NIOZ-RAPPORT 1993 - 11

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The Netherlands

ISSN 0923 - 3210

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This survey is part of the monitoring program in the Dutch Sector of the North Sea, a cooperation between the Tidal Waters Division (Rijkswaterstaat), the Directorate North Sea (Rijkswaterstaat) and the Department of Benthic Systems (NIOZ)

NETHERLANDS INSTITUTE FOR SEA RESEARCH
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Biomonitoring North Sea-Report 1992

1. SAMENVATTING

Dit rapport bevat de resultaten van een macrobenthos bemonstering op het Nederlands Continentaal Plat (NCP) uitgevoerd in het voorjaar 1992. Deze bemonstering is onderdeel van een lange termijn monitoring van de benthische fauna in het gebied, een initiatief van de Dienst Getijdewateren van Rijkswaterstaat in samenwerking met de Directie Noordzee (RWS) en de afdeling Benthische Systemen van het NIOZ (Contract DG-402).

Het monsternet omvat 25 stations verdeeld over 4 raaien dwars op de Nederlandse kust en één raai parallel aan de Zeeuwse kust (Voordelta). Aan de hand van de resultaten van de bemonstering in 1991 (Duineveld, 1992) is aangetoond dat het monsternet een goede doorsnede oplevert van de macrobenthos gemeenschappen die in de zuidelijke Noordzee onderscheiden worden. Bij de bespreking van de resultaten van de bemonstering in 1992 ligt de nadruk op een beschrijving van de verschillen tussen de jaren 1991 en 1992. Deze vergelijking omvat drie onderdelen.

Het eerste onderdeel is een multivariate analyse van de verandering van de totale gemeenschap op de stations. Hieruit blijkt dat op een drietal stations (R3, R50, N30) een opvallende verschuiving in soorten en/of dichtheden is opgetreden. De soorten die voor deze veranderingen verantwoordelijk zijn, komen op alle 3 stations sterk geaggregeerd voor. Op twee stations (R3, N30) betreft het organismen die meerdere jaren oud zijn zoals af te leiden valt uit hun grootte en gewicht. Deze 'patches' zijn blijkbaar niet afdoende bemonsterd tijdens de eerste (1991) survey. De grote variatie in dichtheid van interstitiële polychaeten op station R50, is volgens informatie een kenmerk van dit type organismen en kan sterk wisselen in de tijd. De grote verschuivingen op stations R3, R50 en N50 zijn ons inziens voor een belangrijk deel toe te schrijven aan variantie in de bemonstering in plaats van veranderingen in de fauna.

In het tweede onderdeel is per station een test uitgevoerd op de verschillen in dichtheden van geselecteerde soorten en op de waarden van gemeenschapskenmerken (biomassa, diversiteit, dichtheid, en soortenaantal). De soorten die voor deze test gebruikt zijn, zijn degenen die een belangrijke bijdrage leveren aan de dissimilariteit tussen de stations in de twee jaren en die bovendien een redelijke verspreiding hebben. Deze analyse laat zien dat er op bepaalde stations significante veranderingen zijn opgetreden in de waarden van gemeenschaps kenmerken en/of in de dichtheden van bepaalde soorten. Hoewel sommige soorten

en kenmerken eenzelfde verandering laten zien op meerdere stations, toont geen enkele variabele een eenduidige verandering over het gehele gebied.

In het derde onderdeel zijn de stations samengevoegd in groepen volgens de clusterindeling van 1991. Vervolgens is met een tweevoudige variantie analyse onderzocht of de variabelen over alle stations van een cluster in de tijd veranderd zijn; het tijdseffect is hierbij gescheiden van het plaats (stations) effect. Hieruit blijkt dat er alleen in de cluster van kuststations sprake is van significante veranderingen in de dichtheid van meerdere soorten. Voor wat de diversiteit, dichtheid en biomassa van de totale gemeenschap en afzonderlijke taxa betreft, zijn significante verschillen voornamelijk beperkt tot de twee clusters in de Oester Gronden. In een van deze clusters is er sprake van een afname van de biomassa en een toename van het soortenaantal, terwijl in de andere cluster de totale benthos dichtheid afgenomen is. Met betrekking tot de cluster van kuststations zijn er geen significante verschillen gevonden in totale biomassa, dichtheid, soortenaantal en diversiteit. Hetzelfde geldt voor de cluster van offshore stations.

Resumerend kan gesteld worden dat er in de periode 1991-1992 geen grootschalige veranderingen hebben plaatsgevonden. Om de verandering in dichtheid van een aantal soorten langs de kust te kunnen interpreteren in termen van een trend, is voortzetting van de monitoring een vereiste.

2. INTRODUCTION

The present report contains and discusses the results of a macrobenthic survey made in spring 1992 in the Dutch Sector of the North Sea. This survey is the second one in a long term biological monitoring program of the benthic fauna in the area, an initiative of the Tidal Waters Division of Rijkswaterstaat (RWS) in cooperation with the department of Benthic Systems of NIOZ (contract DG-402). The primary goal of the project is to obtain an insight into the year-to-year variations of the macrobenthos and in the factors governing these fluctuations. The results of the first survey carried out in 1991, have been published by Duineveld (1992).

On the basis of these results, it was shown that the sampling stations selected for the project, covered the major macrobenthic as well as meiobenthic (Huys & De Smet, 1992) communities that were previously distinguished in the Dutch Continental Sector, for instance by the ICES North Sea Benthos Survey. The compliance to his criterion is a necessary prerequisite for being able to detect large scale variations beyond community borders. Given this result, the discussion of the results from the 1992 survey will mainly focus on changes in species abundances and changes in community attributes such as diversity, biomass and density.

3. MATERIAL AND METHODS

Sampling and sorting of the samples was done in accordance with the prescribed standard methods for macrobenthos sampling in the Dutch Sector of the North Sea (Essink, 1991). A detailed description of the methodology can be found in Duineveld (1992). Only the most relevant aspects of the methods will be summarized in the following sections.

3.1. Sampling and sorting

The positions of the sampling stations are shown in Fig. 1. At each station 5 boxcore samples (0.068 m^2 each) were taken while the ship was anchored. The majority of the stations were sampled in the period 30/3 -20/5/1992, except for station VD3 near the coast of Zeeland which was sampled on 18/6/1992. Because of adverse sea conditions, the nearby station VD2 could not be visited at this date. As the next opportunity for sampling was scheduled in August, it was decided to skip the station from the 1992 campaign. The ground for this decision was our concern that juvenile macro- and meiofauna which usually appear by August in great

numbers would interfere in comparing densities between campaigns.

Animals were identified to species level, except for some notoriously difficult taxa such as Anthozoans and Nemertini, and counted. Sizes (nearest 0.5 mm) were only recorded for molluscs. When the individuals belonging to a species were composed of a mixture of newly settled juveniles and older animals, this was recorded. However, no discrimination between juveniles and adults was made in the tables (Appendix 2) showing the density per species nor in any calculations involving abundances of species.

3.2. Ashfree Dry weight

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

- 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
- Molluscs, echinoids - by means of length-AFDW relations of the form $W=a.L^b$ (W=AFDW and L=length in mm's)
- Remaining taxa - directly, by drying a sample at 60 °C for 60 hours and subsequently incinerating it at 520 °C for two hours (Duineveld & Witte, 1987).

Single, small amphipods and cumaceans were assigned an average individual AFDW of 0.0005 g. The same figure is used by Holtmann & Groenewold (1992) in their analysis of macrobenthos from the MILZON BENTHOS II project in the southern North Sea. This estimate is based on previous determinations of the AFDW of the taxa in question (Duineveld; Holtmann, unpubl.).

3.3. Classification and statistics

The 1992 stations were classified into groups by means of TWINSPAN (Hill, 1979a) in order to compare the cluster pattern with the one found during the first (1991) survey. The input data consisted of the (untransformed) mean abundances of the species. Changes of the whole species assemblage at the separate stations during 1991-1992, were depicted by means of a DECORANA ordination of the joined datasets (Hill, 1979b). Percentage dissimilarity between the species assemblages in 1991 and 1992 was calculated with the Bray-Curtis index (Bloom, 1981), while similarity in terms

of species occurrence was calculated with Jaccard's index (see van Tongeren, 1987).

In accordance with the report on the 1991 survey, diversity of the samples is represented by three variables: species density (i.e. the number of species per sample), Shannon-Wiener index (H', with logarithm to the base e) and the Simpson's Index (SI) for dominance. The relation between the aforementioned diversity measures, and Hill's diversity numbers (Hill, 1973) is as follows: N_0= species density, N_1= exp(H') and N_2=1/SI.

The data from replicate boxcore samples were used for assessing changes in community attributes (species density, biomass, diversity) and species abundances at the level of individual stations and of stationgroups. All data were log(x+1)-transformed prior to analysis. For each combination of station and variable separately, the differences between 1991 and 1992 mean values was tested for significance with a T-test. In case the variance remained unequal after transformation, we used a non-parametric Mann-Whitney U-test. For a selected set of variables, the 1991 and 1992 means at the separate stations have been depicted in Fig. 4 & 5 by way of bars surrounded by their respective 95 % comparison limits (T'-method, Sokal & Rohlf, 1981). Means and comparison limits were back-transformed before being plotted. Congruous changes at the level of stationgroups (clusters) were determined by means of a two-way anova. SYSTAT 4.1 (SYSTAT inc., Evanston, USA) was used for the statistical procedures as well as for the graphics.

3.4. Sediment analysis

At each station shown in Fig. 1, 2 cores were extracted from an intact boxcore sample and subsequently pooled for laboratory analysis of the sediment composition (e.g. grainsize, calcium carbonate). The results of the grainsize analysis (Malvern) of these samples were provided by the Tidal Waters Division (Rijkswaterstaat). Two parameters were derived from the grainsize data: the percentage (by weight) of mud (particles < 63μm) and the median grainsize. The latter value was calculated using the entire size range (thus including the mud fraction).

4. RESULTS

4.1. Sediment grain size

Table 1 shows the median grainsize and percentage mud at the

different stations as well as the depth and sampling date. The gross distribution of median grainsizes is not different from that found in the 1991-survey, i.e. grainsizes of about 200 µm and less, are mainly found at stations in (SM58, META2, TS100, SM30, RHC4) or near (SM20, SM37) the Oyster Ground. The sediment in this area also has relatively high percentages of mud, with maximum values (> 15 %) occurring at the Frisian Front (META2, TS100). Elevated mud contents in combination with relatively low median grainsizes (< 250 µm), are also found at some coastal stations, viz. R3, N2, and VD4. Relatively coarse sand (median > 300 µm) is mainly confined to the offshore part of the Southern Bight (N10, N30, W30, W70) and north of the isle of Rottum (R50).

The most conspicuous change in sediment texture is found at station R3, where in 1992 10.2% mud was found and in 1991 only 1%. With some exceptions, most stations in the coastal and offshore clusters seem to have slightly increased percentages of mud in comparison to 1991. In few cases (R50, N30, W30) this is reflected by a decrease in the median grainsize while in others median grainsize remained unaltered or even increased.

4.2. Distribution of biomass, diversity and species

The distribution of the species over the stations (presence/absence) is summarized in Appendix-1, which also provides the full Latin names of the species. The basic data on species abundance, biomass and diversity are presented in Appendix-2.

4.3. Comparison between 1991 and 1992

In the proceeding 3 sections the 1991 and 1992 data from corresponding stations are compared with regard to the:

- -similarity in species distribution
- -abundance of selected species
- -diversity, biomass and density of the total community and of separate phyla

4.3.1. Similarity in species distribution

Stations were classified with TWINSPAN (Fig. 2) in order to see how well the division fits the one made on basis of the 1991 samples. When compared to the 1991 classification, four stations (R70, SM37, N30, SM20) appear to be relocated. In the 1992 TWINSPAN division, stations R70, SM37 and N30 are allocated to the group of coastal stations, whereas in 1991 they were classified as offshore stations. Station SM20,

which is presently joined to the group of Oyster Ground stations, was a borderline case between the group of Oyster Ground and offshore stations in the 1991 division. No change was found in the division of the stations in the Oyster Ground.

A better insight into the changes of the assemblages at the stations in the period 1991-1992 is provided by the combined DECORANA ordination of the two sample sets (Fig. 3). This shows that the major shifts occurred at stations R3, R50 and minor ones at stations R70, and N30. The samples of station SM37 are located close to each other, which contrasts with the relocation of this station in the 1992 TWINSPAN division.

This result complies with the dissimilarity (Bray-Curtis) that was calculated between corresponding stations in both years (Table 2). Relatively high dissimilarity values (>60%) were found for stations R3, R70, R50 and N30. Relatively low dissimilarities were found among the Oyster Ground stations. As a measure for the heterogeneity of the stations in 1991 and 1992, we have included the average dissimilarity among replicate boxcores in Table 2.

When similarity is calculated in terms of species presence and absence (Jaccard index), we get a similar result. Table 2 shows Jaccard's index as well as the number of species common to both years, and the number of species only present in respectively the 1991 and the 1992 samples. Note the distinct inequality between the 1991 and 1992 species-sets of stations R3 and N30, both having more exclusively 1992 species than species common to both years. Other stations with a relatively low species-similarity between the two years are R50, W70 and N10. In these cases, however, the species numbers in the 3 categories are more equal.

4.3.2. Abundance of selected species

Species with prominent changes in density between 1991 and 1992 were extracted by calculating the contribution of each species to the total (Bray-Curtis) dissimilarity between samples of different years. The top 5 of these species are listed in Table 3 together with their contribution (%) to the total dissimilarity (cf. Table 2).

Species with frequent records in Table 3 and being present at more than 30% of the stations, were selected for a T-test on changes in their abundance at the separate stations. The species set was expanded with some characteristic species of the TWINSPAN groups of 1991 and 1992. The outcome of the T-tests on each combination of

species and station (Table 4), shows some species, notably *Spiophanes bombyx* and *Lanice conchilega*, to be more dynamic than others. Important to note is that none of the species shows an unidirectional change over the entire range of stations. For species with a substantial number of significant changes, comparison plots have been drawn to illustrate the magnitude of the changes (Fig. 4).

4.3.3. Diversity, biomass and density

Table 5 shows the results of T-tests on changes in a set of community attributes at the separate stations. Relatively few changes were recorded among the attributes of the whole community, i.e. Simpson's and Shannon-Wiener diversity, species density, total biomass and density. The tests on attributes at the phylum level revealed more changes, but again none of the attributes showed a consistent unidirectional change over the entire set of stations. Fig. 5 compares the 1991 and 1992 values of selected attributes by means of comparison plots. Only those attributes with a substantial number of changes are shown in Table 5.

4.4. Cluster averages

For reasons of compatibility with the 1991 report (Duineveld, 1992), we have included a table showing the 1992 mean values (+ c.v.) of selected community attributes for the 1991 clusters. A similar table can be found in the report on the 1991 survey (Duineveld, 1992). Changes at the level of clusters are dealt with in the next chapter.

5. DISCUSSION

Before discussing the changes we observed at the separate stations and attempting to resolve changes on larger geographical scales, we first recapitulate the major mutations in species composition and abundance at stations with relatively high dissimilarities (> 50%) between the 1991 and 1992 samples. The species discussed in the synopsis are taken from the top 5 species with the highest contribution to the overall dissimilariy (Table 3). In the case where a formal test showed that the abundance of a top-5 species had not significantly changed, it was either excluded from the following summary or it is explicitly mentioned.

R3 The prominent change in the species assemblage at

station R3, having the highest dissimilarity between years, is due to a set of 'new' 1992 species with relatively high densities (e.g. Oligochaetes, *Ensis directus, Abra alba, Anaitides mucosa, Lanice conchilega*). Notice in Appendix-2 the large heterogeneity of this station: 6 species accounting for 65% of all individuals in the 5 samples were only present in the first two boxcores.

R50 The 1992 samples from station R50, differed from those taken in 1991 by the, on average, higher abundance of interstitial polychaetes (*Aonides paucibranchiata, Goniadella bobretzki*) and the occurrences of two 'new' interstitial polychaetes (*Pisione remota , Hesionura augeneri*). It should be noted that the distribution of these species is very patchy among the replicate samples (see Appendix-2).

R70 The dissimilarity at station R70 is for the main part due to the absence of Phoronids in the 1992 samples. One other species with relatively prominent changes at this station is the polychaete *Magelona* of which the abundances had decreased.

TS30 *Magelona* and *Spiophanes* are also responsible for the dissimilarity at station TS30. Both species were found with lower abundances in 1992. To a lesser degree the same holds for the bivalve *Donax*. The amphipod *Tryphosella* was a new species in 1992, but only occurred in one sample, albeit in high density.

META2 The most striking difference between 1991 and 1992 is the disappearance of the bivalve *Abra alba*. Earlier observations by the author has shown that this species occasionally appears in large numbers at this station and dissapears completely the next year.

N10 The 1992 samples differed from the 1992 ones by the the new occurrence of the polychaete *Capitella capitata* and the decreased abundance of *Lanice* and its cohabitatant *Harmothoe lunulata*.

N30 the polychaetes *Lanice* and *Travisia* as well as the amphipods *Atylus* and *Tryphosella* were new species for station N30 in 1992. All these species were very patchy distributed over the replicate samples. Remarkable is the fact that all amphipods had highest abundances in the samples with highest abundance of *Lanice*.

VD3 The dissimilarity between years is mainly due to species which were present in both years, but with altered abundances. Higher 1992 densities were found for *Ensis directus* and *Spiophanes;* lower densities for *Urothoe* and *Montacuta* and its host *Echinocardium*.

VD1 The increased 1992 abundance of *Urothoe* (not significant!) and, to a lesser degree the decrease in *Magelona* density, account for the large part of the dissimilarity between years at VD1.

The Bray-Curtis dissimilarity as well as the DECORANA ordination showed that the biggest change in the species assemblage were found at stations R3, R50 and N30. Table 2 and 3 respectively show that these particular stations were much more heterogeneous in 1992 than in 1991, and that the dissimilarity between years at these stations is mainly due to 'patchy' distributed species. The question arises whether these patches are a new phenomenon or whether they were not properly exposed by the 1991 sampling. Looking at the sizes (weight) of most of the species in question at stations R3 and N30, it seems unlikely that they were new settlers in the community. Apparently, patchiness has been underestimated in 1991 at stations R3 and N30. To this we can add, that the faunal heterogeneity at station R3 could be related to patchiness in sediment texture as suggested by increased percentage mud (see 4.1.). The clumped distribution of interstitial polychaetes as we observed at station R50 is according to Dr. A. Nørrevang (Kaldbaklab., Faroe Isles; pers. comm.) a common feature of these types of organisms which is subject to large temporal variations. We are, therefore, inclined to belief that the observed changes are due to sampling variance rather than to real changes.

The results of the separate T-tests in Tables 4 & 5 suggest that in none of the species or parameters listed there is a congruous change over the entire sampling area. Only within selected areas (1991 clusters) some variables tend to change simultaneously in the same direction if we exclude cases with non-significant differences. For instance, in the group of coastal stations, the polychaetes *Nephtys cirrosa* and *Lanice conchilega* (except at R3) decreased in density in a number of cases, whereas the number of crustacean species and individuals increased in the second group of Oyster Ground stations.

A formal test on congruous changes in species and community attributes in separate clusters was carried out by means of a 2-way ANOVA. The results have been included in Tables 4 and 5. The same result as with the 2-way ANOVA is obtained with a T-test on the (within stations) standardized or ranked variables. Both transformations remove the between-station differences but retain to some extent the between-year differences. A more drastic test for unidirectional changes within clusters is one in which only the sign of the change in the yearly means of the stations

is used (Sign-test; Siegel, 1956). Because this test requires a minimum of 5 observations and is more sensitive to outliers, it was not applied.

Table 4 shows that among the four clusters that we distinguished, only in the coastal cluster a series of significant changes in species densities were found which mainly consisted of decreases (except *Bathyporeia elegans* and *Scoloplos armiger*). With respect to the community attributes in Table 5, we find the largest number of significant changes in the second cluster of Oyster Ground stations. Here we find a small but, nevertheless, significant increase in species density of molluscs and crustaceans (and consequently total species density), a decrease in individual density of molluscs and other taxa as well as a decrease in echinoderm (mainly echinoid) biomass. In contrast to the results in Table 4, few changes were recorded for community attributes of the coastal cluster. Species density of polychaetes and the biomass of molluscs increased, but different species account for the change in molluscan biomass at the various stations (*Ensis*, *Petricola*, *Spisula*). None of the attributes of the offshore cluster showed a significant change, in spite of the changes found at the individual stations. This outcome illustrates the heterogeneity of this cluster.

Except for the first Oyster Ground cluster, no change could be demonstrated in diversity of the clusters. In the cluster where diversity did change, different species were responsible for the change at the two stations: *Spiophanes bombyx* at TS100 and *Abra alba* at META2.

6. CONCLUSIONS AND SUMMARY

This report presents the data on the second (1992) survey of the long-term monitoring project of the macrofauna in the Dutch Sector of the North Sea. A comparison was made with the data of the first survey (1991) with respect to (1) the compositon of the entire assemblages at individual stations, (2) species and community attributes at the level of individual stations and (3) at the level of station groups.

Major shifts in the composition of the species assemblage were observed at coastal station R3 and offshore stations R50 and N30. The species responsible for these changes had in all cases a very patchy distribution. As a result, the same three stations turned out to be much more heterogeneous in 1992 than in 1991. The individual weights of the species in question indicate that, in the case of station R3 and N30, they were not new settlers. Apparently,

these patches have not been properly sampled during the first (1991) survey. According to supplementary information, the clumped distribution of interstitial polychaetes at station R50 seems to be a common feature of these organisms which is subject to large temporal variations. Hence we conclude that the observed changes at the three stations are for a major part due to sampling variance, rather than to community changes.

At the level of individual stations we frequently found significant changes in density of selected characteristic species. However, among the four stationgroups (clusters) that were distinguished, there is only one cluster (coastal) with an appreciable number of characteristic species showing a congruous change at the stations. In the majority of these cases this concerns a decrease in density.

Community attributes such as total species and individual density and biomass, displayed a limited number of significant changes at the station level. At the cluster level, significant changes were mainly restricted to the second Oyster Ground cluster. The number of crustacean and mollusc species (and total species) in this station group showed a small, but nevertheless significant increase. The biomass of this cluster, on the other hand, decreased in 1992 which is entirely due to the echinoid biomass. No significant change was observed among the community attributes of the offshore cluster, whereas the coastal cluster only showed an increase in the species density of polychaetes and the molluscan biomass.

Except for the first Oyster Ground cluster, no change could be demonstrated in diversity of the clusters. In the cluster where diversity did change, different species were responsible for the change at the two stations.

At this stage it is clearly impossible to make statements about the cause of the observed changes or about possible trends. A more extensive analysis of trends, involving earlier data, is planned after completion of the third survey. Taking the results of the analysis of community attributes of clusters into account,the results of the first two surveys show that in the intermittent period, no dramatic or adverse changes took place in the North Sea benthic macrofauna.

7. ACKNOWLEDGEMENTS

The authors wish to thank the captain, crew and personnel of Rijkswaterstaat on board of the R.V. 'Holland' for their assistance during the cruise. We are grateful to the

following persons for their help in collecting, sorting and identifying the samples: M.S.S. Lavaleye, R. Heyman, E.M. Berghuis and A. Kok.

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Table 1. Average values of median grainsize (in μm), percentage mud (<63μm) and depth (m) as well as date of sampling of the 24 stations visited during the 1992 survey. Sediment data for stations R70, N50 are missing. Station VD2 was not sampled. Stations are grouped according to the 1991 TWINSPAN clusters.

	STATION	Median Grain μ	Perc. Mud	DEPTH m	DATE
O	META2	106	19.8	38	02/04/92
Y	TS100	93	13.4	49	19/05/92
S					
T	SM30	113	9.0	46	20/05/92
E	RHC4	146	6.1	40	20/05/92
R	SM58	151	7.1	41	19/05/92
	R3	144	10.2	16	01/04/92
	TS4	215	1.0	13	02/04/92
C	TS30	213	1.8	26	02/04/92
O	SM1	226	2.4	20	31/03/92
A	N2	250	3.9	12	31/03/92
S	N10	323	1.9	18	31/03/92
T	VD4	204	3.3	14	30/03/92
	VD3	250	2.2	??	18/06/92
	VD1	263	1.6	12	30/03/92
	R50	313	2.5	31	01/04/92
O	R70			33	01/04/92
F	META1	244	1.7	27	31/03/92
F	SM20	135	9.1	32	20/05/92
S	N30	317	1.6	23	31/03/92
H	N50			30	31/03/92
O	N70	291	1.1	32	31/03/92
R	W30	305	2.8	33	30/03/92
E	W70	407	2.4	45	30/03/92
	SM37	192	2.4	22	19/05/92

Table 2. From left to right column: Bray-Curtis dissimilarity between 1991 and 1992 species distributions; within Bray-Curtis dissimilarity in 1991 and 1992; Jaccard's similarity between species sets in 1991 and 1992; Number of species shared between 1991 and 1992 data; Number exclusively 1991 species; Number exclusively 1992 species. Stations are grouped according to the 1991 cluster division.

		BRAY-CURTIS Dissimilarity			JACCARD Similarity	No. SPECIES		
		'91-92	'91	'92	'91-92	SHARED	'91	'92
O	META2	41.	26.	25.	46	37	19	25
Y	TS100	34.	37.	52.	63	49	12	17
S								
T	SM30	32.	34.	41.	55	43	15	20
E	RHC4	50.	37.	18.	54	51	20	24
R	SM58	27.	31.	25.	54	40	11	23
	R3	86.	30.	82.	30	13	6	24
	TS4	38.	23.	62.	49	17	5	13
C	TS30	60.	41.	59.	48	25	11	16
O	SM1	16.	41.	14.	41	14	10	10
A	N2	43.	49.	72.	43	18	15	9
S	N10	51.	37.	61.	39	15	11	12
T	VD4	32.	22.	54.	58	19	9	5
	VD3	52.	45.	40.	49	24	10	15
	VD1	51.	55.	51.	54	14	6	6
	R50	72.	50.	70.	35	17	15	16
O	R70	66.	55.	48.	44	25	21	11
F	META1	46.	35.	38.	50	19	9	10
F	SM20	35.	55.	55.	50	28	6	22
S	N30	81.	48.	71.	33	14	6	22
H	N50	40.	42.	51.	65	26	10	4
O	N70	36.	36.	54.	51	25	13	11
R	W30	41.	46.	56.	44	17	12	10
E	W70	47.	50.	60.	37	19	20	13
	SM37	27.	45.	37.	58	42	17	13

Table 3. Top five of species having the largest contribution to the Bray-Curtis dissimilarity between 1991 and 1992 stations (see Table 2). For full latin names see Appendix-1.

STATION	SPECIES AND THEIR PERCENTAGE CONTRIBUTION TO BRAY-CURTIS DISSIMILARITY									
O	META2	ABRAALBA	74	MYSEBIDE	11	PHOLMINU	1	POLYSPEC	1	AMPHFILI	1
Y	TS100	AMPHFILI	29	SPIOBOMB	12	MYSEBIDE	6	HARPANTE	5	CINGVITR	4
S											
T	SM30	MYSEBIDE	34	AMPHFILI	17	PECTAURI	8	PHORONID	4	SPIOBOMB	4
E	RHC4	SPIOBOMB	50	MYSEBIDE	10	LANICONC	6	MAGEPAPI	4	AMPHFILI	4
R	SM58	CORBGIBB	20	MYSEBIDE	18	AMPHFILI	8	PHORONID	6	MAGEPAPI	6
	R3	OLIGOCHA	22	LANICONC	19	ANAIMUCO	13	EUMISANG	6	ABRAALBA	4
	TS4	UROTPOSE	40	BATHELEG	11	MYSEBIDE	9	MONTFERR	9	SPIOBOMB	5
C	TS30	SPIOBOMB	73	MAGEPAPI	5	TRYPSARS	4	DONAVITT	3	BATHELEG	2
O	SM1	SPISSUBT	51	MONTFERR	17	UROTPOSE	10	NEPHCIRR	6	NATIALDE	3
A	N2	SPISSUBT	47	CAPICAPI	14	TELLFABU	5	NEPHHOMB	5	NEPHCIRR	3
S	N10	UROTPOSE	29	CAPICAPI	17	LANICONC	14	HARMLUNU	6	NEPHCIRR	6
T	VD4	SPISSUBT	24	SPIOBOMB	18	ENSIDIRE	14	TELLFABU	14	UROTPOSE	10
	VD3	LANICONC	27	ENSIDIRE	16	URPTPOSE	11	MONTFERR	10	SPIOBOMB	6
	VD1	UROTPOSE	53	MAGEPAPI	8	ENSIDIRE	7	MYSEBIDE	6	SCOLARMI	6
	R50	AONIPAUC	26	PISIREMO	25	GONIBOBR	13	HESIAUGE	8	BRANLANC	5
O	R70	PHORONID	61	MAGEPAPI	14	SPIOBOMB	6	NEMERTIN	5	UROTPOSE	1
F	META1	SPIOBOMB	26	SCOLARMI	24	DONAVITT	6	ECHIPUSI	6	NEPHCIRR	5
F	SM20	SPIOBOMB	13	PHORONID	13	ECHICORD	8	MONTFERR	6	LANICONC	5
S	N30	LANICONC	25	UROTPOSE	15	TRYPSARS	14	ATYLFALC	7	TRAVFORB	6
H	N50	SPIOBOMB	54	UROTBREV	8	NEPHCIRR	5	SCOLARMI	4	UROTPOSE	3
O	N70	SPIOBOMB	34	NEPHCIRR	13	UROTBREV	10	ARICMINU	4	BATHGUIL	4
R	W30	SPIOBOMB	14	ARICMINU	10	SPIOFILI	9	BATHGUIL	7	PSEUSIMI	5
E	W70	ECHIPUSI	10	ACROBRAC	10	NATIALDE	9	SPIOBOMB	6	POLYMEDU	5
	SM37	SPIOBOMB	23	BATHELEG	21	ACROBRAC	8	PSEULONG	6	ECHIPUSI	4

Table 4. Results of test on the density of selected species (T-test) in 1991 and 1992 for each station separately and for each cluster (2-way ANOVA). Data were log (x+1) transformed. Symbols: <, > relative decrease resp. increase in 1992 at significance level P < 0.05; ▒ no significant change; ▒ no significant change, species absent in both years.

		MACEPAPI	TELFABU	URCOPOSE	ECHIPUSI	NEPHCIRR	SPISSUBT	SPIOBOMB	LANICONC	MYSEBIDE	AMPHFILI	CALLSUBT	BATHELEG	NEPHHOMB	SCOLARMI
OYSTER	META2	▒	▒	▒	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	▒
	TS100	▒	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒
	CLUSTER	▒	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒
	SM30	<	▒	▒	▒	▒	▒	▒	▒	<	▒	▒	▒	▒	▒
	RHC4	>	▒	▒	▒	▒	▒	>	>	▒	▒	▒	▒	▒	▒
	SM58	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	<	▒
	CLUSTER	▒	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒
COAST	R3	▒	▒	▒	▒	▒	▒	>	▒	>	▒	▒	▒	▒	▒
	TS4	▒	▒	<	▒	▒	▒	▒	<	>	▒	▒	>	▒	▒
	TS30	<	▒	▒	>	<	▒	<	<	▒	▒	▒	▒	▒	>
	SM1	▒	▒	▒	▒	<	▒	▒	▒	▒	▒	▒	▒	▒	▒
	N2	▒	<	▒	▒	▒	▒	▒	<	▒	▒	▒	▒	▒	▒
	N10	▒	▒	▒	▒	▒	▒	▒	<	▒	▒	▒	▒	▒	>
	VD4	▒	<	▒	▒	<	▒	▒	▒	▒	▒	▒	>	▒	▒
	VD3	▒	▒	<	▒	<	▒	>	▒	<	▒	▒	▒	>	▒
	VD1	<	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	CLUSTER	<	<	<	▒	<	▒	▒	<	▒	▒	▒	>	▒	>
OFFSHORE	R50	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	R70	<	▒	▒	>	▒	▒	▒	<	▒	▒	▒	>	<	▒
	META1	▒	▒	▒	▒	▒	▒	<	▒	▒	▒	▒	▒	▒	>
	SM20	▒	>	▒	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒
	N30	▒	▒	▒	▒	>	▒	>	>	▒	▒	▒	▒	▒	▒
	N50	▒	▒	▒	▒	▒	▒	<	<	▒	▒	▒	<	▒	▒
	N70	>	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	W30	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	W70	▒	▒	▒	▒	▒	▒	<	<	▒	▒	▒	▒	▒	▒
	SM37	▒	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒
	CLUSTER	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒

Table 5. Results of test on differences between community attributes in 1991 and 1992 for each station separately (T-test) and for each cluster (2-way ANOVA). Data were log (x+1) transformed. Symbols: <, > relative decrease resp. increase in 1992 at significance level P < 0.05; ▒ no significant change.

