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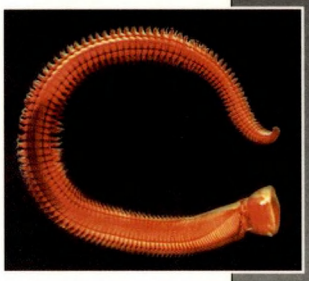

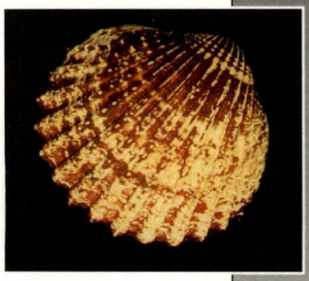

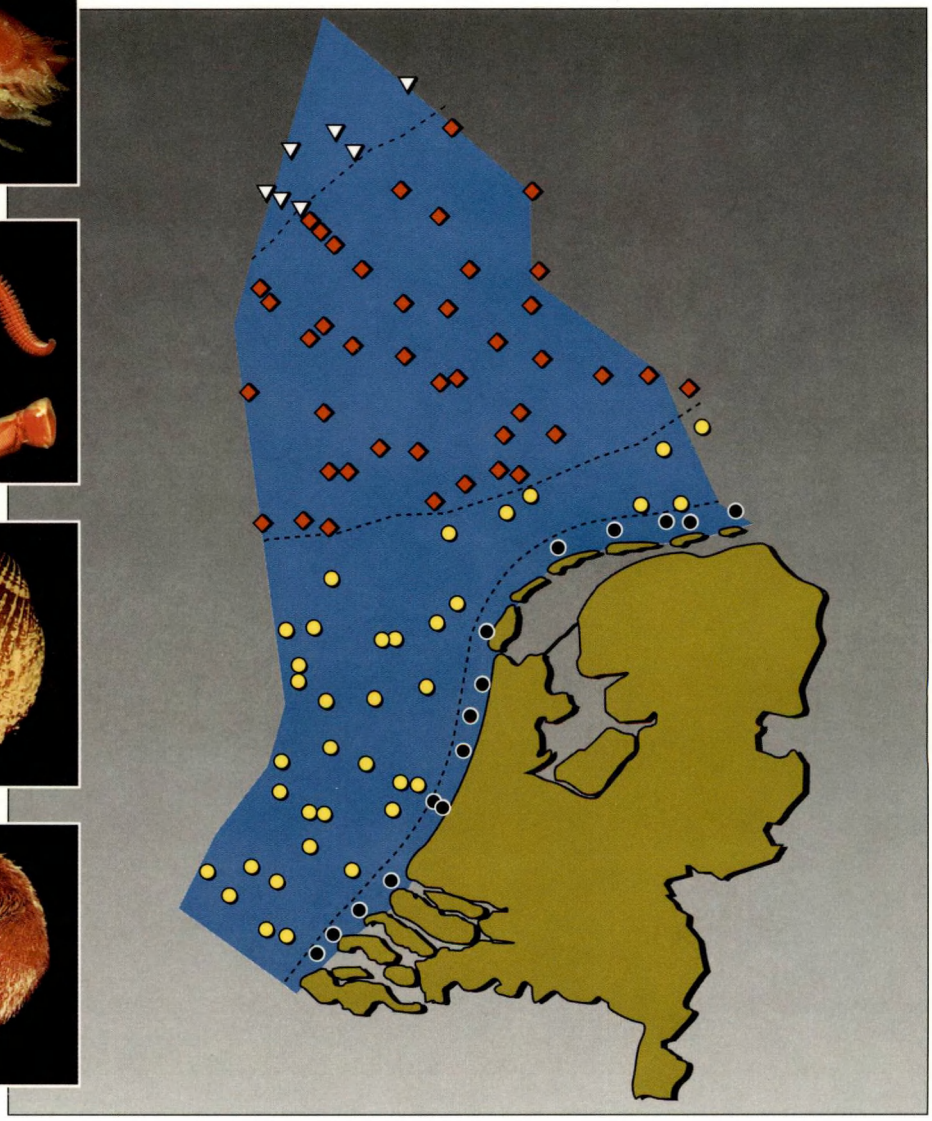

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Monitoring Macrozoobenthos of the North Sea

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THE MACROBENTHIC FAUNA IN THE DUTCH SECTOR OF THE NORTH SEA IN 1996 AND A COMPARISON WITH PREVIOUS DATA

S.E. HOLTMANN, M. MULDER, R. DAAN

This report presents data of the monitoring program of macrozoobenthos in the Dutch Continental Shelf (DCS) of the North Sea, a cooperation between the National Institute for Coastal and Marine Management/RIKZ (Rijkswaterstaat), the North Sea Directorate (Rijkswaterstaat) and the Department of Marine Ecology (NIOZ)

NETHERLANDS INSTITUTE FOR SEA RESEARCH
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Monitoring macrozoobenthos North Sea 1996

1. Summary

This report presents the results of the macrobenthos survey on the Dutch Continental Shelf (DCS), carried out in spring 1996. The survey was the sixth since 1991 and forms part of the programme 'Monitoring Macrobenthos of the North Sea' (BIOMON). The aim of the project is to obtain insight into the year-to-year variations of the benthic assemblages and to detect trend-like changes, that possibly indicate anthropogenic influences on the marine environment (*e.g.* eutrophication, beam-trawl fishery, pollution).

According to the new sampling strategy which was introduced in spring 1995, the whole area of the DCS was divided into four subareas, known as the southern part of the Dogger Bank, the Oyster Ground, the coastal and the more offshore area (Holtmann et al., 1996a). From 100 selected stations boxcore samples were taken in the period between 2 April and 29 May 1996 to study some abiotic and biotic parameters.

The sediment composition was determined in all samples to assess possible trend-like changes of the marine environment in the four subareas of the Dutch part of the North Sea. In 1996 the Oyster Ground showed very fine sand with high mud content and differed clearly from the offshore area with medium to coarse sand containing a low percentage of mud. The Dogger Bank and coastal area characterized in 1996 by fine sand with a low mud content.

In 1996 a total of 191 species/taxa were found in the 100 boxcore samples. The polychaetes were the most dominant taxon of the whole area and accounted for about 40 % of the 191 identified macrobenthic species. The highest species richness ($Hill_0$) and total density (ind./m^2) was found at the Dogger Bank. The coastal area showed in 1996 the highest total biomass due to the high number of large-sized bivalves found along the Dutch coast. Compared to the survey in spring 1995, in 1996 low values were found of the total density, biomass and diversity in all subareas.

With the additional information about the sediment composition and the macrozoobenthos of the DCS as found in the period between 1986 and 1993 (ICES- and MILZON programme) some trend-like changes can be detected. Studying the results of the sediment characteristics an upward trend of the median grain size was found between 1986 and 1996 due to a decrease of fine material in the whole study area. The mud content of the sediment at first increased from 1986 to 1991/1992 and decreased until 1996. This trend was very clear in the Oyster Ground and the southern part of the Dogger Bank.

Moreover, some general community attributes like the density and biomass were evaluated over the period between 1986 and 1996. All these parameters and also the abundances of some selected macrobenthic species in the separate subareas showed no consistent trend over the whole monitoring period. However, the diversity seemed to have decreased in the coastal area.

By means of DECORANA ordination of the macrofauna assemblages found at the stations sampled from 1986 to 1996, the research years 1986 and 1990 were found to be distinct from the years 1991-1996 in most subareas. This can indicate a change in species assemblages over the period of monitoring.

2. Samenvatting

In dit rapport worden de resultaten gepresenteerd van de macrobenthosbemonstering die in het voorjaar van 1996 werd uitgevoerd in de Nederlandse sector van de Noordzee. Deze survey was de zesde sinds 1991 en maakt deel uit van het programma 'Monitoring van het Noordzee macrobenthos' (BIOMON). Met het projekt wordt beoogd inzicht te krijgen in de jaarlijkse fluctuaties van de macrofaunagemeenschap en vast te stellen of er op de langere termijn trendmatige veranderingen optreden. Dergelijke veranderingen zouden onder meer kunnen optreden als gevolg van effekten van anthropogene aktiviteiten (bijv. eutrofiëring, boomkorvisserij, verontreiniging).

Overeenkomsting de nieuwe bemonsteringsmethode die in het voorjaar van 1995 is geintroduceerd, is het hele Nederlandse deel van het Continentale Plat (NCP) ingedeeld in vier subgebieden, te weten het zuidelijke deel van de Doggersbank, de Oestergronden, de kustzone en het offshore gebied (Holtmann et al.,1996a). Op 100 geselecteerde stations zijn in de periode van 2 april tot 29 mei 1996 boxcore monsters genomen om een aantal abiotische en biotische factoren te bestuderen.

De sedimentsamenstelling is in alle monsters bepaald om eventuele trend-matige veranderingen in de vier subgebieden van het NCP vast te stellen. In 1996 vertoonde de Oestergronden zeer fijn zand met hoge slibgehaltes in tegenstelling tot het grove zand met lage slib-percentages in het offshore gebied. De Doggersbank en de kustzone werden in 1996 karakteriseerd door fijn zand met lage slibgehaltes.

In 1996 zijn in totaal 191 soorten/taxa gevonden in de 100 boxcore monsters. De polychaeten vormden het meest dominante taxon van het gehele monitoringsgebied; circa 40% van alle gedetermineerde soorten waren polychaeten. De grootste soortenrijkdom ($Hill_0$) and de hoogste dichtheden (ind./m^2) werden op de Doggersbank gevonden. De kustzone liet in 1996 de hoogste totale biomassa zien als gevolg van de hoge dichtheden van grote bivalven langs de Nederlandse kust. In vergelijking tot de bemonstering in het voorjaar 1995 werden in 1996 in alle subgebieden lagere waarden voor de totale dichtheid, biomassa en diversiteit gevonden.

Aan de hand van aanvullende informatie over de sedimentsamenstelling en het macrobenthos van het NCP zoals gevonden in de periode 1986 tot 1993 (ICES- en MILZOM programma) is het mogelijk trendmatige veranderingen op te sporen. Bij het bestuderen van de sediment karakteristieken is er in het hele onderzoeksgebied een toename geconstateerd in de mediane korrelgrootte van 1986 tot 1996. De slibgehaltes van het sediment zijn aanvankelijk toegenomen van 1986 tot 1991/1992 en afgenomen tot 1996. Deze trend is heel duidelijk te zien in de Oestergronden en op de Doggersbank.

Een aantal karakteristieken van de faunagemeenschap, zoals de dichtheid en biomassa zijn bestudeerd over de periode 1986-1996. Deze parameters en ook de dichtheden van een aantal geselecteerde soorten van de afzonderlijke subgebieden laten geen consistente trend zien over de gehele monitoringsperiode. Echter, de diversiteit in het kustgebied lijkt te zijn afgenomen.

In de DECORANA-ordinatie van de macrobenthosgemeenschappen van 1986-1996, onderscheiden de jaren 1986 en 1990 zich in bijna alle subgebieden, hetgeen op een verandering in soorten samenstelling kan duiden.

3. Introduction

In the past decade macrobenthic fauna is widely used in ecological monitoring to study the effects of marine pollution. Changes in organic input have direct or indirect influence of the benthic fauna. The organisms are mostly sessile and can integrate effects of pollutants over time. The problems of this kind of monitoring are often the natural variability of benthic assemblages in both time and space. Moreover, detailed laboratory experiments and mesocosms studies can give more causal information of the effect of specific pollutants on marine organisms (Pearson & Rosenberg, 1978; Govaere et al., 1980; Warwick, 1986; Gray et al., 1990).

The present report gives an overview of the results from the BIOMON macrozoobenthic survey on the Dutch Continental Shelf (DCS), in spring 1996. The survey is part of a long-term macrobenthos monitoring programme which is an initiative of the National Institute for Coastal and Marine Management/RIKZ (Rijkswaterstaat) in co-operation with the North Sea Directorate of Rijkswaterstaat and the department of Marine Ecology of the NIOZ. The aim of the project is to study year-to-year variations and to detect possible changes in the macrozoobenthic community of the Dutch Sector of the North Sea. The results of the first five studies were published by Duineveld (1992), Duineveld & Belgers (1993; 1994) and Holtmann et al. (1995; 1996a).

The survey of spring 1996 is the second for which the new sampling strategy for the monitoring programme of macrozoobenthos is operative. This new strategy which was adopted in 1995 implied a dramatic break with the strategy used before (Essink, 1995). The reason for changing the sampling strategy is that with the new method a more accurate and statistically founded insight in the benthic community of the DCS can be acquired. Furthermore, it is the aim of the monitoring to detect possible changes in the macrobenthic community of the major habitats of the whole DCS rather than of separate stations. Therefore, this new method will improve the power of any statements about possible large scale changes of the macrobenthos on the DCS (van der Meer, 1997).

With the existing knowledge about the distribution of the macrobenthic fauna of the North Sea (Künitzer et al., 1992; Holtmann et al., 1996b) the whole area of the DCS was divided into 4 subareas, known as the southern part of the Dogger Bank (DOG), the Oyster Ground (OYS), the coastal (COA) and the more offshore (OFF) area. The number of stations per subarea depends on the extent of each area (DOG=7, OYS=42, COA=15 and OFF=36 stations).

The positions of the 100 locations were identical with those of stations that earlier had been sampled during either the ICES North Sea Benthos Survey (ICES-NSBS, 1986; de Wilde & Duineveld, 1988), the MILZON-BENTHOS programme (1988-1993; Holtmann & Groenewold, 1992; 1994) and the first part of the BIOMON project (1991-1994), to look for possible changes over a longer period.

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The results of the sampling campaigns between 1991 and 1995 show trend-like changes in sediment characteristics. The fine material seems to be decreasing in all subareas. On community level the macrobenthos shows only a slight increase in species richness ($Hill_0$). On species level some trends could be observed. The echinoderms *Amphiura filiformis* and *Echinocardium cordatum* showed a downward trend, whereas the polychaetes *Lanice conchilega* and *Magelona papillicornis* increased in some of the subareas during the period of investigation (Holtmann, et al., 1996a).

4. Material and methods

Sampling and sorting of the samples was done according to the prescribed standard methods for macrozoobenthos sampling in the Dutch Sector of the North Sea (Essink, 1991).

4.1. Sampling and sorting

In the previous BIOMON studies (1991-1994) each year 5 replicate boxcore samples were collected from 25 locations on the DCS. These 25 stations were located on 4 transects perpendicular and 1 transect parallel to the Dutch coast. According to the new strategy (since 1995) a total of 100 stations were sampled, with only one sample taken per location. First the study area was divided into 4 subareas, known as the southern part of the Dogger Bank (DOG), the Oyster Ground (OYS), the coastal (COA) and the more offshore (OFF) area. The 100 stations include the 25 'old' BIOMON stations and 75 'new' stations, which are more or less randomly distributed over the DCS (Essink, 1995). Further information about the selection of the locations can be found in the monitoring report of spring 1995 (Holtmann et al., 1996a).

In 1996 a total of 100 stations were visited in the period 2 April to 29 May. The station grid of the sampling cruise in spring 1996 is given in Fig. 1. The geographical positions of the 100 stations, together with the former station codes and some measured abiotic parameters (depth/sediment) are summarized in Table 1(a/b).

The main part of the stations was sampled with the RV. Holland and the RV. Smal Agt. Two coastal stations with a water depth below 10 m, *viz.* COA 13 & 14 were sampled on 18 April 1996 with the RV. Argus. More general information about the cruises and the weather conditions can be found in the cruise report of Rijkswaterstaat (Anonymous, 1996).

At each station 2 boxcore samples (0.068 m^2, minimal depth 15 cm) were taken while the ship was anchored. One of the boxcores was used for sediment analysis and the second boxcore was washed through a sieve with round holes (1 mm) to collect the macrobenthic fauna. The sediment samples (consisting of 2 pooled subsamples, 3.4 cm ∅, depth 10 cm) were immediately stored at -20°C. The residue of the macrobenthos was preserved in a borax-buffered solution of 4-6 % formaldehyde in seawater and stored at room temperature.

In the laboratory the macrobenthos samples were stained with rose-bengal and fractionated over a set of sieves with 0.7 mm as the smallest mesh size to facilitate sorting. The macrobenthos was identified to species level, except for some notoriously difficult taxa such as anthozoans, hydrozoans, phoronids, priapulids and nemerteans, and subsequently counted. Sizes (nearest 0.5 mm) were recorded for most species of the molluscs and echinoderms to calculate the ashfree dry weight (g AFDW/ m^2) by means of length-weight relationships.

4.2. ASHFREE DRY WEIGHT

The **A**sh**F**ree **D**ry **W**eight (AFDW) of the different taxa was determined in one of the following ways:

- *Molluscs and echinoids*: by means of length-AFDW relationships of the form $W=a*L^b$ (W=AFDW in g and L=length in mm)
- *Polychaetes, other worms, larger crustaceans and ophiuroids*: indirectly, by converting the (blotted) wet weight into AFDW by means of conversion factors provided by Rumohr et al. (1987). Wet weights were measured with a Mettler PJ300 balance to the nearest mg.
- *Remaining taxa*: directly, by drying a sample at 60 °C for at least 60 hours and subsequently incinerating at 520 °C for 2 hours (Duineveld & Witte, 1987).

Small molluscs, amphipods and cumaceans were assigned an average individual AFDW of 0.2-0.5 mg. The same figure is used by Holtmann & Groenewold (1992; 1994) in their analysis of macrobenthos from the MILZON-BENTHOS project in the southern North Sea between 1991 and 1993. This estimated individual weight is based on previous determinations of the AFDW of the taxa in question (Duineveld; Holtmann, unpubl.).

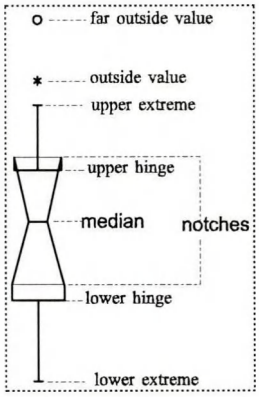
4.3. Statistics

In addition to the species/taxa density (ind./m²) and biomass (g AFDW/m²) the biological diversity (biodiversity) of the macrobenthos for each station was calculated. During a number of recent ecological studies many different diversity indices have been used to identify possible changes of the benthic fauna (Hill, 1973; Peterson, 1977; Pearson & Rosenberg, 1978; Harper & Hawksworth, 1994).

In this report three indices of biodiversity were used. The species richness ($Hill_0$) which represents the number of species per boxcore sample is the most simple index. The other two indices, the Shannon-Wiener index (H') (Shannon & Weaver, 1949) and the Simpson's index (D) for dominance (Simpson, 1949), are based on the proportional abundances of the individual species in the samples. The Simpson index is sensitive to the abundance only of the more plentiful species and can therefore be regarded as a measure of dominance concentration (Hill, 1973). A high Simpson index means low diversity, whereas a high $Hill_0$ or Shannon-Wiener index means high diversity .

To enhance the visual information on a scatterplot and look for possible changes, for some selected variables smoothing scatterplots were made. The so called LOWESS method (Clevland, 1979; 1981) produces a smooth curve by running along the X values and finding predicted values from weighted average of nearby Y values (see for details Wilkinson, 1990). Species abundances were scaled by a log (x+1) transformation in order to limit the influence of species exhibiting very high numerical dominance.

To illustrate the differences between the 4 subareas distinguished on the DCS notched box- and whisker plots were drawn. The notches surrounding the medians provide a measure of the rough significance of differences between the median values. If the notches around two medians do not overlap, the medians are roughly significantly different at the 95 % confidence level (McGill et al., 1978). All the scatter- and boxplots were made with SYSTAT 5.0 (SYSTAT inc. IL, USA).



The ordination technique DECORANA (**DE**trended **COR**respondence **ANA**lysis) was used to detect changes in species assemblages of the 4 distinguished areas over the period 1986-1996 (Hill, 1979; Ter Braak, 1986). The input data of species abundance were scaled by a linear transformation.

4.4. Sediment analysis

At each station shown in Fig. 1, two subsamples were taken from an intact boxcore sample and subsequently pooled for laboratory analysis of the sediment composition (*e.g.* grain size, content of calcium carbonate). The results of the grain size analysis (Malvern) of these samples were provided by the Middelburg laboratory of the National Institute for Coastal and Marine Management/RIKZ.

Two parameters were derived from the grain size data: the percentage (by weight) of mud (particles 16-63 µm) and the median grain size (µm). The latter value was calculated using the entire size range (thus including the mud fraction). Sediment types were classified on the basis of the median grain size as follows:

Characterisation of the sedimenttype according to the median grain size (after Gullentops et al., 1977).

< 175 µm	Very fine sand
175 - 250 µm	Fine sand
250 - 300 µm	Fine-medium sand
300 - 350 µm	Medium-coarse sand
> 350 µm	Coarse sand

5. Results

5.1. Changes in sediment composition

From all stations (except station OYS 29 & OYS 40) the median grain size, the mud content (*i.e.* the particle size fraction between 16 and 63 µm) and the water depth were measured. The composition of the sediment at each location sampled in spring 1996 is summarized in Table 1(a/b). Using all these data of sediment analysis a map of the median grain size and the mud content was made (Figs. 2 and 3) to illustrate the spatial distribution of the sediment in the monitoring area.

An overview of the environmental parameters of the four subareas is given in Table 2. Accordingly the deep Oyster Ground can be described as a very fine sand area with high content of mud (in 1996 mean 6.4 %, max. 15.7 %). The more offshore area shows medium to coarse sand with low values of mud (in 1996 mean 0.3 %). The sediment of the southern part of the Dogger Bank and the shallow coastal area was characterized by fine sand with a mean mud content between 0.1 and 0.3 % during the survey in spring 1996.

The year-to-year variation of the sediment was investigated to look for possible changes of abiotic variables which can influence the distribution of the benthic fauna. In Figs. 4 and 5 the temporal patterns of the median grain size and the mud content are given. In the period between 1986 and 1996 the median grain size of the Dutch sector of the North Sea showed in general a slight increase (Fig. 4). This trend is rather clear in the area of the southern Dogger Bank and along the coast whereas the median grain size of the Oyster Ground was found to be quite stable. The decrease of fine material was also observed in spring 1995 (Holtmann et al., 1996a) but seems to have stagnated or changed into a slight increase when the results of 1996 are integrated.

The mud content of the sediment indicates an increasing trend between 1986 and 1991/1992 and a decreasing trend from 1991/1992 to 1996 (Fig. 5). Especially in the area of the Oyster Ground, where the mud content was found to be very high, the decrease of the last 5 years (1991-1996) is remarkable (from about 10 % in 1991 to 6 % in 1996). However in the Oyster Ground the low percentage of mud (less than 5 %) as found in 1986 was not observed in 1996. At the stations of the southern Dogger Bank high mud contents were found in 1992 but in all years of investigation the mean values of mud were not higher than 2.5 %. It should be noted here that an accurate comparison of the sediment composition between different years is hampered by the fact that not always the same methods have been used. The sieving method generally used in the 1980's has shown to produce results that differ from those obtained by the Malvern method which was used in recent years (Zonneveld, 1994).

5.2. Distribution of the macrobenthic fauna in 1996

5.2.1. Diversity

In 100 boxcore samples a total of 191 species were identified, including 16 juvenile species (identified to genus level only) and 26 higher taxa (not identified to species level). Scientific names and presence-absence data for all species are summarized in Appendix-1 and all basic data of abundance and biomass are listed in Appendix 2. In Table 2 the mean values of some macrobenthic parameters found in the 4 subareas are given.

The Polychaeta were most dominant, accounting for 40.3 % of the total number of identified species in the whole study area. The Crustacea and the Mollusca contributed 23.0 and 24.1 % respectively, whereas 5.8 % of the total number of species found were Echinodermata.

In Fig. 6 the number of species per boxcore sample ($Hill_0$) is plotted. In 1996 high species richness was found at the southern part of the Dogger Bank (mean: 28.7 species per sample) and in the Oyster Ground (mean: 25.1 species). In this areas also the highest values of the Shannon-Wiener diversity were found, whereas the Simpson index was found to be quite low (Table 2). In the coastal area only 8 species per sample were found on average. The high values of the Simpson index (mean 0.35) along the coast indicated the high dominance of some macrobenthic species. The offshore area showed intermediate values of the 3 indices of diversity.

The relation between the species richness ($Hill_0$) and the total density (ind./m^2) of the 4 subareas is given in Fig. 7. A clear relationship can be found between these two parameters. Especially if the total density of the macrobenthos increases from 0 to 2000 ind./m^2 the number of species increases steeply. In the area of the Oyster Ground the relationship between $Hill_0$ and the total density is less clear than in the other areas.

5.2.2. Density and biomass

A map of the total density (ind./m^2) and total biomass (g AFDW/m^2) in 1996 is given in Figs. 8 and 9. Abundances up to more than 4000 ind./m^2 can be found at two stations along the coast (COA 5 & COA 9) and in the Oyster Ground (OYS 14 & OYS 18). The southern Dogger Bank showed on average the highest values of total density, because of the highest number of polychaetes and crustaceans found in this area (Table 2). Polychaetes and crustaceans were also dominant taxa in the offshore area. In the coastal area polychaetes and molluscs dominated, whereas in the Oyster Ground the echinoderms and molluscs occurred in the highest numbers of all subareas.

The total biomass ranged in spring 1996 from 0.02 g AFDW/m^2 (COA 13) to 379.99 g AFDW/m^2 (COA 15) (Fig. 9). The high biomass values along the coast were due to high abundances of large-sized bivalves (*Ensis directus* and *Spisula subtruncata*). In the sandy offshore area the total biomass was found to be quite low in 1996 (mean 9.7 g AFDW/m^2.

In the whole monitoring area the taxa of the crustaceans are mainly represented by small individuals of amphipods. Consequently the biomass of the crustacens was quite low, except for the Oyster Ground where the decapod *Callianassa subterranea* was found to be dominant (Table 2). The Oyster Ground showed the highest biomass values of crustaceans, polychaetes and echinoderms. The high biomass of echinoderms found in 1996 in the Oyster Ground was caused by the high abundance of the brittle-star *Amphiura filiformis*.

5.3. TEMPORAL VARIATION OF THE MACROBENTHIC FAUNA

5.3.1. VARIATION IN THE ABUNDANCE OF INDIVIDUAL SPECIES

The abundances of some selected species in the 4 subareas between 1986 and 1996 is given in scatterplots and box- and whisker plots (Figs. 10-13). The choice of the species is based on the selection made by Holtmann et al. (1995) supplied with species that have a wide distribution in the specific subarea.

Dogger Bank (Fig. 10 a/b):

In this area there is only one station (DOG 7) that was visited during each of the surveys carried out between 1986 and 1996. In general the selected species at the Dogger Bank first showed an upward trend in density, but in the last two years (1995/1996) the trend changed into downward direction. The amphipod *Bathyporeia elegans* (Fig. 10a) reached in 1991 and 1993 values of almost 750 ind./m² whereas in 1996 on average less than 150 ind./m² were found of this species.

Oyster Ground (Fig. 11 a/b):

Most of the selected species showed no constant trend in the period 1986 to 1996. The echinoderm *Amphiura filiformis* (Fig. 11a), which showed a downward trend up to 1995, did not further decrease (Holtmann et al., 1996a). *A. filiformis* reached a density of 2457 ind./m² at one of the stations in 1996. However, the bivalve *Mysella bidentata* (Fig. 11b) which often lives in association with *A. filiformis* showed in 1996 low abundance in the Oyster Ground. The decapod *Callianassa subterranea* (Fig. 11a) which was quite abundant in the period 1991 to 1995 showed mean values of 25 ind./m² in 1996.

Offshore (Fig. 12 a/b):

The polychaete *Nephtys cirrosa* (Fig. 12b) which is characteristic of the offshore area showed from 1986 to 1993 an upward trend and from 1993 to 1996 a downward trend of abundance. The same development, but on a smaller scale, was found in the gastropod *Natica alderi* (Fig. 12b). In the other selected species no trend was observed between 1986 and 1996.

Coast (Fig. 13 a-c):

In 1996 *Lanice conchilega* (Fig. 13a) was almost absent along the coast, whereas high densities were found in 1994 and 1995. The molluscs *Natica alderi* (Fig. 13b) and *Tellina fabula* (Fig. 13c) clearly decreased between 1986 and 1996. The sea urchin *Echinocardium cordatum* (Fig. 13a) which occurred in mean densities of about 20 ind./m^2 up to 1993 and showed a downward trend in the period 1993-1995, seemed to have further decreased. The species was found at only 2 of the 15 stations (1 specimen at each of these stations) in 1996.

5.3.2. Variation in diversity, density and biomass

Year-to-year variation in the diversity, the density and biomass of the total macrobenthos and of 4 major taxa, *viz.* polychaetes, crustaceans, molluscs and echinoderms, are illustrated in smoothing scatterplots and box- and whisker plots (Figs. 14-20).

Diversity (Figs. 14-16):

During the period of study (1986-1996), the number of species per sample ($Hill_0$) was always highest on the Dogger Bank and in the Oyster Ground and lowest in the offshore and coastal area. In the Oyster Ground and in the coastal area the mean $Hill_0$ decreased between 1986 and 1993, slightly increased up to 1995 and decreased again in 1996. In the offshore area the number of species increased continuously until 1995, but appeared to have decreased also in 1996. For the Dogger Bank the development of $Hill_0$ is less clear because only a few data are available of the preceding years. In the whole area there was a lower species richness in 1996 compared to 1995 (Fig. 14).

The Shannon-Wiener index showed a consistent downward trend along the coast over the whole period of investigation, whereas in the offshore area and at the Dogger Bank the index hardly fluctuated. In the Oyster Ground the Shannon-Wiener index showed the same trend as the species richness: first an upward trend changing into a downward trend in 1993 (Fig. 15).

In the southern part of the Dogger Bank, the Oyster Ground and the offshore area the Simpson index of dominance fluctuated only slightly, without showing any trend over the period of study. In the coastal area the index increased between 1992 and 1996, indicating that the fauna is increasingly dominated by one or a few abundant species (Fig. 16).

Density (Figs. 17-18(a-d)):

In 1996 the total density of the Dutch part of the North Sea was rather low. In all 4 subareas the trends of the total density changed in the period 1994/1995 (Fig. 17). In the southern part of the Dogger Bank the clear upward trend changed into downward direction in 1994. This development was apparently due to a decrease of the polychaetes and crustaceans (Fig. 18a) in this area. The highest numbers of molluscs were observed in

1995 but these numbers were also quite high in 1996. Also the echinoderms were rather abundant in 1996 at the southern Dogger Bank (Fig. 18a).

In the Oyster Ground the total density was quite stable over the whole period of investigation (Fig. 17). Although between 1993 and 1995 a decrease was found of echinoderms, due to the low abundance of the ophiuroid *Amphiura filiformis*, this was not reflected in the total density because of relatively high numbers of molluscs in this period (Fig. 18b). The crustaceans showed a increase from 1986-1993 and a decrease until 1996 which was mainly caused by low densities of *Callianassa subterranea* in 1996.

The offshore part of the study area showed between 1986 and 1995 a trend of increasing fauna densities which was not continued in 1996 (Fig. 17). The 4 major taxa followed the same trend as the total density (Fig. 18c).

In the coastal area the total density decreased between 1986 and 1992, increased between 1992 and 1995 and steeply declined again in 1996 (Fig. 17). The parallel development of densities of polychaetes, which form the dominant taxon of the coastal area, and of the crustaceans was apparently responsible for this temporal pattern. The molluscs showed a constant downward trend between 1986-1996, whereas the echinoderms showed a more or less constant low density along the Dutch coast during the monitoring period (Fig. 18d).

Biomass (Figs. 19-20(a-d)):

The total biomass in 1996 was rather low in 3 of the 4 subareas, corresponding to the low total density measured in this year (Fig. 19). In contrast, on the Dogger Bank a mean value of 14.5 g AFDW/m^2 observed in 1996 was high compared to the preceding years (Table 2). Consequently the total biomass of the Dogger Bank indicated an upward trend between 1986 and 1996. However, in the 4 different taxa this trend at the Dogger Bank was not so clear or changed in downward direction in 1991/1993 (Fig. 20a).

High values of biomass were found on average in the Oyster Ground (Fig. 19). The curve of the smoothing scatterplot shows an increase of the echinoderm and total biomass from 1986 to 1993/1994 and a continuous decrease until 1996. The biomass of the other taxa was quite stabile in the Oyster Ground during the whole period of investigation (Fig. 20b).

In contrast to the total density the total biomass of the coastal and offshore area showed no substantial changes between 1986 and 1996. Of the taxonomic groups only the echinoderms along the Dutch coast showed a small peak in biomass values in 1992 (Fig. 20c/d).

5.3.3. Comparison of species assemblages

To find possible changes in species assemblages over the period of monitoring (1986 - 1996) the DECORANA ordination technique was used. The points that are close together correspond to sites that are similar in species composition.

In Fig. 21 the four subareas are grouped according to their species assemblages in the period 1986 to 1996 by means of DECORANA ordination. The ordination is based on a dataset comprising 389 identified macrobenthic species/taxa and shows no substantial changes within each subarea over the period of monitoring. The Dogger Bank and the coastal stations produce relatively compact clusters, whereas the offshore stations showed a higher degree of scattering. Because of the clear separation of the sandy offshore area and the muddy Oyster Ground the presence of the different species assemblages can be explained by different sediment characteristics.

Fig. 22(a-d) represents the separate DECORANA ordinations of the 4 different subareas on the basis of the same dataset. In all subareas the years 1986 and in some cases 1990 showed the highest distance from the rest, which suggest different species assemblages in these years. The differences with the other years were most pronounced at the Dogger Bank (1986) and the offshore area (1986/1990).

6. Discussion

Benthic organisms are intimately associated with the sea-bottom for much of their life-cycle. Their relative immobility requires that they must adapt to seasonal and year-to-year fluctuations in environmental conditions, *e.g.* temperature and food availability. Changes in macrobenthic fauna can be caused by natural reasons such as variation in sediment characteristics, weather condition (*e.g.* cold winters), food supply or predation, but also by anthropogenic influences.

To get an idea about the temporal fluctuation of the macrobenthos many different parameters can be used by biological monitoring. During the macrobenthos monitoring programme of the North Sea (1991-1996) the development of faunal densities, their biomass and diversity are studied to detect possible changes, which might indicate changing environmental conditions. In turn these conditions could change by natural causes or by human influences. Monitoring of the macrozoobenthos may provide a direct indication of such changes, but large parts of the variation in these parameters remain unexplained (Rees & Eleftheriou, 1989; Heip et al., 1992; Mackie, et al., 1995).

A high natural fluctuation from year-to-year can be observed in the total benthic density due to the high abundance fluctuation of individual, particularly the short-living species. The time of sampling may also play an important role. If sampling takes place after the main settling of pelagic spatfall high values of the total density can be expect. Many polychaete species settle in spring with high abundances and live only for a period of one year. These species prefer to colonize newly available habitats, taking thereby advantage of a relatively fast growth (Kirkegaard, 1978). High numbers of the polychaetes *Lanice conchilega*, *Magelona papillicornis* and *Spiophanes bombyx* were found during the biological monitoring in 1994 along the Dutch coast which took place in the period between late spring to early summer of 1994. In 1996 these benthic species were hardly found, most probably because the period of sampling was much earlier in 1996 (Holtmann et al., 1995). The relationship between the time of sampling and the observed faunal abundance is illustrated in Fig. 23. The species which clearly can be identified as juvenile species are excluded in this plot. The figure shows the highest total densities of the macrobenthos in May/June (1986-1996). The effect of the timing of sampling appears to be the strongest in the coastal and offshore area. Along the coast values from 44 ind./m^2 (April 1996) up to 34000 ind./m^2 (June 1989) have been observed.

Other benthic species, for example the echinoderms *Amphiura filiformis* and *Ophiura* spec. and several species of molluscs, live over a long period and spawn later in the season. *Amphiura* populations are known to be stable for periods of up to 15 years (Duineveld et al., 1987). Therefore the timing of sampling does not strongly influence their abundance in samples. However since of most species the spawning periods are not well known it is strongly recommended to standardize the period of sampling.

Other macrobenthic parameters such as the total biomass and the biological diversity are more stable in time than the total density. A high number of very small individuals after settlement has not so much influence on these two parameters. For that reason the analyses of changes in benthic communities in response to environmental

variations usually concentrate on the estimation of the changes in biomass and biodiversity.

It has been stated that the habitat, *e.g.* sediment structure, has a great influence on biomass values and biodiversity (Pearson & Rosenberg, 1978). In the monitoring area $Hill_0$-diversity and the total biomass show a general increase towards the northern part of the DCS. The high values of $Hill_0$ at the shallow sandy Dogger Bank and the relatively deep and muddy Oyster Ground do not suggest a clear relationship with median grain size, mud contents or depth. The sediment characteristics of the Dogger Bank are similar to those of large parts of the coastal and offshore area (Table 2). Also Heip et al.,1992 found a clear and nearly linear increase with latitude of the North Sea macrobenthos. They discussed this patterns by different factors and found that environmental variables had no clear influence on diversity, whereas human impact were named as possible effect.

It is generally assumed that under stable conditions a benthic community will show only small changes in time and that an increase in environmental stress will lead to a decrease in diversity. Over the whole period of investigation the lowest diversity was found at the coastal stations. A major reason for this low diversity is undoubtedly that this shallow area is subject to relatively strong natural stress, due to strong bottom currents and relatively large annual temperature fluctuations compared to the other areas. The upward trend of the Simpson index in the coastal area between 1992 and 1996 (Fig. 16) and the decrease in species richness, indicated a decrease of diversity in this area. It is questionable whether anthropogenic influences have contributed to this decrease since anthropogenic activities like fishery, discharges of waste into the sea and offshore mining are not particularly concentrated in the coastal area.

Proceeding on the assumption that the distribution of the benthic assemblages is dependent on the distribution of the sediment composition, changes in the environmental parameters, with natural of artificial causes, should be reflected in the structure of the benthic fauna. The pattern of the DECORANA ordination plots of the whole area and the separate subareas (Figs. 21 and 22) indicated a correlation between the zoobenthos assemblages and the sediment condition. The ordination of the whole investigation area illustrated a clear separation of the muddy sand Oyster Ground area from the rest of the DCS with more sandy sediment (Fig. 21).

The increase of the median grain size of the sediment, which was due most likely to a decrease of fine material especially in the beginning of the period of monitoring (Fig. 4 and 5) can be the reason of the different fauna composition in the period 1986/1990. Especially on the Dogger Bank and in the coastal area, where the median grain size showed a weak upward trend (Fig. 4) the macrozoobenthos assemblage of 1986 differed clearly from the other years of investigation (Fig. 22). This could possibly be explained by a change in sediment structure, which in turn could indicate a change in hydrodynamic conditions on the DCS. It should be noted that the sieving method to measured the sediment composition as used in the 1980's can produce results that differ from those of the Malvern method which were used in recent years (Zonneveld, 1994). However, the understanding of long-term changes of benthic communities can only be succeeded by population studies carried out continuously for long sequences of years.

7. Conclusions

The results of the macrobenthos survey of the Dutch Continental Shelf (DCS) in spring 1996 together with information from earlier studies (ICES 1986, MILZON, 1988-1993, BIOMON 1991-1995) lead to the following conclusions:

- Measurements of the median grain size suggested a slight decrease of fine material between 1986 and 1996 on the DCS. However, changes in analytical methods may at least partly explain seeming differences in sediment composition between consecutive years.
- The mud content of the sediment increased from 1986 to 1991/1992 and decreased until spring 1996. This trend was very clear in the area of the Oyster Ground and the southern Dogger Bank.
- In 1996 the 4 distinguished subareas differed clearly with respect to the measured abiotic and biotic parameters. The same result was obtained in 1995.
- Comparing to the results of 1995, the total density, total biomass and species richness ($Hill_0$) were low of all four subareas in 1996.
- For several macrobenthic species an upward trend was found between 1986 and 1994 and a downward trend in the last period of investigation (1994-1996). The slightly downward trends for *Mysella bidentata* and *Callianassa subterranea* in the Oyster Ground and for *Echinocardium cordatum, Natica alderi* and *Tellina fabula* in the coastal area, as noticed already in 1995, continued. However, the downward trend of *Amphiura filiformis* in the Oyster Ground was not continued and their densities had stabilized
- The total density and biomass and the abundances of most of the selected macro-benthic species showed no clear trend in one direction over the whole period of monitoring. However, diversity seems to have decreased in the coastal area.
- The DECORANA ordination of the study area shows a clear separation of the 4 different subareas of the period 1986 to 1996, which suggests that the difference in species assemblages is due to differences in sediment characteristics. The muddy Oyster Ground grouped apart from the more sandy subareas. The Dogger Bank and the coastal area formed a close group, whereas the offshore area showed a higher degree of scattering.
- In all four distinguished areas the survey years 1986/1990 are isolated in the individual DECORANA ordination plots, indicating a change in species assemblages. The difference was particularly clear at the Dogger Bank and the offshore area.
- A plot of the total density against time of sampling showed that high macrobenthic densities can be found in the period end of May/June (1986-1996), especially in the area of the Dutch coast. These high densities are caused by a number of polychaete species of which larvae settle in spring. To avoid complicating infaunal density differences due to different time of sampling it is strongly recommended to maintain early sampling, *viz.* late March to April.

