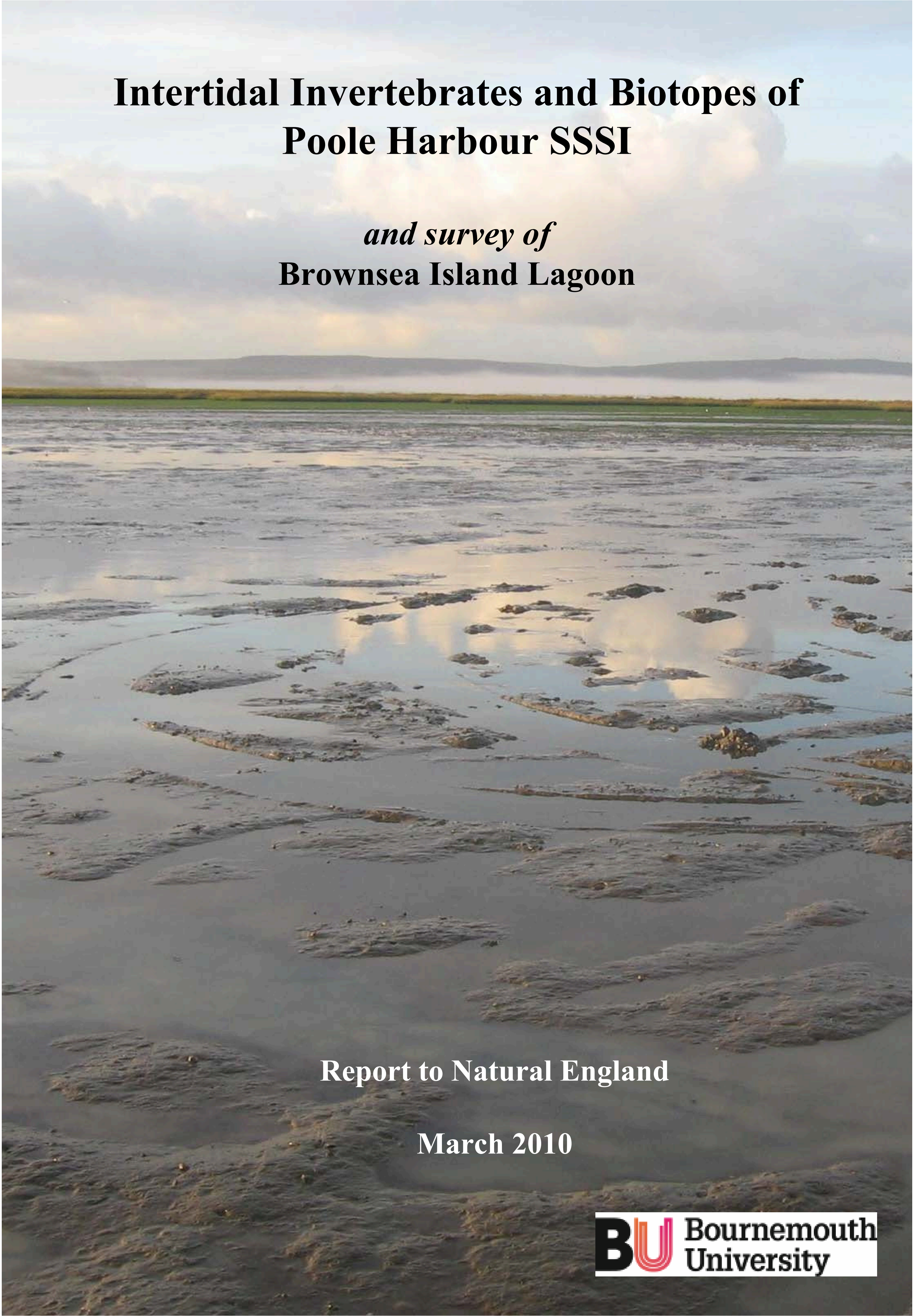

Intertidal Invertebrates and Biotopes of Poole Harbour SSSI

and survey of

Brownsea Island Lagoon

Report to Natural England

March 2010

Bournemouth University

Intertidal Invertebrates and Biotopes of Poole Harbour SSSI

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Report to Natural England

March 2010

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EXECUTIVE SUMMARY

1. This study was commissioned by *Natural England* to monitor and report on the condition of the notified intertidal sediment features (excluding saltmarsh) within the Poole Harbour Site of Special Scientific Interest (SSSI) and Special Protection Area (SPA), using Common Standards Monitoring guidance. These features include 'Estuaries', 'Sheltered Muddy Shores' and 'Coastal Saline Lagoons'.

2. A decadal comparison of the topographic changes of the eastern part of the harbour, approximately between Arne and Sandbanks, was carried out using LIDAR data from 1998 and 2006. Estuarine habitats and features data were obtained from several sources including surveys of saltmarsh and intertidal areas 2003/4 by the Poole Harbour Study Group and the East Dorset Habitat map 2008/9 commissioned by the Environment Agency based on an Integrated Habitat System (IHS).

3. Of a total area of 43ha for which comparative LIDAR data is available for the eastern part of the harbour, excluding Wareham Channel, 21.02ha showed reduced elevation over the period 1998-2006, whereas 21.98ha showed evidence of accretion. Areas of highly significant saltmarsh erosion >60cm were evident in Holes Bay, around Furzey and Green Island. In the Brands Bay area there has been some quite distinct deepening in some of the saltmarsh creeks.

4. A benthic invertebrate survey of the harbour was carried out in October and November 2009 using a 500m x 500m sampling grid of 80 stations employed in the previous survey of September 2002. The area surveyed included mudflats, sandflats and areas of mixed sediment between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS), excluding saltmarsh habitats. Access to most sites was by RNLI hovercraft. The saline lagoon on Brownsea Island was surveyed in November.

5. For biota, five core samples (10cm diameter) were obtained to depth of 15cm from each of the 80 sampling sites. All cores were processed using a 0.5mm sieve and stored in labelled pots containing 10% Formal saline. A separate core sample was taken for sediment analysis. A field assessment of macroalgal cover was supplemented by algal biomass measurement within core samples.

6. The numerical densities of all fauna were derived from the core samples, with the exception of the lugworm *Arenicola marina*, where densities were from cast counts. For the assessment of bird food availability at each station, biomass-length relationships of the larger invertebrates were obtained from transformations presented in the earlier 2002 survey report of Thomas et al. (2004).

7. Most of the harbour can be described as 'mud'; the predominant sediment fraction at 73% of sites had a median diameter of less than 0.063mm, compared with 80% of sites in 2002. Virtually the whole of the Wareham Channel, Lytchett Bay and Holes Bay consisted of these finer sediments. Sand and 'Muddy Sand' sediments were recorded just inside the harbour entrance, towards Rockley Point and south of Brownsea Island. Sites with mixed sediment, including sand and gravels (>2mm) were found throughout the harbour and notably parts of Brands Bay and close to the islands.

8. Apart from at the entrance, most parts of the harbour had patches of dense macroalgal growth, with highest coverage in the sheltered creeks and inlets south of Brownsea Island, and parts of Holes Bay. Seven of the 80 sites sampled had more than 70% coverage; these sites were in Brands Bay, Newton Bay, Fitzworth Point, south west of Holes Bay and south of Holton Heath.

9. A total of 88 invertebrate 'species' were recorded in the core samples comprising 38 annelid species, 21 mollusca, 21 crustacea and 8 other species, including sea anemones and insect larvae. The highest number of species recorded was at the mixed sediment shore at Baiter Park with a total of 29 species, spread over the five core samples. Other pockets of high species richness included Brands Bay, Parkstone Bay, Arne Bay and parts of the Wareham Channel. In total, 10 non-native species were found; published records exist for all except for the South African polychaete worm *Desdemona ornata.*

10. Overall species abundance varied considerably in the harbour, both within and between sampling stations. The most notable change since the 2002 survey is the considerable reduction in abundance of sedentary polychaete species, including spionidae and cirratulidae, and amphipod crustaceans, except *Corophium* spp., which has increased slightly. Small oligochaete worms were of comparable densities to 2002. Significant increases since 2002 were the density of catworm *Nephtys hombergii* and the bivalves *Macoma balthica*, *Mya arenaria* and the manila clam *Ruditapes philippinarum*. The sandy areas near the mouth of the harbour showed least changes with similar densities of amphipods *Urothoe* and *Bathyporeia*, and lugworm *Arenicola marina.* The density of species, diversity and biomass of Lytchett Bay was considerably less compared to 2002.

11. Multivariate analysis carried out using the nMDS and SIMPROF routines in PRIMER software revealed eight main statistically significant groupings. The distribution of biotopes is generally similar to the 2002 survey. Biotopes were assigned to each site, using the Marine Habitat Classification System v0405. Biotopes generally coincide with the distribution of sediments in the harbour. Most biotopes could be described as polychaete/oligochaete and bivalve assemblages of upper and mid-estuarine regions. The most characteristic species across most assemblages was the ragworm *Hediste diversicolor*. Wareham Channel and the western part of the harbour is given the classification **LS.LMu.MEst.HedMac** (*Hediste* and *Macoma* in littoral sandy mud). However the density of *Macoma* is still very low and so the assemblage might best be currently described as '*Hediste* with Mixed Bivalves', due to varying amounts of *Abra*, *Macoma*, *Scrobicularia*, *Mya* and the manila clam *Ruditapes philippinarum*.

12. A series of sites were characterised by a species poor assemblage consisting of the catworm *Nephtys hombergii* and frequently high oligochaete densities, particularly to the south of Brownsea Island and in the vicinity of Brands Bay. This region consistently scored low for several biodiversity indices, including AMBI and Average Taxonomic Distinctness (Δ^+), which is particularly sensitive to ecological impacts and least affected by differences in sampling effort. This general area had high macroalgal mat coverage. Bio-Env and BEST routines in PRIMER revealed weak, yet statistically significant associations between the biological assemblages and % organic matter, % silt/clay and combinations of these two sediment variables. Weaker, though statistically significant, relationships were also found between combinations of these sediment variables and both % algal cover and algal biomass. However, the association between the invertebrate assemblages and either, or combinations, of the two algal measures were not statistically significant.

13. Overall, the average biomass per station (mg AFDW m^{-2}) was calculated to be 74% of that measured in 2002.

14. In some WeBS sectors, available energy greatly exceeded energy requirement, most notably close to the mouth of the harbour where energy requirement was low but biomass availability was relatively high.

15. The overall ratio of energy availability to that required (S_p:S_a) calculated for those sectors for which data is complete (approximately two-thirds of all sectors), is 1.5. This compares with a value of 4:1, calculated in 2002 (Thomas et al. 2004) and below that of an expected range of 2.5-8:1 (Goss-Custard et al. 2004). We caution that figure is sensitive to method of calculation of intertidal feeding area.

16. For avocets, the ratios are well in excess of requirements, except for Sector 31 (lower part of Middlebere Creek) and Sector 3 (Brownsea Island Lagoon) which are borderline. For Black-tailed godwit, Redshank, Grey plover and Oystercatcher, the energy available appears to be well in excess of requirements in most measured sectors. For Shelduck, ratios for over half of sectors are generally low or borderline.

17. Consistent with the 2002 survey is that there are areas for which energy availability significantly exceeds that required, notably in Sectors 20 and 21, the Brands Bay and Bramble Bush Bay region. This area has high biomass, yet predator exploitation is low. Significant parts of this region are colonised by green macroalgal mats, which may deter birds from feeding in these areas, and similarly affected parts of the harbour.

18. The saline lagoon on Brownsea Island was sampled in November 2009, with permission from Dorset Wildlife Trust. Six sampling stations were identified, with good access from the outer wall. Three cores (10cm diameter) were obtained from the edges of the lagoon to a depth of 15cm from each station, plus an additional 6cm diameter core for sediment analysis. Floating seaweed samples (approximately 0.5 litre volume) were taken from each site for the examination of associated fauna.

19. A total of 23 species were found in the core samples, with an additional 4 species recorded in samples of seaweed and in net samples around the sluice. Overall the fauna consisted of 9 annelids, 10 crustacea, 3 mollusca and 4 other species including insect larvae and the Schedule 5 protected anemone species *Nematostella vectensis.* Both biotopes **ENLag.Veg** and **ENLag.IMS.Ann** were assigned to the lagoon.

20. The lagoon at Brownsea Island is of considerable conservation importance. The site has very high abundances of typical lagoonal species, that are either of international importance, nationally scarce or uncommon such as *Nematostella vectensis* and *Ventrosia ventrosa*. These species are restricted to lagoon habitats in Britain. A comparative analysis of the invertebrate assemblage of Brownsea Lagoon and other UK lagoons, using Bray-Curtis similarity indices, places the site within the same category as lagoons currently designated as Special Areas of Conservation (EU Habitats Directive).

Intertidal invertebrates and biotopes of Poole Harbour SSSI, and survey of Brownsea Island Lagoon

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March 2010

1.0 Introduction & Background

1.1 At high tide, Poole Harbour has an area of water of approximately 3600ha, making it one of Europe's largest lowland estuaries (Humphreys & May, 2005). The harbour comprises extensive intertidal areas, saltmarshes and several islands, the largest of which is Brownsea Island close to the harbour entrance. The harbour is fed by several small rivers and streams that mostly discharge into the western end near the small town of Wareham. The harbour consists of one main basin and two smaller basins in the north, Lytchett Bay and Holes Bay. The harbour is classified as micro-tidal, having a spring tide range of 1.8m and a neap tide range of 0.6m. There is a double high water in the harbour, which produces a relatively long stand at high tide, such that for about 16 hours out of 24, the water level is above mean tide level (Humphreys, 2005). The entrance is particularly narrow, with fast tidal streams, and despite the tidal range the harbour has a tidal prism ratio of 0.45 for spring tides, meaning that about 45% of the water leaves the harbour on a spring ebb tide (Humphreys, 2005). Poole Harbour is an area of international importance for nature conservation and is designated under EU and UK legislation, and under the RAMSAR convention. The harbour supports large numbers of waterfowl including internationally important populations of shellduck, black-tailed godwit, avocet, Mediterranean gull and common tern.

1.2 The marine macrofauna of the harbour has been recently reviewed within several papers contained in *The Ecology of Poole Harbour* (Humphreys & May, 2005). These include a review of the intertidal macrofauna (Caldow et al. 2005), sub-tidal fauna (Dyrynda, 2005) and fisheries (Jenson et al. 2005). The intertidal mudflats of the harbour have been characterised by populations of ragworms (*Hediste diversicolor*) and King Ragworm (*Alitta* (*Neanthes*) *virens*) along with numerous smaller polychaete and oligochaete worm species. Prior to the 1990s, the fauna was dominated by much larger populations of molluscs, notably the bivalves *Scrobicularia plana* and *Macoma baltica* (Caldow et al. 2005).

1.3 This study, commissioned by *Natural England,* was to report on the condition of the notified intertidal sediment features (excluding saltmarsh) within the Poole Harbour Site of Special Scientific Interest (SSSI) and Special Protection Area (SPA) designated under the EU Birds Directive. These features include 'Estuaries', 'Sheltered Muddy Shores' and 'Coastal Saline Lagoons'. The monitoring of these features is also an objective of the Poole Harbour Aquatic Management Plan (2007).

1.4 Attributes of each feature, set out in Common Standards Monitoring Guidance (CSM) considered in this study are included in Table 1.

Table 1. CSM attributes of each feature considered in this study.

	Feature		
Attribute	Estuaries	Sheltered Muddy Shores (littoral sediments)	Coastal Saline Lagoons
Extent of Features			
Spatial Pattern of Habitats			
Salinity			
Sediment Character/Type/Organic			
Biotope Composition			
Species Composition of Biotopes			
Spatial Distribution of Biotopes			
Extent of sub-features			
Species Population Measures			
Food Availability for Birds			

2.0 Methodology – assessment of extent of features

2.1 Estuarine habitats and features data on GIS layers were obtained from several sources: (a) survey of saltmarsh prepared for the NBN South-West pilot project in 2003; (b) mudflat survey by the Poole Harbour Study Group using hand held GPS and ground truthing, (Dorset Environmental Records Centre, DERC) (c) East Dorset Habitat map; a new study commissioned by the Environment Agency based on an Integrated Habitat System (IHS) utilising high resolution aerial photography at scale 1:1250, obtained in 2008 and 2009. The flights for this study intended to coincide as close as possible to Mean Low Water Spring tides (MLWS). The maps are used for baseline inventories of saltmarsh as part of the UK response to the EU Water Framework Directive, and provide a benchmark against which the Environment Agency can measure the health of the UK's estuaries. (d) information on the general distribution of sublittoral habitats was obtained from Dyrynda (2005) and from epibenthic surveys carried out by the University of Swansea in the summer of 2003 as part of the impact assessment for the Channel-Deepening project (Poole Harbour Commissioners, 2007). This consisted of recording all species and an estimate of species biomass from trawling at 63 locations within the channels proposed for dredging and other channels including Holes Bay and Wareham Channel. The distribution of Seagrass (*Zostera marina*) was obtained from Collins (2009). The base is OS MasterMap and all layers snap to map features. The data was processed and presented in ArcGIS v9.3.1.

2.2 A decadal comparison of the topographic changes of the eastern part of the harbour, approximately between Arne and Sandbanks, was carried out using LIDAR data from 1998 and 2006, provided by the Environment Agency Geoinformatics group. The intertidal habitats of the western part of the harbour are not sufficiently visible in the 1998 survey, due to tidal conditions. A resolution of approximately 30cm elevation was considered appropriate for a comparison of LIDAR data obtained from two surveys over this period.

2.3 Information on measured changes in the bathymetry of the harbour during the Channel Deepening in 2006 was obtained by Poole Harbour Commissioners (Poole Harbour Commissioners, 2008).

3.0 Methodology: field survey

3.1 The area surveyed included mudflats, sandflats and areas of mixed sediment between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS), excluding saltmarsh habitats (Fig 1). The SSSI (Fig 2) boundaries fall within this range (Mean High Water and Mean Low Water). The lagoon on Brownsea Island, which retains water at low tide, was surveyed separately. The methods used follow appropriate procedural guidelines 3.6 contained in the Marine Monitoring Handbook (Davies et al. 2001).

3.2 Fieldwork commenced on October 4th and was completed on November 20th. Sampling sites were located on a 500m x 500m sampling grid (Fig 3), used in the previous survey (Thomas et al. 2004). Most of the 80 sampling points on the survey grid were accessed by Royal National Lifeboat Institution (RNLI) hovercraft, at low water spring tides. Ten outings were necessary by hovercraft, with between 6 and 11 stations visited on each tide. To minimise disturbance, the environmentally sensitive areas of Lytchett Bay and the north end of Holes Bay, above the railway bridge, were accessed using a small displacement craft and RIB respectively. The sandy shores near Sandbanks and Rockley Point were visited on foot at low spring tides. Samples were taken as close as practically possible to each pre-determined sampling point, located using a global positioning system (GPS). Sampling locations are shown in Appendix 1.

3.3 Air and sea temperatures during the survey period were above the seasonal average and in October the weather was generally calm. Heavy rain and strong winds caused the postponement of survey work in early November.

3.4 For biota, five core samples (10cm diameter) were obtained to a depth of 15cm from each sampling site, except for station 68 where only 3 samples were retrieved due to fast incoming tide. Additional sets of samples were obtained from the shore west of site 33, Rockley Point, HWN & MTL (n = 3) and close to Lilliput Sailing Club pontoon in the Blue Lagoon (n=5, Mean Tide Level). In Lytchett Bay and Blue Lagoon, a long-handle ‘suction-corer’, diameter 10cm, was deployed from a boat. In addition to the cores, 3 separate areas of 30 x 30 cm were dug with a garden spade to search for larger fauna including bivalves and worms. These were quantified and samples kept for further analysis.

3.5 At each site, a core (6cm diameter) was taken to a depth of 15cm for sediment particle size analysis and measurement of organic content.

3.6 In addition to the main grid sites, the rocky and mixed sediment shore below Baiter Park was surveyed separately on 14th October 2009 and March 25th 2010. Three 1m^2 quadrats were placed in each zone on the shore to quantify flora and fauna. A general search was made for other species on the shore.

3.7 A site description, following criteria in *Marine Monitoring Handbook* Method 3.6 (Davies et al. 2001), was completed for each site and most sites were photographed. This included a visual assessment of % algal cover within 5m of each sampling station and counts of lugworm (*Arenicola marina*) casts in a 1m^2 quadrat.

4.0 Methodology: sample processing and preservation

4.1 All cores were sieved through a 0.5mm Endecot sieve within 24hrs of sampling and stored in labelled pots containing 10% Formal saline. Checks on a random selection of samples were made after 72hrs post-collection to ensure adequate preservation. Samples were 'picked' under low power stereo binocular microscope. Quality assurance procedures included checking 10% of all samples to ensure adequate removal of fauna, including small polychaetes and oligochaetes.

4.2 Algae contained in core samples was separated and placed in individual sample labelled specimen bags and frozen. Upon de-frosting, samples were placed in a 0.5mm sieve and washed under running water to remove sediment. Samples were then placed in weighed crucibles, dried in an oven at 100 ^{o}C for 48 hrs and then re-weighed.

4.3 All fauna was identified to species level where possible. Taxonomy and nomenclature follow that of World Register of Marine Species (WoRMS: www.marinespecies.org). Where there has been a change to well known and accepted nomenclature this is given in brackets. Faunal counts within core samples were converted to densities per m^2. Only heads of worms were counted. The fauna found in the 'digs' was used to confirm biotope and presence of larger, less abundant species.

4.4 For biomass assessment the size of selected faunal species, considered to be sufficiently abundant and likely to be of importance as prey for birds, was measured using a micrometer eyepiece or ruler to nearest millimetre. For the larger worms (*Hediste*, *Nephtys* and *Alitta* (*Neanthes*)) the length of fragmented specimens was estimated by a regression analysis on head width vs length.

4.5 The numerical densities of fauna were derived from the core samples, with the exception of the lugworm *Arenicola marina*, where densities were derived from cast counts.

4.6 Core samples for sediment analysis were initially frozen to minimise organic decomposition. Two defrosted sub-samples were weighed, then thoroughly mixed with sodium hexametaphosphate solution to homogenise and muffled at 650^{o}C to determine organic content. Remaining material was then wet-sieved over a stack to determine particle size fractions (< 63µm, 63µm, 125µm, 250µm, 500µm, 1mm, 2mm).

4.7 In addition to in-house quality assurance procedures, samples of biota were also sent to Artoo Marine Biology consultants, Southampton, to confirm identifications and abundances.

5.0 Methodology – data analysis and processing

5.1 The five core samples from each site were combined and multivariate analysis was applied to determine macrofauna assemblage groupings using PRIMER v6 (Clarke & Gorely, 2006). Non-metric multidimensional scaling (nMDS) and Cluster Analysis was utilised to determine the similarity (Bray-Curtis similarity index) between sampling locations. This was carried out to establish whether different assemblages, and possibly biotopes, could be identified. Colonial epifauna such as bryozoans were scored 1 for their presence. The nMDS plots show benthic assemblages from the different locations illustrated on a 2-dimensional scale; the closer the distance between sampling locations the more similar the benthic assemblage. A measure of the agreement between the 2-D plot and multidimensional ‘actual’ solution is shown as value of ‘stress’ for each plot. The plot is considered a reasonable representation of location similarity if stress values are <0.1. A Cluster Analysis was also applied to further clarify identified groupings and a statistical probability applied to separation using the SIMPROF routine (PRIMER 6).

5.2 A biotope classification was assigned to each site, based on its similarity with those defined in the Marine Habitat Classification System of Britain & Ireland v0405 (Conner et al. 2004). This hierarchical system combines both physical habitat characteristics’ with the observed biological community. The system is fully compatible with and contributes to the European system EUNIS. The assignation of biotope utilised both the assemblage nMDS & SIMPEROF data output from PRIMER, the sediment analysis and expert judgement. If an appropriate biotope could not be reasonably assigned, a conservative approach was adopted by moving up a tier in the classification hierarchy, or applying a transitional or temporary biotope. Although the Marine Classification System is still evolving as more information is generated, it is considered useful for describing site attributes and comparing sites.

5.3 Measures of species richness (Margalef Species Richness) and diversity (Shannon & Simpson Diversity indices) were calculated to compare with earlier studies on the estuary.

5.4 Measures of sample Taxonomic Diversity (Δ), Taxonomic Distinctness (Δ^*) Average Taxonomic Distinctness (Δ^+) and Variation in Taxonomic Distinctness (Λ^+) were calculated using PRIMER 6 (Clarke & Gorely, 2006). These indices of biodiversity are much less sensitive to sampling effort than other indices of diversity and species richness, and measure the taxonomic relatedness or taxonomic breadth of fauna in each sample.

5.5 The AMBI (AZTI Marine Biotic Index) was calculated for each sample using AMBI software (www.azti.es). AMBI was designed to establish the ecological quality of European coasts, analysing the response of soft-bottom communities to natural and man-induced changes in water and sediment quality (Borja et al. 2000, 2003a). The AMBI offers a ‘pollution or disturbance classification’ of a particular site, representing the benthic community ‘health’ and is being adopted for use in monitoring programmes associated with the European Water Framework Directive (WFD). The index measures the frequency of particular ecological groups of benthic organisms that have varying responses and sensitivities to disturbance and organic enrichment. The species library utilised was for February 2010.

5.6 To determine whether algal mats and sediment variables influence the composition of invertebrate assemblages the Bio-Env and BEST routines in PRIMER 6 were used. These routines attempt to correlate resemblance matrices of both environmental variables and biotic assemblages. Environmental variables chosen were % algal cover, algal biomass, sediment % organic matter and sediment % clay/silt (< 63μm). The EM (expectation-maximisation) algorithm was employed to compute ‘missing’ values, where data had not been obtained (some of the sites were surveyed from a vessel at high tide, so an accurate assessment of algal cover could not be made).

5.7 For the assessment of bird food availability at each station, biomass-length relationships of the larger invertebrates were obtained from transformations presented in Thomas et al.

(2004) and accompanying Excel file: (ENINVERTEBRATESsmallwormscorrected_2002.xls). For smaller species e.g. oligochaetes that were not measured, Ash Free Dry Weight (AFDW) values presented in Thomas et al (2004) were used wherever possible. For species where size-biomass relationships were not given, those of the closest taxonomic group were employed. For amphipods and other crustacea the relationship derived for *Gammarus locusta* was used. For all *Macoma* and juvenile *Mya arenaria* (<10mm), the relationship for *Abra tenuis* was utilised, whereas adult *Mya* and *Scrobicularia plana*, values given in Thomas et al (2004) were used.

5.8 The distribution of birds within the harbour is based on the most recent low tide WeBS counts, conducted in 2004/5. Count sectors differ from those in 2002. For some of the new sectors, counts are not available or the area of that sector has not been determined. Average biomass and energy availability per sector has been calculated as the mean value of those sampling sites falling within that sector. The energy available to different bird species within the harbour has been calculated on the basis of their preferred diet. The energy requirements for each WeBS sector were determined by converting the number of birds per sector into overwinter energy requirement in kJ using the following conversion factors (from Thomas et al. 2004):

Species	Energy conversion factor
Shelduck	2.902
Oystercatcher	4.018
Grey plover	8.333
Avocet	7.8889
Dunlin	22.6232
Redshank	10.606
Black-tailed godwit	6.1589
Curlew	2.9676

Energy availability in kJ was calculated using AFDM to kJ conversion factors from Thomas et al. (2004). On the energy availability map (Figure 39), energy per sector was calculated using the sector areas from Thomas et al. 2004, which used Admiralty Chart 2615 (extending from HWS to CD) multiplied by 0.39 to account for tidal exposure. For sectors which did not have comparable counterparts in Thomas et al (DP001, DP003, DP004, DP007, DP008, DP022, DP023, DP024, DP033) the areas were calculated in GIS using the area of the sector minus the low water springs area multiplied by 0.39. Energy availability for each species, and availability to requirement ratios were calculated using both estimates for available area, and are included in Appendix 11.

6.0 Results

The Results are presented as follows. Figures are to be found in the 'Figures' section. Most of the tabulated information is to found in the Appendices.

6.1 Estimation of 'Extent' of Poole Harbour Estuary, including the area of intertidal sediments, saltmarshes and lagoon. A more general assessment of sublittoral habitats is also given.

6.2 Description and distribution of sediments in Poole Harbour, Salinity and Macroalgal cover.

6.3 Description of invertebrate communities and biotopes in Poole Harbour.

6.4 Influence of algal mats on species assemblages

6.5 Non-native and notable species recorded in Poole Harbour.

6.6 Individual species distributions and biomass.

6.7 Estimation of biomass of invertebrate prey and energy available to birds in WeBS sectors of Poole Harbour.

6.1 Extent of Estuary

6.1.1 Locations of sites used within this report are presented in Figure 1. The general distribution of marine habitats, including intertidal sediments determined from 2008/9 aerial photography, is presented in Figure 4. As might be expected in a sheltered inlet, the harbour sediments primarily consist of fine grained silts and clays, mixed with coarser sands and gravels where wave or tidal energy is greatest, such as at the harbour entrance and in the major creeks and channels. The distribution of subtidal habitats is largely based on Dyrynda (2005) where studies were focussed on the navigable channels. Some extrapolation, based on field observations during this present survey, has been presented in Figure 4, particularly with respect to likely sediments and habitats between Mean Low Water Springs and Extreme Low Water Springs i.e. the area that was mapped through aerial photography (IHS) and the subtidal surveys. The area of seagrass *Zostera marina* in the Whitley Lake area, just inside Sandbanks, is a BAP Priority habitat and of particular conservation interest. Seahorses (*Hippocampus* sp.) were found at this location (Humphreys pers.comm.) in 2009.

6.1.2 The area of intertidal sediments and saltmarsh is presented in Table 2. Determinations from both the 2002/3 and 2008/9 are included for comparison. However, the validity of any quantitative comparison is questionable, given that the survey data obtained in 2002/3 was largely field based or a combination of field data and aerial photography, yet the 2008/9 data was obtained using aerial photography only.

Table 2. Area (ha) of main habitats determined from two recent studies.
Area of littoral sediment is that exposed between Mean High Water, as indicated on the Ordnance Survey Map, and approximately Mean Low Water Spring Tide, as determined by aerial photography.

Feature	**2003/4**	**2008/9**
Saltmarsh	422.9	385.6
Littoral Sediment	1359.1	1373.8
Littoral Rock	N/R	10
Water at MLWS	N/R	1816.3
Total		3585.7

6.1.3 In an attempt to quantify changes in the vertical elevation of intertidal habitat, that may have occurred through erosion or the accretion of sediments, LIDAR data obtained in 1998 and in 2006 was compared (© Environment Agency Geomatics group). Data for the western part of the harbour was not usable for comparative purposes as this had not been obtained during sufficiently low tides. Figure 5 shows the area of the harbour that was compared in this analysis and Figures 6-13 illustrate areas where the most significant changes have occurred: within Holes Bay, Brands Bay and Furzey and Green Island. Note that this analysis excluded areas outside of the harbour, where there have been significant changes in beach levels. Overall, as presented in Figure 4, of a total area of 43ha for which comparative LIDAR data is available, 21.02ha showed reduced elevation over this period, whereas 21.98ha showed evidence of accretion. Areas of highly significant erosion >60cm, within the resolution of the survey (±30cm) are in total less than 3ha. In Holes Bay, eroded areas appear most significant around the edges of saltmarshes in the southern, eastern and northern region (Figures 5-7). Around Furzey and Green Island, there again appear to have been small areas of saltmarsh erosion (Figures 8-9), with perhaps a slight reduction in upper beach level. In the Brands Bay area (Figures 12-13) there has been some quite distinct deepening in some of the saltmarsh creeks.

6.1.4 The Poole Harbour Commissioners (PHC) bathymetric survey reports of 2007 and 2008, conducted throughout the harbour since the channel deepening project of 2005/6, state no significant differences to the background trends, as measured in previous surveys. The baseline for all depth comparisons is the 2005 Report covering 1849-2004. The tolerance of all surveys is +/- 0.08m. The changes in bed bathymetry around most of the saltmarshes are not clear from these surveys as they are mostly confined to the navigable channels.

6.2 Sediments, salinity and macroalgae

6.2.1 The distribution of sediments from the 80 sampling stations within Poole Harbour is shown in Appendix 2. Sediments are classified according to several different scales. Most of the biotope classifications refer to the Folk Scale (Table 3) and this will be used in this report. For consistency and to enable comparison with Thomas et al. (2004), the predominant sediment type is the sediment fraction representing more than 45% of the total sediment sample. Most of the harbour can be described as ‘mud’; the predominant sediment fraction at 73% of sites had a median diameter of less than 0.063mm. This compares with 80% of sites in 2002, although the earlier survey just used the top 5cm of sediment, rather than a core to 15cm depth. Virtually the whole of the Wareham

Channel, Lytchett Bay and Holes Bay consisted of these finer sediments. Based on the information form cores samples, the approximate distribution of sediments is shown in Figure 14. Sand and 'Muddy Sand' sediments were recorded just inside the Harbour entrance, towards Rockley Point and south of Brownsea Island. Sites with mixed sediment, including sand and gravels (>2mm) were found throughout the harbour and notably parts of Brands Bay and close to the islands. Some sites at higher tidal levels also had coarser sediments. It is possible that those areas shown as 'sandy' may have finer sediments on the lower shore towards MLWS.

Table 3 Approximate cross comparison of different sediment classification schemes.

Wentworth Scale	Phi Class	Median diameter (mm)	Folk Scale (approx)
Granule	-1	>2.0	Sand
Very coarse sand	0	1.0	Sand
Coarse sand	1	0.5	Sand
Medium sand	2	0.25	Sand
Fine sand	3	0.125	Muddy Sand
Very fine sand	4	0.063	Sandy Mud
Coarse to fine silt	5-8	<.063	Mud

6.2.1 The surface salinity data obtained from the Environment Agency is presented in Appendix 3. Importantly, the data shows a gradient in salinity with typically reduced salinities recorded in the Wareham Channel (4.5-20ppt) and higher salinities at the Harbour entrance (27.5-34.5ppt), which is within the range expected and previously recorded (Humphreys, 2005). At most sites, salinities are highest during the summer due to reduced river discharge and greater evapo-transpiration. However low salinities were recorded during the summer also.

6.2.2 Macroalgal species forming green mats on the mud surface and identified for assessment in the field were mostly *Ulva* spp. (NB *Enteromorpha* spp. are now referred to as *Ulva* spp.). Clumps of large brown algae (*Fucus* spp.) were occasionally seen attached to the cobbles and boulders on the mid and upper shore levels, however these were not included in the assessment. Similarly, wind blown or washed up algae was noted but not included. The extent of macroalgal mat coverage, as determined from % cover estimation is shown in Figure 15.Very little algae was recorded on the sandy sediments near the harbour entrance, although most parts of the remainder of the harbour had patches of dense growth, with highest coverage in the sheltered creeks and inlets south of Brownsea Island, and parts of Holes Bay. Seven of the 80 sites sampled had more than 70% coverage; these sites were in Brands Bay, Newton Bay, Fitzworth Point, south west of Holes Bay and south of Holton Heath. Relatively little attached macroalgae was found in the upper Wareham Channel. At the very head of the harbour, there were large quantities of wind blown and drift algae stranded at low tide. The percentage of algal cover could not be visibly determined at sites that were necessarily surveyed at high tide e.g upper part of Holes Bay, Lytchett Bay and Blue Lagoon. The algal biomass determined from the core samples helps to complete the picture (Figure 16), with high values in the north eastern part of Lytchett Bay, Wareham Channel, Holes Bay and south of Brownsea Island, particularly Brands Bay. There is a statistically significant correlation between visible cover and biomass ($r=0.47$, $n=71$, $P>0.001$). The map showing % sediment organic matter (Figure 17) is also useful in indicating areas of organic enrichment. Organic matter is likely to include fluvial and marine debris, live algae, algal detritus and saltmarsh debris, in varying proportions. High values are evident in sheltered areas including Holes Bay, Lytchett Bay, Wareham Channel and Brands Bay.

6.3 Invertebrate communities and Biotopes of Poole Harbour

6.3.1 A total of 88 invertebrate 'species' were recorded in the core samples comprising 38 annelid species, 21 mollusca, 21 crustacea and 8 other species, including sea anemones and insect larvae, summarised in Appendix 4. An additional two sea anemone species, *Anemonia viridis* and *Cereus pedunculatus*, were recorded on the surface of the mud and sand flats when sampling in the field. The latter species was particularly abundant, especially at sites 48, 54 & 68 on sheltered fine sediments south of Brownsea Island and was almost certainly recorded in the cores (but not differentiated from other cnidaria in the above total figure as determination of preserved anemones is inconclusive). An additional 11 species were recorded on the mixed sediments and cobble foreshore at Baiter Park including limpet *Patella vulgata*, periwinkle *Littorina obtusata*, and porcelain crab *Pisidia longicornis.*

6.3.2 The species richness (total no. of species) varied between 1 and 29 species per site (Figure 18). The highest number of species recorded was at the mixed sediment shore at Baiter Park (site 71) with a total of 29 species spread over the five core samples (Figure 6). Other pockets of high species richness were well scattered across the harbour and included Brands Bay, Parkstone Bay, Arne Bay and parts of the Wareham Channel. The total number of species is higher than the 61 species, recorded in 2002 study, which only sampled a single core.

6.3.3 Species Richness measures are strongly dependant on sampling size and effort. The Species Diversity indices are shown in Appendix 5 and presented alongside 2002 data in Figures 19-21. Both the Shannon Weiner Diversity Index and Margalef Species Richness Index are generally greater than the earlier study in 2002, as are Pielou's Eveness indices. Biodiversity measures based on the relatedness of species e.g taxonomic diversity, are the least sensitive to sampling effort and presented in Appendix 6. One region of the harbour that consistently scores low for several of these indices, including Average Taxonomic Distinctness (Δ^+), is the area south of Brownsea Island, including Brands Bay.

6.3.4 The AMBI index map (Figure 22) shows eight 'Heavily Disturbed' sites, compared to five sites using data from 2002. Most of these sites occur in the area to the south of Brownsea Island, with others being in the Blue Lagoon and Parkstone Bay. However nine stations in the Wareham Channel that were previously categorised as having 'Moderate Disturbance' are now shown as having 'Slight Disturbance' in 2009.

6.3.5 Details of the abundance and biomass of selected taxa is given below. Overall species abundance varied considerably, both within and between sampling stations (Figure 23) The most notable change since the 2002 survey is the considerable drop in abundance of sedentary polychaete species, including spionidae and cirratulidae, and amphipod crustaceans, except *Corophium* spp., which has increased slightly. Other increases since 2002 are the density of catworm *Nephtys hombergii* and the bivalves *Macoma balthica*, *Mya arenaria* and the manila clam *Ruditapes philipinarum*. The sandy areas near the mouth of the harbour showed least changes with similar densities of amphipods *Urothoe* and *Bathyporeia*, and lugworm *Arenicola marina,* although the errant polychaete *Scoloplos armiger* is in reduced abundance.

6.3.6 The multivariate analysis carried out using the MDS and SIMPROF routines in PRIMER 6 revealed eight main statistically significant groupings (P<0.05), as indicated on the dendrogram (Appendix 8), shown as clusters A, B1,B2, C, D,E,F,G. The groups within the substructure of the dendrogram shown in red could not be statistically differentiated. The stress level of the MDS output of 0.25 exceeded the accepted threshold of 0.1, and thus must be interpreted with caution.

6.3.7 From the SIMPEROF dendrogram (Appendix 8), Grouping A is a pair of sites (71&73) within predominantly mixed sand and muddy-sand sediments; Group B, those with mainly sandy sediments; Group C is characterised by higher densities of the prosobranch snail *Hydrobia ulvae* and bivalve *Abra tenuis*; Sites D & E are more closely related and generally have higher numbers of oligochaete worms, yet are statistically different, with D characterised by higher densities of the catworm *Nephtys hombergii*; Site F consists of five sites dominated by the amphipod *Corophium volutator* and the ragworm *Hediste diversicolor* common; Site G is a large group of 20 sites characterised by high densities of *Hediste*.

6.3.8 The Biotopes assigned to each site, using the Marine Habitat Classification System v0405 (Connor et al. 2004) are shown in Table 4 and shown spatially in Figure 24. Eight main Biotopes were determined, combining the MDS and SIMPROF dendrogram output from PRIMER 6, the sediment data and 'expert judgement'. Individual sites that were differentiated in SIMPROF as being significantly different to all others, notably 4, 21, 40, 46 & 75 were mostly classified at a lower level in the biotope hierarchy.

6.3.9 The biotopes generally coincide with the distribution of sediments in the harbour, with assemblages characteristic of sands present near the harbour entrance; these consist of the annelid worm *Scoloplos armiger*, lugworm *Arenicola marina* and amphipod *Urothoe.* Polychaete and bivalve assemblages are common throughout the harbour and are primarily differentiated by proximity to areas of reduced salinity.

