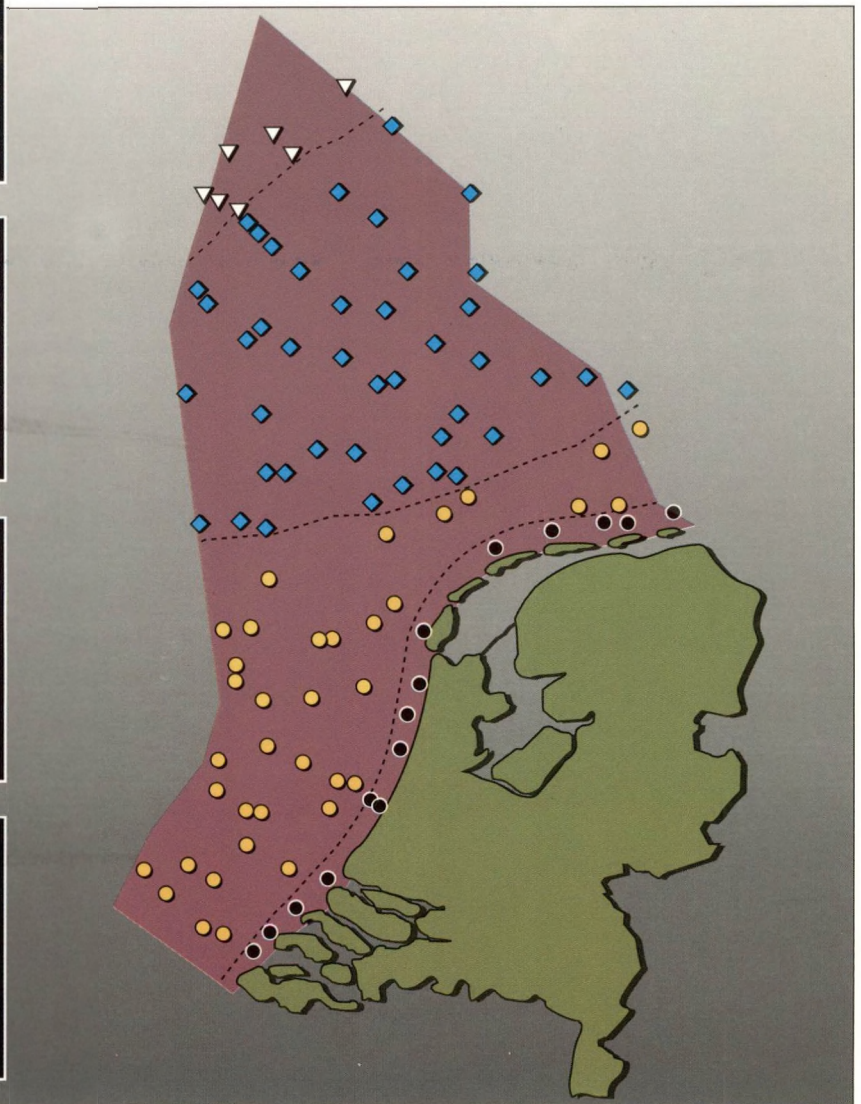
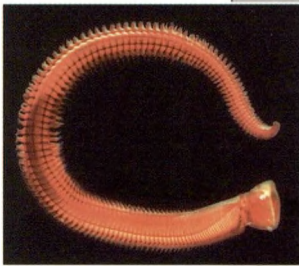


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THE MACROBENTHIC FAUNA IN THE DUTCH SECTOR OF THE NORTH SEA IN 1995 AND A COMPARISON WITH PREVIOUS DATA

S.E. HOLTSMANN, J.J.M. BELGERS, B. KRACHT, 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)

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1. SUMMARY

In this report the results are presented of a macrobenthos survey on the Dutch Continental Shelf (DCS), carried out in spring 1995. The survey was the fifth since 1991 and forms part of the programme 'Monitoring Macrobenthos of the North Sea' (BIOMON), which is initiated by the National Institute for Coastal and Marine Management (RIKZ, Rijkswaterstaat) and is carried out by the department Marine Ecology of the NIOZ in co-operation with the North Sea Directorate of Rijkswaterstaat. The aim of the programme is to obtain insight into the year-to-year variations of the macrobenthic community and to detect trend-like changes, that possibly indicate anthropogenic influences on the marine environment (*e.g.* eutrophication, beam-trawl fishery, pollution).

The sampling strategy followed in 1995 was substantially different from that in previous years, when 25 fixed stations were sampled along 5 transects each year and at each of these stations 5 replicate boxcore samples were taken. During the 1995 survey, 100 stations were sampled. These stations included the 25 'old' BIOMON stations. The 75 'new' stations were selected more or less at random within 4 subareas of the DCS, *i.e.* the southern part of the Dogger Bank, the Oyster Ground, the remaining offshore area and the coastal area. The number of stations within each subarea was proportional to the extent of the subarea. Per station only one boxcore sample was collected for analyse the macrobenthos. The new strategy was aimed to obtain a better coverage of the whole area and to improve the detection of trendwise changes in the macrobenthic community in these subareas. The new approach implies that the monitoring programme in fact has made a second start, because for the 75 'new' stations there is no time series available with monitoring data from previous years. Nevertheless, some indications for possible trends as identified at the 25 'old' stations could also be found at the 'new' stations, since nearly all have previously been sampled during other North Sea macrobenthos programmes.

The results of the period 1991-1995 show some trendlike changes in sediment characteristics. In all subareas an overall slight increase was observed in the median grain size in 1995 compared to previous years. This increase could only partly be explained by a decrease of the mud fraction (the fraction 16-63 μm ; the smallest fraction $<16 \mu\text{m}$ was not considered). Mud contents of sediments showed an overall downward trend on the Dogger Bank, the offshore area and the coastal area. However, in the Oyster Ground such an overall downward trend was not observed. Particularly in the southern offshore area there were several stations that showed a parallel trend in mud contents over the period of 1991-1995. This indicates that year-to-year changes did not occur locally, but can be considered as structural trends that extend over a wide area. However, such trends are not characterized by a monotonous increase or decrease. The observation that mud contents were low in 1995 has no predictive value with respect to mud contents in the following year.

Based on a cluster analysis, by means of TWINSpan ordination, of the macrofauna communities found at the stations sampled in 1995, five cluster areas were

distinguished. In the Oyster Ground there were 2 clusters, which correspond to the clusters formerly named Oyster Ground 1 and 2. In the offshore area there are 2 clusters: one cluster consists of stations mainly concentrated in the southern area (southern offshore cluster) and one of stations in the northern area, which have affinity with the southern Dogger Bank stations (northern offshore- southern Dogger Bank cluster). Finally there is a cluster of coastal stations (coastal cluster). For each cluster a number of characteristic species has been identified.

Changes in macrofauna characteristics at the community level (diversity, density or biomass) generally did not show a temporal trend. However, there seemed to be a slight increase in species richness in recent years compared to the period before 1992.

At the species level some trends could be identified that were generally restricted to one or two cluster areas. For one species, the polychaete *Lanice conchilega*, an overall upward trend in densities can be observed over the monitoring period in nearly all subareas. This trend was already observed in 1994. Although in 1995 this species seemed to be slightly less abundant than in 1994, densities were still high compared to the period before 1994. For other species the following trends in density were found per cluster area:

- * Northern offshore-southern Dogger Bank cluster: weakly downward trend in the sea-urchin *Echinocardium cordatum*.
- * Oyster Ground clusters: downward trends in the echinoderm *Amphiura filiformis* and the bivalve *Mysella bidentata*.
- * Southern offshore cluster: clear and continuous downward trend in *Echinocardium cordatum*.
- * Coastal cluster: upward trend for the polychaete *Magelona papillicornis*; downward trends in *Echinocardium cordatum* and the gastropod *Natica alderi*.

It seems remarkable that overall downward trends are observed particularly in echinoderms. For example *Amphiura filiformis* was generally a dominant species in the Oyster Ground area, including the Frisian Front, up to 1992, where densities of over 1500 specimens per m² were frequently found. In 1995, the densities were usually a few hundred specimens per m², but there were also several stations where the species was not found at all. No relationship was found between the decrease of *A. filiformis* and changes in the mud content (particles 16-63 µm) in the same period.

With respect to continuation of monitoring of North Sea macrobenthos with the aim to identify possible trend-like changes, the standardised programme for sampling and analyses (benthic fauna and sediment) as used in this study (1991-1995), is recommended.

2. SAMENVATTING

In dit rapport worden de resultaten gepresenteerd van een macrobenthos bemonstering die in het voorjaar van 1995 werd uitgevoerd in de Nederlandse sector van de Noordzee. Deze survey was de vijfde sedert 1991 en maakt deel uit van het programma 'Monitoring van het Noordzee macrobenthos' (BIOMON). Dit programma is een initiatief van het Rijksinstituut voor Kust en Zee (RIKZ, Rijkswaterstaat) en wordt uitgevoerd door de afdeling Marine Ecologie van het NIOZ in samenwerking met de Directie Noordzee van Rijkswaterstaat. Met het programma wordt beoogd inzicht te krijgen in jaarlijkse fluctuaties in de samenstelling van de macrofauna gemeenschap en vast te stellen of er op de langere termijn trendmatige veranderingen optreden. Dergelijke veranderingen zouden onder meer kunnen optreden als gevolg van effecten van antropogene activiteiten (bijv. eutrofiëring, boomkorvisserij, verontreiniging).

Het monsterprogramma zoals uitgevoerd in 1995 week aanzienlijk af van de aanpak waar in voorgaande jaren voor was gekozen. Tot en met 1994 werden jaarlijks 25 vaste stations bemonsterd die gelegen waren langs 5 raaien en op elk van deze stations werden steeds 5 boxcoremonsters genomen en geanalyseerd. Tijdens het programma van 1995 werden 100 stations bemonsterd, waaronder de 25 'oude' BIOMON stations. De 75 'nieuwe' stations werden min of meer at random gekozen binnen 4 subgebieden in de Nederlandse sector, te weten het zuidelijke deel van de Doggersbank, de Oestergronden, het overige offshore gebied en de kustzone. Per subgebied werd het aantal stations zodanig gekozen dat dit in verhouding stond tot de omvang van het subgebied. Per station werd slechts één boxcoremonster genomen voor het macrobenthos onderzoek. De reden voor de nieuwe aanpak kwam voort uit de overweging een bemonstering uit te voeren die meer representatief zou zijn voor het totale gebied en betere gegevens te verkrijgen op basis waarvan eventuele trendmatige veranderingen in deze subgebieden kunnen worden gedetecteerd. Als gevolg van de gewijzigde aanpak heeft het monitoring programma in feite een nieuwe start gemaakt. Immers voor de 75 'nieuwe' stations bestaat geen tijdserie van waarnemingen over meerdere achtereenvolgende jaren. Niettemin zijn bijna alle 'nieuwe' stations in het kader van andere onderzoeksprogramma's ooit al wel eens eerder bemonsterd. Dit betekent dat het in principe mogelijk is om te verifiëren of bepaalde indicaties voor trendmatige veranderingen, zoals die verkregen zijn op de 25 'oude' stations, ook op de 'nieuwe' stations gevonden worden.

De resultaten van het in de periode 1991-1995 uitgevoerde onderzoek wijzen op bepaalde trendmatige veranderingen in sedimentkarakteristieken. In alle subgebieden werd in 1995 een lichte toename geconstateerd in de mediane korrelgrootte ten opzichte van voorgaande jaren. Deze toename kon voor een deel verklaard worden uit een afname van de slibfractie (de fractie 16-63 μm , de fractie $<16 \mu\text{m}$ werd niet in de berekeningen meegenomen). Het slibgehalte van het sediment vertoonde een algehele neerwaartse trend op de Doggersbank, in het offshore-gebied en in de kustzone. In de Oestergronden werd zo'n algehele neerwaartse trend niet gevonden. Met name in het zuidelijke offshore-gebied was er een groot aantal stations dat een zelfde trend vertoonde over de periode 1991-1995.

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Dit wijst erop dat veranderingen zoals die zich op de afzonderlijke stations voordoen geen lokaal verschijnsel zijn, maar structurele trendmatige veranderingen reflecteren die zich over een groot gebied voordoen. Deze veranderingen worden echter niet gekenmerkt door een monotone toe- of afname, m.a.w. het gegeven dat slibgehalten laag waren in 1995 vormt geen enkele basis om het slibgehalte in het daarop volgende jaar te voorspellen.

Op basis van een clusteranalyse (TWINSPAN ordinatie) van de macrofaunagemeenschappen die in 1995 op de verschillende stations werden aangetroffen, werden 5 clustergebieden onderscheiden. In de Oestergronden werden 2 clusters onderscheiden welke overeenkomen met de vroeger al onderkende clusters Oestergronden 1 en 2. Het offshore-gebied kan opgedeeld worden in 2 clusters: één cluster bestaat uit stations die voornamelijk in het zuidelijke offshore-gebied zijn gelegen (zuidelijke offshore cluster), de andere uit stations die vooral in het noordelijke offshore-gebied en op de zuidelijke Doggersbank gelegen zijn (noordelijke offshore-zuidelijke Doggersbank cluster). Tenslotte is er een cluster van nabij de kust gelegen stations (kustzone cluster). Voor elke cluster is een aantal kenmerkende soorten geïdentificeerd.

Veranderingen in macrofauna karakteristieken op het niveau van de levensgemeenschap (diversiteit, fauna-dichtheid of biomassa) lieten in het algemeen geen consequente trend zien. Er lijkt echter de laatste jaren een lichte toename te zijn in soortenrijkdom (aantal soorten per monster) ten opzichte van de periode vóór 1992.

Op soortniveau waren bepaalde trends zichtbaar die zich meestal openbaarden in één of enkele clustergebieden. Bij één soort, de polychaet *Lanice cochilega*, was er een algemene trend van toenemende dichtheden gedurende de periode van monitoring in all subgebieden. Deze trend is al in 1994 gesignaleerd. Hoewel deze soort in 1995 iets minder talrijk was dan in 1994, konden dichtheden nog steeds hoog genoemd worden in vergelijking tot de periode vóór 1994. Ook voor enkele andere soorten werden trends gevonden die per clustergebied als volgt kunnen worden samengevat:

- * Noordelijke offshore-zuidelijke Doggersbank cluster: lichte neerwaartse trend bij de hartegel of zeeklit *Echinocardium cordatum*.
- * Oestergronden clusters: neerwaartse trends bij het slangsterretje *Amphiura filiformis* en de tweekleppige schelp *Mysella bidentata*.
- * Zuidelijke offshore cluster: duidelijk continu dalende trend bij *Echinocardium cordatum*.
- * Kustzone cluster: trend voor toenemende aantallen van de polychaet *Magelona papillicornis*; dalende trends bij *Echinocardium cordatum* en het roofslakje *Natica alderi* ("glanzige tepelhoorn").

Het lijkt opmerkelijk dat een algeheel dalende trend speciaal bij stekelhuidigen is waargenomen. *Amphiura filiformis*, bijvoorbeeld, was tot en met 1992 in het algemeen een dominante soort in de Oestergronden en op het Friese Front, waar deze soort regelmatig in dichtheden van meer dan 1500 exemplaren per m² werd aangetroffen. De in 1995 gevonden dichtheden lagen meestal in de orde van enkele honderden per m², maar

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op diverse stations werd de soort ook in het geheel niet aangetroffen. Er is geen direct verband gevonden tussen de afname van *A. filiformis* en veranderingen in het slibgehalte (16-63 μm) in de zelfde periode.

Met betrekking tot voortzetting van monitoring van het Noordzee macrobenthos, teneinde eventuele trendmatige veranderingen te identificeren, wordt aanbevolen ook in de toekomst het gestandaardiseerd programma van monstern en analyses (fauna en sediment), zoals gehanteerd in de voorliggende studie (1991-1995), aan te houden.

3. INTRODUCTION

This report presents the results of the fifth BIOMON macrobenthic survey on the Dutch Continental Shelf (DCS), in spring 1995. 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 macrobenthic community of the Dutch Sector of the North Sea. The results of the first four studies are published by Duineveld (1992), Duineveld & Belgers (1993, 1994) and Holtmann et al (1995).

The survey of spring 1995 is the first for which a totally new sampling strategy for the monitoring programme of macrozoobenthos is operative. The new method implies a dramatic break with the strategy used hitherto. In the previous 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 a total of 100 stations were sampled, but per location only one sample was taken. The 100 stations include the 25 'old' BIOMON stations and 75 'new' stations, which are more or less at random distributed over the DCS (Essink, 1995). However, it was anticipated that a comparison of new data with results of former benthic surveys, particularly those carried out in the framework of the ICES North Sea Benthos Survey (ICES-NSBS, 1986) and the MILZON-BENTHOS programme (1988-1993), would be optimal if the coordinates of the 'new' stations correspond with the positions of stations sampled during those former surveys. Considering this, the selection procedure was as follows. With the existing knowledge about the distribution of the macrobenthic fauna of the North Sea (Holtmann et al., 1996) 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. Depending on the extent of each subarea and its specific stratification a proportional number of positions were randomly generated per subarea. The coordinates of these positions were compared with those of stations that earlier had been sampled and then the station that was geographically the nearest was chosen as the 'new' BIOMON station. In this way 70 stations were selected that have been sampled in preceding years during either the ICES-NSBS survey or the MILZON programme. Finally, in the offshore area 5 real new stations were selected (with random positions), because this subarea had a low coverage in the surveys of 1986-1993.

The reason for changing the sampling strategy of the macrobenthic monitoring is that with the new method a more accurate 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 whole DCS rather than on separate stations. Therefore, this new strategy will improve the power of any statements about possible large scale changes of the macrobenthos on the DCS (v.d. Meer, in prep.).

4. MATERIAL AND METHODS

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

4.1. SAMPLING AND SORTING

The station grid of the sampling cruise in spring 1995 is given in Fig. 1. The geographical positions of the 100 stations, together with the former station codes and some measured abiotic parameters are summarized in Table 1 (a/b).

In the period 22 May to 28 June 1995 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 31 May 1995 with the RV. Argus. More general information about the cruises and the weather conditions can be found in the cruise report of Rijkswaterstaat (Anonymous, 1995).

At each station 2 boxcore samples (0.068 m², minimal depth 15 cm) were taken while the ship was anchored. One boxcore was used for sediment analysis and the second boxcore was washed through a sieve (1 mm) to collect the macrobenthic fauna. The sediment samples were immediately frozen at -20 °C. The residue of the macrobenthos was preserved in a borax-buffered solution of 4-6 % formaldehyde.

In the laboratory the macrobenthic 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 macrozoobenthos was identified to species level, except for some notoriously difficult taxa such as anthozoans, hydrozoans, phoronids, priapulids and nemerteans, and counted. Sizes (nearest 0.5 mm) were recorded for most species of the molluscs and echinoderms to calculate the ashfree dry weight (g AFDW/ m²) by means of length-weight relationships.

4.2. ASHFREE DRY WEIGHT

The ashfree dry weight (AFDW) of the different taxa was determined in one of the following ways:

- * Molluscs, echinoids: by means of length-AFDW relationships of the form $W=a \cdot L^b$ (W =AFDW and L =length in mm)
- * Polychaetes, worms, larger crustaceans, 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 60 hours and subsequently incinerating at 520 °C for two hours (Duineveld & Witte, 1987).

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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 in 1991-1993. This estimated individual weight is based on previous determinations of the AFDW of the taxa in question (Duineveld; Holtmann, unpubl.).

4.3. CLASSIFICATION AND DIVERSITY

Stations were classified in clusters by means of TWINSpan ordination (Hill, 1979) based on macrofauna species abundances (cut levels: 0, 15, 30, 75, 150, 350, 1000 ind./m²). Of each cluster a set of characteristic species can be described because of their dominance in the respective community.

Beside the species density (ind./m²) and biomass (g AFDW/m²) the diversity of the macrozoobenthos was calculated.

The diversity is represented by three variables:

1. species richness (*i.e.* the number of species per sample),
2. Shannon-Wiener index (H' ; with logarithm to the base e) (Shannon & Weaver, 1949) and
3. Simpson's index (SI) for dominance (Simpson, 1949).

The relationship between these diversity measures and Hill's diversity numbers (N_0 , N_1 , N_2 ; Hill, 1973), which have been used in the MILZON-BENTHOS reports on the spatial distribution of the benthic fauna in the Dutch Continental Shelf of the North Sea (Holtmann & Groenewold, 1992; 1994), is as follow: N_0 = species density, N_1 = $\exp(H')$ and N_2 = $1/SI$.

4.4. SEDIMENT ANALYSIS

At each station shown in Fig. 1, two subsamples (3.4 cm diameter, depth 10 cm) 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. SEDIMENT COMPOSITION

The median grain sizes and mud content (16-63 μm ; the smallest fraction $<16 \mu\text{m}$ was not considered) of the sediment at all stations sampled in 1995 (except station OFF 14) are listed in Table 1(a/b). The spatial patterns in median grain size and mud content are illustrated in Fig. 2 and 3. A summary of the data is given in Table 2 where mean values of these parameters are given for 5 cluster areas (these clusters were identified by means of TWINSpan ordination of the macrofauna community, see section 5.2.2). The area of the Oyster Ground is characterized by fine sand, usually mixed up with a significant mud fraction (mean 5.0 %, maximum 25.0 %). Fine to medium sand usually occurred in the coastal area, on the Dogger Bank and in the Northern offshore area. In the offshore area the median grain size gradually increased in southern direction to values beyond 350 μm off the coast of Zeeland. So far, the results roughly correspond with known patterns in sediment composition observed during the monitoring surveys in previous years and published sediment charts (Anonymous, 1992). However, a comparison of the sediment composition at stations that were sampled earlier during either the MILZON- or ICES-NSBS surveys (Holtmann et al., 1990; Holtmann & Groenewold, 1992, 1994; Kunitzer et al., 1992) reveals differences in the median grain size between 1995 and previous years. At the stations in all 4 subareas there appeared to be an overall increase of the median grain size (Fig. 4). The average increase measured was most pronounced on the southern part of the Dogger Bank (9 %). In the other areas the median grain size was on average 6 to 7 % larger than in previous years. This may indicate that there was a slight decrease of fine material in the sediment. More evidence for such a decrease is obtained from the 25 stations that were consistently sampled during the BIOMON programme from 1991 onwards. Fig. 5 shows that at one station on the Dogger Bank (DOG 7) there was only a very slight increase of median grain size compared to the period 1991-1993. However, in the Oyster Ground, the highest value for median grain size was found at all stations in 1995. In the offshore area an overall increase in 1995 compared to previous years was found at 7 of 8 stations sampled and in the coastal area there was an overall increase of median grain size in 1995 at 8 of 9 stations sampled.

Changes were also found in the mud content (*i.e.* the particle size fraction between 16 and 63 μm) of the sediment at the 25 stations sampled between 1991 and 1995 (Fig. 6). At the Dogger Bank station (DOG 7) the mud content decreased from ~ 1 % in 1991 and 1992 to 0 % in 1995. In the Oyster Ground there were 3 stations (OYS 36, 37 & 39) showing a parallel trend over the monitoring period, *viz.* a continuous increase from 1991 to 1994 and a slight decrease in 1995. At the other stations parallel trends were not so clear, but the mud contents tended to be lower in 1995 than in the preceding years. Most obvious are the parallel trends at the stations in the offshore area where mud contents consistently culminated in 1992. At three of these stations a second peak was found in 1994. At the other stations the mud contents continuously decreased after 1992 to zero

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values in 1994 and 1995. In the coastal area mud contents were generally highest in 1992 too and thereafter decreased to zero values at most stations in 1995. Only station COA 10 showed a completely different temporal pattern.

5.2. DISTRIBUTION OF THE MACROBENTHIC FAUNA

5.2.1. DIVERSITY, DENSITY AND BIOMASS

A total of 189 species were found in the 100 boxcore samples, including 13 juvenile species (identified to genus level only) and 13 higher taxa (not identified to species level). Scientific names and presence-absence data for all species are summarized in Appendix-1. All basic data are listed in Appendix 2.

The mean number of species per sample (Hill number N_0) was highest on the Dogger Bank and lowest in the coastal area and southern offshore area (Table 2, Fig. 7). A comparison of the numbers per sample with the numbers found at corresponding stations during ICES-NSBS, MILZON or BIOMON surveys in preceding years suggests an overall increase in the past 10 years (Fig. 8). On the Dogger Bank and in the Oyster Ground the numbers seem to have increased particularly between 1986 and 1991 and to have stabilized thereafter. In the offshore and coastal areas there is an overall increase compared to the period before 1994.

Mean values of the Shannon-Wiener diversity index were in 1995 highest on the southern part of the Dogger Bank and lowest in the coastal area (Table 2). A comparison of the diversity at the 25 'old' BIOMON stations with values found in 1994 (Fig. 9) reveals that there are substantial differences between both years at a number of stations, but there is no consistent trend and mean values are at a similar level in both years.

Total fauna densities were generally highest in the coastal area (Fig. 10). Also on the Dogger Bank high faunal densities were found. A comparison of fauna densities in 1995 with densities found at corresponding stations during ICES-NSBS or MILZON surveys in preceding years (Fig. 11) shows that the densities were very high in 1995 on the Dogger Bank, in the offshore area and in the coastal area. In the Oyster Ground the densities were high compared to the values found during the ICES-NSBS survey in 1986, but at a similar level as found in the early 1990's. Changes in fauna abundance at the 25 'old' BIOMON stations over the period 1991-1995 are illustrated in Fig. 12. At the single Dogger Bank station (DOG 7) fauna numbers increased. In the other areas there were highly variable trends at the different stations. The mean fauna abundance at the Oyster Ground stations hardly changed between 1991 and 1995. In the offshore and coastal areas there seemed to be a slight overall increase in 1994 and 1995 compared to the preceding years.

In 1995, mean biomass values were highest in the coastal area and lowest on the southern part of the Dogger Bank and in the offshore area (Table 2, Fig. 13). Although the biomass values at individual stations may differ considerably from values earlier

measured during the ICES-NSBS and MILZON surveys (Fig. 14), there does not seem to be a consistent increase or decrease compared to preceding years. The changes in biomass values at the 25 'old' BIOMON stations (Fig. 15) also do not suggest a consistent trend between 1991 and 1995 in any of the 4 subareas investigated.

5.2.2. PATTERNS IN FAUNA COMPOSITION

A classification of the 100 stations investigated, based on their fauna composition (species specific abundances), was carried out by means of TWINSpan ordination. The results of the analysis are presented in Fig. 16. Five clusters were distinguished, which is one more than were previously discerned for the 25 'old' BIOMON stations (Duineveld, 1992; Duineveld & Belgers, 1993, 1994; Holtmann et al. 1995). Table 2 presents an overview of the abiotic and biotic parameters of the five clusters. At the first division-level 40 stations of the Oyster Ground were split from the rest. The second division resulted in a sub-division of the Oyster Ground in 2 clusters and separated 24 southern offshore stations from the coastal area, the other offshore stations and the Dogger Bank. After the third division 16 stations of the coastal area were classified as a separate cluster.

As a result, in the Oyster Ground there are 2 clusters which correspond to the clusters formerly named Oyster Ground 1 and Oyster Ground 2. In the offshore area there are two clusters: one cluster consists of stations mainly concentrated in the southern area (southern offshore cluster) and one of stations in the northern area, which have affinity with the Dogger Bank stations (northern offshore-southern Dogger Bank cluster). With the TWINSpan classification of the data in 1991 only one offshore cluster was found (Duineveld, 1992). The 7 stations of the Dogger Bank were not located at the central part of the bank, so the affinity with the northern offshore stations can be explained by the same depth and sediment composition found in the area of the southern Dogger Bank (Kröncke, 1992). Compared to the northern offshore area the stations of the southern offshore cluster show coarse sand with a 'poor' macrobenthic fauna (low mean values of the density and biomass; Table 2). Finally there is a cluster of coastal stations (coastal cluster) with the highest macrobenthic abundance and biomass.

Indicator species of the Oyster Ground are the echinoderm *Amphiura filiformis* and the crustaceans *Callinassa subterranea* and *Harpinia antennaria*, which are all frequently found in both clusters. Characteristic for the Oyster Ground 1 cluster are the crustacean *Upogebia deltaura*, the polychaete *Glycera rouxii* and the sipunculan *Golfingia vulgaris*. In the Oyster Ground 2 cluster the crustacean *Eudorellopsis deformis*, the bivalves *Abra alba* and *Mysia undata* and the polychaete *Pholoe minuta* are frequently found. Indicator species for the southern offshore area are the crustacean *Urothoe brevicornis*, the bivalve *Tellina pygmaea* and the polychaetes *Nephtys cirrosa*, *Ophelia limacina* and *Hesionura augeneri*, whereas the echinoderm *Acrocnida brachiata*, the crustaceans *Bathyporeia elegans*, *B. guilliamsoniana*, *Iphinoe trispinosa*, *Hippomedon denticulatus* and *Urothoe poseidonis*, the bivalve *Tellina fabula* and the polychaete *Aricidea minuta* are characteristic for the northern offshore area and southern Dogger

Bank. Species that are frequently found particularly in the coastal area are the crustacean *Urothoe poseidonis*, the bivalves *Ensis directus*, *Macoma balthica*, *Spisula subtruncata* and *Tellina fabula* and the polychaete *Capitella capitata*.

5.2.3. TEMPORAL VARIATION IN THE ABUNDANCE OF INDIVIDUAL SPECIES

The selection of species for which temporal variation in the abundance is described in this section is composed of the selection previously made by Holtmann et al. (1995) and some other species that have either a wide distribution or are characteristic of one of the 5 fauna clusters. The temporal variation in the abundance of 8 widely distributed species at the 25 'old' BIOMON stations is illustrated in Fig. 17 (a-h). An inspection of these figures for possible temporal trends gives the following results:

-*Lanice conchilega* (Polychaeta; Fig. 17a): densities of this species were high particularly in the northern offshore-southern Dogger Bank cluster; in the southern offshore and coastal clusters, where high densities can also be frequently found there was generally a decrease compared to 1994, when densities of this species culminated and particularly high numbers of juveniles were found (Holtmann et al., 1995).

-*Magelona papillicornis* (Polychaeta; Fig. 17b): strong year-to-year variations are found in the abundance of this species; no consistent parallel trends can be recognized in the offshore and Oyster Ground clusters; in the coastal cluster there has been a strong upward trend since 1993.

-*Nephtys hombergii* (Polychaeta; Fig. 17c): there are strong year-to-year variations and no consistent parallel trends can be recognized between stations within the individual clusters.

-*Pectinaria koreni* (Polychaeta; Fig. 17d): seems to have culminated at most stations in the coastal area in 1994, but further did not show a temporal trend.

-*Spiophanes bombyx* (Polychaeta; Fig. 17e): occurred in relatively high abundance in the offshore clusters in 1995 compared to preceding years; in contrast, densities of this species seem to have decreased in the Oyster Ground clusters, where the species was found at only one of the 4 stations in the Oyster Ground 2 cluster in 1995.

-*Mysella bidentata* (Bivalvia; Fig. 17f): changes in the abundance of this species generally do not show consistent trends; however, in the Oyster Ground cluster a downward trend can be noticed; it seems remarkable that the species has almost completely disappeared at the OYS 36 station in the Oyster Ground 1 cluster; this is the former META-2 station in the Frisian Front, where it occurred in high densities in the early nineties.

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-*Natica alderi* (Gastropoda; Fig. 17g): shows no clear abundance trends in the offshore and Oyster Ground clusters, but in the coastal cluster densities seem to have decreased drastically since 1991; the species was not found at any of the 7 stations that have been sampled during the BIOMON programme in preceding years and at only one of the 9 other stations in this cluster one specimen of this species was found in 1995.

-*Echinocardium cordatum* (Echinodermata; Fig. 17h): a tendency for gradually decreasing abundance of this species between 1991 and 1995 can be recognized in most clusters; the decrease is most pronounced in the coastal cluster and the southern offshore cluster; in the Oyster Ground 2 cluster there is no consistent decrease.

An inspection of possible temporal trends in the abundance pattern of TWINSPAN indicator species was based on the 25 BIOMON stations that have been sampled since 1991. Trends were inspected for each species in its characteristic cluster (Fig. 18 a-e) and this resulted in the following:

Northern offshore-southern Dogger Bank cluster (Fig. 18a)

Bathyporeia elegans (Crustacea): no consistent temporal trend can be observed between 1991 and 1995.

Tellina fabula (Bivalvia): there is a weak upward trend in the abundance of this species in 3 of the 5 stations, but no consistent parallel trend at all 5 stations in this cluster.

Oyster Ground 1 cluster (Fig. 18b)

Amphiura filiformis (Echinodermata): at the only standard station in this cluster (OYS 36 = former META 2) a strong decrease was observed from 1700 ind./m² in 1992 to 100 ind./m² in 1995.

Callianassa subterranea (Crustacea): Densities of this species have also decreased, from 225 ind./m² in 1992 to 75 ind./m² in 1995.

Oyster Ground 2 cluster (Fig. 18c)

Abra alba (Bivalvia): abundance of this species has strongly increased at 3 of the 4 stations in this cluster.

Amphiura filiformis (Echinodermata): there seems to be a slight decrease in population densities in this cluster over the monitoring period.

Callianassa subterranea (Crustacea): except for an obvious increase in the abundance of this species at station OYS 37 between 1992 and 1993 there are no strong changes in the abundance of this species.

Pholoe minuta (Polychaeta): there are no corresponding temporal trends at the 4 stations in this cluster.

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Southern offshore cluster (Fig. 18d)

Nephtys cirrosa (Polychaeta): there are highly variable temporal patterns in the abundance of this species at the different stations; although the mean abundance was somewhat lower in 1994 and 1995 than in the period 1991-1993, the development of the abundance at the individual stations does not indicate an overall decrease.

Coastal cluster (Fig. 18e)

Tellina fabula (Bivalvia): there are no corresponding temporal trends among the 7 stations in this cluster.

Spisula subtruncata (Bivalvia): at most stations there is a decreasing trend over the monitoring period.

5.2.4. RELATIONSHIP BETWEEN SPECIES ABUNDANCES AND MUD CONTENTS IN THE OYSTER GROUND

The mud fraction in sediments in the Oyster Ground is generally large by nature. Particularly in this area a change in the mud content might have consequences for the abundances of species that are typical inhabitants of muddy sediments and therefore are characteristic species of this area. One of such species is *Amphiura filiformis*. Surprisingly, there does not seem to be any relation between the abundance of *A. filiformis* at the 7 'old' BIOMON stations in this area, as measured during the successive surveys carried out between 1991 and 1995, and the mud content (fraction 16-63 μm) at these stations (Fig. 19a). It is obvious therefore that the overall downward trend of *A. filiformis* in the Oyster Ground between 1991 and 1995 can not be explained by the changes in the mud content that occurred in this period, as is illustrated by Fig. 20a.

Another species characteristic of the Oyster Ground is the decapode *Callinassa subterranea*. For this species there is a clear relation between abundance and mud content (Fig. 19b). On average the species occurs in higher abundance at locations where a relatively large mud fraction is found. On the other hand, the changes in the abundance of *C. subterranea* at the 7 'old' BIOMON stations between 1991 and 1995 can not be explained by the simultaneous changes in the mud content at these stations (Fig. 20b).

6. DISCUSSION

In this study the macrobenthic fauna distribution in the Dutch sector of the North Sea was studied by sampling 100 stations that were chosen at random within 4 subareas. At each station only one boxcore sample was collected and analysed. This sampling approach implies an important change compared to the sampling strategy used in the BIOMON programme in preceding years, when only 25 stations were sampled, but per station 5 samples were collected. The decision to change the sampling strategy was based on the aim of the monitoring programme, *i.e.* to monitor changes in the benthic community in the whole area and to detect possible temporal trends in subareas with specific biotic and abiotic characteristics. Although intensive sampling of a few stations can give us information not only on mean species specific densities, but also on the local variance, this is not the most effective way to gather information on faunal densities in a larger area. It seems more appropriate to spread out sampling over such a larger area, which implies that single samples are taken at a larger number of stations. The temporal trends in species specific densities and community attributes as found at the 25 individual BIOMON stations support this approach, because for most species and community attributes no consistent parallel trends could be recognized at stations within one cluster area. This means that a clear trend at one or a few stations is often not representative of overall trends in a subarea.

The new approach implies that the monitoring programme in fact has made a second start, since for the 75 'new' stations there is no time series available with data from previous years. However, since most of these stations have once been sampled during either the ICES-NSBS or the MILZON surveys (Künitzer et al., 1992; Holtmann et al., 1990; Holtmann & Groenewold, 1992, 1994), some indications for possible temporal trends as identified at the 25 'old' BIOMON stations can also be obtained from these stations.

The interpretation of the data on sediment characteristics should take into account that these data concern the range of particles larger than 16 μm and not include the smallest mud particles. "Mud contents" were determined as the fraction 16-63 μm , which in fact may contain the larger mud particles and the smaller sand particles. Further, the median grain size was determined over the whole size range $>16 \mu\text{m}$ and therefore values for the median grain size and mud content are interrelated. For example, the overall relatively large median grain size in 1995 may be (partly) explained by the overall low mud contents. However, the year-to-year changes in these sediment parameters at the individual stations do not show a clear relationship. *E.g.* the parallel trends in the mud contents at the stations in the offshore area were not accompanied by corresponding inverse patterns in median grain size.

Some clear temporal trends could be identified in the sediment characteristics of the different areas, particularly in the mud contents of the sediment. An overall downward trend in the mud content of sediments between 1992 and 1995 was observed in the offshore area. Also on the southern part of the Dogger Bank and in the coastal area such a

downward trend can be observed and at most stations the fraction 16-63 μm had decreased to 0 %. In the Oyster Ground a downward trend was observed at 4 of the 'old' BIOMON stations, but at 3 other stations there was an overall upward trend since 1991. The parallel trends in the mud content of the stations in the offshore area strongly indicate that year-to-year differences in the mud content can not be explained merely by local spatial variance. Apparently, there are structural temporal trends that extend over a wide area. However, these temporal trends are not characterized by a continuous increase or decrease over the monitoring period. This indicates that the overall low mud contents and large median grain size in 1995 do not reflect an overall trend of gradually decreasing small particle fractions in the sediment over a longer term, or, in other words, have no predictive value with respect to the situation in the next year. Further, it is not clear to what extent year-to-year changes in the mud content have consequences for the macrofauna composition. Although the changes in mud content were relatively the largest in the sandy areas, it seems not likely that there is a substantial effect on the macrofauna composition here, since the mud fraction in these areas is always low by nature. In the Oyster Ground, where mud usually forms a substantial fraction in the sediment, a change in the mud fraction is much more likely to result in an effect on the macrofauna. However, for two species that are characteristic for the Oyster Ground sediments (*Amphiura filiformis* and *Callianassa subterranea*) there seemed to be no relationship between temporal changes in their abundance and simultaneous changes in the mud content.

Changes at the community level did not show a clear temporal trend: Average biomass values do not seem to have changed during the past ten years; Total fauna densities may seem to be relatively high in 1994 and 1995 compared to preceding years, but it should be noticed that these densities are usually strongly determined by the abundance of one or two dominant species and do not reflect the overall densities of individual species; finally, Shannon-Wiener diversity appeared to be highly variable between years but did not show an overall temporal trend in any of the subareas. However, the data suggest that there has been a slight increase in species richness (*i.e.* number of species per sample) in the last 4 years compared to the period before 1992, particularly on the Dogger Bank and in the offshore area.

At the species level some trends could be identified that were generally restricted to one or two cluster areas. Per cluster area the following trends were found:

Northern offshore-southern Dogger Bank cluster:

There seems to be an overall increase in the abundance of *Lanice conchilega*. This tube building polychaete, usually living in banks, was found in high population densities at several stations in this cluster in 1995. *Spiophanes bombyx*, also a tube building polychaete, and the bivalve *Tellina fabula* also were abundant in 1995 but further showed no trend. The sea urchin, *Echinocardium cordatum*, showed a weakly downward trend in this cluster.

Oyster Ground clusters:

The tube building polychaete *Spiophanes bombyx* was found in low densities compared to preceding years. Further there was no consistent temporal trend in this species. A downward trend can be observed in the echinoderm *Amphiura filiformis* and also in the bivalve *Mysella bidentata*. Distribution and abundance of these species are usually interrelated in the Oyster Ground. The Oyster Ground 1 cluster includes some stations in the Frisian Front area, e.g. OYS 36 (the former META 2) where both species have almost completely disappeared. Up to 1992 these species were very abundant in this area (densities of over 1500 ind./m² were frequently observed) and considered as characteristic for the area. A downward trend in recent years for *A. filiformis* in the Frisian Front has also been observed during summer cruises on behalf of a marine biological course at NIOZ (R. Daan, pers. observation). The low abundance of the species could be explained by decreased settlement of new generations, decreased survival of newly settled generations or increased mortality among adults in recent years, or by a combination of these factors. However, there is no evidence for a specific cause that could explain such changes in the population dynamic of *A. filiformis*.

Southern offshore cluster:

Spiophanes bombyx and *Lanice conchilega* occurred in high densities in this cluster, although the latter species showed a slight decrease compared to 1994. There seemed to be a continuous downward trend in *Echinocardium cordatum*. The species was found at only 3 of the 24 stations in this cluster, whereas in 1992 the species was found at each of the 7 'old' BIOMON stations.

Coastal cluster:

The polychaete *Magelona papillicornis* showed an upward trend over the monitoring period. Densities of *Lanice conchilega* were also high, but, like in the southern offshore cluster, somewhat lower than in 1994. Downward trends were observed for the gastropod *Natica alderi* and for the echinoderm *Echinocardium cordatum*.

Based on the results of the 1994 study Holtmann et al. (1995) concluded that there was an overall downward trend for densities of echinoderms. This trend seems to have continued in 1995. Particularly the downward trend of *Echinocardium cordatum* in nearly all subareas is remarkable, but also the decrease of *Amphiura filiformis* in the Oyster Ground supports the conclusion that echinoderms show a downward trend. Since both *E. cordatum* and *A. filiformis* can be considered as relatively long living species (life span substantially longer than one year), they may have a relatively strong indicative value for changing (sediment) conditions on the Dutch Continental Shelf, since in such species the effects of changing conditions are accumulated over the longer term. However, if indeed the conditions have changed, there is no evidence whether these are the consequence of anthropogenic disturbance (e.g. fishery or mining activities) or have a natural cause.