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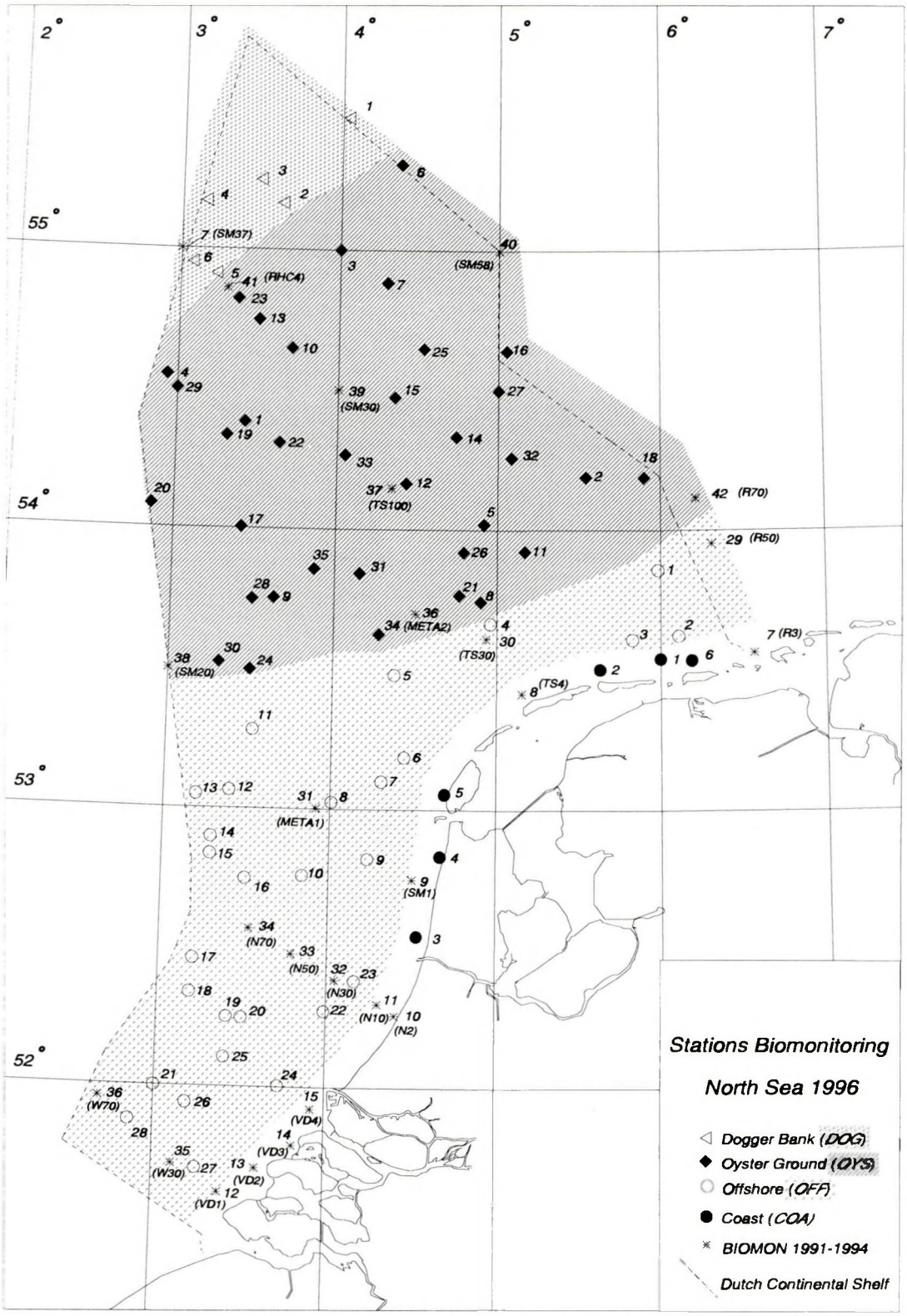


Fig. 1. Locations of the sampling stations which have been visited during the survey in 1996.

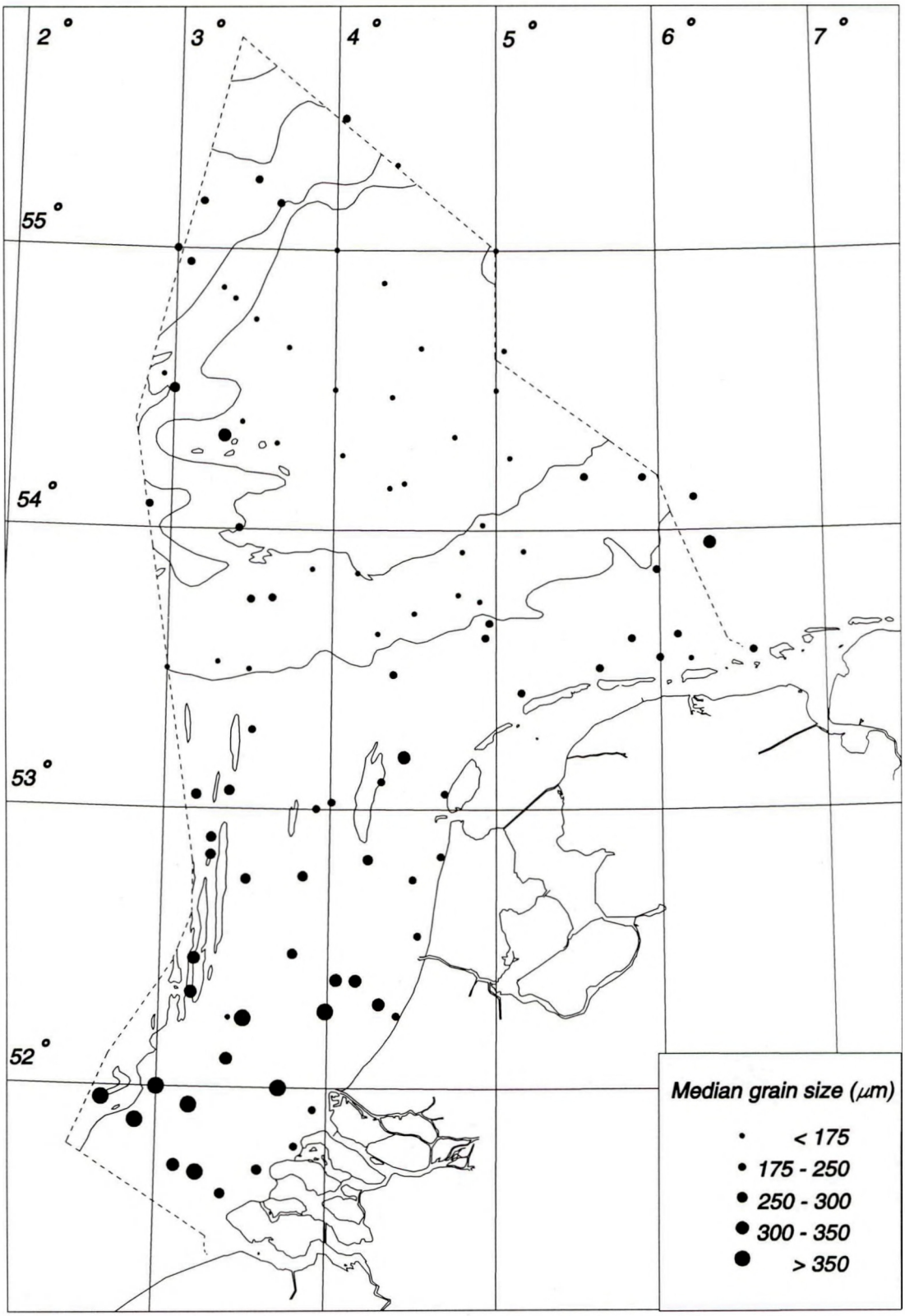


Fig. 2. The median grain size (μm) of the sediment in 1996.

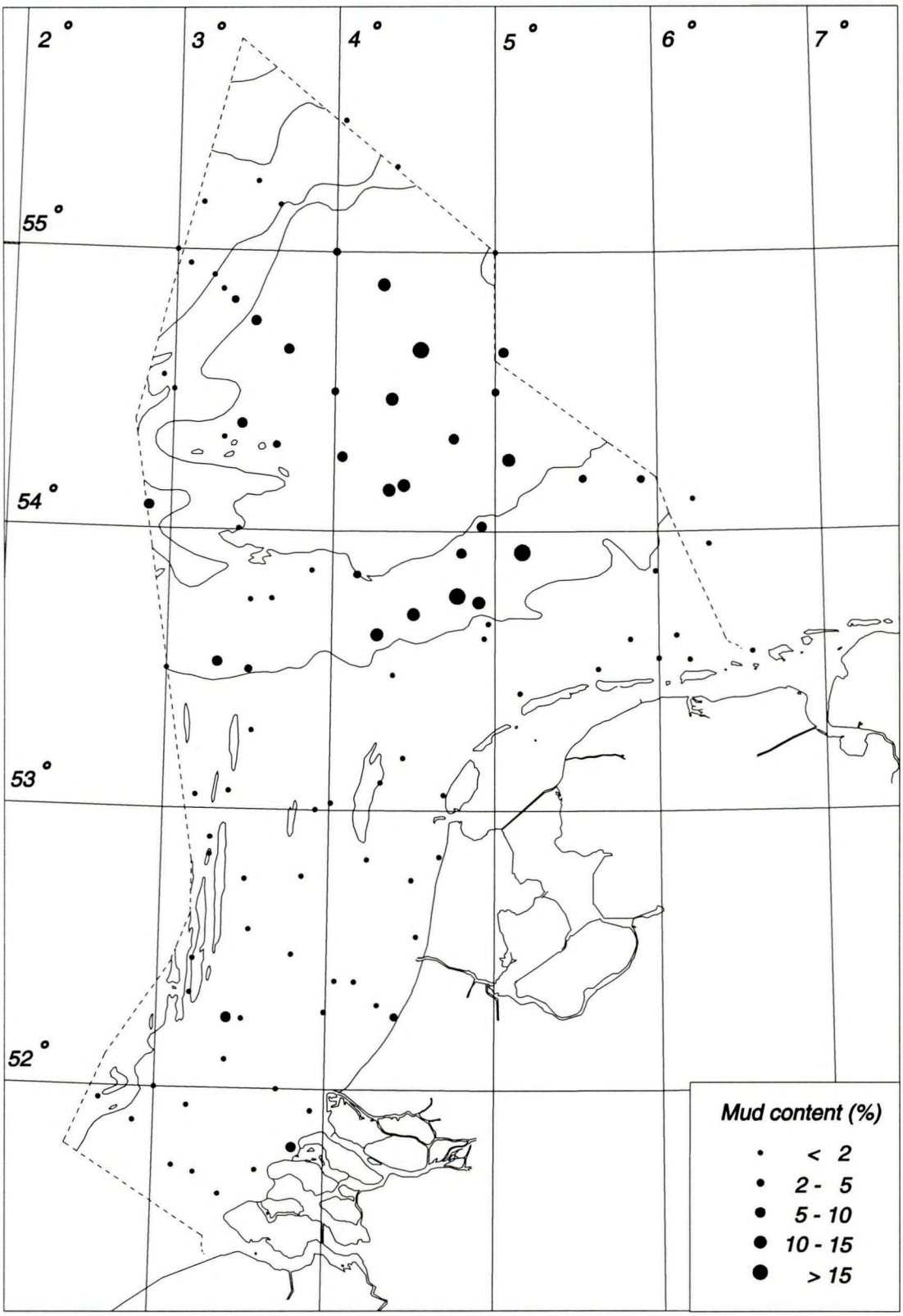


Fig. 3. The mud content (%) of the sediment in 1996.

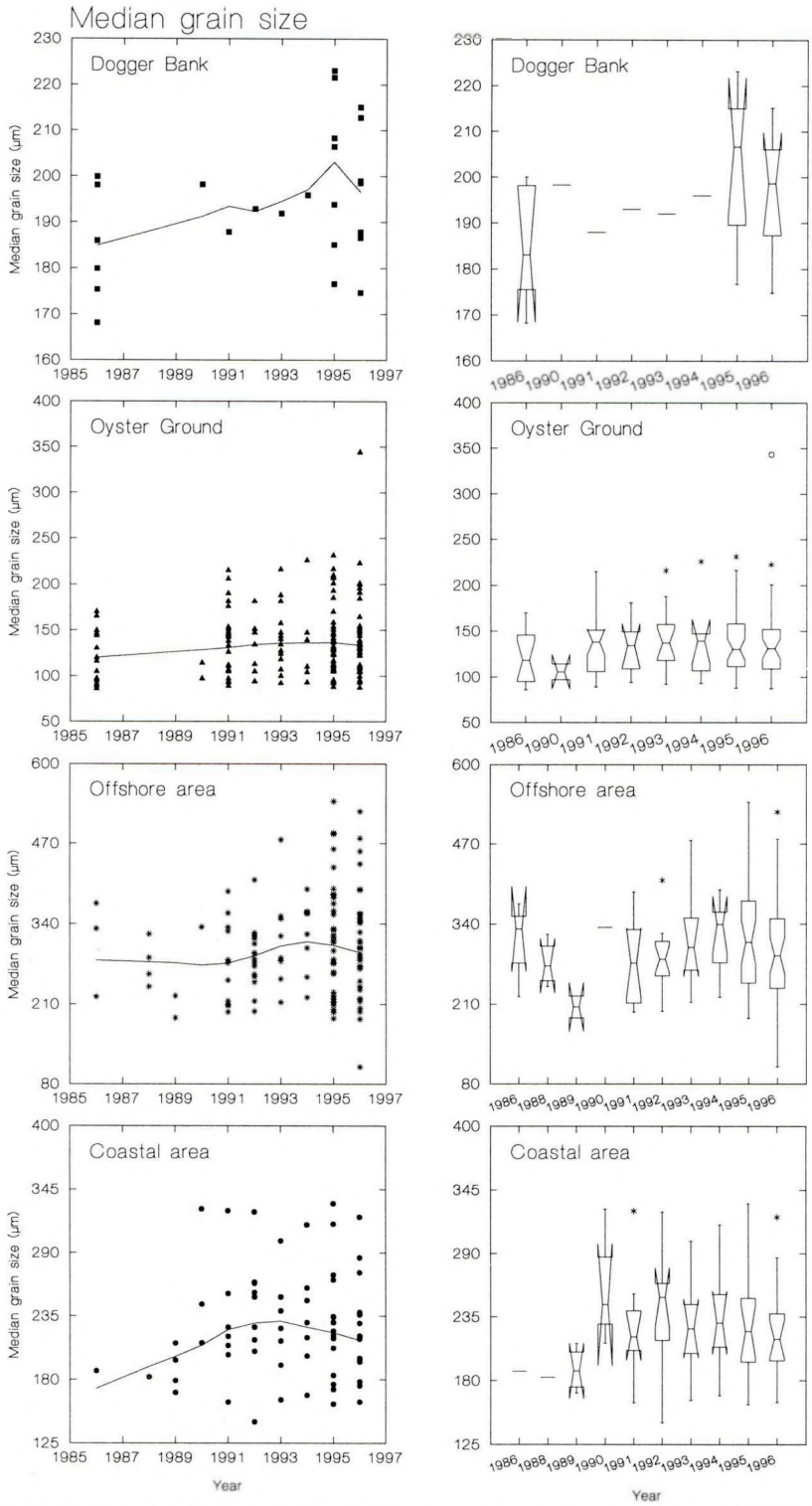


Fig. 4. Temporal patterns of the median grain size (μm) in the period 1986-1996.

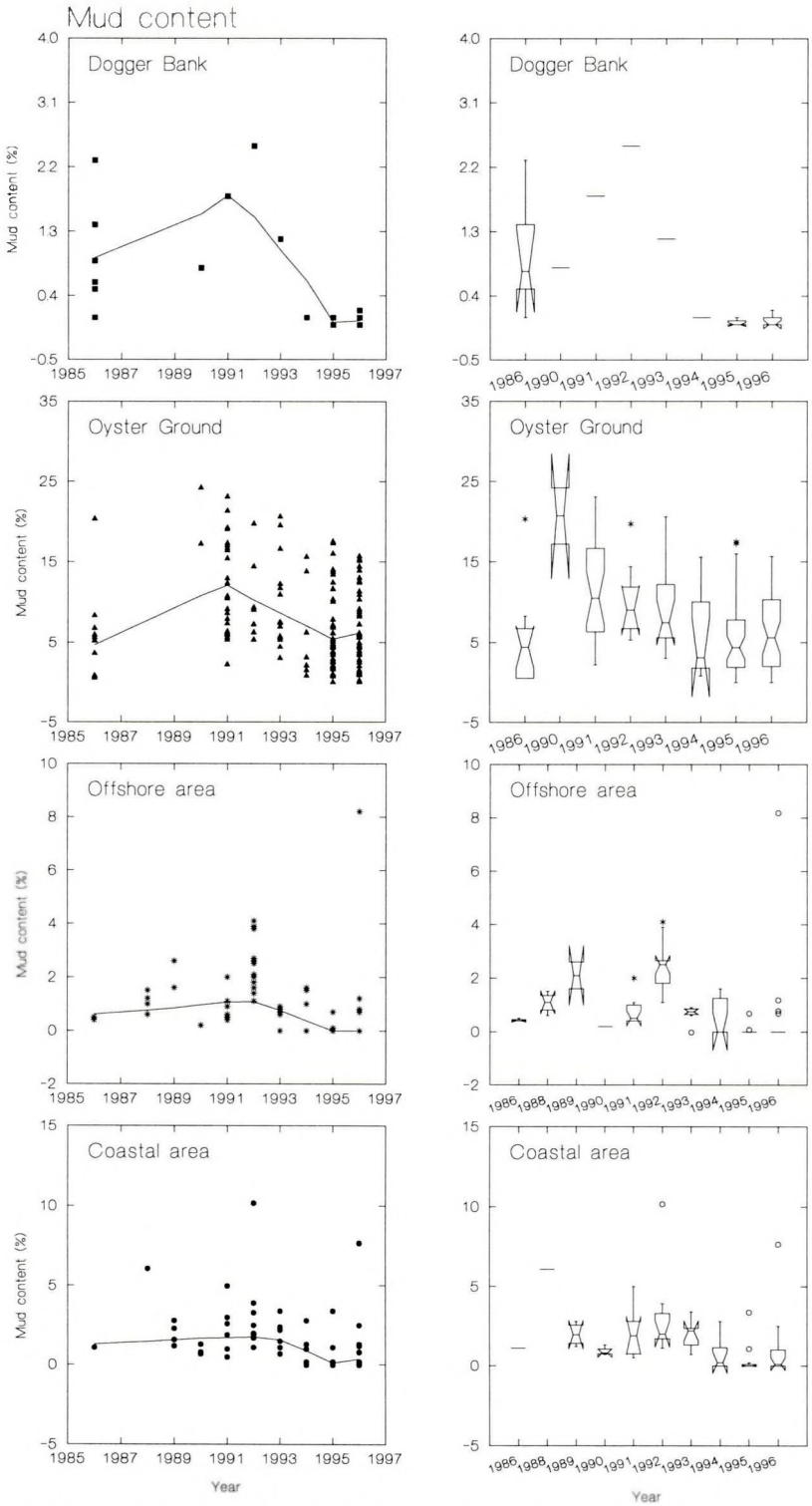
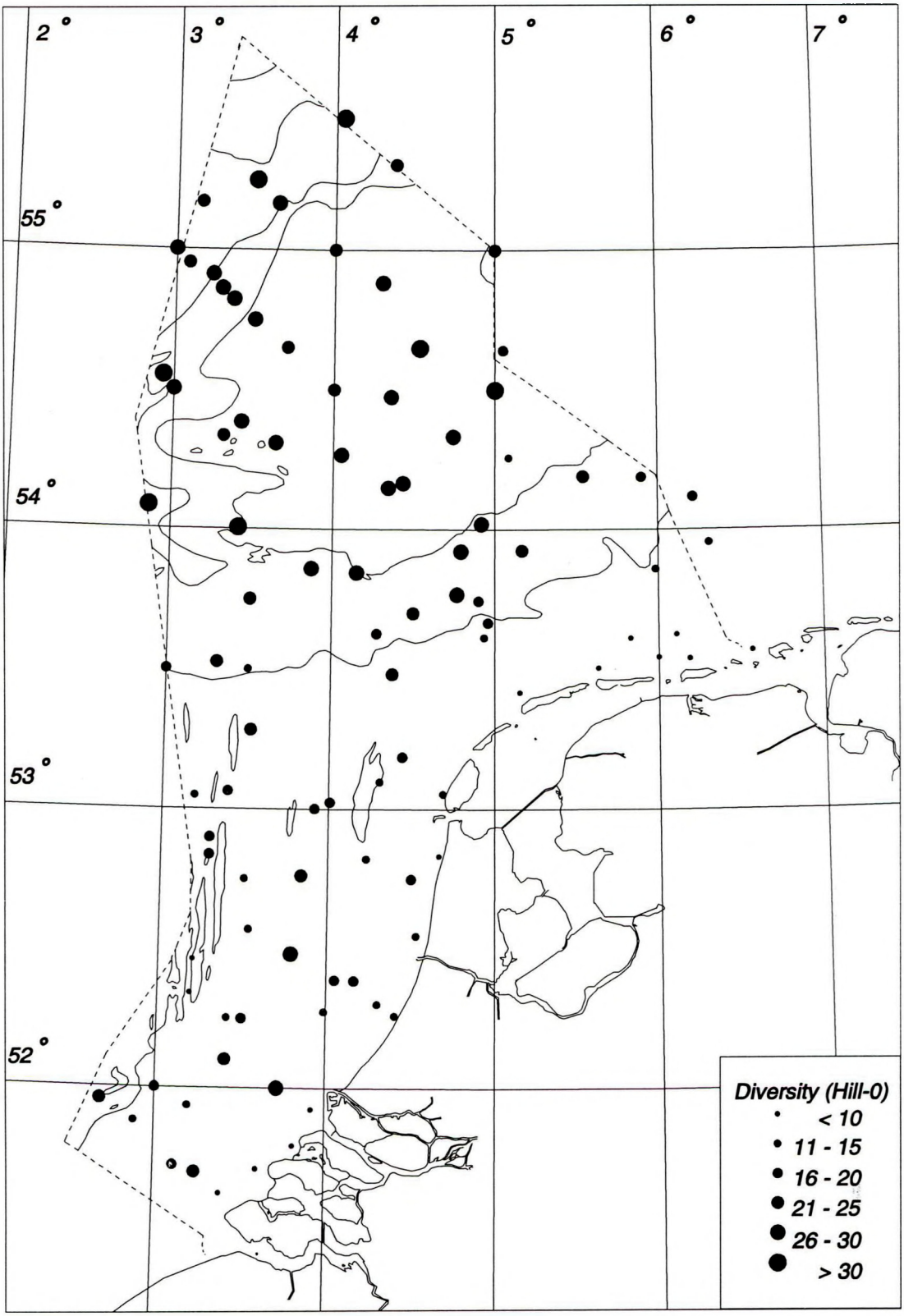


Fig. 5. Temporal patterns of the mud content (%, 16-63 μm) in the period 1986-1996.



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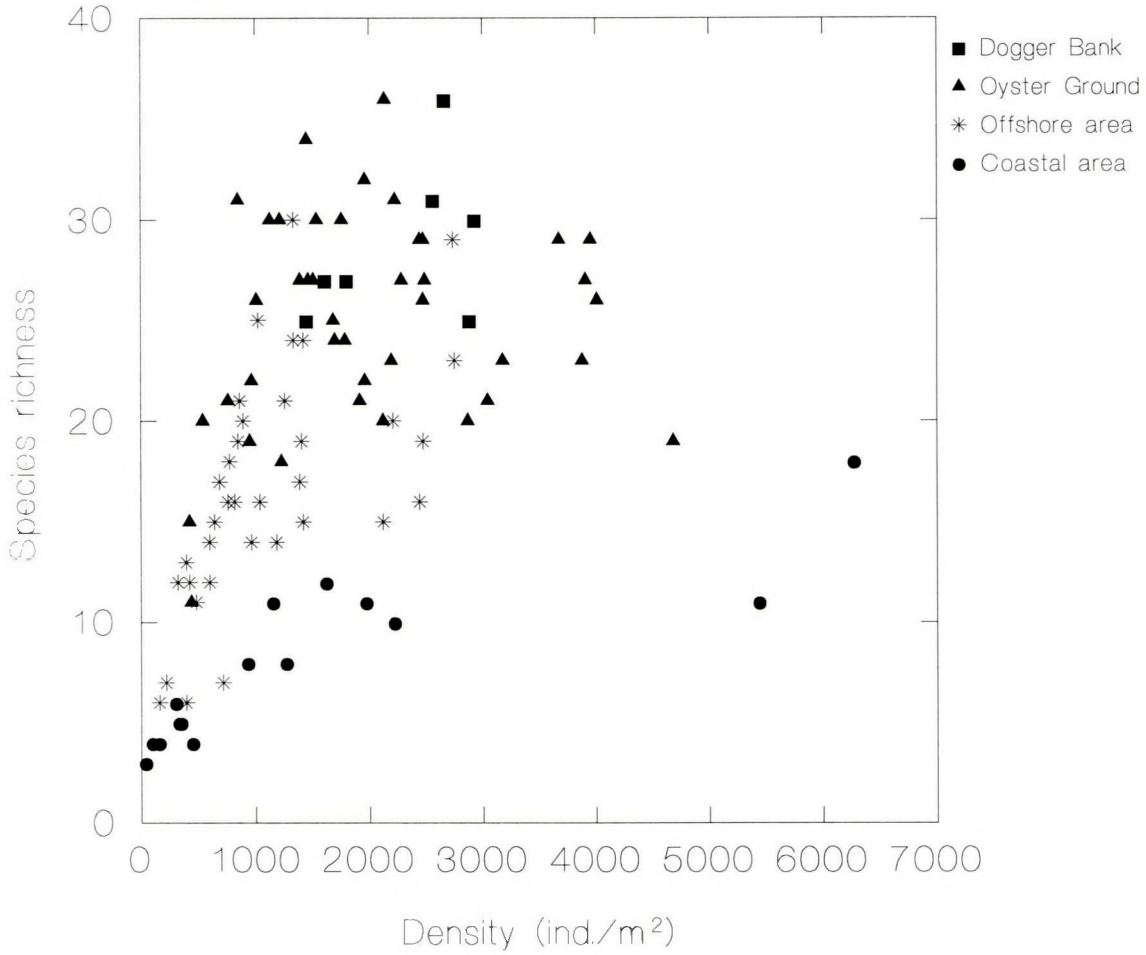

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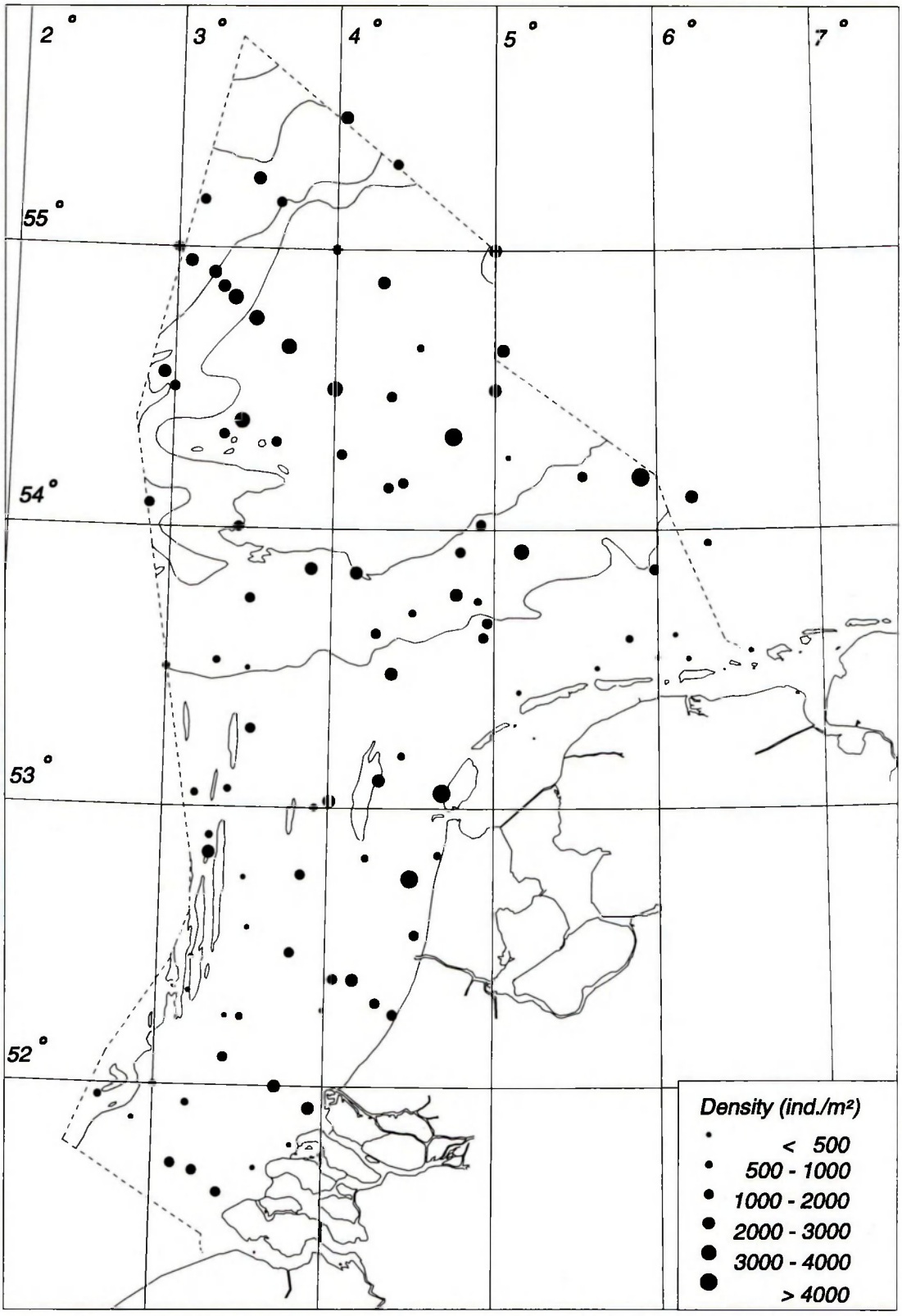

Fig. 8. The total density (ind./m²) of the macrozoobenthos in 1996.

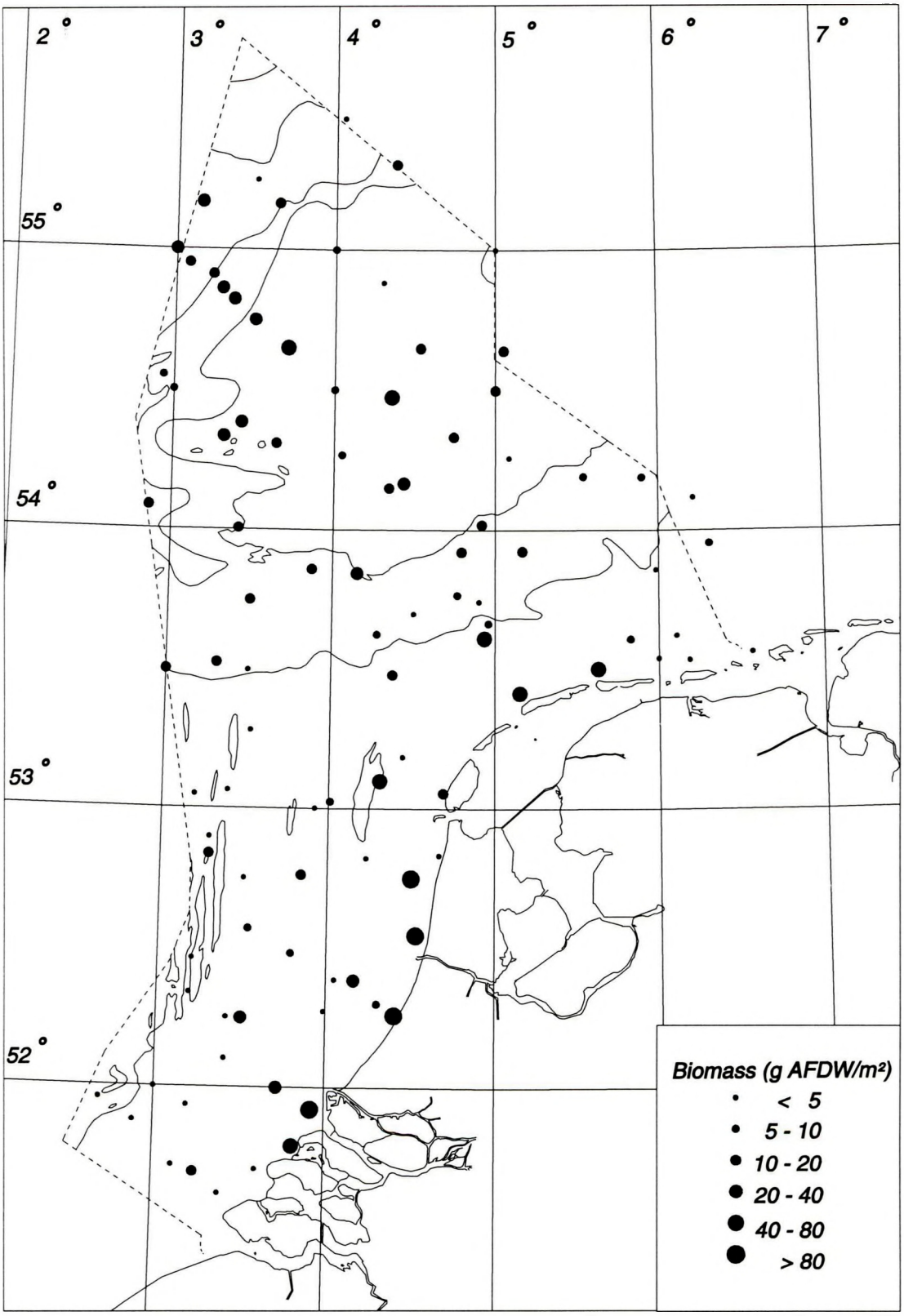

Fig. 9. The total biomass (g AFDW/m²) of the macrobenthos in 1996.