		SH-WIEN	SIMPSON	TOT-SPEC	CRUSSPEC	MOLLSPEC	POLYSPEC	TOT-IND	CRUSIND	ECHIND	MOLLIND	POLYIND	MISCIND	BIOMASS	CRUSBIOM	ECHIBIOM	MOLLBIOM	POLYBIOM	MISCBIOM
OYSTER	META2	▒	▒	▒	▒	▒	▒	<	▒	▒	<	▒	▒	▒	▒	▒	▒	▒	▒
	TS100	>	<	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	CLUSTER	>	<	▒	▒	▒	▒	<	▒	▒	<	▒	▒	▒	>	▒	▒	▒	▒
	SM30	▒	▒	▒	>	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	RHC4	▒	▒	▒	▒	>	▒	>	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒
	SM58	▒	▒	>	>	▒	▒	<	>	▒	<	▒	<	<	▒	<	▒	▒	▒
	CLUSTER	▒	▒	>	>	>	▒	▒	>	▒	<	▒	<	<	▒	<	▒	▒	▒
COAST	R3	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	>	▒	▒	▒	▒	>	▒	▒
	TS4	▒	<	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	TS30	>	▒	▒	▒	<	▒	<	▒	▒	▒	<	▒	▒	▒	▒	▒	<	▒
	SM1	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	<	▒	>	▒	>	>	>	▒
	N2	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	N10	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	VD4	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	VD3	<	>	▒	<	▒	>	▒	<	▒	▒	▒	▒	▒	<	▒	>	▒	▒
	VD1	<	>	▒	▒	>	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	CLUSTER	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	>	▒	▒
OFFSHORE	R50	▒	▒	▒	▒	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	<	▒	▒	▒
	R70	▒	▒	<	▒	▒	▒	▒	▒	▒	▒	▒	<	<	▒	▒	▒	<	▒
	META1	▒	▒	▒	▒	<	▒	▒	▒	▒	<	▒	▒	▒	>	▒	▒	▒	▒
	SM20	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒
	N30	▒	▒	▒	▒	▒	>	>	▒	▒	▒	>	▒	▒	▒	▒	▒	>	▒
	N50	▒	▒	<	▒	▒	<	<	▒	▒	▒	<	▒	▒	▒	▒	▒	▒	▒
	N70	>	▒	▒	▒	>	▒	▒	▒	▒	>	▒	▒	▒	▒	▒	>	▒	▒
	W30	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	>	▒
	W70	▒	▒	▒	▒	▒	▒	<	▒	<	▒	▒	▒	▒	▒	▒	▒	▒	▒
	SM37	▒	▒	▒	<	▒	▒	▒	▒	▒	▒	▒	▒	▒	>	▒	▒	▒	▒	▒
	CLUSTER	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒

Table 6. Mean values (untransformed) of abiotic and biotic parameters in 1992 for each of the 4 TWINSPAN clusters distinguished in 1991. The values between brackets are the coefficients of variation (=s.d./mean).

TWINSPAN-CLUSTER	1	2	3	4
No. of stations	2	3	9	10
Median Grainsize µm	99.5 (0.07)	135.3 (0.12)	232.0 (0.20)	275.5 (0.28)
Perc. Mud	16.6 (0.19)	7.4 (0.16)	3.1 (0.84)	2.9 (0.81)
Depth m	43.5 (0.13)	42.3 (0.06)	16.6 (0.26)	30.8 (0.20)
No. species per core	29.7 (0.16)	35.3 (0.17)	14.9 (0.33)	17.6 (0.38)
Shannon-Wiener diversity	2.313 (0.25)	2.248 (0.13)	1.654 (0.29)	2.209 (0.17)
Simpson's dominance	0.188 (0.54)	0.219 (0.34)	0.324 (0.56)	0.161 (0.47)
No. individuals.m^{-2}				
Crustaceans	272 (0.54)	307 (0.58)	495 (1.07)	329 (1.52)
Echinoderms	1058 (0.81)	1530 (0.41)	41 (1.10)	74 (1.25)
Molluscs	914 (0.88)	753 (0.60)	1016 (1.47)	90 (0.92)
Polychaetes	625 (0.34)	2322 (1.09)	1339 (1.62)	847 (1.35)
Miscellaneous	110 (0.69)	147 (1.48)	161 (3.71)	91 (1.55)
TOTAL	2979 (0.61)	5062 (0.68)	3053 (0.97)	1431 (1.02)
Biomass g AFDW.m^{-2}				
Crustaceans	12.2 (0.83)	2.0 (1.00)	0.2 (1.06)	0.3 (1.58)
Echinoderms	13.9 (0.88)	11.5 (0.62)	11.1 (1.34)	4.2 (2.10)
Molluscs	0.6 (1.50)	1.6 (1.44)	63.9 (1.47)	2.2 (2.93)
Polychaetes	10.6 (0.70)	1.6 (0.81)	6.8 (2.02)	3.3 (2.48)
Miscellaneous	0.4 (1.00)	0.6 (2.50)	1.4 (3.78)	0.3 (3.56)
TOTAL	37.7 (0.43)	17.2 (0.48)	83.4 (1.27)	10.3 (1.25)

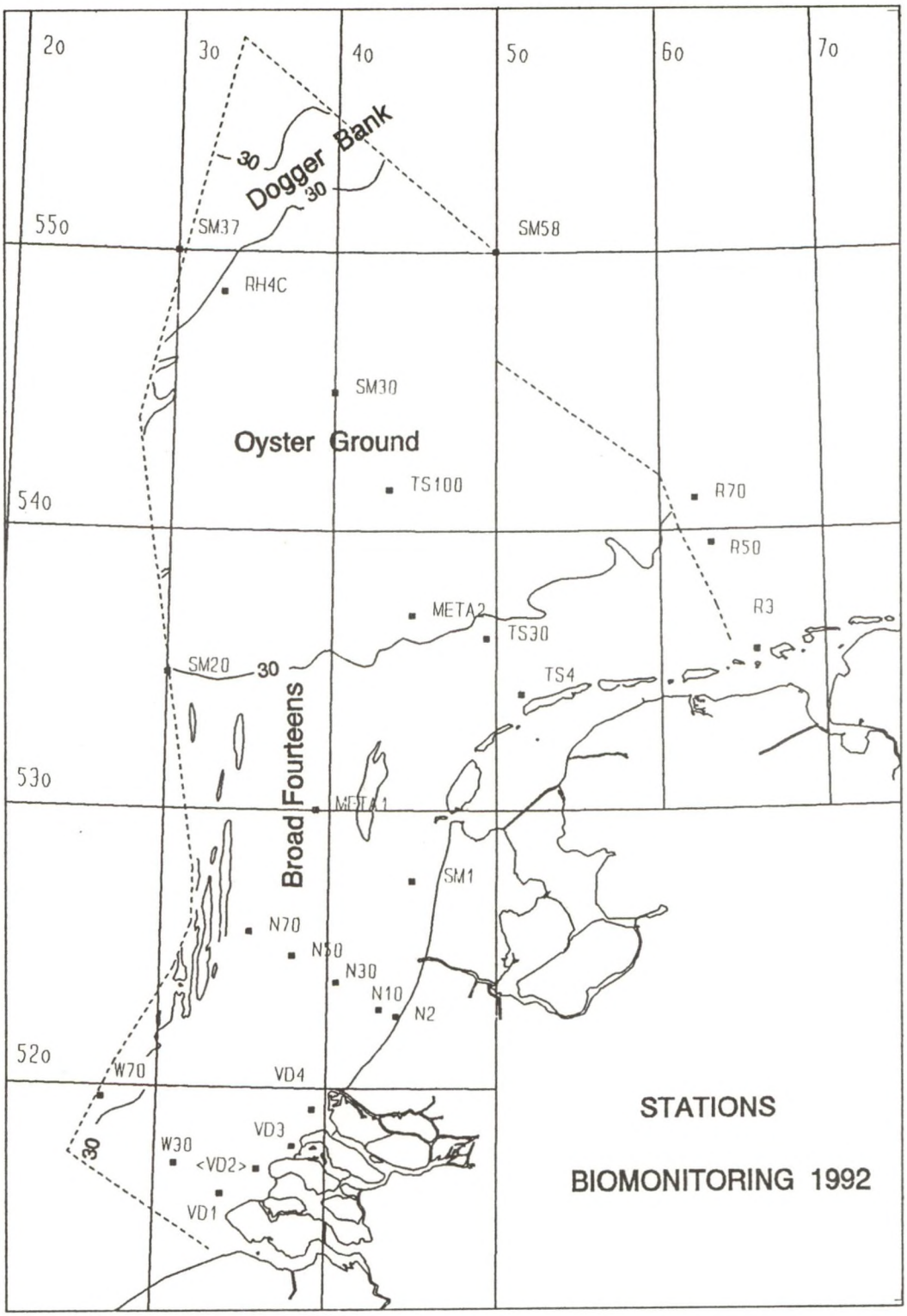

Fig. 1. Positions of sampling stations visited during the survey in spring 1992.

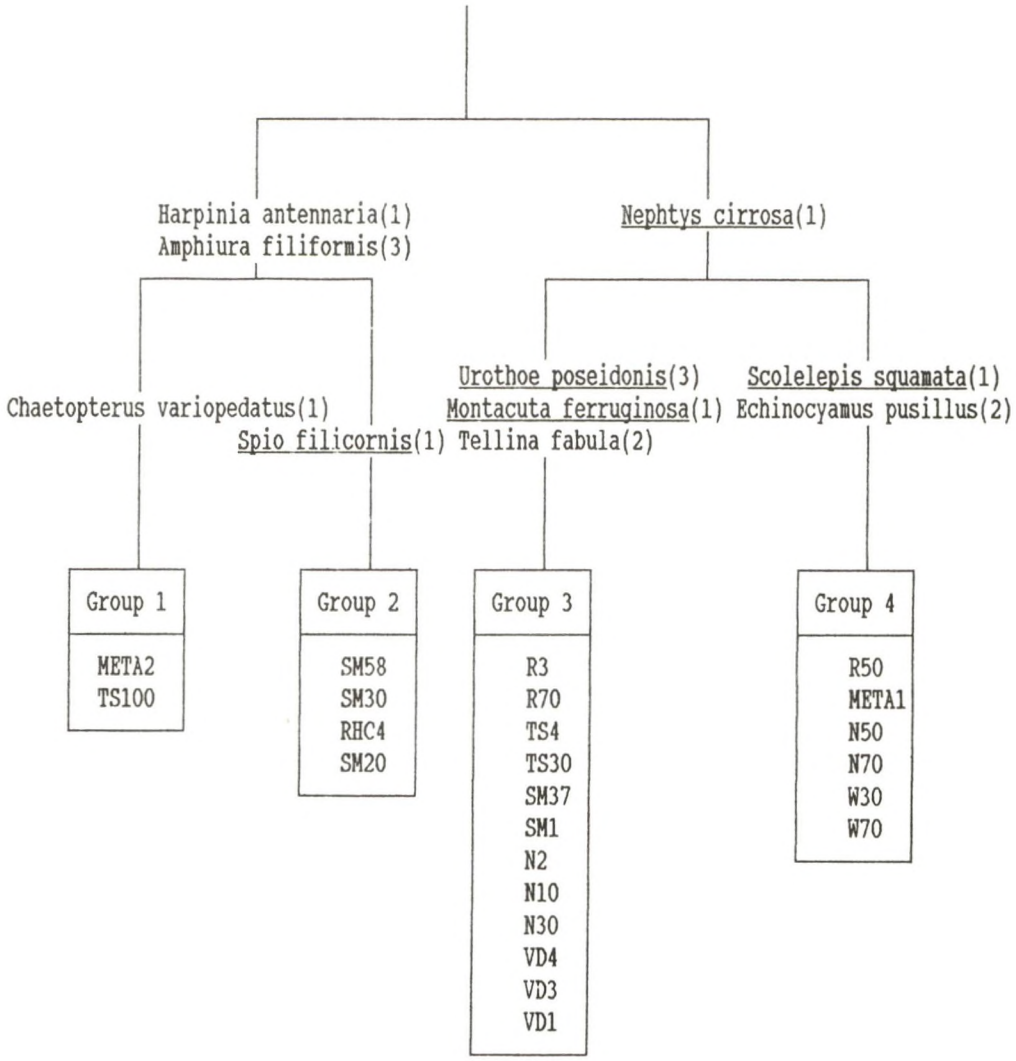

Fig. 2. Division of the stations with TWINSPAN. Indicator (underlined) and preferential species belonging to each branch are shown. Values in brackets denote density class of the species (1=1-5, 2=5-50, 3=50-100 ind. per boxcore).

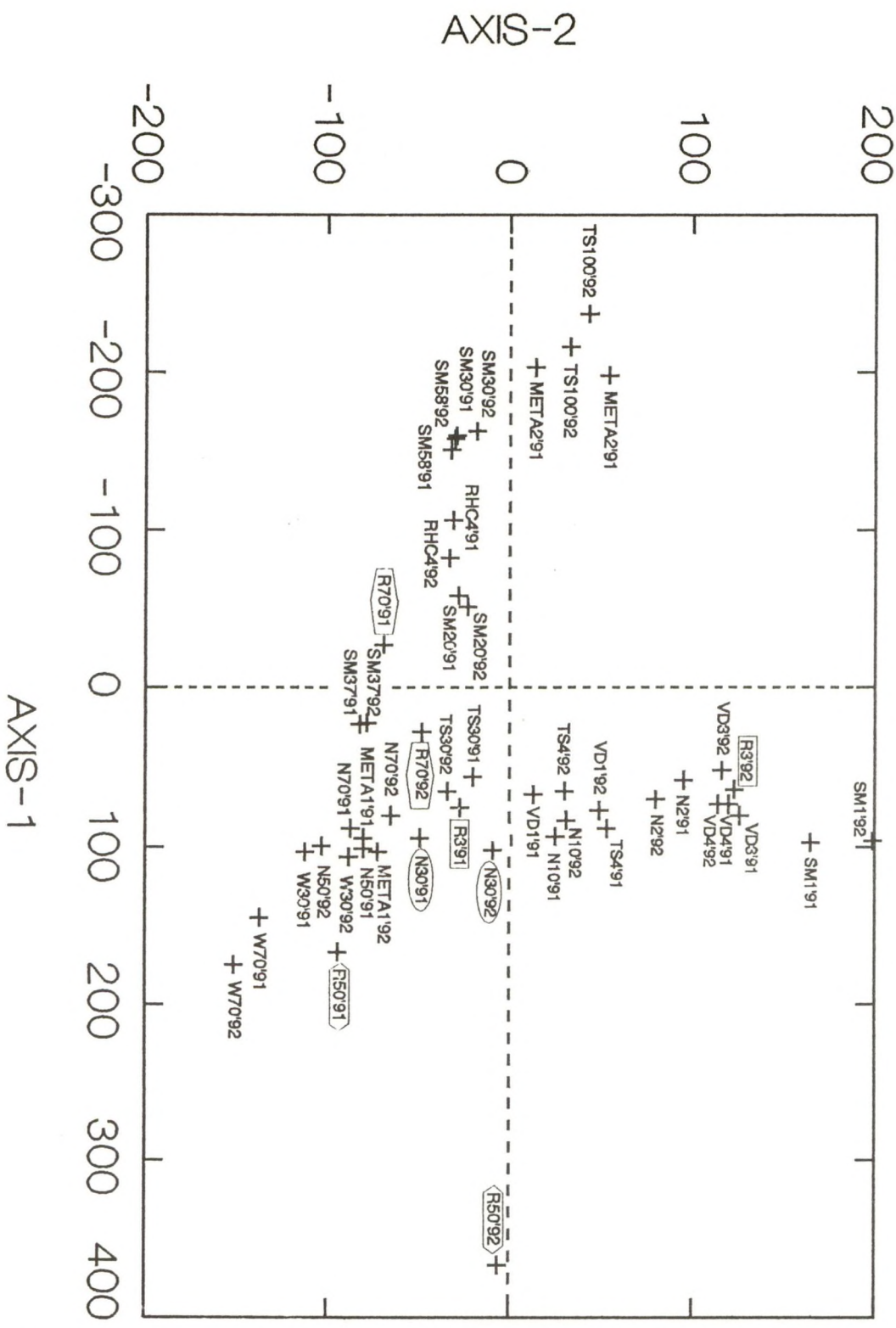

Fig.3. DECORANA ordination of the 1991 and 1992 samples (average values per station) along the two major axes (1 and 2). Stations with major shifts in the species assemblage (R3, R70, and N30; see text) have been marked.

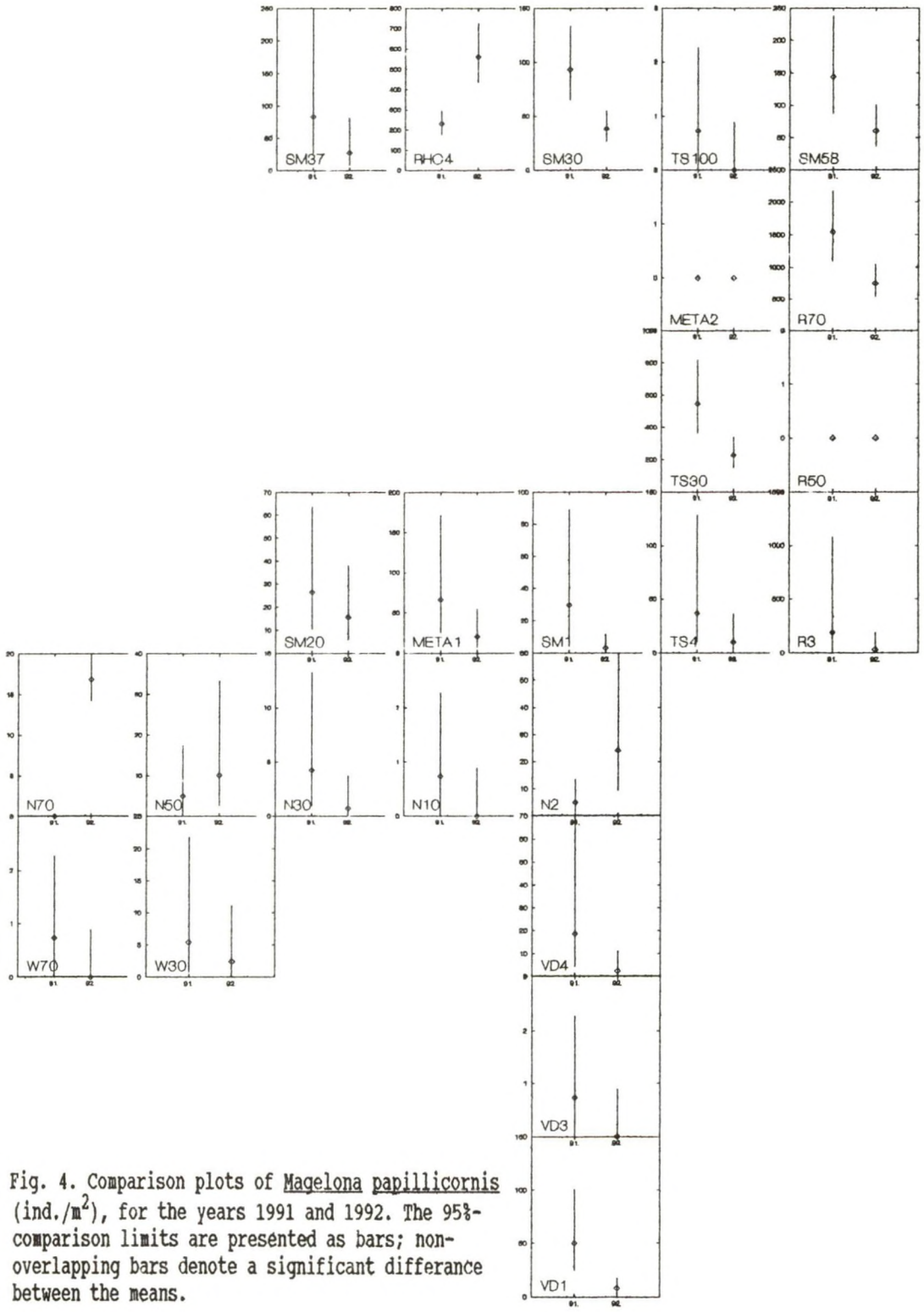

Fig. 4. Comparison plots of Magelona papillicornis (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

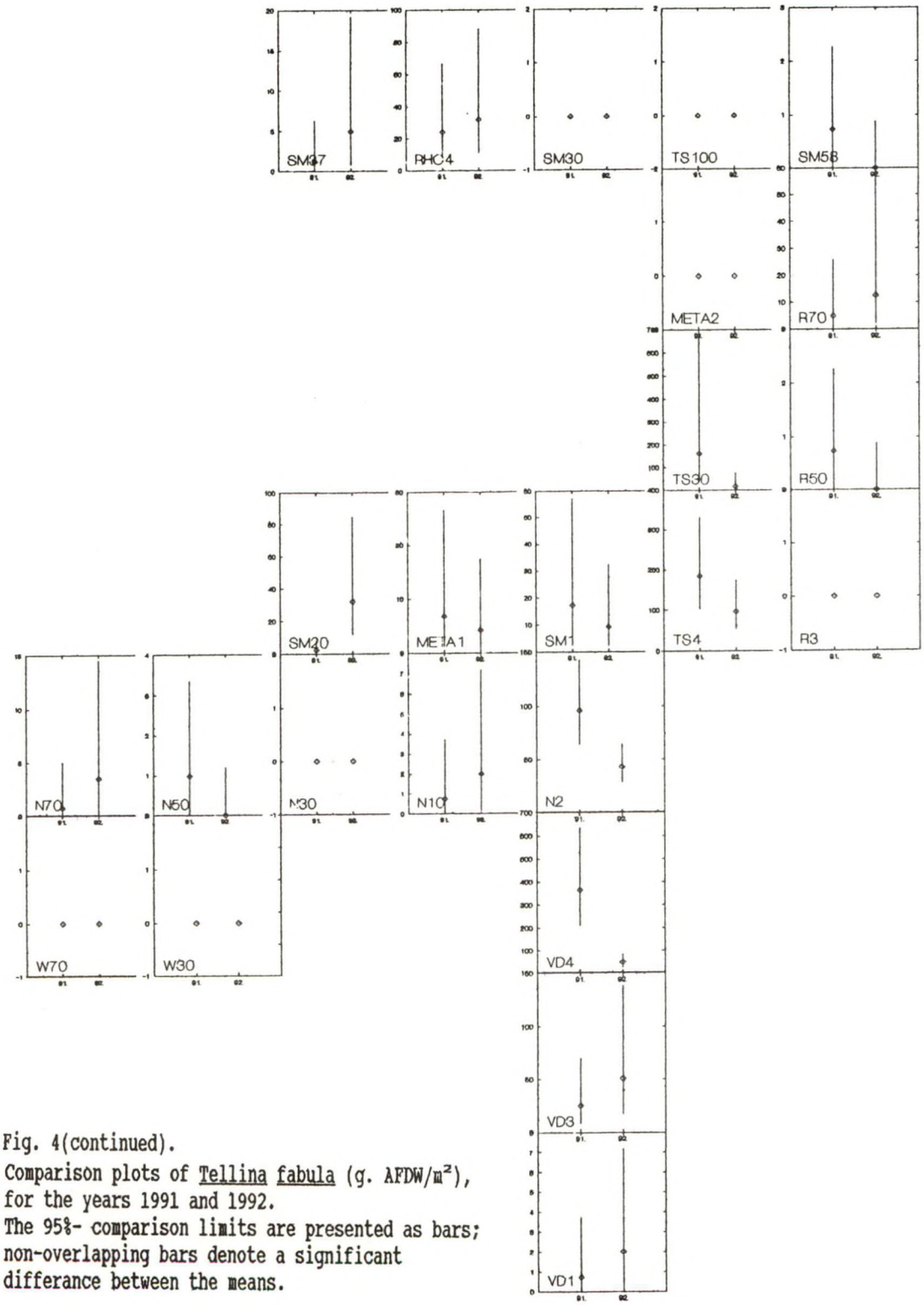

Fig. 4(continued).
Comparison plots of Tellina fabula (g. AFDW/m^2), for the years 1991 and 1992.
The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

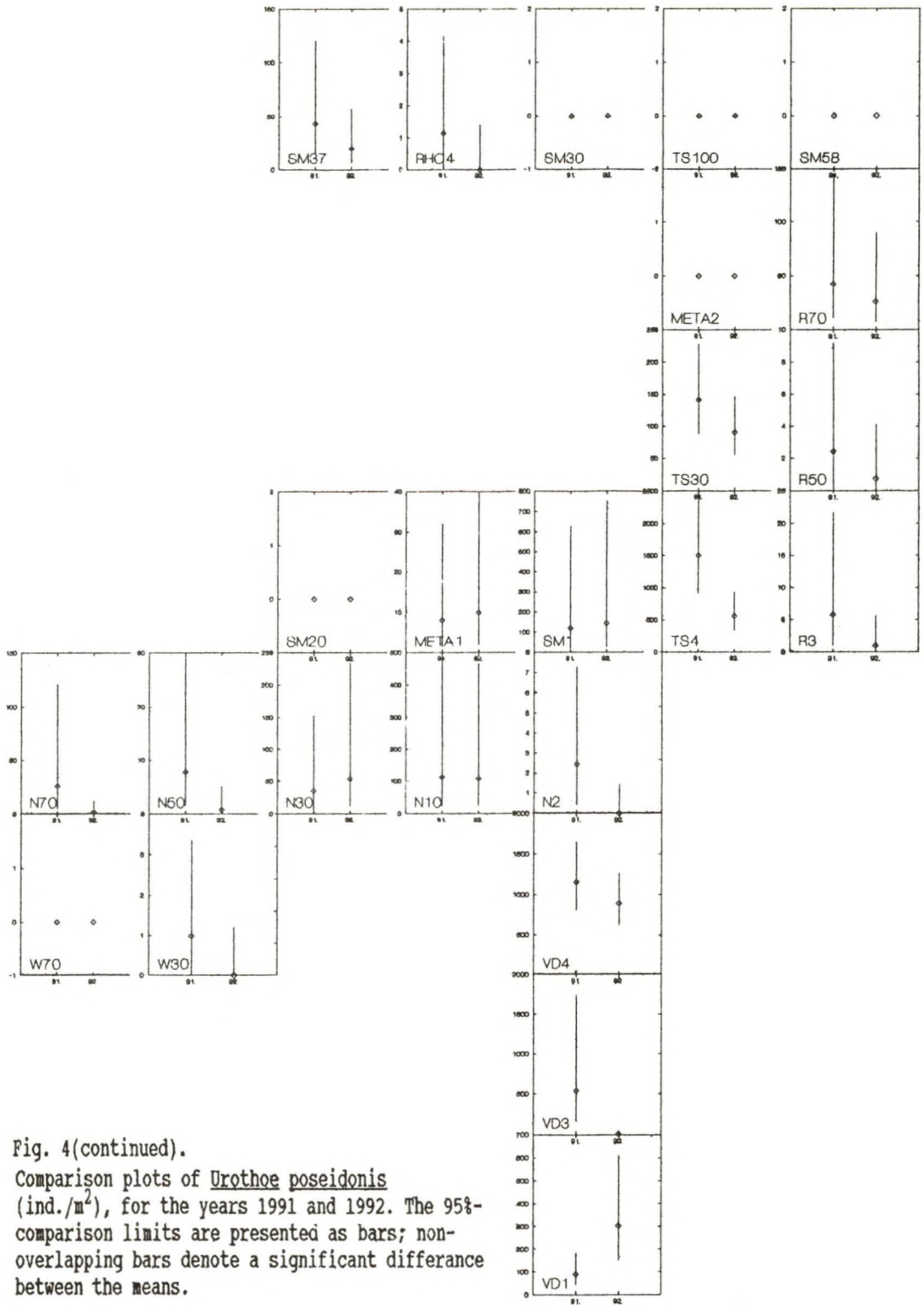

Fig. 4(continued).
Comparison plots of Urothoe poseidonis (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

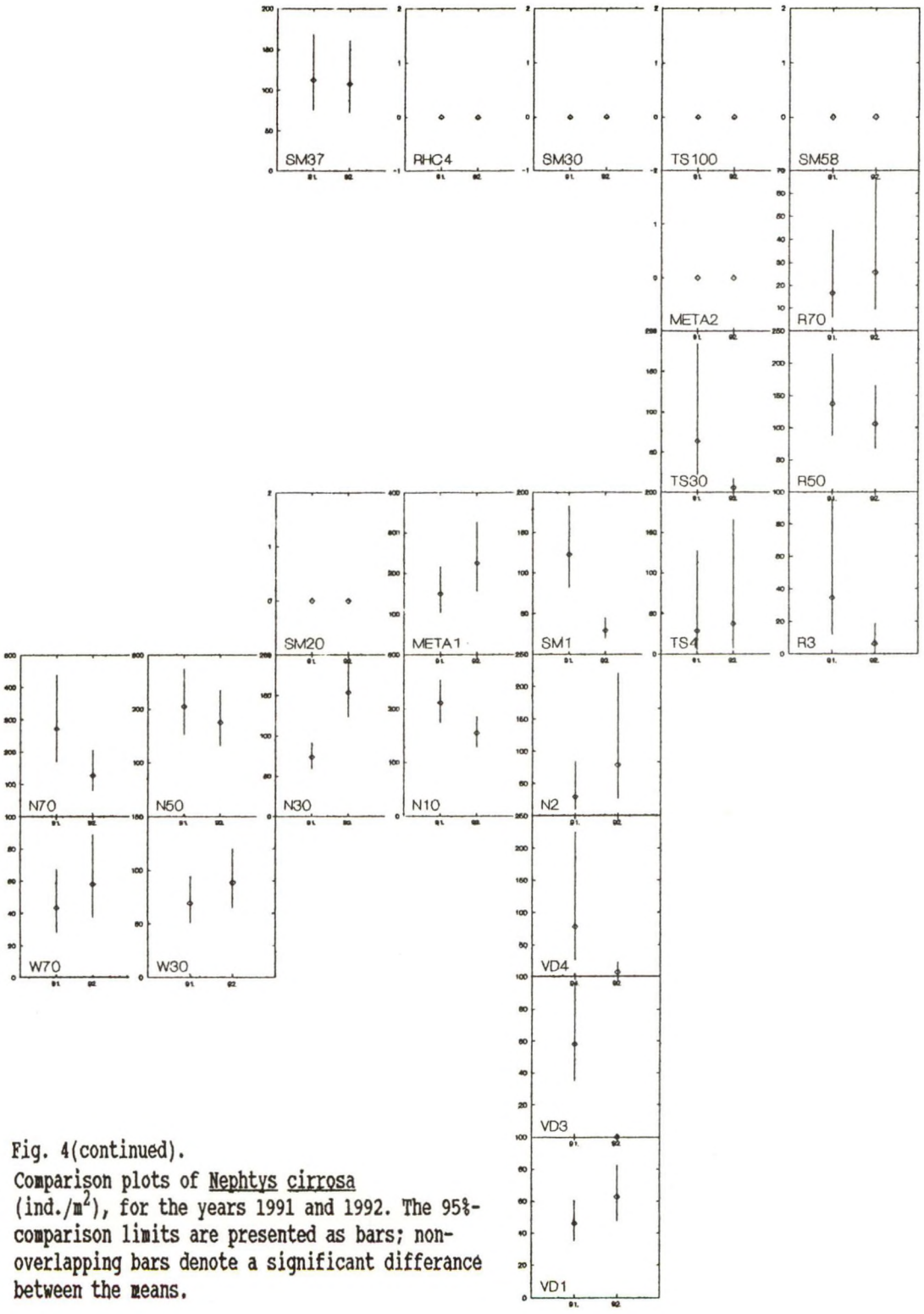

Fig. 4(continued).
Comparison plots of Nephtys cirrosa (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

