	0.1100E+02	0.000E+00	0.600E+01	5
43	Exogdisp	0.938E+00	0.249E+01	0.1500E+02	0.000E+00	0.100E+02	5
44	Glycamer	0.750E+00	0.100E+01	0.1200E+02	0.000E+00	0.300E+01	7
46	Glycsoli	0.419E+01	0.754E+01	0.6700E+02	0.000E+00	0.260E+02	7
47	Gobisp	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
48	Gonigrac	0.250E+00	0.683E+00	0.4000E+01	0.000E+00	0.200E+01	2
49	Gyptvitt	0.250E+00	0.447E+00	0.4000E+01	0.000E+00	0.100E+01	4
50	Harmsp	0.938E+00	0.148E+01	0.1500E+02	0.000E+00	0.400E+01	6
53	Ilyaobso	0.188E+00	0.544E+00	0.3000E+01	0.000E+00	0.200E+01	2
59	Leucamer	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
62	Macotent	0.469E+01	0.538E+01	0.7500E+02	0.000E+00	0.170E+02	13
64	Melicris	0.438E+00	0.814E+00	0.7000E+01	0.000E+00	0.300E+01	5
68	Mulilate	0.125E+00	0.500E+00	0.2000E+01	0.000E+00	0.200E+01	1
69	Munisp	0.122E+02	0.160E+02	0.1950E+03	0.000E+00	0.480E+02	12
72	Nemasp	0.291E+02	0.437E+02	0.4660E+03	0.000E+00	0.118E+03	7
73	Neomamer	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
74	Nephpict	0.175E+01	0.309E+01	0.2800E+02	0.000E+00	0.900E+01	6
75	Neptinci	0.688E+00	0.101E+01	0.1100E+02	0.000E+00	0.300E+01	6
77	Neregray	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
79	Nicosp	0.125E+00	0.342E+00	0.2000E+01	0.000E+00	0.100E+01	2
80	Nucuprox	0.125E+00	0.342E+00	0.2000E+01	0.000E+00	0.100E+01	2
83	Oligsp	0.306E+01	0.387E+01	0.4900E+02	0.000E+00	0.110E+02	10
85	OstrA	0.125E+01	0.232E+01	0.2000E+02	0.000E+00	0.700E+01	5
87	Owenfusi	0.312E+00	0.125E+01	0.5000E+01	0.000E+00	0.500E+01	1
89	Pagulong	0.125E+00	0.342E+00	0.2000E+01	0.000E+00	0.100E+01	2
90	Pandgoul	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
91	Panoherb	0.562E+00	0.727E+00	0.9000E+01	0.000E+00	0.200E+01	7
95	Paralong	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
96	Pectgoul	0.375E+00	0.719E+00	0.6000E+01	0.000E+00	0.200E+01	4
99	Phylaren	0.250E+00	0.577E+00	0.4000E+01	0.000E+00	0.200E+01	3
100	Pinnixa	0.188E+00	0.403E+00	0.3000E+01	0.000E+00	0.100E+01	3
101	Pistpalm	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
102	Platdume	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
103	Podaobsc	0.312E+00	0.602E+00	0.5000E+01	0.000E+00	0.200E+01	4
104	Polylign	0.375E+00	0.885E+00	0.6000E+01	0.000E+00	0.300E+01	3
105	Polydora	0.226E+02	0.265E+02	0.3610E+03	0.000E+00	0.750E+02	15
107	Priohete	0.125E+00	0.342E+00	0.2000E+01	0.000E+00	0.100E+01	2
108	Priopinn	0.431E+01	0.656E+01	0.6900E+02	0.000E+00	0.260E+02	12
109	Rictpunc	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
110	Rudinagl	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
112	Sabevulg	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
116	Scolsqua	0.188E+00	0.403E+00	0.3000E+01	0.000E+00	0.100E+01	3
117	Scolsp	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
123	Sphaerin	0.188E+00	0.544E+00	0.3000E+01	0.000E+00	0.200E+01	2
124	Sphahyst	0.394E+01	0.696E+01	0.6300E+02	0.000E+00	0.250E+02	7
126	Spiobomb	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
132	Tellagil	0.250E+00	0.577E+00	0.4000E+01	0.000E+00	0.200E+01	3
133	Tharsp	0.112E+01	0.141E+01	0.1800E+02	0.000E+00	0.400E+01	7
136	Turbonsp	0.250E+00	0.577E+00	0.4000E+01	0.000E+00	0.200E+01	3
137	Unciirro	0.250E+00	0.775E+00	0.4000E+01	0.000E+00	0.300E+01	2
139	Uncisp	0.625E-01	0.250E+00	0.1000E+01	0.000E+00	0.100E+01	1
AVERAGES:		0.179E+01	0.267E+01	0.2857E+02	0.000E+00	0.818E+01	3.9

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

********** Output from program SUMMARY **********
PC-ORD, Version 4.41
 9 Mar 2009, 13:47

Data Summary - All Samples

Compact format data file:
C:\Documents and Settings\Bob\My Documents\Peconics - Phase II Mapping\PC-Ord Analysis\PCOrdDataCompact.txt
Species file:
C:\Documents and Settings\Bob\My Documents\Peconics - Phase II Mapping\PC-Ord Analysis\PCOrdSpe.txt

Matrix size: 100 Sample (rows)
              141 Species (columns)

Summary of 100 Sample N= 141 Species

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S	E	H`
1	PEC101	2.865	32.68	404.0	0.00	388.	5	0.126	0.203
2	PEC102	1.454	10.19	205.0	0.00	119.	21	0.587	1.788
3	PEC103	1.461	6.174	206.0	0.00	51.0	22	0.790	2.442
4	PEC104	0.851	3.319	120.0	0.00	27.0	19	0.840	2.473
5	PEC105	2.248	18.13	317.0	0.00	212.	14	0.493	1.302
6	PEC106	0.277	1.777	39.00	0.00	20.0	12	0.702	1.743
7	PEC107	0.915	3.469	129.0	0.00	26.0	27	0.810	2.668
8	PEC108	2.688	11.94	379.0	0.00	121.	27	0.746	2.458
9	PEC109	2.170	9.717	306.0	0.00	96.0	22	0.767	2.370
10	PEC110	1.567	7.571	221.0	0.00	66.0	24	0.700	2.225
11	PEC111	1.206	6.690	170.0	0.00	72.0	21	0.699	2.127
12	PEC112	1.936	16.00	273.0	0.00	188.	19	0.454	1.337
13	PEC113	5.057	51.53	713.0	0.00	611.	20	0.241	0.721
14	PEC114	4.418	35.33	623.0	0.00	409.	27	0.421	1.386
15	PEC115	1.440	10.14	203.0	0.00	119.	26	0.572	1.864
16	PEC116	1.730	7.599	244.0	0.00	60.0	28	0.717	2.388
17	PEC117	1.057	5.344	149.0	0.00	51.0	25	0.691	2.223
18	PEC118	1.667	7.769	235.0	0.00	63.0	19	0.728	2.142
19	PEC119	1.383	6.368	195.0	0.00	62.0	27	0.724	2.386
20	PEC120	2.241	8.359	316.0	0.00	66.0	31	0.766	2.630
21	PEC121	0.993	3.587	140.0	0.00	29.0	24	0.831	2.639
22	PEC122	1.489	6.937	210.0	0.00	68.0	26	0.732	2.384
23	PEC123	3.007	23.63	424.0	0.00	270.	28	0.426	1.419
24	PEC124	2.092	8.376	295.0	0.00	88.0	42	0.763	2.851
25	PEC147	2.993	13.37	422.0	0.00	121.	33	0.695	2.429
26	PEC148	1.702	7.246	240.0	0.00	63.0	22	0.775	2.394
27	PEC149	0.908	3.904	128.0	0.00	30.0	14	0.829	2.189
28	PEC150	2.319	9.869	327.0	0.00	73.0	28	0.727	2.421
29	PEC125	1.887	9.738	266.0	0.00	87.0	22	0.665	2.055
30	PEC126	2.064	18.18	291.0	0.00	215.	16	0.429	1.190
31	PEC127	0.943	3.295	133.0	0.00	22.0	23	0.843	2.644
32	PEC128	1.362	7.209	192.0	0.00	78.0	22	0.702	2.169
33	PEC129	0.809	5.040	114.0	0.00	51.0	9	0.716	1.574
34	PEC130	1.099	6.646	155.0	0.00	57.0	11	0.660	1.584
35	PEC131	1.007	4.958	142.0	0.00	54.0	21	0.763	2.324
36	PEC132	1.965	12.05	277.0	0.00	138.	25	0.636	2.047
37	PEC133	4.078	15.83	575.0	0.00	121.	36	0.724	2.594
38	PEC134	1.667	9.149	235.0	0.00	80.0	32	0.621	2.154
39	PEC135	1.652	9.099	233.0	0.00	97.0	27	0.651	2.144
40	PEC136	0.972	5.352	137.0	0.00	48.0	18	0.676	1.955
41	PEC137	0.539	2.260	76.00	0.00	19.0	23	0.807	2.531
42	PEC138	0.695	2.443	98.00	0.00	18.0	18	0.894	2.584
43	PEC139	0.823	4.633	116.0	0.00	39.0	22	0.655	2.024
44	PEC140	2.035	10.08	287.0	0.00	108.	28	0.712	2.372
45	PEC141	0.922	4.618	130.0	0.00	37.0	17	0.735	2.082
46	PEC142	1.752	8.266	247.0	0.00	72.0	25	0.684	2.202
47	PEC143	0.617	3.490	87.00	0.00	37.0	13	0.750	1.924
48	PEC144	1.206	6.391	170.0	0.00	66.0	20	0.695	2.082
49	PEC145	1.220	5.265	172.0	0.00	44.0	22	0.763	2.359

50	PEC146	1.532	7.338	216.0	0.00	81.0	29	0.734	2.473
51	PEC151	2.305	10.27	325.0	0.00	96.0	35	0.698	2.482
52	PEC152	0.497	2.323	70.00	0.00	21.0	14	0.807	2.130
53	PEC153	2.624	14.36	370.0	0.00	155.	27	0.652	2.148
54	PEC154	3.113	21.32	439.0	0.00	237.	25	0.513	1.652
55	PEC155	3.170	17.30	447.0	0.00	177.	30	0.606	2.061
56	PEC156	0.943	8.533	133.0	0.00	101.	14	0.422	1.113
57	PEC157	0.383	1.629	54.00	0.00	17.0	17	0.865	2.452
58	PEC158	0.461	2.065	65.00	0.00	20.0	14	0.846	2.234
59	PEC159	0.879	4.476	124.0	0.00	39.0	14	0.758	2.000
60	PEC160	2.050	11.88	289.0	0.00	118.	23	0.617	1.934
61	PEC161	0.794	5.488	112.0	0.00	62.0	15	0.599	1.622
62	PEC162	0.901	3.434	127.0	0.00	31.0	24	0.825	2.623
63	PEC163	0.340	1.927	48.00	0.00	20.0	11	0.761	1.826
64	PEC164	0.667	3.994	94.00	0.00	45.0	17	0.691	1.957
65	PEC165	3.305	25.31	466.0	0.00	297.	31	0.482	1.654
66	PEC166	0.801	2.694	113.0	0.00	21.0	25	0.854	2.748
67	PEC167	0.277	1.172	39.00	0.00	9.00	12	0.888	2.208
68	PEC168	2.128	18.35	300.0	0.00	216.	21	0.410	1.247
69	PEC169	1.284	5.810	181.0	0.00	47.0	23	0.743	2.329
70	PEC170	2.816	18.57	397.0	0.00	188.	20	0.529	1.585
71	PEC171	1.241	6.820	175.0	0.00	74.0	21	0.692	2.107
72	PEC172	3.879	32.26	547.0	0.00	376.	23	0.410	1.286
73	PEC173	0.447	2.075	63.00	0.00	22.0	20	0.800	2.397
74	PEC174	1.667	9.275	235.0	0.00	105.	29	0.664	2.236
75	PEC175	0.986	6.721	139.0	0.00	78.0	19	0.610	1.797
76	PEC176	2.738	16.80	386.0	0.00	157.	29	0.547	1.841
77	PEC177	0.731	3.703	103.0	0.00	37.0	17	0.738	2.092
78	PEC178	1.596	8.868	225.0	0.00	63.0	17	0.643	1.822
79	PEC179	0.057	0.287	8.000	0.00	2.00	6	0.967	1.733
80	PEC180	2.064	10.02	291.0	0.00	101.	34	0.684	2.412
81	PEC181	1.752	14.64	247.0	0.00	173.	25	0.444	1.429
82	PEC182	0.567	2.269	80.00	0.00	17.0	16	0.850	2.358
83	PEC183	0.710	0.390	10.00	0.00	4.00	7	0.898	1.748
84	PEC184	0.5178	4.438	73.00	0.00	52.0	10	0.495	1.139
85	PEC185	1.014	6.513	143.0	0.00	73.0	20	0.616	1.844
86	PEC186	0.369	2.019	52.00	0.00	17.0	9	0.783	1.720
87	PEC187	0.844	6.096	119.0	0.00	54.0	7	0.617	1.200
88	PEC188	0.872	2.956	123.0	0.00	27.0	30	0.843	2.869
89	PEC189	0.546	4.728	77.00	0.00	55.0	7	0.517	1.007
90	PEC190	2.128	11.99	300.0	0.00	118.	28	0.611	2.036
91	PEC191	1.957	7.887	276.0	0.00	67.0	30	0.737	2.505
92	PEC192	0.9574	6.968	135.0	0.00	75.0	11	0.547	1.312
93	PEC193	0.7518	4.211	106.0	0.00	46.0	23	0.688	2.158
94	PEC194	0.2695	1.320	38.00	0.00	11.0	11	0.835	2.001
95	PEC195	0.9220	7.967	130.0	0.00	94.0	16	0.447	1.240
96	PEC196	1.404	8.466	198.0	0.00	97.0	23	0.659	2.068
97	PEC197	0.5816	3.988	82.00	0.00	44.0	10	0.655	1.509
98	PEC198	0.4965	1.811	70.00	0.00	14.0	24	0.843	2.678
99	PEC199	0.2270	1.161	32.00	0.00	10.0	8	0.879	1.828
100	PEC200	0.4397	2.456	62.00	0.00	22.0	9	0.786	1.728
AVERAGES:		1.47	8.78	207.0	0.00	91.4	20.8	0.679	2.008

Number of cells in main matrix = 14100
Percent of cells empty = 85.227
Matrix total = 2.0700E+04
Matrix mean = 1.4681E+00
Variance of totals of Sample = 1.9309E+04