6.3.10 The most characteristic species across most assemblages was the ragworm *Hediste diversicolor*, which was present at the majority of sites, and samples. Accepted variants of the Upper Estuary biotope **LS.LMu.UEst.Hed (**_Hediste diversicolor_ in littoral mud) are present throughout the harbour, particularly in sheltered creeks, where dilution is likely to be an important factor. At these sites, the isopod *Cyathura carinata* was most frequent. Particularly high densities of the amphipod *Corophium volutator* were present with abundant *Hediste* in some sheltered creeks, particularly the upper Wareham Channel, Brands Bay and Middlebere Lake, which is characteristic of biotope **LS.LMu.UEst.Hed.Cvol (**_Hediste_ and *Corophium* in littoral mud). The site at Middlebere Lake had conspicuously mixed sediment and it is possible that the biotope is **LS.LMx.GvMu.HedMx.Cvol** (*Hediste diversicolor* and *Corophium volutator* in littoral gravelly sandy mud). However, the classification does indicate the high probability of broad transition areas between this biotope and the corresponding muddy sediment biotope Hed.Cvol. The boundaries may be very indistinct, with **HedMx.Cvol** present in patches of gravelly mud on areas of mudflat, where the main biotope is **Hed.Cvol.**

6.3.11 With the variety of bivalves present in association with ragworm *Hediste diversicolor*, much of the Wareham Channel and western part of the harbour is given the classification **LS.LMu.MEst.HedMac** (*Hediste* and *Macoma* in littoral sandy mud). However the density of *Macoma* is still very low and so the assemblage might best be currently described as '*Hediste* with Mixed Bivalves', due to varying amounts of *Abra*, *Macoma*, *Scrobicularia*, *Mya* and the manila clam *Ruditapes philippinarum*.

6.3.12 Assemblages of Littoral Mixed Sediment (**LS.LMx.Mx)** were locally distributed in the vicinity of Baiter Park and Parkstone Bay. The coarse and fine sediments create a varied habitat and as a consequence some of these sites were of high diversity. The shore at Baiter Park also consisted of cobbles and small boulders, covered with seaweeds *Fucus spiralis* and *F. serratus* and gastropod molluscs including *Littorina littorea* and *Patella vulgata.* Beneath the seaweed and cobbles were small amphipod and decapod crustaceans.

6.3.13 A series of sites were characterised by a species poor assemblage consisting of the catworm *Nephtys hombergi* and frequently high oligochaete densities (Assemblage Cluster D), particularly to the south of Brownsea Island and in the vicinity of Brands Bay. Tentatively, this has been assigned the biotope **LS.LMu.UEst.NhomStr** (*Nephtys hombergii* and *Streblospio shrubsolii* in littoral Mud), although *Streblospio* was rare or absent from many of these sites, the observed assemblage matches the classification description in other respects.

Table 4 Summary of assemblages identified and Biotopes assigned (Conner et al. 2004).

Group	Characteristic species	Biotope(s) assigned
A	This assemblage was characterised by mixed sediments, including sands and gravels, in addition to muds. The diversity was generally higher than average and included a broad range of taxa.	Littoral Mixed Sediment **LS.LMx.Mx**
B1	An assemblage of sandy shores, consisting largely of the annelid *Scoloplos armiger,* the lugworm *Arenicola marina* and amphipod *Urothoe.*	Polychaete/Bivalve dominated Muddy Sand Shores: **LS.LSa.MuSa**
B2	An assemblage on sands, without *Arenicola* and *Urothoe* but including *Scoloplos* and bivalves.	Polychaete/Bivalve dominated Muddy Sand Shores: **LS.LSa.MuSa**
C	An assemblage characterised by higher than average densities of *Hydrobia ulvae*, and bivalve *Abra tenuis*	Polychaete/Bivalve dominated mid estuarine Muds: **LS.LMu.MEst**
D	An assemblage characterised by catworm *Nephyts hombergii* and oligochaetes	*Nephtys hombergii* and *Streblospio shrubsolii* in littoral Mud. **LS.LMu.UEst.NhomStr**
E	A mixed and sometime diverse assemblage, yet with generally above average densities of oligochaetes: frequent in Holes Bay.	Polychaete/Bivalve dominated mid estuarine Muds:**LS.LMu.MEst** *Hediste* and oligochaetes in littoral mud: **LS.LMu.UEst.Hed.Ol**
F	An assemblage characterised by generally high densities of the ragworm *Hediste diversicolor* and the amphipod crustacean *Corophium volutator*	*Hediste* and *Corophium* in littoral mud: **LS.LMu.UEst.Hed.Cvol**
G	An assemblage characterised by generally high densities of the ragworm *Hediste diversicolor,* locally enhanced and modified with bivalve molluscs including *Macoma balthica*, *Scrobicularia plana, Mya arenaria* or with reduced diversity in association with oligochaetes and or isopod *Cyathura carinata,* particularly in the upper estuary.	*Hediste diversicolor* in littoral mud **LS.LMu.UEst.Hed.** *Hediste*, *Macoma* in littoral sandy muds **LS.LMu.MEst.HedMac** *Hediste* and oligochaetes in littoral mud: **LS.LMu.UEst.Hed.Ol**

6.4 Influence of Algal mats on invertebrate assemblages

The Bio-Env and BEST routines in PRIMER 6 were used to test the association between invertebrate assemblages and four environmental variables; % algal cover, algal biomass, sediment % organic matter and sediment silt/clay fraction. Two separate tests were carried out; the strength of the association between the assemblages and all four variables and combinations of variables, and the second test examined the algal parameters separately. The histograms and tabular output from the BEST routine is presented in Appendix 9. Using 999 permutations, weak, yet statistically significant associations (P=0.02) were found between the biological assemblages and with % organic matter (ρ=0.283), % silt/clay (ρ=0.265) and combinations of these two sediment variables (ρ=0.302). Weaker, though statistically significant, relationships were also found between combinations of these sediment variables and each of the algal parameters. However, the association between the invertebrate assemblages and either, or combinations, of the two algal measures were not statistically significant (P >0.14).

6.5 Non-native and notable species in Poole Harbour

6.5.1 In total, 10 non-native species were recorded and shown in Table 5. All are listed in Eno et al. (1997), except for the South African polychaete worm *Desdemona ornata*, first reported in the UK by Smith et al. (1999) and for which there are no previously published records in Poole Harbour, although the species was recorded in the harbour by the Environment Agency in March 2008. The Manila clam is now naturalised in the harbour and further details are provided below on abundance and biomass. Other notable occurrences are the Pacific Oyster *Crassostrea gigas,* recorded on harbour walls, steps and hard structures on the shore at Baiter Park and at the entrance to the Blue Lagoon, and the Japanese kelp *Undaria pinnatifida*. There are so far very few UK records of *Undaria* having naturalised on to the shore from pontoons and breakwaters. The Pacific Oyster has naturalised and needs to be monitored, as this species can form reefs on soft substrata.

6.5.2 There were no obvious signs of recently colonised southern species in the harbour as a result of rising sea temperatures. However the crustacean *Apseudes latreillii* (Crustacea:Tanaidae) has not previously been recorded and may be a new colonist, having a primarily southern distribution. The record could be its most easterly station in the Channel (Bamber pers.comm.).

Table 5 Non-native species recorded in Poole Harbour, October-November 2009. Abundance is approximate SACFOR scale code.

Species	**Details**	**Abundance**
Crassostrea gigas (Pacific Oyster)	Recorded on harbour walls, entrance to Blue Lagoon and structures at Baiter Park	R
Crepidula fornicate (Slipper limpet)	Live chains found on mud surfaces	O
Desdemona ornate (Polychaete)	Found in sediment cores; new introduction	O
Elminius modestus (Barnacle)	Established on hard substrata on the shore	A
Eusarsiella zostericolia (Ostracod)	Found in sediment cores. No previous published record in the Harbour	F
Grateloupia turturu (Red alga)	Found at Baiter park on mixed substrata	F
Mya arenaria (Clam)	Found in sediment cores and has widespread in finer sediments	C
Ruditapes philippinarum (Manila clam)	Found in sediment cores and now widespread in the harbour	F
Sytela clava (Korean Tunicate)	On hard substrata at Low water	F
Sargassum muticum (Brown alga)	Occasional clumps attached to shells or pebbles	O
Undaria pinnatifida (Brown alga)	One mature plant found naturalised attached to stone on beach at Baiter Park.	R

6.6 Individual species distributions and biomass

6.6.1 *Hediste diversicolor*

The mean density of the common ragworm (mean density 650 per m^2) was slightly higher than, but overall comparable with the 2002 mean density. In 2002, the species was generally much more restricted to the Wareham Channel, though is now much more widespread across the harbour. Considerable recruitment was evident in the samples and the overall biomass is greater than in 2002 (Figure 25).

6.6.2 *Nephtys hombergii*

Abundance of the catworm was almost double that of 2002 at 75 per m^2. The species was distributed throughout the harbour although less so in the Wareham Channel. Particularly high densities were found in Brands Bay and south of Brownsea Island. The biomass of this species was over four times greater than in 2002 (Figure 26).

6.6.3 *Alitta (Neanthes) virens*

Now known as *Alitta virens*, the abundance of the King Ragworm was at considerably reduced densities compared with 2002. The digs in the sediment at each sampling station confirmed evidence from the core samples that this species has become relatively scarce in the harbour. The harbour biomass of the species was one third of that recorded in 2002 (Figure 27).

6.6.4 **Oligochaetes**

Worms of the genus *Tubicoides* made up the majority of this group and were patchily distributed around the harbour, with concentrations in areas of reduced salinity, such as the Wareham Channel, Holes Bay. Lytchett Bay and Brands Bay area and south of Brownsea Island. Overall densities of these small worms were comparable to 2002 figures.

6.6.5 **Sedentary Polychaetes (inc cirratulidae, spionidae)**

Significant reductions in the densities of these polychaetes were recorded, particularly cirratulidae. The dominant species in 2002, *Cirratulus filiformis* (mean density 3820 per m^2), was not recorded at all in this survey, or in March 2008 by the Environment Agency. The most abundant cirratulid was *Aphelochatea marioni* (mean density 556 per m^2), which was patchily distributed (this species, recorded previously known as 'Tharyx A', was the dominant cirratulid recorded by the Environment Agency in 2008. Spionidae were also considerably reduced; *Malacoceros fuliginosus* was not recorded, although *M.tetraceros* was occasionally found. The most abundant spionid was *Streblospio shrubsolii* (mean density 36 per m^2), which was not recorded in 2002. When combined with the oligochaetes and other 'small worms' the total biomass was a third of that recorded in 2002 (Figure 28). Cirratulids and spionidae were much more abundant in the lagoon on Brownsea Island (4550 per m^2 and 4374 per m^2 respectively (see Section 10.3).

6.6.6 ***Hydrobia ulvae***

The distribution and abundance of the small prosobranch snail *Hydrobia ulvae* was generally comparable with 2002 (Figure 29), although considerably less were recorded in Lytchett Bay. The abundance in the Wareham Channel and south of Brownsea Island were slightly higher, especially in Brands Bay (Figure 29).

6.6.7 ***Abra tenuis***

The density of this small bivalve has reduced in the harbour, especially in former strongholds within the Wareham Channel and Lytchett Bay (Figure 30).

6.6.8 ***Cerastoderma*** spp.

The combined densities of cockles *C.edule* and *C.glaucum* is remarkably similar compared to the *C.edule* of 2002, at approximately 30 per m^2 although the overall harbour biomass is now higher (Figure 31).

6.6.9 ***Scrobicularia plana***

The mean density of this clam is less but comparable with that recorded in 2002 at 5.7 per m^2. The species distribution is shown to be around the upper and middle section of the harbour, in fine muddy sediments (Figure 32).

6.6.10 ***Mya arenaria***

This species is now very widespread, though predominantly in finer muds in the upper parts of the harbour. The mean density has increased from 10 per m^2 in 2002 to 29 per m^2 in 2009, although two-thirds of the individuals recorded were 2008-9 spat. Overall the harbour biomass is 40% less than that calculated in 2002 (Figure 33).

6.6.11 ***Ruditapes philippinarum***

The now naturalised Manila clam has shown an increase in mean density from 5 per m^2 in 2002 to 12 per m^2, and is widespread in the harbour. The overall harbour biomass is almost double that recorded in 2002 (Figure 34).

6.6.12 ***Macoma balthica***

The mean density of this bivalve has increased from 1 per m^2 to 8 per m^2 since 2002. The species is widely distributed across the harbour where finer muds prevail.

6.6.13 **Other mollusca**

It is perhaps worth mentioning that a single juvenile razor clam, *Solen marginatus*, was recorded on the sands near Rockley Point, as was the bivalve *Dosinia lupinus*, neither of which were recorded in 2002. Many dead shells of *Solen* were found, which is perhaps indicative of large intertidal or subtidal populations developing.

6.6.14 ***Corophium volutator***

The abundance of this important bird prey item was slightly higher than in 2002 with mean density of 456 per m^2. Highest concentrations were in the creeks of Middlebere Lake, Holes Bay and upper parts of the Wareham Channel. The overall harbour biomass is also slightly greater than in 2002 (Figure 35).

6.6.15 **Other Crustacea**

Apart from *Corophium,* notable crustacea have in previous surveys included other isopod *Cyathura carinata* and amphipods such as *Microdeutopus gryllotalpa* and *Gammarus locusta*. While both species remain present in the harbour they were recorded at considerably reduced densities compared with 2002. Where found, they were often abundant.

6.7. Estimation of biomass and invertebrate prey availability

6.7.1 Based on the total biomass values measured for each of the eighty sites on the sampling grid, a total mean biomass of 18853 mg AFDW m^{-2} was calculated for Poole Harbour. This is 74% of the mean total calculated in 2002 (25600 mg AFDW m^{-2}, from Thomas et al. 2004). Particularly high values were measured for the Wareham Channel, especially site 17 with the high density of manila clams (106464 mg AFDW m^{-2}). Other areas of high biomass are Arne Bay and Brands Bay. Sites of relatively low biomass were scattered throughout the harbour, including the harbour entrance and in Lytchett Bay.

6.7.2 Bird distribution

The distribution of birds within the harbour is based on the low tide WeBS counts, conducted in 2004/5. The number of birds found within each WeBS sector is presented in Appendix 12. The number of birds quoted for each sector represents the average of counts conducted throughout the winter months of 2004/5.

Shelduck (*Tadorna tadorna*)
The greatest number of shelduck were recorded in areas DP018, and DP017 in the Wareham Channel. Large numbers were also recorded in DP030, around Arne Bay, and in DP028, in the south central part of the harbour. Shelduck were generally widespread throughout the harbour.

Oystercatcher (*Haematopus ostralegus*)
The two areas with the greatest numbers of oystercatchers were in the Wareham Channel (sectors DP018 and DP015) and in the north east of the harbour, to the south of Poole (DP004) and around Parkstone Bay (DP034). Oystercatchers were generally widespread throughout the harbour.

Grey plover (*Pluvialis squatorola*)
The density of grey plover was generally quite low throughout the harbour. Areas of highest numbers were the northwest corner of Holes Bay (DP009) and the south central part of the harbour (DP028).

Avocet (*Recurvirostra avocetta*)
Avocet were present at a small number of sites within the harbour. They were found in high numbers to the north of Brownsea Island (DP002) and around Middlebere (DP029 and DP031).

Dunlin (*Chalidris alpina*)
Dunlin were present in very high numbers in the Wareham Channel (especially DP018 and DP017) as well as in the south central part of the harbour (DP028) and around Middlebere (DP029 and DP031)

Redshank (*Tringa totanus*)
The greatest number of redshank were found in the northeast corner of Holes Bay (DP010). Other important areas were Lytchett Bay (DP016) and Middlebere (DP031).

Black-tailed godwit (*Limosa limosa*)
The largest numbers of black-tailed godwits were recorded in the Wareham Channel (areas DP018 and DP017). Other important areas included the northeast corner of Holes Bay (DP010) and in Arne Bay (DP030).

Curlew (*Numenius arquata*)
The greatest number of curlew were found in the Wareham Channel (DP018 and DP017 and DP015) and around the south central part of the harbour (DP028) and Middlebere (DP029).

Table 6 Energy available and energy required in each WeBS sector.

WeBS sector code	Overwinter energy requirement[1] (kJ x 10^6)	Biomass availability[2] (kJ/m^2)	Energy availability [3] (kJ x 10^6)	Ratio of energy available to required
DP001	25.47	460.32	n/a	n/a
DP002	92.99	n/a	n/a	n/a
DP003	324.66	692.05	127.68	0.39[4]
DP004	61.23	469.24	53.51	0.87[4]
DP005	14.24	n/a	n/a	n/a
DP006	n/a	n/a	n/a	n/a
DP007	n/a	268.11	n/a	n/a
DP008	n/a	442.59	n/a	n/a
DP009	54.27	680.79	100.36	1.85
DP010	64.35	471.54	67.12	1.04
DP011	82.95	212.07	101.56	1.22
DP012	5.87	129.85	30.08	5.13
DP013	n/a	154.10	31.82	n/a
DP014	24.15	512.38	192.82	7.98
DP015	90.30	625.25	353.82	3.92
DP016	56.60	191.16	85.88	1.52
DP017	222.56	400.76	177.87	0.80
DP018	617.91	692.14	290.99	0.47
DP019	n/a	326.94	69.49	n/a
DP020	5.13	287.61	209.64	40.90
DP021	1.67	365.87	225.02	134.78
DP022	n/a	533.26	n/a	n/a
DP023	n/a	235.44	n/a	n/a
DP024	n/a	321.80	n/a	n/a
DP025	n/a	n/a	n/a	n/a
DP026	n/a	208.50	29.92	n/a
DP027	15.93	311.05	227.84	14.31
DP028	106.72	357.18	221.21	2.07
DP029	145.19	196.06	125.55	0.86
DP030	109.85	823.99	178.67	1.63
DP031	93.60	149.99	57.79	0.62
DP032	16.96	208.39	49.49	2.92
DP033	23.74	42.98	2.73	0.06[4]
DP034	37.49	n/a	n/a	n/a

[1] Missing values due to no WeBS data for sector
[2] Missing values due to no sampling points occurring within sector
[3] Missing values due to WeBS sector area not determined
[4] Area of segment calculated from 2004/5 WeBS areas minus the region below LWS.

6.7.3 The biomass availability for each WeBS sector is presented in Figure 37. Areas of greatest biomass density occurred in the northwest corner of Holes Bay (DP009), the upper estuary sector of the Wareham Channel (DP019), Arne Bay (DP030) and the southeast corner of the harbour (DP020 and DP024). The southwest corner of the harbour had generally low biomass density. Other areas of low biomass density included Lytchett Bay (DP016), the lower estuarine stretches of the Wareham Channel (DP012 and DP014) and northeast Holes Bay (DP010).

6.7.4 In some WeBS sectors, available energy greatly exceeded energy requirement, most notably close to the mouth of the harbour where energy requirement was low but biomass availability was relatively high (e.g. Sectors 20 & 21). Areas where energy availability was fairly close to energy requirement included the Wareham Channel and the northeast corner of Holes Bay (Sector 10). The energetic requirements and energy available to each species (based on its preferred diet) on a sector-by-sector basis are presented in Appendix 11. The overall ratio of energy availability to that required (S_p:S_a) calculated for those sectors for which data is complete (two-thirds) is 1.5. This compares with a value of 4:1, calculated in 2002 (Thomas et al. 2004) and below that of an expected range of 2.5-8:1 (Goss-Custard et al. 2004).

6.7.5 The (S_p:S_a) ratios for eight waterfowl species are given in Appendix 11. For Avocets, the ratios are well in excess of requirements, except for Sector 31 (lower part of Middlebere Creek) and Brownsea Island Lagoon, which are borderline. For Black-tailed godwit, Redshank, Grey plover and Oystercatcher, the energy available appears to be well in excess of requirements in measured sectors. For Shelduck, ratios for over half of sectors are generally low or borderline.

7.0 Discussion: Poole Harbour

The structure of the discussion is based around the Common Standards Monitoring guidance for *Estuaries* and *Littoral Sediments* (JNCC, version August 2004). Estuaries are complex ecosystems that are composed of a mosaic of subtidal, intertidal and surrounding terrestrial habitats. There is a gradient of salinity from freshwater at the head to increasingly marine conditions towards the open sea. Littoral sediments include those sedimentary habitats that fall between high and low water, including mudflats and sands, but not saltmarshes. Littoral sediment often displays considerable spatial heterogeneity in topography, sediment structure and sediment composition, resulting in corresponding heterogeneity in their associated biotopes.

7.1 The site attributes monitored in Poole Harbour are shown in Table 1. The four mandatory attributes (JNCC, 2004) are *Extent, Biotope Composition, Sediment Character* and *Distribution of Biotopes.* Species population measures including biomass estimation of bird feeding areas are also important to assess due to the international importance for waterfowl in Poole Harbour.

7.2 Estuaries

7.2.1 Extent of feature

The published area of the harbour is 3600ha (Humphreys & May, 2005). The total area of water, measured at Mean High Water using high resolution aerial photography is shown in Table 2 as 3585.7ha in 2008/9. Mapping the low tide mark was problematic, especially over the broad mudflats, as the area exposed cannot be precisely measured (Christopher Blair-Myers Peter Brett Associates pers. comm.). At low tide, the water is so shallow that the edge of the mudflats is barely visible, and over such broad areas the low water mark changes significantly with very small variations in the tidal state. The flights straddled ±30mins the low water, which can make a significant difference to the total extent observable in some regions. Areas where the mean low water as mapped by the Ordnance Survey (OS) are radically different compared with aerial photographs include Holton Bay, Brands Bay and north of Bramble Bush Bay. The extensive mudflats mapped by OS are either not visible or there is a poor correlation between the MLWM as mapped by OS and that visible in the aerial photographs (Christopher Blair-Myers Peter Bright Associates pers comm.). According to the 2008-9 monitoring report of the Channel Deepening project by Poole Harbour Commissioners, there has been no significant change in the bathymetry of the harbour, although monitoring is mainly carried out in the navigable channels. The LIDAR data in Fig 3 reveals some possible creek-deepening and likely saltmarsh erosion in the bays south of Brownsea Island. This may be considered part of natural cycling of sediments and saltmarsh morphology. *It is suggested that some fixed point monitoring is established across the harbour to assess more precisely the rate of change.*

7.2.2 Distribution and spatial pattern of habitats

This attribute is concerned with the position of the target habitats and their spatial relationship to one another. The main target habitat in the estuary is littoral sediment (muddy sands), which is primarily discussed in the next section. The main habitat in close proximity to littoral sediment is saltmarsh, and of course the water column. A comparison with the 2001/2 survey carried out by the Poole Harbour Study Group shows the general pattern of littoral sediment habitat, channels and saltmarsh, unchanged. The erosion of saltmarsh habitat has long been an issue of concern in the harbour; between 1947-2003, 245ha (38%) of saltmarsh was lost (Born, 2005). Extreme caution must be exercised in attempting to compare the 2002/3 survey and 2008/9 survey as the methodology is different. Visible evidence of erosion of saltmarsh was seen at a number of sites particularly in Holes Bay and the Wareham Channel. The die back of *Spartina anglica*, is also an important factor in the harbour and there were visible signs of this continuing.

Only an approximate indication of the spatial extent of sublittoral habitats is possible as most of the available data is from navigable creeks. The sediments between MLWS and ELWS (close to Chart Datum) have not been examined carefully as these were generally not visible from the aerial surveys. Field observations at ELWS indicate a general extension of the littoral sediments, however the duration of low water at extreme spring tides is so small that any detailed analysis must be obtained through core sampling along bathymetric transects.

The sea grass beds (*Zostera marina*) in Whitley Lake are of considerable conservation interest and their extent needs to be carefully monitored. It has not yet been possible to accurately calculate the precise area of this habitat, although the known distribution is presented in Collins (2009).

The Schedule 5 protected anemone *Nematostella vectensis* was not found in the Blue Lagoon, where it has been recorded previously (Sheader & Sheader, 1985). There is now limited retention of water at low tide and it appears that the lagoonal properties of the site have disappeared. Two specimens of the lagoon cockle, *Cerastoderma glaucum,* another lagoon indicator species, were found within additional core samples obtained from mudflats closer to Mean Tide Level (Site 77 supp), yet *C. glaucum* was also found at several other sheltered sites within the harbour, and at Brownsea Island Lagoon. The absence of *Nematostella* in 1992 (Sheader & Sheader, 1992) and in this survey suggests that the original population was likely to have been ephemeral. The area known as Blue Lagoon (Site 77) should be classified as a sheltered estuarine creek, rather than a saline lagoon.

7.2.3 Salinity

The salinity measurements obtained from the Environment Agency show a gradient of salinity between Wareham and the harbour entrance that is consistent with earlier data presented in Humphreys (2005). Reduced salinities are most evident in the Wareham Channel. Few measurements are available in the embayments and creeks which receive discharges from smaller streams. The data also indicate that seasonal variation is consistent with previous measurements, obtained at different locations in the harbour.

7.3 Littoral sediments

7.3.1 Extent of feature

The 2008/9 data show that intertidal sediment covers 1373.8ha of the harbour. Limitations of this analysis are discussed in 4.2.1 and 4.2.2 above. Of additional interest is the quality of the littoral habitat. The sediment composition is dealt with separately, however there was widespread scour of the mud surfaces by clam and/or cockle fishing activity, using pump-scoop methods, particularly in the Wareham Channel and in some of the creeks south of Brownsea Island.

7.3.2 Sediment Character/Sediment Type

Most of the harbour can be described as ‘mud’; the predominant sediment fraction at 73% of sites had a median diameter of less than 0.063mm. This compares with 80% of sites in 2002, although the earlier survey only used the top 5cm of sediment, rather than a core to 15cm depth. Virtually the whole of the Wareham Channel, Lytchett Bay and Holes Bay consisted of these finer sediments. Sand and ‘Muddy Sand’ sediments were recorded just inside the harbour entrance, towards Rockley Point and south of Brownsea Island. Sites with mixed sediment, including muds sand and gravels were found throughout the harbour, notably at Baiter Park and Parkstone Bay, parts of Brands Bay and close to the islands. Some sites at higher tidal levels also had coarser sediments. The distribution of sands is again consistent with that observed in 2002. The sandbank to the south of Brownsea Island at site 70 is intact and sediment composition is similar to

2002. Natural changes in estuary morphology will undoubtedly cause some areas to shoal and others undergo deposition, so sediment character is likely to vary over both short and long timescales.

7.3.3 Biotope Composition

The main focus of this survey has been the biotopes that are considered to be of greatest conservation value and support a wide range of invertebrate species that provide food for overwintering wildfowl, for which the site is internationally designated. The list of biotopes presented is therefore not comprehensive as others will undoubtedly exist, for example on the upper parts of the shore and strandline. Eight main biotopes were classified in the harbour shown in Table 4. Most may be recognised under the lower level of polychaete/bivalve dominated upper-estuarine or mid-estuarine muds (**LS.LMu.UEst** and **LS.LMu.MEst),** and are largely characterised by the ragworm *Hediste diversicolor,* which was almost ubiquitous. It is possible that several sub-biotopes may cycle as variants of *Hediste diversicolor* in littoral mud **LS.LMu.UEst.Hed.**

It has not always been the case that annelids have dominated the intertidal macrofauna of Poole Harbour. Historical records indicate that in the 1970s, a molluscan fauna, that included high densities of the bivalves *Scrobicularia plana* and *Macoma balthica,* were much more evident and widespread (Caldow et al. 2005). It is possible that these species declined due to pollution and metal contamination, particularly the use of tributyltin antifouling paints (TBT) in the 1960s and 1970s that affected many bivalve species (Langstone et al. 2003, Wardlaw, 2005). It is also possible that there is a natural, cyclical, succession of biotopes and that this was the original cause of molluscan decline. The numbers of *Macoma* are higher compared to 2002 and large areas of the Wareham Channel have been classified as the biotope '*Hediste Macoma* in littoral sandy mud (**LS LMu MEst. HedMac**). It is perhaps more accurate to describe these areas as '*Hesiste* with mixed bivalves', that include *Macoma*, *Abra*, *Scrobicularia*, *Cerastoderma* spp. *Mya* and *Ruditapes*. These areas are at risk of disturbance from clam and cockle dredging, which was evident in the Wareham Channel, Lytchett Bay and south of Brownsea Island. The Manila clam, *Ruditapes philippinarium* is not yet considered to be biotope forming and coexists with other bivalve species. Data on the species overall impact on littoral sediment biotopes in northern Europe is not available, although studies in the Venetian Lagoon appear to demonstrate that the species can potentially alter benthic community structure and functioning (Pranovi et al. 2006). A single *R.decussatus* was found in this survey, and has been recorded elsewhere in the harbour (J. Humphreys, pers.comm.), although has been absent in previous surveys.

The biotope at the head of the harbour, classified as '*Hediste* and oligochaetes in littoral mud' (**LS LMu UEst.Ol**), was also characterised by moderately high densities of the isopod *Cyathura carinata*. This area is no doubt influenced by reduced salinities and could be categorised as a locally distinct biotope (suggested code **LS LMu UEst Hed.Cy)**. The presence of this biotope is useful for confirmation of the salinity gradient in the upper sections of creeks and embayments. The creeks with high densities of the amphipod *Corophium volutator* such as Middlebere Lake and the upper part of Holes Bay, should also be recognised as important for feeding waterfowl, especially avocets. The biotope in these areas (*Hediste* and *Corophium* in littoral mud) **LS.LMu.UEst.Hed.Cvol** is relatively local in the harbour and should be specifically monitored.

7.3.4 **Distribution of biotopes**

The distribution of biotopes is generally similar to the 2002 survey (Thomas et al. 2004), although the codes used are from an earlier version of the classification. The *Hediste diversicolor* biotope **(LS.LMu.MEst.Hed)** with high *Cyathura carinata* abundance at the head of the Wareham Channel was previously recognised. The **HedMacScrob** biotope referred to in 4.3.3 was also found in the same locality, although with few *S. plana.* The *Hediste* and *Corophium* biotope (**LS.LMu.UEst.Hed.Cvol)** was previously noted in Middlebere Lake and areas of reduced salinity. The sandy biotopes were identified just inside the harbour entrance and not assigned to any higher level of resolution. It appears that there has not yet been much change in the overall distribution of biotopes in the harbour. One local yet important region exists between Brownsea Island and Brands Bay, where there is a higher than average density of the catworm *Nephtys hombergii* and *Tubificoides* spp. This has been tentatively classified as **LS.LMu.UEst.NhomStr** (*Nephtys hombergii* and *Streblospio shrubsolii* in littoral mud), although has few *Streblospio.* This area is also characterised by algal mats, as it was in the previous 2002 survey. It may be that there is some local enrichment in the vicinity providing optimum coincidence of environmental conditions for this assemblage of species. It is suggested that the extent and distribution of this biotope is specifically monitored. The extent of areas of mixed sediment, consisting of higher sand and gravel fractions are also worth monitoring as these could be indicative of bed shoaling and erosion.

7.3.5 **Species composition of representative or notable biotopes**

There were no nationally scarce species or biotopes observed in the harbour.
However, of local importance to Condition Assessment must be the relative abundance of annelid worms and bivalve molluscs in the littoral sediments that represent key invertebrate prey items for waterfowl. These include the ragworm *Hediste diversicolor,* oligochates *Tubificoides* spp. bivalves *Macoma balthica, Scrobicularia plana* and the amphipod *Corophium volutator*. All these species were either as high or higher densities than in 2002.

The low density of cirratulids, spionids, and amphipoda species. might be expected within the range of variation that has been characteristic of Poole Harbour and '*where change is the norm*' (Caldow et al. 2005 p106). However, it is worth obtaining small samples from different locations to monitor the range of temporal variation in these groups. For example, samples taken by the Environment Agency at 30 sampling stations from the western and southern areas of the harbour in March 2008 recorded mean densities of oligochaetes and smaller polychaetes of an order of magnitude greater than both the 2002 and 2009 surveys; combined *Tubificoides* spp. densities were 12000 per m^{-2} and combined sedentary polychaetes approaching 20000 per m^{-2}. Table 6 shows the density of key species at the four main surveys since 1972, including the current survey. The table shows that the overall density of invertebrates is lower than in 2002 and 1987, but higher than in 1972. Moreover, the density of the larger bivalves appears to have increased since 2002; perhaps the harbour is reverting back to the state pre 1987, whatever might be the cause. Mid term variability and the range of annual variability is still largely unknown. It might be sensible to target specific species or groups on an annual basis, such as a benthic grab survey at high water, that would capture the larger species of clams and ragworms, and from which sub-samples could be taken for smaller species. This would be logistically easier than attempting to access remote intertidal areas at low water. The faunal composition, biomass and species density of Lytchett Bay was considerably more sparse than in 2002. This is certainly worth a follow up to determine whether the data was a seasonal aberration of indicative of more serious decline.

Table 7. Comparison of the average numerical densities of key species and groups of macroinvertebrates on intertidal flats in Poole Harbour over the past 37 years. For sources of earlier data see Caldow et al. (2005).

Year Survey	**1972**	**1987**	**2002**	**2009**
Scrobicularia plana	53	239	8	5
Macoma balthica	42	10	1	8
Other bivalves	27	133	300	191
All bivalves	120	383	310	205
Hydrobia	214	135	756	490
Errant polychaetes	376	478	814	769
Sedentary polychaetes	2023	6570	4909	925
Oligochaetes and Nermertines	6	1884	1841	1466
All worms	2398	8931	7564	3160
Corophium spp.	1540	2882	374	468
Other crustaceans	56	177	1430	332
All crustaceans	1577	3059	1804	800
All	**4309**	**12508**	**10434**	**8820**
No. of samples	189	168	80	396

There has been much debate over whether Poole Harbour is a lagoon or an estuary feature (Humphreys, 2005b). One species that was widespread in the harbour, yet has received previously little attention, is the lagoon cockle *Cerastoderma glaucum*. The species is characteristic of saline lagoons, yet is also found in sheltered parts of estuaries. It is not commonly recorded in the Solent estuaries, and this may be due to their more dynamic tidal regime. The species can also be overlooked and identified as *C.edule*. More information on its distribution would be beneficial as its abundance could be indicative of the current hydrodynamic regime in the harbour, which in the medium and longer term may be subject to changes caused by rising sea levels.

Overall, the variety of species composition and extent of biotopes observed and classified is consistent with those recorded in 2002. The biotopes of the harbour generally match the sediment characteristics very closely and are locally modified by dilution. These are important parameters to use in future monitoring.

7.3.6 Biomass and bird food availability

The ratios of energy availability to requirements, measured for those sectors for which complete data is available, is less than in 2002 and below the general average. Some of the WeBS count sectors have changed since 2002, and WeBS data for the most recent low tide counts (2003-4) is incomplete for all sectors, so the overall average availability of food may vary to that measured. The figure is sensitive to method of calculation of intertidal area. Consistent with the 2002 survey is that there are areas for which energy availability significantly exceeds that required, notably in Sectors 20 and 21, the Brands Bay and Bramble Bush Bay region (Figures 38-40). This area has high biomass, yet predator exploitation is low. Significant parts of this region are colonised by green macroalgal mats, which may deter birds from feeding in these areas, and similarly affected parts of the harbour. The upper sections of the Wareham Channel were borderline in terms of energy availability. These regions are popular feeding areas for birds, and findings are consistent with those of 2002, when low ratios were also calculated for these sectors. The WeBS sector that incorporates the heavily utilised and potentially disturbed area in the vicinity of Parkstone Bay and Baiter Park has changed in its overall area, and so comparative energy availability to requirement ratios are unlikely to be accurate. From the biomass values, it is highly likely that, as in 2002, the food availability far exceeds requirements.

For the internationally important populations of avocets and black-tailed godwits, there appears to be generally high food availability, although areas where avocets preferentially feed are relatively small, and therefore the population is potentially vulnerable to disturbance. For shelduck, food availability was found to be borderline, theoretically at least. This is again consistent with findings in 2002, and Thomas et al. (2004) suggest that the birds may forage more widely across the harbour than in the areas within which counts have been made. It is also possible that the birds take other food items than those generally known, or that they take terrestrial species when roosting in fields and marshes at high tide. The energy available to curlew generally exceeds requirements, except in parts of the Wareham Channel. Invertebrate biomass may have been underestimated for this species as it will frequently take large prey items, that may not have been adequately sampled.

The 2009 invertebrate study was carried out in October and November, a month or so later than the 2002 survey, and it is possible that reduced productivity and mortality has resulted in lower figures for food availability in some areas. Winter mortality, due to predation and natural mortality, is considered worthy of investigation to determine the magnitude of overall reserves necessary for sustaining populations over the winter months.

As in the previous study, bird feeding activity is concentrated in relatively few areas of the harbour, some of which have high food energy reserves and others not. There is no obvious relationship between bird feeding and food availability. It may be that those areas not currently exploited are utilised during harsh weather or when specific disturbances force birds to move away from preferred areas , and visit these other sites, albeit temporarily.

Brownsea Island Lagoon

8.0 Introduction

The saline lagoon on the north eastern side of Brownsea Island is managed by the Dorset Wildlife Trust. The area that is now Brownsea Lagoon was first separated from the sea in the 1850s, when a sea wall was constructed, enclosing the area formerly known as St. Andrew's Bay, to provide grazing land for the livestock on Brownsea Island. Today, a non-tidal saline lagoon covers the area, with small artificial islands built by the Dorset Wildlife Trust that provide nesting habitats for summer migrants and resident breeding bird species. In the winter, the lagoon accommodates large feeding and roosting numbers of black-tailed godwits, avocets and other waterfowl. Water exchange is managed via a sluice in the south-eastern corner of the lagoon and on the east side by the wind-pump. The lagoon is fed by small streams that discharge through reed beds into the west side of the lagoon.

9.0 Methods

9.1 The extent of the open lagoon water habitat and saltmarsh was measured from the East Dorset Integrated Habitat Map described in 2.1. The maps were produced from aerial photographs obtained from flights on 7th May and 24th June 2008.

9.2.1 The lagoon was sampled on 6th November 2009, with permission from Dorset Wildlife Trust. Six sampling stations were identified, with good access from the outer wall (Figure 40). Three mud cores (10cm diameter) were obtained to a depth of 15cm from each station, plus an additional 6cm diameter core for sediment analysis. Floating seaweed samples (approximately 0.5 litre volume) were taken from each site for the examination of associated fauna. Each station was photographed and a salinity measurement obtained using a refractometer. Using a 1mm mesh standard pond net, three sweeps were taken to quantify the number of prawns (*Palaeomonetes varians*) at each site. An additional semi-quantitative survey was carried out in the vicinity of the main sluice of the lagoon.

9.2.2 The samples for biota were sieved through a 0.5mm mesh and preserved and sorted using the same methodology as the main Poole Harbour samples described in Section 4 above. The mean biomass per m^2 was calculated using the same methodology as for Poole Harbour sediments detailed in Section 5.7 above.

10.0 Results

The results are presented as follows:

10.1 Extent of Lagoon Habitat
10.2 Description and distribution of sediments and salinity in Brownsea Island Lagoon.
10.3 Description of invertebrate communities and biotopes in Brownsea Island Lagoon.
10.4 Estimation of biomass of invertebrate prey in Brownsea Lagoon.

10.1 Extent of water in lagoon.

The area of water in the lagoon shown in Figure 40 was calculated as 17.8ha. The area of saltmarsh in the lagoon was measured as 2.9ha.

10.2 Sediment composition, salinity and macroalgae

The composition of sediments at the lagoon sampling sites was found to be very variable (Table 1). While this is not uncommon in lagoons, it may not be representative of the whole lagoon, as access to the central deeper areas was restricted. Samples varied from having predominantly sand or muddy sand, although site BS2 consisted of finer sediments. Coarser sediments were found at the eastern edge of the lagoon. Overall the lagoon sediments should be classified as a sand or sandy mud.

Table 8. Particle Size Analysis of sediments in Brownsea Island Lagoon.
% of each size fraction, and % organic content.

	% Particle Size Fraction							
Site	**2mm**	**1mm**	**500µm**	**250µm**	**125µm**	**63µm**	**<63µm**	**% Organic**
BS1	0.0	0.9	1.5	13.7	36.7	46.5	0.6	2.95
BS2	7.1	1.5	4.8	10.3	15.6	13.4	47.4	2.38
BS3	33.5	8.9	5.0	23.7	11.9	7.3	9.7	2.08
BS4	3.4	3.7	7.5	38.1	23.9	4.7	18.6	3.41
BS5	0.2	0.1	1.5	11.7	30.1	18.0	38.4	2.99
BS6	0.2	14.0	27.6	10.4	7.9	5.4	34.5	4.90

The salinity around the lagoon varied between 22 and 29ppt, with the lowest value recorded on the north western edge at site BS1. The highest salinities were found at the southern edge, and by the sluice.

Macroalgae was very patchily distributed around the lagoon including the central areas which were inaccessible. The most common species was the green alga *Chaetomorpha linum*, however there were also large floating clumps of the red alga *Gracilariopsis longissima* and occasional green sea lettuce *Ulva lactuca.* At the southern sluice, where the salinity is greater, other species were attached to stones and shells on the lagoon bed, including the Japanese brown alga *Sargassum muticum* and red algae *Aglaothamnion ?hookeri*, *Ceramium pallidum*,*Ceramium secundatum*, *Polysiphonia denudata* and *Polysiphonia elongata.*

10.3 Invertebrate communities & biotopes

A total of 23 species were found in the core samples, with an additional 4 species recorded in samples of seaweed and in net samples around the sluice (Appendix 8). Overall the fauna consisted of 9 annelids, 10 crustacea, 3 mollusca and 4 other species including insect larvae and the Schedule 5 protected anemone species *Nematostella vectensis.*

10.3.1 Lagoonal specialist species recorded were *Nematostella vectensis*, prosobranch mollusc *Ventrosia ventrosa* (formerly *Hydrobia ventrosa*), bivalve mollusc *Cerastoderma glaucum*, amphipod crustacean *Corophium insidiosum* and isopod crustacean *Idotea chelipes*.