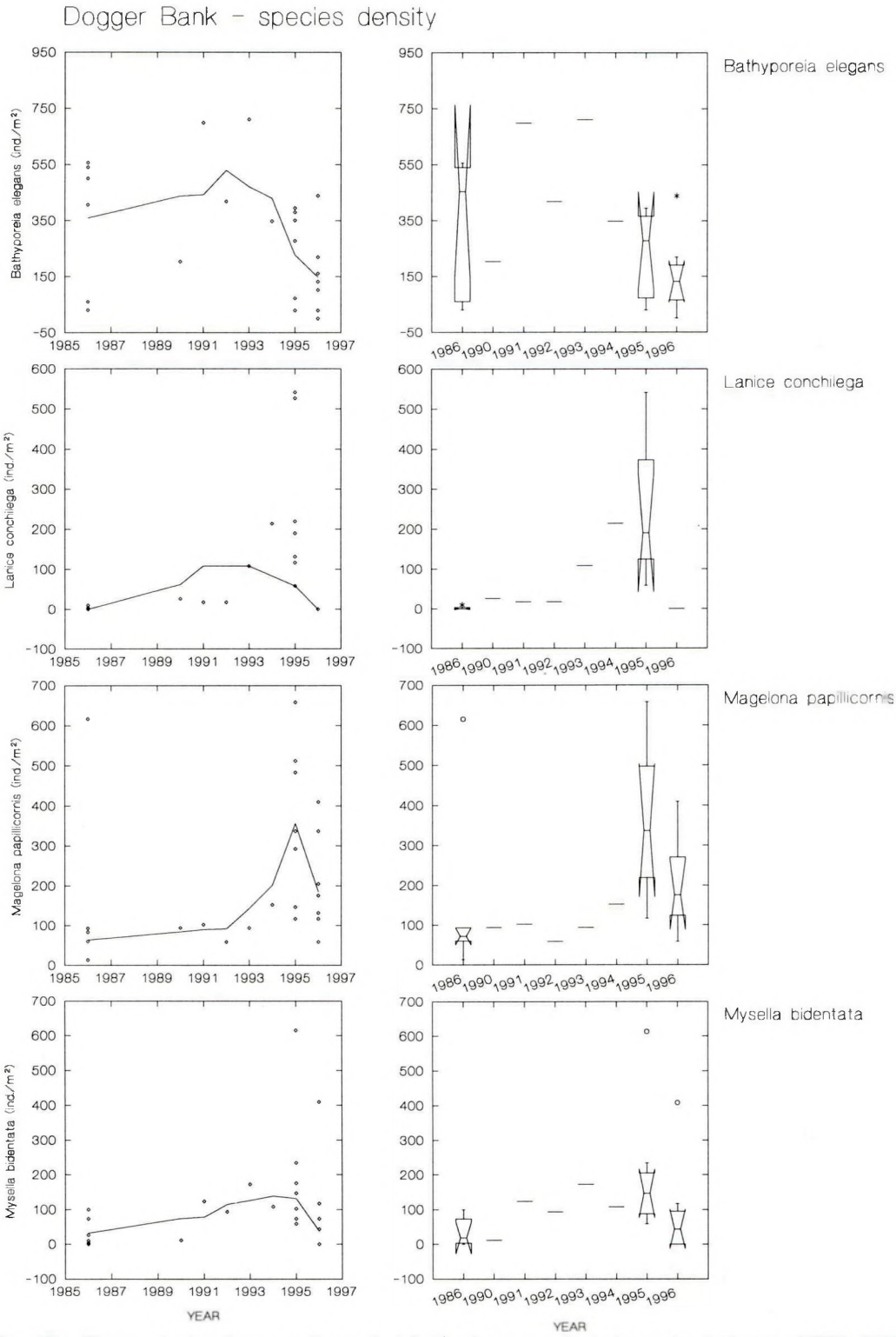

Fig. 10a. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

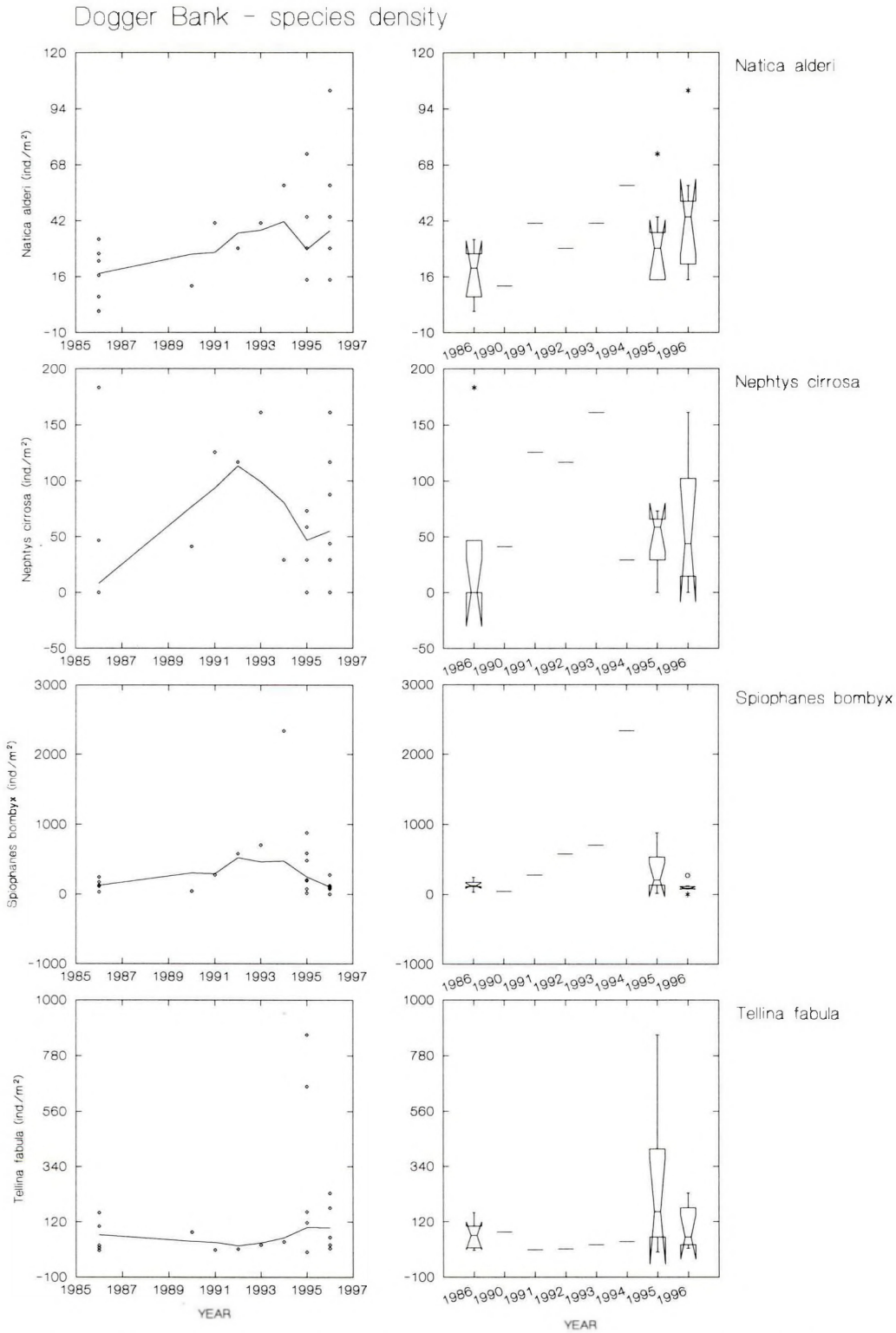

Fig. 10b. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

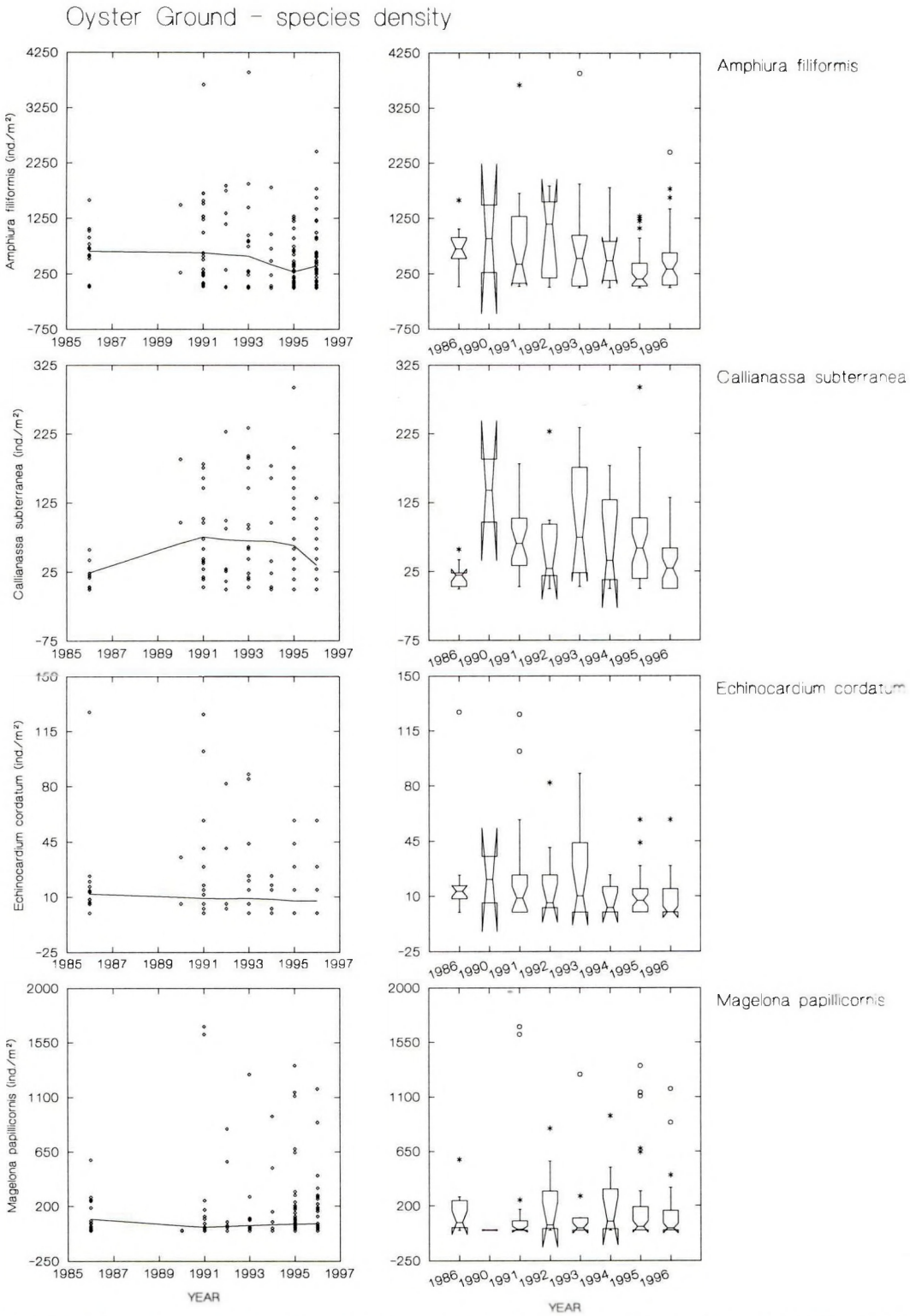

Fig. 11a. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

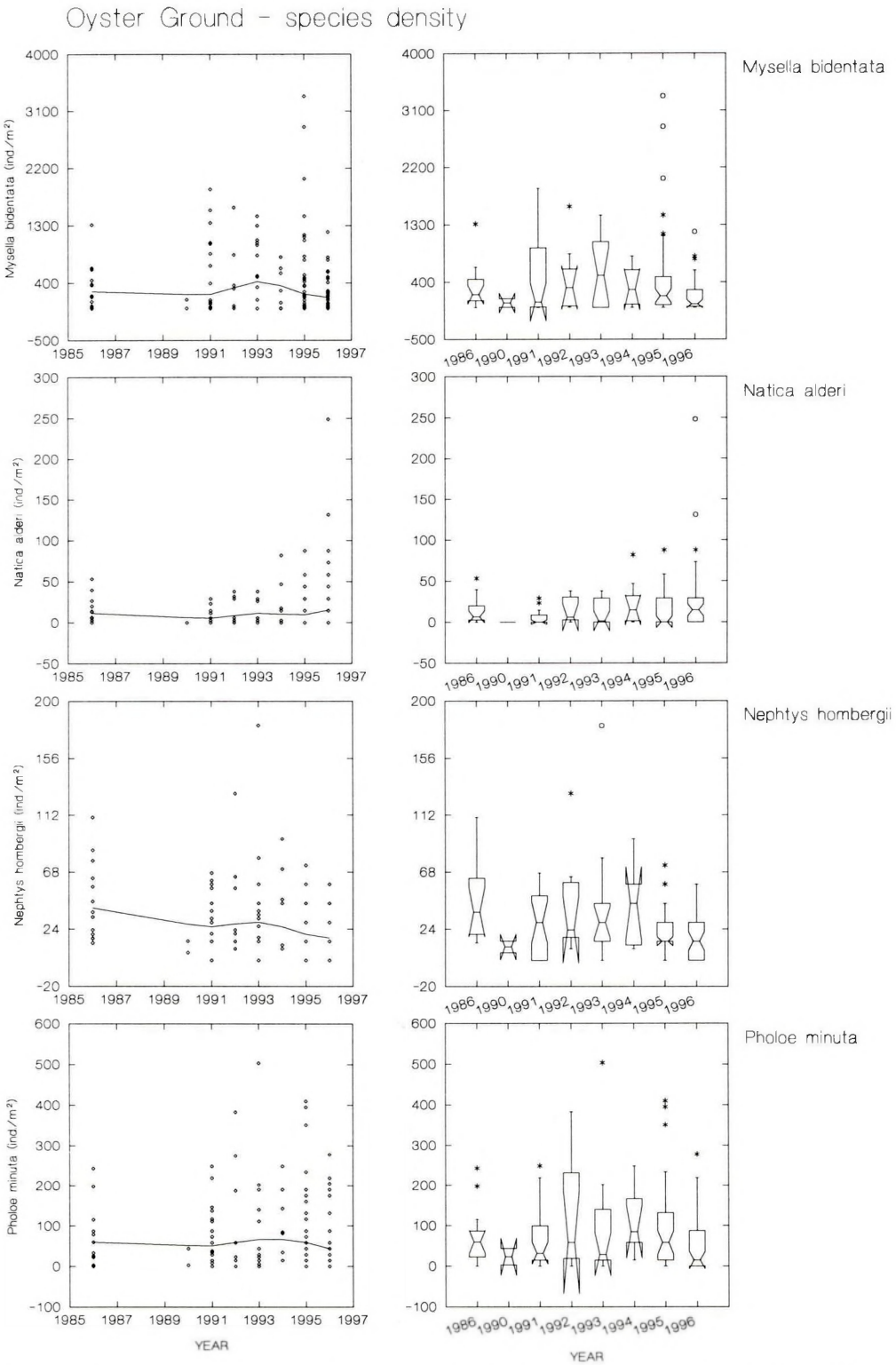

Fig. 11b. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

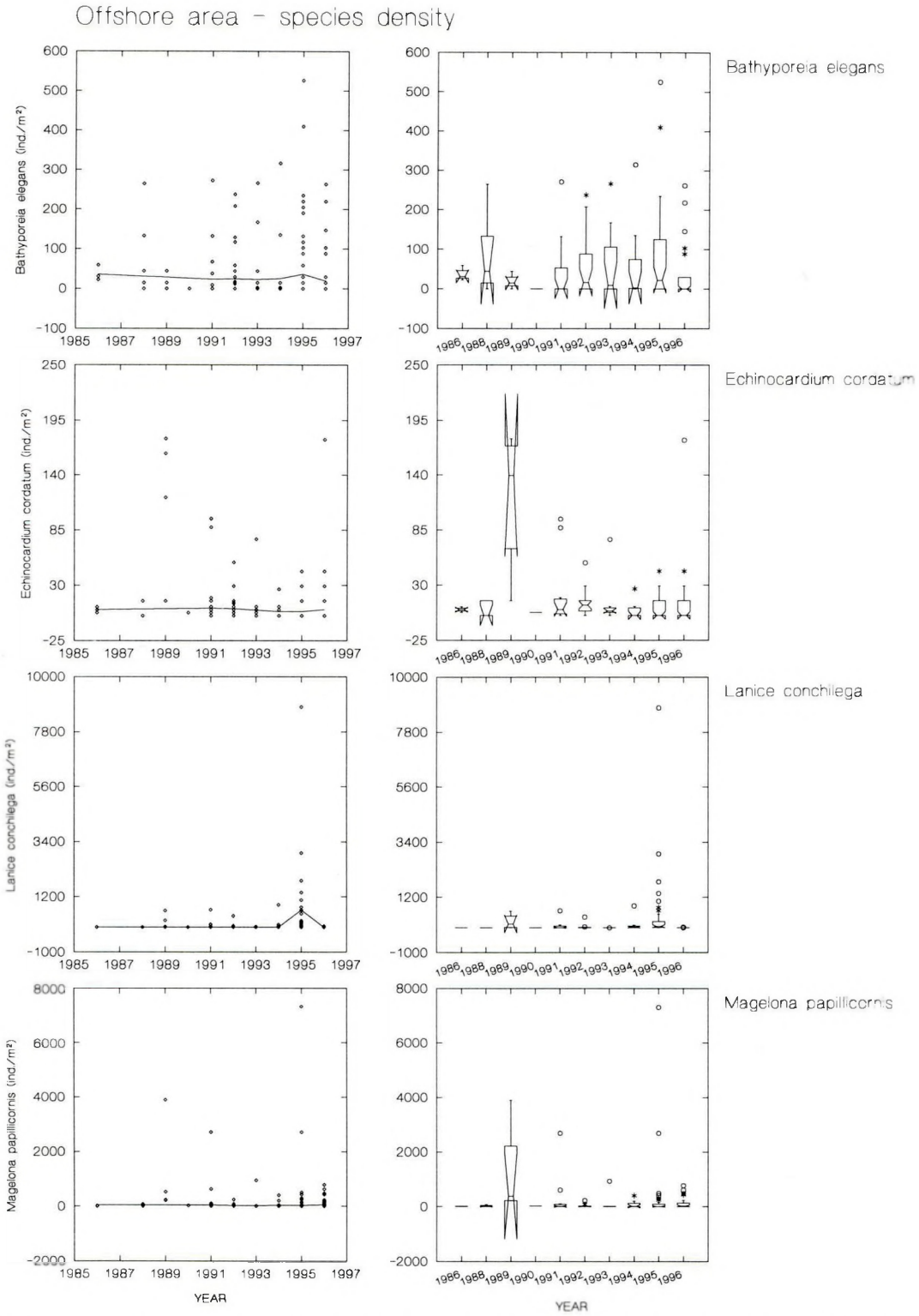

Fig. 12a. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

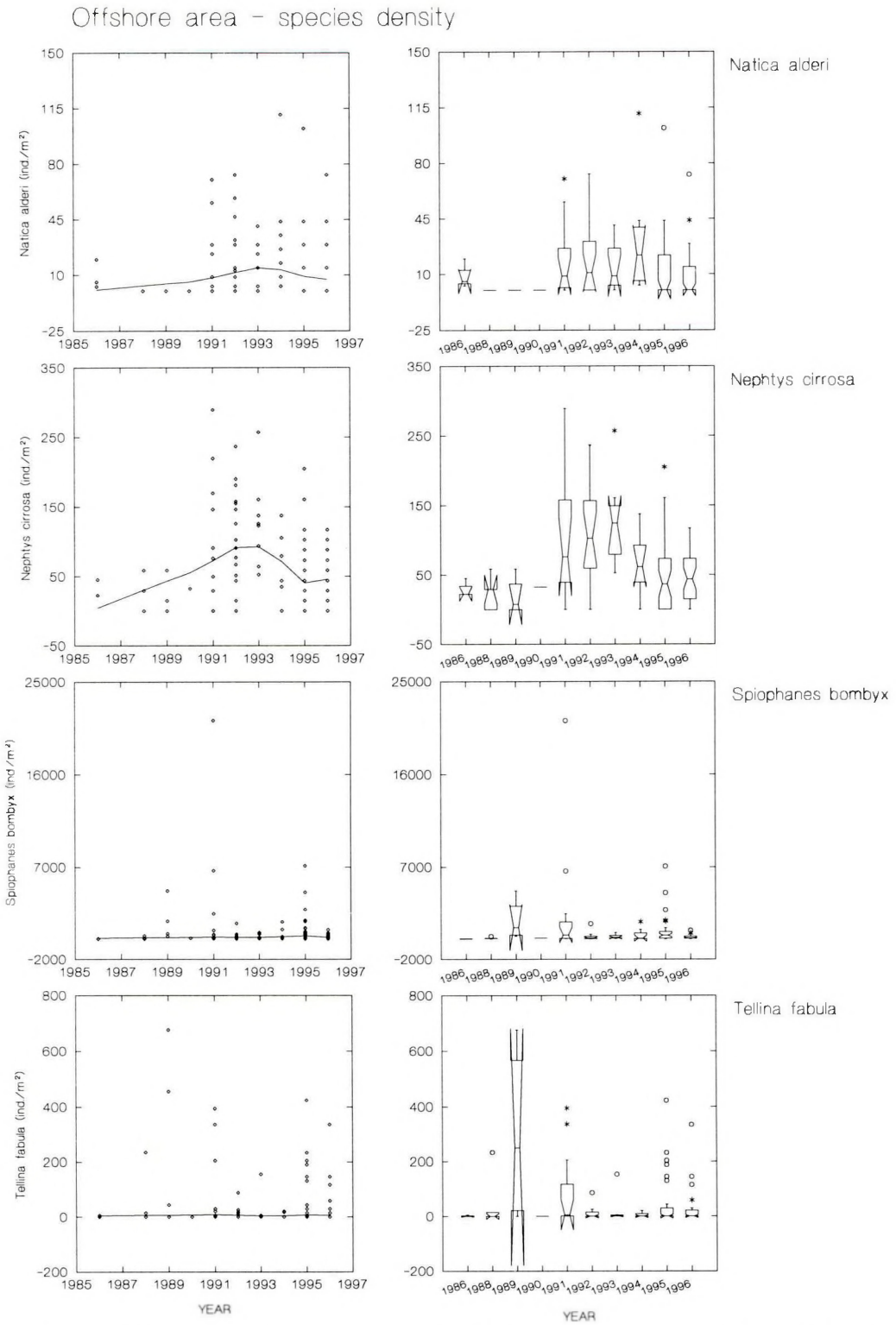

Fig. 12b. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

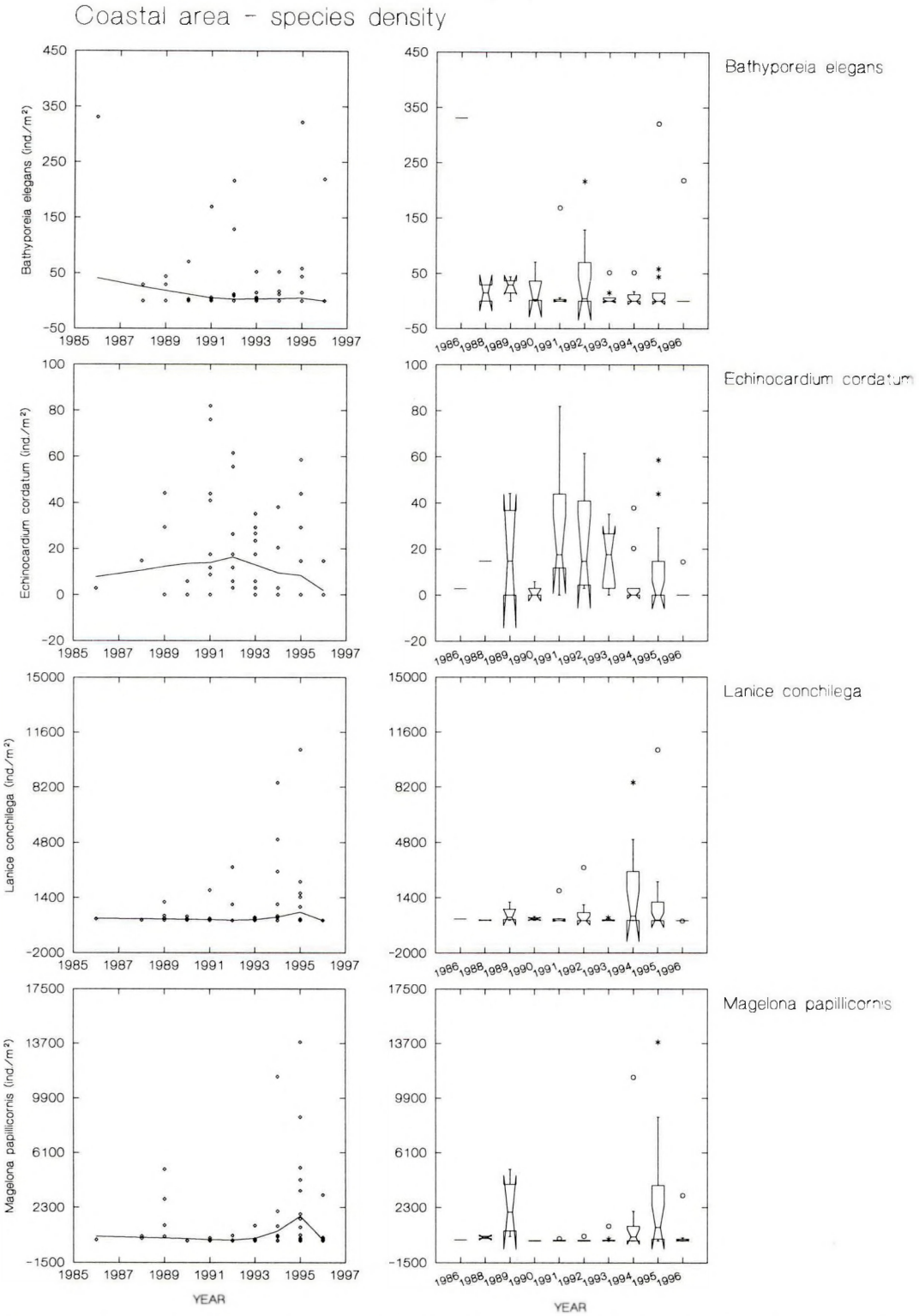

Fig. 13a. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

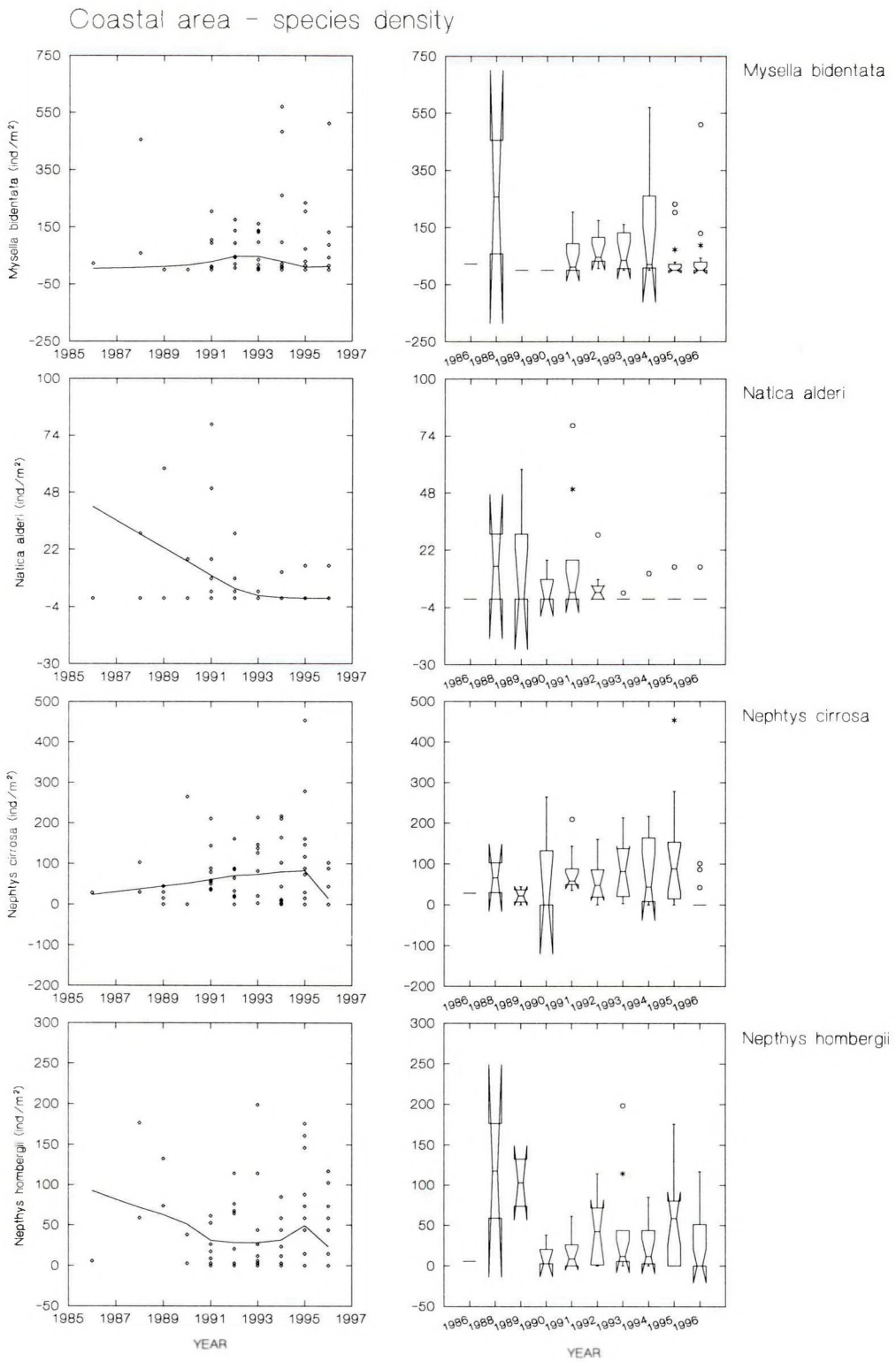

Fig. 13b. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

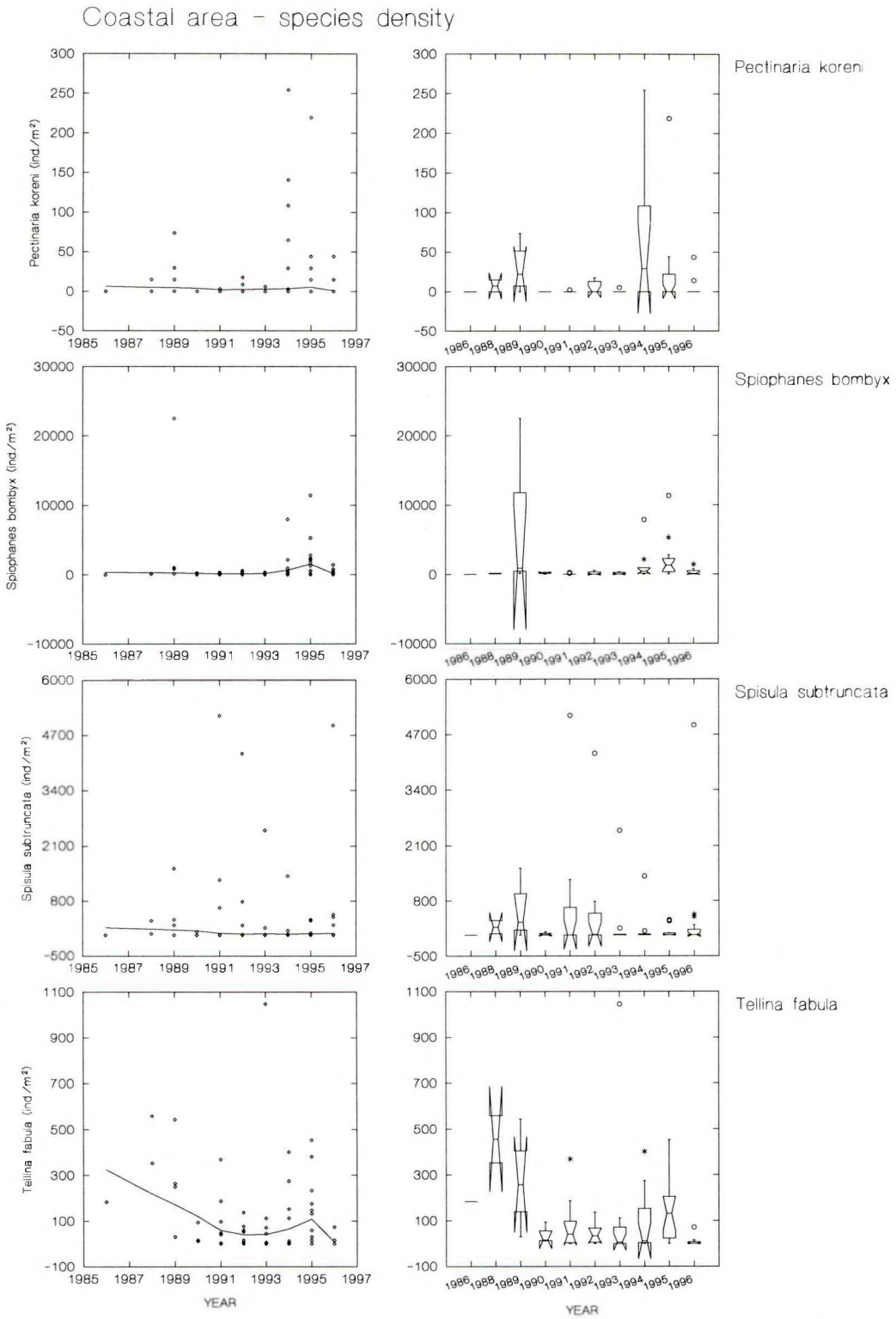

Fig. 13c. Temporal abundance patterns (ind./m²) of some selected species between 1986-1996.

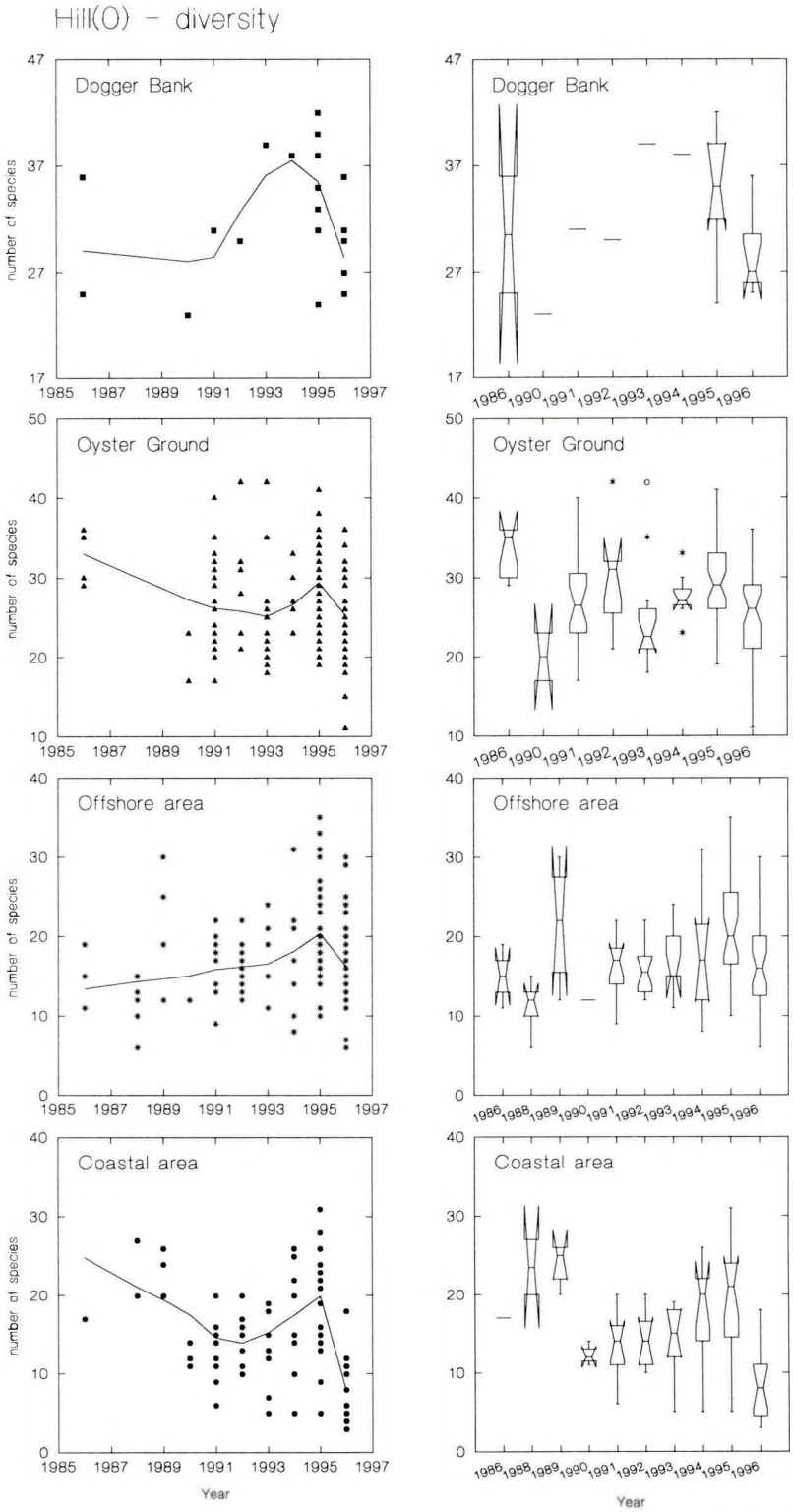

Fig. 14. Temporal patterns of the species richness (Hill-0) between 1986-1996.

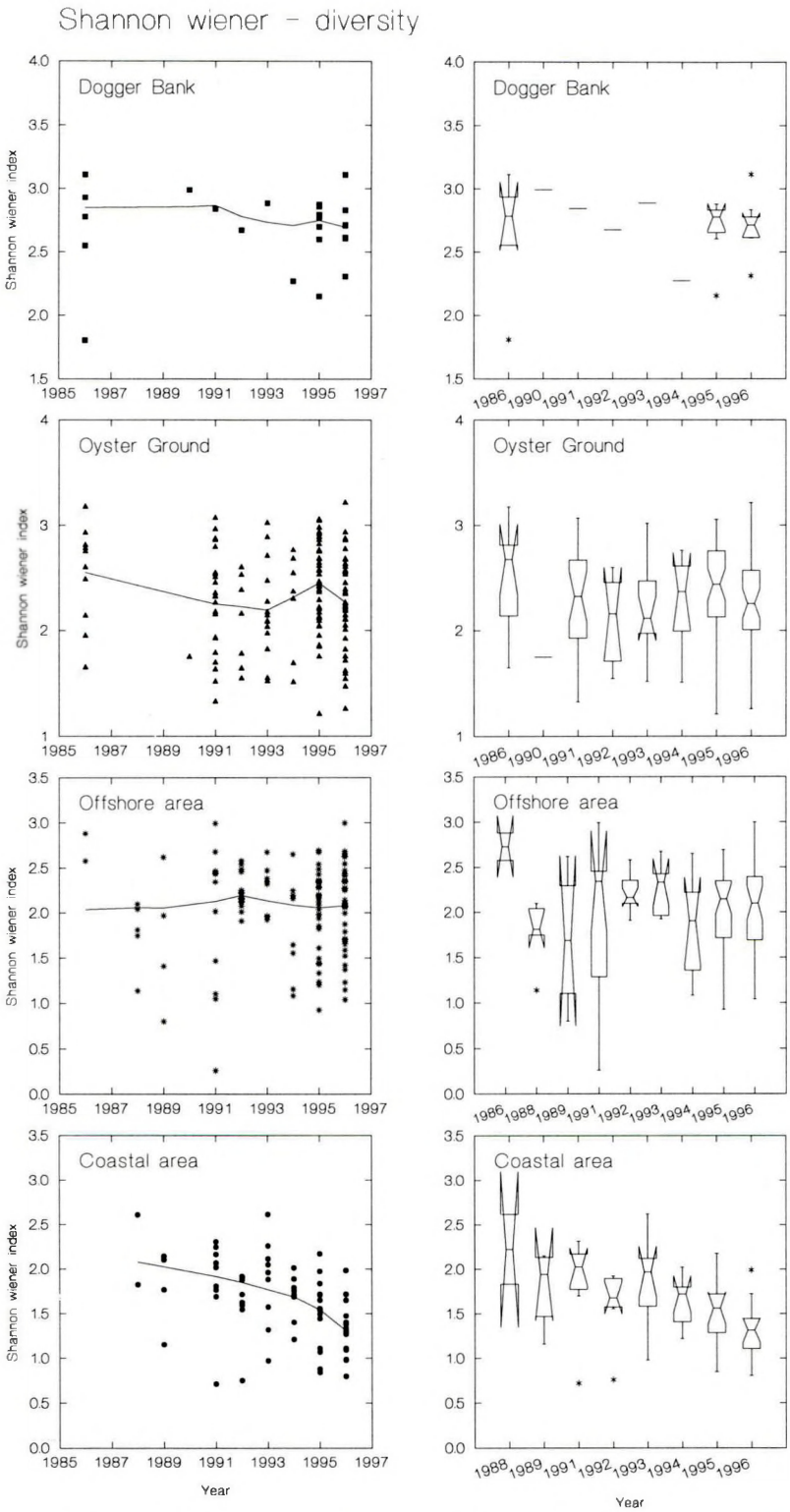

Fig. 15. Temporal patterns of the Shannon-Wiener - diversity between 1986-1996.

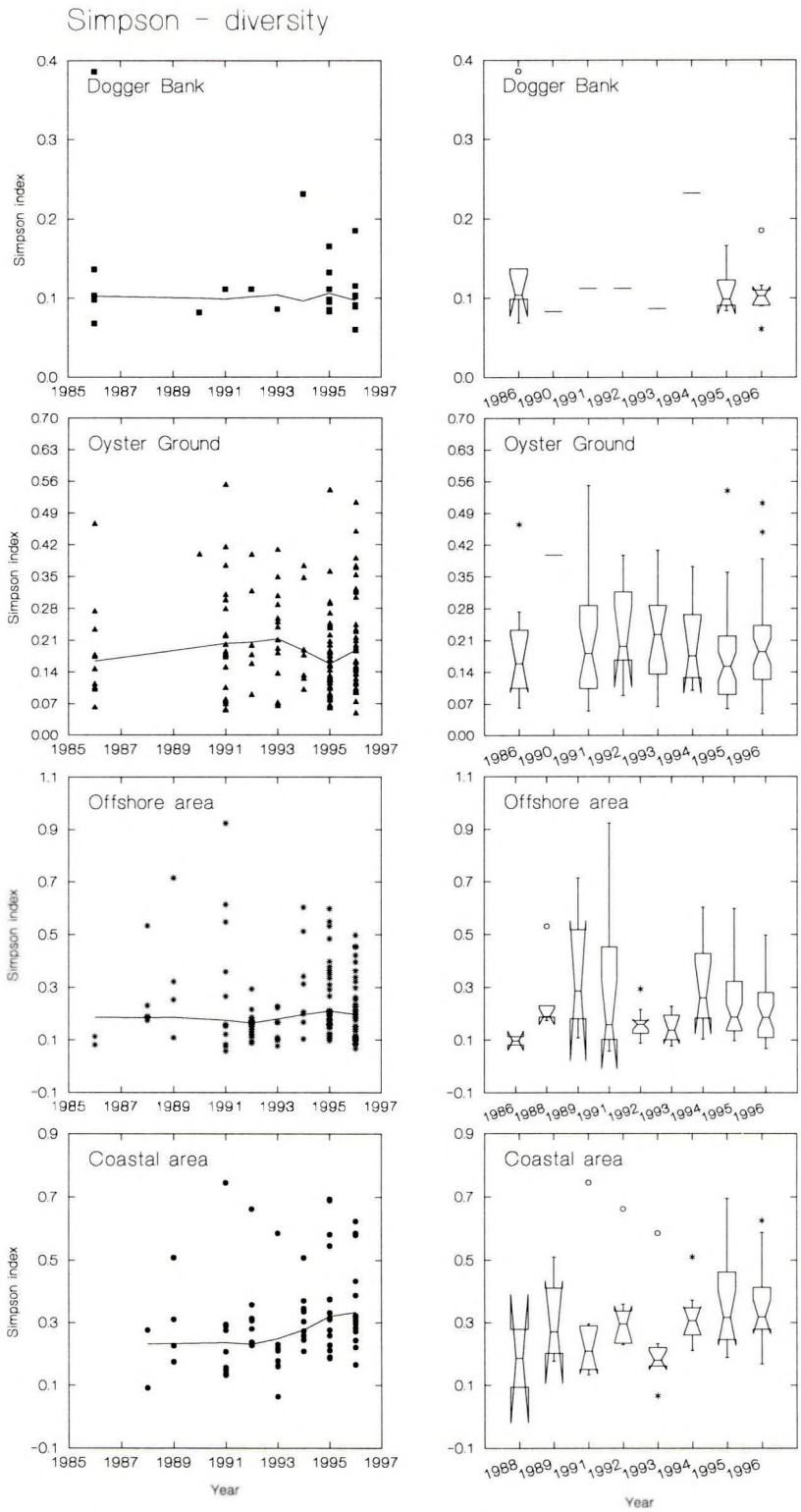

Fig. 16. Temporal patterns of the Simpson index of dominance between 1986-1996.