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 141 Species N= 100 Sample

No.	Name	Mean	Stand.Dev.	Sum	Minimum	Maximum	S

1	Actecana	0.600E+00	0.158E+01	0.6000E+02	0.000E+00	0.800E+01	19
2	Ampevado	0.293E+01	0.519E+01	0.2930E+03	0.000E+00	0.430E+02	64
3	Ampeverr	0.138E+01	0.355E+01	0.1380E+03	0.000E+00	0.250E+02	33
4	Ampharct	0.126E+01	0.403E+01	0.1260E+03	0.000E+00	0.260E+02	19
5	Amphabdi	0.148E+01	0.320E+01	0.1480E+03	0.000E+00	0.180E+02	31
6	Anadtran	0.800E-01	0.273E+00	0.8000E+01	0.000E+00	0.100E+01	8
7	Anomsimp	0.140E+00	0.636E+00	0.1400E+02	0.000E+00	0.400E+01	6
8	Anoplent	0.100E+00	0.362E+00	0.1000E+02	0.000E+00	0.200E+01	8
9	Arabiric	0.800E-01	0.273E+00	0.8000E+01	0.000E+00	0.100E+01	8
10	Ariccath	0.968E+01	0.235E+02	0.9680E+03	0.000E+00	0.157E+03	58
11	Asabocul	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
12	Asycelon	0.780E+00	0.167E+01	0.7800E+02	0.000E+00	0.800E+01	27
13	Autocorn	0.140E+00	0.551E+00	0.1400E+02	0.000E+00	0.300E+01	7
14	Autosp	0.600E-01	0.600E+00	0.6000E+01	0.000E+00	0.600E+01	1
15	Balaamph	0.900E-01	0.805E+00	0.9000E+01	0.000E+00	0.800E+01	2
16	Balasp	0.181E+01	0.122E+02	0.1810E+03	0.000E+00	0.105E+03	4
17	Batecath	0.376E+01	0.274E+02	0.3760E+03	0.000E+00	0.270E+03	12
18	Bittalte	0.330E+00	0.300E+01	0.3300E+02	0.000E+00	0.300E+02	4
19	Branclav	0.150E+00	0.500E+00	0.1500E+02	0.000E+00	0.300E+01	10
20	Branwell	0.290E+00	0.957E+00	0.2900E+02	0.000E+00	0.600E+01	12
21	Capisp	0.225E+02	0.305E+02	0.2245E+04	0.000E+00	0.215E+03	82
22	Caprpena	0.900E-01	0.637E+00	0.9000E+01	0.000E+00	0.600E+01	3
23	Cephsp	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
24	Chaeapic	0.700E-01	0.293E+00	0.7000E+01	0.000E+00	0.200E+01	6
25	Clymzona	0.161E+01	0.293E+01	0.1610E+03	0.000E+00	0.150E+02	44
26	Corbcont	0.400E-01	0.197E+00	0.4000E+01	0.000E+00	0.100E+01	4
27	Cosslong	0.149E+01	0.391E+01	0.1490E+03	0.000E+00	0.250E+02	31
28	Cransept	0.300E-01	0.171E+00	0.3000E+01	0.000E+00	0.100E+01	3
29	Crasmact	0.400E+00	0.154E+01	0.4000E+02	0.000E+00	0.110E+02	11
30	Crepforn	0.390E+01	0.183E+02	0.3900E+03	0.000E+00	0.155E+03	18
31	Crepplan	0.270E+00	0.164E+01	0.2700E+02	0.000E+00	0.120E+02	4
32	Cumitell	0.300E-01	0.223E+00	0.3000E+01	0.000E+00	0.200E+01	2
33	Cyatpoli	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
34	Decamega	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
35	Drillong	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
36	Drilmagn	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
37	Dyspsayi	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
38	Elaslevi	0.490E+00	0.296E+01	0.4900E+02	0.000E+00	0.270E+02	8
39	Ensidire	0.700E-01	0.326E+00	0.7000E+01	0.000E+00	0.200E+01	5
40	Ericbras	0.680E+00	0.366E+01	0.6800E+02	0.000E+00	0.340E+02	10
41	Ericsp	0.600E-01	0.371E+00	0.6000E+01	0.000E+00	0.300E+01	3
42	Eumisang	0.104E+01	0.276E+01	0.1040E+03	0.000E+00	0.210E+02	28
43	Exogdisp	0.183E+01	0.383E+01	0.1830E+03	0.000E+00	0.220E+02	42
44	Glycamer	0.620E+00	0.850E+00	0.6200E+02	0.000E+00	0.300E+01	43
45	Glycdibr	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
46	Glycsoli	0.286E+01	0.579E+01	0.2860E+03	0.000E+00	0.290E+02	44
47	Gobisp	0.400E-01	0.197E+00	0.4000E+01	0.000E+00	0.100E+01	4
48	Gonigrac	0.800E-01	0.339E+00	0.8000E+01	0.000E+00	0.200E+01	6
49	Gyptvitt	0.240E+00	0.571E+00	0.2400E+02	0.000E+00	0.300E+01	18
50	Harmsp	0.149E+01	0.415E+01	0.1490E+03	0.000E+00	0.280E+02	37
51	Heteform	0.500E-01	0.261E+00	0.5000E+01	0.000E+00	0.200E+01	4
52	Hydrdian	0.110E+00	0.764E+00	0.1100E+02	0.000E+00	0.700E+01	3
53	Ilyaobso	0.300E-01	0.223E+00	0.3000E+01	0.000E+00	0.200E+01	2
54	Ilyatriv	0.600E-01	0.343E+00	0.6000E+01	0.000E+00	0.300E+01	4
55	Isopsp	0.130E+00	0.677E+00	0.1300E+02	0.000E+00	0.500E+01	5
56	Jassfalc	0.300E-01	0.300E+00	0.3000E+01	0.000E+00	0.300E+01	1
57	Lembsmit	0.490E+00	0.188E+01	0.4900E+02	0.000E+00	0.140E+02	16
58	Leptsavi	0.110E+00	0.110E+01	0.1100E+02	0.000E+00	0.110E+02	1
59	Leucamer	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
60	Lumbfrag	0.230E+00	0.790E+00	0.2300E+02	0.000E+00	0.400E+01	10
61	Lyonhyal	0.600E+00	0.133E+01	0.6000E+02	0.000E+00	0.700E+01	25
62	Macotent	0.507E+01	0.101E+02	0.5070E+03	0.000E+00	0.570E+02	50
63	Magesp	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
64	Melicris	0.930E+00	0.349E+01	0.9300E+02	0.000E+00	0.330E+02	26
65	Mercmerc	0.100E+00	0.628E+00	0.1000E+02	0.000E+00	0.600E+01	5
66	Micrscze	0.110E+00	0.549E+00	0.1100E+02	0.000E+00	0.400E+01	5
67	Monosp	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
68	Mulilate	0.500E-01	0.261E+00	0.5000E+01	0.000E+00	0.200E+01	4
69	Munisp	0.457E+01	0.112E+02	0.4570E+03	0.000E+00	0.510E+02	29
70	Mytiedul	0.290E+00	0.132E+01	0.2900E+02	0.000E+00	0.120E+02	11
71	Natisp	0.200E-01	0.200E+00	0.2000E+01	0.000E+00	0.200E+01	1

72	Nemasp	0.627E+02	0.975E+02	0.6267E+04	0.000E+00	0.611E+03	79
73	Neomamer	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
74	Nephpict	0.285E+01	0.416E+01	0.2850E+03	0.000E+00	0.190E+02	59
75	Neptinci	0.760E+00	0.166E+01	0.7600E+02	0.000E+00	0.800E+01	25
76	Nerearen	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
77	Neregray	0.300E-01	0.171E+00	0.3000E+01	0.000E+00	0.100E+01	3
78	Neresucc	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
79	Nicosp	0.640E+00	0.220E+01	0.6400E+02	0.000E+00	0.150E+02	17
80	Nucuprox	0.211E+01	0.466E+01	0.2110E+03	0.000E+00	0.390E+02	47
81	Nucutenu	0.120E+00	0.110E+01	0.1200E+02	0.000E+00	0.110E+02	2
82	Odonfulg	0.910E+00	0.321E+01	0.9100E+02	0.000E+00	0.240E+02	15
83	Oligsp	0.583E+01	0.106E+02	0.5830E+03	0.000E+00	0.640E+02	62
84	Orbinia	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
85	OstrA	0.689E+01	0.170E+02	0.6890E+03	0.000E+00	0.121E+03	43
86	OstrB	0.180E+00	0.821E+00	0.1800E+02	0.000E+00	0.700E+01	8
87	Owenfusi	0.170E+00	0.739E+00	0.1700E+02	0.000E+00	0.500E+01	9
88	Oxyusmit	0.120E+00	0.456E+00	0.1200E+02	0.000E+00	0.300E+01	8
89	Pagulong	0.600E-01	0.239E+00	0.6000E+01	0.000E+00	0.100E+01	6
90	Pandgoul	0.200E+00	0.620E+00	0.2000E+02	0.000E+00	0.300E+01	12
91	Panoherb	0.740E+00	0.153E+01	0.7400E+02	0.000E+00	0.110E+02	33
92	Parateni	0.110E+01	0.746E+01	0.1100E+03	0.000E+00	0.720E+02	9
93	Paragrac	0.173E+01	0.629E+01	0.1730E+03	0.000E+00	0.450E+02	12
94	Paraspin	0.610E+00	0.193E+01	0.6100E+02	0.000E+00	0.150E+02	18
95	Paralong	0.115E+01	0.413E+01	0.1150E+03	0.000E+00	0.350E+02	23
96	Pectgoul	0.520E+00	0.150E+01	0.5200E+02	0.000E+00	0.100E+02	21
97	Perilean	0.600E-01	0.509E+00	0.6000E+01	0.000E+00	0.500E+01	2
98	Phersp	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
99	Phylaren	0.900E-01	0.351E+00	0.9000E+01	0.000E+00	0.200E+01	7
100	Pinnixa	0.150E+00	0.539E+00	0.1500E+02	0.000E+00	0.400E+01	10
101	Pistpalm	0.180E+00	0.642E+00	0.1800E+02	0.000E+00	0.400E+01	11
102	Platdume	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
103	Podaobsc	0.340E+00	0.781E+00	0.3400E+02	0.000E+00	0.400E+01	21
104	Polylign	0.410E+00	0.232E+01	0.4100E+02	0.000E+00	0.190E+02	7
105	Polydora	0.776E+01	0.150E+02	0.7760E+03	0.000E+00	0.750E+02	66
106	Polygord	0.800E-01	0.394E+00	0.8000E+01	0.000E+00	0.300E+01	5
107	Priohete	0.430E+00	0.162E+01	0.4300E+02	0.000E+00	0.150E+02	19
108	Priopinn	0.379E+01	0.830E+01	0.3790E+03	0.000E+00	0.390E+02	43
109	Rictpunc	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
110	Rudinagl	0.330E+00	0.805E+00	0.3300E+02	0.000E+00	0.300E+01	18
111	Sabemicr	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
112	Sabevulg	0.800E-01	0.367E+00	0.8000E+01	0.000E+00	0.300E+01	6
113	Scalinfl	0.260E+00	0.124E+01	0.2600E+02	0.000E+00	0.100E+02	7
114	Schicaec	0.390E+00	0.161E+01	0.3900E+02	0.000E+00	0.100E+02	11
115	Schirudo	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
116	Scolsqua	0.410E+00	0.110E+01	0.4100E+02	0.000E+00	0.700E+01	20
117	Scolsp	0.260E+00	0.676E+00	0.2600E+02	0.000E+00	0.400E+01	18
118	Seiladam	0.600E-01	0.278E+00	0.6000E+01	0.000E+00	0.200E+01	5
119	Sigasp	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
120	Solevelu	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
121	Soleviri	0.150E+00	0.479E+00	0.1500E+02	0.000E+00	0.300E+01	11
122	Sphasp	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
123	Sphaerin	0.730E+00	0.332E+01	0.7300E+02	0.000E+00	0.290E+02	15
124	Sphahyst	0.267E+01	0.843E+01	0.2670E+03	0.000E+00	0.730E+02	40
125	Spiosp	0.150E+00	0.479E+00	0.1500E+02	0.000E+00	0.200E+01	10
126	Spiobomb	0.147E+01	0.387E+01	0.1470E+03	0.000E+00	0.220E+02	25
127	Spissoli	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
128	Stenminu	0.109E+01	0.965E+01	0.1090E+03	0.000E+00	0.960E+02	4
129	Stheboa	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
130	Syllseto	0.360E+00	0.145E+01	0.3600E+02	0.000E+00	0.900E+01	9
131	Syllgrac	0.100E-01	0.100E+00	0.1000E+01	0.000E+00	0.100E+01	1
132	Tellagil	0.145E+01	0.283E+01	0.1450E+03	0.000E+00	0.130E+02	38
133	Tharsp	0.150E+02	0.407E+02	0.1499E+04	0.000E+00	0.237E+03	73
134	Travcarn	0.700E-01	0.607E+00	0.7000E+01	0.000E+00	0.600E+01	2
135	Turbelsp	0.100E+00	0.595E+00	0.1000E+02	0.000E+00	0.500E+01	4
136	Turbonsp	0.290E+00	0.117E+01	0.2900E+02	0.000E+00	0.900E+01	11
137	Unciirro	0.410E+00	0.121E+01	0.4100E+02	0.000E+00	0.600E+01	14
138	Unciserr	0.600E-01	0.422E+00	0.6000E+01	0.000E+00	0.300E+01	2
139	Uncisp	0.600E-01	0.278E+00	0.6000E+01	0.000E+00	0.200E+01	5
140	Uroscine	0.200E-01	0.141E+00	0.2000E+01	0.000E+00	0.100E+01	2
141	Yoldlima	0.120E+00	0.537E+00	0.1200E+02	0.000E+00	0.400E+01	6

AVERAGES: 0.147E+01 0.351E+01 0.1468E+03 0.000E+00 0.244E+02 14.8

Data Summary - All Samples

Group: JessNeck
Sample unit: PEC101

Value	Code	Species	Code Name
11.00	89	Crassinella mactracea	Crasmact
1.00	64	Lyonsia hyalina	Lyonhyal
388.00	80	Nematoda sp	Nemasp
3.00	96	Paraphoxus spinosus	Paraspin
1.00	129	Unciola irrorata	Unciirro

Group: JessNeck
Sample unit: PEC102

Value	Code	Species	Code Name
119.00	80	Nematoda sp	Nemasp
2.00	96	Paraphoxus spinosus	Paraspin
2.00	61	Anomia simplex	Anomsimp
2.00	153	Asychis elongata	Asycelon
6.00	2	Capitellidae sp	Capisp
1.00	35	Caprella penantis	Caprpena
4.00	111	Erichthonius brasiliensis	Ericbras
7.00	13	Eumida sanguinea	Eumisang
5.00	20	Exogone dispar	Exogdisp
1.00	95	Gobiosoma sp	Gobisp
1.00	55	Heteromysis formosa	Heteform
2.00	33	Lembos smithi	Lembsmit
9.00	132	Nicolea sp	Nicosp
1.00	66	Nucula proxima	Nucuprox
10.00	4	Odontosyllis fulgurans	Odonfulg
2.00	82	Ostracod A	OstrA
2.00	53	Panopeus herbstii	Panoherb
10.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
15.00	22	Sphaerosyllis erinaceus	Sphaerin
3.00	23	Sphaerosyllis hystrix	Sphahyst

Group: JessNeck
Sample unit: PEC103

Value	Code	Species	Code Name
51.00	80	Nematoda sp	Nemasp
5.00	153	Asychis elongata	Asycelon
44.00	2	Capitellidae sp	Capisp
20.00	82	Ostracod A	OstrA
4.00	16	Polydora sp	Polydora
2.00	23	Sphaerosyllis hystrix	Sphahyst
5.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr
13.00	11	Aricidea catherinae	Ariccath
8.00	234	Cossura longocirrata	Cosslong
3.00	140	Glycera americana	Glycamer
1.00	238	Glycinde solitaria	Glycsoli
4.00	160	Melinna cristata	Melicris
14.00	7	Nephtys picta	Nephpict
3.00	1	Oligochaeta sp	Oligsp
2.00	83	Ostracod B	OstrB
1.00	107	Pectinaria gouldii	Pectgoul
2.00	131	Prionospio heterobranchia	Priohete
6.00	97	Prionospio pinnata	Priopinn

2.00	182	Scolelepis squamata	Scolsqua
9.00	69	Tellina agilis	Tellagil
6.00	25	Tharyx sp	Tharsp

Group: JessNeck
Sample unit: PEC104

Value	Code	Species	Code Name
3.00	64	Lyonsia hyalina	Lyonhyal
3.00	80	Nematoda sp	Nemasp
7.00	2	Capitellidae sp	Capisp
6.00	66	Nucula proxima	Nucuprox
27.00	82	Ostracod A	OstrA
6.00	30	Ampelisca vadorum	Ampevado
14.00	32	Ampelisca verrilli	Ampeverr
2.00	11	Aricidea catherinae	Ariccath
1.00	238	Glycinde solitaria	Glycsoli
1.00	160	Melinna cristata	Melicris
17.00	7	Nephtys picta	Nephpict
1.00	131	Prionospio heterobranchia	Priohete
1.00	182	Scolelepis squamata	Scolsqua
4.00	25	Tharyx sp	Tharsp
4.00	177	Acteocina canaliculata	Actecana
3.00	292	Clymenella zonalis	Clymzona
1.00	122	Drilonereis longa	Drillong
15.00	244	Macoma tenta	Macotent
4.00	59	Pinnixa sp	Pinnixa

Group: JessNeck
Sample unit: PEC105

Value	Code	Species	Code Name
22.00	2	Capitellidae sp	Capisp
20.00	16	Polydora sp	Polydora
1.00	140	Glycera americana	Glycamer
1.00	238	Glycinde solitaria	Glycsoli
1.00	7	Nephtys picta	Nephpict
1.00	107	Pectinaria gouldii	Pectgoul
1.00	97	Prionospio pinnata	Priopinn
4.00	182	Scolelepis squamata	Scolsqua
212.00	25	Tharyx sp	Tharsp
21.00	244	Macoma tenta	Macotent
9.00	167	Amphioplus abditus	Amphabdi
1.00	145	Gyptis vittata	Gyptvitt
5.00	291	Harmothoe sp	Harmsp
18.00	212	Muniospio sp	Munisp

Group: JessNeck
Sample unit: PEC106

Value	Code	Species	Code Name
1.00	153	Asychis elongata	Asycelon
4.00	2	Capitellidae sp	Capisp
1.00	16	Polydora sp	Polydora
1.00	32	Ampelisca verrilli	Ampeverr
1.00	160	Melinna cristata	Melicris
5.00	7	Nephtys picta	Nephpict
1.00	107	Pectinaria gouldii	Pectgoul
1.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
1.00	25	Tharyx sp	Tharsp
20.00	244	Macoma tenta	Macotent
2.00	167	Amphioplus abditus	Amphabdi