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Nevertheless, trends in the macrofauna composition seem to be better identified at the species level than at the community level. Therefore, the attention in the North Sea monitoring programme should particularly focus on trendwise changes at the species level. Even, monitoring of only a selection of species could be considered, *e.g.* a selection of more or less long living species that are frequently found in one or more subareas. Such a way of monitoring could reduce the amount of work involved in the current programme. However, there are disadvantages for such an approach. Firstly, it is generally not known to what kind of change in environmental conditions individual species show a typical response. For example, if there are species that display a distinct response to a subtle change in temperature regime, but the selection to which was decided does not include such species, we would fail to obtain any indication that a change in environmental conditions had occurred. A second disadvantage is that we might overlook that there are species that, till now, were only seldom found, but could colonise one or more subareas due to favorable changes in environmental conditions. Finally, in view of an optimal comparison of faunal densities between consecutive years it is necessary to use standardized methods. It is recommended therefore to maintain the current approach during the continued monitoring programme, and to perform complete fauna analyses for the stations sampled.

7. CONCLUSIONS

The results of the macrobenthos survey of the Dutch Continental Shelf (DCS) in spring 1995 together with information from earlier studies (ICES 1986, MILZON, 1988-1993, BIOMON 1991-1994) lead to the following conclusions:

- * On the basis of the fauna composition in different subareas of the DCS in 1995, five cluster areas can be distinguished. In the Oyster Ground there are 2 clusters which correspond to the clusters formerly named Oyster Ground 1 and 2. In the offshore area there are 2 clusters: one cluster consists of stations mainly concentrated in the southern area (southern offshore cluster) and one of stations in the northern area, which have affinity with the southern part of the Dogger Bank stations (northern offshore-southern Dogger Bank cluster). Finally there is a cluster of coastal stations (coastal cluster).
- * The area of the Oyster Ground clusters is characterized by fine sand mixed up with a significant mud fraction. The northern offshore-southern Dogger Bank cluster and the coastal cluster are lying in areas with fine to medium sand. The fauna in the southern offshore cluster are inhabitants of medium to coarse sand.
- * Compared to previous years, an overall slight increase in median grain size was observed in all subareas in 1995. An overall downward trend in the mud contents of sediments (*i.e.* the fraction 16-63 μm ; the smallest fraction $<16 \mu\text{m}$ was not considered) was observed on the Dogger Bank, the offshore area and the coastal area.
- * Parallel temporal fluctuations in the mud content at several stations in the southern offshore area indicate that year-to-year changes are structural temporal trends that extend over a wide area. These long-term trends do not indicate a clear-cut increase or decrease in the whole monitoring area.
- * Changes in macrofauna characteristics at the community level (diversity, density or biomass) generally did not show a clear temporal trend. However, there seemed to be a slight increase in species richness in recent years compared to the period before 1992.
- * The polychaete *Lanice conchilega*, which showed an overall upward trend up to 1994, was still abundant in 1995, particularly in the northern offshore-southern Dogger Bank, the southern offshore and the coastal clusters. In the coastal cluster an upward trend was also found in the polychaete *Magelona papillicornis*.

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- * An overall downward trend can be observed for echinoderms, in particular for *Amphiura filiformis* in the two Oyster Ground clusters and for *Echinocardium cordatum* in the other clusters.
- * With respect to future monitoring, continuation of the standardized programme for sampling and analyses (macrofauna and sediment composition), such as used in this study, is recommended.

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Monitoring macrozoobenthos North Sea 1995

9. REFERENCES

- ANONYMOUS, 1992. Noordzee-atlas. Stadsuitgeverij Amsterdam, 192 pp.
- ANONYMOUS, 1995. Meetverslag EXP*BMN/Benthos; week 21, 23, 24, 25 en 26, 1995. - Rijkswaterstaat, Directie Noordzee: 80 pp.
- DUINEVELD, G.C.A., 1992. The macrobenthic fauna in the Dutch sector of the North Sea in 1991. NIOZ-report 1992-6, NIOZ, Texel, The Netherlands: 1-17.
- DUINEVELD, G.C.A. & J.J.M. BELGERS, 1993. The macrobenthic fauna in the Dutch sector of the North Sea in 1992. NIOZ-report 1993-11, NIOZ, Texel, The Netherlands: 1-38.
- DUINEVELD, G.C.A. & J.J.M. BELGERS, 1994. The macrobenthic fauna in the Dutch sector of the North Sea in 1993 and a comparison with previous data. NIOZ-report 1994-12, NIOZ, Texel, The Netherlands: 1-103.
- DUINEVELD, G.C.A., H.J. WITTE, 1987. Report on an intercalibration exercise on methods for determining ashfree dry weight of macrozoobenthos. -ICES CM 1987/L:39: 1-6.
- ESSINK, K., 1991. Bemonstering en analyse van macroscopische bodemfauna van de Voordelta en de Noordzee (Nederlands Continentaal Plat). -Getijdewateren Standaard Voorschrift, Rijkswaterstaat Dienst Getijdewateren: 1-9.
- ESSINK, K., 1995. Change of strategy for monitoring macrozoobenthos in the Dutch sector of the North Sea. - National Institute for Coastal and Marine Management/RIKZ/ Workingdocument OS-95.606x: 5 pp.
- GULLENTOPS, F., M. MOENS, A. RINGELE & R. SENGIER, 1977. Geologische kenmerken van de suspensies en de sedimenten. -In: J. Nihoul & F. Gullentops (eds): Mathematisch Model Noordzee. Vol 4. Sedimentologie.
- HILL, M.O., 1973. Diversity and evenness: A unifying notation and its consequences. -Ecology 54(2): 427-432.
- HILL, M.O., 1979. TWINSpan - A FORTRAN program for arranging multivariate data in an ordered two-way table by classification of the individuals and attributes. -In: Ecology and Systematics, Cornell University, Ithaca, New York: 1-48.
- HOLTMANN, S.E., Y.C.M. VAN SCHEPPINGEN & A. GROENEWOLD, 1990. Biomonitoring van het zoöbenthos in de zuidelijke Noordzee, voorjaar 1990. -Deelrapport monitoring MILZON-BENTHOS. -MILZON-BENTHOS rapport 90: 15 pp.

Monitoring macrozoobenthos North Sea 1995

HOLTMANN, S.E. & A. GROENEWOLD, 1992. Distribution of the zoobenthos on the Dutch Continental Shelf: the Oyster Ground, Frisian Front, Vlieland Ground and Terschelling Bank (1991) -NIOZ-RAPPORT 1992-8, NIOO-CEMO rapporten en verslagen 1992-6: 129 pp.

HOLTMANN, S.E. & A. GROENEWOLD, 1994. Distribution of the zoobenthos on the Dutch Continental Shelf: The western Frisian Front, Brown Bank and Broad Fourteens (1992/1993). MILZON-BENTHOS II Deelrapport, Rijkswaterstaat -NIOZ-RAPPORT 1994-1, NIOO-CEMO rapporten en verslagen 1994-1: 136 pp.

HOLTMANN, S.E., J.J.M. BELGERS, B. KRACHT & G.C.A DUINEVELD, 1995. The macrobenthic fauna in the Dutch sector of the North Sea in 1994. NIOZ-report 1995-7, NIOZ, Texel, The Netherlands: 1-98.

HOLTMANN, S.E., A. Groenewold, K.H.M. Schrader, J. Asjes, J.A. Craeymeersch, G.C.A. Duineveld, A.J. van Bostelen & J. van der Meer, 1996. Atlas of the zoobenthos of the Dutch Continental Shelf. Ministry of Transport, Public Works and Water Management, North Sea Directorate, Rijswijk, 1-244 pp.

KRÖNCKE, I., 1992. Macrofauna standing stock of the Dogger Bank. A comparison: III. 1950-54 versus 1985-87. A final summary. -Helgoländer Meeresunters. 46: 137-169.

KÜNITZER, A., D. BASFORD, J.A. CRAEYMEERSCH, J.M. DEWARUMÉZ, J. DÖRJES, G.C.A. DUINEVELD, A. ELEFThERIOU, C. HEIP, P. HERMAN, P. KINGSTON, U. NIERMANN, E. RACHOR, H. RUMOHR & P.A.W.J. DE WILDE, 1992. The benthic infauna of the North Sea species distribution and assemblages. -ICES J. Mar. Sci. 49:127-143.

MEER, J. van der, in prep. Sampling design of monitoring programmes for marine benthos: a comparison between the use of fixed versus randomly selected stations.

RUMOHR, H., T. BREY & S. ANKAR, 1987. A compilation of biometric conversion factors for benthic invertebrates in the Baltic Sea. -Baltic Marine Biology Publ. 9: 1-56.

SHANNON, C.E. & W. WEAVER, 1949. The mathematical theory of communication. -Univ. of Illinois Press, Urbana.

SIMPSON, E.H., 1949. Measurements of diversity. -Nature, 163: 688-688.

Figures and Tables

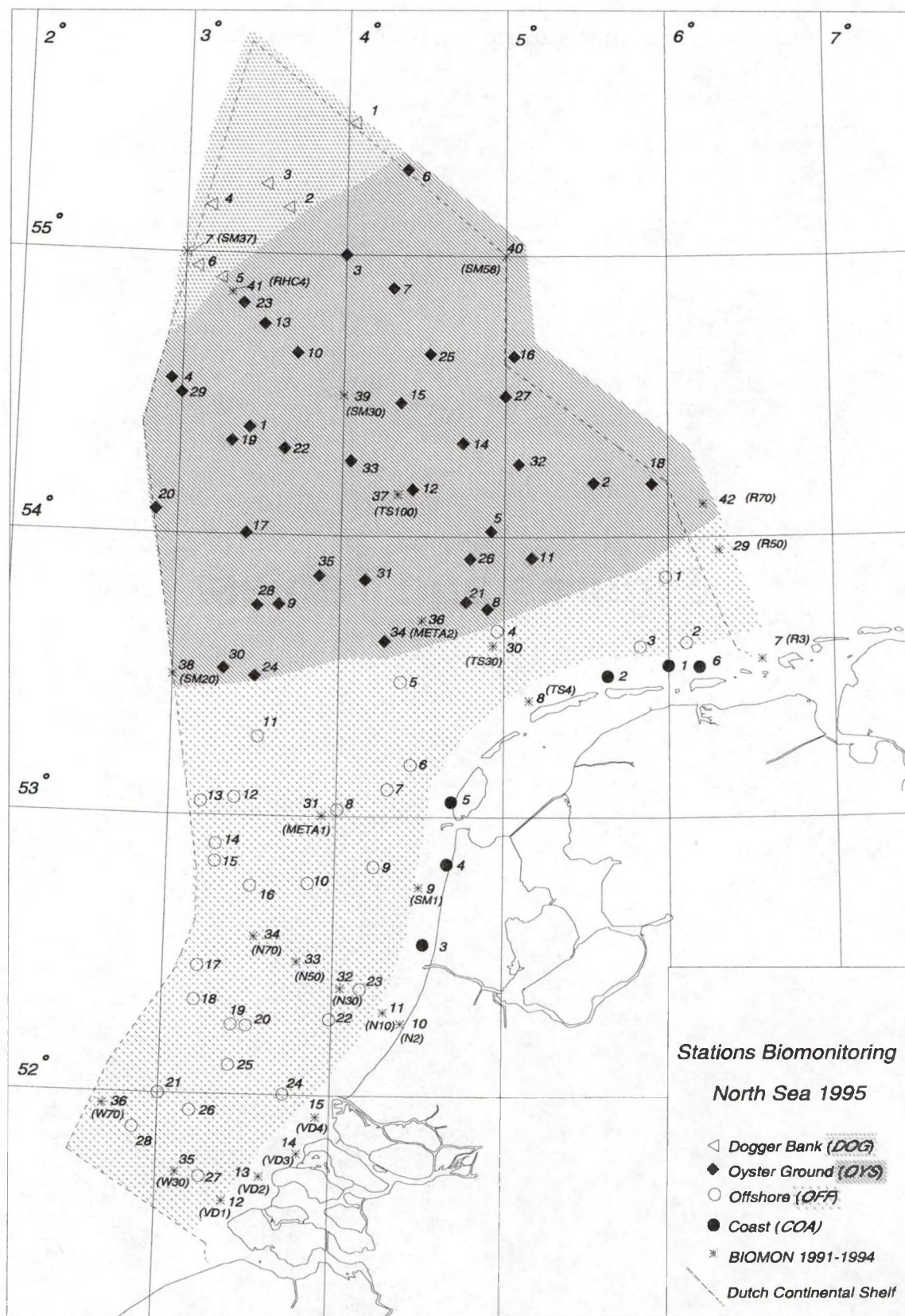


Fig. 1. Locations of the sampling stations which have been visited during the survey in 1995.

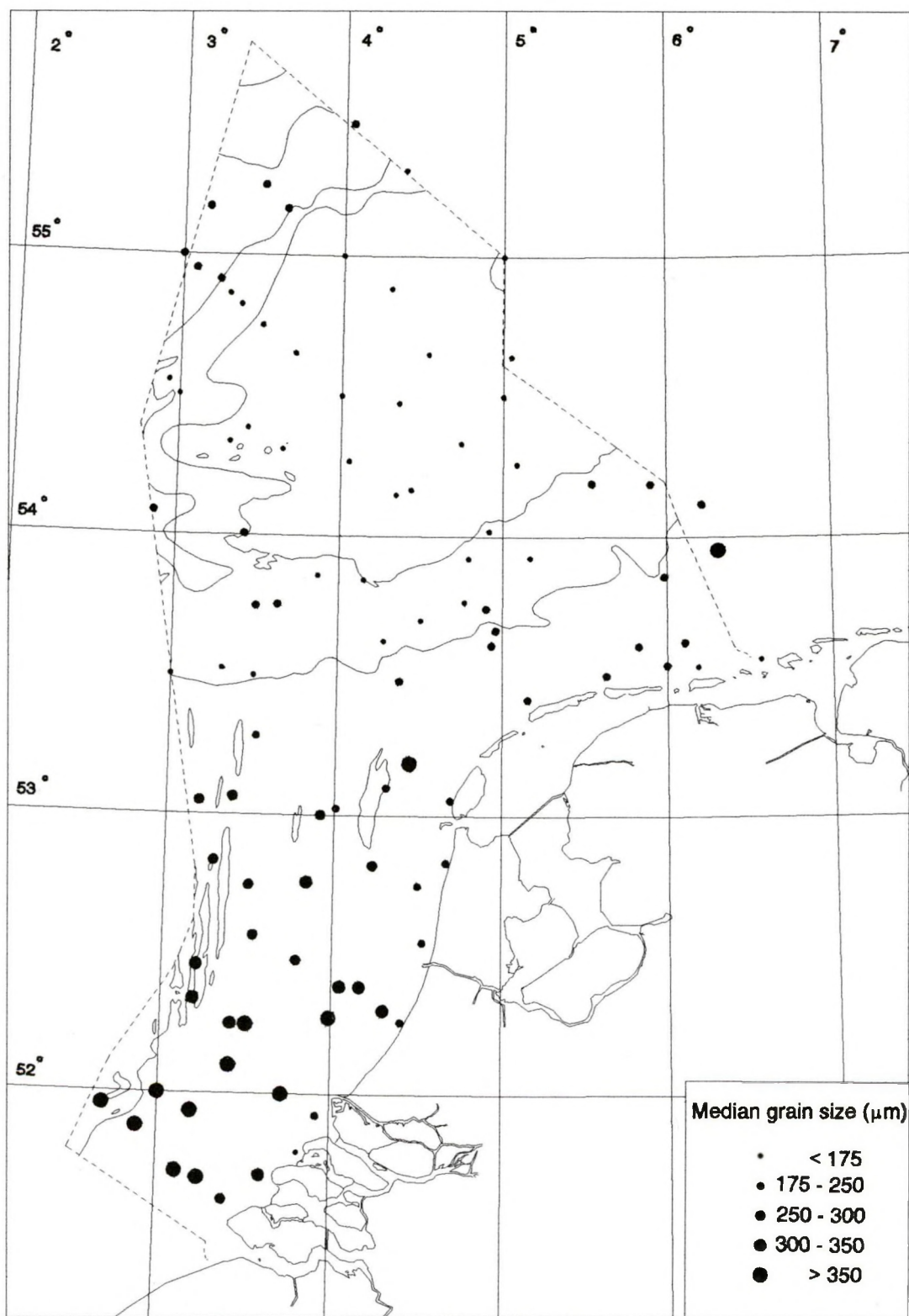


Fig. 2. Median grain size (μm) of the sediment in 1995

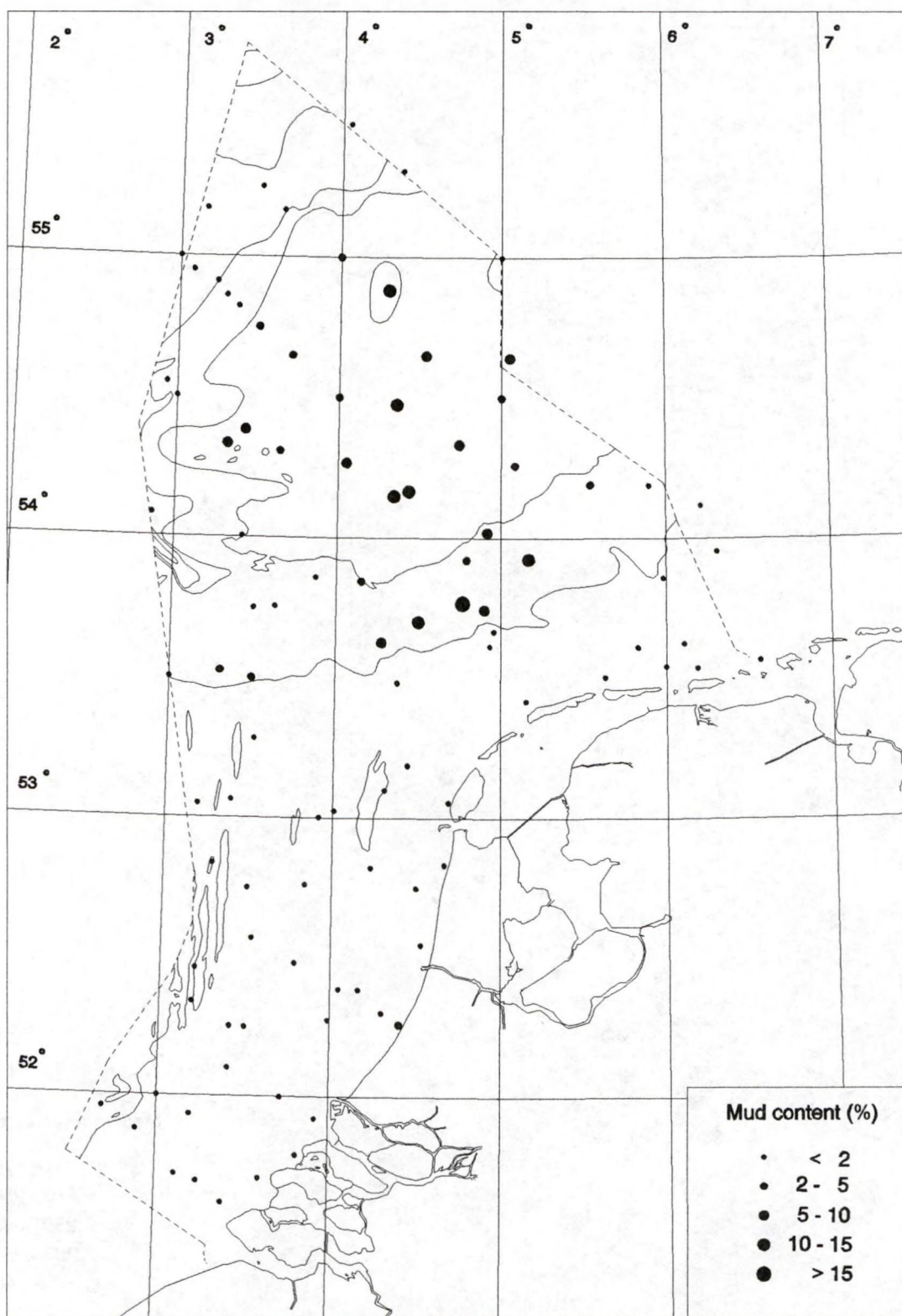


Fig. 3. Mud content (% , 16 - 63 μ m) of the sediment in 1995.

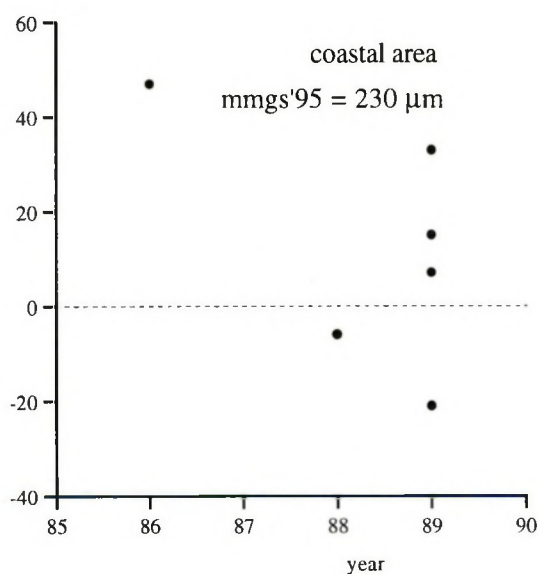
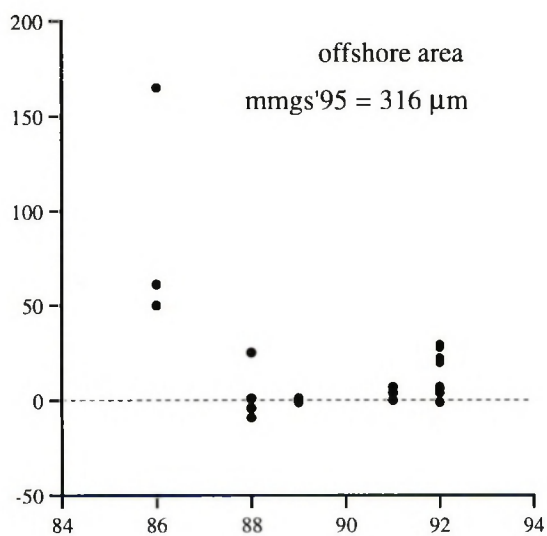
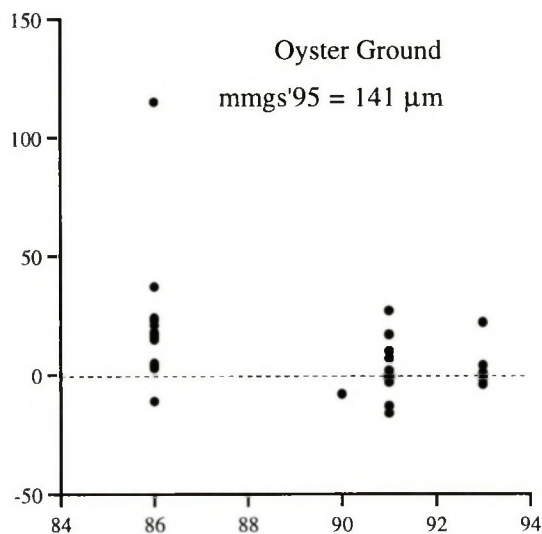
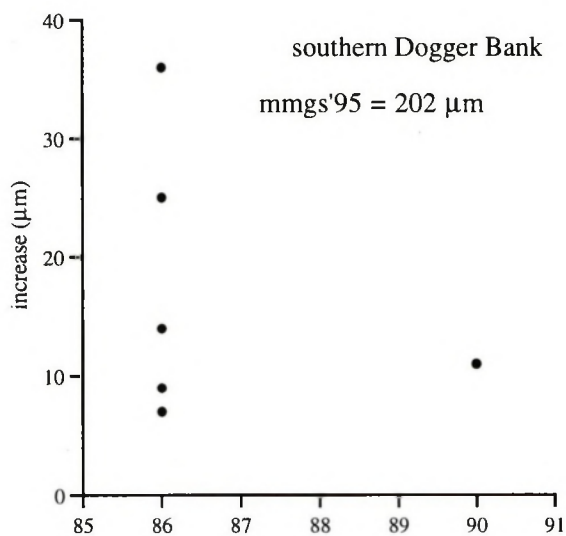


Fig. 4. Increase (or decrease) of median grainsize at stations in the 4 areas in 1995 compared to previous years. Each point refers to a station that was previously sampled during either the ICES-NSBS or MILZON programme. Horizontal axis: year to which the 1995 data are compared. Vertical axis: increase or decrease in 1995 compared to previous years. mmgs'95 = mean median grainsize in 1995.

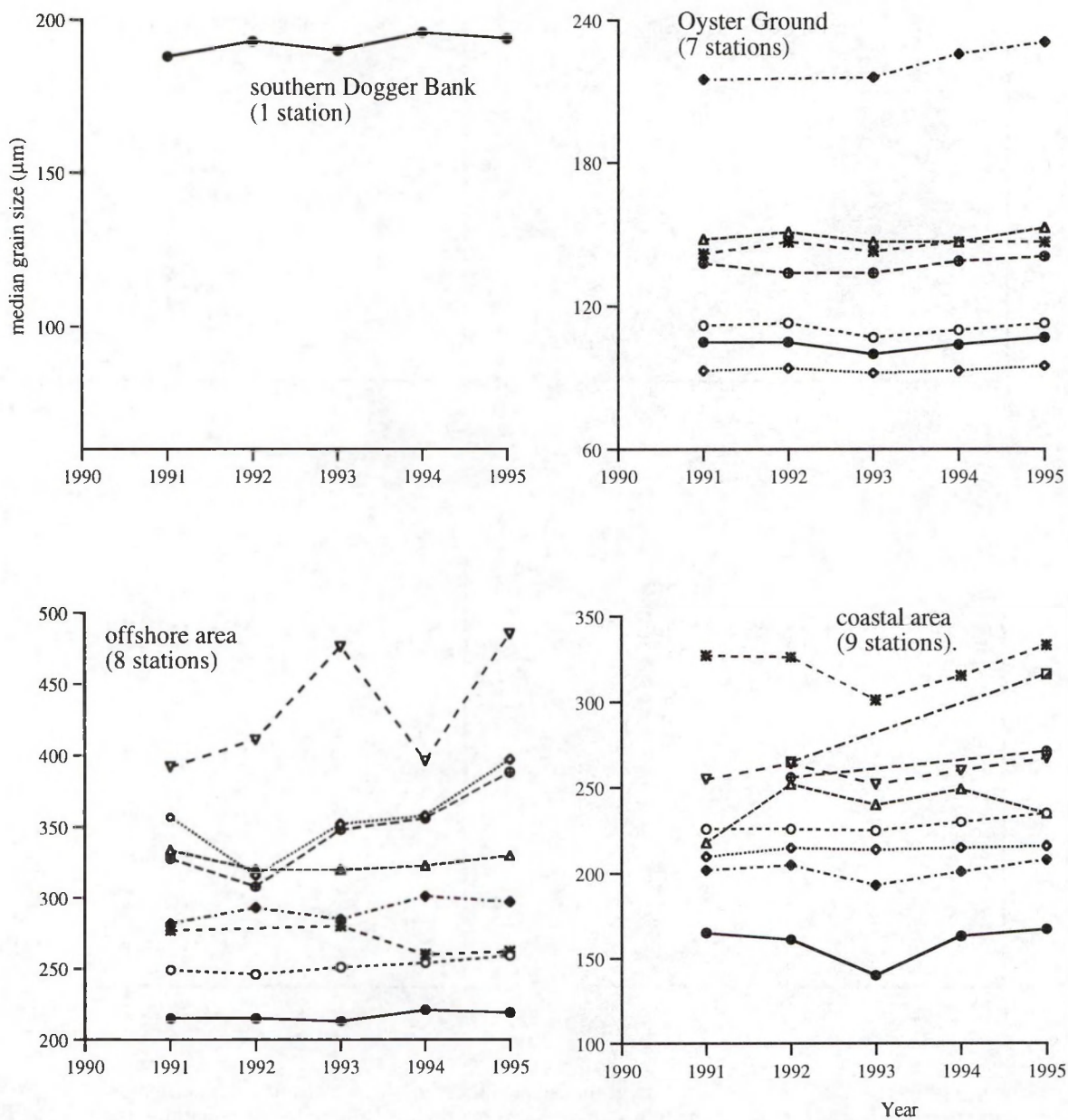


Fig. 5. Median grainsize (µm) of the sediments at 25 BIOMON stations between 1991 and 1995.

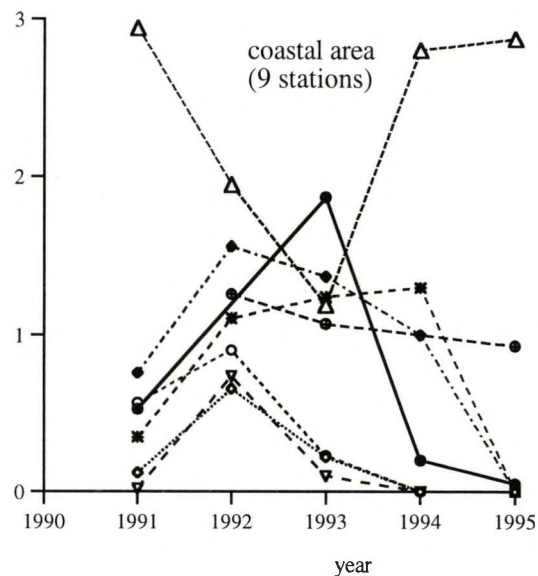
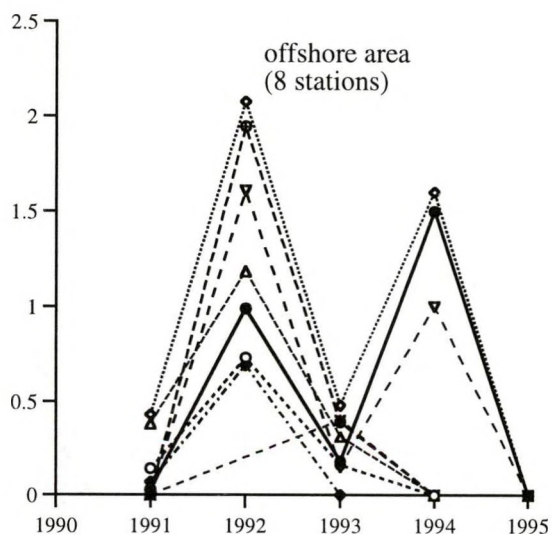
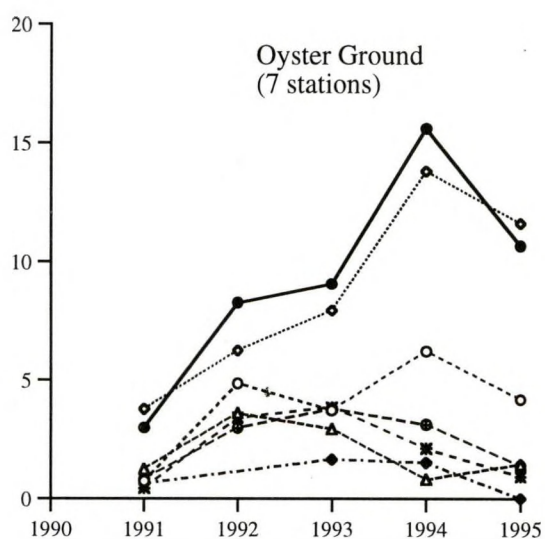
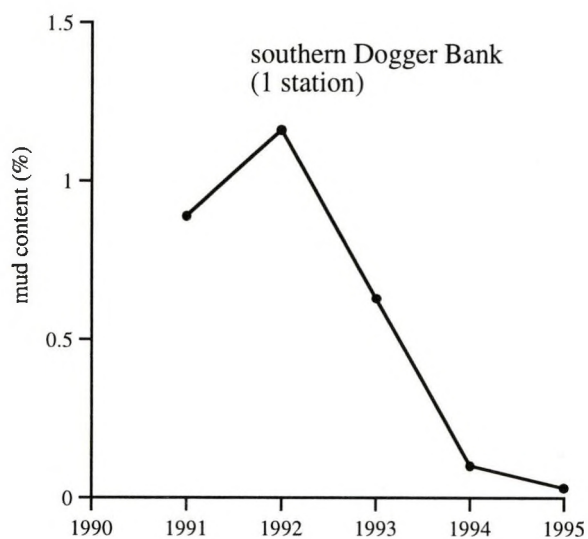


Fig. 6. Mud content (fraction 16-63 μm) of the sediments at 25 BIOMON stations between 1991 and 1995.

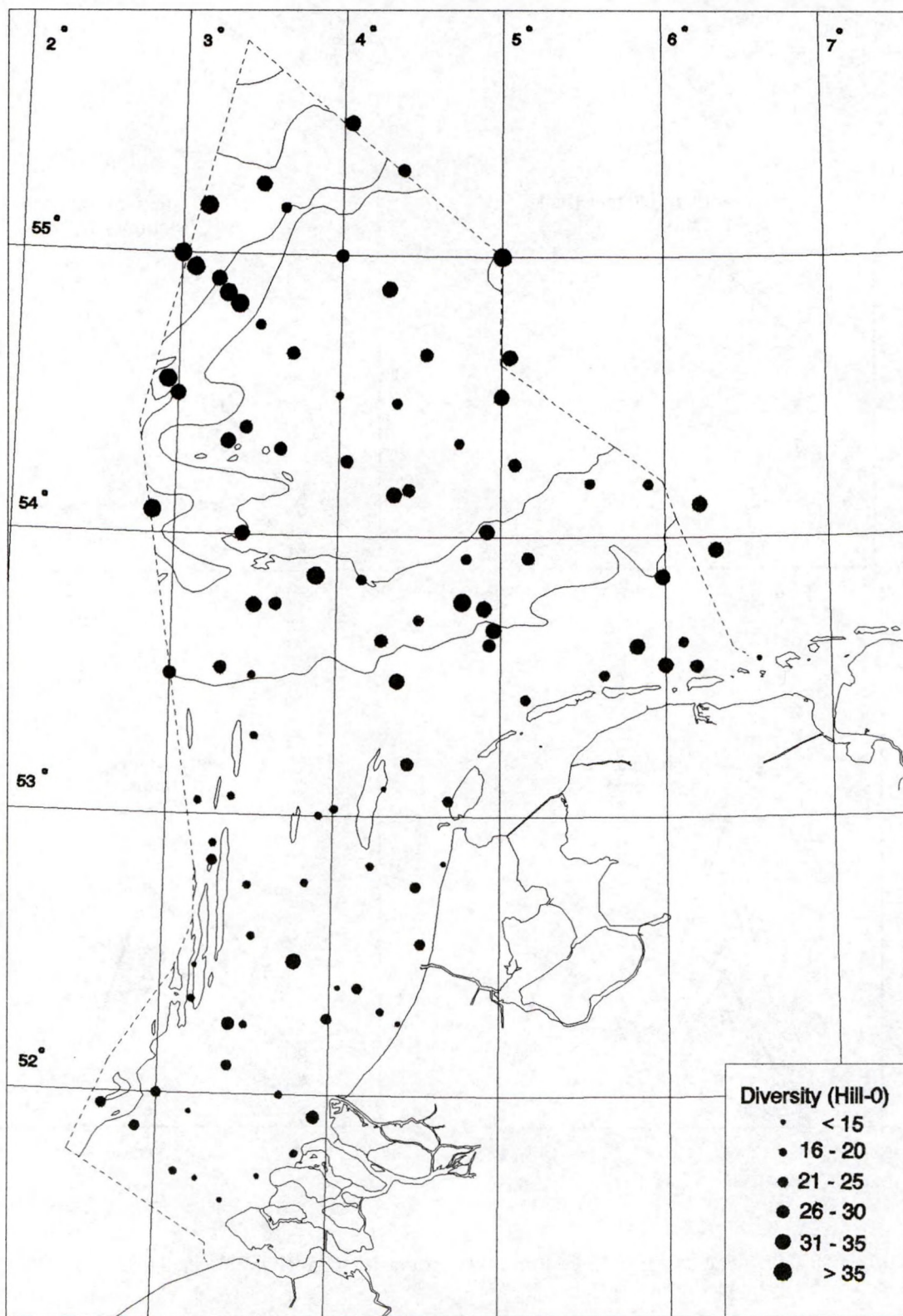


Fig. 7. Number of species (Hill(0)-diversity) of the macrozoobenthos in 1995.

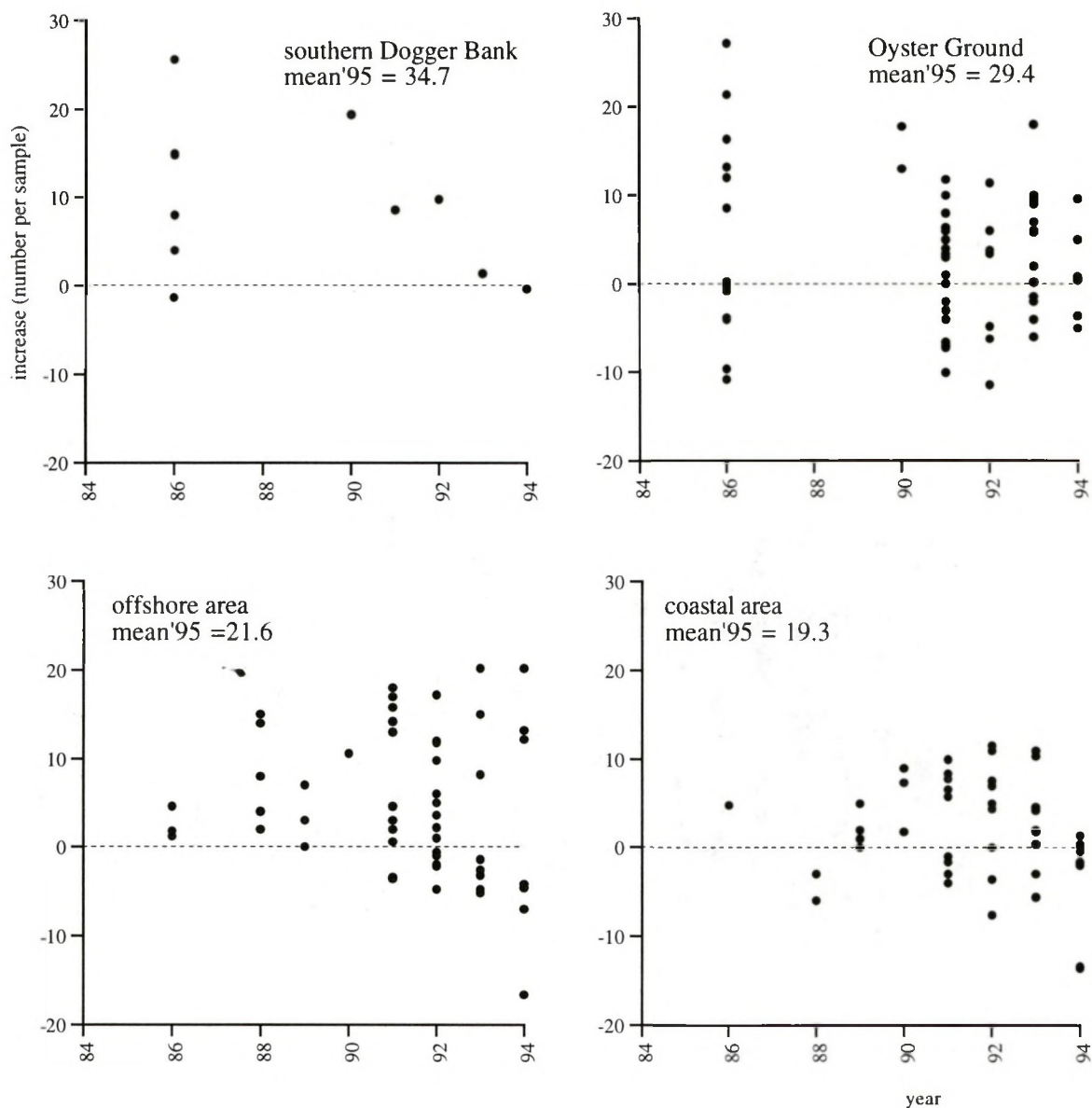


Fig. 8. Increase (or decrease) in numbers of species per boxcore (Hill 0) at stations in the 4 areas compared to preceding years. Each point refers to a station that was previously sampled during either the ICES-NSBS, MILZON or BIOMON programme. Horizontal axis: year to which the 1995 data are compared. Vertical axis: increase or decrease in 1995 compared to previous years.
mean'95 = mean number of species per sample in 1995.