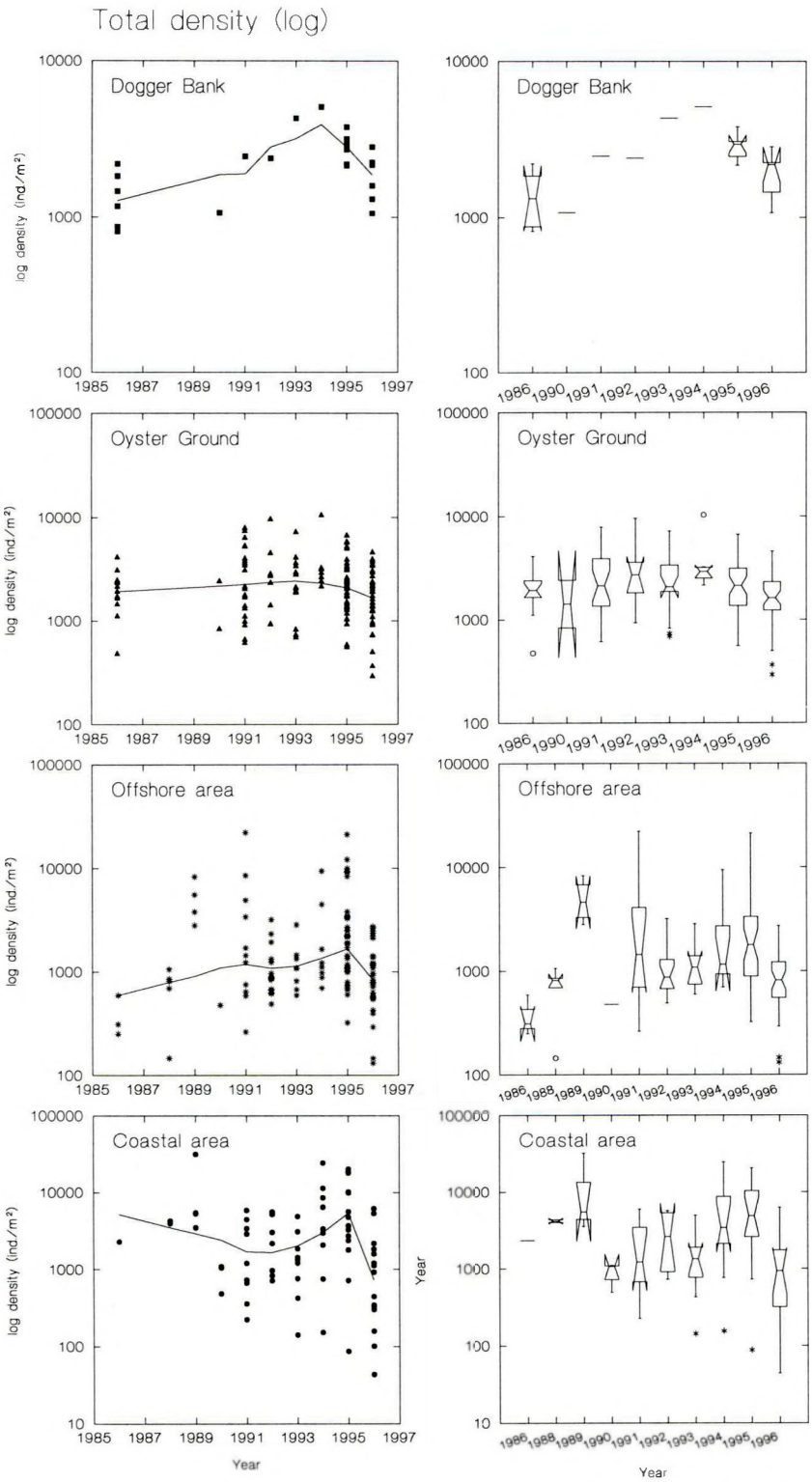

Fig. 17. Temporal patterns of the total density (ind./m²) between 1986-1996.

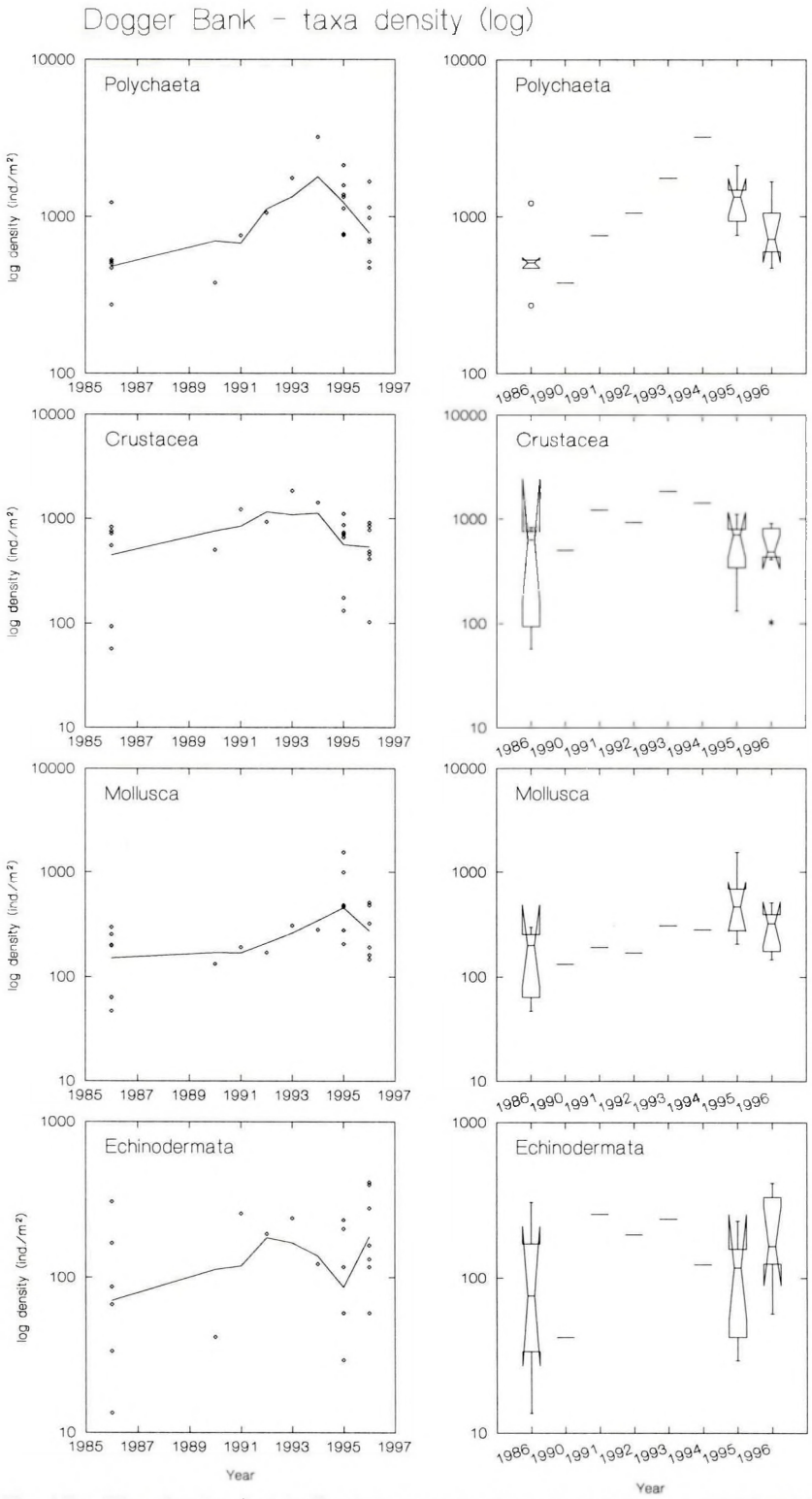

Fig. 18a. The density (ind./m²) of 4 macrobenthos taxa between 1986-1996.

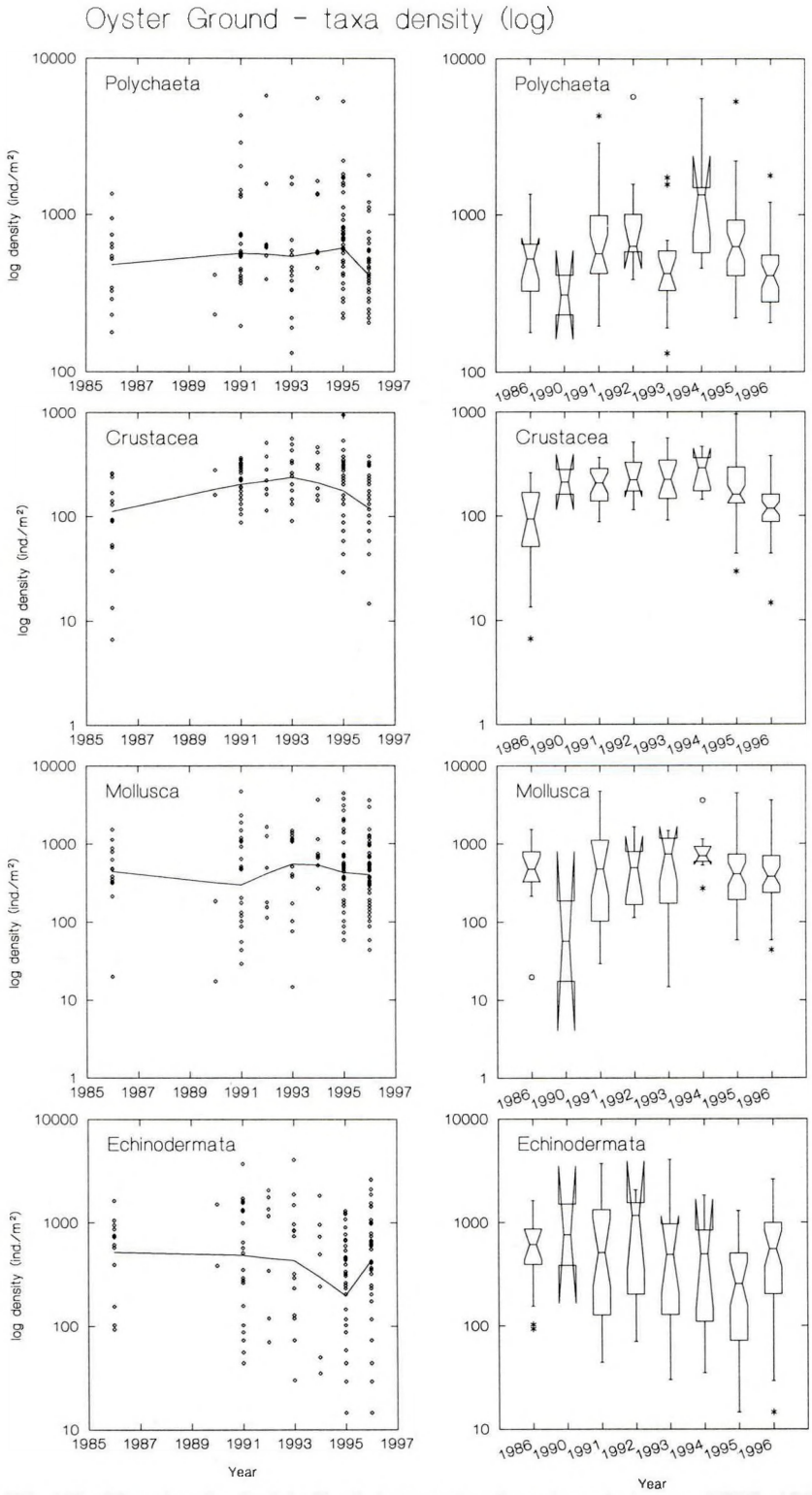

Fig. 18b. The density (ind./m²) of 4 macrobenthos taxa between 1986-1996.

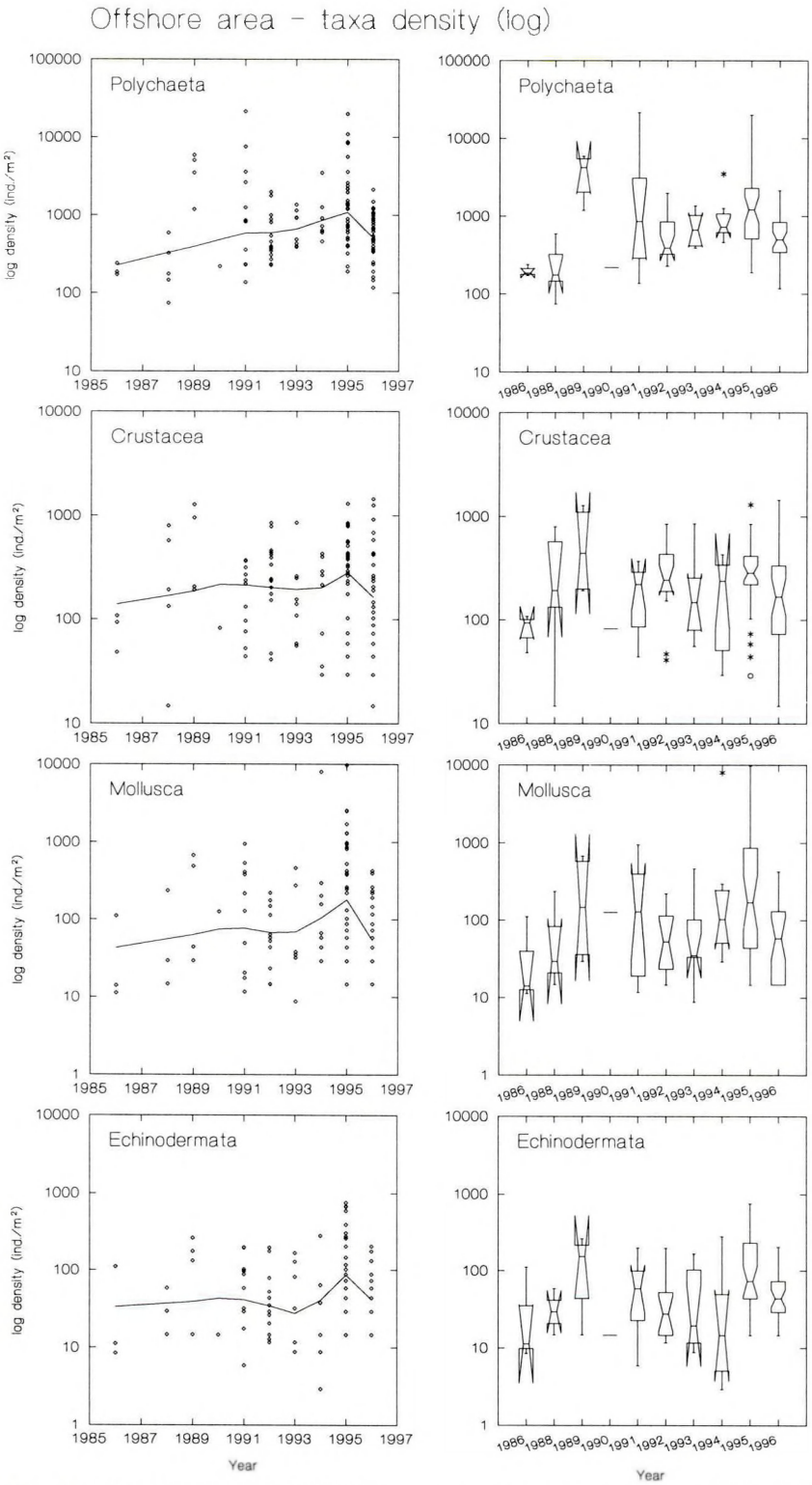

Fig. 18c. The density (ind./m²) of 4 macrobenthos taxa between 1986-1996.

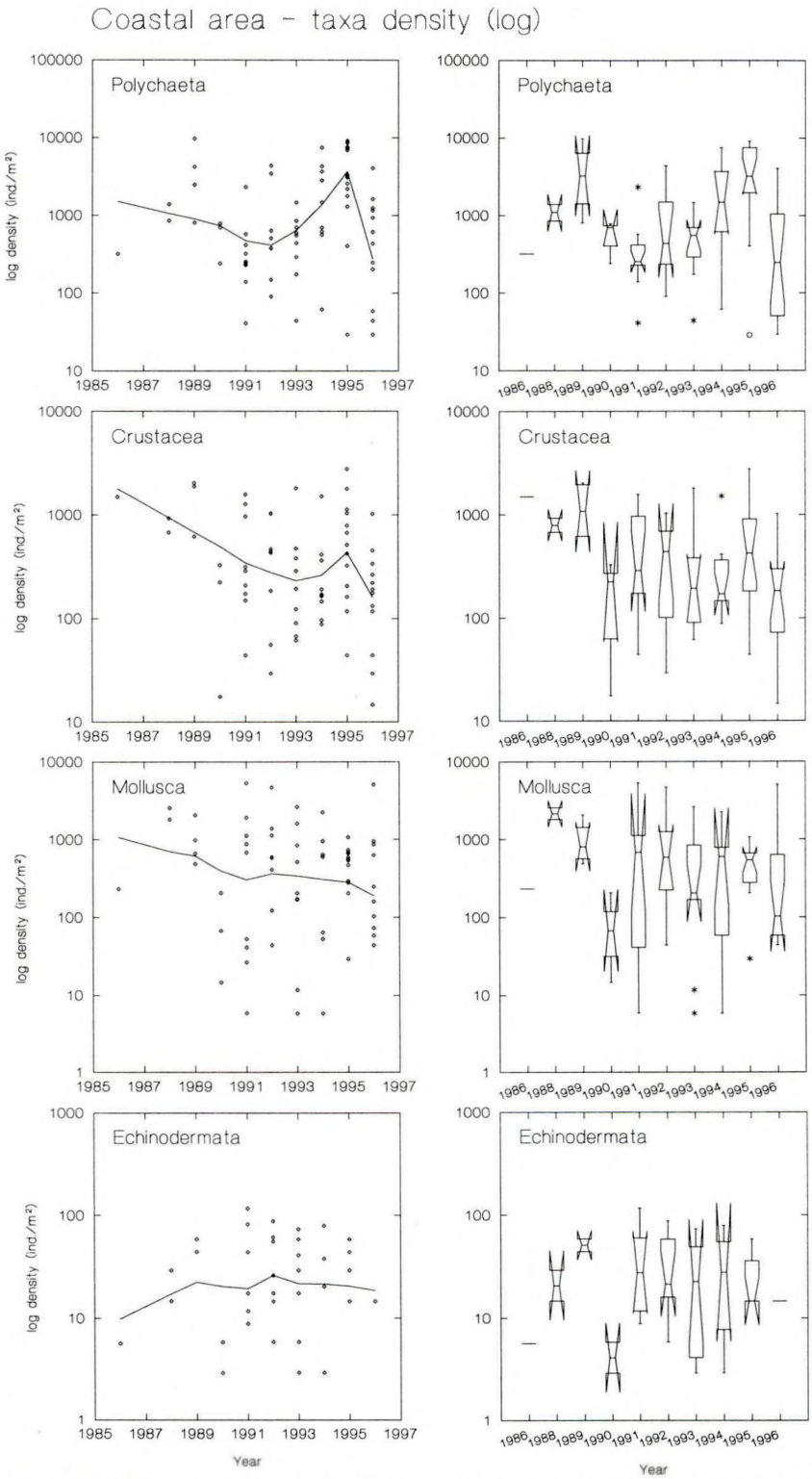

Fig. 18d. The density (ind./m²) of 4 macrobenthos taxa between 1986-1996.

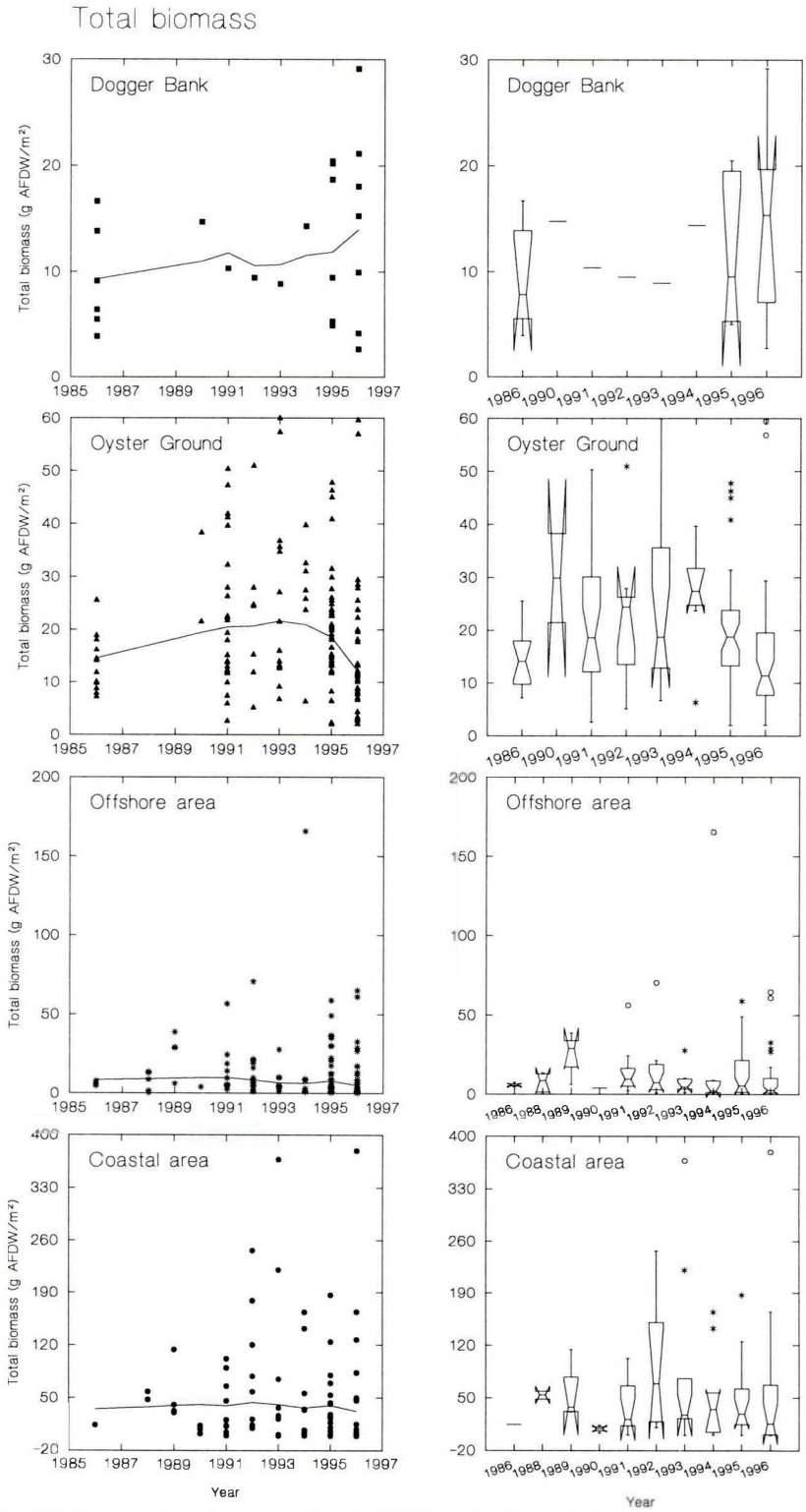

Fig. 19. Temporal patterns of the total biomass (g AFDW/m²) between 1986-1996.

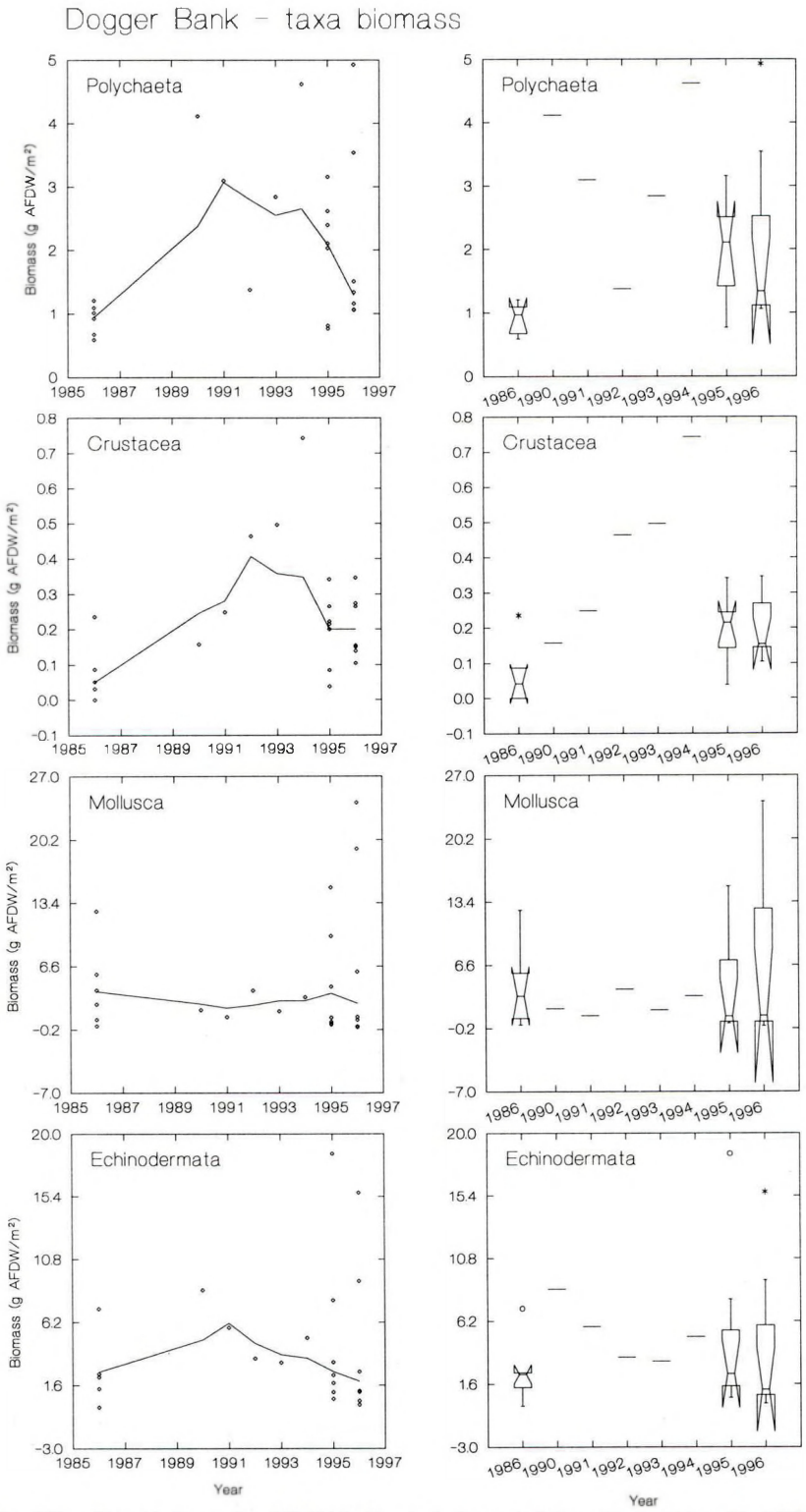

Fig. 20a. The biomass (g AFDW/m²) of 4 macrobenthos taxa between 1986-1996.

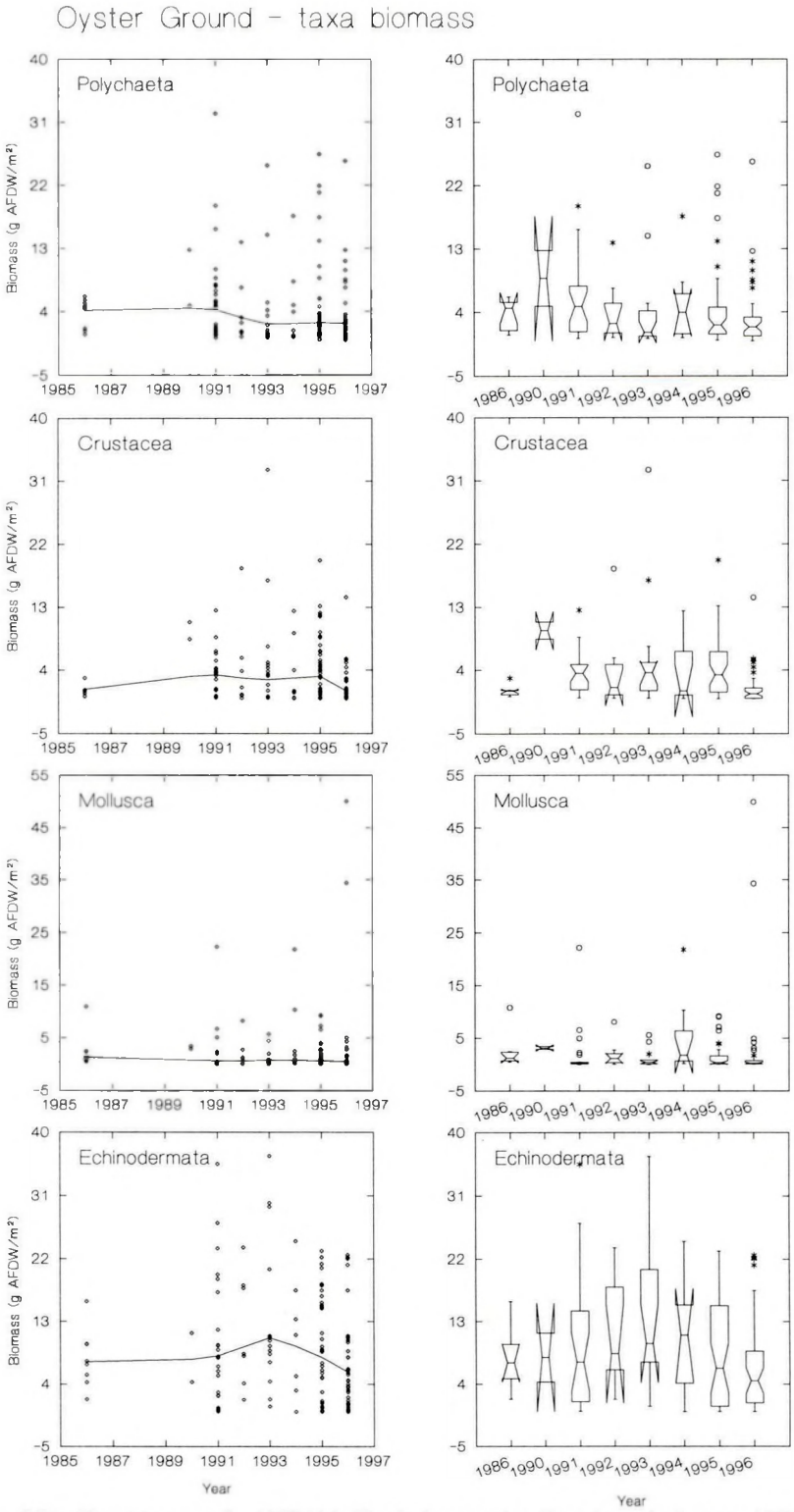

Fig. 20b. The biomass (g AFDW/m²) of 4 macrobenthos taxa between 1986-1996.

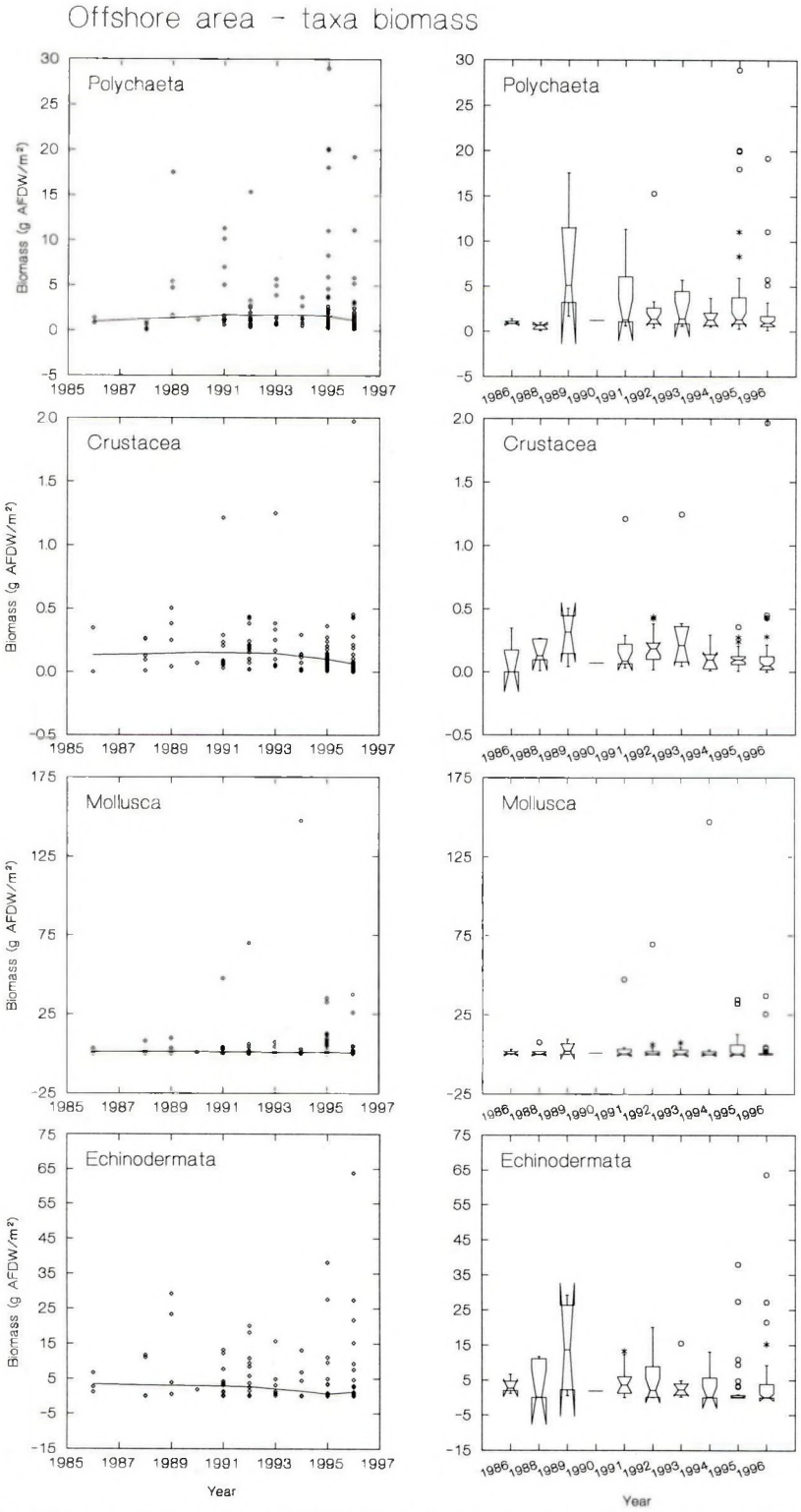

Fig. 20c. The biomass (g AFDW/m²) of 4 macrobenthos taxa between 1986-1996.

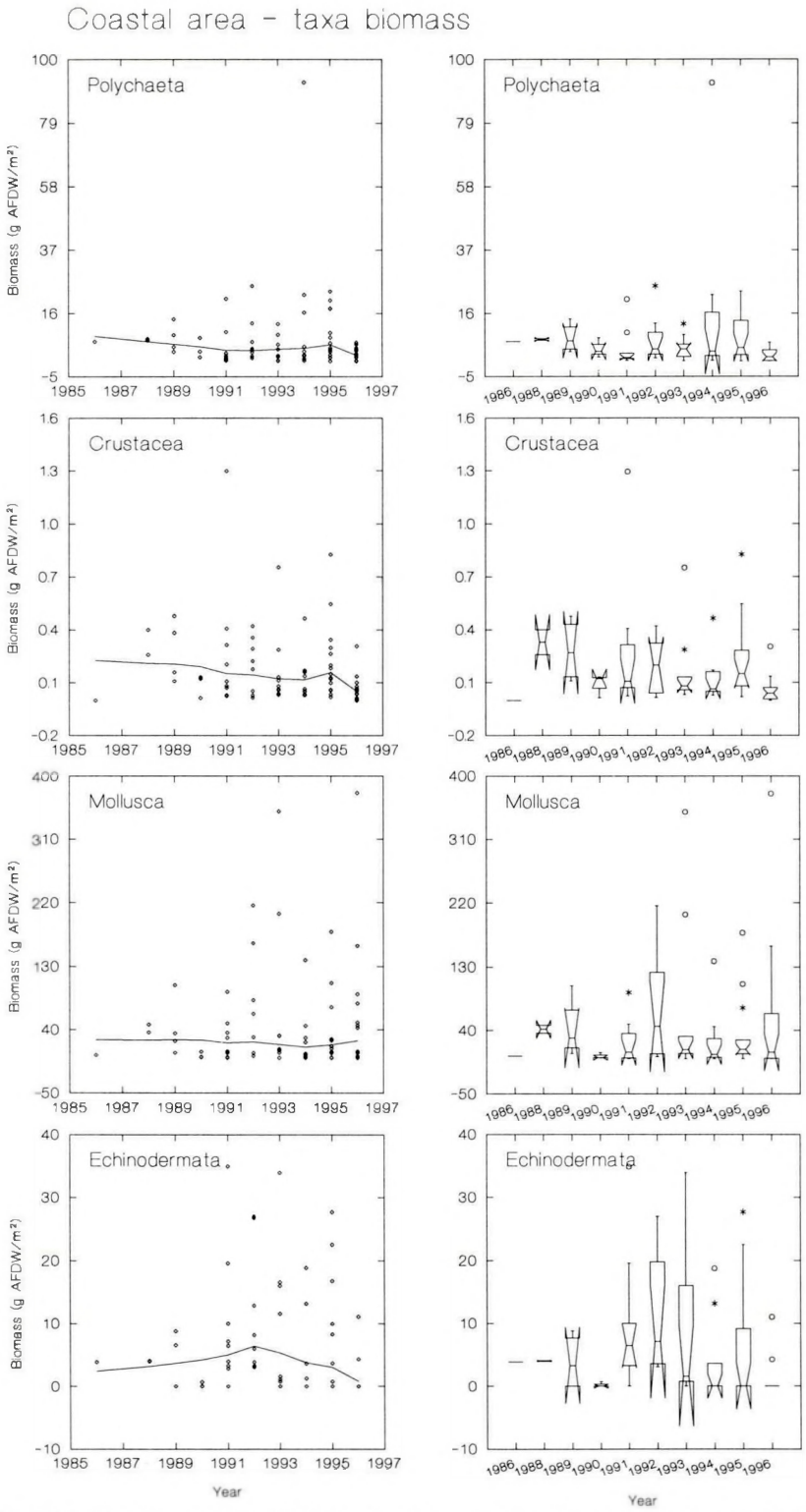

Fig. 20d. The biomass (g AFDW/m²) of 4 macrobenthos taxa between 1986-1996.