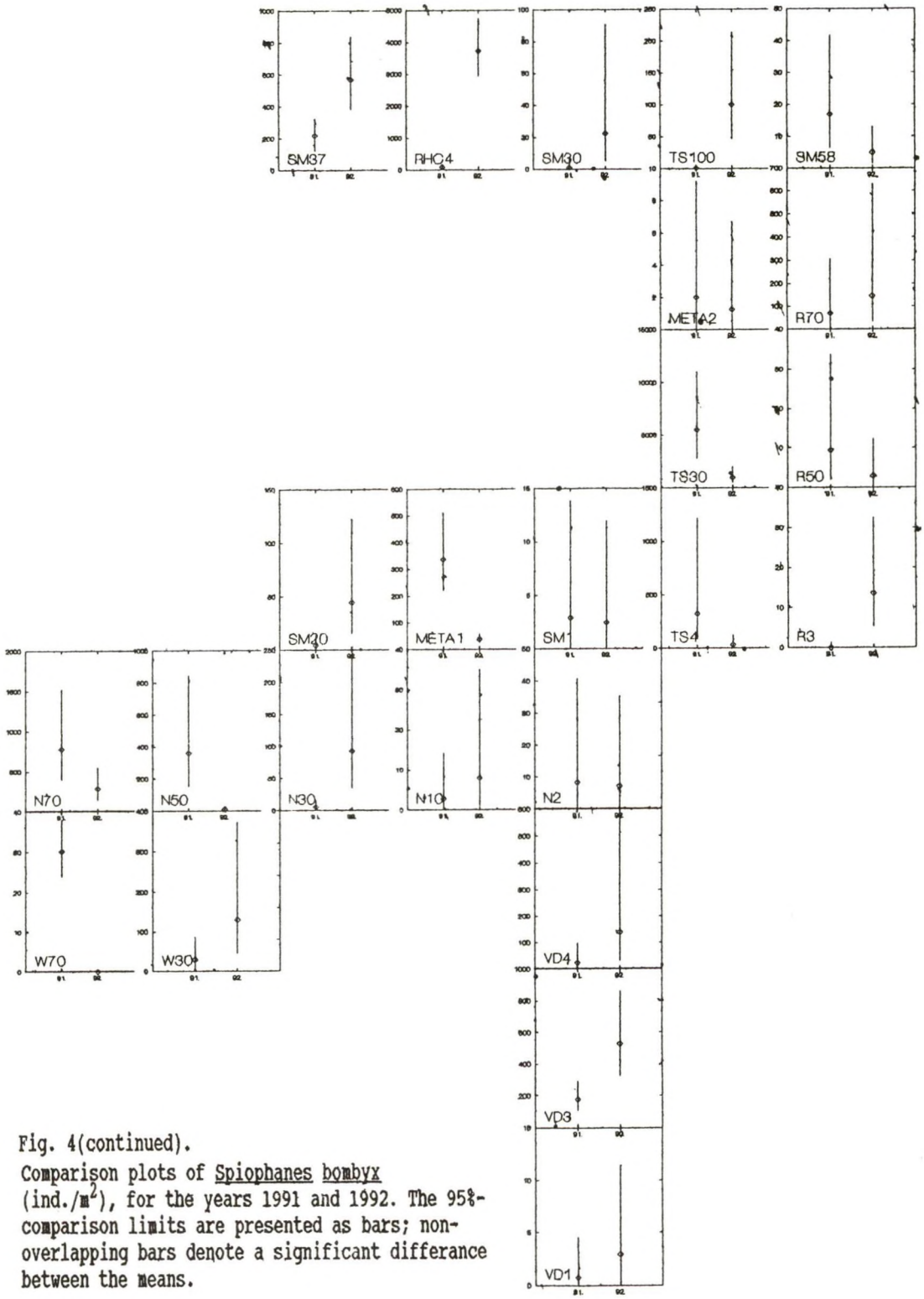

Fig. 4(continued).
Comparison plots of Spiophanes bombyx (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

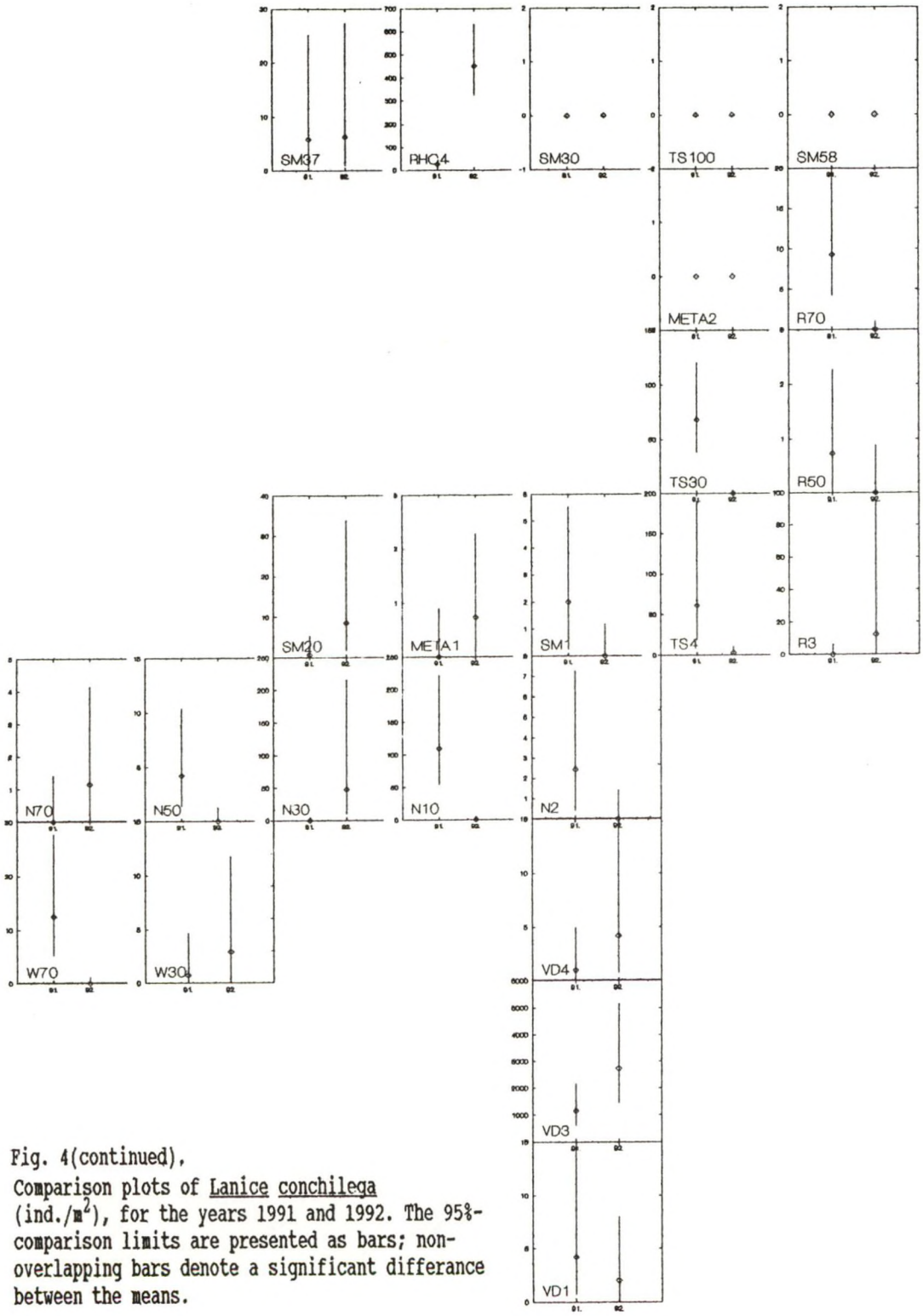

Fig. 4(continued),
Comparison plots of Lanice conchilega (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

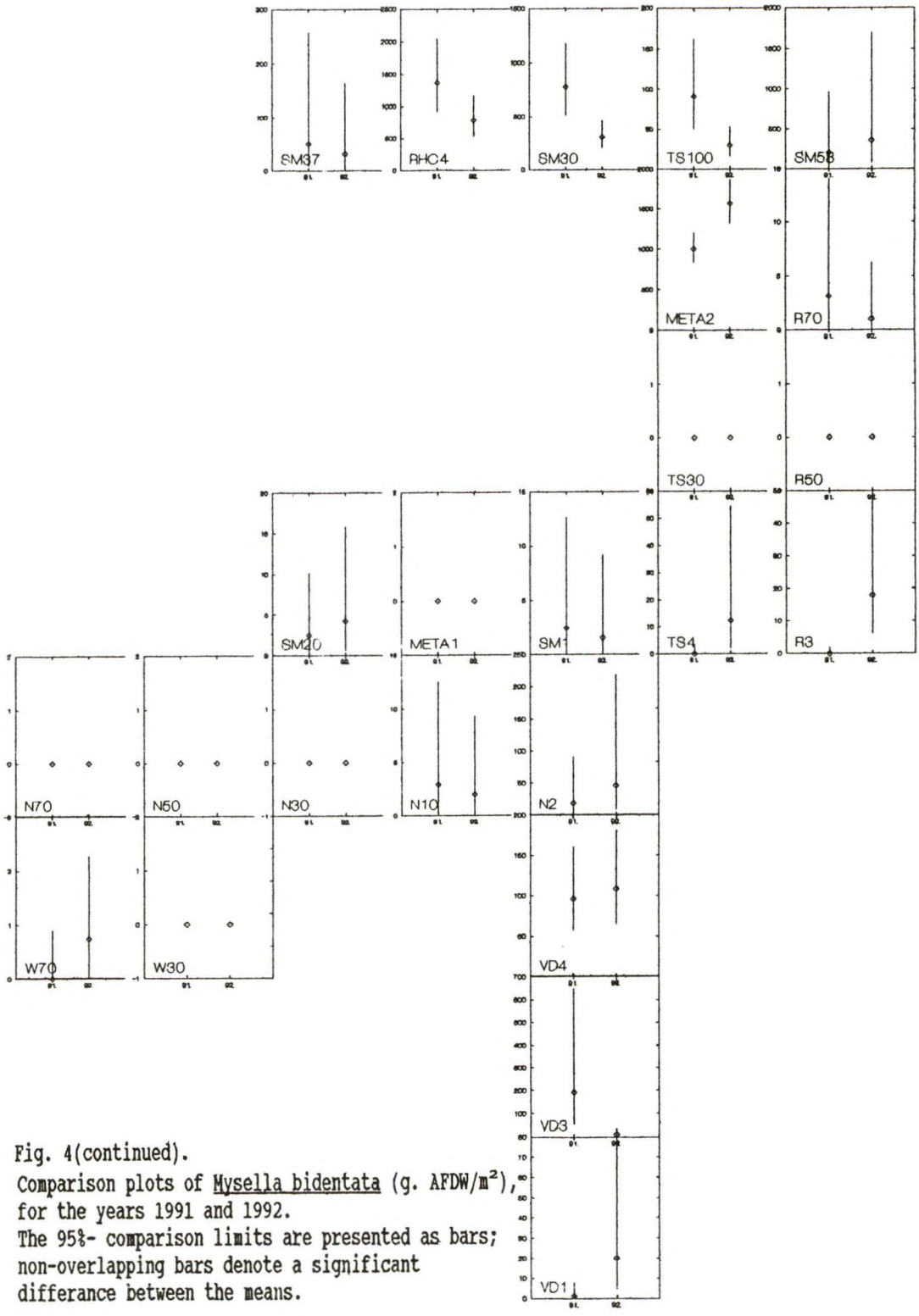

Fig. 4(continued).
Comparison plots of Mysella bidentata (g. AFDW/m^2), for the years 1991 and 1992.
The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

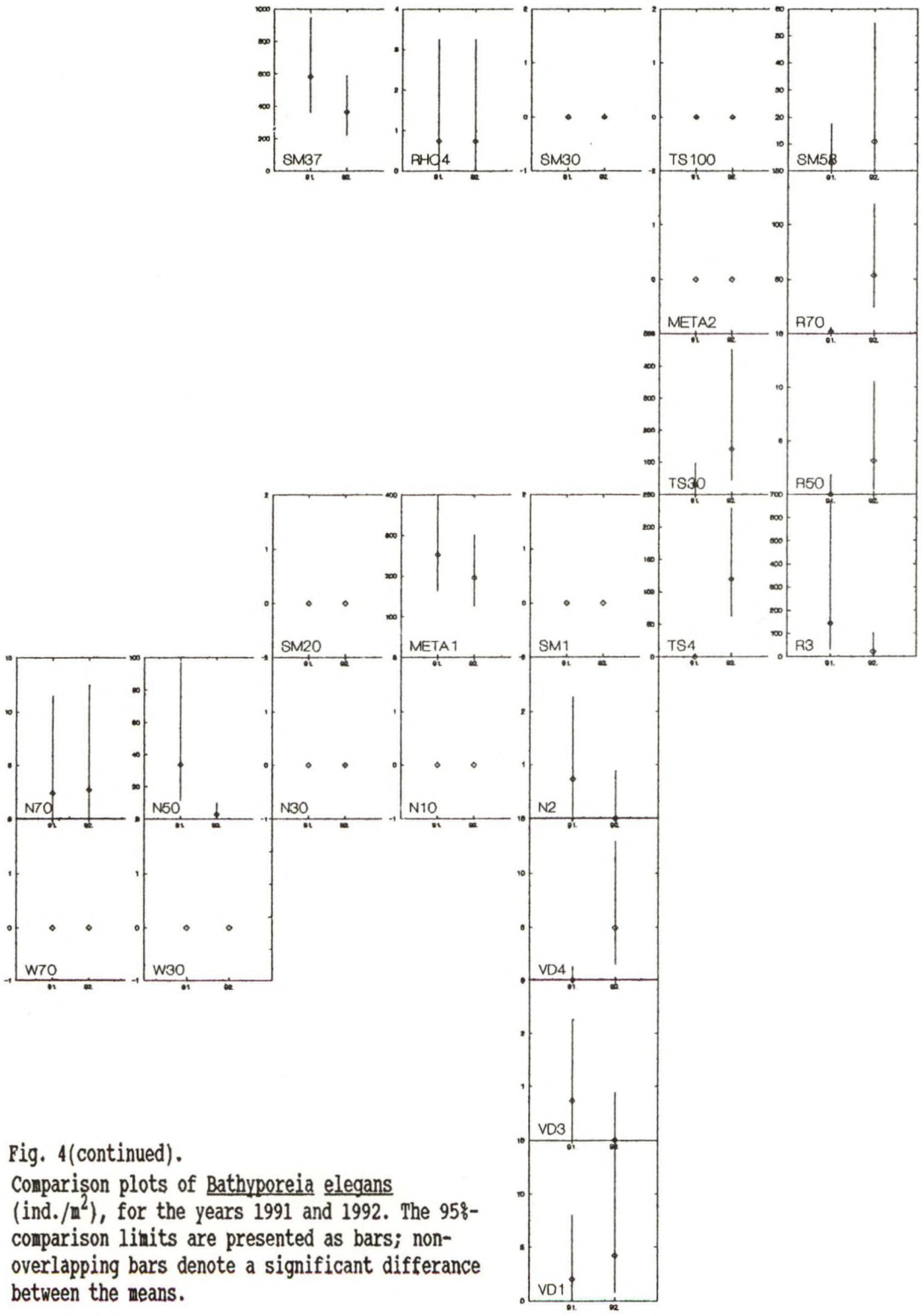

Fig. 4(continued).
Comparison plots of Bathyporeia elegans (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

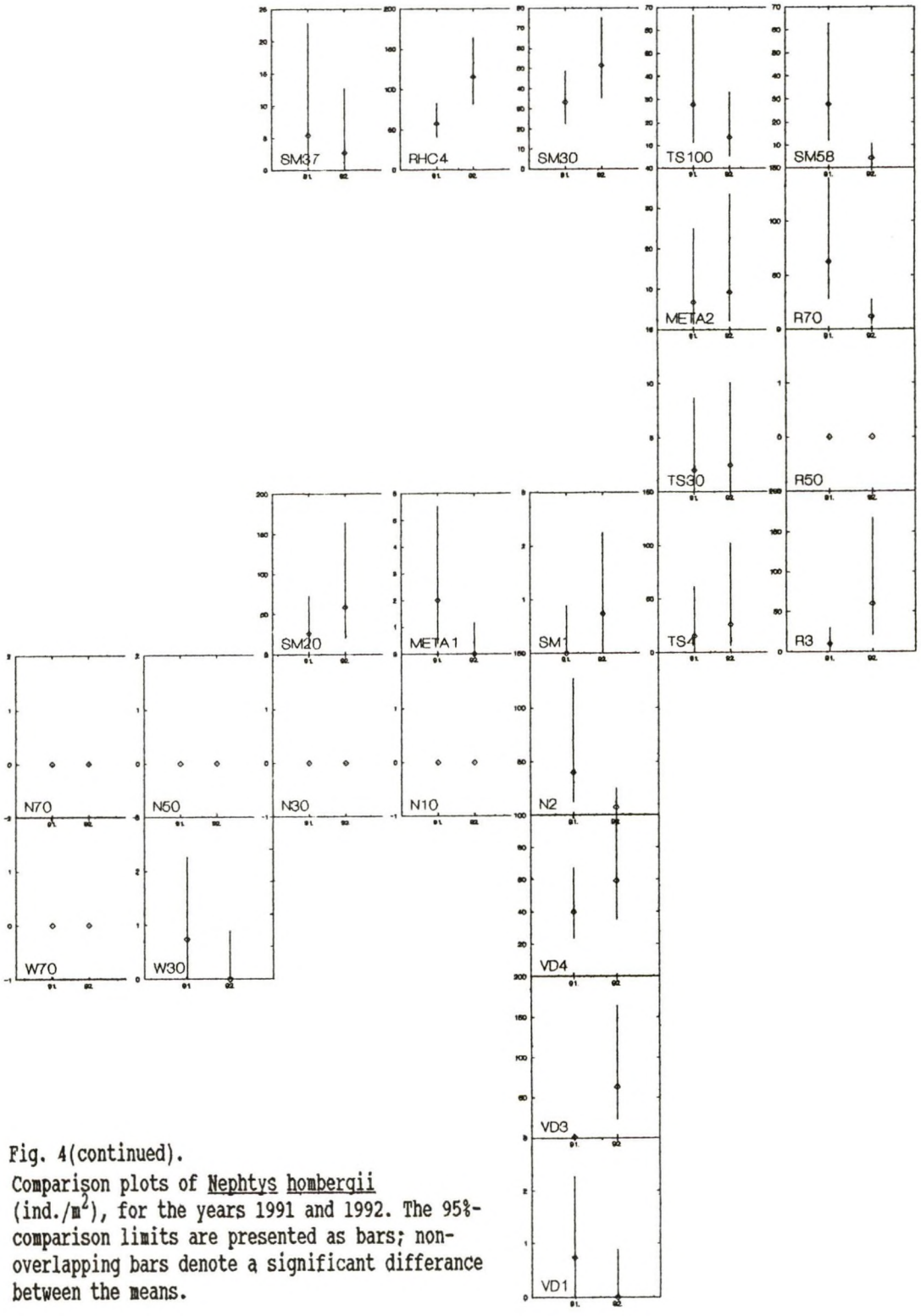

Fig. 4(continued).
Comparison plots of Nephtys hombergii (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

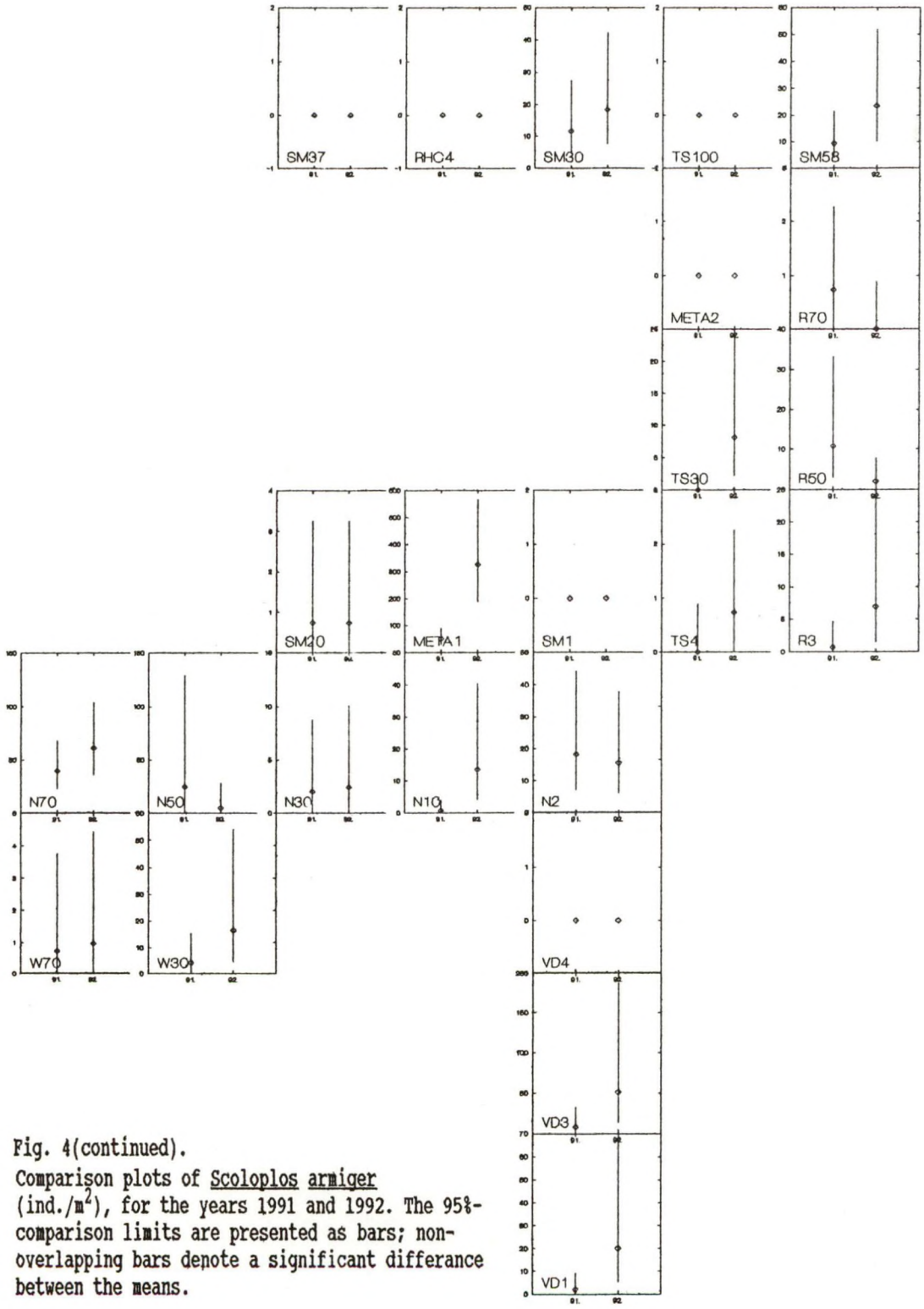

Fig. 4(continued).
Comparison plots of Scoloplos armiger (ind./m^2), for the years 1991 and 1992. The 95%-comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

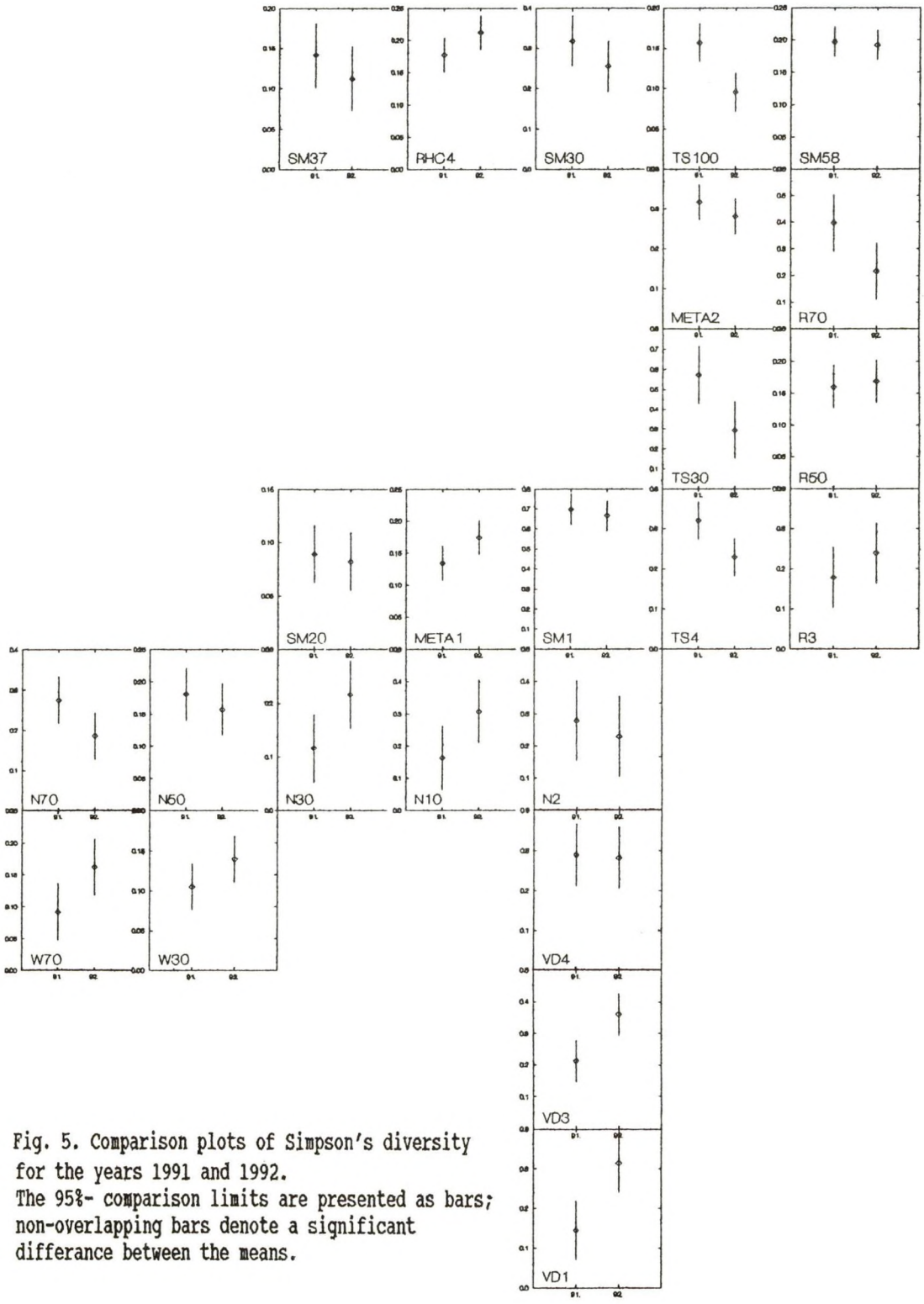

Fig. 5. Comparison plots of Simpson's diversity for the years 1991 and 1992.
The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

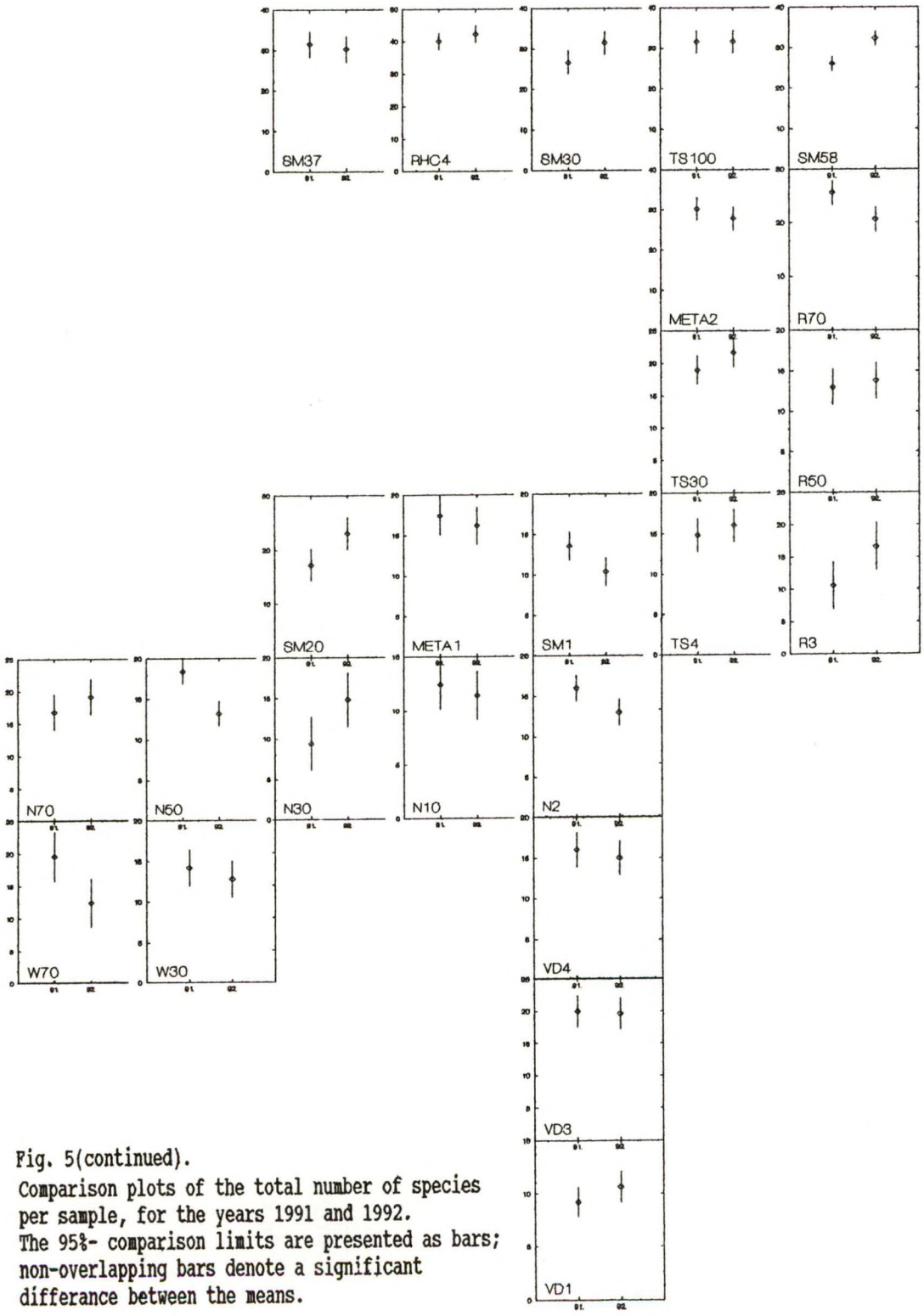

Fig. 5(continued).
Comparison plots of the total number of species per sample, for the years 1991 and 1992.
The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

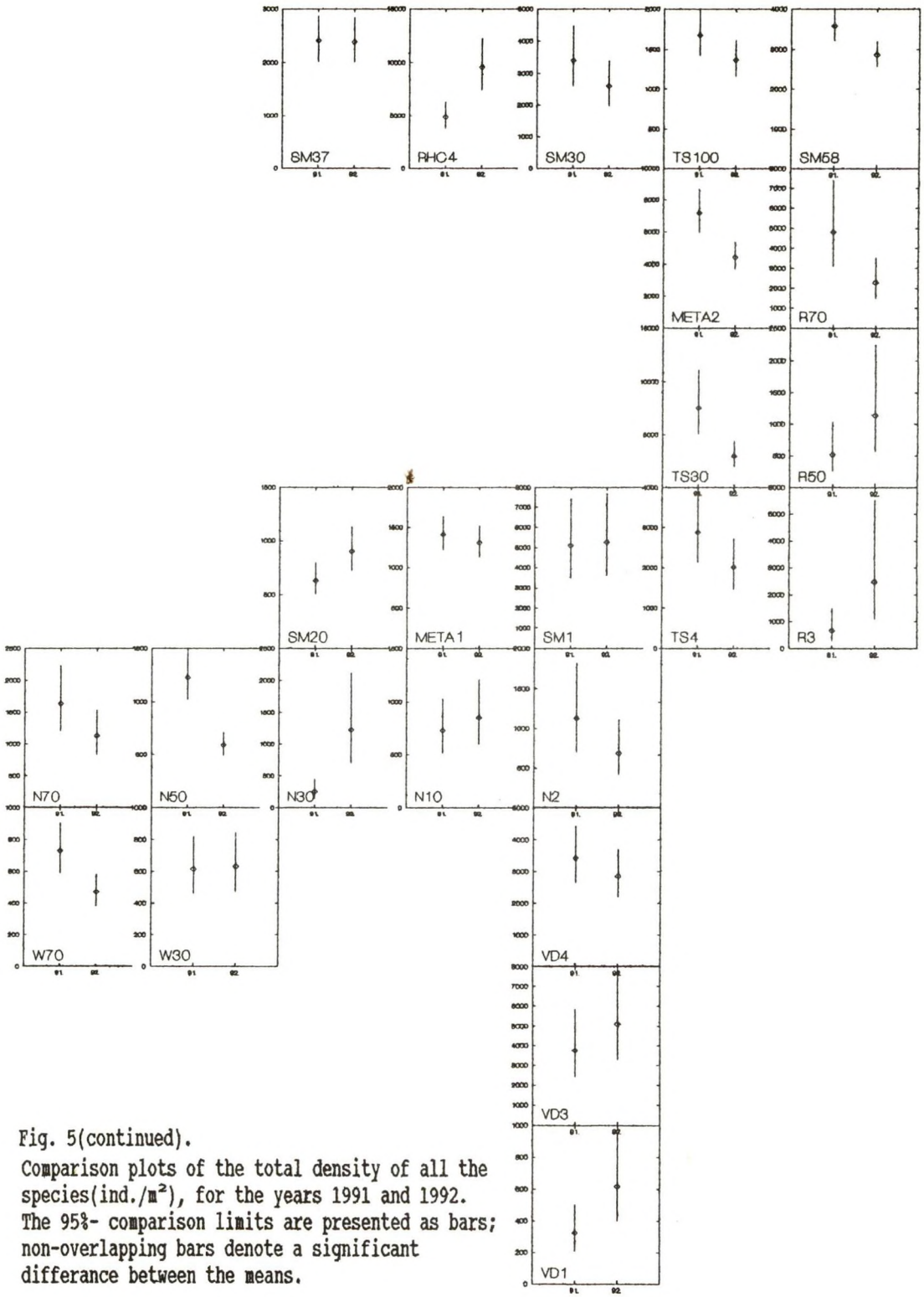

Fig. 5(continued).
Comparison plots of the total density of all the species(ind./m^2), for the years 1991 and 1992. The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