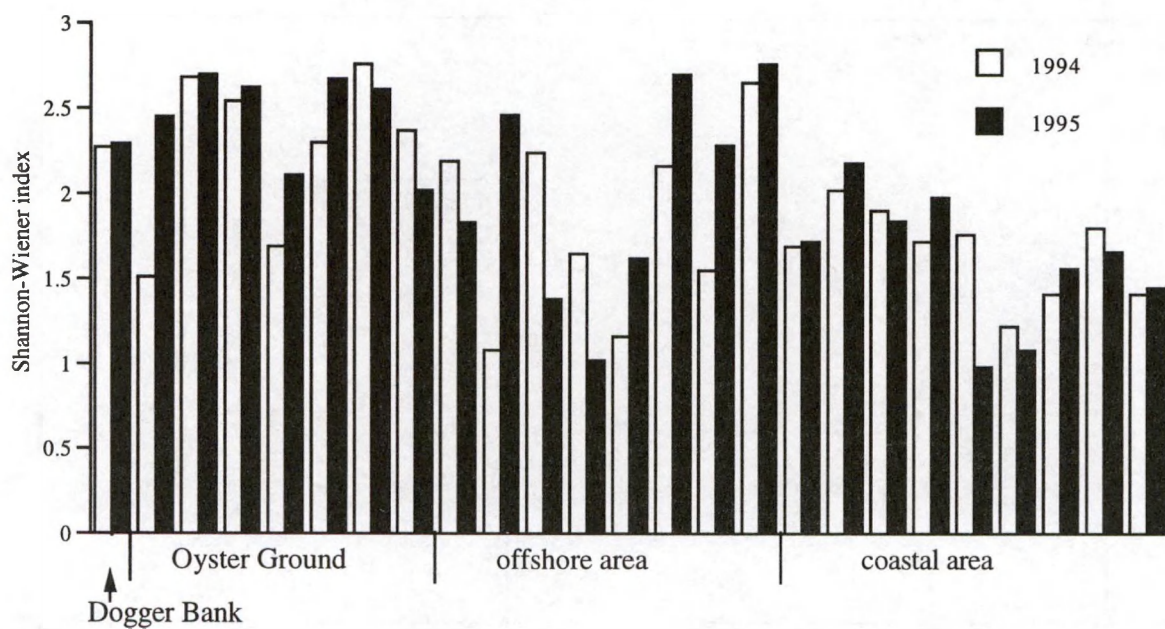


Fig. 9. Shannon-Wiener diversity at 25 BIOMON stations in 1994 and 1995.

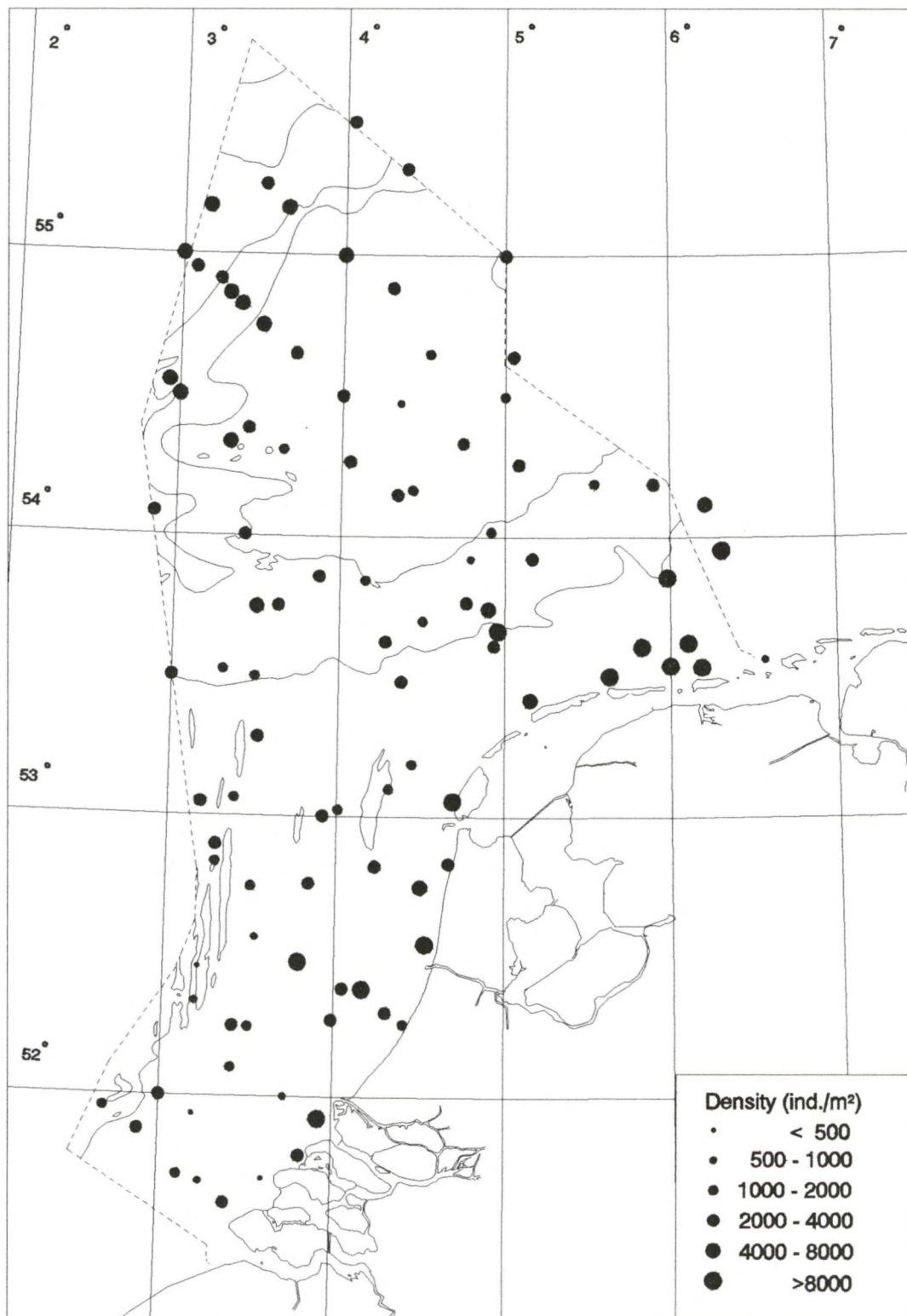


Fig. 10. Total density (ind./m²) of the macrozoobenthos in 1995.

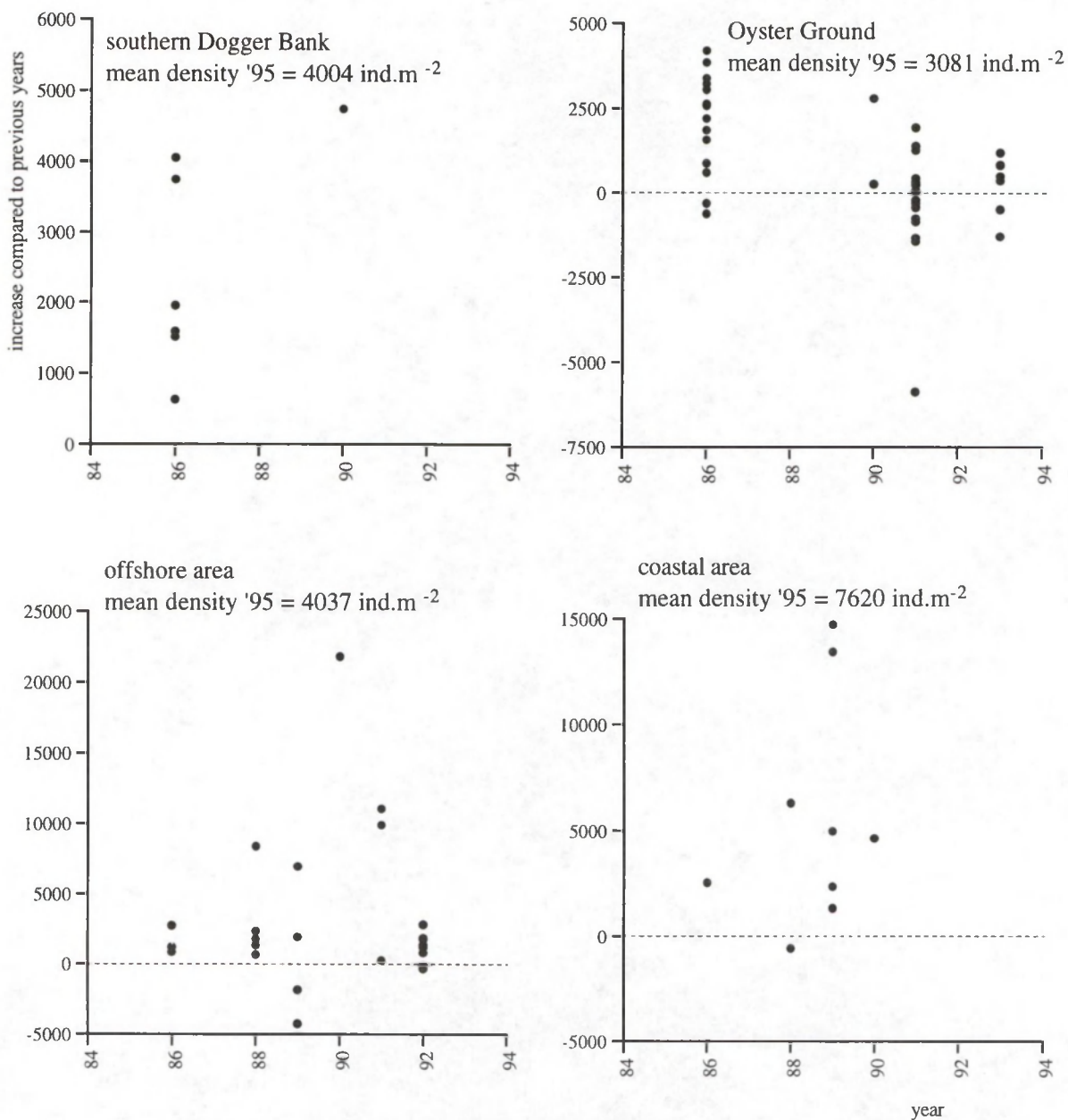


Fig. 11. Increase (or decrease) in numbers of individuals per m² at stations in the 4 areas in 1995 compared to preceding years. Each point refers to a station that was previously sampled during either the MILZON or ICES-NSBS programme. Horizontal axis: year to which the 1995 data are compared. Vertical axis: increase or decrease in 1995 compared to previous years.

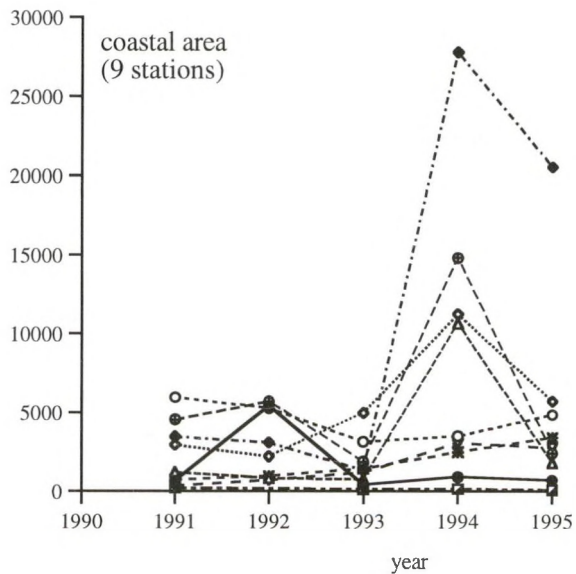
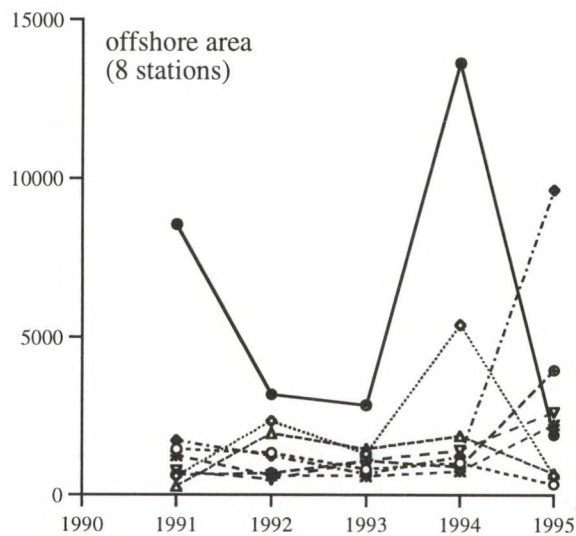
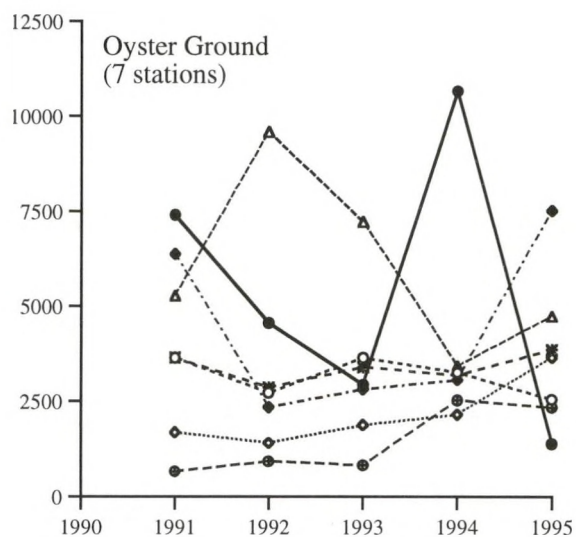
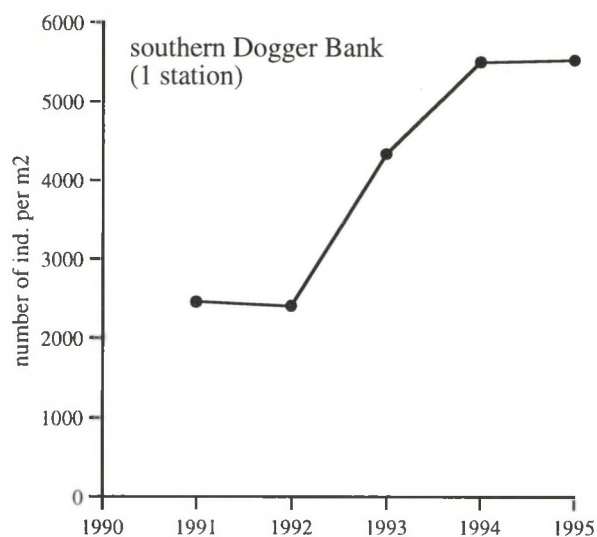


Fig. 12. Fauna abundance (numbers of individuals per m²) at 25 BIOMON stations between 1991 and 1995.

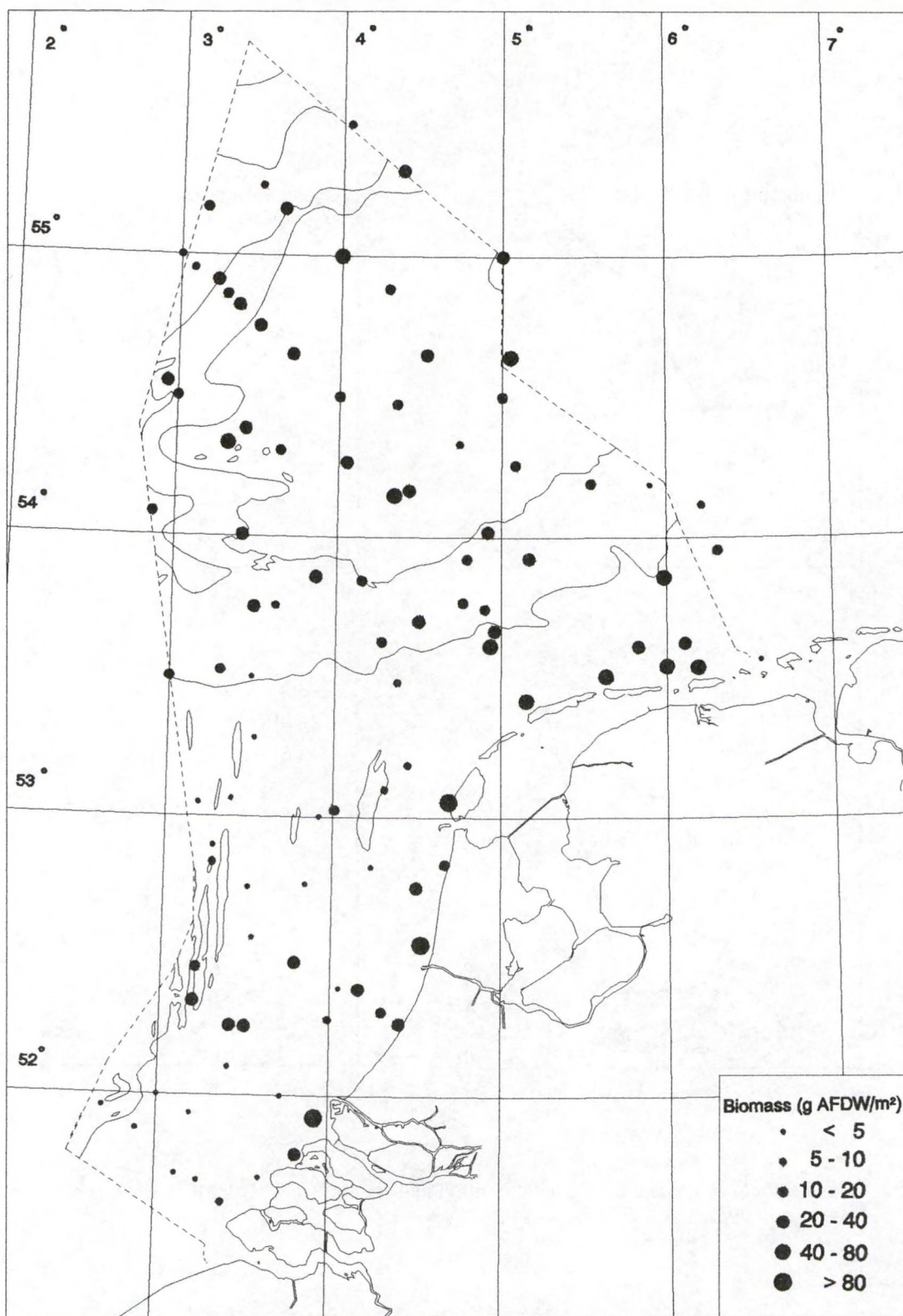
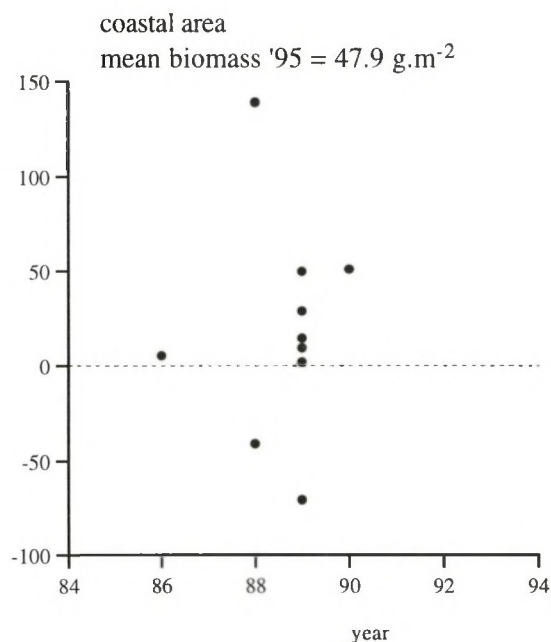
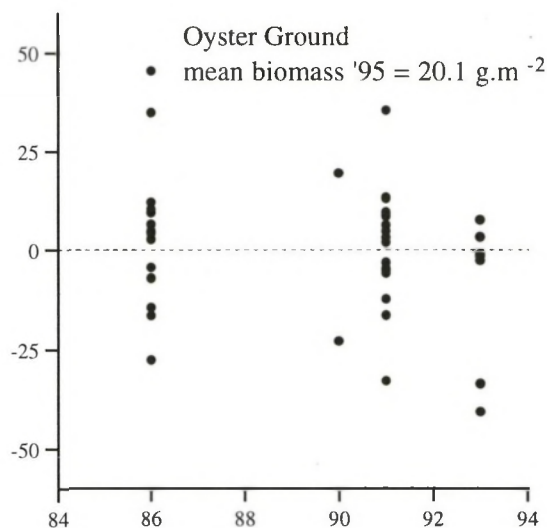


Fig. 13. Total biomass (g AFDW/m²) of the macrozoobenthos in 1995.



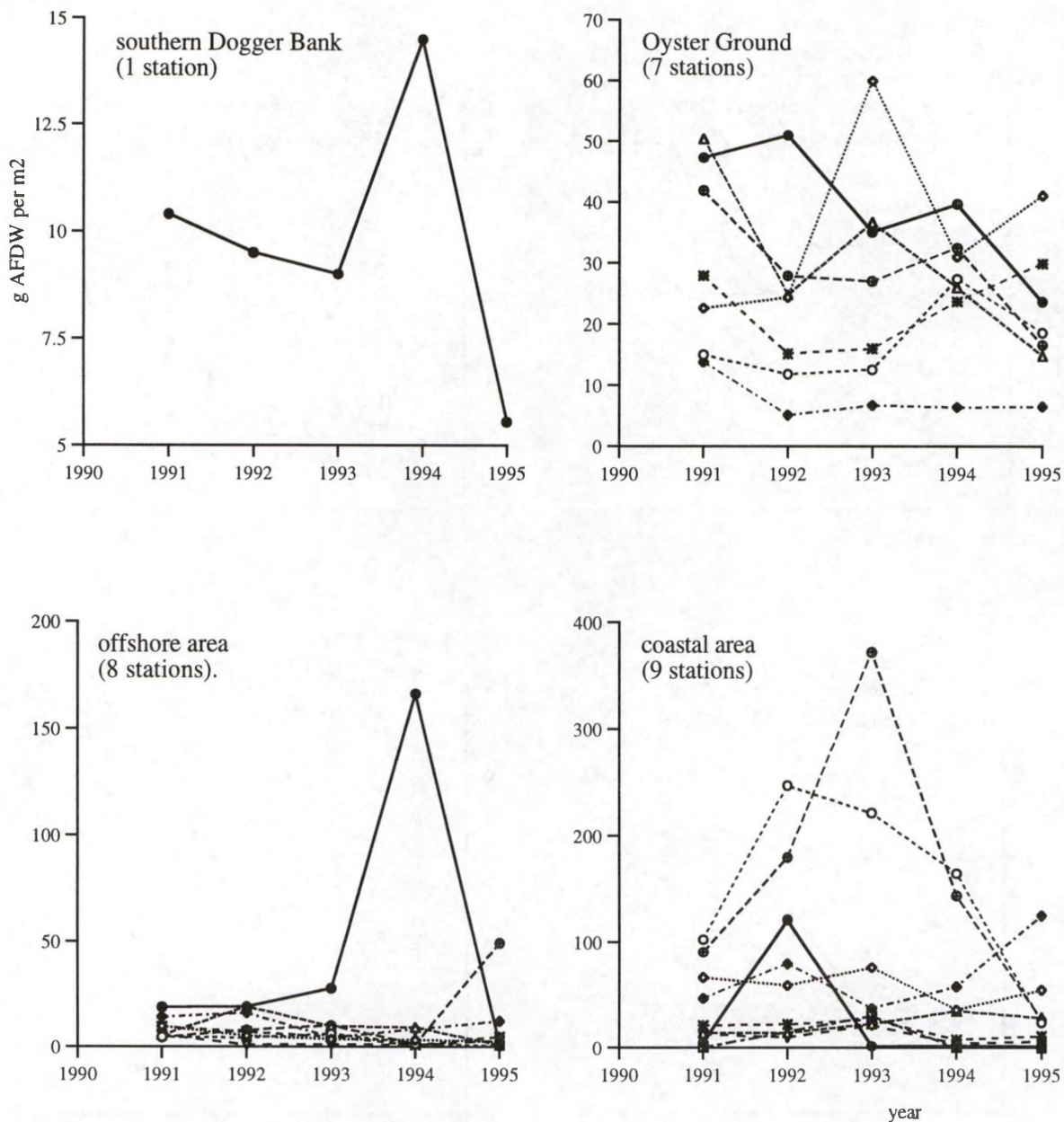


Fig. 15. Biomass values (g AFDW per m²) at 25 BIOMON stations between 1991 and 1995.

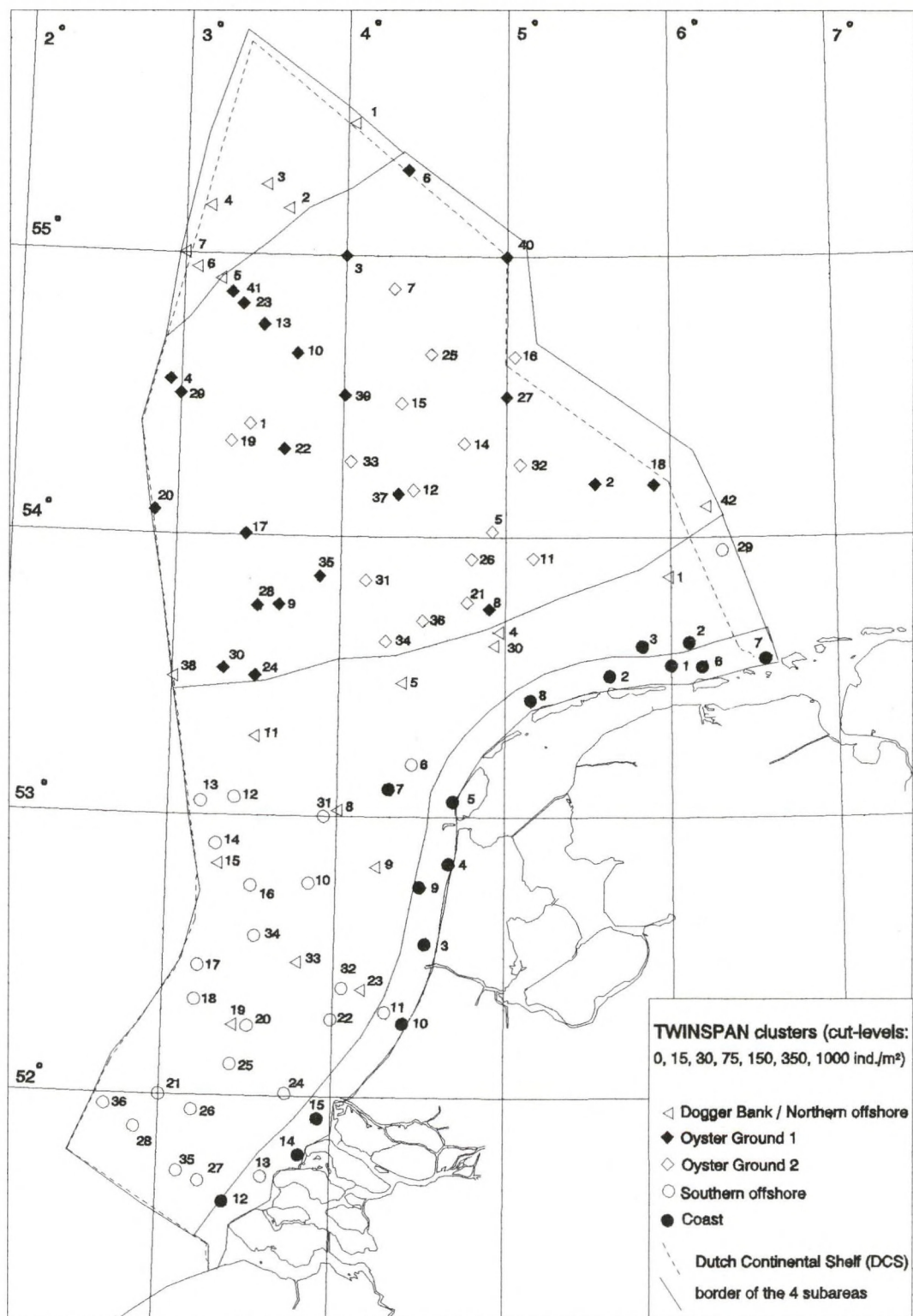


Fig. 16. TWINSpan clustering of the macrobenthos density (ind./m²) in 1995.

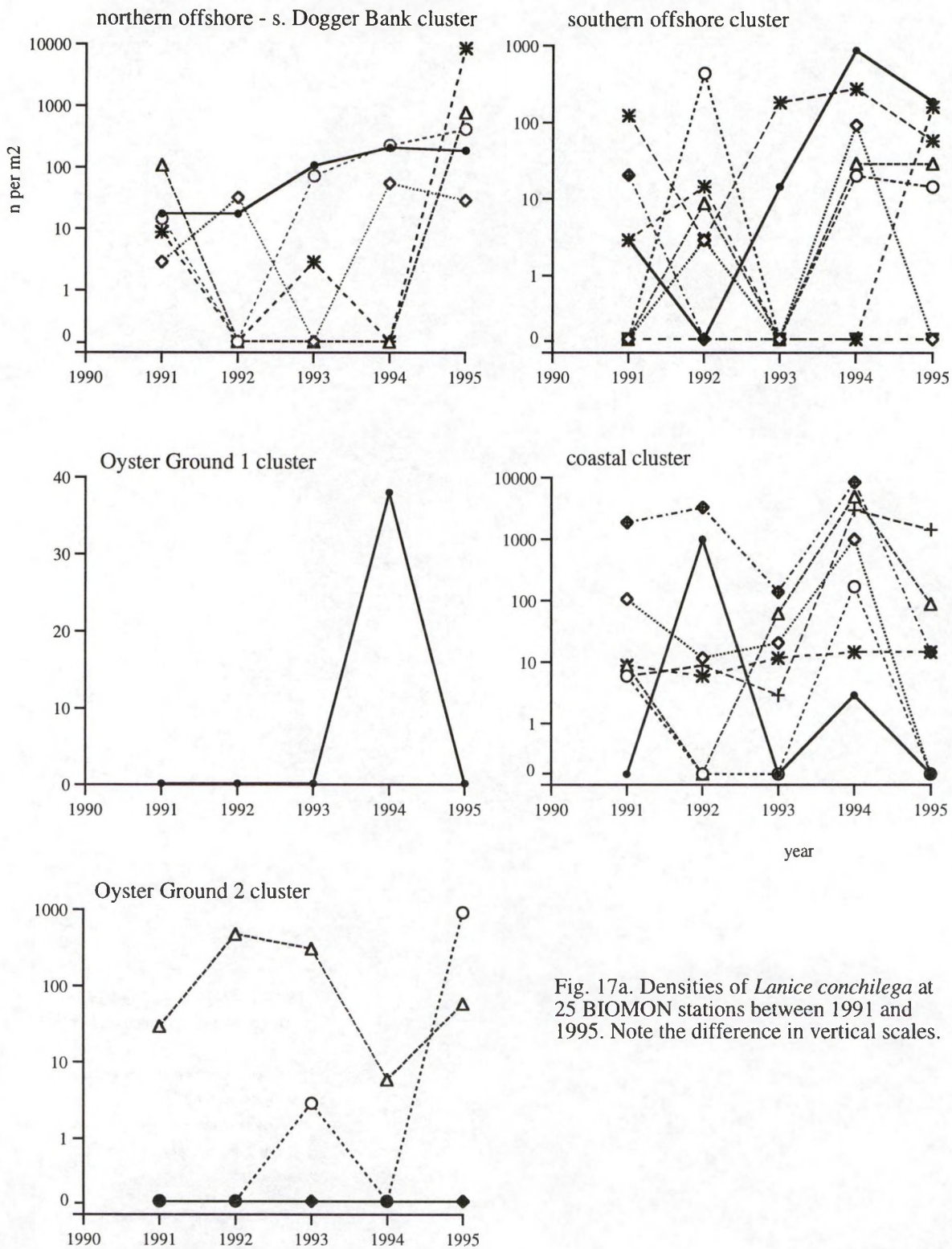


Fig. 17a. Densities of *Lanice conchilega* at 25 BIOMON stations between 1991 and 1995. Note the difference in vertical scales.

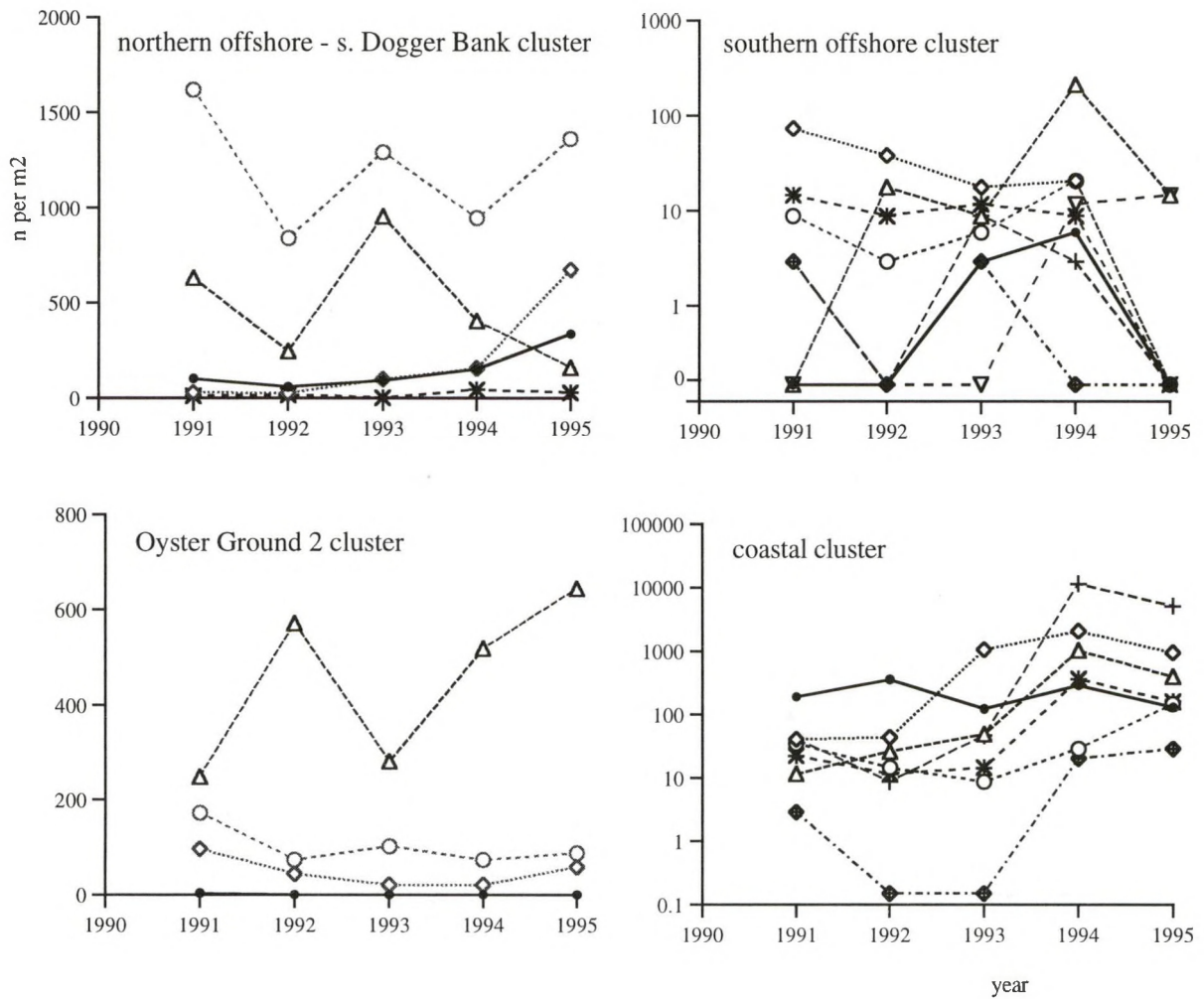


Fig. 17b. Densities of *Magelona papillicornis* at 24 BIOMON stations between 1991 and 1995. (At the station in the Oyster Ground 1 cluster the species has never been found.) Note the difference in vertical scales.

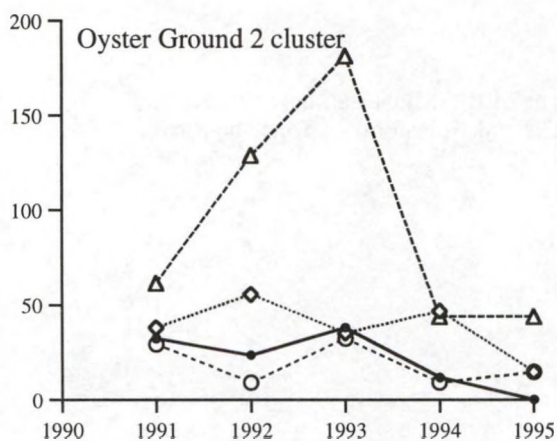
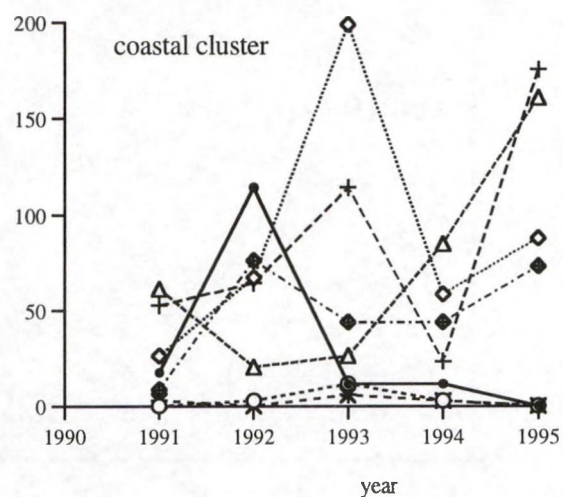
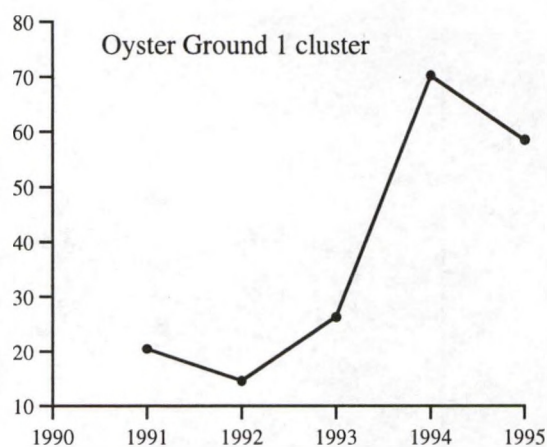
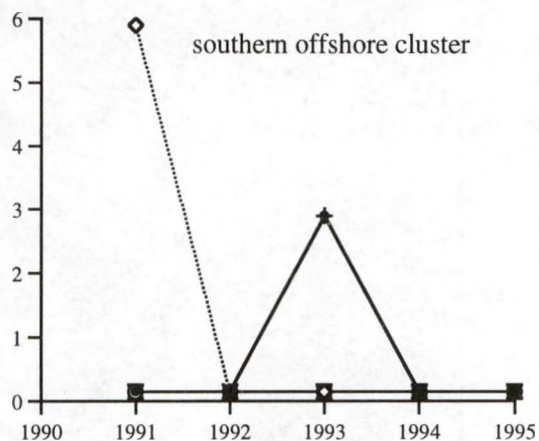
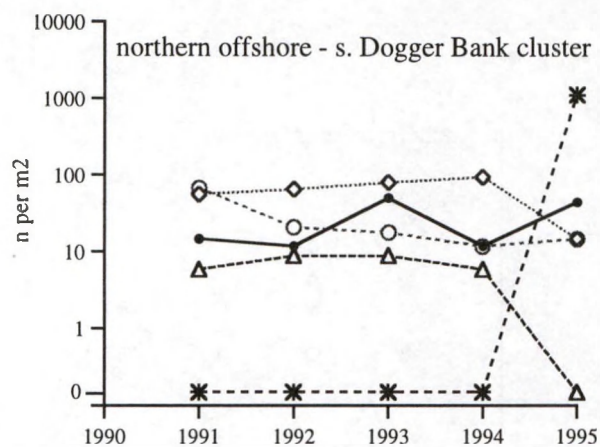


Fig. 17c. Densities of *Nephtys hombergii* at 25 BIOMON stations between 1991 and 1995. Note the difference in vertical scales.

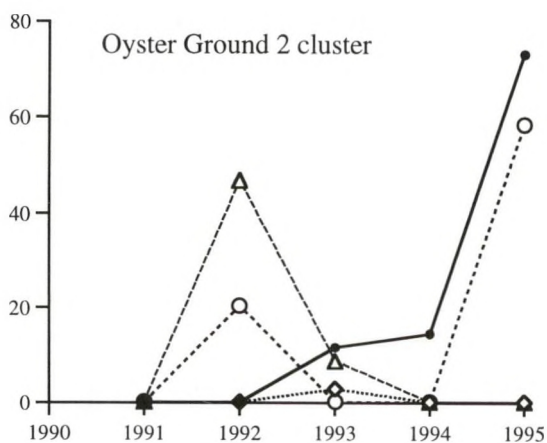
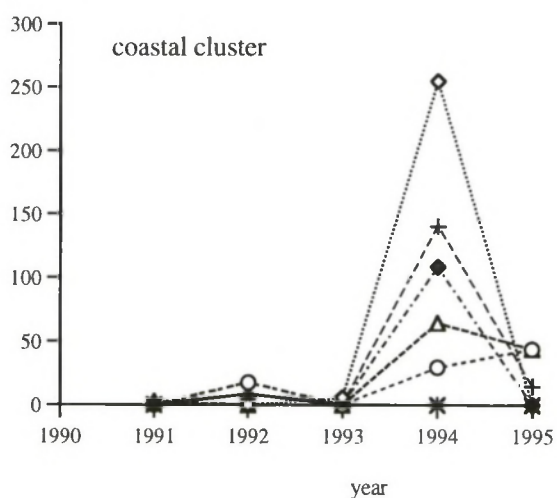
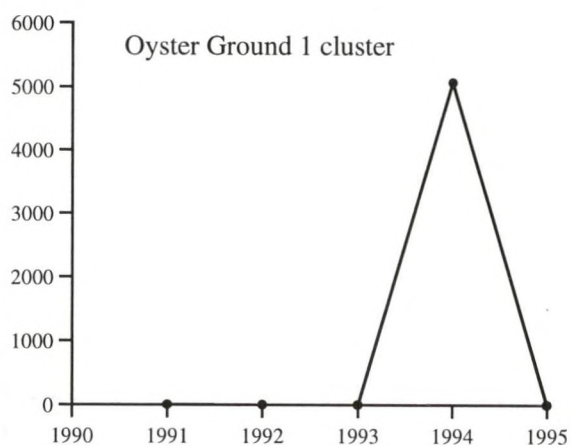
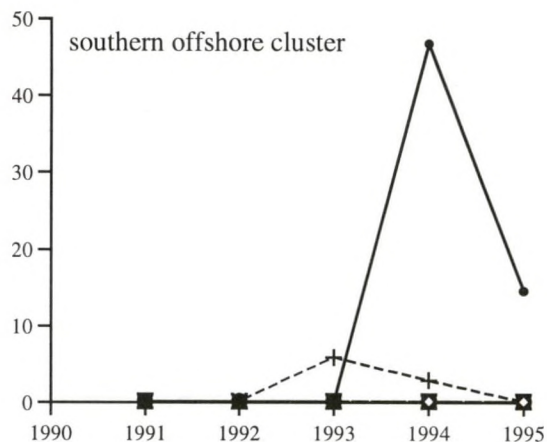
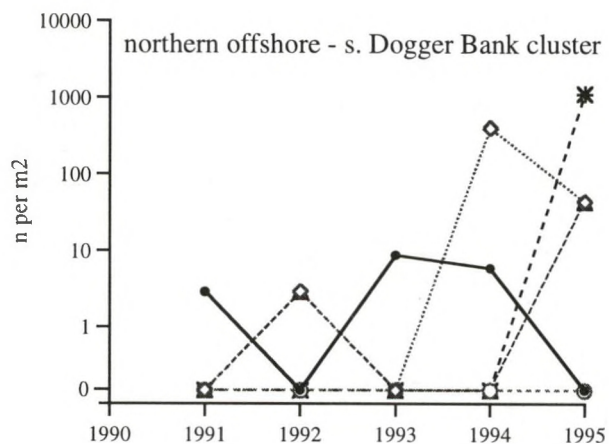
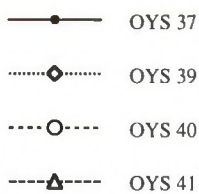


Fig. 17d. Densities of *Pectinaria koreni* at 25 BIOMON stations between 1991 and 1995. Note the difference in vertical scales.



