

QUANTIFICATION OF EXTENSIVE FRESHWATER INPUT

TO ESTUARINE BENTHOS

by

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INTRODUCTION

Estuaries are typically thought of as highly productive aquatic habitats, and throughout the world they sustain important shellfish cultures and fisheries. This high production, which supports marine food chains, is usually reflected by secondary productivity of the benthos in these habitats (Wolff, 1977). High benthic production is also exhibited in the role estuaries play as nursery grounds for juvenile nekton and shellfish, and in the multitude of shorebirds that feed in these areas.

The Texas coastline in the northwestern Gulf of Mexico is situated in a semi-arid to arid climate which receives usually less than 70 cm of rainfall per year (Flint and Rabalais, 1981a). Thus, many of the estuaries along the Texas coast are often polyhaline systems but are also highly variable and subject to many extremes. Much of this variability is associated with freshwater inflow to these estuaries which is extremely unpredictable. It is thought that this freshwater inflow affects estuarine community species composition, and is important to the vitality and productivity of the estuarine food chains as well as to the harvests of many fisheries related to the estuarine ecosystem such as shrimp. The actual linking pathways between the inflow of freshwater and changes in fishery harvest however, are presently not well understood.

The Corpus Christi Bay ecosystem, one of seven major estuarine systems along the Texas coast, is an ecosystem typical of the variability and extremes discussed above. Freshwater inflows originate from numerous sources including creeks and rivers, rainfall directly on the bay surface, land runoff, and effluent return flows from various industrial, domestic, and agricultural users (Henley and Rauscher, 1980). In addition, oceanic waters from the Gulf of Mexico are thought to be unpredictable in terms of their influences on the bay ecosystem. Actual mixing and major exchange have been observed

only on spring tides (Smith, 1977). Variability in flow from these various sources occurs as a result of numerous natural and man-influenced events such as hurricanes, droughts, channelization, dredging and other alteration of bay structural features. These factors act in concert to establish hydrodynamic and water quality gradients which directly influence the productivity of living resources within the Corpus Christi Bay ecosystem.

Corpus Christi Bay has been characterized by several years of data collection on benthic species distribution and community structure (Holland, et al., 1975; Flint and Young, in press). This characterization covers both temporal and spatial dimensions. Therefore, an historical data base is available in order to evaluate changes to the estuarine benthos related to the occurrence of either a natural or man-induced event within the habitat.

During a 24 hr period beginning with the evening of 18 September 1979 an extensive low pressure system engulfed the south Texas coast. The weather system impacted the Corpus Christi Bay area with tropical storm intensity rains that reached as much as a 33 cm accumulation before the storm ended (NOAA, U.S. Weather Bureau, Corpus Christi, Texas, personal communication). The results of this storm system produced excessive riverine input and local land runoff to Corpus Christi Bay. This storm event, with its associated high freshwater inflow to the estuarine ecosystem, proved to be a relatively unique event to the area. Freshwater inputs to this system had not occurred with such intensity since Hurricane Beulah in 1967 (Flint and Rabalais, 1981b).

The availability of an historical benthic record stimulated interest in evaluating the effect of this storm event upon the ecosystem's productivity as characterized by the benthos. By continuing a study design after September 1979 similar to that used for the historical record, we hoped to document the changes that occurred in the benthic habitat and determine the effect of these changes on total ecosystem productivity, especially fishery yields.

METHODS

Part of the historical benthic data base for Corpus Christi Bay consisted of monthly collections from 1974-1979, taken at six stations located in the northern part of the ecosystem (Figure 1). Results from sampling these stations, three shoal and three channel sites, suggested that the shoal supported one kind of benthic community and the channel a different community (Flint and Younk, in press). Based upon these results, monthly benthic collections were continued at one channel site (Station 1) and one shoal site (Station 4), to monitor changes to the two different communities after the September 1979 rains. Sampling was continued from October 1979 to July 1981.

Bottom water conductivity, temperature, and dissolved oxygen were measured during each collection period at each site with a Hydrolab Surveyor 6. Conductivity was converted to salinity using a standard conductivity-salinity curve adjusted for 25 °C water temperature.

Benthic samples were obtained from the stations during each month of the sampling period using a 0.09 m² modified Petersen grab. Triplicate samples were taken at each collection site during the study period. The contents of the grabs were washed through a 500 μ mesh screen and the retained material preserved in a 10% formalin solution containing Rose Bengal as a vital stain. Benthic macroinvertebrates were separated from the debris in the laboratory by examination under a stereo dissecting microscope, identified to lowest possible taxa, and counted. Wet weight biomass was measured for each total sample plus individually for the dominant taxa. A 15% weight correction was done to compensate for decrease in weight due to preservative effects (Mills and Fournier, 1979).

The measure of species diversity based on species lists recorded for each station during each sampling interval was calculated by the Shannon-Wiener

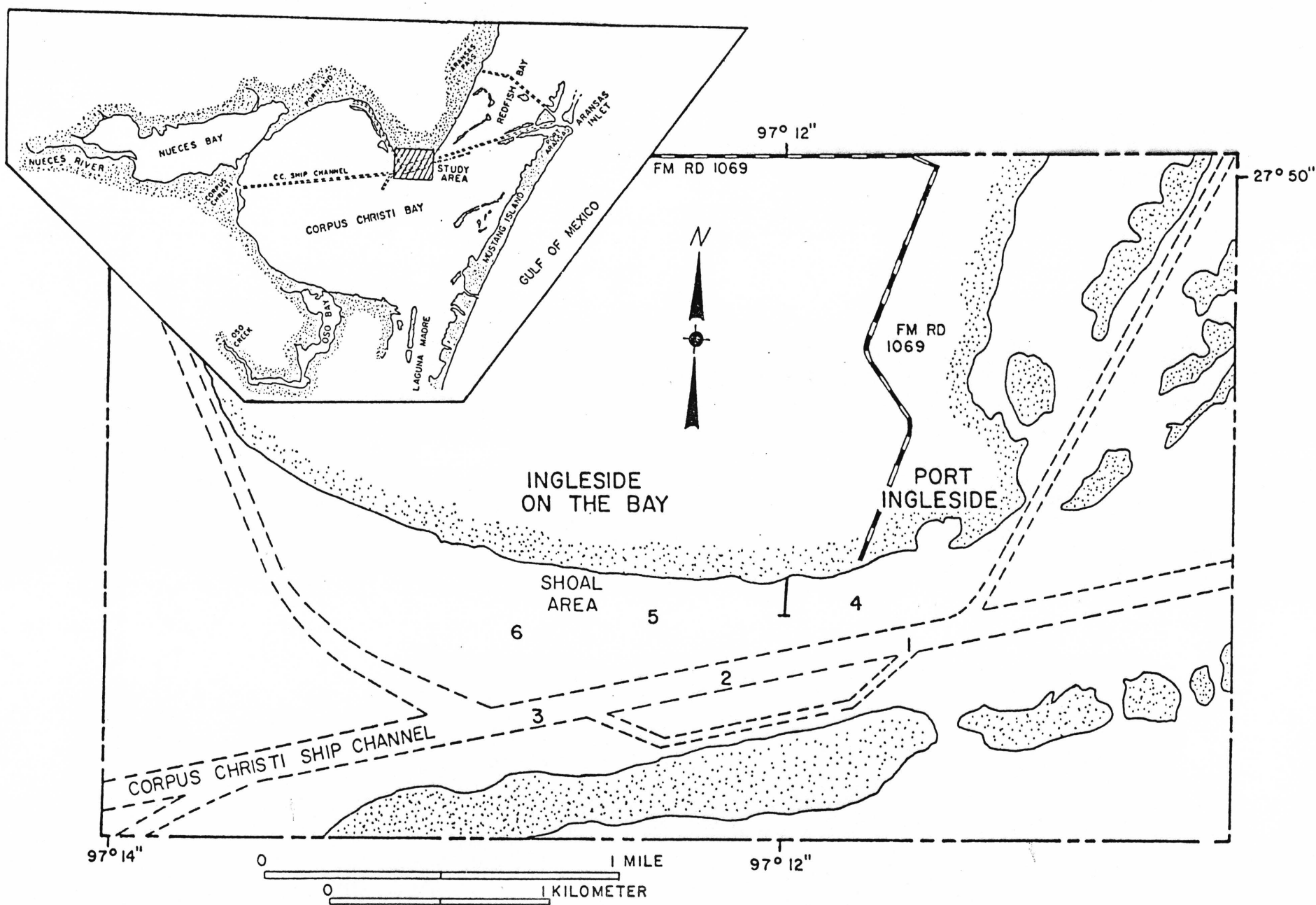


Figure 1. Station locations for benthic sampling in Corpus Christi Bay, 1974-1981. After September 1979 only stations 1 and 4 were sampled. Insert shows study area in respect to total Corpus Christi Bay ecosystem.

diversity index (Pielou, 1966) using $\log_2$ and equitability (Lloyd and Ghelardi, 1964). By combining a diversity index with measures of richness (numbers of species) and evenness (distribution of relative abundance of the species) a reasonable comparison both temporally and between communities could be accomplished.

Species compositions of individual sampling sites over time were compared using the numerical classification technique of cluster analysis. The cluster analysis grouped together sampling periods which were similar in species composition and abundance. These analyses also identified species groups which were similar in distribution temporally, through inverse cluster analysis.

Preliminary analysis of the benthic macroinvertebrate data indicated that several of the dominant species were relatively ubiquitous. Therefore, a classification technique which was unbiased toward species dominance and yet included both quantitative and qualitative information seemed desirable to employ. The Canberra-Metric similarity measure of Lance and Williams (1967) was employed to determine similarity between the entities of sampling period and infaunal species.

As suggested by Day et al. (1971) we chose to include in the cluster analyses, only those species whose total abundance over the study duration (7 yr) was greater than 30 individuals. This criterion alleviated the infrequently taken species and reduced the data base to a more easily workable size. As Day et al. (1971) had done, we compared several initial analyses both with and without the rare species information and found no difference in clustering results. After comparing several data transformations, including the log and fourth root, the square root transformation of species abundances was chosen for analysis, to reduce the heterogeneity effects of the data.

Infaunal biomass was measured during this investigation in order to calculate annual production of the benthos according to the techniques of Allen (1951) and compare these production estimates to fishery harvests. Unfortunately the historical benthic data base (1974-1979) did not include biomass measures for the infauna sampled. Using least-square regression techniques (Sokal and Rohlf, 1969) we attempted to establish a relationship between infaunal total density observed at each station/sampling time with total biomass measured for each station/sampling time. Since the shoal and channel stations represented different communities, regression equations best explaining the relationship between density and biomass were calculated separately for each sampling area. The best correlations between density and biomass were found using fourth-order polynomial regression equations (Figure 2). The shoal density-biomass relationship was better than the channel and the regression equation developed was able to explain 61% of the variation in biomass by density changes. These two regression equations were used to calculate expected infaunal total biomass for the densities observed at both the shoal and channel sites between 1974 and 1979. With these calculations we were then able to estimate benthic annual production for seven years rather than just the two when biomass was actually measured. For the estimates of annual production prior to 1979, only shoal data was used since the correlation between density and biomass was better for this habitat (Figure 2).

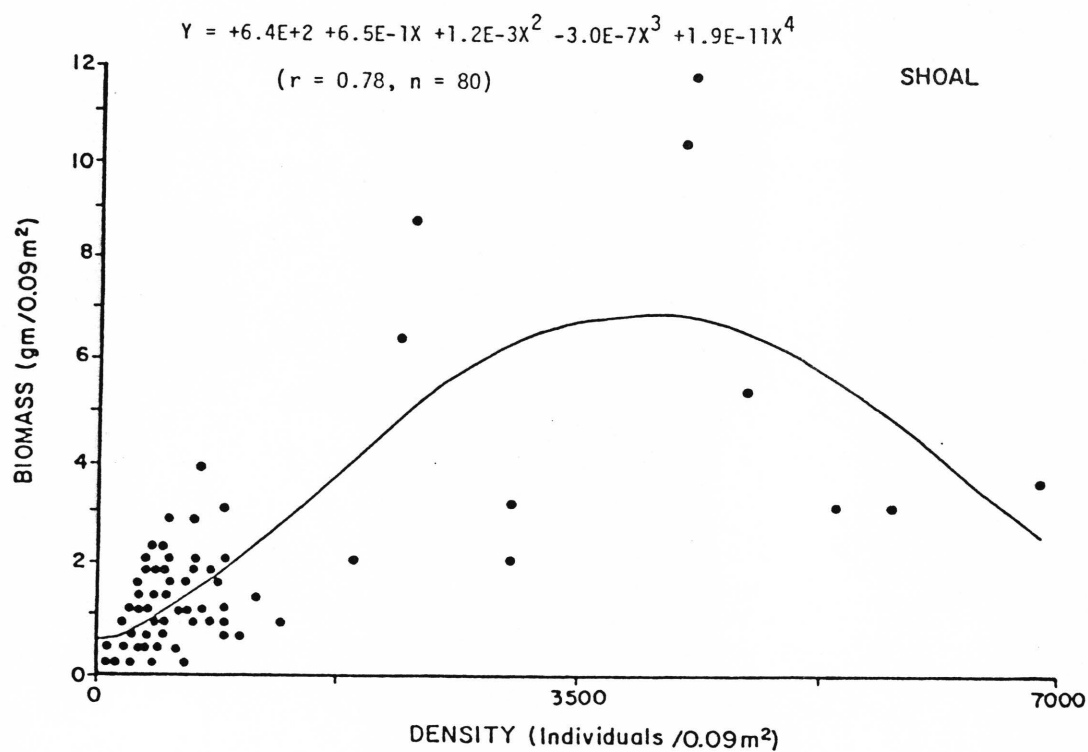
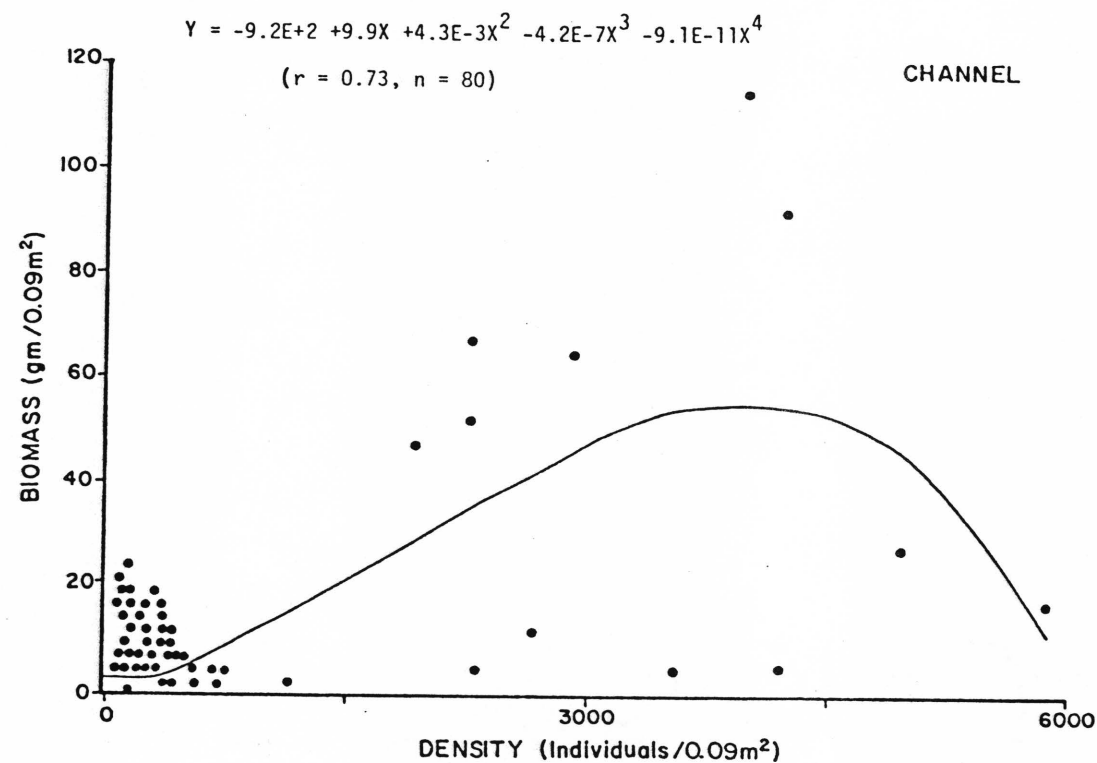


Figure 2. Linear regression best-fit curves of total infaunal biomass correlated against total infaunal density for shoal and channel benthic data collected from 1979-1981 in Corpus Christi Bay.

RESULTS

Study Area Description

Corpus Christi Bay is a shallow estuary, generally less than 5 m deep, with the exception of the ship channel which reaches a maximum depth of 15 m. The Bay is separated from the Gulf of Mexico by a barrier island, Mustang Island, with one main tidal inlet, Aransas Pass, approximately 10 km away from the study area. A second and possibly more influential access to Gulf waters is through the extensive Laguna Madre (Smith, 1978). The main fluvial flow into this estuary is from the Nueces River (Figure 1).

In general, bottom sediments within Corpus Christi Bay are primarily mud in the interior portions, with muddy and shelly sands around the margins. Sediment analysis results of the sampling sites indicated that clays, fine sand, and silt dominated the channel stations (Flint and Younk, in press). A 1-2 cm layer of oxidized brown silt was present at the very surface of these sediments. A layer of blackened sediment lay just below this silty layer, indicating the beginning of anoxic sediments. Little evidence of biogenic activity or tube structures were ever observed in these channel grabs with the exception of an occasional *Diopatra cuprea* tube. In contrast to the channel stations, the shoal stations (4-6) had an overwhelming dominance of fine sands with small amounts of shell and clay (Flint and Younk, in press). There were always numerous tube structures present in these grabs which served to stabilize the surface sediment.

Both meteorological events and tides influenced bay circulation. Observations have indicated that changing wind conditions rapidly affect the Bay's circulation and associated turbidity patterns because it is extensively shallow (Shideler, 1980). Because of the presence of winds on almost a daily basis, the bay is almost always turbid.

Contrasted to the size of the bay system, the riverine input from the Nueces River is small. In addition, tidal cycles have relatively little influence on the majority of bay waters, with the exception of spring tides (Smith, 1977). Therefore, this bay system is relatively sensitive to changes from such factors as infrequent surges of freshwater that usually occur from local cloudbursts. An example of a more catastrophic event to this area would be from a tropical storm, as occurred in 1979, or a hurricane as occurred in 1980 (Hurricane Allen).

Water temperature in the study area (Figure 3) usually reflected ambient air temperatures due to the shallowness of the study sites. In addition, there was rarely any stratification observed in the channel, probably due to sufficient wind mixing. Bottom dissolved oxygen (Figure 4) never indicated the presence of hypoxic conditions in these waters. Dissolved oxygen measures were significantly lower ($P < 0.01$) in the channel during minimum periods (summer) however, than at the shoal stations as tested by one-way analysis of variance. Dissolved oxygen usually peaked every year during the winter months. During the last two years of sampling the winter peaks were significantly lower ($P < 0.01$) than they were during earlier years with the exception of 1974.

Analysis of variance showed that over the duration of observation the channel stations were significantly different ($P < 0.01$) from the shoal stations in terms of bottom water salinity (Figure 5). In most cases channel salinities were higher, reflecting more oceanic conditions. There were also significant differences between years for salinity measures ($P < 0.01$). These differences could almost always be related to weather patterns (e.g. heavy rains) that occurred in the region during these periods. For example, the fall of 1977 and most of 1978 was a very dry year with unusually low rainfall.

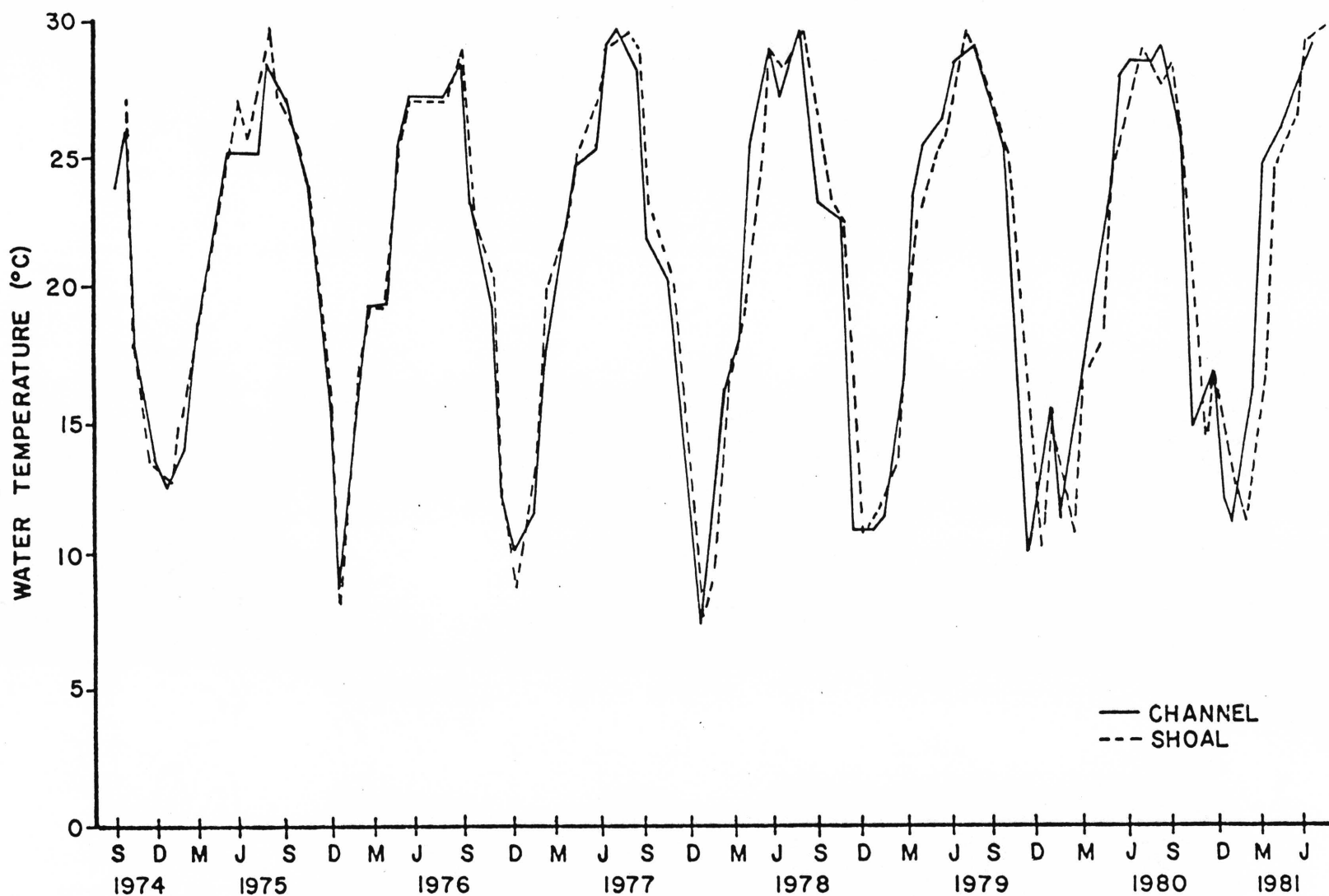
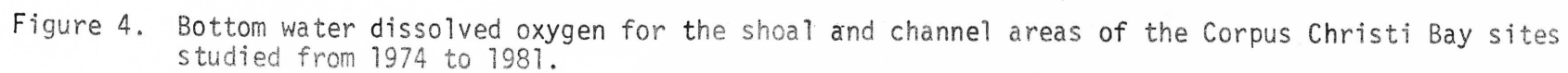
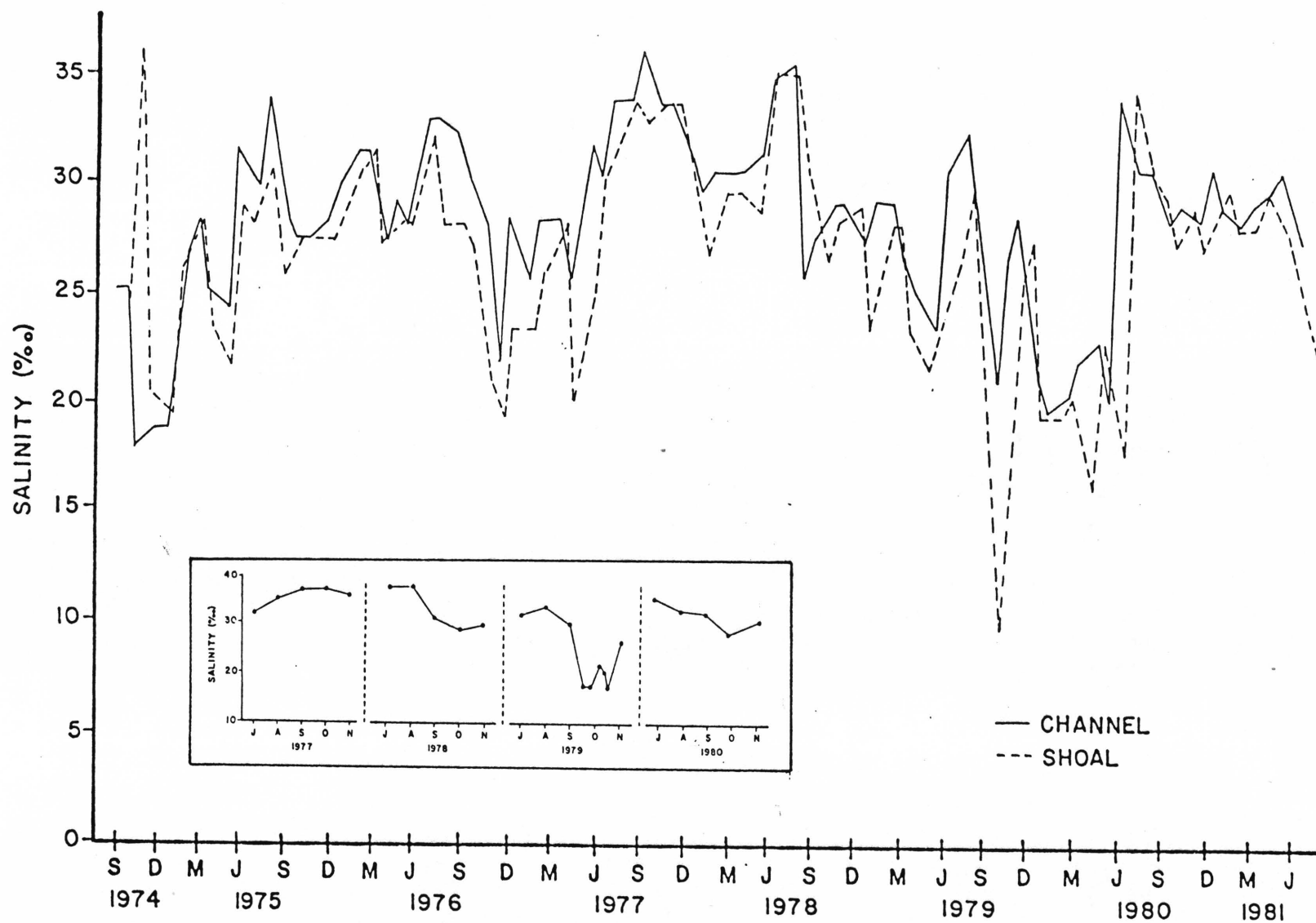


Figure 3. Bottom water temperature for the shoal and channel areas of the Corpus Christi Bay sites studied from 1974 to 1981.





Additionally, the insert of Figure 5 specifically illustrates changes in bay salinities associated with the storm of September 1979. As shown by the seven year pattern, this period of low salinity was unique.

Other factors that may be responsible for changes observed in the benthos over this study were related to human activities in the channel. Obvious bottom sediment disruption in the channel and high turbidity levels at the shoal sites, due to tanker traffic and shrimp trawlers, was observed on several occasions (Flint and Younk, in press). As Schubel et al. (1979) noted, shrimp trawling in Corpus Christi Bay can account for 100 times more resuspension of bay sediments than dredging. Also from September 1974 through March 1975, maintenance dredging occurred in the immediate study area, resulting in deepening of the ship channel.

Benthos Dynamics

A total of 357 taxa comprising 13 phyla was collected during the 7 year investigation of Corpus Christi Bay benthos. A listing of all species and faunal groups observed is presented in Appendix A. A summary by station and sampling period for benthic faunal densities from October 1979 to July 1981 is presented in Appendix B.

The most abundant species for shoal and channel sites combined was the polychaete *Mediomastus californiensis* followed by the two bivalves *Abra aequalis* and *Mulinia lateralis*. Table 1 illustrates the 10 most abundant species for the channel and shoal sites separately. The 10 densest species in the channel community comprised 85% of the total faunal density observed during 7 years. *Abra aequalis* populations represented 35.6% of the total observed density while *Mediomastus californiensis* represented an additional 23.3% of the total infaunal density. In contrast, the 10 densest populations on the shoal (Table 1)

Table 1. Listing of the 10 dominant benthic species according to density and the 10 dominant benthic species according to biomass at the channel and shoal sampling sites in Corpus Christi Bay.

Top Density Species		Top Biomass Species	
Species	Total Density ^a (/0.09 m ²)	Species	Total Biomass ^a (mg/0.09 m ²)
<u>Channel Station</u>			
<i>Abra aequalis</i>	25,152	<i>Abra aequalis</i>	491,505
<i>Mediomastus californiensis</i>	16,494	<i>Diopatra cuprea</i>	25,637
<i>Oligochaete</i>	4,059	<i>Rhynchocoels</i>	19,307
<i>Balanoglossus</i> sp.	3,600	<i>Mulinia lateralis</i>	5,485
<i>Streblospio benedicti</i>	3,069	<i>Polinices duplicatus</i>	5,082
<i>Paraprionospio pinnata</i>	2,421	<i>Mediomastus californiensis</i>	2,404
<i>Rhynchocoels</i>	2,091	<i>Glycera capitata</i>	1,370
<i>Mulinia lateralis</i>	1,449	<i>Paraprionospio pinnata</i>	1,283
<i>Sigambra tentaculata</i>	1,061	<i>Glycera americana</i>	1,244
<i>Cossura delta</i>	959	<i>Pseudeurythoe</i> sp.	997
<u>Shoal Station</u>			
<i>Mediomastus californiensis</i>	34,611	<i>Lyonsia hyalina floridana</i>	15,371
<i>Paraonidae</i> spp. A	12,222	<i>Lucina multilineata</i>	7,757
<i>Lyonsia hyalina floridana</i>	10,844	<i>Rhynchocoels</i>	7,302
<i>Mulinia lateralis</i>	8,712	<i>Abra aequalis</i>	7,182
<i>Abra aequalis</i>	7,077	<i>Mulinia lateralis</i>	5,338
<i>Balanoglossus</i> sp.	4,948	<i>Mediomastus californiensis</i>	2,745
<i>Streblospio benedicti</i>	4,045	<i>Paraonidae</i> spp. A	2,017
<i>Oligochaete</i>	3,937	<i>Clymenella torquata calida</i>	1,802
<i>Rhynchocoels</i>	2,855	<i>Cirratulidae</i>	1,323
<i>Paraonidae</i> spp. B	2,560	<i>Pandora trilineata</i>	1,059

^a Numbers represent total summation for seven years of sampling.

comprised 70% of the total faunal density observed there over 7 years.

M. californiensis was the most abundant species, representing 26% of the total faunal density. Paraonidae spp. A was the next most abundant group (9.2%) followed by the mollusc *Lyonsia hyalina floridana* (8.1%).

With the exception of the polychaete *Diopatra cuprea*, which was mostly observed in the channel community, and the Rhynchocoels group, molluscs comprised the majority of faunal biomass measured during the period of 1979 - 1981 (Table 1). Unlike the density comparisons between shoal and channel species, there was considerable difference in the ranking of dominant taxa according to biomass between the two sampling locations (Table 1). In fact, there were only four fauna common to both sites for the respective biomass lists. Thus, unlike the density patterns for the two benthic communities, different species were responsible for the secondary production dynamics of the two estuarine bottom habitats. In addition, biomass for the 10 top fauna was greater in the channel than on the shoal.

During the winter of 1976 and spring of 1977 salinities exhibited a decrease at the Corpus Christi Bay sites in response to increased rainfall for this period (Figure 5). Another low salinity period was observed during the fall of 1978 and winter of 1979. Number of infaunal species observed during the above two periods showed increasing trends, especially at the shoal site, where species richness was always greater than in the channel (Figure 6). These slight increases in number of species did not compare however, to the increases observed after the storm event of September 1979 when the salinities were the lowest recorded during the entire study (Figure 5).

In respect to general trends in species richness, outside of responding to lowered salinities, occasionally peaks in species richness occurred in the spring of the year with some smaller increases observed in the fall. These

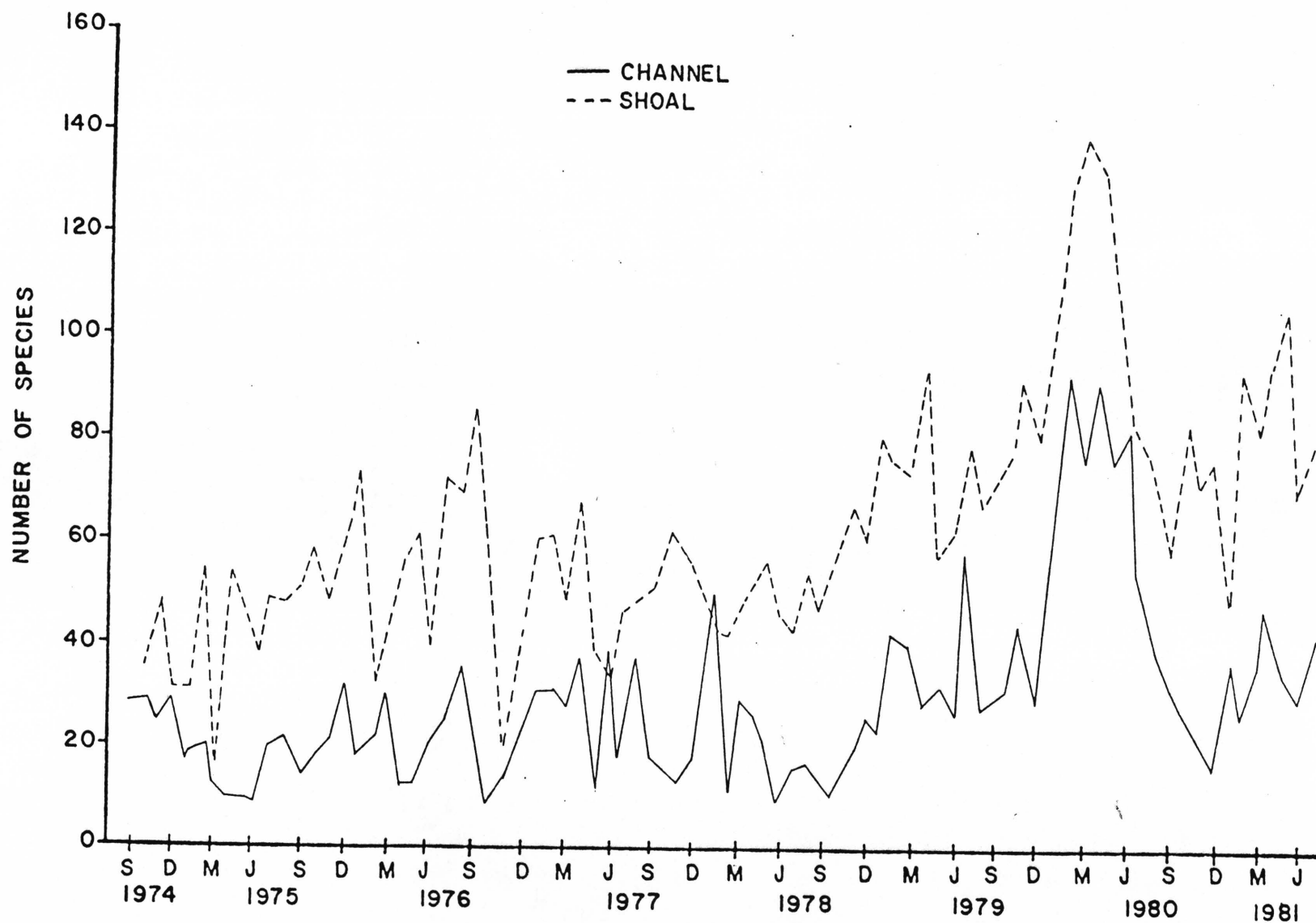
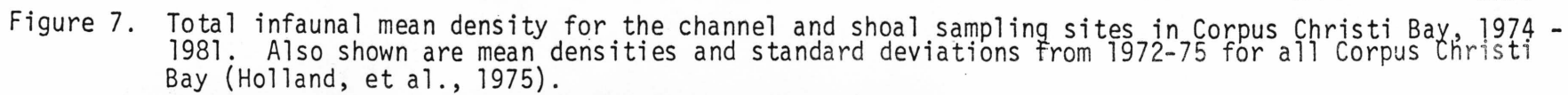


Figure 6. Number of infaunal species observed at the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

patterns were not consistent however, from year to year. Most of the early spring increases in species number were usually related to some of the mollusc populations which always occurred during this period of the year.

Seven year patterns for total infaunal mean density for the channel and shoal sites (Figure 7) were within the range of observations recorded for infaunal density between 1972 - 1975 with the exception of the period after the September 1979 storm. According to Figure 7, increases in density usually corresponded with decreases in salinity (Figure 5), especially at the shallower shoal site. This pattern was most pronounced after the September 1979 storm and freshwater inflow event. During the winter-spring of 1980 (January.- May) total mean infaunal density was greater than had ever been recorded in the Bay before, as indicated by both the data from this study as well as the data from three years of observations between 1972 - 1975 (Holland, et al., 1975).

Total infaunal biomass was only measured for two years of the seven year study of Corpus Christi Bay benthos. A relatively high correlation was established however, between total density and total biomass (see Methods). The regression equations explaining this relationship for both the channel and shoal sites was used to calculate expected biomass based upon density measures for the sampling years prior to 1979. The resulting patterns (Figure 8) suggested that biomass for the infauna usually peaked during the winter-spring period and that these peaks were often associated with periods of lower salinity. Similar to the species richness and total density patterns, infaunal biomass exhibited a large increase after the September 1979 storm and freshwater inflow event. The fauna responsible for the majority of this increased biomass were the molluscs *Abra aequalis*, *Lyonsia hyalina floridana*, *Lucina multilineata*, and *Mulinia lateralis*. All of these fauna usually occur and reach peak densities during the winter-spring period of the year. Rhynchocoels



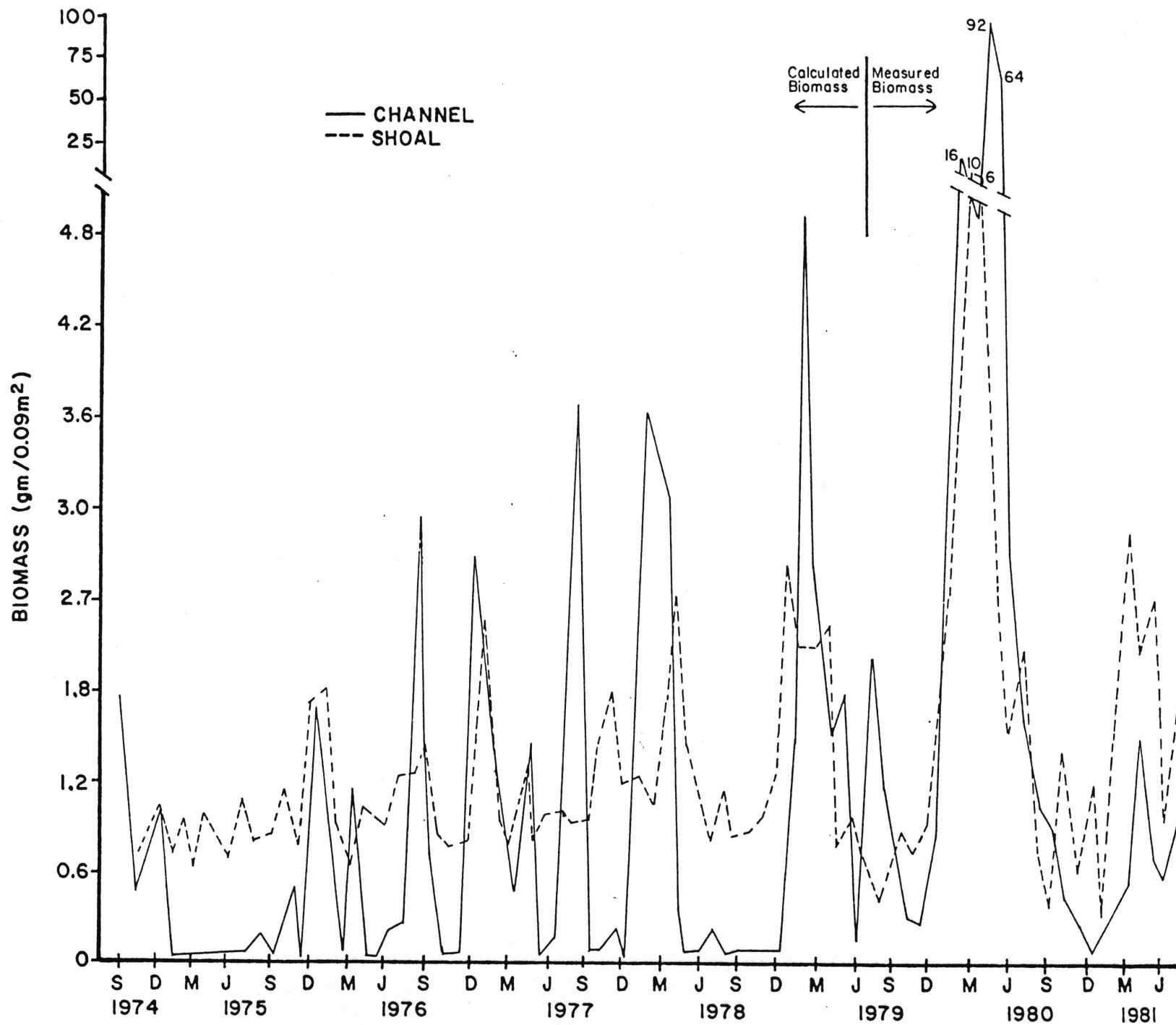


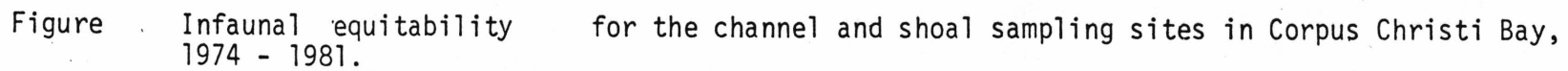
Figure 8. Total infaunal biomass for the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981. Prior to July 1979 biomass was not measured but rather calculated from density by regression equations from Figure 2.

also contributed to the increased biomass observed during the winter-spring of 1980 (Figure 8). After the 1980 increased benthic production, infaunal biomasses in 1981 returned to levels calculated for previous years.

Species diversity measures for the Corpus Christi Bay shoal and channel sites usually ranged between 2.0 and 4.6 with the shoal site normally showing higher indices than the channel (Figure 9). The seven-year mean for the shoal site was 3.76 while the species diversity mean for the channel was 2.96. Species diversity means for Corpus Christi Bay collection sites from an earlier study (Holland, et al., 1975) similar in environmental characteristics to our channel and shoal sites were 1.84 and 3.61 respectively. In general, species diversity did not exhibit defineable patterns over time with the exception of the channel collections that periodically showed higher indices during lower salinity periods (Figure 9).

Equitability of the benthic communities observed at the Corpus Christi Bay channel and shoal sites differed tremendously (Figure 10). Equitability was almost consistently higher at the channel site suggesting that the density distributions between populations was much more even there than for the shoal site. Dominance in the community by a few populations was the normal pattern in the shoal habitat, which usually resulted in the lower measures of equitability. Equitability decreased to the lowest measures observed at both sites during the seven year study following the September 1979 storm (Figure 10). The large increase in density of a few populations at both sites following this event was what caused the lower equitabilities.

The preceding patterns in benthic community characteristics are further exemplified by examining benthic community structure changes over the study period according to numerical classification techniques. For both the shoal and channel communities there appeared to be a change in overall community structure during 1979 as indicated by the fusion of two major groups for



for both sites (Figures 11 and 12), which fused collection groups into a pre-1979 and post-1979 classification. This major change appeared to occur between the spring and summer of 1979. Prior to 1979 the next major fusion of collection groups at the shoal site distinguished a dredging period from a post-dredging period (Figure 12). Although community structure patterns for the channel collections were not as well defined as for the shoal (Figure 11), the dredging collection groups were still distinguished at a dissimilarity level of 30% in the channel.

The cluster analysis results for post-spring 1979 at both collection sites exhibited a separate fusion of collection groups representing the period after the September 1979 storm and freshwater inflow event (winter-spring 80). For the channel this was the first major separation for the post-spring 1979 collections (Figure 11). For the shoal collections, the winter-spring 80 fusion was within the second separation of collection groups for the post-spring 1979 collections (Figure 12).

In general, numerical classification was quite successful in defining major events that potentially contributed to the structuring of the benthic community during the seven-year Corpus Christi Bay study. An inverse cluster analysis was performed on the same data set for the channel and shoal sites separately to determine benthic species assemblages that were characteristic of the collection groups described in Figures 11 and 12. At the 20% dissimilarity level 15 taxa groups were defined for the channel collection groupings (Table 2). Similarly, for the shoal collections 24 taxa groups were defined at the 20% dissimilarity level (Table 3). Twenty percent dissimilarity was used as a cut-off point because below this level taxa usually exhibited a definable pattern of distribution in respect to one another.

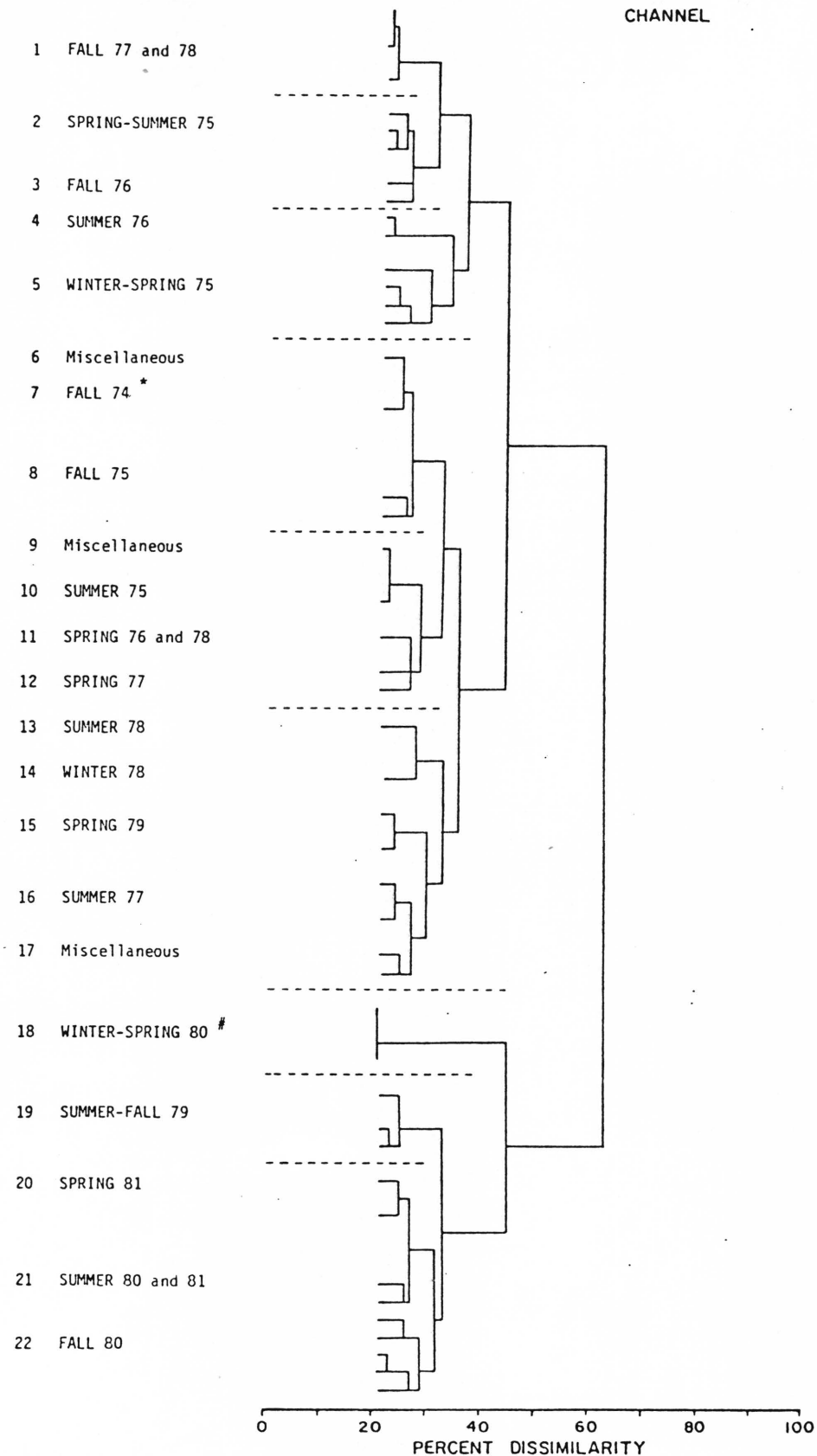


Figure 11. Dendrogram from numerical classification (cluster analysis) of infaunal taxa for all collection periods at the Corpus Christi channel site. Group membership below 20% is not shown because of similarity of collection periods comprising these groups. The dredging period (*) and the period following the September 1979 storm event (#) are indicated.

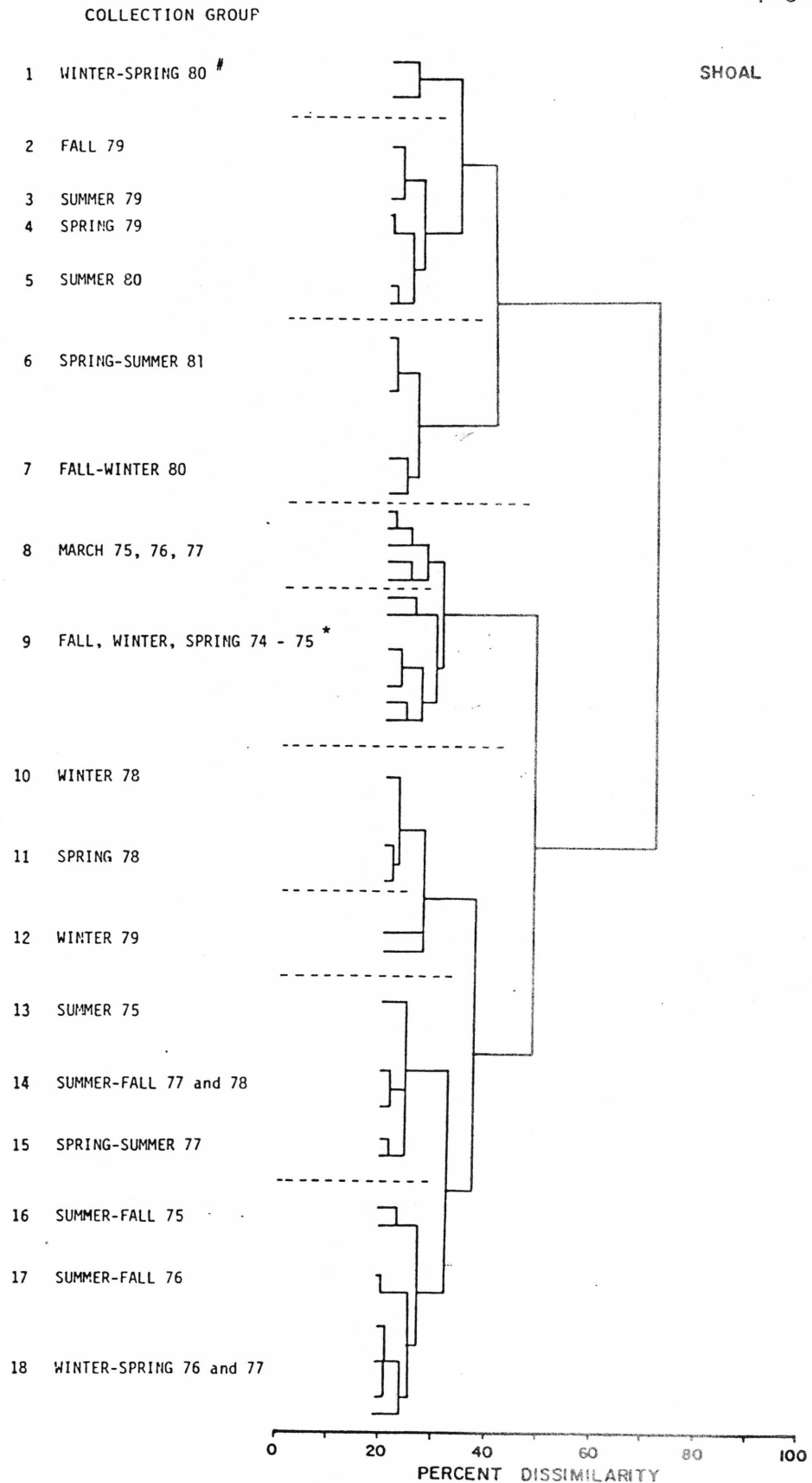


Figure 12. Dendrogram from numerical classification (cluster analysis) of infaunal taxa for all collection periods at the Corpus Christi shoal site. Group membership below 20% is not shown because of similarity of collection periods comprising these groups. The dredging period (*) and the period following the September 1979 storm event (#) are indicated.

Table 2. Taxonomic groups formed following classification of 83 "characteristic taxa for the channel station from the Corpus Christi Bay benthic sampling.

Group A

Nereidae
Anachis obesa
 Ophiuroids
Anadara sp.
Erichthonias brasiliensis
 Onuphidae
Nassarius acutus
Leucon sp.

Group B

Batea catharinensis
Exogone dispar
 Paraonidae spp. B
 Cirratulidae
 Polynoidae
Glycera americana
Paleanotus heteroseta
 Nephtyidae

Group C

Spiochaetopterus costarum
 Capitellidae
Anaitides erythrophyllus
 Caprellid A
Corophium acherusicum
 Gastropod
Polydora socialis
Macoma tenta
Melinna maculata

Group D

Sphaerosyllis sp. A
Pandora trilineata
Owenia fusiformis
Odostomia sp.
 Cyclopoid Copepod

Group E

Corophium louisianum
Schistomeringos rudolphi
Podarke obscura
 Terebellidae

Group F

Xanthidae
 Pinnotheridae
 Bivalve
 Nereid sp. A
Sigambra bassi
 Serpulidae

Group G

Cyclaspis varians
Apoprionospio pygmaea
Minuspio cirrifera
Gyptis vittata
 Nereid sp.
Armandia agilis
Ogyrides limicola

Group H

Lyonsia hyalina floridana
Spiophanes bombyx
Tellina alternata
Stylochus ellipticus
Pseudeurythoe sp.

Group I

Magelona phyllisae
Ancistrostylis papillosa
 Paraonidae spp. A
 Spionidae
Diopatra cuprea
 Pilargidae

Group J

Nephtys magellanica
Glycera capitata
Phoronis architecta
Tharyx setigera
Polinices duplicatus
 Anemone

Group K

Balanoglossus sp.

Group L

Micropholis atra
Nereis pelagica occidentalis
 Anemone (burrowing)
Onuphis sp.
Diastylis sculpta
Magelona pettiboneae
Pinnotheres sp.

Group M

Mediomastus californiensis
Paraprionospio pinnata

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Table 2. Con't.

Group N

Streblospio benedicti
Cossura delta
Rhynchocoels
Sigambra tentaculata
Glycinde solitaria
Oligochaete

Group O

Mulinia lateralis
Abra aequalis

Table 3. Taxonomic groups formed following classification of 94 "characteristic taxa for the shoal station from the Corpus Christi Bay benthic sampling.

Group A

Gyptis vittata
Magelona pettiboneae
Sigambra tentaculata
Paraprionospio pinnata

Group B

Clymenella mucosa
Clymenella torquata calida
Exogone dispar
 Ostracoda

Group C

Phoronis architecta
Stylochus ellipticus
Spiophanes bombyx
Tellina alternata

Group D

Streblospio benedicti
 Oligochaete
 Paraonidae spp. B
Lyonsia hyalina floridana
Mulinia lateralis
Tharyx setigera
Glycinde solitaria
 Rhynchocoels

Group E

Apoprionospio pygmaea
Brania clavata

Group F

Mediomastus californiensis
 Paraonidae spp. A

Group G

Glycera americana
 Nephtyidae
Minusprio cirrifera
Nereis pelagica occodental

Group H

Listriella clymenellae
 Nereid sp.
Armandia agilis

Group I

Ceratonereis irritabilis
Onuphis sp.
Polydora socialis
Schistomeringos rudolphi

Group J

Branchiostoma caribaeum
Scolecopsis texana
Phascolion strombi

Group K

Megalomma bioculatum
Diopatra cuprea
Mysella planulata
Cyclaspis varians
 Spionidae
Ampelisca abdita

Group L

Abra aequalis
Balanoglossus sp.

Group M

Nuculana acuta
Acteocina canaliculata
 Maldanidae

Group N

Pandora trilineata
 Bivalve
Tellina sp.

Group O

Anaitides erythrophyllus
Spiochaetopterus costarum
Melinna maculata
Macoma tenta
Aligena texasiana
Nephtys magellanica

Group P

Scoloplos rubra
Listriella barnardi
Drilonereis magna
Magelona phyllisae
Litocorsa strenna
 Tanaidacean

Table 3. Con't.

Group Q

Ampelisca verrilli
Haploscoloplos foliosus

Group R

Lucina multilineata
Periploma margaritaceum
Xenanthura brevitelson
Cirratulidae

Group S

Sphaerosyllis sp. A
Notomastus sp.
Armandia sp.

Group T

Epitonium sp.
Cyclopoid copepod
Ampharetidae
Ensis minor
Truncatella caribaeensis

Group U

Anemone
Glycera capitata
Schistomeringos sp. A
Syllidae

Group V

Capitellidae
Sphaerosyllis cf. *sublaevis*

Group W

Diplodonta cf. *soror*
Glyceridae
Hiatella arctica
Corophium acherusicum
Erichthonias brasiliensis

Group X

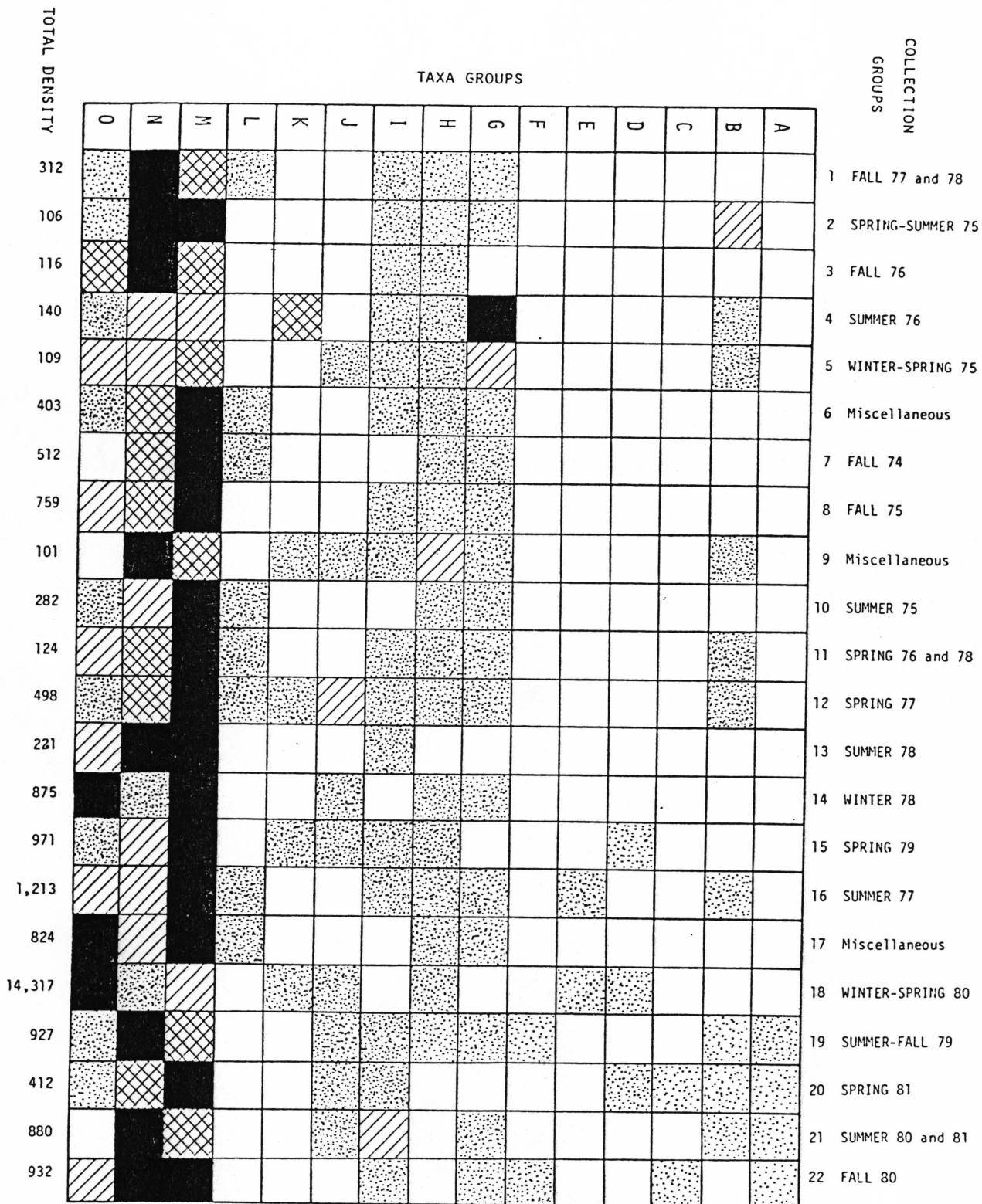
Listriella bahia
Notomastus latericeus
Notomastus cf. *latericeus*
Cymadusa compta

Taxa groups M, N, and O of the channel collections were the dominant groups for this habitat and were relatively ubiquitous in their distribution over time (Figure 13). Group M consisting of *Mediomastus californiensis* and *Paraprionospio pinnata* was consistently the overwhelming dominant group and only dropped below 20% of total abundance during the summer of 1976 and after the September 1979 storm (winter-spring 80). The densities of these two species usually were in contrast to one another. When one species was dense, the other species exhibited lowered abundances, and vice versa. The other two groups (N and O) were more seasonal in distribution with group O, the dominant molluscs, normally occurring in greatest densities in the winter and spring.

Taxa groups G, H, and I were considered low density ubiquitous groups for the channel and occurred through the majority of the study period. Group G represented the dominant fauna during the summer of 1976. Taxa groups A, C, D, E, and F generally occurred later in the study (Figure 13), either following the freshwater inflow event of September 1979 or else well after the channel dredging of 1974 - 1975. Taxa groups J and K were occasionally abundant but did not show any temporal pattern. Taxa group L occurred during dredging and for a period of three years after dredging, but not after the 1979 storm (Figure 13).

Taxa groups D and F of the shoal site were the dominant faunal groups for this habitat (Figure 14). Group F was comprised of the species *M. californiensis*, the most abundant polychaete in the study and the polychaete group Paraonidae spp. A (Table 3). Group D consisted of other abundant polychaetes and the dominant molluscs characteristic of the shoal habitat. Taxa groups B, C, and E were ubiquitous low density fauna found in the shoal collections (Figure 14). Group A was characteristic of this habitat until the summer of 1979. Taxa groups G-J also did not occur in any abundance (<1%) after the spring-summer of 1979.

Figure 13. Two-way table for the Corpus Christi Bay channel sampling site showing percent of total abundance for each taxa group from Table 2 recorded in each collection group defined in Figure 11.



TAXA GROUPS

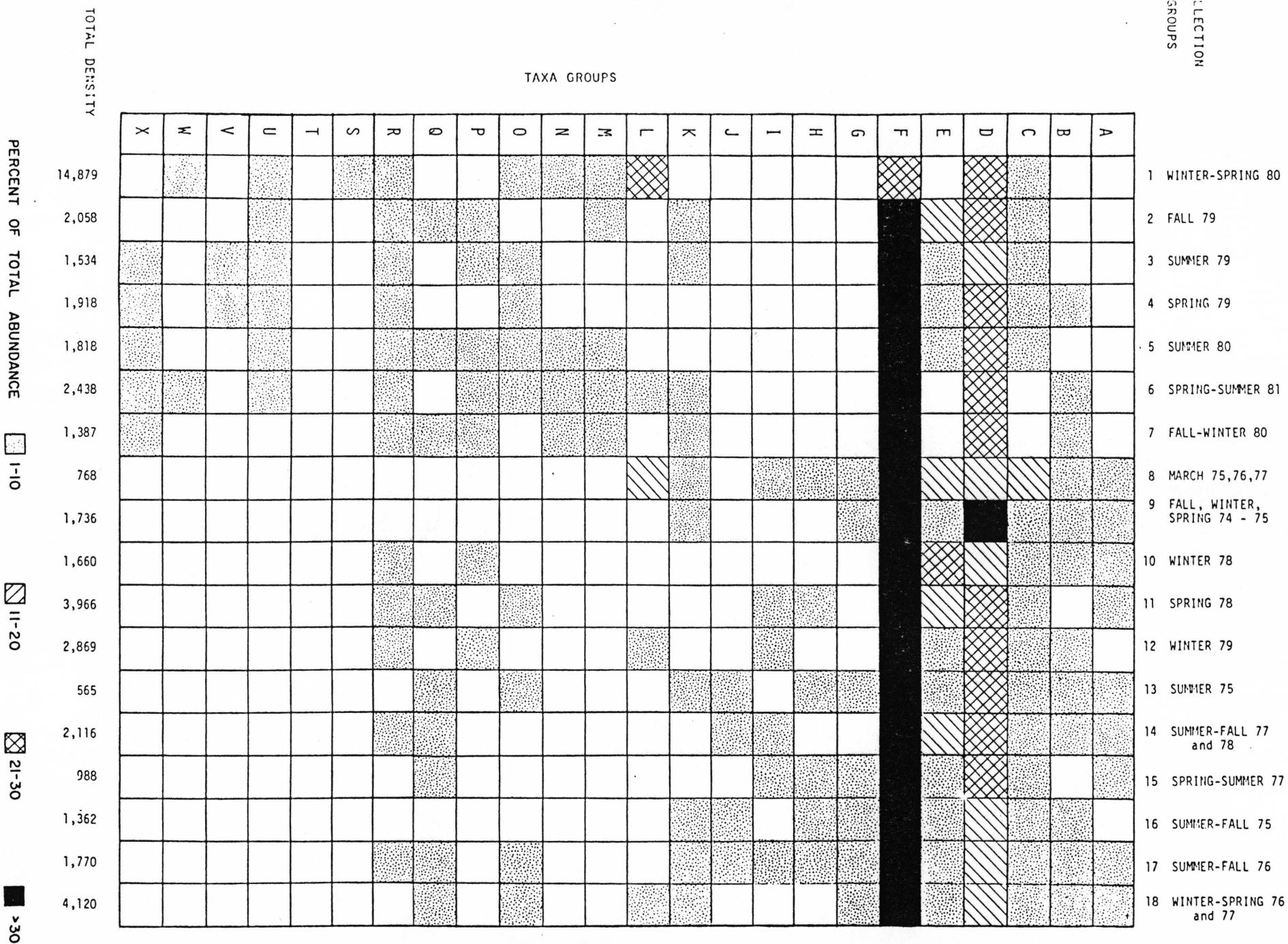


Figure 14. Two-way table for the Corpus Christi Bay shoal sampling site showing percent of total abundance for each taxa group from Table 3 recorded in each collection group defined from Figure 12.

Taxa group L exhibited a definite seasonal distribution with abundances occurring in the winter and spring. Highest densities for this group occurred after dredging and after the September 1979 storm (Figure 14). Taxa groups M and N as well as groups S-X were only abundant in the shoal habitat after the spring-summer of 1979 with some fauna occurring only after the freshwater inflow event of September 1979 (e.g. groups W and X). Taxa groups O-R were observed periodically over the seven-year study but did not occur during the dredging period.

To this point, only general characteristics of the benthic communities observed over the past seven years at the Corpus Christi Bay channel and shoal habitats have been examined. Through this evaluation however, trends have been identified relating changes in specific community characteristics (e.g. density, biomass), as well as community structure composition, to changes in the estuarine environment (i.e. dredging and freshwater inflow). These community changes and the variation in change from one time period to another, have been the culmination of a variety of faunal responses to the environmental changes that have occurred in concert and resulted in a number of different views of the communities characteristic of each habitat.

For example, early in the study period, especially during dredging and for the two years following dredging, *Paraprionospio pinnata* was the dominant species found in both the channel and shoal habitats (Figure 15). This fauna, known for its opportunistic nature (Boesch, 1977) was dominant during a period of time when a disturbance to the benthos had eliminated many other fauna. With the return of many of these fauna, *P. pinnata* populations declined in the later years of the study.

The most dominant of polychaetes, *Mediomastus californiensis*, unlike *P. pinnata*, was less dense during and immediately after dredging (Figure 16).