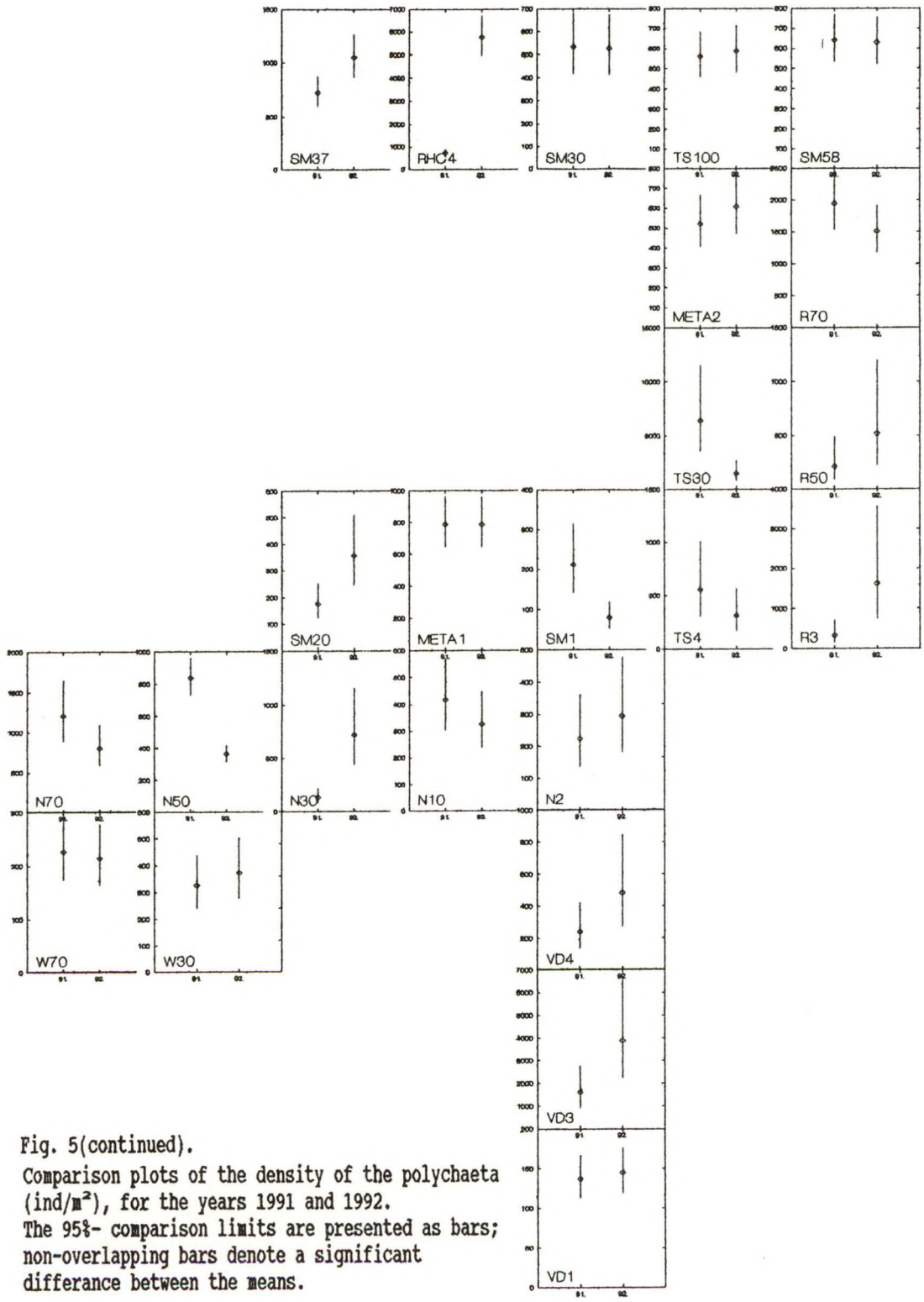

Fig. 5(continued).
Comparison plots of the density of the polychaeta (ind/m^2), for the years 1991 and 1992.
The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

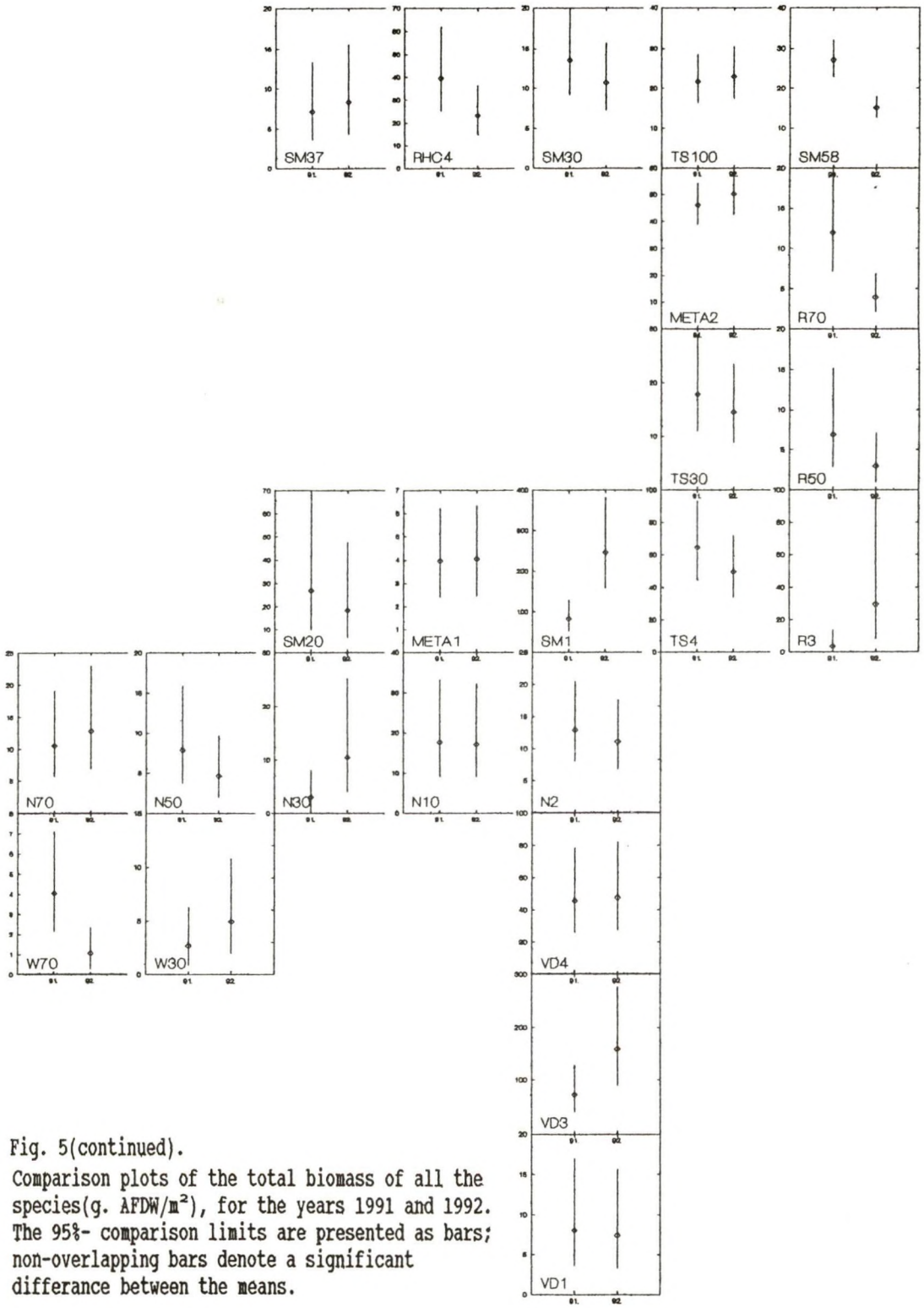

Fig. 5(continued).
Comparison plots of the total biomass of all the species(g. AFDW/m^2), for the years 1991 and 1992. The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

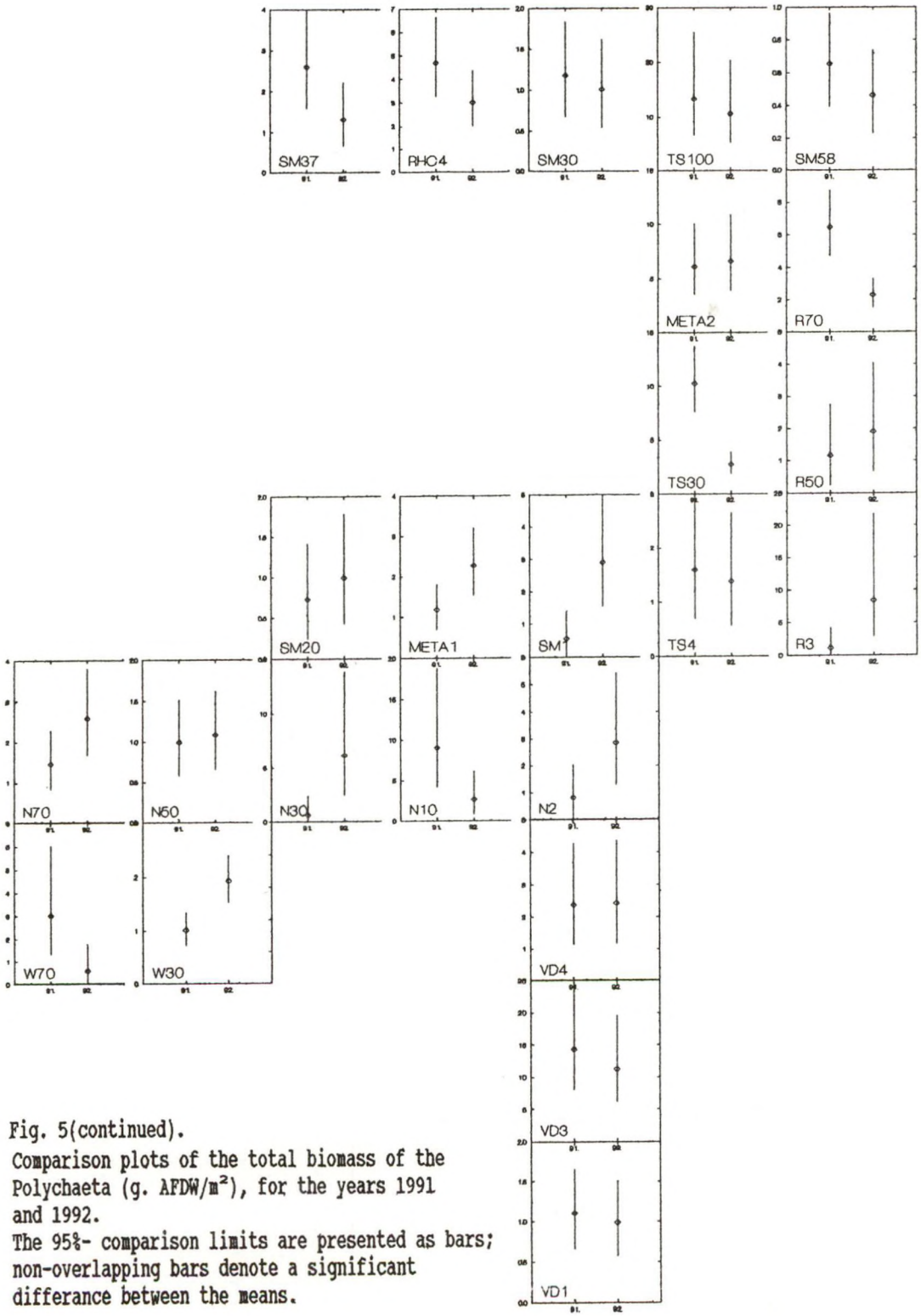

Fig. 5(continued).
Comparison plots of the total biomass of the Polychaeta (g. AFDW/m^2), for the years 1991 and 1992.
The 95%- comparison limits are presented as bars; non-overlapping bars denote a significant differance between the means.

Appendix - 1 Biomonitoring 1992

NOTE

Occurrences of the species that were collected during the Biomonitoring 1992-survey. The left-hand column shows the abbreviated species names as have been used in Appendix-2. The corresponding full latin names are shown in the right-hand column.

Appendix - 1 Biomonitoring 1992

	R 3	R 5 0	R 7 0	S M 5 8	T S 3 4	T S 3 0	M E T A 2	T S 1 0 0	S M 3 0	R H C 4	S M 3 7	S M 1	M E T A 1	S M 2 0	N 2	N 1 0	N 3 0	N 5 0	N 7 0	V D 0 4	V D 0 3	V D 0 1	W 3 0	W 7 0	
ABRA ALBA	+	-	-	+	-	-	-	-	-	+	-	-	-	+	-	+	-	-	-	-	+	-	-	-	ABRA ALBA
ABRA NITI	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA NITIDA
ABRA PRIS	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	ABRA PRISMATICA
ABRA SPEC	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ABRA SPEC.
ACID OBES	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACIDOSTOMA OBESUM
ACRO BRAC	-	-	+	-	-	+	-	-	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	ACROCNIDA BRACHIATA
ACTA TORN	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ACTAEON TORNATILUS
AMPE BREV	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	AMPELISCA BREVICORNIS
AMPE DIAD	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPELISCA DIADEMA
AMPE TENU	-	-	-	+	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPELISCA TENUICORNIS
AMPH FILI	-	-	+	+	-	-	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	AMPHIURA FILIFORMIS
AMPH IPOD	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPHIPODA INDET.
AMPH SPEC	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	AMPHARETE SPEC.
ANAI GROE	-	-	-	-	+	-	+	-	-	+	+	+	-	+	-	+	-	-	-	-	-	-	-	-	ANAITIDES GROENLANDICA
ANAI JUVE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	ANAITIDES JUVENILE
ANAI MUCO	+	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ANAITIDES MUCOSA
ANAI SUBU	+	-	-	-	-	+	-	+	-	+	-	+	+	-	-	-	-	-	+	-	-	-	-	-	ANAITIDES SUBULIFERA
ANTH OZOA	+	-	+	+	+	+	-	+	+	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	ANTHOZOA INDET.
AONI PAUC	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	AONIDES PAUCIBRANCHIATA
AORI DAE	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AORIDAE INDET.
APHE JURI	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHERUSA JURI
APHR ACUL	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	APHRODITA ACULEATA
ARGI HAMA	-	+	-	-	-	+	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	ARGISSA HAMATIPES
ARIC MINU	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+	+	+	+	-	-	-	+	+	ARICIDEA MINUTA
ASTA TRIA	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTARTE TRIANGULARIS
ASTE RUBE	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	ASTERIAS RUBENS
ASTR IRRE	-	-	+	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	ASTROPECTEN IRREGULARIS
ATYL FALC	-	+	-	-	-	+	-	-	-	-	+	-	-	-	+	-	+	-	-	+	-	+	-	+	ATYLUS FALCATUS
ATYL SWAM	-	-	-	-	-	-	-	-	-	-	+	+	-	-	+	-	-	+	+	-	+	-	-	+	ATYLUS SWAMMERDAMI
AUTO SPEC	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	AUTOLYTUS SPEC.
BATH ELEG	+	+	+	+	+	+	-	-	-	+	+	-	+	-	-	-	-	+	+	+	-	+	-	-	BATHYPOREIA ELEGANS
BATH GUIL	+	+	+	+	+	+	-	-	+	+	+	-	+	+	-	+	+	+	+	+	-	-	+	+	BATHYPOREIA GUILLIAMSONIANA
BATH TENU	-	-	+	+	-	-	-	-	+	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	BATHYPOREIA TENUIPES
BODO AREN	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	BODO AREN
BRAN LANC	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BRANCHIOSTOMA LANCEOLATUM
BRIS LYRI	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BRISSOPSIS LYRIFERA
CALL SUBT	-	-	-	+	-	-	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	CALLIANASSA SUBTERRANEA
CALL TYRR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	CALLIANASSA TYRRHENA
CAPI CAPI	+	-	-	-	+	-	-	-	-	-	-	-	-	+	+	+	-	-	-	+	+	-	+	-	CAPITELLA CAPITATA
CAPI TELL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	+	-	CAPITELLIDAE INDET.
CAPR ELLI	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	+	-	-	-	CAPRELLIDAE INDET.
CARD ECHI	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CARDIUM ECHINATUM
CAUL SPEC	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	CAULLERIELLA SPEC.
CHAE SETO	+	-	+	+	-	+	-	+	+	+	+	-	+	+	+	-	-	+	+	+	+	+	-	-	CHAETOZONE SETOSA
CHAE VARI	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHAETOPTERUS VARIOPEDATUS
CING VITR	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CINGULA VITREA
CIRR ATUL	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CIRRATULIDAE INDET.
CORB GIBB	-	-	-	-	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CORBULA GIBBA
CUCU ELON	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CUCUMARIA ELONGATA
CULT PELL	-	-	-	+	-	-	-	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	CULTELLUS PELLUCIDUS
CYLI CYLI	-	-	-	+	-	-	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	CYLICHNA CYLINDRACEA
DEVO PERR	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DEVONIA PERREIRI
DIAS BRAD	-	+	+	-	+	-	+	-	-	-	+	+	+	-	+	-	-	+	-	-	-	-	-	-	DIASTYLIS BRADYI
DIAS LAEV	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	DIASTYLIS LAEVIS
DIPL GLAU	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DIPLOCIRRUS GLAUCUS
DONA VITT	-	-	-	-	+	+	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	+	-	-	DONAX VITTATUS
DOSI EXOL	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOSINIA EXOLETA
DOSI LUPI	-	-	-	-	-	-	-	-	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	DOSINIA LUPINUS
ECHI CORD	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	ECHINOCARDIUM CORDATUM
ECHI FLAV	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ECHICARDIUM FLAVESCENS
ECHI PUSI	-	+	+	-	-	+	-	-	-	+	+	-	+	-	-	-	-	+	-	-	-	-	-	+	ECHICYAMUS PUSILLUS
EDWA RDSI	-	-	-	+	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EDWARDSIA SPEC.
ENSI ARCU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	ENSIS ARCUATUS
ENSI DIRE	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-	-	+	+	+	-	-	ENSIS DIRECTUS
ENSI ENSI	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	ENSIS ENSIS
ENSI SPEC	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	ENSIS SPEC.
ENTE ROPN	-	-	-	+	-	-	-	-	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	ENTEROPNEUSTA INDET.
ETEO LACT	-	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ETEONE LACTEA
ETEO LONG	+	-	-	-	-	+	-	-	-	+	-	-	-	+	-	+	-	-	-	-	-	-	-	-	ETEONE LONGA
EUDO DEFO	-	-	-	+	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDORELLOPSIS DEFORMIS
EUDO EMAR	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EUDORELLA EMARGINATA
EUDO TRUN	-	-	-	+	-	-	+	+	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	EUDORELLA TRUNCATULA
EULI ALBA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EULIMA ALBA
EUMI SANG	+	-	-	-	-	+	-	-	-	+	-	-	-	-	-	+	-	-	-	+	-	+	-	-	EUMIDA SANGUINEA
EXOG DISP	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXOGONE DISPAR
EXOG HEBE	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	EXOGONE HEBES
GAMM MACU	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	GAMMARUS MACULATUS
GARI FERV	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	GARI FERVENSIS
GATT CIRR	-	-	-	-	-	-	+	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GATTYANA CIRROSA
GLYC ALBA	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYCERA ALBA
GLYC CAPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	GLYCERA CAPITATA
GLYC LAPI	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	GLYCERA LAPIDUM
GLYC NORD	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYCINDE NORDMANNI
GLYC ROUX	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GLYCERA ROUXI
GOLF ELON	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLFINGIA ELONGATA
GOLF PROC	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLFINGIA PROCERA
GOLF VULG	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GOLFINGIA VULGARIS
GONI BOBR	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	GONIADELLA BOBRETZKI
GONI MACU	-	-	+	+	-	+	+	-	+	+	+	-	+	+	-	-	-	-	+	-	-	-	-	-	GONIADA MACULATA
GYPT CAPE	-	-	-	-	-	-	+	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	GYPTIS CAPENSIS

Appendix - 1 Biomonitoring 1992

	R 3	R 5 0	R 7 0	S M 5 8	T S 4	T S 3 0	M E T A 2	T S 1 0 0	S M 3 0	R H C 4	S M 3 7	S M 1	M E T A 1	S M 2 0	N 2	N 1 0	N 3 0	N 5 0	N 7 0	V D 4	V D 3	V D 1	W 3 0	W 7 0	
HARM IMPA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	HARMOTHOE IMPAR
HARM LONG	-	-	-	+	-	-	+	+	+	+	+	-	-	+	-	-	-	-	-	-	+	-	-	-	HARMOTHOE LONGISETIS
HARM LUNU	+	-	-	-	+	-	+	+	+	-	+	-	+	-	-	+	-	+	+	+	-	-	-	-	HARMOTHOE LUNULATA
HARM SPEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	HARMOTHOE SPEC.
HARP ANTE	-	-	-	+	-	-	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	HARPINIA ANTENNARIA
HARP CREN	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARPINIA CRENULATA
HARP LAEV	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARPINIA LAEVIS
HARP PECT	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HARPINIA PECTINATA
HESI AUGE	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	HESIONURA AUGENERI
HIPP DENT	-	+	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	+	-	-	-	-	-	HIPPOMEDON DENTICULATUS
IONE THOR	-	-	-	+	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IONE THORACIA
IPHI TRIS	-	-	-	-	-	+	-	-	-	-	+	-	-	+	-	-	+	-	-	-	-	-	-	-	IPHINOE TRISPINOSA
KELL SUBO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	KELLIA SUBORBICULARIS
LANI CONC	+	-	-	-	+	-	-	-	-	+	+	-	+	+	-	+	+	-	+	+	+	+	+	-	LANICE CONCHILEGA
LEPT INHA	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPTOSYNAPTA INHAERENS
LEPT SQUA	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEPTON SQUAMOSUM
LEUC INCI	-	-	-	-	+	-	-	-	-	+	-	-	+	-	+	+	+	-	-	-	-	-	-	-	LEUCOTHOE INCISA
LEUC RICH	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LEUCOTHOE RICHARDI
LOPH TYPI	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	LOPHOGASTER TYPICUS
LUCI BORE	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUCINOMA BOREALIS
LUMB LATR	-	-	-	-	-	-	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	LUMBRINERIS LATREILLI
LUMB PSEU	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LUMBRINERIS PSEUDOFRAGILIS
LUPI NIDA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	LUPINIDAE INDET.
LYSI LOVE	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LYSILLA LOVENI
MACO BALT	+	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	MACOMA BALTTHICA
MACT CORA	+	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MACTRA CORALLINA
MAGE ALLE	-	-	-	+	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAGELONA ALLENI
MAGE PAPI	+	-	+	+	+	+	-	-	+	+	+	+	+	+	+	-	+	+	+	+	-	+	+	-	MAGELONA PAPILLICORNIS
MALD ANID	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	MALDANIDAE INDET.
MEDI GRAC	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MEDIOMASTUS GRACILIS
MEGA AGIL	-	+	+	-	-	+	-	-	-	-	+	+	+	+	-	+	+	+	+	-	-	-	+	+	MEGALUROPUS AGILIS
MELI OBTU	-	-	-	-	-	+	+	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	MELITA OBTUSATA
METO ALDE	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	METOPA ALDERI
MICR MACU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	MICROPROTOPUS MACULATUS
MICR SCZE	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	MICROPHTHALMUS SCZELKOWI
MONT FERR	+	+	+	-	+	+	+	+	+	+	+	+	-	-	+	+	+	-	+	+	+	+	-	-	MONTACUTA FERRUGINOSA
MYA AREN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	MYA ARENARIA
MYRI OCUL	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	MYRIOCHELE OCULATA
MYSE BIDE	+	-	+	+	+	-	+	+	+	+	+	+	-	+	+	+	-	-	-	+	+	+	-	+	MYSELLA BIDENTAT
MYSI UNDA	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MYSIA UNDATA
NATI ALDE	-	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	+	NATICA ALDERI
NEME RTIN	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	NEMERTINI
NEPH CAEC	-	+	-	-	-	-	-	-	-	-	+	+	-	+	-	-	-	-	-	-	-	-	-	-	NEPHTYS CAECA
NEPH CIRR	+	+	+	-	+	+	-	-	-	-	+	+	+	-	+	+	+	+	+	-	+	+	+	+	NEPHTYS CIRROSA
NEPH HOMB	+	-	+	+	+	+	+	+	+	+	+	+	-	+	+	-	-	-	-	+	+	-	-	-	NEPHTYS HOMBERGII
NEPH INCI	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPHYS INCISA
NEPH JUVE	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	NEPHTYS JUVENILE
NEPH LONG	-	-	-	+	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	+	-	+	-	+	NEPHTYS LONGOSETOSA
NERE LONG	+	-	-	-	+	-	-	-	-	-	-	+	-	-	+	-	+	-	-	+	+	-	-	-	NEREIS LONGISSIMA
NERE VIRE	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NEREIS VIRENS
NORM SPEC	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	NORMANION SPEC.
NOTO LATE	-	-	-	-	-	-	+	+	-	+	+	-	-	-	+	+	-	-	-	-	+	-	-	+	NOTOMASTUS LATERICEUS
NUCU TENU	-	-	-	+	-	-	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NUCULA TENUIS
NUCU TURG	-	-	-	+	-	-	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	NUCULA TURGIDA
OLIG OCHA	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OLIGOCHAETA INDET.
OPHE ACUM	-	-	-	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHELINA ACUMINATA
OPHE LIMA	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	OPHELIA LIMACINA
OPHI ALBI	-	+	-	+	-	+	+	+	+	+	+	-	-	+	-	-	+	+	+	-	+	+	+	+	OPHIURA ALBIDA
OPHI FLEX	-	-	-	+	-	-	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	OPHIODROMUS FLEXUOSUS
OPHI TEXT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	OPHIURA TEXTURATA
OPIS PTER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	OPISTHODONTA PTEROCHAETA
ORCH NANA	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	ORCHOMENE NANA
OWEN FUSI	-	-	+	-	-	-	+	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	OWENIA FUSIFORMIS
PARA GRAC	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARAONIS GRACILIS
PARI TYPI	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PARIAMBUS TYPICUS
PECT AURI	-	-	+	+	-	-	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	PECTINARIA AURICOMA
PECT KORE	+	-	-	+	-	+	-	-	-	+	-	+	-	+	-	-	-	-	-	+	-	-	-	-	PECTINARIA KORENI
PERI LONG	-	-	-	+	-	-	-	+	+	+	+	-	-	+	-	-	+	+	+	-	-	-	-	-	PERIOCULODES LONGIMANUS
PETR PHOL	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PETRICOLA PHOLADIFORMIS
PHIL SPEC	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PHILINE SPEC.
PHOL MINU	+	-	-	+	-	-	+	+	+	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	PHOLOE MINUTA
PHOR ONID	-	-	-	+	+	-	+	+	+	+	-	-	-	+	-	-	-	-	+	+	-	-	+	-	PHORONIDA INDET.
PISI REMO	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PISIONE REMOTA
PLAT WORM	-	-	-	+	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PLATWORM
POEC SERP	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POECILOCHAETUS SERPENS
POLY KINB	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLYNOE KINBERGI
POLY MEDU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	POLYCIRRUS MEDUSA
POLY SPEC	-	-	-	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	POLYDORA SPEC.
PONT ALTA	+	-	+	-	+	+	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	PONTOCRATES ALTAMARINUS
PRIO CIRR	-	-	-	+	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PRIONOSPIO CIRRIFERA
PSEU LONG	-	-	+	+	+	+	-	+	+	+	+	+	-	+	-	+	-	+	+	+	+	-	-	-	PSEUDOCUMA LONGICORNIS
PSEU PULC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	PSEUDOPOLYDORA PULCHRA
PSEU SIMI	-	-	-	+	-	+	-	-	-	-	-	-	+	-	+	-	+	-	+	-	-	-	+	-	PSEUDOCUMA SIMILIS
SCAL INFL	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	SCALIBREGMA INFLATUM
SCOL ARMI	+	+	-	+	+	+	-	-	+	-	-	-	+	+	+	+	+	+	+	-	+	+	+	+	SCOLOPLOS ARMIGER
SCOL BONN	-	+	+	+	-	-	-	-	+	+	+	-	-	-	-	-	+	+	-	-	+	-	-	-	SCOLELEPIS BONNIERI
SCOL SQUA	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-	-	+	+		SCOLELEPIS SQUAMATA
SCOP HOPE	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SCOPELOCHEIRUS HOPEI
SIGA MATH	-	-	+	+	-	+	-	-	+	+	+	-	-	+	-	-	-	-	-	+	-	-	-	-	SIGALION MATHILDAE
SIPH KROY	-	-	+	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-		SIPHONOECETES KROYERANUS

Appendix - 1 Biomonitoring 1992

	R 3	R 5 0	R 7 0	S M 5 8	T S 4	T S 3 0	M E T A 2	T S 1 0 0	S M 3 0	R H C 4	S M 3 7	S M 1	M E T A 1	S M 2 0	N 2	N 1 0	N 3 0	N 5 0	N 7 0	V D 4	V D 3	V D 1	W 3 0	W 7 0	
SIPU NCUL	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SIPUNCULIDA INDET.
SPIO BOMB	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	SPIOPHANES BOMBYX
SPIO FILI	+	-	+	+	+	+	-	-	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	SPIO FILICORNIS
SPIO KROY	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPIOPHANES KROYERI
SPIS ELLI	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	+	+	SPISULA ELLIPTICA
SPIS SPEC	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SPISULA SPEC.
SPIS SUBT	-	-	-	-	+	-	-	-	-	-	-	+	-	-	+	+	-	-	-	+	-	-	-	-	SPISULA SUBTRUNCATA
STHE BOA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	STHENELAIS BOA
STHE LIMI	-	-	-	+	-	-	+	+	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	STHENELAIS LIMICOLA
STRE WEBS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	STREPTOSYLLIS WEBSTERI
SYNC MACU	-	-	-	+	-	-	-	-	-	+	+	-	+	+	-	+	+	-	-	-	-	-	+	-	SYNCHELIDIUM MACULATUM
SYNE KLAT	-	-	-	+	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SYNELMIS KLATTI
TANA IDAC	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TANAIDACEA INDET.
TELL FABU	-	-	+	-	+	+	-	-	-	+	+	+	+	+	+	+	-	-	+	+	+	+	-	-	TELLINA FABULA
TELL PYGM	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	TELLINA PYGMEA
TELL TENU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	TELLINA TENUIS
TERE STRO	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TEREBELLIDES STROEMI
THIA SCUT	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	+	-	-	-	-	-	THIA SCUTELLATA
THRA CONV	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THRACIA CONVEXA
THRA PHAS	-	-	-	-	-	-	+	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	THRACIA PHASEOLINA
THYA FLEX	-	-	-	-	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	THYASIRA FLEXUOSA
TRAV FORB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	TRAVISIA FORBESI
TRYP SARS	-	-	+	-	-	+	+	-	-	-	-	-	-	-	-	+	+	-	+	-	-	-	-	-	TRYPHOSELLA SARSI
TURI COMM	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TURITELLA COMMUNIS
TYPO ARMI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	TYPOSYLLIS ARMILLARIS
UNCI PLAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	UNCIOLA PLANIPES
UPOG DELT	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UPOGEBIA DELTAURA
UPOG STEL	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UPOGEBIA STELLATA
UROT BREV	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	+	-	-	-	+	-	UROTHOE BREVICORNIS
UROT POSE	+	+	+	-	+	+	-	-	-	-	+	+	+	-	-	+	+	+	+	+	+	+	-	-	UROTHOE POSEIDONIS
VENU STRI	-	-	-	+	-	+	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VENUS STRIATULA
WEST CAEC	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	WESTWOODILLA CAECULA
No. Spec.	37	33	36	63	30	41	62	66	63	75	55	24	29	50	27	27	36	30	36	24	39	20	27	32	

Appendix - 2 Biomonitoring 1992

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
Σ = Sum of densities resp. biomass
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.