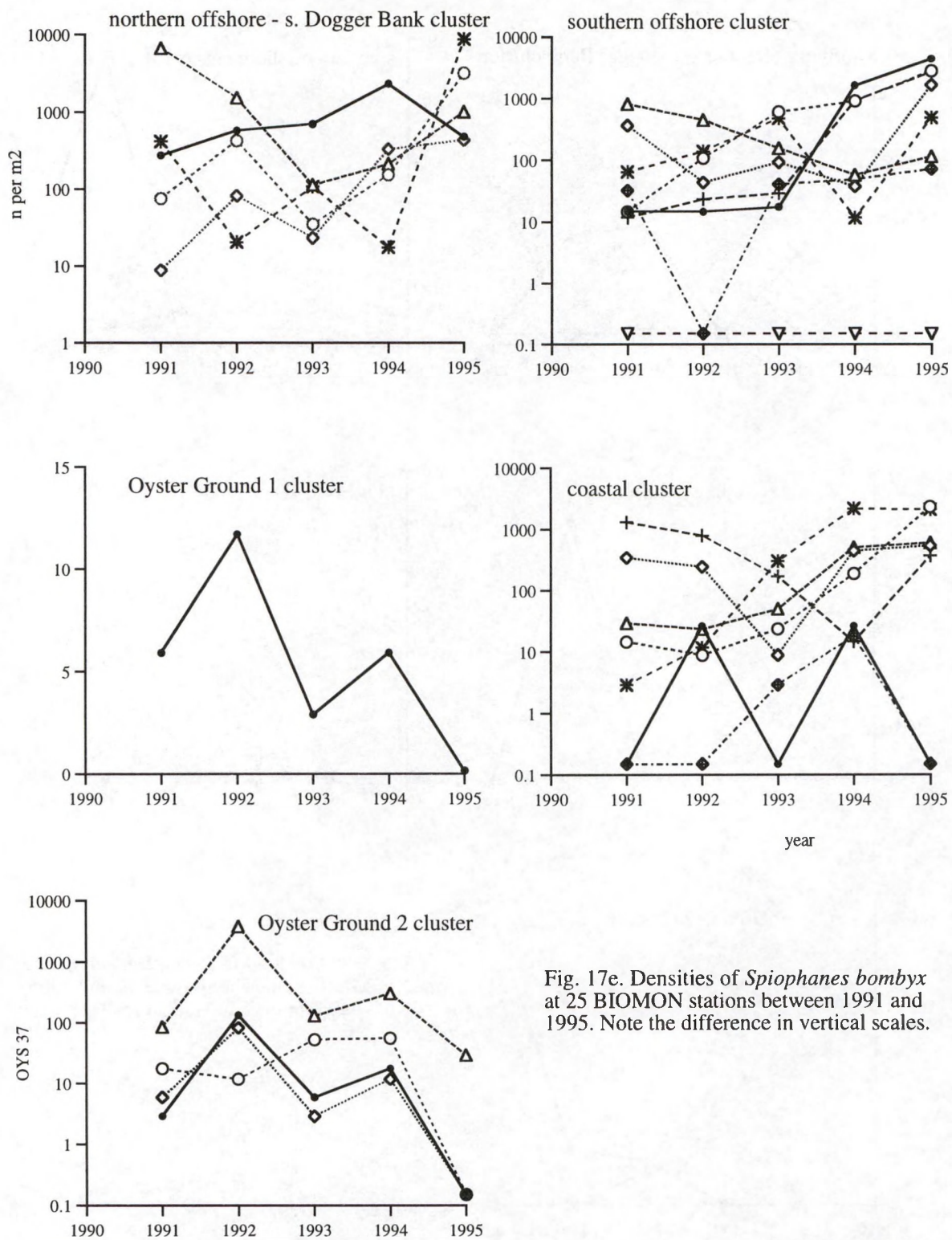


Fig. 17e. Densities of *Spiophanes bombyx* at 25 BIOMON stations between 1991 and 1995. Note the difference in vertical scales.

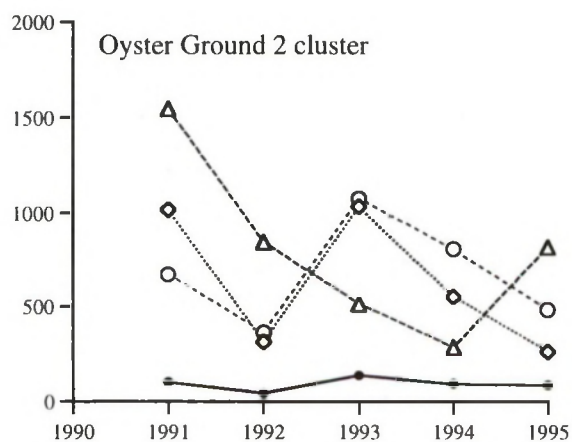
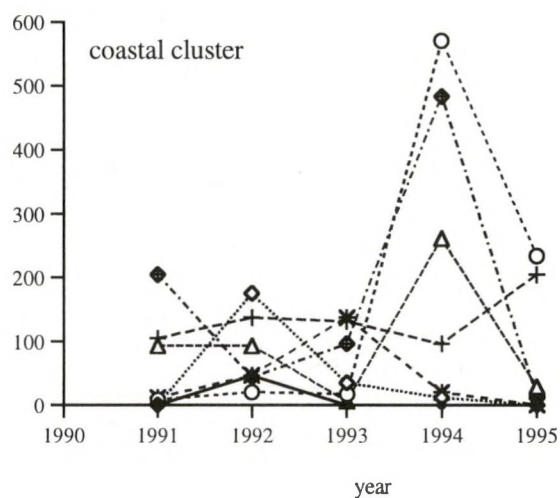
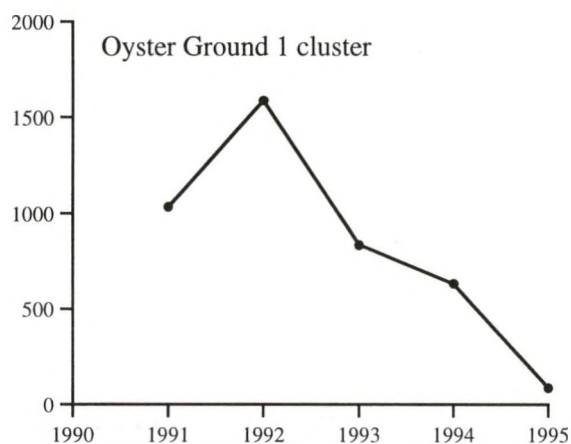
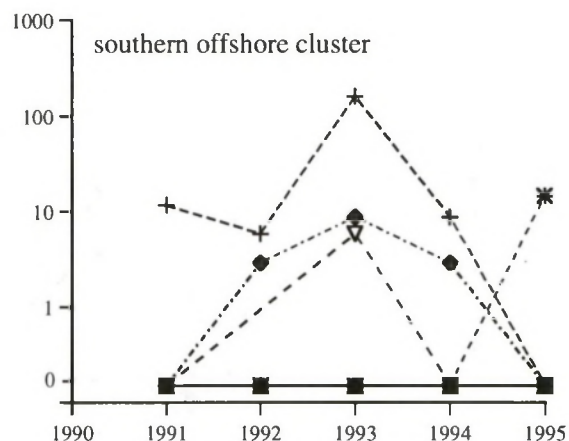
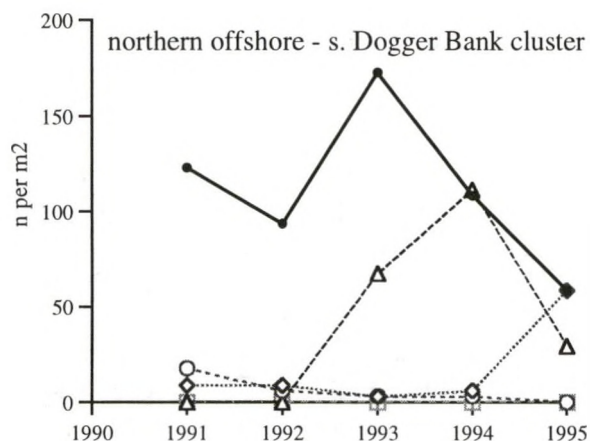


Fig.17f. Densities of *Mysella bidentata* at 25 BIOMON stations between 1991 and 1995. Note the difference in vertical scales.

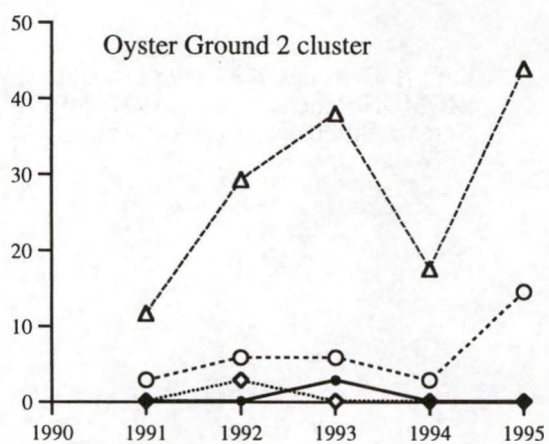
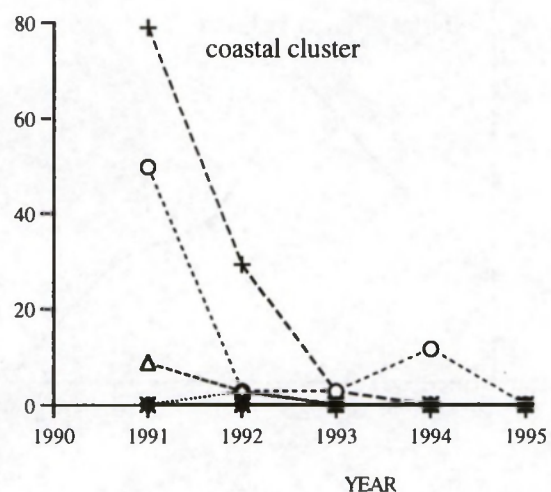
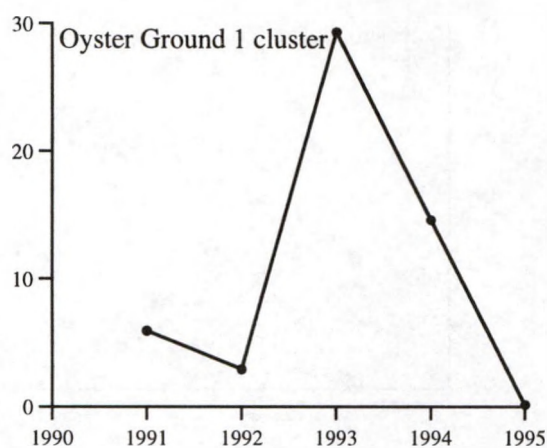
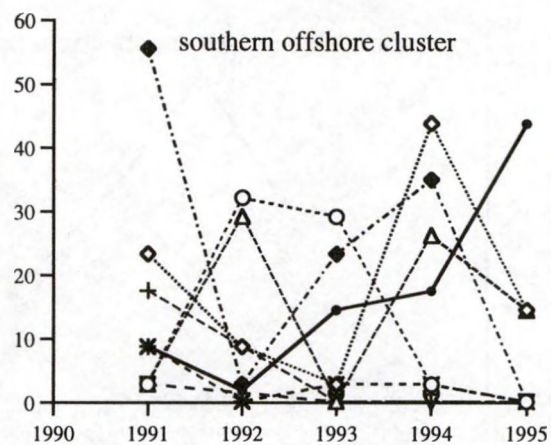
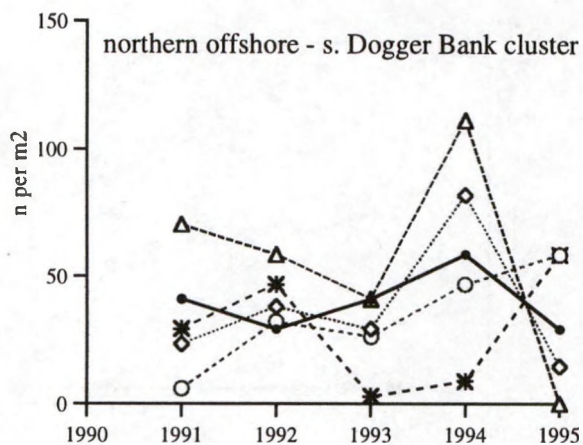


Fig. 17g. Densities of *Natica alderi* at 25 BIOMON stations between 1991 and 1995. Note the difference in vertical scales.

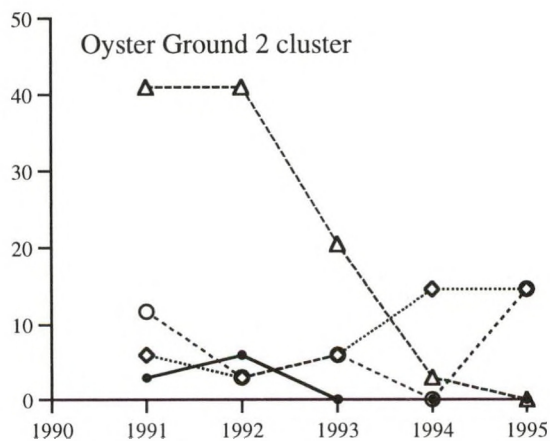
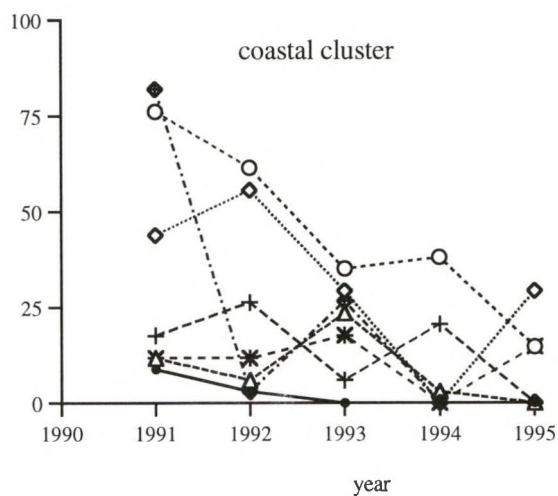
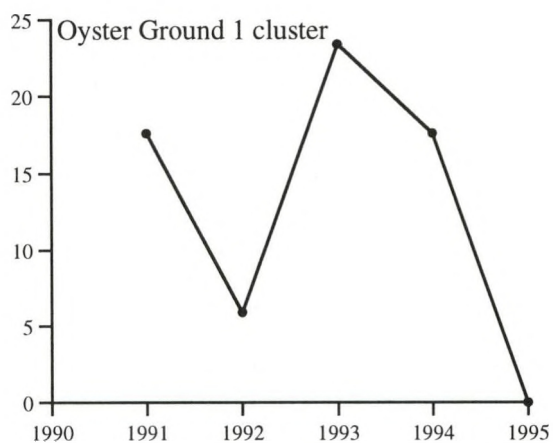
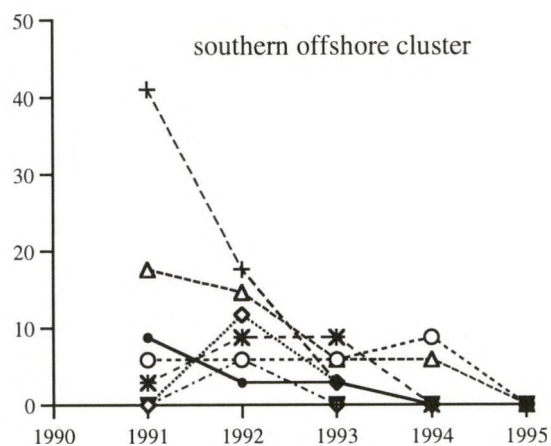
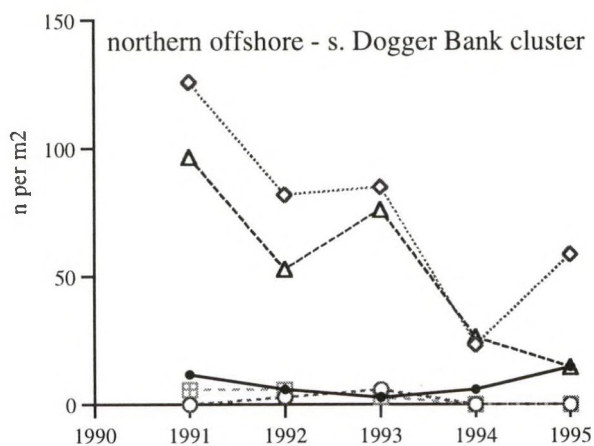


Fig. 17h. Densities of *Echinocardium cordatum* at 25 BIOMON stations between 1991 and 1995. Note the difference in vertical scales.

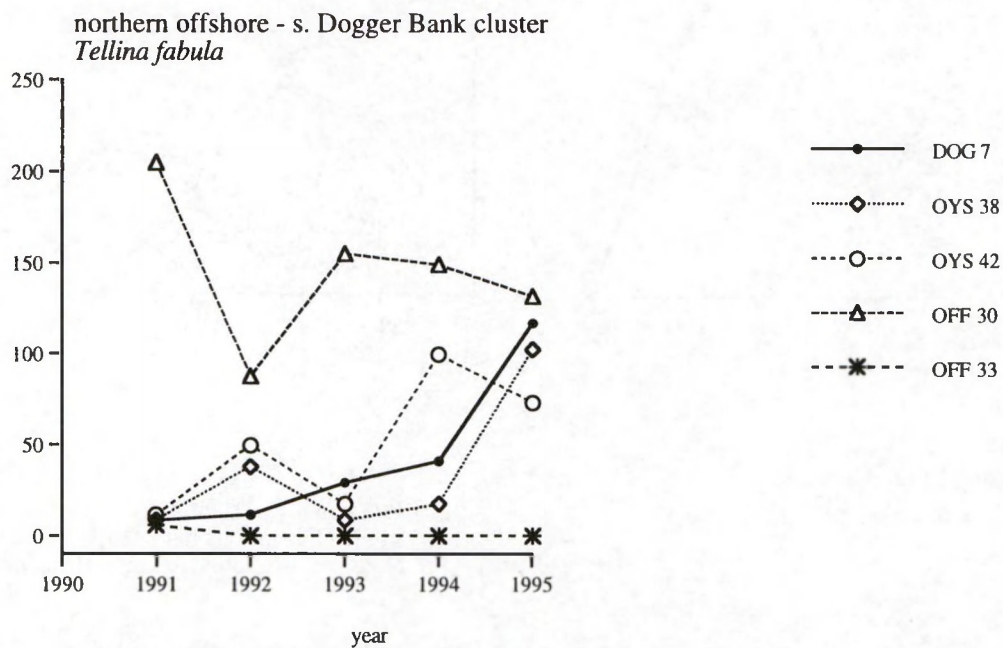
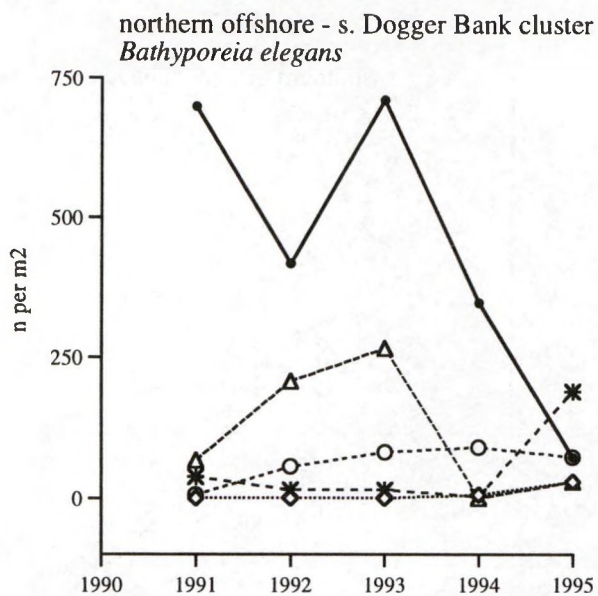


Fig. 18a. Temporal abundance patterns of 2 species characteristic of the northern offshore - s. Dogger Bank cluster at 5 stations in this cluster between 1991 and 1995.

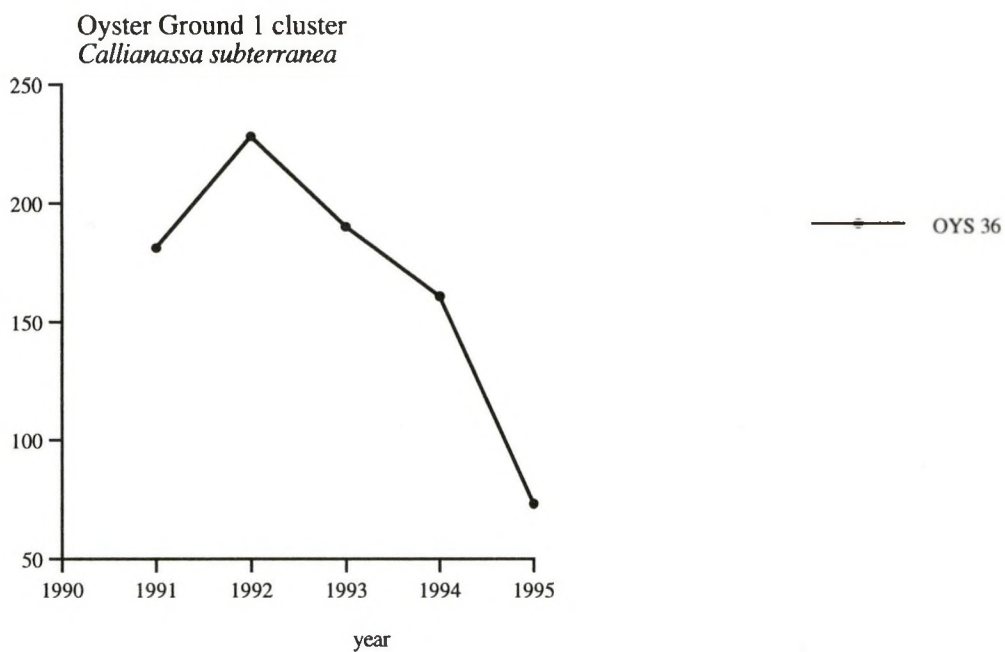
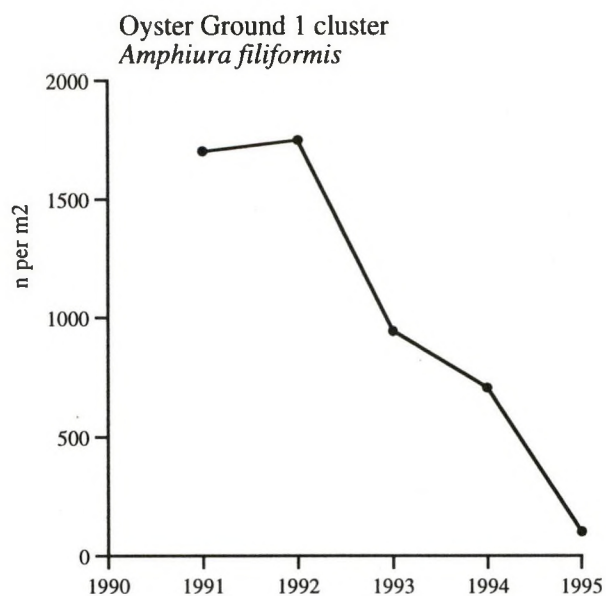


Fig. 18b. Temporal abundance patterns of 2 species characteristic of the Oyster Ground 2 cluster at 1 station in this cluster between 1991 and 1995.

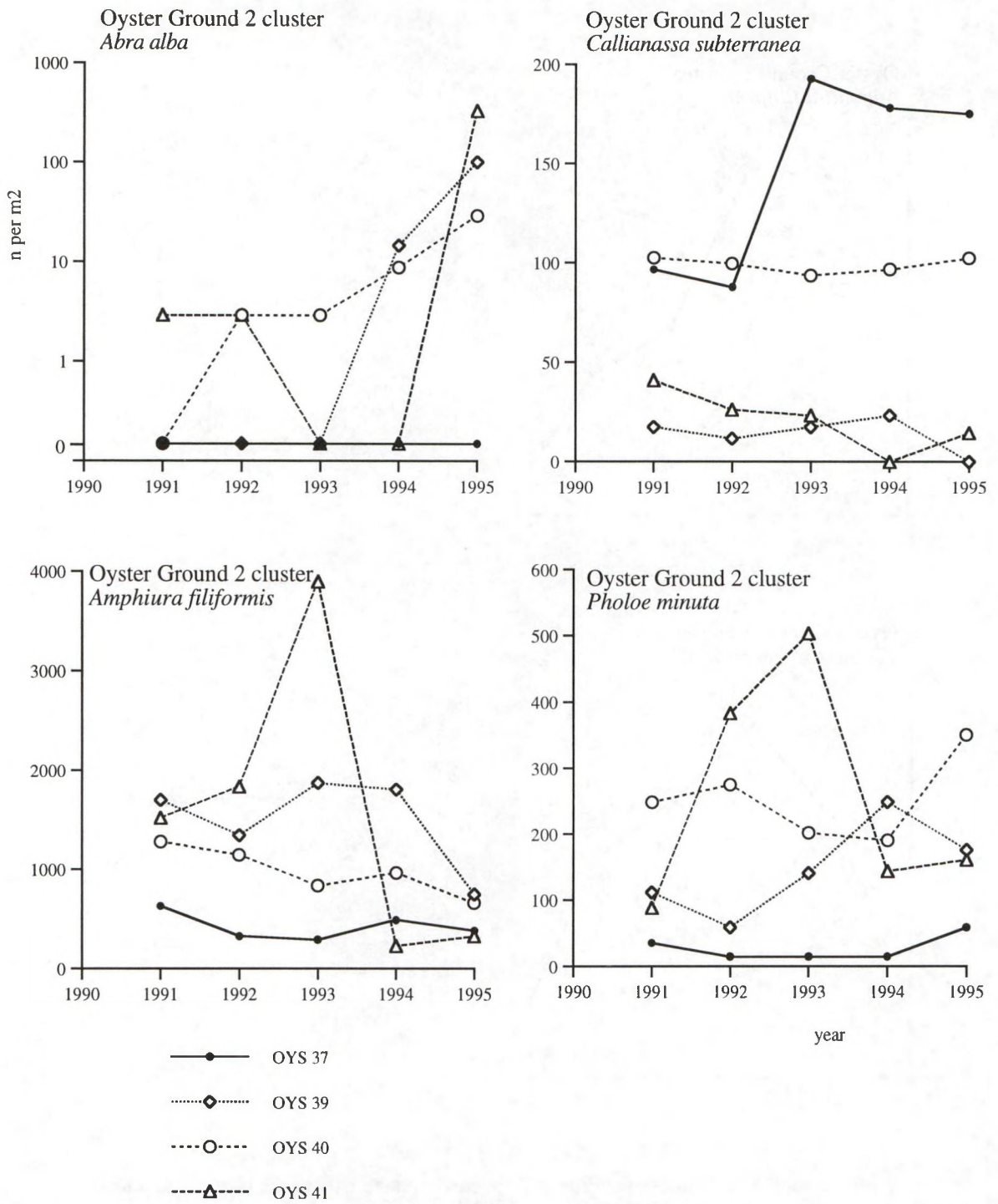


Fig. 18c. Temporal abundance patterns of 4 species characteristic of the Oyster Ground 2 cluster at 4 stations in this cluster between 1991 and 1995.

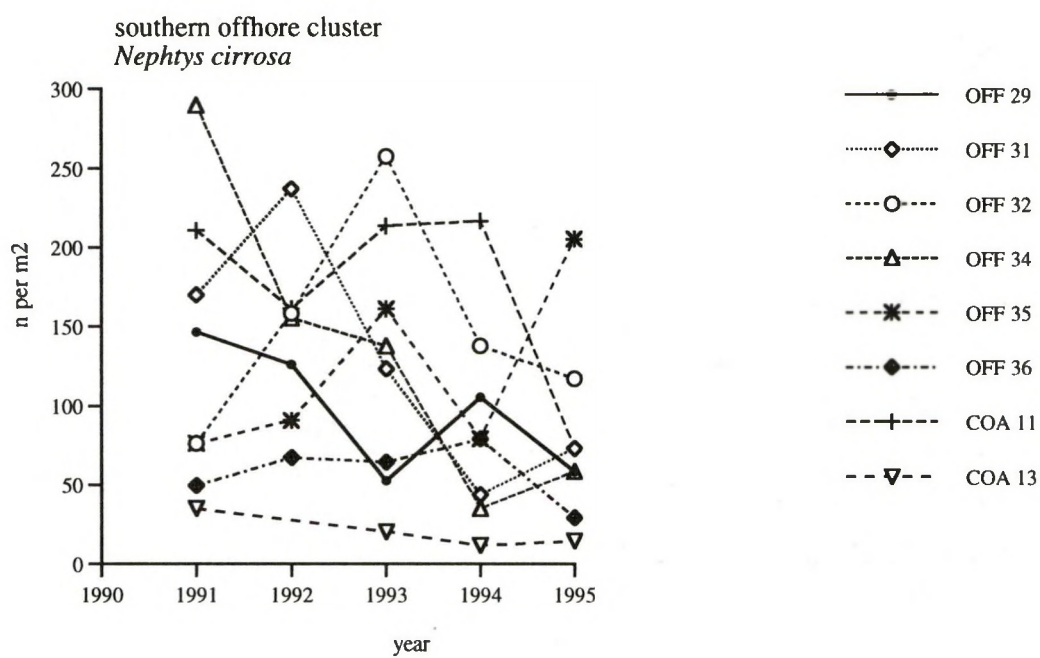


Fig. 18d. Temporal abundance pattern of a species characteristic of the Southern offshore cluster at 8 stations in this cluster between 1991 and 1995.

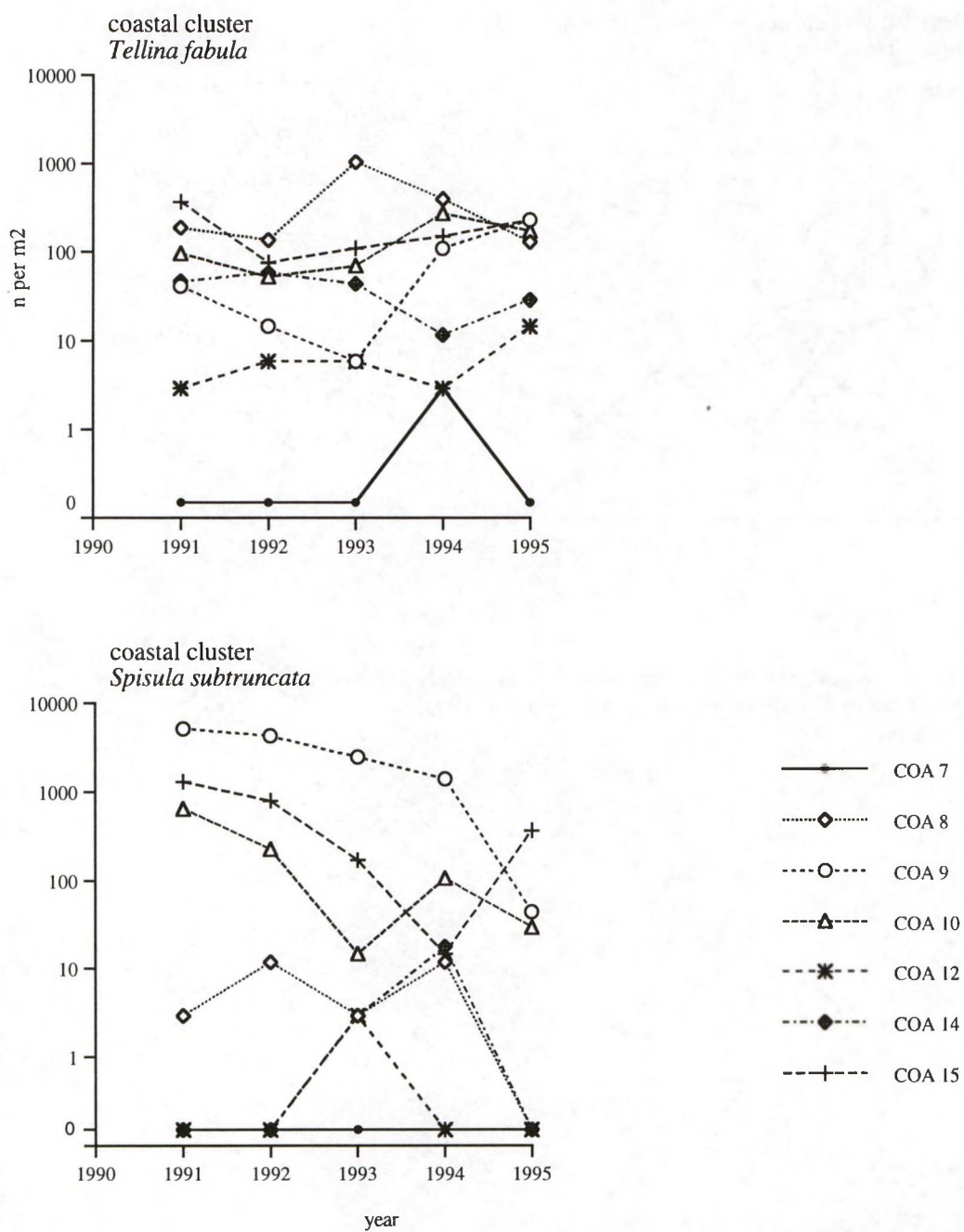


Fig. 18e. Temporal abundance patterns of 2 species characteristic of the coastal cluster at 7 stations in this cluster between 1991 and 1995.

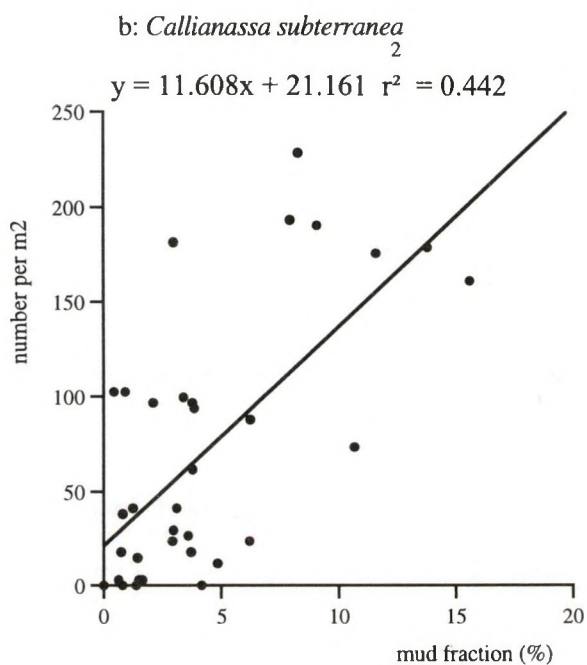
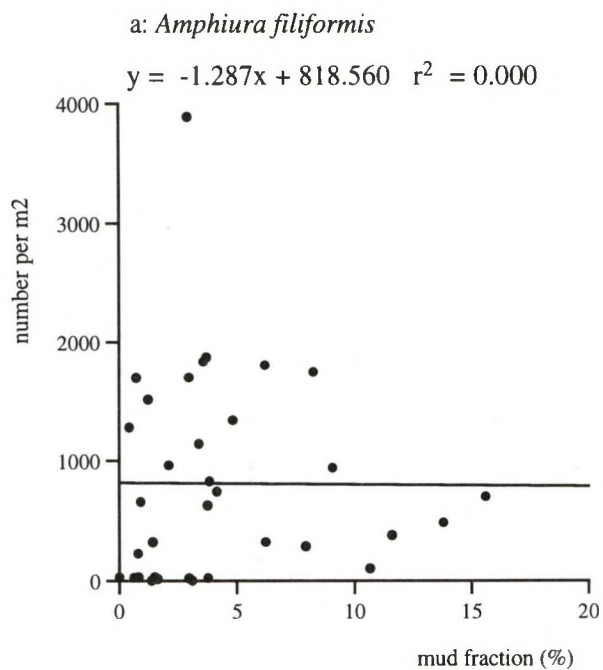


Fig. 19. Relation between mud content (fraction 16 - 63 μm) of sediments at 7 stations in the Oyster Ground (data from 1991-1995) and the abundance of two species characteristic of this area. a: *Amphiura filiformis*; b: *Callianassa subterranea*.

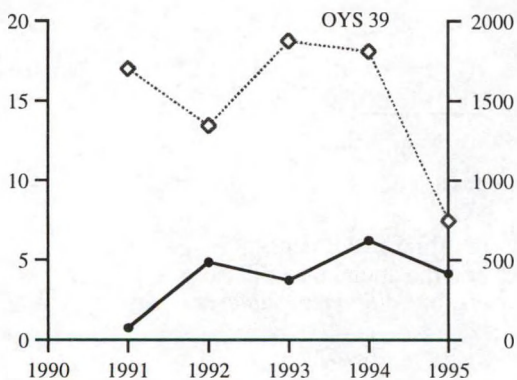
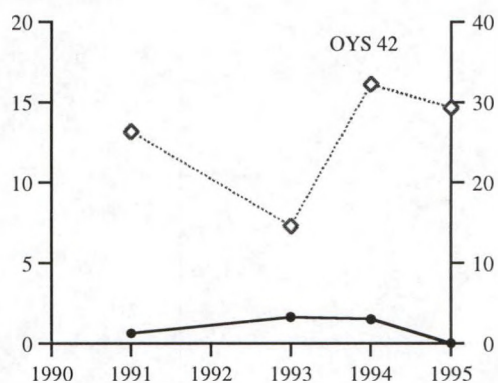
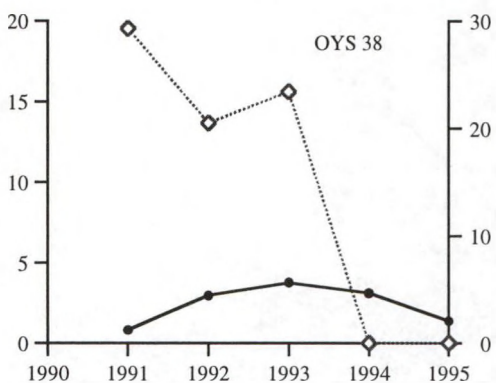
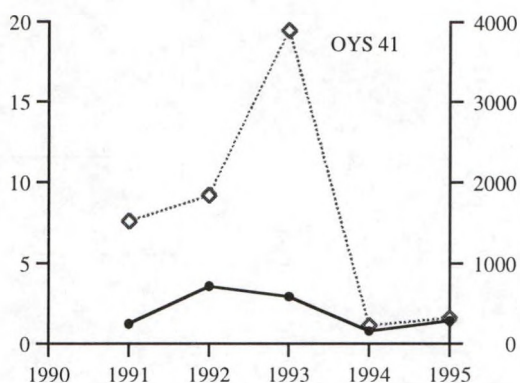
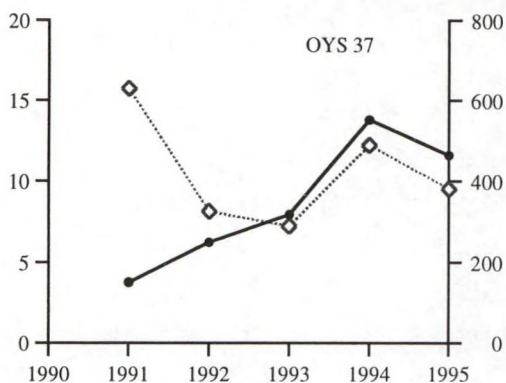
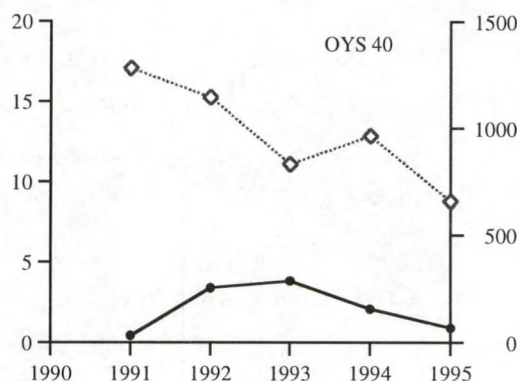
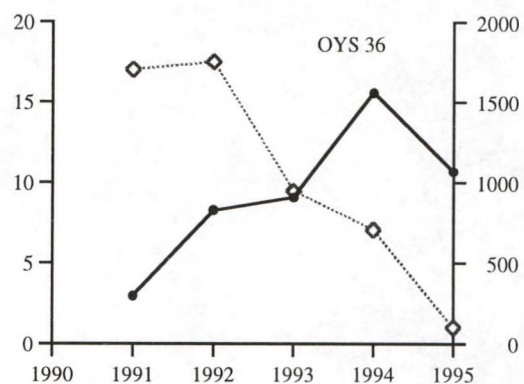


Fig. 20a. Development of mud content and densities of *Amphiura filiformis* at 7 stations in the Oyster Ground between 1991 and 1995.