Group: JessNeck
Sample unit: PEC107

Value	Code	Species	Code Name
3.00	153	Asychis elongata	Asycelon
10.00	2	Capitellidae sp	Capisp
2.00	20	Exogone dispar	Exogdisp
1.00	132	Nicolea sp	Nicosp
2.00	66	Nucula proxima	Nucuprox
4.00	82	Ostracod A	OstrA
2.00	16	Polydora sp	Polydora
3.00	23	Sphaerosyllis hystrix	Sphahyst
3.00	30	Ampelisca vadorum	Ampevado
1.00	11	Aricidea catherinae	Ariccath
2.00	234	Cossura longocirrata	Cosslong
9.00	238	Glycinde solitaria	Glycsoli
4.00	160	Melinna cristata	Melicris
2.00	7	Nephtys picta	Nephpict
3.00	1	Oligochaeta sp	Oligsp
1.00	83	Ostracod B	OstrB
1.00	107	Pectinaria gouldii	Pectgoul
26.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
5.00	25	Tharyx sp	Tharsp
1.00	177	Acteocina canaliculata	Actecana
12.00	292	Clymenella zonalis	Clymzona
26.00	244	Macoma tenta	Macotent
1.00	59	Pinnixa sp	Pinnixa
2.00	167	Amphioplus abditus	Amphabdi
1.00	293	Microphthalmus sczelkowii	Micrscze
1.00	63	Pista palmata	Pistpalm

Group: JessNeck
Sample unit: PEC108

Value	Code	Species	Code Name
121.00	80	Nematoda sp	Nemasp
31.00	2	Capitellidae sp	Capisp
2.00	13	Eumida sanguinea	Eumisang
33.00	82	Ostracod A	OstrA
4.00	30	Ampelisca vadorum	Ampevado
3.00	11	Aricidea catherinae	Ariccath
8.00	234	Cossura longocirrata	Cosslong
2.00	140	Glycera americana	Glycamer
14.00	238	Glycinde solitaria	Glycsoli
6.00	160	Melinna cristata	Melicris
1.00	7	Nephtys picta	Nephpict
2.00	1	Oligochaeta sp	Oligsp
3.00	83	Ostracod B	OstrB
9.00	107	Pectinaria gouldii	Pectgoul
2.00	131	Prionospio heterobranchia	Priohete
23.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
52.00	25	Tharyx sp	Tharsp
8.00	177	Acteocina canaliculata	Actecana
15.00	292	Clymenella zonalis	Clymzona
11.00	244	Macoma tenta	Macotent
8.00	289	Balanus amphitrite	Balaamph
1.00	189	Brania clavata	Branclav
1.00	19	Brania wellfleetensis	Branwell
1.00	180	Cephalaspidea sp	Cephsp
6.00	75	Crepidula fornicata	Crepforn
11.00	104	Nucula tenuis	Nucutenu

Group: JessNeck
Sample unit: PEC109

Value	Code	Species	Code Name
3.00	89	Crassinella mactracea	Crasmact
7.00	64	Lyonsia hyalina	Lyonhyal
96.00	80	Nematoda sp	Nemasp
22.00	2	Capitellidae sp	Capisp
22.00	82	Ostracod A	OstrA
4.00	16	Polydora sp	Polydora
2.00	23	Sphaerosyllis hystrix	Sphahyst
13.00	30	Ampelisca vadorum	Ampevado
2.00	32	Ampelisca verrilli	Ampeverr
43.00	11	Aricidea catherinae	Ariccath
3.00	234	Cossura longocirrata	Cosslong
33.00	160	Melinna cristata	Melicris
12.00	7	Nephtys picta	Nephpict
3.00	97	Prionospio pinnata	Priopinn
3.00	182	Scolelepis squamata	Scolsqua
13.00	25	Tharyx sp	Tharsp
10.00	292	Clymenella zonalis	Clymzona
7.00	244	Macoma tenta	Macotent
3.00	19	Brania wellfleetensis	Branwell
1.00	214	Crangon septemspinosa	Cransept
1.00	113	Phyllodoce arenae	Phylaren
3.00	18	Spiophanes bombyx	Spiobomb

Group: JessNeck
Sample unit: PEC110

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
66.00	80	Nematoda sp	Nemasp
13.00	2	Capitellidae sp	Capisp
1.00	66	Nucula proxima	Nucuprox
1.00	82	Ostracod A	OstrA
19.00	16	Polydora sp	Polydora
2.00	23	Sphaerosyllis hystrix	Sphahyst
5.00	30	Ampelisca vadorum	Ampevado
25.00	32	Ampelisca verrilli	Ampeverr
52.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
5.00	238	Glycinde solitaria	Glycsoli
4.00	160	Melinna cristata	Melicris
2.00	7	Nephtys picta	Nephpict
3.00	1	Oligochaeta sp	Oligsp
4.00	69	Tellina agilis	Tellagil
5.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
2.00	293	Microphthalmus sczelkowii	Micrscze
4.00	18	Spiophanes bombyx	Spiobomb
1.00	70	Mercenaria mercenaria	Mercmerc
1.00	50	Oxyurostylis smithi	Oxyusmit
1.00	123	Podarke obscura	Podaobsc
2.00	172	Solen viridis	Soleviri

Group: JessNeck
Sample unit: PEC111

Value	Code	Species	Code Name
3.00	64	Lyonsia hyalina	Lyonhyal
72.00	80	Nematoda sp	Nemasp
31.00	2	Capitellidae sp	Capisp
2.00	20	Exogone dispar	Exogdisp
6.00	66	Nucula proxima	Nucuprox
6.00	82	Ostracod A	OstrA
4.00	16	Polydora sp	Polydora
4.00	30	Ampelisca vadorum	Ampevado
8.00	32	Ampelisca verrilli	Ampeverr

1.00	11	Aricidea catherinae	Ariccath
2.00	140	Glycera americana	Glycamer
3.00	238	Glycinde solitaria	Glycsoli
5.00	7	Nephtys picta	Nephpict
2.00	1	Oligochaeta sp	Oligsp
6.00	97	Prionospio pinnata	Priopinn
1.00	69	Tellina agilis	Tellagil
3.00	25	Tharyx sp	Tharsp
1.00	244	Macoma tenta	Macotent
1.00	86	Asabellides oculata	Asabocul
7.00	46	Batea catharinensis	Batecath
2.00	39	Erichthonius sp	Ericsp

Group: JessNeck
Sample unit: PEC112

Value	Code	Species	Code Name
188.00	80	Nematoda sp	Nemasp
1.00	129	Unciola irrorata	Unciirro
18.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
22.00	20	Exogone dispar	Exogdisp
7.00	4	Odontosyllis fulgurans	Odonfulg
4.00	53	Panopeus herbstii	Panoherb
1.00	16	Polydora sp	Polydora
2.00	22	Sphaerosyllis erinaceus	Sphaerin
3.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr
1.00	238	Glycinde solitaria	Glycsoli
1.00	7	Nephtys picta	Nephpict
1.00	292	Clymenella zonalis	Clymzona
10.00	46	Batea catharinensis	Batecath
2.00	158	Cumingia tellinoides	Cumitell
5.00	138	Isopoda sp	Isopsp
4.00	21	Parapionosyllis longicirrata	Paralong
1.00	270	Sabellaria vulgaris	Sabevulg

Group: JessNeck
Sample unit: PEC113

Value	Code	Species	Code Name
5.00	89	Crassinella mactracea	Crasmact
611.00	80	Nematoda sp	Nemasp
6.00	96	Paraphoxus spinosus	Paraspin
41.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
12.00	20	Exogone dispar	Exogdisp
4.00	66	Nucula proxima	Nucuprox
2.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
1.00	264	Scoloplos sp	Scolsp
1.00	23	Sphaerosyllis hystrix	Sphahyst
7.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
9.00	1	Oligochaeta sp	Oligsp
1.00	75	Crepidula fornicata	Crepforn
1.00	46	Batea catharinensis	Batecath
1.00	138	Isopoda sp	Isopsp
4.00	21	Parapionosyllis longicirrata	Paralong
1.00	78	Chaetopleura apiculata	Chaeapic
3.00	105	Rudilemboides naglei	Rudinagl

Group: JessNeck
Sample unit: PEC114

Value	Code	Species	Code Name

1.00	89	Crassinella mactracea	Crasmact
409.00	80	Nematoda sp	Nemasp
3.00	96	Paraphoxus spinosus	Paraspin
4.00	61	Anomia simplex	Anomsimp
18.00	2	Capitellidae sp	Capisp
4.00	20	Exogone dispar	Exogdisp
5.00	66	Nucula proxima	Nucuprox
2.00	53	Panopeus herbstii	Panoherb
5.00	23	Sphaerosyllis hystrix	Sphahyst
93.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
20.00	1	Oligochaeta sp	Oligsp
1.00	131	Prionospio heterobranchia	Priohete
1.00	69	Tellina agilis	Tellagil
2.00	189	Brania clavata	Branclav
20.00	75	Crepidula fornicata	Crepforn
2.00	50	Oxyurostylis smithi	Oxyusmit
2.00	172	Solen viridis	Soleviri
1.00	46	Batea catharinensis	Batecath
17.00	21	Parapionosyllis longicirrata	Paralong
3.00	105	Rudilemboides naglei	Rudinagl
3.00	161	Ilyanassa trivittata	Ilyatriv
1.00	51	Pandora gouldiana	Pandgoul
1.00	67	Periploma leanum	Perilean
2.00	14	Polygordius sp	Polygord
1.00	217	Sphaeromatidae sp	Sphasp
1.00	139	Sthenelais boa	Stheboa

Group: JessNeck
Sample unit: PEC115

Value	Code	Species	Code Name
2.00	96	Paraphoxus spinosus	Paraspin
119.00	2	Capitellidae sp	Capisp
2.00	111	Erichthonius brasiliensis	Ericbras
8.00	13	Eumida sanguinea	Eumisang
6.00	20	Exogone dispar	Exogdisp
1.00	33	Lembos smithi	Lembsmit
1.00	132	Nicolea sp	Nicosp
2.00	66	Nucula proxima	Nucuprox
14.00	82	Ostracod A	OstrA
7.00	16	Polydora sp	Polydora
2.00	22	Sphaerosyllis erinaceus	Sphaerin
2.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
3.00	11	Aricidea catherinae	Ariccath
2.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
5.00	238	Glycinde solitaria	Glycsoli
1.00	7	Nephtys picta	Nephpict
2.00	83	Ostracod B	OstrB
9.00	97	Prionospio pinnata	Priopinn
1.00	25	Tharyx sp	Tharsp
3.00	123	Podarke obscura	Podaobsc
1.00	46	Batea catharinensis	Batecath
2.00	105	Rudilemboides naglei	Rudinagl
5.00	67	Periploma leanum	Perilean
1.00	290	Corbula contracta	Corbcont

Group: JessNeck
Sample unit: PEC116

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
60.00	80	Nematoda sp	Nemasp
3.00	153	Asychis elongata	Asycelon

25.00	2	Capitellidae sp	Capisp
1.00	132	Nicolea sp	Nicosp
10.00	66	Nucula proxima	Nucuprox
32.00	82	Ostracod A	OstrA
3.00	16	Polydora sp	Polydora
5.00	23	Sphaerosyllis hystrix	Sphahyst
2.00	30	Ampelisca vadorum	Ampevado
2.00	11	Aricidea catherinae	Ariccath
8.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
3.00	238	Glycinde solitaria	Glycsoli
1.00	160	Melinna cristata	Melicris
2.00	7	Nephtys picta	Nephpict
1.00	1	Oligochaeta sp	Oligsp
2.00	107	Pectinaria gouldii	Pectgoul
12.00	97	Prionospio pinnata	Priopinn
1.00	25	Tharyx sp	Tharsp
3.00	177	Acteocina canaliculata	Actecana
7.00	292	Clymenella zonalis	Clymzona
53.00	244	Macoma tenta	Macotent
1.00	167	Amphioplus abditus	Amphabdi
1.00	291	Harmothoe sp	Harmsp
1.00	70	Mercenaria mercenaria	Mercmerc
2.00	109	Naticidae sp	Natisp
1.00	103	Spisula solidissima	Spissoli

Group: JessNeck
Sample unit: PEC117

Value	Code	Species	Code Name
51.00	80	Nematoda sp	Nemasp
34.00	2	Capitellidae sp	Capisp
2.00	111	Erichthonius brasiliensis	Ericbras
7.00	13	Eumida sanguinea	Eumisang
7.00	20	Exogone dispar	Exogdisp
2.00	33	Lembos smithi	Lembsmit
1.00	132	Nicolea sp	Nicosp
13.00	4	Odontosyllis fulgurans	Odonfulg
1.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
9.00	16	Polydora sp	Polydora
1.00	11	Aricidea catherinae	Ariccath
2.00	234	Cossura longocirrata	Cosslong
2.00	238	Glycinde solitaria	Glycsoli
1.00	160	Melinna cristata	Melicris
1.00	7	Nephtys picta	Nephpict
3.00	25	Tharyx sp	Tharsp
1.00	244	Macoma tenta	Macotent
1.00	145	Gyptis vittata	Gyptvitt
1.00	123	Podarke obscura	Podaobsc
1.00	78	Chaetopleura apiculata	Chaeapic
1.00	62	Anadara transversa	Anadtran
1.00	29	Arabella iricolor	Arabiric
2.00	119	Autolytus cornutus	Autocorn
3.00	168	Hydroides dianthus	Hydrdian

Group: JessNeck
Sample unit: PEC118

Value	Code	Species	Code Name
63.00	80	Nematoda sp	Nemasp
40.00	2	Capitellidae sp	Capisp
8.00	66	Nucula proxima	Nucuprox
12.00	82	Ostracod A	OstrA
44.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
2.00	30	Ampelisca vadorum	Ampevado

4.00	32	Ampelisca verrilli	Ampeverr
30.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
1.00	83	Ostracod B	OstrB
1.00	131	Prionospio heterobranchia	Priohete
2.00	69	Tellina agilis	Tellagil
11.00	25	Tharyx sp	Tharsp
1.00	244	Macoma tenta	Macotent
8.00	18	Spiophanes bombyx	Spiobomb
1.00	172	Solen viridis	Soleviri
3.00	21	Parapionosyllis longicirrata	Paralong
2.00	110	Syllides setosa	Syllseto

Group: JessNeck
Sample unit: PEC119

Value	Code	Species	Code Name
33.00	80	Nematoda sp	Nemasp
4.00	96	Paraphoxus spinosus	Paraspin
62.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
1.00	132	Nicolea sp	Nicosp
3.00	66	Nucula proxima	Nucuprox
13.00	82	Ostracod A	OstrA
2.00	53	Panopeus herbstii	Panoherb
3.00	16	Polydora sp	Polydora
2.00	22	Sphaerosyllis erinaceus	Sphaerin
3.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
22.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
1.00	238	Glycinde solitaria	Glycsoli
4.00	7	Nephtys picta	Nephpict
7.00	1	Oligochaeta sp	Oligsp
1.00	97	Prionospio pinnata	Priopinn
3.00	69	Tellina agilis	Tellagil
13.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
2.00	145	Gyptis vittata	Gyptvitt
1.00	293	Microphthalmus sczelkowii	Micrscze
2.00	123	Podarke obscura	Podaobsc
1.00	62	Anadara transversa	Anadtran
1.00	119	Autolytus cornutus	Autocorn
7.00	134	Schistomeringos caecus	Schicaec

Group: JessNeck
Sample unit: PEC120

Value	Code	Species	Code Name
66.00	80	Nematoda sp	Nemasp
2.00	96	Paraphoxus spinosus	Paraspin
1.00	129	Unciola irrorata	Unciirro
52.00	2	Capitellidae sp	Capisp
1.00	111	Erichthonius brasiliensis	Ericbras
21.00	13	Eumida sanguinea	Eumisang
14.00	20	Exogone dispar	Exogdisp
14.00	33	Lembos smithi	Lembsmit
6.00	132	Nicolea sp	Nicosp
1.00	66	Nucula proxima	Nucuprox
24.00	4	Odontosyllis fulgurans	Odonfulg
2.00	53	Panopeus herbstii	Panoherb
25.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
29.00	22	Sphaerosyllis erinaceus	Sphaerin
1.00	23	Sphaerosyllis hystrix	Sphahyst
6.00	30	Ampelisca vadorum	Ampevado
19.00	11	Aricidea catherinae	Ariccath

1.00	140	Glycera americana	Glycamer
1.00	7	Nephtys picta	Nephpict
4.00	1	Oligochaeta sp	Oligsp
3.00	25	Tharyx sp	Tharsp
2.00	292	Clymenella zonalis	Clymzona
2.00	291	Harmothoe sp	Harmsp
1.00	123	Podarke obscura	Podaobsc
3.00	270	Sabellaria vulgaris	Sabevulg
1.00	29	Arabella iricolor	Arabiric
3.00	119	Autolytus cornutus	Autocorn
7.00	168	Hydroides dianthus	Hydrdian
2.00	110	Syllides setosa	Syllseto
1.00	74	Seila adamsi	Seiladam