Station index:

Appendix - 2 Biomonitoring 1992

STATION : R3
GEOGR. POS. : 53^0 34" 57' N 06^0 33" 28' E
DATE : 01/04/92
DEPTH m : 16
Median Grain: 144µ
Perc. Mud. : 10.2

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
BATHELEG	0.0	0.000	0.0	0.000	365.8	0.097	73.2	0.022	204.8	0.056	128.7(	156.7)	0.035(	0.041)
BATHGUIL	0.0	0.000	0.0	0.000	14.6	0.012	0.0	0.000	29.3	0.025	8.8(	13.1)	0.007(	0.011)
METOALDE	160.9	0.018	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	32.2(	72.0)	0.004(	0.008)
PARITYPI	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
PONTALTA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	2.9(	6.5)	0.001(	0.002)
UROTPOSE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.020	5.9(	13.1)	0.004(	0.009)
ASTERUBE	29.3	1.324	43.9	1.106	0.0	0.000	0.0	0.000	0.0	0.000	14.6(	20.7)	0.486(	0.670)
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	12.948	2.9(	6.5)	2.590(	5.790)
MOLLUSCA														
ABRAALBA	1009.5	4.339	131.7	1.931	0.0	0.000	0.0	0.000	0.0	0.000	228.2(	440.4)	1.254(	1.917)
ENSIDIRE	702.2	232.324	204.8	66.567	43.9	8.646	0.0	0.000	14.6	3.028	193.1(	296.1)	62.113(	98.994)
MACOBALT	14.6	0.004	0.0	0.000	43.9	0.176	0.0	0.000	29.3	0.051	17.6(	19.1)	0.046(	0.075)
MACTCORA	14.6	0.015	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	5.9(	8.0)	0.004(	0.006)
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.114	11.7(	26.2)	0.023(	0.051)
MYSEBIDE	73.2	0.059	131.7	0.044	14.6	0.000	0.0	0.000	14.6	0.000	46.8(	55.1)	0.020(	0.029)
PETRPHOL	380.4	94.080	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	76.1(	170.1)	18.816(	42.074)
POLYCHAETA														
ANAIMUCO	1872.6	3.969	1506.9	3.061	0.0	0.000	0.0	0.000	0.0	0.000	675.9(	934.5)	1.406(	1.952)
ANAISUBU	14.6	0.023	1506.9	2.585	0.0	0.000	0.0	0.000	0.0	0.000	304.3(	672.3)	0.522(	1.154)
CAPICAPI	278.0	0.031	658.3	0.042	0.0	0.000	29.3	0.000	14.6	0.000	196.0(	282.7)	0.015(	0.020)
CHAESETO	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.001(	0.002)
ETEOLONG	87.8	0.018	29.3	0.010	0.0	0.000	0.0	0.000	0.0	0.000	23.4(	38.2)	0.006(	0.008)
EUMISANG	1711.7	0.644	599.8	0.294	14.6	0.004	14.6	0.000	0.0	0.000	468.2(	740.7)	0.188(	0.284)
HARMLUNU	365.8	0.102	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	76.1(	162.1)	0.022(	0.045)
LANICONC	4842.5	30.201	87.8	0.549	0.0	0.000	0.0	0.000	0.0	0.000	986.1(	2156.2)	6.150(	13.447)
MAGEPAPI	0.0	0.000	0.0	0.000	1038.7	1.328	43.9	0.145	702.2	1.127	357.0(	484.0)	0.520(	0.652)
MICRSCZE	43.9	0.000	117.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	32.2(	51.1)	0.000(	0.000)
NEPHCIRR	0.0	0.000	0.0	0.000	43.9	0.617	29.3	0.236	14.6	0.056	17.6(	19.1)	0.182(	0.262)
NEPHHOMB	204.8	0.666	278.0	0.595	58.5	1.004	14.6	0.038	14.6	1.273	114.1(	120.4)	0.715(	0.466)
NERELONG	380.4	35.239	307.2	28.913	0.0	0.000	0.0	0.000	0.0	0.000	137.5(	190.1)	12.831(	17.711)
NEREVIRE	14.6	11.249	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	2.250(	5.031)
PECTKORE	43.9	0.976	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.195(	0.436)
PHOLMINU	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
SCOLARMI	43.9	0.035	43.9	0.022	0.0	0.000	14.6	0.277	0.0	0.000	20.5(	22.2)	0.067(	0.118)
SPIOBOMB	14.6	0.013	58.5	0.019	0.0	0.000	43.9	0.010	14.6	0.016	26.3(	24.0)	0.012(	0.007)
SPIOFILI	0.0	0.000	14.6	0.004	58.5	0.019	29.3	0.004	43.9	0.013	29.3(	23.1)	0.008(	0.008)
MISCELLANEOUS														
ANTHOZOA	73.2	24.062	58.5	26.467	0.0	0.000	0.0	0.000	0.0	0.000	26.3(	36.4)	10.106(	13.864)
NEMERTIN	0.0	0.000	0.0	0.000	29.3	0.158	29.3	0.016	0.0	0.000	11.7(	16.0)	0.035(	0.069)
OLIGOCHA	2969.9	0.484	2677.3	0.395	0.0	0.000	0.0	0.000	0.0	0.000	1129.4(	1550.0)	0.176(	0.243)
Σ	15405.4	439.893	8485.4	132.612	1726.3	12.061	336.5	0.752	1214.3	18.729	5433.6(	6447.4)	120.810(	186.155)
NSPC	26		20		11		11		15					
SH-W	2.149		2.097		1.334		2.258		1.578					
SIMP	0.171		0.176		0.407		0.079		0.362					

Appendix - 2 Biomonitoring 1992

STATION : R50
GEOGR. POS. : 53^0 57" 12' N 06^0 18" 34' E
DATE : 01/04/92
DEPTH m : 31
Median Grain: 313µ
Perc. Mud. : 2.5

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ARGIHAMA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ATYLPALC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
BATHELEG	0.0	0.000	73.2	0.037	0.0	0.000	14.6	0.007	0.0	0.000	17.6(	31.7)	0.009(	0.016)
BATHGUIL	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
HIPPDENT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015	5.9(	13.1)	0.003(	0.007)
MEGAAGIL	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
TANAIDAC	0.0	0.000	0.0	0.000	14.6	0.003	14.6	0.003	0.0	0.000	5.9(	8.0)	0.001(	0.002)
UROTPOSE	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ECHINODERMATA														
ECHICORD	14.6	0.099	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.020(	0.044)
ECHIPUSI	87.8	0.127	102.4	0.132	336.5	0.597	160.9	0.312	102.4	0.095	158.0(	103.7)	0.253(	0.210)
OPHIALBI	0.0	0.000	14.6	0.000	14.6	0.000	146.3	0.059	0.0	0.000	35.1(	62.6)	0.012(	0.026)
ASTATRIA	0.0	0.000	0.0	0.000	175.6	0.018	175.6	0.018	73.2	0.003	84.9(	88.0)	0.008(	0.009)
MOLLUSCA														
DOSIEXOL	0.0	0.000	14.6	0.231	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.046(	0.103)
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.010	2.9(	6.5)	0.002(	0.005)
NATIALDE	0.0	0.000	0.0	0.000	14.6	0.073	0.0	0.000	0.0	0.000	2.9(	6.5)	0.015(	0.033)
SPISELLI	14.6	0.117	14.6	0.146	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.053(	0.073)
TELLPYGM	0.0	0.000	0.0	0.000	29.3	0.007	14.6	0.007	29.3	0.010	14.6(	14.6)	0.005(	0.005)
POLYCHAETA														
AONIPAUC	0.0	0.000	14.6	0.000	43.9	0.006	14.6	0.006	2677.3	0.636	550.1(	1189.2)	0.130(	0.283)
ETEOLACT	14.6	0.059	14.6	0.031	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.018(	0.026)
GLYCLAPI	0.0	0.000	0.0	0.000	14.6	0.000	43.9	0.010	438.9	0.104	99.5(	190.6)	0.023(	0.046)
GONIBOBR	0.0	0.000	14.6	0.000	29.3	0.004	117.0	0.000	1272.8	0.303	286.7(	553.1)	0.061(	0.135)
HESIAUGE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.000	746.1	0.177	158.0(	329.3)	0.035(	0.079)
NEPHCAEC	0.0	0.000	0.0	0.000	14.6	4.633	0.0	0.000	29.3	8.073	8.8(	13.1)	2.541(	3.686)
NEPHCIRR	190.2	0.320	117.0	0.176	117.0	0.316	175.6	0.364	29.3	0.477	125.8(	63.4)	0.331(	0.108)
PISIREMO	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2604.1	0.619	520.8(	1164.6)	0.124(	0.277)
SCOLARMI	0.0	0.000	14.6	0.080	14.6	0.104	0.0	0.000	0.0	0.000	5.9(	8.0)	0.037(	0.051)
SCOLBONN	14.6	0.205	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.041(	0.092)
SCOLSQUA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.059	5.9(	13.1)	0.012(	0.026)
SPIOBOMB	58.5	0.064	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000	14.6(	25.3)	0.015(	0.028)
MISCELLANEOUS														
BRANLANC	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.019	658.3	7.052	137.5(	291.4)	1.414(	3.151)
NEMERTIN	87.8	0.161	29.3	0.029	14.6	0.003	29.3	0.019	14.6	0.078	35.1(	30.3)	0.058(	0.064)
OLIGOCHA	29.3	0.003	0.0	0.000	43.9	0.004	0.0	0.000	0.0	0.000	14.6(	20.7)	0.001(	0.002)
Σ	512.0	1.156	453.5	0.876	892.4	5.776	1024.1	0.849	8763.4	17.717	2329.1(	3605.1)	5.275(	7.262)
NSPC	9		13		15		16		16					
SH-W	1.790		2.154		2.014		2.319		1.776					
SIMP	0.193		0.129		0.194		0.111		0.217					

Appendix - 2 Biomonitoring 1992

STATION : R70
GEOGR. POS. : 54^0 7" 0' N 06^0 12" 50' E
DATE : 01/04/92
DEPTH m : 33
Median Grain:
Perc. Mud. :

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
BATHELEG	58.5	0.015	43.9	0.010	43.9	0.009	87.8	0.019	43.9	0.006	55.6(	19.1)	0.012(	0.005)
BATHGUIL	58.5	0.031	29.3	0.022	43.9	0.031	0.0	0.000	58.5	0.029	38.0(	24.5)	0.023(	0.013)
BATHTENU	58.5	0.016	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	17.6(	26.2)	0.004(	0.007)
DIASBRAD	14.6	0.006	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.002(	0.003)
MEGAAGIL	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.000	0.0	0.000	5.9(	13.1)	0.000(	0.000)
PONTALTA	29.3	0.006	14.6	0.000	29.3	0.012	14.6	0.000	0.0	0.000	17.6(	12.2)	0.004(	0.005)
PSEULONG	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
SIPHKROY	43.9	0.006	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.000	14.6(	20.7)	0.001(	0.003)
TRYPSARS	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	5.9(	8.0)	0.000(	0.000)
UROTPOSE	0.0	0.000	497.4	0.231	29.3	0.000	14.6	0.000	58.5	0.006	120.0(	212.1)	0.047(	0.103)
ECHINODERMATA														
ACROBRAC	29.3	0.010	102.4	0.041	58.5	0.009	29.3	0.000	29.3	0.012	49.7(	32.1)	0.014(	0.016)
AMPHFILI	0.0	0.000	14.6	0.004	14.6	0.004	0.0	0.000	14.6	0.047	8.8(	8.0)	0.011(	0.020)
ASTRIRRE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	2.846	2.9(	6.5)	0.569(	1.273)
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	5.810	0.0	0.000	2.9(	6.5)	1.162(	2.598)
ECHIPUSI	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.000	0.0	0.000	5.9(	8.0)	0.001(	0.002)
MOLLUSCA														
ABRANITI	29.3	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.001(	0.001)
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	102.4	0.105	0.0	0.000	20.5(	45.8)	0.021(	0.047)
MYSEBIDE	0.0	0.000	29.3	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.000(	0.000)
NATIALDE	43.9	0.015	43.9	0.040	29.3	0.042	29.3	0.098	14.6	0.041	32.2(	12.2)	0.047(	0.031)
TELLFABU	0.0	0.000	131.7	0.209	73.2	0.007	43.9	0.004	0.0	0.000	49.7(	55.3)	0.044(	0.092)
POLYCHAETA														
ANAIMUCO	0.0	0.000	43.9	0.016	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.003(	0.007)
CHAESETO	0.0	0.000	14.6	0.004	14.6	0.000	43.9	0.010	0.0	0.000	14.6(	17.9)	0.003(	0.005)
ETEOLACT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.019	2.9(	6.5)	0.004(	0.009)
GONIMACU	29.3	0.193	14.6	0.010	73.2	0.199	14.6	0.023	29.3	0.158	32.2(	24.0)	0.117(	0.093)
MAGEPAPI	380.4	0.354	585.2	0.478	585.2	0.553	1287.4	1.286	1360.6	1.418	839.8(	450.6)	0.818(	0.495)
NEPHCIRR	29.3	0.080	29.3	0.215	29.3	0.061	14.6	0.026	29.3	0.059	26.3(	6.5)	0.088(	0.073)
NEPHHOMB	14.6	0.140	29.3	1.021	14.6	0.591	43.9	2.322	0.0	0.000	20.5(	16.7)	0.815(	0.933)
OWENFUSI	29.3	0.023	87.8	0.079	190.2	0.271	102.4	0.060	29.3	0.023	87.8(	66.2)	0.091(	0.103)
PECTAURI	14.6	0.097	0.0	0.000	0.0	0.000	14.6	0.083	0.0	0.000	5.9(	8.0)	0.036(	0.050)
SCOLBONN	14.6	0.091	0.0	0.000	14.6	0.073	14.6	0.070	14.6	0.237	11.7(	6.5)	0.094(	0.087)
SCOLSQUA	14.6	0.038	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.008(	0.017)
SIGAMATH	0.0	0.000	29.3	0.158	14.6	0.252	58.5	0.519	0.0	0.000	20.5(	24.5)	0.186(	0.215)
SPIOBOMB	468.2	0.132	599.8	0.278	0.0	0.000	292.6	0.116	775.4	0.231	427.2(	297.2)	0.151(	0.108)
SPIOFILI	0.0	0.000	0.0	0.000	336.5	0.067	14.6	0.007	0.0	0.000	70.2(	149.0)	0.015(	0.029)
MISCELLANEOUS														
ANTHOZOA	73.2	0.114	336.5	0.180	102.4	0.129	73.2	2.765	0.0	0.000	117.0(	128.4)	0.638(	1.191)
NEMERTIN	0.0	0.000	87.8	0.035	497.4	0.132	73.2	0.019	292.6	0.094	190.2(	203.2)	0.056(	0.055)
Σ	1463.0	1.369	2779.7	3.037	2238.4	2.452	2428.6	13.344	2823.6	5.224	2346.7(	551.0)	5.085(	4.826)
NSPC	21		21		21		23		17					
SH-W	2.253		2.281		2.274		1.934		1.567					
SIMP	0.174		0.140		0.149		0.300		0.317					

Appendix - 2 Biomonitoring 1992

STATION : SM58
GEOGR. POS. : 55° 0" 12' N 04° 59" 39' E
DATE : 19/05/92
DEPTH m : 41
Median Grain: 151µ
Perc. Mud. : 7.1

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
AMPEBREV	0.0	0.000	0.0	0.000	14.6	0.056	0.0	0.000	0.0	0.000	2.9(	6.5)	0.011(	0.025)
AMPETENU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
AMPHIPOD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHELEG	0.0	0.000	102.4	0.051	0.0	0.000	73.2	0.037	29.3	0.015	41.0(	45.6)	0.020(	0.023)
BATHGUIL	102.4	0.051	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	20.5(	45.8)	0.010(	0.023)
BATHTENU	73.2	0.037	58.5	0.029	58.5	0.029	87.8	0.044	29.3	0.015	61.4(	21.7)	0.031(	0.011)
CALLSUBT	146.3	4.753	117.0	6.051	73.2	2.006	102.4	1.267	58.5	3.590	99.5(	34.9)	3.533(	1.956)
EUDODEFO	102.4	0.051	117.0	0.059	117.0	0.059	102.4	0.051	43.9	0.022	96.6(	30.3)	0.048(	0.015)
EUDOTRUN	0.0	0.000	58.5	0.029	29.3	0.015	0.0	0.000	0.0	0.000	17.6(	26.2)	0.009(	0.013)
HARPANTE	160.9	0.080	0.0	0.000	190.2	0.095	160.9	0.080	131.7	0.066	128.7(	74.9)	0.064(	0.037)
IONETHOR	14.6	0.007	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.003(	0.004)
PERILONG	14.6	0.007	0.0	0.000	14.6	0.007	0.0	0.000	14.6	0.007	8.8(	8.0)	0.004(	0.004)
PSEULONG	14.6	0.007	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.003(	0.004)
PSEUSIMI	0.0	0.000	43.9	0.022	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.004(	0.010)
SYNCMACU	0.0	0.000	29.3	0.015	14.6	0.007	0.0	0.000	0.0	0.000	8.8(	13.1)	0.004(	0.007)
UPOGSTEL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.658	2.9(	6.5)	0.132(	0.294)
ECHINODERMATA														
AMPHFILI	1024.1	7.344	1097.3	7.062	1272.8	7.015	965.6	8.853	1360.6	11.351	1144.1(	167.3)	8.325(	1.851)
ECHICORD	0.0	0.000	0.0	0.000	14.6	0.180	0.0	0.000	0.0	0.000	2.9(	6.5)	0.036(	0.080)
OPHIALBI	29.3	0.000	0.0	0.000	0.0	0.000	0.0	0.000	58.5	0.000	17.6(	26.2)	0.000(	0.000)
MOLLUSCA														
ABRAALBA	0.0	0.000	0.0	0.000	14.6	0.098	0.0	0.000	0.0	0.000	2.9(	6.5)	0.020(	0.044)
ABRANITI	0.0	0.000	58.5	0.070	29.3	0.123	0.0	0.000	0.0	0.000	17.6(	26.2)	0.039(	0.056)
ABRAPRIS	0.0	0.000	0.0	0.000	14.6	0.107	0.0	0.000	0.0	0.000	2.9(	6.5)	0.021(	0.048)
CULTPELL	14.6	0.003	0.0	0.000	14.6	0.206	29.3	0.003	0.0	0.000	11.7(	12.2)	0.042(	0.092)
CYLICYLI	14.6	0.015	14.6	0.026	43.9	0.040	29.3	0.012	43.9	0.067	29.3(	14.6)	0.032(	0.023)
MACTCORA	0.0	0.000	29.3	0.000	0.0	0.000	29.3	0.000	0.0	0.000	11.7(	16.0)	0.000(	0.000)
MYSEBIDE	248.7	0.035	409.6	0.059	351.1	0.044	351.1	0.047	453.5	0.050	362.8(	77.0)	0.047(	0.009)
NATIALDE	0.0	0.000	14.6	0.178	0.0	0.000	14.6	0.003	0.0	0.000	5.9(	8.0)	0.036(	0.080)
NUCUTENU	0.0	0.000	14.6	0.004	29.3	0.004	14.6	0.007	29.3	0.029	17.6(	12.2)	0.009(	0.012)
NUCUTURG	14.6	0.012	29.3	0.016	29.3	0.015	0.0	0.000	29.3	0.060	20.5(	13.1)	0.020(	0.023)
VENUSTRI	0.0	0.000	14.6	0.020	14.6	2.609	14.6	2.449	14.6	0.000	11.7(	6.5)	1.016(	1.383)
POLYCHAETA														
APHRACUL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	2.9(	6.5)	0.001(	0.002)
CHAESETO	73.2	0.029	14.6	0.000	14.6	0.004	43.9	0.007	29.3	0.006	35.1(	24.5)	0.009(	0.011)
GLYCALBA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.031	0.0	0.000	2.9(	6.5)	0.006(	0.014)
GLYCROUX	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	2.9(	6.5)	0.001(	0.002)
GONIMACU	0.0	0.000	0.0	0.000	14.6	0.048	29.3	0.066	14.6	0.047	11.7(	12.2)	0.032(	0.030)
HARMLONG	14.6	0.004	0.0	0.000	14.6	0.004	29.3	0.006	29.3	0.006	17.6(	12.2)	0.004(	0.002)
MAGEALLE	14.6	0.085	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.017(	0.038)
MAGEPAPI	87.8	0.019	43.9	0.006	29.3	0.010	160.9	0.031	43.9	0.010	73.2(	53.8)	0.015(	0.010)
MEDIGRAC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	2.9(	6.5)	0.001(	0.002)
NEPHHOMB	14.6	0.035	0.0	0.000	0.0	0.000	14.6	0.375	14.6	0.240	8.8(	8.0)	0.130(	0.169)
NEPHJUVE	29.3	0.007	29.3	0.004	0.0	0.000	14.6	0.000	0.0	0.000	14.6(	14.6)	0.002(	0.003)
NEPHLONG	14.6	0.035	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.007(	0.016)
OPHEACUM	0.0	0.000	29.3	0.004	0.0	0.000	14.6	0.000	0.0	0.000	8.8(	13.1)	0.001(	0.002)
OPHIFLEX	14.6	0.010	0.0	0.000	0.0	0.000	14.6	0.075	43.9	0.140	14.6(	17.9)	0.045(	0.062)
PECTAURI	14.6	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.005)
PECTKORE	14.6	0.004	14.6	0.000	0.0	0.000	43.9	0.007	29.3	0.006	20.5(	16.7)	0.004(	0.003)
PHOLMINU	263.3	0.059	160.9	0.023	380.4	0.121	234.1	0.117	336.5	0.075	275.0(	86.2)	0.079(	0.041)
POECSERP	29.3	0.089	14.6	0.000	14.6	0.004	29.3	0.060	0.0	0.000	17.6(	12.2)	0.031(	0.041)
POLYSPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	102.4	0.023	20.5(	45.8)	0.005(	0.010)
PRIOCIRR	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
SCOLARMI	73.2	0.161	29.3	0.042	14.6	0.029	14.6	0.000	14.6	0.004	29.3(	25.3)	0.047(	0.066)
SCOLBONN	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
SIGAMATH	14.6	0.035	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.007(	0.016)
SPIOBOMB	0.0	0.000	14.6	0.000	14.6	0.004	0.0	0.000	29.3	0.006	11.7(	12.2)	0.002(	0.003)
SPIOFILI	14.6	0.004	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	5.9(	8.0)	0.001(	0.002)
STHELIMI	14.6	0.004	0.0	0.000	14.6	0.029	14.6	0.127	0.0	0.000	8.8(	8.0)	0.032(	0.055)
SYNEKLAT	87.8	0.019	58.5	0.007	14.6	0.004	29.3	0.006	29.3	0.006	43.9(	29.3)	0.008(	0.006)
MISCELLANEOUS														
ANTHOZOA	14.6	5.760	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	1.152(	2.576)
EDWARDSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.061	5.9(	13.1)	0.012(	0.027)
ENTEROPN	0.0	0.000	0.0	0.000	14.6	0.029	0.0	0.000	0.0	0.000	2.9(	6.5)	0.006(	0.013)
NEMERTIN	14.6	0.006	0.0	0.000	0.0	0.000	14.6	0.013	0.0	0.000	5.9(	8.0)	0.004(	0.006)
PHORONID	43.9	0.018	14.6	0.006	29.3	0.012	14.6	0.006	0.0	0.000	20.5(	16.7)	0.008(	0.007)
PLATWORM	0.0	0.000	14.6	0.006	14.6	0.006	0.0	0.000	0.0	0.000	5.9(	8.0)	0.002(	0.003)
Σ	2838.2	18.798	2691.9	13.806	2926.0	13.021	2750.4	13.786	3116.2	16.582	2864.6(	166.3)	15.199(	2.426)
NSPC	34		31		32		33		31					
SH-W	2.550		2.348		2.175		2.512		2.208					
SIMP	0.156		0.197		0.225		0.155		0.225					

Appendix - 2 Biomonitoring 1992

STATION : TS4
GEOGR. POS. : 53° 25" 5' N 05° 9" 9' E
DATE : 02/04/92
DEPTH m : 13
Median Grain: 215µ
Perc. Mud. : 1.0

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
BATHELEG	43.9	0.012	29.3	0.010	643.7	0.215	248.7	0.078	117.0	0.026	216.5(	254.1)	0.068(	0.087)
BATHGUIL	0.0	0.000	0.0	0.000	175.6	0.205	43.9	0.060	0.0	0.000	43.9(	76.0)	0.053(	0.089)
DIASBRAD	14.6	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.004)
PONTALTA	0.0	0.000	14.6	0.000	43.9	0.015	14.6	0.000	0.0	0.000	14.6(	17.9)	0.003(	0.007)
PSEULONG	0.0	0.000	43.9	0.004	14.6	0.000	0.0	0.000	0.0	0.000	11.7(	19.1)	0.001(	0.002)
UROTPOSE	1258.2	0.541	1228.9	0.598	321.9	0.113	146.3	0.060	775.4	0.159	746.1(	508.9)	0.294(	0.255)
ECHINODERMATA														
ECHICORD	29.3	9.681	175.6	83.644	14.6	0.241	14.6	18.990	43.9	22.292	55.6(	68.2)	26.970(	32.829)
MOLLUSCA														
DONAVITT	175.6	30.577	87.8	13.325	87.8	11.663	102.4	14.355	365.8	53.793	163.9(	118.6)	24.743(	17.940)
MACOBALT	0.0	0.000	73.2	0.693	0.0	0.000	14.6	0.012	0.0	0.000	17.6(	31.7)	0.141(	0.309)
MONTFERR	131.7	0.287	0.0	0.000	29.3	0.018	14.6	0.041	234.1	0.240	81.9(	99.5)	0.117(	0.135)
MYSEBIDE	29.3	0.006	833.9	0.512	14.6	0.000	0.0	0.000	0.0	0.000	175.6(	368.2)	0.104(	0.228)
NATIALDE	0.0	0.000	14.6	0.247	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.049(	0.111)
SPISSUBT	14.6	0.811	14.6	0.020	29.3	1.352	0.0	0.000	0.0	0.000	11.7(	12.2)	0.437(	0.619)
TELLFABU	102.4	4.020	117.0	2.746	160.9	1.074	14.6	0.000	292.6	10.831	137.5(	101.7)	3.734(	4.256)
POLYCHAETA														
ANAIGROE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.554	0.0	0.000	2.9(	6.5)	0.111(	0.248)
ANAIMUCO	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.019	2.9(	6.5)	0.004(	0.009)
AUTOSPEC	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.000	8.8(	13.1)	0.000(	0.000)
CAPICAPI	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.001(	0.002)
HARMLUNU	14.6	0.000	0.0	0.000	14.6	0.013	0.0	0.000	0.0	0.000	5.9(	8.0)	0.003(	0.006)
LANICONC	14.6	0.120	0.0	0.000	43.9	0.199	0.0	0.000	0.0	0.000	11.7(	19.1)	0.064(	0.092)
MAGEPAPI	131.7	0.164	0.0	0.000	73.2	0.170	0.0	0.000	14.6	0.018	43.9(	57.6)	0.070(	0.088)
NEPHCIRR	87.8	0.585	73.2	0.224	219.4	0.629	0.0	0.000	58.5	0.097	87.8(	80.8)	0.307(	0.286)
NEPHHOMB	175.6	0.018	0.0	0.000	14.6	0.234	87.8	0.104	58.5	2.130	67.3(	69.9)	0.497(	0.918)
NERELONG	0.0	0.000	0.0	0.000	29.3	1.887	0.0	0.000	0.0	0.000	5.9(	13.1)	0.377(	0.844)
SCOLARMI	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
SPIOBOMB	73.2	0.013	0.0	0.000	1097.3	1.770	29.3	0.006	14.6	0.000	242.9(	478.4)	0.358(	0.790)
SPIOFILI	0.0	0.000	14.6	0.007	43.9	0.019	0.0	0.000	58.5	0.022	23.4(	26.6)	0.010(	0.010)
MISCELLANEOUS														
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.012	2.9(	6.5)	0.002(	0.005)
NEMERTIN	73.2	0.437	0.0	0.000	14.6	0.126	0.0	0.000	29.3	0.158	23.4(	30.3)	0.144(	0.179)
PHORONID	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
Σ	2428.6	47.290	2735.8	102.033	3086.9	19.942	746.1	34.259	2121.4	89.796	2223.8(	900.4)	58.664(	35.617)
NSPC	19		14		20		12		15					
SH-W	1.918		1.591		2.091		1.966		1.980					
SIMP	0.286		0.300		0.190		0.173		0.195					

Appendix - 2 Biomonitoring 1992

STATION : TS30
GEOGR. POS. : 53^0 36" 56' N 04^0 56" 18' E
DATE : 02/04/92
DEPTH m : 26
Median Grain: 213µ
Perc. Mud. : 1.8

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
APHEJURI	43.9	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.001(	0.002)
ARGIHAMA	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
ATYLFALC	14.6	0.009	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.004)
BATHELEG	351.1	0.061	87.8	0.019	468.2	0.086	43.9	0.010	87.8	0.010	207.7(	189.7)	0.037(	0.035)
BATHGUIL	58.5	0.067	29.3	0.006	102.4	0.066	0.0	0.000	0.0	0.000	38.0(	43.4)	0.028(	0.035)
IPHITRIS	14.6	0.006	14.6	0.004	14.6	0.004	0.0	0.000	0.0	0.000	8.8(	8.0)	0.003(	0.003)
LEUCINCI	14.6	0.000	29.3	0.006	14.6	0.004	29.3	0.006	43.9	0.009	26.3(	12.2)	0.005(	0.003)
MEGAAGIL	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MELIOBTU	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.002)
PONTALTA	43.9	0.009	29.3	0.000	102.4	0.016	73.2	0.009	29.3	0.000	55.6(	31.7)	0.007(	0.007)
PSEULONG	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
PSEUSIMI	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
SIPHKROY	0.0	0.000	14.6	0.000	0.0	0.000	14.6	0.000	14.6	0.000	8.8(	8.0)	0.000(	0.000)
TRYPSARS	1506.9	0.268	0.0	0.000	29.3	0.006	0.0	0.000	14.6	0.000	310.2(	669.1)	0.055(	0.119)
UROTPOSE	102.4	0.026	43.9	0.004	175.6	0.080	58.5	0.015	131.7	0.061	102.4(	53.8)	0.037(	0.032)
ECHINODERMATA														
ACROBRAC	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	29.3	0.129	8.8(	13.1)	0.027(	0.057)
ECHICORD	14.6	0.692	146.3	8.355	29.3	3.770	0.0	0.000	73.2	33.904	52.7(	59.1)	9.344(	14.119)
ECHIPUSI	14.6	0.003	14.6	0.009	0.0	0.000	0.0	0.000	14.6	0.003	8.8(	8.0)	0.003(	0.004)
OPHIALBI	14.6	0.003	0.0	0.000	0.0	0.000	29.3	0.429	0.0	0.000	8.8(	13.1)	0.086(	0.191)
MOLLUSCA														
DONAVITT	0.0	0.000	0.0	0.000	29.3	3.062	146.3	15.281	43.9	6.241	43.9(	60.3)	4.917(	6.344)
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	131.7	0.089	26.3(	58.9)	0.018(	0.040)
NATIALDE	0.0	0.000	0.0	0.000	43.9	0.040	58.5	1.191	190.2	0.992	58.5(	78.1)	0.444(	0.595)
TELLFABU	0.0	0.000	0.0	0.000	204.8	0.174	58.5	0.028	175.6	0.170	87.8(	97.0)	0.074(	0.090)
VENUSTRI	0.0	0.000	14.6	3.352	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.670(	1.499)
POLYCHAETA														
ANAIMUCO	0.0	0.000	0.0	0.000	14.6	0.004	292.6	0.110	0.0	0.000	61.4(	129.4)	0.023(	0.049)
ANAISUBU	43.9	0.007	190.2	0.067	0.0	0.000	0.0	0.000	0.0	0.000	46.8(	82.4)	0.015(	0.029)
CHAESETO	29.3	0.000	14.6	0.012	0.0	0.000	14.6	0.010	14.6	0.010	14.6(	10.3)	0.006(	0.006)
ETEOLACT	0.0	0.000	0.0	0.000	14.6	0.048	0.0	0.000	0.0	0.000	2.9(	6.5)	0.010(	0.022)
ETEOLONG	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.013	0.0	0.000	5.9(	13.1)	0.003(	0.006)
EUMISANG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	2.9(	6.5)	0.001(	0.002)
GONIMACU	29.3	0.294	29.3	0.195	14.6	0.155	0.0	0.000	0.0	0.000	14.6(	14.6)	0.129(	0.128)
MAGEPAPI	248.7	0.617	131.7	0.206	175.6	0.322	438.9	0.949	234.1	0.606	245.8(	117.7)	0.540(	0.290)
NEPHCIRR	0.0	0.000	14.6	0.110	0.0	0.000	14.6	0.032	43.9	0.025	14.6(	17.9)	0.033(	0.045)
NEPHHOMB	14.6	0.091	29.3	2.407	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	13.1)	0.499(	1.067)
PECTKORE	0.0	0.000	0.0	0.000	14.6	0.832	0.0	0.000	0.0	0.000	2.9(	6.5)	0.166(	0.372)
SCOLARMI	29.3	0.007	43.9	0.023	0.0	0.000	43.9	0.019	0.0	0.000	23.4(	22.2)	0.010(	0.011)
SIGAMATH	14.6	1.049	14.6	0.241	14.6	0.303	29.3	1.347	14.6	1.438	17.6(	6.5)	0.876(	0.570)
SPIOBOMB	1024.1	0.222	3174.7	1.058	307.2	0.060	2750.4	0.967	351.1	0.101	1521.5(	1354.2)	0.482(	0.489)
SPIOFILI	29.3	0.010	14.6	0.004	14.6	0.007	0.0	0.000	0.0	0.000	11.7(	12.2)	0.004(	0.005)
MISCELLANEOUS														
ANTHOZOA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.203	5.9(	13.1)	0.041(	0.091)
NEMERTIN	43.9	0.467	73.2	0.244	73.2	0.593	175.6	0.579	102.4	0.099	93.6(	50.3)	0.396(	0.217)
Σ	3745.3	3.918	4169.5	16.327	1887.3	9.634	4315.8	21.000	1770.2	44.090	3177.6(	1249.7)	18.994(	15.459)
NSPC	25		22		22		19		20					
SH-W	1.885		1.176		2.424		1.497		2.566					
SIMP	0.249		0.584		0.120		0.423		0.092					

Appendix - 2 Biomonitoring 1992

STATION : META2
GEOGR. POS. : 53^0 42" 7' N 04^0 30" 1' E
DATE : 02/04/92
DEPTH m : 38
Median Grain: 106µ
Perc. Mud. : 19.8