10.3.2 Amongst the *Chaetomorpha linum* samples were found *Cerastoderma glaucum*, *Abra tenuis*, *Corophium volutator* and *Idotea chelipes*. On the *Ulva* samples, *Ventrosia ventrosa* and *Corophium insidiosum* were present and large numbers of *Idotea chelipes* were found on *Gracilariopsis longissima*.

10.3.3 Species richness and diversity did not vary widely across the lagoon, although the highest densities of individuals were at the northern end. Overall, the lagoon had very much higher densities of fauna compared to Poole Harbour mudflats. Of the annelids, the oligocahete *Tubificoides benedii* had the highest mean density of any species, followed by the polychaetes *Aphelochaeta marioni*, *Polydora cornuta* and ragworm *Hediste diversicolor.* The crustaceans were dominated by very high densities of *Corophium insidiosum.*

10.3.4 The density of the Schedule 5 anemone *Nematostella vectensis* was generally high throughout the lagoon, although significantly lower at sites BS3 & BS4, where the substrate was coarser.

10.3.5 According to the classification of English lagoon biotopes in Bamber (1997), Brownsea has two of the seven types identified, excluding the special Fleet lagoon biotopes. These are **ENLag.Veg** and **ENLag.IMS**. **Ann**. A description of these biotopes is presented in Table 8.

Table 9. Biotopes identified in Brownsea Lagoon, as classified by Bamber (1997).

English Lagoon Biotopes
ENLag.Veg Submerged vegetation and associated fauna: *Ruppia*/*Enteromorpha*/*Chaetomorpha*/*Ulva* with *Idotea chelipes*, *Corophium insidiosum*, *Sphaeroma*, *Gammarus*, *Hydrobia* spp. *Gasterosteus aculeatus*.
ENLag.IMS.Ann Infralittoral muddy sand with tubificids, chironomids, hydrobiids, *Capitella capitata*, *Hediste diversicolor*, *Cerastoderma glaucum*, *Corophium volutator*, *Abra tenuis*.

10.4 Estimation of species biomass

The mean biomass per m^2 for each of the main taxa is given in Appendix 15.
A total mean biomass of 33853 mg AFDW m^{-2} was calculated for the lagoon, which is considerably greater than the mean biomass calculated for Poole Harbour in 2002 (18853 mg AFDW m^{-2}) and for Poole Harbour in 2002 (25600 mg AFDW m^{-2}). Only nine of the eighty sites sampled in Poole Harbour in 2009 had mean biomass values greater that this value for the lagoon. Just over half of the total biomass was contributed by small oligochaete and polychaete worms, with the ragworm *Hediste diversiclor* contributing another 24% of the total. The anemone *Nematostella vectensis* was excluded from the calculations as the species is not considered an important bird prey item.

11.0 Discussion

11.1 The structure of the discussion is based around the Common Standards Monitoring guidance for Lagoons (JNCC, version August 2004). Lagoons are areas of shallow coastal salt water, wholly or partially separated from the sea by sandbanks, shingle or rocks. Five main types have been identified in the UK and the lagoon at Brownsea is considered 'sluiced'.

11.2 The site attributes that are monitored are *Extent, Extent of Water, Salinity Regime, Biotope Composition*, *Extent of representative notable biotopes, Distribution of biotopes, Species composition of representative biotopes* and *Species Population measures*.

11.3 **Overall extent and extent of water in feature**

The overall extent of the lagoon is bounded by a sea wall which appears not have changed over the survey period 2002-2009, or indeed for many years. The area of water in the lagoon measured as 17.8ha in May/June 2008 will represent an almost maximum extent, as in the springtime the water levels are raised via the sluices to provide a degree of isolation for bird nesting on the islands within the lagoon. In the autumn the sluices are opened to increase the area of mudflats available for feeding waterfowl. There were areas of mudflat visible around the edges of the lagoon when sampled in November 2009. There had been rain previously and overall the water levels and area of lagoon was considered greater than the 60% water retention threshold considered necessary for maintaining favourable condition (JNCC, 2004).

11.4 **Salinity regime**

A gradient of salinity was observed between the western and south eastern corner of the lagoon. Overall the salinity gradient observed of 26-29ppt is well within the range 16-35ppt, outside which the Scheduled starlet sea anemone *Nematostella vectensis* will become moribund. It is suggested that data on the salinity of the lagoon be obtained on a seasonal or monthly basis to establish whether there any extended periods of hypo or hypersalinity.

11.5 Biotope composition

There has not been any previous biotope study of the lagoon on Brownsea Island. Overall the assemblages in the lagoon matched closely the biotopes **ENLag.Veg** and **ENLag.IMS.Ann,** described above. The former biotope is subjected to greater fluctuation as macroalgal levels rise and fall seasonally and drift around the lagoon when they become dislodged at the end of the growing period. The muddy sand biotope is likely to be more stable, although potentially vulnerable to salinity regime.

11.6 Extent of biotopes

The lagoon has a fixed wall around the edges so there is little room for expansion. Potentially, the biotope areas could be reduced by natural succession of the reed beds on the western side of the lagoon or through saltmarsh development and accretion. Very little is known of any cyclical changes in lagoon biotopes.

11.7 Species composition of notable biotopes and sub-features,

The lagoon at Brownsea Island is of considerable interest and although surveyed by Seasearch in 2008, its exclusion from previous lagoon surveys across the country in the 1980s and 1990s is surprising and regrettable. The site has very high abundances of typical lagoonal species, that are either of international importance, nationally scarce or uncommon such as *Nematostella vectensis* and *Ventrosia ventrosa.* These species are restricted to lagoon habitats in Britain. The lagoon cockle *Ceratsoderma glaucum* is mainly found in lagoons or in sheltered areas of estuaries. A comparative analysis of the invertebrate assemblage of Brownsea Lagoon and other UK lagoons, using Bray-Curtis similarity indices, places the site within the same category as lagoons currently designated as Special Areas of Conservation (Bamber, in prep. Appendix 16). A small-scale survey of the lagoon was carried out in September 2008 by SeaSearch who estimated densities of *Nematostella* to be 1000-1500 per m^2, which is of the same order of magnitude as the current survey. The densities of invertebrate species in the lagoon were found to be considerably higher than large areas of Poole Harbour, and thus must be an important food resource for waterfowl including the black-tailed godwit and avocet. The abundance of the lagoon amphipod *Corophium insidiosum* may be of particular importance to avocets, as the species is known to feed in areas of Poole Harbour where *Corophium volutator* is common. It was noted that the invasive Japanese seaweed *Sargassum muticum* was present in small quantities in the vicinity of the sluice. If the salinity of the lagoon was to rise appreciably then one might expect an increase in the population of this species. Whether lagoonal invertebrates would colonise the fronds is unknown, although they are likely to disappear should the lagoon become more saline. The non-native polychaete worm *Desdemona ornata* was also recorded in the lagoon. This species is a relatively recent introduction to the regional marine fauna and appears to be benign in littoral habitats. It has been found in Poole Harbour during this current survey and also in other lagoons in England (Bamber, pers.comm.).

11.8 Biomass and bird food availability

At only 17.8ha, the lagoon might appear to be of limited importance for wintering waterfowl. However the high numbers of birds recorded on the site is likely to be partly attributed to the high density and biomass of the invertebrates within the lagoon sediments. Energy availability for Brownsea lagoon exceeded requirements for all bird species except for oystercatchers, when the species energy requirements were considered separately. However when the energy requirements for all species was considered together, as such a large number of birds are present in a small area, the energy requirements are 2.6 times greater than the energy availability, suggesting that competition for resources in this area must be fierce and supplemented with feeding in the harbour. Owing to the shallow waters, food is accessible to most bird species throughout the tidal cycle, providing resources when the remainder of the harbour sediments are covered at high tide. Because of access difficulties, the sediments in the middle of the lagoon were not sampled. It would be useful to do so to confirm the biomass estimate across the whole site. It would also be valuable to gain an estimate of winter mortality of invertebrates and production throughout the summer. This research is important considering the likely reconstruction of the lagoon habitat elsewhere in the Poole harbour environs, should it be lost through sea level rise.

12.0 Conclusion

The lagoon is of high nature conservation importance and currently in good ecological condition. Its international importance should perhaps be more widely known amongst Poole Harbour stakeholders. Plans to reconstruct the lagoon or create new lagoon habitat in the harbour should be investigated considering the vulnerability of this site, and other intertidal bird feeding areas in the harbour. Seasonal changes in the lagoon with respect to algal cover, nutrient levels and salinity would also be extremely useful.

13.0 Acknowledgements

The authors would like to express their considerable thanks and gratitude to Andrew Woods and colleagues of the RNLI who made this survey possible, and also to Poole Harbour Commissioners for their support. We are also grateful for data made available by the Environment Agency Geomatics Group and Dorset Office, especially Suzy Witt, and Richard Caldow and Sue Burton of Natural England. Special thanks also to Frank Elston of Dorset Workboats, Chris Thain of Dorset Wildlife Trust for access to Brownsea Island Lagoon, John Humphreys and Matt Harris for boatwork and fieldwork, Dr Roger Bamber for help with fieldwork and species identification. Special thanks to the Field, Laboratory and Research Assistants Sam Cottingham, Reece Woolgar, Jane Wilkin, Sarah Kerr, Steven Colledge, Christopher Butler, Stephen Treby, David Bray, Christopher Ranford, Michael Strowger, Chris Moody, Elena Canterelo.

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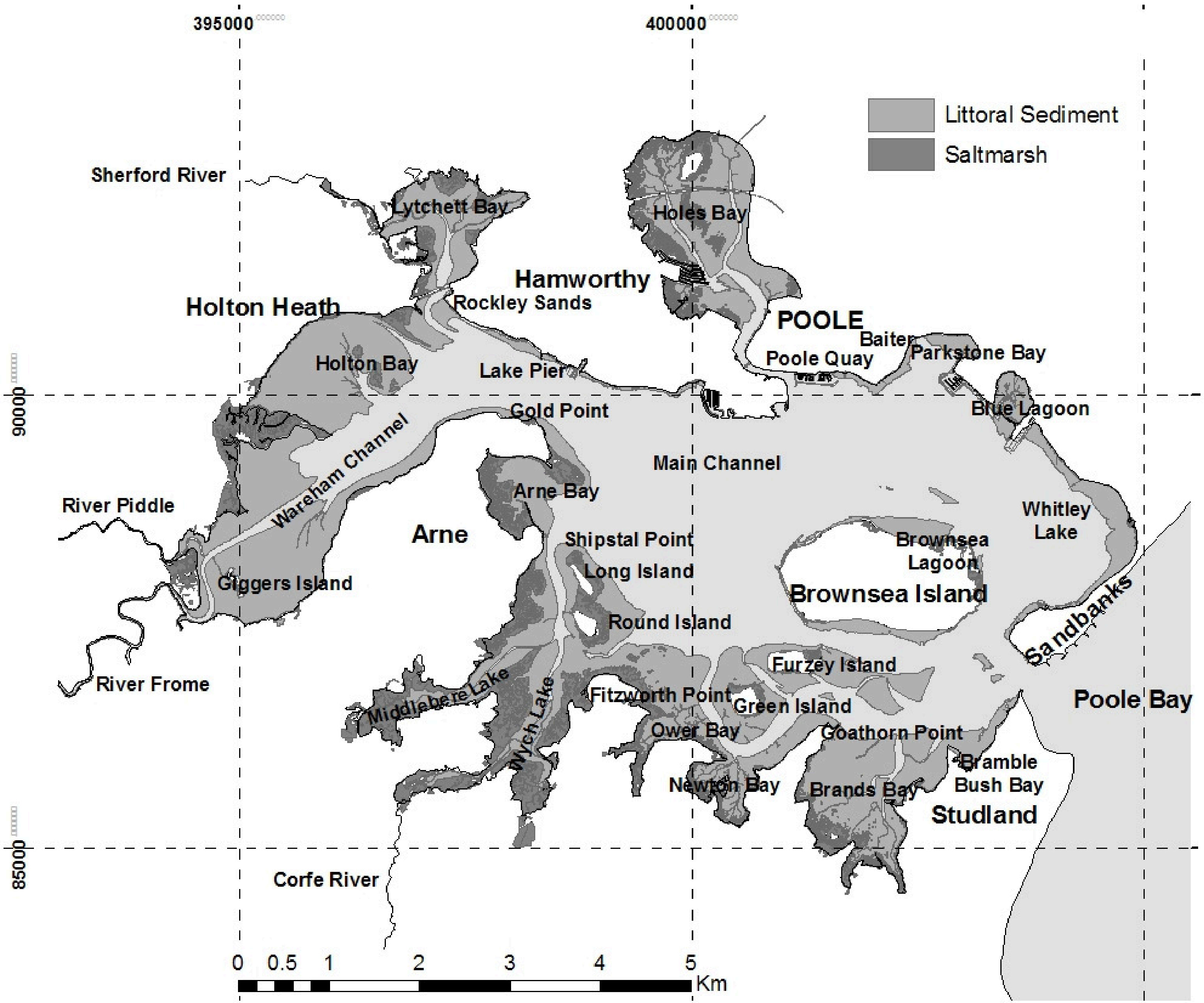


Figure 1. Map of Poole Harbour.

Saltmarsh & Sediment data from East Dorset Habitat map © Environment Agency, 2010

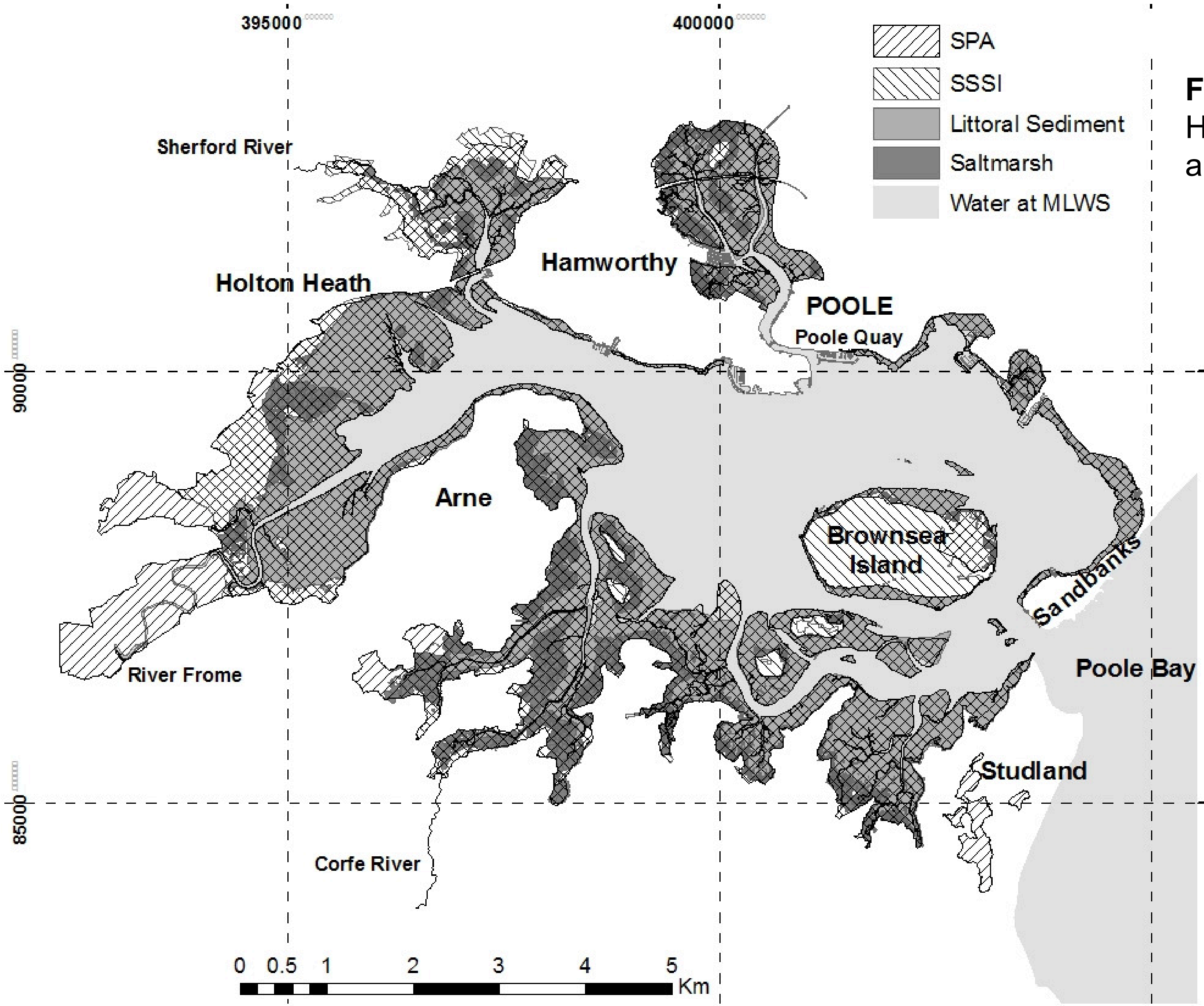


Figure 2. Map of Poole Harbour showing SSSI and SPA boundaries.

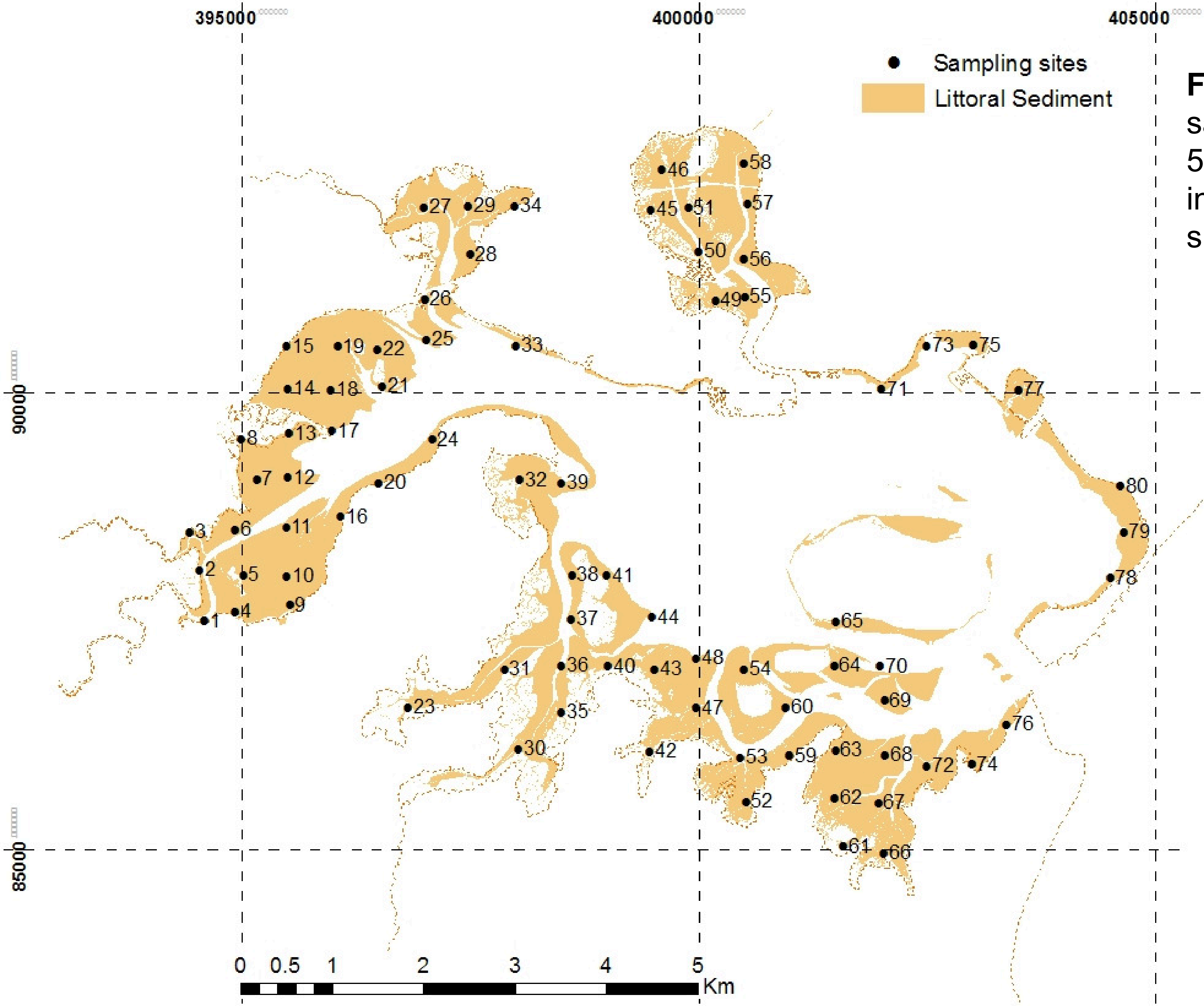


Figure 3. The 80 sampling stations on 500m x 500m grid used in both 2002 and 2009 survey.

Sediment data from East Dorset Habitat map © Environment Agency, 2010

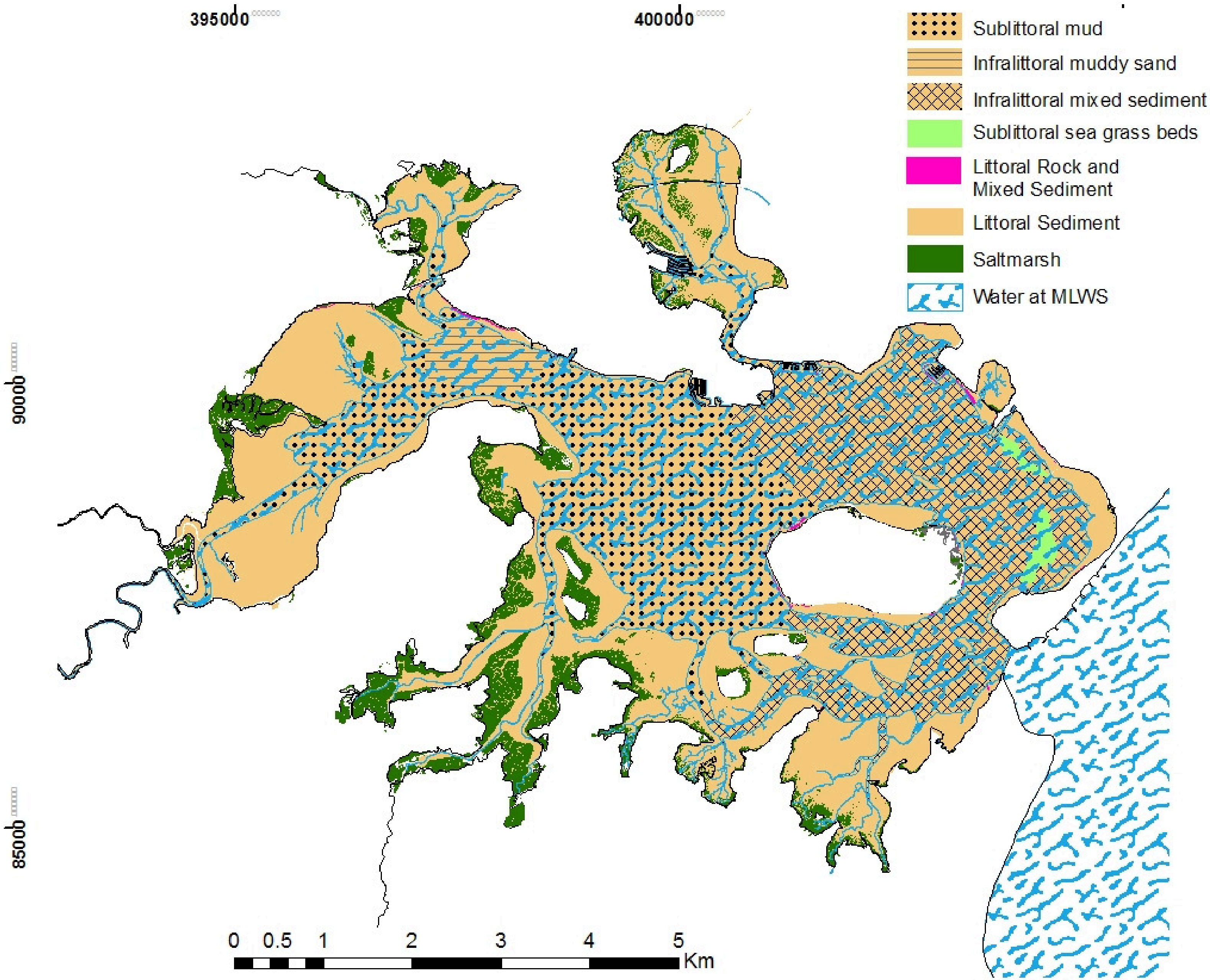


Figure 4. Extent and distribution marine habitats in Poole Harbour. See text for data sources.

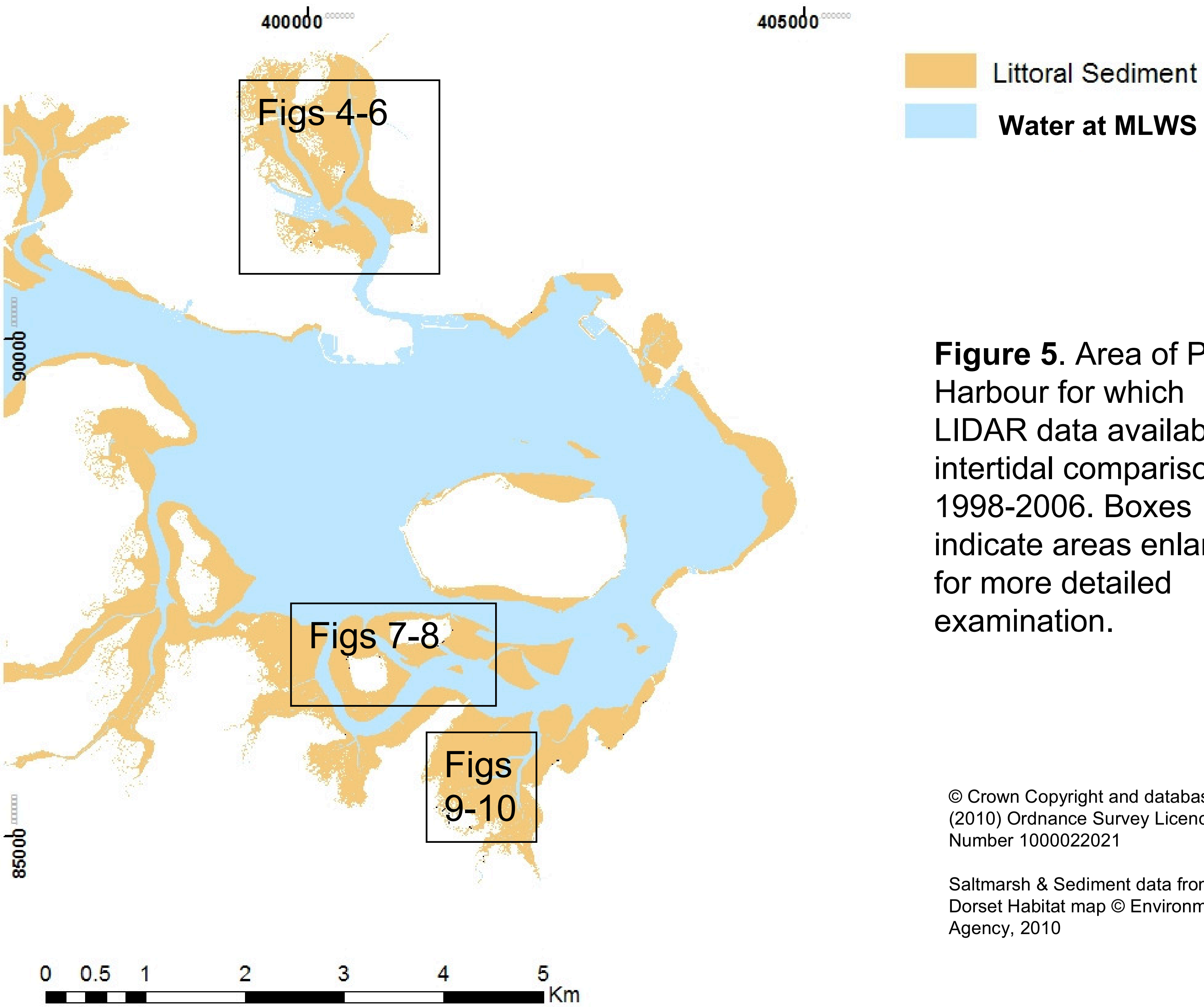


Figure 5. Area of Poole Harbour for which LIDAR data available for intertidal comparison 1998-2006. Boxes indicate areas enlarged for more detailed examination.

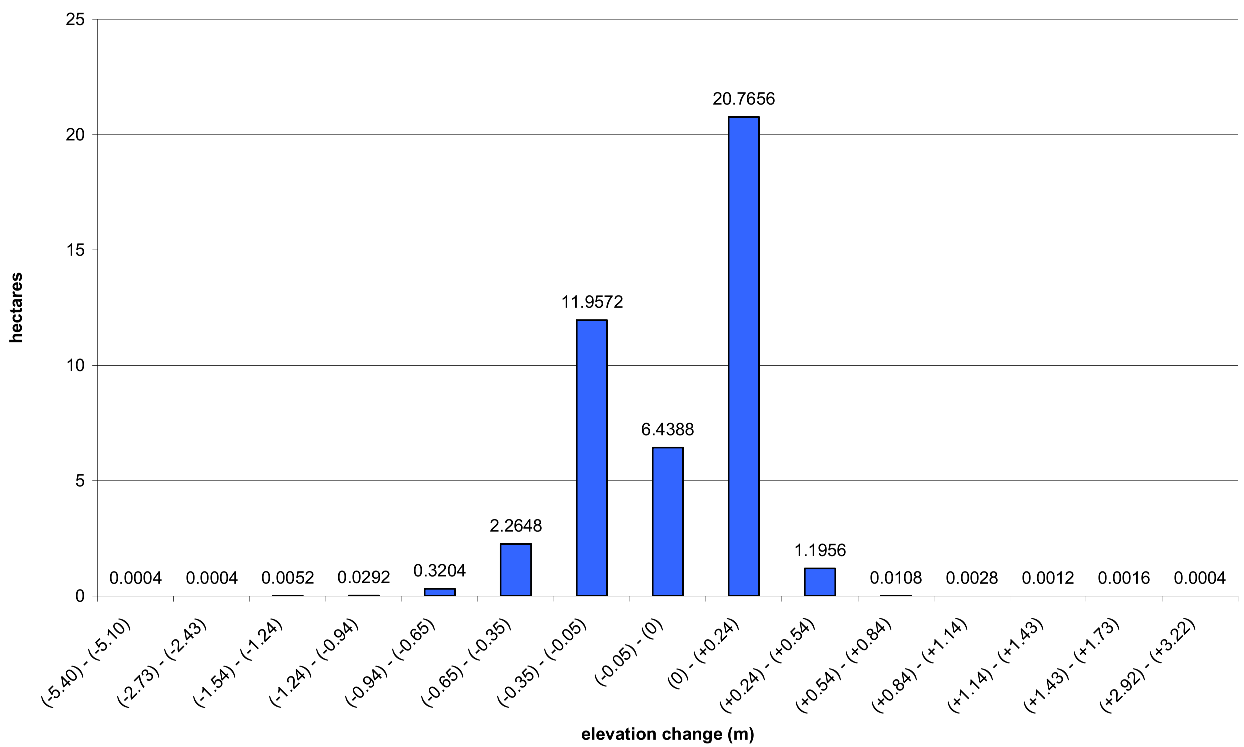


Figure 6. Histogram showing elevation range changes 1998-2006 of intertidal areas from LIDAR data.
The histogram shows that 21.02 ha were eroded and 21.98 ha went through a process of accretion.

Hectares (ha)	Elevation change ranges
0.0004	(-5.40) - (-5.10)
0.0004	(-2.73) - (-2.43)
0.0052	(-1.54) - (-1.24)
0.0292	(-1.24) - (-0.94)
0.3204	(-0.94) - (-0.65)
2.2648	(-0.65) - (-0.35)
11.9572	(-0.35) - (-0.05)
6.4388	(-0.05) - (0)
20.7656	(0) - (+0.24)
1.1956	(+0.24) - (+0.54)
0.0108	(+0.54) - (+0.84)
0.0028	(+0.84) - (+1.14)
0.0012	(+1.14) - (+1.43)
0.0016	(+1.43) - (+1.73)
0.0004	(+2.92) - (+3.22)

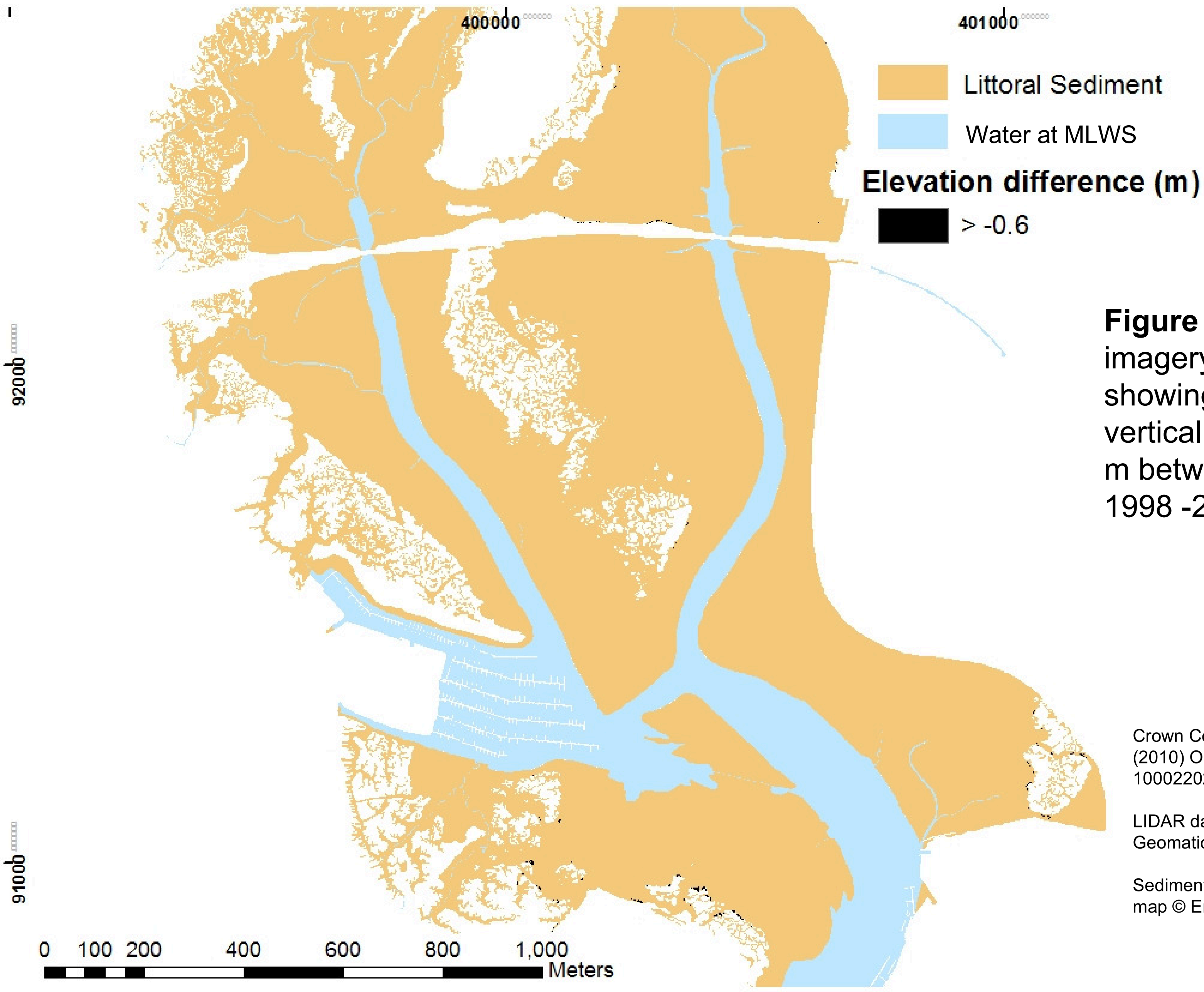


Figure 7. LIDAR imagery of Holes Bay showing variation in vertical elevation > -0.6 m between surveys in 1998 -2006.