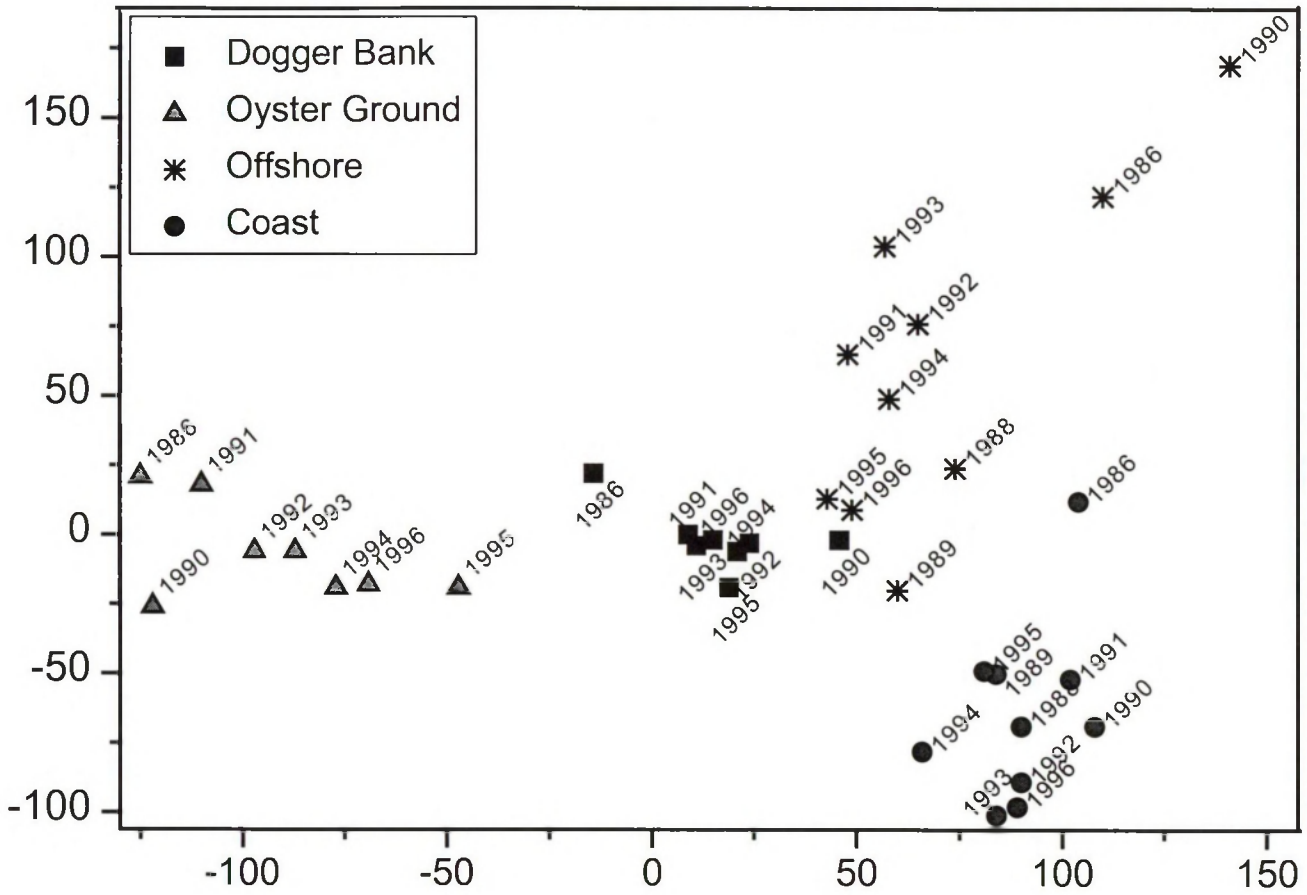

Fig. 21. The DECORANA ordination of the combined datasets from 1986 (ICES-NSBS), 1988-1993 (MILZON- project) and 1990-1996 (Biomonitoring North Sea, this report).

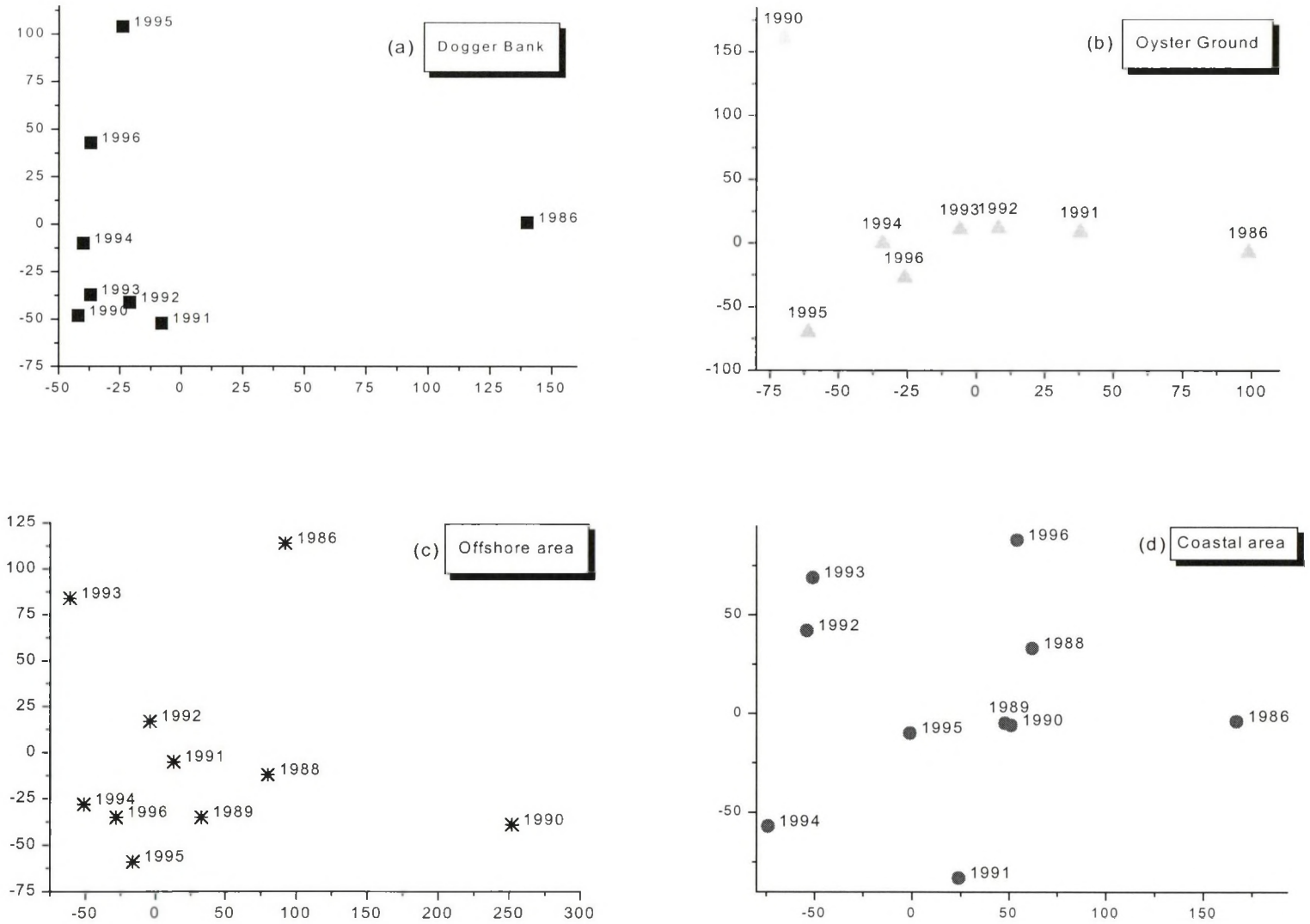

Fig. 22. The DECORANA ordination of the 4 distinguished areas; the southern part of the Dogger Bank (a), the Oyster Ground (b), the Offshore area (c) and the Coastal area (d) using the data of the period 1986 - 1996.

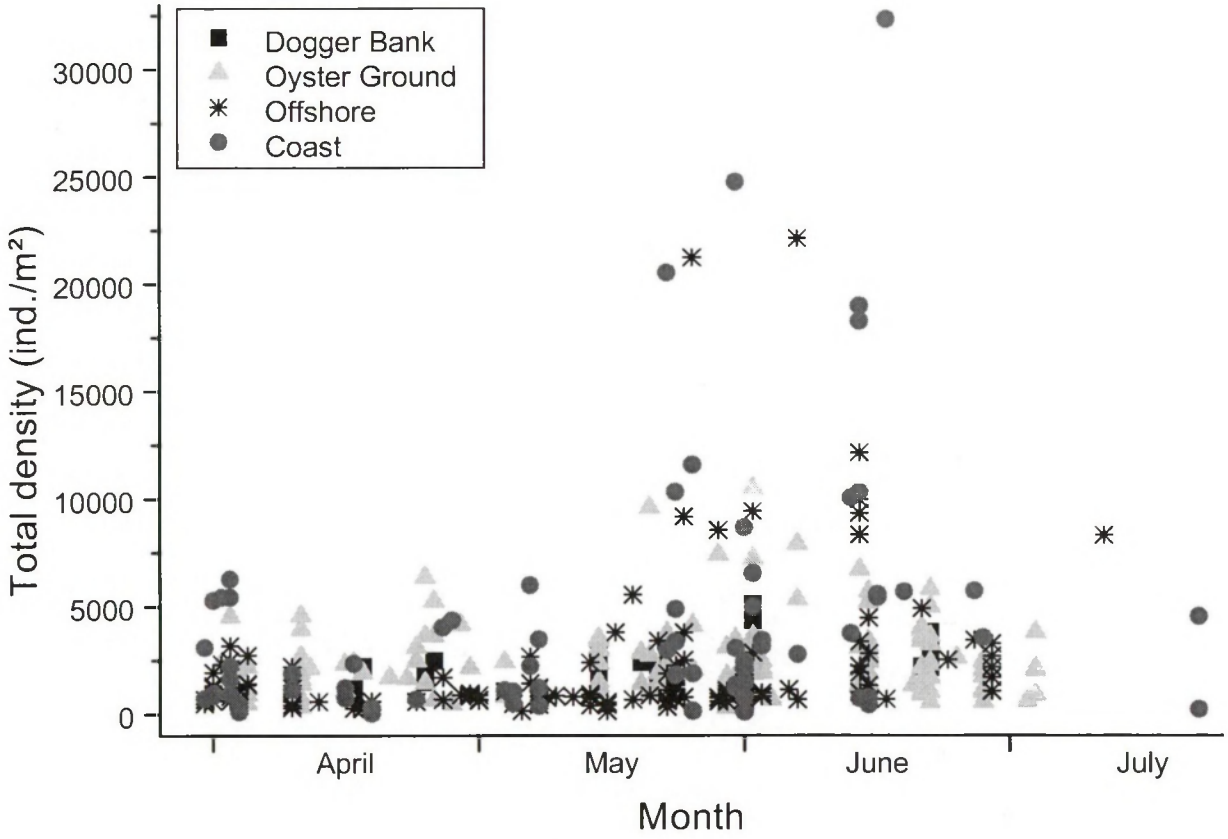

Fig. 23. The correlation between the total density (ind./m^2) and the time of sampling in the period 1986-1996.

Table1a. Overview of the geographical position, date, depth and sediment composition in 1996.

Station (name)			Geographical position				Sediment	
new		previously	E	N	Date	Depth (m)	Med. Gr. Size (μm)	Mud (%)
DOG	1	Dog E5	04°03'00"	55°28'18"	21/05/96	29.9	215.2	0.0
DOG	2	Dog D3	03°38'30"	55°10'00"	21/05/96	36.2	186.7	0.1
DOG	3	ICES 97/SM38	03°30'00"	55°15'00"	21/05/96	27.9	199.1	0.0
DOG	4	TS 235	03°09'26"	55°10'14"	21/05/96	30.1	198.7	0.0
DOG	5	Dog C5	03°14'00"	54°54'42"	14/05/96	35.1	174.8	0.2
DOG	6	Dog C6	03°05'00"	54°57'06"	14/05/96	22.3	213.0	0.0
DOG	7	ICES 87/SM 37	03°00'00"	55°00'00"	14/05/96	24.5	188.0	0.1
OYS	1	MZ 1-3 '91	03°25'30"	54°23'00"	22/05/96	46.7	105.8	9.1
OYS	2	MZ 9-1 '91	05°32'30"	54°11'30"	10/04/96	39.0	199.4	2.8
OYS	3	ICES 88/SM 39	04°00'00"	55°00'00"	10/04/96	48.2	110.4	4.5
OYS	4	Dog B5	02°56'00"	54°33'00"	21/05/96	34.4	134.4	1.3
OYS	5	MZ 8-3 '91	04°55'00"	54°01'10"	14/05/96	42.8	125.2	8.2
OYS	6	Dog E2	04°22'48"	55°18'24"	21/05/96	46.2	149.4	0.9
OYS	7	MZ 2-1 '91	04°18'00"	54°53'00"	10/04/96	50.5	87.3	14.4
OYS	8	MZ 12-4 '91	04°54'00"	53°44'40"	04/04/96	37.3	154.2	10.3
OYS	9	MZ 15-1 '93	03°37'50"	53°45'20"	23/05/96	36.9	184.4	0.2
OYS	10	MZ 1-1 '91	03°42'30"	54°39'00"	14/05/96	44.2	108.5	5.6
OYS	11	MZ 12-1 '91	05°10'00"	53°55'30"	14/05/96	39.5	122.1	15.3
OYS	12	MZ 5-4 '91	04°26'00"	54°10'00"	22/05/96	48.3	94.5	12.4
OYS	13	ICES 78/SM 31	03°30'00"	54°45'00"	14/05/96	43.8	110.0	5.9
OYS	14	MZ 5-3 '91	04°44'30"	54°20'00"	10/04/96	46.8	132.9	7.2
OYS	15	MZ 5-1 '91	04°21'20"	54°28'30"	14/05/96	50.7	93.0	11.3
OYS	16	MZ 3-4 '91	05°03'00"	54°38'30"	10/04/96	46.8	138.3	8.5
OYS	17	MZ 17-2 '93	03°25'08"	54°00'21"	22/05/96	43.1	191.2	1.5
OYS	18	MZ 10-2 '91	05°54'00"	54°11'20"	10/04/96	36.9	201.0	3.4
OYS	19	Dog B2	03°19'00"	54°20'00"	22/05/96	49.4	344.1	0.0
OYS	20	Dog A1	02°51'51"	54°05'00"	22/05/96	51.5	190.9	5.7
OYS	21	TS 50	04°46'03"	53°46'04"	04/04/96	38.3	105.0	15.7
OYS	22	MZ 1-4 '91	03°38'30"	54°18'30"	22/05/96	44.8	143.6	4.6
OYS	23	Dog C3	03°22'00"	54°49'24"	14/05/96	41.0	129.5	3.6
OYS	24	MZ 11-3 '93	03°29'46"	53°30'00"	29/05/96	31.7	126.0	4.9
OYS	25	MZ 2-3 '91	04°32'00"	54°39'00"	10/04/96	49.6	104.1	15.1
OYS	26	MZ 8-5 '91	04°47'30"	53°55'20"	14/05/96	41.5	128.7	6.0
OYS	27	ICES 70/SM 60	05°00'00"	54°30'00"	10/04/96	43.9	164.3	4.3
OYS	28	ICES 42/SM 19	03°30'00"	53°45'00"	29/05/96	35.4	195.6	1.0
OYS	29	ICES 68/SM 32	03°00'00"	54°30'00"	21/05/96	36.7	/	/
OYS	30	MZ 11-1 '93	03°18'21"	53°31'30"	29/05/96	33.7	122.7	6.1
OYS	31	MZ 19-2 '93	04°09'06"	53°50'42"	22/05/96	41.6	135.7	2.5
OYS	32	MZ 6-5 '91	05°05'00"	54°15'30"	10/04/96	44.3	131.0	13.9
OYS	33	MZ 4-1 '91	04°03'00"	54°16'00"	22/05/96	48.1	99.7	8.8
OYS	34	MZ 16-3 '93	04°16'37"	53°37'40"	04/04/96	36.2	109.0	12.6
OYS	35	MZ 18-3 '93	03°52'24"	53°51'31"	22/05/96	38.8	152.0	1.1
OYS	36	META 2	04°30'00"	53°42'05"	04/04/96	38.0	105.3	13.0
OYS	37	TS 100	04°20'27"	54°09'04"	22/05/96	48.6	95.4	10.9
OYS	38	ICES 34/SM 20	03°00'00"	53°30'00"	29/05/96	31.8	138.5	2.0
OYS	39	ICES 69/SM 30	04°00'00"	54°30'00"	14/05/96	45.1	111.9	3.9
OYS	40	ICES 89/SM 58	05°00'00"	55°00'00"	11/04/96	/	149.2	1.2
OYS	41	RHC 4/Dog C4	03°17'36"	54°51'42"	14/05/96	38.7	146.8	1.1
OYS	42	R 70	06°12'51"	54°07'03"	03/04/96	33.3	222.6	0.0

Table1b. Overview of the geographical position, date, depth and sediment composition in 1996.

Station (name)			Geographical position				Sediment	
new		previously	E	N	Date	Depth (m)	Med. Gr. Size (μm)	Mud (%)
DOG	1	Dog E5	04°03'00"	55°28'18"	21/05/96	29.9	215.2	0.0
DOG	2	Dog D3	03°38'30"	55°10'00"	21/05/96	36.2	186.7	0.1
DOG	3	ICES 97/SM38	03°30'00"	55°15'00"	21/05/96	27.9	199.1	0.0
DOG	4	TS 235	03°09'26"	55°10'14"	21/05/96	30.1	198.7	0.0
DOG	5	Dog C5	03°14'00"	54°54'42"	14/05/96	35.1	174.8	0.2
DOG	6	Dog C6	03°05'00"	54°57'06"	14/05/96	22.3	213.0	0.0
DOG	7	ICES 87/SM 37	03°00'00"	55°00'00"	14/05/96	24.5	188.0	0.1
OYS	1	MZ 1-3 '91	03°25'30"	54°23'00"	22/05/96	46.7	105.8	9.1
OYS	2	MZ 9-1 '91	05°32'30"	54°11'30"	10/04/96	39.0	199.4	2.8
OYS	3	ICES 88/SM 39	04°00'00"	55°00'00"	10/04/96	48.2	110.4	4.5
OYS	4	Dog B5	02°56'00"	54°33'00"	21/05/96	34.4	134.4	1.3
OYS	5	MZ 8-3 '91	04°55'00"	54°01'10"	14/05/96	42.8	125.2	8.2
OYS	6	Dog E2	04°22'48"	55°18'24"	21/05/96	46.2	149.4	0.9
OYS	7	MZ 2-1 '91	04°18'00"	54°53'00"	10/04/96	50.5	87.3	14.4
OYS	8	MZ 12-4 '91	04°54'00"	53°44'40"	04/04/96	37.3	154.2	10.3
OYS	9	MZ 15-1 '93	03°37'50"	53°45'20"	23/05/96	36.9	184.4	0.2
OYS	10	MZ 1-1 '91	03°42'30"	54°39'00"	14/05/96	44.2	108.5	5.6
OYS	11	MZ 12-1 '91	05°10'00"	53°55'30"	14/05/96	39.5	122.1	15.3
OYS	12	MZ 5-4 '91	04°26'00"	54°10'00"	22/05/96	48.3	94.5	12.4
OYS	13	ICES 78/SM 31	03°30'00"	54°45'00"	14/05/96	43.8	110.0	5.9
OYS	14	MZ 5-3 '91	04°44'30"	54°20'00"	10/04/96	46.8	132.9	7.2
OYS	15	MZ 5-1 '91	04°21'20"	54°28'30"	14/05/96	50.7	93.0	11.3
OYS	16	MZ 3-4 '91	05°03'00"	54°38'30"	10/04/96	46.8	138.3	8.5
OYS	17	MZ 17-2 '93	03°25'08"	54°00'21"	22/05/96	43.1	191.2	1.5
OYS	18	MZ 10-2 '91	05°54'00"	54°11'20"	10/04/96	36.9	201.0	3.4
OYS	19	Dog B2	03°19'00"	54°20'00"	22/05/96	49.4	344.1	0.0
OYS	20	Dog A1	02°51'51"	54°05'00"	22/05/96	51.5	190.9	5.7
OYS	21	TS 50	04°46'03"	53°46'04"	04/04/96	38.3	105.0	15.7
OYS	22	MZ 1-4 '91	03°38'30"	54°18'30"	22/05/96	44.8	143.6	4.6
OYS	23	Dog C3	03°22'00"	54°49'24"	14/05/96	41.0	129.5	3.6
OYS	24	MZ 11-3 '93	03°29'46"	53°30'00"	29/05/96	31.7	126.0	4.9
OYS	25	MZ 2-3 '91	04°32'00"	54°39'00"	10/04/96	49.6	104.1	15.1
OYS	26	MZ 8-5 '91	04°47'30"	53°55'20"	14/05/96	41.5	128.7	6.0
OYS	27	ICES 70/SM 60	05°00'00"	54°30'00"	10/04/96	43.9	164.3	4.3
OYS	28	ICES 42/SM 19	03°30'00"	53°45'00"	29/05/96	35.4	195.6	1.0
OYS	29	ICES 68/SM 32	03°00'00"	54°30'00"	21/05/96	36.7	/	/
OYS	30	MZ 11-1 '93	03°18'21"	53°31'30"	29/05/96	33.7	122.7	6.1
OYS	31	MZ 19-2 '93	04°09'06"	53°50'42"	22/05/96	41.6	135.7	2.5
OYS	32	MZ 6-5 '91	05°05'00"	54°15'30"	10/04/96	44.3	131.0	13.9
OYS	33	MZ 4-1 '91	04°03'00"	54°16'00"	22/05/96	48.1	99.7	8.8
OYS	34	MZ 16-3 '93	04°16'37"	53°37'40"	04/04/96	36.2	109.0	12.6
OYS	35	MZ 18-3 '93	03°52'24"	53°51'31"	22/05/96	38.8	152.0	1.1
OYS	36	META 2	04°30'00"	53°42'05"	04/04/96	38.0	105.3	13.0
OYS	37	TS 100	04°20'27"	54°09'04"	22/05/96	48.6	95.4	10.9
OYS	38	ICES 34/SM 20	03°00'00"	53°30'00"	29/05/96	31.8	138.5	2.0
OYS	39	ICES 69/SM 30	04°00'00"	54°30'00"	14/05/96	45.1	111.9	3.9
OYS	40	ICES 89/SM 58	05°00'00"	55°00'00"	11/04/96	/	149.2	1.2
OYS	41	RHC 4/Dog C4	03°17'36"	54°51'42"	14/05/96	38.7	146.8	1.1
OYS	42	R 70	06°12'51"	54°07'03"	03/04/96	33.3	222.6	0.0

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Table1b. Overview of the geographical position, date, depth and sediment composition in 1996.

Station (name)			Geographical position				Sediment	
new		previously	E	N	Date	Depth (m)	Med. Gr. Size (μm)	Mud (%)
OFF	1	MZ 18-2 '91	05°59'00"	53°51'30"	03/04/96	31.5	218.5	0.0
OFF	2	MZ VIA-12-25-2 '89	06°06'25"	53°37'29"	03/04/96	23.7	219.0	0.0
OFF	3	MZ VA-12-25-3 '89	05°49'37"	53°36'40"	03/04/96	24.6	185.8	0.0
OFF	4	MZ 16-3 '91	04°57'30"	53°40'00"	04/04/96	32.0	197.7	0.0
OFF	5	MZ 14-1 '91	04°22'30"	53°29'00"	04/04/96	27.2	214.5	0.0
OFF	6	MZ IIA-12-25-2 '89	04°26'32"	53°11'16"	02/04/96	30.5	309.4	0.0
OFF	7	MZ IA-25-40-4 '89	04°18'22"	53°05'59"	02/04/96	35.5	233.2	0.0
OFF	8	MZ C-40-65-4 '88	04°00'30"	53°01'30"	02/04/96	30.3	238.7	0.0
OFF	9	MZ B-25-40-2 '88	04°13'50"	52°49'20"	12/04/96	25.6	270.8	0.0
OFF	10	MZ W-40-65-3 '88	03°50'30"	52°45'40"	13/05/96	30.6	280.6	0.0
OFF	11	MZ 10-4 '92	03°31'18"	53°17'00"	29/05/96	26.3	203.2	0.0
OFF	12	MZ 9-2 '92	03°23'30"	53°03'55"	29/05/96	27.3	287.1	0.0
OFF	13	MZ 9-1 '92	03°11'36"	53°02'58"	29/05/96	29.8	271.9	0.0
OFF	14	MZ 8-2 '92	03°17'20"	52°53'53"	13/05/96	31.9	270.8	0.0
OFF	15	MZ 8-5 '92	03°17'18"	52°50'12"	13/05/96	35.0	291.6	0.0
OFF	16	ICES 20/SM 3	03°30'00"	52°45'00"	13/05/96	27.5	267.6	0.0
OFF	17	MZ 6-2 '92	03°12'12"	52°27'43"	15/05/96	28.3	301.8	0.0
OFF	18	MZ 6-1 '92	03°11'25"	52°20'25"	15/05/96	26.4	341.7	0.0
OFF	19	MZ 1-1 '92	03°24'42"	52°15'10"	15/05/96	27.7	108.2	8.2
OFF	20	ICES 15/SM 5	03°30'00"	52°15'00"	15/05/96	30.0	394.9	0.8
OFF	21	ICES 12/SM 10	03°00'00"	52°00'00"	28/05/96	35.3	521.6	0.0
OFF	22	MZ T-25-40-3 '88	03°59'15"	52°16'30"	09/04/96	22.3	355.2	0.0
OFF	23	MZ N-12-25-1 '88	04°09'50"	52°23'08"	09/04/96	21.2	326.1	0.0
OFF	24	/	03°42'58"	52°00'00"	06/05/96	24.0	437.3	0.7
OFF	25	/	03°24'26"	52°06'12"	06/05/96	32.7	344.0	0.0
OFF	26	/	03°11'34"	51°56'07"	28/05/96	29.9	395.6	0.0
OFF	27	/	03°14'28"	51°41'40"	07/05/96	27.5	356.9	0.7
OFF	28	/	02°52'48"	51°52'40"	07/05/96	32.0	457.5	0.0
OFF	29	R 50	06°18'36"	53°57'14"	03/04/96	31.0	349.7	1.2
OFF	30	TS 30	04°56'17"	53°36'56"	04/04/96	26.0	214.4	0.0
OFF	31	META 1	03°55'01"	52°59'53"	02/04/96	27.0	247.3	0.0
OFF	32	N 30	04°02'53"	52°23'15"	09/04/96	24.5	312.7	0.0
OFF	33	N 50	03°47'07"	52°28'30"	09/04/96	30.6	284.7	0.0
OFF	34	N 70	03°31'53"	52°34'10"	09/04/96	31.5	300.4	0.0
OFF	35	W 30	03°06'49"	51°43'06"	07/05/96	30.4	347.7	0.0
OFF	36	W 70	02°40'45"	51°57'25"	28/05/96	40.7	478.2	0.0
COA	1	MZ VIA-05-12-1 '89	05°59'53"	53°32'34"	03/04/96	16.5	199.1	0.2
COA	2	MZ VA -00-05-5 '89	05°37'48"	53°30'19"	03/04/96	8.5	175.2	0.1
COA	3	MZ W-00-05-5 '88	04°31'50"	52°32'50"	02/04/96	16.7	218.5	1.2
COA	4	MZ C-00-05-5 '88	04°40'00"	52°50'00"	02/04/96	10.4	198.6	0.8
COA	5	MZ IB-00-05-5 '89	04°41'20"	53°03'23"	02/04/96	11.2	195.8	0.1
COA	6	MZ VIB-00-05-3 '89	06°11'10"	53°32'18"	03/04/96	8.9	161.2	0.1
COA	7	R 3	06°33'51"	53°33'58"	03/04/96	9.0	178.8	0.0
COA	8	TS 4	05°09'02"	53°24'54"	03/04/96	18.4	215.8	0.0
COA	9	ICES 21/SM 1	04°30'00"	52°45'00"	02/04/96	20.0	229.4	0.0
COA	10	N 2	04°24'20"	52°15'36"	09/04/96	12.7	238.9	2.5
COA	11	N 10	04°18'01"	52°17'41"	09/04/96	18.3	321.6	1.3
COA	12	VD 1	03°23'15"	51°37'04"	07/05/96	12.7	273.4	0.0
COA	13	VD 2	03°36'02"	51°42'23"	18/04/96	3.5	286.4	0.0
COA	14	VD 3	03°48'48"	51°47'26"	18/04/96	2.1	236.8	7.7
COA	15	VD 4	03°55'09"	51°55'20"	06/05/96	14.4	198.5	0.1

Table 2. Mean values of abiotic and biotic parameters of the 4 distinguished areas in 1996 (C.V.: coefficients of variation = s.d./mean).

	AREA							
	south.Dogger Bank		Oyster Ground		Offshore area		Coastal area	
No. of stations	7	C.V.	42	C.V.	36	C.V.	15	C.V.
Median Grain Size (µm)	196.5	0.07	141.3	0.33	301.0	0.29	221.9	0.20
Mud content (%)	0.1	1.32	6.4	0.77	0.3	4.31	0.9	2.13
Depth (m)	29.4	0.17	42.1	0.14	29.1	0.14	12.2	0.44
Diversity:								
No. of total species	68		142		103		36	
No. species per core	28.7	0.14	25.1	0.21	16.5	0.36	8.0	0.52
Shannon- Wiener diversity	2.74	0.09	2.35	0.18	2.14	0.22	1.35	0.23
Simpson's dominance	0.10	0.37	0.18	0.55	0.20	0.58	0.35	0.38
No. individuals (ind./m²):								
Crustaceans	568.5	0.51	137.0	0.64	287.7	1.31	199.9	1.33
Echinoderms	221.5	0.63	689.8	1.04	48.4	0.97	2.0	65.70
Molluscs	305.1	0.49	628.4	1.14	84.5	1.28	559.8	2.30
Polychaetes	882.0	0.48	481.4	0.67	625.0	0.69	736.4	1.45
Miscellaneous	292.6	1.25	103.1	0.76	52.4	1.21	12.7	1.68
TOTAL DENSITY	2269.7	0.28	2039.6	0.53	1098.1	0.65	1510.8	1.26
Biomass (g AFDW/m²):								
Crustaceans	0.2	0.44	1.5	1.71	0.1	2.28	0.1	1.32
Echinoderms	4.4	1.35	6.6	1.05	4.9	2.41	1.0	2.91
Molluscs	7.4	1.37	2.7	3.38	2.3	3.27	57.4	1.73
Polychaetes	2.1	0.73	3.5	1.36	2.1	1.71	2.1	1.02
Miscellaneous	0.4	0.76	0.4	1.47	0.2	1.63	1.5	3.75
TOTAL BIOMASS	14.5	0.65	14.8	0.85	9.7	1.61	62.2	1.63

Appendices

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	Dogger Bank							Oyster Ground																		
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	17	18	19	
ABRA ALBA	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	+	-	+	+	+	-	-	ABRA ALBA
ABRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA JUVE
ABRA NITIDA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA NITI
ABRA PRISMATICA	-	+	-	-	+	-	-	-	-	-	+	-	+	-	-	+	-	-	+	-	-	-	-	-	-	ABRA PRIS
ACROCNIDA BRACHIATA	+	+	+	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACRO BRAC
AMPELISCA BREVICORNIS	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	AMPE BREV
AMPELISCA MACROCEPHALA	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE MACR
AMPELISCA TENUICORNIS	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	AMPE TENU
AMPHIURA FILIFORMIS	-	-	-	-	-	-	-	+	-	+	-	+	+	+	-	+	+	+	+	+	+	+	+	-	+	AMPH FILI
AMPHIPODA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	AMPH IPOD
ANAITIDES GROENLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI GROE
ANAITIDES JUVENILE	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	ANAI JUVE
ANAITIDES MACULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI MACU
ANAITIDES MUCOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI MUCO
ANAITIDES SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI SPEC
ANAITIDES SUBULIFERA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	+	-	-	-	-	-	-	ANAI SUBU
ANTHOZOA	-	-	+	-	-	+	-	+	-	-	+	-	-	+	-	-	-	+	-	-	+	-	-	-	-	ANTH OZOA
AONIDES PAUCIBRANCHIATA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	AONI PAUC
AORIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	AORI SPEC
APHRODITA ACULEATA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR ACUL
APLACOPHORA	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	APLA COPH
ARCHIANNELIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCH IANN
ARCTICA ISLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	ARCT ISLA
ARGISSA HAMATIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARGI HAMA
ARICIDEA JEFFREYSII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC JEFF
ARICIDEA MINUTA	+	-	+	+	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC MINU
ASTARTE TRIANGULARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTA TRIA
ASTROPECTEN IRREGULARIS	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	ASTR IRRE
ATYLUS FALCATUS	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ATYL FALC
ATYLUS SWAMMERDAMI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	ATYL SWAM
BATHYPOREIA ELEGANS	+	-	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH ELEG
BATHYPOREIA GUILLIAMSONIANA	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH GUIL
BATHYPOREIA JUVENILE	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH JUVE
BATHYPOREIA PELAGICA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH PELA
BATHYPOREIA SPEC.	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH SPEC
BATHYPOREIA TENUIPES	-	+	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	BATH TENU
BIVALVAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BIVA LVAE
BRISSOPSIS LYRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BRIS LYRI
CALLIANASSA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL JUVE
CALLIANASSA SUBTERRANEA	-	-	-	-	-	-	-	+	+	+	-	+	+	-	+	-	+	+	+	+	+	+	+	-	+	CALL SUBT
CALLIANASSA TYRRHENA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL TYRR
CAPITELLA CAPITATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPI CAPI
CAPITELLIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	CAPI TELL
CAPRELLIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPR ELLI
CARDIUM SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	CARD SPEC
CAULLERIELLA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAUL LERI
CHAETOZONE SETOSA	+	+	+	-	+	-	-	-	-	-	+	-	-	+	-	+	-	+	+	-	+	-	+	-	-	CHAE SETO
CHAETOPTERUS VARIOPEDATUS	-	-	-	-	-	-	-	+	+	+	-	+	-	-	-	-	-	+	-	-	+	-	-	-	+	CHAE VARI

Appendix-1 Biomonitoring 1996

	Dogger Bank							Oyster Ground																			
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	17	18	19		
CINGULA VITREA	-	-	-	-	-	-	-	+	-	-	-	+	-	+	-	+	+	+	-	+	+	+	-	-	+	CING VITR
CORBULA GIBBA	-	-	-	-	-	-	-	-	+	-	-	+	-	-	+	-	+	+	-	+	+	+	+	+	-	CORB GIBB
CORYSTES CASSIVELAUNUS	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORY CASS
CUCUMARIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	CUCU ELON
CULTELLUS PELLUCIDUS	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CULT PELL
CYLICHNA CYLINDRACEA	-	-	+	+	-	-	-	+	-	-	-	+	-	-	+	+	+	+	+	+	+	+	+	-	+	CYLI CYLI
DIASTYLIS BRADYI	-	-	-	-	-	-	-	+	+	+	+	-	-	-	+	+	-	+	-	-	-	-	+	-	-	DIAS BRAD
DIASTYLIS RATHKEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	DIAS RATH
DIPLOCIRRUS GLAUCUS	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	+	-	-	DIPL GLAU
DONAX VITTATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DONA VITT
DOSINIA EXOLETA	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI EXOL
DOSINIA LUPINUS	-	-	-	+	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	DOSI LUPI
DOSINIA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI SPEC
ECHINOCARDIUM CORDATUM	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	+	-	-	+	-	+	-	-	-	+	ECHI CORD
ECHINOCARDIUM JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	ECHI JUVE
ECHINOCYAMUS PUSILLUS	+	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	ECHI PUSI
EDWARDSIA CLAPAREDII	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EDWA CLAP
ENSIS ARCUATUS	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI ARCU
ENSIS DIRECTUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI DIRE
ENSIS ENSIS	-	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI ENSI
ENSIS SPEC.	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SPEC
ENTEROPNEUSTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENTE ROPN
ETEONE LONGA	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ETEO LONG
EUDORELLOPSIS DEFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	EUDO DEFO
EUDORELLA TRUNCATULA	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	+	+	-	-	-	+	+	-	-	+	EUDO TRUN
EUMIDA SANGUINEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUMI SANG
EUZONUS FLABELLIGERUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUZO FLAB
EXOGONE HEBES	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	EXOG HEBE
EXOGONE NAIDINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG NAID
GARI FERVENSIS	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	GARI FERV
GATTYANA CIRROSA	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	+	-	-	+	-	-	-	+	GATT CIRR
GLYCERA JUVENILE	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC JUVE
GLYCERA LAPIDUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC LAPI
GLYCERA ROUXI	-	-	-	-	-	-	-	+	-	-	-	+	-	+	-	-	-	+	-	+	+	-	-	-	-	GLYC ROUX
GLYCERA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC SPEC
GOLFINGIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF ELON
GOLFINGIA VULGARIS	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	+	-	+	-	-	-	-	-	GOLF VULG
GONIADA MACULATA	+	+	+	+	+	+	+	-	-	+	+	-	-	+	-	-	+	-	+	-	-	-	+	+	-	GONI MACU
GYPTIS CAPENSIS	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GYPT CAPE
HARMOTHOE JUVENILE	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM JUVE
HARMOTHOE LONGISETIS	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM LONG
HARMOTHOE LUNUATA	-	-	-	-	-	+	-	-	-	-	+	-	-	+	-	+	-	-	-	-	-	-	-	-	-	HARM LUNU
HARMOTHOE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM SPEC
HARPINIA ANTENNARIA	-	-	-	-	-	-	-	+	-	-	-	+	-	+	-	+	+	+	+	+	+	+	+	-	-	HARP ANTE
HESIONURA AUGENERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE
HETEROMASTUS FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	HETE FILI
HIPPOMEDON DENTICULATUS	+	+	+	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	HIPP DENT
HYDROZOA	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HYDR OZOA

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	Dogger Bank							Oyster Ground																		
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	17	18	19	
HYDROBIA ULVAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HYDR ULVA
IONE THORACIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-	-	+	IONE THOR
IPHINOE TRISPINOSA	+	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IPHI TRIS
LANICE CONCHILEGA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	LANI CONC
LANICE JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LANI JUVE
LEPIDEPECREUM LONGICORNE	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPI LONG
LEUCOTHOE INCISA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC INCI
LEUCOTHOE LILLJEBORGI	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	LEUC LILL
LORA TURRICULA	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LORA TURR
LUCINOMA BOREALIS	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUCI BORE
LUMBRINERIS LATREILLI	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	LUMB LATR
MACOMA BALTHICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACO BALT
MACTRA CORALLINA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	MACT CORA
MAGELONA ALLENI	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	MAGE ALLE
MAGELONA JUVENILE	-	+	+	+	+	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAGE JUVE
MAGELONA PAPILLICORNIS	+	+	+	+	+	+	+	-	+	-	+	+	+	-	-	-	-	-	+	-	-	+	+	+	-	MAGE PAPI
MEDIOMASTUS FRAGILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MEDI FRAG
MEGALUROPUS AGILIS	+	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MEGA AGIL
MODIOLUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MODI SPEC
MONTACUTA FERRUGINOSA	-	+	+	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	MONT FERR
MUSCULUS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MUSC JUVE
MYA TRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	MYA TRUN
MYRTEA SPINIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYRT SPIN
MYSELLA BIDENTATA	+	+	+	-	-	+	-	+	-	+	+	+	+	+	+	+	+	-	+	-	+	+	-	+	+	MYSE BIDE
MYSIA UNDATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	MYSI UNDA
NATICA ALDERI	+	+	+	+	+	+	+	-	+	-	+	+	-	-	+	-	-	-	+	+	-	-	+	+	-	NATI ALDE
NEMERTINI	+	+	-	+	+	-	+	-	+	+	+	+	+	-	+	-	+	+	+	+	+	+	-	+	-	NEME RTIN
NEPHTYS CAECA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	NEPH CAEC
NEPHTYS CIRROSA	+	-	+	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	NEPH CIRR
NEPHTYS HOMBERGII	-	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	-	-	+	-	+	+	NEPH HOMB
NEPHTYS JUVENILE	-	-	-	-	-	+	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	+	-	NEPH JUVE
NEPHTYS LONGOSETOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPH LONG
NEPHTYS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	NEPH SPEC
NEREIS LONGISSIMA	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	NERE LONG
NOTOMASTUS JUVENILE	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NOTO JUVE
NOTOMASTUS LATERICEUS	-	-	-	-	+	-	+	+	-	+	-	+	-	+	-	-	-	+	-	-	-	-	-	-	+	NOTO LATE
NUCULA TENIUS	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	+	+	+	-	+	-	-	-	-	NUCU TENU
NUCULA TURGIDA	-	-	-	-	+	-	-	-	-	-	+	+	-	-	-	-	-	-	+	+	-	-	-	-	-	NUCU TURG
OLIGOCHAETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OLIG OCHA
OPHELINA ACUMINATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	OPHE ACUM
OPHELIA LIMACINA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHE LIMA
OPHIURA ALBIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	OPHI ALBI
OPHIODROMUS FLEXUOSUS	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	+	-	+	-	+	OPHI FLEX
OPHIURIDAE JUVENILE	+	+	+	+	+	-	-	+	-	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	OPHI JUVE
OPHIURA TEXTURATA	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI TEXT
ORBINIA SERTULATA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	ORBI SERT
ORCHOMENE HUMILIS	+	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	ORCH HUMI
ORCHOMENE NANA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH NANA