Group: JessNeck
Sample unit: PEC121

Value	Code	Species	Code Name
6.00	80	Nematoda sp	Nemasp
2.00	153	Asychis elongata	Asycelon
29.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
2.00	66	Nucula proxima	Nucuprox
15.00	82	Ostracod A	OstrA
2.00	30	Ampelisca vadorum	Ampevado
9.00	234	Cossura longocirrata	Cosslong
2.00	238	Glycinde solitaria	Glycsoli
3.00	7	Nephtys picta	Nephpict
12.00	1	Oligochaeta sp	Oligsp
2.00	107	Pectinaria gouldii	Pectgoul
1.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
1.00	25	Tharyx sp	Tharsp
5.00	177	Acteocina canaliculata	Actecana
8.00	292	Clymenella zonalis	Clymzona
18.00	244	Macoma tenta	Macotent
2.00	167	Amphioplus abditus	Amphabdi
12.00	212	Muniospio sp	Munisp
1.00	21	Parapionosyllis longicirrata	Paralong
4.00	210	Nepthys incisa	Neptinci
1.00	258	Owenia fusiformis	Owenfusi
1.00	175	Turbonilla sp	Turbonsp

Group: JessNeck
Sample unit: PEC122

Value	Code	Species	Code Name
2.00	64	Lyonsia hyalina	Lyonhyal
4.00	80	Nematoda sp	Nemasp
68.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
8.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
3.00	16	Polydora sp	Polydora
6.00	23	Sphaerosyllis hystrix	Sphahyst
5.00	30	Ampelisca vadorum	Ampevado
9.00	11	Aricidea catherinae	Ariccath
25.00	234	Cossura longocirrata	Cosslong
3.00	238	Glycinde solitaria	Glycsoli
7.00	7	Nephtys picta	Nephpict
37.00	1	Oligochaeta sp	Oligsp
5.00	182	Scolelepis squamata	Scolsqua
8.00	25	Tharyx sp	Tharsp
5.00	292	Clymenella zonalis	Clymzona
3.00	244	Macoma tenta	Macotent
2.00	167	Amphioplus abditus	Amphabdi
2.00	145	Gyptis vittata	Gyptvitt

1.00	212	Muniospio sp	Munisp
1.00	289	Balanus amphitrite	Balaamph
1.00	172	Solen viridis	Soleviri
1.00	21	Parapionosyllis longicirrata	Paralong
1.00	258	Owenia fusiformis	Owenfusi
1.00	146	Orbinia sp	Orbinia

Group: JessNeck
Sample unit: PEC123

Value	Code	Species	Code Name
78.00	80	Nematoda sp	Nemasp
1.00	61	Anomia simplex	Anomsimp
15.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
4.00	20	Exogone dispar	Exogdisp
1.00	33	Lembos smithi	Lembsmit
3.00	66	Nucula proxima	Nucuprox
9.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
1.00	264	Scoloplos sp	Scolsp
2.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	32	Ampelisca verrilli	Ampeverr
5.00	11	Aricidea catherinae	Ariccath
4.00	1	Oligochaeta sp	Oligsp
2.00	131	Prionospio heterobranchia	Priohete
1.00	69	Tellina agilis	Tellagil
4.00	25	Tharyx sp	Tharsp
1.00	63	Pista palmata	Pistpalm
2.00	75	Crepidula fornicata	Crepforn
270.00	46	Batea catharinensis	Batecath
4.00	138	Isopoda sp	Isopsp
1.00	78	Chaetopleura apiculata	Chaeapic
3.00	105	Rudilemboides naglei	Rudinagl
6.00	110	Syllides setosa	Syllseto
1.00	43	Pagurus longicarpus	Pagulong
1.00	37	Paracaprella tenius	Parateni
1.00	24	Syllis gracilis	Syllgrac
1.00	99	Turbellaria sp	Turbelsp

Group: JessNeck
Sample unit: PEC124

Value	Code	Species	Code Name
2.00	64	Lyonsia hyalina	Lyonhyal
88.00	80	Nematoda sp	Nemasp
2.00	96	Paraphoxus spinosus	Paraspin
4.00	61	Anomia simplex	Anomsimp
16.00	2	Capitellidae sp	Capisp
6.00	35	Caprella penantis	Caprpena
11.00	111	Erichthonius brasiliensis	Ericbras
2.00	13	Eumida sanguinea	Eumisang
5.00	20	Exogone dispar	Exogdisp
1.00	55	Heteromysis formosa	Heteform
2.00	33	Lembos smithi	Lembsmit
4.00	132	Nicolea sp	Nicosp
1.00	66	Nucula proxima	Nucuprox
5.00	82	Ostracod A	OstrA
3.00	53	Panopeus herbstii	Panoherb
2.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
2.00	22	Sphaerosyllis erinaceus	Sphaerin
10.00	23	Sphaerosyllis hystrix	Sphahyst
7.00	30	Ampelisca vadorum	Ampevado
16.00	11	Aricidea catherinae	Ariccath
3.00	140	Glycera americana	Glycamer
2.00	160	Melinna cristata	Melicris

1.00	7	Nephtys picta	Nephpict
12.00	1	Oligochaeta sp	Oligsp
4.00	131	Prionospio heterobranchia	Priohete
3.00	69	Tellina agilis	Tellagil
11.00	25	Tharyx sp	Tharsp
1.00	145	Gyptis vittata	Gyptvitt
1.00	291	Harmothoe sp	Harmsp
3.00	75	Crepidula fornicata	Crepforn
1.00	18	Spiophanes bombyx	Spiobomb
36.00	46	Batea catharinensis	Batecath
4.00	21	Parapionosyllis longicirrata	Paralong
3.00	105	Rudilemboides naglei	Rudinagl
1.00	62	Anadara transversa	Anadtran
9.00	110	Syllides setosa	Syllseto
1.00	134	Schistomeringos caecus	Schicaec
1.00	43	Pagurus longicarpus	Pagulong
6.00	37	Paracaprella tenius	Parateni
1.00	99	Turbellaria sp	Turbelsp
1.00	294	Urosalpinx cinerea	Uroscine

Group: JessNeck
Sample unit: PEC147

Value	Code	Species	Code Name
5.00	64	Lyonsia hyalina	Lyonhyal
78.00	80	Nematoda sp	Nemasp
2.00	153	Asychis elongata	Asycelon
56.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
3.00	20	Exogone dispar	Exogdisp
121.00	82	Ostracod A	OstrA
3.00	16	Polydora sp	Polydora
30.00	23	Sphaerosyllis hystrix	Sphahyst
9.00	30	Ampelisca vadorum	Ampevado
6.00	11	Aricidea catherinae	Ariccath
23.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
3.00	160	Melinna cristata	Melicris
4.00	7	Nephtys picta	Nephpict
21.00	1	Oligochaeta sp	Oligsp
1.00	83	Ostracod B	OstrB
1.00	107	Pectinaria gouldii	Pectgoul
7.00	182	Scolelepis squamata	Scolsqua
3.00	69	Tellina agilis	Tellagil
7.00	25	Tharyx sp	Tharsp
3.00	292	Clymenella zonalis	Clymzona
13.00	244	Macoma tenta	Macotent
4.00	19	Brania wellfleetensis	Branwell
3.00	18	Spiophanes bombyx	Spiobomb
1.00	70	Mercenaria mercenaria	Mercmerc
1.00	50	Oxyurostylis smithi	Oxyusmit
1.00	172	Solen viridis	Soleviri
1.00	21	Parapionosyllis longicirrata	Paralong
2.00	105	Rudilemboides naglei	Rudinagl
1.00	51	Pandora gouldiana	Pandgoul
5.00	110	Syllides setosa	Syllseto

Group: JessNeck
Sample unit: PEC148

Value	Code	Species	Code Name
63.00	80	Nematoda sp	Nemasp
44.00	2	Capitellidae sp	Capisp
22.00	82	Ostracod A	OstrA
10.00	16	Polydora sp	Polydora
4.00	30	Ampelisca vadorum	Ampevado

1.00	32	Ampelisca verrilli	Ampeverr
10.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
6.00	7	Nephtys picta	Nephpict
25.00	1	Oligochaeta sp	Oligsp
2.00	107	Pectinaria gouldii	Pectgoul
1.00	131	Prionospio heterobranchia	Priohete
2.00	97	Prionospio pinnata	Priopinn
3.00	182	Scolelepis squamata	Scolsqua
1.00	69	Tellina agilis	Tellagil
4.00	25	Tharyx sp	Tharsp
3.00	177	Acteocina canaliculata	Actecana
3.00	292	Clymenella zonalis	Clymzona
15.00	244	Macoma tenta	Macotent
3.00	167	Amphioplus abditus	Amphabdi
3.00	291	Harmothoe sp	Harmsp
14.00	212	Muniospio sp	Munisp

Group: JessNeck
Sample unit: PEC149

Value	Code	Species	Code Name
21.00	80	Nematoda sp	Nemasp
21.00	2	Capitellidae sp	Capisp
30.00	16	Polydora sp	Polydora
1.00	140	Glycera americana	Glycamer
1.00	238	Glycinde solitaria	Glycsoli
10.00	1	Oligochaeta sp	Oligsp
5.00	97	Prionospio pinnata	Priopinn
9.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
10.00	244	Macoma tenta	Macotent
6.00	167	Amphioplus abditus	Amphabdi
11.00	212	Muniospio sp	Munisp
1.00	63	Pista palmata	Pistpalm
1.00	204	Anoplodactylus lentus	Anoplent

Group: JessNeck
Sample unit: PEC150

Value	Code	Species	Code Name
73.00	80	Nematoda sp	Nemasp
34.00	2	Capitellidae sp	Capisp
4.00	20	Exogone dispar	Exogdisp
9.00	66	Nucula proxima	Nucuprox
7.00	82	Ostracod A	OstrA
3.00	264	Scoloplos sp	Scolsp
13.00	23	Sphaerosyllis hystrix	Sphahyst
4.00	30	Ampelisca vadorum	Ampevado
2.00	32	Ampelisca verrilli	Ampeverr
55.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
3.00	160	Melinna cristata	Melicris
1.00	7	Nephtys picta	Nephpict
64.00	1	Oligochaeta sp	Oligsp
15.00	131	Prionospio heterobranchia	Priohete
2.00	69	Tellina agilis	Tellagil
4.00	25	Tharyx sp	Tharsp
2.00	19	Brania wellfleetensis	Branwell
5.00	18	Spiophanes bombyx	Spiobomb
2.00	50	Oxyurostylis smithi	Oxyusmit
1.00	123	Podarke obscura	Podaobsc
9.00	21	Parapionosyllis longicirrata	Paralong
8.00	110	Syllides setosa	Syllseto
1.00	134	Schistomeringos caecus	Schicaec
1.00	258	Owenia fusiformis	Owenfusi

1.00	43	Pagurus longicarpus	Pagulong
1.00	283	Monoculodes sp	Monosp

Group: SouthRce
Sample unit: PEC125

Value	Code	Species	Code Name
12.00	80	Nematoda sp	Nemasp
1.00	96	Paraphoxus spinosus	Paraspin
87.00	2	Capitellidae sp	Capisp
3.00	13	Eumida sanguinea	Eumisang
4.00	20	Exogone dispar	Exogdisp
10.00	33	Lembos smithi	Lembsmit
5.00	4	Odontosyllis fulgurans	Odonfulg
4.00	53	Panopeus herbstii	Panoherb
1.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
4.00	1	Oligochaeta sp	Oligsp
65.00	75	Crepidula fornicata	Crepforn
1.00	104	Nucula tenuis	Nucutenu
4.00	123	Podarke obscura	Podaobsc
1.00	78	Chaetopleura apiculata	Chaeapic
1.00	62	Anadara transversa	Anadtran
2.00	74	Seila adamsi	Seiladam
1.00	37	Paracaprella tenius	Parateni
1.00	294	Urosalpinx cinerea	Uroscine
30.00	295	Bittium alternatum	Bittalte
27.00	41	Elasmopus levis	Elaslevi
1.00	137	Mulinia lateralis	Mulilate

Group: SouthRce
Sample unit: PEC126

Value	Code	Species	Code Name
15.00	96	Paraphoxus spinosus	Paraspin
215.00	2	Capitellidae sp	Capisp
2.00	111	Erichthonius brasiliensis	Ericbras
1.00	33	Lembos smithi	Lembsmit
4.00	66	Nucula proxima	Nucuprox
11.00	11	Aricidea catherinae	Ariccath
3.00	140	Glycera americana	Glycamer
1.00	131	Prionospio heterobranchia	Priohete
1.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
8.00	75	Crepidula fornicata	Crepforn
3.00	123	Podarke obscura	Podaobsc
6.00	46	Batea catharinensis	Batecath
6.00	21	Parapionosyllis longicirrata	Paralong
2.00	105	Rudilemboides naglei	Rudinagl
12.00	41	Elasmopus levis	Elaslevi

Group: SouthRce
Sample unit: PEC127

Value	Code	Species	Code Name
3.00	89	Crassinella mactracea	Crasmact
2.00	64	Lyonsia hyalina	Lyonhyal
19.00	2	Capitellidae sp	Capisp
2.00	20	Exogone dispar	Exogdisp
11.00	66	Nucula proxima	Nucuprox
5.00	82	Ostracod A	OstrA
4.00	264	Scoloplos sp	Scolsp
4.00	23	Sphaerosyllis hystrix	Sphahyst
5.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr

15.00	11	Aricidea catherinae	Ariccath
3.00	238	Glycinde solitaria	Glycsoli
1.00	7	Nephtys picta	Nephpict
13.00	1	Oligochaeta sp	Oligsp
1.00	107	Pectinaria gouldii	Pectgoul
12.00	69	Tellina agilis	Tellagil
5.00	25	Tharyx sp	Tharsp
1.00	75	Crepidula fornicata	Crepforn
22.00	18	Spiophanes bombyx	Spiobomb
1.00	50	Oxyurostylis smithi	Oxyusmit
1.00	172	Solen viridis	Soleviri
1.00	21	Parapionosyllis longicirrata	Paralong
1.00	51	Pandora gouldiana	Pandgoul

Group: SouthRce
Sample unit: PEC128

Value	Code	Species	Code Name
2.00	64	Lyonsia hyalina	Lyonhyal
78.00	80	Nematoda sp	Nemasp
5.00	2	Capitellidae sp	Capisp
3.00	82	Ostracod A	OstrA
14.00	16	Polydora sp	Polydora
2.00	23	Sphaerosyllis hystrix	Sphahyst
16.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr
1.00	11	Aricidea catherinae	Ariccath
14.00	238	Glycinde solitaria	Glycsoli
3.00	160	Melinna cristata	Melicris
5.00	7	Nephtys picta	Nephpict
3.00	97	Prionospio pinnata	Priopinn
2.00	25	Tharyx sp	Tharsp
6.00	292	Clymenella zonalis	Clymzona
25.00	244	Macoma tenta	Macotent
1.00	113	Phyllodoce arenae	Phylaren
7.00	18	Spiophanes bombyx	Spiobomb
1.00	123	Podarke obscura	Podaobsc
1.00	105	Rudilemboides naglei	Rudinagl
1.00	258	Owenia fusiformis	Owenfusi
1.00	137	Mulinia lateralis	Mulilate

Group: SouthRce
Sample unit: PEC129

Value	Code	Species	Code Name
2.00	80	Nematoda sp	Nemasp
4.00	16	Polydora sp	Polydora
24.00	25	Tharyx sp	Tharsp
20.00	244	Macoma tenta	Macotent
5.00	167	Amphioplus abditus	Amphabdi
1.00	145	Gyptis vittata	Gyptvitt
4.00	291	Harmothoe sp	Harmsp
51.00	212	Muniospio sp	Munisp
3.00	210	Nepthys incisa	Neptinci

Group: SouthRce
Sample unit: PEC130

Value	Code	Species	Code Name
4.00	80	Nematoda sp	Nemasp
1.00	11	Aricidea catherinae	Ariccath
1.00	234	Cossura longocirrata	Cosslong
46.00	25	Tharyx sp	Tharsp
57.00	244	Macoma tenta	Macotent
5.00	167	Amphioplus abditus	Amphabdi

1.00	145	Gyptis vittata	Gyptvitt
3.00	291	Harmothoe sp	Harmsp
30.00	212	Muniospio sp	Munisp
1.00	63	Pista palmata	Pistpalm
6.00	210	Nepthys incisa	Neptinci

Group: SouthRce
Sample unit: PEC131

Value	Code	Species	Code Name
5.00	64	Lyonsia hyalina	Lyonhyal
7.00	80	Nematoda sp	Nemasp
54.00	2	Capitellidae sp	Capisp
4.00	66	Nucula proxima	Nucuprox
16.00	82	Ostracod A	OstrA
4.00	16	Polydora sp	Polydora
2.00	264	Scoloplos sp	Scolsp
1.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr
7.00	11	Aricidea catherinae	Ariccath
4.00	238	Glycinde solitaria	Glycsoli
5.00	7	Nephtys picta	Nephpict
6.00	1	Oligochaeta sp	Oligsp
1.00	97	Prionospio pinnata	Priopinn
11.00	69	Tellina agilis	Tellagil
3.00	25	Tharyx sp	Tharsp
1.00	244	Macoma tenta	Macotent
1.00	212	Muniospio sp	Munisp
6.00	18	Spiophanes bombyx	Spiobomb
2.00	51	Pandora gouldiana	Pandgoul
1.00	115	Goniadella gracilis	Gonigrac