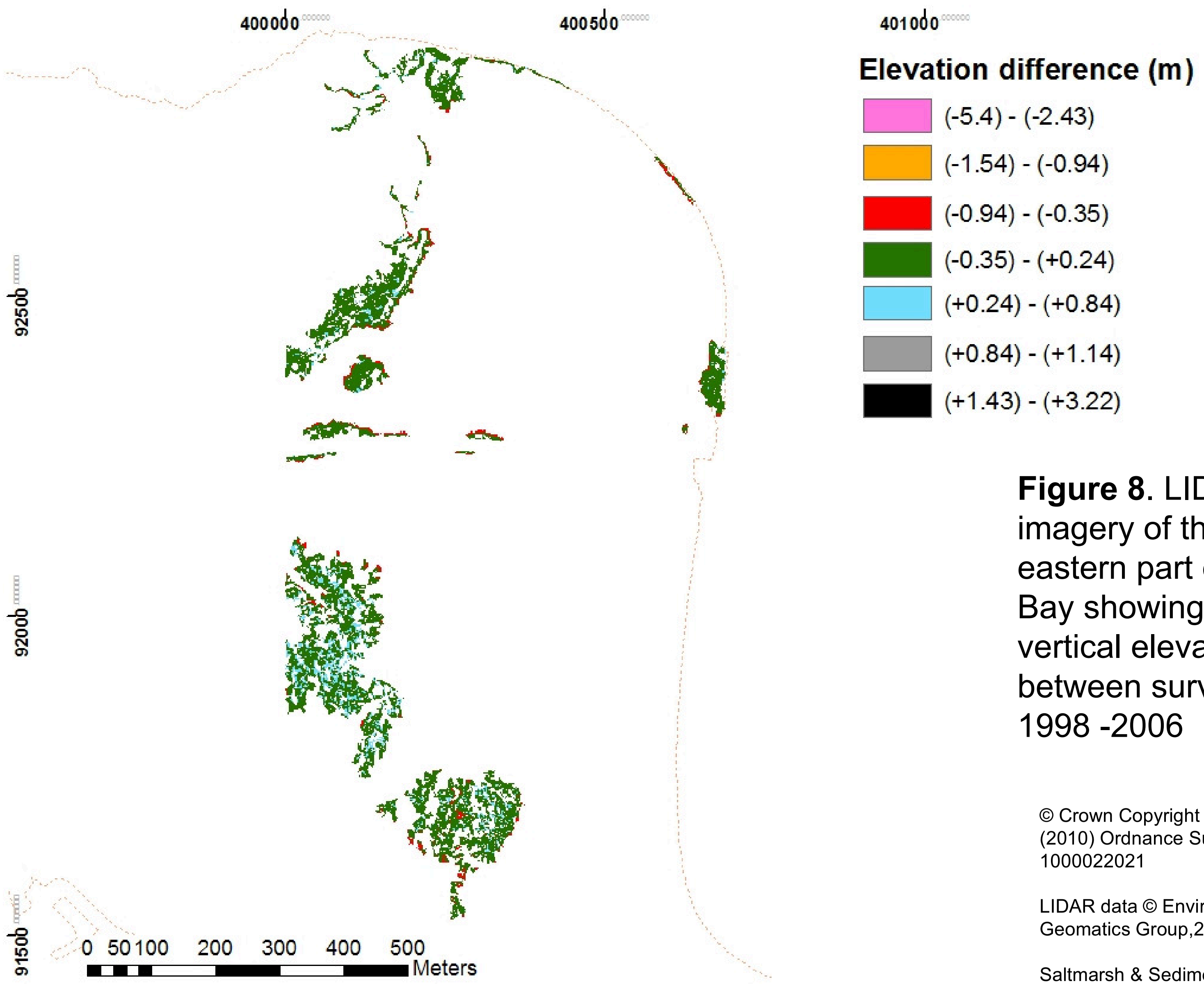


Figure 8. LIDAR imagery of the northern eastern part of Holes Bay showing variation in vertical elevation between surveys in 1998 -2006

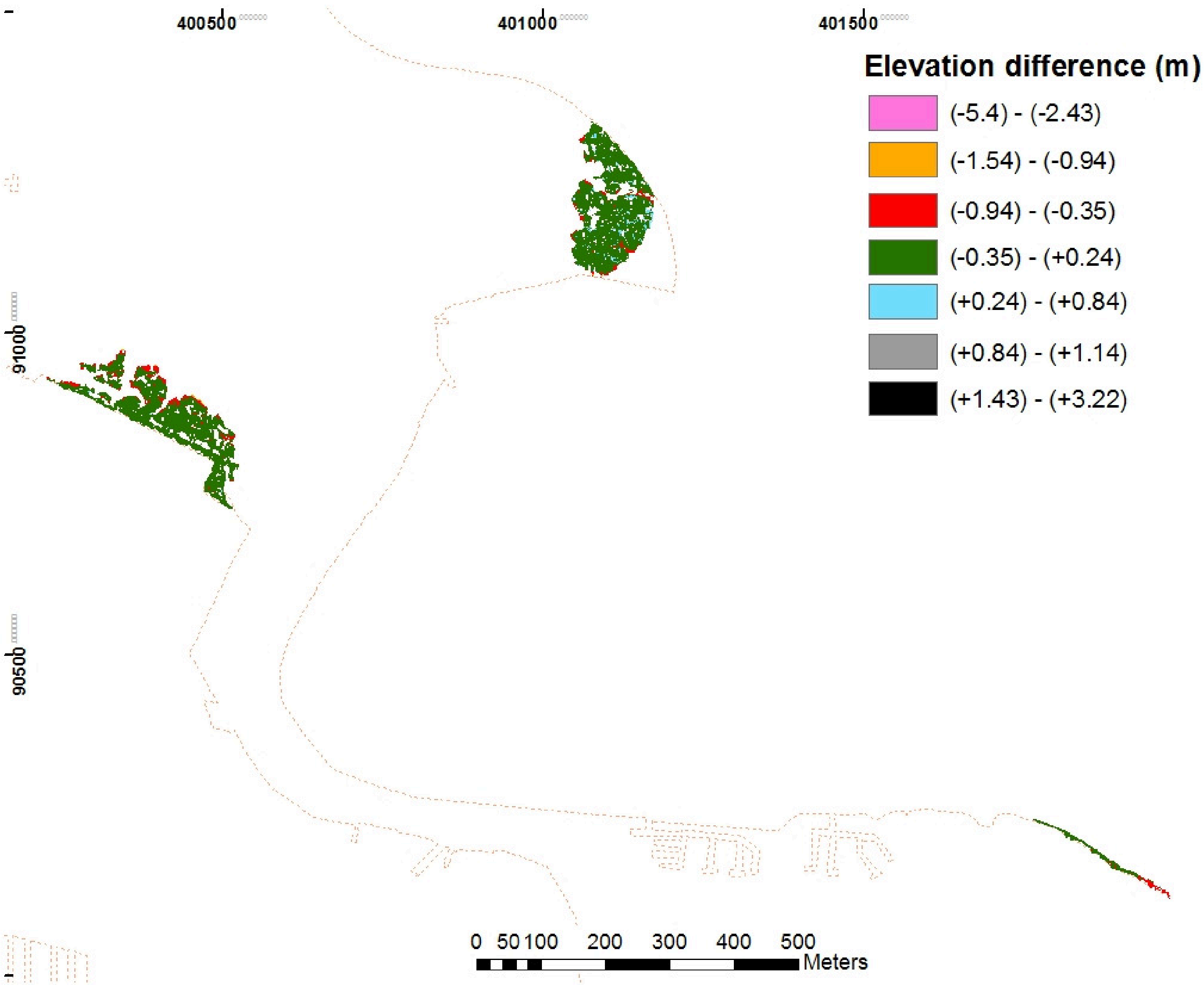


Figure 9. LIDAR imagery of the southern part of Holes Bay showing variation in vertical elevation between surveys in 1998 -2006

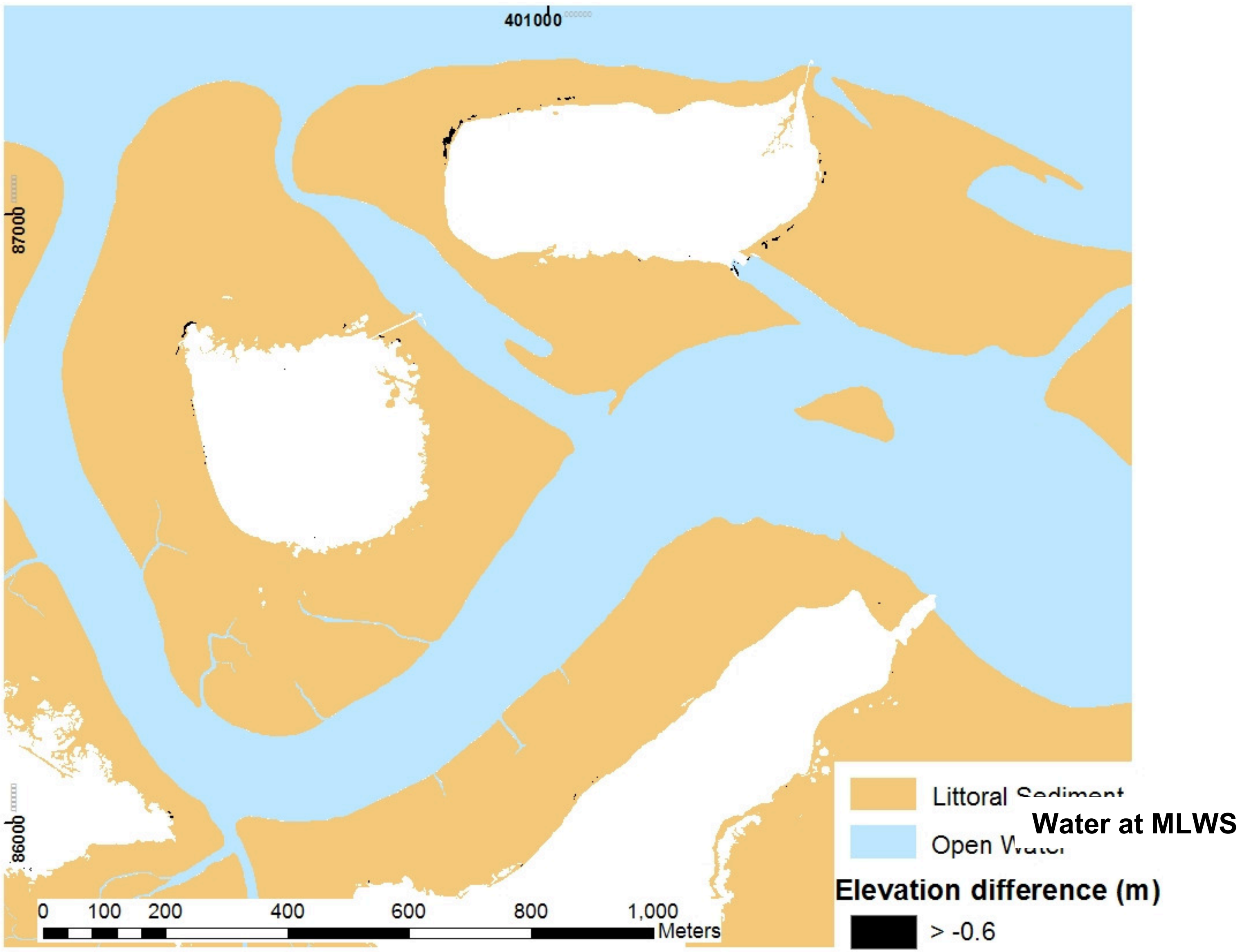


Figure 10. LIDAR imagery of Furzey and Green Islands showing variation in vertical elevation > -0.6 m between surveys in 1998 -2006.

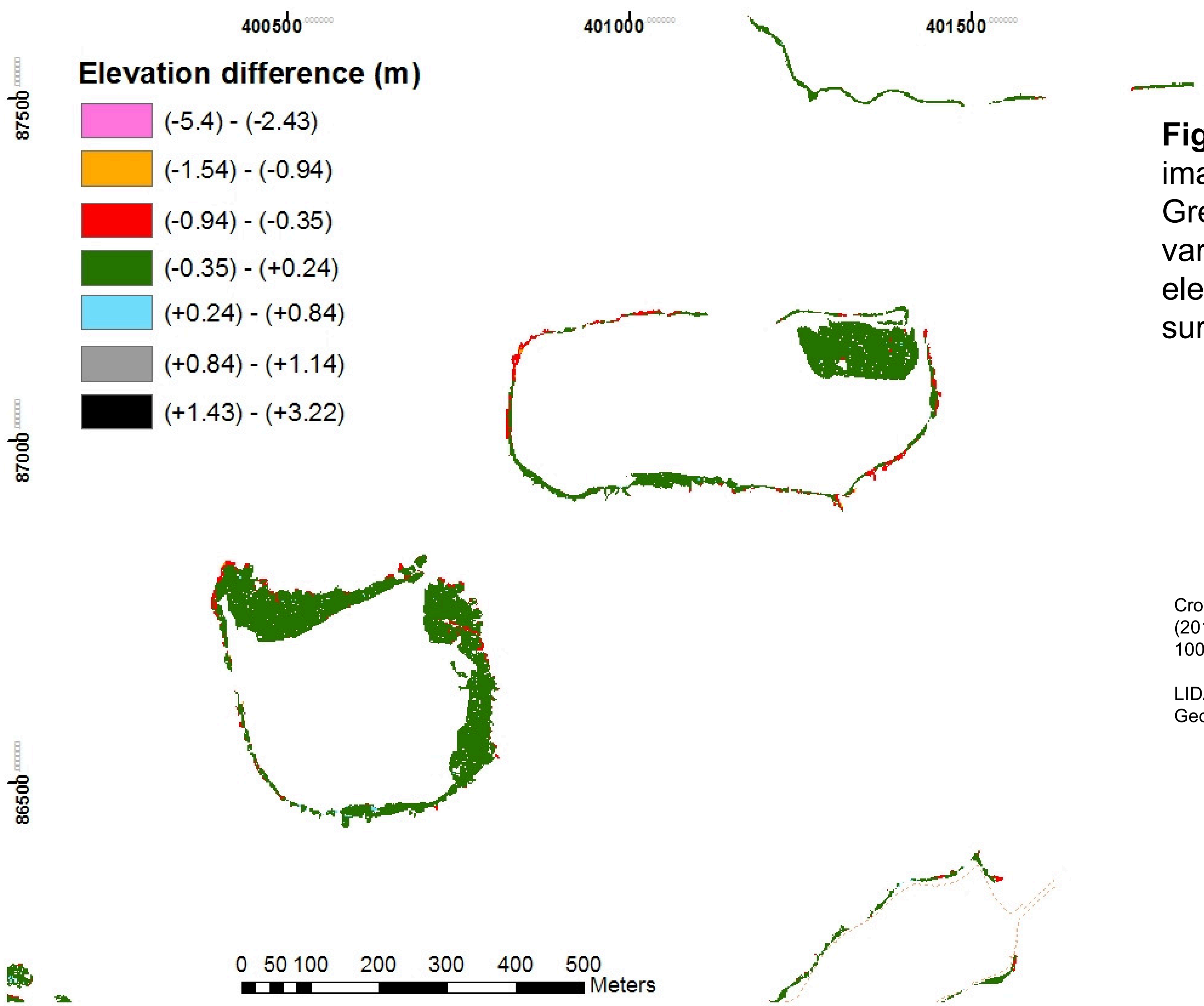


Figure 11. LIDAR imagery of Furzey and Green Islands showing variation in vertical elevation between surveys in 1998 -2006

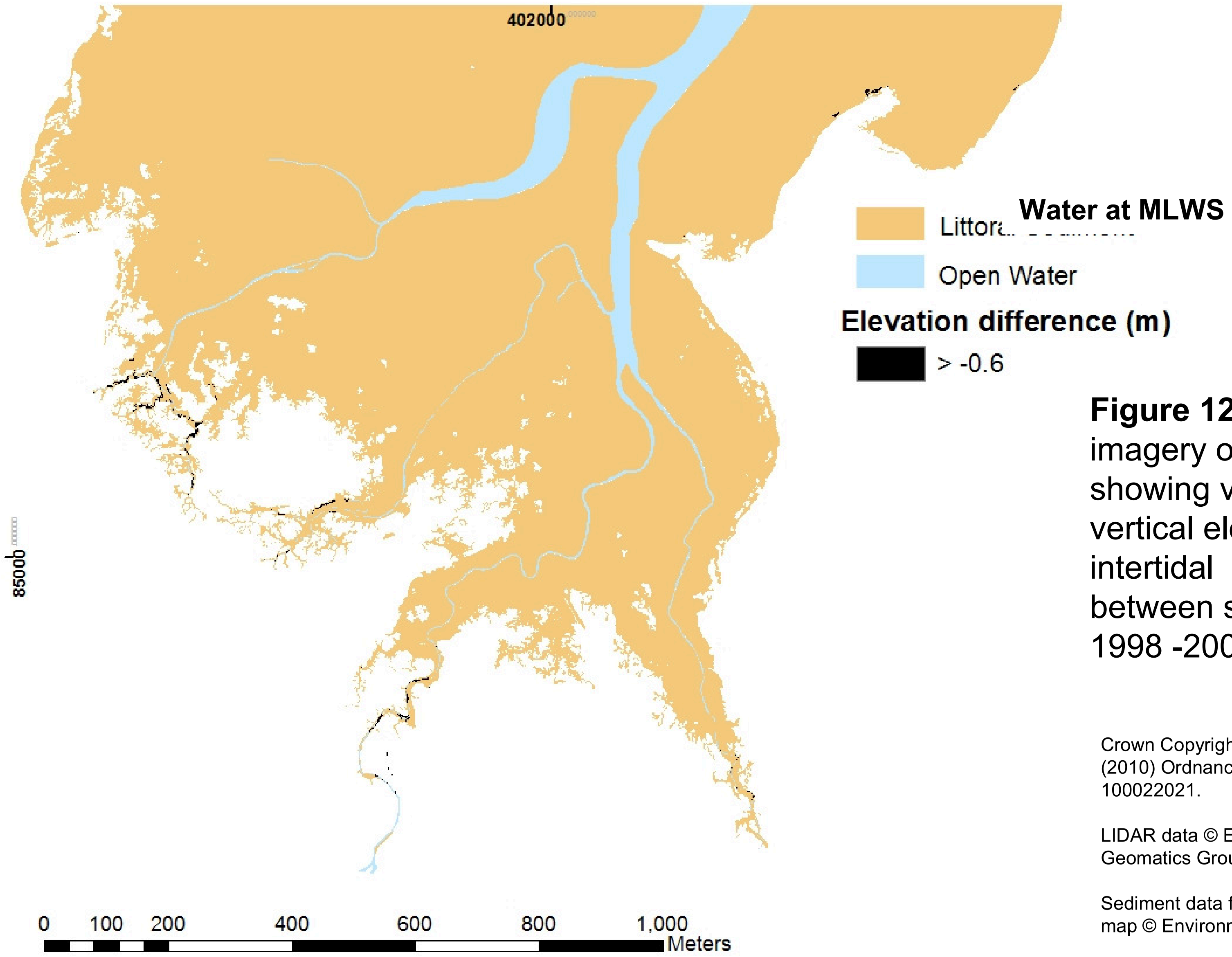


Figure 12. LIDAR imagery of Brands Bay showing variation in vertical elevation in intertidal > -0.6 m between surveys in 1998 -2006.

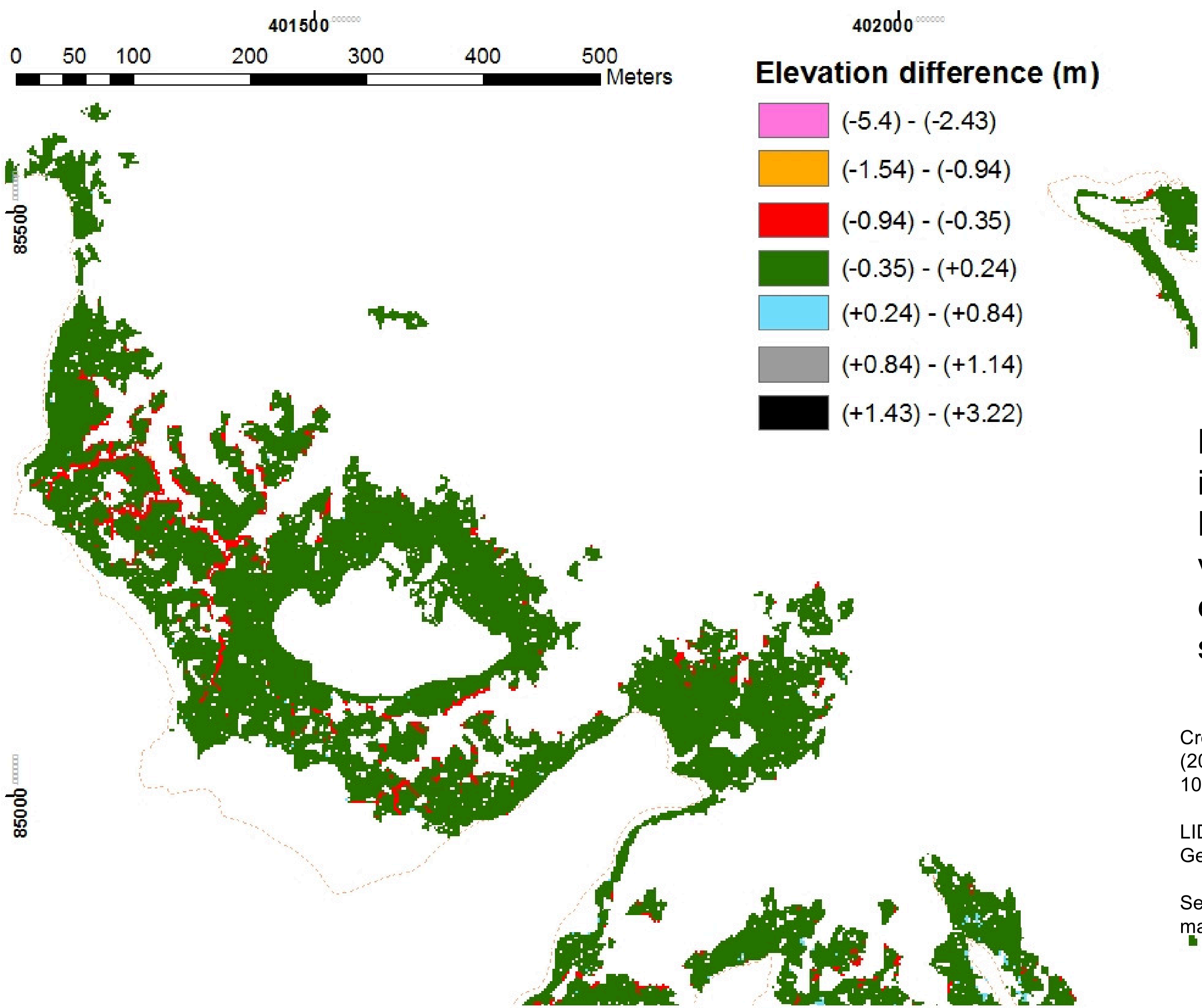


Figure 13. LIDAR imagery of part of Brands Bay showing variation in vertical elevation between surveys in 1998 -2006

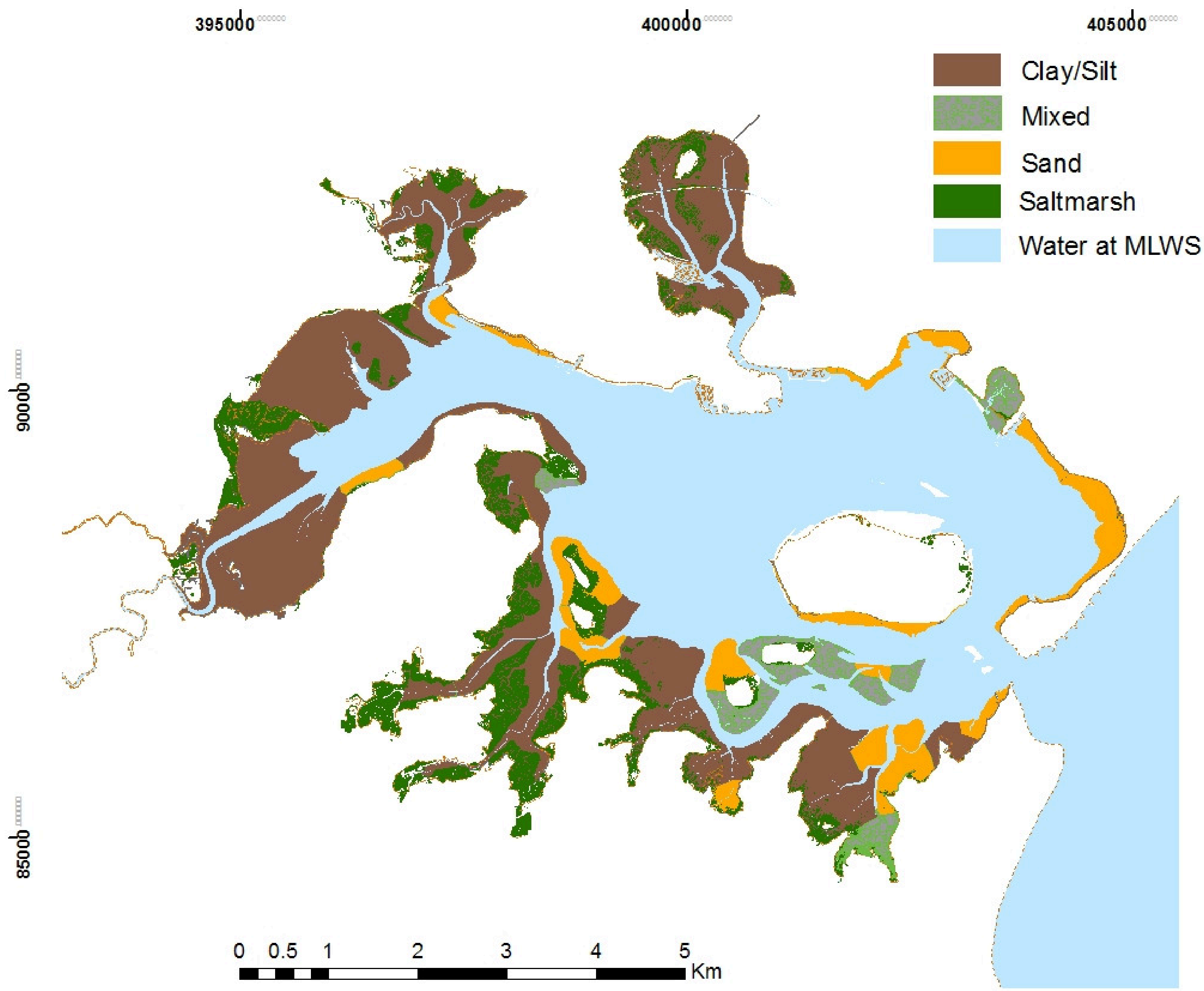


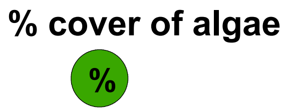
Figure 14. Distribution of sediments.
Clay/Silt: >45% of sample weight < 63 µm

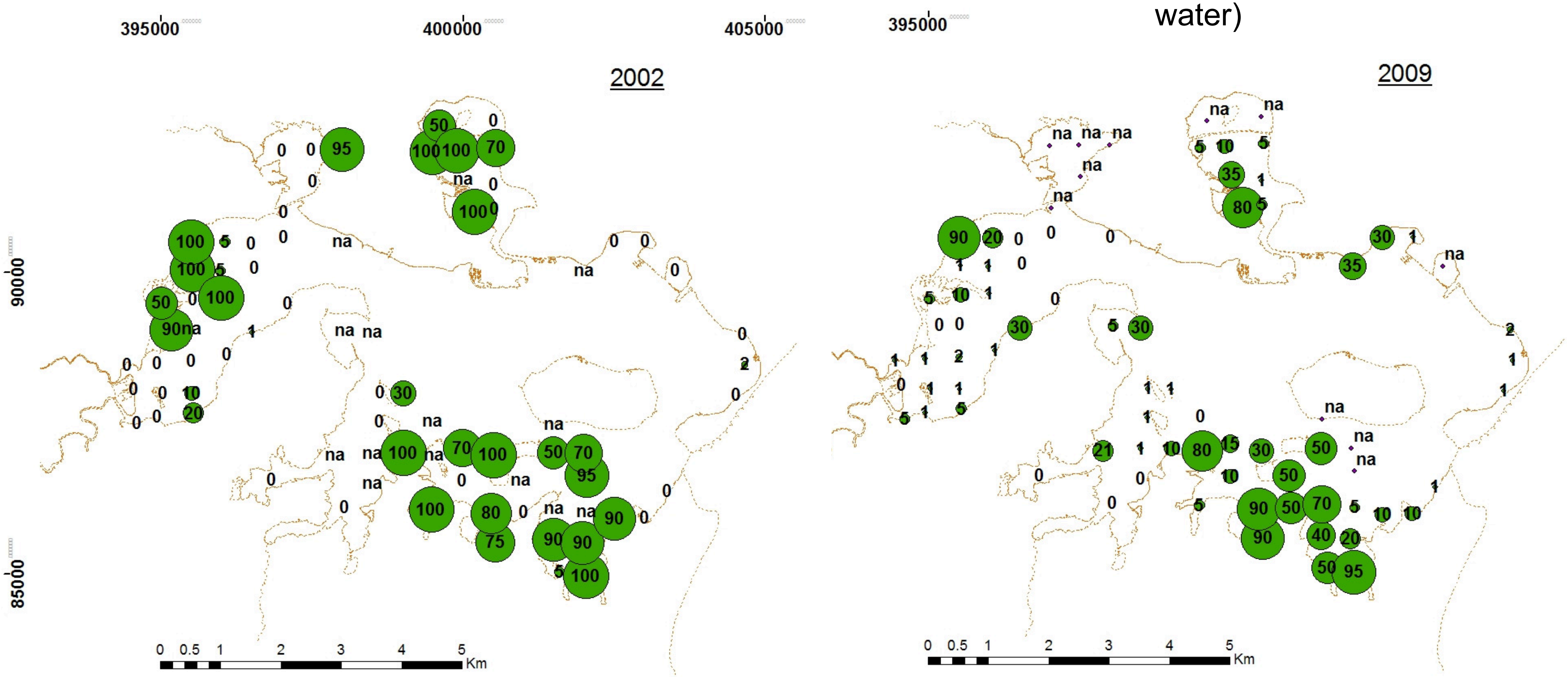
Sand: >45% of sample weight >125 µm

Mixed: >45% of sample weight 63-125 µm

Sediment data from East Dorset Habitat map © Environment Agency, 2010

Figure 15. Algal % coverage within 5m of sampling station in 2002 and 2009. (na = missing values due to survey at high water)





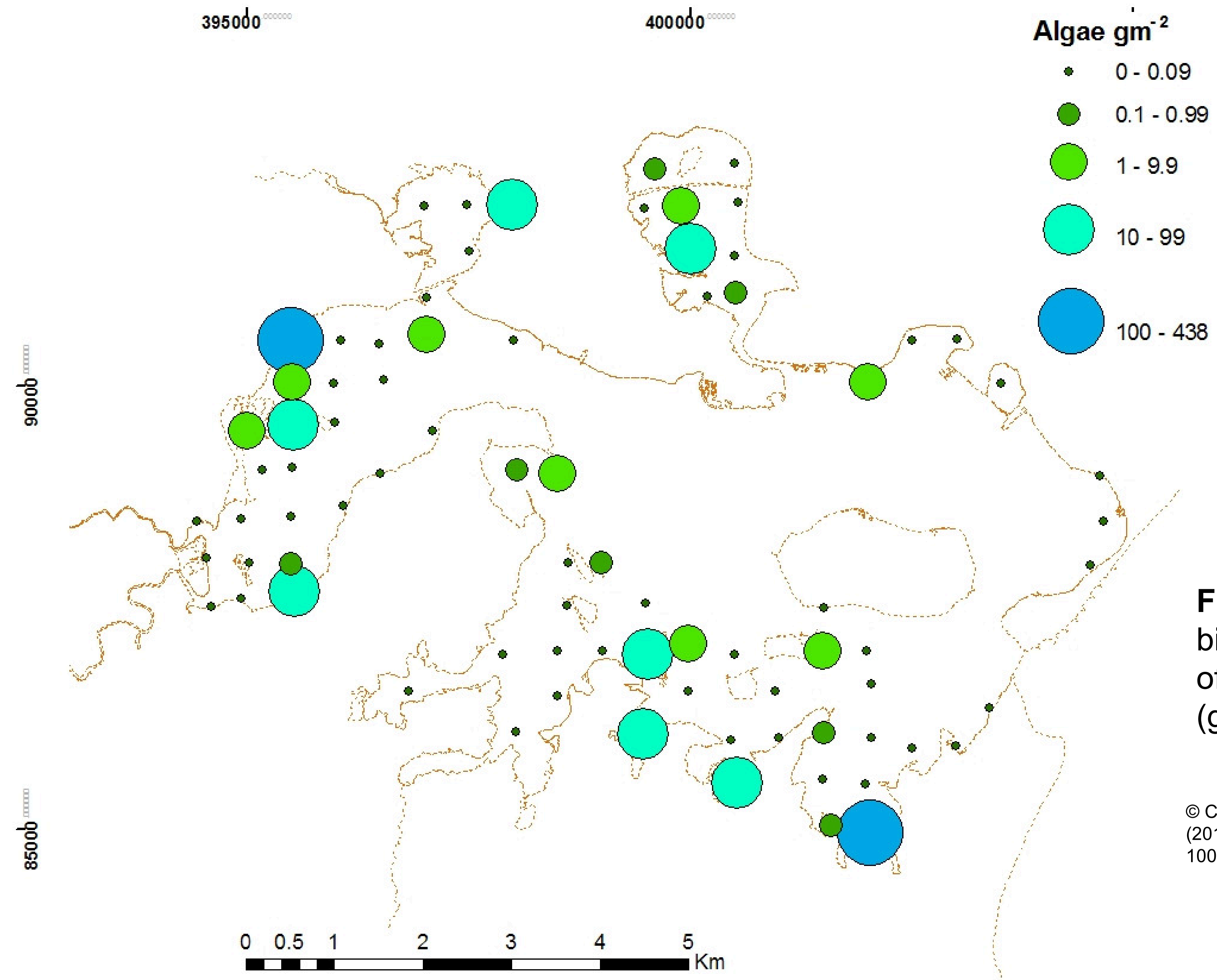


Figure 16. Algal biomass in 2009. Mean of 5 core samples (g m^{-2}).

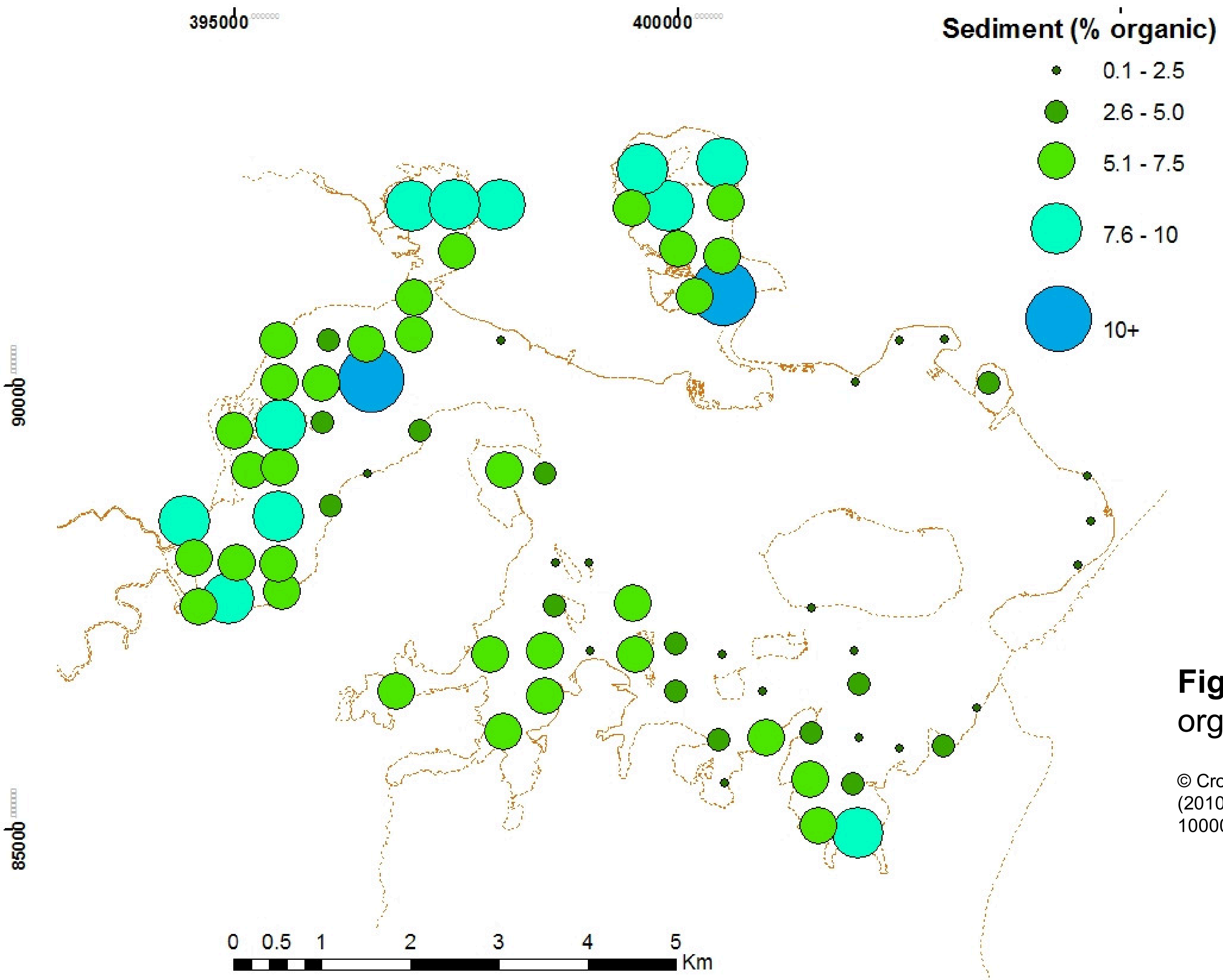


Figure 17. Sediment organic content (%).

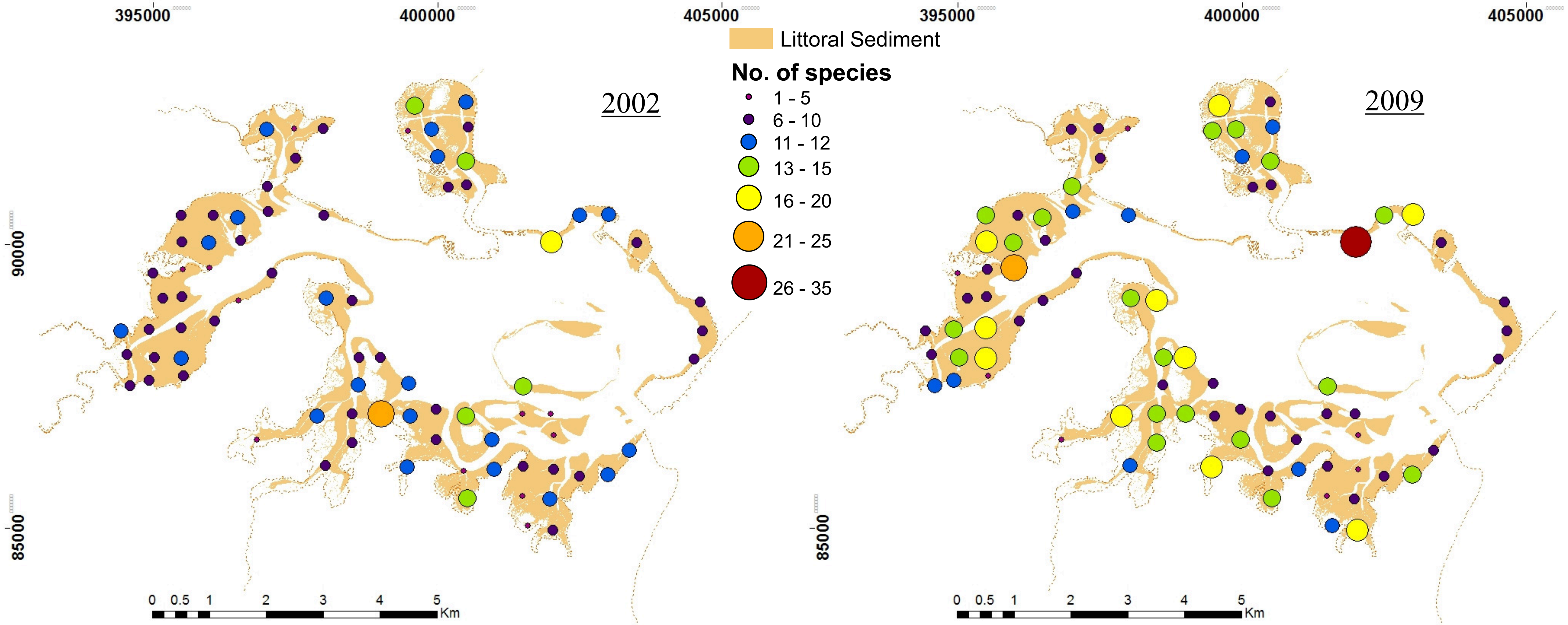


Figure 18. Total No. of species found at each sampling station in 2002 and 2009. A single core sample was taken in 2002, five core samples in 2009.

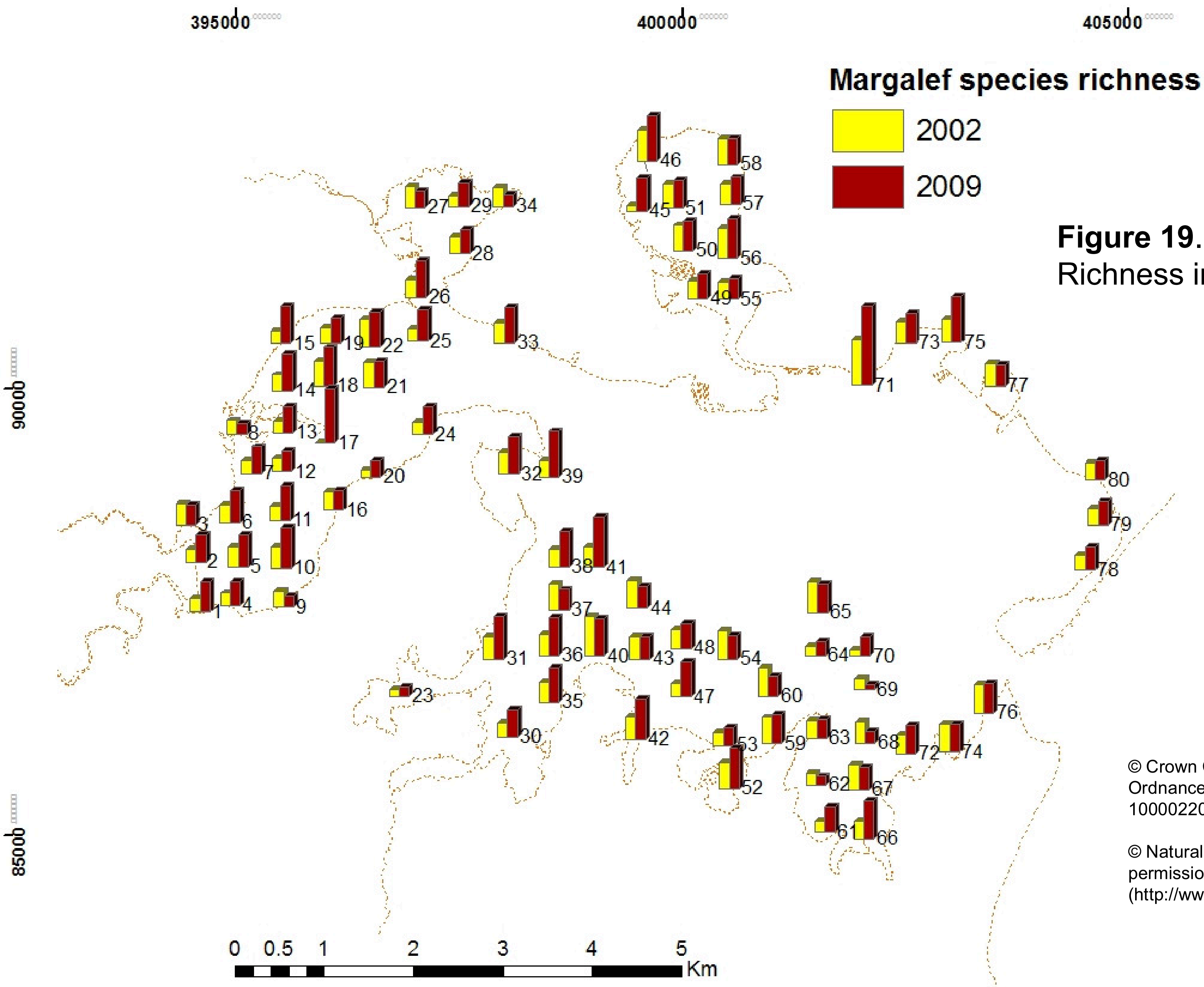


Figure 19. Margalef Species Richness in 2002 and 2009.