Paraprionospio pinnata

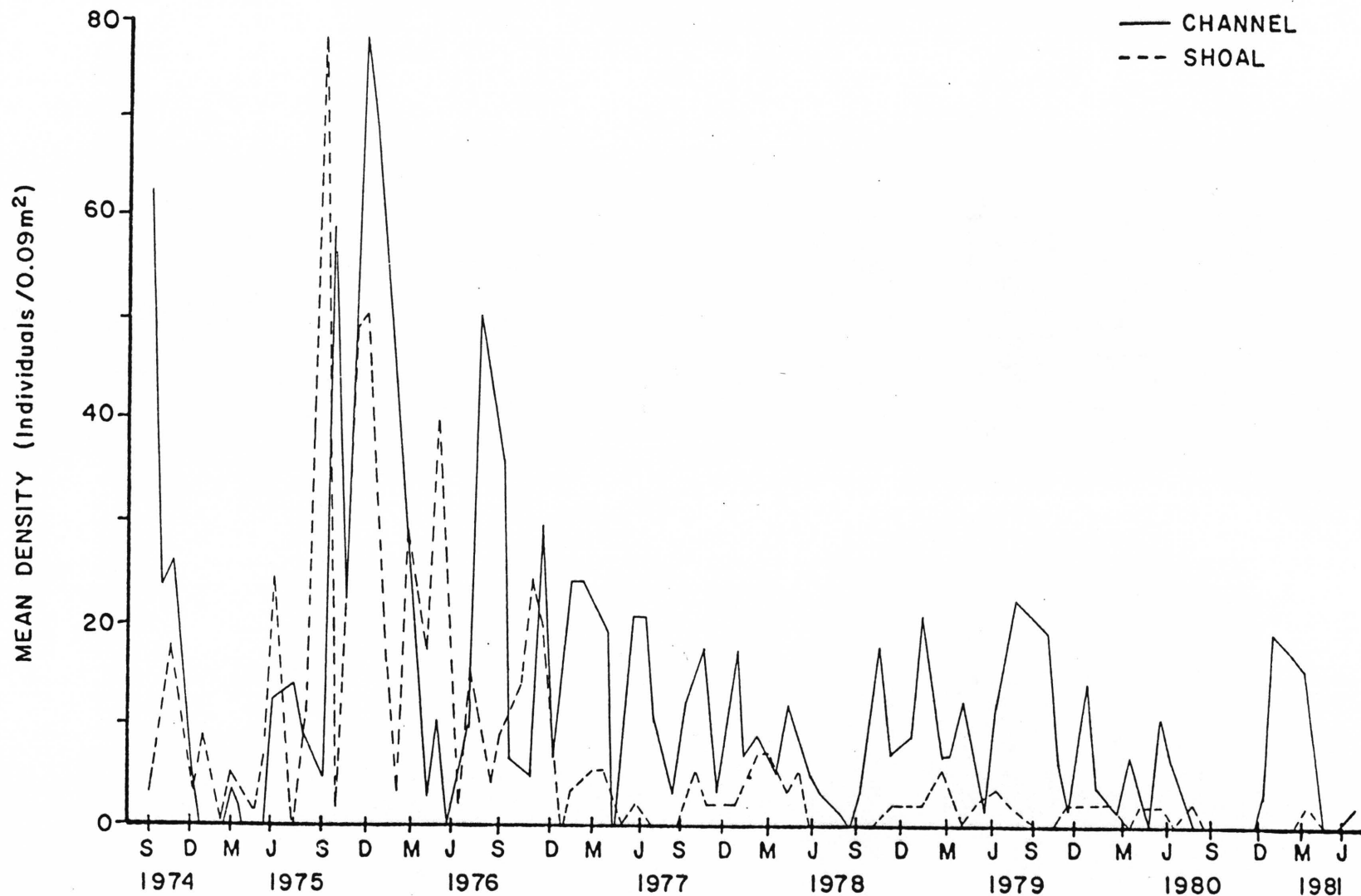


Figure 15. Mean density of the polychaete *Paraprionospio pinnata* for the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

Mediomastus californiensis

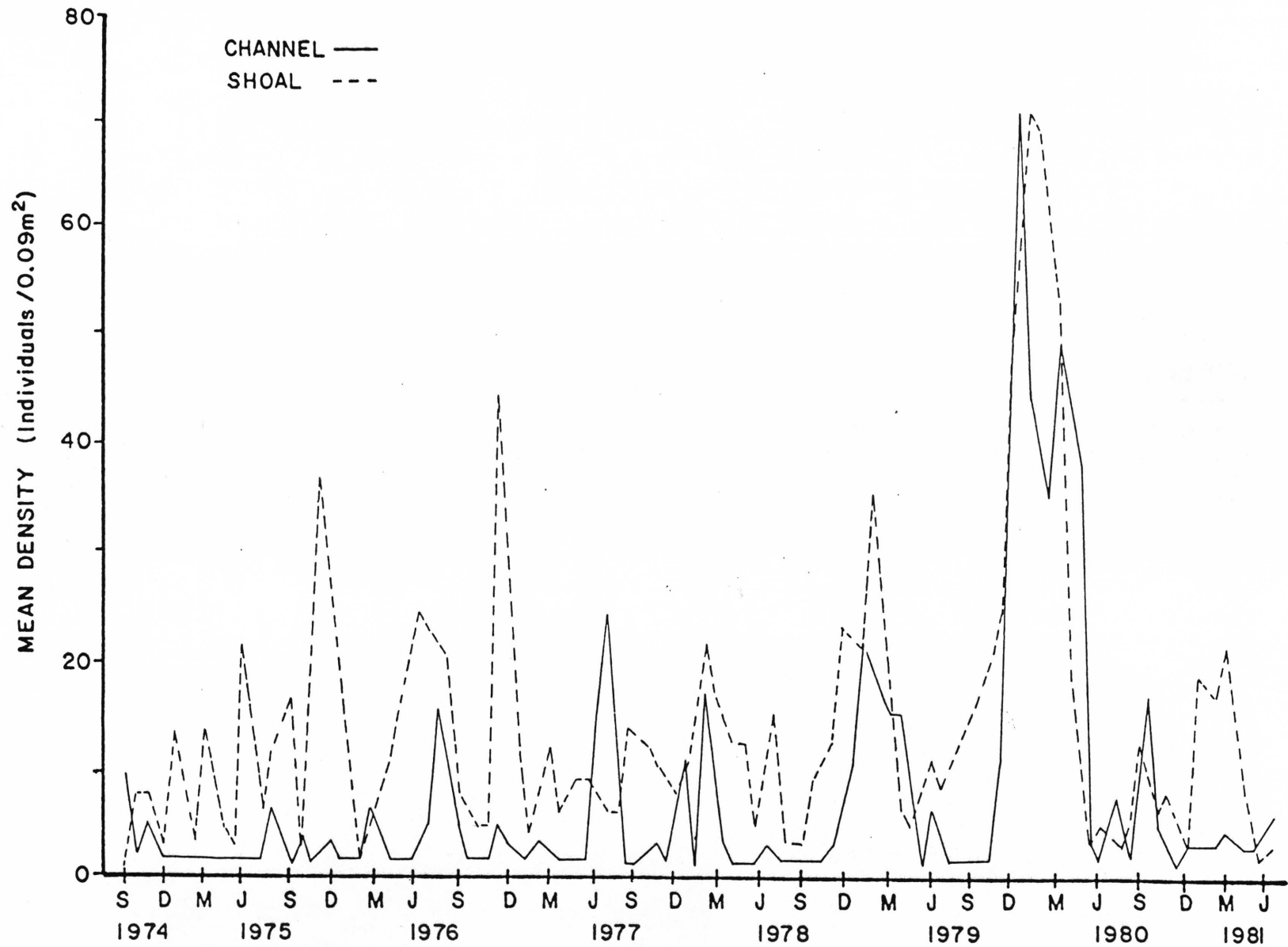


Figure 16. Mean density of the polychaete *Mediomastus californiensis* for the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

This species did show a response to any decreases in salinity by exhibiting increases in density (e.g. lower salinity periods of 1976-77 and 1978-79). The most pronounced of these responses was an unequalled density increase observed after the September 1979 storm, which contributed to lower salinities through the following spring (Figure 5).

The species which exhibited the greatest change in response to the September 1979 storm and freshwater inflow event was *Abra aequalis* (Figure 17). This bivalve mollusc normally occurs in the winter and spring of the year and its highest densities are normally found in the channel habitat. This species accounted for better than 50% of the total infaunal density in the channel in January and February of 1980. As Figure 17 illustrates this population was much more dense than the 1979 population; the size class structure was altered, and the persistence of the population was much longer than in 1979 or any other year studied. In terms of biomass, this population was also much more productive in 1980 than any other time during the study period.

Probably the most indicative faunal group with regards to freshwater effects on the estuary was the oligochaetes (Figure 18). These annelids are normally abundant in freshwater habitats, although there are some marine species (Brinkhurst and Jamieson, 1971). The patterns in density exhibited by this group of fauna in Corpus Christi Bay paralleled the lower salinity periods in the estuary from 1974 - 1981. Again as with numerous other benthic fauna, oligochaete peak densities were observed during the prolonged period of low salinities following the September 1979 storm (Figure 18).

The Rhynchocoels like the other fauna discussed so far, were also most abundant during periods of lowered salinity (Figure 19), although this benthic faunal group was always present in the estuary, during both low and high

ABRA AEQUALIS

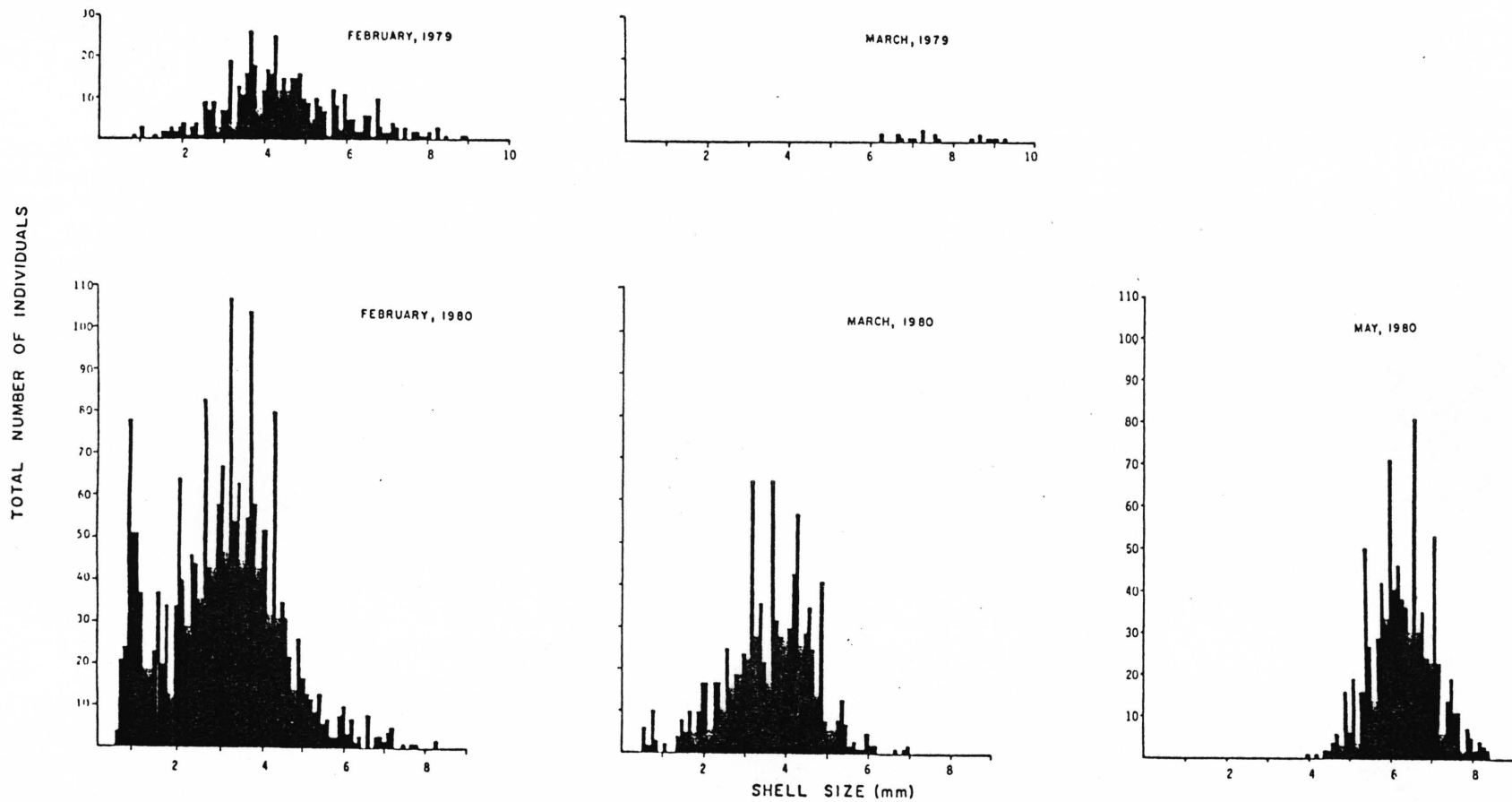


Figure 17. Size class structure for the *Abra aequalis* population in the channel habitat of Corpus Christi Bay during its peak abundance period in 1979 and 1980. No members of the population were observed in May 1979.

Oligochaete

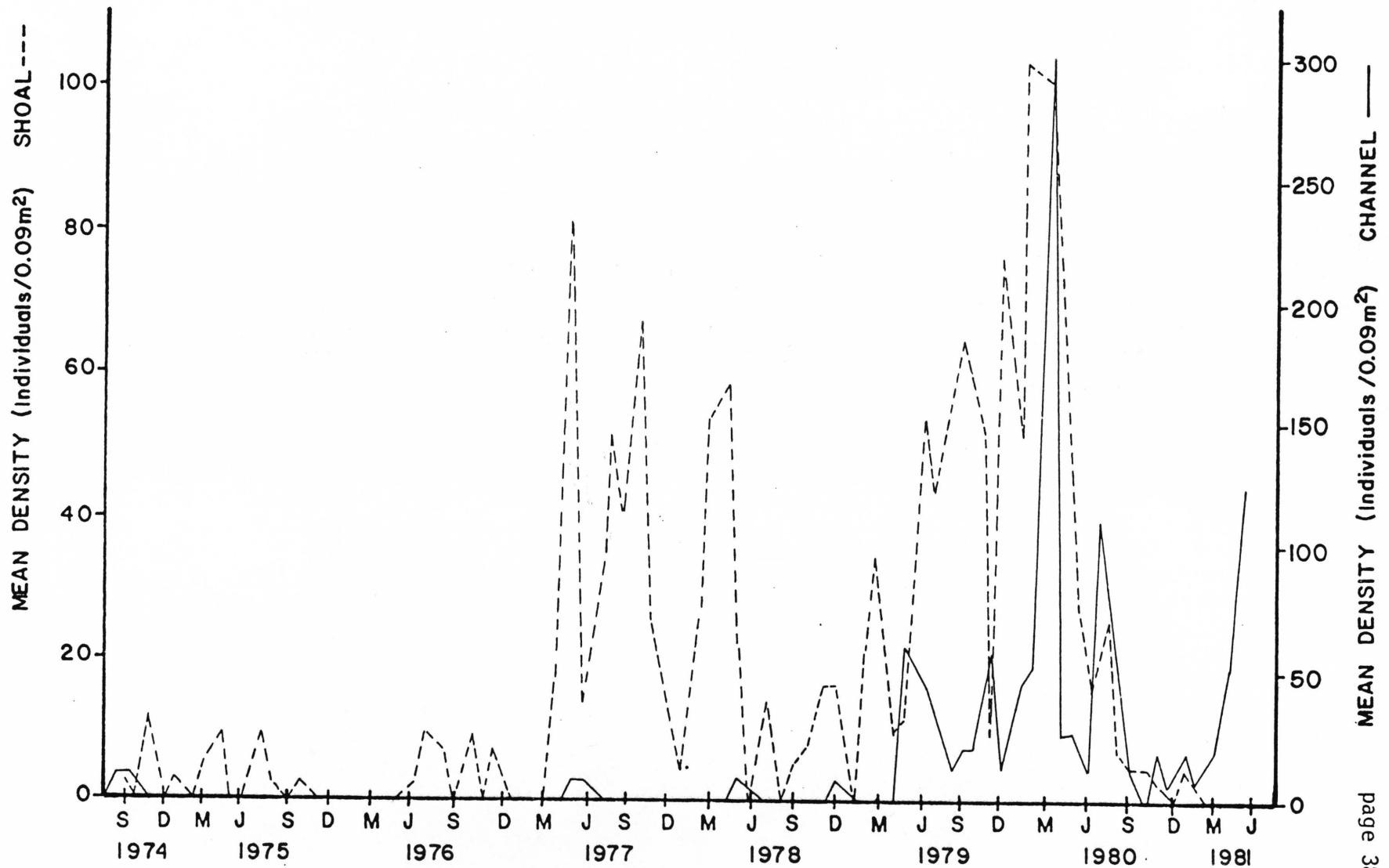


Figure 18. Mean density of the Oligochaete faunal group in the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

Rhynchocoels

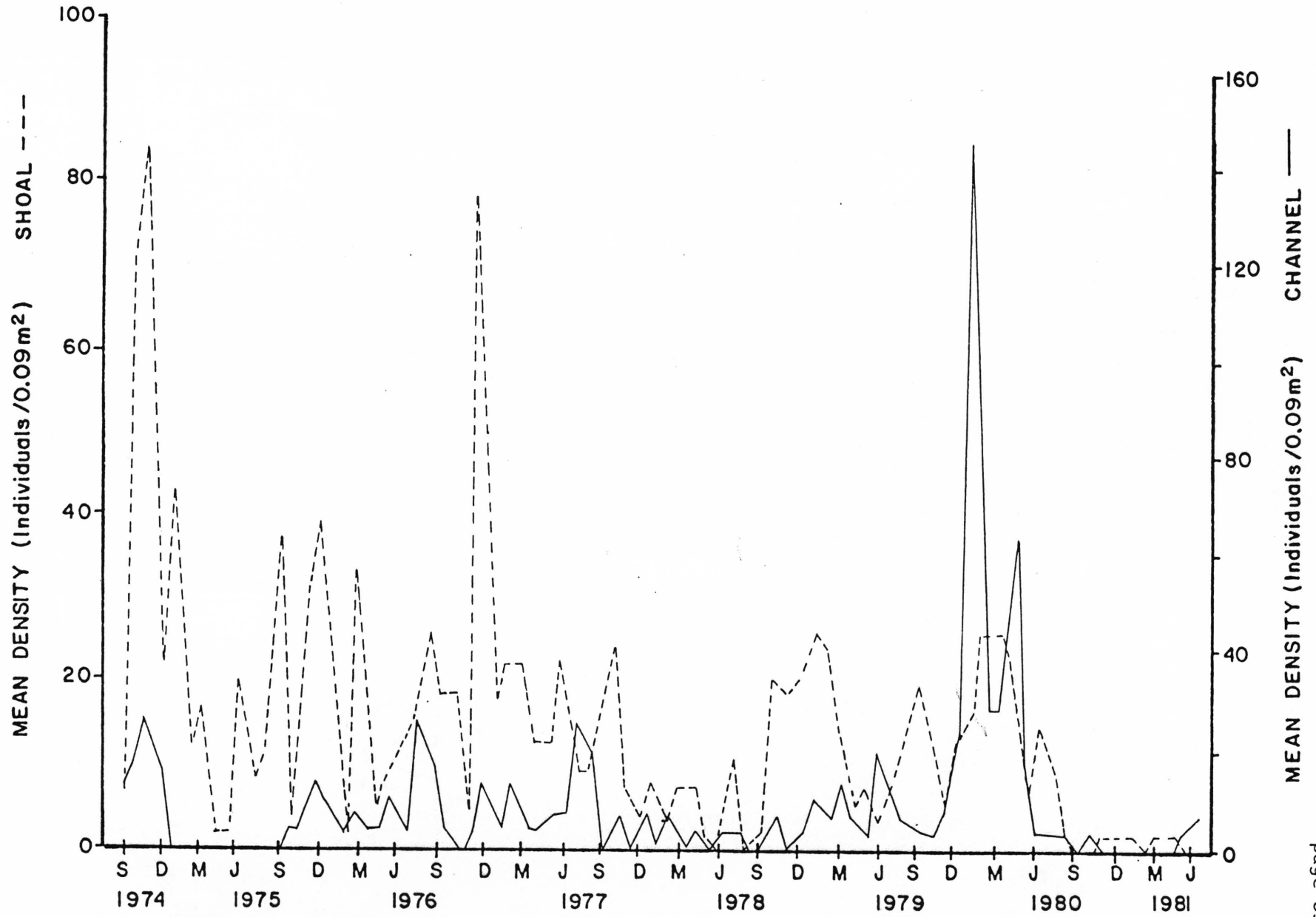


Figure 19. Mean density for the Rhynchocoels faunal group at the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

salinities. This group also appeared to respond to dredging during the earlier years of the study.

An interesting comparison was observed between two polychaete species which occurred in the shoal community, concerning their separate responses to salinity changes (Figure 20). *Spiophanes bombyx* densities were greatest during periods of low salinity. In contrast, *Apoprionospio pygmaea* populations exhibited largest densities during periods of high salinity. This polychaete appeared to be inhibited from the habitat during periods of low salinity, showing extremely small densities and often being totally absent from the community.

Two other polychaete species whose density variations over the study period obviously caused some of the changes in community patterns described above were *Sigambra tentaculata* and *Schistomeringos rudolphi*. *S. tentaculata* (Figure 21) occurred the summer after cessation of dredging and exhibited its highest densities. This period also corresponded to a time frame that was characterized by relatively normal estuarine salinities for Corpus Christi Bay, 27 - 33 ppt (Figure 5). Following a period of lower salinities (winter-spring of 1977), this species decreased in density and did not show another increase in density until a prolonged period of 30 ppt average salinity, which occurred just prior to the September 1979 storm. After the 1979 freshwater inflow event, *S. tentaculata* populations decreased in the channel community and disappeared from the shoal habitat (Figure 21).

S. rudolphi (Figure 22) was abundant when *S. tentaculata* was not and appeared to prefer salinity ranges slightly lower than *S. tentaculata*. After peak abundances for *S. rudolphi* in 1978 - 1979, this population, like the previous two was inhibited by the September 1979 storm with associated extended periods of lower than normal salinities (Figure 22).

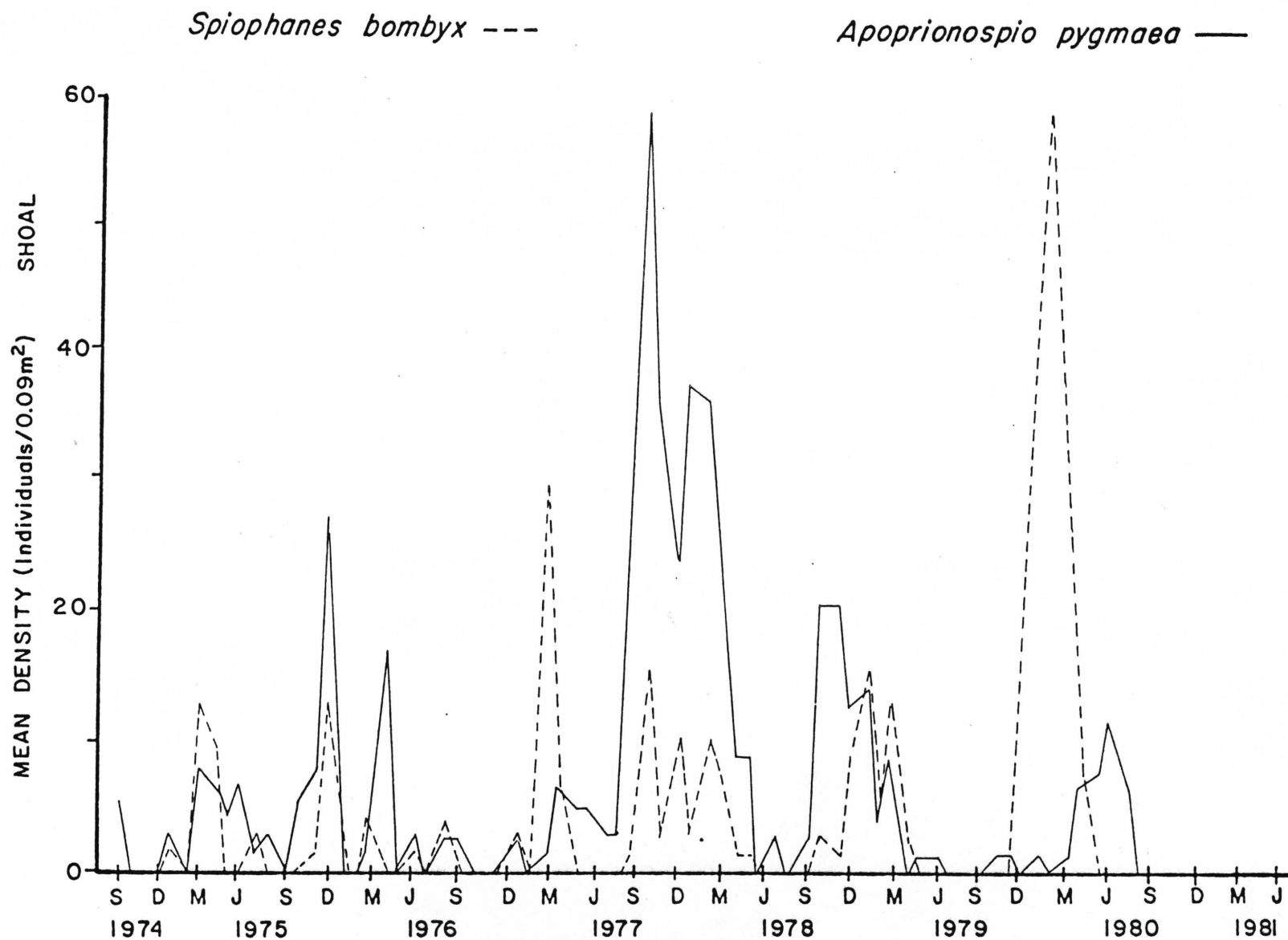


Figure 20. Mean densities for the polychaetes *Spiophanes bombyx* and *Apoprionospio pygmaea* at the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

Sigambra tentaculata

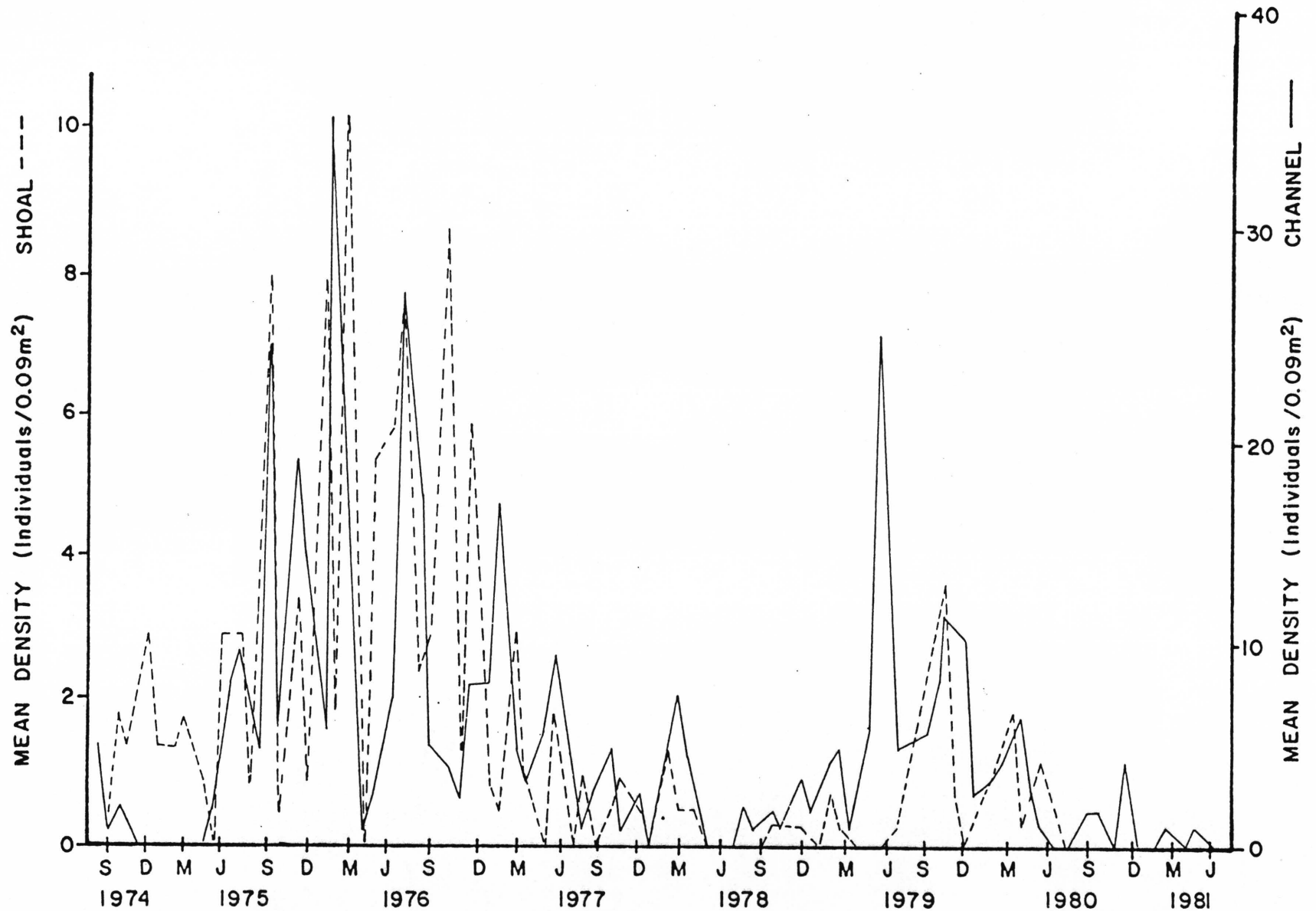


Figure 21. Mean density of the polychaete *Sigambra tentaculata* at the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

Schistomeringos rudolphi

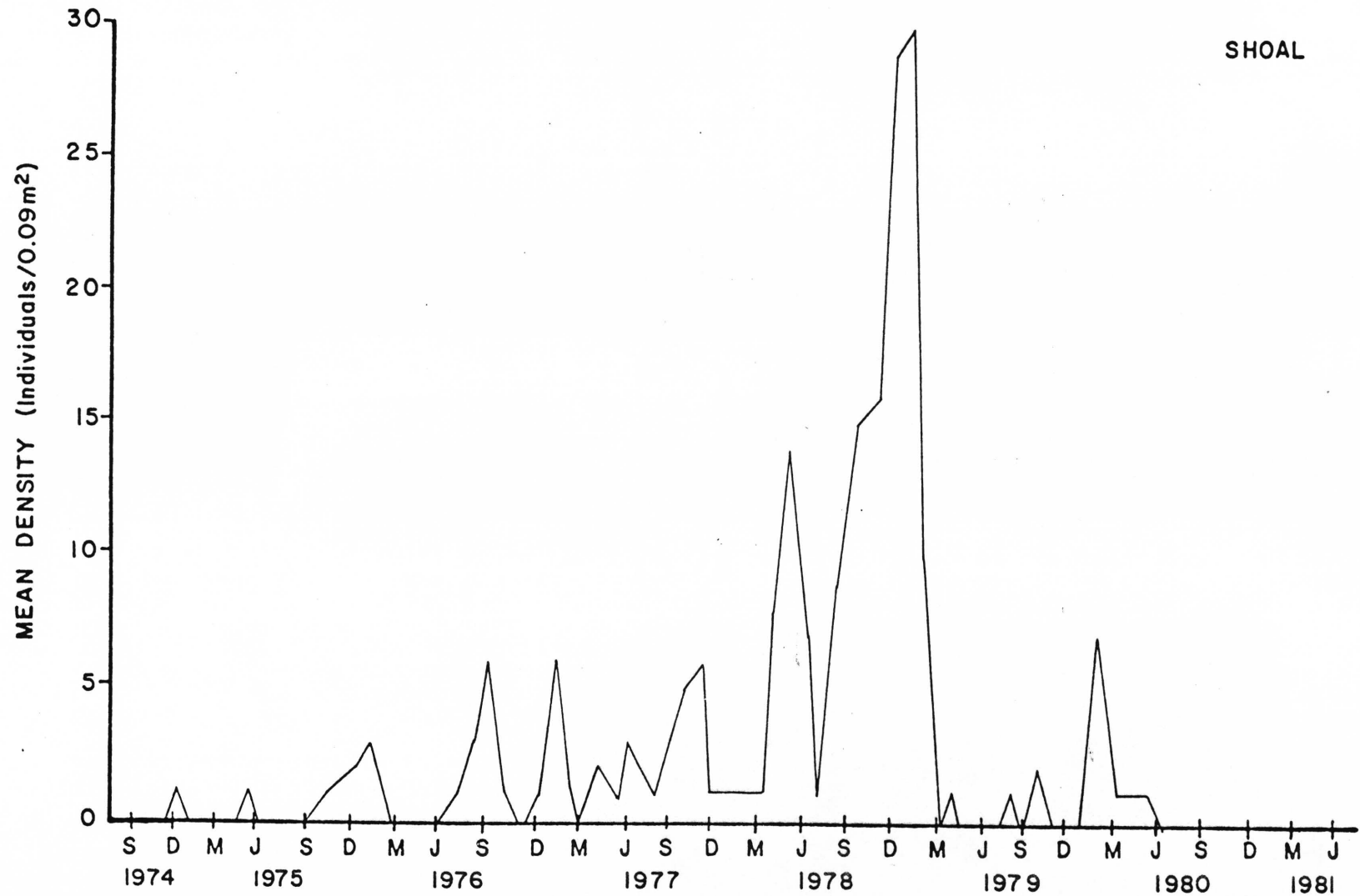


Figure 22. Mean density of the polychaete *Schistomeringos rudolphi* at the channel and shoal sampling sites in Corpus Christi Bay, 1974 - 1981.

DISCUSSION

The logic involved in focusing on the dynamics of populations on the sea-floor for this study included the fact that because of the sedentary nature of these fauna, they represent a potential barometer indicating changes to the system unlike fish and many planktonic fauna which are relatively mobile and able to avoid adverse conditions. Thus the status of such benthic populations at any point in time is likely to reflect the conditions prevailing over a preceding point. Furthermore, the benthos represents an important component of the estuarine ecosystem not only because of their trophic relationships with important fisheries but also because their activities and functioning within the sediments play a large role in material fluxes from the sediment sinks, including the nutrients which potentially drive the production of the system.

Although this study focused on a relatively small area of the Corpus Christi Bay estuarine ecosystem, the habitat studied (shoal and channel) showed comparable results to a previous study of similar habitats, which represents the only other study of macrobenthos in Corpus Christi Bay and was conducted between 1972 and 1975 (Holland, et al., 1975). Sampling methods were similar to those used in the present study. In the earlier study a central Bay station where environmental conditions were similar to our shoal habitat in the present study, exhibited faunal densities between 159 and 774 animals/ 0.09 m^2 with an annual mean species diversity of 3.61. In contrast, our shoal station with the exception of the period following the September 1979 storm, exhibited mean densities between 180 and 1700 animals/ 0.09 m^2 with a mean species diversity of 3.76. Another station from the earlier study was similar in depth and ship traffic activity to our channel habitat. This station exhibited benthic community densities between 78 and 772 animals/ 0.09 m^2 with an annual mean species diversity of 1.84. In the present study, the channel station, again with the exception of the period following September 1979,

exhibited densities between 35 and 580 animals/0.09 m² and a mean species diversity of 2.96. Although slightly different in absolute terms, these comparisons showed similar trends between different parts of the ecosystem (e.g. channel and shoal).

The intensity and duration of sample collection by the investigation presented here provided very useful information on the relation of benthic community patterns to environmental variation, both natural and man-induced. Over seven years the channel station almost consistently exhibited lower species numbers, total densities and diversities than the shoal station. In addition, over the study duration the shoal site appeared to have a characteristic fauna while the channel station did not show as strong a pattern (Flint and Younk, in press). These differences between habitats were potentially related to both environmental differences (e.g. sediment structure, water depth, etc.) as well as to different degrees of influence from disturbance to the habitats (e.g. dredging, shrimp trawling, tanker traffic). Considering both benthic habitats together, we were able to further define temporal changes in ecosystem characteristics which were directly related to specific events that occurred in this ecosystem (e.g. dredging and freshwater inflows).

Prior to the September 1979 storm and associated periods of prolonged lower salinities, the Corpus Christi Bay ecosystem had not shown a dramatic shift in salinity concentrations extending over greater time periods than a diel cycle for more than a decade. Hurricane Beulah which impacted the estuarine ecosystem behind Mustang Island in 1967 was the last major natural disturbance to the south Texas coastline which significantly altered the salinity gradients of this system away from normal regimes. Although heavy rainfalls were observed for this area during 1972, the estuarine system had

not totally recovered from the impact of Beulah and the effects of these rains were therefore confounded and not totally interpretable (Flint and Rabalais, 1981b).

This seven-year study, plus where possible the inclusion of data from a previous study (Holland, et al., 1975), has illustrated a number of different features of the Corpus Christi Bay benthic habitat that were correlated with the September 1979 storm and resultant localized freshwater input to the system. The actual impact of this event is well documented by the prolonged record of low salinities that occurred following the event (Figure 5).

Unlike the few previous studies documenting accounts of effects of freshwater flooding on the estuarine benthos (e.g. Stone and Reish, 1965; Boesch et al., 1976), the results of this study suggested that the inflow event had a positive impact on the functioning of the ecosystem. Stone and Reish (1965) reported mortalities of benthic invertebrates resulting from heavy rainfalls in the upper portions of some California estuaries. Wells (1961) reported effects of freshwater inflow from a series of successive hurricanes on oyster reef fauna of the Newport River estuary in North Carolina indicating mass mortalities and community structure changes. In a similar fashion, Thomas and White (1969) observed high invertebrate mortality following an unusually heavy spring thaw discharge into the Bedford River, Prince Edward Island.

In contrast to the above reports concerning small estuarine systems which do not have the volume of water to buffer against dramatic salinity changes, two studies in large estuaries also showed either high mortalities and community structure changes or that salinity changes simply determined the distribution of fauna. Boesch et al. (1976) observed the benthos in the lower Chesapeake Bay after Hurricane Agnes and found that many abundant species were

of organisms and biomass decreased markedly from higher salinity areas to areas affected by freshwater inflows in the Gulf of St. Lawrence.

In the present study, changes in community structure within the benthos were directly related to the freshwater inflow event associated with the September 1979 storm. These community structure changes as defined by cluster analysis, were not the result of species disappearances (as in previous studies) as much as they were the result of increased species numbers and increased faunal densities following the storm event. Parallel with these increases in species number (Figure 6) and density (Figure 7) were dramatic increases in benthos standing stock as represented by biomass (Figure 8). The dominant fauna did not change due to the environmental change but rather these fauna simply increased their numbers and production of biomass to records never observed before for this ecosystem.

In terms of total ecosystem functioning this change following the September 1979 storm appeared to be quite significant to other components of the ecosystem. Figure 23 illustrates a ten-year pattern of fishery yields in the Corpus Christi Bay ecosystem (from: Texas Landings, Dept. Commerce, NOAA, 1970 - 1980). These fishery yields include shrimp, total shellfish, and total finfish. Along with this data are included annual production estimates for the benthos of the shoal habitat in Corpus Christi Bay for 1975 - 1980 (Figure 23). The comparison of every fishery yield curve to these estimates of benthic production illustrates the same pattern; a one-year lag between the amount of benthic production calculated and a correlated (direct) response in the fishery yield.

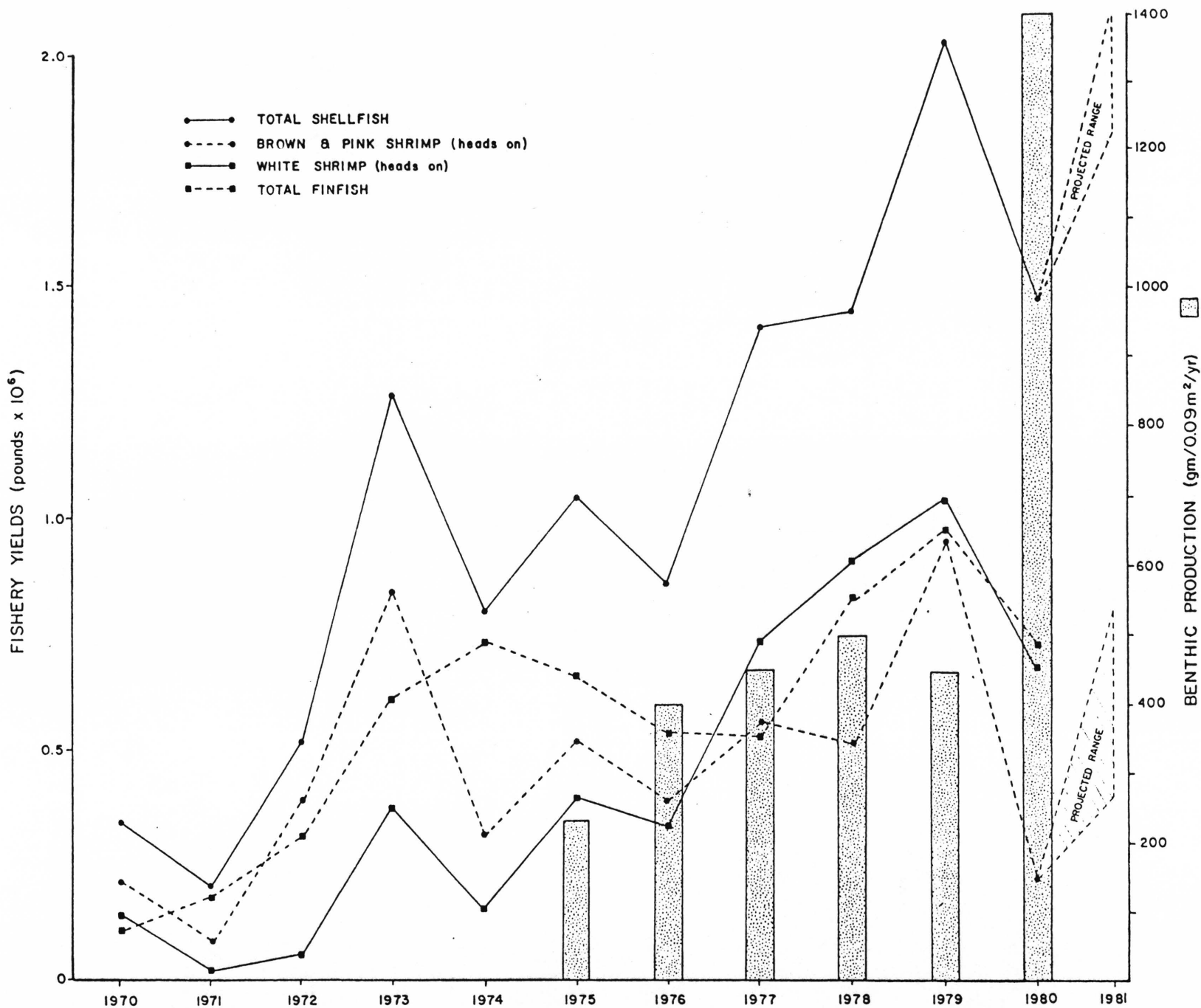


Figure 23. Fishery harvest yields for shrimp, total shellfish, and finfish in Corpus Christi Bay from Texas Landings (Dept. Commerce, NOAA) for 1970-1980. The histograms represent the benthic production of biomass (annual) from 1975-1980. The projected yields for 1981 fisheries are from statistics in the Corpus Christi Caller newspaper (1 September, 1981).

In terms of shellfish that will usually reproduce during their first and second years, this lag appears to be realistic. The schematic representation of Figure 24 suggests that the results of benthic production, which are a potential food source to shellfish (e.g. shrimp) and finfish, will usually be realized in the fishery species next year class as a result of reproductive success.

But what about the increased benthic production of 1980 (Figure 23)? Does this theory of a one-year lag in fishery response hold as predicted? Statistical data on shrimp yields for 1981 reported from the National Marine Fisheries Service (NOAA) in the Corpus Christi Caller newspaper (1 September 1981) appear to follow the prediction. According to these reports 13.5×10^6 pounds of shrimp were landed for the Texas coast in July 1981, which was doubled the amount landed in July 1980. In addition, 4.2×10^6 pounds of shrimp were reported for the south Texas bays in the first seven months of 1980. In contrast, 5.6×10^6 pounds of shrimp were reported for the first seven months of 1981, a 25% increase in yield. Using these statistics, projected ranges for total shellfish and brown and pink shrimp are plotted on Figure 23. This comparison with other years and with the benthic production suggests that the theory of a one-year lag in fishery yields, directly correlated to the previous year's benthic production, holds.

We concluded from this study, unlike other reports of freshwater inflow to estuaries, that periodic freshwater inflow to the Corpus Christi Bay ecosystem is extremely important in maintaining the productivity of this ecosystem. This appears to be especially true in respect to the impact of a localized event such as the September 1979 storm. This event, because of a great deal of land runoff in contrast to riverine input, resulted in the input of both nutrients and detrital material to the Bay ecosystem. We hypothesize

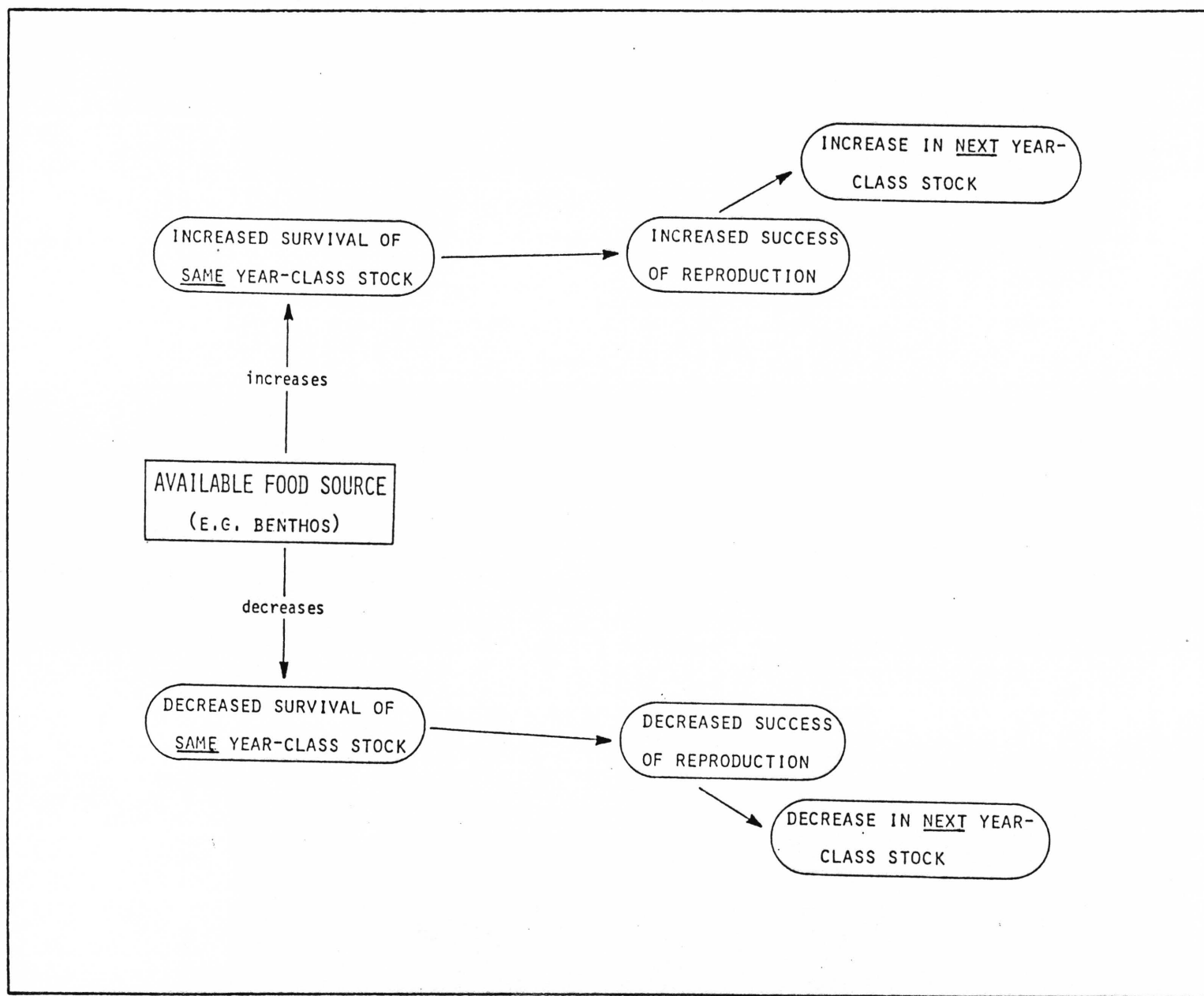


Figure 24. Schematic diagram showing the theoretical relationship between benthic production as a food source and the success of reproduction in important estuarine fishery species.

the following chain of events as depicted in Figure 25: The increased nutrients to the habitat resulted in increased primary production. Much of this increased primary production is ultimately diverted to the benthos (Flint and Rabalais, 1981a) along with the increased input of detrital material. Thus the available food sources are present for benthic production to bloom, which it did four months after the freshwater inflow event. This increased benthic production enhances the next years fishery yield by causing an increase in reproductive success by fishery species because of an increase in food sources.

Although only the production of the benthos was measured directly (only calculated prior to 1979) there are other sources of evidence that the Corpus Christi Bay ecosystem was more productive in general after the September 1979 storm. For example, we can examine the bottom water dissolved oxygen records since trends in dissolved oxygen are often indicative of more eutrophic conditions. During this seven-year study, bottom water dissolved oxygen (Figure 4) exhibited trends that showed winter maximums each year. These maximums however, were significantly lowered during the winter-spring of 1980 and even a year later for the winter-spring of 1981, contrasted to previous years. Thus one could assume from this data that the Corpus Christi Bay ecosystem had become more eutrophic in recent years which would correlate with our conclusions concerning increased input of detrital material into the system after September 1979 and increased production within the system in general.

From the data presented above, we feel that the kind of freshwater inflow observed during September 1979 is definitely beneficial to the entire estuarine ecosystem. The significance of documenting the effects within the Corpus Christi Bay system are obvious. Environmental managers in this area are constantly faced with decisions involving freshwater resources and effects to the estuary, related to the regulation of their flows. In addition, since the benthos is included in the trophic webs involving many of the

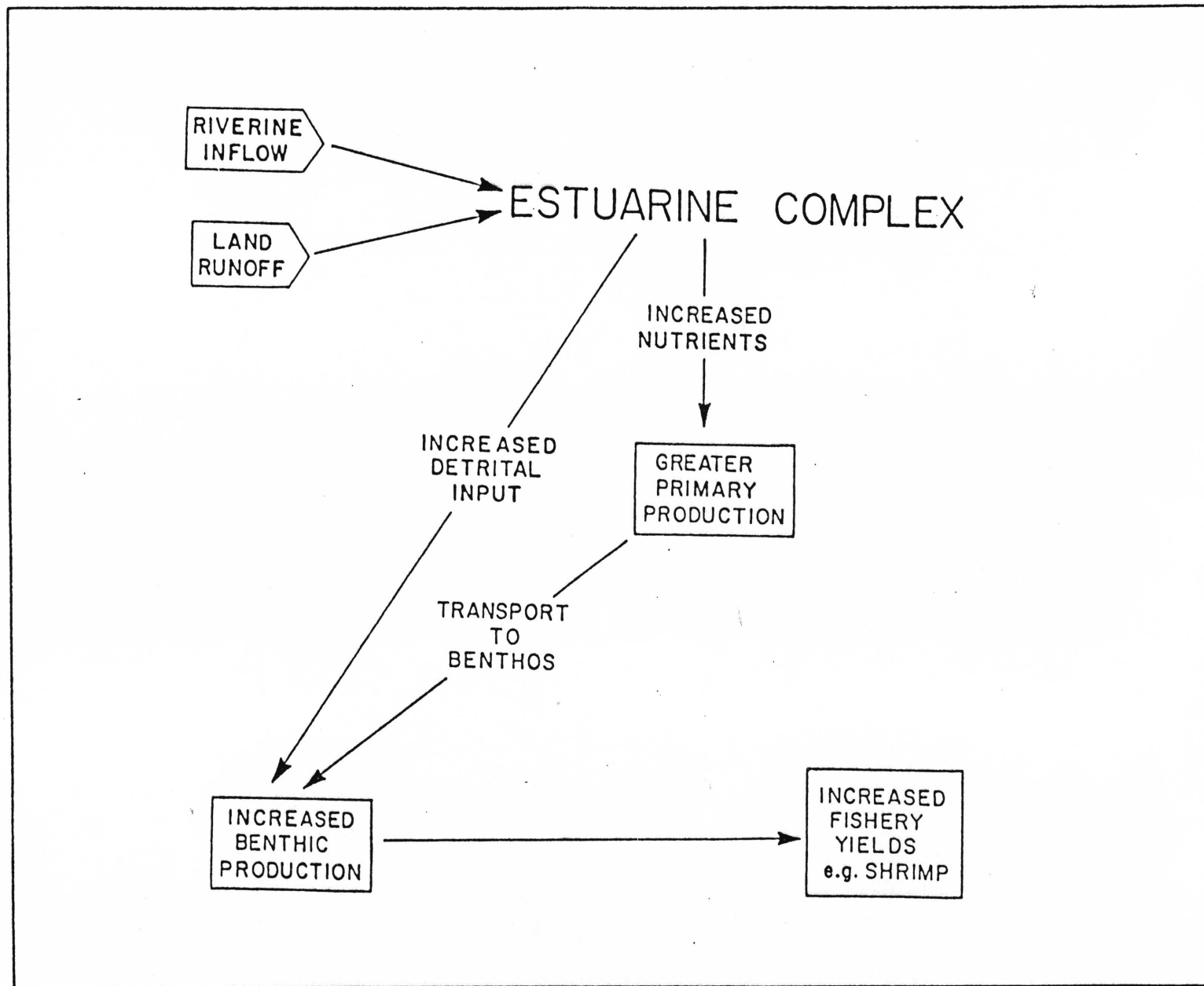


Figure 25. Schematic diagram illustrating the theoretical relationship between freshwater inflow to an estuarine ecosystem, the input of materials, its impact on the benthos as a food source, and the resultant effect on fishery species harvests.

important fisheries of the area, such as shrimp, the indirect effect to the fishery, reflected by future catch statistics correlated to the heavy freshwater inputs, and their effect to the benthic populations provide sound information to further test some of the models developed by environmental managers in recent years. We feel that this information on the benthos provides a missing link in the correlation observed between freshwater inflow and shrimp catch statistics.

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APPENDIX A

BENTHIC FAUNAL LIST OF TAXA FOR THE CORPUS CHRISTI BAY BENTHIC
STUDY 1974 - 1981. TAXA ARE LISTED ALPHABETICALLY.

ABRA AEGUALIS
 ACETES AMERICANUS
 ACIECCINA CANALICULATA
 ACEON PUNCTOSTRIATUS
 AEDICINA BELGICAE
 AGLAOPHANTUS VERRILLI
 ALBONEA PARETII
 ALIGENA TEXASIANA
 ALPHEUS HETEROCHAELIS
 ALTEUTHA DEPRESSA
 AMPELISCA ADDITA
 AMPELISCA SP B (=AMPHIPOD A)
 AMPELISCA SP.
 AMPELISCA VERRILLI
 AMPHARETE AMERICANA
 AMPHARETIDAE
 AMPHETEIS GUNNERI
 AMPHILOCHUS SP.
 AMPHIOMIDAE
 AMPHIOMID A
 AMPHIPOD UNID.
 AMYGDALUM PAPYRIA
 ANACHIS OBESA
 ANACHIS SEMPLICATA
 ANADARA OVALIS
 ANADARA SP
 ANADARA TRANSVERSA
 ANATIDES ERYTHROPHYLLUS
 ANATIDES MUCOSA
 ANGINUS DEPRESSUS
 ANCISTROSYLLIS GROENLANDICA
 ANCISTROSYLLIS JONESI
 ANCISTROSYLLIS PAPILLOSA
 ANCISTROSYLLIS SP
 ANEMONE BURROWING
 ANEMONE
 ANOMALOCARDIA AUBERIANA
 APOPKIONUSPID PYGMAEA
 ARABELLIDAE
 ARCIDAE
 ARENICOLA CRISTATA
 ARGULUS SP
 ARICIDEA BREVICORNIS
 ARICIDEA CF. FRAGILIS
 ARICIDEA JEFFREYSII
 ARICIDEA TAYLORI
 ARICIDEA WASSI
 ARMANDIA AGILIS
 ARMANDIA MACULATA
 ARMANDIA SP
 ASCIDIACEA
 ASTEROPELLA MACLAUGHLINAE
 ASTEROPELLA SP
 ASTEROPTERON OCULITRISTIS
 ASTHENOTHAERUS CF HEMPHILLI
 ASYCHIS ELONGATA
 ASYCHIS SP.
 ATRINA SEMINUDA
 AUTOLYTUS PROLIFER
 AUTOLYTUS SP.
 BALANOGLOSSUS SP.

BALANUS EBURNEUS
BATEA CATHARINENSIS
BIVALVE
BOWMANIELLA BRASILIENSIS
BOWMANIELLA DISSIMILIS
BOWMANIELLA SP.
BRACHIDONTES EXOSTUS
BRANCHIOASYCHIS AMERICANA
BRANCHIOSTOMA CARIBAEUM
BRANIA CLAVATA
BRYOZOA
BUSYCON CONTRARIUM
BUSYCON SP
CABIRA CF INCERTA
CAECUM GLABRUM
CAECUM PULCHELLUM
CALANOID COPEPOD
CALLIANASSA BIFORMIS
CALLINECTES SAPIDUS
CALLINECTES SIMILIS
CALLINECTES SP.
CANIHARUS CANCELLARIA
CAPITELLA CAPITATA
CAPITELLIDAE
CAPITELLIDES JONESI
CAPITELLID A
CAPRELLID A
CAULLERIELLA SP (=SP B)
CERAPUS TUBULARIS
CERATONEREIS IRRITABILIS
CERATONEREIS MIRABILIS
CEREBRATULUS LACTEUS
CHAETOPTERIDAE
CHAETOZORE SETOSA
CHIONE CANCELLATA
CHIONE SP
CHLOEIA VIRIDIS
CHONE SP
CIRRATULIDAE
CLIBANARIUS VITTATUS
CLYMENELLA MUCOSA
CLYMENELLA TORQUATA CALIDA
CONGERIA LEUCOPHAETA
CORBULA CONTRACIA
CORBULA DIEZIANA
CORBULA SP
COROPHIUM ACHERUSICUM
COROPHIUM LOUISIANUM
COROPHIUM SP
COSSURA DELTA
CREPIDULA FORNICATA
CREPIDULA PLANA
CYCLASPIS SP
CYCLASPIS VARIANS
CYCLOPOID COPEPOD
CYCLOSTREMISCUS SP
CYCLOSTREMISCUS SUPPRESSUS
CYLICHNA BIDENTATA
CYMADUSA COMPTA
CYMODOCE SP
CYRTOPLEURA COSTATA
DENTALIUM SP

DENTALIUM TEXASIANUM
DIASTOMA VARIUM
DIASIYLIS SCULPTA
DIUPAIRA CUPREA
DIPLODONTA CF SOROR
DIPLOTHYRA SMYTHI
DISPID UNCINATA
DORIDELLA OBSCURA
DORVILLEA RUBRA
DORVILLEA SP.
DORVILLEIDAE
DOSINIA ELEGANS
DOSINIA SP
DRILOMEREIS MAGNA
ECHINOIDEA
ECHIOPHIS SP
ECHIURIDEAN
EODITEA MONTUSA
ELASMOPUS SP
EMERITA SP.
ENSIS MINOR
EPITONIUM RUPICOLA
EPITONIUM-SP
ERICHSONELLA FILIFORMIS
ERICHSONELLA SP
ERICHINONIAS BRASILIENSIS
ETEOPE CF. LACTEA
ETEOPE HETEROPODA
ETEOPE LACTEA
EUCERAMUS PRAELONGUS
EUDORELLA MONODON
EULIMOSTOMA SP
EUMIDA SANGUINEA
EUNICIDAE
EUNDE CF NODULOSA
EUPANIMALIS KINBERGI
EXOgone DISPAR
FLABELLIGERIDAE
GAMMARUS MUCRONATUS
GASTROPOD
GLYCERA AMERICANA
GLYCERA CAPITATA
GLYCERIDAE
GLYCINDE SOLITARIA
GULFINGIA SP
GUNIADIDAE
GRANDIDIERELLA BONNIEROIDES
GROBEULEPIS CF MEXICANA
GYPTIS VITIATA
HAMINOEA SUCCINEA
HAPLOSCOLOPLOS FOLIOSUS
HAPLOSCOLOPLOS FRAGILIS
HAPLOSCOLOPLOS ROBUSTUS
HAPLOSCOLOPLOS SP
HEMIPHOLIS ELONGATA
HEPATUS PODIBUNDUS
HESIONIDAE
HETEROCRYPTA GRANULATA
HETEROMASTUS FILIFORMIS
HIAELLA ARCTICA
HIPPOLYTE ZOSTINCOLA
HIRUDINEA A

HOLOTHUROIDEA-LEPTOSYNAPTA
HOLOTHUROIDEA
HYDROIDES DIANTHUS
HYDROIDUS
ISCHNOCHITON PAPILLOSUS
ISOLJA PULCHELLA
LABIDOCERA AESTIVA
LAEVICARDIUM MORIONI
LATREUTES PARVULUS
LEANDER TENUICORNIS
LEPIDAMEIRIA COMMENSALIS
LEPIDASTHENIA SP.
LEPIDONOTUS SP.
LEPTOCHELA SEBRATORBITA
LEPTOCHELIA RAPAX
LEPTON SP.
LEUCON SP.
LIBINIA DUBIA
LIUBERIS CASTANEUS
LISTRIELLA BAHIA
LISTRIELLA BARNARDI
LISTRIELLA CLYMENELLAE
LISTRIELLA SP.
LITOCURSA STREMA
LUCIFER FAXONI
LUCINA AMIANTUS
LUCINA MULTILINEATA
LUMBRINERIDAE
LUMBRINERIS LATREILLI
LUMBRINERIS PARVAPEDATA
LUMBRINERIS TENUIS
LUMBRINERIS TETRAURA
LYONSIA HYALINA FLORIDANA
LYSIDICE MINETTA
MACOMA BREVIFRONS
MACOMA SP.
MACOMA TENTA
MACROCLYMENE SPA
MAGELONA PETTIBONEAE
MAGELONA PHYLLISAE
MAGELONA ROSEA
MAGELONIDAE
MALACOCERUS INDICUS
MALDANE SARSI
MALDANIDAE UNKNOWN
MALDANIDAE
MARPHYSA SANGUINEA
NARTESIA SP.
MEDIUNASTUS CALIFORNIENSIS
MEGALOMMA BILOCULATUM
MEGALOMMA LOBIFERUM
MELINIA MACULATA
MELITA SP.
MERCENARIA CAMPECHIENSIS
MESUCHAEOPTERUS TAYLORI
MICRONEPHTYS SP.
MICROPHOLIS ALBA
MICROPROTOPUS SPP.
MINUSPIO CIRRIFERA
MITRELLA LUNATA
MOLGULA MANHATTENSIS
MONOCULOIDES SP.

MULLINIA LATERALIS
 MUNNA HAYESI
 MYRIOMENIA CALIFORNIENSIS
 MYRUPHIS PUNCTATUS
 MYSELLA PLANULATA
 MYSIDOPSIS BIGELOGI
 MYSIDOPSIS CF. BIGELOWI
 MYSIDOPSIS SP
 MYSIDOPSIS VAHIA
 MYSIIDES RARICA
 NASSARIUS ACUTUS
 NASSARIUS SP
 NASSARIUS VIBEX
 NATICA FUSILLA
 NEANTHES SUCCINEA
 NEMATODE
 NEOPANOPE TEXANA
 NEPHYIIDAE
 NEPHYIID A
 NEPHYS BUCERA
 NEPHYS JUV.
 NEPHYS MAGELLANICA
 NEPHYS PICTA
 NEREIDAE
 NEREID SPA
 NEREIPHYLLA FRAGILIS
 NEREIS PELAGICA OCCIDENTALIS
 NOTHRIA CF. GEOPHILIFORMIS
 NOTOMASTUS CF. LATERICEUS
 NOTOMASTUS HEMIPODUS
 NOTOMASTUS LATERICEUS
 NOTOMASTUS LOBATUS
 NOTOMASTUS SP
 NUCULANA ACUTA
 NUCULANA CONCENTRICA
 NODIBRANCH
 ODOSTOMIA SP.
 OGYRIDES LIMICOLA
 OLIGOCHAETE
 OLIVELLA DEALBATA
 ONUPHIDAE
 ONUPHIS EREMITA OCOLATA
 ONUPHIS SP.
 OPHELIDAE
 OPHIOROIDS
 ORBINIDAE
 OSTRACODA
 OREA FUSIFORMIS
 OWENIIDAE
 OXYOROSTYLIS SALIONI
 PAGURID JUV.
 PAGURUS ANNULIPES
 PAGURUS LONGICARPUS
 PAGURUS POLLICARIS
 PALAEMONETES PUGIO
 PALAEMONETES ZOEA
 PALEMONIUS HETEROSETA
 PANDORA TRILINEATA
 PANOPEUS BERمودENSIS
 PANOPEUS HERBSTII
 PANOPEUS SP.
 PANOPEUS TERGIDUS

PARAHAUSTORUS SP.
PARAHESIONE LUTEOLA
PARAMEIOPELLA SP
PARANAITIS POLYNOIDES (=PHYL A)
PARANAITIS SPECIOSA
PARANETOPELLA SP.
PARANIHAS RAPIFORMIS
PARAONIDAE GRPA
PARAONIDAE GRPB
PARAONIDES LYRA
PARAONIS FULGENS
PARAONIS GRACILIS
PARAONIS SP B
PARAPRIONOSPIO PINNATA
PARASTEROPE SPP
PECTINARIA GOULDII
PECTINARIIDAE
PENAEUS AZTECUS
PENAEUS SETIFERUS
PENTAMERA PULCHERRIMA
PERIPLUMA MARGARITACEUM (=INEQUALE)
PERSEPHONA PUNCTATA=P.MEDITERRANEA
PETRICOLA PHOLADIFORMES
PETROLISTHES ARMATUS
PHACOIDES PECTINATUS
PHASCOLION SINDBI
PHORONIS ARCHITECTA
PHOTIS MACROMANUS
PHOTIS SP.
PHOXOCEPHALIDAE
PHYLLUDUCIDAE
PILARGIDAE ANCISTROSYLLIS
PILARGIDAE SIGAMBRA
PILARGIDAE
PILARGIS BERKELEYAE
PINNIXA CRISIATA
PINNIXA CYLINDRICA (=SP.)
PINNIXA RETINENS
PINNIXA SAYANA
PINNIXA
PINNOTHERES SP
PINNOTHERIDAE
PIONOSYLLIS SP
PIROMIS ARENOSUS
PISIA PALMATA
PLATYISCHNOPUS SP.
PODARKE OBSCURA
PODUCERUS BRASILIENSIS
POLINICES DUPLICATUS
POLYDORA A
POLYDORA CAULLERYI
POLYDORA LIGNI
POLYDORA SOCIALIS
POLYDORA SP.
POLYDORA WEBSTERI
POLYNOIDAE
POLYNOID B
POLYODONTES LUPINA
POLYODONTIDAE
POLYOPHTHALMUS PICTUS
POMATOLEIUS KRAUSSI
PORCELLANID JUV.

PURONYA SP
POTAMILLA CF. SPATHIFERUS
PRIONOSPID CRISTATA
PRIONOSPID HETEROBRAUCHIA
PRIONOSPID STEENSIRUPI
PROCESSA HEMPHILLI
PSEUDEURYTHOE SP.
PSEUDODIAPTOMUS CORONATUS
PYCNOGONIDA
PYRAMIDELLA CRENULATA
RHYNCHOCOELS
SABELLA MELANOSTIGMA
SABELLA MICROPHTHALMA
SABELLIDAE
SABELLID A (=LAGNOME SP.)
SAMYTHELLA ELIASONI
SARSIELLA DISPARALIS
SARSIELLA SP
SARSIELLA TEXANA
SARSIELLA ZOSTERICOLA
SCHISTOMERINGOS RUDOLPHI
SCHISTOMERINGOS SPA
SCOLELEPIS TEXANA
SCOLOPLOS N.SP.(=TEXANA)
SCOLOPLUS RUBRA
SERPULA VERNICULARIS
SERPULIDAE
SERPULID A
SICYONIA BREVIROSTRIS
SIGALONIDAE
SIGAMBRA BASSI
SIGAMBRA TENTACULATA
SINUM PERSPECTIVUM
SIPUNCULA
SMARAGDIA VIRIDIS VIRIDEMARIS
SOLEA VIRIDIS
SPHACROMA WALKERI
SPHAEROMA QUADRIDENTATUM
SPHAEROPOMATUS MIAMIENSIS
SPHAERUSYLLIS CF. SUBLAEVIS
SPHAERUSYLLIS SPA
SPIOCHAETOPTERUS COSTARUM
SPIONIDAE
SPIOPHANES BOMBYX
SPID PETIIBONEAE
SPID SETOSA
SPID SP.
SPORTELLIDAE
SQUILLA SP
STENOTHOE SP
STHENELAIS BOA
STHENELAIS LIMICOLA
STHENELAIS SP
STREBLUSOMA SP
STREBLUSPID BENEDICTI
STYLOCHUS ELLIPTICUS
SYLLIDAE
SYLLIS CORNUTA
SYLLIS GRACILIS
SYLLIS SP
SYMDOCE FOXONI
SYNCHELIDIUM AMERICANUM

TAGELUS DIVISUS
TANAIDACEAN
TEINOSTOMA BISCAYNENSE
TELLIDURA CRISTATA
TELLINA ALTERNATA
TELLINA SP.
TELLINA TEXANA
TEREBELLIDAE
THARYX ANNULOSUS
THARYX SETIGERA
TRACHYCARDIUM MURICATUM
TRACHYPENAEUS CONSTRICTUS
TRUNCATELLA CARIBAEENSIS
TURBOMILLA SP
TYPOSYLLIS CORALLICOLOIDES
UNKNOWN ANIMAL A
UPOGEBIA AFFINIS
VENERIDAE JUV
VITRINELLA FLORIDANA
VITRINELLIDAE
XANTHIDAE
XENANIDURA BREVI TELSON

APPENDIX B

BENTHIC FAUNAL SUMMARY TABLES OF ABUNDANCE, OCCURENCE, AND BIOMASS
FOR EACH SAMPLING STATION AND SAMPLING PERIOD BETWEEN OCTOBER
1979 AND JULY 1981. SHELF DESIGNATION REFERS TO SHOAL STATION.