Group: SouthRce
Sample unit: PEC132

Value	Code	Species	Code Name
5.00	64	Lyonsia hyalina	Lyonhyal
138.00	80	Nematoda sp	Nemasp
26.00	2	Capitellidae sp	Capisp
5.00	20	Exogone dispar	Exogdisp
10.00	66	Nucula proxima	Nucuprox
7.00	82	Ostracod A	OstrA
5.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
4.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
25.00	11	Aricidea catherinae	Ariccath
7.00	238	Glycinde solitaria	Glycsoli
1.00	7	Nephtys picta	Nephpict
3.00	1	Oligochaeta sp	Oligsp
1.00	131	Prionospio heterobranchia	Priohete
6.00	69	Tellina agilis	Tellagil
4.00	25	Tharyx sp	Tharsp
8.00	177	Acteocina canaliculata	Actecana
1.00	292	Clymenella zonalis	Clymzona
1.00	244	Macoma tenta	Macotent
10.00	18	Spiophanes bombyx	Spiobomb
1.00	21	Parapionosyllis longicirrata	Paralong
3.00	105	Rudilemboides naglei	Rudinagl
1.00	51	Pandora gouldiana	Pandgoul
3.00	14	Polygordius sp	Polygord

Group: SouthRce
Sample unit: PEC133

Value	Code	Species	Code Name

2.00	64	Lyonsia hyalina	Lyonhyal
121.00	80	Nematoda sp	Nemasp
1.00	96	Paraphoxus spinosus	Paraspin
90.00	2	Capitellidae sp	Capisp
34.00	111	Erichthonius brasiliensis	Ericbras
2.00	20	Exogone dispar	Exogdisp
5.00	66	Nucula proxima	Nucuprox
8.00	82	Ostracod A	OstrA
31.00	16	Polydora sp	Polydora
73.00	23	Sphaerosyllis hystrix	Sphahyst
4.00	30	Ampelisca vadorum	Ampevado
4.00	32	Ampelisca verrilli	Ampeverr
14.00	11	Aricidea catherinae	Ariccath
9.00	238	Glycinde solitaria	Glycsoli
5.00	160	Melinna cristata	Melicris
3.00	7	Nephtys picta	Nephpict
7.00	1	Oligochaeta sp	Oligsp
2.00	107	Pectinaria gouldii	Pectgoul
2.00	131	Prionospio heterobranchia	Priohete
3.00	69	Tellina agilis	Tellagil
1.00	177	Acteocina canaliculata	Actecana
5.00	292	Clymenella zonalis	Clymzona
1.00	63	Pista palmata	Pistpalm
6.00	19	Brania wellfleetensis	Branwell
2.00	113	Phyllodoce arenae	Phylaren
11.00	18	Spiophanes bombyx	Spiobomb
1.00	172	Solen viridis	Soleviri
35.00	46	Batea catharinensis	Batecath
1.00	21	Parapionosyllis longicirrata	Paralong
3.00	105	Rudilemboides naglei	Rudinagl
2.00	51	Pandora gouldiana	Pandgoul
1.00	29	Arabella iricolor	Arabiric
72.00	37	Paracaprella tenius	Parateni
2.00	41	Elasmopus levis	Elaslevi
1.00	284	Decapoda megalopa	Decamega
11.00	121	Stenothoe minuta	Stenminu

Group: SouthRce
Sample unit: PEC134

Value	Code	Species	Code Name
80.00	80	Nematoda sp	Nemasp
8.00	96	Paraphoxus spinosus	Paraspin
72.00	2	Capitellidae sp	Capisp
4.00	111	Erichthonius brasiliensis	Ericbras
6.00	13	Eumida sanguinea	Eumisang
1.00	20	Exogone dispar	Exogdisp
2.00	55	Heteromysis formosa	Heteform
3.00	33	Lembos smithi	Lembsmit
1.00	132	Nicolea sp	Nicosp
2.00	66	Nucula proxima	Nucuprox
4.00	4	Odontosyllis fulgurans	Odonfulg
3.00	53	Panopeus herbstii	Panoherb
5.00	16	Polydora sp	Polydora
3.00	22	Sphaerosyllis erinaceus	Sphaerin
1.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
4.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
17.00	238	Glycinde solitaria	Glycsoli
1.00	131	Prionospio heterobranchia	Priohete
1.00	25	Tharyx sp	Tharsp
1.00	244	Macoma tenta	Macotent
1.00	145	Gyptis vittata	Gyptvitt
1.00	189	Brania clavata	Branclav
2.00	123	Podarke obscura	Podaobsc
2.00	46	Batea catharinensis	Batecath
1.00	105	Rudilemboides naglei	Rudinagl

1.00	290	Corbula contracta	Corbcont
2.00	119	Autolytus cornutus	Autocorn
1.00	74	Seila adamsi	Seiladam
2.00	41	Elasmopus levis	Elaslevi
1.00	148	Sabella microphthalma	Sabemicr

Group: SouthRce
Sample unit: PEC135

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
97.00	80	Nematoda sp	Nemasp
2.00	96	Paraphoxus spinosus	Paraspin
37.00	2	Capitellidae sp	Capisp
2.00	13	Eumida sanguinea	Eumisang
1.00	95	Gobiosoma sp	Gobisp
2.00	66	Nucula proxima	Nucuprox
12.00	82	Ostracod A	OstrA
5.00	53	Panopeus herbstii	Panoherb
4.00	23	Sphaerosyllis hystrix	Sphahyst
3.00	30	Ampelisca vadorum	Ampevado
2.00	234	Cossura longocirrata	Cosslong
29.00	238	Glycinde solitaria	Glycsoli
3.00	160	Melinna cristata	Melicris
5.00	7	Nephtys picta	Nephpict
2.00	1	Oligochaeta sp	Oligsp
3.00	97	Prionospio pinnata	Priopinn
5.00	69	Tellina agilis	Tellagil
7.00	25	Tharyx sp	Tharsp
4.00	292	Clymenella zonalis	Clymzona
1.00	244	Macoma tenta	Macotent
1.00	145	Gyptis vittata	Gyptvitt
1.00	123	Podarke obscura	Podaobsc
1.00	105	Rudilemboides naglei	Rudinagl
1.00	62	Anadara transversa	Anadtran
1.00	258	Owenia fusiformis	Owenfusi
1.00	146	Orbinia sp	Orbinia

Group: SouthRce
Sample unit: PEC136

Value	Code	Species	Code Name
5.00	80	Nematoda sp	Nemasp
3.00	2	Capitellidae sp	Capisp
4.00	82	Ostracod A	OstrA
4.00	16	Polydora sp	Polydora
2.00	30	Ampelisca vadorum	Ampevado
2.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
3.00	25	Tharyx sp	Tharsp
1.00	177	Acteocina canaliculata	Actecana
1.00	292	Clymenella zonalis	Clymzona
38.00	244	Macoma tenta	Macotent
17.00	167	Amphioplus abditus	Amphabdi
1.00	145	Gyptis vittata	Gyptvitt
4.00	291	Harmothoe sp	Harmsp
48.00	212	Muniospio sp	Munisp
1.00	63	Pista palmata	Pistpalm
1.00	210	Nepthys incisa	Neptinci
1.00	204	Anoplodactylus lentus	Anoplent

Group: SouthRce
Sample unit: PEC137

Value	Code	Species	Code Name

4.00	80	Nematoda sp	Nemasp
1.00	96	Paraphoxus spinosus	Paraspin
19.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
1.00	33	Lembos smithi	Lembsmit
2.00	4	Odontosyllis fulgurans	Odonfulg
3.00	53	Panopeus herbstii	Panoherb
2.00	16	Polydora sp	Polydora
3.00	22	Sphaerosyllis erinaceus	Sphaerin
2.00	30	Ampelisca vadorum	Ampevado
5.00	11	Aricidea catherinae	Ariccath
1.00	234	Cossura longocirrata	Cosslong
2.00	140	Glycera americana	Glycamer
4.00	238	Glycinde solitaria	Glycsoli
1.00	7	Nephtys picta	Nephpict
1.00	1	Oligochaeta sp	Oligsp
17.00	97	Prionospio pinnata	Priopinn
1.00	59	Pinnixa sp	Pinnixa
2.00	123	Podarke obscura	Podaobsc
1.00	119	Autolytus cornutus	Autocorn
1.00	210	Nepthys incisa	Neptinci
1.00	37	Paracaprella tenius	Parateni
1.00	135	Schistomeringos rudolphi	Schirudo

Group: SouthRce
Sample unit: PEC138

Value	Code	Species	Code Name
4.00	64	Lyonsia hyalina	Lyonhyal
18.00	80	Nematoda sp	Nemasp
14.00	2	Capitellidae sp	Capisp
1.00	66	Nucula proxima	Nucuprox
6.00	82	Ostracod A	OstrA
8.00	30	Ampelisca vadorum	Ampevado
2.00	238	Glycinde solitaria	Glycsoli
2.00	160	Melinna cristata	Melicris
5.00	7	Nephtys picta	Nephpict
4.00	1	Oligochaeta sp	Oligsp
3.00	107	Pectinaria gouldii	Pectgoul
5.00	97	Prionospio pinnata	Priopinn
4.00	69	Tellina agilis	Tellagil
9.00	292	Clymenella zonalis	Clymzona
9.00	244	Macoma tenta	Macotent
2.00	59	Pinnixa sp	Pinnixa
1.00	51	Pandora gouldiana	Pandgoul
1.00	204	Anoplodactylus lentus	Anoplent

Group: SouthRce
Sample unit: PEC139

Value	Code	Species	Code Name
38.00	2	Capitellidae sp	Capisp
2.00	13	Eumida sanguinea	Eumisang
1.00	20	Exogone dispar	Exogdisp
1.00	33	Lembos smithi	Lembsmit
2.00	132	Nicolea sp	Nicosp
1.00	66	Nucula proxima	Nucuprox
2.00	4	Odontosyllis fulgurans	Odonfulg
2.00	16	Polydora sp	Polydora
2.00	22	Sphaerosyllis erinaceus	Sphaerin
2.00	23	Sphaerosyllis hystrix	Sphahyst
2.00	234	Cossura longocirrata	Cosslong
2.00	140	Glycera americana	Glycamer
9.00	238	Glycinde solitaria	Glycsoli
2.00	7	Nephtys picta	Nephpict
39.00	97	Prionospio pinnata	Priopinn
1.00	145	Gyptis vittata	Gyptvitt

1.00	291	Harmothoe sp	Harmsp
1.00	189	Brania clavata	Branclav
3.00	123	Podarke obscura	Podaobsc
1.00	270	Sabellaria vulgaris	Sabevulg
1.00	62	Anadara transversa	Anadtran
1.00	168	Hydroides dianthus	Hydrdian

Group: SouthRce
Sample unit: PEC140

Value	Code	Species	Code Name
108.00	80	Nematoda sp	Nemasp
17.00	2	Capitellidae sp	Capisp
37.00	82	Ostracod A	OstrA
6.00	23	Sphaerosyllis hystrix	Sphahyst
6.00	30	Ampelisca vadorum	Ampevado
4.00	32	Ampelisca verrilli	Ampeverr
4.00	11	Aricidea catherinae	Ariccath
3.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
3.00	238	Glycinde solitaria	Glycsoli
2.00	160	Melinna cristata	Melicris
8.00	7	Nephtys picta	Nephpict
2.00	1	Oligochaeta sp	Oligsp
3.00	107	Pectinaria gouldii	Pectgoul
28.00	97	Prionospio pinnata	Priopinn
3.00	182	Scolelepis squamata	Scolsqua
1.00	25	Tharyx sp	Tharsp
2.00	177	Acteocina canaliculata	Actecana
5.00	292	Clymenella zonalis	Clymzona
19.00	244	Macoma tenta	Macotent
3.00	212	Muniospio sp	Munisp
4.00	19	Brania wellfleetensis	Branwell
6.00	70	Mercenaria mercenaria	Mercmerc
3.00	51	Pandora gouldiana	Pandgoul
1.00	74	Seila adamsi	Seiladam
5.00	258	Owenia fusiformis	Owenfusi
1.00	137	Mulinia lateralis	Mulilate
2.00	204	Anoplodactylus lentus	Anoplent

Group: SouthRce
Sample unit: PEC141

Value	Code	Species	Code Name
2.00	2	Capitellidae sp	Capisp
5.00	16	Polydora sp	Polydora
2.00	30	Ampelisca vadorum	Ampevado
2.00	11	Aricidea catherinae	Ariccath
2.00	140	Glycera americana	Glycamer
1.00	97	Prionospio pinnata	Priopinn
35.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
3.00	244	Macoma tenta	Macotent
18.00	167	Amphioplus abditus	Amphabdi
10.00	291	Harmothoe sp	Harmsp
37.00	212	Muniospio sp	Munisp
4.00	63	Pista palmata	Pistpalm
1.00	123	Podarke obscura	Podaobsc
1.00	29	Arabella iricolor	Arabiric
3.00	210	Nepthys incisa	Neptinci
3.00	99	Turbellaria sp	Turbelsp

Group: SouthRce
Sample unit: PEC142

Value	Code	Species	Code Name

44.00	80	Nematoda sp	Nemasp
32.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
1.00	66	Nucula proxima	Nucuprox
72.00	82	Ostracod A	OstrA
1.00	16	Polydora sp	Polydora
1.00	22	Sphaerosyllis erinaceus	Sphaerin
1.00	23	Sphaerosyllis hystrix	Sphahyst
5.00	30	Ampelisca vadorum	Ampevado
1.00	234	Cossura longocirrata	Cosslong
15.00	238	Glycinde solitaria	Glycsoli
5.00	160	Melinna cristata	Melicris
2.00	7	Nephtys picta	Nephpict
3.00	107	Pectinaria gouldii	Pectgoul
38.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
1.00	177	Acteocina canaliculata	Actecana
7.00	244	Macoma tenta	Macotent
1.00	167	Amphioplus abditus	Amphabdi
2.00	145	Gyptis vittata	Gyptvitt
1.00	291	Harmothoe sp	Harmsp
7.00	212	Muniospio sp	Munisp
1.00	214	Crangon septemspinosa	Cransept
3.00	51	Pandora gouldiana	Pandgoul
1.00	204	Anoplodactylus lentus	Anoplent

Group: SouthRce
Sample unit: PEC143

Value	Code	Species	Code Name
6.00	80	Nematoda sp	Nemasp
1.00	2	Capitellidae sp	Capisp
5.00	16	Polydora sp	Polydora
3.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
2.00	97	Prionospio pinnata	Priopinn
37.00	25	Tharyx sp	Tharsp
3.00	167	Amphioplus abditus	Amphabdi
2.00	145	Gyptis vittata	Gyptvitt
2.00	291	Harmothoe sp	Harmsp
16.00	212	Muniospio sp	Munisp
4.00	63	Pista palmata	Pistpalm
5.00	210	Nepthys incisa	Neptinci

Group: SouthRce
Sample unit: PEC144

Value	Code	Species	Code Name
5.00	80	Nematoda sp	Nemasp
11.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
66.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
2.00	23	Sphaerosyllis hystrix	Sphahyst
2.00	30	Ampelisca vadorum	Ampevado
1.00	234	Cossura longocirrata	Cosslong
24.00	238	Glycinde solitaria	Glycsoli
3.00	107	Pectinaria gouldii	Pectgoul
26.00	97	Prionospio pinnata	Priopinn
2.00	182	Scolelepis squamata	Scolsqua
1.00	25	Tharyx sp	Tharsp
8.00	244	Macoma tenta	Macotent
7.00	167	Amphioplus abditus	Amphabdi
1.00	291	Harmothoe sp	Harmsp
5.00	212	Muniospio sp	Munisp
1.00	51	Pandora gouldiana	Pandgoul

2.00	210	Nepthys incisa	Neptinci
1.00	258	Owenia fusiformis	Owenfusi

Group: SouthRce
Sample unit: PEC145

Value	Code	Species	Code Name
4.00	80	Nematoda sp	Nemasp
30.00	2	Capitellidae sp	Capisp
3.00	66	Nucula proxima	Nucuprox
44.00	82	Ostracod A	OstrA
1.00	16	Polydora sp	Polydora
1.00	30	Ampelisca vadorum	Ampevado
2.00	234	Cossura longocirrata	Cosslong
15.00	238	Glycinde solitaria	Glycsoli
1.00	160	Melinna cristata	Melicris
1.00	7	Nephtys picta	Nephpict
7.00	83	Ostracod B	OstrB
10.00	107	Pectinaria gouldii	Pectgoul
27.00	97	Prionospio pinnata	Priopinn
6.00	177	Acteocina canaliculata	Actecana
7.00	244	Macoma tenta	Macotent
4.00	167	Amphioplus abditus	Amphabdi
3.00	145	Gyptis vittata	Gyptvitt
2.00	291	Harmothoe sp	Harmsp
1.00	212	Muniospio sp	Munisp
1.00	123	Podarke obscura	Podaobsc
1.00	290	Corbula contracta	Corbcont
1.00	204	Anoplodactylus lentus	Anoplent