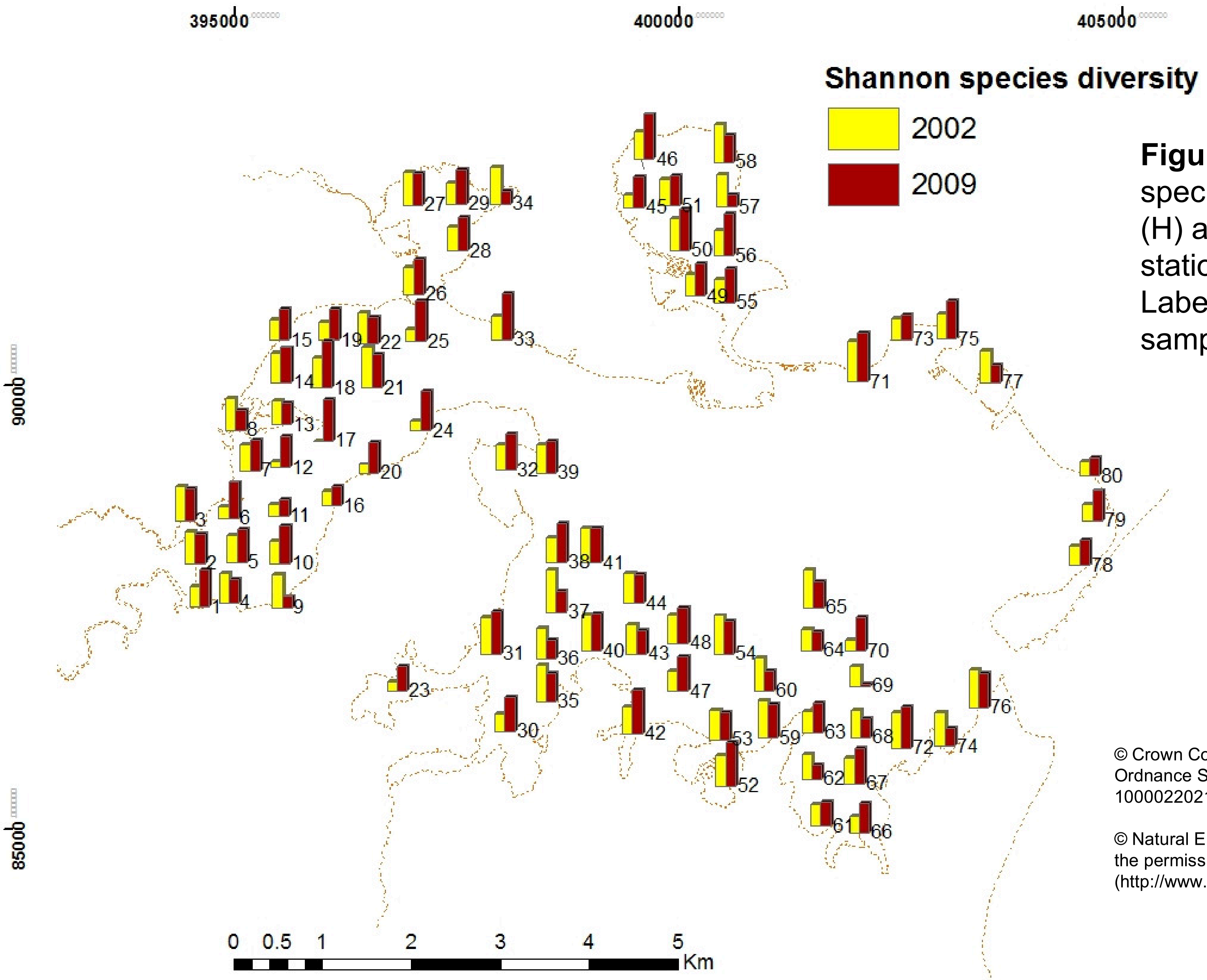


Figure 20. Shannon species diversity index (H) at each sampling station in 2002 and 2009. Labels represent the sampling site numbers.

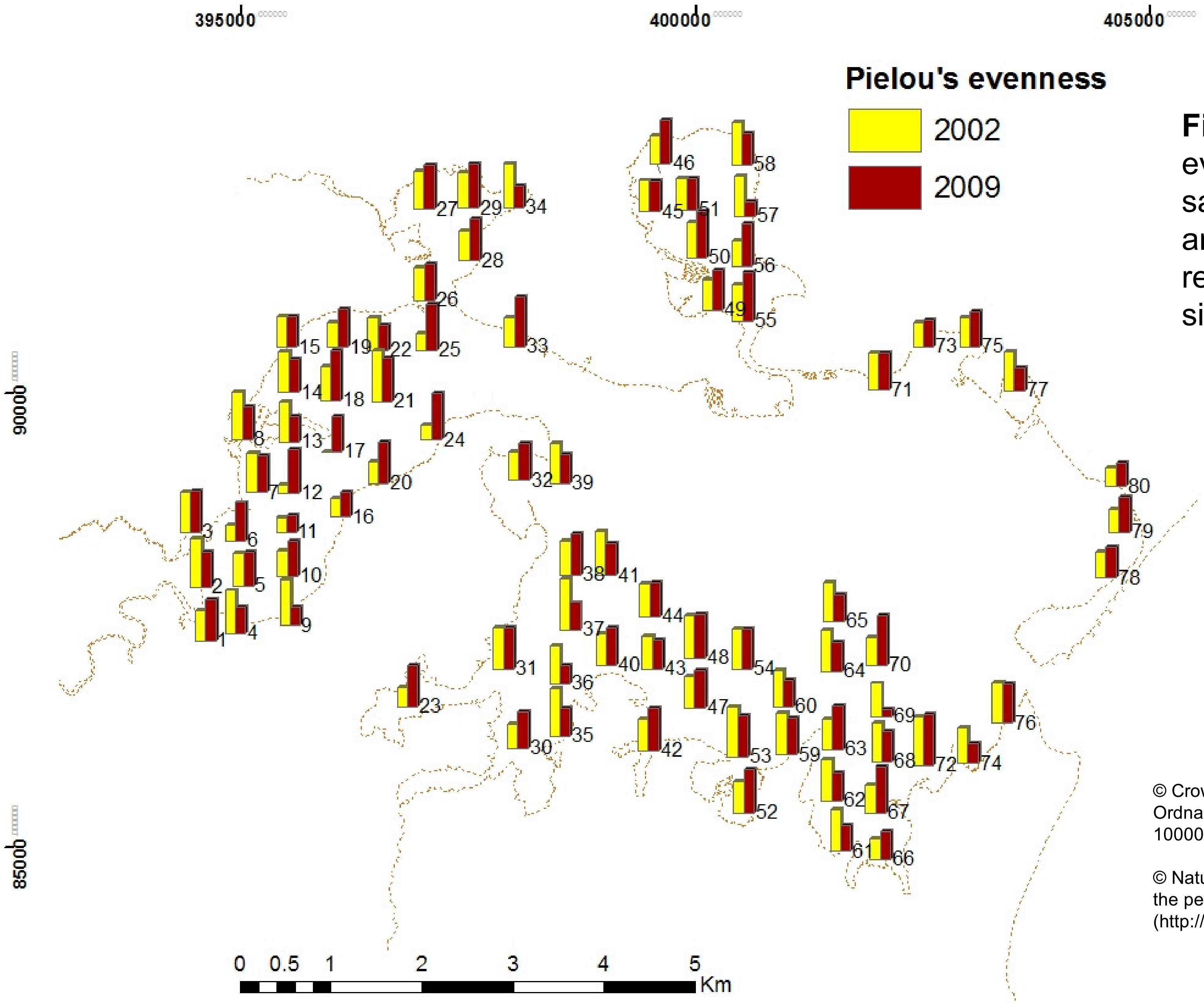


Figure 21. Pielou's evenness at each sampling station in 2002 and 2009. Labels represent the sampling site numbers.

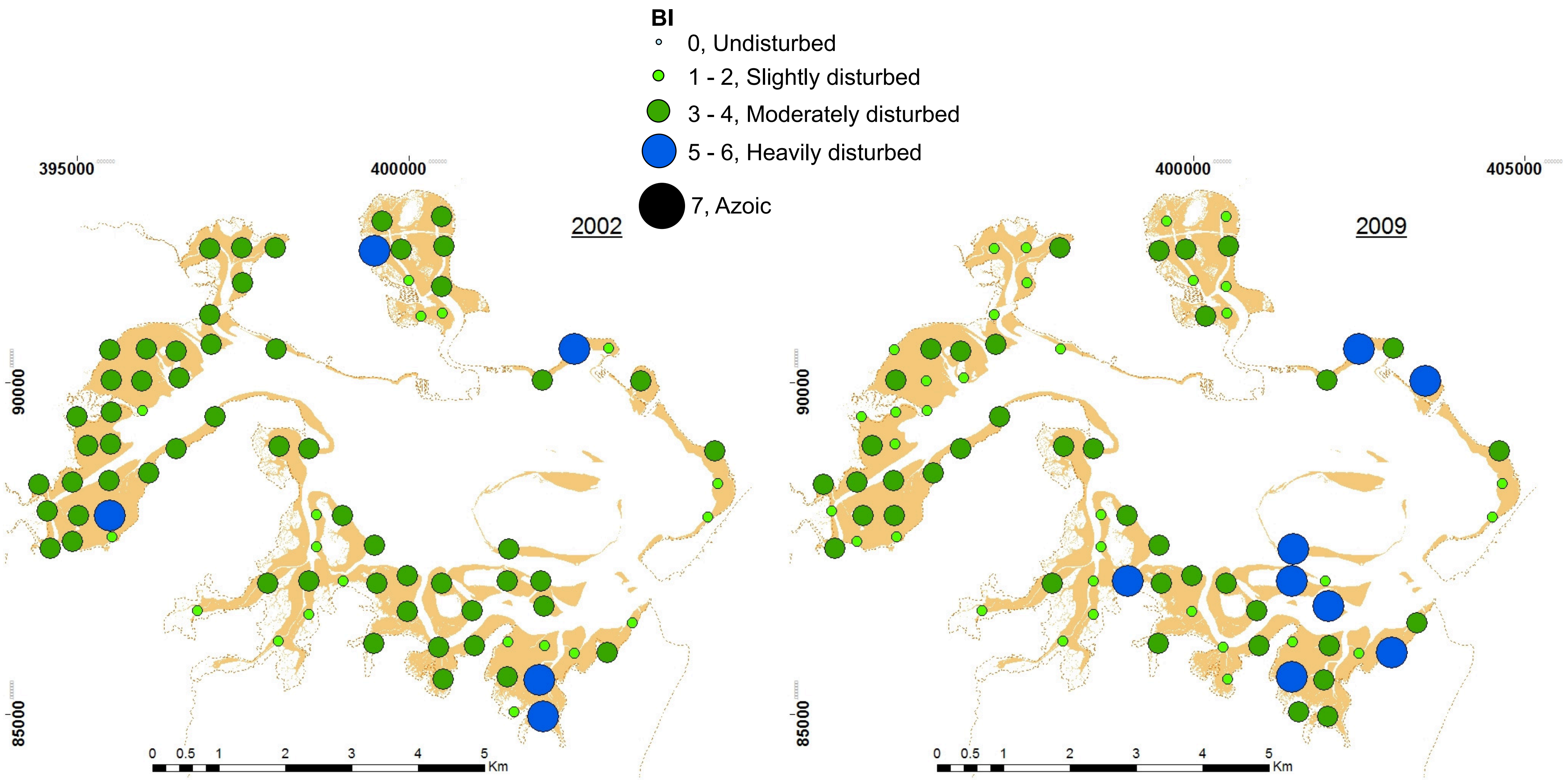
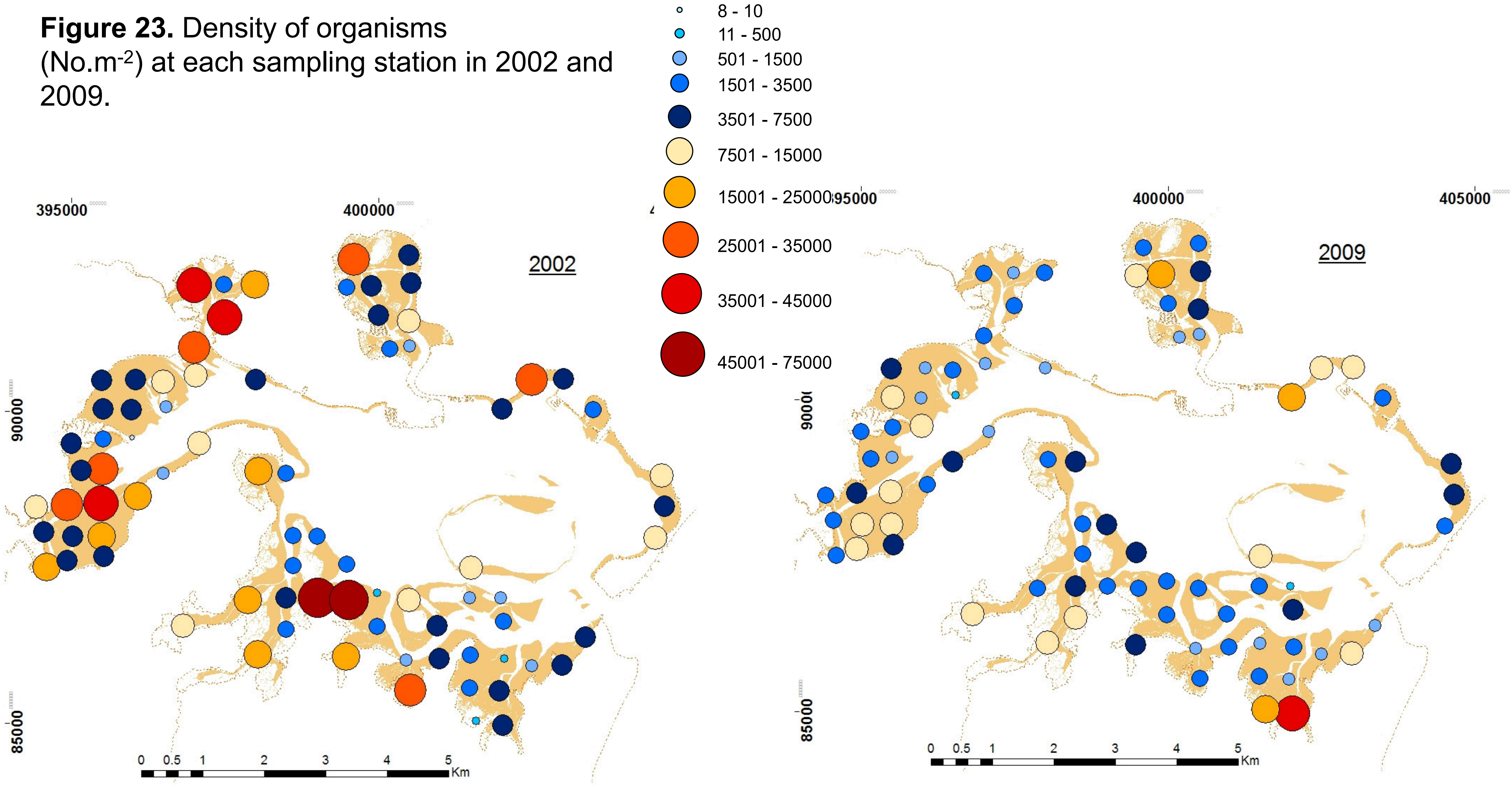


Figure 22. AZTI Marine Biotic Index (AMBI) at each sampling station in 2002 and 2009.

Figure 23. Density of organisms (No.m^{-2}) at each sampling station in 2002 and 2009.



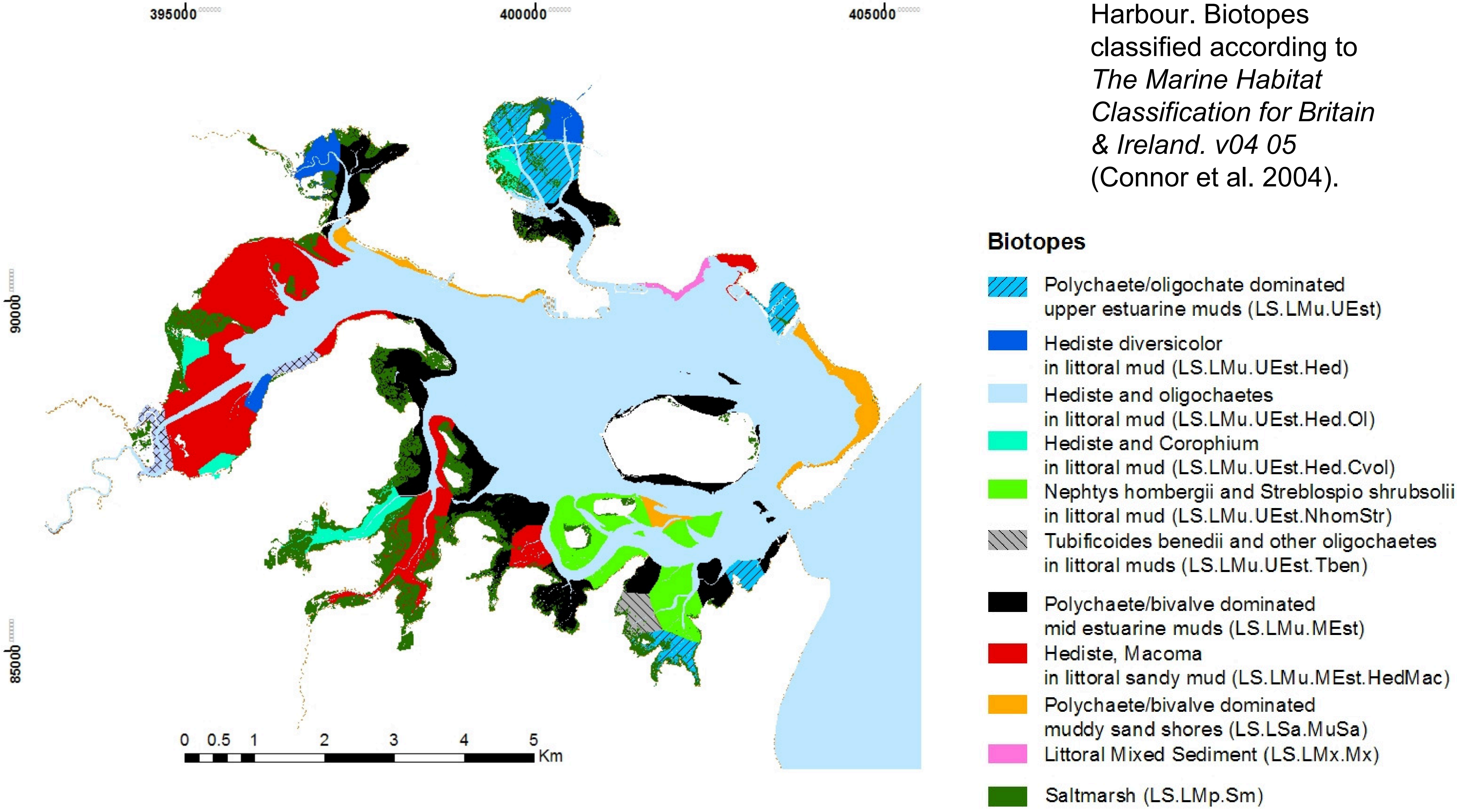


Figure 24. Intertidal biotopes of Poole Harbour. Biotopes classified according to *The Marine Habitat Classification for Britain & Ireland. v04 05* (Connor et al. 2004).

Figure 25. Mean biomass *Hediste diversicolor* at each sampling station in 2002 and 2009.

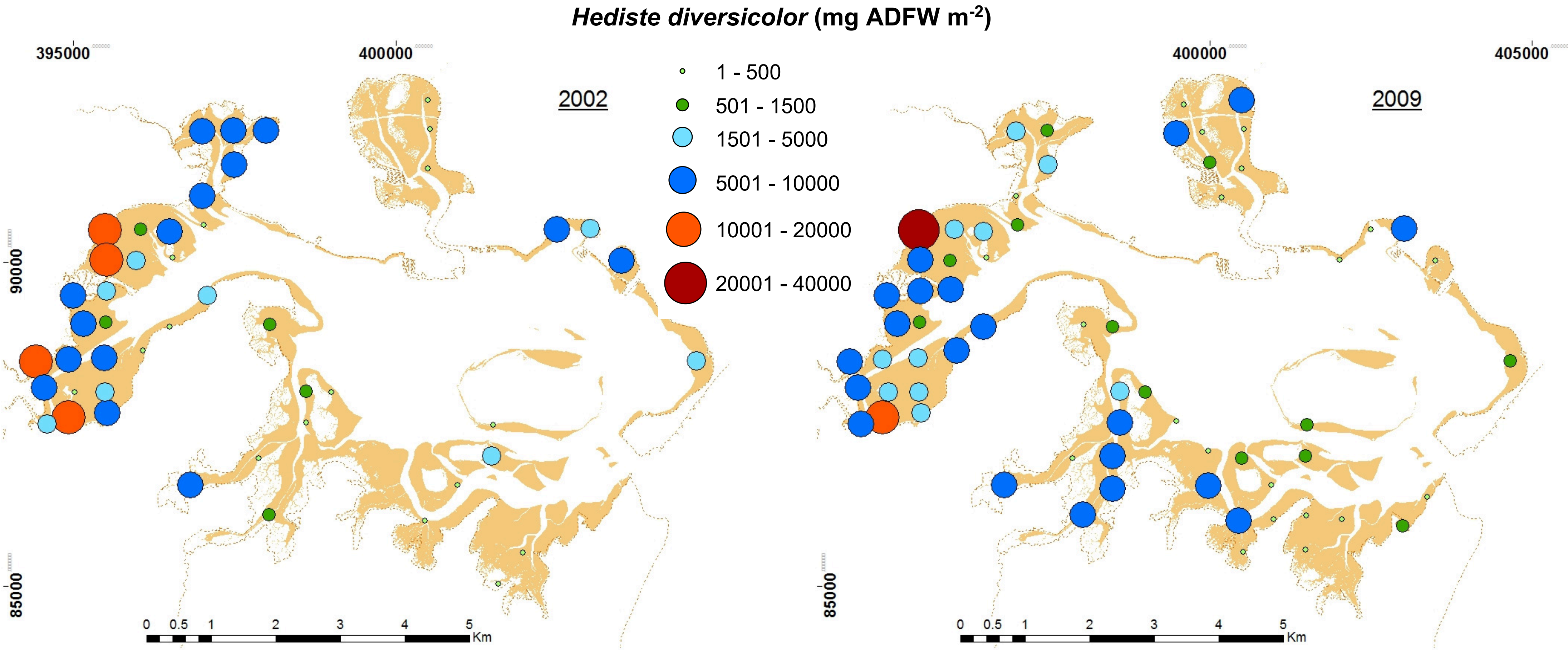


Figure 26. Mean biomass *Nephtys hombergii* at each sampling station in 2002 and 2009.

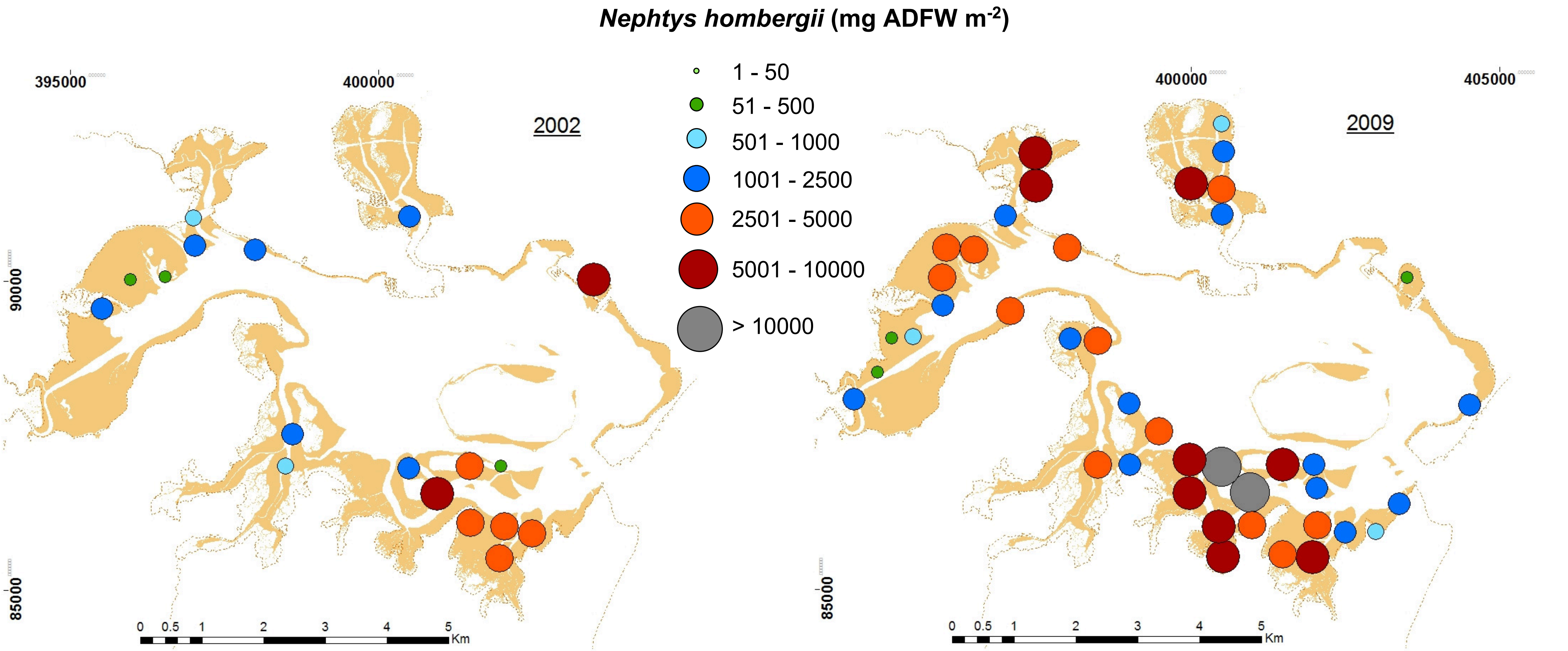


Figure 27. Mean biomass *Alitta* (*Neanthes) virens* at each sampling station in 2002 and 2009.

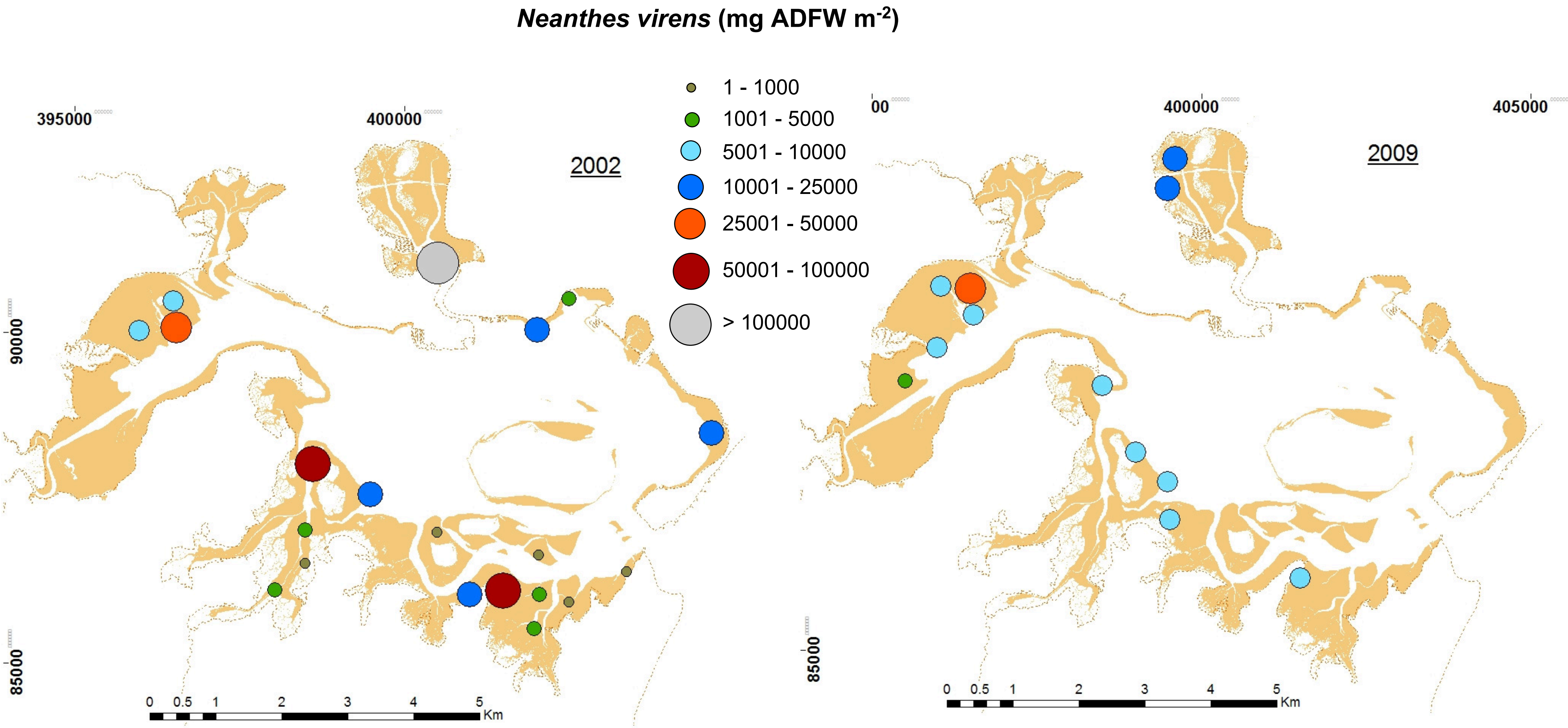
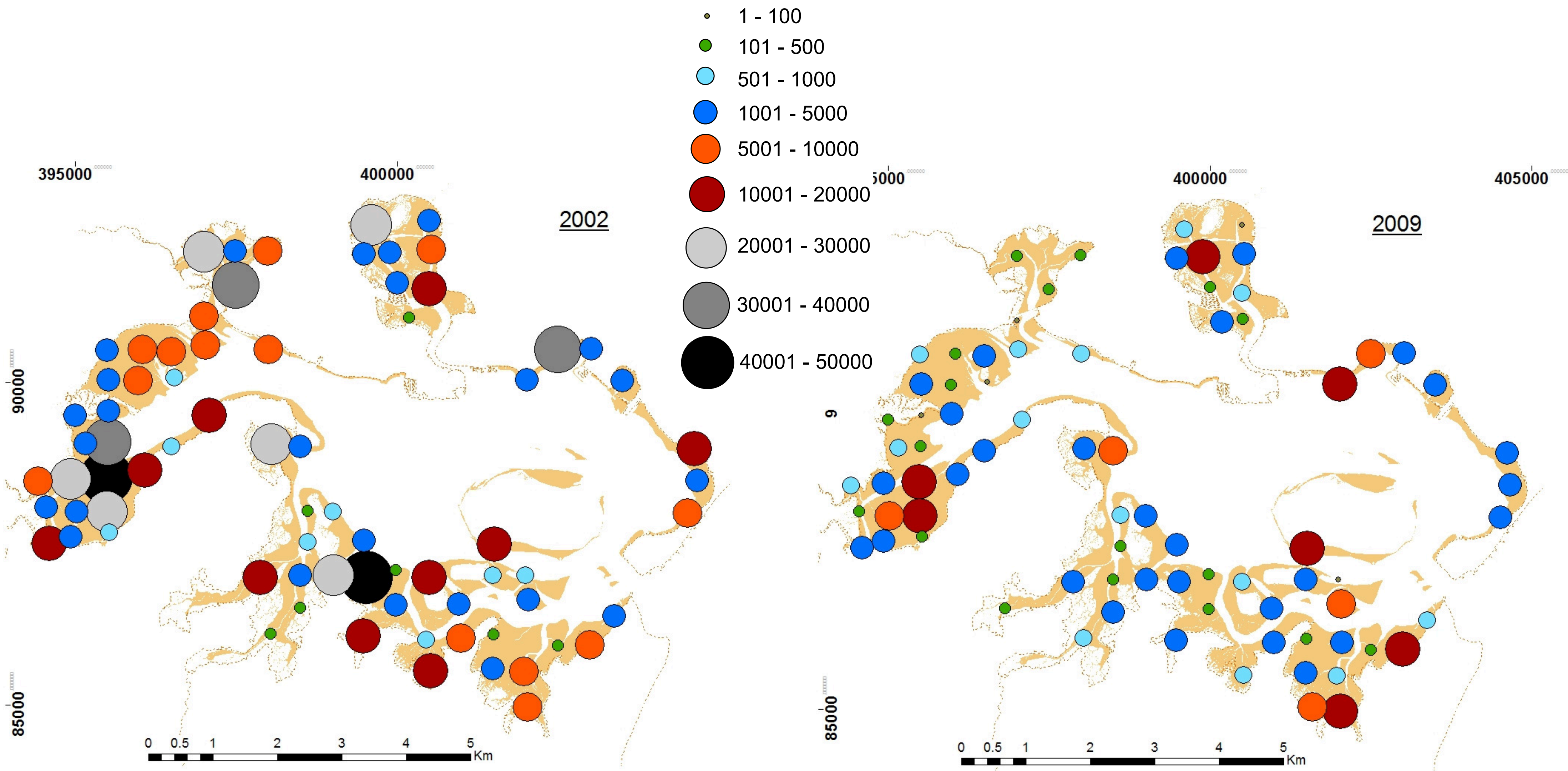


Figure 28. Mean biomass (mg ADFW m-2) of ‘small worms’ including oligochaetes and polychaetes (inc cirratulidae & spionidae) at each sampling station in 2002 and 2009.



Sediment data from East Dorset Habitat map © Environment Agency, 2010

Figure 29. Mean biomass (mg ADFW m^{-2}) of *Hydrobia ulvae* at each sampling station in 2002 and 2009.

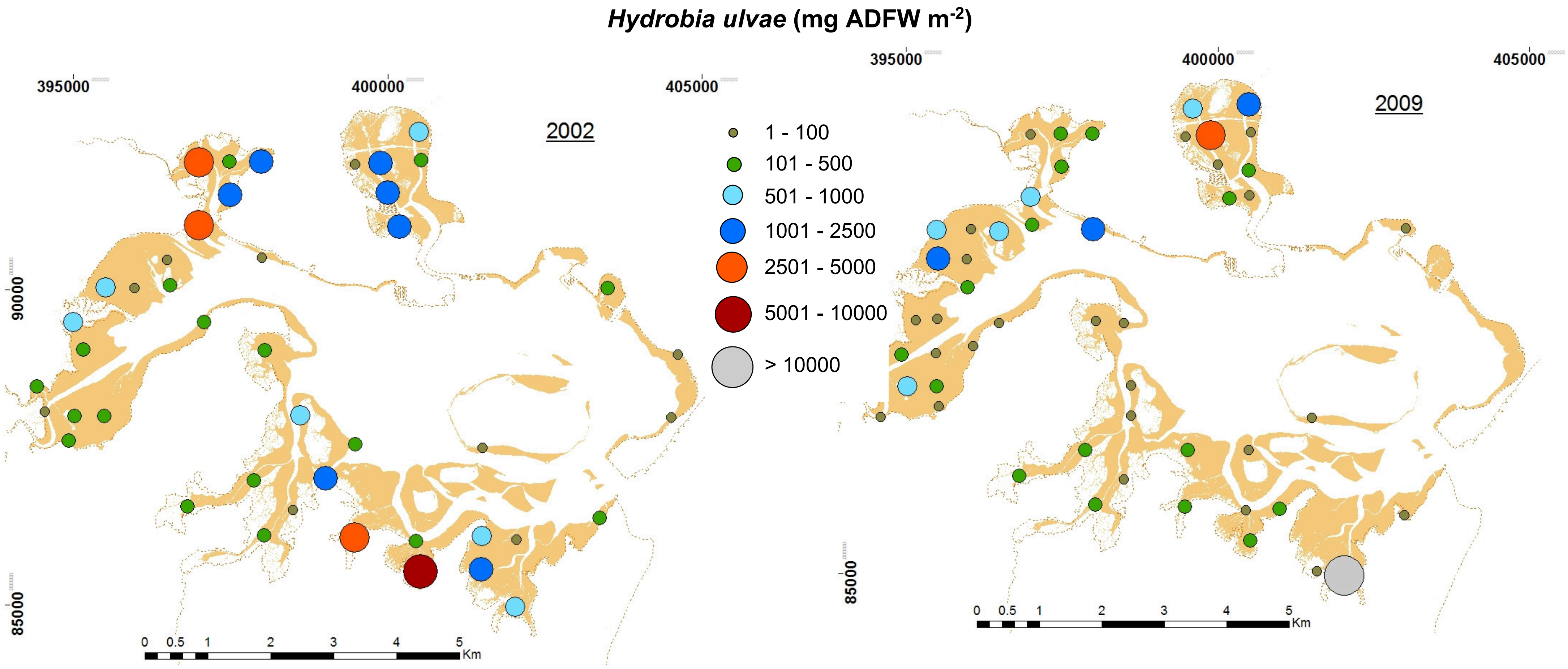


Figure 30. Mean biomass (mg ADFW m^{-2}) of *Abra tenuis* at each sampling station in 2002 and 2009.

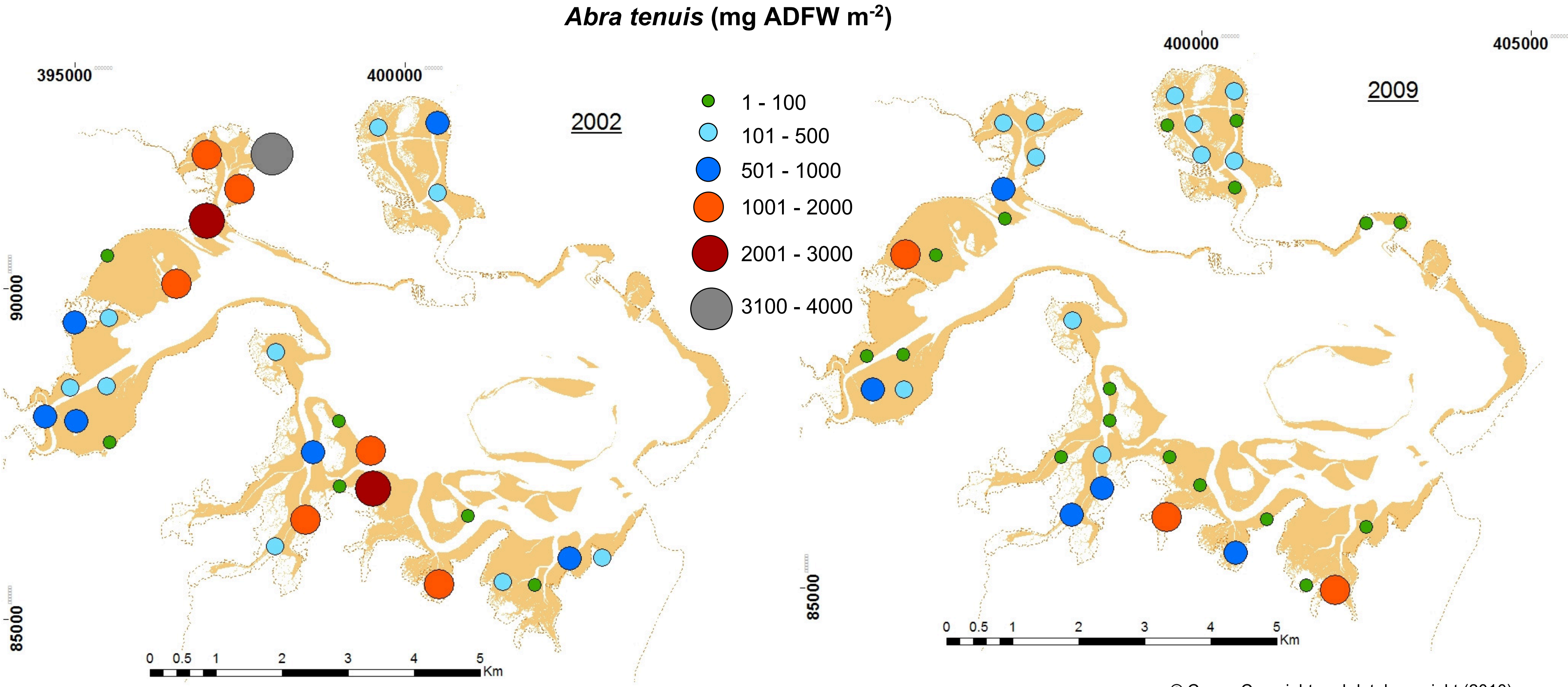


Figure 31. Mean biomass (mg ADFW m^{-2}) of *Cerastoderma* spp. at each sampling station in 2002 and 2009.