STATION 1 TRANSECT CHANNEL PERIOD OCTOBER 79

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 STRELOSPIO BENEDICTII	72	22	9	7.6	103	3	28.53	28.53	34.33	33.262	-48.30	116.97
2 OLISUCHAEAE	16	34	7	0.0	57	3	15.79	44.32	19.00	13.748	-15.15	53.15
3 PARAPRIONOSPION PINNATA	26	25	5	24.3	56	3	15.51	59.83	18.67	18.846	-18.76	48.16
4 MEDICASTOS CALIFORNIENSIS	27	6	2	.1	35	3	9.70	69.53	11.67	13.427	-21.70	45.03
5 SIGAMBRA TENTACULATA	3	9	6	2.0	18	3	4.99	74.52	6.00	3.000	-1.45	13.45
6 RHYNCOCOELES	2	6	7	5.2	15	3	4.16	78.67	5.00	2.646	-1.57	11.57
7 COSSURA DELTA	3	8	3	0.0	14	3	3.88	82.55	4.67	2.887	-2.50	11.84
8 NEMALIDE	4	4	0	0.0	8	2	2.22	84.76	2.67	2.309	-3.27	8.40
9 PSEUDONYCTIMUS SP.	1	5	2	0.0	8	3	2.22	86.96	2.67	2.082	-2.50	7.84
10 PARALOMA PHYLLISAE	4	1	2	0.0	7	3	1.94	88.92	2.33	1.528	-1.46	6.13
11 MINUSPIO LIGNIFERA	0	6	1	0.0	7	2	1.94	90.86	2.33	3.215	-5.65	10.32
12 SPIRULIDAE	0	0	0	29.6	0	1	1.66	92.52	2.00	3.464	-6.61	10.61
13 PILARGIDAE ANCIROSTYLLIS	0	3	1	0.0	4	2	1.11	93.63	1.33	1.528	-2.46	5.13
14 PILARGIDAE SIGAMBRA	0	3	0	0.0	3	1	.83	94.46	1.00	1.732	-3.30	5.30
15 SIGAMBRA BASAL	0	0	2	0.0	2	1	.55	95.01	.67	1.155	-2.20	3.54
16 ANCIROSTYLLIS PAPILLOSA	0	1	1	0.0	2	2	.55	95.57	.67	.577	-.77	2.10
17 OGYRIDES LIMICOLA	1	1	0	0.0	2	2	.55	96.12	.67	.577	-.77	2.10
18 APOMPHIDOSPION PYGMAEA	0	0	1	.0	1	1	.28	96.40	.33	.577	-1.10	1.77
19 DIOPATRA COPREA	0	0	1	0.0	1	1	.28	96.68	.33	.577	-1.10	1.77
20 PARALIDAE GRPA	1	0	0	.8	1	1	.28	96.95	.33	.577	-1.10	1.77
21 THARTA SETIGERA	1	0	0	1.9	1	1	.28	97.23	.33	.577	-1.10	1.77
22 GYLIIDE SOLITARIA	0	1	0	1.4	1	1	.28	97.51	.33	.577	-1.10	1.77
23 NEREID SPA	0	0	1	0.0	1	1	.28	97.78	.33	.577	-1.10	1.77
24 LITOGOMSA STREMA	1	0	0	0.0	1	1	.28	98.06	.33	.577	-1.10	1.77
25 ANADARA TRANSVERSA	0	1	0	0.0	1	1	.28	98.34	.33	.577	-1.10	1.77
26 PHOKONIS ARCHITECTA	0	1	0	0.0	1	1	.28	98.61	.33	.577	-1.10	1.77
27 MYSELLA PLANDATA	0	1	0	0.0	1	1	.28	98.89	.33	.577	-1.10	1.77
28 ANADARIDAE	1	0	0	0.0	1	1	.28	99.17	.33	.577	-1.10	1.77
29 GYPTIS VITATA	0	1	0	0.0	1	1	.28	99.45	.33	.577	-1.10	1.77
30 POLYDORUS DUPLICATUS	0	1	0	137.1	1	1	.28	99.72	.33	.577	-1.10	1.77
31 EUDOR OF NUDULOSA	0	1	0	0.0	1	1	.28	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 16 22 16
 NO. OF INDIVIDUALS 169 141 51
 TOTAL INFAUNAL BIOMASS 229 572 188 987.9

STATION 1 TRANSECT CHANNEL SPECIES MEAN DENSITY DIVERSITY PIE EQUITABILITY BIOMASS
 1 CHANNEL 31 120.3 3.4199 .8544 .5051 329.3

STATION 4 TRANSECT SHELF PERIOD OCTOBER 79

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STU	95 PCT CONF LIM	
	1	2	3									
1 MEDIOASTIUS CALIFORNIENSIS	218	120	190	15.0	528	3	24.30	24.30	176.00	50.478	50.60	301.40
2 PARANIDAE GRPA	111	98	97	23.6	306	3	14.08	38.38	102.00	7.810	82.60	121.40
3 ULIOCHAELE	98	41	62	0.0	201	3	9.25	47.63	67.00	28.827	-4.62	136.62
4 NEIATIDE	114	36	37	0.0	187	3	8.61	56.24	62.33	44.747	-48.83	173.50
5 STRELOSPIU BENEDICTI	43	43	62	4.8	148	3	6.81	63.05	49.33	10.970	22.08	76.59
6 PARANIDAE GRPH	32	35	38	12.4	105	3	4.83	67.88	35.00	3.000	27.55	42.45
7 LUCINA MULTILINEATA	24	23	43	69.6	90	3	4.14	72.02	30.00	11.269	2.40	50.00
8 RHYNCOCULUS	25	21	15	83.9	61	3	2.81	74.83	20.33	5.033	7.83	32.84
9 SCHISTOMERINGUS SPA	27	9	16	0.0	52	3	2.39	77.22	17.33	9.074	-5.21	39.88
10 THARYA SETIGERA	0	20	29	15.5	49	2	2.25	79.48	16.33	14.844	-20.54	53.21
11 ACIENCLIA CANALICULATA	31	6	9	0.0	46	3	2.12	81.59	15.33	13.050	-18.58	49.25
12 ANFELISCA VERRILLI	12	9	19	6.3	40	3	1.84	83.43	13.33	5.132	.58	26.28
13 CIRRIATULIDAE	25	4	5	6.2	34	3	1.56	85.00	11.33	11.846	-18.10	40.76
14 LYONIA NYALINA FLORIDANA	18	1	10	5.7	29	3	1.33	86.33	9.67	8.525	-11.46	30.80
15 GLYCINDE SULITAMIA	19	1	8	4.4	28	3	1.29	87.62	9.33	9.074	-13.21	31.88
16 PERIPLONA MARGARITACEUM (=INEGUALE	4	14	7	0.0	25	3	1.15	88.77	8.33	5.132	-4.42	21.08
17 MOLINIA LATERALIS	4	9	9	18.7	22	3	1.01	89.78	7.33	2.887	.16	14.50
18 SPIRIDAE	0	3	10	0.0	13	2	.60	90.38	4.33	5.132	-8.42	17.08
19 SYLLIDAE	11	0	0	0.0	11	1	.51	90.89	3.67	6.351	-12.11	19.44
20 MYSELLA PLANULATA	6	0	4	0.0	10	2	.46	91.35	3.33	3.055	-4.26	10.92
21 TELLINA ALTERNATA	1	5	4	0.0	10	3	.46	91.81	3.33	2.082	-1.84	8.50
22 NUCULANA ACUTA	2	5	3	0.0	10	3	.46	92.27	3.33	1.520	-.46	7.13
23 NUCULASTIUS HEMIPODUS	2	3	5	0.0	10	3	.46	92.73	3.33	1.520	-.46	7.13
24 GYPTIS VITTATA	7	1	1	0.0	9	3	.41	93.14	3.00	3.464	-5.61	11.61
25 BIVALVE	0	8	1	0.0	9	2	.41	93.56	3.00	4.359	-7.83	13.83
26 SCOLELEPIS TEXANA	2	3	3	0.0	8	3	.37	93.93	2.67	.577	1.23	4.10
27 PHORUNIS ARCHITECTA	2	4	2	0.0	8	3	.37	94.29	2.67	1.155	-.20	5.54
28 CLYMERELLA MUCOSA	2	4	1	0.0	7	3	.32	94.62	2.33	1.528	-1.46	6.13
29 HAPLOSCOLOPUS FOLIUSUS	2	0	4	0.0	6	2	.28	94.89	2.00	2.000	-2.97	6.97
30 SCOLOPUS RUBRA	4	2	0	0.0	6	2	.28	95.17	2.00	2.000	-2.97	6.97
31 SPHAEROSTILLIS CF. SUBLAEVIS	0	6	0	0.0	6	1	.28	95.44	2.00	3.464	-6.61	10.61
32 OSTRACODA	3	1	1	0.0	5	3	.23	95.67	1.67	1.155	-1.20	4.54
33 LISTRIELLA BAHIA	0	5	0	0.0	5	1	.23	95.90	1.67	2.087	-5.51	8.84
34 BRANIA CLAVATA	0	0	4	0.0	4	1	.18	96.09	1.33	2.309	-4.40	7.07
35 MAGELONA PHYLLISAE	1	1	2	0.0	4	3	.18	96.27	1.33	.577	-.10	2.77
36 APOPHIDIOSPIU PYGMAEA	0	0	4	1.4	4	1	.18	96.46	1.33	2.309	-4.40	7.07
37 LIUCURSA SIREMMA	4	0	0	0.0	4	1	.18	96.64	1.33	2.309	-4.40	7.07
38 SPIROCHALTOPIERUS COSTARUM	2	0	2	0.0	4	2	.18	96.82	1.33	1.155	-1.54	4.20
39 PHASCOLIUM SIROMBI	1	2	1	0.0	4	3	.18	97.01	1.33	.577	-.10	2.77
40 SAKIELLA TEXANA	1	1	2	0.0	4	3	.18	97.19	1.33	.577	-.10	2.77
41 PARAPHIDIOSPIU PINNATA	2	1	0	3.3	3	2	.14	97.33	1.00	1.000	-1.48	3.48
42 SIPUNCULA	0	1	2	0.0	3	2	.14	97.47	1.00	1.000	-1.48	3.48
43 NALICA PUSILLA	0	1	2	0.0	3	2	.14	97.61	1.00	1.000	-1.48	3.48
44 ONERIA FUSIFORMIS	2	0	1	0.0	3	2	.14	97.75	1.00	1.000	-1.48	3.48
45 TURBOVILLA SP	2	0	1	0.0	3	2	.14	97.86	1.00	1.000	-1.48	3.48
46 PYRAMIDELLA CRENULATA	0	3	0	0.0	3	1	.14	98.02	1.00	1.732	-3.30	5.30
47 DRILONEHEIS MAGNA	0	1	2	0.0	3	2	.14	98.16	1.00	1.000	-1.48	3.48
48 MEGALONIA BICULATUM	1	0	1	0.0	2	2	.09	98.25	.67	.577	-.77	2.10
49 MAGELONA PELLIBONEAE	0	0	2	0.0	2	1	.09	98.34	.67	1.155	-2.20	3.54
50 BRANCHIOSTOMA CARIBAEUM	2	0	0	0.0	2	1	.09	98.44	.67	1.155	-2.20	3.54
51 SIGAMARA TENTACULATA	1	1	0	.4	2	2	.09	98.53	.67	.577	-.77	2.10
52 LISTRIELLA ANKARDI	2	0	0	0.0	2	1	.09	98.62	.67	1.155	-2.20	3.54
53 GLYCERA CAPITATA	1	0	1	26.8	2	2	.09	98.71	.67	.577	-.77	2.10
54 MICROPROTODUS SPP.	1	1	0	0.0	2	2	.09	98.80	.67	.577	-.77	2.10

55	CLYPEELLA TORQUATA CALIDA	1	1	0	5.4	2	2	.09	98.90	.67	.577	-.77	2.10
56	PLEUROTHERIA GODELLI	0	1	1	0.0	2	2	.09	98.99	.67	.577	-.77	2.10
57	XENANTHURA BREVIETELSON	0	1	1	0.0	2	2	.09	99.08	.67	.577	-.77	2.10
58	NEKEID SPA	0	0	1	0.0	1	1	.05	99.13	.33	.577	-1.10	1.77
59	TABELUS DIVISUS	0	0	1	0.0	1	1	.05	99.17	.33	.577	-1.10	1.77
60	TANAIDALEAN	0	0	1	0.0	1	1	.05	99.22	.33	.577	-1.10	1.77
61	ASPHARETIIDAE	0	1	0	0.0	1	1	.05	99.26	.33	.577	-1.10	1.77
62	PODARKE OBSCURA	0	1	0	0.0	1	1	.05	99.31	.33	.577	-1.10	1.77
63	PSEUDOPYTHOE SP.	0	1	0	0.0	1	1	.05	99.36	.33	.577	-1.10	1.77
64	UNKNOWN ANIMAL A	1	0	0	0.0	1	1	.05	99.40	.33	.577	-1.10	1.77
65	DIOPATRA COPREA	0	0	1	0.0	1	1	.05	99.45	.33	.577	-1.10	1.77
66	MADELONIDAE	1	0	0	0.0	1	1	.05	99.49	.33	.577	-1.10	1.77
67	PINNIXA	0	0	1	0.0	1	1	.05	99.54	.33	.577	-1.10	1.77
68	OGYRIDES LIMICOLA	1	0	0	0.0	1	1	.05	99.59	.33	.577	-1.10	1.77
69	POLINICES DUPLICATUS	0	0	1	0.0	1	1	.05	99.63	.33	.577	-1.10	1.77
70	ANEMONE	1	0	0	0.0	1	1	.05	99.68	.33	.577	-1.10	1.77
71	HESIONIDAE	0	0	1	0.0	1	1	.05	99.72	.33	.577	-1.10	1.77
72	CAPITELLIDAE	1	0	0	0.0	1	1	.05	99.77	.33	.577	-1.10	1.77
73	PANDORA TRILINEATA	1	0	0	0.0	1	1	.05	99.82	.33	.577	-1.10	1.77
74	STYLOCHUS ELLIPTICUS	1	0	0	0.0	1	1	.05	99.66	.33	.577	-1.10	1.77
75	OPHIURIDS	0	0	1	0.0	1	1	.05	99.91	.33	.577	-1.10	1.77
76	HAMINGEA SUCCINEA	1	0	0	0.0	1	1	.05	99.95	.33	.577	-1.10	1.77
77	PHYLLIRODIDAE	1	0	0	0.0	1	1	.05	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 52 46 53
 NO. OF INDIVIDUALS 882 559 732 2173
 TOTAL INFAUNAL BIOMASS 767 682 1127 2575.4

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	77	724.3	4.1004	.8931	.3361	858.5

STATION 1 TRANSECT CHANNEL PERIOD NOVEMBER 79

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									

1	STRELOSPIO BENEDICTI	54	11	35	3.7	100	3	27.62	27.62	33.33	21.548	-20.20	86.87
2	OLIGOCHELE	15	18	31	0.0	64	3	17.68	45.30	21.33	8.505	.20	42.46
3	COSSURA DELIA	14	7	9	0.0	30	3	8.29	53.59	10.00	3.606	1.04	18.96
4	SIGAMBRA TENTACULATA	7	17	3	8.5	27	3	7.46	61.05	9.00	7.211	-8.91	26.91
5	MEDIOMASUS CALIFORNIENSIS	12	8	4	1.4	24	3	6.63	67.68	8.00	4.000	-1.94	17.94
6	PARAKIONOSPIO PINNATA	20	1	0	7.9	21	2	5.80	73.48	7.00	11.269	-21.00	35.00
7	RHYNCOCUELS	5	3	4	28.1	12	3	3.31	76.80	4.00	1.000	1.52	6.48
8	PSEUDOCYTHOE SP.	1	2	6	52.2	9	3	2.49	79.28	3.00	2.646	-3.57	9.57
9	SPIONIDAE	1	5	3	0.0	9	3	2.49	81.77	3.00	2.000	-1.97	7.97
10	BAIEA CATHEINENSIS	0	0	5	0.0	5	1	1.38	83.15	1.67	2.887	-5.51	6.84
11	NASSARIUS VIREX	0	0	4	0.0	4	1	1.10	84.25	1.33	2.309	-4.40	7.07
12	PINNIXA SAYANA	4	0	0	0.0	4	1	1.10	85.36	1.33	2.309	-4.40	7.07
13	PARAONIDAE GRPA	3	1	0	1.5	4	2	1.10	86.46	1.33	1.528	-2.46	5.13
14	ARCISTROSYLLIS PAPILLUSA	1	2	1	0.0	4	3	1.10	87.57	1.33	.577	-.10	2.77
15	NEMATODE	4	0	0	0.0	4	1	1.10	88.67	1.33	2.309	-4.40	7.07
16	MINUSPIO CIRRIFERA	1	2	0	0.0	3	2	.83	89.50	1.00	1.000	-1.48	3.48
17	SERPULIDAE	0	0	3	0.0	3	1	.83	90.33	1.00	1.732	-3.30	5.30
18	ABRA AERUALIS	0	0	3	.1	3	1	.83	91.16	1.00	1.732	-3.30	5.30
19	MAGELONA PHYLLISAE	1	0	2	0.0	3	2	.83	91.99	1.00	1.000	-1.48	3.48
20	ANADARA TRANSVERSA	0	0	2	0.0	2	1	.55	92.54	.67	1.155	-2.20	3.54
21	NEANTHES SUCCINEA	2	0	0	0.0	2	1	.55	93.09	.67	1.155	-2.20	3.54
22	OGTRIDES LIMICULA	0	1	1	0.0	2	2	.55	93.65	.67	.577	-.77	2.10
23	ERICHTHONIAS BRASILIENSIS	0	0	2	0.0	2	1	.55	94.20	.67	1.155	-2.20	3.54
24	ANACHIS USESA	0	0	1	0.0	1	1	.28	94.48	.33	.577	-1.10	1.77
25	ELASMOPUS SP	0	0	1	0.0	1	1	.28	94.75	.33	.577	-1.10	1.77
26	EXOGONE DISPAR	0	0	1	0.0	1	1	.28	95.03	.33	.577	-1.10	1.77
27	XANTHIDAE	0	0	1	0.0	1	1	.28	95.30	.33	.577	-1.10	1.77
28	DIOPATRA COPREA	0	0	1	25.9	1	1	.28	95.58	.33	.577	-1.10	1.77
29	GASTROPOD	0	0	1	0.0	1	1	.28	95.86	.33	.577	-1.10	1.77
30	BIVALVE	0	0	1	0.0	1	1	.28	96.13	.33	.577	-1.10	1.77
31	NEPHYTIDAE	1	0	0	22.2	1	1	.28	96.41	.33	.577	-1.10	1.77
32	NEREIDAE	1	0	0	0.0	1	1	.28	96.69	.33	.577	-1.10	1.77
33	AMPHINOMIDAE	1	0	0	0.0	1	1	.28	96.96	.33	.577	-1.10	1.77
34	AMPHARETIIDAE	1	0	0	0.0	1	1	.28	97.24	.33	.577	-1.10	1.77
35	PINNOHERIDAE	0	1	0	0.0	1	1	.28	97.51	.33	.577	-1.10	1.77
36	PARAONIDAE GRPB	1	0	0	.5	1	1	.28	97.79	.33	.577	-1.10	1.77
37	MYSELLA PLANOLATA	0	1	0	0.0	1	1	.28	98.07	.33	.577	-1.10	1.77
38	ARMANDIA AGILIS	0	0	1	0.0	1	1	.28	98.34	.33	.577	-1.10	1.77
39	AMPELISCA VERRILLI	1	0	0	.8	1	1	.28	98.62	.33	.577	-1.10	1.77
40	PILARGIDAE SIGAMBRA	1	0	0	0.0	1	1	.28	98.90	.33	.577	-1.10	1.77
41	NUCULANA ACUTA	1	0	0	0.0	1	1	.28	99.17	.33	.577	-1.10	1.77
42	SIGAMBRA MASSI	1	0	0	0.0	1	1	.28	99.45	.33	.577	-1.10	1.77
43	SIPUNCULA	1	0	0	0.0	1	1	.28	99.72	.33	.577	-1.10	1.77
44	OMENIA FUSIFORMIS	1	0	0	0.0	1	1	.28	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	27	15	25
NO. OF INDIVIDUALS	156	80	126
TOTAL INFAUNAL BIOMASS	259	108	544

362

910.8

STATION TRANSECT SPECIES MEAN DENSITY DIVERSITY PIE EQUITABILITY BIOMASS

303.6

.4733

.8710

3.7963

120.7

44

CHAMBER

1

STATION	4	TRANSECT	SHELF	BIOMASS			PERCENT	ACC PCT	MEAN	STD	95 PCT	
SPECIES	1	2	3	MG	ABUND	OCCUR					CONF	LIM
1 MEDIUMASTUS CALIFURNIENSIS	203	224	309	17.2	736	3	27.71	27.71	245.33	56.128	145.89	384.77
2 PARANOMASTUS GMPA	115	120	189	35.6	424	3	15.96	43.67	141.33	41.356	38.59	244.08
3 NEMATODE	305	0	0	0.0	305	1	11.48	55.16	101.67	176.042	*****	539.14
4 ULLOCH-LE	54	52	57	0.0	163	3	6.14	61.30	54.33	2.517	48.08	60.59
5 SIREBLOSPIO BENEDICTI	12	30	74	7.5	110	3	4.37	65.66	38.67	31.896	40.57	117.91
6 PARANOMASTUS GRPH	32	40	24	3.9	96	3	3.61	69.28	32.00	8.000	12.13	51.87
7 MULLINIA LATERNALIS	30	30	31	15.4	91	3	3.43	72.70	30.33	.577	28.90	31.77
8 LUCINA MULLINIANA	12	34	17	132.8	68	3	2.56	75.26	22.67	14.364	-13.02	58.35
9 FRANTA SETIGERA	16	26	0	15.0	42	2	1.58	76.84	14.00	13.115	-18.58	46.58
10 SCHISTOCEPHALUS SPA	7	22	8	0.0	37	3	1.39	78.24	12.33	8.380	-8.50	33.17
11 LYONSIA MYALIMA FLORIDANA	15	14	6	2.2	35	3	1.32	79.56	11.67	4.933	-5.59	23.92
12 GLYCYDE SULITARIA	11	9	14	4.0	34	3	1.28	80.84	11.33	2.517	5.08	17.59
13 CIRRHATULIDAE	8	0	24	5.9	32	2	1.20	82.04	10.67	12.220	-19.69	41.03
14 NUCULANA ACUTA	10	19	3	0.0	32	3	1.20	83.25	10.67	8.021	-9.26	30.59
15 MYNCHOCUELLS	7	11	12	39.3	30	3	1.13	84.37	10.00	2.646	3.43	16.57
16 PERIPLUM-A MARGARITACEUM (=INEQUALE	7	15	6	0.0	28	3	1.05	85.43	9.33	4.933	-2.92	21.59
17 XENANTHURA BREVIPELSON	3	2	23	0.0	28	3	1.05	86.48	9.33	11.846	-20.10	38.76
18 TELLINA ALIENATA	10	4	9	0.0	23	3	.87	87.35	7.67	3.215	-3.32	15.65
19 MASSARIUS ACUTUS	15	4	0	0.0	19	2	.72	88.06	6.33	7.767	-12.96	25.63
20 ACTEUCINA CANALICULATA	7	4	7	0.0	18	3	.68	88.74	6.00	1.732	1.70	10.30
21 AMPELISCA VERMILLI	4	4	10	4.7	18	3	.68	89.42	6.00	3.404	-2.61	14.61
22 ADMA AEGUALIS	14	4	0	1.1	15	2	.68	90.10	6.00	7.211	-11.91	23.91
23 BRANIN CLAVATA	5	0	10	0.0	15	2	.56	90.66	5.00	5.000	-7.42	17.42
24 STYLLIDAE	0	6	7	0.0	13	2	.49	91.15	4.33	3.786	-5.07	13.74
25 LIUCURSA SIMEMMA	10	2	0	0.0	12	2	.45	91.60	4.00	5.292	-9.15	17.15
26 DIVALVE	2	7	3	0.0	12	3	.45	92.06	4.00	2.646	-2.57	10.57
27 TURBUNILLA SP	7	3	2	0.0	12	3	.45	92.51	4.00	2.646	-2.57	10.57
28 SIGAMBRA TENTACULATA	4	4	3	1.5	11	3	.41	92.92	3.67	.577	2.23	5.10
29 OSIRACUDA	3	3	4	0.0	10	3	.38	93.30	3.33	.577	1.90	4.77
30 PYRAMIDELLA CREMULATA	2	2	6	0.0	10	3	.38	93.67	3.33	2.309	-2.40	9.07
31 NUDOMASTUS HEMIPUUS	3	6	0	0.0	9	2	.34	94.01	3.00	3.000	-4.45	10.45
32 MYSELLA PLANULATA	7	0	1	0.0	8	2	.30	94.31	2.67	3.786	-6.74	12.07
33 CYCLASPIS VARIANS	2	4	1	0.0	7	3	.26	94.58	2.33	1.528	-1.46	6.13
34 NATICA PUSILLA	3	2	2	0.0	7	3	.26	94.84	2.33	.577	.90	3.77
35 ALIGERA LEASIANA	0	5	2	0.0	7	2	.26	95.11	2.33	2.517	-3.92	8.59
36 LISINIELLA BARNARDI	0	1	6	0.0	7	2	.26	95.37	2.33	3.215	-5.65	10.32
37 CLYMEHELLA MUCOSA	3	3	1	0.0	7	3	.26	95.63	2.33	1.155	-5.54	5.20
38 SCHISTOCEPHALUS RUDOLPHI	6	0	0	0.0	6	1	.23	95.86	2.00	3.464	-6.61	10.61
39 SPIONIUM	5	1	0	0.0	6	2	.23	96.08	2.00	2.646	-4.57	8.57
40 APORHODOSPIO PYGMAEA	2	0	4	1.3	6	2	.23	96.31	2.00	2.000	-2.97	6.97
41 SPHAEROSTYLIS SPA	1	2	3	0.0	6	3	.23	96.54	2.00	1.000	-2.97	6.97
42 TANAIDACEAN	2	0	4	0.0	6	2	.23	96.76	2.00	2.000	-2.97	6.97
43 PHASCOLIUM SIRUMBI	2	2	1	0.0	5	3	.19	96.95	1.67	.577	.23	3.10
44 BRANCHIOSTOMA CARIBAEUM	1	2	1	7.9	4	3	.15	97.10	1.33	.577	-1.10	2.77
45 SABELLIDAE	0	1	2	0.0	3	2	.11	97.21	1.00	1.000	-1.48	3.48
46 CAPITELLIDAE	0	1	2	0.0	3	2	.11	97.33	1.00	1.000	-1.48	3.48
47 CAPRELLID A	0	3	0	0.0	3	1	.11	97.44	1.00	1.732	-3.30	5.30
48 MAPUSCULOPUS FOLIOSUS	3	0	0	0.0	3	1	.11	97.55	1.00	1.732	-3.30	5.30
49 OXYMUSIYLLIS SALONI	0	2	1	0.0	3	2	.11	97.67	1.00	1.000	-1.48	3.48
50 MALDANIDAE	1	2	0	0.0	3	2	.11	97.78	1.00	1.000	-1.48	3.48
51 MERCENARIA CAMPECHEIENSIS	2	1	0	0.0	3	2	.11	97.89	1.00	1.000	-1.48	3.48
52 SYNCHYLIDUM AMERICANUM	1	2	0	0.0	3	2	.11	98.00	1.00	1.000	-1.48	3.48
53 OPHIURIUS	0	2	0	0.0	2	1	.08	98.08	.67	1.155	-2.20	3.54
54 LUCINA AMANTUS	1	1	0	0.0	2	2	.08	98.16	.67	.577	-.77	2.10

55	SPILOPHAPS GUMBYX	1	1	0	0.0	2	2	.08	98.23	.67	.577	-.77	2.10
56	SPILOPHAPS GUMBYX	1	1	0	2.8	2	2	.08	98.31	.67	.577	-.77	2.10
57	UNOPHIDAE	0	0	2	0.0	2	1	.08	98.38	.67	1.155	-2.20	3.54
58	PARAPHRIONOSPION PINNATA	1	1	0	.9	2	2	.08	98.46	.67	.577	-.77	2.10
59	ONCHIA FUSIFORMIS	2	0	0	0.0	2	1	.08	98.53	.67	1.155	-2.20	3.54
60	SCOLELEPIS TEXANA	1	1	0	0.0	2	2	.08	98.61	.67	.577	-.77	2.10
61	SARSIELLA ZOSTERICOLA	2	0	0	0.0	2	1	.08	98.68	.67	1.155	-2.20	3.54
62	ERYTHRODIA	0	2	0	0.0	2	1	.08	98.76	.67	1.155	-2.20	3.54
63	GYPTIS VIITATA	0	2	0	0.0	2	1	.08	98.83	.67	1.155	-2.20	3.54
64	TAGELUS DIVISUS	0	1	0	0.0	1	1	.04	98.87	.33	.577	-1.10	1.77
65	BURMANIELLA SP.	1	0	0	0.0	1	1	.04	98.91	.33	.577	-1.10	1.77
66	AGLAOPHANTUS VERRILLI	0	1	0	0.0	1	1	.04	98.95	.33	.577	-1.10	1.77
67	MEGALOPOMA BIUCULATUM	0	0	1	0.0	1	1	.04	98.98	.33	.577	-1.10	1.77
68	PHUKONIS ARCHITECTA	1	0	0	0.0	1	1	.04	99.02	.33	.577	-1.10	1.77
69	LISINIELLA BAHIA	0	1	0	0.0	1	1	.04	99.06	.33	.577	-1.10	1.77
70	EXOGONE DISPAR	0	1	0	0.0	1	1	.04	99.10	.33	.577	-1.10	1.77
71	BAIEA CATHRINENSIS	1	0	0	0.0	1	1	.04	99.13	.33	.577	-1.10	1.77
72	PANDORA IRILINEATA	1	0	0	0.0	1	1	.04	99.17	.33	.577	-1.10	1.77
73	SARSIELLA TEXANA	0	0	1	0.0	1	1	.04	99.21	.33	.577	-1.10	1.77
74	MANGELONA PETTIBONEAE	0	0	1	0.0	1	1	.04	99.25	.33	.577	-1.10	1.77
75	HELIODONTIDAE	1	0	0	0.0	1	1	.04	99.28	.33	.577	-1.10	1.77
76	COSSURA DELIA	0	1	0	0.0	1	1	.04	99.32	.33	.577	-1.10	1.77
77	ASTEROPTERON OCULITRISTIS	0	0	1	0.0	1	1	.04	99.36	.33	.577	-1.10	1.77
78	ENSIS MINOR	0	1	0	0.0	1	1	.04	99.40	.33	.577	-1.10	1.77
79	SARSIELLA SP	0	0	1	0.0	1	1	.04	99.44	.33	.577	-1.10	1.77
80	CERAPUS TUBULARIS	1	0	0	0.0	1	1	.04	99.47	.33	.577	-1.10	1.77
81	CLYMERELLA TORQUATA CALIDA	0	0	1	.8	1	1	.04	99.51	.33	.577	-1.10	1.77
82	ANEMONE	0	0	1	0.0	1	1	.04	99.55	.33	.577	-1.10	1.77
83	DUSINIA ELEGANS	0	0	1	0.0	1	1	.04	99.59	.33	.577	-1.10	1.77
84	ERICHTHONIAS BRASILIENSIS	0	1	0	0.0	1	1	.04	99.62	.33	.577	-1.10	1.77
85	ANACHIS ONESA	0	1	0	0.0	1	1	.04	99.66	.33	.577	-1.10	1.77
86	PARASTERONE SPP	1	0	0	0.0	1	1	.04	99.70	.33	.577	-1.10	1.77
87	DIOPATRA COPKEA	1	0	0	0.0	1	1	.04	99.74	.33	.577	-1.10	1.77
88	SERPULIDAE	0	1	0	0.0	1	1	.04	99.77	.33	.577	-1.10	1.77
89	GASTROPOD	0	0	1	0.0	1	1	.04	99.81	.33	.577	-1.10	1.77
90	ORILONEREIS MAGNA	0	1	0	0.0	1	1	.04	99.85	.33	.577	-1.10	1.77
91	OPHELIDAE	0	0	1	0.0	1	1	.04	99.89	.33	.577	-1.10	1.77
92	SYLLOCHUS ELLIPTICUS	0	0	1	0.0	1	1	.04	99.92	.33	.577	-1.10	1.77
93	MICROPROTODUS SPP.	0	1	0	0.0	1	1	.04	99.96	.33	.577	-1.10	1.77
94	PECTINARIA GOULDII	0	1	0	0.0	1	1	.04	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 60 64 51
 NO. OF INDIVIDUALS 991 763 902 2656
 TOTAL INFAUNAL BIOMASS 809 849 712 2369.5

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	94	885.3	4.0681	.8741	.2601	789.8

STATION 1 TRANSECT CHANNEL PERIOD DECEMBER79

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 ABRA AEQUALIS	214	85	44	33.1	343	3	29.75	29.75	114.33	88.715	*****	334.73
2 MEDIOMASTUS CALIFORNIENSIS	204	68	58	9.3	330	3	28.62	58.37	110.00	81.560	-92.62	312.62
3 STREBLUSPIO BENEDICTI	132	30	57	6.4	219	3	18.99	77.36	73.00	52.849	-58.29	204.29
4 OLIGOCHAELE	24	22	17	0.0	63	3	5.46	82.83	21.00	3.606	12.04	29.96
5 COSSURA DELTA	7	20	16	0.0	43	3	3.73	86.56	14.33	6.658	-2.21	30.87
6 SIGAMBRA TENIACULATA	7	25	5	3.0	37	3	3.21	89.77	12.33	11.015	-15.03	39.70
7 BIVALVE	0	0	23	0.0	23	1	1.99	91.76	7.67	13.279	-25.32	40.66
8 RHYNCHOCOELES	10	1	0	30.1	19	3	1.65	93.41	6.33	4.726	-5.41	18.07
9 MULLINIA LATERALIS	12	2	3	1.7	17	3	1.47	94.88	5.67	5.508	-8.02	19.35
10 PARAPRIONOSPION PINNATA	8	0	2	6.1	10	2	.87	95.75	3.33	4.163	-7.01	13.68
11 TELLINA ALTERNATA	7	0	1	0.0	8	2	.69	96.44	2.67	3.786	-6.74	12.07
12 SERPULIDAE	0	0	0	0.0	6	1	.52	96.96	2.00	3.464	-6.61	10.61
13 PSEUDEURYTHOE SP.	0	2	3	77.2	5	2	.43	97.40	1.67	1.528	-2.13	5.46
14 GLYCINOE SOLITARIA	3	1	1	2.3	5	3	.43	97.83	1.67	1.155	-1.20	4.54
15 ANCISTROSTYLIS PAPILLOSA	2	2	1	0.0	5	3	.43	98.27	1.67	.577	.23	3.10
16 DIOPATRA CUPREA	0	0	4	497.0	4	1	.35	98.61	1.33	2.309	-4.44	7.07
17 NEREID SPA	4	0	0	0.0	4	1	.35	98.96	1.33	2.309	-4.40	7.07
18 SPIONIDAE	0	2	0	0.0	2	1	.17	99.13	.67	1.155	-2.20	3.54
19 GLYCERA CAPITATA	0	1	0	38.8	1	1	.09	99.22	.33	.577	-1.10	1.77
20 AMPHARETIIDAE	0	0	1	0.0	1	1	.09	99.31	.33	.577	-1.10	1.77
21 ERICHTHONIAS BRASILIENSIS	0	0	1	0.0	1	1	.09	99.39	.33	.577	-1.10	1.77
22 MAGELONA PHYLLOSAE	0	1	0	0.0	1	1	.09	99.48	.33	.577	-1.10	1.77
23 BRYOZOA	0	1	0	0.0	1	1	.09	99.57	.33	.577	-1.10	1.77
24 UNOPHIDAE	0	1	0	0.0	1	1	.09	99.65	.33	.577	-1.10	1.77
25 SIGAMBRA BASSI	1	0	0	0.0	1	1	.09	99.74	.33	.577	-1.10	1.77
26 AMOPRIONOSPION PYGMAEA	0	0	1	.9	1	1	.09	99.83	.33	.577	-1.10	1.77
27 NASSARIUS ACUTUS	0	0	1	0.0	1	1	.09	99.91	.33	.577	-1.10	1.77
28 LYONSIA HYALINA FLORIDANA	0	0	1	.7	1	1	.09	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	14	16	21	
NO. OF INDIVIDUALS	635	264	254	1153
TOTAL INFAUNAL BIOMASS	235	340	1863	2436.0

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	28	384.3	2.7735	.7877	.3390	812.0

STATION 4 TRANSECT SHELF PERIOD DECEMBER 79

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MOLINIA LATERALIS	403	164	466	172.7	1033	3	31.58	31.58	344.33	159.318	-51.47	740.13
2 MEDIOMASTUS CALIFORNIENSIS	275	297	322	10.4	894	3	27.33	58.91	298.00	23.516	239.58	356.42
3 PARANIDAE GRPA	88	40	34	5.2	162	3	4.95	63.86	54.00	29.597	-19.53	127.53
4 LYONSIA HYALINA FLORIDANA	49	33	47	10.0	129	3	3.94	67.81	43.00	8.710	21.34	64.66
5 ADRA AEQUALIS	38	15	65	63.9	118	3	3.61	71.42	39.33	25.027	-22.84	101.51
6 PANDORA IRILINEATA	25	25	39	0.0	89	3	2.72	74.14	29.67	8.083	4.59	49.75
7 NUCULANA ACUTA	27	24	38	0.0	89	3	2.72	76.86	29.67	7.371	11.35	47.98
8 SIRENOSPID BENEDICTI	0	2	77	1.7	79	2	2.42	79.27	26.33	43.890	-82.70	135.37
9 ACTEUCINA CANALICULATA	22	31	22	0.0	75	3	2.29	81.57	25.00	5.196	12.09	37.91
10 PARANIDAE GRPA	13	25	3	1.7	41	3	1.25	82.82	13.67	11.015	-13.70	41.03
11 SPIRIDAE	24	14	0	0.0	38	2	1.16	83.98	12.67	12.055	-17.28	42.62
12 TRUNCATELLA CARIBAEENSIS	13	23	0	0.0	36	2	1.10	85.08	12.00	11.533	-16.65	40.65
13 LUCINA MULTILINEATA	11	11	13	54.3	35	3	1.07	86.15	11.67	1.155	8.80	14.54
14 USIRACODA	4	6	23	0.0	33	3	1.01	87.16	11.00	10.440	-14.94	36.94
15 TELLINA ALTERNATA	5	12	11	0.0	28	3	.86	88.02	9.33	3.786	-.07	18.74
16 ULIOCHAETE	6	13	9	0.0	28	3	.86	88.87	9.33	3.512	.61	18.06
17 GLYCINDE SOLITARIA	11	12	3	3.6	26	3	.79	89.67	8.67	4.933	-3.59	20.92
18 TURBONILLA SP	0	2	24	0.0	26	2	.79	90.46	8.67	13.317	-24.42	41.75
19 CIRRIATULIDAE	0	13	13	14.8	26	2	.79	91.26	8.67	7.506	-9.98	27.31
20 PHASCOLIUM SIRONI	0	12	10	0.0	22	2	.67	91.93	7.33	6.429	-8.64	23.31
21 UNOPHIDAE	9	4	7	0.0	20	3	.61	92.54	6.67	2.517	.41	12.92
22 XENANTHURA BREVITELSON	5	5	7	0.0	17	3	.52	93.06	5.67	1.155	2.80	8.54
23 RHYNCHOCERUS	5	4	8	67.7	17	3	.52	93.58	5.67	2.062	.50	10.84
24 PERIPLOMA MARGARITACEUM (=INEQUALE	8	6	2	0.0	16	3	.49	94.07	5.33	3.055	-2.26	12.92
25 HIAIELLA ARCTICA	3	10	2	0.0	15	3	.46	94.53	5.00	4.359	-5.83	15.83
26 MERCENARIA CAMPECHIENSIS	3	8	3	0.0	14	3	.43	94.96	4.67	2.887	-2.50	11.84
27 MALDANIDAE	3	7	1	0.0	11	3	.34	95.29	3.67	3.055	-3.92	11.26
28 THARYX SETIGERA	10	0	0	2.7	10	1	.31	95.60	3.33	5.774	-11.01	17.68
29 AMPELISCA VERRILLI	2	7	1	8.2	10	3	.31	95.90	3.33	3.215	-4.65	11.32
30 MYSELLA PLANULATA	0	5	5	0.0	10	2	.31	96.21	3.33	2.887	-3.84	10.50
31 BIVALVE	5	0	2	0.0	7	2	.21	96.42	2.33	2.517	-3.92	8.59
32 URBINIDAE	0	0	6	0.0	6	1	.18	96.61	2.00	3.464	-6.61	10.61
33 AMPHARETIIDAE	1	4	1	0.0	6	3	.18	96.79	2.00	1.732	-2.30	6.30
34 SARSIELLA TEXANA	3	2	1	0.0	6	3	.18	96.97	2.00	1.000	-.48	4.48
35 TANAIIDAEAN	0	4	2	0.0	6	2	.18	97.16	2.00	2.000	-2.97	6.97
36 PARAPRIUNUSPID PINNATA	1	4	0	4.9	5	2	.15	97.31	1.67	2.082	-3.50	6.84
37 APOPRIUNUSPID PYGMAEA	0	0	5	1.2	5	1	.15	97.46	1.67	2.887	-5.51	8.84
38 EDUIEA MONTUSA	3	0	1	0.0	4	2	.12	97.58	1.33	1.528	-2.46	5.13
39 LITOGORSA SIREMMA	4	0	0	0.0	4	1	.12	97.71	1.33	2.309	-4.40	7.07
40 DIOPATRA CUPREA	0	4	0	0.0	4	1	.12	97.83	1.33	2.309	-4.40	7.07
41 NASSARIUS ACUTUS	1	1	2	0.0	4	3	.12	97.95	1.33	.577	-.10	2.77
42 POLYDORA CAULLERYI	0	4	0	0.0	4	1	.12	98.07	1.33	2.309	-4.40	7.07
43 SARSIELLA SP	1	1	1	0.0	3	3	.09	98.17	1.00	0.000	1.00	1.00
44 SIPUNCULA	3	0	0	0.0	3	1	.09	98.26	1.00	1.732	-3.30	5.30
45 BRANCHIUSTOMA CARIBAEUM	0	3	0	0.0	3	1	.09	98.35	1.00	1.732	-3.30	5.30
46 HAPLUSCULOPUS FOLIUSUS	2	1	0	0.0	3	2	.09	98.44	1.00	1.000	-1.48	3.48
47 PYRAMIDELLA CRENULATA	0	1	2	0.0	3	2	.09	98.53	1.00	1.000	-1.48	3.48
48 ENSIS MINOR	0	1	2	0.0	3	2	.09	98.62	1.00	1.000	-1.48	3.48
49 CYLICHNA BIDENTATA	0	0	2	0.0	2	1	.06	98.69	.67	1.155	-2.20	3.54
50 ALIGENA TEXASIANA	0	0	2	0.0	2	1	.06	98.75	.67	1.155	-2.20	3.54
51 CAPITELLIDAE	0	0	2	0.0	2	1	.06	98.81	.67	1.155	-2.20	3.54
52 NATICA PUSILLA	2	0	0	0.0	2	1	.06	98.87	.67	1.155	-2.20	3.54
53 CYCLASPIS VARIANS	0	0	2	0.0	2	1	.06	98.93	.67	1.155	-2.20	3.54
54 MELLINIA MACULATA	2	0	0	0.0	2	1	.06	98.99	.67	1.155	-2.20	3.54

55	SIGAMBRA TENTACULATA	0	1	1	1.7	2	2	.06	99.05	.67	.577	-.77	2.10
56	DIPLUDONTA CF SOKOR	2	0	0	0.0	2	1	.06	99.11	.67	1.155	-2.20	3.54
57	UNKNOWN ANIMAL A	0	2	0	0.0	2	1	.06	99.17	.67	1.155	-2.20	3.54
58	ANEMONE	0	0	2	0.0	2	1	.06	99.24	.67	1.155	-2.20	3.54
59	SCOLOPUS RUMKA	0	1	0	0.0	1	1	.03	99.27	.33	.577	-1.10	1.77
60	MACOMA TENIA	0	0	1	0.0	1	1	.03	99.30	.33	.577	-1.10	1.77
61	POLYNOIDAE	0	0	1	0.0	1	1	.03	99.33	.33	.577	-1.10	1.77
62	PINNOTHERIDAE	1	0	0	0.0	1	1	.03	99.36	.33	.577	-1.10	1.77
63	NASSARIUS SP	0	0	1	0.0	1	1	.03	99.39	.33	.577	-1.10	1.77
64	NOTOMASTUS HEMIPODUS	0	1	0	0.0	1	1	.03	99.42	.33	.577	-1.10	1.77
65	POLINICES DUPLICATUS	0	0	1	0.0	1	1	.03	99.45	.33	.577	-1.10	1.77
66	GULFINIGIA SP	0	0	1	0.0	1	1	.03	99.48	.33	.577	-1.10	1.77
67	ECHINOIDEA	0	1	0	0.0	1	1	.03	99.51	.33	.577	-1.10	1.77
68	HOLUTHUROIDEA-LEPTOSYNAPTA	1	0	0	0.0	1	1	.03	99.54	.33	.577	-1.10	1.77
69	EPITONIUM SP	0	0	1	0.0	1	1	.03	99.57	.33	.577	-1.10	1.77
70	OPHIUROIDS	1	0	0	0.0	1	1	.03	99.60	.33	.577	-1.10	1.77
71	CERAPUS TUBULARIS	0	0	1	0.0	1	1	.03	99.63	.33	.577	-1.10	1.77
72	LISIKIELLA BARNARDI	1	0	0	0.0	1	1	.03	99.66	.33	.577	-1.10	1.77
73	CYCLOPOID COPEPOD	0	0	1	0.0	1	1	.03	99.69	.33	.577	-1.10	1.77
74	DUSINIA ELEGANS	0	0	1	0.0	1	1	.03	99.72	.33	.577	-1.10	1.77
75	MAGELONIDAE	1	0	0	0.0	1	1	.03	99.76	.33	.577	-1.10	1.77
76	PHUKONIS ARCHITECTA	1	0	0	0.0	1	1	.03	99.79	.33	.577	-1.10	1.77
77	PECTINARIA GOULDII	0	0	1	0.0	1	1	.03	99.82	.33	.577	-1.10	1.77
78	GLYCERA AMERICANA	1	0	0	0.0	1	1	.03	99.85	.33	.577	-1.10	1.77
79	DRILONEREIS MAGNA	1	0	0	0.0	1	1	.03	99.88	.33	.577	-1.10	1.77
80	PAGURID JUV.	0	1	0	0.0	1	1	.03	99.91	.33	.577	-1.10	1.77
81	GASTROPOD	0	0	1	0.0	1	1	.03	99.94	.33	.577	-1.10	1.77
82	COROPHIUM ACHERUSICUM	0	0	1	0.0	1	1	.03	99.97	.33	.577	-1.10	1.77
83	UGYRIDES LIMICOLA	0	0	1	0.0	1	1	.03	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES - 46 - 47 - 57
 NO. OF INDIVIDUALS 1100 867 1304 3271
 TOTAL INFAUNAL BIOMASS 675 1156 951 2782.2

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	83	1090.3	3.5649	.8167	.2163	927.4

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 AMBA AEGUALIS	2129	2288	1252	3093.6	5669	3	56.25	56.25	1889.67	557.929	503.58	*****
2 MEDIUMASTIUS CALIFORNIENSIS	753	1075	520	154.7	2348	3	23.30	79.54	782.67	278.687	90.31	*****
3 STREBLUSPIU BENEDICTI	332	559	251	64.9	1142	3	11.33	90.87	380.67	159.663	-15.99	777.32
4 OLIGOCHAELE	84	94	26	0.0	204	3	2.02	92.90	68.00	36.715	-23.21	159.21
5 MOLINIA LATERALIS	39	20	32	17.6	91	3	.90	93.80	30.33	9.609	6.46	54.21
6 RHYNCHOCHELS	43	10	29	71.9	82	3	.81	94.61	27.33	16.563	-13.81	68.48
7 ANEMONE	31	16	32	0.0	79	3	.78	95.40	26.33	8.963	4.07	48.60
8 BALANOGLOSSUS SP.	18	30	14	0.0	62	3	.62	96.01	20.67	8.327	-.02	41.35
9 COSSURA DELTA	10	26	17	0.0	53	3	.53	96.54	17.67	8.021	-2.26	37.59
10 PARAPHRIONUSPIU PINNATA	13	14	14	48.2	41	3	.41	96.94	13.67	.577	12.23	15.10
11 SIGAMBRA TENIACULATA	9	15	10	10.4	34	3	.34	97.28	11.33	3.215	3.35	19.32
12 PHOKUNIS ARCHITECTA	6	16	6	0.0	28	3	.28	97.56	9.33	5.774	-5.01	23.68
13 GLYCINDE SOLITARIA	9	8	5	9.3	22	3	.22	97.78	7.33	2.082	2.16	12.50
14 ERICHTHONIAS BRASILIENSIS	5	1	12	0.0	18	3	.18	97.96	6.00	5.568	-7.83	19.83
15 STYLOCHUS ELLIPTICUS	4	6	8	0.0	18	3	.18	98.13	6.00	2.000	1.03	10.97
16 CYCLOPOID COPEPOD	0	15	0	0.0	15	1	.15	98.28	5.00	8.660	-16.51	26.51
17 MINUSPIU CIRRIFERA	4	2	8	0.0	14	3	.14	98.42	4.67	3.055	-2.92	12.26
18 ANCISTROSYLLIS PAPILLUSA	3	3	6	0.0	12	3	.12	98.54	4.00	1.732	-.30	8.30
19 TELLINA ALTERNATA	4	3	3	0.0	10	3	.10	98.64	3.33	.577	1.90	4.77
20 SPHAEROSYLLIS SPA	5	4	1	0.0	10	3	.10	98.74	3.33	2.082	-1.84	8.50
21 GASTROPOD	4	0	5	0.0	9	2	.09	98.83	3.00	2.646	-3.57	9.57
22 UNKNOWN ANIMAL A	3	1	4	0.0	8	3	.08	98.91	2.67	1.528	-1.13	6.46
23 DIOPATRA CUPREA	4	0	3	561.7	7	2	.07	98.98	2.33	2.082	-2.84	7.50
24 SIGAMBRA BASSI	4	0	2	0.0	6	2	.06	99.04	2.00	2.000	-2.97	6.97
25 ANATILIDES ERYTHROPHYLLUS	4	1	1	0.0	6	3	.06	99.10	2.00	1.732	-2.50	6.30
26 ANADARA SP	0	0	6	0.0	6	1	.06	99.16	2.00	3.464	-6.61	10.61
27 BATEA CALHOUNENSIS	1	0	4	0.0	5	2	.05	99.21	1.67	2.082	-3.50	6.04
28 NEKEID SPA	3	2	0	0.0	5	2	.05	99.26	1.67	1.528	-2.13	5.46
29 PSEUDEURYTHOE SP.	0	0	5	0.0	5	1	.05	99.31	1.67	2.887	-5.51	8.84
30 MELINNA MACULATA	3	0	2	0.0	5	2	.05	99.36	1.67	1.528	-2.13	5.46
31 EULIMNOSTOMA SP	0	0	5	0.0	5	1	.05	99.40	1.67	2.887	-5.51	8.84
32 GLYCERA CAPITATA	0	1	3	0.0	4	2	.04	99.44	1.33	1.528	-2.46	5.13
33 UNOPHIDAE	4	0	0	0.0	4	1	.04	99.48	1.33	2.309	-4.40	7.07
34 MAGELONA PHYLLISAE	3	0	1	0.0	4	2	.04	99.52	1.33	1.528	-2.46	5.13
35 EPITUNUM SP	4	0	0	0.0	4	1	.04	99.56	1.33	2.309	-4.40	7.07
36 NASSARIUS ACUTUS	1	0	2	0.0	3	2	.03	99.59	1.00	1.000	-1.48	3.48
37 SPIROCHAETOPITERUS COSTARUM	2	1	0	0.0	3	2	.03	99.62	1.00	1.000	-1.48	3.48
38 LYONSIA HYALINA FLORIDANA	0	1	2	1.0	3	2	.03	99.65	1.00	1.000	-1.48	3.48
39 PILARGIDAE	0	0	2	0.0	2	1	.02	99.67	.67	1.155	-2.20	3.54
40 MITRELLA LUNATA	0	0	2	0.0	2	1	.02	99.69	.67	1.155	-2.20	3.54
41 ECHINURIDEAN	0	2	0	4.4	2	1	.02	99.71	.67	1.155	-2.20	3.54
42 MACOMA TENIA	0	1	1	0.0	2	2	.02	99.73	.67	.577	-.77	2.10
43 SPIROPHANES BUMBYX	1	1	0	.5	2	2	.02	99.75	.67	.577	-.77	2.10
44 AMPHINOMIDAE	2	0	0	0.0	2	1	.02	99.77	.67	1.155	-2.20	3.54
45 PARANIDAE GRPH	0	0	2	1.5	2	1	.02	99.79	.67	1.155	-2.20	3.54
46 CYCLOSTREMICUS SP	0	0	2	0.0	2	1	.02	99.81	.67	1.155	-2.20	3.54
47 PHYLODOUCIDAE	1	0	1	0.0	2	2	.02	99.83	.67	.577	-.77	2.10
48 NEPHYS MAGELLANICA	1	0	0	0.0	1	1	.01	99.84	.33	.577	-1.10	1.77
49 CYCLASPIS VARIANS	1	0	0	0.0	1	1	.01	99.85	.33	.577	-1.10	1.77
50 ELASMOPOUS SP	0	0	1	0.0	1	1	.01	99.86	.33	.577	-1.10	1.77
51 IMARYX SETIGERA	0	1	0	.3	1	1	.01	99.87	.33	.577	-1.10	1.77
52 SABELLIDAE	0	0	1	0.0	1	1	.01	99.88	.33	.577	-1.10	1.77
53 OXYURUSYLLIS SALIONI	1	0	0	0.0	1	1	.01	99.89	.33	.577	-1.10	1.77
54 XANTHIDAE	0	0	1	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77

55 PISTA PALATA	0	0	1	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
56 SCHISTOMERINGOS RUDOLPHI	0	0	1	0.0	1	1	.01	99.92	.33	.577	-1.10	1.77
57 NASSARIUS SP	0	1	0	0.0	1	1	.01	99.93	.33	.577	-1.10	1.77
58 MYSELLA PLANULATA	0	0	1	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
59 ALTEUTHA DEPRESSA	0	1	0	0.0	1	1	.01	99.95	.33	.577	-1.10	1.77
60 NIAELLA ARCTICA	0	0	1	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
61 POLYMUDDAE	0	1	0	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
62 OPHIURIDUS	0	0	1	0.0	1	1	.01	99.98	.33	.577	-1.10	1.77
63 CERAPUS TUBULARIS	0	0	1	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
64 PANDURA TRILINEATA	0	0	1	0.0	1	1	.01	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 38 33 49
 NO. OF INDIVIDUALS 3548 4220 2311 10079
 TOTAL INFAUNAL BIOMASS 4249 3900 4790 12938.2

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	64	3359.7	2.0251	.6159	.0879	4312.7

STATION 4 TRANSECT SHELF PERIOD JANUARY 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	720	516	515	72.4	1751	3	23.87	23.87	583.67	118.069	290.34	876.99
2 MULLINIA LATERALIS	699	31	719	381.6	1449	3	19.75	43.63	483.00	391.571	*****	*****
3 LYONSIA HYALINA FLORIDANA	379	38	612	80.9	1029	3	14.03	57.66	343.00	288.688	*****	*****
4 ADRA AEGUALIS	338	23	133	175.9	494	3	6.73	64.39	164.67	159.870	*****	561.84
5 PAKAONIDAE GRPA	96	127	127	27.1	350	3	4.77	69.16	116.67	17.898	72.20	161.13
6 BIVALVE	49	2	207	0.0	258	3	3.52	72.68	86.00	107.392	*****	352.80
7 OLIGOCHAETE	91	31	111	0.0	233	3	3.18	75.86	77.67	41.633	-25.76	181.10
8 SIRENOSPIU BENEDICTI	82	36	17	4.0	135	3	1.84	77.70	45.00	33.422	-38.03	128.03
9 FANDURA TRILINEATA	41	10	75	0.0	126	3	1.72	79.41	42.00	32.512	-38.77	122.77
10 PAKAONIDAE GRPD	25	28	52	6.1	105	3	1.43	80.85	35.00	14.749	-1.76	71.76
11 ANEMONE	35	10	38	0.0	83	3	1.13	81.98	27.67	15.373	-10.53	65.86
12 SPHAEROSYLLIS SPA	33	22	27	0.0	82	3	1.12	83.09	27.33	5.508	13.65	41.02
13 NUCULANA ACUTA	43	0	37	0.0	80	2	1.09	84.19	26.67	23.288	-31.19	84.52
14 SYLLIDAE	37	0	40	0.0	77	2	1.05	85.24	25.67	22.279	-29.68	81.01
15 SCHISTOMERINGUS SPA	34	0	40	0.0	74	2	1.01	86.24	24.67	21.572	-28.92	78.26
16 SPIOPHANES BUMBYX	23	14	14	8.0	51	3	.70	86.94	17.00	5.196	4.09	29.91
17 CIRRATULIDAE	14	33	0	8.8	47	2	.64	87.58	15.67	16.563	-25.48	56.81
18 MELINNA MACULATA	16	25	3	0.0	44	3	.60	88.18	14.67	11.060	-12.81	42.14
19 THARYX SETIGERA	23	0	21	4.0	44	2	.60	88.78	14.67	12.741	-16.99	46.32
20 RHYNCOCUELS	15	13	14	281.0	42	3	.57	89.35	14.00	1.000	11.52	16.48
21 TRUNCATELLA CARIBAEENSIS	14	0	26	0.0	40	2	.55	89.90	13.33	13.013	-18.49	45.66
22 DIPLODONTIA CF SOROK	29	4	3	0.0	36	3	.49	90.39	12.00	14.731	-24.60	48.60
23 USIRACODA	12	3	19	0.0	34	3	.46	90.85	11.33	8.021	-8.59	31.26
24 MALDANIDAE	23	3	8	0.0	34	3	.46	91.32	11.33	10.408	-14.52	37.19
25 ENSIS MINOR	13	3	17	0.0	33	3	.45	91.77	11.00	7.211	-6.91	28.91
26 ACIEUCINA CANALICULATA	0	3	28	0.0	31	2	.42	92.19	10.33	15.373	-27.86	48.53
27 CAPITELLIDAE	15	12	2	0.0	29	3	.40	92.58	9.67	6.807	-7.24	26.58
28 CYRTOPLEURA COSTATA	9	1	17	0.0	27	3	.37	92.95	9.00	8.000	-10.87	28.87
29 CYCLOPOID COPEPOD	16	0	10	0.0	26	2	.35	93.31	8.67	8.083	-11.41	28.75
30 AMPHARETIIDAE	6	0	20	0.0	26	2	.35	93.66	8.67	10.263	-16.83	34.16
31 HAPLOSICULOPUS FOLIOSUS	9	10	5	35.1	24	3	.33	93.99	8.00	2.646	1.43	14.57
32 PHORONIS ARCHITECTA	15	6	2	0.0	23	3	.31	94.30	7.67	6.658	-8.87	24.21
33 MERCENARIA CAMPECHIENSIS	10	2	8	0.0	20	3	.27	94.57	6.67	4.163	-3.68	17.01
34 GLYCIDAE SULFARIA	11	5	4	7.7	20	3	.27	94.85	6.67	3.786	-2.74	16.07
35 CLYMENELLA TORQUATA CALIDA	9	9	0	11.1	18	2	.25	95.09	6.00	5.196	-6.91	18.91
36 LUCINA MULTILINEATA	7	5	5	42.9	17	3	.23	95.32	5.67	1.155	2.80	8.54
37 XEMANTHURA BREVIETSON	7	5	4	0.0	16	3	.22	95.54	5.33	1.528	1.54	9.13
38 PERIPLOMA MARGARITACEUM (=INEQUALE	4	7	5	0.0	16	3	.22	95.76	5.33	1.528	1.54	9.13
39 BRANIA CLAVATA	0	16	0	0.0	16	1	.22	95.98	5.33	9.238	-17.62	28.28
40 TELLINA SP.	0	0	16	0.0	16	1	.22	96.20	5.33	9.238	-17.62	28.28
41 TELLINA ALTERNATA	12	2	0	0.0	14	2	.19	96.39	4.67	6.429	-11.31	20.64
42 ASCIDIACEA	2	1	10	0.0	13	3	.18	96.56	4.33	4.933	-7.92	16.59
43 AMPELISCA VERRILLI	6	2	5	5.1	13	3	.18	96.74	4.33	2.082	-0.84	9.50
44 PHASCOLION SIMONBI	2	5	6	0.0	13	3	.18	96.92	4.33	2.082	-0.84	9.50
45 HAMINDEA SUCCINEA	2	0	8	0.0	10	2	.14	97.06	3.33	4.163	-7.01	13.68
46 STYLOCHUS ELLIPTICUS	2	4	3	0.0	9	3	.12	97.18	3.00	1.000	.52	5.46
47 UNKNOWN ANIMAL A	0	4	5	0.0	9	2	.12	97.30	3.00	2.646	-3.57	9.57
48 NASSARIUS ACUTUS	0	0	9	0.0	9	1	.12	97.42	3.00	5.196	-9.91	15.91
49 SPIONIDAE	5	1	2	0.0	8	3	.11	97.53	2.67	2.082	-2.50	7.04
50 NITATELLA ARCTICA	0	1	7	0.0	8	2	.11	97.64	2.67	3.786	-6.74	12.07
51 ANADARA SP	8	0	0	0.0	8	1	.11	97.75	2.67	4.619	-8.81	14.14
52 CLYMENELLA MUCOSA	0	3	5	68.5	8	2	.11	97.86	2.67	2.517	-3.59	8.92
53 CHONE SP	4	2	2	0.0	8	3	.11	97.97	2.67	1.155	-0.20	5.54
54 SAKSIELLA TEXANA	5	0	2	0.0	7	2	.10	98.06	2.33	2.517	-3.92	8.59

STATION 1 TRANSECT CHANNEL PERIOD FEBRUARY80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 AGRA AEQUALIS	2327	3667	338	13764.4	6332	3	55.16	55.16	2110.67	1675.011	*****	*****
2 BALANOGLOSSUS SP.	1548	439	0	26.9	1987	2	17.31	72.47	662.33	797.800	*****	*****
3 MEDIOMASTUS CALIFORNIENSIS	1021	356	114	96.7	1491	3	12.99	85.45	497.00	469.652	*****	*****
4 RHYNCOCUELS	358	38	21	463.4	417	3	3.63	89.09	139.00	189.850	*****	610.65
5 ARGEMONE	140	30	5	0.0	175	3	1.52	90.61	58.33	71.822	*****	236.76
6 MULLINIA LATERALIS	32	118	12	684.8	162	3	1.41	92.02	54.00	56.321	-85.92	193.92
7 STREBLOSPID BENEDICTI	136	0	17	7.4	153	2	1.33	93.35	51.00	74.101	*****	235.09
8 TEREBELLIDAE	0	88	0	6.3	88	1	.77	94.12	29.33	50.807	-96.84	155.55
9 CYCLOPOID COPEPOD	0	59	1	0.0	60	2	.52	94.64	20.00	33.779	-63.92	103.92
10 OLIGOCHEATE	30	17	8	0.0	55	3	.48	95.12	18.33	11.060	-9.14	45.81
11 SPHAEROSYLLIS SPA	31	9	1	0.0	41	3	.36	95.48	13.67	15.535	-24.93	52.26
12 PHUKONIS ARCHITECTA	18	17	6	0.0	41	3	.36	95.84	13.67	6.658	-2.87	30.21
13 CUSSURA DELIA	15	13	6	0.0	34	3	.30	96.13	11.33	4.726	-.41	23.07
14 GLYCERA CAPITATA	13	14	0	0.0	27	2	.24	96.37	9.00	7.810	-10.40	28.40
15 SPILICHAETOPTERUS COSTARUM	13	6	1	0.0	20	3	.17	96.54	6.67	6.028	-8.31	21.64
16 MINUSPID CIRRIFERA	13	5	0	0.0	18	2	.16	96.70	6.00	6.557	-10.29	22.29
17 STYLOCHUS ELLIPTICUS	10	8	0	0.0	18	2	.16	96.86	6.00	5.292	-7.15	14.15
18 ARNANDIA MACULATA	9	7	0	0.0	16	2	.14	96.99	5.33	4.726	-6.41	17.07
19 ANADARA SP	12	3	1	0.0	16	3	.14	97.13	5.33	5.859	-9.22	19.89
20 SIGAMBRA BASSI	0	0	15	4.9	15	1	.13	97.26	5.00	8.660	-16.51	26.51
21 PARAPRIONOSPID PINNATA	2	5	7	13.3	14	3	.12	97.39	4.67	2.517	-1.59	10.92
22 UNKNOWN ANIMAL A	9	5	0	0.0	14	2	.12	97.51	4.67	4.509	-6.54	15.87
23 MAGELONA PHYLLISAE	4	7	3	0.0	14	3	.12	97.63	4.67	2.082	-.50	9.84
24 GLYCINDE SOLITARIA	5	6	0	9.7	11	2	.10	97.73	3.67	3.215	-4.32	11.65
25 MACOMA TENIA	5	6	0	0.0	11	2	.10	97.82	3.67	3.215	-4.32	11.65
26 EULIMOSIOMA SP	8	3	0	0.0	11	2	.10	97.92	3.67	4.041	-6.37	13.71
27 NUOLIBRANCH	1	9	0	43.0	10	2	.09	98.01	3.33	4.933	-8.92	15.59
28 LYONSIA HYALINA FLORIDANA	2	6	2	4.5	10	3	.09	98.09	3.33	2.309	-2.40	9.07
29 DIOPATRA CUPREA	8	1	0	412.3	9	2	.08	98.17	3.00	4.359	-7.83	13.83
30 NEKEID SPA	4	2	3	0.0	9	3	.08	98.25	3.00	1.000	.52	5.46
31 ANATILDES ERYTHROPHYLLUS	4	5	0	0.0	9	2	.08	98.33	3.00	2.046	-3.57	9.57
32 VITRINELLA FLORIDANA	0	8	0	0.0	8	1	.07	98.40	2.67	4.619	-8.81	14.14
33 BIVALVE	0	0	8	0.0	8	1	.07	98.47	2.67	4.619	-8.81	14.14
34 MELINNA MACULATA	6	2	0	0.0	8	2	.07	98.54	2.67	3.055	-4.92	10.26
35 GYPTIS VITTATA	7	1	0	0.0	8	2	.07	98.61	2.67	3.786	-6.74	12.07
36 SIGAMBRA TENTACULATA	5	3	0	3.2	8	2	.07	98.68	2.67	2.517	-3.59	8.92
37 ANCISTRUSYLLIS PAPILLOSA	2	0	5	0.0	7	2	.06	98.74	2.33	2.517	-3.92	8.59
38 GASTROPOD	6	0	1	0.0	7	2	.06	98.80	2.33	3.215	-5.65	10.32
39 ERICHTHONIAS BRASILIENSIS	6	0	0	0.0	6	1	.05	98.85	2.00	3.464	-6.61	10.61
40 AMPHINOMIDAE	6	0	0	0.0	6	1	.05	98.90	2.00	3.464	-6.61	10.61
41 EPITONIUM SP	6	0	0	0.0	6	1	.05	98.95	2.00	3.464	-6.61	10.61
42 PANDORA IRLINEATA	1	0	5	0.0	6	2	.05	99.01	2.00	2.646	-4.57	8.57
43 PILARGIDAE	6	0	0	0.0	6	1	.05	99.06	2.00	3.464	-6.61	10.61
44 AGLAUPHOMUS VERRILLI	5	0	0	0.0	5	1	.04	99.10	1.67	2.887	-5.51	8.84
45 THAKYX SETIGERA	0	2	3	6.1	5	2	.04	99.15	1.67	1.528	-2.13	5.46
46 NASSARIUS VIDEX	0	5	0	0.0	5	1	.04	99.19	1.67	2.887	-5.51	8.84
47 PSEUDOURYTHUE SP.	0	1	4	0.0	5	2	.04	99.23	1.67	2.082	-3.50	6.84
48 BATEA CALIFORNIENSIS	5	0	0	0.0	5	1	.04	99.28	1.67	2.887	-5.51	8.84
49 NEPHTYS MAGELLANICA	0	3	1	0.0	4	2	.03	99.31	1.33	1.528	-2.46	5.13
50 TRUNCATELLA CARIBAEENSIS	0	4	0	0.0	4	1	.03	99.35	1.33	2.309	-4.40	7.07
51 ONUPHIDAE	2	0	2	0.0	4	2	.03	99.38	1.33	1.155	-1.54	4.20
52 CAPITELLIDAE	4	0	0	0.0	4	1	.03	99.42	1.33	2.309	-4.40	7.07
53 ANACHIS OBESA	3	1	0	0.0	4	2	.03	99.45	1.33	1.528	-2.46	5.13
54 TELLINA ALTERNATA	2	1	1	0.0	4	3	.03	99.49	1.33	.577	-.10	2.77