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
AMPETENU	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
CALLSUBT	204.8	5.186	380.4	4.986	160.9	6.488	204.8	7.132	190.2	2.886	228.2(	86.9)	5.336(	1.635)
DIASBRAD	29.3	0.015	0.0	0.000	0.0	0.000	14.6	0.007	29.3	0.015	14.6(	14.6)	0.007(	0.007)
EUDOTRUN	0.0	0.000	0.0	0.000	14.6	0.007	43.9	0.022	58.5	0.029	23.4(	26.6)	0.012(	0.013)
GAMMMACU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
HARPANTE	0.0	0.000	146.3	0.073	0.0	0.000	58.5	0.029	29.3	0.015	46.8(	60.7)	0.023(	0.030)
HARPPECT	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015	0.0	0.000	5.9(	13.1)	0.003(	0.007)
LEUCRICH	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
MELIOBTU	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.022	0.0	0.000	8.8(	19.6)	0.004(	0.010)
SCOPHOPE	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
TRYPSARS	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
UPOGDELT	87.8	30.454	29.3	6.902	29.3	14.473	0.0	0.000	43.9	13.874	38.0(	32.1)	13.141(	11.332)
ECHINODERMATA														
AMPHFILI	1536.2	17.410	1901.9	15.299	848.5	13.517	2296.9	32.670	2165.2	29.257	1749.7(	581.6)	21.630(	8.715)
CUCUELON	14.6	0.963	0.0	0.000	0.0	0.000	0.0	0.000	14.6	2.310	5.9(	8.0)	0.655(	1.015)
ECHICORD	0.0	0.000	0.0	0.000	14.6	2.698	14.6	3.009	0.0	0.000	5.9(	8.0)	1.141(	1.567)
LEPTINHA	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.454	0.0	0.000	2.9(	6.5)	0.091(	0.203)
OPHIALBI	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.689	5.9(	8.0)	0.138(	0.308)
MOLLUSCA														
CORBGIBB	0.0	0.000	14.6	0.026	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.005(	0.012)
CYLICYLI	14.6	0.035	0.0	0.000	0.0	0.000	14.6	0.019	0.0	0.000	5.9(	8.0)	0.011(	0.016)
LEPTSQUA	14.6	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.005)
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.023	0.0	0.000	2.9(	6.5)	0.005(	0.010)
MYSEBIDE	1506.9	0.301	1609.3	0.322	1287.4	0.257	1463.0	0.293	2062.8	0.413	1585.9(	290.9)	0.317(	0.058)
NATIALDE	14.6	0.195	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.039(	0.087)
NUCUTENU	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
NUCUTURG	14.6	0.022	43.9	0.015	29.3	0.016	29.3	0.019	14.6	0.010	26.3(	12.2)	0.016(	0.004)
THRACONV	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	2.9(	6.5)	0.001(	0.003)
THRAPHAS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	2.9(	6.5)	0.001(	0.001)
THYAFLEX	0.0	0.000	14.6	0.009	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.004)
TURICOMM	0.0	0.000	14.6	1.603	0.0	0.000	29.3	2.136	0.0	0.000	8.8(	13.1)	0.748(	1.041)
POLYCHAETA														
ANAIGROE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.575	0.0	0.000	5.9(	13.1)	0.115(	0.257)
CHAEVARI	0.0	0.000	29.3	6.029	14.6	8.234	58.5	8.883	14.6	3.006	23.4(	22.2)	5.231(	3.718)
CIRRATUL	0.0	0.000	0.0	0.000	29.3	0.004	14.6	0.000	0.0	0.000	8.8(	13.1)	0.001(	0.002)
EXOGHEBE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
GATTCIRR	0.0	0.000	0.0	0.000	29.3	1.836	14.6	0.339	0.0	0.000	8.8(	13.1)	0.435(	0.797)
GONIMACU	14.6	0.004	14.6	0.000	0.0	0.000	0.0	0.000	14.6	0.007	8.8(	8.0)	0.002(	0.003)
GYPTCAPE	14.6	0.004	0.0	0.000	14.6	0.007	14.6	0.007	14.6	0.012	11.7(	6.5)	0.006(	0.004)
HARMLONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.192	0.0	0.000	2.9(	6.5)	0.038(	0.086)
HARMLUNU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.151	0.0	0.000	2.9(	6.5)	0.030(	0.067)
LUMBLATR	43.9	0.050	321.9	0.360	190.2	0.212	365.8	0.252	58.5	0.092	196.0(	147.2)	0.193(	0.125)
LUMBPSEU	14.6	0.032	0.0	0.000	0.0	0.000	14.6	0.010	0.0	0.000	5.9(	8.0)	0.008(	0.014)
LYSILOVE	14.6	1.122	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.224(	0.502)
NEPHHOMB	14.6	0.641	14.6	0.026	0.0	0.000	29.3	0.075	14.6	1.260	14.6(	10.3)	0.400(	0.548)
NEPHLONG	0.0	0.000	14.6	0.500	0.0	0.000	0.0	0.000	14.6	1.170	5.9(	8.0)	0.334(	0.515)
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.296	0.0	0.000	2.9(	6.5)	0.059(	0.132)
OPHEACUM	0.0	0.000	14.6	0.044	14.6	0.025	0.0	0.000	0.0	0.000	5.9(	8.0)	0.014(	0.020)
OPHIFLEX	29.3	0.053	14.6	0.037	29.3	0.038	14.6	0.010	14.6	0.032	20.5(	8.0)	0.034(	0.015)
OWENFUSI	14.6	0.031	14.6	0.222	0.0	0.000	14.6	0.091	14.6	0.091	11.7(	6.5)	0.087(	0.085)
PECTAURI	0.0	0.000	14.6	0.067	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.013(	0.030)
PHOLMINU	87.8	0.023	102.4	0.048	190.2	0.073	365.8	0.119	190.2	0.060	187.3(	110.6)	0.065(	0.035)
POLYKINB	29.3	0.161	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.032(	0.072)
POLYSPEC	146.3	0.126	14.6	0.012	14.6	0.032	0.0	0.000	117.0	0.059	58.5(	67.8)	0.046(	0.050)
PRIOCIRR	14.6	0.000	0.0	0.000	14.6	0.000	14.6	0.000	14.6	0.000	11.7(	6.5)	0.000(	0.000)
SPIOBOMB	0.0	0.000	58.5	0.004	0.0	0.000	0.0	0.000	0.0	0.000	11.7(	26.2)	0.001(	0.002)
SPIOKROY	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.002)
STHELIMI	0.0	0.000	29.3	0.129	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.026(	0.058)
SYNEKLAT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
MISCELLANEOUS														
GOLFELON	0.0	0.000	0.0	0.000	14.6	0.271	0.0	0.000	0.0	0.000	2.9(	6.5)	0.054(	0.121)
GOLFPROC	0.0	0.000	29.3	0.157	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.031(	0.070)
GOLFVULG	0.0	0.000	0.0	0.000	29.3	0.044	43.9	0.133	0.0	0.000	14.6(	20.7)	0.035(	0.058)
NEMERTIN	14.6	0.010	29.3	0.003	29.3	0.061	58.5	0.244	0.0	0.000	26.3(	21.7)	0.064(	0.104)
PHORONID	14.6	0.007	29.3	0.012	14.6	0.006	87.8	0.035	102.4	0.041	49.7(	42.1)	0.020(	0.017)
PLATWORM	14.6	0.010	0.0	0.000	0.0	0.000	29.3	0.016	29.3	0.110	14.6(	14.6)	0.027(	0.047)
Σ	3950.1	56.876	4930.3	36.892	3028.4	48.305	5515.5	57.293	5310.7	55.454	4547.0(	1040.5)	50.964(	8.664)
NSPC	27		27		22		35		28					
SH-W	1.691		1.795		1.795		1.959		1.617					
SIMP	0.300		0.265		0.267		0.253		0.319					

Appendix - 2 Biomonitoring 1992

STATION : TS100
GEOGR. POS. : 54° 8" 58' N 04° 20" 31' E
DATE : 19/05/92
DEPTH m : 49
Median Grain: 93µ
Perc. Mud. : 13.4

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
AMPETENU	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	14.6	0.007	5.9(	8.0)	0.003(	0.004)
AORIDAE	0.0	0.000	0.0	0.000	14.6	0.007	14.6	0.007	0.0	0.000	5.9(	8.0)	0.003(	0.004)
CALLSUBT	102.4	3.230	87.8	2.961	58.5	1.469	58.5	0.124	131.7	3.527	87.8(	31.0)	2.262(	1.434)
DIASLAEV	0.0	0.000	0.0	0.000	29.3	0.035	0.0	0.000	0.0	0.000	5.9(	13.1)	0.007(	0.016)
EUDOEMAR	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
EUDOTRUN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
HARPANTE	29.3	0.015	14.6	0.007	43.9	0.022	29.3	0.015	0.0	0.000	23.4(	16.7)	0.012(	0.008)
IONETHOR	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
PERILONG	0.0	0.000	0.0	0.000	29.3	0.015	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
PSEULONG	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
UPOGDELT	0.0	0.000	14.6	1.883	14.6	9.272	43.9	6.194	0.0	0.000	14.6(	17.9)	3.470(	4.114)
UROTBREV	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ECHINODERMATA														
AMPHFILI	278.0	0.614	58.5	0.138	541.3	0.644	321.9	1.002	424.3	1.167	324.8(	180.2)	0.713(	0.399)
BRISLYRI	0.0	0.000	14.6	4.943	0.0	0.000	14.6	7.003	0.0	0.000	5.9(	8.0)	2.389(	3.352)
ECHICORD	0.0	0.000	0.0	0.000	14.6	1.674	14.6	0.816	0.0	0.000	5.9(	8.0)	0.498(	0.746)
ECHIFLAV	14.6	1.030	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.206(	0.461)
LEPTINHA	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.655	2.9(	6.5)	0.331(	0.740)
OPHIALBI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MOLLUSCA														
CINGVITR	29.3	0.010	219.4	0.038	14.6	0.003	58.5	0.010	117.0	0.020	87.8(	83.4)	0.016(	0.014)
CORBGIBB	43.9	0.022	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.004(	0.010)
CYLICYLI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
LEPTSQUA	0.0	0.000	29.3	0.009	14.6	0.006	29.3	0.020	0.0	0.000	14.6(	14.6)	0.007(	0.008)
MONTFERR	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.001)
MYSEBIDE	14.6	0.000	14.6	0.000	58.5	0.006	14.6	0.000	117.0	0.006	43.9(	45.1)	0.002(	0.003)
NUCUTURG	0.0	0.000	14.6	0.004	14.6	0.023	14.6	0.009	14.6	0.009	11.7(	6.5)	0.009(	0.009)
THYAFLEX	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
VENUSTRI	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
POLYCHAETA														
AMPHSPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.013	2.9(	6.5)	0.003(	0.006)
ANAISUBU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	14.6	0.000	5.9(	8.0)	0.001(	0.003)
CAULSPEC	43.9	0.012	43.9	0.006	0.0	0.000	0.0	0.000	29.3	0.000	23.4(	22.2)	0.004(	0.005)
CHAESETO	58.5	0.019	0.0	0.000	131.7	0.073	0.0	0.000	29.3	0.010	43.9(	54.7)	0.020(	0.030)
CHAEVARI	102.4	24.262	14.6	0.421	29.3	7.823	73.2	11.550	73.2	12.847	58.5(	35.8)	11.381(	8.673)
DIPLGLAU	14.6	0.004	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000	5.9(	8.0)	0.002(	0.003)
EXOGDISP	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
GATTCIRR	58.5	0.989	14.6	0.499	29.3	0.127	73.2	0.768	87.8	2.041	52.7(	30.3)	0.885(	0.722)
GLYCALBA	0.0	0.000	14.6	0.059	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.012(	0.026)
GLYCROUX	58.5	0.189	14.6	0.240	29.3	2.584	14.6	0.892	29.3	0.019	29.3(	17.9)	0.785(	1.059)
GYPTCAPE	0.0	0.000	0.0	0.000	14.6	0.012	14.6	0.004	14.6	0.007	8.8(	8.0)	0.005(	0.005)
HARMLONG	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	14.6	0.044	5.9(	8.0)	0.010(	0.019)
HARMLUNU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.044	2.9(	6.5)	0.009(	0.020)
LUMBLATR	43.9	0.151	14.6	0.038	29.3	0.029	14.6	0.078	29.3	0.016	26.3(	12.2)	0.062(	0.054)
LUMBPSEU	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MAGEALLE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.091	2.9(	6.5)	0.018(	0.041)
MEDIGRAC	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.001(	0.002)
NEPHHOMB	29.3	0.116	43.9	0.044	29.3	0.031	14.6	0.013	0.0	0.000	23.4(	16.7)	0.041(	0.045)
NEPHINCI	14.6	0.032	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.006(	0.014)
NOTOLATE	87.8	0.873	0.0	0.000	14.6	0.119	14.6	0.222	73.2	1.419	38.0(	39.5)	0.527(	0.603)
OPHEACUM	0.0	0.000	0.0	0.000	14.6	0.038	0.0	0.000	0.0	0.000	2.9(	6.5)	0.008(	0.017)
OPHIFLEX	14.6	0.019	0.0	0.000	14.6	0.018	29.3	0.138	0.0	0.000	11.7(	12.2)	0.035(	0.058)
PARAGRAC	29.3	0.000	14.6	0.000	0.0	0.000	14.6	0.000	43.9	0.004	20.5(	16.7)	0.001(	0.002)
PECTAURI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.053	8.8(	19.6)	0.011(	0.024)
PHOLMINU	29.3	0.015	0.0	0.000	29.3	0.015	0.0	0.000	14.6	0.007	14.6(	14.6)	0.007(	0.007)
POLYSPEC	0.0	0.000	29.3	0.004	73.2	0.018	29.3	0.018	0.0	0.000	26.3(	30.0)	0.008(	0.009)
PRIOCIRR	0.0	0.000	0.0	0.000	14.6	0.022	29.3	0.006	29.3	0.000	14.6(	14.6)	0.006(	0.010)
SPIOBOMB	58.5	0.006	146.3	0.023	58.5	0.009	58.5	0.010	336.5	0.025	131.7(	120.6)	0.015(	0.009)
SPIOKROY	14.6	0.018	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.007	8.8(	13.1)	0.005(	0.008)
STHELIMI	14.6	0.006	0.0	0.000	14.6	0.044	29.3	0.054	0.0	0.000	11.7(	12.2)	0.021(	0.026)
SYNEKLAT	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	29.3	0.004	8.8(	13.1)	0.001(	0.002)
TERESTRO	29.3	0.044	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	13.1)	0.010(	0.019)
MISCELLANEOUS														
ANTHOZOA	0.0	0.000	0.0	0.000	14.6	0.012	14.6	0.004	0.0	0.000	5.9(	8.0)	0.003(	0.005)
GOLFELON	29.3	1.004	0.0	0.000	14.6	0.616	0.0	0.000	14.6	0.116	11.7(	12.2)	0.347(	0.447)
GOLFPROC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.350	2.9(	6.5)	0.070(	0.156)
GOLFVULG	29.3	0.097	0.0	0.000	0.0	0.000	14.6	0.019	0.0	0.000	8.8(	13.1)	0.023(	0.042)
NEMERTIN	0.0	0.000	0.0	0.000	14.6	0.429	43.9	0.078	14.6	0.006	14.6(	17.9)	0.102(	0.185)
PHORONID	14.6	0.006	0.0	0.000	14.6	0.006	160.9	0.064	58.5	0.023	49.7(	65.9)	0.020(	0.026)
PLATWORM	0.0	0.000	0.0	0.000	14.6	0.010	14.6	0.010	29.3	0.019	11.7(	12.2)	0.008(	0.008)
Σ	1360.6	32.803	907.1	11.335	1477.6	25.222	1360.6	29.158	1945.8	23.557	1410.3(	370.6)	24.415(	8.144)
NSPC	32		24		34		35		33					
SH-W	3.058		2.664		2.710		3.006		2.839					
SIMP	0.063		0.095		0.147		0.079		0.092					

Appendix - 2 Biomonitoring 1992

STATION : SM30
GEOGR. POS. : 54° 30" 0' N 03° 59" 50' E
DATE : 20/05/92
DEPTH m : 46
Median Grain: 113µ
Perc. Mud. : 9.0

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ACIDOBES	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
AMPEBREV	14.6	0.056	0.0	0.000	0.0	0.000	14.6	0.047	0.0	0.000	5.9(	8.0)	0.020(	0.028)
AMPEDIAD	14.6	0.018	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.004(	0.008)
AMPETENU	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHGUIL	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHTENU	29.3	0.015	58.5	0.029	14.6	0.007	14.6	0.007	29.3	0.015	29.3(	17.9)	0.015(	0.009)
CALLSUBT	14.6	2.831	29.3	2.322	0.0	0.000	0.0	0.000	14.6	2.035	11.7(	12.2)	1.438(	1.343)
EUDODEFO	43.9	0.022	102.4	0.051	58.5	0.029	43.9	0.022	43.9	0.022	58.5(	25.3)	0.029(	0.013)
EUDOTRUN	14.6	0.007	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	5.9(	8.0)	0.003(	0.004)
HARPANTE	102.4	0.051	29.3	0.015	29.3	0.015	58.5	0.029	43.9	0.022	52.7(	30.3)	0.026(	0.015)
HARPCREN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
HARPLAEV	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
PERILONG	0.0	0.000	73.2	0.037	14.6	0.007	29.3	0.015	29.3	0.015	29.3(	27.4)	0.015(	0.014)
PSEULONG	0.0	0.000	43.9	0.022	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.004(	0.010)
WESTCAEC	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ECHINODERMATA														
AMPHFILI	994.8	4.170	526.7	1.213	863.2	3.355	2501.7	9.249	1828.8	5.069	1343.0(	805.7)	4.611(	2.960)
ASTRIRRE	14.6	2.756	0.0	0.000	0.0	0.000	0.0	0.000	14.6	3.065	5.9(	8.0)	1.164(	1.598)
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	7.599	0.0	0.000	2.9(	6.5)	1.520(	3.398)
ECHIFLAV	0.0	0.000	0.0	0.000	14.6	2.410	0.0	0.000	0.0	0.000	2.9(	6.5)	0.482(	1.078)
LEPTINHA	0.0	0.000	14.6	1.043	0.0	0.000	0.0	0.000	14.6	0.375	5.9(	8.0)	0.284(	0.455)
OPHIALBI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
MOLLUSCA														
ABRASPEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
CINGVITR	0.0	0.000	29.3	0.009	0.0	0.000	14.6	0.004	0.0	0.000	8.8(	13.1)	0.003(	0.004)
CORBGIBB	58.5	0.010	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.010	17.6(	26.2)	0.004(	0.006)
CULTPELL	0.0	0.000	43.9	0.003	29.3	0.003	58.5	0.724	14.6	0.063	29.3(	23.1)	0.159(	0.317)
CYLICYLI	73.2	0.023	29.3	0.020	14.6	0.000	58.5	0.035	58.5	0.107	46.8(	24.0)	0.037(	0.041)
DEVOPERR	0.0	0.000	14.6	0.009	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.004)
ENSIENSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.508	2.9(	6.5)	0.302(	0.675)
MONTFERR	0.0	0.000	14.6	0.013	0.0	0.000	14.6	0.003	0.0	0.000	5.9(	8.0)	0.003(	0.006)
MYSEBIDE	248.7	0.035	234.1	0.034	307.2	0.054	424.3	0.061	351.1	0.051	313.1(	77.8)	0.047(	0.012)
NATIALDE	14.6	0.082	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.016(	0.037)
NUCUTENU	29.3	0.010	43.9	0.018	0.0	0.000	73.2	0.020	29.3	0.010	35.1(	26.6)	0.012(	0.008)
NUCUTURG	0.0	0.000	0.0	0.000	14.6	0.022	29.3	0.059	0.0	0.000	8.8(	13.1)	0.016(	0.026)
THYAFLEX	0.0	0.000	14.6	0.018	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.004(	0.008)
VENUSTRI	14.6	0.000	14.6	0.000	14.6	0.003	14.6	0.000	14.6	0.000	14.6(	0.0)	0.001(	0.001)
POLYCHAETA														
CHAESETO	0.0	0.000	29.3	0.007	0.0	0.000	29.3	0.006	29.3	0.006	17.6(	16.0)	0.004(	0.004)
DIPLGLAU	29.3	0.026	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.016	8.8(	13.1)	0.008(	0.012)
GLYCNORD	0.0	0.000	14.6	0.013	0.0	0.000	0.0	0.000	14.6	0.006	5.9(	8.0)	0.004(	0.006)
GONIMACU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	14.6	0.006	5.9(	8.0)	0.003(	0.004)
HARMLONG	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.002)
HARMLUNU	0.0	0.000	14.6	0.243	14.6	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.049(	0.109)
MAGEPAPI	58.5	0.016	73.2	0.019	29.3	0.007	43.9	0.016	14.6	0.000	43.9(	23.1)	0.012(	0.008)
NEPHHOMB	87.8	0.231	29.3	0.138	43.9	1.014	43.9	1.043	73.2	1.305	55.6(	24.0)	0.746(	0.526)
OPHIFLEX	14.6	0.183	14.6	0.056	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.048(	0.079)
OWENFUSI	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.004	5.9(	8.0)	0.002(	0.002)
PARAGRAC	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
PECTAURI	58.5	0.019	102.4	0.032	43.9	0.070	204.8	0.133	409.6	0.158	163.9(	151.1)	0.083(	0.061)
PHOLMINU	58.5	0.029	0.0	0.000	87.8	0.044	117.0	0.059	29.3	0.015	58.5(	46.3)	0.029(	0.023)
PRIOCIRR	29.3	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	8.8(	13.1)	0.000(	0.000)
SCOLARMI	43.9	0.044	14.6	0.004	14.6	0.000	14.6	0.000	14.6	0.004	20.5(	13.1)	0.011(	0.019)
SCOLBONN	0.0	0.000	43.9	0.016	43.9	0.007	0.0	0.000	0.0	0.000	17.6(	24.0)	0.005(	0.007)
SIGAMATH	29.3	0.022	0.0	0.000	0.0	0.000	29.3	0.026	14.6	0.013	14.6(	14.6)	0.012(	0.012)
SPIOBOMB	278.0	0.097	102.4	0.010	0.0	0.000	14.6	0.000	14.6	0.003	81.9(	116.9)	0.022(	0.042)
SPIOFILI	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
STHELIMI	14.6	0.010	14.6	0.016	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.005(	0.008)
SYNEKLAT	29.3	0.004	29.3	0.006	0.0	0.000	14.6	0.000	0.0	0.000	14.6(	14.6)	0.002(	0.003)
MISCELLANEOUS														
ANTHOZOA	0.0	0.000	0.0	0.000	14.6	0.138	0.0	0.000	0.0	0.000	2.9(	6.5)	0.028(	0.062)
EDWARDSI	14.6	0.031	14.6	0.006	0.0	0.000	29.3	0.129	87.8	0.073	29.3(	34.3)	0.048(	0.054)
ENTEROPN	14.6	1.617	0.0	0.000	0.0	0.000	29.3	0.171	0.0	0.000	8.8(	13.1)	0.358(	0.708)
NEMERTIN	29.3	0.038	29.3	0.010	0.0	0.000	0.0	0.000	14.6	0.244	14.6(	14.6)	0.059(	0.105)
PHORONID	43.9	0.018	0.0	0.000	14.6	0.006	29.3	0.012	29.3	0.012	23.4(	16.7)	0.009(	0.007)
PLATWORM	0.0	0.000	29.3	0.013	14.6	0.006	0.0	0.000	0.0	0.000	8.8(	13.1)	0.004(	0.006)
SIPUNCUL	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.002)
Σ	2545.6	12.478	1931.2	5.469	1755.6	7.220	4037.9	19.492	3335.6	14.232	2721.2(	961.6)	11.778(	5.626)
NSPC	33		36		25		32		31					
SH-W	2.485		2.902		1.997		1.726		1.860					
SIMP	0.177		0.099		0.274		0.398		0.326					

Appendix - 2 Biomonitoring 1992

STATION : RHC4
GEOGR. POS. : 54^0 51" 26' N 03^0 17" 28' E
DATE : 20/05/92
DEPTH m : 40
Median Grain: 142µ
Perc. Mud. : 6.1

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ACIDOBES	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ARGIHAMA	14.6	0.007	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	5.9(	8.0)	0.003(	0.004)
BATHELEG	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHGUIL	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
BATHTENU	73.2	0.037	0.0	0.000	29.3	0.015	14.6	0.007	14.6	0.007	26.3(	28.1)	0.013(	0.014)
CALLSUBT	14.6	0.023	14.6	0.038	29.3	0.758	14.6	0.369	58.5	0.650	26.3(	19.1)	0.368(	0.339)
EUDODEFO	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	29.3	0.015	8.8(	13.1)	0.004(	0.007)
HARPANTE	29.3	0.015	0.0	0.000	58.5	0.029	43.9	0.022	14.6	0.007	29.3(	23.1)	0.015(	0.012)
HIPPDENT	43.9	0.022	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.004(	0.010)
IONETHOR	0.0	0.000	0.0	0.000	14.6	0.040	14.6	0.013	0.0	0.000	5.9(	8.0)	0.011(	0.017)
PERILONG	29.3	0.015	29.3	0.015	0.0	0.000	14.6	0.007	58.5	0.029	26.3(	21.7)	0.013(	0.011)
PSEULONG	14.6	0.007	14.6	0.007	29.3	0.015	0.0	0.000	43.9	0.022	20.5(	16.7)	0.010(	0.008)
SYNCMACU	58.5	0.029	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	14.6(	25.3)	0.007(	0.013)
ECHINODERMATA														
ACROBRAC	160.9	0.082	117.0	0.020	248.7	1.612	175.6	1.688	102.4	1.808	160.9(	57.6)	1.042(	0.908)
AMPHFILI	1287.4	5.672	2296.9	8.781	2004.3	7.271	1755.6	8.705	1843.4	7.982	1837.5(	370.2)	7.682(	1.280)
ASTRIRRE	14.6	2.353	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.471(	1.052)
ECHICORD	0.0	0.000	43.9	4.863	29.3	10.826	43.9	10.667	87.8	17.171	41.0(	31.7)	8.705(	6.530)
ECHIFLAV	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.467	2.9(	6.5)	0.293(	0.656)
ECHIPUSI	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
OPHIALBI	29.3	0.000	14.6	0.000	0.0	0.000	14.6	0.000	14.6	0.000	14.6(	10.3)	0.000(	0.000)
MOLLUSCA														
ABRAALBA	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
ABRANITI	0.0	0.000	14.6	0.000	29.3	0.000	0.0	0.000	29.3	0.000	14.6(	14.6)	0.000(	0.000)
ACTATORN	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
CARDECHI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	14.6	0.000	5.9(	8.0)	0.000(	0.000)
CORBGIBB	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.003	2.9(	6.5)	0.001(	0.001)
CULTPELL	29.3	0.018	29.3	0.007	29.3	0.013	43.9	0.035	14.6	0.007	29.3(	10.3)	0.016(	0.011)
CYLICYLI	14.6	0.000	0.0	0.000	0.0	0.000	14.6	0.015	29.3	0.012	11.7(	12.2)	0.005(	0.007)
DOSILUPI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	8.506	0.0	0.000	2.9(	6.5)	1.701(	3.804)
EULIALBA	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	29.3	0.006	8.8(	13.1)	0.001(	0.003)
GARIFERV	29.3	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.002(	0.005)
LUCIBORE	0.0	0.000	0.0	0.000	14.6	1.934	0.0	0.000	0.0	0.000	2.9(	6.5)	0.387(	0.865)
MACTCORA	0.0	0.000	0.0	0.000	43.9	0.003	14.6	0.000	87.8	0.006	29.3(	37.3)	0.002(	0.003)
MONTFERR	14.6	0.010	58.5	0.010	43.9	0.022	0.0	0.000	29.3	0.020	29.3(	23.1)	0.013(	0.009)
MYSEBIDE	351.1	0.070	1097.3	0.219	1053.4	0.211	994.8	0.199	731.5	0.146	845.6(	310.8)	0.169(	0.062)
MYSIUNDA	0.0	0.000	0.0	0.000	29.3	0.000	14.6	0.000	0.0	0.000	8.8(	13.1)	0.000(	0.000)
NATIALDE	14.6	0.026	73.2	0.298	0.0	0.000	14.6	0.038	43.9	0.073	29.3(	29.3)	0.087(	0.121)
NUCUTENU	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.007	11.7(	19.1)	0.002(	0.003)
NUCUTURG	14.6	0.145	131.7	0.227	43.9	0.025	117.0	0.045	87.8	0.048	79.0(	49.2)	0.098(	0.086)
PHILSPEC	0.0	0.000	29.3	0.000	43.9	0.003	0.0	0.000	0.0	0.000	14.6(	20.7)	0.001(	0.001)
SPISSPEC	0.0	0.000	58.5	0.003	0.0	0.000	0.0	0.000	0.0	0.000	11.7(	26.2)	0.001(	0.001)
TELLFABU	29.3	0.578	29.3	0.035	43.9	0.000	14.6	0.186	58.5	0.000	35.1(	16.7)	0.160(	0.246)
THRAPHAS	0.0	0.000	14.6	0.003	29.3	0.009	43.9	0.031	14.6	0.003	20.5(	16.7)	0.009(	0.013)
THYAFLEX	29.3	0.120	87.8	0.187	29.3	0.010	58.5	0.105	43.9	0.108	49.7(	24.5)	0.106(	0.063)
VENUSTRI	14.6	0.015	29.3	0.000	14.6	0.000	14.6	0.040	0.0	0.000	14.6(	10.3)	0.011(	0.017)
AMPHSPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
POLYCHAETA														
ANAIGROE	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
ANAISUBU	0.0	0.000	0.0	0.000	14.6	0.000	14.6	0.000	0.0	0.000	5.9(	8.0)	0.000(	0.000)
CHAESETO	0.0	0.000	160.9	0.006	0.0	0.000	0.0	0.000	0.0	0.000	32.2(	72.0)	0.001(	0.003)
DIPLGLAU	43.9	0.009	43.9	0.016	43.9	0.053	43.9	0.139	58.5	0.183	46.8(	6.5)	0.080(	0.077)
ETEOLONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
EUMISANG	14.6	0.000	0.0	0.000	14.6	0.013	14.6	0.054	0.0	0.000	8.8(	8.0)	0.013(	0.023)
GATTCIRR	0.0	0.000	0.0	0.000	14.6	0.006	14.6	0.006	0.0	0.000	5.9(	8.0)	0.002(	0.003)
GLYCNORD	0.0	0.000	43.9	0.037	0.0	0.000	43.9	0.038	0.0	0.000	17.6(	24.0)	0.015(	0.020)
GONIMACU	14.6	0.006	14.6	0.006	0.0	0.000	0.0	0.000	14.6	0.012	8.8(	8.0)	0.005(	0.005)
GYPTCAPE	0.0	0.000	14.6	0.000	14.6	0.000	0.0	0.000	14.6	0.000	8.8(	8.0)	0.000(	0.000)
HARMLONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	14.6	0.000	5.9(	8.0)	0.001(	0.003)
LANICONC	292.6	0.594	351.1	0.070	702.2	0.139	629.1	1.090	409.6	0.080	476.9(	179.1)	0.395(	0.445)
MAGEALLE	0.0	0.000	0.0	0.000	14.6	0.059	0.0	0.000	43.9	0.161	11.7(	19.1)	0.044(	0.070)
MAGEPAPI	629.1	0.080	395.0	0.097	541.3	0.152	673.0	0.143	614.5	0.138	570.6(	109.0)	0.122(	0.032)
NEPHHOMB	73.2	0.009	131.7	1.696	190.2	1.141	58.5	0.012	190.2	0.297	128.7(	62.4)	0.631(	0.754)
NOTOLATE	0.0	0.000	29.3	1.637	0.0	0.000	0.0	0.000	14.6	1.570	8.8(	13.1)	0.641(	0.879)
OPHIFLEX	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.047	0.0	0.000	2.9(	6.5)	0.009(	0.021)
PECTAURI	0.0	0.000	14.6	0.025	0.0	0.000	14.6	0.007	14.6	0.004	8.8(	8.0)	0.007(	0.010)
PECTKORE	14.6	0.000	160.9	0.006	43.9	0.007	0.0	0.000	14.6	0.004	46.8(	65.8)	0.004(	0.003)
PHOLMINU	0.0	0.000	438.9	0.219	541.3	0.271	438.9	0.219	497.4	0.249	383.3(	218.6)	0.192(	0.109)
SCALINFL	0.0	0.000	0.0	0.000	14.6	0.481	0.0	0.000	0.0	0.000	2.9(	6.5)	0.096(	0.215)
SCOLBONN	234.1	0.127	219.4	0.053	131.7	0.089	190.2	0.044	0.0	0.000	155.1(	95.2)	0.063(	0.048)
SIGAMATH	0.0	0.000	0.0	0.000	58.5	0.138	14.6	0.012	0.0	0.000	14.6(	25.3)	0.030(	0.060)
SPIOBOMB	3686.8	0.778	3774.5	0.797	3745.3	0.791	3994.0	0.732	3452.7	0.729	3730.6(	194.1)	0.765(	0.033)
SPIOFILI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.004	5.9(	13.1)	0.001(	0.002)
STHELIMI	175.6	0.092	160.9	0.004	14.6	0.000	0.0	0.000	14.6	0.000	73.2(	87.2)	0.019(	0.041)
MISCELLANEOUS														
EDWARDSI	14.6	0.022	58.5	0.116	58.5	0.161	29.3	0.080	29.3	0.050	38.0(	19.6)	0.086(	0.055)
ENTEROPN	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.164	2.9(	6.5)	0.033(	0.073)
NEMERTIN	43.9	0.038	234.1	0.097	204.8	0.042	29.3	0.000	73.2	0.032	117.0(	95.4)	0.042(	0.035)
PHORONID	29.3	0.012	585.2	0.234	87.8	0.035	14.6	0.006	29.3	0.012	149.2(	245.3)	0.060(	0.098)
Σ	7680.7	11.046	11031.0	19.837	10401.9	26.388	9728.9	33.313	9129.1	33.295	9594.3(	1285.7)	24.776(	9.499)
NSPC	41		38		44		41		47					
SH-W	2.016		2.330		2.269		2.070		2.267					
SIMP	0.270		0.178		0.188		0.222		0.200					