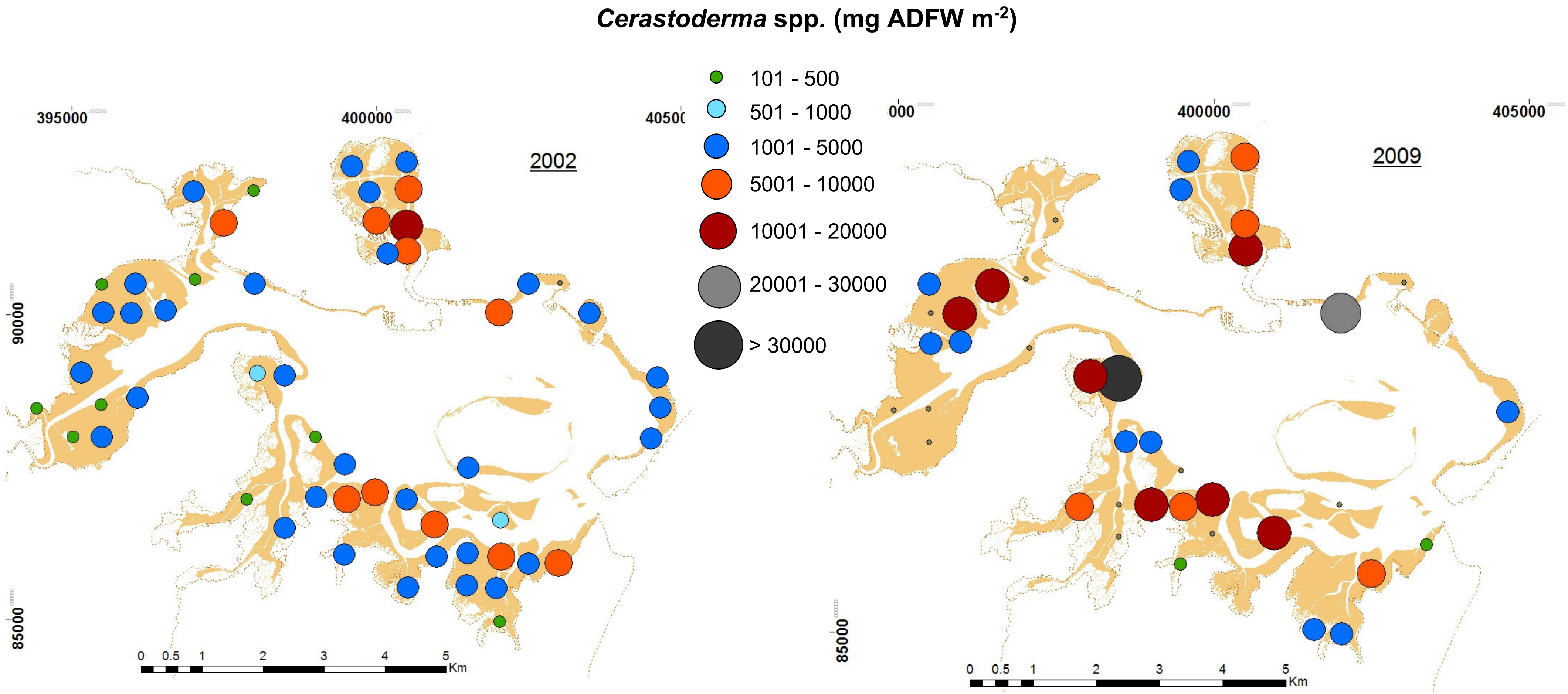


Figure 32. Mean biomass (mg ADFW m^{-2}) of *Scrobicularia plana*. at each sampling station in 2002 and 2009.

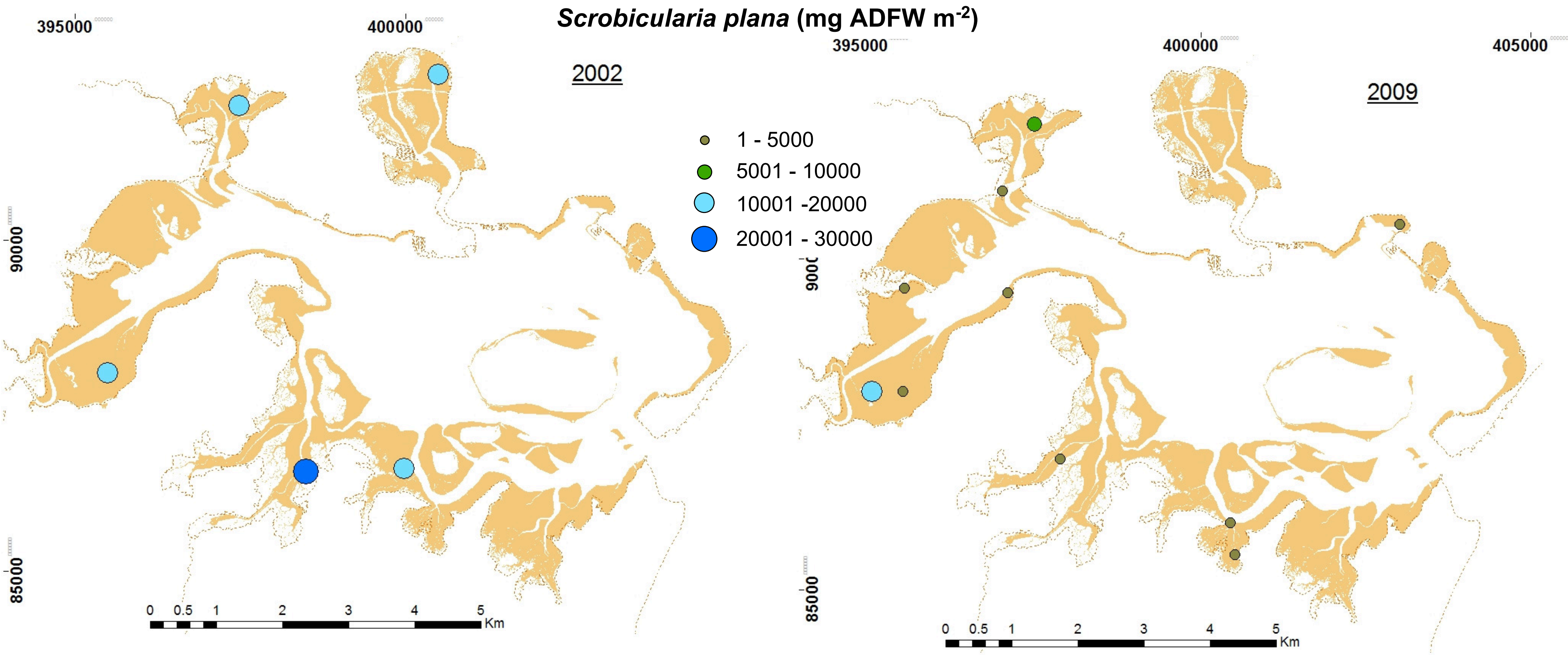


Figure 33. Mean biomass (mg ADFW m^{-2}) of *Mya arenaria* at each sampling station in 2002 and 2009.

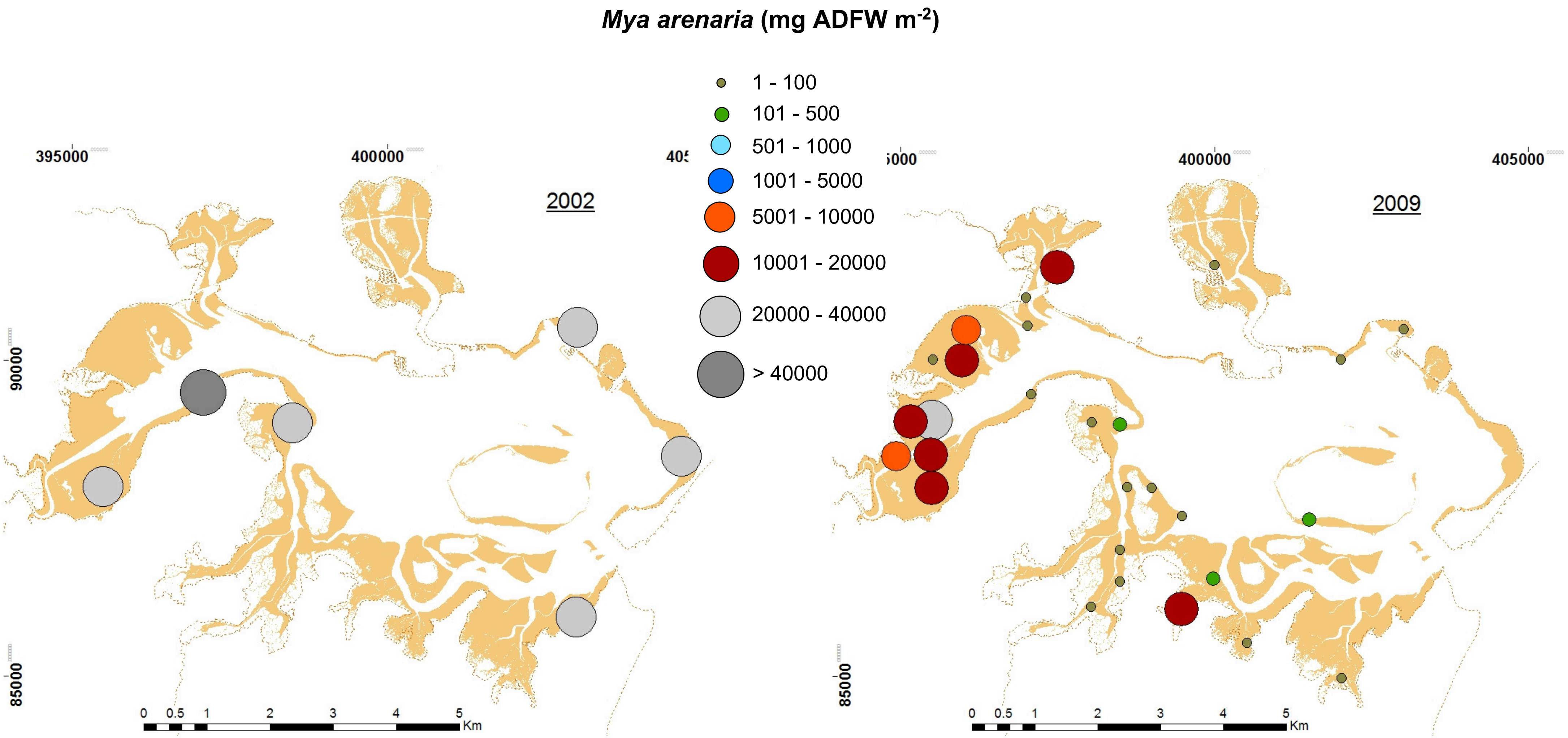


Figure 34. Mean biomass (mg ADFW m^{-2}) of *Ruditapes* spp. at each sampling station in 2002 and 2009. All specimens were *R.philipinarium* except for a single *R.decussatus* at station 63 in Brands Bay in 2009

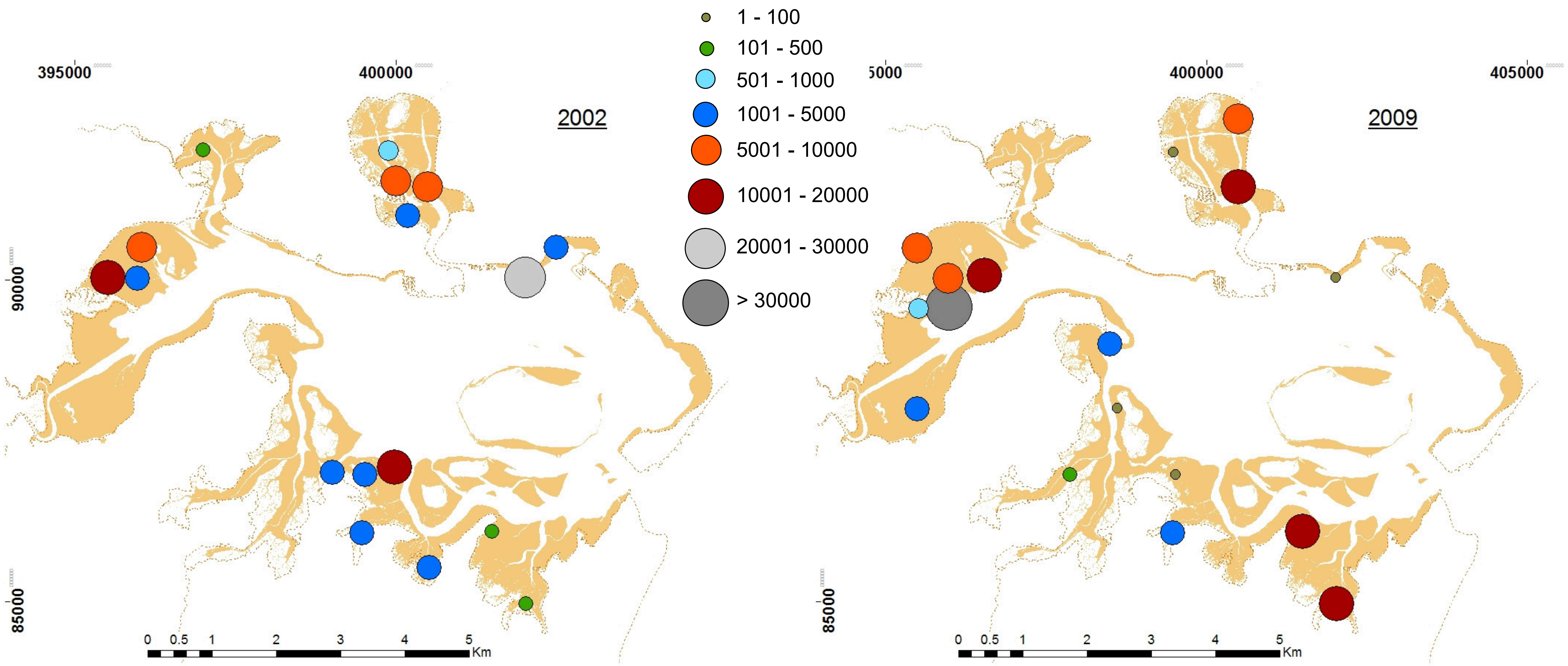


Figure 35. Mean biomass (mg ADFW m^{-2}) of *Corophium volutator* at each sampling station in 2002 and 2009.

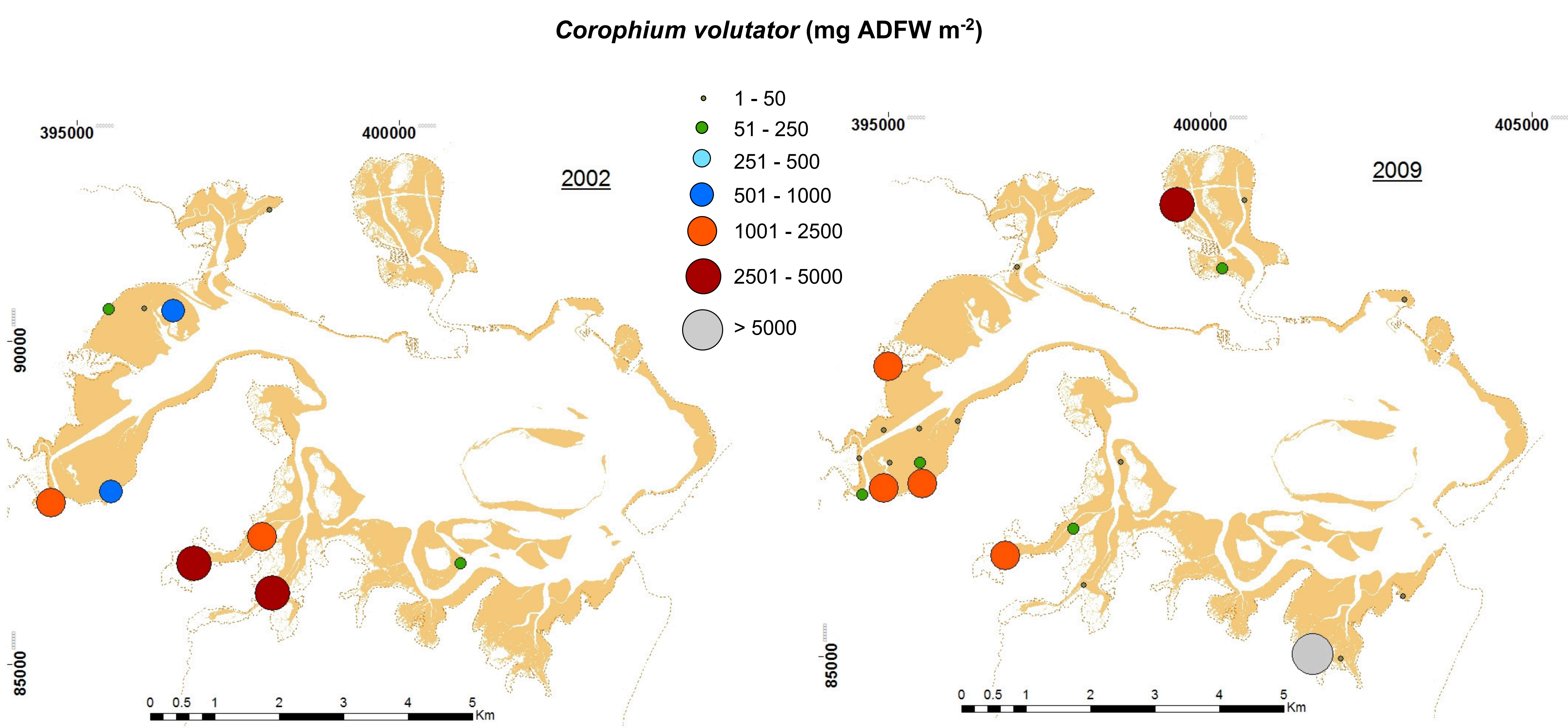


Figure 36. Mean biomass (mg ADFW m^{-2}) of *Cyathura carinata* at each sampling station in 2002 and 2009.

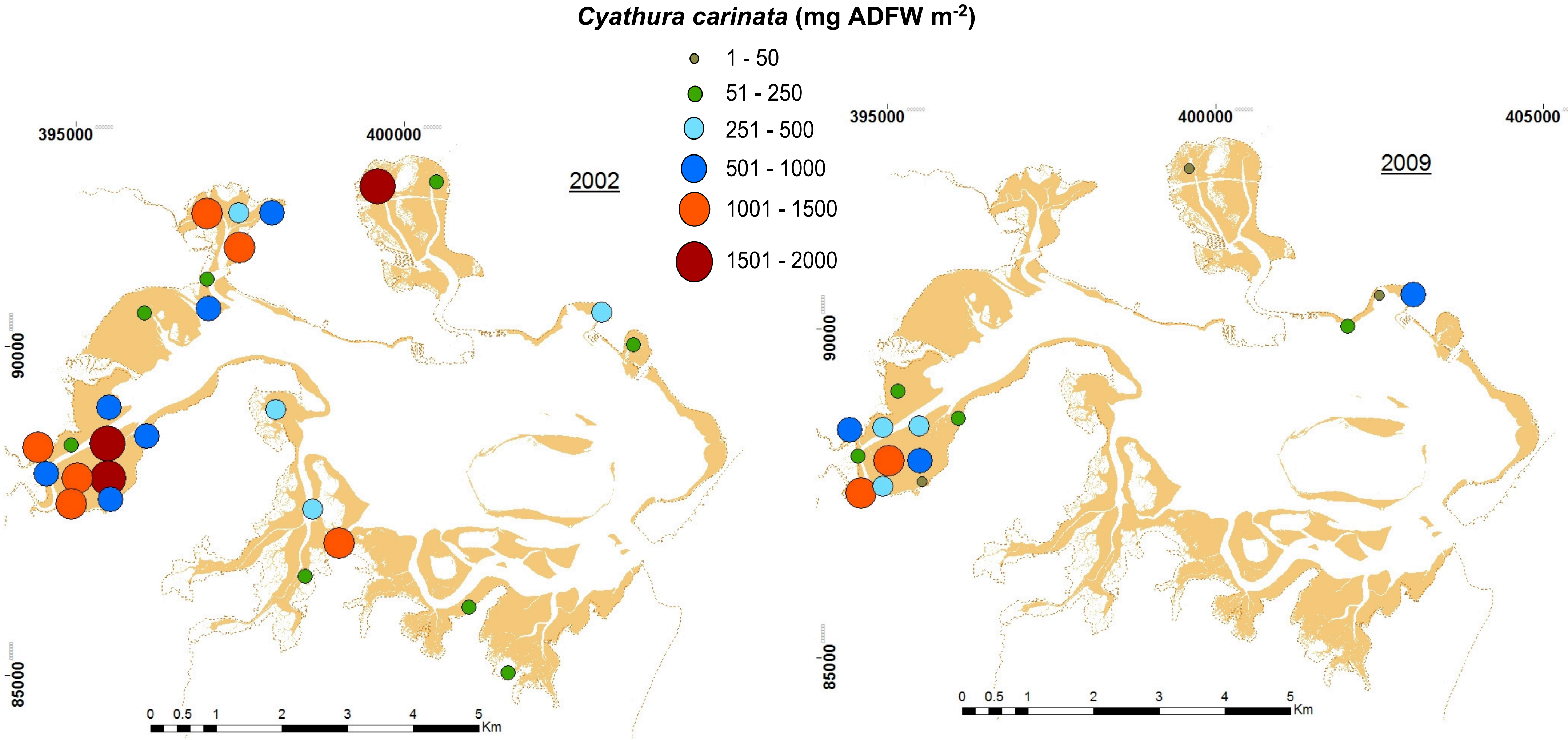
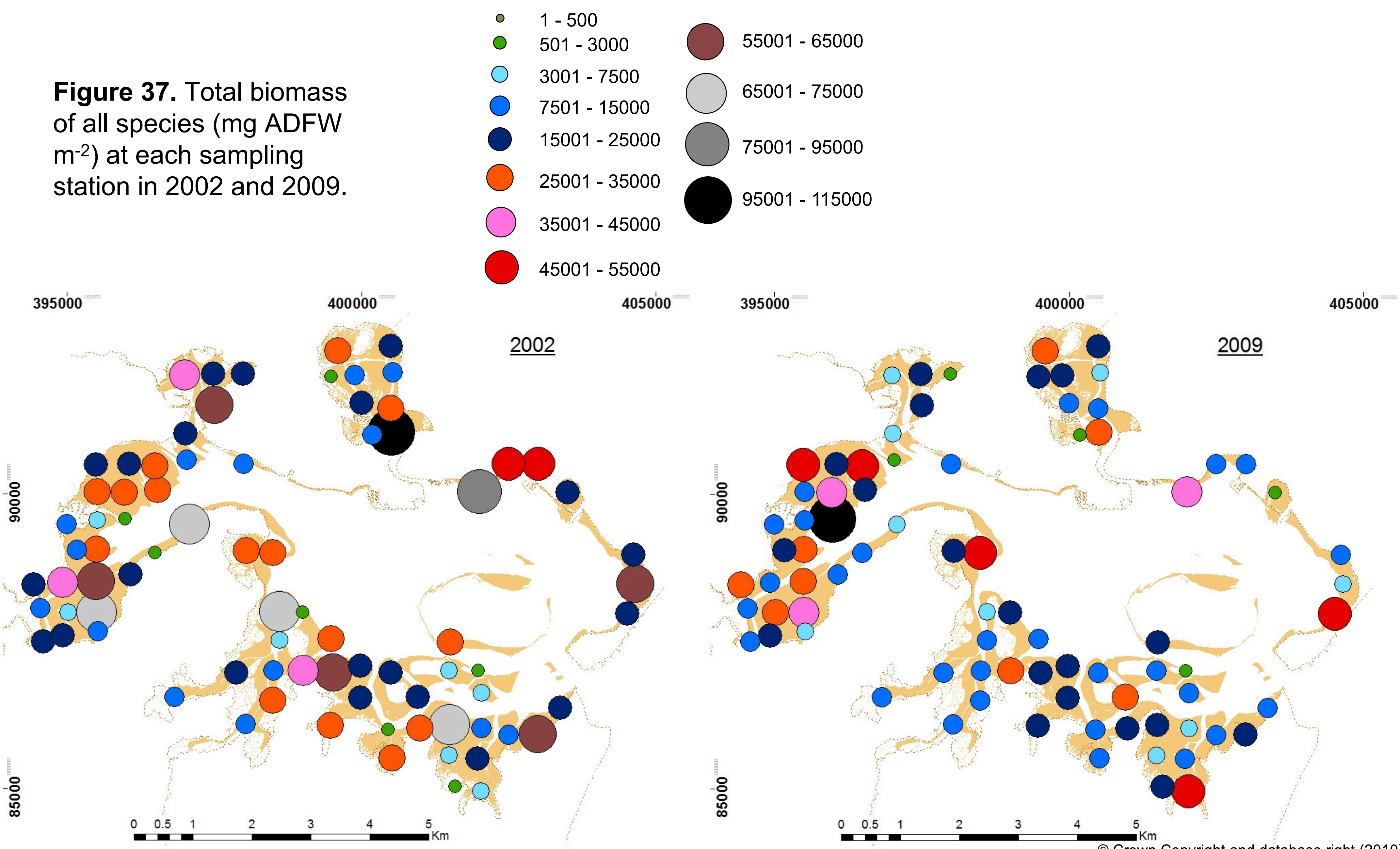


Figure 37. Total biomass of all species (mg ADFW m^{-2}) at each sampling station in 2002 and 2009.



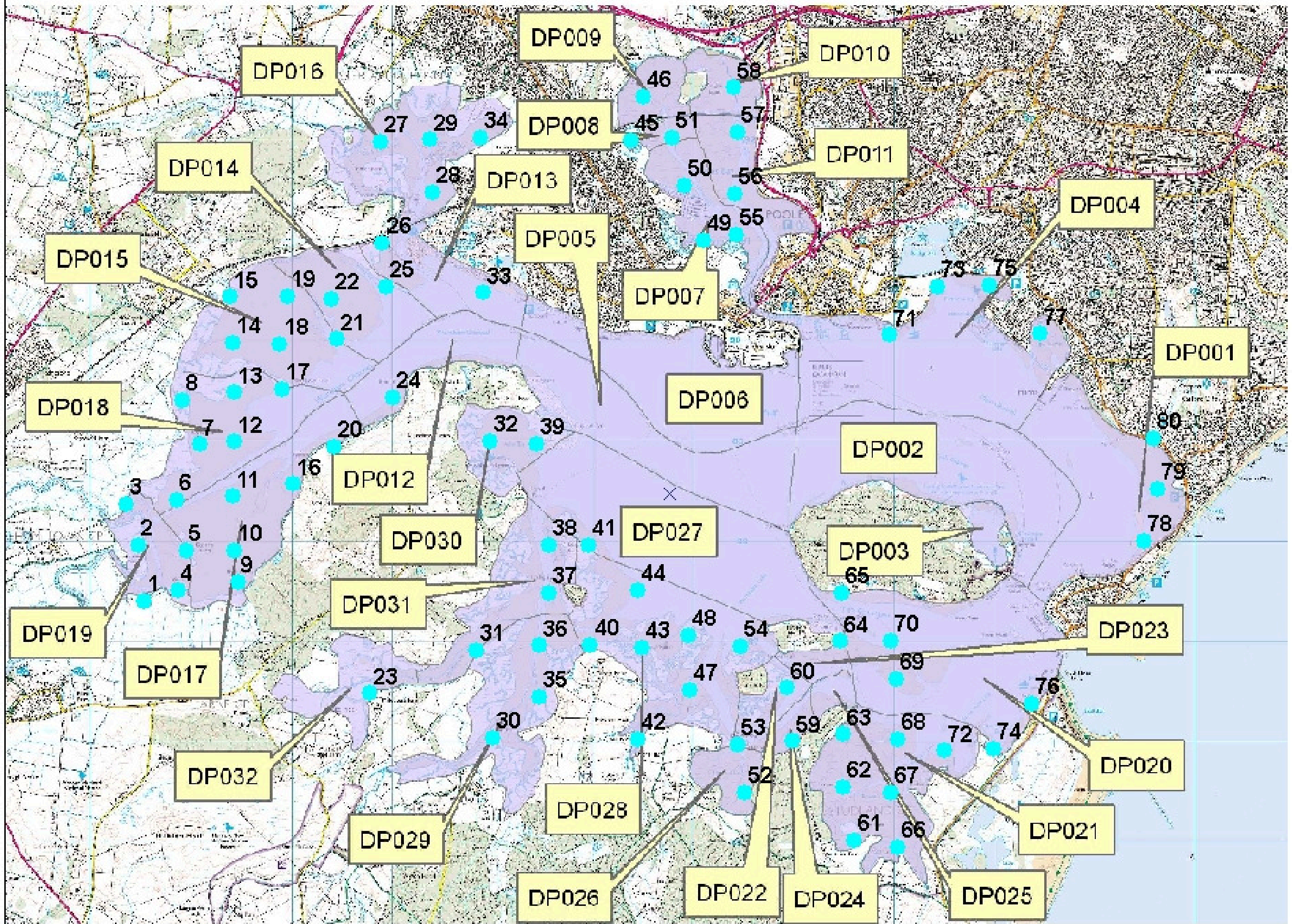


Figure 38. Sampling points shown within WeBS sectors.

Figure 39. Energy availability for wintering waterfowl in each WeBS sector (Sector 1 refers to Sector DP001 etc)

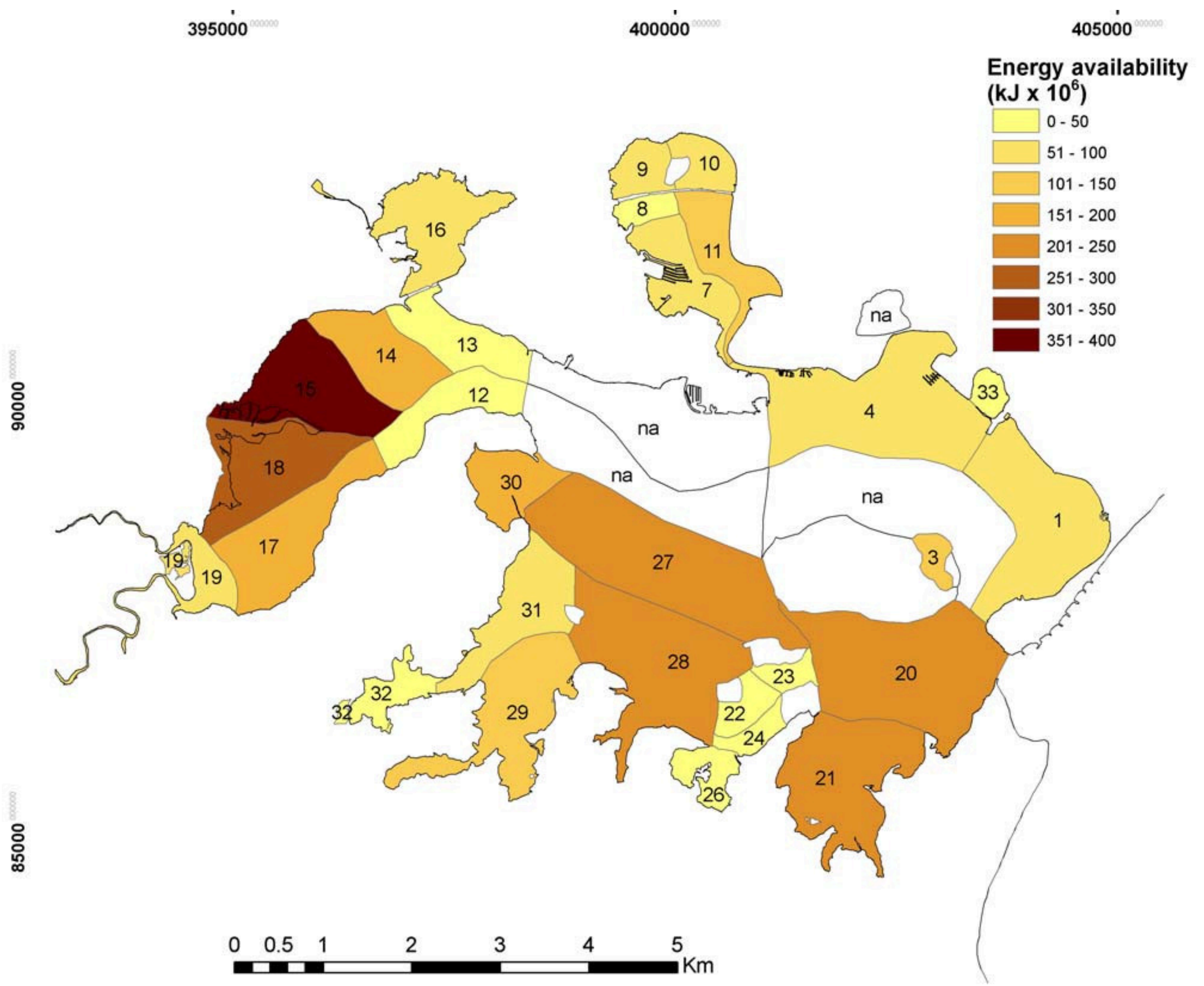
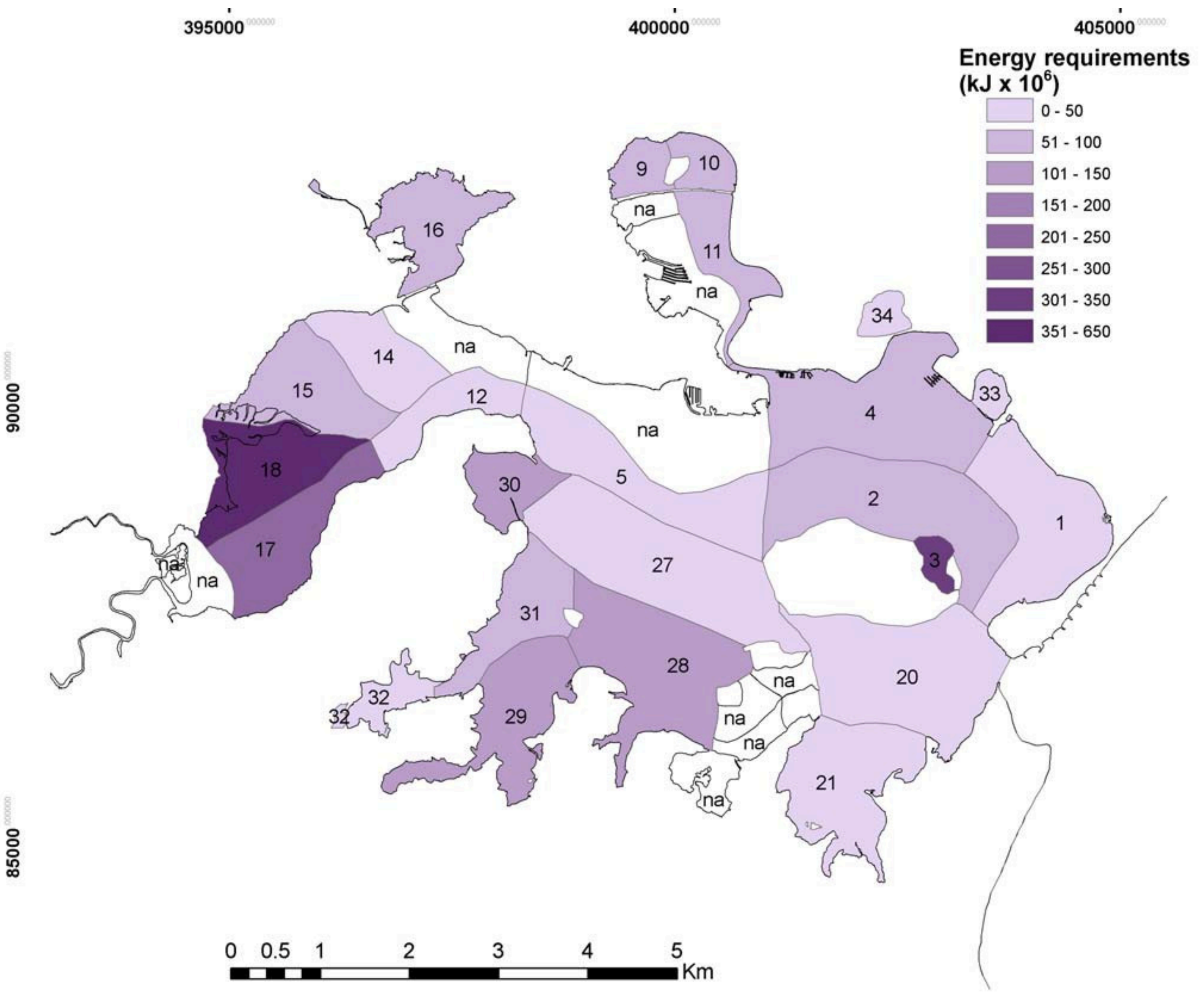


Figure 40. Energy requirements for wintering waterfowl in each WeBS sector (Sector 1 refers to Sector DP001 etc).



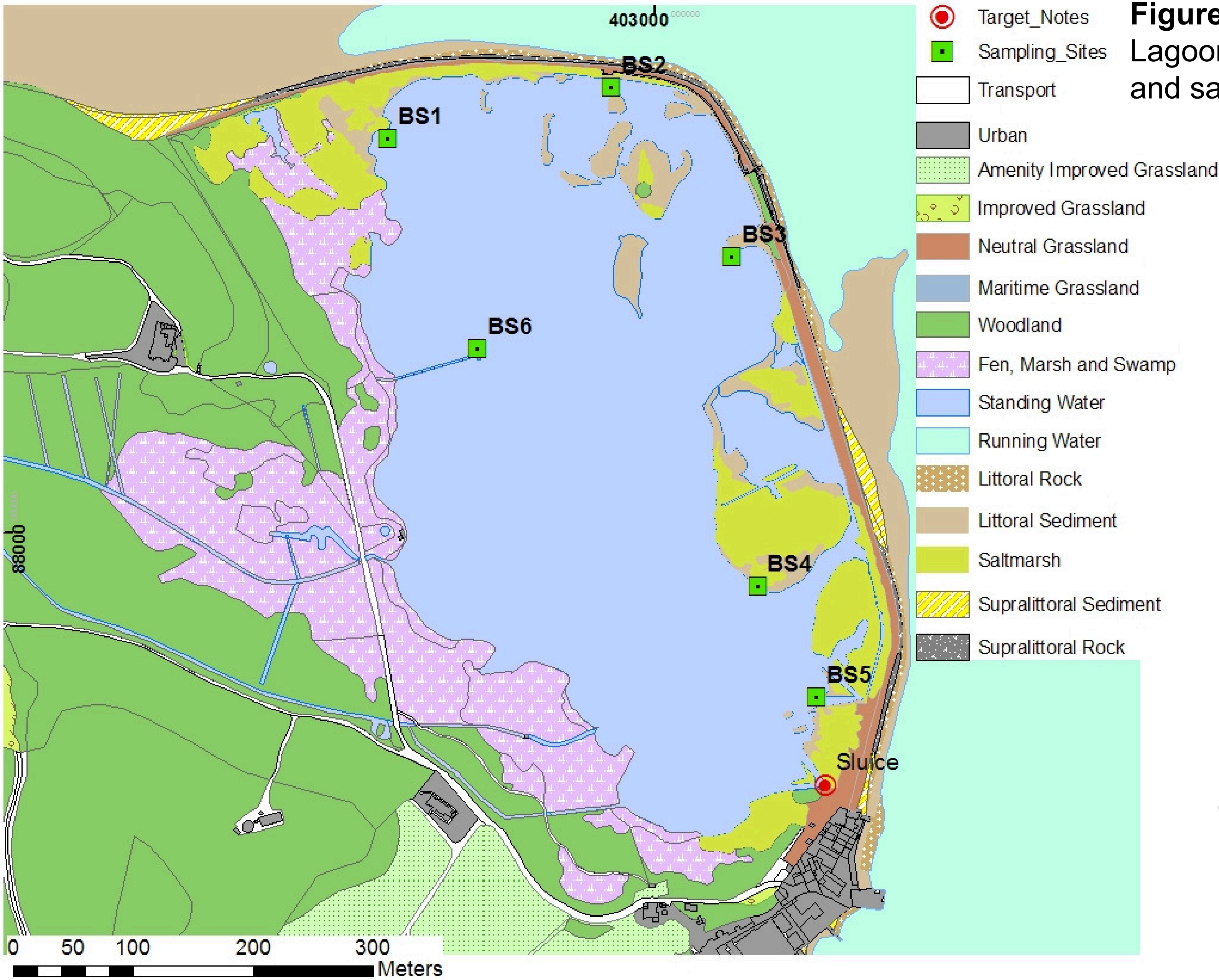


Figure 41. Brownsea Island Lagoon indicating habitats and sampling stations.