55	COROPHIUM ACHERUSICUM	1	2	0	0.0	3	2	.03	99.51	1.00	1.000	-1.48	3.48
56	MALDANIDAE	1	0	2	0.0	3	2	.03	99.54	1.00	1.000	-1.48	3.48
57	CYCLUSIREMISCUS SP	3	0	0	0.0	3	1	.03	99.56	1.00	1.732	-3.30	5.30
58	HIATELLA ARCTICA	3	0	0	0.0	3	1	.03	99.59	1.00	1.732	-3.30	5.30
59	SPIOPHANES BUMBYX	2	1	0	4.4	3	2	.03	99.62	1.00	1.000	-1.48	3.48
60	OPHIURIDUS	2	0	0	0.0	2	1	.02	99.63	.67	1.155	-2.20	3.54
61	LUMBRINERIS PARVAPEDATA	2	0	0	0.0	2	1	.02	99.65	.67	1.155	-2.20	3.54
62	CAPRELLID A	0	2	0	0.0	2	1	.02	99.67	.67	1.155	-2.20	3.54
63	HAPLUSCULUPLUS SP	2	0	0	0.0	2	1	.02	99.69	.67	1.155	-2.20	3.54
64	ELCHURIDEAN	0	2	0	0.0	2	1	.02	99.70	.67	1.155	-2.20	3.54
65	NOTUMASTIUS CF. LATERICEUS	0	0	2	0.0	2	1	.02	99.72	.67	1.155	-2.20	3.54
66	HAPLUSCULUPLUS FULIOSUS	0	1	1	0.0	2	2	.02	99.74	.67	.577	-.77	2.10
67	GLYCERIDAE	0	0	2	0.0	2	1	.02	99.76	.67	1.155	-2.20	3.54
68	COROPHIUM LOUISIANUM	2	0	0	0.0	2	1	.02	99.77	.67	1.155	-2.20	3.54
69	PHYLLUDUCIDAE	2	0	0	0.0	2	1	.02	99.79	.67	1.155	-2.20	3.54
70	PECTINARIA GOULDII	1	0	0	0.0	1	1	.01	99.80	.33	.577	-1.10	1.77
71	NEKEIDAE	1	0	0	0.0	1	1	.01	99.81	.33	.577	-1.10	1.77
72	APOPHIONUSPIO PYGMAEA	0	1	0	2.7	1	1	.01	99.82	.33	.577	-1.10	1.77
73	EXOGONE DISPAR	1	0	0	0.0	1	1	.01	99.83	.33	.577	-1.10	1.77
74	ONENIA FUSIFORMIS	0	0	1	0.0	1	1	.01	99.83	.33	.577	-1.10	1.77
75	AMPHARETIIDAE	0	1	0	0.0	1	1	.01	99.84	.33	.577	-1.10	1.77
76	SERPULIDAE	1	0	0	0.0	1	1	.01	99.85	.33	.577	-1.10	1.77
77	PUDARKE OBSCURA	0	0	1	0.0	1	1	.01	99.86	.33	.577	-1.10	1.77
78	SABELLIDAE	0	0	1	0.0	1	1	.01	99.87	.33	.577	-1.10	1.77
79	AMPELISCA VERRILLI	1	0	0	.5	1	1	.01	99.88	.33	.577	-1.10	1.77
80	PARAUNIDAE GRPB	1	0	0	.2	1	1	.01	99.89	.33	.577	-1.10	1.77
81	SPIONIDAE	0	1	0	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77
82	SCHISTOMERINGOS RUDOLPHI	1	0	0	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77
83	PAGURID JUV.	0	0	1	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
84	PARAUNIDAE GRPA	0	0	1	.7	1	1	.01	99.92	.33	.577	-1.10	1.77
85	CIRRAFULIDAE	1	0	0	1.2	1	1	.01	99.93	.33	.577	-1.10	1.77
86	NUCULANA ACUTA	1	0	0	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
87	CYCLASPIS VARIANS	0	1	0	0.0	1	1	.01	99.95	.33	.577	-1.10	1.77
88	LITOCURSA STREMA	1	0	0	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
89	MILRELLA LUNATA	1	0	0	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
90	POLYDORA SOCIALIS	1	0	0	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
91	SQUILLA SP	1	0	0	332.3	1	1	.01	99.98	.33	.577	-1.10	1.77
92	DRILONEKEIS MAGNA	0	1	0	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
93	ANCISTROSYLLIS SP	0	1	0	0.0	1	1	.01	100.00	.33	.577	-1.10	1.77

NU. OF SPECIES	67	51	36	
NU. OF INDIVIDUALS	5883	4994	603	11480
TOTAL INFAUNAL BIOMASS	18029	28176	2785	48990.0

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	93	3826.7	2.3494	.6469	.0657	16330.0

STATION 4 TRANSECT SHELF PERIOD FEBRUARY80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 LYONSIA HYALINA FLORIDANA	1655	1541	1603	631.0	4799	3	25.53	25.53	1599.67	57.073	*****	*****
2 ANNA AEQUALIS	762	783	1363	478.7	2908	3	15.47	40.99	969.33	341.087	121.96	*****
3 MEDIOMASTUS CALIFORNIENSIS	674	1092	781	154.9	2547	3	13.55	54.54	849.00	217.138	309.56	*****
4 BALANOGLOSSUS SP.	764	839	759	25.6	2362	3	12.56	67.11	787.33	44.814	676.00	898.67
5 MOLINIA LATERALIS	615	377	1336	300.0	2328	3	12.38	79.49	776.00	499.361	*****	*****
6 ANEMONE	106	158	98	0.0	362	3	1.93	81.41	120.67	32.578	39.73	201.60
7 PARANIDAE GRPA	104	99	108	39.8	311	3	1.65	83.07	103.67	4.509	92.46	114.87
8 SPHAERUSYLLIS SPA	86	90	78	0.0	254	3	1.35	84.42	84.67	6.110	69.49	99.85
9 PANDORA TRILINEATA	89	58	94	117.6	241	3	1.28	85.70	80.33	19.502	31.88	128.78
10 STRELOSPIO BENEDICTI	68	73	74	15.3	215	3	1.14	86.85	71.67	3.215	63.68	79.65
11 OLIGOCHEATE	21	83	52	0.0	156	3	.83	87.68	52.00	31.000	-25.01	129.01
12 BIVALVE	0	61	78	0.0	139	2	.74	88.41	46.33	41.016	-55.56	148.23
13 THARYX SETIGERA	0	59	75	17.9	134	2	.71	89.13	44.67	39.531	-53.47	142.80
14 SPIOPHANES BOMBYX	41	46	33	20.4	120	3	.64	89.77	40.00	6.557	23.71	56.29
15 NUCULANA ACUTA	33	36	42	0.0	111	3	.59	90.36	37.00	4.583	25.62	48.38
16 CIRRATULIDAE	76	27	0	15.7	103	2	.55	90.90	34.33	38.527	-61.38	130.05
17 CAPITELLIDAE	5	54	38	0.0	97	3	.52	91.42	32.33	24.987	-29.74	94.41
18 TELLINA ALTERNATA	40	48	0	0.0	88	2	.47	91.89	29.33	25.716	-34.55	93.22
19 PARANIDAE GRPB	9	38	35	7.7	82	3	.44	92.32	27.33	15.948	-12.29	66.95
20 SYLLIDAE	23	33	25	0.0	81	3	.43	92.76	27.00	5.292	13.85	40.15
21 HAPLUSCULOPLUS FOLIOSUS	26	26	27	0.0	79	3	.42	93.18	26.33	.577	24.90	27.77
22 ACTEUCINA CANALICULATA	20	22	31	0.0	73	3	.39	93.56	24.33	5.859	9.78	38.89
23 MELINNA MACULATA	23	8	26	0.0	57	3	.30	93.87	19.00	9.644	-4.96	42.96
24 RHYNCOCUELS	14	27	11	112.5	52	3	.20	94.14	17.33	8.505	-3.80	38.46
25 HIALELLA ARCTICA	12	8	25	0.0	45	3	.24	94.38	15.00	8.888	-7.08	37.08
26 USIKACODA	17	10	17	0.0	44	3	.23	94.62	14.67	4.041	4.63	24.71
27 TELLINA SP.	0	0	43	0.0	43	1	.23	94.85	14.33	24.826	-47.34	76.01
28 LUCINA MULTIILINEATA	6	18	17	132.8	41	3	.22	95.06	13.67	6.658	-2.87	30.21
29 EPITONIUM SP	20	10	10	0.0	40	3	.21	95.28	13.33	5.774	-1.01	27.68
30 ENSIS MINOR	11	17	9	0.0	37	3	.20	95.47	12.33	4.163	1.99	22.68
31 NOTOMASIOS CF. LATERICEUS	37	0	0	0.0	37	1	.20	95.67	12.33	21.362	-40.74	65.40
32 CLYMENELLA TURQUATA CALIDA	24	3	6	21.1	33	3	.18	95.85	11.00	11.358	-17.22	39.22
33 MALDANIDAE	10	13	9	0.0	32	3	.17	96.02	10.67	2.082	5.50	15.84
34 SCHISTOMERINGUS SPA	4	14	13	0.0	31	3	.16	96.18	10.33	5.508	-3.35	24.02
35 ANATILDES ERYTHROPHYLLUS	10	11	7	0.0	28	3	.15	96.33	9.33	2.082	4.16	14.50
36 PHUKUNIS ARCHITECTA	7	9	11	0.0	27	3	.14	96.47	9.00	2.000	4.03	13.97
37 MACOMA TENTA	0	8	19	0.0	27	2	.14	96.62	9.00	9.539	-14.70	32.70
38 MACOMA SP	23	3	0	0.0	26	2	.14	96.76	8.67	12.503	-22.40	39.73
39 TRUNCATELLA CARIBAEENSIS	0	5	21	0.0	26	2	.14	96.89	8.67	10.970	-18.59	35.92
40 PUKUNYA SP	7	17	0	0.0	24	2	.13	97.02	8.00	8.544	-13.23	29.23
41 GLYCERA CAPITATA	14	1	9	22.5	24	3	.13	97.15	8.00	6.557	-8.29	24.29
42 MYSELLA PLANULATA	3	4	16	0.0	23	3	.12	97.27	7.67	7.234	-10.31	25.64
43 MEKCEMARIA CAMPECHIENSIS	6	9	7	238.6	22	3	.12	97.39	7.33	1.528	3.54	11.13
44 CUKUPHIUM ACHERUSICUM	5	15	2	88.4	22	3	.12	97.51	7.33	6.807	-9.58	24.24
45 POLYDORA SOCIALIS	6	6	8	0.0	20	3	.11	97.61	6.67	1.155	3.80	9.54
46 NUDIBRANCH	19	1	0	0.0	20	2	.11	97.72	6.67	10.693	-19.90	33.23
47 XENANTHURA BREVITELSON	12	4	4	0.0	20	3	.11	97.82	6.67	4.619	-4.81	18.14
48 AMPHARETIIDAE	0	9	10	0.0	19	2	.10	97.93	6.33	5.508	-7.35	20.02
49 SPIOCHAETOPTERUS COSTARUM	6	4	8	0.0	18	3	.10	98.02	6.00	2.000	1.03	10.97
50 CYCLOPOID COPEPOD	0	6	12	0.0	18	2	.10	98.12	6.00	6.000	-8.91	20.91
51 PHASCOLIUM STROMBI	4	13	1	0.0	18	3	.10	98.21	6.00	6.245	-9.51	21.51
52 TRACHYPENAEUS CONSTRICTUS	15	0	0	0.0	15	1	.08	98.29	5.00	8.060	-16.51	26.51
53 PERIPLUMA MARGARITACEUM (=INEQUALE	3	7	5	0.0	15	3	.08	98.37	5.00	2.000	.03	9.97
54 UNKNOWN AN(MAL A	11	0	0	0.0	11	1	.06	98.43	3.67	6.351	-12.11	19.44

55	CLYMENELLA MUCOSA	2	2	7	69.6	11	3	.06	98.49	3.67	2.887	-3.50	10.84
56	SAKSIELLA TEXANA	2	7	2	0.0	11	3	.06	98.55	3.67	2.887	-3.50	10.84
57	PYRAMIDELLA CRENULATA	3	4	4	0.0	11	3	.06	98.61	3.67	.577	2.23	5.10
58	AMPELISCA VERRILLI	5	4	2	11.3	11	3	.06	98.66	3.67	1.528	-.13	7.46
59	STYLOCHUS ELLIPTICUS	6	3	2	0.0	11	3	.06	98.72	3.67	2.082	-1.50	8.84
60	MEGALOMMA BIUCULATUM	2	5	2	0.0	9	3	.05	98.77	3.00	1.732	-1.30	7.30
61	GLYCIDAE SOLITARIA	4	4	1	6.2	9	3	.05	98.82	3.00	1.732	-1.30	7.30
62	LITUCORSA SIRENNA	1	3	4	0.0	8	3	.04	98.86	2.67	1.528	-1.13	6.46
63	PARAPRIURUSPIO PINNATA	2	3	3	22.2	8	3	.04	98.90	2.67	.577	1.23	4.10
64	VIRINELLIDAE	0	0	8	0.0	8	1	.04	98.95	2.67	4.619	-8.81	14.14
65	CYCLASPIS VARIANS	1	0	7	0.0	8	2	.04	98.99	2.67	3.786	-6.74	12.07
66	DIOPATRA CUPREA	7	0	0	0.0	7	1	.04	99.03	2.33	4.041	-7.71	12.37
67	SCOLOPLUS RUBRA	5	1	1	0.0	7	3	.04	99.06	2.33	2.309	-3.40	8.07
68	NEPHIYS MAGELLANICA	4	3	0	0.0	7	2	.04	99.10	2.33	2.082	-2.84	7.50
69	CAPRELLIDAE	1	6	0	0.0	7	2	.04	99.14	2.33	3.215	-5.65	10.32
70	CYRTOPLEURA COSTATA	1	4	2	0.0	7	3	.04	99.18	2.33	1.528	-1.46	6.13
71	PISTA PALMATA	1	1	4	0.0	6	3	.03	99.21	2.00	1.732	-2.30	6.30
72	GLYCERIDAE	0	6	0	0.0	6	1	.03	99.24	2.00	3.464	-6.61	10.61
73	NASSARIUS ACUTUS	0	1	5	0.0	6	2	.03	99.27	2.00	2.646	-4.57	8.57
74	BRANIA CLAVATA	0	6	0	0.0	6	1	.03	99.30	2.00	3.464	-6.61	10.61
75	EULIMOSTOMA SP	2	0	4	0.0	6	2	.03	99.34	2.00	2.000	-2.97	6.97
76	DRILONEKEIS MAGNA	2	0	4	0.0	6	2	.03	99.37	2.00	2.000	-2.97	6.97
77	SPIRONIDAE	0	3	3	0.0	6	2	.03	99.40	2.00	1.732	-2.30	6.30
78	APOPRIURUSPIO PYGMAEA	2	2	1	6.5	5	3	.03	99.43	1.67	.577	.23	3.10
79	PECTINARIA GOULDII	0	0	5	118.1	5	1	.03	99.45	1.67	2.082	-5.51	8.84
80	UNOPHIDAE	1	2	2	0.0	5	3	.03	99.48	1.67	.577	.23	3.10
81	TANAIDACEAN	1	3	1	0.0	5	3	.03	99.51	1.67	1.155	-1.20	4.54
82	UXYURUSTYLIS SALIONI	1	2	2	0.0	5	3	.03	99.53	1.67	.577	.23	3.10
83	BRANCHIOSTOMA CARIBAEUM	0	2	2	54.5	4	2	.02	99.55	1.33	1.155	-1.54	4.20
84	NATICA PUSILLA	3	0	1	0.0	4	2	.02	99.57	1.33	1.528	-2.46	5.13
85	DENTALIUM TEXASIANUM	1	3	0	0.0	4	2	.02	99.60	1.33	1.528	-2.46	5.13
86	EDDIEA MONTUSA	0	2	2	0.0	4	2	.02	99.62	1.33	1.155	-1.54	4.20
87	DIPLODONTA CF SOROK	1	2	1	0.0	4	3	.02	99.64	1.33	.577	-.10	2.77
88	OPHIUROIDES	1	0	2	81.0	3	2	.02	99.65	1.00	1.000	-1.48	3.48
89	MAGELONA PETTIBONEAE	0	2	1	0.0	3	2	.02	99.67	1.00	1.000	-1.48	3.48
90	ARMANDIA MACULATA	0	0	3	0.0	3	1	.02	99.69	1.00	1.732	-3.30	5.30
91	GASTROPOD	3	0	0	0.0	3	1	.02	99.70	1.00	1.732	-3.30	5.30
92	PHYLLODOUCIDAE	0	2	1	0.0	3	2	.02	99.72	1.00	1.000	-1.48	3.48
93	TURRONILLA SP	2	0	0	0.0	2	1	.01	99.73	.67	1.155	-2.20	3.54
94	SABELLIDAE	1	1	0	0.0	2	2	.01	99.74	.67	.577	-.77	2.10
95	COROPHIUM LOUISIANUM	0	0	2	0.0	2	1	.01	99.75	.67	1.155	-2.20	3.54
96	DURVILLEIDAE	0	2	0	0.0	2	1	.01	99.76	.67	1.155	-2.20	3.54
97	NEREIS PELAGICA OCCIDENTALIS	2	0	0	0.0	2	1	.01	99.77	.67	1.155	-2.20	3.54
98	LEUCON SP	0	0	2	0.0	2	1	.01	99.78	.67	1.155	-2.20	3.54
99	ANADARA SP	0	2	0	0.0	2	1	.01	99.79	.67	1.155	-2.20	3.54
100	MAGELONA PHYLLISAE	1	0	1	0.0	2	2	.01	99.80	.67	.577	-.77	2.10
101	LUMBRINERIS PARVAPEDATA	0	1	1	0.0	2	2	.01	99.81	.67	.577	-.77	2.10
102	SIGAMBRA TENTACULATA	0	1	1	4.1	2	2	.01	99.82	.67	.577	-.77	2.10
103	CHONE SP	1	0	1	0.0	2	2	.01	99.84	.67	.577	-.77	2.10
104	NEREID SPA	0	1	1	0.0	2	2	.01	99.85	.67	.577	-.77	2.10
105	COSSURA DELTA	0	2	0	0.0	2	1	.01	99.86	.67	1.155	-2.20	3.54
106	PAGURID JUV.	2	0	0	0.0	2	1	.01	99.87	.67	1.155	-2.20	3.54
107	MICROPROTOPUS SPP.	0	1	1	0.0	2	2	.01	99.88	.67	.577	-.77	2.10
108	BRYOZOA	0	0	1	0.0	1	1	.01	99.88	.33	.577	-1.10	1.77
109	PSEUDEURYTHOE SP.	0	1	0	0.0	1	1	.01	99.89	.33	.577	-1.10	1.77
110	GYPTIS VITTATA	1	0	0	0.0	1	1	.01	99.89	.33	.577	-1.10	1.77
111	POLYNOIDAE	1	0	0	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77
112	UNOPHIS SP.	1	0	0	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77
113	EXOGONE DISPAR	0	1	0	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
114	PINNIXA	0	0	1	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
115	SERPULIDAE	0	1	0	0.0	1	1	.01	99.92	.33	.577	-1.10	1.77
116	HESIONIDAE	0	0	1	0.0	1	1	.01	99.93	.33	.577	-1.10	1.77

117	PAGURUS ANNULIPES	0	0	1	0.0	1	1	.01	99.93	.33	.577	-1.10	1.77
118	EFEONE HETEROPODA	0	1	0	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
119	ONUPHIS EREMITA OCOLATA	0	1	0	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
120	ECHIURIDEAN	0	0	1	4.2	1	1	.01	99.95	.33	.577	-1.10	1.77
121	NASSARIUS VIBEX	0	1	0	0.0	1	1	.01	99.95	.33	.577	-1.10	1.77
122	ARCIDAE	0	1	0	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
123	HAMINDEA SUCCINEA	1	0	0	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
124	SANSIELLA SP	0	0	1	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
125	ASTEROPTERON OCULITRISTIS	0	0	1	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
126	ONENIA FUSIFORMIS	0	1	0	0.0	1	1	.01	99.98	.33	.577	-1.10	1.77
127	CYCLASPIS SP	0	1	0	0.0	1	1	.01	99.98	.33	.577	-1.10	1.77
128	EPITONIUM RUPICOLA	0	1	0	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
129	VITRINELLA FLORIDANA	0	1	0	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
130	HOLUTHURIDEA	0	0	1	0.0	1	1	.01	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES

84 97 93

NO. OF INDIVIDUALS

5624 6013 7163

18800

TOTAL INFAUNAL BIOMASS

3531 3508 4003 11042.4

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	130	6266.7	3.6467	.8599	.1454	3680.8

STATION 1 TRANSECT CHANNEL PERIOD MARCH 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIOMASTUS CALIFORNIENSIS	273	284	639	149.4	1196	3	26.92	26.92	398.67	208.207	*****	915.92
2 ABRA AEGUALIS	176	119	853	3975.2	1148	3	25.84	52.77	382.67	408.316	*****	*****
3 BALANUGLOSSUS SP.	109	449	553	0.0	1111	3	25.01	77.78	370.33	232.218	*****	947.24
4 ANEMONE	5	45	115	0.0	165	3	3.71	81.49	55.00	55.678	-83.32	193.32
5 OLIGUCHAEIE	16	43	95	0.0	154	3	3.47	84.96	51.33	40.154	-48.42	151.09
6 STREBLOSPIU BENEDICTI	11	31	67	11.5	109	3	2.45	87.42	36.33	28.378	-34.17	106.83
7 RHYNCHOCUELS	29	19	44	206.1	92	3	2.07	89.49	30.67	12.583	-5.59	61.93
8 CYCLOPOID COPEPOD	0	10	46	0.0	56	2	1.26	90.75	18.67	24.194	-41.44	78.77
9 COSSURA DELTA	19	25	11	0.0	55	3	1.24	91.99	18.33	7.024	.88	35.78
10 PHUKONIS ARCHITECTA	14	5	3	0.0	22	3	.50	92.48	7.33	5.859	-7.22	21.89
11 ANADARA SP	1	0	20	0.0	21	2	.47	92.95	7.00	11.269	-21.00	35.00
12 ERICHTHONIAS BRASILIENSIS	0	0	19	0.0	19	1	.43	93.38	6.33	10.970	-20.92	33.59
13 ANATILDES ERYTHROPHYLLUS	2	7	10	0.0	19	3	.43	93.81	6.33	4.041	-3.71	16.37
14 MULINIA LATERALIS	2	1	14	88.7	17	3	.38	94.19	5.67	7.234	-12.31	23.64
15 CAPRELLID A	0	0	16	0.0	16	1	.36	94.55	5.33	9.238	-17.62	28.26
16 SPHAEROSYLLIS SPA	1	1	14	0.0	16	3	.36	94.91	5.33	7.506	-13.31	23.98
17 PSEUDEURYTHUE SP.	7	3	6	35.5	16	3	.36	95.27	5.33	2.082	.16	10.50
18 SPIOCHAELOPTERUS COSTARUM	4	9	2	0.0	15	3	.34	95.61	5.00	3.606	-3.96	13.96
19 GLYCERA CAPITATA	3	7	4	0.0	14	3	.32	95.93	4.67	2.082	-5.50	9.84
20 STYLOCHUS ELLIPTICUS	2	2	9	0.0	13	3	.29	96.22	4.33	4.041	-5.71	14.37
21 NOTOMASTUS CF. LAETERICEUS	0	5	6	0.0	11	2	.25	96.47	3.67	3.215	-4.32	11.65
22 SIGAMBRA TENTACULATA	3	4	3	9.8	10	3	.23	96.69	3.33	.577	1.92	4.77
23 BATEA CATHRINENSIS	0	0	9	0.0	9	1	.20	96.89	3.00	5.196	-9.91	15.91
24 NEPHIYS MAGELLANICA	0	3	6	0.0	9	2	.20	97.10	3.00	3.000	-4.45	10.45
25 PARAPRIONOSPIO PINNATA	1	2	4	12.5	7	3	.16	97.25	2.33	1.528	-1.46	6.13
26 ETEUNE HETEROPODA	0	0	7	0.0	7	1	.16	97.41	2.33	4.041	-7.71	12.37
27 BIVALVE	0	0	7	0.0	7	1	.16	97.57	2.33	4.041	-7.71	12.37
28 MINUSPIO CIRRIFERA	1	2	3	0.0	6	3	.14	97.70	2.00	1.000	-.48	4.48
29 ANCISTRUSYLLIS PAPILLOSA	2	2	2	0.0	6	3	.14	97.84	2.00	0.000	2.00	2.00
30 POLINICES DUPLICATUS	0	2	4	0.0	6	2	.14	97.97	2.00	2.000	-2.97	6.97
31 MACOMA TERTA	1	1	3	0.0	5	3	.11	98.09	1.67	1.155	-1.20	4.54
32 MAGELONA PHYLLISAE	1	4	0	0.0	5	2	.11	98.20	1.67	2.082	-3.50	6.84
33 STHEMELAIS BUA	0	1	4	51.6	5	2	.11	98.31	1.67	2.082	-3.50	6.84
34 LYONSIA HYALINA FLORIDANA	3	2	0	14.4	5	2	.11	98.42	1.67	1.528	-2.13	5.46
35 DIOPATRA CUPREA	0	0	4	375.3	4	1	.09	98.51	1.33	2.309	-4.40	7.07
36 ALIEUTHA DEPRESSA	0	0	4	0.0	4	1	.09	98.60	1.33	2.309	-4.40	7.07
37 TELLINA SP.	0	1	3	0.0	4	2	.09	98.69	1.33	1.528	-2.46	5.13
38 THARYX SETIGERA	0	2	2	3.8	4	2	.09	98.78	1.33	1.155	-1.54	4.20
39 GASTROPOD	2	0	2	0.0	4	2	.09	98.87	1.33	1.155	-1.54	4.20
40 OPHELIDAE	0	0	3	0.0	3	1	.07	98.94	1.00	1.732	-3.30	5.30
41 NEREID SPA	1	1	1	0.0	3	3	.07	99.01	1.00	0.000	1.00	1.00
42 HAPLUSCULOPLUS FOLIOSUS	0	2	1	0.0	3	2	.07	99.08	1.00	1.000	-1.48	3.48
43 SPIOPHANES BOMBYX	0	2	1	4.4	3	2	.07	99.14	1.00	1.000	-1.48	3.48
44 COROPHIUM ACHERUSICUM	0	0	3	0.0	3	1	.07	99.21	1.00	1.732	-3.30	5.30
45 ARMANDIA MACULATA	0	2	0	0.0	2	1	.05	99.26	.67	1.155	-2.20	3.54
46 CAPITELLIDAE	0	0	2	0.0	2	1	.05	99.30	.67	1.155	-2.20	3.54
47 EPITONIUM SP	0	0	2	0.0	2	1	.05	99.35	.67	1.155	-2.20	3.54
48 MALDANIDAE	0	1	0	0.0	1	1	.02	99.37	.33	.577	-1.10	1.77
49 PARADONIDAE GRPA	1	0	0	2.4	1	1	.02	99.39	.33	.577	-1.10	1.77
50 PAGURUS ANNULIPES	1	0	0	0.0	1	1	.02	99.41	.33	.577	-1.10	1.77
51 NEREIDAE	0	0	1	0.0	1	1	.02	99.44	.33	.577	-1.10	1.77
52 DRYOZUA	0	0	1	0.0	1	1	.02	99.46	.33	.577	-1.10	1.77
53 OMENIA FUSIFORMIS	0	0	1	0.0	1	1	.02	99.48	.33	.577	-1.10	1.77
54 MITRELLA LUNATA	0	0	1	0.0	1	1	.02	99.50	.33	.577	-1.10	1.77

55	APOPHIONUSPID PYGMAEA	0	0	1	1.2	1	1	.02	99.53	.33	.577	-1.10	1.77
56	SIGAMBRA BASSI	1	0	0	0.0	1	1	.02	99.55	.33	.577	-1.10	1.77
57	NASSARIUS ACUTUS	1	0	0	0.0	1	1	.02	99.57	.33	.577	-1.10	1.77
58	POLYDORA SOCIALIS	1	0	0	0.0	1	1	.02	99.59	.33	.577	-1.10	1.77
59	MELINNA MACULATA	1	0	0	0.0	1	1	.02	99.62	.33	.577	-1.10	1.77
60	ORBINIDAE	1	0	0	0.0	1	1	.02	99.64	.33	.577	-1.10	1.77
61	AMPHILOCHUS SP.	0	0	1	0.0	1	1	.02	99.66	.33	.577	-1.10	1.77
62	SYLLIDAE	0	1	0	0.0	1	1	.02	99.68	.33	.577	-1.10	1.77
63	PANDORA TRILINEATA	0	0	1	0.0	1	1	.02	99.71	.33	.577	-1.10	1.77
64	SERPULIDAE	0	1	0	0.0	1	1	.02	99.73	.33	.577	-1.10	1.77
65	NUCULANA ACUTA	0	1	0	0.0	1	1	.02	99.75	.33	.577	-1.10	1.77
66	NOUDURANCH	1	0	0	0.0	1	1	.02	99.77	.33	.577	-1.10	1.77
67	LITOCORSA STREMA	0	0	1	0.0	1	1	.02	99.80	.33	.577	-1.10	1.77
68	GLYCINDE SOLITARIA	0	1	0	1.8	1	1	.02	99.82	.33	.577	-1.10	1.77
69	EULIMOSTOMA SP.	0	1	0	0.0	1	1	.02	99.84	.33	.577	-1.10	1.77
70	UGYRIDES LIMICOLA	0	1	0	0.0	1	1	.02	99.86	.33	.577	-1.10	1.77
71	ODOSTOMIA SP.	0	0	1	0.0	1	1	.02	99.89	.33	.577	-1.10	1.77
72	UNKNOWN ANIMAL A	1	0	0	0.0	1	1	.02	99.91	.33	.577	-1.10	1.77
73	AMPELISCA VERRILLI	1	0	0	2.3	1	1	.02	99.93	.33	.577	-1.10	1.77
74	ANCISTRUSYLLIS JONESI	1	0	0	0.0	1	1	.02	99.95	.33	.577	-1.10	1.77
75	ARMANDIA AGILIS	1	0	0	0.0	1	1	.02	99.98	.33	.577	-1.10	1.77
76	VITRINELLIDAE	0	1	0	0.0	1	1	.02	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES

38 42 53

NO. OF INDIVIDUALS

701 1106 2635 4442

TOTAL INFAUNAL BIOMASS

2822 1777 12680 17279.1

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	76	1480.7	2.9871	.7942	.1560	5759.7

STATION 4 TRANSECT SHELF PERIOD MARCH 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 LYONSIA HYALINA FLORIDANA	672	1134	761	4141.1	2567	3	18.50	18.50	855.67	245.117	246.71	*****
2 MEDIOMASTUS CALIFORNIENSIS	1079	586	843	159.6	2508	3	18.07	36.57	836.00	246.575	223.43	*****
3 BALANUGLOSSUS SP.	648	982	608	0.0	2238	3	16.13	52.70	740.00	205.358	235.82	*****
4 ABRA AEQUALIS	483	915	794	1146.4	2192	3	15.80	68.49	730.67	222.855	177.02	*****
5 AREMONE	126	169	132	0.0	427	3	3.08	71.57	142.33	23.288	64.48	200.19
6 PARAONIDAE GRPA	144	108	118	58.6	370	3	2.67	74.24	123.33	18.583	77.17	169.50
7 OLIGUCHAETE	82	150	80	0.0	312	3	2.25	76.49	104.00	39.850	5.00	203.00
8 SPHAERUSYLLIS SPA	110	40	139	0.0	289	3	2.08	78.57	96.33	50.895	-30.11	222.77
9 STREBLUSPII BENEICTI	104	84	70	16.9	258	3	1.86	80.43	86.00	17.088	43.55	128.45
10 MULLINIA LATERALIS	58	105	64	108.0	227	3	1.64	82.06	75.67	25.580	12.12	139.22
11 NOTOMASTUS SP	78	43	80	177.8	201	3	1.45	83.51	67.00	20.809	15.30	118.70
12 PANDORA TRILINEATA	86	52	45	235.4	183	3	1.32	84.83	61.00	21.932	6.51	115.49
13 THARYX SEIGERA	0	62	106	16.2	168	2	1.21	86.04	56.00	53.254	-76.30	188.30
14 SPIOPHANES BUMBYX	62	36	55	48.9	153	3	1.10	87.14	51.00	13.454	17.58	84.42
15 CIRRAULIDAE	129	0	18	12.8	147	2	1.06	88.20	49.00	69.804	*****	222.57
16 ANATIDES ERYTHROPHYLLUS	41	26	32	0.0	99	3	.71	88.92	33.00	7.550	14.24	51.70
17 NUCULANA ACUTA	33	22	29	0.0	84	3	.61	89.52	28.00	5.568	14.17	41.83
18 MACOMA TENIA	45	29	10	0.0	84	3	.61	90.13	28.00	17.521	-15.53	71.53
19 RHYNCOCUELS	26	31	21	481.3	78	3	.56	90.69	26.00	5.000	13.58	38.42
20 PARAONIDAE GRPB	19	24	33	8.6	76	3	.55	91.24	25.33	7.045	7.71	42.96
21 CLYMENELLA TORQUATA CALIDA	36	20	16	58.3	72	3	.52	91.76	24.00	10.583	-2.29	50.29
22 HAPLOSCULOPUS FOLIOSUS	14	18	31	48.9	63	3	.45	92.21	21.00	8.888	-1.08	43.88
23 ACIEUCINA CANALICULATA	26	13	16	0.0	55	3	.40	92.61	18.33	6.807	1.42	35.24
24 HIAELLA ARCTICA	12	24	16	0.0	52	3	.37	92.98	17.33	6.110	2.15	32.51
25 BLVALVE	1	0	47	0.0	48	2	.35	93.33	16.00	26.851	-50.71	82.71
26 MELINNA MACULATA	18	18	10	0.0	46	3	.33	93.66	15.33	4.619	3.86	26.81
27 SYLLIDAE	0	29	15	0.0	44	2	.32	93.98	14.67	14.503	-21.36	50.70
28 GLYCINDE SOLITARIA	10	16	17	11.5	43	3	.31	94.29	14.33	3.786	4.93	23.74
29 PHORONIS ARCHITECTA	7	15	20	0.0	42	3	.30	94.59	14.00	6.557	-2.29	30.29
30 LUCINA MULTILINEATA	25	3	13	172.2	41	3	.30	94.88	13.67	11.015	-13.70	41.03
31 CORUPHIUM ALMERUSICUM	12	11	9	0.0	32	3	.23	95.11	10.67	1.528	6.87	14.46
32 STYLOCHUS ELLIPTICUS	10	7	11	0.0	28	3	.20	95.32	9.33	2.082	4.16	14.50
33 MYSELLA PLANULATA	2	4	21	22.5	27	3	.19	95.51	9.00	10.440	-16.94	34.94
34 UNKNOWN ANIMAL A	25	0	1	0.0	26	2	.19	95.70	8.67	14.154	-26.50	43.83
35 TELLINA SP.	0	9	14	0.0	23	2	.17	95.86	7.67	7.095	-9.96	25.29
36 SCHISTOMERINGOS SPA	13	9	0	0.0	22	2	.16	96.02	7.33	6.658	-9.21	23.87
37 SCHISTOMERINGOS RUDOLPHI	0	0	22	0.0	22	1	.16	96.18	7.33	12.702	-24.22	38.89
38 BRANIA CLAVATA	21	0	0	0.0	21	1	.15	96.33	7.00	12.124	-23.12	37.12
39 GLYCERA CAPITATA	11	5	4	61.8	20	3	.14	96.48	6.67	3.786	-2.74	16.07
40 AMPELISCA ABDITA	2	16	1	0.0	19	3	.14	96.61	6.33	8.386	-14.50	27.17
41 POLYDORA CAOLLERYI	4	10	3	0.0	17	3	.12	96.74	5.67	3.786	-3.74	15.07
42 PISTA PALMATA	9	3	4	0.0	16	3	.12	96.85	5.33	3.215	-2.65	13.32
43 CYCLASPIS VARIANS	7	0	9	0.0	16	2	.12	96.97	5.33	4.726	-6.41	17.07
44 PERIPLUMA MARGARITACEUM (=INEQUALE	5	2	8	0.0	15	3	.11	97.07	5.00	3.000	-2.45	12.45
45 AMPELISCA VERRILLI	6	5	3	10.1	14	3	.10	97.18	4.67	1.528	.87	8.46
46 POLINICES DUPLICATUS	0	6	8	0.0	14	2	.10	97.28	4.67	4.163	-5.68	15.01
47 CYCLOPOID COPEPOD	0	8	6	0.0	14	2	.10	97.38	4.67	4.163	-5.68	15.01
48 POLYDORA SOCIALIS	0	10	4	0.0	14	2	.10	97.48	4.67	5.033	-7.84	17.17
49 TELLINA ALIERNATA	13	0	0	0.0	13	1	.09	97.57	4.33	7.506	-14.51	22.98
50 OSTRACODA	12	0	1	0.0	13	2	.09	97.67	4.33	6.658	-12.21	20.87
51 MEGALOMMA BIUCULATUM	3	3	7	0.0	13	3	.09	97.76	4.33	2.309	-1.40	10.07
52 EPITONIUM SP	12	0	1	0.0	13	2	.09	97.85	4.33	6.658	-12.21	20.87
53 OXYURUSYLLIS SALIONI	2	0	10	0.0	12	2	.09	97.94	4.00	5.292	-9.15	17.15
54 MERCENARIA CAMPECHIENSIS	7	1	4	0.0	12	3	.09	98.03	4.00	3.000	-3.45	11.45

55	XENANTHURA BREVITELSON	1	3	7	0.0	11	3	.08	98.10	3.67	3.055	-3.92	11.26
56	GASTROPOD	10	0	0	0.0	10	1	.07	98.18	3.33	5.774	-11.01	17.68
57	SANSIELLA TEXANA	1	6	3	0.0	10	3	.07	98.25	3.33	2.517	-2.92	9.59
58	PHYLLUDOCIDAE	5	5	0	0.0	10	2	.07	98.32	3.33	2.887	-3.84	10.50
59	MALDANIDAE	2	0	0	0.0	10	2	.07	98.39	3.33	4.163	-7.01	13.68
60	TRUNCATELLA CARIBAEENSIS	6	0	3	0.0	9	2	.06	98.46	3.00	3.000	-4.45	10.45
61	PHASCOLIUM STROMBI	8	1	0	0.0	9	2	.06	98.52	3.00	4.359	-7.83	13.83
62	SPIOCHAETOPTERUS COSTARUM	3	2	4	0.0	9	3	.06	98.59	3.00	1.000	.52	5.48
63	NEPHTYS MAGELLANICA	2	3	3	0.0	8	3	.06	98.65	2.67	.577	1.23	4.10
64	AMPHARETIDAE	0	0	8	0.0	8	1	.06	98.70	2.67	4.619	-8.81	14.14
65	ERICHTHONIAS BRASILIENSIS	0	2	5	0.0	7	2	.05	98.75	2.33	2.517	-3.92	8.59
66	ALIGENA TEXASIANA	6	0	0	0.0	6	1	.04	98.80	2.00	3.464	-6.61	10.61
67	PARAPHRIONUSPID PINNATA	3	2	1	15.9	6	3	.04	98.84	2.00	1.000	-4.48	4.48
68	POLYDORA SP.	6	0	0	0.0	6	1	.04	98.88	2.00	3.464	-6.61	10.61
69	PURONYA SP.	5	0	0	0.0	5	1	.04	98.92	1.67	2.887	-5.51	8.84
70	LUMBRINERIS PARVAPEDATA	5	0	0	0.0	5	1	.04	98.96	1.67	2.887	-5.51	8.84
71	GLYCERA AMERICANA	0	5	0	31.0	5	1	.04	98.99	1.67	2.887	-5.51	8.84
72	CYCLASPIS SP.	0	5	0	0.0	5	1	.04	99.03	1.67	2.887	-5.51	8.84
73	SPIONIDAE	0	0	5	0.0	5	1	.04	99.06	1.67	2.887	-5.51	8.84
74	TEREBELLIDAE	0	0	5	0.0	5	1	.04	99.10	1.67	2.887	-5.51	8.84
75	STENOTHOE SP.	0	0	4	0.0	4	1	.03	99.13	1.33	2.309	-4.40	7.07
76	CAPRELLID A	0	0	4	0.0	4	1	.03	99.16	1.33	2.309	-4.40	7.07
77	TANAIDACEAN	1	1	2	0.0	4	3	.03	99.19	1.33	.577	-1.10	2.77
78	TURBOVILLA SP.	2	0	2	0.0	4	2	.03	99.21	1.33	1.155	-1.54	4.20
79	LITUCURSA SIREMMA	0	4	0	0.0	4	1	.03	99.24	1.33	2.309	-4.40	7.07
80	HAMINOEA SUCCINEA	4	0	0	0.0	4	1	.03	99.27	1.33	2.309	-4.40	7.07
81	PECTINARIA GOULDII	1	0	2	0.0	3	2	.02	99.29	1.00	1.000	-1.48	3.48
82	DRILONEKEIS MAGNA	1	0	2	0.0	3	2	.02	99.32	1.00	1.000	-1.48	3.48
83	SIGAMBRA TENTACULATA	0	2	1	3.0	3	2	.02	99.34	1.00	1.000	-1.48	3.48
84	ECHIURIDEAN	0	3	0	3.6	3	1	.02	99.36	1.00	1.732	-3.30	5.30
85	ASYCHIS SP.	3	0	0	0.0	3	1	.02	99.38	1.00	1.732	-3.30	5.30
86	CLYMENELLA MUCOSA	0	2	1	0.0	3	2	.02	99.40	1.00	1.000	-1.48	3.48
87	OWENIA FUSIFORMIS	0	2	1	0.0	3	2	.02	99.42	1.00	1.000	-1.48	3.48
88	SITHELINIS BOA	0	3	0	0.0	3	1	.02	99.45	1.00	1.732	-3.30	5.30
89	SITHELINIS SP.	0	0	3	0.0	3	1	.02	99.47	1.00	1.732	-3.30	5.30
90	SCOLOPLUS RUBRA	1	0	2	0.0	3	2	.02	99.49	1.00	1.000	-1.48	3.48
91	DENTALIUM TEXASIANUM	1	1	1	0.0	3	3	.02	99.51	1.00	0.000	1.00	1.00
92	CORBULA CONTRACTA	0	2	0	0.0	2	1	.01	99.52	.67	1.155	-2.20	3.54
93	NUDIBRANCH	1	1	0	0.0	2	2	.01	99.54	.67	.577	-1.77	2.10
94	ETEUNE HETEROPODA	0	0	2	0.0	2	1	.01	99.55	.67	1.155	-2.20	3.54
95	MICRUPHIDIOPUS SPP.	0	2	0	0.0	2	1	.01	99.57	.67	1.155	-2.20	3.54
96	ANADARA SP.	0	2	0	0.0	2	1	.01	99.58	.67	1.155	-2.20	3.54
97	PHOLIS MACHOMANUS	2	0	0	0.0	2	1	.01	99.60	.67	1.155	-2.20	3.54
98	NATICA PUSILLA	0	0	2	0.0	2	1	.01	99.61	.67	1.155	-2.20	3.54
99	LEPTOCHELIA RAPAX	2	0	0	0.0	2	1	.01	99.63	.67	1.155	-2.20	3.54
100	NEREID SPA	1	1	0	0.0	2	2	.01	99.64	.67	.577	-1.77	2.10
101	SANSIELLA SP.	0	1	1	0.0	2	2	.01	99.65	.67	.577	-1.77	2.10
102	APOPHRIUSPID PYGMAEA	0	2	0	2.2	2	1	.01	99.67	.67	1.155	-2.20	3.54
103	ENSIS MINOR	0	0	2	0.0	2	1	.01	99.68	.67	1.155	-2.20	3.54
104	SABELLIDAE	2	0	0	0.0	2	1	.01	99.70	.67	1.155	-2.20	3.54
105	ARMANDIA MACULATA	0	2	0	0.0	2	1	.01	99.71	.67	1.155	-2.20	3.54
106	POLYNIDAE	1	1	0	0.0	2	2	.01	99.73	.67	.577	-1.77	2.10
107	LISIRIELLA SP.	0	0	2	0.0	2	1	.01	99.74	.67	1.155	-2.20	3.54
108	ORBINIDAE	0	0	2	0.0	2	1	.01	99.75	.67	1.155	-2.20	3.54
109	SIPUNCULA	0	0	2	0.0	2	1	.01	99.77	.67	1.155	-2.20	3.54
110	GYTTIS VITTATA	1	0	0	0.0	1	1	.01	99.78	.33	.577	-1.10	1.77
111	ANADARA TRANSVERSA	0	0	1	0.0	1	1	.01	99.78	.33	.577	-1.10	1.77
112	PARASTEROPE SPP	0	1	0	0.0	1	1	.01	99.79	.33	.577	-1.10	1.77
113	UPHELIDAE	0	0	1	0.0	1	1	.01	99.80	.33	.577	-1.10	1.77
114	MAGELONA PETTIBONEAE	1	0	0	0.0	1	1	.01	99.81	.33	.577	-1.10	1.77
115	ARMANDIA AGILIS	1	0	0	0.0	1	1	.01	99.81	.33	.577	-1.10	1.77
116	CORBULA SP.	0	0	1	0.0	1	1	.01	99.82	.33	.577	-1.10	1.77

117 DIPLODONTIA CF. SOROR	1	0	0	0.0	1	1	.01	99.83	.33	.577	-1.10	1.77
118 OPHIURIDS	0	0	1	113.9	1	1	.01	99.83	.33	.577	-1.10	1.77
119 MINUSPIO CIRRIFERA	0	0	1	0.0	1	1	.01	99.84	.33	.577	-1.10	1.77
120 EDOUEA MONTOSA	0	0	1	0.0	1	1	.01	99.85	.33	.577	-1.10	1.77
121 UGYRIDES LIMICULA	1	0	0	0.0	1	1	.01	99.86	.33	.577	-1.10	1.77
122 NEREIDAE	0	0	1	0.0	1	1	.01	99.86	.33	.577	-1.10	1.77
123 PYRAMIDELLA CREMULATA	0	0	1	0.0	1	1	.01	99.87	.33	.577	-1.10	1.77
124 SIGALONIDAE	1	0	0	0.0	1	1	.01	99.88	.33	.577	-1.10	1.77
125 BRANCHIUSTOMA CARIBAEUM	0	0	1	16.6	1	1	.01	99.88	.33	.577	-1.10	1.77
126 CHONE SP.	0	1	0	0.0	1	1	.01	99.89	.33	.577	-1.10	1.77
127 PHOTIS SP.	0	1	0	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77
128 SCOLELEPIS TEXANA	0	1	0	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
129 CHONE SP.	0	1	0	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
130 NEREIS PELAGICA OCCIDENTALIS	0	1	0	0.0	1	1	.01	99.92	.33	.577	-1.10	1.77
131 NASSARIUS ACUTUS	0	1	0	0.0	1	1	.01	99.93	.33	.577	-1.10	1.77
132 GLYCERIDAE	0	0	1	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
133 MAGELONA PHYLLISAE	1	0	0	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
134 MOLLUSCIDEA	1	0	0	45.3	1	1	.01	99.95	.33	.577	-1.10	1.77
135 PRIONOSPION CRISTATA	0	0	1	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
136 MYRAPHIS PUNCTATUS	0	0	1	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
137 GONIADIDAE	0	0	1	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
138 ASCIDIACEA	0	0	1	0.0	1	1	.01	99.98	.33	.577	-1.10	1.77
139 LUMBRINERIDAE	0	0	1	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
140 ACTEON PUNCTUSTRATUS	1	0	0	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
141 CYTHOPLEURA COSTATA	1	0	0	0.0	1	1	.01	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	85	78	96	
NO. OF INDIVIDUALS	4446	4936	4495	13877
TOTAL INFAUNAL BIOMASS	11130	5945	12278	29353.0

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	141	4625.7	3.9211	.8779	.1626	9784.3

STATION 1 TRANSECT CHANNEL PERIOD APRIL 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 ABKA AEQUALIS	3033	2903	1499	84994.6	7435	3	71.05	71.05	2478.33	850.615	365.12	*****
2 MEDIOMASTUS CALIFORNIENSIS	733	477	412	133.0	1622	3	15.50	86.55	540.67	169.707	119.06	962.28
3 BALANOGLOSSUS SP.	47	83	55	0.0	185	3	1.77	88.32	61.67	18.903	14.70	108.63
4 ULIGUCHAELE	75	57	35	0.0	167	3	1.60	89.92	55.67	20.033	5.90	105.44
5 STYLOCHUS ELLIPTICUS	48	45	18	0.0	111	3	1.06	90.98	37.00	16.523	-4.05	78.05
6 RHYNCHOCHELLS	36	17	34	1429.7	87	3	.83	91.81	29.00	10.440	3.06	54.94
7 MULLINIA LATERALIS	24	36	22	1019.5	82	3	.78	92.59	27.33	7.572	8.52	46.14
8 ANEMONE	21	32	20	0.0	73	3	.70	93.29	24.33	6.650	7.79	40.87
9 GLYCINDE SOLITARIA	22	14	11	16.0	47	3	.45	93.74	15.67	5.656	1.54	29.79
10 POLINICES DUPLICATUS	19	10	12	1315.8	41	3	.39	94.13	13.67	4.726	1.93	25.41
11 COSSURA DELIA	8	12	15	0.0	35	3	.33	94.47	11.67	3.512	2.94	20.39
12 ANADARA SP	0	32	0	0.0	32	1	.31	94.77	10.67	18.475	-35.23	56.57
13 ARMANDIA SP	18	11	0	0.0	29	2	.28	95.05	9.67	9.074	-12.88	32.21
14 BIVALVE	0	28	1	0.0	29	2	.28	95.33	9.67	15.085	-29.00	49.13
15 NASSARIUS SP	0	28	0	0.0	28	1	.27	95.59	9.33	16.166	-30.83	49.49
16 SPIROCHAETOPTEKUS COSTARUM	10	9	8	0.0	27	3	.26	95.85	9.00	1.000	6.52	11.48
17 SPHAEROSTYLLIS SPA	7	12	5	0.0	24	3	.23	96.08	8.00	3.600	-0.96	16.96
18 CIRRHATULIDAE	15	0	8	11.7	23	2	.22	96.30	7.67	7.506	-10.98	26.31
19 PARAPRIONOSPIO PINNATA	16	3	4	39.8	23	3	.22	96.52	7.67	7.234	-10.31	25.64
20 SIREBLUSPIO BENEDICII	12	3	7	7.1	22	3	.21	96.73	7.33	4.509	-3.87	18.54
21 NEPHYS MAGELLANICA	7	8	5	0.0	20	3	.19	96.92	6.67	1.528	2.87	10.46
22 PHUKUNIS ARCHITECTA	1	5	11	0.0	17	3	.16	97.09	5.67	5.033	-6.84	18.17
23 CYCLOPOID COPEPOD	0	17	0	0.0	17	1	.16	97.25	5.67	9.815	-18.72	30.05
24 CAPITELLIDAE	10	0	5	0.0	15	2	.14	97.39	5.00	5.000	-7.42	17.42
25 BATEA CATHRINENSIS	2	12	1	0.0	15	3	.14	97.53	5.00	6.083	-10.11	20.11
26 DIOPATRA COPKEA	3	9	2	943.5	14	3	.13	97.67	4.67	3.786	-4.74	14.07
27 SIGAMBRA TENIACULATA	4	7	2	10.0	13	3	.12	97.79	4.33	2.517	-1.92	10.59
28 GLYCERA CAPITATA	2	8	3	0.0	13	3	.12	97.92	4.33	3.215	-3.65	12.32
29 ODUSTOMIA SP.	0	13	0	0.0	13	1	.12	98.04	4.33	7.506	-14.31	22.98
30 THARYX SEFIGERA	0	12	0	4.6	12	1	.11	98.16	4.00	6.928	-13.21	21.21
31 NASSARIUS ACUTUS	5	0	6	0.0	11	2	.11	98.26	3.67	3.215	-4.32	11.65
32 LYONSIA HYALINA FLORIDANA	1	9	0	10.8	10	2	.10	98.36	3.33	4.933	-8.92	15.59
33 ANADARA TRANSVERSA	8	0	2	0.0	10	2	.10	98.45	3.33	4.163	-7.01	13.08
34 UNKNOWN ANIMAL A	4	4	2	0.0	10	3	.10	98.55	3.33	1.155	.46	6.20
35 ANATIDES ERYTHROPHYLLUS	2	5	3	0.0	10	3	.10	98.64	3.33	1.528	-0.46	7.13
36 ARMANDIA AGILIS	0	0	9	0.0	9	1	.09	98.73	3.00	5.196	-9.91	15.91
37 PSEUDEURYTHOE SP.	3	1	2	0.0	6	3	.06	98.79	2.00	1.000	-0.48	4.48
38 GASTROPOD	2	4	0	0.0	6	2	.06	98.84	2.00	2.000	-2.97	6.97
39 MAGELONA PHYLLISAE	2	1	3	0.0	6	3	.06	98.90	2.00	1.000	-0.48	4.48
40 ERICHTHONIAS BRASILIENSIS	0	5	1	0.0	6	2	.06	98.96	2.00	2.646	-4.57	8.57
41 TEREBELLIDAE	0	6	0	0.0	6	1	.06	99.02	2.00	3.464	-6.61	10.61
42 PANDORA IRILINEATA	2	1	2	0.0	5	3	.05	99.06	1.67	.577	.23	3.10
43 NOTOMASTUS SP	0	5	0	0.0	5	1	.05	99.11	1.67	2.087	-5.51	8.84
44 PARAONIDAE GRPA	2	0	3	5.3	5	2	.05	99.16	1.67	1.528	-2.13	5.46
45 ANCISTRUSYLLIS PAPILLOSA	1	0	3	0.0	4	2	.04	99.20	1.33	1.528	-2.46	5.13
46 CLYMENELLA TURQUATA CALIDA	2	0	2	6.1	4	2	.04	99.24	1.33	1.155	-1.54	4.20
47 SIGALONIDAE	2	0	2	0.0	4	2	.04	99.27	1.33	1.155	-1.54	4.20
48 MACOMA LENTA	2	2	0	0.0	4	2	.04	99.31	1.33	1.155	-1.54	4.20
49 MITRELLA LUNATA	1	2	0	0.0	3	2	.03	99.34	1.00	1.000	-1.48	3.48
50 TELLINA SP.	0	3	0	0.0	3	1	.03	99.37	1.00	1.732	-3.30	5.30
51 MELINNA MACULATA	2	1	0	0.0	3	2	.03	99.40	1.00	1.000	-1.48	3.48
52 CAPRELLID A	0	2	1	0.0	3	2	.03	99.43	1.00	1.000	-1.48	3.48
53 SPIOPHONES BUMBYX	1	1	1	8.3	3	3	.03	99.46	1.00	0.000	1.00	1.00
54 HAPLOSCULOPUS SP	3	0	0	0.0	3	1	.03	99.48	1.00	1.732	-3.30	5.30

55	NUDIBRANCH	1	2	0	0.0	3	2	.03	99.51	1.00	1.000	-1.48	3.48
56	EPILUNION SP	0	2	1	0.0	3	2	.03	99.54	1.00	1.000	-1.48	3.48
57	PYRAMIDELLA CRENULATA	0	3	0	0.0	3	1	.03	99.57	1.00	1.732	-3.30	5.30
58	SCHISTOMERINGUS RUDOLPHI	2	0	0	0.0	2	1	.02	99.59	.67	1.155	-2.20	3.54
59	PARAONIDAE GRPB	0	2	0	1.8	2	1	.02	99.61	.67	1.155	-2.20	3.54
60	NEREID SPA	0	1	1	0.0	2	2	.02	99.63	.67	.577	-.77	2.10
61	PHYLLODOUCIDAE	0	2	0	0.0	2	1	.02	99.65	.67	1.155	-2.20	3.54
62	ELASMOPUS SP	0	2	0	0.0	2	1	.02	99.67	.67	1.155	-2.20	3.54
63	SPIONIDAE	0	2	0	0.0	2	1	.02	99.68	.67	1.155	-2.20	3.54
64	MINUSPIU CIRRIFERA	0	0	2	0.0	2	1	.02	99.70	.67	1.155	-2.20	3.54
65	STHENELAIS SP	0	2	0	142.0	2	1	.02	99.72	.67	1.155	-2.20	3.54
66	CAPITELLA CAPITATA	0	2	0	0.0	2	1	.02	99.74	.67	1.155	-2.20	3.54
67	COROPHIUM ACHERUSICUM	0	2	0	0.0	2	1	.02	99.76	.67	1.155	-2.20	3.54
68	POLYDORAE	0	2	0	0.0	2	1	.02	99.78	.67	1.155	-2.20	3.54
69	SCHISTOMERINGUS SPA	0	1	0	0.0	1	1	.01	99.79	.33	.577	-1.10	1.77
70	BRANIA CLAVATA	0	0	1	0.0	1	1	.01	99.80	.33	.577	-1.10	1.77
71	NEREIDAE	0	1	0	0.0	1	1	.01	99.81	.33	.577	-1.10	1.77
72	DRILONEREIS MAGNA	0	1	0	0.0	1	1	.01	99.82	.33	.577	-1.10	1.77
73	LEUCON SP	0	1	0	0.0	1	1	.01	99.83	.33	.577	-1.10	1.77
74	ACTEON PUNCTOSTRIATUS	0	0	1	0.0	1	1	.01	99.84	.33	.577	-1.10	1.77
75	MUNNA HATESI	0	1	0	0.0	1	1	.01	99.85	.33	.577	-1.10	1.77
76	PINNULHERIDAE	0	1	0	0.0	1	1	.01	99.86	.33	.577	-1.10	1.77
77	ANACHIS UHESA	0	1	0	0.0	1	1	.01	99.87	.33	.577	-1.10	1.77
78	OWENIA FUSIFORMIS	0	1	0	0.0	1	1	.01	99.88	.33	.577	-1.10	1.77
79	COROPHIUM LOUISIANUM	1	0	0	0.0	1	1	.01	99.89	.33	.577	-1.10	1.77
80	PECTINARIA GOULDII	1	0	0	0.0	1	1	.01	99.89	.33	.577	-1.10	1.77
81	TELLINA ALTERNATA	1	0	0	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77
82	CALLINECTES SP.	0	1	0	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
83	SYLLIDAE	0	1	0	0.0	1	1	.01	99.92	.33	.577	-1.10	1.77
84	CERAPUS TUBULARIS	0	1	0	0.0	1	1	.01	99.93	.33	.577	-1.10	1.77
85	CHAETOPTERIDAE	0	1	0	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
86	HAPLUSCULOPLUS FOLIOSUS	0	1	0	0.0	1	1	.01	99.95	.33	.577	-1.10	1.77
87	OPHIURIDS	1	0	0	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
88	POLYDORA SP.	1	0	0	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
89	CREPIDULA FURNICATA	0	1	0	0.0	1	1	.01	99.98	.33	.577	-1.10	1.77
90	LUMBRINERIS PARVAPEDATA	1	0	0	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
91	POLYDORA SOCIALIS	0	1	0	0.0	1	1	.01	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES

50 71 44

NO. OF INDIVIDUALS

4227 3994 2243

10464

TOTAL INFAUNAL BIOMASS

99411121220 54204 274835.2

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	91	3488.0	1.8311	.4702	.0481	91611.7

STATION 4 TRANSECT SHELF PERIOD APRIL 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEIOMASTUS CALIFORNIENSIS	470	735	776	92.8	1981	3	30.64	30.64	660.33	166.103	247.68	*****
2 PARAUNIDAE GRPA	148	186	174	61.3	508	3	7.86	38.49	169.33	19.425	121.07	217.59
3 OLIGOCHAETE	102	90	113	0.0	305	3	4.72	43.21	101.67	11.504	73.09	130.25
4 SPHAERUSYLLIS SPA	97	41	130	0.0	274	3	4.24	47.45	91.33	47.753	-27.30	209.97
5 LYONSIA HYALINA FLORIDANA	103	72	89	43.3	264	3	4.08	51.53	88.00	15.524	49.43	126.57
6 PANDURA TRILINEATA	33	103	37	0.0	173	3	2.68	54.21	57.67	39.311	-39.99	155.33
7 PARAUNIDAE GRPB	33	41	81	15.7	155	3	2.40	56.60	51.67	25.716	-12.22	115.55
8 CIRRIATULIDAE	17	104	27	240.4	148	3	2.29	58.89	49.33	47.606	-68.94	167.60
9 ABRA AEGUALIS	27	98	20	324.0	145	3	2.24	61.14	40.33	43.155	-58.88	155.54
10 THARYX SEIGERA	67	0	65	11.9	132	2	2.04	63.18	44.00	38.118	-50.74	138.70
11 NOTOMASTUS SP	60	0	60	123.6	126	2	1.95	65.13	42.00	36.497	-48.67	132.67
12 STREBLUSPIU BENEDICTI	26	24	59	6.9	109	3	1.69	66.81	36.33	19.655	-12.50	85.16
13 ERICHIOMIAS BRASILIENSIS	0	109	0	0.0	109	1	1.69	68.50	36.33	62.931	*****	192.68
14 CAPITELLIDAE	0	92	7	0.0	99	2	1.53	70.03	33.00	51.215	-94.24	160.24
15 MACOMA TENIA	38	29	29	0.0	96	3	1.48	71.51	32.00	5.196	19.09	44.91
16 TELLINA SP.	54	0	39	0.0	93	2	1.44	72.95	31.00	27.875	-38.25	100.25
17 GLYCIDAE SOLITARIA	36	23	30	17.9	89	3	1.38	74.33	29.67	6.506	13.50	45.83
18 SPIOPHANTES HUMBYX	28	30	29	17.7	87	3	1.35	75.67	29.00	1.000	26.52	31.48
19 ANATIDIS ERYTHROPHYLLUS	34	27	25	0.0	86	3	1.33	77.00	28.67	4.726	16.93	40.41
20 RHYNCHELOUS	13	25	40	683.9	78	3	1.21	78.21	26.00	13.528	-7.61	59.61
21 STYLOCHUS ELLIPTICUS	32	27	18	0.0	77	3	1.19	79.40	25.67	7.095	8.04	43.29
22 BALANOGLOSSUS SP.	20	33	22	0.0	75	3	1.16	80.56	25.00	7.000	7.61	42.39
23 NUCULANA ACUTA	37	17	18	0.0	72	3	1.11	81.67	24.00	11.269	-4.00	52.00
24 ARMANDIA SP	42	0	21	0.0	63	2	.97	82.65	21.00	21.000	-31.17	73.17
25 LUCINA MULTILINEATA	16	22	23	452.5	61	3	.94	83.59	20.33	3.786	10.93	29.74
26 ANEMONE	21	19	19	0.0	59	3	.91	84.50	19.67	1.155	16.80	22.54
27 SCHISTOMERINGOS SPA	18	26	14	0.0	58	3	.90	85.40	19.33	6.110	4.15	34.51
28 ACIEUCINA CANALICULATA	17	28	12	0.0	57	3	.88	86.28	19.00	8.185	-1.34	39.34
29 CAPRELLID A	1	50	0	0.0	51	2	.79	87.07	17.00	28.583	-54.01	88.01
30 MULINIA LATERALIS	22	3	23	19.0	48	3	.74	87.81	16.00	11.269	-12.00	44.00
31 COROPHIUM ACHERUSICUM	2	42	2	0.0	46	3	.71	88.52	15.33	23.094	-42.04	72.71
32 PHUKONIS ARCHITECTA	15	4	16	0.0	35	3	.54	89.07	11.67	6.658	-4.87	28.21
33 CLYMENELLA TORQUATA CALIDA	4	22	9	275.6	35	3	.54	89.61	11.67	9.292	-11.42	34.75
34 TURBONILLA SP	18	6	5	0.0	29	3	.45	90.06	9.67	7.234	-8.31	27.04
35 GLYCERA CAPITATA	13	8	5	0.0	26	3	.40	90.46	8.67	4.041	-1.37	18.71
36 TELLINA ALTERNATA	0	26	0	0.0	26	1	.40	90.86	8.67	15.011	-28.63	45.90
37 SPIUCHAETOPHERUS COSTARUM	9	7	8	0.0	24	3	.37	91.23	8.00	1.000	5.52	10.48
38 SYLLIDAE	7	0	15	0.0	22	2	.34	91.57	7.33	7.506	-11.31	25.98
39 BRANIA CLAVATA	0	22	0	0.0	22	1	.34	91.91	7.33	12.702	-24.22	38.89
40 MELINNA MACULATA	4	13	4	0.0	21	3	.32	92.24	7.00	5.196	-5.91	19.91
41 MYSELLA PLANULATA	10	3	8	0.0	21	3	.32	92.56	7.00	3.606	-1.96	15.96
42 XENANTHURA BREVITELSON	8	0	6	0.0	20	3	.31	92.87	6.67	1.155	3.00	9.54
43 LIUCURSA STREMA	3	6	7	0.0	16	3	.25	93.12	5.33	2.002	.16	10.50
44 BIVALVE	6	0	10	0.0	16	2	.25	93.37	5.33	5.033	-7.17	17.84
45 PERIPLUMA MARGARITACEUM (=INEQUALE	4	6	6	0.0	16	3	.25	93.61	5.33	1.155	2.46	8.20
46 PYRAMIDELLA CRENULOATA	5	6	4	0.0	15	3	.23	93.84	5.00	1.000	2.52	7.48
47 MERCEMARIA CAMPECHIENSIS	3	7	5	0.0	15	3	.23	94.08	5.00	2.000	.03	9.97
48 NASSARIUS ACUTUS	7	3	4	0.0	14	3	.22	94.29	4.67	2.002	-5.50	9.84
49 MALDANIDAE	5	0	8	0.0	13	2	.20	94.49	4.33	4.041	-5.71	14.37
50 SARSIELLA TEXANA	6	0	6	0.0	12	2	.19	94.68	4.00	3.464	-4.61	12.61
51 HIATELLA ARCTICA	9	1	2	0.0	12	3	.19	94.87	4.00	4.359	-6.83	14.83
52 GLYCERIDAE	0	0	12	0.0	12	1	.19	95.05	4.00	6.928	-13.21	21.21
53 HAIEA CATHEINENSIS	0	11	0	0.0	11	1	.17	95.22	3.67	6.351	-12.11	19.44
54 POLINICES DUPLICATUS	4	3	4	0.0	11	3	.17	95.39	3.67	.577	2.23	5.10

55	POLYDORA SOCIALIS	4	1	5	0.0	10	3	.15	95.55	3.33	2.082	-1.84	8.50
56	UNKNOWN ANIMAL A	0	10	0	0.0	10	1	.15	95.70	3.33	5.774	-11.01	17.68
57	POLYDORA CAULLERYI	4	0	0	0.0	9	2	.14	95.84	3.00	2.646	-3.57	9.57
58	TANAIDACEAN	4	2	3	0.0	9	3	.14	95.98	3.00	1.000	.52	5.48
59	CYCLASPIS VARIANS	7	1	1	0.0	9	3	.14	96.12	3.00	3.464	-5.61	11.01
60	OSIRACUDA	2	4	3	0.0	9	3	.14	96.26	3.00	1.000	.52	5.48
61	POLYDORA SP.	0	9	0	0.0	9	1	.14	96.40	3.00	5.196	-9.91	15.91
62	SIPUNCULA	0	0	9	0.0	9	1	.14	96.54	3.00	5.196	-9.91	15.91
63	SPIONIDAE	7	0	1	0.0	8	2	.12	96.66	2.67	3.786	-6.74	12.07
64	AMPELISCA VERRILLI	4	1	3	5.0	8	3	.12	96.78	2.67	1.528	-1.13	6.46
65	LISIRIELLA SP	3	1	4	0.0	8	3	.12	96.91	2.67	1.528	-1.13	6.46
66	NEPHYTIS MAGELLANICA	2	5	1	0.0	8	3	.12	97.03	2.67	2.082	-2.50	7.84
67	PHASCOLIUM SIMBBI	4	4	0	0.0	8	2	.12	97.15	2.67	2.309	-3.07	8.40
68	OMENIA FUSIFORMIS	3	0	5	0.0	8	2	.12	97.28	2.67	2.517	-3.59	8.92
69	HAPLOSCHOLUS FOLIUSUS	1	6	0	0.0	7	2	.11	97.39	2.33	3.215	-5.65	10.32
70	UXYURUSIYLIS SALIONI	6	0	1	0.0	7	2	.11	97.49	2.33	3.215	-5.65	10.32
71	PECTINARIA GOULDII	3	1	2	0.0	6	3	.09	97.59	2.00	1.000	-.48	4.48
72	SIGAMBRA TENTACULATA	3	3	0	5.2	6	2	.09	97.68	2.00	1.732	-2.30	6.30
73	ALIGENA TEXASIANA	0	6	0	0.0	6	1	.09	97.77	2.00	3.464	-6.61	10.61
74	SIGALONIDAE	0	6	0	147.5	6	1	.09	97.87	2.00	3.464	-6.61	10.61
75	CERAPUS TUBULARIS	3	1	1	0.0	5	3	.08	97.94	1.67	1.155	-1.20	4.54
76	PISTA PALMATA	2	0	3	0.0	5	2	.08	98.02	1.67	1.528	-2.13	5.46
77	ISOLDA PULCHELLA	0	5	0	0.0	5	1	.08	98.10	1.67	2.087	-5.51	8.84
78	APOPRIUSPIU PYGMAEA	2	3	0	6.6	5	2	.08	98.18	1.67	1.528	-2.13	5.46
79	PURONIA SP	0	5	0	0.0	5	1	.08	98.25	1.67	2.087	-5.51	8.84
80	LUMBRINERIS PARVAPEDATA	0	5	0	0.0	5	1	.08	98.33	1.67	2.087	-5.51	8.84
81	DIPLODONIA CF SURON	1	4	0	0.0	5	2	.08	98.41	1.67	2.082	-3.50	6.84
82	MEGALOMMA BIUCULATUM	1	3	0	0.0	4	2	.06	98.47	1.33	1.528	-2.40	5.13
83	CYCLOPOID COPEPOD	4	0	0	0.0	4	1	.06	98.53	1.33	2.309	-4.40	7.07
84	ENSIS MINOR	0	4	0	0.0	4	1	.06	98.59	1.33	2.309	-4.40	7.07
85	SCOLOPLUS RUBRA	3	0	1	53.7	4	2	.06	98.65	1.33	1.528	-2.46	5.13
86	GYPTIS VITTATA	2	1	1	0.0	4	3	.06	98.72	1.33	.577	-.10	2.77
87	ASYCHIS SP.	0	4	0	0.0	4	1	.06	98.78	1.33	2.309	-4.40	7.07
88	MICROPHIDIOPUS SPP.	1	2	1	0.0	4	3	.06	98.84	1.33	.577	-.10	2.77
89	CLYMENELLA MUCOSA	0	3	0	0.0	3	1	.05	98.89	1.00	1.732	-3.30	5.30
90	COSSURA DELTA	1	1	1	0.0	3	3	.05	98.93	1.00	0.000	1.00	1.00
91	MAGELONA PETIIBONEAE	1	1	1	0.0	3	3	.05	98.98	1.00	0.000	1.00	1.00
92	PHYLLUDOCIDAE	0	3	0	0.0	3	1	.05	99.03	1.00	1.732	-3.30	5.30
93	ELEGONE HETEROPODA	0	0	3	0.0	3	1	.05	99.07	1.00	1.732	-3.30	5.30
94	EPITUNUM SP	0	1	2	0.0	3	2	.05	99.12	1.00	1.000	-1.48	3.48
95	DRILONEKEIS MAGNA	0	0	3	0.0	3	1	.05	99.16	1.00	1.732	-3.30	5.30
96	NEKEIDAE	1	0	2	0.0	3	2	.05	99.21	1.00	1.000	-1.48	3.48
97	PARAPRIUSPIU PINNATA	2	0	1	7.0	3	2	.05	99.26	1.00	1.000	-1.48	3.48
98	GASTROPOD	2	0	0	0.0	2	1	.03	99.29	.67	1.155	-2.20	3.54
99	PARANELOPELLA SP.	2	0	0	0.0	2	1	.03	99.32	.67	1.155	-2.20	3.54
100	DUSINKIA ELEGANS	0	2	0	0.0	2	1	.03	99.35	.67	1.155	-2.20	3.54
101	STENOTHOE SP	0	2	0	0.0	2	1	.03	99.38	.67	1.155	-2.20	3.54
102	MAGELONA PHYLLISAE	2	0	0	0.0	2	1	.03	99.41	.67	1.155	-2.20	3.54
103	PHYLIS SP.	1	0	1	0.0	2	2	.03	99.44	.67	.577	-.77	2.10
104	NEKEID SPA	0	1	1	0.0	2	2	.03	99.47	.67	.577	-.77	2.10
105	HOLOTHUROIDAE	1	1	0	0.0	2	2	.03	99.51	.67	.577	-.77	2.10
106	SCOLELEPIS IEXANA	0	1	1	0.0	2	2	.03	99.54	.67	.577	-.77	2.10
107	PHYLIS MACRUMANUS	0	2	0	0.0	2	1	.03	99.57	.67	1.155	-2.20	3.54
108	CERATONEKEIS IRRITABILIS	0	2	0	0.0	2	1	.03	99.60	.67	1.155	-2.20	3.54
109	ARMANDIA AGILIS	0	2	0	0.0	2	1	.03	99.63	.67	1.155	-2.20	3.54
110	VENTALUM TEXASIANUM	0	1	0	0.0	1	1	.02	99.64	.33	.577	-1.10	1.77
111	POLYNIDAE	0	0	1	0.0	1	1	.02	99.66	.33	.577	-1.10	1.77
112	ANCISTRUSYLLIS PAPILLOSA	0	0	1	0.0	1	1	.02	99.68	.33	.577	-1.10	1.77
113	TEREBELLIDAE	0	0	1	0.0	1	1	.02	99.69	.33	.577	-1.10	1.77
114	SAKSIELLA SP	0	0	1	0.0	1	1	.02	99.71	.33	.577	-1.10	1.77
115	LUCINA AMIANUS	1	0	0	0.0	1	1	.02	99.72	.33	.577	-1.10	1.77
116	LISIRIELLA BARNARDI	0	1	0	0.0	1	1	.02	99.74	.33	.577	-1.10	1.77