—●— % mud (left axis)
 - - -◇- - - *A. filiformis* (n per m², right axis)

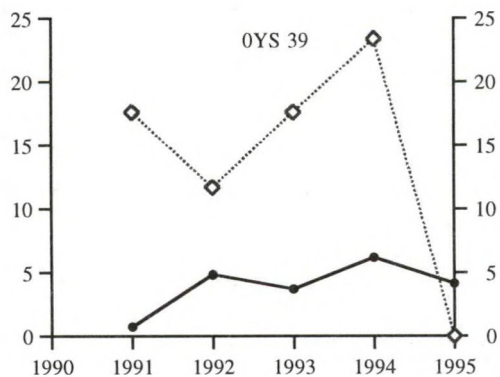
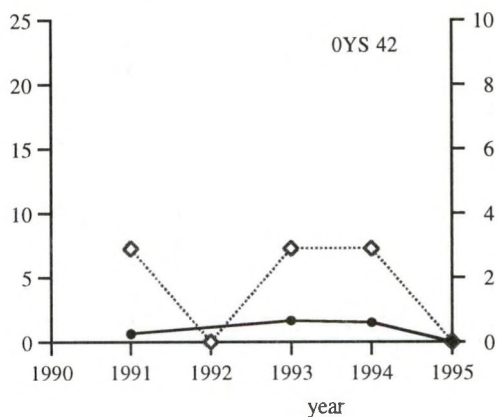
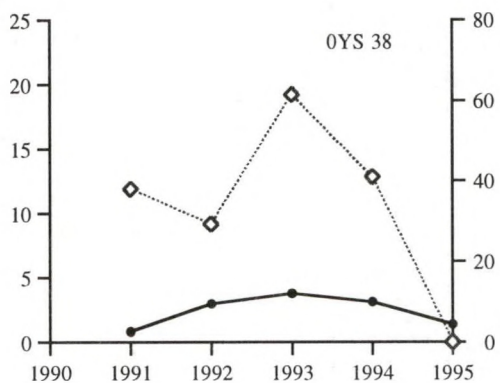
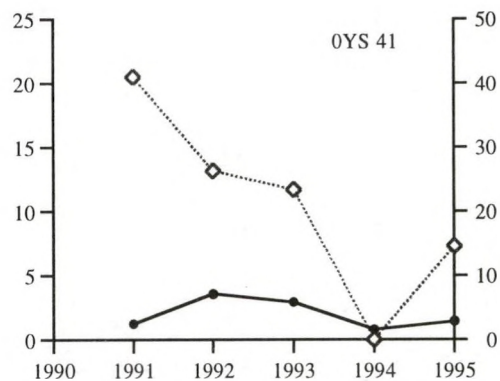
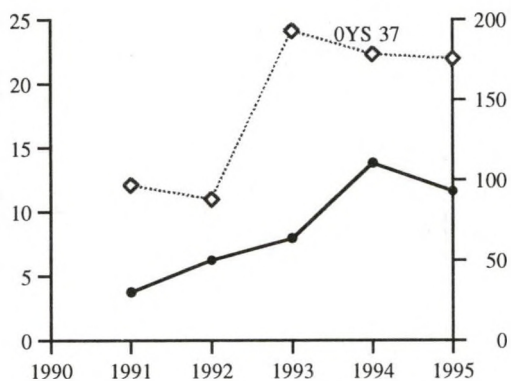
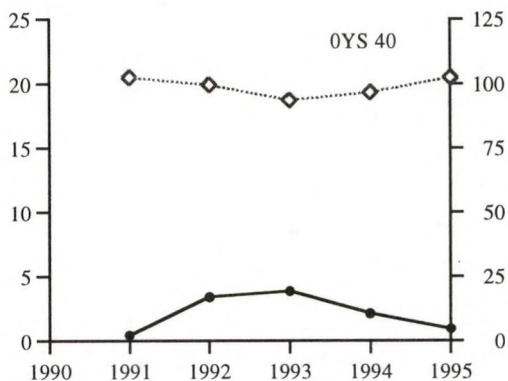
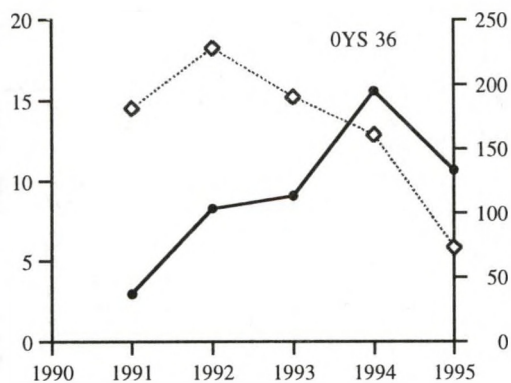


Fig. 20b. Development of mud content and densities of *Callianassa subterranea* at 7 stations in the Oyster Ground between 1991 and 1995.

—●— % mud (left axis)
◇..... *C. subterranea* (n per m², right axis)

Table1a. Station number, position, date, depth and sediment composition of the survey in spring 1995.

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"	20/06/95	29.8	221.7	0.0
DOG	2	Dog D3	03°38'30"	55°10'00"	21/06/95	37.0	185.2	0.1
DOG	3	ICES 97/SM38	03°30'00"	55°15'00"	20/06/95	28.1	206.6	0.0
DOG	4	TS 235	03°09'26"	55°10'14"	21/06/95	29.7	208.5	0.0
DOG	5	Dog C5	03°14'00"	54°54'42"	21/06/95	34.6	176.7	0.1
DOG	6	Dog C6	03°05'00"	54°57'06"	21/06/95	21.9	223.2	0.0
DOG	7	ICES 87/SM 37	03°00'00"	55°00'00"	21/06/95	23.9	194.0	0.0
OYS	1	MZ 1-3 '91	03°25'30"	54°23'00"	14/06/95	46.6	108.0	6.0
OYS	2	MZ 9-1 '91	05°32'30"	54°11'30"	13/06/95	40.0	216.5	2.2
OYS	3	ICES 88/SM 39	04°00'00"	55°00'00"	20/06/95	48.0	111.0	4.8
OYS	4	Dog B5	02°56'00"	54°33'00"	14/06/95	33.2	138.1	0.6
OYS	5	MZ 8-3 '91	04°55'00"	54°01'10"	20/06/95	41.7	123.8	8.6
OYS	6	Dog E2	04°22'48"	55°18'24"	20/06/95	45.6	150.2	1.6
OYS	7	MZ 2-1 '91	04°18'00"	54°53'00"	20/06/95	50.1	87.8	14.0
OYS	8	MZ 12-4 '91	04°54'00"	53°44'40"	27/06/95	37.0	192.9	6.7
OYS	9	MZ 15-1 '93	03°37'50"	53°45'20"	27/06/95	36.0	185.2	1.4
OYS	10	MZ 1-1 '91	03°42'30"	54°39'00"	21/06/95	44.0	112.8	3.0
OYS	11	MZ 12-1 '91	05°10'00"	53°55'30"	19/06/95	38.1	128.8	14.8
OYS	12	MZ 5-4 '91	04°26'00"	54°10'00"	21/06/95	48.6	93.7	11.9
OYS	13	ICES 78/SM 31	03°30'00"	54°45'00"	21/06/95	43.5	111.6	3.3
OYS	14	MZ 5-3 '91	04°44'30"	54°20'00"	20/06/95	45.6	129.9	9.9
OYS	15	MZ 5-1 '91	04°21'20"	54°28'30"	21/06/95	50.2	92.2	12.2
OYS	16	MZ 3-4 '91	05°03'00"	54°38'30"	20/06/95	45.2	153.4	5.2
OYS	17	MZ 17-2 '93	03°25'08"	54°00'21"	14/06/95	43.4	209.6	0.9
OYS	18	MZ 10-2 '91	05°54'00"	54°11'20"	13/06/95	36.0	208.1	1.5
OYS	19	Dog B2	03°19'00"	54°20'00"	14/06/95	47.8	108.7	6.2
OYS	20	Dog A1	02°51'51"	54°05'00"	14/06/95	51.5	206.5	1.8
OYS	21	TS 50	04°46'03"	53°46'04"	27/06/95	30.0	105.9	15.0
OYS	22	MZ 1-4 '91	03°38'30"	54°18'30"	14/06/95	44.3	144.5	3.2
OYS	23	Dog C3	03°22'00"	54°49'24"	21/06/95	40.9	130.5	1.8
OYS	24	MZ 11-3 '93	03°29'46"	53°30'00"	27/06/95	32.0	127.7	4.0
OYS	25	MZ 2-3 '91	04°32'00"	54°39'00"	20/06/95	48.9	116.9	9.0
OYS	26	MZ 8-5 '91	04°47'30"	53°55'20"	27/06/95	42.0	131.8	4.4
OYS	27	ICES 70/SM 60	05°00'00"	54°30'00"	20/06/95	42.3	170.0	2.5
OYS	28	ICES 42/SM 19	03°30'00"	53°45'00"	27/06/95	35.0	200.8	0.0
OYS	29	ICES 68/SM 32	03°00'00"	54°30'00"	14/06/95	36.4	122.7	1.8
OYS	30	MZ 11-1 '93	03°18'21"	53°31'30"	27/06/95	33.0	124.7	3.8
OYS	31	MZ 19-2 '93	04°09'06"	53°50'42"	13/06/95	41.8	136.1	2.2
OYS	32	MZ 6-5 '91	05°05'00"	54°15'30"	20/06/95	43.3	158.1	3.8
OYS	33	MZ 4-1 '91	04°03'00"	54°16'00"	21/06/95	48.0	104.8	5.9
OYS	34	MZ 16-3 '93	04°16'37"	53°37'40"	13/06/95	21.1	116.2	6.7
OYS	35	MZ 18-3 '93	03°52'24"	53°51'31"	14/06/95	38.5	158.1	0.8
OYS	36	META 2	04°30'00"	53°42'05"	13/06/95	38.1	106.6	10.7
OYS	37	TS 100	04°20'27"	54°09'04"	21/06/95	48.6	95.4	11.6
OYS	38	ICES 34/SM 20	03°00'00"	53°30'00"	27/06/95	32.0	140.7	1.4
OYS	39	ICES 69/SM 30	04°00'00"	54°30'00"	21/06/95	44.9	112.8	4.2
OYS	40	ICES 89/SM 58	05°00'00"	55°00'00"	20/06/95	30.8	153.3	0.9
OYS	41	RHC 4/Dog C4	03°17'36"	54°51'42"	21/06/95	38.4	146.7	1.4
OYS	42	R 70	06°12'51"	54°07'03"	13/06/95	30.0	231.1	0.0

Table1b. Station number, position, date, depth and sediment composition of the survey in spring 1995.

Station (name)			Geographical position		Date	Depth (m)	Sediment	
new	previously		E	N			Med. Gr. Size (μm)	Mud (%)
OFF	1	MZ 18-2 '91	05°59'00"	53°51'30"	13/06/95	30.0	212.7	0.0
OFF	2	MZ VIA-12-25-2 '89	06°06'25"	53°37'29"	13/06/95	24.0	208.1	0.0
OFF	3	MZ VA-12-25-3 '89	05°49'37"	53°36'40"	13/06/95	25.0	186.5	0.1
OFF	4	MZ 16-3 '91	04°57'30"	53°40'00"	27/06/95	31.0	196.7	0.0
OFF	5	MZ 14-1 '91	04°22'30"	53°29'00"	13/06/95	28.1	213.5	0.0
OFF	6	MZ IIA-12-25-2 '89	04°26'32"	53°11'16"	13/06/95	29.6	372.7	0.0
OFF	7	MZ IA-25-40-4 '89	04°18'22"	53°05'59"	13/06/95	34.8	224.0	0.0
OFF	8	MZ C-40-65-4 '88	04°00'30"	53°01'30"	23/05/95	30.0	229.3	0.0
OFF	9	MZ B-25-40-2 '88	04°13'50"	52°49'20"	23/05/95	27.0	259.7	0.0
OFF	10	MZ W-40-65-3 '88	03°50'30"	52°45'40"	13/06/95	29.3	310.6	0.0
OFF	11	MZ 10-4 '92	03°31'18"	53°17'00"	23/05/95	27.0	201.5	0.0
OFF	12	MZ 9-2 '92	03°23'30"	53°03'55"	23/05/95	28.0	277.5	0.0
OFF	13	MZ 9-1 '92	03°11'36"	53°02'58"	23/05/95	29.0	276.1	0.0
OFF	14	MZ 8-2 '92	03°17'20"	52°53'53"	23/05/95	30.0	/	-9.0
OFF	15	MZ 8-5 '92	03°17'18"	52°50'12"	23/05/95	33.0	277.5	0.0
OFF	16	ICES 20/SM 3	03°30'00"	52°45'00"	23/05/95	22.0	283.0	0.0
OFF	17	MZ 6-2 '92	03°12'12"	52°27'43"	22/05/95	28.0	313.3	0.0
OFF	18	MZ 6-1 '92	03°11'25"	52°20'25"	22/05/95	31.0	321.4	0.0
OFF	19	MZ 1-1 '92	03°24'42"	52°15'10"	28/06/95	30.0	332.0	0.0
OFF	20	ICES 15/SM 5	03°30'00"	52°15'00"	28/06/95	29.0	382.1	0.0
OFF	21	ICES 12/SM 10	03°00'00"	52°00'00"	28/06/95	40.0	538.1	0.0
OFF	22	MZ T-25-40-3 '88	03°59'15"	52°16'30"	24/05/95	24.0	360.6	0.0
OFF	23	MZ N-12-25-1 '88	04°09'50"	52°23'08"	24/05/95	23.0	318.7	0.0
OFF	24	/	03°42'58"	52°00'00"	22/05/95	24.0	431.2	0.0
OFF	25	/	03°24'26"	52°06'12"	22/05/95	32.0	354.8	0.0
OFF	26	/	03°11'34"	51°56'07"	22/05/95	30.0	486.9	0.0
OFF	27	/	03°14'28"	51°41'40"	06/06/95	27.7	386.9	0.6
OFF	28	/	02°52'48"	51°52'40"	28/06/95	33.5	460.9	0.0
OFF	29	R 50	06°18'36"	53°57'14"	13/06/95	29.0	396.6	0.0
OFF	30	TS 30	04°56'17"	53°36'56"	26/06/95	25.0	218.7	0.0
OFF	31	META 1	03°55'01"	52°59'53"	23/05/95	27.0	259.4	0.0
OFF	32	N 30	04°02'53"	52°23'15"	24/05/95	23.0	330.1	0.0
OFF	33	N 50	03°47'07"	52°28'30"	24/05/95	28.0	262.3	0.0
OFF	34	N 70	03°31'53"	52°34'10"	24/05/95	30.0	297.0	0.0
OFF	35	W 30	03°06'49"	51°43'06"	28/06/95	27.0	388.0	0.0
OFF	36	W 70	02°40'45"	51°57'25"	28/06/95	40.0	485.2	0.0
COA	1	MZ VIA-05-12-1 '89	05°59'53"	53°32'34"	13/06/95	19.0	230.1	0.0
COA	2	MZ VA -00-05-5 '89	05°37'48"	53°30'19"	13/06/95	10.0	184.2	0.0
COA	3	MZ W-00-05-5 '88	04°31'50"	52°32'50"	23/05/95	17.0	222.6	0.0
COA	4	MZ C-00-05-5 '88	04°40'00"	52°50'00"	12/06/95	18.0	176.5	0.2
COA	5	MZ IB-00-05-5 '89	04°41'20"	53°03'23"	12/06/95	11.0	218.8	0.0
COA	6	MZ VIB-00-05-3 '89	06°11'10"	53°32'18"	13/06/95	11.0	159.4	0.2
COA	7	R 3	06°33'51"	53°33'58"	13/06/95	10.0	172.0	0.1
COA	8	TS 4	05°09'02"	53°24'54"	26/06/95	12.5	216.2	0.0
COA	9	ICES 21/SM 1	04°30'00"	52°45'00"	23/05/95	20.0	234.8	0.0
COA	10	N 2	04°24'20"	52°15'36"	23/05/95	12.0	235.1	2.9
COA	11	N 10	04°18'01"	52°17'41"	23/05/95	18.0	333.3	0.0
COA	12	VD 1	03°23'15"	51°37'04"	06/06/95	11.7	267.1	0.0
COA	13	VD 2	03°36'02"	51°42'23"	31/05/95	3.3	315.7	0.0
COA	14	VD 3	03°48'48"	51°47'26"	31/05/95	4.6	271.4	0.9
COA	15	VD 4	03°55'09"	51°55'20"	22/05/95	12.8	207.8	0.0

Table 2. Mean values of abiotic and biotic parameters for each of the 5 TWINSpan clusters distinguished in 1995 (C.V.: coefficients of variation = s.d./mean).

	TWINSpan-CLUSTERS									
Area	southern Dogger Bank Northern offshore		Oyster Ground 1		Oyster Ground 2		Southern offshore		Coastal area	
No. of stations	20	C.V.	17	C.V.	23	C.V.	24	C.V.	16	C.V.
Median Grain Size (μm)	225.5	0.20	117.8	0.17	153.5	0.25	363.5	0.21	213.4	0.15
Perc. Mud (%)	0.1	3.77	8.6	0.46	2.8	0.90	0.0	4.73	0.3	2.70
Depth (m)	29.0	0.13	42.8	0.18	40.1	0.14	27.7	0.26	15.8	0.47
Diversity:										
No. species per core	30.0	0.24	27.9	0.16	30.4	0.20	18.0	0.30	21.2	0.32
Shannon- Wiener diversity	2.21	0.24	2.49	0.13	2.44	0.14	1.94	0.27	1.59	0.22
Simpson's dominance	0.22	0.66	0.16	0.52	0.16	0.41	0.27	0.63	0.35	0.42
No. individuals (ind./m²):										
Crustaceans	548.6	0.67	197.1	0.52	228.4	0.88	228.6	0.63	737.9	0.95
Echinoderms	1329.2	1.63	969.9	0.86	970.0	0.60	331.6	1.58	63.1	2.03
Molluscs	418.4	0.90	444.9	0.74	1151.3	1.12	64.0	1.14	442.6	0.63
Polychaetes	3335.6	1.43	433.8	0.32	988.5	0.53	1260.6	1.06	7015.1	0.87
Miscellaneous	180.0	1.19	185.9	1.10	209.9	0.72	134.7	3.54	43.0	0.96
TOTAL	5811.8	0.90	2231.5	0.45	3548.1	0.43	2019.6	0.95	8301.6	0.78
Biomass (g AFDW/m²):										
Crustaceans	0.2	0.64	6.8	0.78	3.1	0.96	0.1	0.54	0.2	0.85
Echinoderms	5.7	1.43	5.4	0.96	10.6	0.77	2.3	3.29	7.4	1.19
Molluscs	5.6	1.87	1.9	1.64	1.2	1.59	1.3	2.13	30.7	1.60
Polychaetes	4.7	1.55	6.1	1.18	3.7	1.56	2.4	1.65	9.3	0.82
Miscellaneous	2.8	2.56	2.2	1.97	0.4	2.70	0.4	3.93	0.6	1.93
TOTAL	18.9	0.85	22.4	0.48	19.1	0.56	6.4	1.41	48.2	1.01

Appendices

Appendix-1 Biomonitoring 1995

	Northern offshore area/ southern Dogger Bank																				
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Oys	Oys	
	1	2	3	4	5	6	7	1	4	5	8	9	11	15	19	23	30	33	38	42	
ABRA ALBA	-	-	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	ABRA ALBA
ABRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA JUVE
ABRA PRISMATICA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA PRIS
ACIDOSTOMA OBESUM	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	ACID OBES
ACROCNIDA BRACHIATA	+	+	+	+	+	+	+	-	-	-	+	-	-	-	-	-	+	-	-	-	ACRO BRAC
AMPELISCA BREVICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE BREV
AMPELISCA TENUICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE TENU
AMPHIURA FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	AMPH FILI
AMPHIPODA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH IPOD
ANAITIDES GROENLANDICA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	+	+	-	-	-	ANAI GROE
ANAITIDES JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI JUVE
ANAITIDES LINEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	ANAI LINE
ANAITIDES MACULATA	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	ANAI MACU
ANAITIDES MUCOSA	+	-	+	-	+	+	-	-	-	-	-	-	-	-	-	+	-	+	-	-	ANAI MUCO
ANAITIDES SUBULIFERA	-	-	-	-	-	-	+	-	+	-	-	-	-	-	+	-	+	-	-	-	ANAI SUBU
ANTHOZOA	-	-	-	+	+	-	-	+	+	-	+	-	-	-	-	+	+	-	-	+	ANTH OZOA
AONIDES PAUCIBRANCHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AONI PAUC
APHERUSA JURI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHE JURI
APHRODITA ACULEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR ACUL
APHRODITA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR JUVE
APLACOPHORA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APLA COPH
ARCHIANNELIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCH IANN
ARCTICA ISLANDICA	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCT ISLA
ARGISSA HAMATIPES	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	+	ARGI HAMA
ARICIDEA JEFFREYSII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC JEFF
ARICIDEA MINUTA	-	-	+	-	-	+	+	-	-	-	-	-	+	+	-	-	-	+	-	-	ARIC MINU
ASTERIAS JUVENILE	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	+	-	+	ASTE JUVE
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 SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH SPEC
BATHYPOREIA TENUIPES	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	BATH TENU
BODOTRIA ARENOSA	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	BODO AREN
BRISSOPSIS LYRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BRIS LYRI
CALLIANASSA SUBTERRANEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL SUBT
CAPITELLA CAPITATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPI CAPI
CAPITELLIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPI TELL
CAPRELLIDAE	-	-	+	-	-	+	-	+	-	+	-	-	-	-	+	+	-	+	-	-	CAPR ELLI
CAUDERIELLA SPEC.	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAUD ERIE
CHAETOZONE SETOSA	-	-	+	+	+	-	+	+	-	+	+	-	-	-	+	-	-	-	+	+	CHAE SETO
CHAETOPTERUS VARIOPEDATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHAE VARI
CHLAMYS VARIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	CHLA VARI
CINGULA VITREA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CING VITR
CORBULA GIBBA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	CORB GIBB
CORYSTES CASSIVELAUNUS	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	CORY CASS
CUCUMARIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CUCU ELON
CUTELLUS PELLUCIDUS	-	-	-	-	-	-	-	+	+	+	-	-	-	+	-	-	-	-	+	-	CULT PELL

Appendix-1 Biomonitoring 1995

	Northern offshore area/ southern Dogger Bank																					
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Oys	Oys		
	1	2	3	4	5	6	7	1	4	5	8	9	11	15	19	23	30	33	38	42		
CYLICHA CYLINDRACEA	+	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+	CYLI CYLI	
DIASTYLIS BRADYI	-	-	+	+	-	+	-	+	+	-	+	-	-	-	+	+	-	+	-	+	DIAS BRAD	
DIPLOCIRRUS GLAUCUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIPL GLAU	
DONAX VITTATUS	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	DONA VITT	
DOSINIA EXOLETA	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI EXOL	
DOSINIA LUPINUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI LUPI	
ECHINOCARDIUM CORDATUM	-	+	-	-	-	-	+	+	+	+	-	-	-	+	+	-	+	-	+	-	ECHI CORD	
ECHINOCARDIUM JUVENILE	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	ECHI JUVE	
ECHINOCYAMUS PUSILLUS	+	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	+	-	-	ECHI PUSI	
EDWARDSIA CLAPAREDI	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EDWA CLAP	
ENSIS DIRECTUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI DIRE	
ENSIS ENSIS	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	ENSI ENSI	
ENSIS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI JUVE	
ENSIS SILIQUA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SILI	
ENSIS SPEC.	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SPEC	
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EUDORELLA TRUNCATULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDO TRUN	
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EULIMA ALBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EULI ALBA	
EUMIDA SANGUINEA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	+	EUMI SANG	
EURYDICE SPINIGERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EURY SPIN	
EXOGONE HEBES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG HEBE	
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GLYCERA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC JUVE	
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GLYCERA ROUXI	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	GLYC ROUX	
GOLFINGIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF ELON	
GOLFINGIA VULGARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF VULG	
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HARMOTHOE LONGISETIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	HARM LONG	
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HARPINIA ANTENNARIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARP ANTE	
HESIONURA AUGENERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE	
HETEROMASTUS FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HETE FILI	
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IONE THORACIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IONE THOR	
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LEPIDEPECREUM LONGICORNE	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPI LONG	

Appendix-1 Biomonitoring 1995

	Northern offshore area/ southern Dogger Bank																					
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Oys	Oys	
	1	2	3	4	5	6	7	1	4	5	8	9	11	15	19	23	30	33	38	42		
LEPTON SQUAMOSUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPT SQUA
LEUCOTHOE INCISA	-	-	-	-	-	-	-	-	+	-	-	-	+	-	+	+	+	+	-	-	-	LEUC INCI
LEUCOTHOE LILLJEBORGI	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC LILL
LUCINOMA BOREALIS	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUCI BORE
LUMBRINERIS LATREILLI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUMB LATR
MACOMA BALTHICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACO BALT
MACTRA CORALLINA	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	MACT CORA
MACTRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACT JUVE
MAGELONA ALLENI	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAGE ALLE
MAGELONA PAPILLICORNIS	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	MAGE PAPI
MEGALUROPIUS AGILIS	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+	-	+	-	-	-	-	MEGA AGIL
MICROPROTOPUS MACULATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	MICR MACU
MICROPHTHALAMUS SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SIMI
MICROPHTHALAMUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SPEC
MONTACUTA FERRUGINOSA	-	+	-	-	+	-	+	+	+	+	-	-	-	+	+	+	+	-	+	-	-	MONT FERR
MYA TRUNCATA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	MYA TRUN
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
NEREIS LONGISSIMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NERE LONG
NOTOMASTUS LATERICEUS	-	-	-	+	-	-	+	-	-	+	-	-	-	-	-	-	+	-	-	-	-	NOTO LATE
NUCULA NUCLEUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NUCU NUCL
NUCULA TENIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NUCU TENU
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OPHELINA ACUMINATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHE ACUM
OPHELIA LIMACINA	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	OPHE LIMA
OPHIURA ALBIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	OPHI ALBI
OPHIODROMUS FLEXUOSUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI FLEX
OPHIURIDAE JUVENILE	+	+	+	+	+	+	+	+	-	-	+	-	+	+	-	+	+	-	+	-	+	OPHI JUVE
OPHIURA TEXTURATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHI TEXT
ORCHOMENE HUMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH HUMI
OWENIA FUSIFORMIS	-	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN FUSI
PARAONIS FULGENS	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA FULG
PARAONIS GRACILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA GRAC
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT AURI
PECTINARIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT JUVE
PECTINARIA KORENI	-	-	+	+	-	-	-	+	-	+	-	-	-	-	-	+	+	+	+	-	-	PECT KORE
PERICULODES LONGIMANUS	+	-	-	-	+	-	+	-	+	-	-	+	-	-	-	-	+	+	-	-	-	PERI LONG
PHOLOE MINUTA	+	+	+	+	+	-	-	+	-	+	-	-	-	-	-	-	-	-	+	-	-	PHOL MINU
PHORONIDA	+	+	+	+	+	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	PHOR ONID
PISONE REMOTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISI REMO
PLATHYHELMITHES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PLAT HYHE
POECILOCHAETUS SERPENS	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	+	+	-	-	POEC SERP

Appendix-1 Biomonitoring 1995

	Northern offshore area/ southern Dogger Bank																				
	Dog	Dog	Dog	Dog	Dog	Dog	Dog	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Oys	Oys	
	1	2	3	4	5	6	7	1	4	5	8	9	11	15	19	23	30	33	38	42	
POLYDORA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY DORA
POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB
PONTOCRATES ALTAMARINUS	-	-	-	-	-	-	+	-	-	-	+	-	+	+	+	-	+	-	-	+	PONT ALTA
PONTOCRATES ARENARIUS	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT AREN
PSEUDOCUMA LONGICORNIS	-	+	+	-	-	+	+	-	+	+	+	+	+	+	-	-	-	-	+	+	PSEU LONG
PSEUDOCUMA SIMILIS	-	-	-	-	-	-	-	-	+	-	+	-	-	-	+	-	+	+	-	-	PSEU SIMI
SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCAL INFL
SCOLOPLOS ARMIGER	+	+	+	+	-	-	-	-	+	+	-	+	-	+	-	-	-	+	+	-	SCOL ARMI
SCOLELEPIS BONNERI	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	SCOL BONN
SCOLELEPIS SQUAMATA	-	-	+	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	+	SCOL SQUA
SIGALION JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	SIGA JUVE
SIGALION MATHILDAE	-	+	-	+	+	+	+	+	+	+	-	-	-	-	-	-	+	-	+	-	SIGA MATH
SIPHONOCETES KROYERANUS	-	-	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY
SPHAERODORUM FLAVUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA FLAV
SPHAEROSYLLIS HYTRIX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA HYTR
SPIOPHANES BOMBYX	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	SPIO BOMB
SPIO FILICORNIS	+	-	+	+	-	-	+	+	-	-	-	+	-	+	+	-	-	-	-	-	SPIO FILI
SPIOPHANES KROYERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIO KROE
SPISULA ELLIPTICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS ELLI
SPISULA SUBTRUNCATA	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	SPIS SUBT
STHENELAIS BOA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STHE BOA
STHENELAIS LIMICOLA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STHE LIMI
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	STRE WEBS
SYNCHELIDIUM MACULATUM	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	SYNC MACU
SYNELMIS KLATTI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNE KLAT
TELLINA FABULA	-	+	+	+	+	-	+	+	+	+	+	+	+	+	-	-	+	-	+	+	TELL FABU
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL PYGM
TELLINA TENIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL TENU
THRACIA CONVEXA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA CONV
THRACIA PHASEOLINA	-	-	+	+	-	+	+	+	+	-	-	-	-	-	-	-	-	-	+	+	THRA PHAS
THYASIRA FLEXUOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THYA FLEX
TORNUS SUBCARINATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TORN SUBC
TRAVISIA FORBESI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	TRAV FORB
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	24	35	42	33	38	40	35	35	31	17	20	19	23	27	24	30	35	29	32	

Appendix-1 Biomonitoring 1995

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	Oysterground 1																
	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
	1	5	7	11	12	14	15	16	19	21	25	26	31	32	33	34	36
CYLICHNA CYLINDRACEA	+	+	+	-	+	+	+	-	+	+	-	-	-	+	+	-	CYLI CYLI
DIASTYLIS BRADYI	-	-	-	-	-	-	-	+	-	+	-	-	+	-	-	+	DIAS BRAD
DIPLOCIRRUS GLAUCUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIPL GLAU
DONAX VITTATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DONA VITT
DOSINIA EXOLETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI EXOL
DOSINIA LUPINUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI LUPI
ECHINOCARDIUM CORDATUM	+	+	-	-	+	-	+	+	+	-	-	+	-	+	-	-	ECHI CORD
ECHINOCARDIUM JUVENILE	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	ECHI JUVE
ECHINOCYAMUS PUSILLUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ECHI PUSI
EDWARDSIA CLAPAREDI	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	EDWA CLAP
ENSIS DIRECTUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI DIRE
ENSIS ENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI ENSI
ENSIS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI JUVE
ENSIS SILIQUA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SILI
ENSIS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SPEC
ENTOPROCTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENTO PROC
ETEONE LONGA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	ETEO LONG
EUDORELLOPSIS DEFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDO DEFO
EUDORELLA TRUNCATULA	-	-	-	-	-	-	-	+	-	+	+	-	+	-	-	+	EUDO TRUN
EULALIA BILINEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EULA BILI
EULIMA ALBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EULI ALBA
EUMIDA SANGUINEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUMI SANG
EURYDICE SPINIGERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EURY SPIN
EXOGONE HEBES	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	EXOG HEBE
EXOGONE NAIDINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG NAID
GAMMARIDAE	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GAMM ARID
GAMMAROPSIS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GAMM AROP
GARI FERVENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GARI FERV
GATTYANA CIRROSA	+	-	-	-	+	-	+	-	+	-	+	-	-	+	-	+	GATT CIRR
GLYCERA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC JUVE
GLYCERA LAPIDUM	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	GLYC LAPI
GLYCERA ROUXI	-	-	+	+	+	+	+	+	+	+	+	-	+	-	+	-	GLYC ROUX
GOLFINGIA ELONGATA	-	-	-	-	+	-	-	-	+	-	+	-	-	-	-	-	GOLF ELON
GOLFINGIA VULGARIS	-	-	-	-	+	-	+	-	-	+	-	+	-	+	-	+	GOLF VULG
GONIADELLA BOBRETZKII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GONI BOBR
GONIADA MACULATA	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	GONI MACU
GYPTIS CAPENSIS	-	-	-	+	+	-	-	-	+	-	-	-	+	+	+	+	GYPT CAPE
HARMOTHOE JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM JUVE
HARMOTHOE LONGISETIS	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	HARM LONG
HARMOTHOE LUNUATA	-	+	+	-	-	-	-	+	-	+	-	+	-	-	-	-	HARM LUNU
HARMOTHOE NODOSA	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	HARM NODO
HARPINIA ANTENNARIA	+	+	+	-	+	+	-	+	+	+	+	-	+	+	+	+	HARP ANTE
HESIONURA AUGENERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE
HETEROMASTUS FILIFORMIS	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	HETE FILI
HIPPOMEDON DENTICULATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HIPP DENT
HYDROZOA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HYDR OZOA
IONE THORACIA	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	+	IONE THOR
IPHINOE TRISPINOSA	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	IPHI TRIS
LANICE CONCHILEGA	-	-	-	-	-	-	-	+	-	+	-	+	-	-	-	-	LANI CONC
LEPIDEPECREUM LONGICORNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPI LONG

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	Oysterground 1																		
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	1	5	7	11	12	14	15	16	19	21	25	26	31	32	33	34	36		
LEPTON SQUAMOSUM	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPT SQUA	
LEUCOTHOE INCISA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC INCI	
LEUCOTHOE LILLJEBORGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC LILL	
LUCINOMA BOREALIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUCI BORE	
LUMBRINERIS LATREILLI	-	+	-	+	+	+	-	-	-	+	+	+	+	+	-	+	+	LUMB LATR	
MACOMA BALTHICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACO BALT	
MACTRA CORALLINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACT CORA	
MACTRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACT JUVE	
MAGELONA ALLENI	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	MAGE ALLE	
MAGELONA PAPILLICORNIS	+	-	-	-	-	-	-	+	-	-	+	-	+	+	-	-	-	MAGE PAPI	
MEGALUROPUS AGILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MEGA AGIL	
MICROPROTOPUS MACULATUS	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	MICR MACU	
MICROPHTHALAMUS SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SIMI	
MICROPHTHALAMUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SPEC	
MONTACUTA FERRUGINOSA	-	-	-	-	-	-	-	-	+	-	-	+	-	+	-	-	-	MONT FERR	
MYA TRUNCATA	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	MYA TRUN	
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	
NEREIS LONGISSIMA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	NERE LONG	
NOTOMASTUS LATERICEUS	+	+	+	-	-	-	-	-	+	-	+	-	-	+	-	-	+	NOTO LATE	
NUCULA NUCLEUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NUCU NUCL	
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	
ORCHOMENE HUMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH HUMI	
OWENIA FUSIFORMIS	-	+	-	-	-	-	-	+	-	-	-	+	-	-	-	+	-	OWEN FUSI	
PARAONIS FULGENS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA FULG	
PARAONIS GRACILIS	-	+	+	-	-	-	-	-	-	-	+	-	-	-	+	-	-	PARA GRAC	
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	PECT AURI	
PECTINARIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	PECT JUVE	
PECTINARIA KORENI	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	-	PECT KORE	
PERIOCULODES LONGIMANUS	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	PERI LONG	
PHOLOE MINUTA	+	-	+	+	-	+	-	+	+	+	-	-	-	+	+	+	+	PHOL MINU	
PHORONIDA	+	+	+	+	-	+	-	+	+	+	-	-	-	+	+	+	+	PHOR ONID	
PISONE REMOTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISI REMO	
PLATHYHELMITHES	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	PLAT HYHE	
POECILOCHAETUS SERPENS	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	POEC SERP	

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	Oysterground 1																	
	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	Oys	
	1	5	7	11	12	14	15	16	19	21	25	26	31	32	33	34	36	
POLYDORA SPEC.	-	+	-	-	-	-	-	+	+	-	-	-	-	-	-	+	+	POLY DORA
POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB
PONTOCRATES ALTAMARINUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT ALTA
PONTOCRATES ARENARIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT AREN
PSEUDOCUMA LONGICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU LONG
PSEUDOCUMA SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU SIMI
SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	SCAL INFL
SCOLOPLOS ARMIGER	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	SCOL ARMI
SCOLELEPIS BONNERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCOL BONN
SCOLELEPIS SQUAMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCOL SQUA
SIGALION JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIGA JUVE
SIGALION MATHILDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIGA MATH
SIPHONOCETES KROYERANUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY
SPHAERODORUM FLAVUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA FLAV
SPHAEROSYLLIS HYTRIX	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA HYTR
SPIOPHANES BOMBYX	+	-	+	+	-	-	+	+	+	+	-	-	-	+	-	+	-	SPIO BOMB
SPIO FILICORNIS	+	-	-	-	-	+	-	+	-	-	-	-	+	+	+	-	-	SPIO FILI
SPIOPHANES KROYERI	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	SPIO KROE
SPISULA ELLIPTICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS ELLI
SPISULA SUBTRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS SUBT
STHENELAIS BOA	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	STHE BOA
STHENELAIS LIMICOLA	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	STHE LIMI
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRE WEBS
SYNCHELIDIUM MACULATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNC MACU
SYNELMIS KLATTI	+	-	+	-	+	+	+	+	+	-	+	-	+	+	+	-	-	SYNE KLAT
TELLINA FABULA	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL FABU
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL PYGM
TELLINA TENIUS	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	TELL TENU
THRACIA CONVEXA	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	THRA CONV
THRACIA PHASEOLINA	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA PHAS
THYASIRA FLEXUOSA	+	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	THYA FLEX
TORNUS SUBCARINATUS	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	TORN SUBC
TRAVISIA FORBESI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TRAV FORB
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	27	31	33	26	27	22	22	34	33	36	29	23	23	29	27	30	23	

Appendix-1 Biomonitoring 1995

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Appendix-1 Biomonitoring 1995

	Oyster Ground 2																							
	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs	Ovs				
	2	3	4	6	8	9	10	13	17	18	20	22	23	24	#	28	29	30	35	37	39	40	41	
CYLICHNA CYLINDRACEA	-	-	+	+	-	-	+	+	-	-	-	-	+	-	-	-	+	-	-	+	+	-	+	CYLI CYLI
DIASTYLIS BRADYI	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	DIAS BRAD
DIPLOCIRRUS GLAUCUS	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	+	DIPL GLAU
DONAX VITTATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DONA VITT
DOSINIA EXOLETA	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	DOSI EXOL
DOSINIA LUPINUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	DOSI LUPI
ECHINOCARDIUM CORDATUM	-	+	+	-	+	-	-	+	+	-	-	-	+	-	+	+	-	+	+	-	+	+	-	ECHI CORD
ECHINOCARDIUM JUVENILE	+	+	+	-	+	+	+	-	-	+	+	+	-	+	+	+	-	+	+	+	+	+	-	ECHI JUVE
ECHINOCYAMUS PUSILLUS	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	ECHI PUSI
EDWARDSIA CLAPAREDII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EDWA CLAP
ENSIS DIRECTUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI DIRE
ENSIS ENSIS	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI ENSI
ENSIS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI JUVE
ENSIS SILIQUA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SILI
ENSIS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SPEC
ENTOPROCTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENTO PROC
ETEONE LONGA	-	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	ETEO LONG
EUDORELLOPSIS DEFORMIS	-	-	-	+	-	-	-	+	+	-	-	+	+	-	-	-	-	-	-	-	-	+	-	EUDO DEFO
EUDORELLA TRUNCATULA	-	-	-	-	-	+	+	-	-	+	+	+	-	-	+	-	+	-	+	-	-	-	-	EUDO TRUN
EULALIA BILINEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EULA BILI
EULIMA ALBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	EULI ALBA
EUMIDA SANGUINEA	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUMI SANG
EURYDICE SPINIGERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EURY SPIN
EXOGONE HEBES	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	EXOG HEBE
EXOGONE NAIDINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG NAID
GAMMARIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GAMM ARID
GAMMAROPSIS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GAMM AROP
GARI FERVENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GARI FERV
GATTYANA CIRROSA	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	GATT CIRR
GLYCERA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	GLYC JUVE
GLYCERA LAPIDUM	+	+	+	-	-	-	-	-	-	+	+	-	-	-	+	+	-	-	-	-	-	-	-	GLYC LAPI
GLYCERA ROUXI	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	GLYC ROUX
GOLFINGIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	GOLF ELON
GOLFINGIA VULGARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	GOLF VULG
GONIADELLA BOBRETZKII	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	GONI BOBR
GONIADA MACULATA	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	+	+	-	-	-	-	+	GONI MACU
GYPTIS CAPENSIS	+	-	-	+	+	+	-	-	+	-	+	-	-	+	-	-	-	+	+	-	-	+	+	GYPT CAPE
HARMOTHOE JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM JUVE
HARMOTHOE LONGISETIS	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM LONG
HARMOTHOE LUNUATA	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	HARM LUNU
HARMOTHOE NODOSA	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM NODO
HARPINIA ANTENNARIA	-	+	-	+	+	+	+	+	+	+	+	+	+	-	+	+	+	-	+	+	+	+	+	HARP ANTE
HESIONURA AUGENERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE
HETEROMASTUS FILIFORMIS	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HETE FILI
HIPPOMEDON DENTICULATUS	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	HIPP DENT
HYDROZOA	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	HYDR OZOA
IONE THORACIA	-	-	-	+	-	+	-	-	-	-	+	+	-	-	-	-	-	-	-	+	-	+	+	IONE THOR
IPHINOE TRISPINOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IPHI TRIS
LANICE CONCHILEGA	-	-	+	-	+	+	-	-	-	+	+	-	+	-	-	-	-	+	+	-	-	+	+	LANI CONC
LEPIDEPECREUM LONGICORNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPI LONG