APPENDIX 1 Poole Harbour Sampling Locations

	BNG[a,b]		WGS84[c]						UTM[c,d]		depth
	zone	eastings northings	latitude	longitude	latitude	longitude	latitude	longitude	zone	eastings northings	ab. LAT [a]
1	SY	94598 87489	50.6870276	-2.0778326	50°41.22165'N	002°04.66995'W	50°41'13.299"N	002°04'40.197"W	30U	565141 5615427	1.9
2	SY	94550 88048	50.6920541	-2.0785205	50°41.52325'N	002°04.71123'W	50°41'31.395"N	002°04'42.674"W	30U	565086 5615986	1.1
3	SY	94435 88459	50.6957490	-2.0801549	50°41.74493'N	002°04.80930'W	50°41'44.696"N	002°04'48.558"W	30U	564965 5616395	1.1
4	SY	94932 87593	50.6879659	-2.0731061	50°41.27795'N	002°04.38637'W	50°41'16.677"N	002°04'23.182"W	30U	565474 5615536	1.3
5	SY	95021 87989	50.6915278	-2.0718516	50°41.49167'N	002°04.31110'W	50°41'29.500"N	002°04'18.666"W	30U	565558 5615933	1.4
6	SY	94930 88485	50.6959874	-2.0731469	50°41.75925'N	002°04.38882'W	50°41'45.555"N	002°04'23.329"W	30U	565460 5616428	1.1
7	SY	95169 89036	50.7009445	-2.0697704	50°42.05667'N	002°04.18622'W	50°42'03.400"N	002°04'11.173"W	30U	565691 5616982	1.3
8	SY	95006 89481	50.7049448	-2.0720846	50°42.29668'N	002°04.32508'W	50°42'17.801"N	002°04'19.505"W	30U	565522 5617425	1.2
9	SY	95532 87664	50.6886094	-2.0646133	50°41.31657'N	002°03.87680'W	50°41'18.994"N	002°03'52.608"W	30U	566073 5615615	1.3
10	SY	95502 87983	50.6914779	-2.0650420	50°41.48867'N	002°03.90252'W	50°41'29.320"N	002°03'54.151"W	30U	566039 5615933	1.3
11	SY	95492 88515	50.6962619	-2.0651902	50°41.77572'N	002°03.91142'W	50°41'46.543"N	002°03'54.685"W	30U	566021 5616465	1.0
12	SY	95510 89059	50.7011541	-2.0649421	50°42.06925'N	002°03.89653'W	50°42'04.155"N	002°03'53.792"W	30U	566032 5617009	1.0
13	SY	95521 89544	50.7055156	-2.0647924	50°42.33093'N	002°03.88755'W	50°42'19.856"N	002°03'53.253"W	30U	566037 5617495	0.9
14	SY	95516 90035	50.7099310	-2.0648693	50°42.59587'N	002°03.89217'W	50°42'35.752"N	002°03'53.530"W	30U	566025 5617985	1.1
15	SY	95494 90494	50.7140585	-2.0651867	50°42.84350'N	002°03.91120'W	50°42'50.610"N	002°03'54.672"W	30U	565997 5618444	1.1
16	SY	96086 88629	50.6972915	-2.0567813	50°41.83748'N	002°03.40688'W	50°41'50.249"N	002°03'24.413"W	30U	566614 5616587	1.0
17	SY	95991 89570	50.7057530	-2.0581369	50°42.34518'N	002°03.48822'W	50°42'20.711"N	002°03'29.293"W	30U	566506 5617527	0.9
18	SY	95978 90016	50.7097636	-2.0583260	50°42.58582'N	002°03.49957'W	50°42'35.149"N	002°03'29.974"W	30U	566487 5617973	1.1
19	SY	96054 90496	50.7140806	-2.0572549	50°42.84483'N	002°03.43530'W	50°42'50.690"N	002°03'26.118"W	30U	566557 5618454	1.1
20	SY	96500 89000	50.7006305	-2.0509232	50°42.03783'N	002°03.05538'W	50°42'02.270"N	002°03'03.323"W	30U	567023 5616964	1.2
21	SY	96539 90061	50.7101720	-2.0503812	50°42.61032'N	002°03.02287'W	50°42'36.619"N	002°03'01.372"W	30U	567048 5618025	1.1
22	SY	96495 90462	50.7137778	-2.0510083	50°42.82667'N	002°03.06050'W	50°42'49.600"N	002°03'03.630"W	30U	566998 5618426	1.1
23	SY	96824 86547	50.6785733	-2.0463135	50°40.71440'N	002°02.77882'W	50°40'42.864"N	002°02'46.729"W	30U	567380 5614515	1.4
24	SY	97088 89476	50.7049144	-2.0426011	50°42.29487'N	002°02.55607'W	50°42'17.692"N	002°02'33.364"W	30U	567604 5617448	0.7
25	SY	97030 90570	50.7147521	-2.0434316	50°42.88513'N	002°02.60590'W	50°42'53.108"N	002°02'36.354"W	30U	567532 5618541	0.9
26	SY	97007 91013	50.7187357	-2.0437611	50°43.12415'N	002°02.62567'W	50°43'07.449"N	002°02'37.540"W	30U	567503 5618984	1.2
27	SY	97000 92014	50.7277373	-2.0438687	50°43.66423'N	002°02.63212'W	50°43'39.854"N	002°02'37.927"W	30U	567482 5619984	1.1
28	SY	97502 91500	50.7231176	-2.0367527	50°43.38705'N	002°02.20517'W	50°43'23.223"N	002°02'12.310"W	30U	567991 5619477	1.1
29	SY	97487 92026	50.7278477	-2.0369690	50°43.67087'N	002°02.21813'W	50°43'40.252"N	002°02'13.088"W	30U	567969 5620003	1.1
30	SY	98036 86089	50.6744602	-2.0291573	50°40.46762'N	002°01.74943'W	50°40'28.057"N	002°01'44.966"W	30U	568598 5614074	1.1
31	SY	97880 86957	50.6822654	-2.0313702	50°40.93592'N	002°01.88222'W	50°40'56.155"N	002°01'52.933"W	30U	568430 5614940	1.4
32	SY	98047 89032	50.7009259	-2.0290181	50°42.05555'N	002°01.74108'W	50°42'03.333"N	002°01'44.465"W	30U	568569 5617017	1.8
33	SY	98000 90500	50.7141269	-2.0296920	50°42.84762'N	002°01.78152'W	50°42'50.857"N	002°01'46.891"W	30U	568503 5618484	0.6
34	SY	97988 92033	50.7279127	-2.0298708	50°43.67477'N	002°01.79225'W	50°43'40.486"N	002°01'47.535"W	30U	568470 5620017	1.1
35	SY	98500 86489	50.6780588	-2.0225925	50°40.68353'N	002°01.35555'W	50°40'41.012"N	002°01'21.333"W	30U	569057 5614480	1.0
36	SY	98502 86997	50.6826271	-2.0225664	50°40.95763'N	002°01.35398'W	50°40'57.458"N	002°01'21.239"W	30U	569052 5614988	1.3
37	SY	98610 87514	50.6872766	-2.0210398	50°41.23660'N	002°01.26238'W	50°41'14.196"N	002°01'15.743"W	30U	569153 5615506	0.7
38	SY	98617 87994	50.6915932	-2.0209427	50°41.49558'N	002°01.25657'W	50°41'29.735"N	002°01'15.394"W	30U	569153 5615986	1.0
39	SY	98500 89000	50.7006395	-2.0226035	50°42.03837'N	002°01.35622'W	50°42'02.302"N	002°01'21.373"W	30U	569023 5616991	1.4
40	SY	99012 86995	50.6826103	-2.0153477	50°40.95662'N	002°00.92087'W	50°40'57.397"N	002°00'55.252"W	30U	569562 5614993	1.4

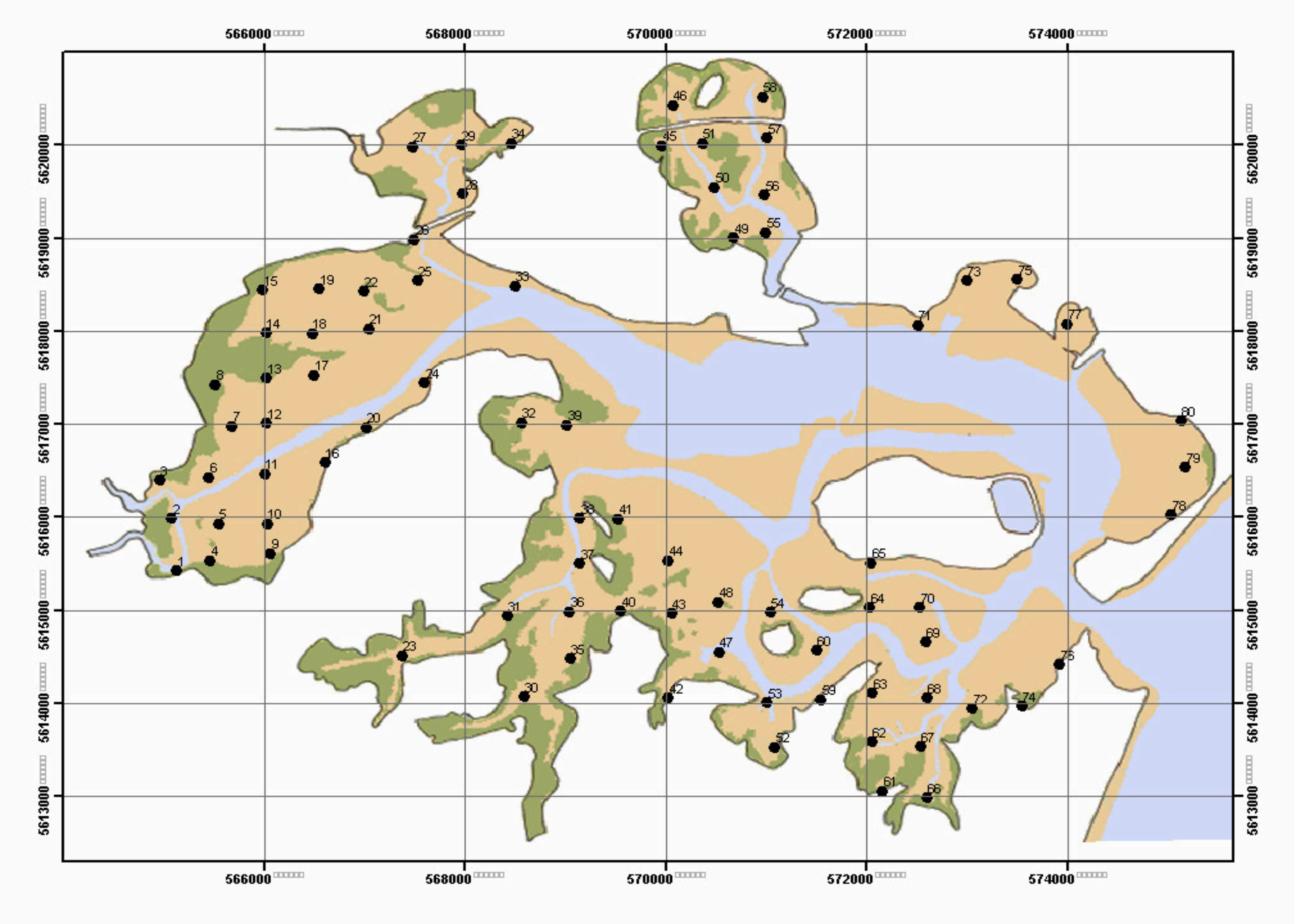
APPENDIX 1 Poole Harbour Sampling Locations

41	SY	99001	87985	50.6915131	-2.0155063	50°41.49078'N	002°00.93038'W	50°41'29.447"N	002°00'55.823"W	30U	569537	5615983	1.5
42	SY	99471	86058	50.6741848	-2.0088491	50°40.45108'N	002°00.53095'W	50°40'27.065"N	002°00'31.857"W	30U	570033	5614062	1.4
43	SY	99517	86960	50.6822963	-2.0081996	50°40.93778'N	002°00.49198'W	50°40'56.267"N	002°00'29.519"W	30U	570067	5614965	1.5
44	SY	99490	87532	50.6874401	-2.0085828	50°41.24640'N	002°00.51497'W	50°41'14.784"N	002°00'30.898"W	30U	570033	5615536	1.5
45	SY	99485	91987	50.7275026	-2.0086611	50°43.65015'N	002°00.51967'W	50°43'39.009"N	002°00'31.180"W	30U	569967	5619991	2.0
46	SY	99602	92425	50.7314415	-2.0070041	50°43.88648'N	002°00.42025'W	50°43'53.189"N	002°00'25.215"W	30U	570078	5620431	0.8
47	SY	99982	86538	50.6785017	-2.0016177	50°40.71010'N	002°00.09707'W	50°40'42.606"N	002°00'05.824"W	30U	570538	5614549	1.1
48	SY	99982	87077	50.6833488	-2.0016179	50°41.00093'N	002°00.09707'W	50°41'00.056"N	002°00'05.824"W	30U	570531	5615088	1.1
49	SZ	00186	90994	50.7185732	-1.9987296	50°43.11438'N	001°59.92378'W	50°43'06.863"N	001°59'55.427"W	30U	570682	5619007	1.6
50	SZ	00003	91537	50.7234562	-2.0013220	50°43.40737'N	002°00.07932'W	50°43'24.442"N	002°00'04.759"W	30U	570491	5619548	1.7
51	SY	99891	92010	50.7277097	-2.0029090	50°43.66258'N	002°00.17453'W	50°43'39.755"N	002°00'10.472"W	30U	570373	5620019	1.9
52	SZ	00521	85510	50.6692570	-1.9939903	50°40.15542'N	001°59.63942'W	50°40'09.325"N	001°59'38.365"W	30U	571091	5613528	2.1
53	SZ	00456	85992	50.6735916	-1.9949096	50°40.41550'N	001°59.69458'W	50°40'24.930"N	001°59'41.675"W	30U	571019	5614009	1.3
54	SZ	00500	86962	50.6823145	-1.9942859	50°40.93887'N	001°59.65715'W	50°40'56.332"N	001°59'39.429"W	30U	571050	5614980	1.1
55	SZ	00507	91042	50.7190047	-1.9941825	50°43.14028'N	001°59.65095'W	50°43'08.417"N	001°59'39.057"W	30U	571002	5619060	0.8
56	SZ	00500	91446	50.7226377	-1.9942812	50°43.35827'N	001°59.65687'W	50°43'21.496"N	001°59'39.412"W	30U	570990	5619464	1.0
57	SZ	00533	92057	50.7281322	-1.9938131	50°43.68793'N	001°59.62878'W	50°43'41.276"N	001°59'37.727"W	30U	571014	5620075	0.2
58	SZ	00500	92500	50.7321160	-1.9942801	50°43.92697'N	001°59.65682'W	50°43'55.618"N	001°59'39.409"W	30U	570975	5620518	0.7
59	SZ	00993	86016	50.6738068	-1.9873101	50°40.42842'N	001°59.23860'W	50°40'25.705"N	001°59'14.316"W	30U	571556	5614041	2.1
60	SZ	00956	86545	50.6785640	-1.9878325	50°40.71385'N	001°59.26995'W	50°40'42.831"N	001°59'16.197"W	30U	571512	5614569	0.9
61	SZ	01589	85023	50.6648758	-1.9788796	50°39.89255'N	001°58.73277'W	50°39'53.553"N	001°58'43.966"W	30U	572165	5613056	1.8
62	SZ	01490	85553	50.6696422	-1.9802784	50°40.17853'N	001°58.81670'W	50°40'10.712"N	001°58'49.002"W	30U	572059	5613584	1.8
63	SZ	01500	86076	50.6743454	-1.9801349	50°40.46072'N	001°58.80810'W	50°40'27.643"N	001°58'48.486"W	30U	572062	5614108	1.6
64	SZ	01486	87000	50.6826547	-1.9803296	50°40.95928'N	001°58.81978'W	50°40'57.557"N	001°58'49.187"W	30U	572036	5615031	0.9
65	SZ	01511	87479	50.6869622	-1.9799739	50°41.21773'N	001°58.79843'W	50°41'13.064"N	001°58'47.906"W	30U	572054	5615511	1.9
66	SZ	02027	84950	50.6642181	-1.9726827	50°39.85308'N	001°58.36097'W	50°39'51.185"N	001°58'21.658"W	30U	572604	5612989	2.0
67	SZ	01970	85499	50.6691553	-1.9734864	50°40.14932'N	001°58.40918'W	50°40'08.959"N	001°58'24.551"W	30U	572540	5613537	0.9
68	SZ	02043	86021	50.6738492	-1.9724507	50°40.43095'N	001°58.34703'W	50°40'25.857"N	001°58'20.822"W	30U	572606	5614060	1.7
69	SZ	02037	86619	50.6792269	-1.9725325	50°40.75362'N	001°58.35195'W	50°40'45.217"N	001°58'21.117"W	30U	572592	5614658	1.0
70	SZ	01985	86995	50.6826084	-1.9732666	50°40.95650'N	001°58.39600'W	50°40'57.390"N	001°58'23.760"W	30U	572535	5615033	0.5
71	SZ	02007	90026	50.7098652	-1.9729396	50°42.59192'N	001°58.37638'W	50°42'35.515"N	001°58'22.583"W	30U	572516	5618064	1.0
72	SZ	02499	85901	50.6727684	-1.9659982	50°40.36610'N	001°57.95990'W	50°40'21.966"N	001°57'57.594"W	30U	573063	5613946	1.3
73	SZ	02500	90500	50.7141259	-1.9659544	50°42.84755'N	001°57.95727'W	50°42'50.853"N	001°57'57.436"W	30U	573002	5618545	0.7
74	SZ	02988	85919	50.6729281	-1.9590780	50°40.37568'N	001°57.54468'W	50°40'22.541"N	001°57'32.681"W	30U	573552	5613971	2.0
75	SZ	03008	90506	50.7141776	-1.9587591	50°42.85065'N	001°57.52555'W	50°42'51.039"N	001°57'31.533"W	30U	573510	5618558	1.2
76	SZ	03370	86360	50.6768919	-1.9536683	50°40.61352'N	001°57.22010'W	50°40'36.811"N	001°57'13.206"W	30U	573928	5614417	1.8
77	SZ	03498	90021	50.7098135	-1.9518232	50°42.58880'N	001°57.10940'W	50°42'35.328"N	001°57'06.564"W	30U	574007	5618079	1.6
78	SZ	04505	87958	50.6912548	-1.9375860	50°41.47528'N	001°56.25517'W	50°41'28.517"N	001°56'15.310"W	30U	575041	5616030	1.0
79	SZ	04650	88462	50.6957860	-1.9355270	50°41.74717'N	001°56.13162'W	50°41'44.830"N	001°56'07.897"W	30U	575180	5616536	1.0
80	SZ	04615	88966	50.7003186	-1.9360165	50°42.01912'N	001°56.16098'W	50°42'01.147"N	001°56'09.659"W	30U	575138	5617039	1.3

[(a)] extracted from Thomas *et al.* (2004) [(b)] presumed to be based on OSGB36, zones assumed [(c)] converted [(d)] based on WGS84

APPENDIX 1 Poole Harbour Sampling Locations

	BNG			WGS84			BNG			WGS84	
	zone	eastings	northings	latitude	longitude		zone	eastings	northings	latitude	longitude
1	SY	94598	87489	50°41.22165'N	002°04.66995'W	41	SY	99001	87985	50°41.49078'N	002°00.93038'W
2	SY	94550	88048	50°41.52325'N	002°04.71123'W	42	SY	99471	86058	50°40.45108'N	002°00.53095'W
3	SY	94435	88459	50°41.74493'N	002°04.80930'W	43	SY	99517	86960	50°40.93778'N	002°00.49198'W
4	SY	94932	87593	50°41.27795'N	002°04.38637'W	44	SY	99490	87532	50°41.24640'N	002°00.51497'W
5	SY	95021	87989	50°41.49167'N	002°04.31110'W	45	SY	99485	91987	50°43.65015'N	002°00.51967'W
6	SY	94930	88485	50°41.75925'N	002°04.38882'W	46	SY	99602	92425	50°43.88648'N	002°00.42025'W
7	SY	95169	89036	50°42.05667'N	002°04.18622'W	47	SY	99982	86538	50°40.71010'N	002°00.09707'W
8	SY	95006	89481	50°42.29668'N	002°04.32508'W	48	SY	99982	87077	50°41.00093'N	002°00.09707'W
9	SY	95532	87664	50°41.31657'N	002°03.87680'W	49	SZ	00186	90994	50°43.11438'N	001°59.92378'W
10	SY	95502	87983	50°41.48867'N	002°03.90252'W	50	SZ	00003	91537	50°43.40737'N	002°00.07932'W
11	SY	95492	88515	50°41.77572'N	002°03.91142'W	51	SY	99891	92010	50°43.66258'N	002°00.17453'W
12	SY	95510	89059	50°42.06925'N	002°03.89653'W	52	SZ	00521	85510	50°40.15542'N	001°59.63942'W
13	SY	95521	89544	50°42.33093'N	002°03.88755'W	53	SZ	00456	85992	50°40.41550'N	001°59.69458'W
14	SY	95516	90035	50°42.59587'N	002°03.89217'W	54	SZ	00500	86962	50°40.93887'N	001°59.65715'W
15	SY	95494	90494	50°42.84350'N	002°03.91120'W	55	SZ	00507	91042	50°43.14028'N	001°59.65095'W
16	SY	96086	88629	50°41.83748'N	002°03.40688'W	56	SZ	00500	91446	50°43.35827'N	001°59.65687'W
17	SY	95991	89570	50°42.34518'N	002°03.48822'W	57	SZ	00533	92057	50°43.68793'N	001°59.62878'W
18	SY	95978	90016	50°42.58582'N	002°03.49957'W	58	SZ	00500	92500	50°43.92697'N	001°59.65682'W
19	SY	96054	90496	50°42.84483'N	002°03.43530'W	59	SZ	00993	86016	50°40.42842'N	001°59.23860'W
20	SY	96500	89000	50°42.03783'N	002°03.05538'W	60	SZ	00956	86545	50°40.71385'N	001°59.26995'W
21	SY	96539	90061	50°42.61032'N	002°03.02287'W	61	SZ	01589	85023	50°39.89255'N	001°58.73277'W
22	SY	96495	90462	50°42.82667'N	002°03.06050'W	62	SZ	01490	85553	50°40.17853'N	001°58.81670'W
23	SY	96824	86547	50°40.71440'N	002°02.77882'W	63	SZ	01500	86076	50°40.46072'N	001°58.80810'W
24	SY	97088	89476	50°42.29487'N	002°02.55607'W	64	SZ	01486	87000	50°40.95928'N	001°58.81978'W
25	SY	97030	90570	50°42.88513'N	002°02.60590'W	65	SZ	01511	87479	50°41.21773'N	001°58.79843'W
26	SY	97007	91013	50°43.12415'N	002°02.62567'W	66	SZ	02027	84950	50°39.85308'N	001°58.36097'W
27	SY	97000	92014	50°43.66423'N	002°02.63212'W	67	SZ	01970	85499	50°40.14932'N	001°58.40918'W
28	SY	97502	91500	50°43.38705'N	002°02.20517'W	68	SZ	02043	86021	50°40.43095'N	001°58.34703'W
29	SY	97487	92026	50°43.67087'N	002°02.21813'W	69	SZ	02037	86619	50°40.75362'N	001°58.35195'W
30	SY	98036	86089	50°40.46762'N	002°01.74943'W	70	SZ	01985	86995	50°40.95650'N	001°58.39600'W
31	SY	97880	86957	50°40.93592'N	002°01.88222'W	71	SZ	02007	90026	50°42.59192'N	001°58.37638'W
32	SY	98047	89032	50°42.05555'N	002°01.74108'W	72	SZ	02499	85901	50°40.36610'N	001°57.95990'W
33	SY	98000	90500	50°42.84762'N	002°01.78152'W	73	SZ	02500	90500	50°42.84755'N	001°57.95727'W
34	SY	97988	92033	50°43.67477'N	002°01.79225'W	74	SZ	02988	85919	50°40.37568'N	001°57.54468'W
35	SY	98500	86489	50°40.68353'N	002°01.35555'W	75	SZ	03008	90506	50°42.85065'N	001°57.52555'W
36	SY	98502	86997	50°40.95763'N	002°01.35398'W	76	SZ	03370	86360	50°40.61352'N	001°57.22010'W
37	SY	98610	87514	50°41.23660'N	002°01.26238'W	77	SZ	03498	90021	50°42.58880'N	001°57.10940'W
38	SY	98617	87994	50°41.49558'N	002°01.25657'W	78	SZ	04505	87958	50°41.47528'N	001°56.25517'W
39	SY	98500	89000	50°42.03837'N	002°01.35622'W	79	SZ	04650	88462	50°41.74717'N	001°56.13162'W
40	SY	99012	86995	50°40.95662'N	002°00.92087'W	80	SZ	04615	88966	50°42.01912'N	001°56.16098'W



Basemap adapted from Gray, 1985. Poole Harbour - Ecological sensitivity analysis of the shoreline.

APPENDIX 2. Poole Harbour salinity (ppt) measured between January 2007 - December 2009. Source: Environment Agency.

URN	Name	SMPT Grid Ref	Mean	Max	Min
50024473	POOLE BAY SHELLFISH WATER	SZ0950089000	34.3	35.1	33.4
50900007	POOLE HARBOUR WFD FISH WATER COLUMN DATA	SY9862086684	28.1	34.5	0.5
50900149	POOLE HARBOUR TWELVE (SOUTH DEEP)	SZ0162786649	30.6	35.0	22.5
50900387	POOLE HARBOUR 1 WAREHAM CHANNEL BUOY 82	SY9630689097	20.1	29.2	4.5
50911036	POOLE HARBOUR - UPPER SOUTH DP	SZ0070087200	28.0	28.0	28.0
50950106	POOLE HARBOUR TEN (HARBOUR ENTRANCE)	SZ0342986947	32.3	34.5	27.5
50950125	POOLE HARBOUR SIX (NEAR BUOY NO 36)	SZ0351089208	31.7	34.3	22.5
50950217	POOLE HARBOUR FOUR (POOLE BRIDGE)	SZ0062690356	29.4	32.8	20.8
50950249	POOLE HARBOUR THREE (HUTCHINS BUOY 71)	SY9943789299	28.2	33.3	16.8

APPENDIX 3: Particle Size Analysis and Organic content of Poole Harbour Sediments from each sampling station.

	% of each Fraction							% Organic
Site	>2mm	>1mm	>500µm	>250µm	>125µm	>63µm	< 63µm	
1	0.00	0.04	0.10	0.09	1.92	8.42	89.43	7.36
2	0.00	0.00	0.04	0.08	0.26	11.98	87.64	6.73
3	0.00	0.00	0.06	0.37	0.67	8.31	90.59	9.30
4	0.00	0.02	0.03	0.08	0.33	8.47	91.08	7.78
5	0.00	0.18	0.20	0.37	5.45	14.80	79.00	7.23
6								
7	0.00	0.82	0.54	0.77	2.50	12.76	82.62	5.70
8	0.00	0.09	0.47	1.06	2.22	4.00	92.15	7.23
9	0.00	0.05	0.03	0.22	0.42	5.99	93.29	6.93
10	0.00	0.15	0.27	0.63	2.37	23.78	72.80	5.03
11	0.00	0.07	0.06	0.19	1.60	5.21	92.86	8.06
12	0.00	0.00	0.26	0.17	0.87	10.46	88.23	5.08
13	0.44	0.48	0.46	0.57	1.07	7.07	89.91	8.31
14	0.00	0.19	0.87	1.56	2.62	10.65	84.11	5.49
15	0.05	0.26	0.51	0.77	1.10	4.73	92.58	5.98
16	0.00	0.05	0.23	9.13	25.01	1.71	63.87	4.39
17	0.00	1.14	1.20	0.81	3.97	14.52	78.36	4.94
18	0.06	0.11	0.23	0.24	0.90	14.96	83.50	6.31
19	0.00	0.41	0.72	1.52	2.28	2.52	92.55	4.65
20	1.16	5.91	23.52	37.80	14.53	3.54	13.54	1.79
21	0.31	0.16	0.36	0.68	3.94	10.77	83.79	18.29
22	0.23	0.12	0.78	10.58	10.78	7.88	69.63	6.22
23	23.75	7.09	5.57	3.15	2.21	1.40	56.85	6.50
24	0.00	0.00	0.10	0.52	18.01	8.28	73.08	4.52
25	0.10	0.29	1.96	24.87	9.34	3.73	59.70	6.44
26	0.00	0.02	0.04	0.18	0.53	0.77	98.47	5.32
27	0.07	0.03	0.09	0.32	1.68	6.48	91.34	7.96
28	0.00	0.43	0.60	0.65	0.50	4.69	93.13	5.29
29	0.00	0.01	0.15	0.19	2.93	6.51	90.20	7.86
30	15.32	10.53	2.05	1.10	2.43	1.74	66.82	5.84
31	5.41	11.92	4.98	1.58	0.68	1.23	74.21	5.81
32	11.07	7.14	3.22	2.10	2.47	3.47	70.53	5.79
33	1.70	2.51	10.89	50.54	22.60	5.89	5.87	1.43
34	0.00	0.05	0.00	0.20	10.28	14.31	75.16	8.34
35	0.00	0.00	0.15	1.89	1.74	4.09	92.13	6.32
36	0.17	0.22	7.60	21.18	3.01	1.76	66.05	5.30
37	0.00	0.34	11.41	50.18	8.74	3.23	26.10	3.16
38	2.61	3.96	10.50	33.96	37.79	4.68	6.50	0.65
39	14.72	6.21	6.97	13.64	7.61	2.23	48.61	2.82
40	1.19	0.17	11.90	36.95	16.61	4.48	28.71	1.97
41	0.00	0.17	2.78	54.27	28.72	3.05	11.02	1.52
42								
43	0.00	0.22	0.77	1.52	4.91	5.64	86.95	5.78
44	0.00	0.00	0.09	0.64	2.27	6.56	90.43	6.47
45	0.00	0.04	0.10	0.15	0.24	1.15	98.31	6.06
46	0.02	0.11	0.25	0.45	0.61	1.28	97.28	7.70
47	1.17	0.40	0.34	0.18	1.03	13.38	83.51	4.48
48	0.00	0.03	0.24	4.89	10.55	15.70	68.58	4.00
49	0.02	0.04	0.09	0.12	2.74	6.12	90.88	7.42

APPENDIX 3 contd.: Particle Size Analysis and Organic content of Poole Harbour Sediments from each sampling station.

	% of each fraction							% Organic
Site	**>2mm**	**>1mm**	**>500µm**	**>250µm**	**>125µm**	**>63µm**	**< 63µm**	
50	0.00	0.27	0.23	0.81	3.51	7.07	88.12	6.22
51	0.00	0.32	0.25	0.22	0.67	3.91	94.63	9.47
52	0.18	0.84	7.19	44.53	19.33	4.43	23.48	1.47
53	0.00	0.06	0.68	2.99	12.59	18.41	65.27	4.07
54	0.00	0.03	1.04	18.79	43.48	8.21	28.46	2.10
55	0.00	0.19	0.48	0.66	0.96	4.06	93.66	11.09
56	0.00	0.31	0.38	0.83	6.56	13.85	78.06	7.16
57	0.19	0.66	0.68	1.47	4.61	14.75	77.64	6.40
58	0.00	0.05	0.60	0.90	1.36	4.32	92.77	7.74
59	0.00	0.08	0.21	0.47	0.90	1.34	97.00	6.56
60	0.00	0.28	4.74	18.67	18.46	13.02	44.83	2.35
61	0.00	0.17	0.25	1.14	1.75	9.86	86.82	5.01
62	0.09	0.12	0.15	0.64	4.39	9.91	84.70	5.11
63	0.00	0.04	0.17	0.62	10.68	28.00	60.49	4.48
64								
65	1.20	0.77	1.77	46.96	34.81	5.48	9.02	1.20
66	0.00	0.65	1.75	29.50	10.34	29.00	28.76	8.63
67	0.00	0.13	0.03	1.40	17.20	23.42	57.82	3.60
68	0.00	0.07	0.16	0.87	58.90	14.46	25.54	1.62
69	0.04	0.07	0.16	0.99	40.30	14.21	44.23	3.56
70	0.00	0.53	1.62	44.85	43.94	1.61	7.44	1.12
71	11.08	9.91	29.80	29.06	9.76	1.89	8.51	1.13
72	0.04	0.40	9.11	57.60	20.07	2.09	10.69	0.82
73	15.73	8.92	15.61	33.22	14.40	2.99	9.12	2.32
74	0.00	0.00	0.07	0.35	2.87	8.85	87.86	2.87
75	0.00	0.04	0.24	37.02	51.37	4.87	6.46	1.10
76	0.00	0.03	1.41	42.91	45.87	2.31	7.48	0.59
77	0.00	0.15	0.40	2.04	19.98	36.30	41.14	4.49
78	0.04	0.04	1.57	39.44	48.52	0.55	9.85	0.35
79	0.01	0.05	0.19	32.33	63.94	0.59	2.89	0.31
80	4.33	3.08	14.95	47.70	19.52	0.38	10.04	0.58

APPENDIX 4. Mean density of taxa recorded from Poole Harbour (Excluding Brownsea Island Lagoon) in 2009 and in 2002 (adapted from Caldow et al. 2005). Where a taxon differs at species level this is shown in notes. P= present. The 2002 data combines samples in cores and fauna collected from surface dredges with a hand net.

	Density per m^2	**Density per m^2**	**Notes**
Group	**2009**	**2002**	
PHYLUM CNIDARIA (Actiniaria)	191.0	114.7	
PHYLUM NEMATODA	27.7	9.9	
PHYLUM NEMERTEA			
Lineus viridis	7.02	12.7	Nemertine
PHYLUM HIRUDINEA			
PHYLUM ANNELIDA			
Ampharete balthica	2.3	34 (*A.grubei*)	
Anaitides mucosa	18.3	9.9	
Aonides oxycephala	0.3		
Aphelochaeta marioni	555.9		
Arenicola marina	3.5	3.3	
Capitella capitata	131.6	113.3	
Chaetozone christii	23.5		
Cirratulidae indet.	4.2		
Cirratulus filiformis		3819.6	
Cirriformia tentaculata	1.6	9.9	
Caulleriella zetlandica	9.3		
Cossura longissima	0.3		
Desdemona ornata	12.6		
Eteone foliosa	0.6		
Eteone longa	251	60.9	
Eumida cf sanguinea	2.3		
Eumida punctifera	0.3		
Glycera tridactyla	1.0	1.4	
Harmothoe sp.		1.4	
Hediste diversicolor	649.9	614.7	
Heteromastus filiformis		9.9	
Janua pagenstecheri	68.0		
Malacoceros tetraceros	0.6	422	(*M.fulginosus*)
Mediomastus fragilis	0.3		
Melinna palmata	10.9		
Neanthes virens	8.4	80.7	
Neoamphitrite figulus	0.3		
Nephtys hombergii	74.6	46.7	
Nephtys kersivalensis	8.0		
Notomastus latericeus	10.0		
Parapionosyllis minuta	0.3		
Polycirrus sp.	1.9	29.7	*P.caliendrum*
Polydora cornuta	11.6		
Polydora sp.	4.8		
Pomatoceros lamarki	0.3		
Pseudopolydora antennata	1.0		
Pygospio elegans	12.5	11.3	
Scolelepsis spp.	1.3	31.1	(11.3 *S.squamata*; 19.8 *S.foliosa*)
Scoloplos armiger	45.7	263.4	
Serpulidae sp.	1.3		
Spio martinensis	8.4		
Spionidae sp	1.6	151.5	
Streblospio shrubsolii	35.7		

APPENDIX 4 Contd.			
	Density per m^2 2009	**Density per m^2 2002**	**Notes**
Group			
Talitrus saltator		1.4	
Oligochaeta Total	1431.5	1818.5	
Tubificoides sp.	244.5		
Tubificoides benedii	665.3	1818.5	
Tubificoides pseudogaster	518.9		
Ostracoda sp.	121.6		
Eusarsiella zostericola	7.4		
Mysidae spp		0.1	
Mesopdopsis slabberi		15.6	
Neomysis integer		35.4	
Praunus flexuosus		9.9	
Copepoda	1.6		
Cirripedia			
Amphibalanus improvisus	2.3		
Elminius modestus	39.9		
Isopoda			
Apseudes latreillii	17.4		
Cyathura carinata	82.0	355.5	
Idotea balthica	0.3	1.4	
Idotea chelipes	7.1		
Idotea neglecta		4.2	
Amphipoda			
Ampelisca brevicornis	2.9		
Bathyporeia indet.	1.3	2.8	*B.sarsi*
Corophium arenarium		28.3	
Corophium volutator	456.5	373.9	
Gammaropsis palmata		7.1	
Gammarus locusta	3.2	277.6	
Melita palmata	21.2		
Microdeutopus gryllotalpa	48.3	635.9	
Microprotopus maculeatus	14.5		
Phtisica marina	0.3		
Urothoe pulchellus	35.7	42.5	*U.poseidonis*
Decapoda			
Carcinus maenas	1.6	2.1	
Crangon crangon	1.9	1.2	
Liocarcinus arcuatus	1.3		
Palaemon longirostris		2.8	
Palaemon serratus		1.4	
PHYLUM MOLLUSCA			
Abra tenuis	113.2	254.9	
Alderia modesta	2.3		
Cerastoderma edule	23.8	30.2	
Cerastoderma glaucum	6.1		
Crepidula fornicata	P	0.9	
Dosinia lupinus	1.3		
Gibbula umbilicalis	0.6	0.4	
Haminoea navicula	1.3	1.4	
Hinia reticulata	0.6	0.2	
Hydrobia ulvae	489.6	756.3	
Leptochitona cinereus	0.3		
Littorina littorea	1.3	4.0	*Littorina* spp.
Littorina saxatilis agg.	0.6		
Macoma balthica	8.7	1.4	

APPENDIX 4. Contd.			
	Density per m²	Density per m²	Notes
Group	2009	2002	
Mya arenaria	29.0	9.9	
Mytilus edulis	0.6		
Parvicardium exiguum	0.3		
Retusa obtusa	9.7		
Ruditapes decussatus	0.3		
Ruditapes phillipinarum	12.6	4.6	
Scrobicularia plana	5.7	8.5	
Solen marginatus	0.3		
Venerupis saxatilis	0.3		
PHYLUM ECHINODERMATA			
Amphipholis squamata	14.2		
PHYLUM INSECTA			
Chironomidae	63.7	54.2	inc pupae
Dolichopodidae	0		
Insecta indet	0.3		
Insecta larvae	5.5		
PHYLUM TUNICATA		0.4	
PHYLUM CHORDATA			
Pomatochistus sp.	1.9		
Bryozoa indet.	1.3		

APPENDIX 5: Species Richness and Diversity and each sampling point, 2002 & 2009.