Group: SouthRce
Sample unit: PEC146

Value	Code	Species	Code Name
2.00	64	Lyonsia hyalina	Lyonhyal
16.00	80	Nematoda sp	Nemasp
4.00	96	Paraphoxus spinosus	Paraspin
81.00	2	Capitellidae sp	Capisp
7.00	111	Erichthonius brasiliensis	Ericbras
4.00	20	Exogone dispar	Exogdisp
1.00	33	Lembos smithi	Lembsmit
2.00	66	Nucula proxima	Nucuprox
9.00	4	Odontosyllis fulgurans	Odonfulg
3.00	53	Panopeus herbstii	Panoherb
15.00	16	Polydora sp	Polydora
5.00	22	Sphaerosyllis erinaceus	Sphaerin
5.00	23	Sphaerosyllis hystrix	Sphahyst
14.00	11	Aricidea catherinae	Ariccath
1.00	234	Cossura longocirrata	Cosslong
1.00	238	Glycinde solitaria	Glycsoli
2.00	7	Nephtys picta	Nephpict
16.00	97	Prionospio pinnata	Priopinn
1.00	167	Amphioplus abditus	Amphabdi
2.00	291	Harmothoe sp	Harmsp
1.00	212	Muniospio sp	Munisp
3.00	189	Brania clavata	Branclav
6.00	46	Batea catharinensis	Batecath
1.00	270	Sabellaria vulgaris	Sabevulg
1.00	105	Rudilemboides naglei	Rudinagl
2.00	119	Autolytus cornutus	Autocorn
1.00	74	Seila adamsi	Seiladam
9.00	37	Paracaprella tenius	Parateni
1.00	41	Elasmopus levis	Elaslevi

Group: OrienDel
Sample unit: PEC151

Value	Code	Species	Code Name
2.00	89	Crassinella mactracea	Crasmact
63.00	80	Nematoda sp	Nemasp
2.00	96	Paraphoxus spinosus	Paraspin
2.00	35	Caprella penantis	Caprpena
3.00	13	Eumida sanguinea	Eumisang
14.00	20	Exogone dispar	Exogdisp
2.00	66	Nucula proxima	Nucuprox
1.00	4	Odontosyllis fulgurans	Odonfulg
1.00	53	Panopeus herbstii	Panoherb
4.00	16	Polydora sp	Polydora
1.00	23	Sphaerosyllis hystrix	Sphahyst
11.00	30	Ampelisca vadorum	Ampevado
3.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
1.00	7	Nephtys picta	Nephpict
2.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
28.00	291	Harmothoe sp	Harmsp
2.00	18	Spiophanes bombyx	Spiobomb
1.00	50	Oxyurostylis smithi	Oxyusmit
3.00	172	Solen viridis	Soleviri
1.00	46	Batea catharinensis	Batecath
3.00	39	Erichthonius sp	Ericsp
1.00	105	Rudilemboides naglei	Rudinagl
1.00	14	Polygordius sp	Polygord
3.00	119	Autolytus cornutus	Autocorn
1.00	110	Syllides setosa	Syllseto
18.00	37	Paracaprella tenius	Parateni
3.00	41	Elasmopus levis	Elaslevi
96.00	121	Stenothoe minuta	Stenminu
23.00	143	Ampharete arctica	Ampharct
11.00	125	Leptochelia savignyi	Leptsavi
12.00	296	Mytilus edulis	Mytiedul
3.00	299	Unciola serrata	Unciserr

Group: OrienDel
Sample unit: PEC152

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
21.00	80	Nematoda sp	Nemasp
5.00	32	Ampelisca verrilli	Ampeverr
5.00	11	Aricidea catherinae	Ariccath
2.00	7	Nephtys picta	Nephpict
1.00	1	Oligochaeta sp	Oligsp
3.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
1.00	172	Solen viridis	Soleviri
1.00	103	Spisula solidissima	Spissoli
10.00	134	Schistomeringos caecus	Schicaec
12.00	143	Ampharete arctica	Ampharct
1.00	114	Glycera dibranchiata	Glycdibr
6.00	9	Travisia carnea	Travcarn

Group: OrienDel
Sample unit: PEC153

Value	Code	Species	Code Name
9.00	2	Capitellidae sp	Capisp
10.00	13	Eumida sanguinea	Eumisang
10.00	20	Exogone dispar	Exogdisp
7.00	33	Lembos smithi	Lembsmit
9.00	132	Nicolea sp	Nicosp

5.00	66	Nucula proxima	Nucuprox
3.00	4	Odontosyllis fulgurans	Odonfulg
11.00	53	Panopeus herbstii	Panoherb
4.00	16	Polydora sp	Polydora
2.00	22	Sphaerosyllis erinaceus	Sphaerin
2.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr
1.00	238	Glycinde solitaria	Glycsoli
31.00	1	Oligochaeta sp	Oligsp
2.00	131	Prionospio heterobranchia	Priohete
58.00	25	Tharyx sp	Tharsp
27.00	291	Harmothoe sp	Harmsp
2.00	189	Brania clavata	Branclav
155.00	75	Crepidula fornicata	Crepforn
1.00	158	Cumingia tellinoides	Cumitell
2.00	78	Chaetopleura apiculata	Chaeapic
1.00	62	Anadara transversa	Anadtran
1.00	29	Arabella iricolor	Arabiric
1.00	295	Bittium alternatum	Bittalte
1.00	143	Ampharete arctica	Ampharct
12.00	76	Crepidula plana	Crepplan
2.00	156	Spio sp	Spiosp

Group: OrienDel
Sample unit: PEC154

Value	Code	Species	Code Name
78.00	80	Nematoda sp	Nemasp
46.00	2	Capitellidae sp	Capisp
3.00	13	Eumida sanguinea	Eumisang
4.00	20	Exogone dispar	Exogdisp
1.00	33	Lembos smithi	Lembsmit
8.00	132	Nicolea sp	Nicosp
1.00	4	Odontosyllis fulgurans	Odonfulg
1.00	53	Panopeus herbstii	Panoherb
2.00	16	Polydora sp	Polydora
1.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
6.00	11	Aricidea catherinae	Ariccath
3.00	140	Glycera americana	Glycamer
16.00	1	Oligochaeta sp	Oligsp
2.00	131	Prionospio heterobranchia	Priohete
237.00	25	Tharyx sp	Tharsp
5.00	291	Harmothoe sp	Harmsp
2.00	189	Brania clavata	Branclav
13.00	75	Crepidula fornicata	Crepforn
1.00	50	Oxyurostylis smithi	Oxyusmit
1.00	78	Chaetopleura apiculata	Chaeapic
1.00	29	Arabella iricolor	Arabiric
1.00	37	Paracaprella tenius	Parateni
3.00	143	Ampharete arctica	Ampharct
2.00	156	Spio sp	Spiosp

Group: OrienDel
Sample unit: PEC155

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
177.00	80	Nematoda sp	Nemasp
3.00	129	Unciola irrorata	Unciirro
24.00	2	Capitellidae sp	Capisp
1.00	95	Gobiosoma sp	Gobisp
1.00	55	Heteromysis formosa	Heteform
2.00	53	Panopeus herbstii	Panoherb
12.00	30	Ampelisca vadorum	Ampevado
2.00	32	Ampelisca verrilli	Ampeverr
4.00	11	Aricidea catherinae	Ariccath

2.00	7	Nephtys picta	Nephpict
4.00	1	Oligochaeta sp	Oligsp
2.00	69	Tellina agilis	Tellagil
79.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
2.00	291	Harmothoe sp	Harmsp
10.00	75	Crepidula fornicata	Crepforn
9.00	18	Spiophanes bombyx	Spiobomb
1.00	172	Solen viridis	Soleviri
1.00	39	Erichthonius sp	Ericsp
2.00	21	Parapionosyllis longicirrata	Paralong
1.00	43	Pagurus longicarpus	Pagulong
1.00	115	Goniadella gracilis	Gonigrac
1.00	121	Stenothoe minuta	Stenminu
26.00	143	Ampharete arctica	Ampharct
1.00	296	Mytilus edulis	Mytiedul
11.00	76	Crepidula plana	Crepplan
2.00	156	Spio sp	Spiosp
63.00	79	Balanus sp	Balasp
1.00	142	Scalibregma inflatum	Scalinfl

Group: OrienDel
Sample unit: PEC156

Value	Code	Species	Code Name
101.00	80	Nematoda sp	Nemasp
6.00	129	Unciola irrorata	Unciirro
5.00	153	Asychis elongata	Asycelon
1.00	2	Capitellidae sp	Capisp
3.00	30	Ampelisca vadorum	Ampevado
2.00	1	Oligochaeta sp	Oligsp
1.00	69	Tellina agilis	Tellagil
2.00	25	Tharyx sp	Tharsp
1.00	59	Pinnixa sp	Pinnixa
3.00	210	Nepthys incisa	Neptinci
1.00	204	Anoplodactylus lentus	Anoplent
1.00	143	Ampharete arctica	Ampharct
1.00	297	Drilonereis magna	Drilmagn
5.00	117	Paraonis gracilis	Paragrac

Group: OrienDel
Sample unit: PEC157

Value	Code	Species	Code Name
2.00	80	Nematoda sp	Nemasp
2.00	129	Unciola irrorata	Unciirro
4.00	153	Asychis elongata	Asycelon
3.00	2	Capitellidae sp	Capisp
1.00	16	Polydora sp	Polydora
4.00	30	Ampelisca vadorum	Ampevado
3.00	11	Aricidea catherinae	Ariccath
3.00	1	Oligochaeta sp	Oligsp
1.00	97	Prionospio pinnata	Priopinn
2.00	25	Tharyx sp	Tharsp
1.00	59	Pinnixa sp	Pinnixa
1.00	180	Cephalaspidea sp	Cephsp
2.00	210	Nepthys incisa	Neptinci
2.00	156	Spio sp	Spiosp
17.00	117	Paraonis gracilis	Paragrac
4.00	200	Lumbrineris fragilis	Lumbfrag
2.00	211	Yoldia limatula	Yoldlima

Group: OrienDel
Sample unit: PEC158

Value	Code	Species	Code Name

7.00	80	Nematoda sp	Nemasp
4.00	129	Unciola irrorata	Unciirro
8.00	153	Asychis elongata	Asycelon
2.00	2	Capitellidae sp	Capisp
5.00	11	Aricidea catherinae	Ariccath
2.00	1	Oligochaeta sp	Oligsp
1.00	97	Prionospio pinnata	Priopinn
6.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
4.00	210	Nepthys incisa	Neptinci
1.00	297	Drilonereis magna	Drilmagn
20.00	117	Paraonis gracilis	Paragrac
3.00	200	Lumbrineris fragilis	Lumbfrag
1.00	8	Nereis succinea	Neresucc

Group: OrienDel
Sample unit: PEC159

Value	Code	Species	Code Name
3.00	80	Nematoda sp	Nemasp
4.00	2	Capitellidae sp	Capisp
39.00	66	Nucula proxima	Nucuprox
9.00	11	Aricidea catherinae	Ariccath
1.00	182	Scolelepis squamata	Scolsqua
28.00	25	Tharyx sp	Tharsp
4.00	177	Acteocina canaliculata	Actecana
3.00	244	Macoma tenta	Macotent
3.00	210	Nepthys incisa	Neptinci
1.00	115	Goniadella gracilis	Gonigrac
1.00	156	Spio sp	Spiosp
21.00	117	Paraonis gracilis	Paragrac
3.00	200	Lumbrineris fragilis	Lumbfrag
4.00	211	Yoldia limatula	Yoldlima

Group: OrienDel
Sample unit: PEC160

Value	Code	Species	Code Name
72.00	80	Nematoda sp	Nemasp
1.00	153	Asychis elongata	Asycelon
10.00	2	Capitellidae sp	Capisp
6.00	16	Polydora sp	Polydora
7.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr
29.00	11	Aricidea catherinae	Ariccath
2.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
5.00	1	Oligochaeta sp	Oligsp
3.00	69	Tellina agilis	Tellagil
118.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
1.00	291	Harmothoe sp	Harmsp
1.00	75	Crepidula fornicata	Crepforn
3.00	18	Spiophanes bombyx	Spiobomb
4.00	21	Parapionosyllis longicirrata	Paralong
9.00	143	Ampharete arctica	Ampharct
8.00	79	Balanus sp	Balasp
3.00	142	Scalibregma inflatum	Scalinfl
2.00	200	Lumbrineris fragilis	Lumbfrag
1.00	68	Ensis directus	Ensidire
1.00	285	Neomysis americana	Neomamer

Group: OrienDel
Sample unit: PEC161

Value	Code	Species	Code Name
62.00	80	Nematoda sp	Nemasp
2.00	153	Asychis elongata	Asycelon
1.00	66	Nucula proxima	Nucuprox
1.00	30	Ampelisca vadorum	Ampevado
7.00	11	Aricidea catherinae	Ariccath
7.00	25	Tharyx sp	Tharsp
3.00	177	Acteocina canaliculata	Actecana
1.00	292	Clymenella zonalis	Clymzona
1.00	161	Ilyanassa trivittata	Ilyatriv
4.00	210	Nepthys incisa	Neptinci
2.00	175	Turbonilla sp	Turbonsp
18.00	117	Paraonis gracilis	Paragrac
1.00	211	Yoldia limatula	Yoldlima
1.00	216	Pherusa sp	Phersp
1.00	280	Unciola sp	Uncisp

Group: OrienDel
Sample unit: PEC162

Value	Code	Species	Code Name
31.00	80	Nematoda sp	Nemasp
5.00	129	Unciola irrorata	Unciirro
4.00	153	Asychis elongata	Asycelon
7.00	2	Capitellidae sp	Capisp
6.00	66	Nucula proxima	Nucuprox
2.00	82	Ostracod A	OstrA
4.00	30	Ampelisca vadorum	Ampevado
15.00	11	Aricidea catherinae	Ariccath
1.00	7	Nephtys picta	Nephpict
1.00	97	Prionospio pinnata	Priopinn
5.00	25	Tharyx sp	Tharsp
2.00	177	Acteocina canaliculata	Actecana
2.00	292	Clymenella zonalis	Clymzona
1.00	122	Drilonereis longa	Drillong
2.00	167	Amphioplus abditus	Amphabdi
1.00	291	Harmothoe sp	Harmsp
7.00	210	Nepthys incisa	Neptinci
1.00	258	Owenia fusiformis	Owenfusi
5.00	175	Turbonilla sp	Turbonsp
5.00	99	Turbellaria sp	Turbelsp
1.00	143	Ampharete arctica	Ampharct
1.00	142	Scalibregma inflatum	Scalinfl
17.00	117	Paraonis gracilis	Paragrac
1.00	211	Yoldia limatula	Yoldlima

Group: OrienDel
Sample unit: PEC163

Value	Code	Species	Code Name
5.00	80	Nematoda sp	Nemasp
4.00	153	Asychis elongata	Asycelon
1.00	11	Aricidea catherinae	Ariccath
1.00	238	Glycinde solitaria	Glycsoli
1.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
8.00	210	Nepthys incisa	Neptinci
5.00	175	Turbonilla sp	Turbonsp
20.00	117	Paraonis gracilis	Paragrac
1.00	280	Unciola sp	Uncisp
1.00	298	Nereis grayi	Neregray

Group: OrienDel
Sample unit: PEC164

Value	Code	Species	Code Name
10.00	80	Nematoda sp	Nemasp
3.00	129	Unciola irrorata	Unciirro
7.00	153	Asychis elongata	Asycelon
7.00	2	Capitellidae sp	Capisp
1.00	30	Ampelisca vadorum	Ampevado
1.00	140	Glycera americana	Glycamer
1.00	7	Nephtys picta	Nephpict
1.00	1	Oligochaeta sp	Oligsp
2.00	292	Clymenella zonalis	Clymzona
1.00	29	Arabella iricolor	Arabiric
6.00	210	Nepthys incisa	Neptinci
1.00	175	Turbonilla sp	Turbonsp
2.00	204	Anoplodactylus lentus	Anoplent
45.00	117	Paraonis gracilis	Paragrac
3.00	200	Lumbrineris fragilis	Lumbfrag
2.00	211	Yoldia limatula	Yoldlima
1.00	178	Sigambra sp	Sigasp