Appendix-1 Biomonitoring 1995

	Oyster Ground 2																							
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	2	3	4	6	8	9	10	13	17	18	20	22	23	24	#	28	29	30	35	37	39	40	41	
LEPTON SQUAMOSUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPT SQUA
LEUCOTHOE INCISA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC INCI
LEUCOTHOE LILLJEBORGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC LILL
LUCINOMA BOREALIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	LUCI BORE
LUMBRINERIS LATREILLI	-	-	-	-	+	-	-	-	-	-	+	-	-	+	-	-	+	-	+	-	-	-	-	LUMB LATR
MACOMA BALTHICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACO BALT
MACTRA CORALLINA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	MACT CORA
MACTRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACT JUVE
MAGELONA ALLENI	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	MAGE ALLE
MAGELONA PAPILLICORNIS	+	+	+	+	-	+	+	-	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	MAGE PAPI
MEGALUROPUS AGILIS	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	MEGA AGIL
MICROPROTOPUS MACULATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR MACU
MICROPHTHALAMUS SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SIMI
MICROPHTHALAMUS SPEC.	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SPEC
MONTACUTA FERRUGINOSA	-	-	-	-	-	-	-	+	-	-	+	-	-	+	-	+	-	+	+	+	+	-	+	MONT FERR
MYA TRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYA TRUN
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
NEREIS LONGISSIMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NERE LONG
NOTOMASTUS LATERICEUS	+	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	NOTO LATE
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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
ORCHOMENE HUMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ORCH HUMI
OWENIA FUSIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN FUSI
PARAONIS FULGENS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA FULG
PARAONIS GRACILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	PARA GRAC
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	PECT AURI
PECTINARIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	PECT JUVE
PECTINARIA KORENI	+	+	+	-	+	+	-	-	+	-	+	+	+	-	+	-	-	-	+	+	-	+	-	PECT KORE
PERIOCULODES LONGIMANUS	-	-	+	-	-	-	-	-	+	+	-	-	-	-	-	+	+	-	-	-	-	+	-	PERI LONG
PHOLOE MINUTA	-	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	-	+	+	+	+	+	PHOL MINU
PHORONIDA	+	+	+	+	-	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	PHOR ONID
PISONE REMOTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISI REMO
PLATHYHELMITHES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PLAT HYHE
POECILOCHAETUS SERPENS	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	-	-	-	-	-	-	+	-	POEC SERP

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	Oyster Ground 2																							
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	2	3	4	6	8	9	10	13	17	18	20	22	23	24	#	28	29	30	35	37	39	40	41	
POLYDORA SPEC.	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	POLY DORA
POLYNOE KINBERGI	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB
PONTOCRATES ALTAMARINUS	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	PONT ALTA
PONTOCRATES ARENARIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT AREN
PSEUDOCUMA LONGICORNIS	-	+	+	-	-	-	-	-	-	-	-	-	+	-	-	-	+	+	-	-	-	-	-	PSEU LONG
PSEUDOCUMA SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PSEU SIMI
SCALIBREGMA INFLATUM	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	+	SCAL INFL
SCOLOPLOS ARMIGER	-	+	+	+	+	+	+	-	+	-	+	+	+	-	+	+	+	-	-	-	-	-	-	SCOL ARMI
SCOLELEPIS BONNERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	SCOL BONN
SCOLELEPIS SQUAMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCOL SQUA
SIGALION JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIGA JUVE
SIGALION MATHILDAE	-	-	+	-	-	+	-	+	-	+	-	-	+	+	+	+	+	-	+	-	+	-	+	SIGA MATH
SIPHONOCETES KROYERANUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY
SPHAERODORUM FLAVUM	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA FLAV
SPHAEROSYLLIS HYTRIX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA HYTR
SPIOPHANES BOMBYX	+	+	+	-	+	+	+	-	+	+	+	-	+	+	+	+	+	+	+	-	-	-	+	SPIO BOMB
SPIO FILICORNIS	-	-	+	-	-	+	-	+	+	-	-	-	-	-	-	+	+	+	+	+	-	+	-	SPIO FILI
SPIOPHANES KROYERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIO KROE
SPISULA ELLIPTICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS ELLI
SPISULA SUBTRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS SUBT
STHENELAIS BOA	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STHE BOA
STHENELAIS LIMICOLA	+	-	-	-	-	+	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	STHE LIMI
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRE WEBS
SYNCHELIDIUM MACULATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNC MACU
SYNELMIS KLATTI	-	-	-	-	-	-	+	+	-	-	+	+	+	-	+	+	-	-	+	+	+	+	-	SYNE KLAT
TELLINA FABULA	-	-	+	-	-	-	-	-	+	+	-	-	+	+	-	+	+	+	-	-	-	-	+	TELL FABU
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL PYGM
TELLINA TENIUS	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	TELL TENU
THRACIA CONVEXA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA CONV
THRACIA PHASEOLINA	-	-	-	-	+	-	-	-	+	-	+	-	+	-	+	+	+	-	-	-	-	-	+	THRA PHAS
THYASIRA FLEXUOSA	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	THYA FLEX
TORNUS SUBCARINATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TORN SUBC
TRAVISIA FORBESI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TRAV FORB
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	24	29	38	29	31	29	27	25	33	21	41	28	38	19	31	32	35	26	36	35	20	36	36	

Appendix-1 Biomonitoring 1995

			Southern offshore area																											
	Coe	Coe	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr	Ofr			
	11	13	6	10	12	13	14	16	17	18	20	21	22	24	25	26	27	28	29	31	32	34	35	36						
ABRA ALBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA ALBA		
ABRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA JUVE		
ABRA PRISMATICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA PRIS		
ACIDOSTOMA OBESUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACID OBES		
ACROCNIDA BRACHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACRO BRAC		
AMPELISCA BREVICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE BREV		
AMPELISCA TENUICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE TENU		
AMPHIURA FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH FILI		
AMPHIPODA SPEC.	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH IPOD		
ANAITIDES GROENLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI GROE		
ANAITIDES JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI JUVE		
ANAITIDES LINEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI LINE		
ANAITIDES MACULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI MACU		
ANAITIDES MUCOSA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	ANAI MUCO		
ANAITIDES SUBULIFERA	-	-	+	-	-	-	-	-	-	-	+	-	+	-	+	-	-	+	-	+	-	-	-	-	-	-	-	ANAI SUBU		
ANTHOZOA	+	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	ANTH OZOA		
AONIDES PAUCIBRANCHIATA	-	-	+	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AONI PAUC		
APHERUSA JURI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHE JURI		
APHRODITA ACULEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR ACUL		
APHRODITA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR JUVE		
APLACOPHORA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APLA COPH		
ARCHIANNELIDA	+	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+	-	+	-	-	-	-	-	-	-	-	ARCH IANN		
ARCTICA ISLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCT ISLA		
ARGISSA HAMATIPIES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	ARGI HAMA		
ARICIDEA JEFFREYSII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC JEFF		
ARICIDEA MINUTA	-	-	+	+	+	+	+	+	+	-	+	-	-	-	+	-	-	-	-	+	+	+	+	+	+	+	+	ARIC MINU		
ASTERIAS JUVENILE	+	-	-	-	-	-	-	-	-	+	-	-	-	+	+	-	-	-	+	-	-	-	-	-	-	-	-	ASTE JUVE		
ASTROPECTEN IRREGULARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTR IRRE		
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Appendix-1 Biomonitoring 1995

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Appendix-1 Biomonitoring 1995

			Southern offshore area																																
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Appendix-1 Biomonitoring 1995

	Southern offshore area																																				
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POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB		
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PONTOCRATES ARENARIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT AREN		
PSEUDOCUMA LONGICORNIS	+	-	+	+	+	+	+	+	-	+	-	+	+	+	+	+	-	+	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	PSEU LONG		
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SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCAL INFL		
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SIGALION MATHILDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIGA MATH		
SIPHONOCETES KROYERANUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY		
SPHAERODORUM FLAVUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA FLAV		
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SPIO FILICORNIS	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	SPIO FILI	
SPIOPHANES KROYERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIO KROE		
SPISULA ELLIPTICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	SPIE ELLI		
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STHENELAIS BOA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STHE BOA		
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TELLINA TENIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL TENU		
THRACIA CONVEXA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA CONV		
THRACIA PHASEOLINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA PHAS		
THYASIRA FLEXUOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THYA FLEX		
TORNUS SUBCARINATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TORN SUBC		
TRAVISIA FORBESI	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TRAV FORB		
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	19	5	26	17	17	18	18	16	11	18	16	21	21	16	21	14	10	23	31	16	15	20	19	24													

Appendix-1 Biomonitoring 1995

						Coastal area													
	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Off	Off	Off		
	1	2	3	4	5	6	7	8	9	10	12	14	15	2	3	7			
ABRA ALBA	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	ABRA ALBA		
ABRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA JUVE		
ABRA PRISMATICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA PRIS		
ACIDOSTOMA OBESUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACID OBES		
ACROCNIDA BRACHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACRO BRAC		
AMPELISCA BREVICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE BREV		
AMPELISCA TENUICORNIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPE TENU		
AMPHIURA FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH FILI		
AMPHIPODA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPH IPOD		
ANAITIDES GROENLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI GROE		
ANAITIDES JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	ANAI JUVE		
ANAITIDES LINEATA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAI LINE		
ANAITIDES MACULATA	-	-	-	-	-	-	-	+	+	-	-	-	+	-	+	-	ANAI MACU		
ANAITIDES MUCOSA	+	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	ANAI MUCO		
ANAITIDES SUBULIFERA	+	+	-	-	-	+	-	-	-	-	-	-	-	-	+	-	ANAI SUBU		
ANTHOZOA	+	-	+	-	-	-	-	-	+	-	-	-	+	+	+	+	ANTH OZOA		
AONIDES PAUCIBRANCHIATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AONI PAUC		
APHERUSA JURI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHE JURI		
APHRODITA ACULEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR ACUL		
APHRODITA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHR JUVE		
APLACOPHORA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APLA COPH		
ARCHIANNELIDA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	ARCH IANN		
ARCTICA ISLANDICA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARCT ISLA		
ARGISSA HAMATIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARGI HAMA		
ARICIDEA JEFFREYSII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC JEFF		
ARICIDEA MINUTA	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARIC MINU		
ASTERIAS JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	ASTE JUVE		
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 SPEC.	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	BATH SPEC		
BATHYPOREIA TENUIPES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BATH TENU		
BODOTRIA ARENOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BODO AREN		
BRISOPSIS LYRIFERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BRIS LYRI		
CALLIANASSA SUBTERRANEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CALL SUBT		
CAPITELLA CAPITATA	+	-	+	+	+	+	-	+	+	-	-	+	+	+	+	+	CAPI CAPI		
CAPITELLIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAPI TELL		
CAPRELLIDAE	+	-	+	-	-	-	+	-	-	-	-	-	+	+	-	-	CAPR ELLI		
CAUDERIELLA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CAUD ERIE		
CHAETOZONE SETOSA	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	+	CHAE SETO		
CHAETOPTERUS VARIOPEDATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHAE VARI		
CHLAMYS VARIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHLA VARI		
CINGULA VITREA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CING VITR		
CORBULA GIBBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORB GIBB		
CORYSTES CASSIVELAUNUS	-	-	-	+	-	-	-	-	-	-	-	-	-	+	+	-	CORY CASS		
CUCUMARIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CUCU ELON		
CULTELLUS PELLUCIDUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CULT PELL		

Appendix-1 Biomonitoring 1995

	Coastal area															
	Cos	Cos	Cos	Cos	Cos	Cos	Cos	Cos	Cos	Cos	Cos	Cos	Cos	Off	Off	Off
	1	2	3	4	5	6	7	8	9	10	12	14	15	2	3	7
CYLICHA CYLINDRACEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CYLI CYLI
DIASTYLIS BRADYI	+	+	+	-	+	-	-	-	-	-	-	-	+	+	+	DIAS BRAD
DIPLOCIRRUS GLAUCUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIPL GLAU
DONAX VITTATUS	+	-	-	-	-	+	-	+	-	-	-	-	-	-	-	DONA VITT
DOSINIA EXOLETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI EXOL
DOSINIA LUPINUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSI LUPI
ECHINOCARDIUM CORDATUM	+	+	-	-	+	+	-	+	+	-	+	-	-	+	+	ECHI CORD
ECHINOCARDIUM JUVENILE	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	ECHI JUVE
ECHINOCYAMUS PUSILLUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ECHI PUSI
EDWARDSIA CLAPAREDI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EDWA CLAP
ENSIS DIRECTUS	-	+	+	+	-	-	-	+	-	+	-	+	+	-	-	ENSI DIRE
ENSIS ENSIS	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	ENSI ENSI
ENSIS JUVENILE	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	ENSI JUVE
ENSIS SILIQUA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SILI
ENSIS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENSI SPEC
ENTOPROCTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ENTO PROC
ETEONE LONGA	-	-	-	-	-	+	-	-	+	-	-	-	-	-	+	ETEO LONG
EUDORELLOPSIS DEFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDO DEFO
EUDORELLA TRUNCATULA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDO TRUN
EULALIA BILINEATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EULA BILI
EULIMA ALBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EULI ALBA
EUMIDA SANGUINEA	+	+	-	-	+	+	-	-	-	-	-	-	-	-	+	EUMI SANG
EURYDICE SPINIGERA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EURY SPIN
EXOGONE HEBES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG HEBE
EXOGONE NAIDINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOG NAID
GAMMARIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GAMM ARID
GAMMAROPSIS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GAMM AROP
GARI FERVENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GARI FERV
GATTYANA CIRROSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GATT CIRR
GLYCERA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC JUVE
GLYCERA LAPIDUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC LAPI
GLYCERA ROUXI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYC ROUX
GOLFINGIA ELONGATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF ELON
GOLFINGIA VULGARIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLF VULG
GONIADELLA BOBRETZKII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GONI BOBR
GONIADA MACULATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GONI MACU
GYPTIS CAPENSIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	GYPT CAPE
HARMOTHOE JUVENILE	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM JUVE
HARMOTHOE LONGISETIS	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	HARM LONG
HARMOTHOE LUNUATA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	HARM LUNU
HARMOTHOE NODOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARM NODO
HARPINIA ANTENNARIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARP ANTE
HESIONURA AUGENERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HESI AUGE
HETEROMASTUS FILIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	HETE FILI
HIPPOMEDON DENTICULATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HIPP DENT
HYDROZOA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	HYDR OZOA
IONE THORACIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	IONE THOR
IPHINOE TRISPINOSA	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	IPHI TRIS
LANICE CONCHILEGA	+	+	+	+	+	+	-	-	-	+	+	+	+	+	+	LANI CONC
LEPIDEPECREUM LONGICORNE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPI LONG

Appendix-1 Biomonitoring 1995

	Coastal area															
	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Off	Off	Off
	1	2	3	4	5	6	7	8	9	10	12	14	15	2	3	7
LEPTON SQUAMOSUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPT SQUA
LEUCOTHOE INCISA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC INCI
LEUCOTHOE LILLJEBORGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUC LILL
LUCINOMA BOREALIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUCI BORE
LUMBRINERIS LATREILLI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUMB LATR
MACOMA BALTHICA	-	+	-	+	-	+	-	+	-	-	+	-	-	-	-	MACO BALT
MACTRA CORALLINA	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	MACT CORA
MACTRA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACT JUVE
MAGELONA ALLENI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAGE ALLE
MAGELONA PAPILLICORNIS	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	MAGE PAPI
MEGALUROPUS AGILIS	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	MEGA AGIL
MICROPROTOPUS MACULATUS	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	MICR MACU
MICROPHTHALAMUS SIMILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SIMI
MICROPHTHALAMUS SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MICR SPEC
MONTACUTA FERRUGINOSA	+	+	-	-	+	+	-	+	+	-	+	-	+	+	+	MONT FERR
MYA TRUNCATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYA TRUN
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
NEREIS LONGISSIMA	+	-	+	-	-	-	-	+	-	-	-	-	-	-	-	NERE LONG
NOTOMASTUS LATERICEUS	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	NOTO LATE
NUCULA NUCLEUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NUCU NUCL
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
ORCHOMENE HUMILIS	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	ORCH HUMI
OWENIA FUSIFORMIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OWEN FUSI
PARAONIS FULGENS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA FULG
PARAONIS GRACILIS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARA GRAC
PECTINARIA AURICOMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT AURI
PECTINARIA JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PECT JUVE
PECTINARIA KORENI	-	-	+	+	+	-	-	-	+	+	-	-	+	-	-	PECT KORE
PERIOCULODES LONGIMANUS	+	-	-	-	+	-	-	-	-	-	-	-	-	-	+	PERI LONG
PHOLOE MINUTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PHOL MINU
PHORONIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	PHOR ONID
PISONE REMOTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISI REMO
PLATHYHELMITHES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PLAT HYHE
POECILOCHAETUS SERPENS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POEC SERP

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	Coastal area																	
	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Coa	Off	Off	Off	
	1	2	3	4	5	6	7	8	9	10	12	14	15	2	3	7		
POLYDORA SPEC.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY DORA	
POLYNOE KINBERGI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLY KINB	
PONTOCRATES ALTAMARINUS	-	-	-	-	-	-	+	+	-	-	+	-	-	-	-	-	PONT ALTA	
PONTOCRATES ARENARIUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PONT AREN	
PSEUDOCUMA LONGICORNIS	+	+	+	-	+	-	+	+	+	-	+	-	+	+	+	+	PSEU LONG	
PSEUDOCUMA SIMILIS	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	PSEU SIMI	
SCALIBREGMA INFLATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCAL INFL	
SCOLOPLOS ARMIGER	-	-	+	-	-	-	-	+	-	-	-	+	-	-	-	+	SCOL ARMI	
SCOLELEPIS BONNERI	-	-	-	-	+	+	-	-	-	-	+	-	-	-	-	-	SCOL BONN	
SCOLELEPIS SQUAMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCOL SQUA	
SIGALION JUVENILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIGA JUVE	
SIGALION MATHILDAE	+	-	-	-	-	-	-	+	-	-	-	-	+	+	+	-	SIGA MATH	
SIPHONOCETES KROYERANUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPH KROY	
SPHAERODORUM FLAVUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA FLAV	
SPHAEROSYLLIS HYTRIX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPHA HYTR	
SPIOPHANES BOMBYX	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	SPIO BOMB	
SPIO FILICORNIS	+	+	+	+	+	+	-	+	+	-	+	+	+	-	+	-	SPIO FILI	
SPIOPHANES KROYERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIO KROE	
SPISULA ELLIPTICA	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIS ELLI	
SPISULA SUBTRUNCATA	+	-	+	-	+	-	-	-	+	+	-	-	+	-	-	-	SPIS SUBT	
STHENELAIS BOA	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	STHE BOA	
STHENELAIS LIMICOLA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STHE LIMI	
STREPTOSYLLIS WEBSTERI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRE WEBS	
SYNCHELIDIUM MACULATUM	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	SYNC MACU	
SYNELMIS KLATTI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNE KLAT	
TELLINA FABULA	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	TELL FABU	
TELLINA PYGMEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TELL PYGM	
TELLINA TENIUS	-	+	-	+	-	+	-	-	-	+	-	+	-	-	-	-	TELL TENU	
THRACIA CONVEXA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA CONV	
THRACIA PHASEOLINA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRA PHAS	
THYASIRA FLEXUOSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THYA FLEX	
TORNUS SUBCARINATUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TORN SUBC	
TRAVISIA FORBESI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TRAV FORB	
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	21	24	14	24	28	9	23	22	13	15	16	26	25	33	15		

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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 latin 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										
ATYLFALC	29.3	0.009	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
ATYLSWAM	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	380.4	0.114	29.3	0.009	278.0	0.083	351.1	0.105	73.2	0.022
BATHGUIL	58.5	0.018	0.0	0.000	87.8	0.026	175.6	0.053	14.6	0.004
BATHJUVE	160.9	0.032	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CAPRELLI	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
CORYCASS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.038
DIASBRAD	0.0	0.000	0.0	0.000	29.3	0.015	14.6	0.007	0.0	0.000
HIPPIDENT	73.2	0.022	29.3	0.009	0.0	0.000	0.0	0.000	14.6	0.004
IPHITRIS	14.6	0.007	0.0	0.000	14.6	0.004	14.6	0.007	14.6	0.007
LEPILONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
LEUCLILL	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000
PERILONG	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009
PONTAREN	0.0	0.000	0.0	0.000	14.6	0.004	29.3	0.009	0.0	0.000
PSEULONG	0.0	0.000	14.6	0.003	14.6	0.003	0.0	0.000	0.0	0.000
STPHKROY	0.0	0.000	0.0	0.000	73.2	0.022	0.0	0.000	0.0	0.000
UROTELEG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
UROTPOSE	131.7	0.040	58.5	0.018	131.7	0.040	204.8	0.061	0.0	0.000
ECHINODERMATA										
ACROBRAC	102.4	3.238	102.4	10.318	58.5	2.335	29.3	0.616	204.8	7.808
ASTEJUVE	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	0.0	0.000	14.6	8.241	0.0	0.000	0.0	0.000	0.0	0.000
ECHIJUVE	380.4	0.038	1550.8	0.155	380.4	0.038	1975.1	0.198	29.3	0.003
ECHIPUSI	131.7	0.047	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	160.9	0.032	204.8	0.041	43.9	0.009	29.3	0.006	102.4	0.021
MOLLUSCA										
ABRAALBA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.007
ABRAPRIS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.004
ARCTISLA	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.004	0.0	0.000
CYLICYLI	14.6	0.026	0.0	0.000	0.0	0.000	58.5	0.012	0.0	0.000
DOSIEKOL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.304
ENSIENSI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	8.405	0.0	0.000
GARIFERV	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.628
LUCIBORE	14.6	4.314	0.0	0.000	0.0	0.000	14.6	5.371	14.6	7.185
MACTCORA	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
MONTFERR	0.0	0.000	29.3	0.021	0.0	0.000	0.0	0.000	43.9	0.038
MYSEBIDE	234.1	0.057	614.5	0.148	175.6	0.038	73.2	0.018	102.4	0.160
NATIALDE	14.6	0.004	43.9	0.022	29.3	0.038	73.2	0.073	14.6	0.010
SPISSUBT	0.0	0.000	0.0	0.000	14.6	0.069	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	863.2	0.907	160.9	0.401	160.9	0.800	658.3	1.507
THRAPHAS	0.0	0.000	0.0	0.000	73.2	0.053	14.6	0.060	0.0	0.000
VENUSTRI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.332	0.0	0.000
POLYCHAETA										
ANAIMUCO	14.6	0.002	0.0	0.000	29.3	0.007	0.0	0.000	14.6	0.010
ARICMINU	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000	0.0	0.000
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.002	234.1	0.037	29.3	0.006
ETEOLONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	14.6	0.004
EUMISANG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.010
GLYCROUX	0.0	0.000	0.0	0.000	14.6	0.032	0.0	0.000	0.0	0.000
GONIMACU	14.6	0.079	29.3	0.083	0.0	0.000	43.9	0.110	29.3	0.143
HARMLUNU	14.6	0.006	29.3	0.013	0.0	0.000	0.0	0.000	0.0	0.000
LANICONC	58.5	0.010	526.7	0.127	541.3	0.060	219.4	0.029	117.0	1.128
MAGEALLE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
MAGEPAPI	292.6	0.241	512.0	0.064	117.0	0.022	482.8	0.313	658.3	0.253
NEPHCIRR	73.2	0.402	0.0	0.000	73.2	0.072	58.5	0.012	29.3	0.044
NEPHHOMB	0.0	0.000	87.8	0.042	0.0	0.000	14.6	0.006	29.3	0.032
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.021	0.0	0.000
OWENFUSI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.568	0.0	0.000
PARAFULG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	14.6	0.004	43.9	0.013	0.0	0.000
PHOLMINU	29.3	0.004	29.3	0.007	14.6	0.002	14.6	0.002	58.5	0.012
SCOLARMI	29.3	0.038	87.8	0.037	58.5	1.684	43.9	0.029	0.0	0.000
SCOLSQUA	0.0	0.000	0.0	0.000	14.6	0.120	0.0	0.000	0.0	0.000
SIGAMATH	0.0	0.000	14.6	0.379	0.0	0.000	14.6	0.394	43.9	0.380
SPIOBOMB	190.2	0.023	14.6	0.007	585.2	0.086	877.8	0.078	73.2	0.006
SPIOFILI	29.3	0.002	0.0	0.000	58.5	0.012	14.6	0.004	0.0	0.000
STHEBOA	14.6	0.002	0.0	0.000	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	29.3	0.091	29.3	0.376
EDWACLAP	14.6	0.241	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ENTOPROC	0.0	0.000	0.0	0.000	0.0	0.000	146.3	0.015	0.0	0.000
NEMERTIN	58.5	0.445	43.9	0.006	29.3	0.019	43.9	0.029	43.9	0.026
PHORONID	131.7	0.120	29.3	0.006	146.3	0.108	117.0	0.050	160.9	0.089
SUMS	2911.4	9.627	4974.2	20.667	3379.5	5.419	5822.7	18.961	2867.5	20.280
DIVERSITY										
NSPC	31		24		35		42		33	
SH-W	2.919		2.184		2.848		2.549		2.694	
SIMP	0.071		0.168		0.088		0.156		0.122	

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STATION:	DOG 6		DOG 7		OYS 1		OYS 2		OYS 3	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ATYLFALC	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
ATYLSWAM	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	395.0	0.119	73.2	0.022	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	497.4	0.149	248.7	0.075	0.0	0.000	0.0	0.000	0.0	0.000
BATHJUVE	204.8	0.061	43.9	0.013	0.0	0.000	0.0	0.000	0.0	0.000
CALLSUBT	0.0	0.000	0.0	0.000	14.6	0.715	43.9	2.527	0.0	0.000
CAPRELLI	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CORYCASS	0.0	0.000	0.0	0.000	43.9	0.070	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	14.6	0.009
GAMMARID	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
HARPANTE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.004
HIPPIDENT	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
IPHITRIS	14.6	0.007	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000
LEPILONG	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LEUCILILL	43.9	0.013	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	0.0	0.000	0.0	0.000	0.0	0.000
PONTALTA	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
PSEULONG	14.6	0.003	14.6	0.003	0.0	0.000	0.0	0.000	14.6	0.003
SIPHKROY	58.5	0.018	43.9	0.013	0.0	0.000	0.0	0.000	0.0	0.000
UPOGDELT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.383	0.0	0.000
UROTPOSE	14.6	0.004	219.4	0.066	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	0.004
<u>ECHINODERMATA</u>										
ACROBRAC	29.3	1.770	14.6	0.920	0.0	0.000	0.0	0.000	0.0	0.000
AMPHILI	0.0	0.000	0.0	0.000	1287.4	11.326	87.8	0.543	892.4	16.978
ASTEJUVE	29.3	0.006	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.004
ECHICORD	0.0	0.000	14.6	0.145	14.6	4.011	0.0	0.000	14.6	4.294
ECHIJUVE	58.5	0.006	2516.4	0.252	702.2	0.070	351.1	0.035	87.8	0.009
ECHIPUSI	0.0	0.000	87.8	0.029	0.0	0.000	0.0	0.000	0.0	0.000
OPHIALBI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.016	0.0	0.000
OPHIJUVE	14.6	0.003	14.6	0.003	0.0	0.000	131.7	0.026	43.9	0.009
<u>MOLLUSCA</u>										
ABRAALBA	0.0	0.000	0.0	0.000	73.2	0.009	117.0	0.031	863.2	0.590
CULTEPELL	0.0	0.000	0.0	0.000	29.3	0.007	0.0	0.000	0.0	0.000
CYLICYLI	14.6	0.003	0.0	0.000	29.3	0.018	0.0	0.000	0.0	0.000
DOSIEXOL	0.0	0.000	14.6	0.044	0.0	0.000	0.0	0.000	0.0	0.000
ENSIENSI	14.6	0.370	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MONTFERR	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
MYSEBIDE	146.3	0.034	58.5	0.025	526.7	0.105	43.9	0.009	1068.0	0.214
NATIALDE	14.6	0.003	29.3	0.012	0.0	0.000	29.3	0.010	0.0	0.000
NUCUTENU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	117.0	0.100
TELLFABU	0.0	0.000	117.0	0.238	0.0	0.000	0.0	0.000	0.0	0.000
THRACONV	0.0	0.000	0.0	0.000	14.6	3.864	0.0	0.000	0.0	0.000
THRAPLEX	14.6	0.003	29.3	0.019	0.0	0.000	0.0	0.000	0.0	0.000
THYAFLEX	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	29.3	0.004
VENUSTRI	0.0	0.000	14.6	0.009	0.0	0.000	0.0	0.000	14.6	0.777
<u>POLYCHAETA</u>										
ANAIMACU	0.0	0.000	29.3	0.007	0.0	0.000	0.0	0.000	0.0	0.000
ANAIMUCO	29.3	0.247	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ANASUBU	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000
ARICMINU	43.9	0.006	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
CAUDERIE	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CHAESETO	0.0	0.000	87.8	0.012	0.0	0.000	29.3	0.007	117.0	0.061
CHAEVARI	0.0	0.000	0.0	0.000	14.6	3.295	14.6	2.313	14.6	18.135
EXOGEHEB	0.0	0.000	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000
GATTCCR	0.0	0.000	0.0	0.000	14.6	1.334	29.3	0.255	14.6	1.055
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.139	58.5	0.029
GONIBOBR	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GONIMACU	29.3	0.119	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GYPTCAPE	14.6	0.012	0.0	0.000	0.0	0.000	58.5	0.026	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.012
LANICONC	131.7	1.323	190.2	1.043	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	146.3	0.070	336.5	0.285	14.6	0.010	29.3	0.026	43.9	0.018
NEPHCIRR	58.5	0.092	29.3	0.050	0.0	0.000	0.0	0.000	0.0	0.000
NEPHHOMB	14.6	0.032	43.9	0.442	14.6	0.421	29.3	0.834	43.9	1.798
NEPHJUVE	73.2	0.002	0.0	0.000	43.9	0.010	0.0	0.000	0.0	0.000
NOTOLATE	0.0	0.000	43.9	0.913	43.9	0.749	14.6	1.056	14.6	0.638
OPHELIMA	14.6	0.044	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
OPHIFLEX	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.047
OWENFUSI	0.0	0.000	14.6	0.037	0.0	0.000	0.0	0.000	0.0	0.000
PARAFULG	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	14.6	0.002	14.6	0.002	29.3	0.010
PHOLMINU	0.0	0.000	0.0	0.000	234.1	0.044	0.0	0.000	234.1	0.031
SCOLARMI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.092
SCOLBONN	29.3	0.180	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SCOLSQUA	0.0	0.000	14.6	0.044	0.0	0.000	0.0	0.000	0.0	0.000
SIGAMATH	14.6	0.234	14.6	0.198	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	204.8	0.026	482.8	0.083	14.6	0.004	117.0	0.012	58.5	0.012
SPIOFILI	0.0	0.000	43.9	0.037	58.5	0.016	0.0	0.000	0.0	0.000
SHELIMI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.031	0.0	0.000
SYNEKLAT	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
<u>MISCELLANEOUS</u>										
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
NEMERTIN	0.0	0.000	29.3	0.279	29.3	0.006	29.3	5.260	43.9	0.019
PHORONID	43.9	0.070	453.5	0.187	43.9	0.004	599.8	0.590	117.0	0.078
SUMS	2545.6	5.068	5530.1	5.549	3364.9	26.118	1858.0	15.136	4052.5	45.033
<u>DIVERSITY</u>										
NSPC		38		40		27		24		29
SH-W		2.909		2.286		2.023		2.381		2.238
SIMP		0.089		0.232		0.221		0.159		0.171

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STATION:	OYS 4		OYS 5		OYS 6		OYS 7		OYS 8	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	14.6	0.022	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
AMPETENU	0.0	0.000	0.0	0.000	43.9	0.044	14.6	0.006	0.0	0.000
ATYLSWAM	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	29.3	0.009	0.0	0.000	0.0	0.000
CALLSUBT	0.0	0.000	102.4	4.747	29.3	0.816	14.6	0.917	102.4	8.853
CAPRELLI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	14.6	0.003
EUDODEFO	0.0	0.000	0.0	0.000	43.9	0.013	0.0	0.000	0.0	0.000
HARPANTE	0.0	0.000	14.6	0.004	29.3	0.009	73.2	0.022	14.6	0.004
IONETHOR	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000
IPHITRIS	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	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
PERILONG	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	14.6	0.004	0.0	0.000	0.0	0.000
PSEULONG	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
UPOGDEL	0.0	0.000	29.3	14.923	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
ACROBRAC	102.4	7.726	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHINODERMATA										
AMPHFILI	131.7	0.957	58.5	0.117	687.6	18.402	292.6	2.139	0.0	0.000
BRISLYRI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	3.895	0.0	0.000
ECHICORD	14.6	0.113	14.6	0.067	0.0	0.000	0.0	0.000	29.3	0.006
ECHIJUVE	14.6	0.002	263.3	0.026	0.0	0.000	29.3	0.003	395.0	0.079
OPHIALBI	0.0	0.000	14.6	0.012	0.0	0.000	0.0	0.000	58.5	1.220
OPHIJUVE	102.4	0.021	131.7	0.026	395.0	0.079	1770.2	0.354	1199.7	0.240
MOLLUSCA										
ABRAALBA	687.6	0.138	58.5	0.012	14.6	0.080	14.6	0.002	73.2	0.064
ABRAPRIS	0.0	0.000	0.0	0.000	29.3	0.244	0.0	0.000	73.2	0.006
APLACOPH	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.132	0.0	0.000
ARCTISLA	0.0	0.000	14.6	0.015	0.0	0.000	29.3	0.006	0.0	0.000
CINGVITR	0.0	0.000	73.2	0.015	0.0	0.000	0.0	0.000	0.0	0.000
CORBGIBB	0.0	0.000	453.5	1.492	0.0	0.000	0.0	0.000	0.0	0.000
CULTEPELL	117.0	0.026	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CYLICLYI	58.5	0.013	14.6	0.023	29.3	0.025	29.3	0.010	0.0	0.000
ENSIENSI	14.6	5.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LEPTSQUA	0.0	0.000	58.5	0.051	0.0	0.000	0.0	0.000	0.0	0.000
MYATRUN	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009	0.0	0.000
MYSEBIDE	1155.8	0.231	14.6	0.003	1448.4	0.310	131.7	0.026	351.1	0.070
MYSIUNDA	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
NATIALDE	43.9	0.063	14.6	0.010	0.0	0.000	0.0	0.000	87.8	0.173
NUCUTURG	14.6	0.048	0.0	0.000	0.0	0.000	0.0	0.000	117.0	0.516
TELLFABU	438.9	0.500	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	0.0	0.000	29.3	0.006
THYAFLEX	131.7	0.503	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
VENUSTRI	14.6	0.021	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
APHRACUL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
CAPITELL	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
CAUDERIE	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000	0.0	0.000
CHAESETO	175.6	0.042	0.0	0.000	29.3	0.025	73.2	0.019	0.0	0.000
ETEOLONG	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
FUMISANG	14.6	0.022	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GLYCLAPI	29.3	0.013	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GLYCROUX	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.010	0.0	0.000
GYPTCAPE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	43.9	0.013
HARMIUNU	14.6	0.004	14.6	0.044	0.0	0.000	43.9	0.200	0.0	0.000
HARMNODO	0.0	0.000	0.0	0.000	14.6	0.006	29.3	0.026	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
LANICONC	160.9	3.242	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.012
LUMBLATR	0.0	0.000	14.6	0.041	0.0	0.000	0.0	0.000	87.8	0.132
MAGEALLE	29.3	0.029	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	1111.9	0.603	0.0	0.000	102.4	0.016	0.0	0.000	0.0	0.000
MICRSPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
NEPHHOMB	14.6	0.156	14.6	0.579	43.9	0.729	73.2	0.386	29.3	1.450
NEPHJUVE	43.9	0.010	43.9	0.042	0.0	0.000	43.9	0.025	0.0	0.000
NOTOLATE	0.0	0.000	14.6	0.195	0.0	0.000	29.3	1.350	0.0	0.000
OPHEACUM	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000	14.6	0.023
OPHIFLEX	0.0	0.000	0.0	0.000	14.6	0.019	0.0	0.000	14.6	0.032
OWENFUSI	0.0	0.000	14.6	0.152	0.0	0.000	0.0	0.000	0.0	0.000
PARAGRAC	0.0	0.000	14.6	0.002	0.0	0.000	14.6	0.002	0.0	0.000
PECTKORE	58.5	0.004	43.9	0.004	0.0	0.000	14.6	0.004	29.3	0.026
PHOLMINU	73.2	0.016	0.0	0.000	395.0	0.078	58.5	0.010	43.9	0.016
POLYDORA	0.0	0.000	102.4	0.026	0.0	0.000	0.0	0.000	117.0	0.032
SCALINFL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	131.7	0.067
SCOLAMI	29.3	0.060	0.0	0.000	43.9	0.060	0.0	0.000	14.6	0.002
SIGAMATH	29.3	0.445	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPHAFLAV	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000
SPHAHYTR	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	43.9	0.022	0.0	0.000	0.0	0.000	29.3	0.004	292.6	0.078
SPIOFILI	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOKROE	0.0	0.000	14.6	0.038	0.0	0.000	14.6	0.031	0.0	0.000
SYNEKLAT	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.010	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	58.5	0.016	0.0	0.000	87.8	0.016	73.2	2.537	336.5	0.257
NEMERTIN	204.8	0.171	14.6	0.102	29.3	0.010	29.3	0.151	175.6	0.196
PHORONID	131.7	0.029	73.2	0.042	117.0	0.006	29.3	0.006	0.0	0.000
SUMS	5369.2	20.298	1770.2	22.826	3789.2	21.029	3174.7	12.312	4008.6	13.594
DIVERSITY										
NSPC	38		31		29		33		31	
SH-W	2.649		2.750		2.163		2.040		2.631	
SIMP	0.120		0.109		0.204		0.325		0.127	

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STATION:	OYS 9		OYS 10		OYS 11		OYS 12		OYS 13	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
AMPEBREV	0.0	0.000	14.6	0.022	0.0	0.000	0.0	0.000	0.0	0.000
AMPHIPOD	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ATYLSWAM	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
BATHGUIL	102.4	0.031	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
CALLSUBT	131.7	2.860	58.5	3.112	160.9	11.938	175.6	2.515	43.9	5.403
EUDODEFO	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009
EUDOTRUN	14.6	0.004	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
HARPANTE	14.6	0.004	43.9	0.013	0.0	0.000	14.6	0.004	43.9	0.013
IONETHOR	14.6	0.007	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	0.0	0.000	14.6	0.004
UPOGDELT	0.0	0.000	0.0	0.000	0.0	0.000	29.3	6.131	0.0	0.000
WESTCAEC	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
<u>ECHINODERMATA</u>										
AMPHILI	87.8	1.299	1199.7	16.585	14.6	0.369	14.6	0.070	1068.0	22.325
BRISLYRI	0.0	0.000	14.6	4.130	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.075	14.6	0.803
ECHIJUVE	907.1	0.091	14.6	0.002	58.5	0.006	58.5	0.006	0.0	0.000
ECHIPUSI	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
OPHIALBI	0.0	0.000	0.0	0.000	14.6	0.168	0.0	0.000	0.0	0.000
OPHIJUVE	131.7	0.026	263.3	0.053	658.3	0.132	117.0	0.023	921.7	0.184
<u>MOLLUSCA</u>										
ABRAALBA	14.6	0.012	190.2	0.212	43.9	0.018	0.0	0.000	833.9	0.167
ABRAPRIS	0.0	0.000	14.6	0.107	0.0	0.000	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	14.6	0.291
CINGVITR	0.0	0.000	0.0	0.000	365.8	1.097	29.3	0.029	0.0	0.000
CORBGIBB	0.0	0.000	0.0	0.000	29.3	0.007	14.6	0.057	0.0	0.000
CULTPELL	58.5	0.019	14.6	0.006	0.0	0.000	0.0	0.000	14.6	0.655
CYLICYLI	0.0	0.000	14.6	0.006	0.0	0.000	14.6	0.006	73.2	0.019
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.070
MYSEBIDE	351.1	0.070	760.8	0.152	0.0	0.000	14.6	0.003	2033.6	0.256
NATALDE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
NUCUTENU	0.0	0.000	43.9	0.058	0.0	0.000	0.0	0.000	87.8	0.048
NUCUTURG	14.6	0.121	0.0	0.000	14.6	0.015	0.0	0.000	14.6	0.013
TELLFABU	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000	0.0	0.000
THRAPHAS	0.0	0.000	0.0	0.000	14.6	8.197	0.0	0.000	0.0	0.000
TORNUSUBC	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
<u>POLYCHAETA</u>										
ANAIGROE	0.0	0.000	14.6	0.701	0.0	0.000	0.0	0.000	0.0	0.000
ANASUBU	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
ANIPPAUC	0.0	0.000	0.0	0.000	0.0	0.000	160.9	0.029	0.0	0.000
APHRACUL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007
CAPITELL	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
CAUDERIE	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CHAEVARI	0.0	0.000	0.0	0.000	0.0	0.000	29.3	12.541	0.0	0.000
DIPIGLAU	0.0	0.000	43.9	0.061	0.0	0.000	0.0	0.000	0.0	0.000
ETEOLONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
GATTICIRR	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.783	0.0	0.000
GLYCROUX	0.0	0.000	0.0	0.000	14.6	0.692	14.6	0.672	0.0	0.000
GONIBOBR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007
GONTMACU	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
GYPTCAPE	14.6	0.004	0.0	0.000	29.3	0.016	14.6	0.006	0.0	0.000
HARMLONG	29.3	0.023	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LANICONC	248.7	0.650	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	14.6	0.053	43.9	0.010	0.0	0.000
MAGEPAPI	175.6	0.113	14.6	0.067	0.0	0.000	0.0	0.000	0.0	0.000
NEPHCIRR	29.3	0.026	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEPHHOMB	0.0	0.000	0.0	0.000	14.6	0.042	0.0	0.000	0.0	0.000
NEPHJUVE	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
OPHEACUM	0.0	0.000	0.0	0.000	29.3	0.010	14.6	0.004	0.0	0.000
OPHIFLEX	29.3	0.098	0.0	0.000	0.0	0.000	14.6	0.037	0.0	0.000
PECTKORE	58.5	0.013	0.0	0.000	43.9	0.002	204.8	0.012	0.0	0.000
PHOLMINU	14.6	0.004	190.2	0.031	14.6	0.006	0.0	0.000	351.1	0.038
POLYKINB	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.562
SCOLARMI	29.3	0.037	14.6	0.029	0.0	0.000	0.0	0.000	0.0	0.000
SIGAMATH	43.9	0.771	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.290
SPIOBOMB	117.0	0.041	219.4	0.047	29.3	0.004	0.0	0.000	0.0	0.000
SPIOFILI	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.002
STHEBOA	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
STHELIMI	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SYNEKIAT	0.0	0.000	87.8	0.016	0.0	0.000	43.9	0.018	58.5	0.010
<u>MISCELLANEOUS</u>										
ANTHOZOA	0.0	0.000	87.8	0.174	43.9	0.016	0.0	0.000	0.0	0.000
GOLFELON	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.784	0.0	0.000
GOLFFVULG	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.016	0.0	0.000
NEMERTIN	87.8	0.209	0.0	0.000	43.9	0.235	14.6	0.013	87.8	0.470
PHORONID	0.0	0.000	117.0	0.010	307.2	0.263	0.0	0.000	58.5	0.004
PLATHYHE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
SUMS	2809.0	6.554	3555.1	25.557	2048.2	23.300	1199.7	23.855	5910.5	31.656
<u>DIVERSITY</u>										
NSPC	29		27		26		27		25	
SH-W	2.535		2.267		2.315		2.795		1.991	
SIMP	0.143		0.178		0.168		0.089		0.200	