117	AMPELISCA ABDITA	1	0	0	0.0	1	1	.02	99.75	.33	.577	-1.10	1.77
118	HYDRUIDS	1	0	0	0.0	1	1	.02	99.77	.33	.577	-1.10	1.77
119	SCHISTOMERINGOS RUDOLPHI	1	0	0	0.0	1	1	.02	99.78	.33	.577	-1.10	1.77
120	PSEUDOEURYTHOE SP.	0	1	0	0.0	1	1	.02	99.80	.33	.577	-1.10	1.77
121	MINOSPIO CIRRIFERA	1	0	0	0.0	1	1	.02	99.81	.33	.577	-1.10	1.77
122	ALIEUTHA DEPRESSA	0	1	0	0.0	1	1	.02	99.83	.33	.577	-1.10	1.77
123	BRANCHIUSTOMA CARIBAEUM	0	0	1	0.0	1	1	.02	99.85	.33	.577	-1.10	1.77
124	OPHIUROID	0	1	0	0.0	1	1	.02	99.86	.33	.577	-1.10	1.77
125	PALEANOTUS HETEROSEIA	0	0	1	0.0	1	1	.02	99.88	.33	.577	-1.10	1.77
126	POLYDONTIDAE	1	0	0	0.0	1	1	.02	99.89	.33	.577	-1.10	1.77
127	MORNA HAYESI	1	0	0	0.0	1	1	.02	99.91	.33	.577	-1.10	1.77
128	AMPHARETIIDAE	0	0	1	0.0	1	1	.02	99.92	.33	.577	-1.10	1.77
129	EPITONIUM RUPICOLA	0	0	1	0.0	1	1	.02	99.94	.33	.577	-1.10	1.77
130	ASTEROPTERON OCULISTRIS	0	0	1	0.0	1	1	.02	99.95	.33	.577	-1.10	1.77
131	EDUTEA MONTOSA	0	0	1	0.0	1	1	.02	99.97	.33	.577	-1.10	1.77
132	PRIONOSPIO CRISTATA	0	0	1	0.0	1	1	.02	99.98	.33	.577	-1.10	1.77
133	MAGELONA ROSEA	0	0	1	0.0	1	1	.02	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 88 89 89
 NO. OF INDIVIDUALS 1856 2380 2230 6466
 TOTAL INFAUNAL BIOMASS 2237 9284 6822 18342.5

STATION	TRANSCT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	133	2155.3	4.6874	.8881	.2915	6114.2

STATION 1 TRANSECT CHANNEL PERIOD MAY 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCI	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 ABRA AEGUALIS	1101	1218	812	57930.1	3131	3	44.67	44.67	1043.67	208.984	524.48	*****
2 MEDIOMASTUS CALIFORNIENSIS	573	304	409	78.5	1286	3	16.35	63.02	428.67	135.574	91.85	765.48
3 OLIGOCHEILE	387	273	277	0.0	937	3	13.37	76.39	312.33	64.694	151.61	473.06
4 STYLOCHUS ELLIPTICUS	210	96	82	0.0	388	3	5.54	81.92	129.33	70.209	-45.69	303.76
5 RHYNCOLOELS	90	29	71	3655.8	190	3	2.71	84.63	63.33	31.214	-14.21	140.88
6 UNKNOWN ANIMAL A	146	0	0	0.0	146	1	2.08	86.72	40.67	84.293	*****	258.06
7 GLYCINE SOLITARIA	49	24	33	18.0	106	3	1.51	88.23	35.33	12.662	3.88	66.79
8 NEPHYS MAGELLANICA	23	24	28	0.0	75	3	1.07	89.30	25.00	2.646	18.43	31.57
9 COSSURA DELTA	32	25	14	0.0	71	3	1.01	90.31	23.67	9.074	1.12	46.21
10 BALANUSGLUSSUS SP.	34	17	19	0.0	70	3	1.00	91.31	23.33	9.292	.25	46.42
11 THARYX SETIGERA	0	37	25	16.4	62	2	.88	92.20	20.67	18.077	-26.23	67.56
12 NASSARIUS SP	0	31	20	0.0	51	2	.73	92.42	17.00	15.716	-22.04	56.04
13 ANEMONE	22	7	9	0.0	38	3	.54	93.47	12.67	8.145	-7.57	32.90
14 CIRRHATULIDAE	37	1	0	2.3	38	2	.54	94.01	12.67	21.079	-39.70	65.03
15 PHORONIS ARCHITECTA	15	12	10	0.0	37	3	.53	94.54	12.33	2.517	6.08	18.59
16 NASSARIUS ACUIUS	25	0	0	0.0	25	1	.36	94.89	8.33	14.434	-27.52	44.19
17 GLYCERA CAPITATA	4	11	8	0.0	23	3	.33	95.22	7.67	3.512	-1.06	16.39
18 SIGAMBRA TENTACULATA	6	6	10	53.5	22	3	.31	95.53	7.33	2.309	1.60	13.07
19 ANATIDES ERYTHROPHYLLUS	5	9	7	0.0	21	3	.30	95.83	7.00	2.000	2.03	11.97
20 MINUSPIO CIRRIFERA	13	6	0	0.0	19	2	.27	96.11	6.33	0.506	-9.63	22.50
21 POLINICES DUPLICATUS	4	7	6	0.0	17	3	.24	96.35	5.67	1.528	1.87	9.46
22 ARMANDIA SP	0	11	3	0.0	14	2	.20	96.55	4.67	5.666	-9.46	18.79
23 PANDORA IRILINEATA	7	3	3	0.0	13	3	.19	96.73	4.33	2.309	-1.40	10.07
24 MAGELONA PHYLLISAE	6	6	1	0.0	13	3	.19	96.92	4.33	2.887	-2.84	11.50
25 SPHAEROSYLLIS SPA	9	4	0	0.0	13	2	.19	97.10	4.33	4.549	-0.87	15.54
26 CAPITELLIDAE	12	0	0	0.0	12	1	.17	97.27	4.00	6.928	-13.21	21.21
27 ONEZIA FUSIFORMIS	0	3	9	0.0	12	2	.17	97.45	4.00	4.583	-7.38	15.38
28 ANADARA SP	1	7	3	0.0	11	3	.16	97.64	3.67	3.005	-3.92	11.26
29 NEREIDAE	2	8	1	0.0	11	3	.16	97.76	3.67	3.786	-5.74	13.07
30 MOUTOMASTUS SP	0	7	4	0.0	11	2	.16	97.92	3.67	3.512	-5.06	12.39
31 ARMANDIA AGILIS	11	0	0	0.0	11	1	.16	98.07	3.67	6.351	-12.11	19.44
32 BIVALVE	0	2	8	0.0	10	2	.14	98.22	3.33	4.163	-7.01	13.68
33 STRENELAIS SP	0	5	4	0.0	9	2	.13	98.34	3.00	2.646	-3.57	9.57
34 ANCISTROSYLLIS PAPILLOSA	4	4	0	0.0	8	2	.11	98.46	2.67	2.309	-3.07	8.40
35 DIOPATRA COPREA	1	5	2	191.0	8	3	.11	98.57	2.67	2.082	-2.50	7.84
36 POLYNUIDAE	7	1	0	0.0	8	2	.11	98.69	2.67	3.786	-6.74	12.07
37 OPHIURIDS	0	4	3	0.0	7	2	.10	98.79	2.33	2.082	-2.84	7.50
38 CAPITELLA CAPITATA	2	3	1	0.0	6	3	.09	98.87	2.00	1.000	-0.48	4.48
39 SPIOPHANES BOMBYX	2	1	2	3.6	5	3	.07	98.94	1.67	.577	.23	3.10
40 MACOMA TENIA	3	0	2	0.0	5	2	.07	99.02	1.07	1.528	-2.13	5.40
41 SPIONIDAE	0	4	0	0.0	4	1	.06	99.07	1.33	2.309	-4.40	7.07
42 ODOSTOMIA SP.	0	4	0	0.0	4	1	.06	99.13	1.33	2.309	-4.40	7.07
43 NEPHYIDAE	4	0	0	0.0	4	1	.06	99.19	1.33	2.309	-4.40	7.07
44 PALEANUTUS HETEROSETA	2	2	0	0.0	4	2	.06	99.24	1.33	1.155	-1.54	4.20
45 NEREID SPA	3	0	0	0.0	3	1	.04	99.29	1.00	1.732	-3.30	5.30
46 HIATIELLA ARCTICA	2	1	0	0.0	3	2	.04	99.33	1.00	1.000	-1.48	3.48
47 ACTEUCINA CANALICULATA	1	2	0	0.0	3	2	.04	99.37	1.00	1.000	-1.48	3.48
48 GASTROPOD	1	0	2	0.0	3	2	.04	99.42	1.00	1.000	-1.48	3.48
49 MAPUSCULOPLOS FOLIUSUS	0	0	2	0.0	2	1	.03	99.44	.67	1.155	-2.20	3.54
50 GLYCERA AMERICANA	0	0	2	0.0	2	1	.03	99.47	.67	1.155	-2.20	3.54
51 ANACHIS OBESA	0	2	0	0.0	2	1	.03	99.50	.67	1.155	-2.20	3.54
52 TELLINA ALTERNATA	2	0	0	0.0	2	1	.03	99.53	.67	1.155	-2.20	3.54
53 POLYDORA SOCIALIS	0	0	2	0.0	2	1	.03	99.56	.67	1.155	-2.20	3.54
54 PARAPRIUNUSPIO PINNATA	1	1	0	2.2	2	2	.03	99.59	.67	.577	-.77	2.10

55	PILARGIDAE	0	2	0	0.0	2	1	.03	99.61	.67	1.155	-2.20	3.54
56	SYLLIDAE	0	2	0	0.0	2	1	.03	99.64	.67	1.155	-2.20	3.54
57	ISOLDA PULCHELLA	2	0	0	0.0	2	1	.03	99.67	.67	1.155	-2.20	3.54
58	PYRAMIDELLA CRENULATA	0	2	0	0.0	2	1	.03	99.70	.67	1.155	-2.20	3.54
59	PSEUDEURYTHOE SP.	0	2	0	0.0	2	1	.03	99.73	.67	1.155	-2.20	3.54
60	MALDANIDAE	0	2	0	0.0	2	1	.03	99.76	.67	1.155	-2.20	3.54
61	MEGALOMMA BIOCULATUM	0	1	0	0.0	1	1	.01	99.77	.33	.577	-1.10	1.77
62	AMPHINOMIDAE	1	0	0	0.0	1	1	.01	99.79	.33	.577	-1.10	1.77
63	SIPUNCULA	0	1	0	0.0	1	1	.01	99.80	.33	.577	-1.10	1.77
64	PECTINARIA GOULDII	0	1	0	0.0	1	1	.01	99.81	.33	.577	-1.10	1.77
65	CLYMEHELLA TORQUATA CALIDA	1	0	0	2.6	1	1	.01	99.83	.33	.577	-1.10	1.77
66	AMPELISCA ADULTA	1	0	0	0.0	1	1	.01	99.84	.33	.577	-1.10	1.77
67	PARAONIDAE GRPA	1	0	0	1.7	1	1	.01	99.86	.33	.577	-1.10	1.77
68	MELINNA MACULATA	1	0	0	0.0	1	1	.01	99.87	.33	.577	-1.10	1.77
69	MULINIA LATERALIS	1	0	0	1.7	1	1	.01	99.89	.33	.577	-1.10	1.77
70	LITIDCURSA STREMA	1	0	0	0.0	1	1	.01	99.90	.33	.577	-1.10	1.77
71	DRILONEREIS MAGNA	0	0	1	0.0	1	1	.01	99.91	.33	.577	-1.10	1.77
72	STREBLOSPIO BENEDICTI	1	0	0	1.5	1	1	.01	99.93	.33	.577	-1.10	1.77
73	NOIDIBRANCH	1	0	0	0.0	1	1	.01	99.94	.33	.577	-1.10	1.77
74	SPIROCHAETOPTERUS COSTARUM	0	1	0	0.0	1	1	.01	99.96	.33	.577	-1.10	1.77
75	BRANIA CLAVATA	1	0	0	0.0	1	1	.01	99.97	.33	.577	-1.10	1.77
76	LISTRIELLA BARNARDI	1	0	0	0.0	1	1	.01	99.99	.33	.577	-1.10	1.77
77	CERAPUS TUBULARIS	1	0	0	0.0	1	1	.01	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 53 51 36
 NO. OF INDIVIDUALS 2873 2241 1895 7009
 TOTAL INFAUNAL BIOMASS 70037 72563 49250 191849.8

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	77	2336.3	2.8960	.7439	.1374	63949.9

STATION 4 TRANSECT SHELF PERIOD MAY 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEIOMASTUS CALIFORNIENSIS	166	246	259	45.2	671	3	27.70	27.70	223.67	50.362	98.55	348.78
2 PARAONIDAE GRPA	86	132	145	32.4	363	3	14.99	42.69	121.00	31.000	43.99	198.01
3 OLIGOCHAETE	69	90	92	0.0	251	3	10.36	53.06	83.67	12.741	52.01	115.32
4 IMARTX SLIDERA	33	63	20	30.5	116	3	4.79	57.84	38.67	22.053	-16.12	93.45
5 TELLINA SP.	35	39	28	0.0	102	3	4.21	62.06	34.00	45.568	20.17	47.83
6 NOTOMASTUS LATERICEUS	0	27	63	0.0	90	2	3.72	65.77	30.00	31.607	-48.52	108.52
7 RHYNCHOCUELS	23	16	35	104.8	74	3	3.06	68.83	24.67	9.609	.79	48.54
8 NUCULANA ACUTA	16	20	11	0.0	47	3	1.94	70.77	15.67	4.509	4.46	26.87
9 PANDORA IRILINEATA	19	15	10	0.0	44	3	1.82	72.58	14.67	4.509	3.46	25.87
10 NOTOMASTUS CF. LATERICEUS	33	0	0	0.0	33	1	1.36	73.95	11.00	19.053	-36.33	58.33
11 STREBLUSPIU BENEDICTII	7	15	10	1.2	32	3	1.32	75.27	10.67	4.041	.63	20.71
12 LUCINA MULTILINEATA	13	8	10	172.4	31	3	1.28	76.55	10.33	2.517	4.08	16.59
13 LYONSIA ITALINA FLORIDANA	10	5	8	2.4	23	3	.95	77.50	7.67	2.517	1.41	13.92
14 SPIOMPHARES BUMBYX	4	13	6	22.3	23	3	.95	78.45	7.67	4.726	-4.07	19.41
15 APOPRIONUSPIU PYGMAEA	0	22	0	.4	22	1	.91	79.36	7.33	12.702	-24.22	38.89
16 ORENIA FUSIFORMIS	10	8	4	0.0	22	3	.91	80.26	7.33	3.055	-.26	14.92
17 XENANTHURA BREVITELSON	14	4	2	0.0	20	3	.83	81.09	6.67	6.429	-9.31	22.64
18 STYLOCHUS ELLIPTICUS	7	6	6	0.0	19	3	.78	81.87	6.33	.577	4.96	7.77
19 ANEMONE	0	9	10	0.0	19	2	.78	82.66	6.33	5.508	-7.35	20.02
20 ANATIDES ERYTHROPHYLLUS	0	11	7	0.0	18	2	.74	83.40	6.00	5.568	-7.83	19.83
21 AMPELISCA VERRILLI	3	7	8	12.6	18	3	.74	84.15	6.00	2.646	-.57	12.57
22 ABRA AEGUALIS	4	9	5	69.1	18	3	.74	84.89	6.00	2.646	-.57	12.57
23 GLYCINDE SOLITARIA	0	9	9	4.0	18	2	.74	85.63	6.00	5.196	-6.91	18.91
24 GLYCERA CAPITATA	5	7	5	0.0	17	3	.70	86.33	5.67	1.155	2.80	8.54
25 PARAONIDAE GRPD	3	5	9	2.1	17	3	.70	87.04	5.67	3.055	-1.92	13.26
26 MINUSPIU CIRRIFFERA	1	0	16	0.0	17	2	.70	87.74	5.67	8.963	-16.60	27.93
27 ACTEULINA CANALICULATA	0	12	4	0.0	16	2	.66	88.40	5.33	6.113	-9.85	20.51
28 MULLINIA LATERALIS	4	5	6	35.1	15	3	.62	89.02	5.00	1.000	2.52	7.48
29 SPHAERUSYLLIS SPA	3	3	6	0.0	12	3	.50	89.51	4.00	1.732	-.30	8.30
30 MACOMA TENIA	0	7	4	0.0	11	2	.45	89.97	3.67	3.512	-5.06	12.39
31 PERIPLUMA MARGARITACEUM (=INEGUALE	0	5	6	0.0	11	2	.45	90.42	3.67	3.215	-4.32	11.65
32 SARSIELLA TEXANA	4	5	1	0.0	10	3	.41	90.83	3.33	2.082	-1.84	8.50
33 MAGELONA PHYLLISAE	0	7	3	0.0	10	2	.41	91.25	3.33	3.512	-5.39	12.06
34 NEPHYS MAGELLANICA	2	5	2	0.0	9	3	.37	91.62	3.00	1.732	-1.30	7.30
35 PHUKONIS ARCHITECTA	4	2	3	0.0	9	3	.37	91.99	3.00	1.000	.52	5.48
36 POLYDORA CAULLENYI	0	8	0	0.0	8	1	.33	92.32	2.67	4.619	-8.81	14.14
37 CYCLASPIS SP	2	4	1	0.0	7	3	.29	92.61	2.33	1.528	-1.46	6.13
38 AMPELISCA ABDITA	2	3	2	0.0	7	3	.29	92.90	2.33	.577	.90	3.77
39 PARAPRIONUSPIU PINNATA	1	2	4	10.2	7	3	.29	93.19	2.33	1.528	-1.46	6.13
40 MERCENARIA CAMPECHIENSIS	1	5	1	0.0	7	3	.29	93.48	2.33	2.309	-3.40	8.07
41 MELINNA MACULATA	5	0	2	0.0	7	2	.29	93.77	2.33	2.517	-3.92	8.59
42 SPIROCHAETOPITERUS COSTARUM	1	3	2	0.0	6	3	.25	94.01	2.00	1.000	-.48	4.48
43 CIRRIATULIDAE	0	0	0	7.0	6	1	.25	94.26	2.00	3.464	-6.61	10.61
44 MONOCULOIDES SP	1	1	3	0.0	5	3	.21	94.47	1.67	1.155	-1.20	4.54
45 SIPUNCULA	2	3	0	0.0	5	2	.21	94.67	1.67	1.528	-2.13	5.46
46 SCOLOPUS RUBRA	0	1	3	0.0	4	2	.17	94.84	1.33	1.528	-2.46	5.13
47 SCHISTOMERINGUS SPA	2	1	1	0.0	4	3	.17	95.00	1.33	.577	-.10	2.77
48 LISTRIELLA SP	0	1	3	0.0	4	2	.17	95.17	1.33	1.528	-2.46	5.13
49 TANAIIDACEAN	2	0	2	0.0	4	2	.17	95.33	1.33	1.155	-1.54	4.20
50 UPHIURIDUS	1	1	2	0.0	4	3	.17	95.50	1.33	.577	-.10	2.77
51 LISTRIELLA BAHIA	4	0	0	0.0	4	1	.17	95.66	1.33	2.309	-4.40	7.07
52 NASSARIUS ACUTUS	0	4	0	0.0	4	1	.17	95.83	1.33	2.309	-4.40	7.07
53 HIATELLA ARCTICA	3	1	0	0.0	4	2	.17	96.00	1.33	1.528	-2.46	5.13
54 TEREBELLIDAE	4	0	0	0.0	4	1	.17	96.16	1.33	2.309	-4.40	7.07

55	CLYMENELLA TORQUATA CALIDA	0	1	3	14.3	4	2	.17	96.33	1.33	1.528	-2.46	5.13
56	MALDANIDAE	0	3	0	0.0	3	1	.12	96.45	1.00	1.732	-3.30	5.50
57	UGYRIDES LIMICOLA	0	3	0	0.0	3	1	.12	96.57	1.00	1.732	-3.30	5.30
58	ERICHINONIAS BRASILIENSIS	0	0	3	0.0	3	1	.12	96.70	1.00	1.732	-3.30	5.30
59	BRANIA CLAVATA	0	0	3	0.0	3	1	.12	96.82	1.00	1.732	-3.30	5.30
60	AMPELISCA SP B (=AMPHIPOD A)	0	0	3	0.0	3	1	.12	96.94	1.00	1.732	-3.30	5.30
61	LEPTOCHELLIA RAPAX	0	0	3	0.0	3	1	.12	97.07	1.00	1.732	-3.30	5.30
62	CLYMENELLA MUCOSA	0	1	2	0.0	3	2	.12	97.19	1.00	1.000	-1.48	3.48
63	CORBULA CONTRACTA	2	0	1	0.0	3	2	.12	97.32	1.00	1.000	-1.48	3.48
64	HAPLUSCULOPLUS FOLIOSUS	0	0	2	0.0	2	1	.08	97.40	.67	1.155	-2.20	3.54
65	POLYNOIDAE	1	0	1	0.0	2	2	.08	97.48	.67	1.577	-.77	2.10
66	URBINIDAE	0	0	2	0.0	2	1	.08	97.56	.67	1.155	-2.20	3.54
67	SYLLIS SP	2	0	0	0.0	2	1	.08	97.65	.67	1.155	-2.20	3.54
68	PSEUDEUKYTHOE SP.	0	2	0	0.0	2	1	.08	97.73	.67	1.155	-2.20	3.54
69	CHIONE SP	0	2	0	0.0	2	1	.08	97.81	.67	1.155	-2.20	3.54
70	LISTRICHELLA BARNARDI	0	2	0	0.0	2	1	.08	97.89	.67	1.155	-2.20	3.54
71	BATEA CALHOUNENSIS	0	0	2	0.0	2	1	.08	97.98	.67	1.155	-2.20	3.54
72	PHOLIS SP.	0	0	2	0.0	2	1	.08	98.06	.67	1.155	-2.20	3.54
73	CERAPUS TUBULARIS	0	0	2	0.0	2	1	.08	98.14	.67	1.155	-2.20	3.54
74	SERPULIDAE	0	0	2	0.0	2	1	.08	98.22	.67	1.155	-2.20	3.54
75	PHYLLUDUCIDAE	0	0	2	0.0	2	1	.08	98.31	.67	1.155	-2.20	3.54
76	PYRAMIDELLA CRENULATA	0	2	0	0.0	2	1	.08	98.39	.67	1.155	-2.20	3.54
77	SCHISTOMERINGUS RUDOLPHI	0	0	2	0.0	2	1	.08	98.47	.67	1.155	-2.20	3.54
78	DRILONEIREIS MAGNA	0	1	1	0.0	2	2	.08	98.55	.67	.577	-.77	2.10
79	GRANDIDIERELLA BONNIEROIDES	0	1	1	0.0	2	2	.08	98.64	.67	.577	-.77	2.10
80	TURBOHILLA SP	0	2	0	0.0	2	1	.08	98.72	.67	1.155	-2.20	3.54
81	LUCINA AMIANUS	0	0	1	0.0	1	1	.04	98.76	.33	.577	-1.10	1.77
82	HOLOTHURIDEA	0	0	1	0.0	1	1	.04	98.80	.33	.577	-1.10	1.77
83	OXYURUSIYLLIS SALONI	0	1	0	0.0	1	1	.04	98.84	.33	.577	-1.10	1.77
84	NASSARIUS VIBEX	0	0	1	0.0	1	1	.04	98.89	.33	.577	-1.10	1.77
85	SIGAMBRA TENTACULATA	0	0	1	1.9	1	1	.04	98.93	.33	.577	-1.10	1.77
86	NUDIBRANCH	1	0	0	0.0	1	1	.04	98.97	.33	.577	-1.10	1.77
87	EDUTEA MOVITUSA	0	1	0	0.0	1	1	.04	99.01	.33	.577	-1.10	1.77
88	PECTINARIA GOULDII	0	1	0	0.0	1	1	.04	99.05	.33	.577	-1.10	1.77
89	GLYCERA AMERICANA	0	1	0	0.0	1	1	.04	99.09	.33	.577	-1.10	1.77
90	PYCHOGONIDA	0	0	1	0.0	1	1	.04	99.13	.33	.577	-1.10	1.77
91	NEREID SPA	0	0	1	0.0	1	1	.04	99.17	.33	.577	-1.10	1.77
92	STENOCHOE SP	0	0	1	0.0	1	1	.04	99.22	.33	.577	-1.10	1.77
93	BALANOGLOSSUS SP.	0	0	1	0.0	1	1	.04	99.26	.33	.577	-1.10	1.77
94	HETEROMASTUS FILIFORMIS	0	0	1	0.0	1	1	.04	99.30	.33	.577	-1.10	1.77
95	ANACHIS OBESA	0	0	1	0.0	1	1	.04	99.34	.33	.577	-1.10	1.77
96	CAPITELLA CAPITATA	0	0	1	0.0	1	1	.04	99.38	.33	.577	-1.10	1.77
97	EXOCHORDA DISPAR	0	0	1	0.0	1	1	.04	99.42	.33	.577	-1.10	1.77
98	BIVALVE	0	1	0	0.0	1	1	.04	99.46	.33	.577	-1.10	1.77
99	PISTA PALMATA	0	0	1	0.0	1	1	.04	99.50	.33	.577	-1.10	1.77
100	HYDROID	0	0	1	0.0	1	1	.04	99.55	.33	.577	-1.10	1.77
101	ETEONE HETEROPODA	0	0	1	0.0	1	1	.04	99.59	.33	.577	-1.10	1.77
102	POLINICES DUPLICATUS	0	1	0	0.0	1	1	.04	99.63	.33	.577	-1.10	1.77
103	SYLLIDAE	0	0	1	0.0	1	1	.04	99.67	.33	.577	-1.10	1.77
104	COROPHIUM LOUISIANUM	0	0	1	0.0	1	1	.04	99.71	.33	.577	-1.10	1.77
105	TAGELUS DIVISUS	0	0	1	0.0	1	1	.04	99.75	.33	.577	-1.10	1.77
106	ANCISTRUSYLLIS PAPILLUSA	0	1	0	0.0	1	1	.04	99.79	.33	.577	-1.10	1.77
107	LUMBRINERIDAE	0	0	1	0.0	1	1	.04	99.83	.33	.577	-1.10	1.77
108	SOLEN VIRIDIS	0	0	1	0.0	1	1	.04	99.88	.33	.577	-1.10	1.77
109	NOTUMASTUS LOBATUS	1	0	0	0.0	1	1	.04	99.92	.33	.577	-1.10	1.77
110	UNKNOWN ANIMAL A	0	0	1	0.0	1	1	.04	99.96	.33	.577	-1.10	1.77
111	AMPHARETIIDAE	0	1	0	0.0	1	1	.04	100.00	.33	.577	-1.10	1.77

NO. OF INDIVIDUALS
TOTAL INFAUNAL BIOMASS

622 903 897 2422
1939 2269 3382 7590.5

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	111	807.3	4.3357	.8816	.2636	2530.2

STATION 1 TRANSECT CHANNEL PERIOD JUNE 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 OLIGUCHAETE	19	44	40	0.0	103	3	14.43	14.43	34.33	13.429	.97	67.70
2 MEDIOMASTUS CALIFORNIENSIS	36	34	17	18.1	87	3	12.18	26.61	29.00	10.440	3.06	54.94
3 NASSARIUS ACUTUS	7	20	52	0.0	79	3	11.06	37.68	26.33	23.159	-31.20	83.87
4 RHYNCOCOELES	24	16	10	181.1	50	3	7.00	44.68	16.67	7.024	-.78	34.12
5 CIRKATIDOLAE	21	2	12	12.6	35	3	4.90	49.58	11.67	49.504	-11.95	35.28
6 PALEANTUS METEROSETA	1	31	1	0.0	33	3	4.62	54.20	11.00	17.321	-32.03	54.03
7 PARAPRIONOSPION PINNATA	7	13	11	19.7	31	3	4.34	58.54	10.33	3.055	2.74	17.92
8 COSSURA DELTA	8	11	8	0.0	27	3	3.78	62.32	9.00	1.732	4.70	13.30
9 ANADARA SP	0	15	10	0.0	25	2	3.50	65.83	8.33	7.638	-10.64	27.31
10 STREBLOSPIU BENEDICII	6	1	10	10.8	17	3	2.38	68.21	5.67	4.509	-5.54	16.87
11 MINUSPIU CIRKIFERA	0	8	4	0.0	12	2	1.68	69.89	4.00	4.000	-5.94	13.94
12 PANOPEUS HERBSTII	0	2	10	0.0	12	2	1.68	71.57	4.00	5.292	-9.15	17.15
13 BATEA CATHININENSIS	0	1	10	0.0	11	2	1.54	73.11	3.67	5.508	-10.02	17.35
14 ABRA AEGUALIS	2	7	1	22.7	10	3	1.40	74.51	3.33	3.215	-4.65	11.32
15 MAGELUNA PHYLLISAE	4	3	2	0.0	9	3	1.26	75.77	3.00	1.000	.52	5.48
16 SIGAMBRA TENTACULATA	3	2	4	11.8	9	3	1.26	77.03	3.00	1.000	.52	5.48
17 ANCISTROSYLLIS PAPILLOSA	1	4	3	0.0	8	3	1.12	78.15	2.67	1.528	-1.13	6.46
18 DIOPATRA CUPREA	1	6	1	550.4	8	3	1.12	79.27	2.67	2.887	-4.50	9.84
19 THARYX SETIGERA	0	8	0	0.1	8	1	1.12	80.39	2.67	4.619	-8.81	14.14
20 NEPHTYS MAGELLANICA	0	3	4	0.0	7	2	.98	81.37	2.33	2.082	-2.84	7.50
21 OPHIURIDS	0	2	5	0.0	7	2	.98	82.35	2.33	2.517	-3.92	8.59
22 UNKNOWN ANIMAL A	0	6	0	0.0	6	1	.84	83.19	2.00	3.464	-6.61	10.61
23 LEUCON SP	1	3	2	0.0	6	3	.84	84.03	2.00	1.000	-.48	4.48
24 PINNOTHERIDAE	0	4	2	0.0	6	2	.84	84.87	2.00	2.000	-2.97	6.97
25 ANACHIS OBESA	0	5	0	0.0	5	1	.70	85.57	1.67	2.087	-5.51	8.84
26 PSEUDEURYTHOE SP.	0	2	3	0.0	5	2	.70	86.27	1.67	1.528	-2.13	5.46
27 NEREIDAE	0	3	2	0.0	5	2	.70	86.97	1.67	1.528	-2.13	5.46
28 ELASMOPUS SP	0	1	4	0.0	5	2	.70	87.68	1.67	2.082	-3.50	6.84
29 ODOSTOMIA SP.	0	4	0	0.0	4	1	.56	88.24	1.33	2.309	-4.40	7.07
30 ANEMONE	1	0	3	0.0	4	2	.56	88.80	1.33	1.528	-2.46	5.13
31 OPHELIDAE	0	0	3	0.0	3	1	.42	89.22	1.00	1.732	-3.30	5.30
32 SPHAEROSYLLIS CF. SUBLAEVIS	0	0	3	0.0	3	1	.42	89.64	1.00	1.732	-3.30	5.30
33 PHORONIS ARCHITECTA	2	0	1	0.0	3	2	.42	90.06	1.00	1.000	-1.48	3.48
34 TEREBELLIDAE	0	2	1	0.0	3	2	.42	90.48	1.00	1.000	-1.48	3.48
35 GLYCERA CAPITATA	1	2	0	145.9	3	2	.42	90.90	1.00	1.000	-1.48	3.48
36 NEPHTYIDAE	0	0	3	0.0	3	1	.42	91.32	1.00	1.732	-3.30	5.30
37 STYLOCHUS ELLIPTICUS	0	1	2	0.0	3	2	.42	91.74	1.00	1.000	-1.48	3.48
38 SYLLIDAE	0	0	3	0.0	3	1	.42	92.16	1.00	1.732	-3.30	5.30
39 XANTHIDAE	0	3	0	0.0	3	1	.42	92.58	1.00	1.732	-3.30	5.30
40 PARALINIDAE GRPA	0	1	1	2.1	2	2	.28	92.86	.67	.577	-.77	2.10
41 ANACHIS SEMIPLICATA	0	0	2	0.0	2	1	.28	93.14	.67	1.155	-2.20	3.54
42 BIVALVE	0	0	2	0.0	2	1	.28	93.42	.67	1.155	-2.20	3.54
43 MITRELLA LUNATA	0	2	0	0.0	2	1	.28	93.70	.67	1.155	-2.20	3.54
44 NEREID SPA	1	1	0	0.0	2	2	.28	93.98	.67	.577	-.77	2.10
45 GYTTIS VITTATA	0	2	0	0.0	2	1	.28	94.26	.67	1.155	-2.20	3.54
46 PODARKE OBSCURA	0	2	0	2.0	2	1	.28	94.54	.67	1.155	-2.20	3.54
47 AMPHILOCHUS SP.	0	0	2	0.0	2	1	.28	94.82	.67	1.155	-2.20	3.54
48 ISOLDA PULCHELLA	2	0	0	0.0	2	1	.28	95.10	.67	1.155	-2.20	3.54
49 SIGAMBRA BASSI	0	2	0	0.0	2	1	.28	95.38	.67	1.155	-2.20	3.54
50 PECTINARIA GOULDII	0	1	0	0.0	1	1	.14	95.52	.33	.577	-1.10	1.77
51 GONIADIDAE	0	0	1	0.0	1	1	.14	95.66	.33	.577	-1.10	1.77
52 TAGELUS DIVISUS	0	1	0	0.0	1	1	.14	95.80	.33	.577	-1.10	1.77
53 HIATELLA ARCTICA	0	1	0	0.0	1	1	.14	95.94	.33	.577	-1.10	1.77
54 MULINIA LATERALIS	1	0	0	1.0	1	1	.14	96.08	.33	.577	-1.10	1.77

STATION 4 TRANSECT SHELF PERIOD NOVEMBER80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	44	63	85	22.4	192	3	22.22	22.22	64.00	20.518	13.03	114.97
2 PARANIDAE GRPA	52	39	46	17.8	137	3	15.86	38.08	45.67	6.506	29.50	61.83
3 MOLINIA LATERALIS	14	33	20	25.1	67	3	7.75	45.83	22.33	9.713	-1.80	46.46
4 STREBLOSPIO BENEDICTI	16	19	27	22.6	62	3	7.18	53.01	20.67	5.686	6.54	34.79
5 CYMADUSA COMPTA	32	4	1	0.0	37	3	4.28	57.29	12.33	17.098	-30.14	54.81
6 GLYCINDE SOLITARIA	3	11	19	14.2	33	3	3.82	61.11	11.00	8.000	-8.87	30.87
7 PERIPLUMA MARGARITACEUM (=INEQUALE	6	12	12	0.0	30	3	3.47	64.58	10.00	3.464	1.39	18.61
8 XENANTHURA BREVITELSON	9	10	3	0.0	22	3	2.55	67.13	7.33	3.786	-2.07	16.74
9 AMPELISCA VERRILLI	4	9	9	14.3	22	3	2.55	69.68	7.33	2.887	.16	14.50
10 NUCULANA ACUTA	5	6	9	0.0	20	3	2.31	71.99	6.67	2.082	1.50	11.84
11 ACTEUCINA CANALICULATA	5	9	5	0.0	19	3	2.20	74.19	6.33	2.309	.60	12.07
12 LUCINA MULTILINEATA	5	7	6	36.4	18	3	2.08	76.27	6.00	1.000	3.52	8.48
13 OLIGOCHAETE	10	1	4	0.0	15	3	1.74	78.01	5.00	4.583	-6.38	16.38
14 PARANIDAE GRPB	9	4	2	3.7	15	3	1.74	79.75	5.00	3.606	-3.96	13.96
15 TANAIIDACEAN	5	5	4	0.0	14	3	1.62	81.37	4.67	.577	3.23	6.10
16 SIPUNCULA	2	10	2	0.0	14	3	1.62	82.99	4.67	4.619	-6.81	16.14
17 SPIRONIDAE	0	10	0	0.0	10	1	1.16	84.14	3.33	5.774	-11.01	17.68
18 LYONSIA HYALINA FLORIDANA	3	3	2	3.6	8	3	.93	85.07	2.67	.577	1.23	4.10
19 TELLINA SP.	8	0	0	0.0	8	1	.93	86.00	2.67	4.619	-8.81	14.14
20 MINUSPIO CIRRIFERA	5	0	3	0.0	8	2	.93	86.92	2.67	2.517	-3.59	8.92
21 CORUPHIUM ACHEMUSICUM	0	7	0	0.0	7	1	.81	87.73	2.33	4.041	-7.71	12.37
22 CAPRELLID A	5	1	0	0.0	6	2	.69	88.43	2.00	2.646	-4.57	6.57
23 PANDORA IRIINEATA	2	1	3	0.0	6	3	.69	89.12	2.00	1.000	-.48	4.48
24 RHYNCHOCUELS	3	1	1	36.0	5	3	.58	89.70	1.67	1.155	-1.20	4.54
25 PALAEMONETES PUGIO	5	0	0	0.0	5	1	.58	90.28	1.67	2.887	-5.51	8.84
26 CLYMENELLA MUCOSA	0	2	3	0.0	5	2	.58	90.86	1.67	1.528	-2.13	5.46
27 BRANCHIUSTOMA CARIBAEUM	1	2	1	0.0	4	3	.46	91.32	1.33	.577	-.10	2.77
28 SAKSIELLA TEXANA	3	0	1	0.0	4	2	.46	91.78	1.33	1.528	-2.46	5.13
29 MALDANIDAE	0	4	0	0.0	4	1	.46	92.25	1.33	2.309	-4.40	7.07
30 UNUPHIDAE	0	0	3	0.0	3	1	.35	92.59	1.00	1.732	-3.30	5.30
31 CORUPHIUM LOUISIANUM	1	2	0	0.0	3	2	.35	92.94	1.00	1.000	-1.48	3.48
32 ANACHIS SEMIPLICATA	3	0	0	0.0	3	1	.35	93.29	1.00	1.732	-3.30	5.30
33 LISTRIELLA BARNARDI	1	2	0	0.0	3	2	.35	93.63	1.00	1.000	-1.48	3.48
34 THARYX SEIGERA	0	3	0	3.1	3	1	.35	93.98	1.00	1.732	-3.30	5.30
35 DIOPATRA CUPREA	0	2	0	15.3	2	1	.23	94.21	.67	1.155	-2.20	3.54
36 NATICA PUSILLA	0	0	2	0.0	2	1	.23	94.44	.67	1.155	-2.20	3.54
37 PARAMESSIONE LUTEOLA	0	0	2	2.1	2	1	.23	94.68	.67	1.155	-2.20	3.54
38 PARASTEROPE SPP	1	0	1	0.0	2	2	.23	94.91	.67	.577	-.77	2.10
39 SCULOPLUS RUBRA	0	0	2	0.0	2	1	.23	95.14	.67	1.155	-2.20	3.54
40 MYSIDOPSIS VAHIA	1	1	0	0.0	2	2	.23	95.37	.67	.577	-.77	2.10
41 MERCENARIA CAMPECHIENSIS	0	1	1	0.0	2	2	.23	95.60	.67	.577	-.77	2.10
42 ERICHTHONIAS BRASILIENSIS	0	2	0	0.0	2	1	.23	95.83	.67	1.155	-2.20	3.54
43 HAMINUEA SUCCINEA	1	0	1	0.0	2	2	.23	96.06	.67	.577	-.77	2.10
44 PAGURID JUV.	2	0	0	0.0	2	1	.23	96.30	.67	1.155	-2.20	3.54
45 MAGELONA PHYLLISAE	1	0	1	0.0	2	2	.23	96.53	.67	.577	-.77	2.10
46 TAGELUS DIVISUS	0	2	0	0.0	2	1	.23	96.76	.67	1.155	-2.20	3.54
47 EDUTEA MUNITOSA	0	2	0	0.0	2	1	.23	96.99	.67	1.155	-2.20	3.54
48 GLYCERA CAPITATA	1	0	0	6.0	1	1	.12	97.11	.33	.577	-1.10	1.77
49 ABKA AEQUALIS	1	0	0	.7	1	1	.12	97.22	.33	.577	-1.10	1.77
50 CERAPUS TUBULARIS	0	1	0	0.0	1	1	.12	97.34	.33	.577	-1.10	1.77
51 CYCLASPIS SP	0	1	0	0.0	1	1	.12	97.45	.33	.577	-1.10	1.77
52 UPHIURIDUS	0	0	1	0.0	1	1	.12	97.57	.33	.577	-1.10	1.77
53 PINNIXA	1	0	0	0.0	1	1	.12	97.69	.33	.577	-1.10	1.77
54 PENAUS AZTECUS	1	0	0	0.0	1	1	.12	97.80	.33	.577	-1.10	1.77

55	COROPHIUM LOUISIANUM	0	0	1	0.0	1	1	.14	96.22	.33	.577	-1.10	1.77
56	EXOGONE DISPAR	0	0	1	0.0	1	1	.14	96.36	.33	.577	-1.10	1.77
57	MALDANIDAE	0	1	0	0.0	1	1	.14	96.50	.33	.577	-1.10	1.77
58	OWENIA FUSIFORMIS	0	1	0	0.0	1	1	.14	96.64	.33	.577	-1.10	1.77
59	BRYOZOA	0	0	1	0.0	1	1	.14	96.78	.33	.577	-1.10	1.77
60	POLINICES DUPLICATUS	1	0	0	0.0	1	1	.14	96.92	.33	.577	-1.10	1.77
61	POLYNOIDAE	0	1	0	0.0	1	1	.14	97.06	.33	.577	-1.10	1.77
62	CYCLASPIS SP	0	0	1	0.0	1	1	.14	97.20	.33	.577	-1.10	1.77
63	CERATONEREIS IRRITABILIS	1	0	0	0.0	1	1	.14	97.34	.33	.577	-1.10	1.77
64	BALANOGLOSSUS SP.	0	0	1	0.0	1	1	.14	97.48	.33	.577	-1.10	1.77
65	PRIONOSPION CRISTATA	0	0	1	0.0	1	1	.14	97.62	.33	.577	-1.10	1.77
66	LITRIELLA BARNARDI	0	1	0	0.0	1	1	.14	97.76	.33	.577	-1.10	1.77
67	SCHISTOMERINGOS SPA	0	1	0	0.0	1	1	.14	97.90	.33	.577	-1.10	1.77
68	SPHAEROSYLLIS SPA	0	1	0	0.0	1	1	.14	98.04	.33	.577	-1.10	1.77
69	STENOCHMUS SP	0	1	0	0.0	1	1	.14	98.18	.33	.577	-1.10	1.77
70	PETROLISTHES ARMATUS	0	1	0	0.0	1	1	.14	98.32	.33	.577	-1.10	1.77
71	ACTEOCINA CANALICULATA	0	0	1	0.0	1	1	.14	98.46	.33	.577	-1.10	1.77
72	HRANIA CLAVATA	0	1	0	0.0	1	1	.14	98.60	.33	.577	-1.10	1.77
73	ERICHTHONIAS BRASILIENSIS	0	0	1	0.0	1	1	.14	98.74	.33	.577	-1.10	1.77
74	EUNOE CF NODULOSA	0	0	1	0.0	1	1	.14	98.88	.33	.577	-1.10	1.77
75	ONUPHIDAE	1	0	0	0.0	1	1	.14	99.02	.33	.577	-1.10	1.77
76	LAKEUTES PARVULUS	0	1	0	0.0	1	1	.14	99.16	.33	.577	-1.10	1.77
77	TELLINA ALTERNATA	1	0	0	0.0	1	1	.14	99.30	.33	.577	-1.10	1.77
78	MERCENARIA CAMPECHIENSIS	0	0	1	0.0	1	1	.14	99.44	.33	.577	-1.10	1.77
79	SERPULIDAE	0	0	1	0.0	1	1	.14	99.58	.33	.577	-1.10	1.77
80	GLYCERA AMERICANA	0	1	0	0.0	1	1	.14	99.72	.33	.577	-1.10	1.77
81	HAPLOSCULOPUS FOLIUSUS	0	0	1	0.0	1	1	.14	99.86	.33	.577	-1.10	1.77
82	SPIONIDAE	0	0	1	0.0	1	1	.14	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 25 53 51
 NO. OF INDIVIDUALS 153 293 268 714
 TOTAL INFAUNAL BIOMASS 1677 4553 2227 8456.5

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	82	238.0	4.8093	.9362	.5039	2818.8

SPECIES	STATION 4			TRANSECT			SHOULDER	PERIOD			JUNE	80	ACC PCT	MEAN	STD	95 PCT	
	1	2	3	1	2	3		ABUND	PERCENT	PERCENT						CONF LIM	
1 PARAONIDAE GRPA	106	100	189				55.9	295	27.26	27.26			27.26	98.33	8.622	76.91	119.75
2 ULIGOCHAETE	50	39	1				0.0	90	0.32	0.32			35.58	30.00	25.710	-33.87	93.87
3 MEDIUMASTUS CALIFORMIENSIS	30	18	30				21.5	78	7.21	7.21			42.79	26.00	6.928	8.79	43.21
4 PARAONIDAE GRPB	19	11	31				26.0	61	5.64	5.64			48.43	20.33	10.066	-4.68	45.34
5 MULLIMIA LAEMALIS	20	12	21				27.4	53	4.90	4.90			53.33	17.67	4.933	5.41	29.92
6 LULINA MULTILINEATA	11	19	13				593.1	43	3.97	3.97			57.30	14.33	4.103	3.99	24.68
7 STREHLUSPIU BENEDECII	10	10	14				10.9	34	3.14	3.14			60.44	11.33	2.309	5.60	17.07
8 APOPHONOSPPIO PYGMAEA	15	10	4				23.0	29	2.68	2.68			63.12	9.67	5.508	-4.02	23.35
9 CAPRELLID A	16	13	0				0.0	29	2.68	2.68			65.80	9.67	8.505	-11.46	30.80
10 MYNCHOCUELS	8	9	6				81.6	23	2.13	2.13			67.93	7.67	1.528	3.87	11.46
11 NUCULAVA ACUTA	4	9	10				0.0	23	2.13	2.13			70.06	7.67	3.215	-3.2	15.65
12 TELLINA SP.	14	5	0				0.0	22	2.03	2.03			72.09	7.33	5.059	-7.22	21.89
13 ACIEUCINA CANALICULATA	5	7	6				0.0	18	1.66	1.66			73.75	6.00	1.000	3.52	8.48
14 CIRRAULIDAE	6	7	4				28.1	17	1.57	1.57			75.32	5.67	1.528	1.87	9.40
15 PANDORA TRILINEATA	3	4	6				0.0	13	1.20	1.20			76.52	4.33	1.528	.54	8.13
16 PHUKOJIS ARCHITECTA	2	3	7				0.0	12	1.11	1.11			77.63	4.00	2.646	-2.57	10.57
17 AMPELISCA VERRILLI	5	4	3				11.3	12	1.11	1.11			78.74	4.00	1.000	1.52	6.48
18 MINUSPIO CIRRIFERA	2	0	10				0.0	12	1.11	1.11			79.85	4.00	5.292	-9.15	17.15
19 SCHISTOMERINGUS SPA	1	0	11				0.0	12	1.11	1.11			80.96	4.00	6.003	-11.11	19.11
20 XENANTHUKA BREVITELSON	0	0	0				0.0	10	.92	.92			81.89	3.33	5.774	-11.01	17.68
21 NUTOMASTUS LATICEUS	7	1	2				25.3	10	.92	.92			82.81	3.33	3.215	-4.65	11.32
22 ARMA AEGUALIS	7	2	0				0.1	9	.83	.83			83.64	3.00	3.606	-5.96	11.96
23 TAGELUS DIVISUS	5	3	0				0.0	8	.74	.74			84.38	2.67	2.517	-3.59	8.92
24 SPIORIDAE	2	5	1				0.0	8	.74	.74			85.12	2.67	2.082	-2.50	7.84
25 SIPUNCULA	3	4	0				0.0	7	.65	.65			85.77	2.33	2.082	-2.84	7.50
26 SYLLIDAE	2	1	4				0.0	7	.65	.65			86.41	2.33	1.528	-1.46	6.13
27 THARYX SETIGERA	3	4	0				12.6	7	.65	.65			87.06	2.33	2.082	-2.84	7.50
28 BIVALVE	0	1	4				0.0	5	.46	.46			87.52	1.67	2.082	-3.50	6.84
29 PARAPHIONUSPIO PINNATA	2	2	1				13.8	5	.46	.46			87.99	1.67	.577	.23	3.10
30 TURBONILLA SP	1	4	0				0.0	5	.46	.46			88.45	1.67	2.082	-3.50	6.84
31 LYONSIA HYALINA FLORIDANA	1	0	0				4.9	5	.46	.46			88.91	1.67	2.082	-3.50	6.84
32 NASSARIUS ACUTUS	4	0	1				0.0	5	.46	.46			89.37	1.67	2.082	-3.50	6.84
33 MERCENARIA CAMPECHIENSIS	1	2	2				0.0	5	.46	.46			89.83	1.67	.577	.23	3.10
34 GYPIIS VITATA	1	1	3				0.0	4	.37	.37			90.20	1.33	1.528	-2.46	5.13
35 SCHISTOMERINGUS RUDOLPHI	0	4	0				0.0	4	.37	.37			90.57	1.33	2.309	-4.40	7.07
36 GLYCINDE SULTARIA	1	3	0				12.1	4	.37	.37			90.94	1.33	1.528	-2.46	5.13
37 MAGELONA PHYLLISAE	1	0	3				0.0	4	.37	.37			91.31	1.33	1.528	-2.46	5.13
38 SIGAMHKA TENTACULATA	2	0	2				9.2	4	.37	.37			91.68	1.33	1.155	-1.54	4.20
39 SAKSIELLA TEXANA	3	1	0				0.0	4	.37	.37			92.05	1.33	1.528	-2.46	5.13
40 USIRACUDA	2	0	2				0.0	4	.37	.37			92.42	1.33	1.155	-1.54	4.20
41 OMENIA FUSIFORMIS	2	1	1				0.0	4	.37	.37			92.79	1.33	.577	.10	2.77
42 BRANCHIOASYCHIS AMERICANA	4	0	0				0.0	4	.37	.37			93.10	1.33	2.309	-4.40	7.07
43 BRANCHIOUSIDIA CARINAEUM	0	3	1				0.0	4	.37	.37			93.53	1.33	1.528	-2.46	5.13
44 NEPHYIIDAE	1	1	1				0.0	3	.28	.28			93.81	1.00	0.000	1.00	1.00
45 OPHIURIDS	3	0	0				0.0	3	.28	.28			94.09	1.00	1.732	-3.30	5.30
46 SPIOPHARES BOMBIX	1	1	1				6.3	3	.28	.28			94.36	1.00	0.000	1.00	1.00
47 ERSIS MINOR	0	0	3				0.0	3	.28	.28			94.64	1.00	1.732	-3.30	5.30
48 GLYCERIDAE	1	0	2				0.0	3	.28	.28			94.92	1.00	1.000	-1.48	3.48
49 PERIPLOMA MARGARITACEUM (=INEQUALE	2	1	0				0.0	3	.28	.28			95.19	1.00	1.000	-1.48	3.48
50 CLYMEHELLA MUCOSA	2	1	0				0.0	3	.28	.28			95.47	1.00	1.000	-1.48	3.48
51 LYSTRIELLA HANNAUDI	1	0	2				0.0	3	.28	.28			95.75	1.00	1.000	-1.48	3.48
52 PISIA PALMATA	3	0	0				0.0	3	.28	.28			96.03	1.00	1.732	-3.30	5.30
53 MELINNA MACULATA	2	1	0				0.0	3	.28	.28			96.30	1.00	1.000	-1.48	3.48
54 MAPLUSCULOPUS FOLIUSUS	0	1	2				0.0	3	.28	.28			96.58	1.00	1.000	-1.48	3.48

55 SCOLOPLOS RUBRA	0	0	2	0.0	2	1	.18	96.77	.67	1.155	-2.20	3.54
56 ANATIDES ERYTHROPHYLLUS	0	2	0	0.0	2	1	.18	96.95	.67	1.155	-2.20	3.54
57 SYNCHELIDIUM AMERICANUM	0	1	1	0.0	2	2	.18	97.13	.67	.577	-.77	2.10
58 TANAIDALEAN	0	0	2	0.0	2	1	.18	97.32	.67	1.155	-2.20	3.54
59 CAPITELLIDAE	0	2	0	0.0	2	1	.18	97.50	.67	1.155	-2.20	3.54
60 SPHAEROSYLLIS CF. SUBLAEVIS	0	0	2	0.0	2	1	.18	97.69	.67	1.155	-2.20	3.54
61 ORBINIDAE	0	0	2	0.0	2	1	.18	97.87	.67	1.155	-2.20	3.54
62 MALDANIDAE	0	2	0	0.0	2	1	.18	98.06	.67	1.155	-2.20	3.54
63 ANADARA SP	1	0	1	0.0	2	2	.18	98.24	.67	.577	-.77	2.10
64 DRILONEREIS MAGNA	1	0	0	0.0	1	1	.09	98.34	.33	.577	-1.10	1.77
65 ONUPHIDAE	0	0	1	0.0	1	1	.09	98.43	.33	.577	-1.10	1.77
66 DIPLODONTA CF SOROR	0	0	1	0.0	1	1	.09	98.52	.33	.577	-1.10	1.77
67 ASTEROPELLA MACLAUGHLINAE	1	0	0	0.0	1	1	.09	98.61	.33	.577	-1.10	1.77
68 PYKANIDELLA CRENULATA	1	0	0	0.0	1	1	.09	98.71	.33	.577	-1.10	1.77
69 MICROPROTUPUS SPP.	0	0	1	0.0	1	1	.09	98.80	.33	.577	-1.10	1.77
70 SABELLIDAE	0	0	1	0.0	1	1	.09	98.89	.33	.577	-1.10	1.77
71 PILARGIDAE	1	0	0	0.0	1	1	.09	98.98	.33	.577	-1.10	1.77
72 NERPTYS MAGELLANICA	1	0	0	0.0	1	1	.09	99.08	.33	.577	-1.10	1.77
73 OXYUROSTYLIS SALIUMI	0	1	0	0.0	1	1	.09	99.17	.33	.577	-1.10	1.77
74 CLYMENELLA TORQUATA CALIDA	0	1	0	0.0	1	1	.09	99.26	.33	.577	-1.10	1.77
75 XANIDAE	1	0	0	0.0	1	1	.09	99.35	.33	.577	-1.10	1.77
76 PAGURUS LUNGICARPUS	1	0	0	0.0	1	1	.09	99.45	.33	.577	-1.10	1.77
77 HOLTHURIDEA	1	0	0	0.0	1	1	.09	99.54	.33	.577	-1.10	1.77
78 HYDROIDS	1	0	0	0.0	1	1	.09	99.63	.33	.577	-1.10	1.77
79 PODARKE OBSCURA	0	1	0	0.0	1	1	.09	99.72	.33	.577	-1.10	1.77
80 ASTEROPTERON OCULITRISTIS	0	0	1	0.0	1	1	.09	99.82	.33	.577	-1.10	1.77
81 MYSELLA PLANULATA	1	0	0	0.0	1	1	.09	99.91	.33	.577	-1.10	1.77
82 STYLOCHUS ELLIPTICUS	0	1	0	0.0	1	1	.09	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 58 48 50
 NO. OF INDIVIDUALS 407 339 336 1082
 TOTAL INFAUNAL BIOMASS 2020 1405 1352 4777.2

STATION 4
 TRANSECT SHELF
 SPECIES 82
 MEAN DENSITY 360.7
 DIVERSITY 4.5962
 PIE .9015
 EQUITABILITY .4290
 BIOMASS 1592.4

STATION 1 TRANSECT CHANNEL PERIOD JULY 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 OLIGOCHEATE	11	46	27	0.0	84	3	24.78	24.78	28.00	17.521	-15.53	71.53
2 MEDIOMASTUS CALIFORNIENSIS	2	18	9	7.0	29	3	8.55	33.33	9.67	8.021	-10.26	29.59
3 BATEA CAHRIKINENSIS	0	0	26	0.0	26	1	7.67	41.00	8.67	15.011	-28.63	45.96
4 PARAPRIONOSPION PINNATA	11	7	5	20.8	23	3	6.78	47.79	7.67	3.055	.08	15.26
5 NASSARIUS ACUIUS	21	0	1	0.0	22	2	6.49	54.28	7.33	11.846	-22.10	36.76
6 STREBLOSPIRO BENEDICTI	5	4	3	4.9	12	3	3.54	57.82	4.00	1.000	1.52	6.48
7 RHYNCHOCUELS	0	11	0	5.2	11	1	3.24	61.06	3.67	6.351	-12.11	19.44
8 HYDROIDS	0	0	10	0.0	10	1	2.95	64.01	3.33	5.774	-11.01	17.68
9 COSSURA DELTA	0	6	2	0.0	8	2	2.36	66.37	2.67	3.055	-4.92	10.26
10 OPHIURIDS	0	0	7	0.0	7	1	2.06	68.44	2.33	4.041	-7.71	12.37
11 NEPHYS MAGELLANICA	0	3	3	0.0	6	2	1.77	70.21	2.00	1.732	-2.30	6.30
12 DIOPATRA CUPREA	0	0	6	731.2	6	1	1.77	71.98	2.00	3.464	-6.61	10.61
13 MITRELLA LUNATA	0	0	5	0.0	5	1	1.47	73.45	1.67	2.887	-5.51	8.84
14 ANCISTRUSYLLIS PAPILLUSA	0	4	1	0.0	5	2	1.47	74.93	1.67	2.082	-3.50	6.84
15 CAPRELLID A	0	0	5	0.0	5	1	1.47	76.40	1.67	2.887	-5.51	8.84
16 MAGELONA PHYLLISAE	0	4	1	0.0	5	2	1.47	77.88	1.67	2.082	-3.50	6.84
17 ABRA AEGUALIS	0	0	5	4.2	5	1	1.47	79.35	1.67	2.887	-5.51	8.84
18 SIGAMBRA TENTACULATA	0	2	2	4.9	4	2	1.18	80.53	1.33	1.155	-1.54	4.20
19 GYPIIS VITIATA	0	1	3	0.0	4	2	1.18	81.71	1.33	1.528	-2.46	5.13
20 CYRTOPLEURA COSTATA	4	0	0	0.0	4	1	1.18	82.89	1.33	2.309	-4.40	7.07
21 THALYX SETIGERA	0	2	2	4.7	4	2	1.18	84.07	1.33	1.155	-1.54	4.20
22 ANADARA SP	0	0	3	0.0	3	1	.88	84.96	1.00	1.732	-3.30	5.30
23 PARAONIDAE GRPA	1	2	0	2.2	3	2	.88	85.84	1.00	1.000	-1.48	3.48
24 MIATELLA ARCTICA	0	3	0	0.0	3	1	.88	86.73	1.00	1.732	-3.30	5.30
25 ANACHIS UMESA	0	0	3	0.0	3	1	.88	87.61	1.00	1.732	-3.30	5.30
26 PARAONIDAE GRPB	1	2	0	1.9	3	2	.88	88.50	1.00	1.000	-1.48	3.48
27 EXOGONE DISPAR	0	0	3	0.0	3	1	.88	89.38	1.00	1.732	-3.30	5.30
28 NEREIDAE	0	0	3	0.0	3	1	.88	90.27	1.00	1.732	-3.30	5.30
29 PANOPEUS HERBSTII	0	0	3	0.0	3	1	.88	91.15	1.00	1.732	-3.30	5.30
30 CIRRIATULIDAE	0	0	3	6.0	3	1	.88	92.04	1.00	1.732	-3.30	5.30
31 GLYCINDE SOLITARIA	1	1	0	4.6	2	2	.59	92.63	.67	.577	-.77	2.10
32 BALANOGLOSSUS SP.	1	0	1	0.0	2	2	.59	93.22	.67	.577	-.77	2.10
33 PALLANUS HETEROSETA	1	0	1	0.0	2	2	.59	93.81	.67	.577	-.77	2.10
34 MOLINIA LATERALIS	1	0	1	4.3	2	2	.59	94.40	.67	.577	-.77	2.10
35 PHOXOCEPHALIDAE	0	1	0	0.0	1	1	.29	94.69	.33	.577	-1.10	1.77
36 LAKEUTES PARVULUS	0	0	1	0.0	1	1	.29	94.99	.33	.577	-1.10	1.77
37 EDUTEA MONTOSA	0	0	1	0.0	1	1	.29	95.28	.33	.577	-1.10	1.77
38 SPIONIDAE	0	0	1	0.0	1	1	.29	95.58	.33	.577	-1.10	1.77
39 AMPHIPOD UNID.	0	0	1	0.0	1	1	.29	95.87	.33	.577	-1.10	1.77
40 ODUSIONIA SP.	0	0	1	0.0	1	1	.29	96.17	.33	.577	-1.10	1.77
41 ETEONE HETEROPODA	0	0	1	0.0	1	1	.29	96.46	.33	.577	-1.10	1.77
42 UPOGEBIA AFFINIS	0	0	1	0.0	1	1	.29	96.76	.33	.577	-1.10	1.77
43 ALPHEUS HETEROCHEALIS	0	0	1	0.0	1	1	.29	97.05	.33	.577	-1.10	1.77
44 PILARGIDAE	0	0	1	0.0	1	1	.29	97.35	.33	.577	-1.10	1.77
45 MINUSPIO CIRRIFERA	0	0	1	0.0	1	1	.29	97.64	.33	.577	-1.10	1.77
46 ANACHIS SEMIPLICATA	0	0	1	0.0	1	1	.29	97.94	.33	.577	-1.10	1.77
47 ANEMONE	0	0	1	0.0	1	1	.29	98.23	.33	.577	-1.10	1.77
48 NEPHYIDAE	0	1	0	0.0	1	1	.29	98.53	.33	.577	-1.10	1.77
49 NALICA PUSILLA	0	1	0	0.0	1	1	.29	98.82	.33	.577	-1.10	1.77
50 LEUCON SP	0	0	1	0.0	1	1	.29	99.12	.33	.577	-1.10	1.77
51 SYLLIDAE	0	1	0	0.0	1	1	.29	99.41	.33	.577	-1.10	1.77
52 PHOTIS SP.	0	0	1	0.0	1	1	.29	99.71	.33	.577	-1.10	1.77
53 MURINA MAYESI	0	0	1	0.0	1	1	.29	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 12 20 43
 NO. OF INDIVIDUALS 60 120 159 339
 TOTAL INFAUNAL BIOMASS 805 772 3242 4819.0

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	53	113.0	4.4833	.9118	.6405	1606.3

STATION 4 TRANSECT SHELF PERIOD JULY 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 PARAONIDAE GRPA	62	69	72	36.0	203	3	18.90	18.90	67.67	5.132	54.92	80.42
2 MEDIOMASTUS CALIFORNIENSIS	41	49	59	25.2	149	3	13.87	32.77	49.67	9.018	27.26	72.07
3 OLIGUCHAETE	21	20	13	0.0	54	3	5.03	37.80	18.00	4.359	7.17	28.83
4 ACTEUCINA CANALICULATA	13	15	26	0.0	54	3	5.03	42.83	18.00	7.000	.61	35.39
5 MOLINIA LATERALIS	28	14	7	126.1	49	3	4.56	47.39	16.33	10.693	-10.23	42.90
6 TELLINA SP.	17	22	7	0.0	46	3	4.28	51.68	15.33	7.638	-3.64	34.31
7 RHYNCOCUELS	17	22	5	61.9	44	3	4.10	55.77	14.67	8.737	-7.04	36.37
8 APOPRIUMUSPIO PYGMAEA	9	21	10	22.1	40	3	3.72	59.50	13.33	6.658	-3.21	29.87
9 PANDORA TRILINEATA	10	12	11	0.0	33	3	3.07	62.57	11.00	1.000	8.52	13.48
10 PARAONIDAE GRPB	7	7	13	13.2	27	3	2.51	65.08	9.00	3.464	.39	17.61
11 AMPELISCA VERRILLI	10	9	7	17.3	26	3	2.42	67.50	8.67	1.528	4.87	12.46
12 SIREBLOSPIO BENEDICTI	8	5	11	11.9	24	3	2.23	69.74	8.00	3.000	.55	15.45
13 PERIPLUMA MARGARITACEUM (=INEQUALE	3	11	7	0.0	21	3	1.96	71.69	7.00	4.000	-2.94	16.94
14 LUCINA MULTILINEATA	7	9	3	227.7	19	3	1.77	73.46	6.33	3.055	-1.26	13.92
15 BRANIA CLAVAIA	0	8	10	0.0	18	2	1.68	75.14	6.00	5.292	-7.15	19.15
16 NUCULANA ACUTA	3	7	8	0.0	18	3	1.68	76.82	6.00	2.646	-.57	12.57
17 HAPLOSCULOPUS FOLIUSUS	5	7	5	0.0	17	3	1.58	78.40	5.67	1.155	2.80	8.54
18 GLYCINDE SOLITARIA	3	10	2	44.5	15	3	1.40	79.80	5.00	4.359	-5.83	15.83
19 CAPRELLID A	8	0	4	0.0	12	2	1.12	80.91	4.00	4.000	-5.94	13.94
20 IMARYX SETIGERA	4	4	4	21.9	12	3	1.12	82.03	4.00	0.000	4.00	4.00
21 BRANCHIOSTOMA CARIBAEUM	6	2	3	0.0	11	3	1.02	83.05	3.67	2.082	-1.50	8.84
22 ABRA AEGUALIS	2	4	5	10.0	11	3	1.02	84.08	3.67	1.528	-.13	7.46
23 PHORONIS ARCHITECTA	2	3	4	0.0	9	3	.84	84.92	3.00	1.000	.52	5.48
24 MAGELONA PHYLLISAE	1	3	5	0.0	9	3	.84	85.75	3.00	2.000	-1.97	7.97
25 SYLLIDAE	9	0	0	0.0	9	1	.84	86.59	3.00	5.196	-9.91	15.91
26 LYNSIA HYALINA FLORIDANA	6	1	2	6.9	9	3	.84	87.43	3.00	2.646	-3.57	9.57
27 MACOMA TENIA	0	4	5	0.0	9	2	.84	88.27	3.00	2.646	-3.57	9.57
28 NASSARIUS ACUTUS	3	4	1	0.0	8	3	.74	89.01	2.67	1.528	-1.13	6.46
29 PULNICES DUPLICATUS	1	3	3	0.0	7	3	.65	89.66	2.33	1.155	-.54	5.20
30 MERCENARIA CAMPECHIENSIS	0	2	5	0.0	7	2	.65	90.32	2.33	2.517	-3.92	8.59
31 SCULOPLUS RUBRA	3	0	3	0.0	6	2	.56	90.88	2.00	1.732	-2.30	6.30
32 NOTOMASTUS LATERICEUS	1	3	2	22.3	6	3	.56	91.43	2.00	1.000	-.48	4.48
33 SIPUNCULA	3	0	2	0.0	5	2	.47	91.90	1.67	1.528	-2.13	5.46
34 NATICA FUSILLA	0	3	2	0.0	5	2	.47	92.36	1.67	1.528	-2.13	5.46
35 XENANTHURA OREVITELSON	0	4	0	0.0	4	1	.37	92.74	1.33	2.309	-4.40	7.07
36 CIRRIATULIDAE	2	0	2	6.1	4	2	.37	93.11	1.33	1.155	-1.54	4.20
37 PYRAMIDELLA CRENULATA	3	0	1	0.0	4	2	.37	93.48	1.33	1.528	-2.46	5.13
38 LISTRIELLA BAHIA	0	3	1	0.0	4	2	.37	93.85	1.33	1.528	-2.46	5.13
39 GLYCERA AMERICANA	0	2	1	108.7	3	2	.28	94.13	1.00	1.000	-1.48	3.48
40 PAGURUS LONGICARPUS	0	2	1	0.0	3	2	.28	94.41	1.00	1.000	-1.48	3.48
41 GYPTIS VITATA	2	0	1	0.0	3	2	.28	94.69	1.00	1.000	-1.48	3.48
42 PARAPRIUMUSPIO PINNATA	2	1	0	13.4	3	2	.28	94.97	1.00	1.000	-1.48	3.48
43 SCOLELEPIS TEXANA	0	2	1	0.0	3	2	.28	95.25	1.00	1.000	-1.48	3.48
44 MINUSPIO CIRRIFERA	1	0	1	0.0	2	2	.19	95.44	.67	.577	-.77	2.10
45 CLYMENELLA MUCOSA	0	1	1	0.0	2	2	.19	95.62	.67	.577	-.77	2.10
46 POLYDORIDAE	0	2	0	0.0	2	1	.19	95.81	.67	1.155	-2.20	3.54
47 ASTEROPELLA MACLAUGHLINAE	0	2	0	0.0	2	1	.19	96.00	.67	1.155	-2.20	3.54
48 TURBONILLA SP	1	1	0	0.0	2	2	.19	96.18	.67	.577	-.77	2.10
49 PUDARKE OBSCURA	0	0	2	0.0	2	1	.19	96.37	.67	1.155	-2.20	3.54
50 NEPHTYIDAE	2	0	0	0.0	2	1	.19	96.55	.67	1.155	-2.20	3.54
51 HYDROIDS	2	0	0	0.0	2	1	.19	96.74	.67	1.155	-2.20	3.54
52 SCHISTOMERINGUS SPA	1	0	1	0.0	2	2	.19	96.93	.67	.577	-.77	2.10
53 ANEMONE	1	1	0	0.0	2	2	.19	97.11	.67	.577	-.77	2.10
54 ASTEROPTERON OCULITRISTIS	1	1	0	0.0	2	2	.19	97.30	.67	.577	-.77	2.10