Group: OrienDel
Sample unit: PEC165

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
297.00	80	Nematoda sp	Nemasp
2.00	129	Unciola irrorata	Unciirro
2.00	153	Asychis elongata	Asycelon
9.00	2	Capitellidae sp	Capisp
1.00	66	Nucula proxima	Nucuprox
6.00	30	Ampelisca vadorum	Ampevado
5.00	32	Ampelisca verrilli	Ampeverr
14.00	11	Aricidea catherinae	Ariccath
3.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
19.00	7	Nephtys picta	Nephpict
8.00	1	Oligochaeta sp	Oligsp
1.00	69	Tellina agilis	Tellagil
44.00	25	Tharyx sp	Tharsp
1.00	177	Acteocina canaliculata	Actecana
8.00	292	Clymenella zonalis	Clymzona
4.00	244	Macoma tenta	Macotent
4.00	293	Microphthalmus sczelkowii	Micrscze
1.00	18	Spiophanes bombyx	Spiobomb
3.00	51	Pandora gouldiana	Pandgoul
1.00	210	Nepthys incisa	Neptinci
1.00	175	Turbonilla sp	Turbonsp
1.00	41	Elasmopus levis	Elaslevi
8.00	143	Ampharete arctica	Ampharct
3.00	296	Mytilus edulis	Mytiedul
10.00	142	Scalibregma inflatum	Scalinfl
4.00	117	Paraonis gracilis	Paragrac
1.00	200	Lumbrineris fragilis	Lumbfrag
2.00	211	Yoldia limatula	Yoldlima
1.00	178	Sigambra sp	Sigasp

Group: OrienDel
Sample unit: PEC166

Value	Code	Species	Code Name
7.00	80	Nematoda sp	Nemasp
6.00	129	Unciola irrorata	Unciirro
3.00	153	Asychis elongata	Asycelon
11.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
6.00	16	Polydora sp	Polydora
8.00	30	Ampelisca vadorum	Ampevado

1.00	32	Ampelisca verrilli	Ampeverr
3.00	11	Aricidea catherinae	Ariccath
4.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
5.00	7	Nephtys picta	Nephpict
21.00	1	Oligochaeta sp	Oligsp
3.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
1.00	69	Tellina agilis	Tellagil
14.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
1.00	244	Macoma tenta	Macotent
1.00	75	Crepidula fornicata	Crepforn
1.00	29	Arabella iricolor	Arabiric
1.00	210	Nepthys incisa	Neptinci
9.00	175	Turbonilla sp	Turbonsp
2.00	117	Paraonis gracilis	Paragrac
1.00	298	Nereis grayi	Neregray

Group: OrienDel
Sample unit: PEC167

Value	Code	Species	Code Name
9.00	2	Capitellidae sp	Capisp
3.00	16	Polydora sp	Polydora
1.00	30	Ampelisca vadorum	Ampevado
6.00	1	Oligochaeta sp	Oligsp
1.00	25	Tharyx sp	Tharsp
1.00	244	Macoma tenta	Macotent
2.00	59	Pinnixa sp	Pinnixa
5.00	167	Amphioplus abditus	Amphabdi
2.00	291	Harmothoe sp	Harmsp
6.00	212	Muniospio sp	Munisp
1.00	210	Nepthys incisa	Neptinci
2.00	117	Paraonis gracilis	Paragrac

Group: OrienDel
Sample unit: PEC168

Value	Code	Species	Code Name
28.00	80	Nematoda sp	Nemasp
6.00	2	Capitellidae sp	Capisp
1.00	66	Nucula proxima	Nucuprox
1.00	53	Panopeus herbstii	Panoherb
1.00	30	Ampelisca vadorum	Ampevado
1.00	32	Ampelisca verrilli	Ampeverr
3.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
11.00	7	Nephtys picta	Nephpict
11.00	1	Oligochaeta sp	Oligsp
1.00	69	Tellina agilis	Tellagil
216.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
3.00	293	Microphthalmus sczelkowii	Micrscze
2.00	63	Pista palmata	Pistpalm
2.00	143	Ampharete arctica	Ampharct
2.00	296	Mytilus edulis	Mytiedul
2.00	142	Scalibregma inflatum	Scalinfl
2.00	117	Paraonis gracilis	Paragrac
4.00	200	Lumbrineris fragilis	Lumbfrag
1.00	205	Polydora ligni	Polylign

Group: OrienDel
Sample unit: PEC169

Value	Code	Species	Code Name

1.00	64	Lyonsia hyalina	Lyonhyal
21.00	80	Nematoda sp	Nemasp
3.00	129	Unciola irrorata	Unciirro
3.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
2.00	53	Panopeus herbstii	Panoherb
3.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
43.00	30	Ampelisca vadorum	Ampevado
2.00	32	Ampelisca verrilli	Ampeverr
8.00	11	Aricidea catherinae	Ariccath
13.00	7	Nephtys picta	Nephpict
4.00	1	Oligochaeta sp	Oligsp
2.00	69	Tellina agilis	Tellagil
47.00	25	Tharyx sp	Tharsp
5.00	292	Clymenella zonalis	Clymzona
1.00	18	Spiophanes bombyx	Spiobomb
1.00	123	Podarke obscura	Podaobsc
1.00	62	Anadara transversa	Anadtran
1.00	134	Schistomeringos caecus	Schicaec
10.00	143	Ampharete arctica	Ampharct
6.00	142	Scalibregma inflatum	Scalinfl
2.00	205	Polydora ligni	Polylign

Group: OrienDel
Sample unit: PEC170

Value	Code	Species	Code Name
188.00	80	Nematoda sp	Nemasp
10.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
1.00	66	Nucula proxima	Nucuprox
3.00	264	Scoloplos sp	Scolsp
1.00	30	Ampelisca vadorum	Ampevado
111.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
8.00	1	Oligochaeta sp	Oligsp
15.00	25	Tharyx sp	Tharsp
1.00	291	Harmothoe sp	Harmsp
1.00	19	Brania wellfleetensis	Branwell
2.00	18	Spiophanes bombyx	Spiobomb
35.00	21	Parapionosyllis longicirrata	Paralong
1.00	161	Ilyanassa trivittata	Ilyatriv
10.00	134	Schistomeringos caecus	Schicaec
3.00	143	Ampharete arctica	Ampharct
1.00	156	Spio sp	Spiosp
3.00	142	Scalibregma inflatum	Scalinfl
1.00	200	Lumbrineris fragilis	Lumbfrag

Group: OrienDel
Sample unit: PEC171

Value	Code	Species	Code Name
1.00	89	Crassinella mactracea	Crasmact
3.00	64	Lyonsia hyalina	Lyonhyal
22.00	80	Nematoda sp	Nemasp
4.00	2	Capitellidae sp	Capisp
4.00	66	Nucula proxima	Nucuprox
1.00	53	Panopeus herbstii	Panoherb
9.00	16	Polydora sp	Polydora
2.00	30	Ampelisca vadorum	Ampevado
74.00	11	Aricidea catherinae	Ariccath
6.00	7	Nephtys picta	Nephpict
4.00	1	Oligochaeta sp	Oligsp
2.00	69	Tellina agilis	Tellagil
2.00	25	Tharyx sp	Tharsp

22.00	18	Spiophanes bombyx	Spiobomb
1.00	70	Mercenaria mercenaria	Mercmerc
5.00	21	Parapionosyllis longicirrata	Paralong
1.00	161	Ilyanassa trivittata	Ilyatriv
1.00	134	Schistomeringos caecus	Schicaec
8.00	143	Ampharete arctica	Ampharct
2.00	156	Spio sp	Spiosp
1.00	68	Ensis directus	Ensidire

Group: OrienDel
Sample unit: PEC172

Value	Code	Species	Code Name
376.00	80	Nematoda sp	Nemasp
1.00	61	Anomia simplex	Anomsimp
2.00	20	Exogone dispar	Exogdisp
15.00	132	Nicolea sp	Nicosp
7.00	66	Nucula proxima	Nucuprox
11.00	16	Polydora sp	Polydora
2.00	30	Ampelisca vadorum	Ampevado
2.00	11	Aricidea catherinae	Ariccath
4.00	7	Nephtys picta	Nephpict
2.00	1	Oligochaeta sp	Oligsp
24.00	25	Tharyx sp	Tharsp
5.00	291	Harmothoe sp	Harmsp
73.00	75	Crepidula fornicata	Crepforn
1.00	18	Spiophanes bombyx	Spiobomb
5.00	21	Parapionosyllis longicirrata	Paralong
1.00	14	Polygordius sp	Polygord
3.00	134	Schistomeringos caecus	Schicaec
1.00	295	Bittium alternatum	Bittalte
1.00	41	Elasmopus levis	Elaslevi
7.00	143	Ampharete arctica	Ampharct
1.00	296	Mytilus edulis	Mytiedul
2.00	76	Crepidula plana	Crepplan
1.00	156	Spio sp	Spiosp

Group: PipesCov
Sample unit: PEC173

Value	Code	Species	Code Name
1.00	89	Crassinella mactracea	Crasmact
22.00	80	Nematoda sp	Nemasp
2.00	96	Paraphoxus spinosus	Paraspin
5.00	2	Capitellidae sp	Capisp
3.00	13	Eumida sanguinea	Eumisang
1.00	20	Exogone dispar	Exogdisp
1.00	132	Nicolea sp	Nicosp
1.00	66	Nucula proxima	Nucuprox
1.00	4	Odontosyllis fulgurans	Odonfulg
3.00	1	Oligochaeta sp	Oligsp
1.00	25	Tharyx sp	Tharsp
8.00	291	Harmothoe sp	Harmsp
1.00	189	Brania clavata	Branclav
2.00	138	Isopoda sp	Isopsp
2.00	143	Ampharete arctica	Ampharct
1.00	296	Mytilus edulis	Mytiedul
3.00	299	Unciola serrata	Unciserr
1.00	52	Dyspanopeus sayi	Dyspsayi
3.00	186	Jassa falcata	Jassfalc
1.00	102	Nereis arenaceodonta	Nerearen

Group: PipesCov
Sample unit: PEC174

Value	Code	Species	Code Name

18.00	80	Nematoda sp	Nemasp
2.00	61	Anomia simplex	Anomsimp
18.00	2	Capitellidae sp	Capisp
3.00	13	Eumida sanguinea	Eumisang
16.00	20	Exogone dispar	Exogdisp
1.00	33	Lembos smithi	Lembsmit
2.00	132	Nicolea sp	Nicosp
8.00	4	Odontosyllis fulgurans	Odonfulg
4.00	53	Panopeus herbstii	Panoherb
2.00	16	Polydora sp	Polydora
2.00	22	Sphaerosyllis erinaceus	Sphaerin
1.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
10.00	1	Oligochaeta sp	Oligsp
1.00	83	Ostracod B	OstrB
6.00	291	Harmothoe sp	Harmsp
1.00	189	Brania clavata	Branclav
1.00	19	Brania wellfleetensis	Branwell
14.00	75	Crepidula fornicata	Crepforn
1.00	138	Isopoda sp	Isopsp
1.00	270	Sabellaria vulgaris	Sabevulg
3.00	134	Schistomeringos caecus	Schicaec
1.00	37	Paracaprella tenius	Parateni
1.00	121	Stenothoe minuta	Stenminu
3.00	296	Mytilus edulis	Mytiedul
2.00	76	Crepidula plana	Crepplan
105.00	79	Balanus sp	Balasp
1.00	280	Unciola sp	Uncisp
6.00	300	Autolytus sp	Autosp

Group: PipesCov
Sample unit: PEC175

Value	Code	Species	Code Name
3.00	64	Lyonsia hyalina	Lyonhyal
78.00	80	Nematoda sp	Nemasp
1.00	20	Exogone dispar	Exogdisp
10.00	66	Nucula proxima	Nucuprox
1.00	82	Ostracod A	OstrA
1.00	16	Polydora sp	Polydora
2.00	30	Ampelisca vadorum	Ampevado
4.00	32	Ampelisca verrilli	Ampeverr
4.00	11	Aricidea catherinae	Ariccath
11.00	7	Nephtys picta	Nephpict
7.00	69	Tellina agilis	Tellagil
5.00	25	Tharyx sp	Tharsp
1.00	291	Harmothoe sp	Harmsp
5.00	18	Spiophanes bombyx	Spiobomb
1.00	172	Solen viridis	Soleviri
1.00	105	Rudilemboides naglei	Rudinagl
1.00	14	Polygordius sp	Polygord
2.00	143	Ampharete arctica	Ampharct
1.00	296	Mytilus edulis	Mytiedul

Group: PipesCov
Sample unit: PEC176

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
122.00	80	Nematoda sp	Nemasp
11.00	2	Capitellidae sp	Capisp
10.00	66	Nucula proxima	Nucuprox
1.00	82	Ostracod A	OstrA
1.00	264	Scoloplos sp	Scolsp
1.00	23	Sphaerosyllis hystrix	Sphahyst
5.00	30	Ampelisca vadorum	Ampevado

6.00	32	Ampelisca verrilli	Ampeverr
157.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
7.00	7	Nephtys picta	Nephpict
1.00	107	Pectinaria gouldii	Pectgoul
13.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
2.00	292	Clymenella zonalis	Clymzona
1.00	291	Harmothoe sp	Harmsp
1.00	19	Brania wellfleetensis	Branwell
1.00	113	Phyllodoce arenae	Phylaren
12.00	18	Spiophanes bombyx	Spiobomb
3.00	50	Oxyurostylis smithi	Oxyusmit
1.00	21	Parapionosyllis longicirrata	Paralong
1.00	134	Schistomeringos caecus	Schicaec
2.00	143	Ampharete arctica	Ampharct
1.00	296	Mytilus edulis	Mytiedul
1.00	156	Spio sp	Spiosp
2.00	68	Ensis directus	Ensidire
19.00	205	Polydora ligni	Polylign
1.00	48	Cyathura polita	Cyatpoli

Group: PipesCov
Sample unit: PEC177

Value	Code	Species	Code Name
37.00	80	Nematoda sp	Nemasp
16.00	2	Capitellidae sp	Capisp
2.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
4.00	30	Ampelisca vadorum	Ampevado
9.00	32	Ampelisca verrilli	Ampeverr
1.00	238	Glycinde solitaria	Glycsoli
13.00	7	Nephtys picta	Nephpict
2.00	1	Oligochaeta sp	Oligsp
9.00	69	Tellina agilis	Tellagil
2.00	25	Tharyx sp	Tharsp
1.00	244	Macoma tenta	Macotent
1.00	18	Spiophanes bombyx	Spiobomb
1.00	115	Goniadella gracilis	Gonigrac
1.00	156	Spio sp	Spiosp
2.00	280	Unciola sp	Uncisp
1.00	301	Magelona sp	Magesp

Group: PipesCov
Sample unit: PEC178

Value	Code	Species	Code Name
63.00	80	Nematoda sp	Nemasp
62.00	2	Capitellidae sp	Capisp
6.00	82	Ostracod A	OstrA
3.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
4.00	32	Ampelisca verrilli	Ampeverr
1.00	11	Aricidea catherinae	Ariccath
8.00	234	Cossura longocirrata	Cosslong
3.00	238	Glycinde solitaria	Glycsoli
6.00	7	Nephtys picta	Nephpict
58.00	1	Oligochaeta sp	Oligsp
1.00	69	Tellina agilis	Tellagil
3.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
2.00	244	Macoma tenta	Macotent
1.00	200	Lumbrineris fragilis	Lumbfrag
2.00	68	Ensis directus	Ensidire

Group: PipesCov
Sample unit: PEC179

Value	Code	Species	Code Name
1.00	153	Asychis elongata	Asycelon
1.00	7	Nephtys picta	Nephpict
2.00	1	Oligochaeta sp	Oligsp
1.00	244	Macoma tenta	Macotent
2.00	167	Amphioplus abditus	Amphabdi
1.00	291	Harmothoe sp	Harmsp

Group: PipesCov
Sample unit: PEC180

Value	Code	Species	Code Name
1.00	64	Lyonsia hyalina	Lyonhyal
101.00	80	Nematoda sp	Nemasp
16.00	2	Capitellidae sp	Capisp
2.00	13	Eumida sanguinea	Eumisang
5.00	66	Nucula proxima	Nucuprox
3.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
56.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
3.00	23	Sphaerosyllis hystrix	Sphahyst
11.00	30	Ampelisca vadorum	Ampevado
9.00	32	Ampelisca verrilli	Ampeverr
4.00	11	Aricidea catherinae	Ariccath
1.00	140	Glycera americana	Glycamer
1.00	238	Glycinde solitaria	Glycsoli
11.00	7	Nephtys picta	Nephpict
23.00	1	Oligochaeta sp	Oligsp
1.00	131	Prionospio heterobranchia	Priohete
4.00	69	Tellina agilis	Tellagil
2.00	25	Tharyx sp	Tharsp
4.00	177	Acteocina canaliculata	Actecana
1.00	167	Amphioplus abditus	Amphabdi
2.00	291	Harmothoe sp	Harmsp
1.00	63	Pista palmata	Pistpalm
3.00	19	Brania wellfleetensis	Branwell
3.00	18	Spiophanes bombyx	Spiobomb
1.00	123	Podarke obscura	Podaobsc
7.00	21	Parapionosyllis longicirrata	Paralong
1.00	105	Rudilemboides naglei	Rudinagl
2.00	110	Syllides setosa	Syllseto
1.00	175	Turbonilla sp	Turbonsp
5.00	143	Ampharete arctica	Ampharct
3.00	296	Mytilus edulis	Mytiedul
1.00	200	Lumbrineris fragilis	Lumbfrag