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STATION:	OYS 14		OYS 15		OYS 16		OYS 17		OYS 18	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPEBREV	14.6	0.029	0.0	0.000	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	58.5	0.018	0.0	0.000
BATHGUIL	0.0	0.000	0.0	0.000	43.9	0.013	175.6	0.070	0.0	0.000
CALLSUBT	29.3	1.355	58.5	2.928	102.4	7.706	146.3	4.453	0.0	0.000
CORYCASS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.164
DIASBRAD	0.0	0.000	0.0	0.000	29.3	0.012	0.0	0.000	14.6	0.007
EUDODEFO	0.0	0.000	0.0	0.000	0.0	0.000	102.4	0.031	0.0	0.000
EUDOTRUN	0.0	0.000	0.0	0.000	58.5	0.018	0.0	0.000	14.6	0.004
HARPANTE	175.6	0.053	0.0	0.000	87.8	0.026	102.4	0.031	14.6	0.004
IONETHOR	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000
PERILONG	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009	14.6	0.004
UPOGDEL	0.0	0.000	0.0	0.000	29.3	3.932	0.0	0.000	0.0	0.000
UROTBRV	0.0	0.000	0.0	0.000	0.0	0.000	336.5	0.135	0.0	0.000
ECHINODERMATA										
AMPHFILI	599.8	4.932	29.3	0.088	409.6	10.662	438.9	6.667	14.6	0.164
ECHICORD	0.0	0.000	14.6	0.119	14.6	4.294	14.6	8.622	0.0	0.000
ECHIJUVE	438.9	0.044	263.3	0.026	58.5	0.006	0.0	0.000	526.7	0.053
OPHIJUVE	526.7	0.105	146.3	0.029	117.0	0.023	219.4	0.044	351.1	0.070
MOLLUSCA										
ABRAALBA	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009	0.0	0.000
ABRAPRIS	0.0	0.000	0.0	0.000	14.6	0.016	0.0	0.000	0.0	0.000
ARCTISLA	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000
CINGVITR	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000
CORBGIBB	131.7	0.377	0.0	0.000	190.2	0.531	0.0	0.000	0.0	0.000
CULTEPELL	0.0	0.000	0.0	0.000	14.6	0.003	87.8	0.013	0.0	0.000
CYLICYLI	14.6	0.003	14.6	0.019	0.0	0.000	0.0	0.000	0.0	0.000
MYSEBIDE	190.2	0.038	43.9	0.009	453.5	0.091	0.0	0.000	0.0	0.000
NATIALDE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	43.9	0.012
NUCUTURG	14.6	0.007	0.0	0.000	29.3	0.249	0.0	0.000	0.0	0.000
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.002
THRACONV	0.0	0.000	14.6	3.855	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	0.004	0.0	0.000
POLYCHAETA										
ANAIGROE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.177	0.0	0.000
CHAESETO	29.3	0.002	14.6	0.010	0.0	0.000	146.3	0.035	0.0	0.000
CHAEVARI	0.0	0.000	58.5	7.726	0.0	0.000	0.0	0.000	0.0	0.000
ETEOLONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
EXOGHEBE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
GATTCCIRR	0.0	0.000	29.3	1.422	0.0	0.000	0.0	0.000	0.0	0.000
GLYCLAPI	14.6	0.012	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.019
GLYCROUX	14.6	0.688	29.3	0.089	14.6	0.053	29.3	0.054	0.0	0.000
GYFTCAPE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	14.6	0.110	0.0	0.080	0.0	0.000
LANICONC	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	29.3	0.107
LUMBLATR	14.6	0.114	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MAGEALLE	0.0	0.000	0.0	0.000	14.6	0.095	0.0	0.000	0.0	0.000
MAGEPAPI	0.0	0.000	0.0	0.000	14.6	0.016	73.2	0.038	292.6	0.367
NEPHCIRR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.026
NEPHHOMB	29.3	0.064	14.6	1.061	0.0	0.000	0.0	0.000	0.0	0.000
NEPHJUVE	0.0	0.000	0.0	0.000	14.6	0.006	14.6	0.018	0.0	0.000
OPHIFLEX	0.0	0.000	14.6	0.042	0.0	0.000	29.3	0.073	29.3	0.102
OWENFUSI	0.0	0.000	0.0	0.000	29.3	0.198	0.0	0.000	0.0	0.000
PECTKORE	14.6	0.002	14.6	0.002	14.6	0.002	29.3	0.002	0.0	0.000
PHOLMINU	73.2	0.012	0.0	0.000	117.0	0.023	87.8	0.019	14.6	0.004
POECSERP	0.0	0.000	0.0	0.000	14.6	0.031	0.0	0.000	0.0	0.000
POLYDORA	0.0	0.000	0.0	0.000	58.5	0.038	0.0	0.000	0.0	0.000
SCALINFL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.019
SCOLARMI	0.0	0.000	0.0	0.000	29.3	1.631	29.3	0.022	0.0	0.000
SIGAMATH	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.489
SPIOBOMB	0.0	0.000	29.3	0.075	29.3	0.013	248.7	0.013	1755.6	0.777
SPIOFILI	43.9	0.004	0.0	0.000	73.2	0.018	29.3	0.010	0.0	0.000
SPIOKROE	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
STHEBOA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
STHELIMI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
SYNEKLAT	29.3	0.010	29.3	0.006	73.2	0.019	0.0	0.000	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	29.3	0.051	29.3	17.467	0.0	0.000	0.0	0.000
CUCUELON	0.0	0.000	0.0	0.000	14.6	0.108	0.0	0.000	0.0	0.000
EDWACLAP	0.0	0.000	0.0	0.000	14.6	0.399	0.0	0.000	0.0	0.000
GOLFFVULG	0.0	0.000	58.5	0.508	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	58.5	0.515	0.0	0.000	0.0	0.000	73.2	0.022	43.9	0.010
PHORONID	14.6	0.004	0.0	0.000	146.3	0.013	73.2	0.010	29.3	0.004
SUMS	2487.1	8.376	965.6	18.087	2384.7	47.826	2750.4	20.633	3306.4	2.410
DIVERSITY										
NSPC	22		22		34		33		21	
SH-W	2.261		2.603		2.888		2.955		1.645	
SIMP	0.150		0.118		0.089		0.073		0.327	

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STATION:	OYS 19		OYS 20		OYS 21		OYS 22		OYS 23	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009	29.3	0.009
CALLSUBT	73.2	1.018	292.6	6.693	102.4	4.718	131.7	9.414	14.6	1.058
DIASBRAD	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000	0.0	0.000
EUDODEFO	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	58.5	0.018
EUDOTRUN	0.0	0.000	14.6	0.004	14.6	0.004	14.6	0.004	0.0	0.000
HARPANTE	43.9	0.013	175.6	0.053	14.6	0.004	14.6	0.004	14.6	0.004
HIPPIDENT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
IONETHOR	0.0	0.000	29.3	0.013	0.0	0.000	14.6	0.029	0.0	0.000
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	0.0	0.000	29.3	0.006
UPOGDELT	14.6	1.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
UROTBREV	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000
ECHINODERMATA										
AMPHFILI	424.3	4.316	58.5	0.723	482.8	3.698	321.9	2.849	321.9	9.489
ASTEJUVE	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	29.3	0.006
ECHICORD	43.9	6.159	0.0	0.000	0.0	0.000	0.0	0.000	14.6	6.227
ECHIJUVE	0.0	0.000	14.6	0.002	29.3	0.003	43.9	0.004	0.0	0.000
ECHIPUSI	0.0	0.000	204.8	0.038	0.0	0.000	0.0	0.000	0.0	0.000
OPHIALBI	0.0	0.000	0.0	0.000	29.3	0.484	0.0	0.000	0.0	0.000
OPHIJUVE	2618.8	0.524	380.4	0.076	599.8	0.120	160.9	0.032	424.3	0.085
MOLLUSCA										
ABRAALBA	160.9	0.016	73.2	0.015	14.6	0.003	73.2	0.015	395.0	0.287
ABRAPRIS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.028
ARCTISLA	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
CINGVITR	102.4	0.031	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CULTEPELL	73.2	0.007	117.0	0.016	0.0	0.000	14.6	0.002	14.6	0.063
CYLICYLI	14.6	0.010	0.0	0.000	43.9	0.045	0.0	0.000	14.6	0.002
DOSIEXOL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.970
MACTCORA	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
MONTFERR	73.2	0.063	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000
MYATRUN	0.0	0.000	0.0	0.000	14.6	0.009	0.0	0.000	0.0	0.000
MYSEBIDE	87.8	0.018	14.6	0.003	424.3	0.085	263.3	0.053	2852.9	0.571
MYSIUNDA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.004
NATIALDE	29.3	0.006	14.6	0.003	0.0	0.000	0.0	0.000	14.6	0.004
NUCUNUCL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.032
NUCUTENU	0.0	0.000	58.5	0.135	14.6	0.003	29.3	0.018	0.0	0.000
NUCUTURG	0.0	0.000	14.6	0.022	14.6	0.007	0.0	0.000	146.3	0.531
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.110
TELLTENU	14.6	0.002	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
THRAPHAS	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	58.5	0.012
THYAFLEX	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
TORNSUBC	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
POLYCHAETA										
ANATSUBU	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000	73.2	0.007
APHRJUVE	14.6	0.002	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
CAPITELL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
CHAESETO	0.0	0.000	43.9	0.026	0.0	0.000	14.6	0.007	0.0	0.000
CHAEVARI	43.9	21.256	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
EXOGHEBE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
GATTTCIRR	43.9	2.570	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GLYCLAPI	0.0	0.000	43.9	0.013	0.0	0.000	0.0	0.000	0.0	0.000
GLYCROUX	58.5	0.960	0.0	0.000	43.9	0.533	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	29.3	0.004
GYPTCAPE	0.0	0.000	14.6	0.025	14.6	0.006	0.0	0.000	0.0	0.000
HARMLONG	0.0	0.000	0.0	0.000	14.6	0.031	0.0	0.000	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	14.6	0.129	0.0	0.000	0.0	0.000
HARMNODO	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HETEFILE	29.3	0.006	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	73.2	0.012	58.5	0.004	0.0	0.000	43.9	0.044
LUMBLATR	0.0	0.000	29.3	0.019	58.5	0.133	0.0	0.000	0.0	0.000
MAGEPAPI	0.0	0.000	190.2	0.060	0.0	0.000	117.0	0.026	643.7	0.132
NEPHCAEC	0.0	0.000	14.6	0.127	0.0	0.000	0.0	0.000	0.0	0.000
NEPHHOMB	29.3	0.537	43.9	2.377	14.6	0.060	29.3	0.563	14.6	0.405
NEPHJUVE	43.9	0.004	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007
NERELONG	0.0	0.000	0.0	0.000	29.3	1.842	0.0	0.000	0.0	0.000
NOTOLATE	43.9	1.072	14.6	2.824	0.0	0.000	0.0	0.000	0.0	0.000
OPHEACUM	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.023	0.0	0.000
OPHIFLEX	14.6	0.037	14.6	0.060	14.6	0.032	0.0	0.000	0.0	0.000
PECTAURI	0.0	0.000	29.3	0.012	14.6	0.006	0.0	0.000	0.0	0.000
PECTKORE	29.3	0.007	438.9	0.025	219.4	0.092	14.6	0.002	14.6	0.002
PHOLMINU	175.6	0.031	43.9	0.010	58.5	0.018	87.8	0.013	409.6	0.061
POECSERP	0.0	0.000	321.9	0.149	0.0	0.000	14.6	0.035	58.5	0.026
POLYDORA	73.2	0.025	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	29.3	0.022	0.0	0.000	14.6	0.023	29.3	0.042
SIGAMATH	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.035
SPIOBOMB	29.3	0.007	278.0	0.050	14.6	0.002	0.0	0.000	43.9	0.007
SYNEKLAT	29.3	0.007	102.4	0.023	0.0	0.000	29.3	0.006	14.6	0.002
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	73.2	1.902	14.6	0.006	14.6	0.300
CUCUELON	0.0	0.000	0.0	0.000	29.3	0.721	0.0	0.000	0.0	0.000
GOLFELON	43.9	7.066	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GOLFFVULG	0.0	0.000	0.0	0.000	29.3	0.530	0.0	0.000	0.0	0.000
HYDROZOA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.013
NEMERTIN	29.3	0.010	160.9	0.110	29.3	0.013	29.3	0.102	87.8	0.351
PHORONID	14.6	0.004	43.9	0.010	87.8	0.145	14.6	0.002	0.0	0.000
SUMS	4549.9	46.797	3540.5	13.784	2706.5	15.419	1565.4	13.254	6276.3	20.958
DIVERSITY										
NSPC	33		41		36		28		38	
SH-W	1.954		3.095		2.673		2.693		2.227	
SIMP	0.346		0.063		0.118		0.102		0.234	

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STATION:	OYS 24		OYS 25		OYS 26		OYS 27		OYS 28	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.022
BATHTENU	87.8	0.026	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CALLSUBT	43.9	1.148	58.5	1.609	58.5	4.472	58.5	4.038	58.5	0.521
EUDOTRUN	0.0	0.000	29.3	0.006	0.0	0.000	29.3	0.006	0.0	0.000
HARPANTE	0.0	0.000	131.7	0.040	0.0	0.000	190.2	0.057	29.3	0.009
HIPPDENT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.009
IONETHOR	0.0	0.000	14.6	0.029	0.0	0.000	0.0	0.000	0.0	0.000
MEGAAGIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
MICRMACU	0.0	0.000	58.5	0.018	0.0	0.000	0.0	0.000	0.0	0.000
PERILONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
UPOGDEL	0.0	0.000	14.6	1.346	0.0	0.000	0.0	0.000	0.0	0.000
UROTBREV	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
UROTPOSE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009
ECHINODERMATA										
AMPHFILI	0.0	0.000	0.0	0.000	29.3	0.022	102.4	1.655	0.0	0.000
ECHICORD	0.0	0.000	0.0	0.000	14.6	6.442	14.6	5.365	14.6	17.467
ECHIJUVE	14.6	0.002	248.7	0.025	73.2	0.007	87.8	0.009	1916.5	0.192
OPHIJUVE	0.0	0.000	58.5	0.012	0.0	0.000	73.2	0.015	102.4	0.021
MOLLUSCA										
ABRAALBA	0.0	0.000	14.6	0.097	29.3	0.003	43.9	0.009	29.3	0.004
ABRAJUVE	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ARCTISLA	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000
CHLAVARI	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
CINGVITR	0.0	0.000	14.6	0.015	0.0	0.000	14.6	0.007	0.0	0.000
CORBGIBB	0.0	0.000	29.3	0.158	14.6	0.086	14.6	0.004	0.0	0.000
CULTELL	14.6	0.013	0.0	0.000	0.0	0.000	14.6	0.002	73.2	0.029
EULIALBA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
MONTFERR	29.3	0.004	0.0	0.000	14.6	0.032	0.0	0.000	14.6	0.007
MYSEBIDE	0.0	0.000	14.6	0.003	29.3	0.006	43.9	0.009	87.8	0.018
MYSIUNDA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
NATIALDE	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000
NUCUTURG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.022
TELLFABU	29.3	0.002	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	0.0	0.000	14.6	0.003	14.6	0.066
POLYCHAETA										
AONIPAUC	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
CHAESETO	43.9	0.007	29.3	0.012	0.0	0.000	14.6	0.006	43.9	0.010
CHAEVARI	0.0	0.000	73.2	14.863	14.6	0.844	0.0	0.000	0.0	0.000
DIPGLAU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006
EXOGHEBE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
GATTICRR	0.0	0.000	73.2	2.180	0.0	0.000	0.0	0.000	0.0	0.000
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.022
GLYCROUX	0.0	0.000	14.6	0.032	0.0	0.000	0.0	0.000	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000	0.0	0.000
GYPTCAPE	43.9	0.048	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	0.019	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	0.0	0.000	117.0	0.050	0.0	0.000	0.0	0.000
LUMBLATR	43.9	0.195	14.6	0.042	14.6	0.048	0.0	0.000	0.0	0.000
MAGEALLE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.132	0.0	0.000
MAGEPAPI	146.3	0.083	29.3	0.007	0.0	0.000	234.1	0.098	1141.1	1.194
NEPHCIRR	0.0	0.000	58.5	0.224	0.0	0.000	0.0	0.000	0.0	0.000
NEPHHOMB	58.5	0.092	0.0	0.000	43.9	0.110	29.3	1.093	0.0	0.000
NEPHJUVE	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	14.6	0.073	0.0	0.000	0.0	0.000	0.0	0.000
OPHEACUM	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.047	0.0	0.000
OPHELIMA	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
OPHIFLEX	14.6	0.104	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
OWENFUSI	0.0	0.000	0.0	0.000	14.6	1.046	0.0	0.000	0.0	0.000
PARAGRAC	0.0	0.000	43.9	0.004	0.0	0.000	0.0	0.000	0.0	0.000
PECTJUVE	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
PHOLMINU	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.013	73.2	0.012
POECSERP	14.6	0.054	0.0	0.000	0.0	0.000	14.6	0.026	0.0	0.000
SCALINFL	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	0.0	0.000	0.0	0.000	204.8	0.126	14.6	0.114
SCOLBONN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.089	0.0	0.000
SIGAMATH	14.6	0.079	0.0	0.000	0.0	0.000	14.6	0.508	14.6	0.023
SPIOBOMB	365.8	0.072	0.0	0.000	0.0	0.000	14.6	0.004	234.1	0.073
SPIOFILI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006
STHELIMI	14.6	0.007	0.0	0.000	14.6	0.101	0.0	0.000	0.0	0.000
SYNEKLAT	0.0	0.000	43.9	0.007	0.0	0.000	73.2	0.007	29.3	0.010
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000
ARCHIANN	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
CUCUELON	0.0	0.000	14.6	0.198	14.6	0.145	0.0	0.000	0.0	0.000
GOLFELON	0.0	0.000	43.9	1.593	0.0	0.000	0.0	0.000	0.0	0.000
GOLFFVULG	0.0	0.000	0.0	0.000	73.2	0.633	0.0	0.000	0.0	0.000
NEMERTIN	43.9	0.045	0.0	0.000	14.6	0.022	14.6	0.004	278.0	0.151
PHORONID	29.3	0.038	0.0	0.000	0.0	0.000	58.5	0.023	73.2	0.006
SUMS	1068.0	2.023	1228.9	22.612	687.6	14.108	1550.8	13.377	4535.3	20.043
DIVERSITY										
NSPC	19		29		23		31		32	
SH-W	2.367		2.966		2.848		2.931		2.019	
SIMP	0.157		0.076		0.075		0.076		0.251	

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STATION:	OYS 29		OYS 30		OYS 31		OYS 32		OYS 33	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
AMPETENU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.012
BATHGUIL	14.6	0.004	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000
CALLSUBT	0.0	0.000	58.5	1.399	160.9	4.986	117.0	6.636	73.2	4.850
CORYCASS	87.8	0.135	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.044
DIASBRAD	0.0	0.000	0.0	0.000	29.3	0.037	0.0	0.000	0.0	0.000
EUDOTRUN	14.6	0.003	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
HARPANTE	58.5	0.018	0.0	0.000	58.5	0.018	87.8	0.026	43.9	0.013
PERILONG	14.6	0.004	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.004
PSEULONG	29.3	0.006	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
UPOGDELT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.293
ECHINODERMATA										
ACROBRAC	43.9	0.780	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
AMPHFILI	175.6	4.328	0.0	0.000	204.8	5.611	102.4	3.658	1243.6	8.655
ASTRIRRE	14.6	4.256	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	0.0	0.000	14.6	4.944	0.0	0.000	43.9	5.337	0.0	0.000
ECHIJUVE	0.0	0.000	43.9	0.004	43.9	0.004	131.7	0.013	278.0	0.028
OPHIJUVE	614.5	0.123	0.0	0.000	87.8	0.018	570.6	0.114	0.0	0.000
MOLLUSCA										
ABRAALBA	585.2	0.230	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
ARCTISIA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	9.141
CINGVITR	0.0	0.000	0.0	0.000	29.3	0.015	863.2	0.173	0.0	0.000
CORGBIBB	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.190	0.0	0.000
CULTEPELL	43.9	0.007	29.3	0.016	87.8	0.009	0.0	0.000	0.0	0.000
CYLCICLI	29.3	0.004	0.0	0.000	0.0	0.000	87.8	0.322	29.3	0.023
MONTFERR	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.007	0.0	0.000
MYSEBIDE	3335.6	0.667	43.9	0.009	365.8	0.073	219.4	0.044	204.8	0.041
MYSIUNDA	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NATIALDE	43.9	0.025	0.0	0.000	0.0	0.000	87.8	0.350	0.0	0.000
NUCUTENU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.012	0.0	0.000
NUCUTURG	117.0	0.856	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
TELLFABU	160.9	0.044	29.3	0.002	0.0	0.000	0.0	0.000	0.0	0.000
THRAPHAS	29.3	0.012	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
THYAFLEX	117.0	0.252	0.0	0.000	0.0	0.000	14.6	0.009	0.0	0.000
VENUSTRI	0.0	0.000	14.6	2.774	0.0	0.000	0.0	0.000	0.0	0.000
POLYCHAETA										
ANAISSUBU	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CAPITELL	0.0	0.000	43.9	0.006	0.0	0.000	0.0	0.000	0.0	0.000
CAUDERIE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
CHAESETO	14.6	0.006	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000
CHAEVARI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.778
DIPGLAU	29.3	0.023	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GATTCIRR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.007
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.054	0.0	0.000
GLYCRUX	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.200	0.0	0.000
GONIMACU	14.6	0.004	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
GYPTCAPE	0.0	0.000	29.3	0.025	0.0	0.000	14.6	0.012	14.6	0.006
HARMLUNU	0.0	0.000	14.6	0.048	0.0	0.000	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	58.5	2.117	0.0	0.000	0.0	0.000	0.0	0.000
LUMBLATR	0.0	0.000	29.3	0.199	43.9	0.072	43.9	0.129	0.0	0.000
MAGEALLE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.104
MAGEPAPI	204.8	0.050	29.3	0.007	14.6	0.006	14.6	0.002	0.0	0.000
NEPHHOMB	29.3	0.097	43.9	1.127	14.6	0.749	14.6	1.274	14.6	0.058
NEPHJUVE	29.3	0.007	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.569	0.0	0.000
OPHELIMA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.149
OPHIFLEX	14.6	0.038	14.6	0.066	14.6	0.035	0.0	0.000	29.3	0.278
PARAGRAC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
PECTJUVE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	117.0	0.006	14.6	0.002	87.8	0.023
PHOLMINU	58.5	0.007	0.0	0.000	0.0	0.000	29.3	0.007	131.7	0.018
POECSERP	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
SCALINFL	0.0	0.000	29.3	0.007	0.0	0.000	14.6	0.002	0.0	0.000
SCOLARMI	14.6	0.013	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SIGAMATH	58.5	0.252	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	175.6	0.050	468.2	0.133	0.0	0.000	29.3	0.004	0.0	0.000
SPIOFILI	14.6	0.002	0.0	0.000	175.6	0.025	29.3	0.006	175.6	0.042
SYNEKLAT	0.0	0.000	0.0	0.000	14.6	0.006	43.9	0.007	29.3	0.010
MISCELLANEOUS										
GOLFFVULG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	1.093
NEMERTIN	29.3	0.004	0.0	0.000	14.6	0.004	29.3	0.016	43.9	0.029
OLIGOCHA	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
PHORONID	87.8	0.035	102.4	0.167	43.9	0.054	29.3	0.006	43.9	0.013
SUMS	6334.8	12.348	1243.6	13.087	1594.7	11.745	2852.9	19.180	2677.3	27.720
DIVERSITY										
NSPC	35		26		23		29		27	
SH-W	2.014		2.562		2.582		2.504		2.158	
SIMP	0.300		0.163		0.107		0.148		0.243	

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STATION:	OYS 34		OYS 35		OYS 36		OYS 37		OYS 38	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
APHEJURI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000
BATHELEG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009
BATHGUIL	0.0	0.000	58.5	0.018	0.0	0.000	0.0	0.000	14.6	0.006
BATHJUVE	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
CALLSUBT	204.8	8.207	29.3	4.067	73.2	2.970	175.6	2.592	0.0	0.000
CORYCASS	14.6	0.022	0.0	0.000	0.0	0.000	58.5	0.086	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
EUDOTRUN	0.0	0.000	29.3	0.006	14.6	0.003	0.0	0.000	0.0	0.000
HARPANTE	175.6	0.053	146.3	0.044	14.6	0.004	102.4	0.031	0.0	0.000
IONETHOR	14.6	0.007	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
PERILONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.018
PONTALTA	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	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009
UPOGDELT	14.6	3.906	0.0	0.000	29.3	10.172	14.6	4.859	0.0	0.000
UROTELEG	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000
<u>ECHINODERMATA</u>										
AMPHILI	0.0	0.000	424.3	6.355	102.4	1.495	380.4	3.552	0.0	0.000
BRISLYRI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	7.783	0.0	0.000
ECHICORD	0.0	0.000	14.6	10.327	0.0	0.000	0.0	0.000	58.5	14.895
ECHIJUVE	424.3	0.042	43.9	0.004	0.0	0.000	117.0	0.012	131.7	0.013
OPHIJUVE	321.9	0.064	117.0	0.023	117.0	0.023	1155.8	0.231	0.0	0.000
<u>MOLLUSCA</u>										
ABRAALBA	117.0	0.031	29.3	0.019	102.4	0.021	0.0	0.000	0.0	0.000
CINGVITR	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
CORBGIBB	0.0	0.000	14.6	0.012	0.0	0.000	0.0	0.000	0.0	0.000
CULTPELL	14.6	0.002	160.9	0.021	0.0	0.000	0.0	0.000	87.8	0.028
CYLCYLI	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.037	0.0	0.000
MONTFERR	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.007	73.2	0.056
MYSEBIDE	175.6	0.035	1126.5	0.225	87.8	0.018	87.8	0.018	58.5	0.012
MYSIUNDA	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
NATIALDE	29.3	0.016	29.3	0.012	0.0	0.000	0.0	0.000	14.6	0.156
NUCUTURG	29.3	0.060	29.3	0.290	0.0	0.000	0.0	0.000	14.6	0.173
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	102.4	0.021
THRAPHAS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
<u>POLYCHAETA</u>										
ANAIMUCO	0.0	0.000	0.0	0.000	14.6	0.433	0.0	0.000	0.0	0.000
APHRJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
ARICJEFF	29.3	0.004	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
CAPITELL	0.0	0.000	0.0	0.000	29.3	0.004	14.6	0.004	0.0	0.000
CHAESETO	0.0	0.000	29.3	0.016	0.0	0.000	14.6	0.016	87.8	0.026
CHAEVARI	0.0	0.000	14.6	0.740	14.6	2.974	87.8	17.342	0.0	0.000
ETEOLONG	0.0	0.000	14.6	0.073	0.0	0.000	0.0	0.000	0.0	0.000
GATTCIRR	0.0	0.000	0.0	0.000	29.3	1.734	73.2	2.086	0.0	0.000
GLYCJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
GLYCROUX	14.6	0.107	0.0	0.000	0.0	0.000	29.3	0.471	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
GYPTCAPE	29.3	0.006	14.6	0.010	14.6	0.004	0.0	0.000	0.0	0.000
HARMLONG	0.0	0.000	0.0	0.000	14.6	0.133	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	0.007
HARMNODO	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	14.6	0.284	0.0	0.000	0.0	0.000	29.3	0.004
LUMBLATR	117.0	0.489	0.0	0.000	14.6	0.098	87.8	0.104	0.0	0.000
MAGEPAPI	0.0	0.000	321.9	0.198	0.0	0.000	0.0	0.000	673.0	0.290
NEPHCIRR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.042
NEPHHOMB	14.6	2.015	14.6	0.633	58.5	2.987	0.0	0.000	14.6	0.044
NEPHJUVE	73.2	0.022	29.3	0.023	0.0	0.000	29.3	0.022	29.3	0.006
NOTOLATE	0.0	0.000	0.0	0.000	14.6	0.369	14.6	0.557	0.0	0.000
OPHEACUM	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000
OPHELIMA	14.6	0.091	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
OPHIFLEX	29.3	0.066	14.6	0.029	0.0	0.000	0.0	0.000	0.0	0.000
OWENFUSI	14.6	0.129	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
PARAGRAC	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.006	0.0	0.000
PECTKORE	14.6	0.002	58.5	0.002	0.0	0.000	73.2	0.006	43.9	0.004
PHOLMINU	14.6	0.006	73.2	0.010	14.6	0.004	58.5	0.263	87.8	0.018
POECSERP	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
POLYDORA	58.5	0.018	0.0	0.000	87.8	0.023	351.1	0.089	0.0	0.000
SCOLARMI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.366
SIGAJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.010
SIGAMATH	0.0	0.000	29.3	1.118	0.0	0.000	0.0	0.000	14.6	0.247
SPIOBOMB	29.3	0.004	14.6	0.037	0.0	0.000	0.0	0.000	438.9	0.095
SPIOFILI	0.0	0.000	58.5	0.018	0.0	0.000	117.0	0.023	0.0	0.000
STHELIMI	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SYNEKLAT	0.0	0.000	14.6	0.006	0.0	0.000	14.6	0.004	0.0	0.000
<u>MISCELLANEOUS</u>										
CUCUELON	0.0	0.000	0.0	0.000	14.6	0.060	0.0	0.000	0.0	0.000
GOLFELON	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.320	0.0	0.000
GOLFFVULG	0.0	0.000	0.0	0.000	14.6	0.006	160.9	0.505	0.0	0.000
NEMERTIN	58.5	1.106	14.6	0.006	0.0	0.000	87.8	0.037	29.3	0.022
PHORONID	760.8	0.176	234.1	0.241	482.8	0.104	73.2	0.032	0.0	0.000
SUMS	2852.8	16.699	3321.0	24.895	1389.9	23.647	3642.9	41.125	2340.8	16.583
<u>DIVERSITY</u>										
NSPC	30		36		23		35		29	
SH-W	2.563		2.551		2.450		2.697		2.620	
SIMP	0.124		0.154		0.154		0.133		0.133	

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STATION:	OYS 39		OYS 40		OYS 41		OYS 42		OFF 1	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ARGIHAMA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.004
BATHELEG	0.0	0.000	87.8	0.026	0.0	0.000	73.2	0.022	0.0	0.000
BATHGUIL	58.5	0.023	0.0	0.000	0.0	0.000	14.6	0.007	14.6	0.004
BATHJUVE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009	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	0.0	0.000	102.4	3.480	14.6	0.452	0.0	0.000	0.0	0.000
CAPRELLI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
CORYCASS	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.026	0.0	0.000
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.029	14.6	0.007
EUDODEFO	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
HARPAITE	14.6	0.004	87.8	0.026	0.0	0.000	0.0	0.000	0.0	0.000
HIPPIDENT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
IONETHOR	0.0	0.000	14.6	0.004	14.6	0.022	0.0	0.000	0.0	0.000
PERILONG	0.0	0.000	14.6	0.004	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	43.9	0.013	0.0	0.000
PSEULONG	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.012	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
UROTPOSE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.013	0.0	0.000
<u>ECHINODERMATA</u>										
AMPHFILI	746.1	11.284	658.3	16.121	321.9	4.987	29.3	0.132	0.0	0.000
ASTEJUVE	0.0	0.000	14.6	0.003	0.0	0.000	87.8	0.018	0.0	0.000
ASTIRIRE	14.6	3.069	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	14.6	3.855	14.6	6.120	0.0	0.000	0.0	0.000	29.3	7.998
ECHIJUVE	716.9	0.072	87.8	0.009	0.0	0.000	482.8	0.048	2487.1	0.249
OPHIJUVE	73.2	0.015	131.7	0.026	1053.4	0.211	204.8	0.041	43.9	0.009
<u>MOLLUSCA</u>										
ABRAALBA	102.4	0.021	29.3	0.004	336.5	0.034	0.0	0.000	29.3	0.061
ABRAPRIS	0.0	0.000	0.0	0.000	204.8	0.244	0.0	0.000	0.0	0.000
ARCTISIA	0.0	0.000	29.3	0.002	0.0	0.000	0.0	0.000	0.0	0.000
CORBGIBB	0.0	0.000	58.5	0.034	0.0	0.000	0.0	0.000	0.0	0.000
CULTPELL	14.6	0.002	0.0	0.000	43.9	0.013	0.0	0.000	14.6	0.002
CYLICYLI	14.6	0.010	0.0	0.000	43.9	0.162	29.3	0.048	0.0	0.000
DOSILUPI	0.0	0.000	0.0	0.000	29.3	4.017	0.0	0.000	0.0	0.000
ENSISILI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	35.583
ENSISPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	2.092
EULIALBA	0.0	0.000	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000
LUCIBORE	0.0	0.000	0.0	0.000	14.6	1.699	0.0	0.000	0.0	0.000
MONTFERR	58.5	0.057	0.0	0.000	29.3	0.053	0.0	0.000	102.4	0.072
MYATRUN	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
MYSEBIDE	263.3	0.051	482.8	0.101	819.3	0.164	0.0	0.000	29.3	0.006
MYSIUNDA	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000
NATIALDE	0.0	0.000	14.6	0.013	43.9	0.023	58.5	0.083	43.9	0.018
NUCUTENU	14.6	0.028	43.9	0.044	14.6	0.009	0.0	0.000	0.0	0.000
NUCUTURG	0.0	0.000	29.3	0.274	43.9	0.255	0.0	0.000	14.6	0.012
SPISSUBT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.029
TELLFABU	0.0	0.000	0.0	0.000	278.0	0.512	73.2	0.035	438.9	0.151
THRAPHAS	0.0	0.000	0.0	0.000	14.6	0.003	29.3	0.010	29.3	0.152
THYAFLEX	0.0	0.000	0.0	0.000	29.3	0.089	0.0	0.000	0.0	0.000
<u>POLYCHAETA</u>										
ANAIGROE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	73.2	0.026
ANAIJUVE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
ANAIMACU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.016	0.0	0.000
ARICMINU	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000
CHAESETO	0.0	0.000	58.5	0.016	0.0	0.000	29.3	0.012	14.6	0.016
DIPLGLAU	0.0	0.000	0.0	0.000	58.5	0.380	0.0	0.000	0.0	0.000
ETEOLONG	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.004	541.3	0.025
EUMISANG	0.0	0.000	0.0	0.000	0.0	0.000	146.3	0.058	0.0	0.000
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
GLYCROUX	0.0	0.000	14.6	0.079	0.0	0.000	0.0	0.000	0.0	0.000
GONIBOBR	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000
GONIMACU	0.0	0.000	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000
GYPTCAPE	0.0	0.000	14.6	0.002	14.6	0.013	0.0	0.000	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	907.1	3.325	58.5	0.012	424.3	1.663	175.6	0.032
MAGEPAPI	58.5	0.022	87.8	0.010	643.7	0.249	1360.6	1.526	2706.6	3.722
NEPHCAEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.180
NEPHCIRR	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.032	0.0	0.000
NEPHHOMB	14.6	0.031	14.6	0.029	43.9	0.666	14.6	0.979	0.0	0.000
NEPHJUVE	43.9	0.010	0.0	0.000	58.5	0.013	0.0	0.000	117.0	0.018
OPHIFLEX	0.0	0.000	14.6	0.041	0.0	0.000	0.0	0.000	0.0	0.000
PECTAURI	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	58.5	0.004	0.0	0.000	0.0	0.000	14.6	0.004
PHOLMINU	175.6	0.016	351.1	0.007	160.9	0.023	0.0	0.000	14.6	0.004
POECSERP	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	14.6	0.002
SCALINFL	0.0	0.000	0.0	0.000	14.6	0.073	0.0	0.000	0.0	0.000
SCOLSQUA	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.026	0.0	0.000
SIGAMATH	14.6	0.012	0.0	0.000	14.6	0.399	0.0	0.000	58.5	1.229
SPIOBOMB	0.0	0.000	0.0	0.000	29.3	0.006	3218.6	1.495	7124.8	3.046
SPIOFILI	0.0	0.000	43.9	0.006	0.0	0.000	0.0	0.000	87.8	0.047
SYNEKLAT	14.6	0.002	87.8	0.010	0.0	0.000	0.0	0.000	0.0	0.000
<u>MISCELLANEOUS</u>										
ANTHOZOA	0.0	0.000	0.0	0.000	14.6	0.016	14.6	0.016	43.9	4.052
NEMERTIN	0.0	0.000	14.6	0.012	29.3	0.016	833.9	0.127	409.6	0.241
PHORONID	117.0	0.019	160.9	0.032	131.7	0.025	0.0	0.000	0.0	0.000
SUMS	2545.6	18.602	3847.7	29.905	4725.5	14.860	7519.8	6.522	14805.6	59.100
<u>DIVERSITY</u>										
NSPC	20		36		36		32		35	
SH-W	2.106		2.673		2.614		2.019		1.701	
SIMP	0.187		0.116		0.116		0.237		0.297	