55	OWENIA FUSIFORMIS	0	2	0	0.0	2	1	.19	97.49	.67	1.155	-2.20	3.54
56	SPIOPHANES BOMBYX	1	1	0	1.0	2	2	.19	97.67	.67	.577	-.77	2.10
57	SIGAMBRA TENTACULATA	0	1	1	3.1	2	2	.19	97.86	.67	.577	-.77	2.10
58	HOLOTHURIDAE	1	0	0	0.0	1	1	.09	97.95	.33	.577	-1.10	1.77
59	POLYDORA SOCIALIS	1	0	0	0.0	1	1	.09	98.04	.33	.577	-1.10	1.77
60	NEPHTYS MAGELLANICA	1	0	0	0.0	1	1	.09	98.14	.33	.577	-1.10	1.77
61	LUCINA AMIANTUS	0	1	0	0.0	1	1	.09	98.23	.33	.577	-1.10	1.77
62	CORBULA CONTRACTA	1	0	0	0.0	1	1	.09	98.32	.33	.577	-1.10	1.77
63	EUCERAMUS PRAELONGUS	0	1	0	0.0	1	1	.09	98.42	.33	.577	-1.10	1.77
64	GLYCERIDAE	0	0	1	0.0	1	1	.09	98.51	.33	.577	-1.10	1.77
65	POLYDORA CAULLERYI	0	1	0	0.0	1	1	.09	98.60	.33	.577	-1.10	1.77
66	LEPTOCHELIA RAPAX	0	0	1	0.0	1	1	.09	98.70	.33	.577	-1.10	1.77
67	AGLAOPHANUS VERKILLI	0	0	1	0.0	1	1	.09	98.79	.33	.577	-1.10	1.77
68	MEGALUMMA BIOCULATUM	1	0	0	0.0	1	1	.09	98.88	.33	.577	-1.10	1.77
69	HESIONIDAE	0	0	1	0.0	1	1	.09	98.98	.33	.577	-1.10	1.77
70	COSSURA DELTA	0	0	1	0.0	1	1	.09	99.07	.33	.577	-1.10	1.77
71	DRILONEKEIS MAGNA	0	1	0	0.0	1	1	.09	99.16	.33	.577	-1.10	1.77
72	BIVALVE	1	0	0	0.0	1	1	.09	99.26	.33	.577	-1.10	1.77
73	UNKNOWN ANIMAL A	0	1	0	0.0	1	1	.09	99.35	.33	.577	-1.10	1.77
74	STYLOCHUS ELLIPTICUS	1	0	0	0.0	1	1	.09	99.44	.33	.577	-1.10	1.77
75	PILARGIDAE	1	0	0	0.0	1	1	.09	99.53	.33	.577	-1.10	1.77
76	PARASTEROPE SPP	0	0	1	0.0	1	1	.09	99.63	.33	.577	-1.10	1.77
77	OPHIUROIDES	0	1	0	0.0	1	1	.09	99.72	.33	.577	-1.10	1.77
78	SAKSIELLA SP	1	0	0	0.0	1	1	.09	99.81	.33	.577	-1.10	1.77
79	GLYCERA CAPITATA	1	0	0	0.0	1	1	.09	99.91	.33	.577	-1.10	1.77
80	BUSYCON SP	1	0	0	0.0	1	1	.09	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	53	51	51	
NO. OF INDIVIDUALS	343	385	346	1074
TOTAL INFAUNAL BIOMASS	1848	2416	2093	6356.9

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	80	358.0	4.7508	.9283	.4877	2119.0

STATION 1 TRANSECT CHANNEL PERIOD AUGUST 80

95 PCT
CONF LIMREPLICATE TOTAL
1 2 3 ABUNDBIOMASS
MG

SPECIES

ACC PCT

MEAN

STD

SPECIES	1	2	3	BIOMASS MG	ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM
1 MEDIUMASTUS CALIFORNIENSIS	0	88	145	21.5	233	2	55.08	55.08	77.67	73.050	*****
2 ULIGUCHAETE	0	29	21	0.0	50	2	11.82	66.90	16.67	14.978	-20.54
3 SIKELUSPIU BENEDICII	0	2	19	8.8	21	2	4.96	71.87	7.00	14.440	-18.94
4 RHYNCROUELS	0	7	9	11.5	16	2	3.78	75.65	5.33	4.726	-6.41
5 ANEMONE	0	11	1	0.0	12	2	2.84	78.49	4.00	6.083	-11.11
6 MAGELONA PHYLLISAE	0	4	6	0.0	10	2	2.36	80.85	3.33	3.055	-4.26
7 PAKAPRIKUSPIO PINNATA	0	3	6	10.4	9	2	2.13	82.98	3.00	3.000	-4.45
8 COSSURA DELIA	0	4	5	0.0	9	2	2.13	85.11	3.00	2.646	-3.57
9 BATEA CATHRINENSIS	0	6	0	0.0	6	1	1.42	86.52	2.00	3.404	-6.61
10 EMICHTHOMIAS BRASILIENSIS	0	5	0	0.0	5	1	1.18	87.71	1.67	2.887	-5.51
11 CUKUPHIUM ACHERUSICUM	0	5	0	0.0	5	1	1.18	88.89	1.67	2.887	-5.51
12 DIUPATKA CUPREA	0	2	3	829.1	5	2	1.18	90.07	1.67	1.528	-2.13
13 PALEANUTUS HETEROSEITA	0	3	1	0.0	4	2	.95	91.02	1.33	1.528	-2.46
14 GLYCINDE SOLITARIA	0	0	3	4.7	3	1	.71	91.73	1.00	1.732	-3.30
15 GYPIIS VIITATA	0	3	0	0.0	3	1	.71	92.43	1.00	1.732	-3.30
16 MINUSPIO CIRKIFERA	0	2	1	0.0	3	2	.71	93.14	1.00	1.000	-1.48
17 MEKEIO SPA	0	3	0	0.0	3	1	.71	93.85	1.00	1.732	-3.30
18 SIGAMHRA TENIACULATA	0	1	1	3.2	2	2	.47	94.33	.67	.577	-7.77
19 ANADARA SP	0	2	0	0.0	2	1	.47	94.80	.67	1.155	-2.20
20 OPHIURIDUS	0	2	0	0.0	2	1	.47	95.27	.67	1.155	-2.20
21 ANCISIRUSYLLIS PAPILLOSA	0	2	0	0.0	2	1	.47	95.74	.67	1.155	-2.20
22 LIBINIA DUBIA	0	1	0	0.0	1	1	.24	95.98	.33	.577	-1.10
23 CAPRELLIO A	0	1	0	0.0	1	1	.24	96.22	.33	.577	-1.10
24 NASSARIUS ACUTUS	0	1	0	0.0	1	1	.24	96.45	.33	.577	-1.10
25 THARYX SETIGERA	0	1	0	0.0	1	1	.24	96.69	.33	.577	-1.10
26 NEPHYTIJAE	0	0	0	0.0	1	1	.24	96.93	.33	.577	-1.10
27 GLYCERA AMERICANA	0	0	1	39.4	1	1	.24	97.16	.33	.577	-1.10
28 PARAONIDAE GRPB	0	0	1	.6	1	1	.24	97.40	.33	.577	-1.10
29 DRILUMENIS MAGNA	0	1	0	0.0	1	1	.24	97.64	.33	.577	-1.10
30 EXUGONE DISPAR	0	0	1	0.0	1	1	.24	97.87	.33	.577	-1.10
31 SIPUNCULA	0	1	0	0.0	1	1	.24	98.11	.33	.577	-1.10
32 TELLINA SP.	0	1	0	0.0	1	1	.24	98.35	.33	.577	-1.10
33 CYCLASPIIS SP	0	1	0	0.0	1	1	.24	98.58	.33	.577	-1.10
34 ANACRIS UDESA	0	1	0	0.0	1	1	.24	98.82	.33	.577	-1.10
35 NEREIDAE	0	1	0	0.0	1	1	.24	99.05	.33	.577	-1.10
36 PHORONIS ARCHITECTA	0	0	1	0.0	1	1	.24	99.29	.33	.577	-1.10
37 GRANDIDIERELLA BONNIEROIDES	0	1	0	0.0	1	1	.24	99.53	.33	.577	-1.10
38 TURBONILLA SP	0	1	0	0.0	1	1	.24	99.76	.33	.577	-1.10
39 SYLLIDAE	0	0	1	0.0	1	1	.24	100.00	.33	.577	-1.10

NU. OF SPECIES

0 32 19

NU. OF INDIVIDUALS

0 196 227

TOTAL INFAUNAL BIOMASS

3237.9

423

STATION 1

TRANSECT CHANNEL

SPECIES 59

MEAN DENSITY 141.0

DIVERSITY 2.8440

PIE .6770

BIOMASS 1079.3

STATION 4 TRANSECT SHELF PERIOD AUGUST 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MULINIA LATERALIS	54	34	155	28.0	243	3	21.83	21.83	81.00	64.861	-80.14	242.14
2 PARAONIDAE GRPA	54	75	67	32.8	196	3	17.61	39.44	65.33	10.599	39.00	91.66
3 TELLINA SP.	30	30	54	0.0	114	3	10.24	49.69	38.00	13.856	3.58	72.42
4 OLIGOCHELE	35	19	26	0.0	80	3	7.19	56.87	26.67	8.021	6.74	46.59
5 MEDIUMASTUS CALIFORNIENSIS	20	21	29	26.5	70	3	6.29	63.16	23.33	14.433	11.08	35.59
6 PARAONIDAE GRPB	5	11	23	14.8	39	3	3.50	66.67	13.00	9.165	-9.77	35.77
7 STREBLOSPIU BENEDICTI	12	12	14	17.4	38	3	3.41	70.08	12.67	1.155	9.80	15.54
8 AMPELISCA VERRILLI	6	7	18	21.4	31	3	2.79	72.87	10.33	6.658	-6.21	26.87
9 RHYNCOCUELS	9	12	7	84.0	28	3	2.52	75.38	9.33	2.517	3.08	15.59
10 BRANIA CLAVATA	20	6	0	0.0	26	2	2.34	77.72	8.67	10.263	-16.83	34.16
11 APUPRIONUSPIU PYGMAEA	12	10	2	18.1	24	3	2.16	79.87	8.00	5.292	-5.15	21.15
12 HAPLUSCULOPUS FOLIUSUS	2	2	9	0.0	13	3	1.17	81.04	4.33	4.041	-5.71	14.37
13 THARYX SETIGERA	0	6	6	12.0	12	2	1.08	82.12	4.00	3.464	-4.61	12.61
14 SYLLIDAE	0	0	12	0.0	12	1	1.08	83.20	4.00	6.928	-13.21	21.21
15 LUCINA MULTILINEATA	5	1	5	31.7	11	3	.99	84.19	3.67	2.309	-2.07	9.40
16 ARMANDIA AGILIS	4	0	6	0.0	10	2	.90	85.09	3.33	3.055	-4.26	10.92
17 ACTEUCINA CANALICULATA	1	5	4	0.0	10	3	.90	85.98	3.33	2.082	-1.84	8.50
18 XENANTHURA BREVITELSON	0	5	4	0.0	9	2	.81	86.79	3.00	2.646	-3.57	9.57
19 CAPRELLID A	7	1	0	0.0	8	2	.72	87.51	2.67	3.786	-6.74	12.07
20 THARYX ANNULOSUS	8	0	0	5.1	8	1	.72	88.23	2.67	4.619	-8.81	14.14
21 UPHELIDAE	3	4	0	0.0	7	2	.63	88.86	2.33	2.082	-2.84	7.50
22 BRANCHIOSTOMA CARIBAEUM	2	3	2	0.0	7	3	.63	89.49	2.33	.577	.90	3.77
23 TANAIDACEAN	2	3	2	0.0	7	3	.63	90.12	2.33	.577	.90	3.77
24 PARAPRIONUSPIU PINNATA	1	2	4	15.6	7	3	.63	90.75	2.33	1.528	-1.46	6.13
25 CIRRHATULIDAE	2	2	3	15.8	7	3	.63	91.37	2.33	.577	.90	3.77
26 MINUSPIU CIRRIFERA	0	0	7	0.0	7	1	.63	92.00	2.33	4.041	-7.71	12.37
27 MACOMA TENIA	0	0	6	0.0	6	1	.54	92.54	2.00	3.464	-6.61	10.61
28 PANDORA TRILINEATA	1	2	2	0.0	5	3	.45	92.99	1.67	.577	.23	3.10
29 SPIONIDAE	0	1	4	0.0	5	2	.45	93.44	1.67	2.082	-3.50	6.84
30 UNOPHIDAE	3	0	2	0.0	5	2	.45	93.89	1.67	1.528	-2.13	5.46
31 DRILONEIREIS MAGNA	2	0	2	0.0	4	2	.36	94.25	1.33	1.155	-1.54	4.20
32 SCULOPUS RUBRA	1	2	0	0.0	3	2	.27	94.52	1.00	1.000	-1.48	3.48
33 PARASIEROPE SPP	1	0	2	0.0	3	2	.27	94.79	1.00	1.000	-1.48	3.48
34 OMENIA FUSIFORMIS	1	1	1	0.0	3	3	.27	95.06	1.00	0.000	1.00	1.00
35 PLATYISCHNOPUS SP.	0	3	0	0.0	3	1	.27	95.33	1.00	1.732	-3.30	5.30
36 SYNCHELIDIUM AMERICANUM	0	1	2	0.0	3	2	.27	95.60	1.00	1.000	-1.48	3.48
37 MERCENARIA CAMPECHIENSIS	2	0	1	0.0	3	2	.27	95.87	1.00	1.000	-1.48	3.48
38 SCHISTOMERINGOS SPA	0	0	3	0.0	3	1	.27	96.14	1.00	1.732	-3.30	5.30
39 PHASCOLION STROMBI	0	0	3	0.0	3	1	.27	96.41	1.00	1.732	-3.30	5.30
40 GYPTIS VITIATA	1	1	0	0.0	2	2	.18	96.59	.67	.577	-.77	2.10
41 GRANDIOIERELLA BONNIEROIDES	1	1	0	0.0	2	2	.18	96.77	.67	.577	-.77	2.10
42 NATICA POSILLA	0	1	1	0.0	2	2	.18	96.95	.67	.577	-.77	2.10
43 LUCINA AMIANUS	1	0	1	0.0	2	2	.18	97.12	.67	.577	-.77	2.10
44 ABRA AEQUALIS	1	1	0	3.3	2	2	.18	97.30	.67	.577	-.77	2.10
45 MAGELONA PETTIBONEAE	0	1	1	0.0	2	2	.18	97.48	.67	.577	-.77	2.10
46 SIPUNCULA	1	1	0	0.0	2	2	.18	97.66	.67	.577	-.77	2.10
47 ANEMONE	0	1	0	0.0	1	1	.09	97.75	.33	.577	-1.10	1.77
48 MURICULOIDES SP	0	1	0	0.0	1	1	.09	97.84	.33	.577	-1.10	1.77
49 URBINIDAE	0	0	1	0.0	1	1	.09	97.93	.33	.577	-1.10	1.77
50 LITOCORSA STREMA	1	0	0	0.0	1	1	.09	98.02	.33	.577	-1.10	1.77
51 EULIMNOSTOMA SP	0	0	1	0.0	1	1	.09	98.11	.33	.577	-1.10	1.77
52 SPIOPHANES BOMBYX	0	1	0	4.9	1	1	.09	98.20	.33	.577	-1.10	1.77
53 LYONSIA HYALINA FLORIDANA	1	0	0	2.1	1	1	.09	98.29	.33	.577	-1.10	1.77
54 CLYMEHELLA MUCOSA	0	1	0	0.0	1	1	.09	98.38	.33	.577	-1.10	1.77

55 PHOXOCEPHALIDAE	0	0	1	0.0	1	1	.09	98.47	.33	.577	-1.10	1.77
56 UGYRIDES LIMICOLA	0	0	1	0.0	1	1	.09	98.56	.33	.577	-1.10	1.77
57 ALIGENA TEXASIANA	0	0	1	0.0	1	1	.09	98.65	.33	.577	-1.10	1.77
58 CAPITELLIDAE	0	0	1	0.0	1	1	.09	98.74	.33	.577	-1.10	1.77
59 SARSIELLA TEXANA	0	0	1	0.0	1	1	.09	98.83	.33	.577	-1.10	1.77
60 MAGFLOMA PHYLLISAE	0	0	1	0.0	1	1	.09	98.92	.33	.577	-1.10	1.77
61 ETEONE HETEROPODA	1	0	0	0.0	1	1	.09	99.01	.33	.577	-1.10	1.77
62 TURBONILLA SP	0	0	1	0.0	1	1	.09	99.10	.33	.577	-1.10	1.77
63 MASSARIUS ACUTUS	1	0	0	0.0	1	1	.09	99.19	.33	.577	-1.10	1.77
64 PERIPILOMA MARGARITACEUM (=INEQUALE	1	0	0	0.0	1	1	.09	99.28	.33	.577	-1.10	1.77
65 LISTRIELLA BARNARDI	1	0	0	0.0	1	1	.09	99.37	.33	.577	-1.10	1.77
66 TAGELUS DIVISUS	0	1	0	0.0	1	1	.09	99.46	.33	.577	-1.10	1.77
67 SOLEN VIRIDIS	1	0	0	0.0	1	1	.09	99.55	.33	.577	-1.10	1.77
68 SCOLELEPIS TEXANA	1	0	0	0.0	1	1	.09	99.64	.33	.577	-1.10	1.77
69 PHYLLUDUCIDAE	0	0	1	0.0	1	1	.09	99.73	.33	.577	-1.10	1.77
70 UNKNOWN ANIMAL A	1	0	0	0.0	1	1	.09	99.82	.33	.577	-1.10	1.77
71 PYRAMIDELLA CRENULOATA	0	1	0	0.0	1	1	.09	99.91	.33	.577	-1.10	1.77
72 GLYCERA CAPITATA	0	1	0	14.8	1	1	.09	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 43 41 46
 NO. OF INDIVIDUALS 319 294 500
 TOTAL INFAUNAL BIOMASS 748 899 795 2441.6

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STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	72	371.0	4.1960	.8965	.3624	813.9

STATION 1 TRANSECT CHANNEL PERIOD SEPTEMBER80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 OLIGUCHAETE	137	36	183	0.0	356	3	66.17	66.17	118.67	75.195	-68.14	305.48
2 MEDIUMASTUS CALIFORNIENSIS	33	0	1	4.7	34	2	6.32	72.49	11.33	10.771	-35.30	57.97
3 GLYCINDE SOLITARIA	17	1	4	12.7	22	3	4.09	76.58	7.33	8.505	-13.80	28.46
4 STREBLOSPIO BENEDICTI	19	0	2	6.5	21	2	3.90	80.48	7.00	10.440	-18.94	32.94
5 NASSARIUS ACUTUS	14	2	4	0.0	20	3	3.72	84.20	6.67	6.429	-9.31	22.64
6 RHYNCHOCULS	7	11	0	19.1	18	2	3.35	87.55	6.00	5.568	-7.83	19.83
7 DIOPATRA COPREA	15	0	0	341.2	15	1	2.79	90.33	5.00	8.660	-16.51	26.51
8 CUSSURA DELTA	2	0	7	0.0	9	2	1.67	92.01	3.00	3.606	-5.96	11.96
9 SPIONIDAE	0	6	0	0.0	6	1	1.12	93.12	2.00	3.464	-6.61	10.61
10 ANCISTROSYLLIS PAPILLOSA	4	0	0	0.0	4	1	.74	93.87	1.33	2.309	-4.40	7.07
11 PALEANOTUS HETEROSETA	0	4	0	0.0	4	1	.74	94.61	1.33	2.309	-4.40	7.07
12 UNOPHIDAE	0	2	1	0.0	3	2	.56	95.17	1.00	1.000	-1.48	3.48
13 MAGELONA PHYLLOSAE	0	0	3	0.0	3	1	.56	95.72	1.00	1.732	-3.30	5.30
14 ANACHIS SEMIPLICATA	2	0	0	0.0	2	1	.37	96.10	.67	1.155	-2.20	3.54
15 NEREIDAE	1	1	0	0.0	2	2	.37	96.47	.67	.577	-.77	2.10
16 SIGAMBRA TENTACULATA	1	0	1	4.2	2	2	.37	96.84	.67	.577	-.77	2.10
17 EXUGONE DISPAR	2	0	0	0.0	2	1	.37	97.21	.67	1.155	-2.20	3.54
18 CAPITELLA CAPITATA	0	0	2	0.0	2	1	.37	97.58	.67	1.155	-2.20	3.54
19 MINUSPIO CIRRIFERA	1	0	0	0.0	1	1	.19	97.77	.33	.577	-1.10	1.77
20 EUDORELLA MUNDON	0	1	0	0.0	1	1	.19	97.96	.33	.577	-1.10	1.77
21 SCHISTOMERINGUS SPA	0	1	0	0.0	1	1	.19	98.14	.33	.577	-1.10	1.77
22 PENAEUS SETIFERUS	1	0	0	0.0	1	1	.19	98.33	.33	.577	-1.10	1.77
23 PSEUDEURYTHOE SP.	0	1	0	0.0	1	1	.19	98.51	.33	.577	-1.10	1.77
24 PILARGIDAE	0	0	1	0.0	1	1	.19	98.70	.33	.577	-1.10	1.77
25 PANDURA TRILINEATA	0	1	0	0.0	1	1	.19	98.88	.33	.577	-1.10	1.77
26 MULINIA LATERALIS	1	0	0	1.9	1	1	.19	99.07	.33	.577	-1.10	1.77
27 OPHIURIDS	0	1	0	0.0	1	1	.19	99.26	.33	.577	-1.10	1.77
28 ANEMONE	1	0	0	0.0	1	1	.19	99.44	.33	.577	-1.10	1.77
29 PARANIDAE GRPA	0	0	1	.8	1	1	.19	99.63	.33	.577	-1.10	1.77
30 TANALIDACEAN	0	0	1	0.0	1	1	.19	99.81	.33	.577	-1.10	1.77
31 ANADARA SP	1	0	0	0.0	1	1	.19	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	18	13	13	
NO. OF INDIVIDUALS	259	68	211	538
TOTAL INFAUNAL BIOMASS	2052	686	216	2953.6

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	31	179.3	2.2344	.5520	.2156	984.5

STATION 4 TRANSECT SHELF PERIOD SEPTEMBER80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFURNIENSIS	38	35	73	15.9	146	3	21.38	21.38	48.67	21.127	-3.82	101.15
2 PARANIDAE GRPA	23	47	59	22.7	129	3	18.89	40.26	43.00	18.330	-2.54	88.54
3 GLYCINDE SOLITARIA	20	32	35	23.7	87	3	12.74	53.00	29.00	7.937	9.28	48.72
4 STREGLUSPIO BENEDICTI	0	13	34	11.3	47	2	6.88	59.88	15.67	17.156	-26.96	58.29
5 LYONSIA HYALINA FLORIDANA	10	23	2	12.0	35	3	5.12	65.01	11.67	10.599	-14.66	38.00
6 CHIONE CANCELLATA	11	18	3	0.0	32	3	4.69	69.69	10.67	7.506	-7.98	29.31
7 OLIGOCHAETE	2	21	3	0.0	26	3	3.81	73.50	8.67	10.693	-17.90	35.23
8 AMPELISCA VERRILLI	8	3	9	12.2	20	3	2.93	76.43	6.67	3.215	-1.32	14.65
9 XENANTHURA BREVITELSON	7	6	5	0.0	18	3	2.64	79.06	6.00	1.000	3.52	8.48
10 ACTEUCINA CANALICULATA	9	5	2	0.0	16	3	2.34	81.41	5.33	3.512	-3.39	14.06
11 LUCINA MULTILINEATA	8	6	0	10.2	14	2	2.05	83.46	4.67	4.163	-5.68	15.01
12 PARANIDAE GRPB	3	3	4	4.4	10	3	1.46	84.92	3.33	.577	1.90	4.77
13 TELLINA SP.	1	4	5	0.0	10	3	1.46	86.38	3.33	2.082	-1.84	8.50
14 TANALDACEAN	4	3	1	0.0	8	3	1.17	87.55	2.67	1.528	-1.13	6.46
15 SIPUNCULA	1	6	1	0.0	8	3	1.17	88.73	2.67	2.687	-4.50	9.84
16 SPIONIDAE	2	3	2	0.0	7	3	1.02	89.75	2.33	.577	.90	3.77
17 UNOPHIDAE	0	2	4	0.0	6	2	.88	90.63	2.00	2.000	-2.97	6.97
18 RHYNCOCUELS	1	2	3	21.9	6	3	.88	91.51	2.00	1.000	-.48	4.48
19 MULLINIA LATERALIS	2	2	1	18.3	5	3	.73	92.24	1.67	.577	.23	3.10
20 BRANCHIOSTOMA CARIBAEUM	0	1	2	0.0	3	2	.44	92.68	1.00	1.000	-1.48	3.48
21 OPHIOIDUS	1	2	0	0.0	3	2	.44	93.12	1.00	1.000	-1.48	3.48
22 THARYX SETIGERA	3	0	0	1.9	3	1	.44	93.56	1.00	1.732	-3.30	5.30
23 SCOLOPUS RUBRA	2	0	1	0.0	3	2	.44	94.00	1.00	1.000	-1.48	3.48
24 NUCULANA ACUTA	0	2	0	0.0	2	1	.29	94.29	.67	1.155	-2.20	3.54
25 CIRRHATULIDAE	0	1	1	4.1	2	2	.29	94.58	.67	.577	-.77	2.10
26 CERAPUS TUBULARIS	0	2	0	0.0	2	1	.29	94.88	.67	1.155	-2.20	3.54
27 LISTRIELLA BARNARDI	0	1	1	0.0	2	2	.29	95.17	.67	.577	-.77	2.10
28 MALDANIDAE	1	0	1	0.0	2	2	.29	95.46	.67	.577	-.77	2.10
29 MAGELONA PHYLLISAE	0	0	1	0.0	1	1	.15	95.61	.33	.577	-1.10	1.77
30 DIPLODONTA CF SOROR	1	0	0	0.0	1	1	.15	95.75	.33	.577	-1.10	1.77
31 TAGELUS DIVISUS	1	0	0	0.0	1	1	.15	95.90	.33	.577	-1.10	1.77
32 PARASTEROPE SPP	1	0	0	0.0	1	1	.15	96.05	.33	.577	-1.10	1.77
33 SYNCHELIDIUM AMERICANUM	0	0	1	0.0	1	1	.15	96.19	.33	.577	-1.10	1.77
34 HAPLOSCULOPUS FOLIUSUS	1	0	0	0.0	1	1	.15	96.34	.33	.577	-1.10	1.77
35 UNKNOWN ANIMAL A	1	0	0	0.0	1	1	.15	96.49	.33	.577	-1.10	1.77
36 PENIPLUMA MARGARITACEUM (=INEQUALE	1	0	0	0.0	1	1	.15	96.63	.33	.577	-1.10	1.77
37 ASTEROPTERON OCULITRISTIS	1	0	0	0.0	1	1	.15	96.78	.33	.577	-1.10	1.77
38 CYCLOPOID COPEPOD	0	0	1	0.0	1	1	.15	96.93	.33	.577	-1.10	1.77
39 LISTRIELLA BAHIA	1	0	0	0.0	1	1	.15	97.07	.33	.577	-1.10	1.77
40 UNOPHIS SP.	0	0	1	0.0	1	1	.15	97.22	.33	.577	-1.10	1.77
41 PINNOTHERIDAE	0	0	1	0.0	1	1	.15	97.36	.33	.577	-1.10	1.77
42 OXYURUSTYLIS SALIONI	0	1	0	0.0	1	1	.15	97.51	.33	.577	-1.10	1.77
43 POLINICES DUPLICATUS	0	0	1	0.0	1	1	.15	97.66	.33	.577	-1.10	1.77
44 PANDORA TRILINEATA	0	0	1	0.0	1	1	.15	97.80	.33	.577	-1.10	1.77
45 POLYDORA SOCIALIS	0	0	1	0.0	1	1	.15	97.95	.33	.577	-1.10	1.77
46 AMYGDALUM PAPHYRIUM	1	0	0	0.0	1	1	.15	98.10	.33	.577	-1.10	1.77
47 NATICA PUSILLA	0	0	1	0.0	1	1	.15	98.24	.33	.577	-1.10	1.77
48 CLYMENELLA TURQUATA CALIDA	0	0	1	.4	1	1	.15	98.39	.33	.577	-1.10	1.77
49 ASTEROPELLA MACLAUGHLINAE	0	1	0	0.0	1	1	.15	98.54	.33	.577	-1.10	1.77
50 NASSARIUS ACUTUS	0	1	0	0.0	1	1	.15	98.68	.33	.577	-1.10	1.77
51 DIOPATRA CUPREA	1	0	0	2.2	1	1	.15	98.83	.33	.577	-1.10	1.77
52 PECTINARIA GOULDII	0	0	1	0.0	1	1	.15	98.98	.33	.577	-1.10	1.77
53 BIVALVE	0	1	0	0.0	1	1	.15	99.12	.33	.577	-1.10	1.77
54 SAKSIELLA SP	0	1	0	0.0	1	1	.15	99.27	.33	.577	-1.10	1.77

55 LUCINA AMIANTUS	0	1	0	0.0	1	1	.15	99.41	.33	.577	-1.10	1.77
56 UPHELIDAE	0	0	1	0.0	1	1	.15	99.56	.33	.577	-1.10	1.77
57 ADRA AEGUALIS	0	1	0	8.9	1	1	.15	99.71	.33	.577	-1.10	1.77
58 PYRAMIDELLA CRENULATA	0	1	0	0.0	1	1	.15	99.85	.33	.577	-1.10	1.77
59 MASSARIUS VIBEX	0	0	1	0.0	1	1	.15	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	31	33	36	
NO. OF INDIVIDUALS	167	251	265	683
TOTAL INFAUNAL BIOMASS	288	406	537	1230.7

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	59	227.7	3.9728	.8890	.3743	410.2

STATION 1 TRANSECT CHANNEL PERIOD OCTOBER 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	286	251	15	26.7	552	3	58.97	58.97	184.00	147.401	*****	550.19
2 OLIGOCHAETAE	114	42	11	0.0	167	3	17.84	76.82	55.67	52.843	-75.61	186.95
3 DIATOMA VARUM	0	48	2	0.0	50	2	5.34	82.16	16.67	27.154	-50.79	84.13
4 SERPULIDAE	0	47	0	0.0	47	1	5.02	87.18	15.67	27.135	-51.75	83.08
5 SIREBLOSPIU BENEDICTI	5	17	8	14.6	30	3	3.21	90.38	10.00	6.245	-5.51	25.51
6 CUSSURA DELTA	9	9	0	0.0	18	2	1.92	92.31	6.00	5.196	-6.91	18.91
7 CYMADUSA COMPTA	3	13	0	0.0	16	2	1.71	94.02	5.33	6.807	-11.58	22.24
8 NASSARIUS ACUTUS	0	6	6	0.0	12	2	1.28	95.30	4.00	3.464	-4.61	12.61
9 MAGELUNA PHYLLISAE	7	0	0	0.0	7	1	.75	96.05	2.33	4.041	-7.71	12.37
10 SIGAMBRA TENTACULATA	5	1	0	7.2	6	2	.64	96.69	2.00	2.646	-4.57	8.57
11 HIPPOLYTE ZOSTINCOLA	0	4	0	0.0	4	1	.43	97.12	1.33	2.309	-4.40	7.07
12 GLYCINDE SOLITARIA	1	2	1	6.2	4	3	.43	97.54	1.33	.577	-.10	2.77
13 RHYNCOCUELS	1	2	0	5.2	3	2	.32	97.86	1.00	1.000	-1.48	3.48
14 PALAEMONETES PUGIO	0	3	0	0.0	3	1	.32	98.18	1.00	1.732	-3.30	5.30
15 ARGOLUS SP	0	2	0	0.0	2	1	.21	98.40	.67	1.155	-2.20	3.54
16 MYSIDOPSIS VAHIA	0	2	0	0.0	2	1	.21	98.61	.67	1.155	-2.20	3.54
17 MITRELLA LUNATA	0	2	0	0.0	2	1	.21	98.82	.67	1.155	-2.20	3.54
18 AMPHILUCHUS SP.	0	0	1	0.0	1	1	.11	98.93	.33	.577	-1.10	1.77
19 LEPTOCHELIA RAPAX	0	1	0	0.0	1	1	.11	99.04	.33	.577	-1.10	1.77
20 OXYURUSTYLIS SALIONI	0	0	1	0.0	1	1	.11	99.15	.33	.577	-1.10	1.77
21 PARAONIDAE GRPA	0	0	1	.4	1	1	.11	99.25	.33	.577	-1.10	1.77
22 GASTROPOD	0	0	1	0.0	1	1	.11	99.36	.33	.577	-1.10	1.77
23 EXOGONE DISPAR	1	0	0	0.0	1	1	.11	99.47	.33	.577	-1.10	1.77
24 SIPUNCULA	0	1	0	0.0	1	1	.11	99.57	.33	.577	-1.10	1.77
25 ANCISTRUSYLLIS PAPILLOSA	1	0	0	0.0	1	1	.11	99.68	.33	.577	-1.10	1.77
26 AMPELISCA VERRILLI	0	1	0	1.0	1	1	.11	99.79	.33	.577	-1.10	1.77
27 SYLLIDAE	1	0	0	0.0	1	1	.11	99.89	.33	.577	-1.10	1.77
28 UPHIURIDS	1	0	0	0.0	1	1	.11	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	13	19	10	
NO. OF INDIVIDUALS	435	454	47	936
TOTAL INFAUNAL BIOMASS	153	941	282	1376.1

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	28	312.0	2.1815	.6136	.2482	458.7

STATION 4 TRANSECT SHELF PERIOD OCTOBER 80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	100	168	179	27.9	447	3	31.11	31.11	149.00	42.790	42.69	255.31
2 PARAONIDAE GRPA	63	129	97	34.8	289	3	20.11	51.22	96.33	33.005	14.34	178.33
3 PARAONIDAE GRPB	18	55	23	16.6	96	3	6.68	57.90	32.00	20.075	-17.87	81.87
4 GLYCINDE SOLITARIA	32	13	28	22.8	73	3	5.08	62.98	24.33	10.017	-.55	49.22
5 NUCULANA ACUTA	25	13	31	0.0	69	3	4.80	67.78	23.00	19.165	.23	45.77
6 PERIPLUMA MARGARITACEUM (=INEQUALE	17	17	11	0.0	45	3	3.13	70.91	15.00	3.464	6.39	23.61
7 XENANTHURA BREVITELSON	8	12	12	0.0	32	3	2.23	73.14	10.67	2.309	4.93	16.40
8 MULINIA LATERALIS	13	7	11	35.0	31	3	2.16	75.30	10.33	3.055	2.74	17.92
9 AMPELISCA VERRILLI	12	6	8	28.9	26	3	1.81	77.11	8.67	3.055	1.08	16.26
10 LYONSIA HYALINA FLORIDANA	9	3	12	29.6	24	3	1.67	78.78	8.00	4.583	-3.38	19.38
11 LUCINA MULTILINEATA	11	5	6	148.1	22	3	1.53	80.31	7.33	3.215	-.65	15.32
12 ACTEUCINA CANALICULATA	9	4	9	0.0	22	3	1.53	81.84	7.33	2.007	.16	14.50
13 CIRRIIDAE	6	0	13	15.5	19	2	1.32	83.16	6.33	6.506	-9.83	22.50
14 THALIX SETIGERA	0	15	0	7.5	15	1	1.04	84.20	5.00	8.060	-16.51	26.51
15 OLIGOCHAETAE	1	3	11	0.0	15	3	1.04	85.25	5.00	5.292	-8.15	18.15
16 CLYMENELLA MUCOSA	6	2	4	0.0	12	3	.84	86.08	4.00	2.000	-.97	8.97
17 SIPUNCULA	5	4	3	0.0	12	3	.84	86.92	4.00	1.000	1.52	6.48
18 DIOPATRA CUPREA	0	7	3	26.6	10	2	.70	87.61	3.33	3.512	-5.39	12.06
19 PANDORA TRILINEATA	3	3	3	0.0	9	3	.63	88.24	3.00	0.000	3.00	3.00
20 MICROPHOTOPUS SPP.	0	0	9	0.0	9	1	.63	88.87	3.00	5.196	-9.91	15.91
21 SCOLOPLOS RUBRA	0	1	6	0.0	7	2	.49	89.35	2.33	3.215	-5.65	10.32
22 CYCLASPIS VARIANS	0	0	7	0.0	7	1	.49	89.84	2.33	4.041	-7.71	12.37
23 TELLINA SP.	3	1	3	0.0	7	3	.49	90.33	2.33	1.155	-.54	5.20
24 LISTRIELLA BARNARDI	0	2	5	0.0	7	2	.49	90.81	2.33	2.517	-3.92	8.59
25 MAGELONA PHYLLISAE	2	3	1	0.0	6	3	.42	91.23	2.00	1.000	-.48	4.48
26 OPHIURIDS	0	1	5	0.0	6	2	.42	91.65	2.00	2.646	-4.57	8.57
27 COROPHIUM ACHERUSICUM	0	3	2	0.0	5	2	.35	92.00	1.67	1.528	-2.13	5.46
28 MALDANIDAE	4	1	0	0.0	5	2	.35	92.35	1.67	2.042	-3.50	6.84
29 STREBLUSPIO BENEDICTI	2	1	2	6.3	5	3	.35	92.69	1.67	.577	.23	3.10
30 SARSIELLA TEXANA	1	0	3	0.0	4	2	.28	92.97	1.33	1.528	-2.46	5.13
31 SPIONIDAE	0	0	4	0.0	4	1	.28	93.25	1.33	2.309	-4.40	7.07
32 TAGELUS DIVISUS	1	1	2	0.0	4	3	.28	93.53	1.33	.577	-.10	2.77
33 RHYNCOCUELS	2	1	1	32.7	4	3	.28	93.81	1.33	.577	-.10	2.77
34 NASSARIUS VIBEX	0	4	0	0.0	4	1	.28	94.08	1.33	2.309	-4.40	7.07
35 SERPULIDAE	0	4	0	0.0	4	1	.28	94.36	1.33	2.309	-4.40	7.07
36 SYNCHYLIDUM AMERICANUM	1	1	1	0.0	3	3	.21	94.57	1.00	0.000	1.00	1.00
37 NASSARIUS ACUTUS	0	0	3	0.0	3	1	.21	94.78	1.00	1.732	-3.30	5.30
38 ANADARA SP	1	1	1	0.0	3	3	.21	94.99	1.00	0.000	1.00	1.00
39 ONUPHIDAE	1	0	2	0.0	3	2	.21	95.20	1.00	1.000	-1.48	3.48
40 MYSELLA PLANULATA	1	1	1	0.0	3	3	.21	95.41	1.00	0.000	1.00	1.00
41 CERAPUS TUBULARIS	0	1	2	0.0	3	2	.21	95.62	1.00	1.000	-1.48	3.48
42 EXUGONE DISPAR	0	3	0	0.0	3	1	.21	95.82	1.00	1.732	-3.30	5.30
43 NATICA PUSILLA	1	0	2	0.0	3	2	.21	96.03	1.00	1.000	-1.48	3.48
44 CYMADUSA CUMPTA	0	1	2	0.0	3	2	.21	96.24	1.00	1.000	-1.48	3.48
45 AMPHIPUD UNID.	0	3	0	0.0	3	1	.21	96.45	1.00	1.732	-3.30	5.30
46 BRANCHIUSTOMA CARIBAEUM	1	1	1	0.0	3	3	.21	96.66	1.00	0.000	1.00	1.00
47 GLYCERA AMERICANA	0	1	1	25.4	2	2	.14	96.80	.67	.577	-.77	2.10
48 AGLAOPHAMUS VERRILLI	0	1	1	0.0	2	2	.14	96.94	.67	.577	-.77	2.10
49 DRILONEKEIS MAGNA	1	1	0	0.0	2	2	.14	97.08	.67	.577	-.77	2.10
50 DIPLODONTA CF SOROR	1	0	1	0.0	2	2	.14	97.22	.67	.577	-.77	2.10
51 OXYUROSTYLIS SALONI	0	0	2	0.0	2	1	.14	97.36	.67	1.155	-2.20	3.54
52 BIVALVE	0	1	1	0.0	2	2	.14	97.49	.67	.577	-.77	2.10
53 PINNIXA	0	0	2	0.0	2	1	.14	97.63	.67	1.155	-2.20	3.54
54 ERICHTHONIAS BRASILIENSIS	0	2	0	0.0	2	1	.14	97.77	.67	1.155	-2.20	3.54

55 NEREIDAE	1	1	0	0.0	2	2	.14	97.91	.67	.577	-.77	2.10
56 CUCUPHUM SP	0	1	0	0.0	1	1	.07	97.98	.33	.577	-1.10	1.77
57 BRANIA CLAVATA	1	0	0	0.0	1	1	.07	98.05	.33	.577	-1.10	1.77
58 OWENIA FUSIFORMIS	0	1	0	0.0	1	1	.07	98.12	.33	.577	-1.10	1.77
59 PYRAMIDELLA CRENULATA	0	1	0	0.0	1	1	.07	98.19	.33	.577	-1.10	1.77
60 PALEANOTUS HETEROSETA	0	0	1	0.0	1	1	.07	98.26	.33	.577	-1.10	1.77
61 CHIONE CANCELLATA	0	0	1	0.0	1	1	.07	98.33	.33	.577	-1.10	1.77
62 MERCENARIA LAMPECHENSIS	1	0	0	0.0	1	1	.07	98.40	.33	.577	-1.10	1.77
63 PSEUDEURYTHOE SP.	1	0	0	0.0	1	1	.07	98.47	.33	.577	-1.10	1.77
64 NOTOMASTUS LATERICEUS	0	1	0	11.9	1	1	.07	98.54	.33	.577	-1.10	1.77
65 CLYMENELLA TURQUATA CALIDA	0	1	0	9.4	1	1	.07	98.61	.33	.577	-1.10	1.77
66 ELASMOPUS SP	0	0	1	0.0	1	1	.07	98.68	.33	.577	-1.10	1.77
67 PARASTEROPE SPP	0	0	1	0.0	1	1	.07	98.75	.33	.577	-1.10	1.77
68 MEGALOMMA BIUCULATUM	0	1	0	0.0	1	1	.07	98.82	.33	.577	-1.10	1.77
69 BATEA CATHRINENSIS	0	0	1	0.0	1	1	.07	98.89	.33	.577	-1.10	1.77
70 PECTINARIA GOULDII	1	0	0	0.0	1	1	.07	98.96	.33	.577	-1.10	1.77
71 ETEUNE HETEROPODA	0	1	0	0.0	1	1	.07	99.03	.33	.577	-1.10	1.77
72 CALLINECTES SIMILIS	0	1	0	0.0	1	1	.07	99.10	.33	.577	-1.10	1.77
73 COSSURA DELTA	0	0	1	0.0	1	1	.07	99.16	.33	.577	-1.10	1.77
74 EUNOE CF NODULOSA	0	0	1	0.0	1	1	.07	99.23	.33	.577	-1.10	1.77
75 PHYLLUDOCIDAE	0	0	1	0.0	1	1	.07	99.30	.33	.577	-1.10	1.77
76 PHORONIS ARCHITECTA	0	1	0	0.0	1	1	.07	99.37	.33	.577	-1.10	1.77
77 PROCESSA HEMPHILLI	1	0	0	0.0	1	1	.07	99.44	.33	.577	-1.10	1.77
78 PALAEMONETES PUGIO	0	0	1	0.0	1	1	.07	99.51	.33	.577	-1.10	1.77
79 LISIRIELLA BAHIA	1	0	0	0.0	1	1	.07	99.58	.33	.577	-1.10	1.77
80 MAGELUNIDAE	0	0	1	0.0	1	1	.07	99.65	.33	.577	-1.10	1.77
81 PAGURID JUV.	0	1	0	0.0	1	1	.07	99.72	.33	.577	-1.10	1.77
82 OSTRACODA	0	1	0	0.0	1	1	.07	99.79	.33	.577	-1.10	1.77
83 CYCLASPIS SP	0	1	0	0.0	1	1	.07	99.86	.33	.577	-1.10	1.77
84 ANCINUS DEPRESSUS	0	1	0	0.0	1	1	.07	99.93	.33	.577	-1.10	1.77
85 EDUTEA MUNTOSA	0	0	1	0.0	1	1	.07	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 39 57 57
 NO. OF INDIVIDUALS 368 521 548 1437
 TOTAL INFAUNAL BIOMASS 1294 1385 1502 4181.1

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	85	479.0	3.9333	.8501	.2673	1393.7

STATION 1 TRANSECT CHANNEL PERIOD NOVEMBER80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	28	24	88	14.9	140	3	45.02	45.02	46.67	35.852	-42.40	135.73
2 OLIGOCHAETAE	22	10	29	0.0	61	3	19.61	64.63	20.33	9.609	-3.54	44.21
3 MINUSPIO CIRRIFERA	0	11	18	0.0	29	2	9.32	73.95	9.67	9.074	-12.88	32.21
4 CYMADUSA CUMPIA	1	11	5	0.0	17	3	5.47	79.42	5.67	5.033	-6.84	18.17
5 RHYNCHOCELS	8	2	2	16.4	12	3	3.86	83.28	4.00	3.464	-4.61	12.61
6 COSSURA DELTA	3	5	2	0.0	10	3	3.22	86.50	3.33	1.528	-4.46	7.13
7 STREBLUSPIO BENEDICTI	4	2	3	11.4	9	3	2.89	84.39	3.00	1.000	.52	5.48
8 SIGAMORA TENTACULATA	4	0	3	12.5	7	2	2.25	91.64	2.33	2.082	-2.84	7.50
9 GLYCINDE SOLITARIA	0	2	3	9.2	5	2	1.61	93.25	1.67	1.528	-2.13	5.46
10 HIPPOLYTE ZOSTINCOLA	0	3	0	0.0	3	1	.96	94.21	1.00	1.732	-3.30	5.30
11 NASSARIUS ACUTUS	2	0	0	0.0	2	1	.64	94.86	.67	1.155	-2.20	3.54
12 GAMMARUS MUCRONATUS	0	2	0	0.0	2	1	.64	95.50	.67	1.155	-2.20	3.54
13 OGYRIDES LIMICULA	2	0	0	0.0	2	1	.64	96.14	.67	1.155	-2.20	3.54
14 DIOPATRA COPREA	0	0	2	13.9	2	1	.64	96.78	.67	1.155	-2.20	3.54
15 NEREIS SPA	1	1	0	0.0	2	2	.64	97.43	.67	.577	-.77	2.10
16 PSEUDEUKYTHOE SP.	0	1	0	0.0	1	1	.32	97.75	.33	.577	-1.10	1.77
17 AMPHINOMIDAE	0	0	1	0.0	1	1	.32	98.07	.33	.577	-1.10	1.77
18 ORILUNEREIS MAGNA	0	0	1	0.0	1	1	.32	98.39	.33	.577	-1.10	1.77
19 ERICHTHONIAS BRASILIENSIS	0	0	1	0.0	1	1	.32	98.71	.33	.577	-1.10	1.77
20 MYSIDOPSIS VARIA	0	1	0	0.0	1	1	.32	99.04	.33	.577	-1.10	1.77
21 MIRELLA LUNATA	1	0	0	0.0	1	1	.32	99.36	.33	.577	-1.10	1.77
22 NEPHYIIDAE	0	1	0	0.0	1	1	.32	99.68	.33	.577	-1.10	1.77
23 CORBULA CONTRACTA	1	0	0	0.0	1	1	.32	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	12	14	13	
NO. OF INDIVIDUALS	77	76	158	311
TOTAL INFAUNAL BIOMASS	265	174	198	637.6

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	23	103.7	2.7515	.7451	.4195	212.5

STATION 4 TRANSECT SHELF PERIOD NOVEMBER80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTIUS CALIFORNIENSIS	44	63	85	22.4	192	3	22.22	22.22	64.00	20.518	13.03	114.97
2 PARALONIA GRPA	52	39	46	17.8	137	3	15.86	38.08	45.67	6.506	29.50	61.83
3 MOLINIA LATERALIS	14	33	20	25.1	67	3	7.75	45.83	22.33	9.713	-1.80	46.46
4 STREBLUSPIO BENEDICTI	16	19	27	22.6	62	3	7.18	53.01	20.67	5.686	6.54	34.79
5 CYMADUSA COMPTA	32	4	1	0.0	37	3	4.28	57.29	12.33	17.098	-30.14	54.81
6 GLYCINDE SOLITARIA	3	11	19	14.2	33	3	3.82	61.11	11.00	8.000	-8.87	30.87
7 PERIPLUMA MARGARITACEUM (=INEQUALE	6	12	12	0.0	30	3	3.47	64.58	10.00	3.464	1.39	18.61
8 XENANTHURA BREVIETELSON	9	10	3	0.0	22	3	2.55	67.13	7.33	3.786	-2.07	16.74
9 AMPELISCA VERRILLI	4	9	9	14.3	22	3	2.55	69.68	7.33	2.887	.16	14.50
10 NUCULANA ACUTA	5	6	9	0.0	20	3	2.31	71.99	6.67	2.082	1.50	11.84
11 ACTEUCINA CANALICULATA	5	9	5	0.0	19	3	2.20	74.19	6.33	2.309	.60	12.07
12 LUCINA MULTILINEATA	5	7	6	36.4	18	3	2.08	76.27	6.00	1.000	3.52	8.48
13 OLIGOCHAETE	10	1	4	0.0	15	3	1.74	78.01	5.00	4.583	-6.38	16.38
14 PARALONIA GRPB	9	4	2	3.7	15	3	1.74	79.75	5.00	3.606	-3.96	13.96
15 TANAIACEAN	5	5	4	0.0	14	3	1.62	81.37	4.67	.577	3.23	6.10
16 SIPUNCULA	2	10	2	0.0	14	3	1.62	82.99	4.67	4.619	-6.81	16.14
17 SPIRONIDAE	0	10	0	0.0	10	1	1.16	84.14	3.33	5.774	-11.01	17.68
18 LYONSIA HYALINA FLORIDANA	3	3	2	3.6	8	3	.93	85.07	2.67	.577	1.23	4.10
19 TELLINA SP.	8	0	0	0.0	8	1	.93	86.00	2.67	4.619	-8.81	14.14
20 MINUSPIO CIRRIFERA	5	0	3	0.0	8	2	.93	86.92	2.67	2.517	-3.59	8.92
21 CORUPHIUM ACHERUSICUM	0	7	0	0.0	7	1	.81	87.73	2.33	4.041	-7.71	12.37
22 CAPRELLID A	5	1	0	0.0	6	2	.69	88.43	2.00	2.646	-4.57	8.57
23 PANDORA TRILINEATA	2	1	3	0.0	6	3	.69	89.12	2.00	1.000	-.48	4.48
24 RHYNCOCUELS	3	1	1	36.0	5	3	.58	89.70	1.67	1.155	-1.20	4.54
25 PALAEMONIDES PUGIO	5	0	0	0.0	5	1	.58	90.28	1.67	2.887	-5.51	8.84
26 CLYMEHELLA MUCOSA	0	2	3	0.0	5	2	.58	90.86	1.67	1.528	-2.13	5.46
27 BRANCHIUSTOMA CARIBAEUM	1	2	1	0.0	4	3	.46	91.32	1.33	.577	-.10	2.77
28 SARSIELLA TEXANA	3	0	1	0.0	4	2	.46	91.78	1.33	1.528	-2.46	5.13
29 MALDANIDAE	0	4	0	0.0	4	1	.46	92.25	1.33	2.309	-4.40	7.07
30 UNOPHIDAE	0	0	3	0.0	3	1	.35	92.59	1.00	1.732	-3.30	5.30
31 CORUPHIUM LOUISIANUM	1	2	0	0.0	3	2	.35	92.94	1.00	1.000	-1.48	3.48
32 ANACHIS SEMIPLICATA	3	0	0	0.0	3	1	.35	93.29	1.00	1.732	-3.30	5.30
33 LISTRIELLA BARNARDI	1	2	0	0.0	3	2	.35	93.63	1.00	1.000	-1.48	3.48
34 THARYX SEIGERA	0	3	0	3.1	3	1	.35	93.98	1.00	1.732	-3.30	5.30
35 DIOPATKA LUPREA	0	2	0	15.3	2	1	.23	94.21	.67	1.155	-2.20	3.54
36 NATICA PUSILLA	0	0	2	0.0	2	1	.23	94.44	.67	1.155	-2.20	3.54
37 PARAHESIONE LUTEOLA	0	0	2	2.1	2	1	.23	94.68	.67	1.155	-2.20	3.54
38 PARASTEROPS SPP	1	0	1	0.0	2	2	.23	94.91	.67	.577	-.77	2.10
39 SCOLOPLUS RUBRA	0	0	2	0.0	2	1	.23	95.14	.67	1.155	-2.20	3.54
40 MYSIDOPSIS VAHIA	1	1	0	0.0	2	2	.23	95.37	.67	.577	-.77	2.10
41 MERCENARIA CAMPECHIENSIS	0	1	1	0.0	2	2	.23	95.60	.67	.577	-.77	2.10
42 ERICHTHONIAS BRASILIENSIS	0	2	0	0.0	2	1	.23	95.83	.67	1.155	-2.20	3.54
43 HAMINUEA SUCCINEA	1	0	1	0.0	2	2	.23	96.06	.67	.577	-.77	2.10
44 PAGURID JUV.	2	0	0	0.0	2	1	.23	96.30	.67	1.155	-2.20	3.54
45 MAGELONA PHYLLISAE	1	0	1	0.0	2	2	.23	96.53	.67	.577	-.77	2.10
46 TAGELUS DIVISUS	0	2	0	0.0	2	1	.23	96.76	.67	1.155	-2.20	3.54
47 EDUTEA MONTUSA	0	2	0	0.0	2	1	.23	96.99	.67	1.155	-2.20	3.54
48 GLYCERA CAPITATA	1	0	0	6.0	1	1	.12	97.11	.33	.577	-1.10	1.77
49 AGRA AEQUALIS	1	0	0	.7	1	1	.12	97.22	.33	.577	-1.10	1.77
50 CERAPUS TUBULARIS	0	1	0	0.0	1	1	.12	97.34	.33	.577	-1.10	1.77
51 CYCLASPIS SP	0	1	0	0.0	1	1	.12	97.45	.33	.577	-1.10	1.77
52 UPHIURIDUS	0	0	1	0.0	1	1	.12	97.57	.33	.577	-1.10	1.77
53 PINNIXA	1	0	0	0.0	1	1	.12	97.69	.33	.577	-1.10	1.77
54 PENAUS AZTECUS	1	0	0	0.0	1	1	.12	97.80	.33	.577	-1.10	1.77

55	DRILONEREIS MAGNA	0	1	0	0.0	1	1	.12	97.92	.33	.577	-1.10	1.77
56	ALIGENA TEXASIANA	0	1	0	0.0	1	1	.12	98.03	.33	.577	-1.10	1.77
57	ARMANDIA AGILIS	1	0	0	0.0	1	1	.12	98.15	.33	.577	-1.10	1.77
58	SMARAGDIA VIRIDIS VIRIDEMARIS	1	0	0	0.0	1	1	.12	98.26	.33	.577	-1.10	1.77
59	SYNCHELIDIUM AMERICANUM	1	0	0	0.0	1	1	.12	98.38	.33	.577	-1.10	1.77
60	AMPHINOMIDAE	0	1	0	0.0	1	1	.12	98.50	.33	.577	-1.10	1.77
61	DIASTOMA VARUM	1	0	0	0.0	1	1	.12	98.61	.33	.577	-1.10	1.77
62	PAGURUS LONGICARPUS	0	1	0	0.0	1	1	.12	98.73	.33	.577	-1.10	1.77
63	CYMODUCE SP	1	0	0	0.0	1	1	.12	98.84	.33	.577	-1.10	1.77
64	ANEMONE	0	0	1	0.0	1	1	.12	98.96	.33	.577	-1.10	1.77
65	GAMMARUS MUCRONATUS	1	0	0	0.0	1	1	.12	99.07	.33	.577	-1.10	1.77
66	MEGALUMMA BUCULATUM	0	1	0	0.0	1	1	.12	99.19	.33	.577	-1.10	1.77
67	CIRRATULIDAE	1	0	0	.5	1	1	.12	99.31	.33	.577	-1.10	1.77
68	AGLAOPHANTUS VERRILLI	0	1	0	0.0	1	1	.12	99.42	.33	.577	-1.10	1.77
69	OSTRACODA	0	0	1	0.0	1	1	.12	99.54	.33	.577	-1.10	1.77
70	GASTROPOD	0	0	1	0.0	1	1	.12	99.65	.33	.577	-1.10	1.77
71	CHIONE CANCELLATA	0	0	1	0.0	1	1	.12	99.77	.33	.577	-1.10	1.77
72	UGYRIDES LIMICOLA	0	0	1	0.0	1	1	.12	99.88	.33	.577	-1.10	1.77
73	DENTALIUM SP	1	0	0	0.0	1	1	.12	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	45	42	37	
NO. OF INDIVIDUALS	279	298	287	864
TOTAL INFAUNAL BIOMASS	924	435	527	1885.8

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	73	288.0	4.3947	.9061	.4114	628.6

STATION 1 TRANSECT CHANNEL PERIOD DECEMBER80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFURNIENSIS	6	13	5	2.5	24	3	22.64	22.64	8.00	4.359	-2.83	18.83
2 OLIGUCHALIE	6	4	9	0.0	19	3	17.92	40.57	6.33	2.517	.08	12.59
3 SPIONIDAE	2	7	2	0.0	11	3	10.38	50.94	3.67	2.887	-3.50	10.84
4 HIPPOLYTE ZOSTINCOLA	0	0	9	0.0	9	1	8.49	59.43	3.00	5.196	-9.91	15.91
5 CYMADUSA COMPTA	2	1	5	0.0	8	3	7.55	66.98	2.67	2.082	-2.50	7.84
6 PARANIDAE GRPA	0	5	1	1.2	6	2	5.66	72.64	2.00	2.646	-4.57	8.57
7 CYMODUCE SP	0	0	5	0.0	5	1	4.72	77.36	1.67	2.887	-5.51	8.84
8 COSSURA DELTA	2	1	1	0.0	4	3	3.77	81.13	1.33	.577	-1.10	2.77
9 MYSIDOPSIS VANIA	1	0	3	0.0	4	2	3.77	84.91	1.33	1.528	-2.46	5.13
10 ANCISTROSYLLIS PAPILLUSA	1	2	1	0.0	4	3	3.77	88.68	1.33	.577	-1.10	2.77
11 GAMMARUS MUCRONATUS	0	0	2	0.0	2	1	1.89	90.57	.67	1.155	-2.20	3.54
12 RHYNCHOCOELS	1	0	1	10.7	2	2	1.89	92.45	.67	.577	-.77	2.10
13 SYLLIDAE	0	0	2	0.0	2	1	1.89	94.34	.67	1.155	-2.20	3.54
14 STREBLUSPID BENEDICTI	2	0	0	2.7	2	1	1.89	96.23	.67	1.155	-2.20	3.54
15 MAGELONA PETITIBONEAE	0	1	0	0.0	1	1	.94	97.17	.33	.577	-1.10	1.77
16 HAPLOSCULOPLOS FOLIUSUS	0	1	0	0.0	1	1	.94	98.11	.33	.577	-1.10	1.77
17 UPHIURIDS	1	0	0	0.0	1	1	.94	99.06	.33	.577	-1.10	1.77
18 CIRRHATULIDAE	0	0	1	.3	1	1	.94	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	10	9	14	
NO. OF INDIVIDUALS	24	35	47	106
TOTAL INFAUNAL BIOMASS	92	64	118	274.2

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	18	35.3	3.5219	.8898	.9151	91.4

STATION 4 TRANSECT SHELF PERIOD DECEMBER80

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTIUS CALIFORNIENSIS	76	116	96	19.7	288	3	24.74	24.74	96.00	20.000	46.31	145.69
2 PAKAONIDAE GRPA	62	110	76	23.8	248	3	21.31	46.05	82.67	24.685	21.34	143.99
3 MULLINIA LATERALIS	17	45	25	24.9	87	3	7.47	53.52	29.00	14.422	-6.83	64.83
4 PAKAONIDAE GRPH	31	15	27	11.2	73	3	6.27	59.79	24.33	8.327	3.65	45.02
5 STREBLUSPIU BENEDICTI	30	5	28	15.6	63	3	5.41	65.21	21.00	13.892	-13.51	55.51
6 PERIPLOMA MARGARITACEUM (=INEQUALE	10	9	26	0.0	45	3	3.87	69.07	15.00	9.539	-8.70	38.70
7 CLYMENELLA MUCOSA	6	7	23	0.0	36	3	3.09	72.16	12.00	9.539	-11.70	35.70
8 XENANTHURA BREVITELSON	14	7	8	0.0	29	3	2.49	74.66	9.67	3.786	.26	19.07
9 SPIRIDIDAE	2	14	7	0.0	23	3	1.98	76.63	7.67	6.028	-7.31	22.64
10 LUCINA MULTILINEATA	5	10	7	30.1	22	3	1.89	78.52	7.33	2.517	1.08	13.59
11 GLYCINDE SOLITARIA	1	10	6	15.3	17	3	1.46	79.98	5.67	4.509	-5.54	16.87
12 LYONSIA HYALINA FLORIDANA	1	5	10	16.4	16	3	1.37	81.36	5.33	4.509	-5.87	16.54
13 CIRRATULIDAE	0	0	12	8.3	12	1	1.03	82.39	4.00	6.928	-13.21	21.21
14 ANPELISCA VERRILLI	2	1	9	11.2	12	3	1.03	83.42	4.00	4.359	-6.83	14.83
15 OLIGOCHAETE	6	3	3	0.0	12	3	1.03	84.45	4.00	1.732	-.30	8.30
16 NUCULANA ACUTA	0	8	2	0.0	10	2	.86	85.31	3.33	4.163	-7.01	13.68
17 PANDORA IRILINEATA	1	7	2	0.0	10	3	.86	86.17	3.33	3.215	-4.65	11.32
18 TANALDACEAN	4	2	3	0.0	9	3	.77	86.94	3.00	1.000	.52	5.48
19 ACTECCINA CANALICULATA	5	2	2	0.0	9	3	.77	87.71	3.00	1.732	-1.30	7.30
20 SIPUNCULA	2	1	5	0.0	8	3	.69	88.40	2.67	2.082	-2.50	7.84
21 RHYNCOCUELS	2	4	1	27.4	7	3	.60	89.00	2.33	1.528	-1.46	6.13
22 NATICA PUSILLA	2	2	2	0.0	6	3	.52	89.52	2.00	0.000	2.00	2.00
23 THARYX SETIGERA	0	6	0	6.1	6	1	.52	90.03	2.00	3.464	-0.61	10.61
24 UPHIURIDUS	0	3	2	0.0	5	2	.43	90.46	1.67	1.528	-2.13	5.46
25 DRILONEREIS MAGNA	0	3	2	0.0	5	2	.43	90.89	1.67	1.528	-2.13	5.46
26 OSTRACODA	0	4	1	0.0	5	2	.43	91.32	1.67	2.082	-3.50	6.84
27 HAFUSCULOPLUS FOLIOSUS	1	2	2	0.0	5	3	.43	91.75	1.67	.577	.23	3.10
28 PHOKUNIS ARCHITECTA	2	0	3	0.0	5	2	.43	92.18	1.67	1.528	-2.13	5.46
29 BRANCHIUSTOMA CARIBAEUM	3	0	1	0.0	4	2	.34	92.53	1.33	1.528	-2.46	5.13
30 DIPLUDONTA CF SUROR	0	0	4	0.0	4	1	.34	92.87	1.33	2.309	-4.40	7.07
31 TELLINA SP.	0	1	3	0.0	4	2	.34	93.21	1.33	1.528	-2.46	5.13
32 NASSARIUS ACUTUS	0	1	3	0.0	4	2	.34	93.56	1.33	1.528	-2.46	5.13
33 CLYMENELLA TORQUATA CALIDA	0	4	0	9.5	4	1	.34	93.90	1.33	2.309	-4.40	7.07
34 SCULOPLUS KUBRA	1	0	3	0.0	4	2	.34	94.24	1.33	1.528	-2.46	5.13
35 MYSELLA PLANULATA	0	2	2	0.0	4	2	.34	94.59	1.33	1.155	-1.54	4.20
36 ONOPHIS EREMITA OCLATA	0	0	3	0.0	3	1	.26	94.85	1.00	1.732	-3.30	5.30
37 GLYCERA CAPITATA	2	0	1	19.1	3	2	.26	95.10	1.00	1.000	-1.48	3.48
38 POLYNOIDAE	0	2	1	0.0	3	2	.26	95.36	1.00	1.000	-1.48	3.48
39 ANEMONE	1	1	0	0.0	2	2	.17	95.53	.67	.577	-.77	2.10
40 LISTRIELLA SP	1	0	1	0.0	2	2	.17	95.70	.67	.577	-.77	2.10
41 AGLAUPHAMUS VERRILLI	1	1	0	0.0	2	2	.17	95.88	.67	.577	-.77	2.10
42 MALDANIDAE	0	0	2	0.0	2	1	.17	96.05	.67	1.155	-2.20	3.54
43 SYNCHELIDIUM AMERICANUM	1	0	1	0.0	2	2	.17	96.22	.67	.577	-.77	2.10
44 CYCLASPIS VARIANS	2	0	0	0.0	2	1	.17	96.39	.67	1.155	-2.20	3.54
45 ALIGENA TEXASIANA	0	1	1	0.0	2	2	.17	96.56	.67	.577	-.77	2.10
46 PHYLLODOCIDAE	0	0	2	0.0	2	1	.17	96.74	.67	1.155	-2.20	3.54
47 SABELLIDAE	2	0	0	0.0	2	1	.17	96.91	.67	1.155	-2.20	3.54
48 MEGALOMMA BIOCULATUM	0	2	0	0.0	2	1	.17	97.08	.67	1.155	-2.20	3.54
49 MUGULA MANHATTENSIS	0	2	0	0.0	2	1	.17	97.25	.67	1.155	-2.20	3.54
50 ENSIS MINOR	0	2	0	0.0	2	1	.17	97.42	.67	1.155	-2.20	3.54
51 CYRTOPLEURA COSTATA	0	1	1	0.0	2	2	.17	97.59	.67	.577	-.77	2.10
52 BIVALVE	0	2	0	0.0	2	1	.17	97.77	.67	1.155	-2.20	3.54
53 NOTUMASTIUS CF. LATERICEUS	0	2	0	9.9	2	1	.17	97.94	.67	1.155	-2.20	3.54
54 LITOCURSA STREMA	1	1	0	0.0	2	2	.17	98.11	.67	.577	-.77	2.10

55 GLYCERIDAE	0	0	1	0.0	1	1	.09	98.20	.33	.577	-1.10	1.77
56 MELIINA MACULATA	0	0	1	0.0	1	1	.09	98.28	.33	.577	-1.10	1.77
57 HAMINOEA SUCCINEA	0	1	0	0.0	1	1	.09	98.37	.33	.577	-1.10	1.77
58 TRACHYPENALUS CONSTRICTUS	0	1	0	0.0	1	1	.09	98.45	.33	.577	-1.10	1.77
59 SYLLIDAE	0	0	1	0.0	1	1	.09	98.54	.33	.577	-1.10	1.77
60 UNOPHIDAE	0	0	1	0.0	1	1	.09	98.63	.33	.577	-1.10	1.77
61 GLYCIIRA AMERICANA	0	1	0	40.0	1	1	.09	98.71	.33	.577	-1.10	1.77
62 EXOGONE DISPAR	0	1	0	0.0	1	1	.09	98.80	.33	.577	-1.10	1.77
63 LISIPIELLA BARNARDI	0	1	0	0.0	1	1	.09	98.88	.33	.577	-1.10	1.77
64 MERCENARIA CAMPECHIENSIS	1	0	0	0.0	1	1	.09	98.97	.33	.577	-1.10	1.77
65 DIOPATRA CUPREA	1	0	0	4.5	1	1	.09	99.05	.33	.577	-1.10	1.77
66 PALEANOTUS HETEROSETA	1	0	0	0.0	1	1	.09	99.14	.33	.577	-1.10	1.77
67 CYNADUSA LUMPTA	0	0	1	0.0	1	1	.09	99.23	.33	.577	-1.10	1.77
68 CORBULA SP	0	0	1	0.0	1	1	.09	99.31	.33	.577	-1.10	1.77
69 POLINICES DUPLICATUS	0	1	0	0.0	1	1	.09	99.40	.33	.577	-1.10	1.77
70 ASTEROPTERON OCULITRISTIS	1	0	0	0.0	1	1	.09	99.48	.33	.577	-1.10	1.77
71 TELLIDORA CRISTATA	1	0	0	0.0	1	1	.09	99.57	.33	.577	-1.10	1.77
72 AMPHARETIIDAE	0	1	0	0.0	1	1	.09	99.66	.33	.577	-1.10	1.77
73 SARSIELLA SP	0	0	1	0.0	1	1	.09	99.74	.33	.577	-1.10	1.77
74 NEREIDAE	0	0	1	0.0	1	1	.09	99.83	.33	.577	-1.10	1.77
75 PISTA PALMATA	0	0	1	0.0	1	1	.09	99.91	.33	.577	-1.10	1.77
76 ETEUNE HETEROPODA	1	0	0	0.0	1	1	.09	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	38	48	51	
NO. OF INDIVIDUALS	303	433	428	1164
TOTAL INFAUNAL BIOMASS	965	1426	1266	3656.4