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	Dogger Bank							Oyster Ground																		
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	17	18	19	
OWENIA FUSIFORMIS	-	+	+	-	-	+	+	+	-	-	-	-	-	+	+	-	+	-	-	-	+	-	-	-	-	OWEN FUSI
OWENIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN JUVE
PARAONIS GRACILIS	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	PARA GRAC
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	PECT AURI
PECTINARIA KORENI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT KORE
PERIOCULODES LONGIMANUS	+	-	+	-	-	+	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PERI LONG
PHOLOE MINUTA	+	-	+	-	-	-	-	+	+	+	+	-	+	+	+	+	+	-	+	+	-	+	+	-	+	PHOL MINU
PHORONIDA	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	-	+	+	+	+	PHOR ONID
PISIONE REMOTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISI REMO
PLATHYHELMITHES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	+	PLAT HYHE
POECILOCHAETUS SERPENS	-	+	+	+	+	-	+	-	+	-	-	-	+	-	+	-	-	-	-	-	+	-	+	+	-	POEC SERP
POLYCIRRUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY CIRR
POLYDORA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	POLY DORA
POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	POLY KINB
PONTOCRATES ALTAMARINUS	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	PONT ALTA
PRIONOSPIO CIRRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PRIO CIRR
PSEUDOCUMA LONGICORNIS	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU LONG
PSEUDOCUMA SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU SIMI
SAGARTIA TROGLODYTES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SAGA TROG
SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCAL INFL
SCOLOPLOS ARMIGER	-	-	+	-	-	-	-	-	-	+	+	-	+	-	-	+	-	-	+	-	-	+	-	+	+	SCOL ARMI
SCOLELEPIS BONNERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	SCOL BONN
SCOLELEPIS SQUAMATA	+	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	SCOL SQUA
SIGALION MATHILDAE	-	-	+	+	+	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	SIGA MATH
SIPHONOECETES KROYERANUS	-	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY
SIPUNCULIDA	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	+	SIPU NCUL
SPIOPHANES BOMBYX	+	+	+	-	+	+	+	-	+	+	+	+	+	+	+	+	+	-	+	+	-	+	+	+	-	SPIO BOMB
SPIO FILICORNIS	+	+	+	+	+	+	+	-	+	-	+	+	-	-	-	-	-	+	-	+	+	-	-	+	-	SPIO FILI
SPIOPHANES JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIO JUVE
SPISULA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS JUVE
SPISULA SUBTRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS SUBT
STHENELAIS LIMICOLA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	STHE LIMI
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRE WEBS
SYNCHELIDIUM MACULATUM	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNC MACU
SYNELMIS KLATTI	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	+	SYNE KLAT
TELLINA FABULA	+	+	+	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	+	-	TELL FABU
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	TELL PYGM
THRACIA PHASEOLINA	+	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	THRA PHAS
THYASIRA FLEXUOSA	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	+	-	-	-	-	-	-	THYA FLEX
TURRITELLA COMMUNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	TURR COMM
UNCIOLA PLANIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UNCI PLAN
UPOGEBIA DELTAURA	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	+	-	+	-	-	-	-	-	UPOG DELT
UROTHOE BREVICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UROT BREV
UROTHOE ELEGANS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	UROT ELEG
UROTHOE POSEIDONIS	+	+	+	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	UROT POSE
VENUS STRIATULA	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	VENU STRI
WESTWOODILLA CAECULA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	WEST CAEC
No. Species	31	27	36	25	30	25	27	27	22	25	36	27	21	29	20	23	23	26	29	26	30	20	32	19	24	

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	Oyster Ground																							
	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
ABRA ALBA	+	+	-	-	-	+	+	+	-	-	+	+	-	+	+	+	+	-	+	-	-	-	-	ABRA ALBA
ABRA JUVENILE	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA JUVE
ABRA NITIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA NITI
ABRA PRISMATICA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA PRIS
ACROCNIDA BRACHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	ACRO BRAC
AMPELISCA BREVICORNIS	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	AMPE BREV
AMPELISCA MACROCEPHALA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE MACR
AMPELISCA TENUICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	+	-	AMPE TENU
AMPHIURA FILIFORMIS	+	+	+	+	-	+	+	+	+	+	-	+	+	+	+	+	+	+	-	+	+	+	-	AMPH FILI
AMPHIPODA SPEC.	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH IPOD
ANAITIDES GROENLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI GROE
ANAITIDES JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	ANAI JUVE
ANAITIDES MACULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI MACU
ANAITIDES MUCOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI MUCO
ANAITIDES SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI SPEC
ANAITIDES SUBULIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI SUBU
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AONIDES PAUCIBRANCHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AONI PAUC
AORIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AORI SPEC
APHRODITA ACULEATA	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR ACUL
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ARCHIANNELIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCH IANN
ARCTICA ISLANDICA	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCT ISLA
ARGISSA HAMATIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARGI HAMA
ARICIDEA JEFFREYSII	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	ARIC JEFF
ARICIDEA MINUTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC MINU
ASTARTE TRIANGULARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTA TRIA
ASTROPECTEN IRREGULARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	ASTR IRRE
ATYLUS FALCATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ATYL FALC
ATYLUS SWAMMERDAMI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ATYL SWAM
BATHYPOREIA ELEGANS	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	BATH ELEG
BATHYPOREIA GUILLIAMSONIANA	-	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	BATH GUIL
BATHYPOREIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	BATH JUVE
BATHYPOREIA PELAGICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH PELA
BATHYPOREIA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH SPEC
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BIVALVAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	BIVA LVAE
BRISSOPSIS LYRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	BRIS LYRI
CALLIANASSA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL JUVE
CALLIANASSA SUBTERRANEA	+	+	-	+	+	+	+	+	-	-	+	+	-	+	+	+	+	+	+	-	+	-	-	CALL SUBT
CALLIANASSA TYRRHENA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL TYRR
CAPITELLA CAPITATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPI CAPI
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CAPRELLIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPR ELLI
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	Oyster Ground																							
	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
CINGULA VITREA	-	-	+	-	-	+	+	+	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	CING VITR
CORBULA GIBBA	-	+	+	-	-	+	+	+	-	-	-	+	+	-	-	+	+	-	-	+	-	-	-	CORB GIBB
CORYSTES CASSIVELAUNUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORY CASS
CUCUMARIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CUCU ELON
CULTELLUS PELLUCIDUS	+	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	+	-	-	CULT PELL
CYLICHNA CYLINDRACEA	+	-	-	+	-	+	+	+	+	+	-	-	-	+	-	-	-	-	+	+	+	+	+	CYLI CYLI
DIASTYLIS BRADYI	+	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	DIAS BRAD
DIASTYLIS RATHKEI	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIAS RATH
DIPLOCIRRUS GLAUCUS	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIPL GLAU
DONAX VITTATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DONA VITT
DOSINIA EXOLETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI EXOL
DOSINIA LUPINUS	+	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	DOSI LUPI
DOSINIA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI SPEC
ECHINOCARDIUM CORDATUM	+	+	+	+	-	-	+	+	+	-	+	+	+	-	-	-	-	-	+	-	-	+	-	ECHI CORD
ECHINOCARDIUM JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ECHI JUVE
ECHINOCYAMUS PUSILLUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ECHI PUSI
EDWARDSIA CLAPAREDII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	EDWA CLAP
ENSIS ARCUATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI ARCU
ENSIS DIRECTUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI DIRE
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EUMIDA SANGUINEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUMI SANG
EUZONUS FLABELLIGERUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUZO FLAB
EXOGONE HEBES	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	EXOG HEBE
EXOGONE NAIDINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG NAID
GARI FERVENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GARI FERV
GATTYANA CIRROSA	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	GATT CIRR
GLYCERA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC JUVE
GLYCERA LAPIDUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC LAPI
GLYCERA ROUXI	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	GLYC ROUX
GLYCERA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC SPEC
GOLFINGIA ELONGATA	-	-	-	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	GOLF ELON
GOLFINGIA VULGARIS	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF VULG
GONIADA MACULATA	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	GONI MACU
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HARMOTHOE JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM JUVE
HARMOTHOE LONGISETIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM LONG
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HARMOTHOE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM SPEC
HARPINIA ANTENNARIA	+	+	+	+	-	+	-	+	+	+	-	+	-	+	-	+	+	+	-	+	+	+	-	HARP ANTE
HESIONURA AUGENERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE
HETEROMASTUS FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HETE FILI
HIPPOMEDON DENTICULATUS	-	-	+	+	-	-	-	-	+	+	-	+	-	-	-	+	-	-	+	-	-	-	-	HIPP DENT
HYDROZOA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HYDR OZOA

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	Oyster Ground																							
	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
HYDROBIA ULVAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HYDR ULVA
IONE THORACIA	+	-	-	-	-	+	-	+	-	-	-	-	-	+	+	-	-	+	-	-	+	-	-	IONE THOR
IPHINOE TRISPINOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IPHI TRIS
LANICE CONCHILEGA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	LANI CONC
LANICE JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LANI JUVE
LEPIDEPECREUM LONGICORNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPI LONG
LEUCOTHOE INCISA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC INCI
LEUCOTHOE LILLJEBORGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	LEUC LILL
LORA TURRICULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LORA TURR
LUCINOMA BOREALIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUCI BORE
LUMBRINERIS LATREILLI	+	+	-	-	+	+	+	-	-	-	+	+	-	+	+	-	+	+	-	-	-	-	-	LUMB LATR
MACOMA BALTHICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACO BALT
MACTRA CORALLINA	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACT CORA
MAGELONA ALLENI	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	MAGE ALLE
MAGELONA JUVENILE	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	+	-	MAGE JUVE
MAGELONA PAPILLICORNIS	+	+	+	+	-	+	-	+	+	+	+	+	-	+	-	+	-	-	+	+	+	+	+	MAGE PAPI
MEDIOMASTUS FRAGILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	-	-	-	-	-	MEDI FRAG
MEGALUROPUS AGILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MEGA AGIL
MODIOLUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MODI SPEC
MONTACUTA FERRUGINOSA	+	-	-	+	-	+	+	+	+	-	+	-	+	-	-	-	-	+	+	-	-	+	-	MONT FERR
MUSCULUS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	MUSC JUVE
MYA TRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYA TRUN
MYRTEA SPINIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	MYRT SPIN
MYSELLA BIDENTATA	+	-	+	+	-	-	+	+	+	+	-	+	+	+	+	+	+	+	-	+	+	+	-	MYSE BIDE
MYSIA UNDATA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYSI UNDA
NATICA ALDERI	+	+	+	+	+	+	+	+	-	+	+	-	+	-	-	+	+	-	+	-	+	+	+	NATI ALDE
NEMERTINI	-	+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	-	-	+	+	NEME RTIN
NEPHTYS CAECA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPH CAEC
NEPHTYS CIRROSA	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	NEPH CIRR
NEPHTYS HOMBERGII	+	-	+	+	-	+	-	+	+	+	+	-	-	+	+	-	+	-	-	+	+	+	-	NEPH HOMB
NEPHTYS JUVENILE	+	+	-	-	+	-	-	+	-	+	+	+	-	-	-	-	+	+	+	+	-	-	+	NEPH JUVE
NEPHTYS LONGOSETOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPH LONG
NEPHTYS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPH SPEC
NEREIS LONGISSIMA	-	+	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NERE LONG
NOTOMASTUS JUVENILE	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NOTO JUVE
NOTOMASTUS LATERICEUS	-	+	-	-	-	+	+	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	NOTO LATE
NUCULA TENIUS	+	-	-	+	-	+	-	-	-	-	-	-	-	+	-	-	+	-	-	+	-	-	-	NUCU TENU
NUCULA TURGIDA	-	+	+	+	-	-	-	+	+	+	-	-	-	+	-	+	+	-	+	-	-	+	-	NUCU TURG
OLIGOCHAETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OLIG OCHA
OPHELINA ACUMINATA	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	OPHE ACUM
OPHELIA LIMACINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHE LIMA
OPHIURA ALBIDA	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	OPHI ALBI
OPHIODROMUS FLEXUOSUS	-	-	+	-	+	-	+	+	+	-	+	+	-	+	+	+	-	-	-	-	-	+	-	OPHI FLEX
OPHIURIDAE JUVENILE	+	+	+	+	+	+	+	+	-	+	-	+	+	+	-	+	-	+	-	+	+	+	-	OPHI JUVE
OPHIURA TEXTURATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI TEXT
ORBINIA SERTULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	ORBI SERT
ORCHOMENE HUMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	ORCH HUMI
ORCHOMENE NANA	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH NANA

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	Oyster Ground																							
	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
Species name	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
OWENIA FUSIFORMIS	-	+	-	-	-	-	+	-	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	OWEN FUSI
OWENIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	OWEN JUVE
PARAONIS GRACILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA GRAC
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT AURI
PECTINARIA KORENI	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT KORE
PERIOCULODES LONGIMANUS	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	+	+	PERI LONG
PHOLOE MINUTA	+	+	+	+	-	+	+	-	-	+	-	-	-	+	-	+	-	+	-	+	+	+	-	PHOL MINU
PHORONIDA	+	+	+	+	+	-	-	+	+	-	-	+	+	-	+	+	+	-	+	+	+	+	+	PHOR ONID
PISIONE REMOTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISI REMO
PLATHYHELMITHES	+	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	+	-	PLAT HYHE
POECILOCHAETUS SERPENS	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-	+	-	-	-	+	-	+	POEC SERP
POLYCIRRUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY CIRR
POLYDORA SPEC.	-	+	-	-	-	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	POLY DORA
POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB
PONTOCRATES ALTAMARINUS	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT ALTA
PRIONOSPIO CIRRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	PRIO CIRR
PSEUDOCUMA LONGICORNIS	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	+	-	+	-	-	-	-	PSEU LONG
PSEUDOCUMA SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU SIMI
SAGARTIA TROGLODYTES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SAGA TROG
SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	SCAL INFL
SCOLOPLOS ARMIGER	-	+	+	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	SCOL ARMI
SCOLELEPIS BONNERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCOL BONN
SCOLELEPIS SQUAMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	SCOL SQUA
SIGALION MATHILDAE	-	-	-	+	-	-	-	-	+	+	-	-	-	-	-	+	-	-	+	-	-	-	-	SIGA MATH
SIPHONOECETES KROYERANUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY
SIPUNCULIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+	-	-	-	-	-	SIPU NCUL
SPIOPHANES BOMBYX	+	+	-	+	-	-	+	+	-	+	+	-	-	+	-	+	+	-	+	-	+	+	+	SPIO BOMB
SPIO FILICORNIS	+	-	-	-	-	+	+	+	+	+	-	+	-	-	+	+	-	+	-	-	-	-	+	SPIO FILI
SPIOPHANES JUVENILE	-	-	-	-	+	-	+	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	SPIO JUVE
SPISULA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS JUVE
SPISULA SUBTRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	SPIS SUBT
STHENELAIS LIMICOLA	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	STHE LIMI
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRE WEBS
SYNCHELIDIUM MACULATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNC MACU
SYNELMIS KLATTI	+	-	+	+	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNE KLAT
TELLINA FABULA	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	+	+	TELL FABU
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL PYGM
THRACIA PHASEOLINA	-	+	-	-	-	-	-	+	+	-	+	-	-	-	-	+	-	-	-	-	-	-	-	THRA PHAS
THYASIRA FLEXUOSA	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	THYA FLEX
TURRITELLA COMMUNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TURR COMM
UNCIOLA PLANIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UNCI PLAN
UPOGEBIA DELTAURA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UPOG DELT
UROTHOE BREVICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UROT BREV
UROTHOE ELEGANS	+	-	-	-	-	-	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	UROT ELEG
UROTHOE POSEIDONIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	UROT POSE
VENUS STRIATULA	+	-	-	-	-	-	-	+	-	+	-	+	-	-	-	+	-	-	-	+	+	-	-	VENU STRI
WESTWOODILLA CAECULA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	WEST CAEC
No. Species	34	26	30	29	15	31	30	31	24	27	21	27	11	30	18	29	22	27	19	21	23	27	20	

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	Offshore area																									
	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	
Species name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
ABRA ALBA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA ALBA
ABRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA JUVE
ABRA NITIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA NITI
ABRA PRISMATICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA PRIS
ACROCNIDA BRACHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACRO BRAC
AMPELISCA BREVICORNIS	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE BREV
AMPELISCA MACROCEPHALA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE MACR
AMPELISCA TENUICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE TENU
AMPHIURA FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH FILI
AMPHIPODA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH IPOD
ANAITIDES GROENLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI GROE
ANAITIDES JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI JUVE
ANAITIDES MACULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI MACU
ANAITIDES MUCOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	ANAI MUCO
ANAITIDES SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI SPEC
ANAITIDES SUBULIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	ANAI SUBU
ANTHOZOA	+	-	-	-	-	-	+	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	+	-	-	ANTH OZOA
AONIDES PAUCIBRANCHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	AONI PAUC
AORIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AORI SPEC
APHRODITA ACULEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR ACUL
APLACOPHORA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APLA COPH
ARCHIANNELIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCH IANN
ARCTICA ISLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCT ISLA
ARGISSA HAMATIPES	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARGI HAMA
ARICIDEA JEFFREYSII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC JEFF
ARICIDEA MINUTA	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+	-	+	+	+	-	-	-	-	+	ARIC MINU
ASTARTE TRIANGULARIS	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTA TRIA
ASTROPECTEN IRREGULARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTR IRRE
ATYLUS FALCATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	ATYL FALC
ATYLUS SWAMMERDAMI	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ATYL SWAM
BATHYPOREIA ELEGANS	+	-	-	-	-	-	+	+	+	+	+	+	+	+	-	+	-	-	-	-	-	+	+	-	-	BATH ELEG
BATHYPOREIA GUILLIAMSONIANA	-	-	-	-	+	+	-	+	+	+	+	+	+	+	+	-	-	-	-	-	-	+	+	-	-	BATH GUIL
BATHYPOREIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH JUVE
BATHYPOREIA PELAGICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH PELA
BATHYPOREIA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH SPEC
BATHYPOREIA TENUIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH TENU
BIVALVAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BIVA LVAE
BRISSOPSIS LYRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BRIS LYRI
CALLIANASSA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL JUVE
CALLIANASSA SUBTERRANEA	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL SUBT
CALLIANASSA TYRRHENA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	CALL TYRR
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	Offshore area																									
	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	
Species name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
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CORBULA GIBBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORB GIBB
CORYSTES CASSIVELAUNUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORY CASS
CUCUMARIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CUCU ELON
CULTELLUS PELLUCIDUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CULT PELL
CYLICHNA CYLINDRACEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CYLI CYLI
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DIASTYLIS RATHKEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIAS RATH
DIPLOCIRRUS GLAUCUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIPL GLAU
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EUMIDA SANGUINEA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUMI SANG
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GATTYANA CIRROSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GATT CIRR
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GOLFINGIA VULGARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF VULG
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HESIONURA AUGENERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE
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	Offshore area																									
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Species name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
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IONE THORACIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IONE THOR
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LORA TURRICULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LORA TURR
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LUMBRINERIS LATREILLI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUMB LATR
MACOMA BALTHICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACO BALT
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MAGELONA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAGE JUVE
MAGELONA PAPILLICORNIS	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	+	-	-	+	-	-	MAGE PAPI
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MYA TRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYA TRUN
MYRTEA SPINIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYRT SPIN
MYSELLA BIDENTATA	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	+	+	-	MYSE BIDE
MYSIA UNDATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYSI UNDA
NATICA ALDERI	-	-	-	-	-	-	+	+	+	+	+	+	+	-	+	-	-	-	+	-	-	-	-	-	+	NATI ALDE
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OLIGOCHAETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OLIG OCHA
OPHELINA ACUMINATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHE ACUM
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OPHIURA TEXTURATA	+	-	-	+	-	+	-	+	-	-	-	-	-	-	+	-	-	-	+	-	+	+	-	+	-	OPHI TEXT
ORBINIA SERTULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORBI SERT
ORCHOMENE HUMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH HUMI
ORCHOMENE NANA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH NANA

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	Offshore area																									
	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	
Species name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
OWENIA FUSIFORMIS	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN FUSI
OWENIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN JUVE
PARAONIS GRACILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA GRAC
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT AURI
PECTINARIA KORENI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	PECT KORE
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PLATHYHELMITHES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PLAT HYHE
POECILOCHAETUS SERPENS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POEC SERP
POLYCIRRUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY CIRR
POLYDORA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY DORA
POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB
PONTOCRATES ALTAMARINUS	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	+	-	-	-	-	-	+	+	-	-	PONT ALTA
PRIONOSPIO CIRRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PRIO CIRR
PSEUDOCUMA LONGICORNIS	+	-	-	+	+	+	+	-	-	+	+	+	-	+	-	+	-	-	-	-	+	-	+	+	+	PSEU LONG
PSEUDOCUMA SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	PSEU SIMI
SAGARTIA TROGLODYTES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SAGA TROG
SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCAL INFL
SCOLOPLOS ARMIGER	-	-	-	+	+	-	+	+	+	+	-	+	+	+	+	+	-	-	-	-	-	-	-	+	+	SCOL ARMI
SCOLELEPIS BONNERI	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	SCOL BONN
SCOLELEPIS SQUAMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	SCOL SQUA
SIGALION MATHILDAE	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIGA MATH
SIPHONOECETES KROYERANUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY
SIPUNCULIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPU NCUL
SPIOPHANES BOMBYX	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	SPIO BOMB
SPIO FILICORNIS	-	-	-	+	+	+	+	+	-	+	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	SPIO FILI
SPIOPHANES JUVENILE	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	+	-	-	-	+	+	SPIO JUVE
SPISULA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS JUVE
SPISULA SUBTRUNCATA	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	SPIS SUBT
STHENELAIS LIMICOLA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	STHE LIMI
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	STRE WEBS
SYNCHELIDIUM MACULATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNC MACU
SYNELMIS KLATTI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNE KLAT
TELLINA FABULA	-	-	-	+	+	-	+	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	+	-	TELL FABU
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	TELL PYGM
THRACIA PHASEOLINA	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA PHAS
THYASIRA FLEXUOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THYA FLEX
TURRITELLA COMMUNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TURR COMM
UNCIOLA PLANIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UNCI PLAN
UPOGEBIA DELTAURA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UPOG DELT
UROTHOE BREVICORNIS	-	-	-	-	-	-	-	-	+	+	-	+	+	+	+	+	-	-	-	+	-	-	-	+	+	UROT BREV
UROTHOE ELEGANS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UROT ELEG
UROTHOE POSEIDONIS	-	+	-	-	+	+	+	+	-	-	-	-	+	+	+	-	+	-	-	+	-	+	+	+	+	UROT POSE
VENUS STRIATULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VENU STRI
WESTWOODILLA CAECULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	WEST CAEC
No. Species	14	6	7	19	23	19	15	19	15	25	24	18	14	20	16	13	7	6	12	16	16	12	20	29	24	

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	Offshore area											Coastal area															
	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	
Species name	26	27	28	29	30	31	32	33	34	35	36	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
ABRA ALBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA ALBA
ABRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA JUVE
ABRA NITIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA NITI
ABRA PRISMATICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA PRIS
ACROCNIDA BRACHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACRO BRAC
AMPELISCA BREVICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE BREV
AMPELISCA MACROCEPHALA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE MACR
AMPELISCA TENUICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE TENU
AMPHIURA FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH FILI
AMPHIPODA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH IPOD
ANAITIDES GROENLANDICA	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI GROE
ANAITIDES JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI JUVE
ANAITIDES MACULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	ANAI MACU
ANAITIDES MUCOSA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI MUCO
ANAITIDES SPEC.	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI SPEC
ANAITIDES SUBULIFERA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI SUBU
ANTHOZOA	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	ANTH OZOA
AONIDES PAUCIBRANCHIATA	-	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AONI PAUC
AORIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AORI SPEC
APHRODITA ACULEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR ACUL
APLACOPHORA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APLA COPH
ARCHIANNELIDA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCH IANN
ARCTICA ISLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCT ISLA
ARGISSA HAMATIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARGI HAMA
ARICIDEA JEFFREYSII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC JEFF
ARICIDEA MINUTA	+	-	-	-	-	+	+	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC MINU
ASTARTE TRIANGULARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTA TRIA
ASTROPECTEN IRREGULARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTR IRRE
ATYLUS FALCATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	ATYL FALC
ATYLUS SWAMMERDAMI	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ATYL SWAM
BATHYPOREIA ELEGANS	-	-	-	+	+	+	-	+	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	BATH ELEG
BATHYPOREIA GUILLIAMSONIANA	-	-	-	-	-	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	BATH GUIL
BATHYPOREIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH JUVE
BATHYPOREIA PELAGICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH PELA
BATHYPOREIA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH SPEC
BATHYPOREIA TENUIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH TENU
BIVALVAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BIVA LVAE
BRISSOPSIS LYRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BRIS LYRI
CALLIANASSA JUVENILE	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL JUVE
CALLIANASSA SUBTERRANEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL SUBT
CALLIANASSA TYRRHENA	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL TYRR
CAPITELLA CAPITATA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	-	-	-	-	-	-	-	+	+	CAPI CAPI
CAPITELLIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPI TELL
CAPRELLIDAE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPR ELLI
CARDIUM SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CARD SPEC
CAULLERIELLA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAUL LERI
CHAETOZONE SETOSA	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	CHAE SETO
CHAETOPTERUS VARIOPEDATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHAE VARI

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	Offshore area											Coastal area															
	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	
Species name	26	27	28	29	30	31	32	33	34	35	36	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
CINGULA VITREA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CING VITR
CORBULA GIBBA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORB GIBB
CORYSTES CASSIVELAUNUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORY CASS
CUCUMARIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CUCU ELON
CULTELLUS PELLUCIDUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CULT PELL
CYLICHNA CYLINDRACEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CYLI CYLI
DIASTYLIS BRADYI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIAS BRAD
DIASTYLIS RATHKEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIAS RATH
DIPLOCIRRUS GLAUCUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIPL GLAU
DONAX VITTATUS	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DONA VITT
DOSINIA EXOLETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI EXOL
DOSINIA LUPINUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI LUPI
DOSINIA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI SPEC
ECHINOCARDIUM CORDATUM	-	+	-	+	+	-	-	-	+	+	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	ECHI CORD
ECHINOCARDIUM JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ECHI JUVE
ECHINOCYAMUS PUSILLUS	-	-	+	+	-	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ECHI PUSI
EDWARDSIA CLAPAREDII	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EDWA CLAP
ENSIS ARCUATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI ARCU
ENSIS DIRECTUS	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	-	-	+	-	+	+	-	-	+	+	ENSI DIRE
ENSIS ENSIS	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI ENSI
ENSIS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SPEC
ENTEROPNEUSTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENTE ROPN
ETEONE LONGA	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+	-	-	-	ETEO LONG
EUDORELLOPSIS DEFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDO DEFO
EUDORELLA TRUNCATULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDO TRUN
EUMIDA SANGUINEA	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUMI SANG
EUZONUS FLABELLIGERUS	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUZO FLAB
EXOGONE HEBES	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG HEBE
EXOGONE NAIDINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG NAID
GARI FERVENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GARI FERV
GATTYANA CIRROSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GATT CIRR
GLYCERA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC JUVE
GLYCERA LAPIDUM	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC LAPI
GLYCERA ROUXI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC ROUX
GLYCERA SPEC.	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC SPEC
GOLFINGIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF ELON
GOLFINGIA VULGARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF VULG
GONIADA MACULATA	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GONI MACU
GYPTIS CAPENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GYPT CAPE
HARMOTHOE JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM JUVE
HARMOTHOE LONGISETIS	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM LONG
HARMOTHOE LUNUATA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM LUNU
HARMOTHOE SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM SPEC
HARPINIA ANTENNARIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARP ANTE
HESIONURA AUGENERI	+	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE
HETEROMASTUS FILIFORMIS	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HETE FILI
HIPPOMEDON DENTICULATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HIPP DENT
HYDROZOA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	HYDR OZOA

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	Offshore area											Coastal area														
	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	
Species name	26	27	28	29	30	31	32	33	34	35	36	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
HYDROBIA ULVAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	HYDR ULVA
IONE THORACIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IONE THOR
IPHINOE TRISPINOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IPHI TRIS
LANICE CONCHILEGA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	LANI CONC
LANICE JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LANI JUVE
LEPIDEPECREUM LONGICORNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPI LONG
LEUCOTHOE INCISA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC INCI
LEUCOTHOE LILLJEBORGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC LILL
LORA TURRICULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LORA TURR
LUCINOMA BOREALIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUCI BORE
LUMBRINERIS LATREILLI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUMB LATR
MACOMA BALTHICA	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	+	+	-	-	-	-	-	-	-	-	MACO BALT
MACTRA CORALLINA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACT CORA
MAGELONA ALLENI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAGE ALLE
MAGELONA JUVENILE	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAGE JUVE
MAGELONA PAPILLICORNIS	-	-	-	-	+	+	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	-	+	-	-	+	MAGE PAPI
MEDIOMASTUS FRAGILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MEDI FRAG
MEGALUROPUS AGILIS	-	+	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MEGA AGIL
MODIOLUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	MODI SPEC
MONTACUTA FERRUGINOSA	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	MONT FERR
MUSCULUS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MUSC JUVE
MYA TRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYA TRUN
MYRTEA SPINIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYRT SPIN
MYSELLA BIDENTATA	-	+	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	+	+	-	-	+	-	MYSE BIDE
MYSIA UNDATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYSI UNDA
NATICA ALDERI	-	-	+	-	+	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	NATI ALDE
NEMERTINI	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	NEME RTIN
NEPHTYS CAECA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	NEPH CAEC
NEPHTYS CIRROSA	+	+	+	+	-	+	+	+	+	+	+	-	-	-	-	-	-	-	-	+	-	+	+	-	-	-	NEPH CIRR
NEPHTYS HOMBERGII	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-	+	+	+	-	-	-	-	+	NEPH HOMB
NEPHTYS JUVENILE	-	+	-	+	-	+	-	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-	-	NEPH JUVE
NEPHTYS LONGOSETOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPH LONG
NEPHTYS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPH SPEC
NEREIS LONGISSIMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	NERE LONG
NOTOMASTUS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NOTO JUVE
NOTOMASTUS LATERICEUS	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NOTO LATE
NUCULA TENIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NUCU TENU
NUCULA TURGIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NUCU TURG
OLIGOCHAETA	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OLIG OCHA
OPHELINA ACUMINATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHE ACUM
OPHELIA LIMACINA	-	-	+	+	-	+	+	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHE LIMA
OPHIURA ALBIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI ALBI
OPHIODROMUS FLEXUOSUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI FLEX
OPHIURIDAE JUVENILE	+	+	-	-	-	-	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI JUVE
OPHIURA TEXTURATA	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI TEXT
ORBINIA SERTULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORBI SERT
ORCHOMENE HUMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH HUMI
ORCHOMENE NANA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH NANA

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	Offshore area											Coastal area															
	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	
Species name	26	27	28	29	30	31	32	33	34	35	36	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
OWENIA FUSIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN FUSI
OWENIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN JUVE
PARAONIS GRACILIS	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA GRAC
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT AURI
PECTINARIA KORENI	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	PECT KORE
PERIOCULODES LONGIMANUS	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PERI LONG
PHOLOE MINUTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PHOL MINU
PHORONIDA	-	-	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PHOR ONID
PISIONE REMOTA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISI REMO
PLATHYHELMITHES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PLAT HYHE
POECILOCHAETUS SERPENS	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POEC SERP
POLYCIRRUS SPEC.	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY CIRR
POLYDORA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY DORA
POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB
PONTOCRATES ALTAMARINUS	+	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT ALTA
PRIONOSPIO CIRRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PRIO CIRR
PSEUDOCUMA LONGICORNIS	-	-	-	-	-	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU LONG
PSEUDOCUMA SIMILIS	-	+	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU SIMI
SAGARTIA TROGLODYTES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	SAGA TROG
SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCAL INFL
SCOLOPLOS ARMIGER	-	+	+	+	-	+	+	-	+	-	-	-	-	+	-	-	-	-	-	+	-	+	-	+	-	-	SCOL ARMI
SCOLELEPIS BONNERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	SCOL BONN
SCOLELEPIS SQUAMATA	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCOL SQUA
SIGALION MATHILDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIGA MATH
SIPHONOECETES KROYERANUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY
SIPUNCULIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	SIPU NCUL
SPIOPHANES BOMBYX	+	+	+	+	+	+	+	+	+	+	+	+	-	+	-	+	-	-	-	+	+	+	+	+	-	+	SPIO BOMB
SPIO FILICORNIS	+	-	+	-	+	+	-	+	+	+	+	-	-	-	+	-	-	-	-	-	+	-	+	-	-	+	SPIO FILI
SPIOPHANES JUVENILE	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIO JUVE
SPISULA JUVENILE	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS JUVE
SPISULA SUBTRUNCATA	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	+	-	-	-	+	-	+	-	-	+	+	SPIS SUBT
STHENELAIS LIMICOLA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STHE LIMI
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRE WEBS
SYNCHELIDIUM MACULATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNC MACU
SYNELMIS KLATTI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNE KLAT
TELLINA FABULA	-	-	-	-	+	+	-	-	-	-	-	-	-	+	-	-	-	-	-	+	+	-	-	-	-	+	TELL FABU
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	TELL PYGM
THRACIA PHASEOLINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA PHAS
THYASIRA FLEXUOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THYA FLEX
TURRITELLA COMMUNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TURR COMM
UNCIOLA PLANIPES	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UNCI PLAN
UPOGEBIA DELTAURA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UPOG DELT
UROTHOE BREVICORNIS	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UROT BREV
UROTHOE ELEGANS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UROT ELEG
UROTHOE POSEIDONIS	-	+	-	-	+	+	+	-	-	-	-	+	+	+	+	+	-	-	+	+	+	+	+	-	-	+	UROT POSE
VENUS STRIATULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VENU STRI
WESTWOODILLA CAECULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	WEST CAEC
No. Species	12	21	12	14	15	17	16	30	11	17	21	5	4	12	8	11	4	5	4	18	11	11	8	3	6	10	

NOTE

Explanation of abbreviations in the tables:

N	= Number of individuals per m^2
B	= Biomass in g AFDW/m^2
S.D.	= Sample standard deviation
SUMS	= Sum of densities per boxcore
NSPC	= Number of species per boxcore
SH-W	= Shannon-Wiener index of diversity in bits/ind.
SIMP	= Simpson's index of dominance

All species names have been abbreviated by the first four characters of the generic name and the first four characters of the specific name. For full scientific names, see Appendix-1.