Appendix - 2 Biomonitoring 1992

STATION : SM37
GEOGR. POS. : 55° 0" 3' N 02° 59" 53' E
DATE : 19/05/92
DEPTH m : 22
Median Grain: 192µ
Perc. Mud. : 2.4

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ARGIHAMA	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ATYLFALC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ATYLSWAN	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHELEG	409.6	0.205	848.5	0.424	409.6	0.205	219.4	0.110	204.8	0.102	418.4(	260.0)	0.209(	0.130)
BATHGUIL	248.7	0.124	351.1	0.176	190.2	0.095	43.9	0.022	146.3	0.073	196.0(	114.5)	0.098(	0.057)
BATHTENU	29.3	0.015	43.9	0.022	0.0	0.000	73.2	0.037	29.3	0.015	35.1(	26.6)	0.018(	0.013)
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
IPHITRIS	58.5	0.029	43.9	0.022	0.0	0.000	0.0	0.000	14.6	0.007	23.4(	26.6)	0.012(	0.013)
LEUCINCI	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015	0.0	0.000	5.9(	13.1)	0.003(	0.007)
MEGAAGIL	14.6	0.007	0.0	0.000	43.9	0.022	0.0	0.000	14.6	0.007	14.6(	17.9)	0.007(	0.009)
MELIOBTU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.022	8.8(	19.6)	0.004(	0.010)
PERILONG	43.9	0.022	0.0	0.000	14.6	0.007	29.3	0.015	0.0	0.000	17.6(	19.1)	0.009(	0.010)
PONTALTA	29.3	0.015	43.9	0.022	43.9	0.022	0.0	0.000	29.3	0.015	29.3(	17.9)	0.015(	0.009)
PSEULONG	102.4	0.051	160.9	0.080	58.5	0.029	175.6	0.088	102.4	0.051	120.0(	47.9)	0.060(	0.024)
SIPHKROY	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
SYNCMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
UROTPOSE	58.5	0.029	73.2	0.037	14.6	0.007	0.0	0.000	58.5	0.029	41.0(	31.7)	0.020(	0.016)
ECHINODERMATA														
ACROBRAC	102.4	1.178	58.5	0.102	87.8	0.113	43.9	0.789	234.1	2.528	105.3(	75.6)	0.942(	0.998)
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	12.772	14.6	0.209	5.9(	8.0)	2.596(	5.689)
ECHIPUSI	29.3	0.019	58.5	0.010	190.2	0.094	0.0	0.000	87.8	0.012	73.2(	73.2)	0.027(	0.038)
OPHIALBI	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	5.9(	8.0)	0.000(	0.000)
MOLLUSCA														
ABRAPRIS	14.6	0.085	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.017(	0.038)
CYLICYLI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
DOSILUPI	29.3	0.003	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	8.8(	13.1)	0.001(	0.001)
ENSIENSI	14.6	5.691	14.6	2.470	0.0	0.000	0.0	0.000	29.3	8.624	11.7(	12.2)	3.357(	3.759)
GARIFERV	0.0	0.000	0.0	0.000	14.6	2.761	0.0	0.000	0.0	0.000	2.9(	6.5)	0.552(	1.235)
MONTFERR	0.0	0.000	0.0	0.000	29.3	0.019	0.0	0.000	0.0	0.000	5.9(	13.1)	0.004(	0.009)
MYSEBIDE	73.2	0.012	14.6	0.003	0.0	0.000	117.0	0.018	263.3	0.029	93.6(	105.8)	0.012(	0.012)
NATIALDE	0.0	0.000	14.6	0.000	43.9	0.080	43.9	0.076	43.9	0.107	29.3(	20.7)	0.053(	0.049)
TELLFABU	0.0	0.000	29.3	0.000	0.0	0.000	14.6	0.051	14.6	0.000	11.7(	12.2)	0.010(	0.023)
POLYCHAETA														
ANAIGROE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	2.9(	6.5)	0.001(	0.002)
ARICMINU	29.3	0.000	0.0	0.000	0.0	0.000	14.6	0.004	14.6	0.004	11.7(	12.2)	0.002(	0.002)
CHAESETO	14.6	0.004	0.0	0.000	14.6	0.000	43.9	0.012	29.3	0.007	20.5(	16.7)	0.005(	0.005)
GONIMACU	87.8	0.167	43.9	0.176	87.8	0.168	43.9	0.086	43.9	0.129	61.4(	24.0)	0.145(	0.038)
GYPTCAPE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	5.9(	13.1)	0.001(	0.003)
HARMLONG	0.0	0.000	14.6	0.004	14.6	0.006	14.6	0.004	0.0	0.000	8.8(	8.0)	0.003(	0.003)
HARMLUNU	14.6	0.000	0.0	0.000	0.0	0.000	29.3	0.006	29.3	0.010	14.6(	14.6)	0.003(	0.005)
LANICONC	0.0	0.000	29.3	0.004	43.9	0.325	0.0	0.000	14.6	0.004	17.6(	19.1)	0.067(	0.144)
MAGEPAPI	73.2	0.018	58.5	0.067	131.7	0.097	0.0	0.000	29.3	0.006	58.5(	49.6)	0.037(	0.042)
MALDANID	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.068	14.6	0.000	5.9(	8.0)	0.214(	0.478)
MYRIOCUL	0.0	0.000	29.3	0.015	0.0	0.000	14.6	0.000	0.0	0.000	8.8(	13.1)	0.003(	0.007)
NEPHCIRR	146.3	0.186	43.9	0.031	146.3	0.164	131.7	0.183	117.0	0.222	117.0(	42.7)	0.157(	0.074)
NEPHHOMB	0.0	0.000	14.6	0.155	0.0	0.000	0.0	0.000	43.9	0.013	11.7(	19.1)	0.034(	0.068)
NEPHJUVE	29.3	0.006	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000	11.7(	16.0)	0.002(	0.003)
NEPHLONG	0.0	0.000	14.6	0.018	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.004(	0.008)
NOTOLATE	0.0	0.000	29.3	0.312	0.0	0.000	0.0	0.000	29.3	0.531	11.7(	16.0)	0.169(	0.243)
OPHIFLEX	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.010	2.9(	6.5)	0.002(	0.005)
OWENFUSI	29.3	0.070	14.6	0.004	43.9	0.162	43.9	0.121	73.2	0.146	41.0(	21.7)	0.101(	0.064)
PHOLMINU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.013	5.9(	13.1)	0.003(	0.006)
SCOLBONN	14.6	0.121	0.0	0.000	0.0	0.000	14.6	0.139	0.0	0.000	5.9(	8.0)	0.052(	0.072)
SIGAMATH	29.3	0.004	14.6	0.064	0.0	0.000	43.9	0.494	14.6	0.379	20.5(	16.7)	0.188(	0.232)
SPIOBOMB	687.6	0.157	629.1	0.120	453.5	0.107	409.6	0.114	716.9	0.418	579.3(	139.4)	0.183(	0.133)
SPIOFILI	29.3	0.006	58.5	0.010	14.6	0.000	14.6	0.000	29.3	0.006	29.3(	17.9)	0.004(	0.004)
MISCELLANEOUS														
NEMERTIN	58.5	0.026	0.0	0.000	0.0	0.000	29.3	0.006	43.9	0.054	26.3(	26.2)	0.017(	0.023)
PHORONID	43.9	0.018	43.9	0.018	58.5	0.023	29.3	0.012	87.8	0.035	52.7(	22.2)	0.021(	0.009)
Σ	2560.2	8.267	2823.6	4.370	2194.5	4.528	1755.6	16.254	2779.7	13.840	2422.7(	448.4)	9.452(	5.408)
NSPC	30		28		25		29		39					
SH-W	2.678		2.378		2.613		2.791		2.924					
SIMP	0.115		0.159		0.102		0.091		0.095					

Appendix - 2 Biomonitoring 1992

STATION : SM1
GEOGR. POS. : 52^0 45" 0' N 04^0 30" 9' E
DATE : 31/03/92
DEPTH m : 20
Median Grain: 226µ
Perc. Mud. : 2.4

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLSWAM	0.0	0.000	43.9	0.022	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.004(	0.010)
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
LOPHTYPI	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
MEGAAGIL	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ORCHNANA	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
PSEULONG	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
UROTPOSE	0.0	0.000	716.9	0.358	380.4	0.190	409.6	0.205	585.2	0.298	418.4(	270.9)	0.210(	0.136)
ECHINODERMATA														
ECHICORD	87.8	37.554	73.2	22.200	43.9	20.072	58.5	30.839	43.9	22.916	61.4(	19.1)	26.716(	7.305)
MOLLUSCA														
MONTFERR	629.1	0.358	234.1	0.097	219.4	0.135	424.3	0.298	263.3	0.183	354.0(	174.2)	0.214(	0.111)
MYSEBIDE	0.0	0.000	0.0	0.000	102.4	0.018	0.0	0.000	0.0	0.000	20.5(	45.8)	0.004(	0.008)
NATIALDE	14.6	0.203	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.041(	0.091)
SPISSUBT	3964.7	205.209	4242.7	232.259	5281.4	259.358	4023.3	192.155	3818.4	187.956	4266.1(	587.7)	215.387(	30.058)
TELLFABU	14.6	0.404	29.3	1.156	14.6	0.647	0.0	0.000	14.6	0.421	14.6(	10.3)	0.526(	0.422)
POLYCHAETA														
ANAIGROE	0.0	0.000	0.0	0.000	14.6	0.408	0.0	0.000	0.0	0.000	2.9(	6.5)	0.082(	0.183)
ANAISUBU	14.6	0.108	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.022(	0.048)
MAGEPAPI	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.035	43.9	0.164	14.6(	20.7)	0.040(	0.071)
NEPHCAEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.623	0.0	0.000	2.9(	6.5)	0.125(	0.279)
NEPHCIRR	58.5	0.231	29.3	0.038	29.3	0.022	14.6	0.095	29.3	0.367	32.2(	16.0)	0.151(	0.146)
NEPHHOMB	14.6	7.382	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	1.476(	3.301)
NERELONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	1.169	5.9(	13.1)	0.234(	0.523)
PECTKORE	0.0	0.000	0.0	0.000	43.9	3.861	14.6	1.624	29.3	2.873	17.6(	19.1)	1.672(	1.720)
SPIOBOMB	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.022	8.8(	13.1)	0.006(	0.010)
MISCELLANEOUS														
ANTHOZOA	14.6	0.680	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.136(	0.304)
NEMERTIN	0.0	0.000	0.0	0.000	43.9	0.402	29.3	0.116	73.2	0.312	29.3(	31.0)	0.166(	0.184)
Σ	4827.9	252.138	5383.8	256.136	6217.8	285.134	5032.7	225.997	4959.6	216.682	5284.4(	560.9)	247.217(	27.038)
NSPC	10		8		13		10		11					
SH-W	0.659		0.763		0.697		0.771		0.894					
SIMP	0.691		0.640		0.726		0.652		0.609					

STATION : META1
GEOGR. POS. : 53^0 59" 53' N 03^0 55" 0' E
DATE : 31/03/92
DEPTH m : 27
Median Grain: 244µ
Perc. Mud. : 1.7

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
BATHELEG	321.9	0.161	160.9	0.070	73.2	0.037	160.9	0.048	468.2	0.082	237.0(	157.4)	0.080(	0.049)
BATHGUIL	29.3	0.015	0.0	0.000	29.3	0.015	14.6	0.012	0.0	0.000	14.6(	14.6)	0.008(	0.008)
DIASBRAD	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
HIPPDENT	14.6	0.007	0.0	0.000	14.6	0.007	0.0	0.000	14.6	0.132	8.8(	8.0)	0.029(	0.057)
MEGAAGIL	102.4	0.051	87.8	0.022	87.8	0.044	117.0	0.012	14.6	0.007	81.9(	39.5)	0.027(	0.019)
ORCHNANA	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
PSEUSIMI	43.9	0.022	58.5	0.004	43.9	0.022	87.8	0.012	14.6	0.007	49.7(	26.6)	0.013(	0.008)
SYNCMACU	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
THIASCUT	14.6	0.060	29.3	0.053	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	13.1)	0.023(	0.031)
UROTPOSE	0.0	0.000	58.5	0.029	0.0	0.000	58.5	0.035	43.9	0.022	32.2(	30.0)	0.017(	0.016)
ECHINODERMATA														
ECHICORD	14.6	0.076	29.3	0.341	14.6	0.018	0.0	0.000	0.0	0.000	11.7(	12.2)	0.087(	0.145)
ECHIPUSI	14.6	0.015	14.6	0.018	29.3	0.026	43.9	0.035	14.6	0.009	23.4(	13.1)	0.020(	0.010)
MOLLUSCA														
DONAVITT	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	3.385	2.9(	6.5)	0.677(	1.514)
ENSISPEC	0.0	0.000	0.0	0.000	14.6	3.072	0.0	0.000	0.0	0.000	2.9(	6.5)	0.614(	1.374)
NATIALDE	14.6	0.000	29.3	0.003	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	13.1)	0.001(	0.001)
TELLFABU	14.6	0.601	14.6	0.557	14.6	0.006	0.0	0.000	0.0	0.000	8.8(	8.0)	0.233(	0.317)
POLYCHAETA														
ANAIGROE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.018	2.9(	6.5)	0.004(	0.008)
ANAISUBU	14.6	0.006	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ARICMINU	29.3	0.004	0.0	0.000	73.2	0.010	58.5	0.007	234.1	0.018	79.0(	91.1)	0.008(	0.007)
CHAESETO	14.6	0.000	0.0	0.000	14.6	0.000	14.6	0.025	0.0	0.000	8.8(	8.0)	0.005(	0.011)
GONIMACU	0.0	0.000	29.3	0.259	14.6	0.067	14.6	0.078	0.0	0.000	11.7(	12.2)	0.081(	0.106)
LANICONC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.726	0.0	0.000	2.9(	6.5)	0.345(	0.772)
MAGEPAPI	0.0	0.000	58.5	0.162	43.9	0.101	58.5	0.145	29.3	0.151	38.0(	24.5)	0.112(	0.067)
NEPHCAEC	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.558	0.0	0.000	2.9(	6.5)	0.312(	0.697)
NEPHCIRR	131.7	0.060	336.5	0.338	190.2	0.098	292.6	0.296	234.1	0.083	237.0(	81.1)	0.175(	0.131)
OPHELIMA	29.3	0.095	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.019(	0.043)
SCOLARMI	409.6	0.906	146.3	0.774	629.1	3.517	204.8	0.784	468.2	1.277	371.6(	197.3)	1.452(	1.173)
SPIOBOMB	43.9	0.010	43.9	0.022	29.3	0.000	14.6	0.018	87.8	0.023	43.9(	27.4)	0.015(	0.010)
MISCELLANEOUS														
NEMERTIN	14.6	0.003	0.0	0.000	14.6	0.000	0.0	0.000	43.9	0.026	14.6(	17.9)	0.006(	0.012)
Σ	1316.7	2.114	1097.3	2.652	1346.0	7.047	1170.4	4.790	1697.1	5.240	1325.5(	231.7)	4.369(	2.009)
NSPC	20		14		18		15		14					
SH-W	2.202		2.214		1.993		2.250		1.915					
SIMP	0.169		0.142		0.245		0.127		0.188					

Appendix - 2 Biomonitoring 1992

STATION : SM20
GEOGR. POS. : 53^0 29" 17' N 03^0 0" 7' E
DATE : 20/05/92
DEPTH m : 32
Median Grain: 135µ
Perc. Mud. : 9.1

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
BATHGUIL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHTENU	0.0	0.000	14.6	0.007	0.0	0.000	29.3	0.015	14.6	0.007	11.7(	12.2)	0.006(	0.006)
BODOAREN	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
CALLSUBT	0.0	0.000	14.6	0.127	43.9	2.470	29.3	0.048	58.5	0.048	29.3(	23.1)	0.539(	1.080)
CAPRELLI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
EUDOTRUN	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
GAMMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
HARPANTE	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
IPHITRIS	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
LEUCINCI	0.0	0.000	0.0	0.000	29.3	0.015	0.0	0.000	29.3	0.015	11.7(	16.0)	0.006(	0.008)
MEGAAGIL	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
NORMSPEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	2.9(	6.5)	0.001(	0.003)
PERILONG	58.5	0.029	43.9	0.022	0.0	0.000	14.6	0.007	0.0	0.000	23.4(	26.6)	0.012(	0.013)
PSEULONG	14.6	0.007	14.6	0.007	0.0	0.000	0.0	0.000	14.6	0.007	8.8(	8.0)	0.004(	0.004)
SYNCMACU	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ECHINODERMATA														
ACROBRAC	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
AMPHFILI	43.9	0.080	14.6	0.168	14.6	0.178	0.0	0.000	29.3	0.132	20.5(	16.7)	0.112(	0.073)
ECHICORD	146.3	32.640	175.6	38.247	87.8	17.426	0.0	0.000	0.0	0.000	81.9(	81.2)	17.663(	17.833)
OPHIALBI	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	58.5	0.129	14.6(	25.3)	0.026(	0.058)
MOLLUSCA														
ABRAALBA	0.0	0.000	14.6	0.162	0.0	0.000	14.6	0.000	14.6	0.000	8.8(	8.0)	0.032(	0.073)
CULTPELL	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.004	0.0	0.000	5.9(	13.1)	0.001(	0.002)
DOSILUPI	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
ENSIDIRE	0.0	0.000	0.0	0.000	0.0	0.000	43.9	40.233	0.0	0.000	8.8(	19.6)	8.047(	17.993)
MYSEBIDE	0.0	0.000	14.6	0.000	0.0	0.000	14.6	0.000	14.6	0.003	8.8(	8.0)	0.001(	0.001)
NATIALDE	43.9	0.010	29.3	0.127	14.6	0.342	43.9	0.009	58.5	0.136	38.0(	16.7)	0.125(	0.136)
NUCUTURG	43.9	0.007	43.9	0.015	14.6	0.023	58.5	0.022	43.9	0.019	41.0(	16.0)	0.017(	0.006)
TELLFABU	14.6	0.000	58.5	0.000	14.6	0.000	58.5	0.000	43.9	0.000	38.0(	22.2)	0.000(	0.000)
THRAPHAS	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.006	2.9(	6.5)	0.001(	0.003)
POLYCHAETA														
CAPICAPI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.004	0.0	0.000	8.8(	19.6)	0.001(	0.002)
CHAESETO	43.9	0.013	58.5	0.010	0.0	0.000	43.9	0.016	43.9	0.012	38.0(	22.2)	0.010(	0.006)
ETEOLONG	0.0	0.000	14.6	0.000	14.6	0.000	0.0	0.000	29.3	0.006	11.7(	12.2)	0.001(	0.003)
GONIMACU	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.004	0.0	0.000	5.9(	13.1)	0.001(	0.002)
HARMLONG	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
HARMLUNU	14.6	0.070	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.014(	0.031)
LANICONC	58.5	0.693	0.0	0.000	0.0	0.000	87.8	3.349	14.6	0.000	32.2(	39.3)	0.808(	1.452)
LUMBLATR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.016	8.8(	19.6)	0.003(	0.007)
MAGEPAPI	29.3	0.007	29.3	0.013	29.3	0.010	43.9	0.032	0.0	0.000	26.3(	16.0)	0.013(	0.012)
NEPHHOMB	29.3	0.016	43.9	0.568	102.4	0.573	58.5	0.181	87.8	0.234	64.4(	30.3)	0.315(	0.247)
PECTAURI	14.6	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	5.9(	8.0)	0.000(	0.000)
PECTKORE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
PHOLMINU	43.9	0.022	14.6	0.004	43.9	0.006	14.6	0.000	0.0	0.000	23.4(	19.6)	0.006(	0.009)
SCALINFL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
SCOLARMI	0.0	0.000	14.6	0.016	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.003(	0.007)
SIGAMATH	14.6	0.092	58.5	0.041	0.0	0.000	117.0	0.086	14.6	0.019	41.0(	47.9)	0.048(	0.041)
SPIOBOMB	14.6	0.004	29.3	0.018	14.6	0.000	248.7	0.025	102.4	0.010	81.9(	100.1)	0.011(	0.010)
SPIOFILI	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
STHELIMI	29.3	0.007	29.3	0.004	14.6	0.004	29.3	0.004	0.0	0.000	20.5(	13.1)	0.004(	0.003)
MISCELLANEOUS														
ENTEROPN	0.0	0.000	14.6	0.026	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.005(	0.012)
NEMERTIN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.029	58.5	0.059	14.6(	25.3)	0.018(	0.026)
PHORONID	0.0	0.000	248.7	0.099	219.4	0.088	102.4	0.041	87.8	0.035	131.7(	101.9)	0.053(	0.041)
Σ	716.9	33.722	1068.0	39.691	673.0	21.136	1243.6	44.133	936.3	0.914	927.5(	239.2)	27.919(	17.395)
NSPC	21		27		15		27		25					
SH-W	2.774		2.783		2.212		2.922		2.993					
SIMP	0.064		0.089		0.144		0.067		0.045					

Appendix - 2 Biomonitoring 1992

STATION : N2
GEOGR. POS. : 52° 15" 33' N 04° 24" 20' E
DATE : 31/03/92
DEPTH m : 12
Median Grain: 250µ
Perc. Mud. : 3.9

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLFALC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015	5.9(	13.1)	0.003(	0.007)
ATYLSWAM	87.8	0.044	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	17.6(	39.3)	0.009(	0.020)
DIASBRAD	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
PSEUSIMI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ECHINODERMATA														
ECHICORD	0.0	0.000	29.3	16.421	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	3.284(	7.344)
MOLLUSCA														
ENSIDIRE	14.6	1.848	14.6	1.254	29.3	1.258	14.6	1.912	29.3	6.981	20.5(	8.0)	2.651(	2.441)
MACOBALT	0.0	0.000	0.0	0.000	14.6	0.377	14.6	0.846	0.0	0.000	5.9(	8.0)	0.245(	0.374)
MONTFERR	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.002)
MYSEBIDE	14.6	0.006	29.3	0.012	351.1	0.146	43.9	0.016	29.3	0.016	93.6(	144.3)	0.039(	0.060)
NATIALDE	0.0	0.000	0.0	0.000	14.6	0.391	0.0	0.000	0.0	0.000	2.9(	6.5)	0.078(	0.175)
SPISSUBT	14.6	0.992	994.8	5.298	102.4	6.425	14.6	0.856	0.0	0.000	225.3(	432.1)	2.714(	2.925)
TELLFABU	14.6	0.568	73.2	1.390	102.4	1.757	43.9	0.464	29.3	0.117	52.7(	35.2)	0.859(	0.686)
TELLPYGM	14.6	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.000(	0.000)
POLYCHAETA														
ANAIGROE	0.0	0.000	14.6	0.398	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.080(	0.178)
CAPICAPI	0.0	0.000	0.0	0.000	29.3	0.012	658.3	0.219	0.0	0.000	137.5(	291.4)	0.046(	0.097)
CAPITELL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
CHAESETO	0.0	0.000	0.0	0.000	29.3	0.000	29.3	0.013	29.3	0.006	17.6(	16.0)	0.004(	0.006)
MAGEPAPI	43.9	0.075	29.3	0.138	29.3	0.097	14.6	0.044	14.6	0.019	26.3(	12.2)	0.074(	0.046)
NEPHCAEC	0.0	0.000	14.6	10.016	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	2.003(	4.479)
NEPHCIRR	58.5	0.155	131.7	0.143	102.4	0.116	87.8	0.157	43.9	0.097	84.9(	34.9)	0.133(	0.026)
NEPHHOMB	29.3	0.537	29.3	0.669	43.9	0.803	0.0	0.000	0.0	0.000	20.5(	19.6)	0.402(	0.379)
NERELONG	0.0	0.000	0.0	0.000	58.5	4.377	14.6	2.389	0.0	0.000	14.6(	25.3)	1.353(	1.982)
NOTOLATE	0.0	0.000	29.3	0.149	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.030(	0.067)
SCOLARMI	43.9	0.547	29.3	0.110	29.3	0.026	0.0	0.000	29.3	0.031	26.3(	16.0)	0.143(	0.230)
SPIOBOMB	0.0	0.000	14.6	0.006	73.2	0.080	29.3	0.022	0.0	0.000	23.4(	30.3)	0.022(	0.034)
SPIOFILI	0.0	0.000	0.0	0.000	0.0	0.000	87.8	0.023	0.0	0.000	17.6(	39.3)	0.005(	0.010)
MISCELLANEOUS														
NEMERTIN	14.6	0.396	29.3	0.078	43.9	0.231	0.0	0.000	0.0	0.000	17.6(	19.1)	0.141(	0.171)
Σ	380.4	5.179	1477.6	36.079	1053.4	16.097	1082.6	6.968	234.1	7.281	845.6(	521.8)	14.321(	12.882)
NSPC	13		15		15		14		8					
SH-W	2.324		1.403		2.273		1.572		2.047					
SIMP	0.086		0.462		0.143		0.381		0.075					

STATION : N10
GEOGR. POS. : 52° 17" 42' N 04° 18" 09' E
DATE : 31/03/92
DEPTH m : 18
Median Grain: 323µ
Perc. Mud. : 1.9

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
AMPEBREV	0.0	0.000	0.0	0.000	58.5	0.244	0.0	0.000	0.0	0.000	11.7(	26.2)	0.049(	0.109)
BATHGUIL	0.0	0.000	14.6	0.007	87.8	0.149	29.3	0.032	14.6	0.006	29.3(	34.3)	0.039(	0.063)
LEUCINCI	0.0	0.000	0.0	0.000	14.6	0.023	14.6	0.004	0.0	0.000	5.9(	8.0)	0.006(	0.010)
MEGAAGIL	0.0	0.000	43.9	0.022	14.6	0.003	29.3	0.004	0.0	0.000	17.6(	19.1)	0.006(	0.009)
PSEULONG	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
SYNCMACU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
TRYPSARS	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
UROTPOSE	0.0	0.000	1228.9	0.614	278.0	0.139	321.9	0.159	131.7	0.037	392.1(	484.7)	0.190(	0.247)
ECHINODERMATA														
ECHICORD	0.0	0.000	14.6	14.798	43.9	7.991	14.6	16.094	14.6	2.019	17.6(	16.0)	8.181(	7.269)
MOLLUSCA														
ABRAALBA	14.6	0.050	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.010(	0.022)
ENSIDIRE	0.0	0.000	0.0	0.000	14.6	12.122	29.3	18.463	0.0	0.000	8.8(	13.1)	6.117(	8.671)
MONTFERR	0.0	0.000	0.0	0.000	29.3	0.041	0.0	0.000	0.0	0.000	5.9(	13.1)	0.008(	0.018)
MYSEBIDE	14.6	0.006	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.001(	0.003)
NATIALDE	0.0	0.000	43.9	0.873	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.175(	0.391)
SPISSUBT	29.3	0.238	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.048(	0.107)
TELLFABU	0.0	0.000	0.0	0.000	14.6	0.623	14.6	0.635	0.0	0.000	5.9(	8.0)	0.252(	0.345)
ARICMINU	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
POLYCHAETA														
CAPICAPI	0.0	0.000	0.0	0.000	658.3	0.095	87.8	0.018	14.6	0.000	152.2(	285.3)	0.023(	0.041)
ETEOLONG	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
LANICONC	0.0	0.000	0.0	0.000	14.6	0.085	0.0	0.000	0.0	0.000	2.9(	6.5)	0.017(	0.038)
NEPHCAEC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	25.041	2.9(	6.5)	5.008(	11.199)
NEPHCIRR	190.2	1.899	146.3	0.057	87.8	0.702	190.2	1.587	190.2	1.666	160.9(	45.1)	1.182(	0.776)
NOTOLATE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.026	2.9(	6.5)	0.005(	0.012)
SCOLARMI	14.6	0.427	0.0	0.000	43.9	0.057	58.5	0.645	14.6	0.089	26.3(	24.0)	0.244(	0.280)
SPIOBOMB	58.5	0.019	29.3	0.010	0.0	0.000	29.3	0.056	0.0	0.000	23.4(	24.5)	0.017(	0.023)
SPIOFILI	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MISCELLANEOUS														
NEMERTIN	29.3	0.206	29.3	0.247	73.2	0.038	146.3	1.162	102.4	0.730	76.1(	50.0)	0.477(	0.461)
Σ	365.8	2.853	1550.8	16.630	1492.3	22.328	965.6	38.860	541.3	29.614	983.1(	538.1)	22.057(	13.581)
NSPC	8		8		18		12		11					
SH-W	1.552		0.847		1.975		1.974		1.807					
SIMP	0.287		0.636		0.236		0.177		0.203					

Appendix - 2 Biomonitoring 1992

STATION : N30
GEOGR. POS. : 52° 23" 15' N 04° 3" 3' E
DATE : 31/03/92
DEPTH m : 23
Median Grain: 317µ
Perc. Mud. : 1.6

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLPALC	643.7	0.241	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	128.7(	287.9)	0.048(	0.108)
BATHGUIL	0.0	0.000	0.0	0.000	43.9	0.088	29.3	0.051	29.3	0.041	20.5(	19.6)	0.036(	0.037)
CALLTYRR	14.6	0.051	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.010(	0.023)
CAPRELLI	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
IPHITRIS	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
LEUCINCI	146.3	0.073	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3(	65.4)	0.015(	0.033)
MEGAAGIL	14.6	0.007	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	5.9(	8.0)	0.001(	0.003)
MELIOBTU	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
MICRMACU	248.7	0.124	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	49.7(	111.2)	0.025(	0.056)
PERILONG	43.9	0.022	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.004(	0.010)
PSEUSIMI	43.9	0.022	29.3	0.015	14.6	0.007	0.0	0.000	29.3	0.000	23.4(	16.7)	0.009(	0.010)
SYNCMACU	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
TRYPSARS	1228.9	0.614	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	245.8(	549.6)	0.123(	0.275)
UROTPOSE	570.6	0.285	14.6	0.007	58.5	0.006	0.0	0.000	907.1	0.404	310.2(	409.6)	0.140(	0.191)
ECHINODERMATA														
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	12.598	14.6	0.158	5.9(	8.0)	2.551(	5.617)
OPHIALBI	14.6	0.040	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.023	5.9(	8.0)	0.013(	0.018)
LUPINIDA	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
NATIALDE	117.0	0.389	0.0	0.000	14.6	0.000	0.0	0.000	29.3	0.007	32.2(	49.0)	0.079(	0.173)
SPISELLI	14.6	0.016	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.679	5.9(	8.0)	0.139(	0.302)
POLYCHAETA														
ANAIGROE	14.6	0.026	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.005(	0.012)
ARICMINU	0.0	0.000	146.3	0.023	14.6	0.000	14.6	0.000	0.0	0.000	35.1(	62.6)	0.005(	0.010)
EUMISANG	204.8	0.140	0.0	0.000	29.3	0.007	0.0	0.000	0.0	0.000	46.8(	89.2)	0.030(	0.062)
HARMLUNU	321.9	0.157	0.0	0.000	43.9	0.010	0.0	0.000	0.0	0.000	73.2(	140.3)	0.033(	0.069)
LANICONC	1828.8	56.475	14.6	0.083	321.9	11.370	0.0	0.000	29.3	0.593	438.9(	788.3)	13.704(	24.393)
MAGEPAPI	0.0	0.000	14.6	0.056	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.011(	0.025)
NEPHCIRR	102.4	0.423	131.7	0.612	190.2	0.799	160.9	0.837	204.8	1.140	158.0(	41.9)	0.762(	0.268)
NERELONG	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	1.665	2.9(	6.5)	0.333(	0.745)
SCOLARMI	0.0	0.000	0.0	0.000	14.6	0.658	0.0	0.000	29.3	0.155	8.8(	13.1)	0.163(	0.285)
SCOLSQUA	0.0	0.000	14.6	0.306	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.061(	0.137)
SPIOBOMB	146.3	0.186	43.9	0.079	204.8	0.525	87.8	0.285	58.5	0.132	108.3(	66.7)	0.241(	0.176)
SPIOFILI	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.042	0.0	0.000	8.8(	19.6)	0.008(	0.019)
STHE BOA	14.6	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.005)
TRAVFORB	14.6	0.000	73.2	0.007	351.1	0.037	73.2	0.007	14.6	0.000	105.3(	140.5)	0.010(	0.015)
TYPOARMI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MISCELLANEOUS														
NEMERTIN	102.4	1.040	14.6	0.061	29.3	0.486	29.3	0.212	29.3	0.174	41.0(	34.9)	0.395(	0.393)
Σ	5954.4	60.394	497.4	1.249	1346.0	13.994	482.8	14.033	1433.7	5.170	1942.9(	2287.4)	18.968(	23.820)
NSPC	25		10		14		10		15					
SH-W	2.228		1.893		2.027		1.944		1.455					
SIMP	0.164		0.169		0.165		0.161		0.420					