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	76	388.0	4.0818	.8765	.3185	1218.8

STATION 1 TRANSECT CHANNEL PERIOD JANUARY 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	34	41	20	12.1	95	3	21.35	21.35	31.67	10.693	5.10	58.23
2 OLIGUCHAETE	14	31	33	0.0	78	3	17.53	38.88	26.00	10.440	.06	51.94
3 MACOMA LENTA	15	5	56	0.0	76	3	17.08	55.96	25.33	27.025	-41.81	92.47
4 ABRA AEGUALIS	7	15	46	15.9	68	3	15.28	71.24	22.67	20.599	-28.51	73.84
5 COSSURA DELTA	7	6	6	0.0	19	3	4.27	75.51	6.33	.577	4.90	7.77
6 SIGAMBRA LENTACULATA	14	0	0	6.1	14	1	3.15	78.65	4.67	8.083	-15.41	24.75
7 PARAPRIONOSPION PINNATA	2	0	10	16.2	12	2	2.70	81.35	4.00	5.292	-9.15	17.15
8 STREBLUSPID BENEDICTII	2	3	7	10.6	12	3	2.70	84.04	4.00	2.646	-2.57	10.57
9 RHYNCHOCUELS	3	2	4	14.6	9	3	2.02	86.07	3.00	1.000	.52	5.48
10 CYMADUSA CUMPTA	1	0	0	0.0	9	2	2.02	88.09	3.00	4.359	-7.83	13.83
11 ANCISTROSYLLIS PAPILLOSA	7	0	2	0.0	9	2	2.02	90.11	3.00	3.606	-5.96	11.96
12 GLYCINDE SOLITARIA	2	1	5	8.8	8	3	1.80	91.91	2.67	2.082	-2.50	7.84
13 ANEMONE	0	0	4	0.0	4	1	.90	92.81	1.33	2.309	-4.40	7.07
14 HIPPOLYTE ZOSTINCOLA	1	2	0	0.0	3	2	.67	93.48	1.00	1.000	-1.48	3.48
15 GLYCERIDAE	0	0	2	0.0	2	1	.45	93.93	.67	1.155	-2.20	3.54
16 TELLINA SP.	1	0	1	0.0	2	2	.45	94.38	.67	.577	-.77	2.10
17 MYSIDOPSIS VAHIA	0	2	0	0.0	2	1	.45	94.83	.67	1.155	-2.20	3.54
18 ORILONEREIS MAGNA	2	0	0	0.0	2	1	.45	95.28	.67	1.155	-2.20	3.54
19 SPIRONIDAE	2	0	0	0.0	2	1	.45	95.73	.67	1.155	-2.20	3.54
20 NASSARIUS ACUTUS	0	1	1	0.0	2	2	.45	96.18	.67	.577	-.77	2.10
21 GAMMARUS MUCRONATUS	1	0	0	0.0	1	1	.22	96.40	.33	.577	-1.10	1.77
22 ANACHIS OBESA	1	0	0	0.0	1	1	.22	96.63	.33	.577	-1.10	1.77
23 PARALONIDAE GRPB	1	0	0	.2	1	1	.22	96.85	.33	.577	-1.10	1.77
24 COROPHIUM ACHERUSICUM	0	1	0	0.0	1	1	.22	97.08	.33	.577	-1.10	1.77
25 EXUGONE DISPAR	1	0	0	0.0	1	1	.22	97.30	.33	.577	-1.10	1.77
26 AMPELISCA VERRILLI	1	0	0	6.7	1	1	.22	97.53	.33	.577	-1.10	1.77
27 MAGELONA PHYLLISAE	0	0	1	0.0	1	1	.22	97.75	.33	.577	-1.10	1.77
28 THARYX SETIGERA	0	0	1	.7	1	1	.22	97.98	.33	.577	-1.10	1.77
29 AMPHINOMIDAE	1	0	0	0.0	1	1	.22	98.20	.33	.577	-1.10	1.77
30 CALLINECTES SAPIDUS	0	1	0	0.0	1	1	.22	98.43	.33	.577	-1.10	1.77
31 DURVILLEA SP.	0	0	1	0.0	1	1	.22	98.65	.33	.577	-1.10	1.77
32 NEREID SPA	0	1	0	0.0	1	1	.22	98.88	.33	.577	-1.10	1.77
33 MOLINIA LATERALIS	0	1	0	1.2	1	1	.22	99.10	.33	.577	-1.10	1.77
34 AMPHARETIIDAE	0	0	1	0.0	1	1	.22	99.33	.33	.577	-1.10	1.77
35 LYONSIA HYALINA FLORIDANA	0	1	0	.7	1	1	.22	99.55	.33	.577	-1.10	1.77
36 ANADARA SP	0	0	1	0.0	1	1	.22	99.78	.33	.577	-1.10	1.77
37 ENSIS MINOR	1	0	0	0.0	1	1	.22	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	23	17	19	
NO. OF INDIVIDUALS	121	122	202	445
TOTAL INFAUNAL BIOMASS	196	146	289	631.2

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	37	148.3	3.5055	.8670	.4505	210.4

STATION 4 TRANSECT SHELF PERIOD JANUARY 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	0	1	103	7.7	104	2	25.81	25.81	34.67	59.181	*****	181.69
2 PARAONIDAE GRPA	33	0	29	7.8	62	2	15.38	41.19	20.67	18.009	-24.07	65.41
3 PARAONIDAE GRPB	28	0	7	4.7	35	2	8.68	49.88	11.67	14.572	-24.53	47.87
4 ISCHNUCHILION PAPILLOSUS	0	23	0	3.4	23	1	5.71	55.58	7.67	13.279	-25.32	40.66
5 CYCLOSTREMISCUS SUPPRESSUS	0	22	0	2.9	22	1	5.46	61.04	7.33	12.702	-24.22	38.89
6 XENANTHURA BREVIILSON	7	2	7	0.0	16	3	3.97	65.01	5.33	2.887	-1.04	12.51
7 SPIONIDAE	0	0	14	0.0	14	1	3.47	68.49	4.67	8.083	-15.41	24.75
8 STREBLUSPIU BENEDICTI	0	0	10	4.3	10	1	2.48	70.97	3.33	5.774	-11.01	17.68
9 LYONSIA MYALINA FLORIDANA	0	0	9	5.4	9	1	2.23	73.20	3.00	5.196	-9.91	15.91
10 MULINIA LATERALIS	0	1	7	8.4	8	2	1.99	75.19	2.67	3.786	-6.74	12.07
11 GLYCERIDAE	0	0	8	0.0	8	1	1.99	77.17	2.67	4.019	-8.81	14.14
12 RHYNCHOCUELS	2	2	3	18.8	7	3	1.74	78.91	2.33	.577	.90	3.77
13 MACOMA TENTA	0	0	7	0.0	7	1	1.74	80.65	2.33	4.041	-7.71	12.37
14 THARYX SETIGERA	3	0	3	4.4	6	2	1.49	82.13	2.00	1.732	-2.30	6.30
15 SCOLUPLUS RUBRA	4	1	1	0.0	6	3	1.49	83.62	2.00	1.732	-2.30	6.30
16 OLIGUCHALIE	0	0	5	0.0	5	1	1.24	84.86	1.67	2.887	-5.51	8.84
17 PANDORA TRILINEATA	0	0	5	0.0	5	1	1.24	86.10	1.67	2.887	-5.51	8.84
18 PHORONIS ARCHITECTA	4	0	0	0.0	4	1	.99	87.10	1.33	2.309	-4.40	7.07
19 CLYMENELLA MUCOSA	0	0	4	0.0	4	1	.99	88.09	1.33	2.309	-4.40	7.07
20 PERIPLUMA MARGARITACEUM (=INEQUALE	0	0	4	0.0	4	1	.99	89.08	1.33	2.309	-4.40	7.07
21 ABRA AEQUALIS	0	0	4	2.7	4	1	.99	90.07	1.33	2.309	-4.40	7.07
22 AMPELISCA VERRILLI	0	0	3	5.1	3	1	.74	90.82	1.00	1.732	-3.30	5.30
23 HAPLOSCOLUPLUS FULIOSUS	0	0	3	0.0	3	1	.74	91.56	1.00	1.732	-3.30	5.30
24 ACTEUCINA CANALICULATA	0	0	3	0.0	3	1	.74	92.31	1.00	1.732	-3.30	5.30
25 LUCINA MULTILINEATA	0	0	2	15.0	2	1	.50	92.80	.67	1.155	-2.20	3.54
26 ENYSIS MINOR	0	0	2	0.0	2	1	.50	93.30	.67	1.155	-2.20	3.54
27 EXOGONE DISPAR	0	0	2	0.0	2	1	.50	93.80	.67	1.155	-2.20	3.54
28 AMPHARETIIDAE	0	0	2	0.0	2	1	.50	94.29	.67	1.155	-2.20	3.54
29 CIRRATULIDAE	0	2	0	1.2	2	1	.50	94.79	.67	1.155	-2.20	3.54
30 LISTRIELLA BAHIA	0	0	1	0.0	1	1	.25	95.04	.33	.577	-1.10	1.77
31 CORYPHIUM ACHERUSICUM	0	0	1	0.0	1	1	.25	95.29	.33	.577	-1.10	1.77
32 PSEUDEUKYTHOE SP.	0	1	0	0.0	1	1	.25	95.53	.33	.577	-1.10	1.77
33 SCHISTOMERINGUS RUDOLPHI	0	1	0	0.0	1	1	.25	95.78	.33	.577	-1.10	1.77
34 DIPLUDONTA CF SOROR	0	0	1	0.0	1	1	.25	96.03	.33	.577	-1.10	1.77
35 NOTUMASTUS LATERICEUS	1	0	0	5.0	1	1	.25	96.28	.33	.577	-1.10	1.77
36 PARAPRIODUS PINNATA	0	0	1	3.0	1	1	.25	96.53	.33	.577	-1.10	1.77
37 CLYMENELLA TURQUATA CALIDA	0	1	0	9.4	1	1	.25	96.77	.33	.577	-1.10	1.77
38 UNUPHIS SP.	1	0	0	0.0	1	1	.25	97.02	.33	.577	-1.10	1.77
39 ANEMONE	0	0	1	0.0	1	1	.25	97.27	.33	.577	-1.10	1.77
40 ETEONE HETEROPODA	0	0	1	0.0	1	1	.25	97.52	.33	.577	-1.10	1.77
41 MAGELONA PHYLISAE	0	1	0	0.0	1	1	.25	97.77	.33	.577	-1.10	1.77
42 TANAIIDACEAN	0	0	1	0.0	1	1	.25	98.01	.33	.577	-1.10	1.77
43 BRANCHIUSTOMA CARIBAEUM	0	0	1	0.0	1	1	.25	98.26	.33	.577	-1.10	1.77
44 PARASTEROPE SPP	0	0	1	0.0	1	1	.25	98.51	.33	.577	-1.10	1.77
45 TELLINA SP.	0	0	1	0.0	1	1	.25	98.76	.33	.577	-1.10	1.77
46 PHYLLUDOCIDAE	0	0	1	0.0	1	1	.25	99.01	.33	.577	-1.10	1.77
47 BIVALVE	0	0	1	0.0	1	1	.25	99.26	.33	.577	-1.10	1.77
48 PINNIXA CRISIATA	1	0	0	0.0	1	1	.25	99.50	.33	.577	-1.10	1.77
49 GLYCINDE SOLITARIA	0	0	1	2.9	1	1	.25	99.75	.33	.577	-1.10	1.77
50 EPITURION SP	0	0	1	0.0	1	1	.25	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	10	12	39	
NO. OF INDIVIDUALS	84	58	261	403
TOTAL INFAUNAL BIOMASS	312	229	493	1033.3

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	50	134.3	4.1341	.8913	.5052	344.4

STATION 1 TRANSECT CHANNEL PERIOD FEBRUARY81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	54	0	11	7.4	65	2	28.63	28.63	21.67	28.537	-49.23	92.56
2 PARAPRIONOSPIO PINNATA	17	8	32	60.8	57	3	25.11	53.74	19.00	12.124	-11.12	49.12
3 OLIGOCHAETE	18	1	9	0.0	28	3	12.33	66.08	9.33	8.505	-11.80	30.46
4 SPIONIDAE	16	0	0	0.0	16	1	7.05	73.13	5.33	9.238	-17.62	28.28
5 STREBLUSPIO BENEDICTI	6	0	7	8.8	13	2	5.73	78.85	4.33	13.786	-5.07	13.74
6 NASSARIUS ACUTUS	3	1	6	0.0	10	3	4.41	83.26	3.33	2.517	-2.92	9.59
7 GLYCERA CAPITATA	0	0	5	4.4	5	1	2.20	85.46	1.67	2.887	-5.51	8.84
8 NEPHYS MAGELLANICA	1	0	3	0.0	4	2	1.76	87.22	1.33	1.528	-2.46	5.13
9 ANEMONE	2	0	1	0.0	3	2	1.32	88.55	1.00	1.000	-1.48	3.48
10 MACOMA TENTA	1	0	2	0.0	3	2	1.32	89.87	1.00	1.000	-1.48	3.48
11 COSSURA DELTA	2	0	0	0.0	2	1	.88	90.75	.67	1.155	-2.20	3.54
12 PHYLLUDUCIDAE	1	0	1	0.0	2	2	.88	91.63	.67	.577	-.77	2.10
13 HAPLUSCULOPLUS FOLIUSUS	1	0	1	0.0	2	2	.88	92.51	.67	.577	-.77	2.10
14 GAMMARUS MUCRONATUS	0	0	2	0.0	2	1	.88	93.39	.67	1.155	-2.20	3.54
15 SPHAEROSYLLIS SPA	2	0	0	0.0	2	1	.88	94.27	.67	1.155	-2.20	3.54
16 GLYCINE SOLITARIA	1	0	0	4.4	1	1	.44	94.71	.33	.577	-1.10	1.77
17 RHYNCOCOLLS	1	0	0	6.5	1	1	.44	95.15	.33	.577	-1.10	1.77
18 OPHELIDAE	1	0	0	0.0	1	1	.44	95.59	.33	.577	-1.10	1.77
19 LEUCON SP	0	0	1	0.0	1	1	.44	96.04	.33	.577	-1.10	1.77
20 CYMODOCE SP	0	0	1	0.0	1	1	.44	96.48	.33	.577	-1.10	1.77
21 MYSIDOPSIS VAHIA	0	0	1	0.0	1	1	.44	96.92	.33	.577	-1.10	1.77
22 PSEUDEURYTHOE SP.	1	0	0	0.0	1	1	.44	97.36	.33	.577	-1.10	1.77
23 COROPHIUM ACHERUSICUM	0	0	1	0.0	1	1	.44	97.80	.33	.577	-1.10	1.77
24 NATICA PUSILLA	0	0	1	0.0	1	1	.44	98.24	.33	.577	-1.10	1.77
25 PALEANOTUS HETEROSETA	1	0	0	0.0	1	1	.44	98.68	.33	.577	-1.10	1.77
26 GLYCERA AMERICANA	1	0	0	3.4	1	1	.44	99.12	.33	.577	-1.10	1.77
27 SIGAMBRA TENIACULATA	1	0	0	.2	1	1	.44	99.56	.33	.577	-1.10	1.77
28 MORGULA MANHATTENSIS	0	0	1	0.0	1	1	.44	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	20	3	18	
NO. OF INDIVIDUALS	131	10	86	227
TOTAL INFAUNAL BIOMASS	380	0	575	955.0

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	28	75.7	3.2373	.8314	.4851	318.3

STATION 4 TRANSECT SHELF PERIOD FEBRUARY81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	316	162	197	33.7	675	3	35.75	35.75	225.00	80.728	24.44	425.56
2 PAKAONIDAE GRPA	145	89	0	20.1	234	2	12.39	48.15	78.00	73.123	*****	259.66
3 PAKAONIDAE GRPH	22	32	107	26.1	161	3	8.53	56.67	53.67	46.458	-61.75	169.08
4 SIKEHLOSPID BENEDICTI	40	43	39	20.6	122	3	6.46	63.14	40.67	2.082	35.50	45.84
5 ADRA AEGUALIS	26	28	40	27.9	94	3	4.98	68.11	31.33	7.572	12.52	50.14
6 MACOMA TENIA	61	21	4	0.0	86	3	4.56	72.67	28.67	29.263	-44.03	101.37
7 ANEMONE	6	7	30	0.0	43	3	2.28	74.95	14.33	13.577	-19.40	48.06
8 PERIPLUMA MARGARITACEUM (=INEQUALE	9	8	12	0.0	29	3	1.54	76.48	9.67	2.082	4.50	14.84
9 MUGULA MANHATTENSIS	18	8	3	0.0	29	3	1.54	78.02	9.67	7.638	-9.31	28.64
10 TELLINA SP.	11	9	3	0.0	23	3	1.22	79.24	7.67	4.163	-2.68	18.01
11 SPIRIDAE	13	6	2	0.0	21	3	1.11	80.35	7.00	5.568	-6.83	20.83
12 XENANIMURA BREVITELSON	6	8	6	0.0	20	3	1.06	81.41	6.67	1.155	3.80	9.54
13 PANDORA TRILINEATA	9	4	6	0.0	19	3	1.01	82.42	6.33	2.517	.08	12.59
14 CLYMENELLA MUCOSA	9	4	6	0.0	19	3	1.01	83.42	6.33	2.517	.08	12.59
15 EXOGONE DISPAR	16	1	0	0.0	17	2	.90	84.32	5.67	8.963	-16.60	27.93
16 HAPLUSCULOPLUS FOLIUSUS	8	3	4	0.0	15	3	.79	85.12	5.00	2.646	-1.57	11.57
17 OLIGOCHAETE	12	2	1	0.0	15	3	.79	85.91	5.00	6.083	-10.11	20.11
18 CLYMENELLA TURQUATA CALIDA	13	1	0	9.5	14	2	.74	86.65	4.67	7.234	-13.31	22.64
19 CORUPHIUM ACHERUSICUM	5	4	5	0.0	14	3	.74	87.39	4.67	.577	3.23	6.10
20 MUCULANA ACUTA	2	3	6	0.0	11	3	.58	87.98	3.67	2.082	-1.50	8.84
21 GLYCINDE SOLITARIA	7	0	3	11.6	10	2	.53	88.51	3.33	3.512	-5.39	12.06
22 MULLINIA LATERALIS	3	3	4	21.1	10	3	.53	89.04	3.33	.577	1.90	4.77
23 MALDANIDAE	0	3	5	0.0	8	2	.42	89.46	2.67	2.517	-3.59	8.92
24 SPHAEROSTYLIS SPA	0	3	1	0.0	8	2	.42	89.88	2.67	3.786	-6.74	12.07
25 RHYNCHOCULUS	1	0	7	13.5	8	2	.42	90.31	2.67	3.786	-6.74	12.07
26 ACIUCINA CANALICULATA	3	2	2	0.0	7	3	.37	90.68	2.33	.577	.90	3.77
27 LYONSIA HYALINA FLORIDANA	1	2	4	13.2	7	3	.37	91.05	2.33	1.528	-1.46	6.13
28 LUCINA MULTILINEATA	2	4	1	10.6	7	3	.37	91.42	2.33	1.528	-1.46	6.13
29 MELLINIA MACULATA	3	2	1	0.0	6	3	.32	91.74	2.00	1.000	-.48	4.48
30 CYMADUSA COMPTA	0	6	0	0.0	6	1	.32	92.06	2.00	3.464	-6.61	10.61
31 MYSELLA PLANULATA	3	2	1	0.0	6	3	.32	92.37	2.00	1.000	-.48	4.48
32 POLYNOIDAE	2	3	1	0.0	6	3	.32	92.69	2.00	1.000	-.48	4.48
33 POLYDORA CAULLERYI	5	0	0	0.0	5	1	.26	92.96	1.67	2.687	-5.51	8.84
34 AMPHARETIIDAE	3	1	1	0.0	5	3	.26	93.22	1.67	1.155	-1.20	4.54
35 CIRRIATULIDAE	0	3	2	4.9	5	2	.26	93.49	1.67	1.528	-2.13	5.46
36 GLYCERA CAPITATA	0	4	0	7.6	4	1	.21	93.70	1.33	2.309	-4.40	7.07
37 OPHIURIDS	1	2	1	0.0	4	3	.21	93.91	1.33	.577	-.10	2.77
38 OXYUROSTYLIS SALIONI	1	2	1	0.0	4	3	.21	94.12	1.33	.577	-.10	2.77
39 LISTRIELLA JANNARDI	3	1	0	0.0	4	2	.21	94.33	1.33	1.528	-2.46	5.13
40 GLYCERA AMERICANA	2	1	1	32.9	4	3	.21	94.54	1.33	.577	-.10	2.77
41 GLYCERIDAE	1	0	3	0.0	4	2	.21	94.76	1.33	1.528	-2.46	5.13
42 URUPHIS SP.	2	1	1	0.0	4	3	.21	94.97	1.33	.577	-.10	2.77
43 MAGELONA PETTIBONEAE	1	0	3	0.0	4	2	.21	95.18	1.33	1.528	-2.46	5.13
44 PINNIXA CRISTATA	4	0	0	0.0	4	1	.21	95.39	1.33	2.309	-4.40	7.07
45 NATICA PUSILLA	0	1	2	0.0	3	2	.16	95.55	1.00	1.000	-1.48	3.48
46 MERCENARIA CAMPECHIENSIS	0	2	1	0.0	3	2	.16	95.71	1.00	1.000	-1.48	3.48
47 DRILONEKEIS MAGNA	0	2	1	0.0	3	2	.16	95.87	1.00	1.000	-1.48	3.48
48 NEREIDAE	0	1	2	0.0	3	2	.16	96.03	1.00	1.000	-1.48	3.48
49 SCOLOPLUS RUBRA	3	0	0	0.0	3	1	.16	96.19	1.00	1.732	-3.30	5.30
50 DIPLODONTA CF SOROR	1	2	0	0.0	3	2	.16	96.35	1.00	1.000	-1.48	3.48
51 BRANCHIOSTOMA CARIBAEUM	1	1	1	0.0	3	3	.16	96.50	1.00	0.000	1.00	1.00
52 ENSIS MINOR	1	1	1	0.0	3	3	.16	96.66	1.00	0.000	1.00	1.00
53 AMPELISCA VERMILLI	3	0	0	5.8	3	1	.16	96.82	1.00	1.732	-3.30	5.30
54 HIPPOLYTE ZOSTINCOLA	1	2	0	0.0	3	2	.16	96.98	1.00	1.000	-1.48	3.48

55	PARAPRIONOSPIO PINNATA	2	0	1	11.2	3	2	.16	97.14	1.00	1.000	-1.48	3.48
56	PAGURID JUV.	0	2	0	0.0	2	1	.11	97.25	.67	1.155	-2.20	3.54
57	TANAIDACEA	1	0	1	0.0	2	2	.11	97.35	.67	.577	-.77	2.10
58	ERICHTHONIAS BRASILIENSIS	0	2	0	0.0	2	1	.11	97.46	.67	1.155	-2.20	3.54
59	XANTHIDAE	0	2	0	0.0	2	1	.11	97.56	.67	1.155	-2.20	3.54
60	EDUTEA MONTUSA	2	0	0	0.0	2	1	.11	97.67	.67	1.155	-2.20	3.54
61	LIUCORSA STREMA	0	1	1	0.0	2	2	.11	97.78	.67	.577	-.77	2.10
62	GAMMARUS MUCRONATUS	0	2	0	0.0	2	1	.11	97.88	.67	1.155	-2.20	3.54
63	MEGALOMA BIUCULATUM	2	0	0	0.0	2	1	.11	97.99	.67	1.155	-2.20	3.54
64	NASSARIUS ACUTUS	0	2	0	0.0	2	1	.11	98.09	.67	1.155	-2.20	3.54
65	GASTROPOD	0	0	2	0.0	2	1	.11	98.20	.67	1.155	-2.20	3.54
66	BIVALVE	0	2	0	0.0	2	1	.11	98.31	.67	1.155	-2.20	3.54
67	TEREBELLIDAE	0	0	2	0.0	2	1	.11	98.41	.67	1.155	-2.20	3.54
68	THARYX SETIGERA	2	0	0	5.1	2	1	.11	98.52	.67	1.155	-2.20	3.54
69	SIPUNCULA	0	2	0	0.0	2	1	.11	98.62	.67	1.155	-2.20	3.54
70	MAGELUNA PHYLLISAE	1	0	0	0.0	1	1	.05	98.68	.33	.577	-1.10	1.77
71	CAPITELLIDAE	0	0	1	0.0	1	1	.05	98.73	.33	.577	-1.10	1.77
72	CYCLOPOID COPEPOD	1	0	0	0.0	1	1	.05	98.78	.33	.577	-1.10	1.77
73	UGRIDES LIMICOLA	0	0	1	0.0	1	1	.05	98.83	.33	.577	-1.10	1.77
74	NOTOMASTUS CF. LATERICEUS	1	0	0	2.1	1	1	.05	98.89	.33	.577	-1.10	1.77
75	MOLUHUROIDEA	0	1	0	0.0	1	1	.05	98.94	.33	.577	-1.10	1.77
76	DIOPATRA LUPREA	0	1	0	1.7	1	1	.05	98.99	.33	.577	-1.10	1.77
77	PSEUDOEURYTHOE SP.	0	1	0	0.0	1	1	.05	99.05	.33	.577	-1.10	1.77
78	MYSIOPSIS SP	0	1	0	0.0	1	1	.05	99.10	.33	.577	-1.10	1.77
79	EPTIUNUM SP	1	0	0	0.0	1	1	.05	99.15	.33	.577	-1.10	1.77
80	CORBULA CONTRACTA	1	0	0	0.0	1	1	.05	99.21	.33	.577	-1.10	1.77
81	NEREID SPA	1	0	0	0.0	1	1	.05	99.26	.33	.577	-1.10	1.77
82	ONOPHIS EREMITA OCULATA	1	0	0	0.0	1	1	.05	99.31	.33	.577	-1.10	1.77
83	CYCLASPID VARIANS	0	1	0	0.0	1	1	.05	99.36	.33	.577	-1.10	1.77
84	ELEONE HETEROPODA	0	0	1	0.0	1	1	.05	99.42	.33	.577	-1.10	1.77
85	LITHELLA BAHIA	1	0	0	0.0	1	1	.05	99.47	.33	.577	-1.10	1.77
86	COROPHUM SP	0	0	1	0.0	1	1	.05	99.52	.33	.577	-1.10	1.77
87	HIALTELLA ARCTICA	1	0	0	0.0	1	1	.05	99.58	.33	.577	-1.10	1.77
88	AMPELISCA ABDITA	1	0	0	0.0	1	1	.05	99.63	.33	.577	-1.10	1.77
89	CABIRA CF INCERTA	0	1	0	0.0	1	1	.05	99.68	.33	.577	-1.10	1.77
90	SYLLIS SP	0	1	0	0.0	1	1	.05	99.74	.33	.577	-1.10	1.77
91	ONOPHIDAE	0	0	1	0.0	1	1	.05	99.79	.33	.577	-1.10	1.77
92	HETEROMASTUS FILIFORMIS	1	0	0	0.0	1	1	.05	99.84	.33	.577	-1.10	1.77
93	MICROPROTODUS SPP.	0	1	0	0.0	1	1	.05	99.89	.33	.577	-1.10	1.77
94	MILRELLA LUNATA	0	0	1	0.0	1	1	.05	99.95	.33	.577	-1.10	1.77
95	LUCINA AMIANTUS	0	0	1	0.0	1	1	.05	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	61	62	54	
NO. OF INDIVIDUALS	825	521	542	1888
TOTAL INFAUNAL BIOMASS	1816	1390	1317	4523.5

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	95	629.3	3.9413	.8390	.2378	1507.8

STATION 1 TRANSECT CHANNEL PERIOD MARCH 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	38	42	13	10.6	93	3	27.68	27.68	31.00	15.716	-8.04	70.04
2 OLIGOCHAETE	28	35	5	0.0	68	3	20.24	47.92	22.67	15.695	-16.33	61.66
3 PARAPRIUNUSPIO PINNATA	16	30	9	69.0	55	3	16.37	64.29	18.33	14.693	-8.23	44.90
4 ANEMONE	20	20	6	0.0	46	3	13.69	77.98	15.33	8.083	-4.75	35.41
5 STREBLUSPIO BENEDICTII	4	5	2	6.0	11	3	3.27	81.25	3.67	1.528	-.13	7.46
6 PHORONIS ARCHITECTA	1	6	0	0.0	7	2	2.08	83.33	2.33	3.215	-5.65	10.32
7 AMPHARETIIDAE	0	5	1	0.0	6	2	1.79	85.12	2.00	2.646	-4.57	8.57
8 RHYNCHOCUELS	4	2	0	46.7	6	2	1.79	86.90	2.00	2.000	-2.97	6.97
9 NEPHTYS MAGELLANICA	0	4	0	0.0	4	1	1.19	88.10	1.33	2.309	-4.40	7.07
10 UPHELIDAE	1	3	0	0.0	4	2	1.19	89.29	1.33	1.528	-2.46	5.13
11 LEUCON SP	1	2	0	0.0	3	2	.89	90.18	1.00	1.000	-1.48	3.48
12 PARANIDAE GRPA	1	0	2	.5	3	2	.89	91.07	1.00	1.000	-1.48	3.48
13 MACOMA TENIA	1	2	0	0.0	3	2	.89	91.96	1.00	1.000	-1.48	3.48
14 PARANIDAE GRPH	2	0	0	.2	2	1	.60	92.56	.67	1.155	-2.20	3.54
15 GLYCINDE SULITARIA	0	2	0	3.9	2	1	.60	93.15	.67	1.155	-2.20	3.54
16 MULLINIA LATERALIS	0	2	0	1.0	2	1	.60	93.75	.67	1.155	-2.20	3.54
17 MALDANIDAE	0	2	0	0.0	2	1	.60	94.35	.67	1.155	-2.20	3.54
18 NOTOMASTUS LATERICEUS	0	0	1	2.0	1	1	.30	94.64	.33	.577	-1.10	1.77
19 CIRRIATULIDAE	1	0	0	.7	1	1	.30	94.94	.33	.577	-1.10	1.77
20 CAPRELLID A	0	1	0	0.0	1	1	.30	95.24	.33	.577	-1.10	1.77
21 XANTHIDAE	0	1	0	0.0	1	1	.30	95.54	.33	.577	-1.10	1.77
22 GLYCERA AMERICANA	1	0	0	2.7	1	1	.30	95.83	.33	.577	-1.10	1.77
23 POLYDORA SOCIALIS	0	0	1	0.0	1	1	.30	96.13	.33	.577	-1.10	1.77
24 GASTROPOD	1	0	0	0.0	1	1	.30	96.43	.33	.577	-1.10	1.77
25 PSEUDEUKTYHUE SP.	0	0	1	0.0	1	1	.30	96.73	.33	.577	-1.10	1.77
26 NASSARIUS ACUTUS	0	0	1	0.0	1	1	.30	97.02	.33	.577	-1.10	1.77
27 COROPHIUM ACHERUSICUM	0	1	0	0.0	1	1	.30	97.32	.33	.577	-1.10	1.77
28 PARAMETOPELLA SP	0	1	0	0.0	1	1	.30	97.62	.33	.577	-1.10	1.77
29 COSSURA DELTA	0	1	0	0.0	1	1	.30	97.92	.33	.577	-1.10	1.77
30 AGLAOPHARUS VERRILLI	0	0	1	0.0	1	1	.30	98.21	.33	.577	-1.10	1.77
31 ANCISTROSYLLIS PAPILLOSA	0	0	1	0.0	1	1	.30	98.51	.33	.577	-1.10	1.77
32 GLYCERIDAE	1	0	0	0.0	1	1	.30	98.81	.33	.577	-1.10	1.77
33 POLYNIDAE	0	1	0	0.0	1	1	.30	99.11	.33	.577	-1.10	1.77
34 GLYCERA CAPITATA	0	1	0	8.4	1	1	.30	99.40	.33	.577	-1.10	1.77
35 MERCENARIA CAMPECHEIENSIS	0	1	0	0.0	1	1	.30	99.70	.33	.577	-1.10	1.77
36 ECHINURIDAEAN	0	0	1	0.0	1	1	.30	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	16	23	14	
NO. OF INDIVIDUALS	121	170	45	336
TOTAL INFAUNAL BIOMASS	543	552	609	1703.5

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	36	112.0	3.2753	.8364	.3668	567.8

STATION 4 TRANSECT SHELF PERIOD MARCH 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	274	207	102	37.2	583	3	35.18	35.18	194.33	86.697	-21.05	409.72
2 PAKAONIDAE GRPA	75	48	37	17.9	160	3	9.66	44.84	53.33	19.553	4.76	101.91
3 PAKAONIDAE GRPB	52	23	22	12.9	97	3	5.85	50.69	32.33	17.039	-10.00	74.66
4 LYONSIA MYALINA FLORIDANA	36	45	14	37.5	95	3	5.73	56.43	31.67	15.948	-7.95	71.29
5 ANEMONE	33	38	22	0.0	93	3	5.61	62.04	31.00	8.185	10.66	51.34
6 MOLINIA LATERALIS	30	55	5	15.0	90	3	5.43	67.47	30.00	25.000	-32.11	92.11
7 CLYMENELLA MUCOSA	14	10	13	0.0	37	3	2.23	69.70	12.33	2.082	7.16	17.50
8 TELLINA SP.	15	13	8	0.0	36	3	2.17	71.88	12.00	3.606	3.04	20.96
9 SIKEBLOSPID BENEDICTI	7	21	7	9.5	35	3	2.11	73.99	11.67	8.083	-8.41	31.75
10 PERIPLOMA MARGARITACEUM (=INEQUALE	10	14	6	0.0	30	3	1.81	75.80	10.00	4.000	.06	19.94
11 SIPUNCULA	7	8	8	0.0	23	3	1.39	77.19	7.67	.577	6.23	9.10
12 PANDORA TRILINEATA	2	15	6	0.0	23	3	1.39	78.58	7.67	6.658	-8.87	24.21
13 AMPHARETIDAE	12	6	1	0.0	19	3	1.15	79.72	6.33	5.508	-7.35	20.02
14 MALDIANIDAE	14	2	3	0.0	19	3	1.15	80.87	6.33	6.658	-10.21	22.87
15 NUDIBRANCH	3	10	6	0.0	19	3	1.15	82.02	6.33	3.512	-2.39	15.06
16 CIRMATULIDAE	3	12	2	17.1	17	3	1.03	83.04	5.67	5.508	-8.02	19.35
17 MACOMA TENTA	4	9	3	0.0	16	3	.97	84.01	5.33	3.215	-2.65	13.32
18 LUCINA MULTIILINEATA	3	7	5	37.2	15	3	.91	84.91	5.00	2.000	.03	9.97
19 CORUPHIUM ACHERUSICUM	7	3	4	0.0	14	3	.84	85.76	4.67	2.082	-.50	9.84
20 ALIGENA TEXASIANA	8	1	4	0.0	13	3	.78	86.54	4.33	3.512	-4.39	13.06
21 NUCULANA ACUTA	6	4	2	0.0	12	3	.72	87.27	4.00	2.000	-.97	8.97
22 BIVALVE	10	2	0	0.0	12	2	.72	87.99	4.00	5.292	-9.15	17.15
23 ACIUCINA CANALICULATA	8	4	0	0.0	12	2	.72	88.71	4.00	4.000	-5.94	13.94
24 HAPLUSCULOPUS FOLIUSUS	3	8	0	0.0	11	2	.66	89.38	3.67	4.041	-5.37	13.71
25 TEREBELLIDAE	10	1	0	0.0	11	2	.66	90.04	3.67	5.508	-10.02	17.35
26 OXYUROSTYLIS SALIUMI	6	4	1	0.0	11	3	.66	90.71	3.67	2.517	-2.59	9.92
27 MYSELLA PLANULATA	3	2	4	0.0	9	3	.54	91.25	3.00	1.000	.52	5.48
28 PISTIA PALMATA	1	0	6	0.0	7	2	.42	91.67	2.33	3.215	-5.65	10.32
29 XANTHIDAE	2	4	0	0.0	6	2	.36	92.03	2.00	2.000	-2.97	6.97
30 SANSIELLA TEXANA	1	5	0	0.0	6	2	.36	92.40	2.00	2.646	-4.57	8.57
31 XENANTHURA BREVIHELSON	3	0	3	0.0	6	2	.36	92.76	2.00	1.732	-2.30	6.30
32 AMPELISCA ADDITA	2	3	1	0.0	6	3	.36	93.12	2.00	1.000	-.48	4.48
33 GLYCERIDAE	0	4	2	0.0	6	2	.36	93.48	2.00	2.000	-2.97	6.97
34 CLYMENELLA TORQUATA CALIDA	0	2	4	9.4	6	2	.36	93.84	2.00	2.000	-2.97	6.97
35 NEPHYTIS MAGELLANICA	0	3	2	0.0	5	2	.30	94.15	1.67	1.528	-2.13	5.46
36 MEGALOMMA BIUCULATUM	1	2	2	0.0	5	3	.30	94.45	1.67	.577	.23	3.10
37 SCULOPUS RUBRA	1	2	2	0.0	5	3	.30	94.75	1.67	.577	.23	3.10
38 ECHIURIDAE	3	0	1	0.0	4	2	.24	94.99	1.33	1.528	-2.46	5.13
39 NASSARIUS ACUTUS	2	0	2	0.0	4	2	.24	95.23	1.33	1.155	-1.54	4.20
40 PALEAVULUS HETEROSETA	1	2	1	0.0	4	3	.24	95.47	1.33	.577	-.10	2.77
41 MELINNA MACULATA	0	2	2	0.0	4	2	.24	95.72	1.33	1.155	-1.54	4.20
42 OLIGUCHAETE	4	0	0	0.0	4	1	.24	95.96	1.33	2.309	-4.40	7.07
43 LISTRIELLA BAHIA	2	0	2	0.0	4	2	.24	96.20	1.33	1.155	-1.54	4.20
44 BRANCHIOSTOMA CARIBAEUM	2	1	1	0.0	4	3	.24	96.44	1.33	.577	-.10	2.77
45 DIPLODONTA CF SOROR	0	2	1	0.0	3	2	.18	96.62	1.00	1.000	-1.48	3.48
46 URUPHIS SP.	3	0	0	0.0	3	1	.18	96.80	1.00	1.732	-3.30	5.30
47 GASTROPOD	1	1	1	0.0	3	3	.18	96.98	1.00	0.000	1.00	1.00
48 HIATELLA ARCTICA	2	0	1	0.0	3	2	.18	97.16	1.00	1.000	-1.48	3.48
49 LISTRIELLA BARNARDI	1	2	0	0.0	3	2	.18	97.34	1.00	1.000	-1.48	3.48
50 EXOGONE DISPAR	0	1	1	0.0	2	2	.12	97.47	.67	.577	-.77	2.10
51 MERCENARIA CAMPECHIENSIS	0	2	0	0.0	2	1	.12	97.59	.67	1.155	-2.20	3.54
52 POLYNUIDAE	0	1	1	0.0	2	2	.12	97.71	.67	.577	-.77	2.10
53 ENSIS MINOR	1	1	0	0.0	2	2	.12	97.83	.67	.577	-.77	2.10
54 DIOPATRA COPREA	1	1	0	15.7	2	2	.12	97.95	.67	.577	-.77	2.10

55	MAGELONA PETTIBONEAE	1	0	1	0.0	2	2	.12	98.07	.67	.577	-.77	2.10
56	OPHELIDAE	1	0	1	0.0	2	2	.12	98.19	.67	.577	-.77	2.10
57	GLYCIDAE SOLIARIA	1	1	0	4.0	2	2	.12	98.31	.67	.577	-.77	2.10
58	EPITONIUM RUPICOLA	0	1	1	0.0	2	2	.12	98.43	.67	.577	-.77	2.10
59	MAGELONIDAE	0	1	0	0.0	1	1	.06	98.49	.33	.577	-1.10	1.77
60	COROPHIUM SP	0	1	0	0.0	1	1	.06	98.55	.33	.577	-1.10	1.77
61	POLINICES DUPLICATUS	1	0	0	0.0	1	1	.06	98.61	.33	.577	-1.10	1.77
62	MYTICOCUELS	0	1	0	11.8	1	1	.06	98.67	.33	.577	-1.10	1.77
63	SARSIELLA SP	0	1	0	0.0	1	1	.06	98.73	.33	.577	-1.10	1.77
64	ABRA AEGUALIS	0	1	0	.7	1	1	.06	98.79	.33	.577	-1.10	1.77
65	PAGURID JUV.	1	0	0	0.0	1	1	.06	98.85	.33	.577	-1.10	1.77
66	EUNICIDAE	1	0	0	0.0	1	1	.06	98.91	.33	.577	-1.10	1.77
67	AMPELISCA VERRILLI	0	1	0	.7	1	1	.06	98.97	.33	.577	-1.10	1.77
68	SPIOPHARES BOMBYX	1	0	0	4.5	1	1	.06	99.03	.33	.577	-1.10	1.77
69	ERICHINIIDAE BRASILIENSIS	0	0	1	0.0	1	1	.06	99.09	.33	.577	-1.10	1.77
70	MICROPRUTOPUS SPP.	0	0	1	0.0	1	1	.06	99.16	.33	.577	-1.10	1.77
71	ECHINOIDEA	0	1	0	0.0	1	1	.06	99.22	.33	.577	-1.10	1.77
72	EPITONIUM SP	1	0	0	0.0	1	1	.06	99.28	.33	.577	-1.10	1.77
73	PARASTEROPE SPP	0	1	0	0.0	1	1	.06	99.34	.33	.577	-1.10	1.77
74	CYMAEUSA COMPTA	0	1	0	0.0	1	1	.06	99.40	.33	.577	-1.10	1.77
75	SABELLIDAE	0	1	0	0.0	1	1	.06	99.46	.33	.577	-1.10	1.77
76	OPHIURIDS	0	0	1	0.0	1	1	.06	99.52	.33	.577	-1.10	1.77
77	ISOLDA POLCHELLA	0	0	1	0.0	1	1	.06	99.58	.33	.577	-1.10	1.77
78	DENTALIUM TEXASIANUM	1	0	0	0.0	1	1	.06	99.64	.33	.577	-1.10	1.77
79	TURBONILLA SP	0	0	1	0.0	1	1	.06	99.70	.33	.577	-1.10	1.77
80	LITUCURSA STREMA	1	0	0	0.0	1	1	.06	99.76	.33	.577	-1.10	1.77
81	CREPIDULA PLANA	1	0	0	0.0	1	1	.06	99.82	.33	.577	-1.10	1.77
82	NATICA PUSILLA	1	0	0	0.0	1	1	.06	99.88	.33	.577	-1.10	1.77
83	MAGELONA PHILLISAE	1	0	0	0.0	1	1	.06	99.94	.33	.577	-1.10	1.77
84	LINGA AMINATUS	0	1	0	0.0	1	1	.06	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	59	59	50	
NO. OF INDIVIDUALS	702	626	329	1657
TOTAL INFAUNAL BIOMASS	4200	1990	2445	8595.3

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	P/E	EQUITABILITY	BIOMASS
4	SHELF	84	552.3	4.0923	.8511	.2860	2865.1

STATION 1 TRANSECT CHANNEL PERIOD APRIL 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTIUS CALIFORNIENSIS	11	71	25	14.4	107	3	26.82	26.82	35.67	31.390	-42.32	113.65
2 PARAPRIONOSPION PINNATA	1	27	20	47.0	48	3	12.03	38.85	16.00	13.454	-17.42	49.42
3 OLIGOCHAETE	2	26	7	0.0	35	3	8.77	47.62	11.67	12.662	-19.79	43.12
4 ANEMONA	4	11	17	0.0	32	3	8.02	55.64	10.67	6.506	-5.50	26.83
5 STREBLUSPIU BENEDICTI	0	16	11	9.1	27	2	6.77	62.41	9.00	8.185	-11.34	29.34
6 SPIONIDAE	3	16	2	0.0	21	3	5.26	67.67	7.00	7.810	-12.40	26.40
7 COSSURA DELTA	4	7	4	0.0	15	3	3.76	71.43	5.00	1.752	.70	9.30
8 MULLINIA LATERALIS	2	7	2	4.5	11	3	2.76	74.19	3.67	2.887	-3.50	10.84
9 RHYNCOCUELS	3	2	4	48.0	9	3	2.26	76.44	3.00	1.000	.52	5.48
10 AMPHARELLIDAE	2	3	4	0.0	9	3	2.26	78.70	3.00	1.000	.52	5.48
11 POLYDORA SOCIALIS	9	0	0	0.0	9	1	2.26	80.95	3.00	5.196	-9.91	15.91
12 DIOPATRA COPREA	4	1	2	674.2	7	3	1.75	82.71	2.33	1.528	-1.46	6.13
13 ERICHTHONIAS BRASILIENSIS	5	0	1	0.0	6	2	1.50	84.21	2.00	2.646	-4.57	8.57
14 GLYCINDE SOLITARIA	0	5	1	3.2	6	2	1.50	85.71	2.00	2.646	-4.57	8.57
15 LYONSIA MYALINA FLORIDANA	5	0	0	3.4	5	1	1.25	86.97	1.67	2.887	-5.51	8.84
16 ANADARA SP	5	0	0	0.0	5	1	1.25	88.22	1.67	2.887	-5.51	8.84
17 COROPHUM ACHERUSICUM	4	0	0	0.0	4	1	1.00	89.22	1.33	2.509	-4.40	7.07
18 SIGAMBRA TENTACULATA	1	1	1	9.8	3	3	.75	89.97	1.00	0.000	1.00	1.00
19 ONUPHIDAE	1	0	2	0.0	3	2	.75	90.73	1.00	1.000	-1.48	3.48
20 NASSARIUS ACUTUS	1	1	0	0.0	2	2	.50	91.23	.67	.577	-.77	2.10
21 GLYCERIDAE	2	0	0	0.0	2	1	.50	91.73	.67	1.155	-2.20	3.54
22 ANCISTROSYLLIS JONESI	0	2	0	0.0	2	1	.50	92.23	.67	1.155	-2.20	3.54
23 PILARGIDAE	0	2	0	0.0	2	1	.50	92.73	.67	1.155	-2.20	3.54
24 NEPHYS MAGELLANICA	1	0	1	0.0	2	2	.50	93.23	.67	.577	-.77	2.10
25 ONUPHIS SP.	2	0	0	0.0	2	1	.50	93.73	.67	1.155	-2.20	3.54
26 CAPRELLID A	2	0	0	0.0	2	1	.50	94.24	.67	1.155	-2.20	3.54
27 BATEA CATHRINENSIS	2	0	0	0.0	2	1	.50	94.74	.67	1.155	-2.20	3.54
28 MACOMA TENIA	2	0	0	0.0	2	1	.50	95.24	.67	1.155	-2.20	3.54
29 SIGALUNIDAE	0	0	1	0.0	1	1	.25	95.49	.33	.577	-1.10	1.77
30 AMPELISCA ABDITA	0	0	1	0.0	1	1	.25	95.74	.33	.577	-1.10	1.77
31 GASTROPOD	1	0	0	0.0	1	1	.25	95.99	.33	.577	-1.10	1.77
32 ANACHIS OBESA	1	0	0	0.0	1	1	.25	96.24	.33	.577	-1.10	1.77
33 LEUCON SP	0	0	1	0.0	1	1	.25	96.49	.33	.577	-1.10	1.77
34 CIRRIATULIDAE	0	1	0	2.1	1	1	.25	96.74	.33	.577	-1.10	1.77
35 MELINNA MACULATA	0	0	1	0.0	1	1	.25	96.99	.33	.577	-1.10	1.77
36 PHORONIS ARCHITECTA	0	1	0	0.0	1	1	.25	97.24	.33	.577	-1.10	1.77
37 ANATILDES ERYTHROPHYLLUS	0	0	1	0.0	1	1	.25	97.49	.33	.577	-1.10	1.77
38 ANCISTROSYLLIS PAPILLOSA	1	0	0	0.0	1	1	.25	97.74	.33	.577	-1.10	1.77
39 GLYCERA CAPITATA	0	1	0	9.9	1	1	.25	97.99	.33	.577	-1.10	1.77
40 NEREIDAE	0	1	0	0.0	1	1	.25	98.25	.33	.577	-1.10	1.77
41 POLINICES DUPLICATUS	0	0	1	0.0	1	1	.25	98.50	.33	.577	-1.10	1.77
42 SPIROCHAETOPTERUS COSTARUM	0	0	1	0.0	1	1	.25	98.75	.33	.577	-1.10	1.77
43 CORBULA SP	1	0	0	0.0	1	1	.25	99.00	.33	.577	-1.10	1.77
44 OPHIURIDUS	1	0	0	0.0	1	1	.25	99.25	.33	.577	-1.10	1.77
45 GLYCERA AMERICANA	0	0	1	10.7	1	1	.25	99.50	.33	.577	-1.10	1.77
46 EXOGONE DISPAR	0	0	1	0.0	1	1	.25	99.75	.33	.577	-1.10	1.77
47 CAPITELLIDAE	1	0	0	0.0	1	1	.25	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES

30 20 25

NO. OF INDIVIDUALS

84 202 113

TOTAL INFAUNAL BIOMASS

1941 1734 678 4552.5

399

TRANSECT SPECIES MEAN DENSITY DIVERSITY PIE EQUITABILITY BIOMASS
SHELF 108 412.3 4.9471 .9189 .4170 2460.6

STATION 1 TRANSECT CHANNEL PERIOD JUNE 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL		OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT	
	1	2	3		ABUND							CONF	LIM
OLIGOCHAETE	79	29	73	0.0	181		3	38.19	38.19	60.33	27.301	-7.49	128.16
SPIONIDAE	44	16	23	0.0	83		3	17.51	55.70	27.67	14.572	-8.53	63.87
MEGIOMASUS CALIFORNIENSIS	21	15	21	10.0	57		3	12.03	67.72	19.00	3.464	10.39	27.61
MAGELONA PHYLLISAE	6	8	13	0.0	27		3	5.70	73.42	9.00	3.606	.04	17.96
COSSURA DELTA	5	1	10	0.0	16		3	3.38	76.79	5.33	4.509	-5.87	16.54
GLYCINDE SOLITARIA	4	5	6	14.8	15		3	3.16	79.96	5.00	1.000	2.52	7.48
PSEUDEURYTHOE SP.	3	0	10	0.0	13		2	2.74	82.70	4.33	5.132	-8.42	17.08
RHYNCHOCUELS	3	3	4	43.7	10		3	2.11	84.81	3.33	.577	1.90	4.77
DIPLODONTIA CF SOROR	10	0	0	0.0	10		1	2.11	86.92	3.33	5.774	-11.01	17.68
PINRUTHERIDAE	5	0	4	0.0	9		2	1.90	88.82	3.00	2.646	-3.57	9.57
PILARGIDAE	7	0	2	0.0	9		2	1.90	90.72	3.00	3.606	-5.96	11.96
NASSARIUS ACUTUS	0	5	1	0.0	7		2	1.48	92.19	2.33	3.215	-5.65	10.32
XANTHIDAE	2	2	2	0.0	6		3	1.27	93.46	2.00	0.000	2.00	2.00
ARCISIROSYLLIS JONESI	1	0	5	0.0	6		2	1.27	94.73	2.00	2.646	-4.57	8.57
SIGAMBRA TENTACULATA	2	2	0	10.2	4		2	.84	95.57	1.33	1.155	-1.54	4.20
DIOPATRA CUPREA	0	0	4	186.7	4		1	.84	96.41	1.33	2.309	-4.40	7.07
GLYCERA CAPITATA	2	0	0	7.9	2		1	.42	96.84	.67	1.155	-2.20	3.54
STRENUSPID BENEDICTI	1	1	0	2.3	2		2	.42	97.26	.67	.577	-.77	2.10
SCULOPUS RUBRA	1	0	0	0.0	1		1	.21	97.47	.33	.577	-1.10	1.77
PHORONIS ARCHITECTA	1	0	0	0.0	1		1	.21	97.68	.33	.577	-1.10	1.77
PINNIXA CRISTATA	0	1	0	.2	1		1	.21	97.89	.33	.577	-1.10	1.77
GLYCERA AMERICANA	0	0	1	69.5	1		1	.21	98.10	.33	.577	-1.10	1.77
BALANUGLOSSUS SP.	0	1	0	0.0	1		1	.21	98.31	.33	.577	-1.10	1.77
MYRUPHIS PUNCTATUS	0	1	0	0.0	1		1	.21	98.52	.33	.577	-1.10	1.77
HIATIELLA ARCTICA	0	0	1	0.0	1		1	.21	98.73	.33	.577	-1.10	1.77
MELINNA MACULATA	0	0	1	0.0	1		1	.21	98.95	.33	.577	-1.10	1.77
TELLINA SP.	0	0	1	0.0	1		1	.21	99.16	.33	.577	-1.10	1.77
SIPUNCULA	0	0	1	0.0	1		1	.21	99.37	.33	.577	-1.10	1.77
PARAONIDAE GRPA	1	0	0	.3	1		1	.21	99.58	.33	.577	-1.10	1.77
PARAPRIUNUSPID PINNATA	1	0	0	4.3	1		1	.21	99.79	.33	.577	-1.10	1.77
LITRIELLA BARNARDI	0	0	1	0.0	1		1	.21	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	20	14	20	
NO. OF INDIVIDUALS	199	91	184	474
TOTAL INFAUNAL BIOMASS	403	244	1155	1801.7

ION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	31	158.0	3.1718	.8022	.3941	600.6

STATION 4 TRANSECT SHELF PERIOD JUNE 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 PARAUNIDAE GRPA	52	37	24	13.0	113	3	21.32	21.32	37.67	14.012	2.86	72.48
2 MEDIOMASTUS CALIFORNIENSIS	16	22	26	9.6	64	3	12.08	33.40	21.33	5.033	8.83	33.84
3 SPIONIDAE	19	7	21	0.0	47	3	8.87	42.26	15.67	7.572	-3.14	34.48
4 GLYCINDE SOLITARIA	9	10	10	24.9	29	3	5.47	47.74	9.67	5.577	8.23	11.10
5 ACIENCINA CANALICULATA	6	10	13	0.0	29	3	5.47	53.21	9.67	13.512	.94	18.39
6 TELLINA SP.	8	6	9	0.0	23	3	4.34	57.55	7.67	1.528	3.87	11.46
7 PARAUNIDAE GRPB	4	4	14	3.7	22	3	4.15	61.70	7.33	5.774	-7.01	21.68
8 MAGELONA PHYLLISAE	10	4	0	0.0	14	2	2.64	64.34	4.67	5.033	-7.84	17.17
9 MOLINIA LATERALIS	6	2	5	68.7	13	3	2.45	66.79	4.33	2.002	-.84	9.50
10 DIPLODONTA CF. SOROR	0	9	2	0.0	11	2	2.08	68.87	3.67	4.726	-8.07	15.41
11 XENAHIMURA BREVITELSON	4	1	3	0.0	8	3	1.51	70.38	2.67	1.528	-1.13	6.46
12 TURBONILLA SP	2	3	3	0.0	8	3	1.51	71.89	2.67	5.577	1.23	4.10
13 AMPHELISCA VERKILLI	1	2	4	3.5	7	3	1.32	73.21	2.33	1.528	-1.46	6.13
14 PERIPLUMA MARGARITACEUM (=INEQUALE	1	4	2	0.0	7	3	1.32	74.53	2.33	1.528	-1.46	6.13
15 LAEVICARDIUM MORTONI	7	0	0	0.0	7	1	1.32	75.85	2.33	4.041	-7.71	12.37
16 SIPUNCULA	0	2	5	0.0	7	2	1.32	77.17	2.33	2.517	-3.92	8.59
17 LISIRIELLA BAHIA	0	3	4	0.0	7	2	1.32	78.49	2.33	2.002	-2.84	7.50
18 MAGELONA PETIOLONEAE	0	0	6	0.0	6	1	1.13	79.62	2.00	3.464	-6.61	10.61
19 NUCULANA ACUTA	1	1	3	0.0	5	3	.94	80.57	1.67	1.155	-1.20	4.54
20 LUCINA MULTILINEATA	2	2	1	38.1	5	3	.94	81.51	1.67	5.577	.23	3.10
21 OPHIURIDS	0	4	1	0.0	5	2	.94	82.45	1.67	2.002	-3.50	6.84
22 NOTOMASTUS CF. LATERICEUS	1	0	4	20.2	5	2	.94	83.40	1.67	2.002	-3.50	6.84
23 MALDANIDAE	0	3	1	0.0	4	2	.75	84.15	1.33	1.528	-2.46	5.13
24 NOTOMASTUS LATERICEUS	0	4	0	8.8	4	1	.75	84.91	1.33	2.309	-4.40	7.07
25 ALIGENA TEXASIANA	0	3	1	0.0	4	2	.75	85.66	1.33	1.528	-2.46	5.13
26 MERCENARIA CAMPECHEIENSIS	1	2	1	0.0	4	3	.75	86.42	1.33	5.577	-.10	2.77
27 PARASTEROPE SPP	2	0	1	0.0	3	2	.57	86.98	1.00	1.000	-1.48	3.48
28 MIATELLA ARCTICA	0	2	1	0.0	3	2	.57	87.55	1.00	1.000	-1.48	3.48
29 NASSARIUS ACUTUS	0	2	1	0.0	3	2	.57	88.11	1.00	1.000	-1.48	3.48
30 CLYPEVELLA TUBUATA CALIDA	2	0	1	15.6	3	2	.57	88.68	1.00	1.000	-1.48	3.48
31 CIRRIATULIDAE	2	0	1	3.1	3	2	.57	89.25	1.00	1.000	-1.48	3.48
32 SPIROCHAETOPTERUS COSTARUM	0	0	2	0.0	2	1	.38	89.62	.67	1.155	-2.20	3.54
33 ABRA AENUALIS	0	0	2	34.8	2	1	.38	90.00	.67	1.155	-2.20	3.54
34 PANDURA TRILINEATA	2	0	0	0.0	2	1	.38	90.38	.67	1.155	-2.20	3.54
35 ULIGOCHELE	2	0	0	0.0	2	1	.38	90.75	.67	1.155	-2.20	3.54
36 LISIRIELLA SP	2	0	0	0.0	2	1	.38	91.13	.67	1.155	-2.20	3.54
37 STACHELIDION AMERICANUM	1	0	1	0.0	2	2	.38	91.51	.67	5.577	-.77	2.10
38 SCOLOPLOS RUBRA	1	1	0	0.0	2	2	.38	91.89	.67	5.577	-.77	2.10
39 NEREIDAE	0	2	0	0.0	2	1	.38	92.26	.67	1.155	-2.20	3.54
40 ANEMONE	1	1	0	0.0	2	2	.38	92.64	.67	5.577	-.77	2.10
41 ANATILIDES ERYTHROPHYLLUS	1	0	1	0.0	2	2	.38	93.02	.67	5.577	-.77	2.10
42 PSEUDEURYTHOE SP.	1	0	1	0.0	2	2	.38	93.40	.67	5.577	-.77	2.10
43 RHYNCHOCUELS	1	1	0	25.9	2	2	.38	93.77	.67	5.577	-.77	2.10
44 PARAPRIONOSPION PINNATA	0	1	1	9.3	2	2	.38	94.15	.67	5.577	-.77	2.10
45 PHUKUNIS ARCHITECTA	2	0	0	0.0	2	1	.38	94.53	.67	1.155	-2.20	3.54
46 MACOMA TENIA	0	1	1	0.0	2	2	.38	94.91	.67	5.577	-.77	2.10
47 MYSELLA PLANULATA	0	1	1	0.0	2	2	.38	95.28	.67	5.577	-.77	2.10
48 LISIRIELLA BARNARDI	0	1	1	0.0	2	2	.38	95.66	.67	5.577	-.77	2.10
49 CHONE SP	0	1	0	0.0	1	1	.19	95.85	.33	5.577	-1.10	1.77
50 GLYCERA AMERICANA	0	0	1	7.1	1	1	.19	96.04	.33	5.577	-1.10	1.77
51 MONOCULOIDES SP	0	0	1	0.0	1	1	.19	96.23	.33	5.577	-1.10	1.77
52 PAGURID JUV.	0	0	1	0.0	1	1	.19	96.42	.33	5.577	-1.10	1.77
53 PECTINARIA GOULDII	0	1	0	0.0	1	1	.19	96.60	.33	5.577	-1.10	1.77
54 LYONSIA HYALINA FLORIDANA	1	0	0	1.5	1	1	.19	96.79	.33	5.577	-1.10	1.77

55 ETEONE HETEROPODA	0	0	1	0.0	1	1	.19	96.98	.33	.577	-1.10	1.77
56 DUSINIA SP	0	1	0	0.0	1	1	.19	97.17	.33	.577	-1.10	1.77
57 ANPELISCA ABDITA	0	1	0	0.0	1	1	.19	97.36	.33	.577	-1.10	1.77
58 MELIINA MACULATA	0	0	1	0.0	1	1	.19	97.55	.33	.577	-1.10	1.77
59 CLYMENELLA MUCOSA	1	0	0	0.0	1	1	.19	97.74	.33	.577	-1.10	1.77
60 SARSIELLA SP	0	1	0	0.0	1	1	.19	97.92	.33	.577	-1.10	1.77
61 UNOPHIS SP.	0	1	0	0.0	1	1	.19	98.11	.33	.577	-1.10	1.77
62 BRANCHIUSTOMA CARIBAEUM	1	0	0	0.0	1	1	.19	98.30	.33	.577	-1.10	1.77
63 ANADARA SP	1	0	0	0.0	1	1	.19	98.49	.33	.577	-1.10	1.77
64 TANAIDACEAN	1	0	0	0.0	1	1	.19	98.68	.33	.577	-1.10	1.77
65 XANTHIDAE	0	1	0	0.0	1	1	.19	98.87	.33	.577	-1.10	1.77
66 CAPRELLID A	1	0	0	0.0	1	1	.19	99.06	.33	.577	-1.10	1.77
67 DENTALIA TEXASIANUM	0	1	0	0.0	1	1	.19	99.25	.33	.577	-1.10	1.77
68 ANACHIS URESA	1	0	0	0.0	1	1	.19	99.43	.33	.577	-1.10	1.77
69 AGLAOPHAMUS VERRILLI	0	1	0	0.0	1	1	.19	99.62	.33	.577	-1.10	1.77
70 BIVALVE	0	1	0	0.0	1	1	.19	99.81	.33	.577	-1.10	1.77
71 PHYLLUDOCIDAE	1	0	0	0.0	1	1	.19	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	39	43	42	
NO. OF INDIVIDUALS	178	168	184	530
TOTAL INFAUNAL BIOMASS	877	1066	857	2799.4

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	71	176.7	4.6479	.9200	.5329	933.1

STATION 1 TRANSECT CHANNEL PERIOD JULY 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 OLIGONEURUS	73	222	106	0.0	401	3	43.03	43.03	133.67	78.258	-60.75	328.09
2 MEDIOASTUS CALIFORNIENSIS	66	84	51	15.5	201	3	21.57	64.59	67.00	16.523	25.95	108.05
3 SPICULIDAE	18	33	67	0.0	118	3	12.66	77.25	39.33	25.106	-23.04	101.71
4 MAGELONA PHYLLISAE	10	23	16	0.0	49	3	5.26	82.51	16.33	6.506	.17	32.50
5 RHINCHOCERUS	0	17	4	25.1	21	2	2.25	84.76	7.00	8.888	-15.08	29.08
6 STREBLUSPID BENEDICTI	2	0	7	4.0	17	3	1.82	86.59	5.67	3.215	-2.32	13.65
7 COSSURA DELTA	0	1	10	0.0	17	3	1.82	88.41	5.67	4.509	-5.54	16.87
8 OGYRIDES LIMICOLA	7	9	1	0.0	17	3	1.82	90.24	5.67	4.163	-4.68	16.01
9 NASSARIUS ACUTUS	2	11	2	0.0	15	3	1.61	91.85	5.00	5.196	-7.91	17.91
10 PARAPLONOSPID PINNATA	0	6	2	7.7	8	2	.86	92.70	2.67	3.055	-4.92	10.26
11 ORUPHIDAE	0	6	1	0.0	7	2	.75	93.45	2.33	3.215	-5.65	10.32
12 GLYCINDE SOLITARIA	2	2	2	7.5	6	3	.64	94.10	2.00	0.000	2.00	2.00
13 OLUPAIRA COPREA	1	3	1	315.3	5	3	.54	94.64	1.67	1.155	-1.20	4.54
14 SIPUNCULA	3	1	0	0.0	4	2	.43	95.06	1.33	1.528	-2.46	5.13
15 PARAPHIDAE GRPA	2	0	2	.3	4	2	.43	95.49	1.33	1.155	-1.54	4.20
16 OPHIURIDUS	0	2	1	0.0	3	2	.32	95.82	1.00	1.000	-1.48	3.48
17 ANCLISTROSTELLIS PAPILLOSA	2	1	0	0.0	3	2	.32	96.14	1.00	1.000	-1.48	3.48
18 LEUCON SP	1	2	0	0.0	3	2	.32	96.46	1.00	1.000	-1.48	3.48
19 NEKEIDAE	2	1	0	0.0	3	2	.32	96.78	1.00	1.000	-1.48	3.48
20 GLYCERA CAPITATA	2	1	0	43.7	3	2	.32	97.10	1.00	1.000	-1.48	3.48
21 SIGAMBRA TENIACULATA	0	1	1	.6	2	2	.21	97.32	.67	.577	-.77	2.10
22 PARAPHIDAE GRPH	2	0	0	.2	2	1	.21	97.53	.67	1.155	-2.20	3.54
23 NEPHYS MAGELLANICA	1	0	1	0.0	2	2	.21	97.75	.67	.577	-.77	2.10
24 PILARIDAE	0	2	0	0.0	2	1	.21	97.96	.67	1.155	-2.20	3.54
25 MAGELONA PETIIBONEAE	0	2	0	0.0	2	1	.21	98.18	.67	1.155	-2.20	3.54
26 ANATIDES ERYTHROPHYLLUS	0	1	0	0.0	1	1	.11	98.28	.33	.577	-1.10	1.77
27 SPIOPHARES BOMBIX	0	1	0	.3	1	1	.11	98.39	.33	.577	-1.10	1.77
28 PALEANTHUS HETEROSETA	0	1	0	0.0	1	1	.11	98.50	.33	.577	-1.10	1.77
29 AMPHIPOD UNID.	0	1	0	0.0	1	1	.11	98.61	.33	.577	-1.10	1.77
30 LISIRIELLA BARNARDI	1	0	0	0.0	1	1	.11	98.71	.33	.577	-1.10	1.77
31 ANADARA SP	0	1	0	0.0	1	1	.11	98.82	.33	.577	-1.10	1.77
32 MAGELONA ROSEA	1	0	0	0.0	1	1	.11	98.93	.33	.577	-1.10	1.77
33 PYRAMIDELLA CRENULATA	0	1	0	0.0	1	1	.11	99.03	.33	.577	-1.10	1.77
34 DORVILLEIDAE	0	0	1	0.0	1	1	.11	99.14	.33	.577	-1.10	1.77
35 MALDANIDAE	0	0	1	0.0	1	1	.11	99.25	.33	.577	-1.10	1.77
36 NEPHYIDAE	0	1	0	0.0	1	1	.11	99.36	.33	.577	-1.10	1.77
37 BRANCHIUSTOMA CARIBAEUM	1	0	0	0.0	1	1	.11	99.46	.33	.577	-1.10	1.77
38 MICROPHOTOPUS SPP.	1	0	0	0.0	1	1	.11	99.57	.33	.577	-1.10	1.77
39 ORILUNEREIS MAGNA	1	0	0	0.0	1	1	.11	99.68	.33	.577	-1.10	1.77
40 EUDORELLA MONODON	1	0	0	0.0	1	1	.11	99.79	.33	.577	-1.10	1.77
41 HYDROID	0	1	0	0.0	1	1	.11	99.89	.33	.577	-1.10	1.77
42 XANTHIDAE	1	0	0	0.0	1	1	.11	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	25	30	19	
NO. OF INDIVIDUALS	209	446	277	932
TOTAL INFAUNAL BIOMASS	709	1820	438	2967.2

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	42	310.7	2.8167	.7483	.2187	989.1