Group: PipesCov
Sample unit: PEC181

Value	Code	Species	Code Name
173.00	80	Nematoda sp	Nemasp
1.00	153	Asychis elongata	Asycelon
4.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
1.00	33	Lembos smithi	Lembsmit
3.00	66	Nucula proxima	Nucuprox
1.00	16	Polydora sp	Polydora
1.00	264	Scoloplos sp	Scolsp
1.00	32	Ampelisca verrilli	Ampeverr
3.00	11	Aricidea catherinae	Ariccath
2.00	140	Glycera americana	Glycamer
1.00	160	Melinna cristata	Melicris

2.00	7	Nephtys picta	Nephpict
9.00	1	Oligochaeta sp	Oligsp
2.00	131	Prionospio heterobranchia	Priohete
11.00	69	Tellina agilis	Tellagil
7.00	25	Tharyx sp	Tharsp
2.00	177	Acteocina canaliculata	Actecana
1.00	19	Brania wellfleetensis	Branwell
4.00	18	Spiophanes bombyx	Spiobomb
1.00	21	Parapionosyllis longicirrata	Paralong
1.00	105	Rudilemboides naglei	Rudinagl
1.00	110	Syllides setosa	Syllseto
1.00	296	Mytilus edulis	Mytiedul
13.00	205	Polydora ligni	Polylign

Group: PipesCov
Sample unit: PEC182

Value	Code	Species	Code Name
7.00	80	Nematoda sp	Nemasp
6.00	2	Capitellidae sp	Capisp
2.00	66	Nucula proxima	Nucuprox
1.00	16	Polydora sp	Polydora
4.00	30	Ampelisca vadorum	Ampevado
14.00	32	Ampelisca verrilli	Ampeverr
1.00	140	Glycera americana	Glycamer
1.00	160	Melinna cristata	Melicris
9.00	7	Nephtys picta	Nephpict
17.00	1	Oligochaeta sp	Oligsp
6.00	69	Tellina agilis	Tellagil
1.00	25	Tharyx sp	Tharsp
1.00	177	Acteocina canaliculata	Actecana
2.00	292	Clymenella zonalis	Clymzona
7.00	244	Macoma tenta	Macotent
1.00	151	Solemya velum	Solevelu

Group: PipesCov
Sample unit: PEC183

Value	Code	Species	Code Name
4.00	89	Crassinella mactracea	Crasmact
1.00	96	Paraphoxus spinosus	Paraspin
1.00	20	Exogone dispar	Exogdisp
1.00	4	Odontosyllis fulgurans	Odonfulg
1.00	21	Parapionosyllis longicirrata	Paralong
1.00	290	Corbula contracta	Corbcont
1.00	134	Schistomeringos caecus	Schicaec

Group: PipesCov
Sample unit: PEC184

Value	Code	Species	Code Name
8.00	89	Crassinella mactracea	Crasmact
52.00	80	Nematoda sp	Nemasp
3.00	13	Eumida sanguinea	Eumisang
2.00	20	Exogone dispar	Exogdisp
1.00	66	Nucula proxima	Nucuprox
3.00	53	Panopeus herbstii	Panoherb
1.00	291	Harmothoe sp	Harmsp
1.00	189	Brania clavata	Branclav
1.00	9	Travisia carnea	Travcarn
1.00	102	Nereis arenaceodonta	Nerearen

Group: GPecWest
Sample unit: PEC185

Value	Code	Species	Code Name
73.00	80	Nematoda sp	Nemasp
23.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
1.00	264	Scoloplos sp	Scolsp
3.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
6.00	238	Glycinde solitaria	Glycsoli
1.00	160	Melinna cristata	Melicris
5.00	1	Oligochaeta sp	Oligsp
1.00	131	Prionospio heterobranchia	Priohete
5.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
1.00	69	Tellina agilis	Tellagil
2.00	25	Tharyx sp	Tharsp
10.00	292	Clymenella zonalis	Clymzona
2.00	244	Macoma tenta	Macotent
2.00	19	Brania wellfleetensis	Branwell
1.00	143	Ampharete arctica	Ampharct
3.00	205	Polydora ligni	Polylign

Group: GPecWest
Sample unit: PEC186

Value	Code	Species	Code Name
2.00	153	Asychis elongata	Asycelon
10.00	16	Polydora sp	Polydora
1.00	107	Pectinaria gouldii	Pectgoul
17.00	244	Macoma tenta	Macotent
7.00	167	Amphioplus abditus	Amphabdi
1.00	291	Harmothoe sp	Harmsp
12.00	212	Muniospio sp	Munisp
1.00	63	Pista palmata	Pistpalm
1.00	210	Nepthys incisa	Neptinci

Group: GPecWest
Sample unit: PEC187

Value	Code	Species	Code Name
1.00	153	Asychis elongata	Asycelon
54.00	16	Polydora sp	Polydora
1.00	107	Pectinaria gouldii	Pectgoul
7.00	244	Macoma tenta	Macotent
4.00	167	Amphioplus abditus	Amphabdi
4.00	291	Harmothoe sp	Harmsp
48.00	212	Muniospio sp	Munisp

Group: GPecWest
Sample unit: PEC188

Value	Code	Species	Code Name
12.00	80	Nematoda sp	Nemasp
27.00	2	Capitellidae sp	Capisp
1.00	111	Erichthonius brasiliensis	Ericbras
6.00	13	Eumida sanguinea	Eumisang
10.00	20	Exogone dispar	Exogdisp
2.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
10.00	16	Polydora sp	Polydora
1.00	22	Sphaerosyllis erinaceus	Sphaerin
9.00	23	Sphaerosyllis hystrix	Sphahyst
2.00	30	Ampelisca vadorum	Ampevado

4.00	11	Aricidea catherinae	Ariccath
1.00	234	Cossura longocirrata	Cosslong
2.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
3.00	160	Melinna cristata	Melicris
1.00	7	Nephtys picta	Nephpict
4.00	1	Oligochaeta sp	Oligsp
1.00	131	Prionospio heterobranchia	Priohete
4.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
3.00	25	Tharyx sp	Tharsp
6.00	292	Clymenella zonalis	Clymzona
2.00	75	Crepidula fornicata	Crepforn
1.00	214	Crangon septemspinosa	Cransept
2.00	113	Phyllodoce arenae	Phylaren
1.00	123	Podarke obscura	Podaobsc
1.00	105	Rudilemboides naglei	Rudinagl
2.00	115	Goniadella gracilis	Gonigrac
1.00	285	Neomysis americana	Neomamer

Group: GPecWest
Sample unit: PEC189

Value	Code	Species	Code Name
1.00	2	Capitellidae sp	Capisp
55.00	16	Polydora sp	Polydora
1.00	234	Cossura longocirrata	Cosslong
2.00	1	Oligochaeta sp	Oligsp
6.00	167	Amphioplus abditus	Amphabdi
10.00	212	Muniospio sp	Munisp
2.00	210	Nepthys incisa	Neptinci

Group: GPecWest
Sample unit: PEC190

Value	Code	Species	Code Name
118.00	80	Nematoda sp	Nemasp
1.00	153	Asychis elongata	Asycelon
26.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
1.00	95	Gobiosoma sp	Gobisp
1.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
75.00	16	Polydora sp	Polydora
9.00	23	Sphaerosyllis hystrix	Sphahyst
2.00	30	Ampelisca vadorum	Ampevado
2.00	234	Cossura longocirrata	Cosslong
1.00	140	Glycera americana	Glycamer
2.00	238	Glycinde solitaria	Glycsoli
3.00	7	Nephtys picta	Nephpict
10.00	1	Oligochaeta sp	Oligsp
2.00	107	Pectinaria gouldii	Pectgoul
6.00	97	Prionospio pinnata	Priopinn
3.00	25	Tharyx sp	Tharsp
3.00	244	Macoma tenta	Macotent
4.00	167	Amphioplus abditus	Amphabdi
1.00	145	Gyptis vittata	Gyptvitt
12.00	212	Muniospio sp	Munisp
10.00	75	Crepidula fornicata	Crepforn
1.00	123	Podarke obscura	Podaobsc
1.00	43	Pagurus longicarpus	Pagulong
1.00	68	Ensis directus	Ensidire
2.00	191	Ilyanassa obsoleta	Ilyaobso
1.00	302	Platynereis dumerilii	Platdume

Group: GPecWest

Sample unit: PEC191

Value	Code	Species	Code Name
67.00	80	Nematoda sp	Nemasp
1.00	153	Asychis elongata	Asycelon
43.00	2	Capitellidae sp	Capisp
2.00	13	Eumida sanguinea	Eumisang
2.00	20	Exogone dispar	Exogdisp
1.00	132	Nicolea sp	Nicosp
7.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
24.00	16	Polydora sp	Polydora
2.00	22	Sphaerosyllis erinaceus	Sphaerin
25.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	32	Ampelisca verrilli	Ampeverr
5.00	234	Cossura longocirrata	Cosslong
2.00	140	Glycera americana	Glycamer
26.00	238	Glycinde solitaria	Glycsoli
1.00	160	Melinna cristata	Melicris
6.00	7	Nephtys picta	Nephpict
11.00	1	Oligochaeta sp	Oligsp
26.00	97	Prionospio pinnata	Priopinn
1.00	182	Scolelepis squamata	Scolsqua
2.00	25	Tharyx sp	Tharsp
3.00	292	Clymenella zonalis	Clymzona
1.00	244	Macoma tenta	Macotent
1.00	167	Amphioplus abditus	Amphabdi
1.00	145	Gyptis vittata	Gyptvitt
9.00	212	Muniospio sp	Munisp
1.00	113	Phyllodoce arenae	Phylaren
1.00	123	Podarke obscura	Podaobsc
1.00	210	Nepthys incisa	Neptinci
2.00	115	Goniadella gracilis	Gonigrac

Group: GPecWest
Sample unit: PEC192

Value	Code	Species	Code Name
1.00	2	Capitellidae sp	Capisp
1.00	66	Nucula proxima	Nucuprox
75.00	16	Polydora sp	Polydora
1.00	30	Ampelisca vadorum	Ampevado
2.00	97	Prionospio pinnata	Priopinn
16.00	244	Macoma tenta	Macotent
3.00	167	Amphioplus abditus	Amphabdi
1.00	145	Gyptis vittata	Gyptvitt
1.00	291	Harmothoe sp	Harmsp
32.00	212	Muniospio sp	Munisp
2.00	210	Nepthys incisa	Neptinci

Group: GPecWest
Sample unit: PEC193

Value	Code	Species	Code Name
46.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
1.00	20	Exogone dispar	Exogdisp
1.00	132	Nicolea sp	Nicosp
1.00	66	Nucula proxima	Nucuprox
2.00	53	Panopeus herbstii	Panoherb
2.00	16	Polydora sp	Polydora
3.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	32	Ampelisca verrilli	Ampeverr
5.00	234	Cossura longocirrata	Cosslong
2.00	140	Glycera americana	Glycamer
18.00	238	Glycinde solitaria	Glycsoli

1.00	160	Melinna cristata	Melicris
5.00	1	Oligochaeta sp	Oligsp
4.00	97	Prionospio pinnata	Priopinn
1.00	69	Tellina agilis	Tellagil
4.00	25	Tharyx sp	Tharsp
2.00	292	Clymenella zonalis	Clymzona
1.00	212	Muniospio sp	Munisp
1.00	18	Spiophanes bombyx	Spiobomb
1.00	21	Parapionosyllis longicirrata	Paralong
2.00	205	Polydora ligni	Polylign
1.00	173	Leucon americanus	Leucamer

Group: GPecWest
Sample unit: PEC194

Value	Code	Species	Code Name
5.00	80	Nematoda sp	Nemasp
1.00	153	Asychis elongata	Asycelon
11.00	16	Polydora sp	Polydora
1.00	1	Oligochaeta sp	Oligsp
1.00	97	Prionospio pinnata	Priopinn
9.00	244	Macoma tenta	Macotent
3.00	167	Amphioplus abditus	Amphabdi
3.00	212	Muniospio sp	Munisp
2.00	210	Nepthys incisa	Neptinci
1.00	175	Turbonilla sp	Turbonsp
1.00	209	Rictaxis punctostriatus	Rictpunc

Group: GPecWest
Sample unit: PEC195

Value	Code	Species	Code Name
1.00	89	Crassinella mactracea	Crasmact
94.00	80	Nematoda sp	Nemasp
7.00	2	Capitellidae sp	Capisp
1.00	13	Eumida sanguinea	Eumisang
1.00	53	Panopeus herbstii	Panoherb
1.00	16	Polydora sp	Polydora
4.00	11	Aricidea catherinae	Ariccath
9.00	7	Nephtys picta	Nephpict
1.00	1	Oligochaeta sp	Oligsp
2.00	97	Prionospio pinnata	Priopinn
2.00	69	Tellina agilis	Tellagil
2.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
2.00	244	Macoma tenta	Macotent
1.00	145	Gyptis vittata	Gyptvitt
1.00	191	Ilyanassa obsoleta	Ilyaobso

Group: GPecWest
Sample unit: PEC196

Value	Code	Species	Code Name
97.00	80	Nematoda sp	Nemasp
19.00	2	Capitellidae sp	Capisp
4.00	82	Ostracod A	OstrA
1.00	53	Panopeus herbstii	Panoherb
2.00	16	Polydora sp	Polydora
13.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	140	Glycera americana	Glycamer
8.00	238	Glycinde solitaria	Glycsoli
8.00	7	Nephtys picta	Nephpict
9.00	1	Oligochaeta sp	Oligsp
4.00	97	Prionospio pinnata	Priopinn
4.00	292	Clymenella zonalis	Clymzona

5.00	244	Macoma tenta	Macotent
1.00	59	Pinnixa sp	Pinnixa
1.00	212	Muniospio sp	Munisp
5.00	75	Crepidula fornicata	Crepforn
1.00	270	Sabellaria vulgaris	Sabevulg
1.00	51	Pandora gouldiana	Pandgoul
5.00	258	Owenia fusiformis	Owenfusi
1.00	295	Bittium alternatum	Bittalte
2.00	137	Mulinia lateralis	Mulilate
5.00	79	Balanus sp	Balasp
1.00	298	Nereis grayi	Neregray

Group: GPecWest
Sample unit: PEC197

Value	Code	Species	Code Name
1.00	153	Asychis elongata	Asycelon
15.00	16	Polydora sp	Polydora
2.00	97	Prionospio pinnata	Priopinn
1.00	244	Macoma tenta	Macotent
9.00	167	Amphioplus abditus	Amphabdi
3.00	291	Harmothoe sp	Harmsp
44.00	212	Muniospio sp	Munisp
2.00	123	Podarke obscura	Podaobsc
3.00	210	Nepthys incisa	Neptinci
2.00	175	Turbonilla sp	Turbonsp

Group: GPecWest
Sample unit: PEC198

Value	Code	Species	Code Name
14.00	2	Capitellidae sp	Capisp
1.00	20	Exogone dispar	Exogdisp
6.00	82	Ostracod A	OstrA
2.00	53	Panopeus herbstii	Panoherb
1.00	16	Polydora sp	Polydora
1.00	23	Sphaerosyllis hystrix	Sphahyst
1.00	30	Ampelisca vadorum	Ampevado
3.00	234	Cossura longocirrata	Cosslong
3.00	140	Glycera americana	Glycamer
5.00	238	Glycinde solitaria	Glycsoli
1.00	160	Melinna cristata	Melicris
1.00	7	Nephtys picta	Nephpict
1.00	1	Oligochaeta sp	Oligsp
2.00	107	Pectinaria gouldii	Pectgoul
12.00	97	Prionospio pinnata	Priopinn
2.00	25	Tharyx sp	Tharsp
1.00	292	Clymenella zonalis	Clymzona
7.00	244	Macoma tenta	Macotent
1.00	59	Pinnixa sp	Pinnixa
1.00	212	Muniospio sp	Munisp
1.00	113	Phyllodoce arenae	Phylaren
1.00	43	Pagurus longicarpus	Pagulong
1.00	280	Unciola sp	Uncisp
1.00	205	Polydora ligni	Polylign

Group: GPecWest
Sample unit: PEC199

Value	Code	Species	Code Name
3.00	129	Unciola irrorata	Unciirro
7.00	153	Asychis elongata	Asycelon
10.00	16	Polydora sp	Polydora
4.00	30	Ampelisca vadorum	Ampevado
1.00	244	Macoma tenta	Macotent

4.00	167	Amphioplus abditus	Amphabdi
2.00	291	Harmothoe sp	Harmsp
1.00	175	Turbonilla sp	Turbonsp

Group: GPecWest
Sample unit: PEC200

Value	Code	Species	Code Name
1.00	129	Unciola irrorata	Unciirro
4.00	153	Asychis elongata	Asycelon
16.00	16	Polydora sp	Polydora
1.00	97	Prionospio pinnata	Priopinn
4.00	244	Macoma tenta	Macotent
1.00	59	Pinnixa sp	Pinnixa
9.00	167	Amphioplus abditus	Amphabdi
4.00	291	Harmothoe sp	Harmsp
22.00	212	Muniospio sp	Munisp

Total number of species occurrences in data = 2083

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