Appendix - 2 Biomonitoring 1992

STATION : N50
GEOGR. POS. : 52° 28" 51' N 03° 47" 12' E
DATE : 31/03/92
DEPTH m : 30
Median Grain:
Perc. Mud. :

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLSWAM	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHELEG	14.6	0.007	58.5	0.029	0.0	0.000	0.0	0.000	0.0	0.000	14.6(	25.3)	0.007(	0.013)
BATHGUIL	102.4	0.130	43.9	0.050	29.3	0.031	58.5	0.104	0.0	0.000	46.8(	37.9)	0.063(	0.053)
DIASBRAD	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
LEUCINCI	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.016	0.0	0.000	2.9(	6.5)	0.003(	0.007)
MEGAAGIL	73.2	0.037	43.9	0.022	14.6	0.007	29.3	0.015	29.3	0.015	38.0(	22.2)	0.019(	0.011)
PERILONG	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	14.6	0.007	5.9(	8.0)	0.003(	0.004)
PSEULONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	2.9(	6.5)	0.001(	0.003)
THIASCUT	0.0	0.000	14.6	0.680	14.6	0.588	0.0	0.000	0.0	0.000	5.9(	8.0)	0.254(	0.349)
UROTBREV	43.9	0.020	43.9	0.061	29.3	0.031	0.0	0.000	14.6	0.013	26.3(	19.1)	0.025(	0.023)
UROTPOSE	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
ECHINODERMATA														
ECHICORD	0.0	0.000	0.0	0.000	0.0	0.000	29.3	18.106	0.0	0.000	5.9(	13.1)	3.621(	8.097)
ECHIPUSI	14.6	0.047	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.009(	0.021)
OPHIALBI	0.0	0.000	14.6	0.028	0.0	0.000	14.6	0.161	0.0	0.000	5.9(	8.0)	0.038(	0.070)
MOLLUSCA														
ENSIENSI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	7.299	2.9(	6.5)	1.460(	3.264)
NATIALDE	58.5	0.023	131.7	0.041	14.6	0.000	14.6	0.041	14.6	0.034	46.8(	51.1)	0.028(	0.017)
SPISELLI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.982	2.9(	6.5)	0.196(	0.439)
POLYCHAETA														
ARICMINU	87.8	0.013	43.9	0.007	102.4	0.010	0.0	0.000	29.3	0.004	52.7(	42.1)	0.007(	0.005)
CHAESETO	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.025	2.9(	6.5)	0.005(	0.011)
EXOGHEBE	0.0	0.000	0.0	0.000	0.0	0.000	190.2	0.010	0.0	0.000	38.0(	85.1)	0.002(	0.005)
MAGEPAPI	0.0	0.000	14.6	0.089	14.6	0.041	14.6	0.041	43.9	0.225	17.6(	16.0)	0.079(	0.088)
NEPHCIRR	160.9	0.370	263.3	0.233	175.6	0.098	117.0	0.591	190.2	0.306	181.4(	53.4)	0.320(	0.182)
SCOLARMI	73.2	0.774	87.8	1.299	0.0	0.000	0.0	0.000	0.0	0.000	32.2(	44.4)	0.415(	0.597)
SCOLBONN	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.633	2.9(	6.5)	0.127(	0.283)
SCOLSQUA	29.3	0.206	43.9	0.967	0.0	0.000	0.0	0.000	0.0	0.000	14.6(	20.7)	0.235(	0.419)
SPIOBOMB	29.3	0.078	14.6	0.038	43.9	0.025	14.6	0.025	0.0	0.000	20.5(	16.7)	0.033(	0.028)
SPIOFILI	0.0	0.000	0.0	0.000	14.6	0.023	0.0	0.000	0.0	0.000	2.9(	6.5)	0.005(	0.010)
TRAVFORB	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.001)
MISCELLANEOUS														
NEMERTIN	29.3	0.183	29.3	0.102	29.3	0.183	0.0	0.000	14.6	0.010	20.5(	13.1)	0.096(	0.089)
PHORONID	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.012	0.0	0.000	5.9(	13.1)	0.002(	0.005)
Σ	746.1	1.899	877.8	3.662	482.8	1.037	555.9	19.136	409.6	9.553	614.5(	193.3)	7.058(	7.525)
NSPC	14		16		11		13		12					
SH-W	2.366		2.328		1.954		2.067		1.925					
SIMP	0.096		0.128		0.176		0.164		0.220					

Appendix - 2 Biomonitoring 1992

STATION : N70
GEOGR. POS. : 52° 34" 11' N 03° 31" 53' E
DATE : 31/03/92
DEPTH m : 32
Median Grain: 291µ
Perc. Mud. : 1.1

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLSWAN	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHELEG	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.022	11.7(	19.1)	0.006(	0.010)
BATHGUIL	43.9	0.069	43.9	0.070	102.4	0.110	29.3	0.044	29.3	0.042	49.7(	30.3)	0.067(	0.027)
DIASLAEV	0.0	0.000	0.0	0.000	14.6	0.038	0.0	0.000	0.0	0.000	2.9(	6.5)	0.008(	0.017)
HIPPDENT	0.0	0.000	0.0	0.000	14.6	0.007	14.6	0.158	0.0	0.000	5.9(	8.0)	0.033(	0.070)
MEGAAGIL	117.0	0.059	0.0	0.000	29.3	0.015	14.6	0.007	58.5	0.029	43.9(	46.3)	0.022(	0.023)
PERILONG	14.6	0.007	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	5.9(	8.0)	0.003(	0.004)
PONTALTA	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
PSEULONG	43.9	0.022	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	11.7(	19.1)	0.006(	0.010)
PSEUSIMI	0.0	0.000	0.0	0.000	43.9	0.022	0.0	0.000	14.6	0.007	11.7(	19.1)	0.006(	0.010)
THIASCUT	0.0	0.000	0.0	0.000	14.6	1.122	0.0	0.000	0.0	0.000	2.9(	6.5)	0.224(	0.502)
TRYPSARS	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
UROTBREV	102.4	0.110	43.9	0.034	58.5	0.022	29.3	0.042	14.6	0.007	49.7(	33.7)	0.043(	0.040)
UROTPOSE	0.0	0.000	0.0	0.000	160.9	0.057	0.0	0.000	0.0	0.000	32.2(	72.0)	0.011(	0.026)
ECHINODERMATA														
ECHICORD	0.0	0.000	14.6	9.591	29.3	23.186	29.3	21.430	0.0	0.000	14.6(	14.6)	10.841(	11.193)
OPHIALBI	14.6	0.019	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	5.9(	8.0)	0.004(	0.008)
MOLLUSCA														
DONAVITT	14.6	4.186	0.0	0.000	0.0	0.000	14.6	0.837	14.6	1.576	8.8(	8.0)	1.320(	1.732)
MONTFERR	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.004	0.0	0.000	2.9(	6.5)	0.001(	0.002)
NATIALDE	58.5	0.031	43.9	0.013	14.6	0.018	29.3	0.018	0.0	0.000	29.3(	23.1)	0.016(	0.011)
TELLFABU	29.3	0.004	0.0	0.000	58.5	2.575	0.0	0.000	0.0	0.000	17.6(	26.2)	0.516(	1.151)
POLYCHAETA														
ANAISUBU	29.3	0.053	0.0	0.000	29.3	0.028	29.3	0.026	87.8	0.114	35.1(	32.1)	0.044(	0.043)
ARICMINU	73.2	0.007	43.9	0.007	0.0	0.000	204.8	0.018	29.3	0.000	70.2(	79.7)	0.006(	0.007)
CHAESETO	58.5	0.083	0.0	0.000	14.6	0.004	14.6	0.010	0.0	0.000	17.6(	24.0)	0.020(	0.036)
GONIMACU	0.0	0.000	14.6	0.167	14.6	0.138	14.6	0.218	0.0	0.000	8.8(	8.0)	0.104(	0.100)
HARMLUNU	0.0	0.000	0.0	0.000	14.6	0.158	0.0	0.000	0.0	0.000	2.9(	6.5)	0.032(	0.071)
LANICONC	0.0	0.000	0.0	0.000	43.9	2.728	0.0	0.000	0.0	0.000	8.8(	19.6)	0.546(	1.220)
MAGEPAPI	14.6	0.013	14.6	0.085	29.3	0.038	14.6	0.121	14.6	0.006	17.6(	6.5)	0.053(	0.049)
NEPHCIRR	146.3	0.353	204.8	0.312	190.2	0.408	29.3	0.066	204.8	0.677	155.1(	74.3)	0.363(	0.219)
SCOLARMI	131.7	0.784	29.3	0.186	73.2	0.481	102.4	0.847	29.3	0.012	73.2(	45.1)	0.462(	0.365)
SCOLBONN	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.626	14.6	0.701	8.8(	13.1)	0.265(	0.364)
SCOLSQUA	14.6	0.110	0.0	0.000	0.0	0.000	14.6	0.211	43.9	0.456	14.6(	17.9)	0.155(	0.190)
SPIOBOMB	658.3	1.154	73.2	0.123	497.4	0.437	73.2	0.303	965.6	1.423	453.5(	385.8)	0.688(	0.568)
SPIOFILI	0.0	0.000	14.6	0.006	0.0	0.000	43.9	0.044	0.0	0.000	11.7(	19.1)	0.010(	0.019)
TRAVFORB	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.217	14.6	0.000	5.9(	8.0)	0.043(	0.097)
MISCELLANEOUS														
NEMERTIN	0.0	0.000	14.6	0.241	14.6	0.322	14.6	0.048	14.6	0.067	11.7(	6.5)	0.136(	0.138)
PHORONID	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000	87.8	0.035	20.5(	38.2)	0.008(	0.015)
Σ	1623.9	7.091	555.9	10.835	1521.5	31.937	790.0	25.303	1682.5	5.176	1234.8(	522.7)	16.068(	11.871)
NSPC	20		12		25		22		17					
SH-W	2.239		2.070		2.486		2.663		1.690					
SIMP	0.189		0.162		0.139		0.092		0.348					

Appendix - 2 Biomonitoring 1992

STATION : VD4
GEOGR. POS. : 51° 55" 15' N 03° 55" 17' E
DATE : 30/03/92
DEPTH m : 14
Median Grain: 204µ
Perc. Mud. : 3.3

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLFALC	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
BATHELEG	0.0	0.000	29.3	0.016	14.6	0.007	0.0	0.000	14.6	0.007	11.7(	12.2)	0.006(	0.007)
BATHGUIL	0.0	0.000	14.6	0.016	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.003(	0.007)
PSEULONG	0.0	0.000	29.3	0.015	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.003(	0.007)
UROTPOSE	643.7	0.189	1243.6	0.364	453.5	0.135	833.9	0.398	1843.4	0.622	1003.6(	553.1)	0.341(	0.193)
ECHINODERMATA														
ECHICORD	43.9	19.961	0.0	0.000	14.6	10.327	58.5	20.188	14.6	13.667	26.3(	24.0)	12.829(	8.315)
MOLLUSCA														
ENSIDIRE	351.1	6.758	395.0	7.501	0.0	0.000	0.0	0.000	775.4	13.280	304.3(	323.1)	5.508(	5.626)
MONTFERR	29.3	0.006	0.0	0.000	87.8	0.146	146.3	0.413	0.0	0.000	52.7(	63.4)	0.113(	0.179)
MYSEBIDE	175.6	0.028	117.0	0.022	29.3	0.004	278.0	0.056	87.8	0.025	137.5(	94.6)	0.027(	0.018)
NATIALDE	58.5	1.560	43.9	1.694	14.6	1.175	14.6	0.004	14.6	0.502	29.3(	20.7)	0.987(	0.718)
SPISSUBT	175.6	7.078	58.5	2.717	321.9	18.121	3379.5	243.985	14.6	0.108	790.0(	1452.5)	54.402(	106.203)
TELLFABU	29.3	0.753	14.6	0.458	102.4	2.050	29.3	0.478	204.8	5.647	76.1(	79.7)	1.877(	2.207)
POLYCHAETA														
CAPICAPI	43.9	0.004	14.6	0.000	0.0	0.000	14.6	0.000	248.7	0.078	64.4(	104.3)	0.016(	0.034)
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.006	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
HARMLUNU	43.9	0.010	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	11.7(	19.1)	0.002(	0,005)
LANICONC	14.6	0.048	0.0	0.000	14.6	0.023	14.6	0.291	0.0	0.000	8.8(	8.0)	0.073(	0.124)
MAGEPAPI	0.0	0.000	29.3	0.089	14.6	0.072	0.0	0.000	0.0	0.000	8.8(	13.1)	0.032(	0.045)
NEPHCIRR	29.3	0.085	29.3	0.044	43.9	0.138	0.0	0.000	0.0	0.000	20.5(	19.6)	0.053(	0.059)
NEPHHOMB	117.0	4.430	43.9	0.123	43.9	0.686	43.9	0.057	73.2	2.293	64.4(	32.1)	1.518(	1.861)
NERELONG	29.3	0.875	29.3	2.415	0.0	0.000	0.0	0.000	0.0	0.000	11.7(	16.0)	0.658(	1.053)
SIGAMATH	43.9	0.698	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.140(	0.312)
SPIOBOMB	541.3	0.569	716.9	1.124	248.7	0.339	0.0	0.000	555.9	0.780	412.6(	285.8)	0.562(	0.427)
SPIOFILI	14.6	0.016	14.6	0.019	29.3	0.028	0.0	0.000	73.2	0.018	26.3(	28.1)	0.016(	0.010)
MISCELLANEOUS														
NEMERTIN	29.3	0.279	29.3	0.225	14.6	0.113	0.0	0.000	0.0	0.000	14.6(	14.6)	0.123(	0.128)
Σ	2428.6	43.355	2852.9	16.842	1463.0	33.370	4827.9	265.870	3920.8	37.026	3098.6(	1308.7)	79.292(	104.759)
NSPC	19		17		16		11		12					
SH-W	2.231		1.712		2.042		1.021		1.599					
SIMP	0.151		0.272		0.177		0.523		0.286					

Appendix - 2 Biomonitoring 1992

STATION : VD3
GEOGR. POS. : 51° 47" 14' N 03° 48" 29' E
DATE : 18/06/92
DEPTH m : ??
Median Grain: 250µ
Perc. Mud. : 2.2

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
AMPEBREV	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.009	2.9(	6.5)	0.002(	0.004)
ATYLSWAM	0.0	0.000	29.3	0.018	0.0	0.000	29.3	0.009	14.6	0.009	14.6(	14.6)	0.007(	0.007)
CAPRELLI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.015	5.9(	13.1)	0.003(	0.007)
MICRMACU	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.001)
PSEULONG	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.003)
UROTPOSE	117.0	0.066	14.6	0.009	0.0	0.000	0.0	0.000	0.0	0.000	26.3(	51.1)	0.015(	0.029)
ECHINODERMATA														
ASTERUBE	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.009	2.9(	6.5)	0.002(	0.004)
ECHICORD	0.0	0.000	14.6	8.556	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	1.711(	3.826)
OPHIALBI	58.5	1.086	58.5	1.323	87.8	2.417	58.5	1.917	146.3	4.234	81.9(	38.2)	2.195(	1.253)
MOLLUSCA														
ABRAALBA	29.3	0.101	14.6	0.056	29.3	0.272	87.8	0.566	58.5	0.881	43.9(	29.3)	0.375(	0.346)
ENSIDIRE	1243.6	189.719	248.7	32.711	1228.9	170.789	848.5	202.014	1126.5	185.620	939.2(	417.3)	156.171(	69.911)
MACOBALT	73.2	0.360	0.0	0.000	29.3	1.033	0.0	0.000	58.5	0.581	32.2(	33.4)	0.395(	0.434)
MONTFERR	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MYA AREN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	23.687	0.0	0.000	2.9(	6.5)	4.737(	10.593)
MYSEBIDE	131.7	0.057	0.0	0.000	14.6	0.007	0.0	0.000	73.2	0.012	43.9(	57.6)	0.015(	0.024)
TELLFABU	73.2	0.890	29.3	0.559	43.9	0.647	29.3	0.296	117.0	1.599	58.5(	37.3)	0.798(	0.496)
TELLTENU	29.3	0.148	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.035	11.7(	16.0)	0.037(	0.064)
POLYCHAETA														
ANAIJUVE	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.000	0.0	0.000	5.9(	13.1)	0.000(	0.000)
AUTOSPEC	0.0	0.000	0.0	0.000	29.3	0.006	0.0	0.000	0.0	0.000	5.9(	13.1)	0.001(	0.003)
CAPICAPI	87.8	0.019	0.0	0.000	14.6	0.004	234.1	0.054	0.0	0.000	67.3(	100.1)	0.016(	0.023)
CAPITELL	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.032	0.0	0.000	2.9(	6.5)	0.006(	0.014)
CAULSPEC	0.0	0.000	0.0	0.000	73.2	0.022	58.5	0.018	0.0	0.000	26.3(	36.4)	0.008(	0.011)
CHAESETO	0.0	0.000	14.6	0.000	14.6	0.004	29.3	0.006	0.0	0.000	11.7(	12.2)	0.002(	0.003)
EUMISANG	380.4	0.288	43.9	0.006	73.2	0.012	160.9	0.121	87.8	0.042	149.2(	136.2)	0.094(	0.118)
HARMIMPA	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.029	0.0	0.000	8.8(	19.6)	0.006(	0.013)
HARMLONG	0.0	0.000	0.0	0.000	14.6	0.016	0.0	0.000	0.0	0.000	2.9(	6.5)	0.003(	0.007)
HARMLUNU	29.3	0.025	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.005(	0.011)
HARMSPEC	0.0	0.000	0.0	0.000	14.6	0.007	0.0	0.000	14.6	0.000	5.9(	8.0)	0.001(	0.003)
LANICONC	6568.9	22.204	1170.4	6.404	1623.9	4.606	4286.6	13.122	2823.6	9.962	3294.7(	2192.6)	11.259(	6.942)
NEPHHOMB	29.3	0.183	73.2	0.319	29.3	0.108	117.0	0.496	131.7	0.524	76.1(	47.9)	0.326(	0.184)
NEPHLONG	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.078	0.0	0.000	2.9(	6.5)	0.016(	0.035)
NERELONG	175.6	0.031	14.6	0.000	29.3	0.236	43.9	0.004	43.9	0.683	61.4(	64.9)	0.191(	0.292)
NOTOLATE	14.6	0.279	0.0	0.000	0.0	0.000	43.9	2.521	0.0	0.000	11.7(	19.1)	0.560(	1.103)
PECTKORE	0.0	0.000	0.0	0.000	58.5	0.152	14.6	0.162	14.6	0.025	17.6(	24.0)	0.068(	0.082)
PSEUPULC	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	14.6	0.006	5.9(	8.0)	0.001(	0.003)
SCOLARMI	234.1	0.083	146.3	0.025	14.6	0.000	43.9	0.016	14.6	0.004	90.7(	96.7)	0.026(	0.034)
SPIOBOMB	380.4	0.067	336.5	0.097	702.2	0.195	512.0	0.119	877.8	0.309	561.8(	226.8)	0.157(	0.097)
SPIOFILI	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MISCELLANEOUS														
ANTHOZOA	0.0	0.000	0.0	0.000	14.6	0.025	0.0	0.000	14.6	1.188	5.9(	8.0)	0.243(	0.529)
Σ	9670.4	215.605	2238.4	50.083	4169.5	180.565	6715.2	245.266	5720.3	205.745	5702.8(	2789.3)	179.453(	75.940)
NSPC	18		16		22		21		21					
SH-W	1.293		1.674		1.711		1.440		1.643					
SIMP	0.482		0.311		0.266		0.431		0.307					

STATION : VD1
GEOGR. POS. : 51° 37" 19' N 03° 23" 15' E
DATE : 30/03/92
DEPTH m : 12
Median Grain: 263µ
Perc. Mud. : 1.6

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLFALC	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
BATHELEG	0.0	0.000	14.6	0.003	14.6	0.000	0.0	0.000	14.6	0.000	8.8(	8.0)	0.001(	0.001)
UROTPOSE	307.2	0.119	512.0	0.319	994.8	0.372	73.2	0.016	219.4	0.053	421.3(	357.8)	0.176(	0.160)
ECHINODERMATA														
ECHICORD	14.6	1.261	14.6	10.711	14.6	10.327	0.0	0.000	14.6	7.599	11.7(	6.5)	5.980(	5.048)
OPHIALBI	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.107	2.9(	6.5)	0.021(	0.048)
MOLLUSCA														
DONAVITT	0.0	0.000	14.6	2.731	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.546(	1.222)
ENSIDIRE	14.6	0.723	0.0	0.000	131.7	7.809	0.0	0.000	43.9	1.005	38.0(	55.3)	1.907(	3.329)
MONTFERR	0.0	0.000	14.6	0.044	73.2	0.108	0.0	0.000	14.6	0.006	20.5(	30.3)	0.032(	0.047)
MYSEBIDE	0.0	0.000	29.3	0.009	146.3	0.031	29.3	0.010	29.3	0.004	46.8(	57.0)	0.011(	0.012)
TELLFABU	0.0	0.000	14.6	0.325	14.6	0.332	0.0	0.000	0.0	0.000	5.9(	8.0)	0.131(	0.180)
TELLTENU	29.3	0.458	0.0	0.000	0.0	0.000	14.6	0.230	0.0	0.000	8.8(	13.1)	0.138(	0.205)
POLYCHAETA														
CHAESETO	0.0	0.000	0.0	0.000	14.6	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
LANICONC	0.0	0.000	14.6	0.543	0.0	0.000	0.0	0.000	14.6	0.247	5.9(	8.0)	0.158(	0.240)
MAGEPAPI	14.6	0.037	14.6	0.113	14.6	0.038	14.6	0.025	0.0	0.000	11.7(	6.5)	0.042(	0.042)
NEPHCIRR	43.9	0.078	73.2	0.794	87.8	0.514	58.5	0.840	58.5	0.436	64.4(	16.7)	0.532(	0.308)
SCOLARMI	58.5	0.110	58.5	0.732	0.0	0.000	73.2	0.454	14.6	0.120	41.0(	31.7)	0.283(	0.303)
SCOLBONN	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.357	0.0	0.000	2.9(	6.5)	0.071(	0.160)
SPIOBOMB	29.3	0.028	0.0	0.000	29.3	0.028	0.0	0.000	0.0	0.000	11.7(	16.0)	0.011(	0.015)
SPIOFILI	0.0	0.000	14.6	0.006	29.3	0.023	0.0	0.000	0.0	0.000	8.8(	13.1)	0.006(	0.010)
MISCELLANEOUS														
NEMERTIN	14.6	0.010	14.6	0.102	0.0	0.000	14.6	0.003	0.0	0.000	8.8(	8.0)	0.023(	0.045)
Σ	526.7	2.822	804.7	16.431	1565.4	19.582	292.6	1.934	453.5	9.577	728.6(	503.1)	10.069(	7.904)
NSPC	9		13		12		8		11					
SH-W	1.485		1.472		1.390		1.844		1.794					
SIMP	0.351		0.412		0.421		0.142		0.247					

Appendix - 2 Biomonitoring 1992

STATION : W30
GEOGR. POS. : 51° 43" 06' N 03° 6" 15' E
DATE : 30/03/92
DEPTH m : 33
Median Grain: 305µ
Perc. Mud. : 2.8

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
BATHGUIL	102.4	0.206	73.2	0.155	14.6	0.031	0.0	0.000	58.5	0.123	49.7(	42.1)	0.103(	0.086)
MEGAAGIL	14.6	0.003	0.0	0.000	0.0	0.000	14.6	0.003	14.6	0.004	8.8(	8.0)	0.002(	0.002)
PSEUSIMI	73.2	0.007	0.0	0.000	43.9	0.004	0.0	0.000	0.0	0.000	23.4(	33.7)	0.002(	0.003)
SIPHKROY	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.012	5.9(	13.1)	0.002(	0.005)
SYNCMACU	14.6	0.003	0.0	0.000	0.0	0.000	14.6	0.003	0.0	0.000	5.9(	8.0)	0.001(	0.002)
UROTBREV	29.3	0.040	395.0	0.446	0.0	0.000	0.0	0.000	117.0	0.165	108.3(	167.3)	0.130(	0.189)
ECHINODERMATA														
ECHICORD	29.3	1.767	14.6	5.175	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	13.1)	1.388(	2.251)
OPHIALBI	14.6	0.034	43.9	0.468	0.0	0.000	0.0	0.000	14.6	0.044	14.6(	17.9)	0.109(	0.202)
OPHITEXT	14.6	0.083	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.017(	0.037)
MOLLUSCA														
ENSIARCU	14.6	20.671	0.0	0.000	0.0	0.000	14.6	0.534	0.0	0.000	5.9(	8.0)	4.241(	9.187)
SPISELLI	29.3	0.061	0.0	0.000	14.6	0.050	0.0	0.000	0.0	0.000	8.8(	13.1)	0.022(	0.031)
POLYCHAETA														
ARICMINU	0.0	0.000	87.8	0.012	43.9	0.004	0.0	0.000	0.0	0.000	26.3(	39.3)	0.003(	0.005)
CAPICAPI	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.000	87.8	0.013	23.4(	38.2)	0.003(	0.006)
CAPITELL	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14.6	0.000	2.9(	6.5)	0.000(	0.000)
EUMISANG	43.9	0.010	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	8.8(	19.6)	0.002(	0.005)
GLYCCAPI	0.0	0.000	0.0	0.000	14.6	0.009	0.0	0.000	0.0	0.000	2.9(	6.5)	0.002(	0.004)
GLYCLAPI	0.0	0.000	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000	5.9(	13.1)	0.001(	0.002)
LANICONC	14.6	1.197	58.5	0.085	0.0	0.000	0.0	0.000	0.0	0.000	14.6(	25.3)	0.256(	0.527)
MAGEPAPI	0.0	0.000	29.3	0.146	14.6	0.061	0.0	0.000	0.0	0.000	8.8(	13.1)	0.042(	0.064)
NEPHCIRR	117.0	1.062	58.5	0.838	102.4	0.487	87.8	1.232	87.8	0.524	90.7(	21.7)	0.829(	0.327)
NEPHLONG	0.0	0.000	0.0	0.000	29.3	0.056	0.0	0.000	14.6	0.168	8.8(	13.1)	0.045(	0.073)
SCOLARMI	29.3	0.247	29.3	0.181	29.3	0.388	0.0	0.000	58.5	0.614	29.3(	20.7)	0.286(	0.230)
SCOLSQUA	0.0	0.000	0.0	0.000	43.9	0.543	14.6	0.092	0.0	0.000	11.7(	19.1)	0.127(	0.236)
SPIOBOMB	248.7	0.500	160.9	0.174	102.4	0.098	102.4	0.680	87.8	0.440	140.4(	66.7)	0.379(	0.240)
SPIOFILI	14.6	0.000	0.0	0.000	14.6	0.004	0.0	0.000	14.6	0.006	8.8(	8.0)	0.002(	0.003)
MISCELLANEOUS														
NEMERTIN	29.3	0.054	14.6	0.019	43.9	0.051	29.3	0.045	14.6	0.003	26.3(	12.2)	0.035(	0.022)
PHORONID	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	131.7	0.053	26.3(	58.9)	0.011(	0.024)
Σ	833.9	25.946	965.6	7.700	541.3	1.791	307.2	2.590	746.1	2.170	678.8(	258.7)	8.039(	10.295)
NSPC	17		11		14		8		14					
SH-W	2.347		1.897		2.406		1.752		2.341					
SIMP	0.127		0.209		0.086		0.181		0.096					

STATION : W70
GEOGR. POS. : 51° 57" 24' N 02° 40" 57' E
DATE : 30/03/92
DEPTH m : 45
Median Grain: 407µ
Perc. Mud. : 2.4

	BOX 1		BOX 2		BOX 3		BOX 4		BOX 5		MEAN	S.D.	MEAN	S.D.
	N	B	N	B	N	B	N	B	N	B	N		B	
CRUSTACEA														
ATYLFALC	43.9	0.016	14.6	0.007	0.0	0.000	0.0	0.000	0.0	0.000	11.7(	19.1)	0.005(	0.007)
ATYLSWAM	0.0	0.000	0.0	0.000	0.0	0.000	29.3	0.009	43.9	0.013	14.6(	20.7)	0.004(	0.006)
BATHGUIL	0.0	0.000	0.0	0.000	14.6	0.020	0.0	0.000	14.6	0.016	5.9(	8.0)	0.007(	0.010)
MEGAAGIL	0.0	0.000	0.0	0.000	29.3	0.003	0.0	0.000	0.0	0.000	5.9(	13.1)	0.001(	0.001)
UNCIPLAN	0.0	0.000	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.002)
ECHINODERMATA														
ECHICORD	0.0	0.000	0.0	0.000	29.3	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.000(	0.000)
ECHIPUSI	0.0	0.000	14.6	0.034	190.2	0.364	0.0	0.000	14.6	0.038	43.9(	82.1)	0.087(	0.156)
OPHIALBI	0.0	0.000	14.6	0.013	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.003(	0.006)
MOLLUSCA														
ABRAPRIS	14.6	0.070	14.6	1.030	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.220(	0.454)
KELLSUBO	0.0	0.000	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.001)
MYSEBIDE	14.6	0.003	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.001(	0.001)
NATIALDE	0.0	0.000	14.6	0.013	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.003(	0.006)
SPISELLI	0.0	0.000	0.0	0.000	14.6	0.421	0.0	0.000	0.0	0.000	2.9(	6.5)	0.084(	0.188)
TELLPYGM	73.2	0.057	102.4	0.041	102.4	0.059	131.7	0.057	248.7	0.069	131.7(	68.6)	0.056(	0.010)
POLYCHAETA														
AONIPAUC	0.0	0.000	14.6	0.000	0.0	0.000	14.6	0.000	0.0	0.000	5.9(	8.0)	0.000(	0.000)
ARICMINU	29.3	0.010	29.3	0.004	0.0	0.000	0.0	0.000	0.0	0.000	11.7(	16.0)	0.003(	0.005)
GLYCCAPI	14.6	0.029	14.6	0.006	0.0	0.000	14.6	0.010	14.6	0.066	11.7(	6.5)	0.022(	0.027)
GLYCLAPI	14.6	0.003	0.0	0.000	29.3	0.004	0.0	0.000	0.0	0.000	8.8(	13.1)	0.001(	0.002)
HESIAUGE	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
LUMBLATR	14.6	0.004	0.0	0.000	0.0	0.000	0.0	0.000	43.9	0.080	11.7(	19.1)	0.017(	0.036)
MICRSCZE	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
NEPHCIRR	29.3	0.057	131.7	0.260	43.9	0.219	87.8	0.887	43.9	0.080	67.3(	42.1)	0.301(	0.339)
NEPHLONG	0.0	0.000	0.0	0.000	29.3	0.101	0.0	0.000	0.0	0.000	5.9(	13.1)	0.020(	0.045)
NOTOLATE	0.0	0.000	0.0	0.000	14.6	0.018	0.0	0.000	29.3	0.344	8.8(	13.1)	0.072(	0.152)
OPHELIMA	0.0	0.000	14.6	0.004	160.9	0.080	14.6	0.006	0.0	0.000	38.0(	69.1)	0.018(	0.035)
OPISPTER	0.0	0.000	14.6	0.000	0.0	0.000	14.6	0.000	0.0	0.000	5.9(	8.0)	0.000(	0.000)
POLYMEDU	73.2	0.042	0.0	0.000	73.2	0.032	0.0	0.000	0.0	0.000	29.3(	40.1)	0.015(	0.021)
SCOLARMI	0.0	0.000	29.3	0.547	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	13.1)	0.109(	0.245)
SCOLSQUA	14.6	0.113	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.023(	0.050)
SPIOFILI	14.6	0.006	14.6	0.018	0.0	0.000	0.0	0.000	0.0	0.000	5.9(	8.0)	0.005(	0.008)
STREWEBS	14.6	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	2.9(	6.5)	0.000(	0.000)
MISCELLANEOUS														
NEMERTIN	14.6	0.006	14.6	0.010	0.0	0.000	14.6	0.006	43.9	0.158	17.6(	16.0)	0.036(	0.068)
Σ	409.6	0.417	482.8	1.996	731.5	1.323	321.9	0.974	497.4	0.865	488.6(	152.6)	1.115(	0.589)
NSPC	16		17		12		8		9					
SH-W	2.541		2.400		2.107		1.641		1.681					
SIMP	0.066		0.112		0.140		0.225		0.266					

CONTENTS