STATION 4 TRANSECT SHELF PERIOD JULY 61

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 PARAONIDAE GRPA	34	46	25	14.1	105	3	13.71	13.71	35.00	10.536	8.83	61.17
2 MEDIONASTIUS CALIFORNIENSIS	22	25	38	9.5	85	3	11.10	24.80	28.33	8.505	7.20	49.40
3 PARAONIDAE GRPB	13	19	13	5.0	45	3	5.87	30.68	15.00	3.464	6.39	23.61
4 ACTEUCINA CANALICULATA	18	14	9	0.0	41	3	5.35	36.03	13.67	4.509	2.46	24.87
5 SPIONIDAE	7	12	18	0.0	37	3	4.83	40.86	12.33	5.508	-1.35	26.02
6 MAGELONA PHYLLOISAE	3	10	19	0.0	32	3	4.18	45.04	10.67	8.021	-9.26	30.59
7 MOLINIA LATERALIS	8	11	11	60.0	30	3	3.92	48.96	10.00	1.732	5.70	14.30
8 LISTRIELLA BAHIA	4	15	9	0.0	28	3	3.66	52.61	9.33	5.508	-4.35	23.02
9 TELLINA SP.	7	3	14	0.0	24	3	3.13	55.74	8.00	5.508	-5.83	21.83
10 GLYCINDE SOLITARIA	9	5	9	7.3	23	3	3.00	58.75	7.67	2.309	1.93	13.40
11 TURBOGILLA SP	7	11	5	0.0	23	3	3.00	61.75	7.67	3.055	.08	15.26
12 ANACHIS UMESA	21	0	1	0.0	22	2	2.87	64.62	7.33	11.846	-22.10	36.76
13 NASSARIUS ACUTUS	10	5	4	0.0	19	3	2.48	67.10	6.33	3.215	-1.65	14.32
14 MALLONIDAE	5	6	7	0.0	18	3	2.35	69.45	6.00	1.000	3.52	8.48
15 BRACHIOSTOMA CARIBAEUM	4	5	7	0.0	16	3	2.09	71.54	5.33	1.528	1.54	9.13
16 SIPUNCULA	6	1	8	0.0	15	3	1.96	73.50	5.00	3.006	-3.96	13.96
17 AMPHELISCA VERRILLI	4	4	5	7.3	13	3	1.70	75.20	4.33	.577	2.90	5.77
18 BIVALVE	0	3	8	0.0	11	2	1.44	76.63	3.67	4.041	-6.37	13.71
19 PANDORA TRILINEATA	2	6	3	0.0	11	3	1.44	78.07	3.67	2.082	-1.50	8.84
20 NUCULANA ACUTA	3	5	1	0.0	9	3	1.17	79.24	3.00	2.000	-1.97	7.97
21 MYSELLA PLANOLATA	1	5	3	0.0	9	3	1.17	80.42	3.00	2.000	-1.97	7.97
22 CLYPEHELLA TURQUATA CALIDA	0	3	5	24.4	8	2	1.04	81.46	2.67	2.517	-3.54	8.92
23 SERPULIDAE	7	0	0	0.0	7	1	.91	82.38	2.33	4.041	-7.71	12.37
24 LUCINA MULTILINEATA	3	3	0	28.9	6	2	.78	83.16	2.00	1.732	-2.30	6.30
25 HIALELLA ARCTICA	1	0	5	0.0	6	2	.78	83.94	2.00	2.646	-4.57	8.57
26 XANTHIDAE	5	0	1	0.0	6	2	.78	84.73	2.00	2.646	-4.57	8.57
27 PULIDORA SOCIALIS	6	0	0	0.0	6	1	.78	85.51	2.00	3.464	-6.61	10.61
28 URILIDEREIS MAGNA	1	3	2	0.0	6	3	.78	86.29	2.00	1.000	-.48	4.48
29 PERIPLOMA MARGARITACEUM (=INEQUALE	3	2	1	0.0	6	3	.78	87.08	2.00	1.000	-.48	4.48
30 NOTOMASTIUS CF. LATERICEUS	0	0	5	10.8	5	1	.65	87.73	1.67	2.887	-5.51	8.84
31 UPHIRODIDS	4	0	1	0.0	5	2	.65	88.38	1.67	2.082	-3.50	6.84
32 DOSIDIA SP	2	1	2	0.0	5	3	.65	89.03	1.67	.577	.23	3.10
33 XENAMIDURA BREVIETELSON	2	2	1	0.0	5	3	.65	89.69	1.67	.577	.23	3.10
34 URUPHIDAE	3	1	0	0.0	4	2	.52	90.21	1.33	1.528	-2.46	5.13
35 DENTALIUM TEXASIANUM	1	0	2	0.0	3	2	.39	90.60	1.00	1.000	-1.48	3.48
36 OLIGOLINAE	1	2	0	0.0	3	2	.39	90.99	1.00	1.000	-1.48	3.48
37 ABRA AEGUALIS	1	0	2	1.5	3	2	.39	91.38	1.00	1.000	-1.48	3.48
38 AMPHARELIDAE	1	1	1	0.0	3	3	.39	91.78	1.00	0.000	1.00	1.00
39 LYONSIA HYALINA FLORIDANA	2	1	0	3.2	3	2	.39	92.17	1.00	1.000	-1.48	3.48
40 PARASTEROPE SPP	1	2	0	0.0	3	2	.39	92.56	1.00	1.000	-1.48	3.48
41 NEPHYS MAGELLANICA	0	2	1	0.0	3	2	.39	92.95	1.00	1.000	-1.48	3.48
42 GLYCYFA CAPITATA	0	1	1	13.6	2	2	.26	93.21	.67	.577	-.77	2.10
43 MERCENARIA CAMPECHEIENSIS	0	0	2	0.0	2	1	.26	93.47	.67	1.155	-2.20	3.54
44 ELASNOPIUS SP	2	0	0	0.0	2	1	.26	93.73	.67	1.155	-2.20	3.54
45 GASTROPOD	1	1	0	0.0	2	2	.26	93.99	.67	.577	-.77	2.10
46 CORBULA CONTRACTA	2	0	0	0.0	2	1	.26	94.26	.67	1.155	-2.20	3.54
47 URUPHIDAE	1	1	0	0.0	2	2	.26	94.52	.67	.577	-.77	2.10
48 CHORE SP	2	0	0	0.0	2	1	.26	94.78	.67	1.155	-2.20	3.54
49 HAPLOSCOLOPIUS FOLIOSUS	2	0	0	0.0	2	1	.26	95.04	.67	1.155	-2.20	3.54
50 NOTOMASTIUS LATERICEUS	2	0	0	0.0	2	1	.26	95.30	.67	1.155	-2.20	3.54
51 GONIADIDAE	1	1	0	0.0	2	2	.26	95.56	.67	.577	-.77	2.10
52 DIOPATRA COPREA	0	1	1	13.1	2	2	.26	95.82	.67	.577	-.77	2.10
53 RHYNCOCODES	1	0	1	10.6	2	2	.26	96.08	.67	.577	-.77	2.10
54 COKORHIDUM ALBERUSICUM	2	0	0	0.0	2	1	.26	96.34	.67	1.155	-2.20	3.54

55	POLINICES DUPLICATUS	1	0	1	0.0	2	2	.26	96.61	.67	.577	-.77	2.10
56	MACOMA TECTA	1	0	0	0.0	1	1	.13	96.74	.33	.577	-1.10	1.77
57	MELIOMA MACULATA	0	0	1	0.0	1	1	.13	96.87	.33	.577	-1.10	1.77
58	EPITONION KOPICOLA	0	0	1	0.0	1	1	.13	97.00	.33	.577	-1.10	1.77
59	PARAPLIONUSPID PINNATA	1	0	0	4.1	1	1	.13	97.13	.33	.577	-1.10	1.77
60	LUCINA AMANTOS	1	0	0	0.0	1	1	.13	97.26	.33	.577	-1.10	1.77
61	OSTRACODA	1	0	0	0.0	1	1	.13	97.39	.33	.577	-1.10	1.77
62	MAGELONIDAE	0	0	1	0.0	1	1	.13	97.52	.33	.577	-1.10	1.77
63	LUMBRINERIDAE	1	0	0	0.0	1	1	.13	97.65	.33	.577	-1.10	1.77
64	CIRRHATULIDAE	0	0	1	5.4	1	1	.13	97.78	.33	.577	-1.10	1.77
65	MEGALOMMA BIOCULATUM	1	0	0	0.0	1	1	.13	97.91	.33	.577	-1.10	1.77
66	GLYCERA AMERICANA	1	0	0	8.7	1	1	.13	98.04	.33	.577	-1.10	1.77
67	SARSIELLA SP	0	1	0	0.0	1	1	.13	98.17	.33	.577	-1.10	1.77
68	HELEIDAE	1	0	0	0.0	1	1	.13	98.30	.33	.577	-1.10	1.77
69	PYRAMIDELLA CRENULATA	0	0	1	0.0	1	1	.13	98.43	.33	.577	-1.10	1.77
70	PAGURID JOV.	0	1	0	0.0	1	1	.13	98.56	.33	.577	-1.10	1.77
71	NOTOMASTUS LOBATUS	1	0	0	6.1	1	1	.13	98.69	.33	.577	-1.10	1.77
72	ANACHIS SEMIPLICATA	1	0	0	0.0	1	1	.13	98.83	.33	.577	-1.10	1.77
73	NAUICA POSILLA	1	0	0	0.0	1	1	.13	98.96	.33	.577	-1.10	1.77
74	MICROPHOTOPUS SPP.	0	1	0	0.0	1	1	.13	99.09	.33	.577	-1.10	1.77
75	SIGALONIDAE	0	1	0	0.0	1	1	.13	99.22	.33	.577	-1.10	1.77
76	ALIGENA TEXASIANA	0	0	1	0.0	1	1	.13	99.35	.33	.577	-1.10	1.77
77	ANATIDES ERYTHROPHYLLUS	0	1	0	0.0	1	1	.13	99.48	.33	.577	-1.10	1.77
78	DIPLODONTA CF SOROK	1	0	0	0.0	1	1	.13	99.61	.33	.577	-1.10	1.77
79	IRACHTIPENAEUS CONSTRICTUS	0	0	1	0.0	1	1	.13	99.74	.33	.577	-1.10	1.77
80	LYOGONE DISPAR	1	0	0	0.0	1	1	.13	99.87	.33	.577	-1.10	1.77
81	CLYMEVELLA MUCOSA	0	0	1	0.0	1	1	.13	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 61 42 47
 NO. OF INDIVIDUALS 262 244 264 766
 TOTAL INFAUNAL BIOMASS 1934 1733 1947 5613.7

STATION	TRANSSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	81	255.3	5.0472	.9493	.6131	1871.2

STATION 4 TRANSECT SHELF PERIOD APRIL 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	288	185	318	53.1	791	3	39.95	39.95	263.67	69.759	90.36	436.97
2 PARAUNIDAE GRPA	76	102	86	30.5	264	3	13.33	53.28	88.00	13.115	55.42	120.58
3 STREBLOSPIO BENEDICTI	7	56	71	21.0	134	3	6.77	60.05	44.67	33.471	-38.49	127.82
4 LYONSIA HYALINA FLORIDANA	29	24	72	39.2	125	3	6.31	66.36	41.67	26.308	-23.89	107.22
5 MOLINIA LATERALIS	21	21	49	72.9	91	3	4.60	70.96	30.33	16.166	-9.83	70.49
6 PARAUNIDAE GRPA	34	15	5	7.8	54	3	2.73	73.69	18.00	14.731	-18.60	54.60
7 MALDANIDAE	31	5	8	0.0	44	3	2.22	75.91	14.67	14.224	-20.67	50.00
8 GLYCINDE SOLITARIA	9	23	11	24.4	43	3	2.17	78.08	14.33	7.572	-4.48	33.14
9 TELLINA SP.	12	8	16	0.0	36	3	1.82	79.90	12.00	4.000	2.06	21.94
10 NUCULANA ACUTA	7	12	11	0.0	30	3	1.52	81.41	10.00	2.646	3.43	16.57
11 ANEMONE	10	10	6	0.0	26	3	1.31	82.73	8.67	2.309	2.93	14.40
12 CIRRIATULIDAE	2	6	15	13.0	23	3	1.16	83.89	7.67	6.058	-8.87	24.21
13 ABRA AEGUALIS	14	4	0	20.6	18	2	.91	84.80	6.00	7.211	-11.91	23.91
14 SIPUNCULA	5	8	3	0.0	16	3	.81	85.61	5.33	2.517	-.92	11.59
15 PERIPLUMA MARGARITACEUM (=INEGUALE	9	4	2	0.0	15	3	.76	86.36	5.00	3.606	-3.96	13.96
16 NOTOMASTUS LATERICEUS	1	14	0	18.2	15	2	.76	87.12	5.00	7.810	-14.40	24.40
17 BIVALVE	7	2	4	0.0	13	3	.66	87.78	4.33	2.517	-1.92	10.59
18 ALIGENA TEXASIANA	10	0	3	0.0	13	2	.66	88.43	4.33	5.132	-8.42	17.08
19 PANDORA TRILINEATA	2	1	9	0.0	12	3	.61	89.04	4.00	4.359	-6.83	14.83
20 LUCINA MULTILINEATA	0	5	6	30.9	11	2	.56	89.60	3.67	3.215	-4.32	11.65
21 GLYCERA CAPITATA	0	2	8	11.6	10	2	.51	90.10	3.33	4.163	-7.01	13.68
22 SPIONIDAE	8	1	1	0.0	10	3	.51	90.61	3.33	4.041	-6.71	13.37
23 MYSELLA PLANULATA	8	1	0	0.0	9	2	.45	91.06	3.00	4.359	-7.83	13.83
24 PARAPRIONOSPIO PINNATA	0	8	0	8.7	8	1	.40	91.46	2.67	4.619	-6.81	14.14
25 LISTRIELLA SP	0	1	6	0.0	7	2	.35	91.82	2.33	3.215	-5.65	10.32
26 RHYNCHOCUELS	6	0	1	44.5	7	2	.35	92.17	2.33	3.215	-5.65	10.32
27 XENANTHURA BREVITELSON	0	6	1	0.0	7	2	.35	92.53	2.33	3.215	-5.65	10.32
28 OLIGUCHAETE	1	4	1	0.0	6	3	.30	92.83	2.00	1.732	-2.30	6.30
29 COROPHIUM ACHERUSICUM	0	2	3	0.0	5	2	.25	93.08	1.67	1.528	-2.13	5.46
30 NOTOMASTUS SP	0	0	5	0.0	5	1	.25	93.33	1.67	2.887	-5.51	8.84
31 LUMBRINERIS LATREILLI	5	0	0	2.7	5	1	.25	93.59	1.67	2.887	-5.51	8.84
32 ANATIDIS ERYTHROPHYLLUS	3	0	2	0.0	5	2	.25	93.84	1.67	1.528	-2.13	5.46
33 OPHIURIDUS	3	1	1	0.0	5	3	.25	94.09	1.67	1.155	-1.20	4.54
34 AMPELISCA VERRILLI	0	3	2	3.3	5	2	.25	94.34	1.67	1.528	-2.13	5.46
35 CORBULA CONIRACTA	0	0	4	0.0	4	1	.20	94.55	1.33	2.309	-4.40	7.07
36 NEREIDAE	1	2	1	0.0	4	3	.20	94.75	1.33	.577	-.10	2.77
37 TEREBELLIDAE	0	0	4	0.0	4	1	.20	94.95	1.33	2.309	-4.40	7.07
38 MAGELONA PETTIBONEAE	2	2	0	0.0	4	2	.20	95.15	1.33	1.155	-1.54	4.20
39 MAGELONA PHYLLISAE	3	1	0	0.0	4	2	.20	95.35	1.33	1.528	-2.46	5.13
40 LITOCORSA STREMA	0	0	4	0.0	4	1	.20	95.56	1.33	2.309	-4.40	7.07
41 CYCLASPIUS VARIANS	0	0	4	0.0	4	1	.20	95.76	1.33	2.309	-4.40	7.07
42 NATICA PUSILLA	1	1	2	0.0	4	3	.20	95.96	1.33	.577	-.10	2.77
43 OXYURUSYLIS SALIONI	0	1	2	0.0	3	2	.15	96.11	1.00	1.000	-1.48	3.48
44 POLYNUIDAE	2	1	0	0.0	3	2	.15	96.26	1.00	1.000	-1.48	3.48
45 MERCENARIA CAMPECHIENSIS	2	0	1	0.0	3	2	.15	96.41	1.00	1.000	-1.48	3.48
46 PHUKONIS ARCHITECTA	0	2	1	0.0	3	2	.15	96.57	1.00	1.000	-1.48	3.48
47 ACTEUCINA CANALICULATA	0	1	2	0.0	3	2	.15	96.72	1.00	1.000	-1.48	3.48
48 AMPELISCA ABDITA	0	2	0	0.0	2	1	.10	96.82	.67	1.155	-2.20	3.54
49 ONENIA FUSIFORMIS	1	0	1	0.0	2	2	.10	96.92	.67	.577	-.77	2.10
50 CLYMENELLA TORQUATA CALIDA	0	0	2	8.5	2	1	.10	97.02	.67	1.155	-2.20	3.54
51 PSEUDEURYTHUE SP.	2	0	0	0.0	2	1	.10	97.12	.67	1.155	-2.20	3.54
52 LISTRIELLA BAHIA	0	0	2	0.0	2	1	.10	97.22	.67	1.155	-2.20	3.54
53 MELIINA MACULATA	1	1	0	0.0	2	2	.10	97.32	.67	.577	-.77	2.10
54 UNOPHIDAE	0	0	2	0.0	2	1	.10	97.42	.67	1.155	-2.20	3.54

55 AMPHARETIIDAE	2	0	0	0.0	2	1	.10	97.53	.67	1.155	-2.20	3.54
56 NEGALOMMA BIUCULATUM	0	1	1	0.0	2	2	.10	97.63	.67	.577	-.77	2.10
57 HIAELLA ARCTICA	1	1	0	0.0	2	2	.10	97.73	.67	.577	-.77	2.10
58 SCOLOPUS RHODRA	1	1	0	0.0	2	2	.10	97.83	.67	.577	-.77	2.10
59 MICROPHOTOPUS SPP.	0	0	2	0.0	2	1	.10	97.93	.67	1.155	-2.20	3.54
60 MACOMA TENIA	0	1	1	0.0	2	2	.10	98.03	.67	.577	-.77	2.10
61 UNOPHIS SP.	2	0	0	0.0	2	1	.10	98.13	.67	1.155	-2.20	3.54
62 SABELLIDAE	0	0	2	0.0	2	1	.10	98.23	.67	1.155	-2.20	3.54
63 SPIROCHAELOPTERUS COSTARUM	0	2	0	0.0	2	1	.10	98.33	.67	1.155	-2.20	3.54
64 MASSARIUS ACUTUS	2	0	0	0.0	2	1	.10	98.43	.67	1.155	-2.20	3.54
65 POLINICES DUPLICATUS	1	0	1	0.0	2	2	.10	98.54	.67	.577	-.77	2.10
66 DRILONEUREIS MAGNA	1	0	0	0.0	1	1	.05	98.59	.33	.577	-1.10	1.77
67 MINUSPIO CIRRIFERA	0	0	1	0.0	1	1	.05	98.64	.33	.577	-1.10	1.77
68 LINGA AMINATUS	1	0	0	0.0	1	1	.05	98.69	.33	.577	-1.10	1.77
69 ENSIS MINOR	0	0	1	0.0	1	1	.05	98.74	.33	.577	-1.10	1.77
70 EULERAMUS PRAELONGUS	0	1	0	0.0	1	1	.05	98.79	.33	.577	-1.10	1.77
71 CYRTOPLEURA COSTATA	1	0	0	0.0	1	1	.05	98.84	.33	.577	-1.10	1.77
72 DIPLODONTA CF SOKOR	0	0	1	0.0	1	1	.05	98.89	.33	.577	-1.10	1.77
73 CYLLASPIS SP	0	1	0	0.0	1	1	.05	98.94	.33	.577	-1.10	1.77
74 PAGURID JUV.	0	0	1	0.0	1	1	.05	98.99	.33	.577	-1.10	1.77
75 LOSSURA DELTA	0	0	1	0.0	1	1	.05	99.04	.33	.577	-1.10	1.77
76 ETEONE HETEROPODA	0	1	0	0.0	1	1	.05	99.09	.33	.577	-1.10	1.77
77 NEPHYTIDAE	0	0	1	0.0	1	1	.05	99.14	.33	.577	-1.10	1.77
78 GLYCERA AMERICANA	0	0	1	42.7	1	1	.05	99.19	.33	.577	-1.10	1.77
79 CLYMERELLA MUCOSA	1	0	0	0.0	1	1	.05	99.24	.33	.577	-1.10	1.77
80 LISTRIELLA BARNARDI	0	1	0	0.0	1	1	.05	99.29	.33	.577	-1.10	1.77
81 PECTINARIA GOULDII	0	1	0	0.0	1	1	.05	99.34	.33	.577	-1.10	1.77
82 PISTA PALMATA	0	0	1	0.0	1	1	.05	99.39	.33	.577	-1.10	1.77
83 NEPHYTIS MAGELLANICA	0	0	1	0.0	1	1	.05	99.44	.33	.577	-1.10	1.77
84 ERICHTHUMIAS BRASILIENSIS	0	0	1	0.0	1	1	.05	99.49	.33	.577	-1.10	1.77
85 GLYCERIDAE	1	0	0	0.0	1	1	.05	99.55	.33	.577	-1.10	1.77
86 CABIRA CF INCERTA	1	0	0	0.0	1	1	.05	99.60	.33	.577	-1.10	1.77
87 DENTALIUM TEXASIANUM	0	0	1	0.0	1	1	.05	99.65	.33	.577	-1.10	1.77
88 SPHAERUSYLLIS SPA	0	0	1	0.0	1	1	.05	99.70	.33	.577	-1.10	1.77
89 PINNOINERIDAE	0	0	1	0.0	1	1	.05	99.75	.33	.577	-1.10	1.77
90 NOTUMASIUS HEMIPODUS	1	0	0	0.0	1	1	.05	99.80	.33	.577	-1.10	1.77
91 PHASCOLION STROMBI	0	0	1	0.0	1	1	.05	99.85	.33	.577	-1.10	1.77
92 GASIRUPID	1	0	0	0.0	1	1	.05	99.90	.33	.577	-1.10	1.77
93 AGLAUPHOMUS VERRILLI	0	0	1	0.0	1	1	.05	99.95	.33	.577	-1.10	1.77
94 PALEANOTUS HETERUSEIA	1	0	0	0.0	1	1	.05	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 50 49 63
 NO. OF INDIVIDUALS 641 559 780
 TOTAL INFAUNAL BIOMASS 3219 1550 2067 6835.0 1980

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	94	660.0	3.7286	.8091	.2106	2278.3

STATION 1 TRANSECT CHANNEL PERIOD MAY 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 OLIGOCHAETE	10	2	63	0.0	75	3	27.68	27.68	25.00	33.151	-57.36	107.36
2 MEDIOMASTUS CALIFORNIENSIS	24	0	49	4.9	73	2	26.94	54.61	24.33	24.502	-36.54	85.20
3 GLYCIDAE SOLITARIA	3	4	21	24.6	28	3	10.33	64.94	9.33	10.116	-15.80	34.46
4 DIOPATRA COPREA	2	1	10	482.4	13	3	4.80	69.74	4.33	4.933	-7.92	16.59
5 AMPHARETIIDAE	4	1	6	0.0	11	3	4.06	73.80	3.67	2.517	-2.59	9.92
6 MAGELONA PHYLLISAE	0	0	11	0.0	11	1	4.06	77.86	3.67	6.351	-12.11	19.44
7 ANADARA SP.	0	3	4	0.0	7	2	2.58	80.44	2.33	2.002	-2.84	7.50
8 TELLINA SP.	0	3	3	0.0	6	2	2.21	82.66	2.00	1.732	-2.30	6.30
9 RHYNCOCUELS	5	0	0	9.9	5	1	1.85	84.50	1.67	2.887	-5.51	8.84
10 GASTROPOD	0	4	0	0.0	4	1	1.48	85.98	1.33	2.309	-4.40	7.07
11 NEPHTYS MAGELLANICA	0	0	3	0.0	3	1	1.11	87.08	1.00	1.732	-3.30	5.30
12 NEKEIDAE	0	3	0	0.0	3	1	1.11	88.19	1.00	1.732	-3.30	5.30
13 UNOPHIDAE	1	2	0	0.0	3	2	1.11	89.30	1.00	1.000	-1.48	3.48
14 SPIROCHAETOPTERUS COSTARUM	0	0	2	0.0	2	1	.74	90.04	.67	1.155	-2.20	3.54
15 ERICHTHIDIAS BRASILIENSIS	0	2	0	0.0	2	1	.74	90.77	.67	1.155	-2.20	3.54
16 NASSARIUS ACUTUS	0	1	1	0.0	2	2	.74	91.51	.67	.577	-.77	2.10
17 SPIRIDAE	1	1	0	0.0	2	2	.74	92.25	.67	.577	-.77	2.10
18 ANACHIS ODESA	0	2	0	0.0	2	1	.74	92.99	.67	1.155	-2.20	3.54
19 LYONSIA HYALINA FLORIDANA	1	0	1	1.7	2	2	.74	93.73	.67	.577	-.77	2.10
20 PINNIXA	0	0	2	0.0	2	1	.74	94.46	.67	1.155	-2.20	3.54
21 NUCULANA ACUTA	1	0	0	0.0	1	1	.37	94.83	.33	.577	-1.10	1.77
22 UGYRIDES LIMICULA	1	0	0	0.0	1	1	.37	95.20	.33	.577	-1.10	1.77
23 DIPLODONTA CF SOROR	0	0	1	0.0	1	1	.37	95.57	.33	.577	-1.10	1.77
24 HAPLOSCULOPUS FOLIUSUS	1	0	0	0.0	1	1	.37	95.94	.33	.577	-1.10	1.77
25 LEULON SP	0	0	1	0.0	1	1	.37	96.31	.33	.577	-1.10	1.77
26 GLYCERA CAPITATA	1	0	0	22.7	1	1	.37	96.68	.33	.577	-1.10	1.77
27 MALDANIDAE	1	0	0	0.0	1	1	.37	97.05	.33	.577	-1.10	1.77
28 OPHIURIDS	0	0	1	0.0	1	1	.37	97.42	.33	.577	-1.10	1.77
29 PARALIDAE GRPA	0	0	1	.3	1	1	.37	97.79	.33	.577	-1.10	1.77
30 SIREULUSPIO BENEDICTI	0	1	0	1.5	1	1	.37	98.15	.33	.577	-1.10	1.77
31 PHORONIS ARCHITECTA	0	1	0	0.0	1	1	.37	98.52	.33	.577	-1.10	1.77
32 MULINIA LATERALIS	0	0	1	.4	1	1	.37	98.89	.33	.577	-1.10	1.77
33 ABRA AEQUALIS	0	1	0	1.1	1	1	.37	99.26	.33	.577	-1.10	1.77
34 SIGALUNIDAE	0	0	1	0.0	1	1	.37	99.63	.33	.577	-1.10	1.77
35 CAPRELLID A	0	1	0	0.0	1	1	.37	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	14	17	19	
NO. OF INDIVIDUALS	56	33	182	271
TOTAL INFAUNAL BIOMASS	479	331	1333	2142.1

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	35	90.3	3.4352	.8350	.4425	714.0

STATION 4 TRANSECT SHELF PERIOD MAY 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 MEDIUMASTUS CALIFORNIENSIS	93	76	80	19.1	249	3	20.13	20.13	83.00	8.888	60.92	105.08
2 PARAUNIDAE GRPA	62	67	85	26.9	214	3	17.30	37.43	71.33	12.097	41.28	101.39
3 GLYCINDE SOLITARIA	24	23	15	24.8	62	3	5.01	42.44	20.67	4.933	8.41	32.92
4 TELLINA SP.	30	11	15	0.0	56	3	4.53	46.97	10.67	10.017	-6.22	43.55
5 PARAUNIDAE GRPB	16	4	19	7.8	39	3	3.15	50.12	13.00	7.937	-6.72	32.72
6 LYONSIA HYALINA FLORIDANA	14	14	11	27.1	39	3	3.15	53.27	13.00	1.732	8.70	17.30
7 LISTRIELLA JAHIA	12	12	13	0.0	37	3	2.99	56.27	12.33	.577	10.90	13.77
8 ALIGENA TEXASIANA	0	0	27	0.0	27	1	2.18	58.45	9.00	15.588	-29.73	47.73
9 MALDANIDAE	15	0	10	0.0	25	2	2.02	60.47	8.33	7.638	-10.64	27.31
10 PANDORA TRILINEATA	10	5	7	0.0	22	3	1.78	62.25	7.33	2.517	1.08	13.59
11 SIPUNCULA	7	3	8	0.0	18	3	1.46	63.70	6.00	2.646	-.57	12.57
12 CLYMEHELLA TORQUATA CALIDA	3	9	5	87.3	17	3	1.37	65.08	5.67	3.055	-1.92	13.26
13 MOLINIA LATERALIS	11	1	3	34.5	15	3	1.21	66.29	5.00	5.292	-8.15	18.15
14 ABRA AEGUALIS	9	0	6	17.9	15	2	1.21	67.50	5.00	4.583	-6.38	16.38
15 LUCINA MULTILINEATA	5	6	3	46.9	14	3	1.13	68.63	4.67	1.528	.87	8.46
16 NUCULANA ACUTA	3	5	6	0.0	14	3	1.13	69.77	4.67	1.528	.87	8.46
17 ANEMONE	10	0	4	0.0	14	2	1.13	70.90	4.67	5.033	-7.84	17.17
18 CAPRELLID A	0	0	14	0.0	14	1	1.13	72.03	4.67	8.083	-15.41	24.75
19 ACTEOCINA CANALICULATA	6	4	3	0.0	13	3	1.05	73.08	4.33	1.528	.54	8.13
20 NOTOMASIS LATENICEUS	0	6	7	28.6	13	2	1.05	74.13	4.33	3.786	-5.07	13.74
21 OPHIURIDS	4	5	4	0.0	13	3	1.05	75.18	4.33	.577	2.90	5.77
22 ONUPHIDAE	4	5	4	0.0	13	3	1.05	76.23	4.33	.577	2.90	5.77
23 PERIPLOMA MARGARITACEUM (=INEQUALE	5	3	4	0.0	12	3	.97	77.20	4.00	1.000	1.52	6.48
24 LISTRIELLA BARNARDI	2	8	2	0.0	12	3	.97	78.17	4.00	3.464	-4.61	12.61
25 DIPLUDONTA CF SOROK	9	1	1	0.0	11	3	.89	79.06	3.67	4.619	-7.81	15.14
26 RHYNCOCUELS	3	1	6	44.9	10	3	.81	79.87	3.33	2.517	-2.92	9.59
27 TURBONILLA SP	7	0	2	0.0	9	2	.73	80.60	3.00	3.606	-5.96	11.96
28 ERICHTHONIAS BRASILIENSIS	0	0	9	0.0	9	1	.73	81.33	3.00	5.196	-9.91	15.91
29 NEREIDAE	4	0	5	0.0	9	2	.73	82.05	3.00	2.646	-3.57	9.57
30 NOTOMASIS CF. LATENICEUS	8	0	0	15.1	8	1	.65	82.70	2.67	4.619	-8.81	14.14
31 ANATIDES ERYTHROPHYLLUS	1	3	4	0.0	8	3	.65	83.35	2.67	1.528	-1.13	6.46
32 BIVALVE	2	4	2	0.0	8	3	.65	83.99	2.67	1.155	-.20	5.54
33 PHORONIS ARCHITECTA	2	1	5	0.0	8	3	.65	84.64	2.67	2.082	-2.50	7.84
34 ANADARA SP	1	0	6	0.0	7	2	.57	85.21	2.33	3.215	-5.65	10.32
35 THARYA SETIGERA	1	6	0	23.2	7	2	.57	85.77	2.33	3.215	-5.65	10.32
36 CIRRIATULIDAE	0	0	7	6.1	7	1	.57	86.34	2.33	4.041	-7.71	12.37
37 XENANTHURA BREVITELSON	4	1	2	0.0	7	3	.57	86.90	2.33	1.528	-1.46	6.13
38 CLYMEHELLA MUCOSA	0	6	0	0.0	6	1	.49	87.39	2.00	3.464	-6.61	10.61
39 DIOPATRA COPREA	0	1	5	12.4	6	2	.49	87.87	2.00	2.646	-4.57	8.57
40 GLYCERA AMERICANA	1	0	4	15.1	5	2	.40	88.28	1.67	2.082	-3.50	6.84
41 SPIRIDAE	1	0	4	0.0	5	2	.40	88.68	1.67	2.082	-3.50	6.84
42 ANACHIS ODESA	2	0	3	0.0	5	2	.40	89.09	1.67	1.528	-2.13	5.46
43 MELINNA MACULATA	1	1	3	0.0	5	3	.40	89.49	1.67	1.155	-1.20	4.54
44 AMPELISCA VERRILLI	3	0	2	5.5	5	2	.40	89.89	1.67	1.528	-2.13	5.46
45 MITRELLA LUNATA	0	0	5	0.0	5	1	.40	90.30	1.67	2.887	-5.51	8.84
46 XANTHIDAE	1	0	3	0.0	4	2	.32	90.62	1.33	1.528	-2.46	5.13
47 DRILONEKEIS MAGNA	0	3	1	0.0	4	2	.32	90.95	1.33	1.528	-2.46	5.13
48 EPITONIDAE RUPICOLA	4	0	0	0.0	4	1	.32	91.27	1.33	2.309	-4.40	7.07
49 CREPIDULA FORNICATA	3	0	1	0.0	4	2	.32	91.59	1.33	1.528	-2.46	5.13
50 EDDIEA MONTUSA	1	3	0	0.0	4	2	.32	91.92	1.33	1.528	-2.46	5.13
51 CYCLASPIS VARIANS	0	0	3	0.0	3	1	.24	92.16	1.00	1.732	-3.30	5.30
52 LISTRIELLA SP	0	3	0	0.0	3	1	.24	92.40	1.00	1.732	-3.30	5.30
53 ETEUNE HETEROPODA	0	3	0	0.0	3	1	.24	92.64	1.00	1.732	-3.30	5.30
54 MAGELONA PHILLISAE	1	0	2	0.0	3	2	.24	92.89	1.00	1.000	-1.48	3.48

55	ODUSTOMIA SP.	0	0	3	0.0	3	1	.24	93.13	1.00	1.732	-3.30	5.30
56	NASSARIUS ACUTUS	1	1	1	0.0	3	3	.24	93.37	1.00	0.000	1.00	1.00
57	EPITONIAM SP.	1	2	0	0.0	3	2	.24	93.61	1.00	1.000	-1.48	3.48
58	STENOTHEUS SP.	0	0	3	0.0	3	1	.24	93.86	1.00	1.732	-3.30	5.30
59	PYRAMIDELLA CRENOLATA	0	0	3	0.0	3	1	.24	94.10	1.00	1.732	-3.30	5.30
60	OSTEOSITTIS SALICINI	2	1	0	0.0	3	2	.24	94.34	1.00	1.000	-1.48	3.48
61	MACOMA TENIA	0	0	2	0.0	2	1	.16	94.50	.67	1.155	-2.20	3.54
62	CUKOPHIUM ACHERUSICUM	1	0	1	0.0	2	2	.16	94.66	.67	.577	-.77	2.10
63	MAGELONA PETTITONEAE	0	0	2	0.0	2	1	.16	94.83	.67	1.155	-2.20	3.54
64	GASTROPOD	2	0	0	0.0	2	1	.16	94.99	.67	1.155	-2.20	3.54
65	MEGALOMMA BIUCULATUM	2	0	0	0.0	2	1	.16	95.15	.67	1.155	-2.20	3.54
66	MICROPHIDIUM SPP.	0	0	2	0.0	2	1	.16	95.31	.67	1.155	-2.20	3.54
67	SARSIELLA TEXANA	0	1	1	0.0	2	2	.16	95.47	.67	.577	-.77	2.10
68	GLYCERA CAPITATA	2	0	0	11.7	2	1	.16	95.63	.67	1.155	-2.20	3.54
69	ONUPHIS SP.	0	2	0	0.0	2	1	.16	95.80	.67	1.155	-2.20	3.54
70	SABELLIDAE	2	0	0	0.0	2	1	.16	95.96	.67	1.155	-2.20	3.54
71	GLYCERIDAE	0	2	0	0.0	2	1	.16	96.12	.67	1.155	-2.20	3.54
72	SPIROCHAETOPTERUS CUSTARUM	1	0	1	0.0	2	2	.16	96.28	.67	.577	-.77	2.10
73	DUSINIA SP.	0	0	2	0.0	2	1	.16	96.44	.67	1.155	-2.20	3.54
74	SCULOPUS RUBRA	0	0	2	0.0	2	1	.16	96.60	.67	1.155	-2.20	3.54
75	PISTA PALMAIA	1	1	0	0.0	2	2	.16	96.77	.67	.577	-.77	2.10
76	LINGA AMINATUS	1	0	1	0.0	2	2	.16	96.93	.67	.577	-.77	2.10
77	LEPTOCHELIA RAPAX	0	0	2	0.0	2	1	.16	97.09	.67	1.155	-2.20	3.54
78	MERCENARIA CAMPECHIENSIS	1	0	1	0.0	2	2	.16	97.25	.67	.577	-.77	2.10
79	SARSIELLA SP.	1	1	0	0.0	2	2	.16	97.41	.67	.577	-.77	2.10
80	IRACHYCARDIUM MURICATUM	2	0	0	0.0	2	1	.16	97.57	.67	1.155	-2.20	3.54
81	HIATIELLA ARCTICA	2	0	0	0.0	2	1	.16	97.74	.67	1.155	-2.20	3.54
82	ISOLDA PULCHRELLA	2	0	0	0.0	2	1	.16	97.90	.67	1.155	-2.20	3.54
83	ASYCHIS SP.	0	0	1	0.0	1	1	.08	97.98	.33	.577	-1.10	1.77
84	LEUCON SP.	1	0	0	0.0	1	1	.08	98.06	.33	.577	-1.10	1.77
85	STYLOCHUS ELLIPTICUS	0	1	0	0.0	1	1	.08	98.14	.33	.577	-1.10	1.77
86	MYSELLA PLANOLATA	0	0	1	0.0	1	1	.08	98.22	.33	.577	-1.10	1.77
87	OPHELIDAE	1	0	0	0.0	1	1	.08	98.30	.33	.577	-1.10	1.77
88	AMPHARETE AMERICANA	1	0	0	0.0	1	1	.08	98.38	.33	.577	-1.10	1.77
89	ANCISTROSYLLIS PAPILLOSA	0	1	0	0.0	1	1	.08	98.46	.33	.577	-1.10	1.77
90	NATICA PUSILLA	0	0	1	0.0	1	1	.08	98.54	.33	.577	-1.10	1.77
91	PHYLLODOCIDA	1	0	0	0.0	1	1	.08	98.63	.33	.577	-1.10	1.77
92	POLYNOIDA	0	1	0	0.0	1	1	.08	98.71	.33	.577	-1.10	1.77
93	MYRUPHIS PUNCTATUS	1	0	0	0.0	1	1	.08	98.79	.33	.577	-1.10	1.77
94	CHONE SP.	0	0	1	0.0	1	1	.08	98.87	.33	.577	-1.10	1.77
95	MONOCULOIDES SP.	1	0	0	0.0	1	1	.08	98.95	.33	.577	-1.10	1.77
96	AMPELISCA ABDITA	0	1	0	0.0	1	1	.08	99.03	.33	.577	-1.10	1.77
97	PARASTEROPE SPP.	0	0	1	0.0	1	1	.08	99.11	.33	.577	-1.10	1.77
98	PSEUDOEURYTHOE SP.	0	0	1	0.0	1	1	.08	99.19	.33	.577	-1.10	1.77
99	PAGURID JUV.	0	1	0	0.0	1	1	.08	99.27	.33	.577	-1.10	1.77
100	SYNCHELIUM AMERICANUM	0	0	1	0.0	1	1	.08	99.35	.33	.577	-1.10	1.77
101	NEPHTYS MAGELLANICA	1	0	0	0.0	1	1	.08	99.43	.33	.577	-1.10	1.77
102	PECTINARIA GOULDII	1	0	0	0.0	1	1	.08	99.51	.33	.577	-1.10	1.77
103	DUSINIA ELEGANS	0	1	0	0.0	1	1	.08	99.60	.33	.577	-1.10	1.77
104	SIGALONIDAE	0	0	1	0.0	1	1	.08	99.68	.33	.577	-1.10	1.77
105	BALFA CAHINNENSIS	0	0	1	0.0	1	1	.08	99.76	.33	.577	-1.10	1.77
106	SCHISTOMERINGS SPA	0	0	1	0.0	1	1	.08	99.84	.33	.577	-1.10	1.77
107	DENTALUM TEXASIANUM	0	1	0	0.0	1	1	.08	99.92	.33	.577	-1.10	1.77
108	POLINICES DUPLICATUS	0	0	1	0.0	1	1	.08	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES
 NO. OF INDIVIDUALS
 TOTAL INFAUNAL BIOMASS

66 48 73
 437 322 478
 3135 1792 2455 7381.8

1237

STATION 4
TRANSECT SHELF
SPECIES 100
MEAN DENSITY 412.3
DIVERSITY 4.9471
PIE .9189
EQUITABILITY .4170
BIOMASS 2460.6

STATION 1 TRANSECT CHANNEL PERIOD JUNE 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL		OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT	
	1	2	3		ABUND							CONF	LIM
1 OLIGOCHAETE	79	29	73	0.0	181	3	38.19	38.19	60.33	27.301	-7.49	128.16	
2 SPIONIDAE	44	16	23	0.0	83	3	17.51	55.70	27.67	14.572	-8.53	63.87	
3 MEIOMASTUS CALIFORNIENSIS	21	15	21	10.0	57	3	12.03	67.72	19.00	3.464	10.39	27.61	
4 MAGELONA PHYLLOISAE	6	8	13	0.0	27	3	5.70	73.42	9.00	3.606	.04	17.96	
5 COSSURA DELTA	5	1	10	0.0	16	3	3.38	76.79	5.33	4.509	-5.87	16.54	
6 GLYCINDE SOLITARIA	4	5	6	14.8	15	3	3.16	79.96	5.00	1.000	2.52	7.48	
7 PSEUDEURYTHOE SP.	3	0	10	0.0	13	2	2.74	82.70	4.33	5.132	-8.42	17.08	
8 RHYNCOCUELS	3	3	4	43.7	10	3	2.11	84.81	3.33	.577	1.90	4.77	
9 DIPLODONIA CF SOROR	10	0	0	0.0	10	1	2.11	86.92	3.33	5.774	-11.01	17.68	
10 PINNOTHERIDAE	5	0	4	0.0	9	2	1.90	88.82	3.00	2.646	-3.57	9.57	
11 PILARGIDAE	7	0	2	0.0	9	2	1.90	90.72	3.00	3.606	-5.96	11.96	
12 NASSARIUS ACUTUS	0	6	1	0.0	7	2	1.48	92.19	2.33	3.215	-5.65	10.32	
13 XANTHIDAE	2	2	2	0.0	6	3	1.27	93.46	2.00	0.000	2.00	2.00	
14 ARCISIROSYLLIS JONESI	1	0	5	0.0	6	2	1.27	94.73	2.00	2.646	-4.57	8.57	
15 SIGAMBRA TENIACULATA	2	2	0	10.2	4	2	.84	95.57	1.33	1.155	-1.54	4.20	
16 DIOPATRA CUPREA	0	0	4	186.7	4	1	.84	96.41	1.33	2.309	-4.40	7.07	
17 GLYCERA CAPITATA	2	0	0	7.9	2	1	.42	96.84	.67	1.155	-2.20	3.54	
18 STREBLUSPIO BENEDICTI	1	1	0	2.3	2	2	.42	97.26	.67	.577	-.77	2.10	
19 SCULOPUS RUBRA	1	0	0	0.0	1	1	.21	97.47	.33	.577	-1.10	1.77	
20 PHORUNIS ARCHITECTA	1	0	0	0.0	1	1	.21	97.68	.33	.577	-1.10	1.77	
21 PINNIXA CRISTATA	0	1	0	.2	1	1	.21	97.89	.33	.577	-1.10	1.77	
22 GLYCERA AMERICANA	0	0	1	69.5	1	1	.21	98.10	.33	.577	-1.10	1.77	
23 BALANUGLOSSUS SP.	0	1	0	0.0	1	1	.21	98.31	.33	.577	-1.10	1.77	
24 MYRUPHIS PUNCTATUS	0	1	0	0.0	1	1	.21	98.52	.33	.577	-1.10	1.77	
25 HIALIELLA ARCTICA	0	0	1	0.0	1	1	.21	98.73	.33	.577	-1.10	1.77	
26 MELINNA MACULATA	0	0	1	0.0	1	1	.21	98.95	.33	.577	-1.10	1.77	
27 TELLINA SP.	0	0	1	0.0	1	1	.21	99.16	.33	.577	-1.10	1.77	
28 SIPUNCULA	0	0	1	0.0	1	1	.21	99.37	.33	.577	-1.10	1.77	
29 PARANIDAE GRPA	1	0	0	.3	1	1	.21	99.58	.33	.577	-1.10	1.77	
30 PARAPRIUNUSPIO PINNATA	1	0	0	4.3	1	1	.21	99.79	.33	.577	-1.10	1.77	
31 LISTRIELLA BARNARDI	0	0	1	0.0	1	1	.21	100.00	.33	.577	-1.10	1.77	

NO. OF SPECIES	20	14	20	
NO. OF INDIVIDUALS	199	91	184	474
TOTAL INFAUNAL BIOMASS	403	244	1155	1801.7

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	31	150.0	3.1718	.8022	.3941	600.6

STATION 4 TRANSECT SHELF PERIOD JUNE 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 PARAONIDAE GRPA	52	37	24	13.0	113	3	21.32	21.32	37.67	14.012	2.86	72.48
2 MEDIOASTUS CALIFORNIENSIS	16	22	26	9.6	64	3	12.08	33.40	21.33	5.033	8.83	33.84
3 SPIONIDAE	19	7	21	0.0	47	3	8.87	42.26	15.67	7.572	-3.14	34.48
4 GLYCINDE SOLITARIA	9	10	10	24.9	29	3	5.47	47.74	9.67	.577	8.23	11.10
5 ACTEUCIA CANALICULATA	6	10	13	0.0	29	3	5.47	53.21	9.67	3.512	.94	18.39
6 TELLINA SP.	8	6	9	0.0	23	3	4.34	57.55	7.67	1.528	3.87	11.46
7 PARAONIDAE GRPB	4	4	14	3.7	22	3	4.15	61.70	7.33	5.774	-7.01	21.68
8 MAGELONA PHYLLISAE	10	4	0	0.0	14	2	2.64	64.34	4.67	5.033	-7.84	17.17
9 MOLINIA LATERALIS	6	2	5	68.7	13	3	2.45	66.79	4.33	2.002	-.84	9.50
10 DIPLODONTA CF. SOROR	0	9	2	0.0	11	2	2.08	68.87	3.67	4.726	-8.07	15.41
11 XERANTHURA BREVITELSON	4	1	3	0.0	8	3	1.51	70.38	2.67	1.528	-1.13	6.46
12 TURBONILLA SP	2	3	3	0.0	8	3	1.51	71.89	2.67	.577	1.23	4.10
13 APPELISCA VERRILLI	1	2	4	3.5	7	3	1.32	73.21	2.33	1.528	-1.46	6.13
14 PERIPLOMA MARGARITACEUM (=INEQUALE	1	4	2	0.0	7	3	1.32	74.53	2.33	1.528	-1.46	6.13
15 LAEVICARDIUM MORTONI	7	0	0	0.0	7	1	1.32	75.85	2.33	4.041	-7.71	12.37
16 SIPUNCULA	0	2	5	0.0	7	2	1.32	77.17	2.33	2.517	-3.92	8.59
17 LISIPIELLA BAHIA	0	3	4	0.0	7	2	1.32	78.49	2.33	2.002	-2.84	7.50
18 MAGELONA PETTIGONEAE	0	0	6	0.0	6	1	1.13	79.62	2.00	3.464	-6.61	10.61
19 NUCULANA ACUTA	1	1	3	0.0	5	3	.94	80.57	1.67	1.155	-1.20	4.54
20 LUCINA MULTILINEATA	2	2	1	38.1	5	3	.94	81.51	1.67	.577	.23	3.10
21 OPHIURIDS	0	4	1	0.0	5	2	.94	82.45	1.67	2.002	-3.50	6.84
22 NOTUMASTUS CF. LATERICEUS	1	0	4	20.2	5	2	.94	83.40	1.67	2.002	-3.50	6.84
23 MALDANIDAE	0	3	1	0.0	4	2	.75	84.15	1.33	1.528	-2.46	5.13
24 NOTUMASTUS LATERICEUS	0	4	0	8.8	4	1	.75	84.91	1.33	2.309	-4.40	7.07
25 ALIGENA TEXASIANA	0	3	1	0.0	4	2	.75	85.66	1.33	1.528	-2.46	5.13
26 MERCENARIA CAMPECHIENSIS	1	2	1	0.0	4	3	.75	86.42	1.33	.577	-.10	2.77
27 PARASTEROPE SPP	2	0	1	0.0	3	2	.57	86.98	1.00	1.000	-1.48	3.48
28 HIATELLA ARCTICA	0	2	1	0.0	3	2	.57	87.55	1.00	1.000	-1.48	3.48
29 NASSARIUS ACUTUS	0	2	1	0.0	3	2	.57	88.11	1.00	1.000	-1.48	3.48
30 CLYPEVELLA TURQUATA CALIDA	2	0	1	15.6	3	2	.57	88.68	1.00	1.000	-1.48	3.48
31 CIRRHATULIDAE	2	0	1	3.1	3	2	.57	89.25	1.00	1.000	-1.48	3.48
32 SPIROCHAETOPTERUS COSTARUM	0	0	2	0.0	2	1	.38	89.62	.67	1.155	-2.20	3.54
33 ABRA AEGUALIS	0	0	2	34.8	2	1	.38	90.00	.67	1.155	-2.20	3.54
34 PANDORA TRILINEATA	2	0	0	0.0	2	1	.38	90.38	.67	1.155	-2.20	3.54
35 ULIGUCHAETE	2	0	0	0.0	2	1	.38	90.75	.67	1.155	-2.20	3.54
36 LISIPIELLA SP	2	0	0	0.0	2	1	.38	91.13	.67	1.155	-2.20	3.54
37 SYNCHELIDIUM AMERICANUM	1	0	1	0.0	2	2	.38	91.51	.67	.577	-.77	2.10
38 SCOLUPLUS RUBRA	1	1	0	0.0	2	2	.38	91.89	.67	.577	-.77	2.10
39 NEREIDAE	0	2	0	0.0	2	1	.38	92.26	.67	1.155	-2.20	3.54
40 ANEMONE	1	1	0	0.0	2	2	.38	92.64	.67	.577	-.77	2.10
41 ANALLIDES ERYTHROPHYLLUS	1	0	1	0.0	2	2	.38	93.02	.67	.577	-.77	2.10
42 PSEUDOURYTHOE SP.	1	0	1	0.0	2	2	.38	93.40	.67	.577	-.77	2.10
43 RHYNCOCUELS	1	1	0	25.9	2	2	.38	93.77	.67	.577	-.77	2.10
44 PARAPHRIONUSPIO PINNATA	0	1	1	9.3	2	2	.38	94.15	.67	.577	-.77	2.10
45 PHUKUNIS ARCHITECIA	2	0	0	0.0	2	1	.38	94.53	.67	1.155	-2.20	3.54
46 MACOMA TENIA	0	1	1	0.0	2	2	.38	94.91	.67	.577	-.77	2.10
47 MYSELLA PLANOLATA	0	1	1	0.0	2	2	.38	95.28	.67	.577	-.77	2.10
48 LISIPIELLA BARNARDI	0	1	1	0.0	2	2	.38	95.66	.67	.577	-.77	2.10
49 CHONE SP	0	1	0	0.0	1	1	.19	95.85	.33	.577	-1.10	1.77
50 GLYCERA AMERICANA	0	0	1	7.1	1	1	.19	96.04	.33	.577	-1.10	1.77
51 MONOCULOIDES SP	0	0	1	0.0	1	1	.19	96.23	.33	.577	-1.10	1.77
52 PAGURID JUV.	0	0	1	0.0	1	1	.19	96.42	.33	.577	-1.10	1.77
53 PELLINARIA GOULDII	0	1	0	0.0	1	1	.19	96.60	.33	.577	-1.10	1.77
54 LYONSIA NYALINA FLORIDANA	1	0	0	1.5	1	1	.19	96.79	.33	.577	-1.10	1.77

55	ETELONE HETEROPODA	0	0	1	0.0	1	.19	96.98	.33	.577	-1.10	1.77
56	DUSINIA SP	0	1	0	0.0	1	.19	97.17	.33	.577	-1.10	1.77
57	AMELISCIA ABUJIA	0	1	0	0.0	1	.19	97.36	.33	.577	-1.10	1.77
58	MELIINA MALULATA	0	0	1	0.0	1	.19	97.55	.33	.577	-1.10	1.77
59	CLYTEMELLA MOCUSA	1	0	0	0.0	1	.19	97.74	.33	.577	-1.10	1.77
60	SARSIELLA SP	0	1	0	0.0	1	.19	97.92	.33	.577	-1.10	1.77
61	URUPHIS SP.	0	1	0	0.0	1	.19	98.11	.33	.577	-1.10	1.77
62	ORANCHIUSIONA CARIBAEUM	1	0	0	0.0	1	.19	98.30	.33	.577	-1.10	1.77
63	ANADARA SP	1	0	0	0.0	1	.19	98.49	.33	.577	-1.10	1.77
64	TANIDALEAH	1	0	0	0.0	1	.19	98.68	.33	.577	-1.10	1.77
65	XAMIMUAE	0	1	0	0.0	1	.19	98.87	.33	.577	-1.10	1.77
66	CAPRELLIU A	0	1	0	0.0	1	.19	99.06	.33	.577	-1.10	1.77
67	VENALIU TEXASIANUM	0	1	0	0.0	1	.19	99.25	.33	.577	-1.10	1.77
68	ANALHIS ORESA	1	0	0	0.0	1	.19	99.43	.33	.577	-1.10	1.77
69	AGLAOPHAMUS VERRILLI	0	1	0	0.0	1	.19	99.62	.33	.577	-1.10	1.77
70	DIVALVE	0	1	0	0.0	1	.19	99.81	.33	.577	-1.10	1.77
71	PHYLLODOLIAE	1	0	0	0.0	1	.19	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES
NO. OF INDIVIDUALS
TOTAL INFAUNAL BIOMASS

39 43 42
178 168 184
877 1066 857

2799.4 530
PIE EQUITABILITY
BIOMASS
933.1

STATION TRANSECT SPECIES MEAN DENSITY DIVERSITY
4 SHELF 71 176.7 4.6479 .9200 .5329

STATION 1 TRANSECT CHANNEL PERIOD JULY 81

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 OLIGOCHELE	73	222	106	0.0	401	3	43.03	43.03	133.67	78.258	-60.75	328.09
2 MEDIOASTIUS CALIFORNIENSIS	66	84	51	15.5	201	3	21.57	64.59	67.00	16.523	25.95	108.05
3 SPIONIDAE	18	33	67	0.0	118	3	12.66	77.25	39.33	25.106	-23.04	101.71
4 MAGELONA PHYLISAE	10	23	16	0.0	49	3	5.26	82.51	16.33	6.506	.17	32.50
5 RHTHMOCELES	0	17	4	25.1	21	2	2.25	84.76	7.00	8.888	-15.08	29.08
6 SIRENOSPION BENEDICTI	2	0	7	4.0	17	3	1.82	86.59	5.67	3.215	-2.32	13.65
7 CUSSOMA DELIA	0	1	10	0.0	17	3	1.82	88.41	5.67	4.509	-5.54	16.87
8 OGYRIDES LIMICOLA	7	9	1	0.0	17	3	1.82	90.24	5.67	4.163	-4.68	16.01
9 NASSARIUS ACUTUS	2	11	2	0.0	15	3	1.61	91.85	5.00	5.196	-7.91	17.91
10 PALAPHEUSPION PINNATA	0	6	2	7.7	8	2	.86	92.70	2.67	3.055	-4.92	10.26
11 OGYRIDAE	0	6	1	0.0	7	2	.75	93.45	2.33	3.215	-5.65	10.32
12 GLYCINDE SOLITARIA	2	2	2	7.5	6	3	.64	94.10	2.00	0.000	2.00	2.00
13 OLUPAIRA COPREA	1	3	1	315.3	5	3	.54	94.64	1.67	1.155	-1.20	4.54
14 SIPUNCULA	3	1	0	0.0	4	2	.43	95.06	1.33	1.528	-2.46	5.13
15 PARACIDAE GRPA	2	0	2	.3	4	2	.43	95.49	1.33	1.155	-1.54	4.20
16 OPHIURIDS	0	2	1	0.0	3	2	.32	95.82	1.00	1.000	-1.48	3.48
17 ANCLISTROSYLLIS PAPILLOSA	2	1	0	0.0	3	2	.32	96.14	1.00	1.000	-1.48	3.48
18 LEUCON SP	1	2	0	0.0	3	2	.32	96.46	1.00	1.000	-1.48	3.48
19 NEREIDAE	2	1	0	0.0	3	2	.32	96.78	1.00	1.000	-1.48	3.48
20 GLYCERA CAPITATA	2	1	0	43.7	3	2	.32	97.10	1.00	1.000	-1.48	3.48
21 SIGAMBRA TENTACULATA	0	1	1	.6	2	2	.21	97.32	.67	.577	-.77	2.10
22 PARACIDAE GRPH	2	0	0	.2	2	1	.21	97.53	.67	1.155	-2.20	3.54
23 NEPHYS MAGELLANICA	1	0	1	0.0	2	2	.21	97.75	.67	.577	-.77	2.10
24 PILARIDAE	0	2	0	0.0	2	1	.21	97.96	.67	1.155	-2.20	3.54
25 MAGELONA PETTIBONEAE	0	2	0	0.0	2	1	.21	98.18	.67	1.155	-2.20	3.54
26 ANATIDES ERYTHROPHYLLUS	0	1	0	0.0	1	1	.11	98.28	.33	.577	-1.10	1.77
27 SPIOPHARES BOMBYX	0	1	0	.3	1	1	.11	98.39	.33	.577	-1.10	1.77
28 PALEARCTIUS HETEROSETA	0	1	0	0.0	1	1	.11	98.50	.33	.577	-1.10	1.77
29 AMPHIPOD UNID.	0	1	0	0.0	1	1	.11	98.61	.33	.577	-1.10	1.77
30 LISIRIELLA BARNARDI	1	0	0	0.0	1	1	.11	98.71	.33	.577	-1.10	1.77
31 ANADARA SP	0	1	0	0.0	1	1	.11	98.82	.33	.577	-1.10	1.77
32 MAGELONA ROSEA	1	0	0	0.0	1	1	.11	98.93	.33	.577	-1.10	1.77
33 PYRAMIDELLA CRENULATA	0	1	0	0.0	1	1	.11	99.03	.33	.577	-1.10	1.77
34 DORVILLEIDAE	0	0	1	0.0	1	1	.11	99.14	.33	.577	-1.10	1.77
35 MALDANIDAE	0	0	1	0.0	1	1	.11	99.25	.33	.577	-1.10	1.77
36 NEPHYTIDAE	0	1	0	0.0	1	1	.11	99.36	.33	.577	-1.10	1.77
37 BRANCHIUSTOMA CARIBAEUM	1	0	0	0.0	1	1	.11	99.46	.33	.577	-1.10	1.77
38 MICROPTILOPUS SPP.	1	0	0	0.0	1	1	.11	99.57	.33	.577	-1.10	1.77
39 ORILUNEREIS MAGNA	1	0	0	0.0	1	1	.11	99.68	.33	.577	-1.10	1.77
40 EUDURELLA MONODON	1	0	0	0.0	1	1	.11	99.79	.33	.577	-1.10	1.77
41 HYDROIDS	0	1	0	0.0	1	1	.11	99.89	.33	.577	-1.10	1.77
42 XANTHIDAE	1	0	0	0.0	1	1	.11	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES	25	30	19
NO. OF INDIVIDUALS	209	446	277
TOTAL INFAUNAL BIOMASS	709	1820	438
			2967.2

932

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
1	CHANNEL	42	310.7	2.8167	.7483	.2187	989.1

STATION 4 TRANSECT SHELF PERIOD JULY 61

SPECIES	REPLICATE			BIOMASS MG	TOTAL ABUND	OCCUR	PERCENT	ACC PCT	MEAN	STD	95 PCT CONF LIM	
	1	2	3									
1 PARAONIDAE GRPA	34	46	25	14.1	105	3	13.71	13.71	35.00	10.536	8.83	61.17
2 NUTOMASTUS CALIFORNIENSIS	22	25	38	9.5	85	3	11.10	24.80	28.33	8.505	7.20	49.40
3 PARAONIDAE GRPB	13	19	13	5.0	45	3	5.87	30.68	15.00	3.464	6.39	23.61
4 ACTEUCINA CANALICULATA	18	14	9	0.0	41	3	5.35	36.03	13.67	4.509	2.46	24.87
5 SPIONIDAE	7	12	18	0.0	37	3	4.83	40.86	12.33	5.500	-1.35	26.02
6 MAGELONA PHYLISAE	3	10	19	0.0	32	3	4.18	45.04	10.67	8.021	-9.26	30.59
7 MULLINIA LATERALIS	8	11	11	60.0	30	3	3.92	48.96	10.00	1.732	5.70	14.30
8 LISTRIELLA BAHIA	4	15	9	0.0	28	3	3.66	52.61	9.33	5.500	-4.35	23.02
9 TELLINA SP.	7	3	14	0.0	24	3	3.13	55.74	8.00	5.500	-5.83	21.83
10 GLYCINDE SOLITARIA	9	5	9	7.3	23	3	3.00	58.75	7.67	2.309	1.93	13.40
11 TURBONILLA SP	7	11	5	0.0	23	3	3.00	61.75	7.67	3.055	.00	15.20
12 ANACHIS ORESA	21	0	1	0.0	22	2	2.87	64.62	7.33	11.846	-22.10	36.76
13 NASSARIUS ACUTUS	10	5	4	0.0	19	3	2.48	67.10	6.33	3.215	-1.65	14.32
14 MALLONIDAE	5	6	7	0.0	18	3	2.35	69.45	6.00	1.000	3.52	8.48
15 BRACHIOSTOMA CARIBAEUM	4	5	7	0.0	16	3	2.09	71.54	5.33	1.528	1.54	9.13
16 SIPUNCULA	0	1	8	0.0	15	3	1.96	73.50	5.00	3.000	-3.96	13.96
17 AMPELISCA VERRILLI	4	4	5	7.3	13	3	1.70	75.20	4.33	.577	2.90	5.77
18 BIVALVE	0	3	8	0.0	11	2	1.44	76.63	3.67	4.041	-6.37	13.71
19 PANDORA TRILINEATA	2	6	3	0.0	11	3	1.44	78.07	3.67	2.002	-1.50	8.84
20 MOLLUSCA ACUTA	3	5	1	0.0	9	3	1.17	79.24	3.00	2.000	-1.97	7.97
21 MYSELLA PLANOLATA	1	5	3	0.0	9	3	1.17	80.42	3.00	2.000	-1.97	7.97
22 CLYMEDELLA TORQUATA CALIDA	0	3	5	24.4	8	2	1.04	81.46	2.67	2.517	-3.54	8.92
23 SERPULIDAE	7	0	0	0.0	7	1	.91	82.38	2.33	4.041	-7.71	12.37
24 LUCINA MULTILINEATA	3	3	0	28.9	6	2	.78	83.16	2.00	1.732	-2.30	6.30
25 HIALTELLA ARCTICA	1	0	5	0.0	6	2	.78	83.94	2.00	2.646	-4.57	8.57
26 XANTHIDAE	5	0	1	0.0	6	2	.78	84.73	2.00	2.646	-4.57	8.57
27 PANDORA SOCIALIS	6	0	0	0.0	6	1	.78	85.51	2.00	3.464	-6.61	10.61
28 DRILORHENSIS MAGNA	1	3	2	0.0	6	3	.78	86.29	2.00	1.000	-.48	4.48
29 PERIPLOMA MARGARITACEUM (=INEQUALE	3	2	1	0.0	6	3	.78	87.08	2.00	1.000	-.48	4.48
30 NUTOMASTUS CF. LATERICEUS	0	0	5	10.0	5	1	.65	87.73	1.67	2.687	-5.51	8.84
31 UPHIURIDUS	4	0	1	0.0	5	2	.65	88.38	1.67	2.682	-3.50	6.84
32 DOSIDIA SP	2	1	2	0.0	5	3	.65	89.03	1.67	.577	.23	3.10
33 XENANTHURA BREVITELSON	2	2	1	0.0	5	3	.65	89.69	1.67	.577	.23	3.10
34 UROPHIS SP.	3	1	0	0.0	4	2	.52	90.21	1.33	1.528	-2.46	5.13
35 DENTALIUM TEXASIANUM	1	0	2	0.0	3	2	.39	90.60	1.00	1.000	-1.48	3.48
36 OLIGOCHAETE	1	2	0	0.0	3	2	.39	90.99	1.00	1.000	-1.48	3.48
37 ABRA AEGUALIS	1	0	2	1.5	3	2	.39	91.38	1.00	1.000	-1.48	3.48
38 AMPHARETIDAE	1	1	1	0.0	3	3	.39	91.78	1.00	0.000	1.00	1.00
39 LYONSIA MYALINA FLORIDANA	2	1	0	3.2	3	2	.39	92.17	1.00	1.000	-1.48	3.48
40 PARASTEROPE SPP	1	2	0	0.0	3	2	.39	92.56	1.00	1.000	-1.48	3.48
41 NEPHYS MAGELLANICA	0	2	1	0.0	3	2	.39	92.95	1.00	1.000	-1.48	3.48
42 GLYCERA CAPITATA	0	1	1	13.6	2	2	.26	93.21	.67	.577	-.77	2.10
43 MERCENARIA CAMPECHEIENSIS	0	0	2	0.0	2	1	.26	93.47	.67	1.155	-2.20	3.54
44 ELASNOPIUS SP	2	0	0	0.0	2	1	.26	93.73	.67	1.155	-2.20	3.54
45 GASTROPOD	1	1	0	0.0	2	2	.26	93.99	.67	.577	-.77	2.10
46 CORBULA CONTRACTA	2	0	0	0.0	2	1	.26	94.26	.67	1.155	-2.20	3.54
47 UROPHIDAE	1	1	0	0.0	2	2	.26	94.52	.67	.577	-.77	2.10
48 CHORE SP	2	0	0	0.0	2	1	.26	94.78	.67	1.155	-2.20	3.54
49 HAPLOSCULOPUS FOLIOSUS	2	0	0	0.0	2	1	.26	95.04	.67	1.155	-2.20	3.54
50 NUTOMASTUS LATERICEUS	2	0	0	0.0	2	1	.26	95.30	.67	1.155	-2.20	3.54
51 GONIADIDAE	1	1	0	0.0	2	2	.26	95.56	.67	.577	-.77	2.10
52 DIOPATRA COPREA	0	1	1	13.1	2	2	.26	95.82	.67	.577	-.77	2.10
53 RHYNCOCLEUS	1	0	1	10.6	2	2	.26	96.08	.67	.577	-.77	2.10
54 EUCORPIDIUM ACHERUSICUM	2	0	0	0.0	2	1	.26	96.34	.67	1.155	-2.20	3.54

55	POLINICES DUPLICATUS	1	0	1	0.0	2	2	.26	96.61	.67	.577	-.77	2.10
56	MACOMA TENIA	1	0	0	0.0	1	1	.13	96.74	.33	.577	-1.10	1.77
57	MELIOMA MACULATA	0	0	1	0.0	1	1	.13	96.87	.33	.577	-1.10	1.77
58	EPITONIUM KOPICOLA	0	0	1	0.0	1	1	.13	97.00	.33	.577	-1.10	1.77
59	PARAPLIONUS PINNATA	1	0	0	4.1	1	1	.13	97.13	.33	.577	-1.10	1.77
60	LOCINA AMANTUS	1	0	0	0.0	1	1	.13	97.26	.33	.577	-1.10	1.77
61	OSTRACODA	1	0	0	0.0	1	1	.13	97.39	.33	.577	-1.10	1.77
62	MAGELONIDAE	0	0	1	0.0	1	1	.13	97.52	.33	.577	-1.10	1.77
63	LUMBRINERIDAE	1	0	0	0.0	1	1	.13	97.65	.33	.577	-1.10	1.77
64	CIRRHATULIDAE	0	0	1	5.4	1	1	.13	97.78	.33	.577	-1.10	1.77
65	MEGALOMMA BIUCULATUM	1	0	0	0.0	1	1	.13	97.91	.33	.577	-1.10	1.77
66	GLYCERA AMERICANA	1	0	0	8.7	1	1	.13	98.04	.33	.577	-1.10	1.77
67	SARSIELLA SP	0	1	0	0.0	1	1	.13	98.17	.33	.577	-1.10	1.77
68	NEREIDAE	1	0	0	0.0	1	1	.13	98.30	.33	.577	-1.10	1.77
69	PYRAMIDELLA CRENULATA	0	0	1	0.0	1	1	.13	98.43	.33	.577	-1.10	1.77
70	PAGURID JUV.	0	1	0	0.0	1	1	.13	98.56	.33	.577	-1.10	1.77
71	NOTOMASTUS LOBATUS	1	0	0	6.1	1	1	.13	98.69	.33	.577	-1.10	1.77
72	ANACHIS SEMPLICATA	1	0	0	0.0	1	1	.13	98.83	.33	.577	-1.10	1.77
73	NAUICA POSILLA	1	0	0	0.0	1	1	.13	98.96	.33	.577	-1.10	1.77
74	MICROPOTAMUS SPP.	0	1	0	0.0	1	1	.13	99.09	.33	.577	-1.10	1.77
75	SIGALONIDAE	0	1	0	0.0	1	1	.13	99.22	.33	.577	-1.10	1.77
76	ALIGENA TEXASIANA	0	0	1	0.0	1	1	.13	99.35	.33	.577	-1.10	1.77
77	ANATIDES ERYTHROPHYLLUS	0	1	0	0.0	1	1	.13	99.48	.33	.577	-1.10	1.77
78	DIPLODONTA CF. SOROR	1	0	0	0.0	1	1	.13	99.61	.33	.577	-1.10	1.77
79	IRACHYPERNAEUS CONSIKICUS	0	0	1	0.0	1	1	.13	99.74	.33	.577	-1.10	1.77
80	EXOGONE DISPAR	1	0	0	0.0	1	1	.13	99.87	.33	.577	-1.10	1.77
81	CLYMEVELLA MUCOSA	0	0	1	0.0	1	1	.13	100.00	.33	.577	-1.10	1.77

NO. OF SPECIES 61 42 47
 NO. OF INDIVIDUALS 262 244 260 766
 TOTAL INFAUNAL BIOMASS 1934 1733 1947 5613.7

STATION	TRANSECT	SPECIES	MEAN DENSITY	DIVERSITY	PIE	EQUITABILITY	BIOMASS
4	SHELF	81	255.3	5.0472	.9493	.6131	1871.2