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STATION:	DOG 1		DOG 2		DOG 3		DOG 4		DOG 5	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEMACR	0.0	0.000	0.0	0.000	29.3	0.029	0.0	0.000	0.0	0.000
ATYLFALC	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	438.9	0.132	0.0	0.000	102.4	0.031	219.4	0.066	29.3	0.009
BATHGUIL	58.5	0.009	29.3	0.012	204.8	0.061	58.5	0.018	43.9	0.013
BATHJUVE	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.012	0.0	0.000
BATHSPEC	0.0	0.000	0.0	0.000	73.2	0.015	0.0	0.000	0.0	0.000
BATHTENU	0.0	0.000	14.6	0.004	29.3	0.009	0.0	0.000	0.0	0.000
HIPPDENT	14.6	0.015	14.6	0.077	14.6	0.029	0.0	0.000	0.0	0.000
IPHITRIS	14.6	0.022	0.0	0.000	73.2	0.058	0.0	0.000	43.9	0.044
LEUCINCI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
LEUCLILL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
MEGAAGIL	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
ORCHHUMI	29.3	0.022	0.0	0.000	0.0	0.000	0.0	0.000	248.7	0.075
PERILONG	29.3	0.009	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000
PSEULONG	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
SIPHKROY	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
SYNCMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
UROTPOSE	146.3	0.044	14.6	0.004	351.1	0.105	117.0	0.035	14.6	0.004
ECHINODERMATA										
ACROBRAC	14.6	0.096	73.2	6.581	58.5	1.116	43.9	0.440	58.5	2.560
ASTRIRRE	0.0	0.000	14.6	2.631	0.0	0.000	0.0	0.000	0.0	0.000
ECHIPUSI	14.6	0.012	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
OPHIJUVE	380.4	0.076	43.9	0.009	321.9	0.064	117.0	0.023	219.4	0.044
MOLLUSCA										
ABRAPRIS	0.0	0.000	14.6	0.053	0.0	0.000	0.0	0.000	14.6	0.053
CULTPELL	0.0	0.000	14.6	0.414	0.0	0.000	0.0	0.000	0.0	0.000
CYLICYLI	0.0	0.000	0.0	0.000	14.6	0.224	14.6	0.167	0.0	0.000
DOSIEXOL	0.0	0.000	0.0	0.000	102.4	0.156	14.6	0.028	0.0	0.000
DOSILUPI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.807	0.0	0.000
ENSIENSI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	5.612	14.6	4.766
ENSISPEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	11.015	0.0	0.000
LORATURR	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MACTCORA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
MONTFERR	0.0	0.000	29.3	0.006	29.3	0.010	0.0	0.000	0.0	0.000
MYSEBIDE	43.9	0.009	73.2	0.015	117.0	0.023	0.0	0.000	0.0	0.000
NATIALDE	102.4	0.044	14.6	0.038	43.9	0.143	29.3	0.040	14.6	0.003
NUCUTURG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.022
TELLFABU	14.6	0.007	175.6	0.344	175.6	0.614	58.5	0.585	234.1	0.844
THRAPHAS	14.6	0.013	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.331
POLYCHAETA										
ARICMINU	102.4	0.006	0.0	0.000	43.9	0.004	14.6	0.002	0.0	0.000
CHAESETO	190.2	0.010	73.2	0.015	14.6	0.002	0.0	0.000	29.3	0.004
ETEOLONG	14.6	0.002	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
GONIMACU	29.3	0.064	14.6	0.002	87.8	0.251	29.3	0.031	43.9	0.112
GYPTCAPE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.044
MAGEJUVE	0.0	0.000	438.9	0.054	73.2	0.004	204.8	0.010	482.8	0.052
MAGEPAPI	336.5	0.419	204.8	0.187	131.7	0.027	175.6	0.087	409.6	0.216
NEPHCIRR	43.9	0.319	0.0	0.000	87.8	0.046	29.3	0.012	0.0	0.000
NEPHHOMB	0.0	0.000	43.9	4.557	29.3	0.166	0.0	0.000	29.3	0.085
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.224
OPHELIMA	58.5	0.072	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
OWENFUSI	0.0	0.000	14.6	0.015	58.5	0.139	0.0	0.000	0.0	0.000
PHOLMINU	14.6	0.001	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
POECSERP	0.0	0.000	14.6	0.012	14.6	0.008	14.6	0.044	14.6	0.035
SCOLARMI	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
SCOLSQUA	73.2	0.564	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SIGAMATH	0.0	0.000	0.0	0.000	29.3	0.666	29.3	0.865	14.6	0.043
SPIOBOMB	87.8	0.046	117.0	0.044	87.8	0.014	0.0	0.000	278.0	0.172
SPIOFILI	29.3	0.008	219.4	0.041	14.6	0.002	14.6	0.014	336.5	0.069
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	14.6	0.013	0.0	0.000	0.0	0.000
EDWACLAP	73.2	0.483	43.9	0.241	0.0	0.000	0.0	0.000	102.4	0.080
HYDROZOA	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000
NEMERTIN	43.9	0.090	14.6	0.010	0.0	0.000	29.3	0.171	14.6	0.013
PHORONID	87.8	0.178	43.9	0.048	117.0	0.237	102.4	0.168	131.7	0.184
SUMS	2560.2	2.786	1799.5	15.421	2662.7	4.299	1448.4	21.259	2926.0	10.114
DIVERSITY										
NSPC	31		27		36		25		30	
SH-W	2.833		2.648		3.143		2.765		2.684	
SIMP	0.087		0.109		0.059		0.084		0.093	

STATION:	DOG 6		DOG 7		OYS 1		OYS 2		OYS 3	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
BATHELEG	160.9	0.048	131.7	0.040	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	29.3	0.009	468.2	0.140	0.0	0.000	0.0	0.000	0.0	0.000
BATHPELA	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
CALLSUBT	0.0	0.000	0.0	0.000	29.3	0.147	14.6	2.673	14.6	0.362
DIASBRAD	0.0	0.000	0.0	0.000	29.3	0.015	14.6	0.006	14.6	0.012
EUDOTRUN	0.0	0.000	0.0	0.000	43.9	0.009	0.0	0.000	14.6	0.004
HARPANTE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
HIPPDENT	0.0	0.000	58.5	0.037	0.0	0.000	0.0	0.000	0.0	0.000
IPHITRIS	29.3	0.023	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LEPILONG	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
PERILONG	73.2	0.022	29.3	0.009	0.0	0.000	14.6	0.004	0.0	0.000
SIPHKROY	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
UROTPOSE	146.3	0.044	131.7	0.040	0.0	0.000	0.0	0.000	0.0	0.000
WESTCAEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007
ECHINODERMATA										
ACROBRAC	102.4	4.594	29.3	1.094	0.0	0.000	0.0	0.000	0.0	0.000
AMPHFILI	0.0	0.000	0.0	0.000	2457.8	9.674	0.0	0.000	409.6	3.814
ASTRIRRE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.133
ECHICORD	14.6	11.103	0.0	0.000	14.6	0.323	0.0	0.000	0.0	0.000
ECHIPUSI	0.0	0.000	29.3	0.023	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	0.0	0.000	0.0	0.000	131.7	0.026	0.0	0.000	248.7	0.075
MOLLUSCA										
ABRANITI	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000	0.0	0.000
APLACOPH	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.038
CINGVITR	0.0	0.000	0.0	0.000	73.2	0.022	0.0	0.000	0.0	0.000
CORBGIBB	0.0	0.000	0.0	0.000	0.0	0.000	1024.1	0.205	0.0	0.000
CULTPELL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007
CYLICYLI	0.0	0.000	0.0	0.000	102.4	0.060	0.0	0.000	0.0	0.000
DOSILUPI	0.0	0.000	29.3	0.036	0.0	0.000	0.0	0.000	0.0	0.000
ENSIARCU	0.0	0.000	14.6	23.720	0.0	0.000	0.0	0.000	0.0	0.000
GARIFERV	0.0	0.000	14.6	0.241	0.0	0.000	0.0	0.000	0.0	0.000
LUCIBORE	0.0	0.000	14.6	0.155	0.0	0.000	0.0	0.000	0.0	0.000
MONTFERR	14.6	0.038	0.0	0.000	14.6	0.026	14.6	0.005	0.0	0.000
MYSEBIDE	409.6	0.082	0.0	0.000	468.2	0.105	0.0	0.000	263.3	0.053
NATIALDE	58.5	0.037	43.9	0.035	0.0	0.000	131.7	0.022	0.0	0.000
NUCUTENU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.057
TELLFABU	29.3	0.001	29.3	0.024	0.0	0.000	0.0	0.000	0.0	0.000
VENUSTRI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.001	0.0	0.000
POLYCHAETA										
ANAIJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
AONIPAUC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.004
APHRACUL	0.0	0.000	0.0	0.000	14.6	5.150	0.0	0.000	0.0	0.000
ARICMINU	14.6	0.002	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
CHAEVARI	0.0	0.000	0.0	0.000	14.6	3.426	14.6	2.248	14.6	1.549
EXOGHEBE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
GATTCIRR	0.0	0.000	0.0	0.000	29.3	0.226	0.0	0.000	0.0	0.000
GLYCJUVE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
GLYCROUX	0.0	0.000	0.0	0.000	14.6	1.423	0.0	0.000	0.0	0.000
GONIMACU	29.3	0.077	58.5	0.197	0.0	0.000	0.0	0.000	14.6	0.015
HARMLONG	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.247	0.0	0.000
HARMLUNU	43.9	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
MAGEPAPI	117.0	0.124	58.5	0.118	0.0	0.000	43.9	0.015	0.0	0.000
NEPHCIRR	160.9	0.392	117.0	0.141	0.0	0.000	0.0	0.000	0.0	0.000
NEPHHOMB	43.9	0.131	43.9	0.892	43.9	0.390	14.6	0.653	14.6	0.087
NEPHJUVE	43.9	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NERELONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.251	0.0	0.000
NOTOJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
NOTOLATE	0.0	0.000	43.9	1.765	73.2	0.942	0.0	0.000	29.3	0.668
OPHIFLEX	0.0	0.000	0.0	0.000	14.6	0.075	0.0	0.000	0.0	0.000
ORBISERT	0.0	0.000	0.0	0.000	14.6	1.081	0.0	0.000	0.0	0.000
OWENFUSI	58.5	0.209	29.3	0.158	14.6	0.006	0.0	0.000	0.0	0.000
PHOLMINU	0.0	0.000	0.0	0.000	204.8	0.039	29.3	0.006	43.9	0.012
POECSERP	0.0	0.000	14.6	0.017	0.0	0.000	29.3	0.041	0.0	0.000
SCOLARMI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	160.9	0.116
SCOLSQUA	14.6	0.066	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SIGAMATH	0.0	0.000	14.6	0.205	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	102.4	0.104	73.2	0.037	0.0	0.000	365.8	0.122	14.6	0.002
SPIOFILI	58.5	0.037	14.6	0.004	0.0	0.000	14.6	0.004	0.0	0.000
SYNEKLAT	0.0	0.000	0.0	0.000	14.6	0.002	14.6	0.006	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	14.6	0.132	0.0	0.000	14.6	0.547	0.0	0.000	0.0	0.000
GOLFVULG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
NEMERTIN	0.0	0.000	14.6	0.006	0.0	0.000	29.3	0.055	29.3	0.061
PHORONID	1097.3	0.837	73.2	0.052	14.6	0.002	87.8	0.060	146.3	0.043
SUMS	2882.1	18.135	1609.3	29.194	3906.2	23.738	1960.4	6.634	1682.5	7.130
DIVERSITY										
NSPC	25		27		27		22		25	
SH-W	2.355		2.718		1.584		1.784		2.472	
SIMP	0.181		0.116		0.416		0.316		0.127	

STATION:	OYS 4		OYS 5		OYS 6		OYS 7		OYS 8	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000
AMPETENU	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHTENU	43.9	0.013	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CALLSUBT	0.0	0.000	58.5	3.020	29.3	1.183	0.0	0.000	14.6	0.040
CORYCASS	14.6	0.647	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
DIASBRAD	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.009
HARPANTE	0.0	0.000	14.6	0.004	0.0	0.000	87.8	0.026	0.0	0.000
HIPPDENT	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000
MEGAAGIL	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ORCHHUMI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
PONTALTA	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
UPOGDELT	0.0	0.000	14.6	2.612	0.0	0.000	0.0	0.000	0.0	0.000
UROTPOSE	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHINODERMATA										
ACROBRAC	87.8	3.625	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
AMPHFILI	0.0	0.000	248.7	0.231	629.1	6.222	643.7	0.213	0.0	0.000
CUCUELON	0.0	0.000	29.3	0.427	0.0	0.000	0.0	0.000	0.0	0.000
ECHIJUVE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.003	0.0	0.000
OPHIALBI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	102.4	2.078
OPHIJUVE	160.9	0.032	117.0	0.023	0.0	0.000	775.4	0.155	14.6	0.003
OPHITEXT	0.0	0.000	29.3	0.299	0.0	0.000	0.0	0.000	0.0	0.000
MOLLUSCA										
ABRAALBA	29.3	0.360	0.0	0.000	0.0	0.000	14.6	0.008	0.0	0.000
ABRAPRIS	29.3	0.082	0.0	0.000	14.6	0.008	0.0	0.000	0.0	0.000
APLACOPH	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.058	0.0	0.000
CARDSPEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
CINGVITR	0.0	0.000	336.5	0.135	0.0	0.000	73.2	0.029	0.0	0.000
CORBGIBB	0.0	0.000	87.8	0.243	0.0	0.000	0.0	0.000	14.6	0.004
CYLICYLI	0.0	0.000	14.6	0.021	0.0	0.000	0.0	0.000	14.6	0.034
DOSILUPI	0.0	0.000	0.0	0.000	14.6	0.576	0.0	0.000	0.0	0.000
ENSIENSI	14.6	0.051	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GARIFERV	0.0	0.000	0.0	0.000	14.6	2.527	0.0	0.000	0.0	0.000
LORATURR	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MYSEBIDE	14.6	0.003	43.9	0.009	409.6	0.082	204.8	0.041	58.5	0.012
NATIALDE	43.9	0.027	29.3	0.022	0.0	0.000	0.0	0.000	14.6	0.026
NUCUTURG	14.6	0.162	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
TELLFABU	248.7	0.542	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
THRAPHAS	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
THYAFLEX	102.4	0.458	0.0	0.000	14.6	0.061	0.0	0.000	0.0	0.000
VENUSTRI	29.3	0.001	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
ANAIJUVE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
ANAISUBU	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CHAESETO	73.2	0.014	0.0	0.000	0.0	0.000	29.3	0.008	0.0	0.000
CHAEVARI	0.0	0.000	14.6	6.120	0.0	0.000	0.0	0.000	0.0	0.000
DIPLGLAU	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.052	14.6	0.004
GATTCIRR	0.0	0.000	29.3	0.589	0.0	0.000	0.0	0.000	0.0	0.000
GLYCROUX	0.0	0.000	14.6	0.089	0.0	0.000	14.6	0.046	0.0	0.000
GONIMACU	29.3	0.004	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
HARMJUVE	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARMLUNU	14.6	0.012	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000
HETEFILI	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
LANICONC	43.9	1.429	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.363
LUMBLATR	0.0	0.000	58.5	0.079	0.0	0.000	0.0	0.000	0.0	0.000
MAGEALLE	14.6	0.068	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEJUVE	43.9	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	453.5	0.178	14.6	0.008	190.2	0.029	0.0	0.000	0.0	0.000
NEPHHOMB	14.6	0.008	29.3	0.240	29.3	1.163	43.9	0.718	14.6	0.346
NEPHJUVE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.033	29.3	0.012
NERELONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
NOTOLATE	0.0	0.000	29.3	1.454	0.0	0.000	14.6	0.098	0.0	0.000
OPHIFLEX	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000	0.0	0.000
OWENFUSI	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.035	14.6	0.048
PARAGRAC	0.0	0.000	29.3	0.006	0.0	0.000	43.9	0.002	0.0	0.000
PECTAURI	0.0	0.000	0.0	0.000	14.6	0.025	43.9	0.284	0.0	0.000
PHOLMINU	14.6	0.008	0.0	0.000	204.8	0.033	14.6	0.002	14.6	0.002
POECSERP	0.0	0.000	0.0	0.000	14.6	0.008	0.0	0.000	14.6	0.014
POLYKINB	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.060	0.0	0.000
SCOLARMI	14.6	0.014	0.0	0.000	29.3	0.019	0.0	0.000	0.0	0.000
SCOLSQUA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.029	0.0	0.000
SIGAMATH	87.8	0.778	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	160.9	0.137	14.6	0.004	131.7	0.054	14.6	0.004	73.2	0.058
SPIOFILI	117.0	0.033	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
STHELIMI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.089	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	14.6	0.142	0.0	0.000	0.0	0.000	29.3	0.209	0.0	0.000
GOLFVULG	0.0	0.000	43.9	0.946	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	58.5	0.026	29.3	1.062	14.6	0.084	0.0	0.000	14.6	0.006
PHORONID	29.3	0.014	14.6	0.001	87.8	0.008	14.6	0.001	58.5	0.015
SIPUNCUL	0.0	0.000	14.6	0.010	0.0	0.000	0.0	0.000	0.0	0.000
SUMS	2136.0	8.903	1389.9	17.657	1916.5	12.107	2472.5	2.239	541.3	3.081
DIVERSITY										
NSPC	36		27		21		29		20	
SH-W	2.968		2.697		2.127		2.332		2.688	
SIMP	0.084		0.111		0.182		0.179		0.090	

STATION:	OYS 10		OYS 11		OYS 12		OYS 13		OYS 14	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPETENU	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
AMPHIPOD	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
ATYLSWAM	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
CALLSUBT	0.0	0.000	58.5	5.065	131.7	2.666	14.6	0.051	87.8	3.086
DIASBRAD	14.6	0.012	0.0	0.000	14.6	0.015	0.0	0.000	0.0	0.000
EUDOTRUN	43.9	0.009	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
HARPANTE	14.6	0.004	73.2	0.022	58.5	0.018	58.5	0.018	29.3	0.009
IONETHOR	0.0	0.000	0.0	0.000	14.6	0.015	14.6	0.007	0.0	0.000
LEUCLILL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
UPOGDELT	0.0	0.000	14.6	0.029	43.9	11.719	0.0	0.000	14.6	2.368
ECHINODERMATA										
AMPHFILI	1623.9	12.158	1784.9	2.902	102.4	0.184	1199.7	8.908	292.6	1.129
ASTRIRRE	14.6	2.935	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	29.3	7.100	0.0	0.000	0.0	0.000	58.5	13.510	0.0	0.000
OPHIALBI	0.0	0.000	365.8	1.491	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	204.8	0.041	468.2	0.094	102.4	0.021	614.5	0.123	58.5	0.012
MOLLUSCA										
ABRAALBA	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.061	0.0	0.000
ABRAPRIS	29.3	0.032	0.0	0.000	0.0	0.000	14.6	0.001	0.0	0.000
CINGVITR	43.9	0.022	43.9	0.022	43.9	0.013	0.0	0.000	804.7	0.241
CORBGIBB	0.0	0.000	146.3	0.053	29.3	0.011	0.0	0.000	2033.6	1.204
CYLICYLI	14.6	0.004	14.6	0.010	14.6	0.007	58.5	0.036	29.3	0.028
MACTCORA	0.0	0.000	0.0	0.000	14.6	0.015	43.9	0.006	14.6	0.001
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.049	0.0	0.000
MYATRUN	14.6	34.139	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MYSEBIDE	585.2	0.117	234.1	0.047	0.0	0.000	804.7	0.161	0.0	0.000
MYSIUNDA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
NATIALDE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	14.6	0.005
NUCUTENU	73.2	0.115	14.6	0.013	14.6	0.011	73.2	0.070	0.0	0.000
NUCUTURG	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.141	29.3	0.049
THYAFLEX	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.036	0.0	0.000
VENUSTRI	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.003	43.9	0.001
POLYCHAETA										
ANAISUBU	14.6	0.008	0.0	0.000	0.0	0.000	14.6	0.068	0.0	0.000
AONIPAUC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
CAPITELL	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
CHAESETO	29.3	0.023	0.0	0.000	43.9	0.008	14.6	0.006	0.0	0.000
CHAEVARI	0.0	0.000	0.0	0.000	14.6	4.544	0.0	0.000	0.0	0.000
GATTCIRR	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000
GLYCROUX	0.0	0.000	0.0	0.000	14.6	2.578	0.0	0.000	14.6	0.533
GONIMACU	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.031	0.0	0.000
HARMLUNU	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LUMBLATR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.170
MAGEALLE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.085
MAGEPAPI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.017	0.0	0.000
NEPHHOMB	14.6	0.154	0.0	0.000	14.6	0.087	14.6	0.463	0.0	0.000
NEPHJUVE	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEPHSPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
NERELONG	0.0	0.000	14.6	0.008	0.0	0.000	0.0	0.000	0.0	0.000
NOTOLATE	0.0	0.000	0.0	0.000	14.6	0.075	0.0	0.000	0.0	0.000
ORBISERT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	2.412
OWENFUSI	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
PHOLMINU	278.0	0.033	219.4	0.048	0.0	0.000	204.8	0.023	14.6	0.004
POLYDORA	0.0	0.000	14.6	0.002	87.8	0.091	0.0	0.000	0.0	0.000
SCOLARMI	14.6	0.029	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000
SPIOBOMB	58.5	0.015	29.3	0.012	0.0	0.000	43.9	0.008	43.9	0.004
SPIOFILI	0.0	0.000	0.0	0.000	43.9	0.010	0.0	0.000	263.3	0.069
STHELIMI	14.6	0.052	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SYNEKLAT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.015
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000
GOLFVULG	0.0	0.000	0.0	0.000	102.4	0.180	0.0	0.000	14.6	0.008
NEMERTIN	0.0	0.000	14.6	0.010	14.6	0.003	14.6	0.013	14.6	0.006
PHORONID	14.6	0.004	263.3	0.104	0.0	0.000	58.5	0.008	14.6	0.012
PLATHYHE	0.0	0.000	14.6	0.003	0.0	0.000	14.6	0.090	0.0	0.000
SIPUNCUL	0.0	0.000	29.3	0.214	0.0	0.000	0.0	0.000	0.0	0.000
SUMS	3174.7	57.012	3876.9	10.158	1009.5	22.293	3672.1	23.924	4008.6	11.460
DIVERSITY										
NSPC	23		23		26		29		26	
SH-W	1.751		1.968		2.908		2.199		1.764	
SIMP	0.309		0.249		0.069		0.189		0.309	

STATION:	OYS 15		OYS 16		OYS 17		OYS 18		OYS 19	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	0.0	0.000	43.9	0.023	0.0	0.000	0.0	0.000	0.0	0.000
AORISPEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
BATHTENU	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000
CALLSUBT	58.5	0.718	29.3	1.341	14.6	0.103	0.0	0.000	102.4	1.464
DIASBRAD	0.0	0.000	0.0	0.000	14.6	0.022	0.0	0.000	0.0	0.000
DIASRATH	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.015
EUDODEFO	0.0	0.000	0.0	0.000	102.4	0.021	0.0	0.000	0.0	0.000
EUDOTRUN	29.3	0.022	29.3	0.006	0.0	0.000	0.0	0.000	29.3	0.006
HARPANTE	14.6	0.004	146.3	0.044	117.0	0.035	0.0	0.000	0.0	0.000
HIPPDENT	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
IONETHOR	14.6	0.012	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.015
UROTELEG	0.0	0.000	0.0	0.000	73.2	0.022	0.0	0.000	0.0	0.000
UROTPOSE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
ECHINODERMATA										
AMPHFILI	278.0	0.266	907.1	7.818	555.9	2.888	0.0	0.000	599.8	1.157
ECHICORD	29.3	5.419	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.028
ECHIPUSI	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
OPHIJUVE	43.9	0.009	160.9	0.032	219.4	0.044	73.2	0.015	395.0	0.079
MOLLUSCA										
ABRAALBA	58.5	0.034	29.3	0.004	29.3	0.002	0.0	0.000	0.0	0.000
ARCTISLA	29.3	49.819	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CINGVITR	14.6	0.004	14.6	0.003	0.0	0.000	0.0	0.000	146.3	0.044
CORBGIBB	190.2	0.127	438.9	0.127	14.6	0.004	3247.9	0.383	0.0	0.000
CYLICYLI	14.6	0.014	58.5	0.063	14.6	0.007	0.0	0.000	29.3	0.019
MONTFERR	14.6	0.013	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MYSEBIDE	29.3	0.006	497.4	0.100	0.0	0.000	14.6	0.003	14.6	0.003
MYSIUNDA	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
NATIALDE	0.0	0.000	0.0	0.000	43.9	0.015	248.7	3.667	0.0	0.000
NUCUTENU	14.6	0.019	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	0.0	0.000	14.6	0.000	14.6	0.013	0.0	0.000
TELLPYGM	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
THRAPHAS	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.255	0.0	0.000
TURRCOMM	0.0	0.000	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
AONIPAUC	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CHAESETO	14.6	0.006	0.0	0.000	29.3	0.023	0.0	0.000	0.0	0.000
CHAEVARI	14.6	1.842	0.0	0.000	0.0	0.000	0.0	0.000	58.5	23.201
DIPLGLAU	0.0	0.000	0.0	0.000	14.6	0.039	0.0	0.000	0.0	0.000
EXOGHEBE	0.0	0.000	14.6	0.002	14.6	0.001	14.6	0.001	14.6	0.001
GATTCIRR	14.6	0.720	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.375
GLYCROUX	14.6	0.023	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	29.3	0.027	14.6	0.004	0.0	0.000
HETEFILI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.004
MAGEPAPI	0.0	0.000	43.9	0.004	219.4	0.095	292.6	0.274	0.0	0.000
NEPHCAEC	0.0	0.000	0.0	0.000	14.6	6.500	0.0	0.000	0.0	0.000
NEPHCIRR	0.0	0.000	0.0	0.000	14.6	0.041	14.6	0.033	0.0	0.000
NEPHHOMB	0.0	0.000	43.9	0.263	0.0	0.000	29.3	2.032	14.6	0.288
NEPHJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.535
OPHEACUM	14.6	0.098	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.031
OPHIFLEX	14.6	0.054	0.0	0.000	58.5	0.282	0.0	0.000	14.6	0.035
OWENFUSI	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PHOLMINU	0.0	0.000	204.8	0.035	43.9	0.008	0.0	0.000	87.8	0.012
POECSERP	14.6	0.015	0.0	0.000	43.9	0.066	43.9	0.035	0.0	0.000
SCOLARMI	0.0	0.000	117.0	0.112	0.0	0.000	43.9	0.012	14.6	0.004
SCOLBONN	0.0	0.000	0.0	0.000	14.6	0.046	0.0	0.000	0.0	0.000
SIGAMATH	0.0	0.000	0.0	0.000	29.3	0.255	0.0	0.000	0.0	0.000
SPIOBOMB	0.0	0.000	29.3	0.006	43.9	0.025	219.4	0.060	0.0	0.000
SPIOFILI	29.3	0.039	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
STHELIMI	29.3	0.064	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SYNEKLAT	14.6	0.004	0.0	0.000	14.6	0.002	0.0	0.000	29.3	0.008
MISCELLANEOUS										
ANTHOZOA	14.6	0.241	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	43.9	0.013	14.6	1.773	0.0	0.000	117.0	0.154	0.0	0.000
PHORONID	0.0	0.000	29.3	0.002	73.2	0.019	175.6	0.100	14.6	0.004
PLATHYHE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
SIPUNCUL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	1.120
SUMS	1126.5	59.616	2867.5	11.772	1960.4	10.615	4681.6	7.050	1784.9	29.448
DIVERSITY										
NSPC	30		20		32		19		24	
SH-W	2.829		2.201		2.723		1.335		2.266	
SIMP	0.105		0.168		0.119		0.493		0.179	

STATION:	OYS 20		OYS 21		OYS 22		OYS 23		OYS 24	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
AMPHIPOD	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000
BATHTENU	0.0	0.000	0.0	0.000	58.5	0.018	0.0	0.000	14.6	0.004
CALLSUBT	87.8	0.614	43.9	0.998	0.0	0.000	14.6	0.007	29.3	2.587
DIASBRAD	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
DIASRATH	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.010
EUDOTRUN	14.6	0.003	58.5	0.012	14.6	0.003	14.6	0.003	0.0	0.000
HARPANTE	146.3	0.044	58.5	0.018	29.3	0.009	29.3	0.009	0.0	0.000
HIPPDENT	0.0	0.000	0.0	0.000	14.6	0.037	29.3	0.007	0.0	0.000
IONETHOR	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PONTALTA	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
PSEULONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006
UROTELEG	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHINODERMATA										
AMPHFILI	351.1	2.796	1214.3	1.053	453.5	3.756	994.8	10.233	0.0	0.000
ECHICORD	29.3	5.955	14.6	0.816	14.6	4.944	29.3	11.855	0.0	0.000
OPHIALBI	0.0	0.000	87.8	2.683	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	29.3	0.006	234.1	0.047	278.0	0.056	409.6	0.082	29.3	0.006
MOLLUSCA										
ABRAALBA	14.6	0.034	29.3	0.007	0.0	0.000	0.0	0.000	0.0	0.000
ABRAJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
ABRAPRIS	14.6	0.074	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ARCTISLA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.008	0.0	0.000
CINGVITR	0.0	0.000	0.0	0.000	73.2	0.015	0.0	0.000	0.0	0.000
CORBGIBB	0.0	0.000	29.3	0.017	14.6	0.011	0.0	0.000	0.0	0.000
CULTPELL	14.6	0.233	0.0	0.000	14.6	0.637	0.0	0.000	0.0	0.000
CYLICYLI	43.9	0.121	0.0	0.000	0.0	0.000	29.3	0.007	0.0	0.000
DOSILUPI	29.3	2.191	0.0	0.000	0.0	0.000	58.5	3.874	0.0	0.000
MACTCORA	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
MONTFERR	43.9	0.056	0.0	0.000	0.0	0.000	58.5	0.109	0.0	0.000
MYSEBIDE	87.8	0.018	0.0	0.000	160.9	0.032	1199.7	0.240	0.0	0.000
NATIALDE	29.3	0.006	87.8	0.271	14.6	0.002	43.9	0.038	29.3	0.007
NUCUTENU	29.3	0.053	0.0	0.000	0.0	0.000	14.6	0.011	0.0	0.000
NUCUTURG	0.0	0.000	58.5	0.063	14.6	0.011	58.5	0.659	0.0	0.000
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.000	0.0	0.000
THRAPHAS	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
THYAFLEX	0.0	0.000	0.0	0.000	14.6	0.000	29.3	0.089	0.0	0.000
VENUSTRI	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
APHRACUL	14.6	0.002	0.0	0.000	14.6	7.781	0.0	0.000	0.0	0.000
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	87.8	0.004
DIPLGLAU	0.0	0.000	0.0	0.000	14.6	0.056	14.6	0.006	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.004	0.0	0.000
GYPTCAPE	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.008
LUMBLATR	29.3	0.191	58.5	0.039	0.0	0.000	0.0	0.000	14.6	0.044
MAGEALLE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.172	0.0	0.000
MAGEPAPI	14.6	0.002	14.6	0.010	29.3	0.012	278.0	0.039	0.0	0.000
NEPHCIRR	0.0	0.000	0.0	0.000	14.6	0.027	0.0	0.000	0.0	0.000
NEPHHOMB	58.5	0.266	0.0	0.000	29.3	0.178	43.9	0.392	0.0	0.000
NEPHJUVE	14.6	0.014	29.3	0.004	0.0	0.000	0.0	0.000	29.3	0.002
NERELONG	0.0	0.000	14.6	0.008	0.0	0.000	0.0	0.000	14.6	0.139
NOTOLATE	0.0	0.000	58.5	2.578	0.0	0.000	0.0	0.000	0.0	0.000
OPHIFLEX	0.0	0.000	0.0	0.000	29.3	0.093	0.0	0.000	14.6	0.010
OWENFUSI	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
PHOLMINU	14.6	0.002	87.8	0.025	58.5	0.006	175.6	0.027	0.0	0.000
POLYDORA	0.0	0.000	29.3	0.012	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	14.6	0.004	43.9	0.019	0.0	0.000	0.0	0.000
SIGAMATH	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
SPIOBOMB	58.5	0.023	58.5	0.023	0.0	0.000	204.8	0.073	0.0	0.000
SPIOFILI	43.9	0.008	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.002
STHELIMI	0.0	0.000	0.0	0.000	14.6	0.014	0.0	0.000	0.0	0.000
SYNEKLAT	14.6	0.002	0.0	0.000	14.6	0.002	14.6	0.002	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	43.9	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ENTEROPN	0.0	0.000	0.0	0.000	14.6	0.405	0.0	0.000	0.0	0.000
NEMERTIN	0.0	0.000	29.3	0.103	29.3	0.010	29.3	0.006	0.0	0.000
PHORONID	43.9	0.004	102.4	0.058	14.6	0.002	43.9	0.014	29.3	0.004
PLATHYHE	14.6	0.373	0.0	0.000	0.0	0.000	43.9	0.010	0.0	0.000
SUMS	1448.4	13.156	2472.5	8.862	1536.2	18.146	3950.1	27.979	424.3	2.836
DIVERSITY										
NSPC	34		26		30		29		15	
SH-W	2.998		2.168		2.576		2.251		2.519	
SIMP	0.088		0.260		0.140		0.177		0.097	

STATION:	OYS 25		OYS 26		OYS 27		OYS 28		OYS 29	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
BATHELEG	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
BATHTENU	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.013	0.0	0.000
CALLSUBT	29.3	0.581	73.2	2.443	29.3	0.147	0.0	0.000	0.0	0.000
DIASBRAD	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARPANTE	14.6	0.004	0.0	0.000	117.0	0.035	43.9	0.013	43.9	0.013
HIPPDENT	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.007	14.6	0.004
IONETHOR	29.3	0.037	0.0	0.000	14.6	0.015	0.0	0.000	0.0	0.000
ORCHNANA	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
UROTELEG	0.0	0.000	0.0	0.000	14.6	0.004	87.8	0.026	0.0	0.000
ECHINODERMATA										
AMPHFILI	58.5	0.221	570.6	2.630	14.6	0.010	14.6	0.010	336.5	3.543
ECHICORD	0.0	0.000	14.6	2.698	14.6	10.328	14.6	17.467	0.0	0.000
OPHIALBI	0.0	0.000	14.6	0.690	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	117.0	0.023	58.5	0.012	43.9	0.009	0.0	0.000	29.3	0.006
MOLLUSCA										
ABRAALBA	43.9	0.002	14.6	0.002	14.6	0.002	0.0	0.000	0.0	0.000
APLACOPH	14.6	0.022	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CINGVITR	58.5	0.018	14.6	0.006	29.3	0.012	0.0	0.000	0.0	0.000
CORBGIBB	87.8	0.032	131.7	0.136	1009.5	0.210	0.0	0.000	0.0	0.000
CULTPELL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
CYLICYLI	14.6	0.008	43.9	0.092	14.6	0.026	14.6	0.004	29.3	0.213
DOSILUPI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.113
MONTFERR	14.6	0.056	14.6	0.021	14.6	0.007	43.9	0.021	0.0	0.000
MYSEBIDE	0.0	0.000	248.7	0.050	43.9	0.009	14.6	0.003	190.2	0.038
MYSIUNDA	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
NATIALDE	14.6	0.005	29.3	0.010	58.5	0.056	0.0	0.000	29.3	0.007
NUCUTENU	14.6	0.005	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NUCUTURG	0.0	0.000	0.0	0.000	14.6	0.002	43.9	0.027	102.4	0.641
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.002
THRAPHAS	0.0	0.000	0.0	0.000	14.6	0.004	29.3	0.006	0.0	0.000
THYAFLEX	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	160.9	0.390
VENUSTRI	0.0	0.000	0.0	0.000	58.5	0.002	0.0	0.000	14.6	0.000
POLYCHAETA										
CHAESETO	14.6	0.004	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.008
CHAEVARI	29.3	6.798	14.6	2.240	0.0	0.000	0.0	0.000	0.0	0.000
EXOGHEBE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
GATTCIRR	29.3	0.877	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GLYCROUX	14.6	1.634	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GYPTCAPE	0.0	0.000	14.6	0.033	14.6	0.004	0.0	0.000	0.0	0.000
HARMLUNU	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.921
LUMBLATR	14.6	0.062	29.3	0.054	0.0	0.000	0.0	0.000	0.0	0.000
MAGEALLE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.135
MAGEJUVE	0.0	0.000	0.0	0.000	0.0	0.000	175.6	0.010	14.6	0.002
MAGEPAPI	29.3	0.004	0.0	0.000	263.3	0.201	892.4	0.913	160.9	0.058
NEPHHOMB	14.6	0.135	0.0	0.000	14.6	0.162	14.6	0.603	29.3	0.444
NEPHJUVE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	29.3	0.008
NERELONG	0.0	0.000	14.6	0.104	0.0	0.000	0.0	0.000	0.0	0.000
NOTOJUVE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
NOTOLATE	14.6	0.133	14.6	0.114	0.0	0.000	14.6	0.164	0.0	0.000
OPHEACUM	14.6	0.212	14.6	0.043	0.0	0.000	0.0	0.000	0.0	0.000
OPHIFLEX	0.0	0.000	14.6	0.014	29.3	0.041	14.6	0.073	0.0	0.000
OWENFUSI	0.0	0.000	14.6	0.025	0.0	0.000	0.0	0.000	14.6	0.006
PECTKORE	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PHOLMINU	14.6	0.002	29.3	0.004	0.0	0.000	0.0	0.000	14.6	0.002
POLYDORA	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	0.0	0.000	58.5	0.008	0.0	0.000	14.6	0.019
SIGAMATH	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.127
SPIOBOMB	0.0	0.000	43.9	0.017	58.5	0.015	0.0	0.000	58.5	0.017
SPIOFILI	14.6	0.021	14.6	0.004	29.3	0.004	14.6	0.002	14.6	0.002
SPIOJUVE	0.0	0.000	175.6	0.004	0.0	0.000	29.3	0.002	0.0	0.000
STHELIMI	0.0	0.000	0.0	0.000	14.6	0.014	0.0	0.000	0.0	0.000
SYNEKLAT	29.3	0.006	0.0	0.000	29.3	0.002	14.6	0.002	0.0	0.000
MISCELLANEOUS										
GOLFELON	14.6	0.125	43.9	1.174	0.0	0.000	0.0	0.000	0.0	0.000
GOLFVULG	0.0	0.000	29.3	0.637	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	29.3	0.068	14.6	0.145	14.6	0.002	43.9	0.151	43.9	1.134
PHORONID	0.0	0.000	0.0	0.000	117.0	0.081	58.5	0.021	0.0	0.000
SUMS	848.5	11.121	1755.6	13.408	2223.8	11.425	1697.1	19.550	1463.0	7.858
DIVERSITY										
NSPC	31		30		31		24		27	
SH-W	3.173		2.540		2.297		2.016		2.682	
SIMP	0.055		0.148		0.231		0.296		0.105	

STATION:	OYS 30		OYS 31		OYS 32		OYS 33		OYS 34	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	0.0	0.000	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000
AMPETENU	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.004	0.0	0.000
BATHGUIL	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHTENU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
CALLSUBT	87.8	2.831	73.2	4.367	0.0	0.000	87.8	0.674	102.4	3.654
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015	0.0	0.000
EUDOTRUN	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009	14.6	0.003
HARPANTE	0.0	0.000	87.8	0.026	0.0	0.000	117.0	0.035	0.0	0.000
HIPPDENT	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
IONETHOR	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	14.6	0.007
LEUCLILL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
PERILONG	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
PSEULONG	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
UROTELEG	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
WESTCAEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
ECHINODERMATA										
AMPHFILI	0.0	0.000	877.8	10.094	131.7	0.061	321.9	1.585	43.9	0.639
ECHICORD	14.6	5.413	29.3	11.932	29.3	3.128	0.0	0.000	0.0	0.000
OPHIJUVE	0.0	0.000	73.2	0.015	73.2	0.015	234.1	0.047	0.0	0.000
MOLLUSCA										
ABRAALBA	160.9	0.018	131.7	0.007	0.0	0.000	14.6	0.003	219.4	0.044
CINGVITR	14.6	0.003	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000
CORBGIBB	0.0	0.000	29.3	0.008	73.2	0.019	0.0	0.000	0.0	0.000
CYLICYLI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
MONTFERR	14.6	0.004	0.0	0.000	43.9	0.028	0.0	0.000	0.0	0.000
MUSCJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
MYSEBIDE	0.0	0.000	497.4	0.100	14.6	0.003	14.6	0.003	73.2	0.015
NATIALDE	29.3	0.006	0.0	0.000	14.6	0.005	0.0	0.000	0.0	0.000
NUCUTENU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
NUCUTURG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.019	0.0	0.000
THRAPHAS	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
VENUSTRI	0.0	0.000	14.6	0.001	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
ARICJEFF	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
CAPITELL	43.9	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CHAESETO	43.9	0.006	14.6	0.014	0.0	0.000	29.3	0.017	0.0	0.000
CHAEVARI	0.0	0.000	14.6	1.773	0.0	0.000	14.6	4.654	0.0	0.000
GLYCROUX	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
GYPTCAPE	29.3	0.023	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.008
LUMBLATR	14.6	0.008	14.6	0.027	0.0	0.000	14.6	0.031	29.3	0.052
MAGEPAPI	58.5	0.077	29.3	0.010	0.0	0.000	14.6	0.006	0.0	0.000
MEDIFRAG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	234.1	0.023
NEPHHOMB	29.3	1.755	0.0	0.000	0.0	0.000	29.3	0.158	29.3	1.970
NEPHJUVE	43.9	0.006	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
OPHIFLEX	43.9	0.106	29.3	0.075	0.0	0.000	14.6	0.066	14.6	0.054
ORBISERT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.178	14.6	1.139
OWENFUSI	29.3	0.015	0.0	0.000	0.0	0.000	14.6	0.068	0.0	0.000
PHOLMINU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
POECSERP	14.6	0.014	14.6	0.008	0.0	0.000	14.6	0.004	0.0	0.000
POLYDORA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	58.5	0.019
SCALINFL	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	29.3	0.212	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
SPIOFILI	0.0	0.000	175.6	0.037	0.0	0.000	0.0	0.000	14.6	0.002
SPIOJUVE	0.0	0.000	14.6	0.001	0.0	0.000	0.0	0.000	0.0	0.000
MISCELLANEOUS										
GOLFELON	0.0	0.000	0.0	0.000	14.6	0.129	0.0	0.000	0.0	0.000
NEMERTIN	14.6	0.004	14.6	0.004	14.6	0.025	0.0	0.000	14.6	0.002
PHORONID	0.0	0.000	14.6	0.004	14.6	0.002	0.0	0.000	307.2	0.077
PLATHYHE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
SIPUNCUL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.622	0.0	0.000
SUMS	760.8	10.514	2282.3	28.546	438.9	3.421	1214.3	8.239	1228.9	7.714
DIVERSITY										
NSPC	21		27		11		30		18	
SH-W	2.744		2.172		2.049		2.645		2.262	
SIMP	0.087		0.209		0.165		0.127		0.146	