Appendix - 2 Biomonitoring 1995

STATION:	OFF 2		OFF 3		OFF 4		OFF 5		OFF 6	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ATYLFALC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
ATYLSWAM	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	58.5	0.018	14.6	0.004	14.6	0.009	29.3	0.009	0.0	0.000
BATHGUIL	0.0	0.000	0.0	0.000	29.3	0.022	14.6	0.004	14.6	0.009
CAPRELLI	29.3	0.006	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
CORYCASS	14.6	0.006	29.3	0.078	0.0	0.000	0.0	0.000	0.0	0.000
DIASBRAD	58.5	0.023	43.9	0.044	14.6	0.006	0.0	0.000	0.0	0.000
GAMMAROP	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
IONETHOR	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
IPHITRIS	0.0	0.000	0.0	0.000	43.9	0.013	0.0	0.000	0.0	0.000
LEUCINCI	0.0	0.000	0.0	0.000	29.3	0.010	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
PERILONG	0.0	0.000	58.5	0.018	29.3	0.009	0.0	0.000	0.0	0.000
PSEULONG	117.0	0.023	43.9	0.009	29.3	0.006	29.3	0.006	14.6	0.003
PSEUSIMI	0.0	0.000	14.6	0.003	0.0	0.000	29.3	0.006	0.0	0.000
SYNCMACU	43.9	0.013	29.3	0.009	43.9	0.013	14.6	0.004	0.0	0.000
UROTPOSE	497.4	0.149	14.6	0.004	0.0	0.000	87.8	0.026	0.0	0.000
<u>ECHINODERMATA</u>										
ASTEJUVE	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	14.6	9.881	29.3	9.417	14.6	4.944	14.6	4.764	0.0	0.000
ECHIJUVE	321.9	0.032	365.8	0.037	9582.7	0.958	87.8	0.009	160.9	0.016
ECHIPUSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.037
OPHIJUVE	0.0	0.000	0.0	0.000	73.2	0.015	0.0	0.000	43.9	0.009
OPHITEXT	14.6	2.818	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
<u>MOLLUSCA</u>										
CORBGIBB	0.0	0.000	0.0	0.000	43.9	0.114	0.0	0.000	0.0	0.000
CULTEPELL	0.0	0.000	0.0	0.000	14.6	0.004	102.4	0.013	14.6	0.002
ENSISPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	4.980
MONTFERR	146.3	0.035	117.0	0.022	146.3	0.040	58.5	0.012	0.0	0.000
MYSEBIDE	14.6	0.003	0.0	0.000	58.5	0.013	58.5	0.012	0.0	0.000
MYSIUNDA	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
NATIALDE	0.0	0.000	0.0	0.000	102.4	0.091	29.3	0.276	14.6	0.003
NUCUTURG	0.0	0.000	0.0	0.000	73.2	0.186	0.0	0.000	0.0	0.000
SPISSUBT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
TELLFABU	234.1	3.270	146.3	0.256	204.8	0.215	424.3	0.348	0.0	0.000
TELLPYGM	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015
THRAPHAS	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
VENUSTRI	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
<u>POLYCHAETA</u>										
ANAIJUVE	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
ANAIMACU	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000
ANAIUBU	0.0	0.000	29.3	0.004	14.6	0.002	0.0	0.000	14.6	0.006
AONIPAUC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006
ARICMINU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
CAPICAPI	14.6	0.002	102.4	0.007	0.0	0.000	0.0	0.000	0.0	0.000
CHAESETO	0.0	0.000	29.3	0.022	0.0	0.000	1038.7	0.260	0.0	0.000
ETEOLONG	0.0	0.000	58.5	0.004	14.6	0.002	58.5	0.019	43.9	0.006
EUMISANG	0.0	0.000	58.5	0.010	0.0	0.000	0.0	0.000	0.0	0.000
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.107	0.0	0.000
GYPTCAPE	0.0	0.000	14.6	0.007	0.0	0.000	14.6	0.002	0.0	0.000
HARMLUNU	14.6	0.029	14.6	0.019	0.0	0.000	0.0	0.000	14.6	0.029
HESTAUGE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.002
LANICONC	673.0	2.758	1375.2	1.725	248.7	0.083	219.4	0.041	14.6	0.010
MAGEPAPI	7329.6	9.125	4330.5	4.581	160.9	0.133	438.9	0.435	43.9	0.060
NEPHCAEC	0.0	0.000	0.0	0.000	14.6	0.579	0.0	0.000	0.0	0.000
NEPHCIRR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.470
NEPHHOMB	29.3	2.569	102.4	3.047	0.0	0.000	14.6	0.572	0.0	0.000
NEPHJUVE	14.6	0.007	43.9	0.006	58.5	0.007	190.2	0.016	102.4	0.007
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	1.617	0.0	0.000
OPHELIMA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007
OWENFUSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
PECTKORE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.004	0.0	0.000
PHOLMINU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000
POECSERP	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
SCOLARMI	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.002	0.0	0.000
SIGAMATH	146.3	3.432	29.3	0.451	29.3	0.006	14.6	0.433	0.0	0.000
SPIOBOMB	365.8	0.161	2501.7	1.181	658.3	0.230	482.8	0.149	409.6	0.246
SPIOFILI	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000	102.4	0.058
STREWEBS	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
<u>MISCELLANEOUS</u>										
ANTHOZOA	29.3	0.010	29.3	1.301	58.5	29.901	0.0	0.000	0.0	0.000
HYDROZOA	58.5	0.183	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	73.2	0.424	43.9	0.061	29.3	0.080	29.3	0.006	58.5	0.132
PHORONID	0.0	0.000	14.6	0.010	0.0	0.000	14.6	0.006	0.0	0.000
SUMS	10343.4	34.983	9758.2	22.359	11938.1	37.709	3642.9	9.163	1302.1	6.126
<u>DIVERSITY</u>										
NSPC	25		33		35		31		26	
SH-W	1.328		1.739		1.045		2.487		2.571	
SIMP	0.512		0.285		0.649		0.136		0.136	

Appendix - 2 Biomonitoring 1995

STATION:	OFF 7		OFF 8		OFF 9		OFF 10		OFF 11	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ACIDOBES	0.0	0.000	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	14.6	0.004	526.7	0.158	190.2	0.057	219.4	0.066	234.1	0.070
BATHGUIL	43.9	0.013	14.6	0.012	190.2	0.057	0.0	0.000	0.0	0.000
BATHJUVE	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	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009
BODOAREN	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
DIASBRAD	0.0	0.000	14.6	0.006	0.0	0.000	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	14.6	0.004	14.6	0.004	14.6	0.004	43.9	0.013	14.6	0.004
PERILONG	14.6	0.004	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
PONTALTA	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	29.3	0.009
PSEULONG	0.0	0.000	29.3	0.006	248.7	0.050	14.6	0.003	58.5	0.012
PSEUSIMI	0.0	0.000	0.0	0.000	43.9	0.009	0.0	0.000	0.0	0.000
SYNMACU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
UROTPOSE	307.2	0.092	219.4	0.066	14.6	0.004	43.9	0.013	0.0	0.000
<u>ECHINODERMATA</u>										
ACROBRAC	0.0	0.000	14.6	0.310	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	14.6	6.120	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHIJUVE	14.6	0.002	29.3	0.003	219.4	0.022	965.6	0.097	2501.7	0.250
ECHIPUSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006
OPHIJUVE	0.0	0.000	0.0	0.000	43.9	0.009	14.6	0.003	0.0	0.000
<u>MOLLUSCA</u>										
DONAVITT	0.0	0.000	0.0	0.000	14.6	0.162	0.0	0.000	0.0	0.000
ENSIENSI	0.0	0.000	14.6	9.924	0.0	0.000	0.0	0.000	0.0	0.000
MACTJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
MONTFERR	160.9	0.094	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NATIALDE	0.0	0.000	0.0	0.000	14.6	0.021	0.0	0.000	29.3	0.092
NUCUTURG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.189
TELLFABU	146.3	0.461	190.2	1.248	43.9	0.013	14.6	0.002	14.6	0.002
<u>POLYCHAETA</u>										
ARICMINU	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.006	14.6	0.002
CHAESETO	117.0	0.119	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000
EXOHEBE	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
GLYCROUX	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.031
GONIMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.019
LANICONC	73.2	0.083	0.0	0.000	43.9	0.007	0.0	0.000	14.6	0.004
MAGEPAPI	248.7	0.215	131.7	0.265	512.0	0.364	58.5	0.237	292.6	0.176
NEPHCIRR	0.0	0.000	0.0	0.000	29.3	0.075	87.8	0.530	29.3	0.026
NEPHJUVE	0.0	0.000	0.0	0.000	58.5	0.006	0.0	0.000	0.0	0.000
SCOLARMI	14.6	0.060	0.0	0.000	14.6	0.127	29.3	0.164	0.0	0.000
SCOLBONN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
SPIOBOMB	731.5	0.433	175.6	0.023	599.8	0.260	395.0	0.320	307.2	0.022
SPIOFILI	0.0	0.000	0.0	0.000	278.0	0.070	14.6	0.004	0.0	0.000
<u>MISCELLANEOUS</u>										
ANTHOZOA	0.0	0.000	14.6	5.450	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	0.0	0.000	29.3	0.010	0.0	0.000	29.3	0.199	0.0	0.000
SUMS	1931.2	7.706	1463.0	17.511	2662.7	1.337	2018.9	1.668	3672.1	0.929
<u>DIVERSITY</u>										
NSPC	15		17		20		17		19	
SH-W	1.966		2.038		2.367		1.774		1.303	
SIMP	0.204		0.193		0.127		0.283		0.482	

Appendix - 2 Biomonitoring 1995

STATION:	OFF 12		OFF 13		OFF 14		OFF 15		OFF 16	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
BATHELEG	117.0	0.035	87.8	0.026	131.7	0.040	87.8	0.026	219.4	0.066
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009
CORYCASS	0.0	0.000	14.6	0.025	0.0	0.000	0.0	0.000	0.0	0.000
MEGAAGIL	14.6	0.004	14.6	0.004	14.6	0.004	14.6	0.004	0.0	0.000
PONTALTA	14.6	0.004	29.3	0.009	29.3	0.009	29.3	0.009	29.3	0.009
PSEULONG	102.4	0.021	73.2	0.015	29.3	0.006	43.9	0.009	29.3	0.006
PSEUSIMI	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
UROTBREV	0.0	0.000	29.3	0.009	29.3	0.009	117.0	0.035	14.6	0.004
UROTPOSE	14.6	0.004	14.6	0.004	0.0	0.000	87.8	0.026	0.0	0.000
<u>ECHINODERMATA</u>										
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	7.120	0.0	0.000
ECHIJUVE	1316.7	0.132	1711.7	0.171	936.3	0.094	365.8	0.037	804.7	0.080
OPHIJUVE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009	14.6	0.003
<u>MOLLUSCA</u>										
CULTPELL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000
DONAVITT	0.0	0.000	0.0	0.000	14.6	3.561	0.0	0.000	0.0	0.000
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.058	0.0	0.000
MYATRUN	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
NATIALDE	14.6	0.034	29.3	0.054	0.0	0.000	43.9	0.123	29.3	0.105
TELLFABU	29.3	0.002	29.3	0.006	29.3	0.007	29.3	0.006	0.0	0.000
<u>POLYCHAETA</u>										
ARICMINU	14.6	0.004	29.3	0.007	14.6	0.004	29.3	0.010	14.6	0.006
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.029	0.0	0.000	0.0	0.000
GONIBOBR	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000
MAGEPAPI	14.6	0.004	29.3	0.066	0.0	0.000	58.5	0.212	0.0	0.000
NEPHCIRR	102.4	0.379	73.2	0.121	73.2	0.102	43.9	0.199	73.2	0.385
NEPHHOMB	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.332	0.0	0.000
NEPHJUVE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
OPHELIMA	14.6	0.064	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.023
PARAFULG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
SCOLARMI	87.8	0.411	29.3	0.241	14.6	0.108	14.6	0.452	14.6	0.493
SCOLBONN	0.0	0.000	14.6	0.241	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	29.3	0.002	190.2	0.022	570.6	0.054	526.7	0.078	73.2	0.016
SPIOFILI	58.5	0.004	29.3	0.007	29.3	0.006	14.6	0.004	117.0	0.022
<u>MISCELLANEOUS</u>										
HYDROZOA	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.007	0.0	0.000
NEMERTIN	14.6	0.003	0.0	0.000	87.8	0.006	29.3	0.010	29.3	0.006
PHORONID	29.3	0.018	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SUMS	1989.7	1.125	2443.2	1.033	2062.8	4.048	1755.6	8.777	1521.5	1.238
<u>DIVERSITY</u>										
NSPC	17		18		18		23		16	
SH-W	1.462		1.355		1.725		2.421		1.753	
SIMP	0.450		0.501		0.291		0.150		0.313	

Appendix - 2 Biomonitoring 1995

STATION:	OFF 17		OFF 18		OFF 19		OFF 20		OFF 21	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
AMPHIPOD	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.022
ATYLSWAM	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	43.9	0.013
BATHELEG	0.0	0.000	0.0	0.000	29.3	0.009	204.8	0.061	0.0	0.000
BATHGUIL	0.0	0.000	0.0	0.000	58.5	0.018	0.0	0.000	0.0	0.000
CAPRELLI	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
CORYCASS	0.0	0.000	14.6	0.022	0.0	0.000	0.0	0.000	0.0	0.000
DIASBRAD	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000	0.0	0.000
IPHITRIS	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000
LEUCINCI	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
MEGAAGIL	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000	87.8	0.026
PONTALTA	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	29.3	0.009
PSEULONG	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	14.6	0.003
PSEUSIMI	29.3	0.006	0.0	0.000	117.0	0.023	0.0	0.000	307.2	0.061
UROTBREV	43.9	0.022	14.6	0.004	0.0	0.000	29.3	0.009	0.0	0.000
UROTPOSE	0.0	0.000	0.0	0.000	117.0	0.035	0.0	0.000	0.0	0.000
<u>ECHINODERMATA</u>										
ASTEJUVE	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	14.6	11.751	43.9	35.002	43.9	32.579	0.0	0.000	0.0	0.000
ECHIJUVE	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
OPHIJUVE	0.0	0.000	29.3	0.006	14.6	0.003	0.0	0.000	43.9	0.009
<u>MOLLUSCA</u>										
ENSIENSI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	9.638	0.0	0.000
MACTCORA	0.0	0.000	0.0	0.000	29.3	0.010	0.0	0.000	102.4	0.022
MONTFERR	0.0	0.000	43.9	0.007	160.9	0.113	0.0	0.000	0.0	0.000
MYSEBIDE	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
NATIALDE	14.6	0.026	14.6	0.023	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	0.0	0.000	175.6	0.214
<u>POLYCHAETA</u>										
ANATSUBU	0.0	0.000	0.0	0.000	87.8	0.019	14.6	0.004	0.0	0.000
ACONIPAUC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.012
ARICMINU	14.6	0.004	0.0	0.000	0.0	0.000	73.2	0.012	0.0	0.000
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
ETEOLONG	0.0	0.000	0.0	0.000	87.8	0.007	0.0	0.000	0.0	0.000
EXOGHEBE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
EXOGENAID	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
GLYCLAPI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.007
HARMLUNU	0.0	0.000	0.0	0.000	14.6	0.097	14.6	0.053	0.0	0.000
HESIAUGE	0.0	0.000	29.3	0.002	0.0	0.000	14.6	0.002	0.0	0.000
LANICONC	29.3	0.013	102.4	0.047	526.7	1.200	234.1	17.535	1843.4	2.897
NEPHCIRR	58.5	0.032	29.3	0.241	0.0	0.000	14.6	0.413	58.5	0.495
NEPHJUVE	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	29.3	0.004
OPHELIMA	0.0	0.000	14.6	0.037	0.0	0.000	14.6	0.004	43.9	0.010
PARAFULG	43.9	0.022	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	29.3	0.538	14.6	0.158	0.0	0.000	0.0	0.000	0.0	0.000
SCOLBONN	0.0	0.000	0.0	0.000	14.6	0.023	0.0	0.000	0.0	0.000
SCOLSQUA	29.3	0.424	58.5	0.320	29.3	0.120	14.6	0.783	29.3	0.274
SPIOBOMB	0.0	0.000	160.9	0.073	1082.6	0.597	175.6	0.108	87.8	0.048
SPIOFILI	14.6	0.004	73.2	0.010	102.4	0.029	190.2	0.056	43.9	0.012
STREWEBS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	146.3	0.013
TRAVFORB	0.0	0.000	0.0	0.000	0.0	0.000	29.3	1.061	0.0	0.000
<u>MISCELLANEOUS</u>										
NEMERTIN	0.0	0.000	14.6	0.070	43.9	0.035	14.6	0.064	58.5	0.196
SUMS	321.9	12.844	716.9	36.037	2735.8	34.967	1082.6	29.809	3350.3	4.348
<u>DIVERSITY</u>										
NSPC	11		18		27		16		21	
SH-W	2.287		2.550		2.229		2.187		1.901	
SIMP	0.109		0.104		0.206		0.147		0.321	

Appendix - 2 Biomonitoring 1995

STATION:	OFF 22		OFF 23		OFF 24		OFF 25		OFF 26	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ATYLSWAM	0.0	0.000	87.8	0.026	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	14.6	0.007	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000
CAPRELLI	14.6	0.002	43.9	0.004	0.0	0.000	0.0	0.000	0.0	0.000
CORYCASS	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.029	0.0	0.000
DIASBRAD	0.0	0.000	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000
GAMMARID	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000
MEGAAGIL	43.9	0.013	0.0	0.000	14.6	0.004	102.4	0.031	0.0	0.000
PONTALTA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
PSEULONG	43.9	0.009	0.0	0.000	14.6	0.003	87.8	0.018	14.6	0.003
UROTREV	58.5	0.018	14.6	0.004	14.6	0.015	0.0	0.000	0.0	0.000
UROTPOSE	43.9	0.013	204.8	0.061	0.0	0.000	0.0	0.000	0.0	0.000
<u>ECHINODERMATA</u>										
ASTEJUVE	0.0	0.000	204.8	0.041	14.6	0.003	14.6	0.003	0.0	0.000
ECHICORD	14.6	0.016	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHIJUVE	0.0	0.000	43.9	0.004	0.0	0.000	0.0	0.000	14.6	0.002
ECHIPUSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.083
OPHIJUVE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
<u>MOLLUSCA</u>										
MACTCORA	43.9	0.590	102.4	0.010	14.6	0.105	58.5	0.006	0.0	0.000
MONTFERR	0.0	0.000	14.6	0.013	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	43.9	0.037	0.0	0.000
TELLPYGM	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.057	14.6	0.004
<u>POLYCHAETA</u>										
ANATIGROE	0.0	0.000	14.6	0.029	0.0	0.000	0.0	0.000	0.0	0.000
ANAIMUCO	0.0	0.000	278.0	0.161	0.0	0.000	0.0	0.000	0.0	0.000
ANATISUBU	14.6	0.006	0.0	0.000	0.0	0.000	29.3	0.002	0.0	0.000
AONIPAUC	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ARICMINU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
ETEOLONG	14.6	0.004	43.9	0.004	14.6	0.035	14.6	0.002	0.0	0.000
EUMISANG	0.0	0.000	131.7	0.010	0.0	0.000	0.0	0.000	0.0	0.000
GLYCLAPI	0.0	0.000	0.0	0.000	14.6	0.002	43.9	0.012	14.6	0.002
HARMLUNU	0.0	0.000	102.4	0.225	0.0	0.000	0.0	0.000	0.0	0.000
HESIAUGE	14.6	0.002	0.0	0.000	117.0	0.004	0.0	0.000	58.5	0.002
LANICONC	102.4	0.035	2955.3	16.541	14.6	0.019	146.3	0.041	0.0	0.000
MAGEPAPI	14.6	0.104	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEPHCIRR	73.2	0.590	73.2	1.760	117.0	0.989	29.3	0.598	14.6	0.339
PECTKORE	0.0	0.000	73.2	0.007	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	0.0	0.000	14.6	0.002
SCOLARMI	0.0	0.000	0.0	0.000	58.5	0.701	58.5	0.193	0.0	0.000
SCOLBONN	14.6	0.707	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	1814.1	0.459	4652.3	1.052	87.8	0.010	716.9	0.211	0.0	0.000
SPIOFILI	102.4	0.044	0.0	0.000	58.5	0.006	321.9	0.054	58.5	0.018
STREWEBS	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	14.6	0.002
TRAVFORB	0.0	0.000	14.6	0.350	29.3	0.650	29.3	0.097	0.0	0.000
<u>MISCELLANEOUS</u>										
ANTHOZOA	14.6	0.013	14.6	0.010	0.0	0.000	0.0	0.000	0.0	0.000
ARCHIANN	14.6	0.002	0.0	0.000	0.0	0.000	14.6	0.002	14.6	0.002
HYDROZOA	0.0	0.000	14.6	0.003	14.6	0.010	0.0	0.000	0.0	0.000
NEMERTIN	14.6	0.080	263.3	0.360	14.6	0.019	58.5	0.091	58.5	0.054
PHORONID	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
SUMS	2501.7	8.717	9421.7	20.703	614.5	2.575	1901.9	1.499	336.5	0.517
<u>DIVERSITY</u>										
NSPC	21		24		16		21		14	
SH-W	1.330		1.541		2.392		2.256		2.412	
SIMP	0.532		0.345		0.118		0.187		0.109	

Appendix - 2 Biomonitoring 1995

STATION:	OFF 27		OFF 28		OFF 29		OFF 30		OFF 31	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
ARGIHAMA	0.0	0.000	0.0	0.000	58.5	0.018	14.6	0.004	0.0	0.000
ATYLSWAM	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	29.3	0.009	29.3	0.009	409.6	0.123
BATHJUVE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009
BATHSPEC	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
CAPRELLI	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000
CORYCASS	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.038	0.0	0.000
DIASBRAD	0.0	0.000	0.0	0.000	29.3	0.019	0.0	0.000	0.0	0.000
EURYSPIN	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
GAMMARID	0.0	0.000	29.3	0.009	29.3	0.009	0.0	0.000	0.0	0.000
IPHITRIS	0.0	0.000	0.0	0.000	0.0	0.000	117.0	0.044	0.0	0.000
LEUCINCI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
MEGAAGIL	0.0	0.000	29.3	0.009	0.0	0.000	73.2	0.022	29.3	0.009
PONTALTA	14.6	0.012	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
PSEULONG	0.0	0.000	87.8	0.018	0.0	0.000	0.0	0.000	0.0	0.000
PSEUSIMI	0.0	0.000	248.7	0.050	43.9	0.009	73.2	0.015	14.6	0.003
UROTBREV	87.8	0.029	0.0	0.000	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	190.2	0.057	14.6	0.004
ECHINODERMATA										
ACROBRAC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.554	0.0	0.000
ASTEJUVE	0.0	0.000	0.0	0.000	468.2	0.094	0.0	0.000	0.0	0.000
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.447	0.0	0.000
ECHIJUVE	0.0	0.000	0.0	0.000	526.7	0.053	482.8	0.048	58.5	0.006
ECHIPUSI	0.0	0.000	29.3	0.012	0.0	0.000	0.0	0.000	0.0	0.000
OPHIJUVE	0.0	0.000	43.9	0.009	307.2	0.061	14.6	0.003	0.0	0.000
MOLLUSCA										
CHLAVARI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000
MACTCORA	0.0	0.000	43.9	0.010	14.6	0.146	0.0	0.000	0.0	0.000
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.009	0.0	0.000
MYSEBIDE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
NATIALDE	0.0	0.000	43.9	0.018	43.9	0.101	0.0	0.000	14.6	0.004
SPISSUBT	0.0	0.000	0.0	0.000	0.0	0.000	380.4	27.393	14.6	0.151
TELLFABU	0.0	0.000	0.0	0.000	0.0	0.000	131.7	0.171	29.3	0.002
TELLPYGM	0.0	0.000	175.6	0.018	29.3	0.029	0.0	0.000	0.0	0.000
VENUSTRI	0.0	0.000	0.0	0.000	14.6	0.022	0.0	0.000	0.0	0.000
POLYCHAETA										
ANAI GROE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	1.640	0.0	0.000
ANAILINE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.018	0.0	0.000
ANAI SUBU	0.0	0.000	0.0	0.000	43.9	0.004	43.9	0.007	0.0	0.000
ARICMINU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.013
CHAESETO	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.010
ETEOLONG	0.0	0.000	0.0	0.000	146.3	0.007	0.0	0.000	0.0	0.000
EUMISANG	0.0	0.000	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000
EXO NAID	0.0	0.000	0.0	0.000	175.6	0.004	0.0	0.000	0.0	0.000
GLYCLAPI	0.0	0.000	29.3	0.006	14.6	0.004	0.0	0.000	0.0	0.000
HARMLUNU	0.0	0.000	0.0	0.000	29.3	0.037	0.0	0.000	0.0	0.000
HESIAUGE	117.0	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LANICONC	0.0	0.000	1068.0	0.187	190.2	0.095	790.0	1.513	0.0	0.000
LUMBLATR	0.0	0.000	14.6	2.396	0.0	0.000	0.0	0.000	0.0	0.000
MAGEPAPI	14.6	0.029	0.0	0.000	0.0	0.000	160.9	0.180	0.0	0.000
MICRSIMI	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NEPHCAEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	2.367
NEPHCIRR	160.9	0.448	87.8	1.091	58.5	0.537	0.0	0.000	73.2	0.032
NOTOLATE	0.0	0.000	14.6	0.742	0.0	0.000	29.3	1.056	0.0	0.000
OPHELIMA	0.0	0.000	43.9	0.013	43.9	0.016	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	14.6	0.002	43.9	0.013	0.0	0.000
POEC SERP	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
SCOLARMI	14.6	0.274	0.0	0.000	29.3	0.187	0.0	0.000	73.2	0.274
SCOLBONN	0.0	0.000	0.0	0.000	43.9	0.415	0.0	0.000	0.0	0.000
SCOLSQUA	0.0	0.000	14.6	0.146	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	73.2	1.050	0.0	0.000
SPIOBOMB	0.0	0.000	43.9	0.041	4549.9	2.445	1009.5	0.478	1697.1	0.035
SPIOFILI	160.9	0.095	14.6	0.006	234.1	0.086	0.0	0.000	43.9	0.004
STREWERS	0.0	0.000	58.5	0.018	0.0	0.000	0.0	0.000	0.0	0.000
MISCELLANEOUS										
ANTHOZOA	0.0	0.000	14.6	0.010	0.0	0.000	14.6	13.357	0.0	0.000
ARCHIANN	29.3	0.004	0.0	0.000	43.9	0.004	0.0	0.000	0.0	0.000
HYDROZOA	0.0	0.000	0.0	0.000	2326.2	7.657	0.0	0.000	0.0	0.000
NEMERTIN	58.5	0.107	58.5	0.026	43.9	0.070	29.3	0.035	0.0	0.000
SUMS	673.0	1.005	2223.8	4.843	9641.2	12.153	3950.1	49.185	2618.8	3.046
DIVERSITY										
NSPC	10		23		31		30		16	
SH-W	1.936		2.091		1.833		2.459		1.376	
SIMP	0.172		0.257		0.289		0.137		0.448	

Appendix - 2 Biomonitoring 1995

STATION:	OFF 32		OFF 33		OFF 34		OFF 35		OFF 36	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ATYLFALC	0.0	0.000	541.3	0.162	0.0	0.000	175.6	0.053	0.0	0.000
ATYLSWAM	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	0.0	0.000	190.2	0.057	102.4	0.031	0.0	0.000	0.0	0.000
BATHGUIL	43.9	0.013	58.5	0.018	58.5	0.029	0.0	0.000	43.9	0.018
BATHJUVE	29.3	0.006	160.9	0.032	14.6	0.003	0.0	0.000	0.0	0.000
CAPRELLI	14.6	0.003	146.3	0.029	0.0	0.000	14.6	0.003	0.0	0.000
CORYCASS	0.0	0.000	0.0	0.000	14.6	0.013	0.0	0.000	0.0	0.000
DIASBRAD	0.0	0.000	29.3	0.012	0.0	0.000	0.0	0.000	0.0	0.000
GAMMARID	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
LEUCINCI	0.0	0.000	43.9	0.013	0.0	0.000	0.0	0.000	0.0	0.000
MEGAAGIL	58.5	0.018	0.0	0.000	43.9	0.013	29.3	0.009	43.9	0.013
MICRMACU	0.0	0.000	87.8	0.026	0.0	0.000	0.0	0.000	0.0	0.000
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	0.0	0.000	43.9	0.009	29.3	0.006	131.7	0.026
PSEUSIMI	0.0	0.000	29.3	0.006	0.0	0.000	29.3	0.006	73.2	0.015
UROTBREV	0.0	0.000	0.0	0.000	43.9	0.013	0.0	0.000	0.0	0.000
<u>ECHINODERMATA</u>										
ASTEJUVE	0.0	0.000	482.8	0.097	0.0	0.000	0.0	0.000	0.0	0.000
ECHIJUVE	0.0	0.000	175.6	0.018	102.4	0.010	0.0	0.000	0.0	0.000
ECHIPUSI	0.0	0.000	14.6	0.012	0.0	0.000	0.0	0.000	14.6	0.097
OPHIALBI	0.0	0.000	14.6	0.689	0.0	0.000	29.3	0.420	0.0	0.000
OPHIJUVE	43.9	0.009	175.6	0.035	29.3	0.006	0.0	0.000	58.5	0.012
<u>MOLLUSCA</u>										
MACTCORA	0.0	0.000	0.0	0.000	29.3	0.012	0.0	0.000	14.6	0.002
MYSEBIDE	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	58.5	0.073	14.6	0.028	0.0	0.000	0.0	0.000
SPISELLI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.856
SPISSUBT	14.6	0.811	0.0	0.000	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	14.6	0.006	73.2	0.078
<u>POLYCHAETA</u>										
ANAILINE	0.0	0.000	248.7	0.241	0.0	0.000	0.0	0.000	0.0	0.000
ANAIMUCO	0.0	0.000	541.3	1.453	0.0	0.000	14.6	0.004	0.0	0.000
ANASUBU	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ARICMINU	14.6	0.006	43.9	0.006	14.6	0.002	131.7	0.023	14.6	0.004
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.066	0.0	0.000	0.0	0.000
ETEOLONG	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
EULABILI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
EUMISANG	0.0	0.000	58.5	0.044	0.0	0.000	0.0	0.000	0.0	0.000
GLYCLAPI	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	14.6	0.006
GYPTCAPE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.012
HARMLONG	0.0	0.000	102.4	0.098	0.0	0.000	0.0	0.000	0.0	0.000
HARMLUNU	0.0	0.000	14.6	0.079	0.0	0.000	0.0	0.000	0.0	0.000
HARMNODO	0.0	0.000	14.6	0.022	0.0	0.000	0.0	0.000	0.0	0.000
HESIAUGE	0.0	0.000	0.0	0.000	0.0	0.000	73.2	0.004	58.5	0.004
LANICONC	14.6	0.002	8792.6	22.264	29.3	0.019	160.9	0.025	14.6	0.004
LUMBLATR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.113
MAGEPAPI	0.0	0.000	29.3	0.050	14.6	0.002	0.0	0.000	0.0	0.000
NEPHCIRR	117.0	0.813	58.5	0.746	58.5	0.342	204.8	1.024	29.3	0.882
NEPHJUVE	0.0	0.000	58.5	0.004	0.0	0.000	0.0	0.000	0.0	0.000
NEPHLONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.192
OPHELIMA	0.0	0.000	14.6	0.022	0.0	0.000	14.6	0.004	248.7	0.126
PARAGRAC	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	1111.9	0.097	0.0	0.000	0.0	0.000	0.0	0.000
POECSERP	0.0	0.000	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000
SCOLARMI	14.6	0.054	29.3	0.888	0.0	0.000	0.0	0.000	0.0	0.000
SCOLSQUA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.200	0.0	0.000
SPHAHYTR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
SPIOBOMB	2882.1	1.134	8865.8	2.968	117.0	0.019	497.4	0.907	73.2	0.035
SPIOFILI	526.7	0.138	0.0	0.000	146.3	0.026	234.1	0.091	58.5	0.016
STREWEBS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
<u>MISCELLANEOUS</u>										
NEMERTIN	29.3	0.180	43.9	0.058	29.3	0.003	14.6	0.013	58.5	0.373
SUMS	3862.3	3.200	22296.1	30.334	936.3	0.650	1711.7	2.806	1126.5	2.887
<u>DIVERSITY</u>										
NSPC	15		35		20		19		24	
SH-W	1.015		1.622		2.699		2.277		2.756	
SIMP	0.577		0.318		0.083		0.146		0.091	

Appendix - 2 Biomonitoring 1995

STATION:	COA 1		COA 2		COA 3		COA 4		COA 5	
	N	B	N	B	N	B	N	B	N	B
CRUSTACEA										
ATYLFALC	43.9	0.013	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ATYLSWAM	0.0	0.000	0.0	0.000	29.3	0.009	0.0	0.000	0.0	0.000
BATHELEG	0.0	0.000	43.9	0.013	0.0	0.000	0.0	0.000	0.0	0.000
BATHGUIL	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
CAPRELLI	14.6	0.003	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000
CORYCASS	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.152	0.0	0.000
DIASBRAD	43.9	0.018	43.9	0.018	29.3	0.009	0.0	0.000	14.6	0.009
IPHITRIS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.012
MEGAAGIL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
MICRMACU	0.0	0.000	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000
PERILONG	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009
PSEULONG	73.2	0.015	87.8	0.018	29.3	0.006	0.0	0.000	14.6	0.003
UROTPOSE	307.2	0.092	482.8	0.145	307.2	0.092	102.4	0.031	1682.4	0.505
ECHINODERMATA										
ECHICORD	43.9	16.764	58.5	27.677	0.0	0.000	0.0	0.000	14.6	0.790
ECHIJUVE	14.6	0.002	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	14.6	0.080	0.0	0.000	0.0	0.000
DONAVITT	43.9	0.448	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ENSIDIRE	0.0	0.000	43.9	22.267	234.1	170.186	58.5	7.849	0.0	0.000
ENSIENSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	7.227
MACOBALT	0.0	0.000	102.4	1.163	0.0	0.000	73.2	2.127	0.0	0.000
MONTFERR	146.3	0.151	365.8	0.224	0.0	0.000	0.0	0.000	43.9	0.034
MYSEBIDE	73.2	0.018	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPISELLI	0.0	0.000	0.0	0.000	14.6	1.184	0.0	0.000	0.0	0.000
SPISSUBT	14.6	0.050	0.0	0.000	43.9	1.622	0.0	0.000	336.5	61.246
TELLFABU	453.5	5.943	58.5	0.408	380.4	5.912	131.7	2.471	146.3	3.628
TELLTENU	0.0	0.000	14.6	0.573	0.0	0.000	14.6	0.446	0.0	0.000
POLYCHAETA										
ANAILINE	219.4	0.060	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ANAIMUCO	175.6	0.037	0.0	0.000	87.8	0.004	0.0	0.000	43.9	0.012
ANASUBU	29.3	0.002	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000
ARICMINU	14.6	0.002	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CAPICAPI	43.9	0.004	0.0	0.000	87.8	0.013	29.3	0.004	14.6	0.002
EUMISANG	117.0	0.029	14.6	0.002	0.0	0.000	0.0	0.000	43.9	0.012
HARMJUVE	14.6	0.002	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	14.6	0.006	0.0	0.000	0.0	0.000
LANICONC	10519.0	5.359	29.3	0.004	1682.4	0.941	14.6	0.053	833.9	1.094
MAGEPAPI	3467.3	5.576	8573.2	15.262	1521.5	1.583	1843.4	0.421	4228.1	1.543
NEPHCIRR	453.5	0.313	160.9	1.702	87.8	0.121	0.0	0.000	117.0	0.284
NEPHHOMB	73.2	5.047	43.9	0.657	14.6	1.939	73.2	3.557	58.5	1.939
NEPHJUVE	0.0	0.000	58.5	0.007	0.0	0.000	0.0	0.000	0.0	0.000
NERELONG	14.6	0.521	0.0	0.000	14.6	0.375	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	219.4	0.127	14.6	0.133	29.3	0.029
SCOLARMI	0.0	0.000	0.0	0.000	14.6	0.023	0.0	0.000	0.0	0.000
SCOLBONN	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.041
SIGAMATH	58.5	2.489	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPIOBOMB	1755.6	0.882	58.5	0.026	5310.7	2.866	585.2	0.135	2194.5	1.086
SPIOFILI	29.3	0.004	102.4	0.012	87.8	0.032	790.0	0.212	73.2	0.022
MISCELLANEOUS										
ANTHOZOA	14.6	0.006	0.0	0.000	73.2	0.042	0.0	0.000	0.0	0.000
NEMERTIN	14.6	0.003	0.0	0.000	0.0	0.000	14.6	0.064	43.9	1.223
SUMS	18316.8	43.858	10387.3	70.189	10328.8	187.181	3759.9	17.656	10065.4	80.756
DIVERSITY										
NSPC	31		21		24		14		24	
SH-W	1.513		0.887		1.658		1.546		1.724	
SIMP	0.377		0.685		0.316		0.312		0.260	

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STATION:	COA 6		COA 7		COA 8		COA 9		COA 10	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ATYLSWAM	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
BATHELEG	14.6	0.004	58.5	0.018	321.9	0.097	14.6	0.004	0.0	0.000
BATHGUIL	29.3	0.015	58.5	0.023	160.9	0.048	0.0	0.000	0.0	0.000
BATHSPEC	0.0	0.000	0.0	0.000	43.9	0.009	0.0	0.000	0.0	0.000
CAPRELLI	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000
MICRMACU	29.3	0.009	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	14.6	0.004	0.0	0.000	0.0	0.000
PONTALTA	0.0	0.000	146.3	0.044	43.9	0.013	0.0	0.000	0.0	0.000
PSEULONG	0.0	0.000	14.6	0.003	29.3	0.006	102.4	0.021	0.0	0.000
PSEUSIMI	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
UROTPOSE	1053.4	0.316	14.6	0.004	2165.2	0.650	892.4	0.268	204.8	0.061
<u>ECHINODERMATA</u>										
ECHICORD	14.6	9.954	0.0	0.000	29.3	22.539	14.6	8.292	0.0	0.000
<u>MOLLUSCA</u>										
DONAVITT	29.3	0.272	0.0	0.000	14.6	4.142	0.0	0.000	0.0	0.000
ENSIDIRE	0.0	0.000	0.0	0.000	102.4	18.330	0.0	0.000	43.9	21.480
ENSISJUVE	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
MACOBALT	58.5	0.961	0.0	0.000	14.6	0.155	0.0	0.000	0.0	0.000
MONTFERR	160.9	0.110	0.0	0.000	395.0	0.345	29.3	0.057	0.0	0.000
MYSEBIDE	14.6	0.009	0.0	0.000	0.0	0.000	234.1	0.073	29.3	0.038
NATIALDE	14.6	0.597	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
SPISSUBT	0.0	0.000	0.0	0.000	0.0	0.000	43.9	5.081	29.3	0.992
TELLFABU	146.3	3.991	0.0	0.000	131.7	3.401	234.1	1.740	175.6	3.993
TELLTENU	43.9	1.982	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.303
<u>POLYCHAETA</u>										
ANAIMACU	0.0	0.000	0.0	0.000	29.3	0.007	14.6	0.004	0.0	0.000
ANAIMUCO	43.9	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ANAIUBU	43.9	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CAPICAPI	14.6	0.002	0.0	0.000	175.6	0.031	351.1	0.104	0.0	0.000
CHAESETO	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.031	0.0	0.000
ETEOLONG	14.6	0.016	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000
EUMISANG	395.0	0.181	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HARMLONG	58.5	0.139	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
LANICONC	2384.7	1.720	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.026
MAGEPAPI	13796.1	14.864	131.7	0.031	936.3	0.297	146.3	0.047	395.0	0.151
NEPHCIRR	146.3	0.550	278.0	1.328	160.9	0.073	14.6	0.098	14.6	0.006
NEPHHOMB	146.3	5.644	0.0	0.000	87.8	1.659	0.0	0.000	160.9	0.935
NEPHJUVE	29.3	0.004	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	14.6	0.964	0.0	0.000	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.004	43.9	0.041
SCOLARMI	0.0	0.000	0.0	0.000	0.0	0.000	219.4	1.467	0.0	0.000
SCOLBONN	14.6	0.004	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	14.6	0.657	0.0	0.000	0.0	0.000
SPIOBOMB	117.0	0.066	0.0	0.000	541.3	0.203	2340.8	1.086	599.8	0.097
SPIOFILI	175.6	0.042	0.0	0.000	248.7	0.025	14.6	0.002	0.0	0.000
STHEBOA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.388	0.0	0.000
<u>MISCELLANEOUS</u>										
ANTHOZQA	0.0	0.000	0.0	0.000	0.0	0.000	43.9	4.905	0.0	0.000
NEMERTIN	29.3	0.988	0.0	0.000	58.5	0.641	14.6	0.016	29.3	0.145
SUMS	19033.6	42.459	731.5	1.459	5735.0	54.297	4871.8	23.699	1828.8	28.267
<u>DIVERSITY</u>										
NSPC	28		9		23		22		13	
SH-W	1.133		1.715		2.177		1.843		1.981	
SIMP	0.545		0.230		0.192		0.278		0.188	

Appendix - 2 Biomonitoring 1995

STATION:	COA 11		COA 12		COA 13		COA 14		COA 15	
	N	B	N	B	N	B	N	B	N	B
<u>CRUSTACEA</u>										
ATYLFALC	29.3	0.009	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004
BATHELEG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000
BATHGUIL	58.5	0.029	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CAPRELLI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.018
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.061
MEGAAGIL	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000
PONTALTA	0.0	0.000	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000
PSEULONG	29.3	0.006	14.6	0.003	0.0	0.000	0.0	0.000	73.2	0.022
UROTREV	0.0	0.000	0.0	0.000	29.3	0.015	0.0	0.000	0.0	0.000
UROTPOSE	29.3	0.009	73.2	0.022	0.0	0.000	409.6	0.123	526.7	0.158
<u>ECHINODERMATA</u>										
ASTEJUVE	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
ECHICORD	0.0	0.000	14.6	3.704	0.0	0.000	0.0	0.000	0.0	0.000
<u>MOLLUSCA</u>										
ABRAALBA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003
ENSIDIRE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	15.686	219.4	59.753
ENSISPEC	14.6	8.573	0.0	0.000	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	14.6	0.440	0.0	0.000
MACTCORA	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	14.6	5.712
MONTFERR	0.0	0.000	14.6	0.009	0.0	0.000	0.0	0.000	14.6	0.010
MYSEBIDE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	204.8	0.041
SPISSUBT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	365.8	38.363
TELLFABU	0.0	0.000	14.6	0.154	0.0	0.000	29.3	0.319	234.1	2.922
TELLTENU	0.0	0.000	0.0	0.000	0.0	0.000	102.4	0.010	0.0	0.000
<u>POLYCHAETA</u>										
ANAIMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	219.4	0.012
ANAIMUCO	29.3	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
CAPICAPI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.010	43.9	0.004
ETEOLONG	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
HETEFILI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
LANICONC	58.5	0.451	14.6	0.002	0.0	0.000	14.6	0.007	1433.7	0.279
MAGEPAPI	0.0	0.000	160.9	0.424	14.6	0.006	29.3	0.019	5062.0	6.298
NEPHCAEC	14.6	0.234	0.0	0.000	0.0	0.000	0.0	0.000	14.6	5.075
NEPHCIRR	73.2	0.604	146.3	0.873	14.6	0.012	29.3	0.121	0.0	0.000
NEPHHOMB	0.0	0.000	0.0	0.000	0.0	0.000	73.2	3.018	175.6	0.895
NEPHJUVE	43.9	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	117.0	5.262	0.0	0.000
PECTKORE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
SCOLARMI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.002
SCOLBONN	0.0	0.000	117.0	0.521	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	0.0	0.000	29.3	0.019
SPIOBOMB	2779.7	0.857	2106.7	0.356	0.0	0.000	1316.7	1.031	11396.8	4.930
SPIOFILI	117.0	0.029	14.6	0.006	0.0	0.000	160.9	0.061	190.2	0.050
<u>MISCELLANEOUS</u>										
ANTHOZOA	14.6	0.010	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006
ARCHIANN	14.6	0.007	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000
NEMERTIN	43.9	0.119	29.3	0.003	14.6	0.022	14.6	0.006	29.3	0.183
SUMS	3423.4	10.973	2779.7	6.089	87.8	0.058	2428.6	26.125	20525.9	124.823
<u>DIVERSITY</u>										
NSPC	19		15		5		16		26	
SH-W	0.984		1.076		1.561		1.656		1.451	
SIMP	0.662		0.583		0.213		0.333		0.376	

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