STATION:	OYS 35		OYS 36		OYS 37		OYS 38		OYS 39	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
BATHTENU	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CALLSUBT	14.6	1.023	29.3	0.851	102.4	1.016	14.6	0.011	0.0	0.000
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015
EUDODEFO	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
EUDOTRUN	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	29.3	0.006
HARPANTE	73.2	0.022	58.5	0.018	73.2	0.022	0.0	0.000	87.8	0.026
HIPPDENT	14.6	0.022	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
IONETHOR	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000
PERILONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
PSEULONG	0.0	0.000	14.6	0.003	0.0	0.000	29.3	0.006	0.0	0.000
ECHINODERMATA										
AMPHFILI	629.1	5.598	190.2	0.412	468.2	1.157	0.0	0.000	1419.1	7.746
ASTRIRRE	14.6	5.091	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BRISLYRI	0.0	0.000	0.0	0.000	14.6	4.944	0.0	0.000	0.0	0.000
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	29.3	10.945	0.0	0.000
OPHIALBI	0.0	0.000	14.6	0.877	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	102.4	0.021	0.0	0.000	117.0	0.023	0.0	0.000	687.6	0.138
MOLLUSCA										
ABRAALBA	58.5	0.002	58.5	0.002	0.0	0.000	73.2	0.011	0.0	0.000
BIVALVAE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
CINGVITR	0.0	0.000	0.0	0.000	102.4	0.015	0.0	0.000	0.0	0.000
CORBGIBB	73.2	0.016	14.6	0.002	0.0	0.000	0.0	0.000	43.9	0.018
CULTPELL	0.0	0.000	0.0	0.000	14.6	0.001	0.0	0.000	0.0	0.000
CYLICYLI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.010	58.5	0.075
DOSILUPI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.014
MONTFERR	0.0	0.000	0.0	0.000	29.3	0.027	131.7	0.087	0.0	0.000
MYSEBIDE	760.8	0.152	131.7	0.026	29.3	0.006	0.0	0.000	278.0	0.056
NATIALDE	14.6	0.004	73.2	0.020	0.0	0.000	73.2	0.014	0.0	0.000
NUCUTENU	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	29.3	0.030
NUCUTURG	14.6	0.035	14.6	0.052	0.0	0.000	58.5	0.262	0.0	0.000
SPISSUBT	0.0	0.000	29.3	0.047	0.0	0.000	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.008	0.0	0.000
THRAPHAS	14.6	0.013	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
VENUSTRI	14.6	0.486	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.030
POLYCHAETA										
CAPITELL	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CAULLERI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
CHAESETO	73.2	0.027	0.0	0.000	14.6	0.004	58.5	0.006	0.0	0.000
CHAEVARI	0.0	0.000	0.0	0.000	43.9	8.941	0.0	0.000	0.0	0.000
EXOGHEBE	14.6	0.001	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
GATTCIRR	0.0	0.000	0.0	0.000	29.3	1.327	0.0	0.000	0.0	0.000
GLYCROUX	0.0	0.000	0.0	0.000	29.3	0.591	0.0	0.000	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.008
LUMBLATR	0.0	0.000	14.6	0.025	43.9	0.095	0.0	0.000	0.0	0.000
MAGEALLE	29.3	0.095	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEJUVE	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	175.6	0.075	0.0	0.000	0.0	0.000	117.0	0.097	14.6	0.002
MEDIFRAG	0.0	0.000	73.2	0.004	14.6	0.002	0.0	0.000	0.0	0.000
NEPHCIRR	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.012	0.0	0.000
NEPHHOMB	0.0	0.000	14.6	0.054	0.0	0.000	0.0	0.000	58.5	0.301
NEPHJUVE	0.0	0.000	43.9	0.010	29.3	0.004	29.3	0.004	14.6	0.002
NOTOLATE	0.0	0.000	0.0	0.000	14.6	0.135	0.0	0.000	0.0	0.000
OPHEACUM	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.319
OPHIFLEX	29.3	0.044	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
OWENJUVE	0.0	0.000	14.6	0.001	0.0	0.000	0.0	0.000	0.0	0.000
PHOLMINU	43.9	0.004	0.0	0.000	14.6	0.002	0.0	0.000	131.7	0.019
POECSERP	0.0	0.000	73.2	0.043	0.0	0.000	0.0	0.000	0.0	0.000
PRIOCIRR	0.0	0.000	0.0	0.000	58.5	0.081	0.0	0.000	0.0	0.000
SIGAMATH	29.3	0.589	0.0	0.000	0.0	0.000	29.3	0.068	0.0	0.000
SPIOBOMB	14.6	0.002	43.9	0.021	0.0	0.000	14.6	0.002	0.0	0.000
SPIOFILI	29.3	0.002	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000
STHELIMI	43.9	0.135	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.012
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	14.6	0.515	0.0	0.000	0.0	0.000
NEMERTIN	43.9	0.008	14.6	0.002	14.6	0.004	14.6	0.002	0.0	0.000
PHORONID	58.5	0.006	14.6	0.002	0.0	0.000	175.6	0.064	14.6	0.002
PLATHYHE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
SIPUNCUL	0.0	0.000	14.6	0.259	131.7	1.037	0.0	0.000	0.0	0.000
SUMS	2443.2	13.483	965.6	2.732	1506.9	19.971	951.0	11.614	3043.0	8.825
DIVERSITY										
NSPC	29		22		27		19		21	
SH-W	2.356		2.709		2.650		2.609		1.807	
SIMP	0.176		0.090		0.128		0.094		0.281	

STATION:	OYS 40		OYS 41		OYS 42		OFF 1		OFF 2	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	0.0	0.000	14.6	0.022	0.0	0.000	14.6	0.013	0.0	0.000
AMPETENU	0.0	0.000	29.3	0.012	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	43.9	0.013	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000
BATHJUVE	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
BATHTENU	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CALLSUBT	29.3	0.274	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
EUDOTRUN	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARPANTE	14.6	0.004	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000
IONETHOR	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ORCHHUMI	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PERILONG	0.0	0.000	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000
PSEULONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
UROTPOSE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.004
ECHINODERMATA										
ACROBRAC	0.0	0.000	58.5	2.323	0.0	0.000	0.0	0.000	0.0	0.000
AMPHFILI	292.6	2.868	497.4	5.823	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	0.0	0.000	29.3	13.012	0.0	0.000	14.6	0.043	0.0	0.000
OPHIJUVE	29.3	0.006	29.3	0.006	0.0	0.000	29.3	0.012	0.0	0.000
OPHITEXT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.094	0.0	0.000
MOLLUSCA										
CULTPELL	14.6	0.021	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CYLICYLI	43.9	0.147	43.9	0.068	14.6	0.003	0.0	0.000	0.0	0.000
MONTFERR	0.0	0.000	29.3	0.024	0.0	0.000	0.0	0.000	0.0	0.000
MYRTSPIN	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
MYSEBIDE	468.2	0.094	570.6	0.114	0.0	0.000	14.6	0.003	0.0	0.000
NATIALDE	14.6	0.002	43.9	0.122	29.3	0.127	0.0	0.000	0.0	0.000
NUCUTURG	0.0	0.000	131.7	1.140	0.0	0.000	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	131.7	0.031	14.6	0.007	0.0	0.000	0.0	0.000
THYAFLEX	0.0	0.000	14.6	0.028	0.0	0.000	0.0	0.000	0.0	0.000
VENUSTRI	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
ANAIJUVE	29.3	0.014	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
CHAESETO	0.0	0.000	14.6	0.002	14.6	0.002	0.0	0.000	14.6	0.008
ETEOLONG	0.0	0.000	0.0	0.000	29.3	0.004	29.3	0.008	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	14.6	0.098	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	14.6	2.372	0.0	0.000	0.0	0.000	0.0	0.000
MAGEALLE	0.0	0.000	0.0	0.000	14.6	0.135	0.0	0.000	0.0	0.000
MAGEJUVE	0.0	0.000	58.5	0.004	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	160.9	0.054	351.1	0.110	1170.4	1.159	629.1	0.689	102.4	0.072
NEPHCIRR	0.0	0.000	0.0	0.000	0.0	0.000	117.0	0.108	0.0	0.000
NEPHHOMB	14.6	0.431	14.6	0.017	0.0	0.000	0.0	0.000	14.6	0.446
NEPHJUVE	0.0	0.000	0.0	0.000	58.5	0.012	0.0	0.000	0.0	0.000
OPHIFLEX	0.0	0.000	14.6	0.056	0.0	0.000	0.0	0.000	0.0	0.000
OWENFUSI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.087	0.0	0.000
PHOLMINU	190.2	0.017	87.8	0.010	0.0	0.000	0.0	0.000	0.0	0.000
POECSERP	14.6	0.012	0.0	0.000	29.3	0.021	0.0	0.000	0.0	0.000
SCOLARMI	43.9	0.156	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SCOLSQUA	0.0	0.000	0.0	0.000	14.6	0.097	0.0	0.000	0.0	0.000
SPIOBOMB	599.8	0.133	102.4	0.029	365.8	0.077	190.2	0.069	234.1	0.124
SPIOFILI	0.0	0.000	0.0	0.000	58.5	0.023	0.0	0.000	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	73.2	0.235	14.6	1.609	0.0	0.000
EDWACLAP	14.6	0.048	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	0.0	0.000	43.9	0.054	146.3	0.093	58.5	0.393	14.6	0.016
PHORONID	87.8	0.048	87.8	0.125	14.6	0.002	0.0	0.000	0.0	0.000
PLATHYHE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
SUMS	2194.5	4.374	2487.1	25.521	2121.3	2.108	1185.0	4.139	395.0	0.669
DIVERSITY										
NSPC	23		27		20		14		6	
SH-W	2.284		2.538		1.685		1.661		1.148	
SIMP	0.154		0.125		0.342		0.322		0.422	

STATION:	OFF 3		OFF 4		OFF 5		OFF 6		OFF 7	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
ARGIHAMA	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
BATHGUIL	0.0	0.000	0.0	0.000	14.6	0.012	14.6	0.006	0.0	0.000
CALLSUBT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.018	0.0	0.000
DIASBRAD	0.0	0.000	14.6	0.006	14.6	0.006	0.0	0.000	0.0	0.000
LEUCINCI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
MEGAAGIL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
PSEULONG	0.0	0.000	29.3	0.006	14.6	0.003	73.2	0.015	14.6	0.003
UROTPOSE	0.0	0.000	0.0	0.000	43.9	0.013	14.6	0.004	1404.5	0.421
ECHINODERMATA										
ECHICORD	0.0	0.000	14.6	7.599	14.6	7.599	0.0	0.000	175.6	63.795
ECHIPUSI	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.013	0.0	0.000
OPHIJUVE	0.0	0.000	29.3	0.006	0.0	0.000	14.6	0.003	0.0	0.000
OPHITEXT	0.0	0.000	14.6	0.006	0.0	0.000	29.3	0.061	0.0	0.000
MOLLUSCA										
ASTATRIA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
MONTFERR	0.0	0.000	58.5	0.010	58.5	0.038	14.6	0.007	43.9	0.019
MYSEBIDE	14.6	0.004	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
NATIALDE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.001
SPISSUBT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.286
TELLFABU	0.0	0.000	29.3	0.102	336.5	0.903	0.0	0.000	29.3	0.001
THRAPHAS	0.0	0.000	29.3	0.007	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
CHAESETO	29.3	0.015	14.6	0.004	1594.7	0.280	102.4	0.015	0.0	0.000
ETEOLONG	14.6	0.004	43.9	0.015	58.5	0.015	0.0	0.000	0.0	0.000
EUMISANG	0.0	0.000	0.0	0.000	29.3	0.008	0.0	0.000	0.0	0.000
EXOGHEBE	0.0	0.000	0.0	0.000	14.6	0.003	29.3	0.002	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	14.6	0.081	0.0	0.000	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	0.0	0.000	14.6	0.286	0.0	0.000	0.0	0.000
MAGEPAPI	482.8	0.527	234.1	0.214	160.9	0.193	73.2	0.041	131.7	0.069
NEPHCAEC	14.6	4.594	0.0	0.000	14.6	0.035	0.0	0.000	0.0	0.000
NEPHCIRR	0.0	0.000	29.3	0.120	0.0	0.000	43.9	0.012	14.6	0.077
NEPHJUVE	0.0	0.000	0.0	0.000	14.6	0.008	0.0	0.000	0.0	0.000
NOTOLATE	0.0	0.000	0.0	0.000	43.9	2.095	0.0	0.000	0.0	0.000
OPHELIMA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.015	0.0	0.000
PHOLMINU	0.0	0.000	0.0	0.000	14.6	0.015	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	58.5	0.031	29.3	0.014	0.0	0.000	29.3	0.097
SCOLBONN	0.0	0.000	14.6	0.151	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	146.3	0.098	131.7	0.048	87.8	0.025	87.8	0.046	160.9	0.176
SPIOFILI	0.0	0.000	555.9	0.062	43.9	0.014	29.3	0.027	14.6	0.004
STREWEBS	0.0	0.000	0.0	0.000	0.0	0.000	117.0	0.008	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.003
EDWACLAP	14.6	0.373	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	0.0	0.000	58.5	0.174	102.4	0.154	73.2	0.306	0.0	0.000
SUMS	716.9	5.617	1404.5	8.571	2750.4	11.811	848.5	0.608	2121.3	64.962
DIVERSITY										
NSPC	7		19		23		19		15	
SH-W	1.039		2.162		1.737		2.670		1.370	
SIMP	0.498		0.202		0.359		0.082		0.456	

STATION:	OFF 8		OFF 9		OFF 10		OFF 11		OFF 12	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
ATYLSWAM	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
BATHELEG	29.3	0.009	102.4	0.031	14.6	0.004	219.4	0.066	146.3	0.044
BATHGUIL	102.4	0.041	43.9	0.018	29.3	0.015	43.9	0.018	29.3	0.015
BATHJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
CALLSUBT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.323	0.0	0.000
DIASBRAD	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARPANTE	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
HIPPDENT	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000
LEUCINCI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000
MEGAAGIL	0.0	0.000	14.6	0.004	117.0	0.035	14.6	0.004	0.0	0.000
PONTALTA	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.018	14.6	0.004
PSEULONG	0.0	0.000	0.0	0.000	43.9	0.009	29.3	0.006	14.6	0.003
UROTBREV	0.0	0.000	14.6	0.009	29.3	0.012	0.0	0.000	29.3	0.015
UROTPOSE	438.9	0.132	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHINODERMATA										
ECHIPUSI	58.5	0.029	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
OPHIJUVE	0.0	0.000	14.6	0.003	29.3	0.006	29.3	0.006	0.0	0.000
OPHITEXT	14.6	0.042	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MOLLUSCA										
ABRAALBA	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.074	0.0	0.000
DONAVITT	0.0	0.000	0.0	0.000	14.6	1.812	0.0	0.000	0.0	0.000
DOSISPEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
ENSIENSI	29.3	1.615	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ENSISPEC	0.0	0.000	14.6	1.359	0.0	0.000	0.0	0.000	0.0	0.000
MONTFERR	73.2	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NATIALDE	14.6	0.001	14.6	0.038	29.3	0.004	73.2	0.100	14.6	0.017
NUCUTURG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.200	0.0	0.000
TELLFABU	146.3	3.262	14.6	0.011	14.6	0.034	58.5	0.027	0.0	0.000
POLYCHAETA										
ARICMINU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.008
CHAESETO	43.9	0.019	0.0	0.000	14.6	0.012	73.2	0.029	29.3	0.027
ETEOLONG	14.6	0.014	0.0	0.000	14.6	0.400	0.0	0.000	0.0	0.000
EXOGHEBE	0.0	0.000	0.0	0.000	43.9	0.004	14.6	0.001	0.0	0.000
GYPTCAPE	14.6	0.008	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARMSPEC	0.0	0.000	0.0	0.000	14.6	0.033	0.0	0.000	0.0	0.000
HETEFILI	0.0	0.000	0.0	0.000	14.6	0.008	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	0.0	0.000	43.9	5.042	0.0	0.000	0.0	0.000
LANIJUVE	0.0	0.000	0.0	0.000	73.2	0.014	0.0	0.000	0.0	0.000
MAGEPAPI	438.9	0.321	204.8	0.332	58.5	0.197	175.6	0.332	14.6	0.035
NEPHCAEC	0.0	0.000	0.0	0.000	14.6	4.635	0.0	0.000	0.0	0.000
NEPHCIRR	29.3	0.077	14.6	0.398	58.5	0.454	87.8	0.050	102.4	0.407
NEPHJUVE	0.0	0.000	43.9	0.014	0.0	0.000	0.0	0.000	43.9	0.010
SCOLARMI	43.9	0.041	43.9	0.516	14.6	0.195	0.0	0.000	102.4	0.720
SCOLBONN	0.0	0.000	14.6	0.417	0.0	0.000	0.0	0.000	0.0	0.000
SIGAMATH	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.035	0.0	0.000
SPIOBOMB	877.8	1.095	73.2	0.035	248.7	0.176	29.3	0.017	14.6	0.048
SPIOFILI	29.3	0.015	0.0	0.000	43.9	0.008	0.0	0.000	0.0	0.000
SPIOJUVE	0.0	0.000	0.0	0.000	0.0	0.000	219.4	0.004	146.3	0.002
STREWEBS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.010
NEMERTIN	58.5	0.087	0.0	0.000	14.6	0.251	29.3	0.068	14.6	0.006
PHORONID	0.0	0.000	0.0	0.000	14.6	0.015	14.6	0.006	0.0	0.000
SUMS	2472.5	6.823	643.7	3.188	1024.1	13.378	1331.3	1.411	775.4	1.374
DIVERSITY										
NSPC	19		15		25		24		18	
SH-W	2.067		2.227		2.782		2.731		2.447	
SIMP	0.197		0.157		0.096		0.091		0.116	

STATION:	OFF 13		OFF 14		OFF 15		OFF 16		OFF 17	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
BATHELEG	263.3	0.079	87.8	0.026	0.0	0.000	29.3	0.009	0.0	0.000
BATHGUIL	58.5	0.023	87.8	0.035	14.6	0.004	0.0	0.000	0.0	0.000
MEGAAGIL	14.6	0.004	29.3	0.009	0.0	0.000	0.0	0.000	14.6	0.004
PONTALTA	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.004	0.0	0.000
PSEULONG	0.0	0.000	29.3	0.006	0.0	0.000	29.3	0.006	0.0	0.000
PSEUSIMI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
UROTBREV	43.9	0.013	117.0	0.035	43.9	0.013	29.3	0.009	0.0	0.000
UROTPOSE	307.2	0.092	73.2	0.022	863.2	0.259	0.0	0.000	14.6	0.004
ECHINODERMATA										
ECHICORD	0.0	0.000	0.0	0.000	29.3	9.289	29.3	0.582	0.0	0.000
OPHIJUVE	14.6	0.003	29.3	0.006	29.3	0.006	0.0	0.000	58.5	0.012
OPHITEXT	0.0	0.000	0.0	0.000	14.6	0.042	0.0	0.000	0.0	0.000
MOLLUSCA										
DONAVITT	14.6	0.015	14.6	0.094	0.0	0.000	58.5	0.431	0.0	0.000
MONTFERR	0.0	0.000	0.0	0.000	87.8	0.047	0.0	0.000	0.0	0.000
NATIALDE	14.6	0.001	0.0	0.000	29.3	0.127	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	0.0	0.000	117.0	4.208	0.0	0.000	0.0	0.000
POLYCHAETA										
ARICMINU	0.0	0.000	29.3	0.008	14.6	0.008	14.6	0.004	0.0	0.000
CHAESETO	43.9	0.021	87.8	0.014	0.0	0.000	0.0	0.000	14.6	0.035
GONIMACU	0.0	0.000	14.6	0.122	0.0	0.000	14.6	0.081	0.0	0.000
MAGEPAPI	102.4	0.417	29.3	0.048	790.0	2.260	14.6	0.083	0.0	0.000
NEPHCIRR	29.3	0.085	43.9	0.089	43.9	0.212	73.2	0.056	0.0	0.000
NEPHJUVE	29.3	0.008	73.2	0.017	29.3	0.010	0.0	0.000	14.6	0.002
OPHELIMA	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	14.6	0.027	14.6	0.305	14.6	0.060	43.9	1.012	0.0	0.000
SCOLSQUA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.882
SPIOBOMB	14.6	0.027	73.2	0.299	307.2	0.705	29.3	0.015	0.0	0.000
STHELIMI	0.0	0.000	14.6	0.326	0.0	0.000	0.0	0.000	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
NEMERTIN	0.0	0.000	14.6	0.103	14.6	0.116	0.0	0.000	0.0	0.000
SUMS	965.6	0.816	892.4	1.575	2443.2	17.365	395.0	2.299	219.5	0.943
DIVERSITY										
NSPC	14		20		16		13		7	
SH-W	2.000		2.746		1.768		2.414		1.622	
SIMP	0.197		0.075		0.250		0.101		0.25	

STATION:	OFF 18		OFF 19		OFF 20		OFF 21		OFF 22	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
ATYLFALC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
BATHELEG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.012
CAPRELLI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.003
MEGAAGIL	0.0	0.000	73.2	0.022	58.5	0.018	117.0	0.035	14.6	0.004
PONTALTA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
PSEULONG	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009	0.0	0.000
PSEUSIMI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
UROTBREV	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000
UROTPOSE	0.0	0.000	0.0	0.000	58.5	0.018	0.0	0.000	43.9	0.013
ECHINODERMATA										
ECHICORD	0.0	0.000	0.0	0.000	29.3	27.377	0.0	0.000	0.0	0.000
OPHIJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
OPHITEXT	0.0	0.000	29.3	0.004	0.0	0.000	14.6	0.530	14.6	0.396
MOLLUSCA										
ENSIENSI	0.0	0.000	0.0	0.000	14.6	0.695	0.0	0.000	0.0	0.000
MACTCORA	0.0	0.000	14.6	0.000	29.3	0.001	14.6	0.000	0.0	0.000
MYSEBIDE	0.0	0.000	14.6	0.003	14.6	0.003	0.0	0.000	0.0	0.000
NATIALDE	0.0	0.000	43.9	0.021	0.0	0.000	0.0	0.000	0.0	0.000
TELLPYGM	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.077	0.0	0.000
POLYCHAETA										
ANAISUBU	0.0	0.000	0.0	0.000	14.6	0.052	0.0	0.000	0.0	0.000
AONIPAUC	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
ARICMINU	29.3	0.008	43.9	0.010	29.3	0.006	0.0	0.000	0.0	0.000
ETEOLONG	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	131.7	0.017	0.0	0.000
MAGEPAPI	0.0	0.000	0.0	0.000	29.3	0.120	0.0	0.000	0.0	0.000
NEPHCIRR	14.6	0.207	58.5	0.537	43.9	0.243	73.2	0.682	58.5	0.423
NEPHJUVE	29.3	0.006	0.0	0.000	0.0	0.000	29.3	0.004	29.3	0.017
NEPHLONG	0.0	0.000	14.6	0.147	0.0	0.000	0.0	0.000	0.0	0.000
SCOLBONN	0.0	0.000	29.3	0.396	0.0	0.000	0.0	0.000	0.0	0.000
SCOLSQUA	29.3	0.342	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	14.6	0.021	43.9	0.199	73.2	0.060	29.3	0.004	43.9	0.021
SPIOFILI	43.9	0.048	43.9	0.046	87.8	0.112	146.3	0.017	14.6	0.002
SPIOJUVE	0.0	0.000	0.0	0.000	204.8	0.006	0.0	0.000	0.0	0.000
STREWEBS	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000
MISCELLANEOUS										
NEMERTIN	0.0	0.000	14.6	0.032	29.3	0.045	43.9	0.023	14.6	0.106
SUMS	160.9	0.631	424.3	1.417	760.8	28.767	819.3	1.416	321.9	1.007
DIVERSITY										
NSPC	6		12		16		16		12	
SH-W	1.720		2.348		2.443		2.460		2.350	
SIMP	0.185		0.104		0.119		0.105		0.105	

STATION:	OFF 23		OFF 24		OFF 25		OFF 26		OFF 27	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
BATHELEG	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	43.9	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CALLTYRR	14.6	0.055	29.3	1.604	0.0	0.000	0.0	0.000	14.6	0.186
CAPRELLI	14.6	0.002	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
LEUCINCI	0.0	0.000	58.5	0.018	14.6	0.004	0.0	0.000	0.0	0.000
MEGAAGIL	0.0	0.000	117.0	0.035	29.3	0.009	0.0	0.000	14.6	0.004
PERILONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
PONTALTA	14.6	0.004	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
PSEULONG	14.6	0.003	14.6	0.003	43.9	0.009	0.0	0.000	0.0	0.000
PSEUSIMI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
UROTBREV	0.0	0.000	14.6	0.006	14.6	0.006	0.0	0.000	0.0	0.000
UROTPOSE	1126.5	0.338	1009.5	0.303	14.6	0.004	0.0	0.000	43.9	0.013
ECHINODERMATA										
ECHICORD	14.6	3.010	14.6	1.279	14.6	0.816	0.0	0.000	29.3	13.835
OPHIJUVE	0.0	0.000	14.6	0.003	43.9	0.022	14.6	0.002	14.6	0.003
OPHITEXT	0.0	0.000	58.5	1.368	0.0	0.000	0.0	0.000	43.9	1.457
MOLLUSCA										
CORBGIBB	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
ENSIDIRE	29.3	25.844	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MACTCORA	0.0	0.000	0.0	0.000	14.6	0.069	14.6	0.000	0.0	0.000
MONTFERR	43.9	0.056	29.3	0.007	0.0	0.000	0.0	0.000	43.9	0.016
MYSEBIDE	14.6	0.003	117.0	0.023	0.0	0.000	0.0	0.000	29.3	0.006
NATIALDE	0.0	0.000	0.0	0.000	14.6	0.017	0.0	0.000	0.0	0.000
SPISSUBT	0.0	0.000	43.9	1.395	0.0	0.000	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	29.3	0.854	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
ANAIGROE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.075
ANAIMUCO	14.6	0.066	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
ANAISUBU	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
AONIPAUC	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	14.6	0.002
ARICMINU	0.0	0.000	0.0	0.000	43.9	0.004	14.6	0.002	0.0	0.000
CAPICAPI	0.0	0.000	102.4	0.010	0.0	0.000	0.0	0.000	0.0	0.000
EXOGHEBE	0.0	0.000	0.0	0.000	117.0	0.006	0.0	0.000	0.0	0.000
EXOGNAID	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000	0.0	0.000
HARMJUVE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
HARMLONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006
HESIAUGE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
HETEFILI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.008
MAGEPAPI	14.6	0.008	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEPHCIRR	102.4	0.527	58.5	0.182	14.6	0.458	14.6	0.160	73.2	0.321
NEPHHOMB	0.0	0.000	14.6	0.137	0.0	0.000	0.0	0.000	0.0	0.000
NEPHJUVE	0.0	0.000	0.0	0.000	14.6	0.008	0.0	0.000	14.6	0.006
NERELONG	43.9	1.591	43.9	0.197	14.6	0.023	0.0	0.000	0.0	0.000
NOTOLATE	0.0	0.000	248.7	16.251	0.0	0.000	0.0	0.000	0.0	0.000
OPHELIMA	14.6	0.006	0.0	0.000	14.6	0.465	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	14.6	1.344	0.0	0.000	0.0	0.000	0.0	0.000
PHOLMINU	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
PISIREMO	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.008	0.0	0.000
SCOLARMI	0.0	0.000	14.6	0.199	14.6	0.131	0.0	0.000	58.5	0.226
SPIOBOMB	526.7	0.313	438.9	0.942	102.4	0.112	14.6	0.002	570.6	0.585
SPIOFILI	29.3	0.008	14.6	0.002	248.7	0.015	87.8	0.023	0.0	0.000
SPIOJUVE	0.0	0.000	43.9	0.002	219.4	0.010	0.0	0.000	43.9	0.004
MISCELLANEOUS										
ANTHOZOA	29.3	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ARCHIANN	0.0	0.000	0.0	0.000	0.0	0.000	292.6	0.004	0.0	0.000
NEMERTIN	73.2	0.747	117.0	0.679	29.3	0.058	14.6	0.006	87.8	0.361
OLIGOCHA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.004
PHORONID	0.0	0.000	14.6	0.002	321.9	0.147	0.0	0.000	0.0	0.000
SUMS	2209.1	32.612	2735.8	26.855	1419.1	2.400	599.8	0.216	1258.2	17.125
DIVERSITY										
NSPC	20		29		24		12		21	
SH·W	1.702		2.362		2.502		1.728		2.232	
SIMP	0.322		0.180		0.123		0.285		0.225	

STATION:	OFF 28		OFF 29		OFF 30		OFF 31		OFF 32	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
BATHELEG	0.0	0.000	29.3	0.009	14.6	0.004	146.3	0.044	0.0	0.000
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.012
MEGAAGIL	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PONTALTA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
PSEULONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006
PSEUSIMI	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
UROTPOSE	0.0	0.000	0.0	0.000	219.4	0.066	14.6	0.004	292.6	0.088
ECHINODERMATA										
ECHICORD	0.0	0.000	43.9	4.613	43.9	21.674	0.0	0.000	0.0	0.000
ECHIPUSI	29.3	0.118	117.0	0.094	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.015
OPHITEXT	0.0	0.000	43.9	0.019	0.0	0.000	0.0	0.000	0.0	0.000
MOLLUSCA										
ENSIENSI	0.0	0.000	14.6	0.156	0.0	0.000	0.0	0.000	0.0	0.000
MYSEBIDE	0.0	0.000	0.0	0.000	204.8	0.097	0.0	0.000	0.0	0.000
NATIALDE	14.6	0.001	0.0	0.000	14.6	0.195	0.0	0.000	0.0	0.000
SPISSUBT	0.0	0.000	0.0	0.000	175.6	37.134	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	0.0	0.000	29.3	0.001	29.3	0.008	0.0	0.000
POLYCHAETA										
ANAIMUCO	0.0	0.000	0.0	0.000	87.8	1.435	0.0	0.000	0.0	0.000
ANAISPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
AONIPAUC	14.6	0.004	14.6	0.004	14.6	0.002	0.0	0.000	0.0	0.000
ARICMINU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.004	14.6	0.002
CHAESETO	0.0	0.000	14.6	0.006	0.0	0.000	29.3	0.006	0.0	0.000
ETEOLONG	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.081	29.3	0.029
EUMISANG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.017
EUZOFLAB	146.3	0.068	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.031	0.0	0.000
HESIAUGE	14.6	0.001	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	0.0	0.000	0.0	0.000	146.3	0.116	73.2	0.176	14.6	0.029
NEPHCIRR	43.9	0.052	43.9	0.241	0.0	0.000	73.2	0.125	117.0	1.159
NEPHJUVE	0.0	0.000	58.5	0.006	0.0	0.000	58.5	0.014	0.0	0.000
NOTOLATE	0.0	0.000	0.0	0.000	14.6	0.066	0.0	0.000	0.0	0.000
OPHELIMA	14.6	0.025	43.9	0.017	0.0	0.000	14.6	0.012	14.6	0.004
POLYCIRR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.158
SCOLARMI	14.6	0.010	14.6	0.141	0.0	0.000	29.3	0.091	14.6	0.164
SPIOBOMB	14.6	0.002	58.5	0.029	395.0	0.429	73.2	0.075	278.0	0.197
SPIOFILI	73.2	0.004	0.0	0.000	14.6	0.004	14.6	0.008	0.0	0.000
MISCELLANEOUS										
EDWACLAP	0.0	0.000	29.3	0.097	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	29.3	1.123	73.2	0.306	29.3	0.035	14.6	0.087	14.6	0.219
PHORONID	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	73.2	0.017
SUMS	424.3	1.412	599.8	5.738	1419.1	61.259	687.6	0.775	1038.7	2.120
DIVERSITY										
NSPC	12		14		15		17		16	
SH-W	2.087		2.452		2.139		2.552		2.111	
SIMP	0.175		0.099		0.154		0.099		0.177	

STATION:	OFF 33		OFF 34		OFF 35		OFF 36		COA 1	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
ATYLSWAM	14.6	0.004	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
BATHELEG	87.8	0.026	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	29.3	0.009	0.0	0.000	0.0	0.000	14.6	0.015	0.0	0.000
CALLJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
LEUCINCI	58.5	0.018	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MEGAAGIL	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
ORCHNANA	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PONTALTA	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PSEULONG	14.6	0.003	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
PSEUSIMI	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
UNCIPLAN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
UROTBREV	14.6	0.004	160.9	0.048	0.0	0.000	0.0	0.000	0.0	0.000
UROTPOSE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009
ECHINODERMATA										
ECHICORD	0.0	0.000	14.6	7.599	14.6	3.010	0.0	0.000	0.0	0.000
ECHIPUSI	43.9	0.021	0.0	0.000	14.6	0.011	14.6	0.032	0.0	0.000
OPHIJUVE	0.0	0.000	0.0	0.000	14.6	0.003	73.2	0.015	0.0	0.000
OPHITEXT	14.6	0.019	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MOLLUSCA										
DONAVITT	0.0	0.000	14.6	0.065	0.0	0.000	0.0	0.000	0.0	0.000
MACOBALT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.087
NATIALDE	73.2	0.256	0.0	0.000	14.6	0.005	43.9	0.076	0.0	0.000
TELLPYGM	0.0	0.000	0.0	0.000	0.0	0.000	117.0	0.039	0.0	0.000
POLYCHAETA										
ANAIGROE	73.2	1.746	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ANAISUBU	0.0	0.000	0.0	0.000	29.3	0.010	0.0	0.000	0.0	0.000
AONIPAUC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
ARICMINU	87.8	0.006	0.0	0.000	43.9	0.008	0.0	0.000	0.0	0.000
EXOGHEBE	43.9	0.004	0.0	0.000	0.0	0.000	14.6	0.001	0.0	0.000
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.008	0.0	0.000
GLYCSPEC	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GONIMACU	14.6	0.209	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
HESIAUGE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
MAGEJUVE	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	43.9	0.131	117.0	0.512	0.0	0.000	0.0	0.000	102.4	0.106
NEPHCIRR	73.2	1.251	29.3	0.143	58.5	0.382	43.9	0.079	0.0	0.000
NEPHJUVE	102.4	0.046	58.5	0.014	29.3	0.012	0.0	0.000	0.0	0.000
OPHELIMA	43.9	0.118	0.0	0.000	14.6	0.093	43.9	0.093	0.0	0.000
PARAGRAC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.001	0.0	0.000
PECTKORE	29.3	1.993	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
POECSERP	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	14.6	0.048	0.0	0.000	0.0	0.000	0.0	0.000
SCOLSQUA	14.6	0.178	0.0	0.000	14.6	0.237	0.0	0.000	0.0	0.000
SPIOBOMB	219.4	0.160	14.6	0.006	102.4	0.182	43.9	0.004	102.4	0.120
SPIOFILI	14.6	0.006	14.6	0.004	804.7	0.050	219.4	0.029	0.0	0.000
SPIOJUVE	0.0	0.000	0.0	0.000	131.7	0.006	0.0	0.000	0.0	0.000
SPISJUVE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.001	0.0	0.000
STREWEBS	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	29.3	0.042	0.0	0.000	43.9	0.006	0.0	0.000	0.0	0.000
NEMERTIN	43.9	0.373	14.6	0.216	29.3	0.010	29.3	0.116	29.3	0.006
PHORONID	58.5	0.079	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SUMS	1331.3	6.724	482.8	8.663	1389.9	4.032	863.2	0.535	336.5	0.329
DIVERSITY										
NSPC	30		11		17		21		5	
SH-W	3.065		1.941		1.711		2.621		1.481	
SIMP	0.062		0.196		0.355		0.108		0.245	

STATION:	COA 2		COA 3		COA 4		COA 5		COA 6	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
UROTPOSE	43.9	0.013	131.7	0.040	453.5	0.136	1024.1	0.307	0.0	0.000
ECHINODERMATA										
ECHICORD	0.0	0.000	14.6	4.376	0.0	0.000	0.0	0.000	0.0	0.000
MOLLUSCA										
ENSIDIRE	43.9	49.942	234.1	157.117	14.6	1.227	14.6	0.369	0.0	0.000
MACOBALT	14.6	0.409	0.0	0.000	29.3	0.787	0.0	0.000	43.9	0.362
MODISPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
MYSEBIDE	0.0	0.000	131.7	0.056	0.0	0.000	0.0	0.000	0.0	0.000
SPISSUBT	0.0	0.000	482.8	1.602	0.0	0.000	234.1	8.414	0.0	0.000
TELLFABU	0.0	0.000	14.6	0.181	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
ANAIMACU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.048	0.0	0.000
CAPICAPI	0.0	0.000	14.6	0.002	14.6	0.002	365.8	0.056	14.6	0.002
LANICONC	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
MAGEPAPI	58.5	0.172	219.4	0.228	43.9	0.015	3174.7	2.260	29.3	0.015
NEPHHOMB	0.0	0.000	102.4	0.778	117.0	2.470	58.5	3.538	0.0	0.000
PECTKORE	0.0	0.000	14.6	0.185	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	14.6	0.072	0.0	0.000	0.0	0.000	0.0	0.000
SCOLBONN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.027	0.0	0.000
SPIOBOMB	0.0	0.000	248.7	0.162	0.0	0.000	482.8	0.394	0.0	0.000
SPIOFILI	0.0	0.000	0.0	0.000	248.7	0.066	0.0	0.000	0.0	0.000
MISCELLANEOUS										
HYDROZOA	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
NEMERTIN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
SUMS	160.9	50.536	1623.9	164.800	936.3	4.706	5442.4	15.422	102.4	0.382
DIVERSITY										
NSPC	4		12		8		11		4	
SH-W	1.295		1.991		1.410		1.313		1.277	
SIMP	0.285		0.168		0.324		0.390		0.299	

STATION:	COA 7		COA 8		COA 9		COA 10		COA 11	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
ATYLFALC	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.004
BATHELEG	219.4	0.066	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006
UROTPOSE	0.0	0.000	336.5	0.101	160.9	0.048	263.3	0.079	160.9	0.048
ECHINODERMATA										
ECHICORD	0.0	0.000	0.0	0.000	14.6	11.103	0.0	0.000	0.0	0.000
MOLLUSCA										
ENSIDIRE	0.0	0.000	73.2	46.510	0.0	0.000	102.4	77.467	43.9	6.406
HYDRULVA	43.9	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MACOBALT	58.5	0.051	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MONTFERR	0.0	0.000	0.0	0.000	29.3	0.003	0.0	0.000	0.0	0.000
MYSEBIDE	0.0	0.000	0.0	0.000	43.9	0.009	512.0	0.165	87.8	0.030
SPISSUBT	0.0	0.000	0.0	0.000	4930.3	89.673	0.0	0.000	14.6	0.163
TELLFABU	0.0	0.000	0.0	0.000	73.2	1.078	14.6	0.138	0.0	0.000
TELLPYGM	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007
POLYCHAETA										
ANAIMACU	0.0	0.000	0.0	0.000	43.9	0.174	0.0	0.000	0.0	0.000
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000	0.0	0.000
ETEOLONG	14.6	0.010	0.0	0.000	58.5	0.098	0.0	0.000	0.0	0.000
MAGEPAPI	14.6	0.012	29.3	0.021	160.9	0.100	43.9	0.037	0.0	0.000
NEPHCIRR	0.0	0.000	0.0	0.000	43.9	0.039	0.0	0.000	87.8	1.095
NEPHHOMB	0.0	0.000	14.6	0.270	14.6	0.296	43.9	0.844	0.0	0.000
NEPHJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.019	102.4	0.031
NERELONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	4.710	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	43.9	1.976	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	0.0	0.000	43.9	0.313	0.0	0.000	14.6	0.054
SCOLBONN	0.0	0.000	0.0	0.000	14.6	0.027	0.0	0.000	0.0	0.000
SPIOBOMB	0.0	0.000	0.0	0.000	497.4	0.535	87.8	0.079	1419.1	0.886
SPIOFILI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.021	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.637	0.0	0.000
SAGATROG	0.0	0.000	0.0	0.000	73.2	22.308	0.0	0.000	0.0	0.000
SUMS	351.1	0.147	453.5	46.903	6276.3	127.793	1155.8	84.197	1975.1	8.732
DIVERSITY										
NSPC	5		4		18		11		11	
SH-W	1.117		0.803		0.995		1.702		1.138	
SIMP	0.436		0.581		0.625		0.266		0.530	

STATION:	COA 12		COA 13		COA 14		COA 15	
	N	B	N	B	N	B	N	B
CRUSTACEA								
UROTPOSE	14.6	0.004	0.0	0.000	0.0	0.000	117.0	0.035
MOLLUSCA								
ENSIDIRE	0.0	0.000	0.0	0.000	29.3	42.954	497.4	303.365
MYSEBIDE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
NATIALDE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.124
SPISSUBT	0.0	0.000	0.0	0.000	14.6	0.029	424.3	72.126
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.372
POLYCHAETA								
CAPICAPI	0.0	0.000	0.0	0.000	131.7	0.015	29.3	0.004
CHAESETO	0.0	0.000	0.0	0.000	102.4	0.029	0.0	0.000
ETEOLONG	29.3	0.031	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	102.4	0.253	0.0	0.000	0.0	0.000	234.1	0.178
NEPHCAEC	0.0	0.000	0.0	0.000	14.6	4.445	0.0	0.000
NEPHCIRR	102.4	0.263	0.0	0.000	0.0	0.000	0.0	0.000
NEPHHOMB	0.0	0.000	0.0	0.000	0.0	0.000	73.2	2.484
NEPHJUVE	43.9	0.008	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
SPIOBOMB	512.0	0.790	14.6	0.004	0.0	0.000	775.4	1.290
SPIOFILI	453.5	0.006	0.0	0.000	0.0	0.000	43.9	0.010
MISCELLANEOUS								
SIPUNCUL	14.6	0.025	14.6	0.010	0.0	0.000	0.0	0.000
SUMS	1272.8	1.379	43.9	0.018	307.2	47.477	2223.8	379.987
DIVERSITY								
NSPC	8		3		6		10	
SH-W	1.445		1.099		1.388		1.723	
SIMP	0.303		0.318		0.308		0.223	

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