* represents mean value for 5 cores taken in 2009; **** only one species present

Site	Number of species present		Numerical density per core		Numerical density per m^2		Margalef species richness d=(S-1)/logeN		Species evenness Pielou J=H'/logeS		Shannon diversity Index H'		Simpson diversity Index	
	2002	2009	2002	2009*	2002	2009*	2002	2009	2002	2009	2002	2009	2002	2009
1	7	12	-	26	19301	3310	0.61	1.36	0.53	0.74	1.04	1.83	0.53	0.79
2	6	10	-	13	4305	1655	0.60	1.21	0.88	0.64	1.57	1.47	0.77	0.66
3	10	8	-	17	10201	2165	0.98	0.91	0.74	0.76	1.69	1.58	0.77	0.72
4	6	11	-	97	6571	12350	0.57	1.07	0.79	0.49	1.42	1.18	0.72	0.50
5	9	14	-	84	5216	10695	0.93	1.43	0.61	0.61	1.33	1.62	0.63	0.67
6	9	13	-	34	26965	4329	0.78	1.43	0.28	0.70	0.61	1.79	0.23	0.76
7	6	10	-	14	4216	1783	0.60	1.21	0.72	0.67	1.29	1.54	0.67	0.70
8	6	5	-	27	3739	3438	0.61	0.49	0.87	0.61	1.56	0.98	0.76	0.57
9	7	5	-	27	5099	3438	0.70	0.49	0.84	0.34	1.63	0.54	0.76	0.26
10	11	18	-	102	23692	12987	0.99	1.81	0.46	0.63	1.10	1.82	0.50	0.76
11	8	16	-	114	43398	14515	0.66	1.57	0.27	0.30	0.56	0.82	0.24	0.38
12	7	7	-	5	27536	637	0.59	0.94	0.15	0.79	0.29	1.54	0.10	0.73
13	5	10	-	22	2039	2801	0.52	1.14	0.72	0.47	1.17	1.08	0.58	0.57
14	7	16	-	65	4066	8276	0.72	1.66	0.74	0.61	1.43	1.70	0.69	0.75
15	6	15	-	38	5673	4838	0.58	1.65	0.56	0.56	1.00	1.53	0.50	0.62
16	9	8	-	23	16679	2928	0.82	0.88	0.34	0.46	0.74	0.96	0.33	0.49
17	1	23	-	74	8	9422	0.00	2.41	****	0.64	0.00	2.00	0.00	0.80
18	11	13	-	72	6651	9167	1.14	1.73	0.62	0.89	1.48	2.28	0.69	0.88
19	7	9	-	8	6482	1019	0.68	1.15	0.46	0.69	0.90	1.52	0.46	0.70
20	3	7	-	34	914	4329	0.29	0.72	0.39	0.76	0.42	1.48	0.23	0.74
21	9	8	-	3	1372	382	1.11	1.17	0.92	0.79	2.01	1.65	0.85	0.71
22	12	14	-	48	7991	6112	1.22	1.53	0.60	0.47	1.50	1.25	0.66	0.55
23	4	5	-	109	9970	13878	0.33	0.42	0.34	0.75	0.48	1.20	0.24	0.66
24	6	10	-	11	12022	1401	0.53	1.24	0.28	0.85	0.50	1.96	0.21	0.83
25	6	11	-	10	9869	1273	0.54	1.40	0.32	0.83	0.58	2.00	0.30	0.83
26	9	14	-	24	25380	3056	0.79	1.62	0.59	0.66	1.30	1.75	0.67	0.74

APPENDIX 5 contd: Species Richness and Diversity and each sampling point, 2002 & 2009

Site	Number of species present		Numerical density per core		Numerical density per m^2		Margalef species richness d=(S-1)/logeN		Species evenness Pielou J=H'/logeS		Shannon diversity Index H'		Simpson diversity Index	
	2002	2009	2002	2009*	2002	2009*	2002	2009	2002	2009	2002	2009	2002	2009
27	11	7	-	22	36089	2801	0.95	0.76	0.69	0.81	1.66	1.57	0.75	0.76
28	9	9	-	12	40192	1528	0.75	1.09	0.53	0.75	1.17	1.65	0.52	0.75
29	5	8	-	5	3059	637	0.50	1.07	0.65	0.81	1.04	1.69	0.52	0.77
30	7	12	-	61	15413	7767	0.62	1.23	0.44	0.67	0.85	1.66	0.39	0.76
31	11	16	-	20	16659	2546	1.03	1.94	0.76	0.75	1.82	2.08	0.79	0.83
32	11	14	-	23	23914	2928	0.99	1.68	0.52	0.68	1.24	1.78	0.56	0.74
33	9	12	-	7	6022	891	0.92	1.62	0.54	0.91	1.18	2.26	0.60	0.88
34	9	5	-	16	16546	2037	0.82	0.53	0.80	0.40	1.76	0.64	0.79	0.29
35	8	15	-	69	2047	8785	0.92	1.54	0.85	0.50	1.77	1.37	0.80	0.53
36	9	15	-	30	4087	3820	0.96	1.70	0.69	0.35	1.53	0.93	0.71	0.33
37	10	8	-	19	2606	2419	1.14	0.91	0.92	0.50	2.13	1.04	0.87	0.46
38	7	13	-	15	2379	1910	0.77	1.59	0.63	0.75	1.22	1.93	0.54	0.80
39	7	19	-	58	2735	7385	0.76	2.04	0.73	0.54	1.41	1.58	0.66	0.65
40	21	14	-	18	73222	2292	1.79	1.68	0.57	0.69	1.75	1.83	0.75	0.76
41	8	20	-	34	1594	4329	0.95	2.28	0.82	0.58	1.70	1.73	0.80	0.69
42	11	16	-	29	18321	3692	1.02	1.83	0.57	0.77	1.36	2.15	0.69	0.85
43	12	9	-	24	49859	3056	1.02	1.00	0.59	0.52	1.47	1.14	0.70	0.60
44	11	9	-	28	2869	3565	1.26	0.98	0.61	0.63	1.45	1.39	0.68	0.68
45	3	15	-	92	1700	11714	0.27	1.50	0.57	0.56	0.63	1.52	0.34	0.69
46	15	17	-	19	26548	2419	1.37	2.05	0.51	0.78	1.38	2.21	0.61	0.85
47	6	13	-	19	2946	2419	0.63	1.55	0.56	0.67	1.01	1.72	0.52	0.72
48	6	9	-	11	331	1401	0.86	1.14	0.78	0.79	1.40	1.74	0.73	0.78
49	7	9	-	11	1728	1401	0.80	1.11	0.55	0.73	1.07	1.61	0.53	0.71
50	11	11	-	15	7023	1910	1.13	1.33	0.65	0.84	1.55	2.02	0.74	0.85
51	10	13	-	148	3572	18844	1.10	1.24	0.57	0.57	1.32	1.46	0.65	0.69
52	13	15	-	21	29627	2674	1.17	1.79	0.58	0.79	1.49	2.13	0.71	0.82

APPENDIX 5 contd: Species Richness and Diversity and each sampling point, 2002 & 2009

Site	Number of species present		Numerical density per core		Numerical density per m^2		Margalef species richness d=(S-1)/logeN		Species evenness Pielou J=H'/logeS		Shannon diversity Index H'		Simpson diversity Index	
	2002	2009	2002	2009*	2002	2009*	2002	2009	2002	2009	2002	2009	2002	2009
53	5	6	-	5	1020	637	0.58	0.80	0.91	0.75	1.47	1.34	0.74	0.65
54	13	9	-	15	13377	1910	1.26	1.06	0.73	0.72	1.88	1.59	0.79	0.74
55	6	7	-	6	829	764	0.74	0.94	0.66	0.88	1.18	1.71	0.65	0.79
56	14	14	-	25	12656	3183	1.38	1.77	0.46	0.77	1.22	2.04	0.56	0.80
57	9	11	-	45	6041	5730	0.92	1.19	0.73	0.26	1.61	0.62	0.74	0.23
58	11	10	-	20	6397	2546	1.14	1.15	0.78	0.58	1.87	1.33	0.78	0.64
59	11	11	-	18	5570	2292	1.16	1.31	0.77	0.68	1.84	1.64	0.79	0.72
60	12	8	-	17	5342	2165	1.28	0.92	0.66	0.48	1.65	0.99	0.69	0.51
61	4	12	-	141	454	17953	0.49	1.12	0.76	0.48	1.05	1.20	0.63	0.56
62	5	4	-	17	2407	2165	0.51	0.39	0.74	0.50	1.20	0.69	0.63	0.39
63	7	6	-	6	1829	764	0.80	0.85	0.54	0.80	1.05	1.43	0.55	0.69
64	4	6	-	22	1250	2801	0.42	0.63	0.76	0.53	1.05	0.94	0.63	0.44
65	14	13	-	81	12383	10313	1.38	1.30	0.71	0.49	1.89	1.27	0.79	0.61
66	8	19	-	307	6021	39088	0.80	1.70	0.39	0.50	0.80	1.47	0.41	0.70
67	11	8	-	9	6806	1146	1.13	1.01	0.52	0.84	1.25	1.75	0.52	0.80
68	7	5	-	14	497	1783	0.97	0.53	0.70	0.56	1.36	0.90	0.69	0.53
69	5	3	-	48	2270	6112	0.52	0.23	0.61	0.13	0.98	0.14	0.55	0.05
70	3	6	-	3	1024	382	0.29	0.86	0.50	0.91	0.55	1.63	0.35	0.77
71	18	35	-	114	4216	14515	2.02	3.55	0.68	0.68	1.97	2.43	0.78	0.83
72	7	9	-	5	1141	637	0.85	1.28	0.89	0.92	1.73	2.01	0.80	0.85
73	11	13	-	67	29263	8531	0.97	1.34	0.44	0.48	1.05	1.24	0.57	0.60
74	12	13	-	109	6880	13878	1.25	1.26	0.66	0.35	1.63	0.91	0.70	0.43
75	10	20	-	91	7084	11586	1.02	2.03	0.53	0.64	1.22	1.91	0.52	0.79
76	12	10	-	9	6959	1146	1.24	1.29	0.74	0.73	1.84	1.67	0.78	0.71
77	9	8	-	12	3184	1528	0.99	0.96	0.70	0.41	1.53	0.86	0.71	0.36
78	7	9	-	20	8185	2546	0.67	1.02	0.49	0.57	0.94	1.26	0.54	0.63
79	7	10	-	32	3752	4074	0.73	1.08	0.42	0.64	0.83	1.48	0.37	0.69
80	8	8	-	29	10906	3692	0.75	0.88	0.35	0.43	0.73	0.90	0.33	0.43
					848188	409219	**0.86**	**1.28**	**0.61**	**0.63**	**1.27**	**1.49**	**0.60**	**0.66**

APPENDIX 6: Measures of site Taxonomic Diversity (Δ), Taxonomic Distinctness (Δ^*) Average Taxonomic Distinctness (Δ^+) Total Taxonomic Distinctness ($S\Delta^+$) and Variation in Taxonomic Distinctness (Λ^+) were calculated using PRIMER 6 (Clarke & Gorely, 2006). Data from mean of five samples obtained from each site in Poole Harbour, 2009. Lower values of (Δ^+) are highlighted. See text for discussion.

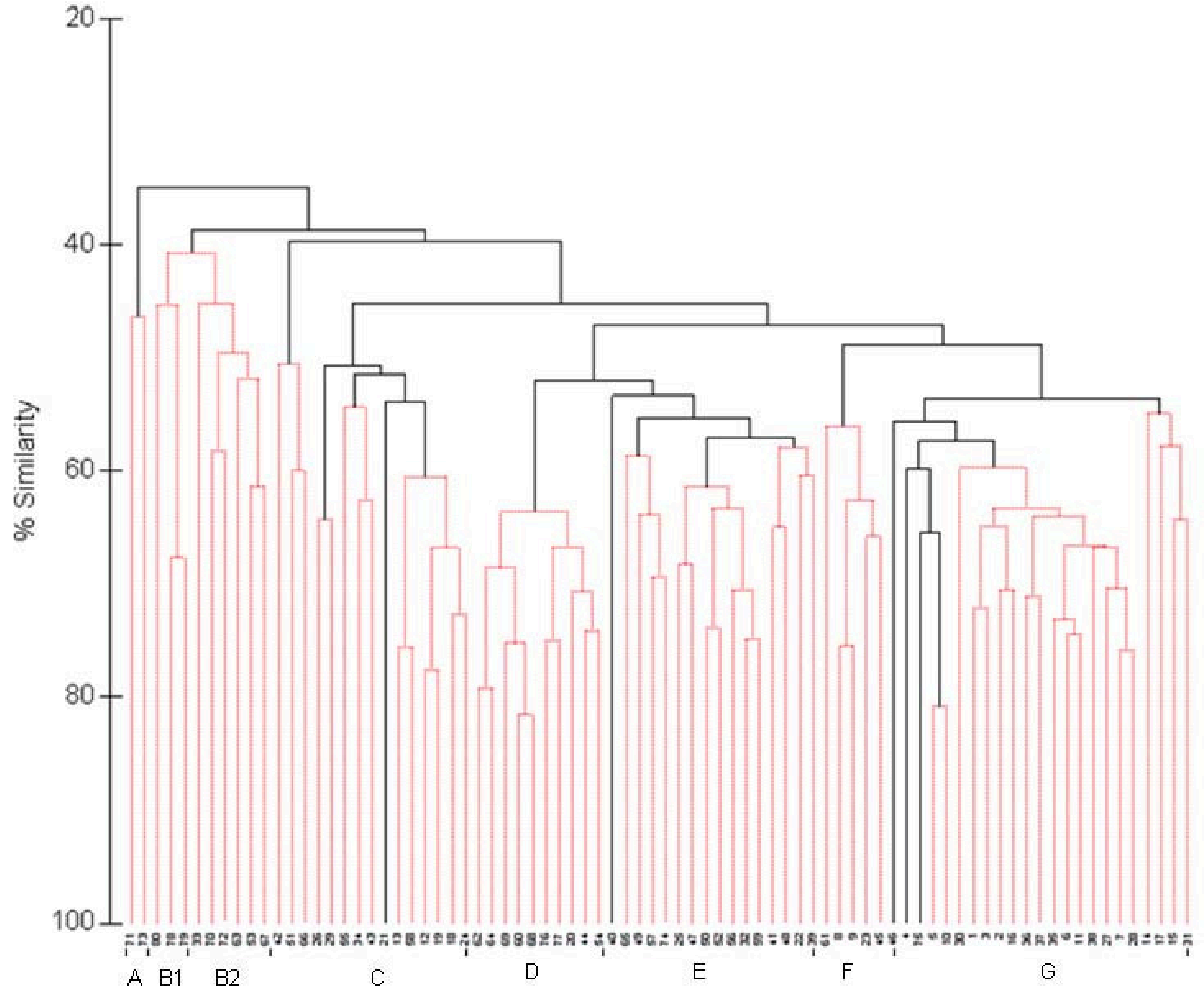
Site	Delta (Δ)	Delta* (Δ^*)	Delta+ (Δ^+)	sDelta+ ($S\Delta^+$)	Lambda+ (Λ^+)
1	73.76	89.54	89.14	1069.70	298.76
2	35.47	70.49	85.19	851.85	311.39
3	64.64	90.16	86.90	695.24	364.23
4	49.56	95.94	82.12	903.33	412.67
5	71.13	96.24	89.86	1437.78	306.93
6	66.44	87.02	90.38	1175.00	288.60
7	56.34	80.51	87.78	877.78	288.89
8	55.50	97.33	90.00	450.00	233.33
9	28.36	98.24	96.67	580.00	81.48
10	68.55	86.91	88.11	1674.07	349.19
11	28.01	74.18	89.95	1529.17	332.02
12	59.21	81.42	83.33	583.33	396.83
13	56.03	97.69	88.18	970.00	370.43
14	67.28	92.12	93.33	1400.00	198.94
15	57.86	91.15	90.79	1361.90	259.16
16	35.56	73.15	89.88	719.05	244.83
17	63.50	94.79	92.42	2125.76	235.76
18	74.69	84.64	82.38	1235.71	480.57
19	53.53	76.32	87.04	783.33	418.38
20	55.43	73.86	79.37	555.56	394.31
21	63.31	88.83	92.86	742.86	226.76
22	70.14	90.77	89.31	1428.89	295.35
23	61.65	92.22	95.56	573.33	54.32
24	73.99	89.32	85.19	851.85	434.84
25	72.75	86.36	90.91	1090.91	312.98
26	65.21	88.37	89.53	1163.89	271.43
27	73.32	97.10	95.24	666.67	83.14
28	68.61	90.28	87.58	963.33	365.84
29	64.57	84.23	88.10	704.76	314.63
30	74.43	96.37	93.59	1216.67	201.07
31	81.25	95.63	91.07	1639.22	279.69
32	72.80	92.06	90.32	1354.76	300.43
33	69.71	79.42	88.03	1144.44	355.39
34	28.86	99.46	93.33	466.67	122.22
35	45.95	86.04	90.48	1357.14	263.79
36	28.18	83.52	90.63	1359.52	301.18
37	47.58	85.94	87.96	791.67	240.91
38	74.11	92.29	90.66	1269.23	269.89
39	60.20	85.12	87.89	1757.89	353.46
40	46.24	59.79	87.08	1393.33	395.66
41	57.51	82.03	82.47	1814.29	412.91
42	80.08	94.51	91.54	1556.25	306.36
43	60.16	97.83	94.24	1036.67	254.73
44	54.78	80.62	84.81	848.15	442.25
45	67.11	98.06	93.81	1407.14	181.25
46	76.70	89.88	86.40	1468.75	352.13

Site	Delta (Δ)	Delta* (Δ^*)	Delta+ (Δ^+)	sDelta+ ($S\Delta^+$)	Lambda+ (Λ^+)
47	64.01	85.69	90.48	1266.67	354.96
48	71.28	86.11	86.06	946.67	391.55
49	61.09	85.49	87.50	787.50	329.86
50	75.02	87.39	93.94	1127.27	165.29
51	68.76	92.63	86.63	1212.82	318.80
52	78.99	93.49	91.30	1552.08	281.73
53	52.64	74.73	90.48	633.33	491.31
54	57.39	76.30	84.81	848.15	392.87
55	79.33	95.07	92.59	833.33	222.91
56	66.73	96.78	90.00	1350.00	283.60
57	47.53	96.68	93.16	1211.11	174.04
58	59.89	93.89	84.81	848.15	392.87
59	51.99	69.05	86.11	1033.33	442.62
60	45.67	84.26	80.09	720.83	398.45
61	52.34	93.55	91.03	1274.36	313.23
62	5.84	83.06	72.22	216.67	246.91
63	63.79	98.51	95.24	666.67	162.51
64	33.83	70.80	76.19	609.52	484.69
65	27.72	45.53	87.73	1228.21	353.08
66	69.33	98.42	93.65	1966.67	200.43
67	64.90	78.85	89.35	804.17	449.89
68	51.13	85.37	80.00	480.00	488.89
69	15.86	92.28	80.00	400.00	600.00
70	73.29	91.88	85.71	600.00	510.20
71	66.16	86.06	89.24	3123.53	313.81
72	73.34	82.79	86.97	956.67	340.31
73	55.69	84.68	78.02	1092.31	420.51
74	33.28	76.99	89.21	1338.10	290.90
75	58.20	73.46	86.27	1811.67	397.46
76	57.25	78.19	79.39	873.33	403.67
77	32.23	80.20	80.09	720.83	521.91
78	57.84	89.38	78.48	863.33	491.64
79	62.37	90.50	86.67	866.67	377.78
80	51.36	85.46	86.97	956.67	350.41

APPENDIX 7

Biomass of key species and groups (mg AFDW m^{-2}) in Poole Harbour 2002 and 2009

	2002	**2009**
Small worms	8105	2684
Neanthes virens	4567	1494
Hediste diversicolor	2453	2999
Mya arenaria	2323	1444
Cerastoderma spp.	2155	2613
Arenicola marina	1176	928
Ruditapes spp.	1155	2132
Scrobicularia plana	1118	617
Nephyts spp.	552	2067
Littorina spp.	537	130
Hydrobia ulvae	449	397
Abra tenuis	301	142
Cyathura carinata	252	76
Carcinus maenas	213	198
Corophium volutator	148	184
Gammarus locusta	39	1
Macoma balthica	1	74
Crangon crangon	1	662
Other amphipods		15



APPENDIX 8 Dendrogram produced using SIMPEROF routine from Resemblance Matrix using Bray Curtis similarity in PRIMER 6. Fourth Root Transform. 2D Stress 0.25. Grouped assemblages shown A –G. Linked groups shown in black are statistically significant $p<0.05$.

APPENDIX 9

Parameters
Rank correlation method: Spearman
Method: BIOENV
Maximum number of variables: 5
Resemblance:
Analyse between: Samples
Resemblance measure: D1 Euclidean distance

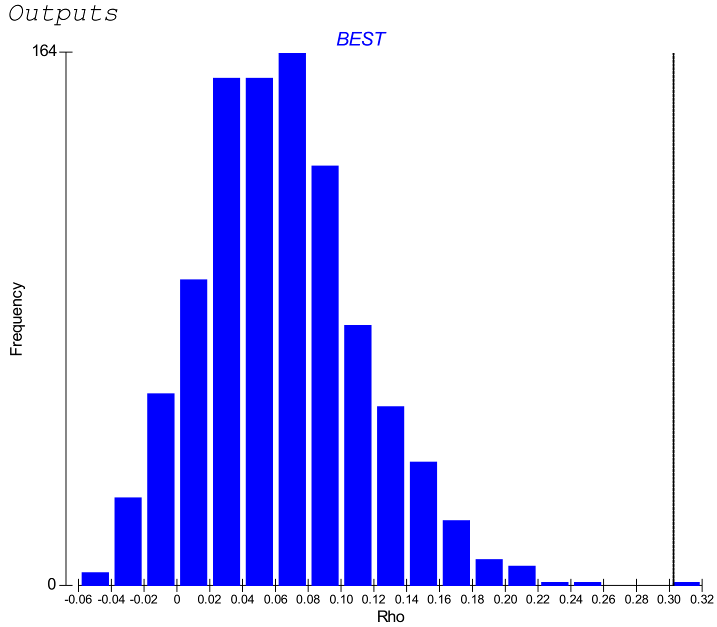
Variables
1 Algae Biomass
2 Algae % Cover
3 % Organic
4 % Clay Silt

Global Test
Sample statistic (Rho): 0.302
Significance level of sample statistic: 0.2%
Number of permutations: 999 (Random sample)
Number of permuted statistics greater than or equal to Rho: 1

Best results

No.Vars	Corr.	Selections
2	0.302	3,4
3	0.296	2-4
3	0.296	1,3,4
4	0.293	All
1	0.283	3
2	0.269	1,3
1	0.265	4
2	0.262	1,4
2	0.259	2,3
3	0.258	1-3

Outputs



APPENDIX 10

Predator prey energy balance

The energy requirements for each bird species were calculated using the following data parameters from Thomas et al (2004):

Species	Energy consumption in kJ/day	Feeding days per year
Shelduck	1624.51	212
Oystercatcher	1023.64	243
Grey plover	554.75	212
Avocet	606.66	212
Dunlin	181.96	243
Redshank	387.62	243
Black-tailed godwit	667.71	243
Curlew	1386.89	243

Available energy was calculated from the average biomass for the sampling sites within each sector, for each of the invertebrate species. Ash-free dry mass in kg was converted to kJ using the following conversion factors that have been obtained from literature and presented in Thomas et al (2004):

Species	**kJ per kg AFDM**
Hediste diversicolor	19678.9
Nereis virens	19678.9
Nephtys hombergii	19678.9
Arenicola marina	19678.9
Small annelids	21353.7
Cyathura carinata	23028.5
Gammarus locusta	23028.5
Microdeutopus gryllotalpus	23028.5
Corophium volutator	23028.5
Corophium arenarium	23028.5
Urothoe poseidonis	23028.5
Other crustacea	23028.5
Carcinus maenas	16748
Crangon crangon	23028.5
Cerastoderma edule	21353.7
Ruditapes phillipinarum	21353.7
Abra tenuis	21353.7
Mya/Scrobicularia	21353.7
Macoma balthica	21353.7
Littorina sp.	16748
Hydrobia ulvae	16748
Other molluscs	21353.7
Other species	18004.1

APPENDIX 11. Poole Harbour predator/prey energy balance (using WeBS areas)

	Shelduck				Oystercatcher				Grey Plover				Avocet			
WeBS sector code	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio
DP001	-	58.02	10.8974	-	17.92	32.94	6.19	0.35	-	87.37	16.41	-	-	89.20	16.75	-
DP002	14.47	-	0	0.00	1.99	-	0.00	0.00	-	-	0.00	-	63.13	-	-	-
DP003	27.57	452.09	32.5285	1.18	59.98	159.21	11.46	0.19	12.60	539.01	38.78	3.08	83.6619	540.16	38.87	0.46
DP004	13.44	195.95	22.346	1.66	41.07	241.75	27.57	0.67	0.12	413.68	47.18	393.11	-	231.24	26.37	-
DP005	-	-	0	-	12.94	-	0.00	0.00	-	-	0.00	-	-	-	-	-
DP006	-	-	0	-	-	-	0.00	-	-	-	0.00	-	-	-	-	-
DP007	-	14.40	3.45927	-	-	183.67	44.13	-	-	123.26	29.61	-	-	87.94	21.13	-
DP008	-	230.10	16.9292	-	-	68.56	5.04	-	-	275.52	20.27	-	-	257.49	18.94	-
DP009	23.43	33.34	4.49971	0.19	12.44	57.20	7.72	0.62	2.04	263.80	35.60	17.45	-	217.97	29.42	-
DP010	2.76	26.12	3.62929	1.32	1.74	429.73	59.70	34.27	-	225.10	31.27	-	1.65	116.34	16.16	9.81
DP011	34.11	63.84	13.9294	0.41	11.20	84.91	18.53	1.65	-	147.03	32.08	-	-	121.70	26.55	-
DP012	0.34	16.82	1.0677	3.10	4.73	48.54	3.08	0.65	0.12	16.84	1.07	8.91	-	81.31	5.16	-
DP013	-	29.25	3.36319	-	-	23.70	2.73	-	-	8.27	0.95	-	-	103.13	11.86	-
DP014	0.69	41.92	9.55908	13.87	16.92	138.41	31.56	1.86	-	167.87	38.28	-	-	98.33	22.42	-
DP015	1.72	30.93	13.3565	7.75	31.61	523.45	226.08	7.15	-	352.17	152.10	-	-	298.14	128.77	-
DP016	19.30	8.15	3.14394	0.16	4.23	124.06	47.86	11.31	-	39.32	15.17	-	1.14	95.11	36.69	32.16
DP017	51.69	131.32	57.3435	1.11	13.44	255.72	111.66	8.31	0.24	230.91	100.83	420.10	-	226.33	98.83	-
DP018	91.32	18.18	7.05757	0.08	70.68	569.91	221.28	3.13	-	170.12	71.52	-	-	156.13	60.62	-
DP019	-	49.86	8.73887	-	-	174.31	30.55	-	-	192.29	40.87	-	-	292.03	51.19	-
DP020	1.03	138.09	40.2129	38.90	2.99	11.87	3.46	1.16	-	181.16	52.76	-	-	242.46	70.61	-
DP021	-	120.35	75.0596	-	1.00	144.84	90.33	90.73	-	132.34	82.54	-	-	138.97	86.67	-
DP022	-	36.88	2.49947	-	-	249.65	16.92	-	-	286.53	19.42	-	-	283.69	19.22	-
DP023	-	55.00	2.12492	-	-	20.19	0.78	-	-	75.20	2.91	-	-	235.44	9.10	-
DP024	-	20.91	1.18186	-	-	72.40	4.09	-	-	75.04	4.24	-	-	302.76	17.11	-
DP025	-	-	0	-	-	-	0.00	-	-	-	0.00	-	-	-	0.00	-
DP026	-	16.02	2.07764	-	-	36.18	4.69	-	-	14.02	1.82	-	-	152.29	19.75	-
DP027	2.76	63.09	6.49136	2.35	10.45	67.04	6.90	0.66	0.48	129.54	13.33	27.77	0.51	184.69	19.00	37.48
DP028	37.90	23.71	15.3969	0.41	19.66	176.06	114.33	5.82	4.32	152.22	98.85	22.88	-	160.20	104.03	-
DP029	19.99	20.30	11.5323	0.58	10.70	141.78	80.53	7.52	0.24	159.70	90.71	377.94	30.17	183.05	103.97	3.45
DP030	43.76	97.51	23.5313	0.54	18.91	487.94	117.74	6.22	0.12	562.98	135.85	1132.06	-	284.06	68.55	-
DP031	5.51	20.11	7.26037	1.32	15.43	127.13	45.89	2.97	0.36	142.96	51.61	143.35	29.41	75.66	27.31	0.93
DP032	2.76	5.53	0.91723	0.33	4.23	176.38	29.24	6.91	-	179.62	29.77	-	3.68	179.62	29.77	8.10
DP033	13.44	32.35	0	0.00	4.23	0.43	0.00	0.00	0.12	32.79	0.00	0.00	-	42.98	2.73	-
DP034	-	-	0	-	36.83	-	0.00	0.00	-	-	0.00	-	-	-	-	-

	Dunlin				Redshank				Black-tailed Godwit				Curlew			
WeBS sector code	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio
DP001	1.77	84.56	15.88	8.98	0.57	84.17	15.81	27.94	0.16	460.32	86.45	532.47	5.05	376.19	70.79	14.01
DP002	0.04	-	0.00	0.00	0.19	-	0.00	0.00	12.83	-	-	-	0.34	-	0.00	0.00
DP003	1620.00	612.44	44.07	0.03	0.57	645.78	46.47	82.14	59.91	574.65	41.35	0.69	8.76	159.21	11.46	1.31
DP004	1.77	230.95	26.34	14.90	1.13	243.59	27.78	24.55	-	446.25	50.89	-	3.71	230.30	26.60	7.18
DP005	-	-	0.00	-	0.28	-	0.00	0.00	-	-	0.00	-	1.01	-	0.00	0.00
DP006	-	-	0.00	-	-	-	0.00	-	-	-	0.00	-	-	-	0.00	-
DP007	-	90.26	21.69	-	-	90.96	21.86	-	-	265.79	63.86	-	-	111.18	26.87	-
DP008	-	279.35	20.55	-	-	308.15	22.67	-	-	419.89	30.89	-	-	68.13	5.32	-
DP009	1.15	38.25	5.16	4.49	2.73	229.90	31.03	11.35	-	668.80	90.26	-	12.47	242.45	25.72	2.06
DP010	1.41	140.52	19.52	13.80	10.65	146.28	20.32	1.91	31.99	447.36	62.15	1.94	14.15	223.16	32.21	2.28
DP011	-	123.01	26.84	-	4.05	124.45	27.16	6.70	12.02	210.35	45.90	3.82	21.57	84.91	18.53	0.86
DP012	-	81.31	5.16	-	-	129.05	8.19	-	-	129.85	8.24	-	0.67	47.76	3.03	4.50
DP013	-	124.29	14.29	-	-	135.28	15.56	-	-	132.95	15.29	-	-	10.82	1.25	-
DP014	-	110.16	25.12	-	0.47	110.04	25.09	53.23	-	500.55	114.14	-	6.07	137.78	31.89	5.26
DP015	0.13	305.79	132.07	995.94	-	316.01	136.48	-	2.92	615.35	265.77	90.94	53.92	331.14	151.77	2.81
DP016	4.33	99.38	38.34	8.85	7.35	124.23	47.92	6.52	12.83	186.89	72.10	5.62	7.41	60.29	24.42	3.29
DP017	21.44	227.72	99.44	4.64	-	250.08	109.20	-	68.36	399.37	174.39	2.55	67.39	112.79	52.83	0.78
DP018	72.40	155.67	60.44	0.83	3.21	173.45	67.35	21.01	61.86	649.45	252.16	4.08	318.44	159.20	61.81	0.19
DP019	-	295.30	51.76	-	-	308.78	54.12	-	-	347.82	60.96	-	-	148.78	26.08	-
DP020	-	210.80	61.39	-	0.09	243.01	70.77	750.56	-	287.09	83.60	-	1.01	86.65	22.93	22.69
DP021	-	172.31	107.46	-	-	194.84	121.51	-	-	328.61	204.94	-	0.67	51.80	32.45	48.15
DP022	-	283.69	19.22	-	-	283.69	19.22	-	-	533.26	36.14	-	-	249.65	16.92	-
DP023	-	235.44	9.10	-	-	235.44	9.10	-	-	235.44	9.10	-	-	20.19	0.85	-
DP024	-	303.93	17.18	-	-	320.16	18.10	-	-	320.63	18.12	-	-	72.40	4.36	-
DP025	-	-	0.00	-	-	-	0.00	-	-	-	-	-	-	-	-	-
DP026	-	156.66	20.32	-	-	190.09	24.65	-	-	204.13	26.47	-	-	35.79	4.67	-
DP027	0.22	184.69	19.00	85.98	1.51	184.69	19.00	12.60	-	311.05	32.00	-	-	66.45	7.01	-
DP028	13.61	160.71	104.37	7.67	2.07	164.95	107.12	51.64	0.16	356.60	231.58	1426.28	28.98	155.79	103.26	3.56
DP029	20.47	184.80	104.97	5.13	3.87	184.78	104.95	27.15	1.46	194.31	110.37	75.53	58.30	141.15	86.99	1.49
DP030	3.89	281.94	68.04	17.49	1.70	281.94	68.04	40.09	17.54	823.54	198.73	11.33	23.93	465.92	112.63	4.71
DP031	9.81	76.79	27.72	2.82	5.85	80.27	28.98	4.96	1.62	148.86	53.74	33.09	25.61	125.66	47.10	1.84
DP032	-	181.92	30.16	-	0.75	208.39	34.54	45.80	0.49	206.09	34.16	70.13	5.05	176.38	31.73	6.28
DP033	1.77	42.98	0.00	0.00	0.47	42.98	0.00	0.00	-	42.98	2.73	-	3.71	0.43	0.00	0.00
DP034	-	-	0.00	-	0.66	-	0.00	0.00	-	-	0.00	-	-	-	0.00	-

Appendix 11. Poole Harbour predator/prey energy balance (using Admiralty chart data)

	Shelduck				Oystercatcher				Grey Plover				Avocet			
WeBS sector code	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio
DP001	-	58.02	-	-	17.92	32.94	-	-	-	87.37	-	-	-	89.20	-	-
DP002	14.47	-	-	-	1.99	-	-	-	-	-	-	-	63.13	-	-	-
DP003	71.6079	612.44	44.07	0.62	59.98	159.21	-	-	12.60	539.01	-	-	83.6619	540.16	-	-
DP004	13.44	195.95	-	-	41.07	241.75	-	-	0.12	413.68	-	-	-	231.24	-	-
DP005	-	-	-	-	12.94	-	-	-	-	-	-	-	-	-	-	-
DP006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DP007	-	14.40	-	-	-	183.67	-	-	-	123.26	-	-	-	87.94	-	-
DP008	-	230.10	-	-	-	68.56	-	-	-	275.52	-	-	-	257.49	-	-
DP009	23.43	33.34	4.91537	0.21	12.44	57.20	8.43	0.68	2.04	263.80	38.89	19.06	-	217.97	32.13	-
DP010	2.76	26.12	3.71873	1.35	1.74	429.73	61.17	35.11	-	225.10	32.04	-	1.65	116.34	16.56	10.05
DP011	34.11	63.84	30.5738	0.90	11.20	84.91	40.67	3.63	-	147.03	70.42	-	-	121.70	58.29	-
DP012	0.34	16.82	3.89749	11.31	4.73	48.54	11.25	2.38	0.12	16.84	3.90	32.51	-	81.31	18.84	-
DP013	-	29.25	6.03944	-	-	23.70	4.89	-	-	8.27	1.71	-	-	103.13	21.30	-
DP014	0.69	41.92	15.7748	22.89	16.92	138.41	52.09	3.08	-	167.87	63.17	-	-	98.33	37.00	-
DP015	1.72	30.93	17.5002	10.16	31.61	523.45	296.22	9.37	-	352.17	199.29	-	-	298.14	168.71	-
DP016	19.30	8.15	3.66156	0.19	4.23	124.06	55.74	13.17	-	39.32	17.67	-	1.14	95.11	42.73	37.46
DP017	51.69	131.32	58.284	1.13	13.44	255.72	113.49	8.44	0.24	230.91	102.48	427.00	-	226.33	100.45	-
DP018	91.32	18.18	7.64205	0.08	70.68	569.91	239.60	3.39	-	170.12	73.19	-	-	156.13	65.64	-
DP019	-	49.86	10.5975	-	-	174.31	37.05	-	-	192.29	40.68	-	-	292.03	62.07	-
DP020	1.03	138.09	100.655	97.37	2.99	11.87	8.65	2.90	-	181.16	132.05	-	-	242.46	176.73	-
DP021	-	120.35	74.0214	-	1.00	144.84	89.08	89.48	-	132.34	81.39	-	-	138.97	85.47	-
DP022	-	36.88	-	-	-	249.65	-	-	-	286.53	-	-	-	283.69	-	-
DP023	-	55.00	-	-	-	20.19	-	-	-	75.20	-	-	-	235.44	-	-
DP024	-	20.91	-	-	-	72.40	-	-	-	75.04	-	-	-	302.76	-	-
DP025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DP026	-	16.02	2.29917	-	-	36.18	5.19	-	-	14.02	2.01	-	-	152.29	21.86	-
DP027	2.76	63.09	46.2138	16.76	10.45	67.04	49.11	4.70	0.48	129.54	94.89	197.67	0.51	184.69	135.29	266.81
DP028	37.90	23.71	14.6836	0.39	19.66	176.06	109.04	5.55	4.32	152.22	94.27	21.82	-	160.20	99.22	-
DP029	19.99	20.30	13.0017	0.65	10.70	141.78	90.79	8.48	0.24	159.70	102.27	426.09	30.17	183.05	117.22	3.89
DP030	43.76	97.51	21.1451	0.48	18.91	487.94	105.80	5.59	0.12	562.98	122.08	1017.26	-	284.06	61.60	-
DP031	5.51	20.11	7.74971	1.41	15.43	127.13	48.98	3.17	0.36	142.96	55.09	153.01	29.41	75.66	29.15	0.99
DP032	2.76	5.53	1.31423	0.48	4.23	176.38	41.89	9.90	-	179.62	42.66	-	3.68	179.62	42.66	11.61
DP033	13.44	32.35	-	-	4.23	0.43	-	-	0.12	32.79	-	-	-	42.98	-	-
DP034	-	-	-	-	36.83	-	-	-	-	-	-	-	-	-	-	-

WeBS sector code	Dunlin Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Redshank Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Black-tailed Godwit Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio	Curlew Energy required (kJ x 10^6)	Energy available (kJ/m^2)	Energy available (kJ x 10^6)	A/R ratio
DP001	1.77	84.56	-	-	0.57	84.17	-	-	0.16	460.32	-	-	5.05	376.19	-	-
DP002	0.04	-	-	-	0.19	-	-	-	12.83	-	-	-	0.34	-	-	-
DP003	71.6079	612.44	-	-	0.57	645.78	-	-	59.91	574.65	-	-	8.76	159.21	-	-
DP004	1.77	230.95	-	-	1.13	243.59	-	-	-	446.25	-	-	3.71	230.30	-	-
DP005	-	-	-	-	0.28	-	-	-	-	-	-	-	1.01	-	-	-
DP006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DP007	-	90.26	-	-	-	90.96	-	-	-	265.79	-	-	-	111.18	-	-
DP008	-	279.35	-	-	-	308.15	-	-	-	419.89	-	-	-	68.13	-	-
DP009	1.15	38.25	5.64	4.91	2.73	229.90	33.89	12.39	-	668.80	98.59	-	12.47	242.45	35.74	2.87
DP010	1.41	140.52	20.00	14.14	10.65	146.28	20.82	1.95	31.99	447.36	63.68	1.99	14.15	223.16	31.77	2.24
DP011	-	123.01	58.91	-	4.05	124.45	59.60	14.70	12.02	210.35	100.74	8.38	21.57	84.91	40.67	1.89
DP012	-	81.31	18.84	-	-	129.05	29.90	-	-	129.85	30.08	-	0.67	47.76	11.06	16.42
DP013	-	124.29	25.67	-	-	135.28	27.94	-	-	132.95	27.45	-	-	10.82	2.23	-
DP014	-	110.16	41.46	-	0.47	110.04	41.41	87.84	-	500.55	188.36	-	6.07	137.78	51.85	8.55
DP015	0.13	305.79	173.04	1304.92	-	316.01	178.82	-	2.92	615.35	348.22	119.15	53.92	331.14	187.39	3.48
DP016	4.33	99.38	44.65	10.31	7.35	124.23	55.81	7.59	12.83	186.89	83.97	6.55	7.41	60.29	27.09	3.65
DP017	21.44	227.72	101.07	4.71	-	250.08	110.99	-	68.36	399.37	177.25	2.59	67.39	112.79	50.06	0.74
DP018	72.40	155.67	65.45	0.90	3.21	173.45	72.92	22.75	61.86	649.45	283.27	4.58	318.44	159.20	66.93	0.21
DP019	-	295.30	62.77	-	-	308.78	65.63	-	-	347.82	68.81	-	-	148.78	31.62	-
DP020	-	210.80	153.66	-	0.09	243.01	177.13	1878.69	-	287.09	209.27	-	1.01	86.65	63.16	62.48
DP021	-	172.31	105.98	-	-	194.84	119.83	-	-	328.61	202.11	-	0.67	51.80	31.86	47.27
DP022	-	283.69	-	-	-	283.69	-	-	-	533.26	-	-	-	249.65	-	-
DP023	-	235.44	-	-	-	235.44	-	-	-	235.44	-	-	-	20.19	-	-
DP024	-	303.93	-	-	-	320.16	-	-	-	320.63	-	-	-	72.40	-	-
DP025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DP026	-	156.66	22.48	-	-	190.09	27.28	-	-	204.13	29.30	-	-	35.79	5.14	-
DP027	0.22	184.69	135.29	612.12	1.51	184.69	135.29	89.68	-	311.05	227.84	-	-	66.45	48.67	-
DP028	13.61	160.71	99.53	7.31	2.07	164.95	102.16	49.25	0.16	356.60	220.85	1360.21	28.98	155.79	96.48	3.33
DP029	20.47	184.80	118.34	5.78	3.87	184.78	118.33	30.61	1.46	194.31	124.43	85.15	58.30	141.15	90.39	1.55
DP030	3.89	281.94	61.14	15.72	1.70	281.94	61.14	36.02	17.54	823.54	178.58	10.18	23.93	465.92	101.03	4.22
DP031	9.81	76.79	29.59	3.02	5.85	80.27	30.93	5.29	1.62	148.86	57.36	35.33	25.61	125.66	48.42	1.89
DP032	-	181.92	43.21	-	0.75	208.39	49.49	65.62	0.49	206.09	48.95	100.49	5.05	176.38	41.89	8.29
DP033	1.77	42.98	-	-	0.47	42.98	-	-	-	42.98	-	-	3.71	0.43	-	-
DP034	-	-	-	-	0.66	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 12

Bird distribution within Poole Harbour from 2004/5 WeBS low tide winter counts.

WeBS sector code	Shelduck	Oystercatcher	Grey Plover	Avocet	Dunlin	Redshank	Black-tailed Godwit	Curlew
DP001	-	72	-	-	40	6	1	15
DP002	42	8	-	498	1	2	79	1
DP003	-	-	-	-	-	-	-	-
DP004	39	165	1	0	40	12	0	11
DP005	-	52	-	-	-	3	-	3
DP006	-	-	-	-	-	-	-	-
DP007	-	-	-	-	-	-	-	-
DP008	-	-	-	-	-	-	-	-
DP009	68	50	17	-	26	29	-	37
DP010	8	7	-	13	32	113	197	42
DP011	99	45	-	-	0	43	74	64
DP012	1	19	1	-	-	0	-	2
DP013	-	-	-	-	-	-	-	-
DP014	2	68	-	-	-	5	-	18
DP015	5	127	-	-	3	-	18	160
DP016	56	17	-	9	98	78	79	22
DP017	150	54	2	-	485	0	421	200
DP018	265	284	-	-	1638	34	381	945
DP019	-	-	-	-	-	-	-	-
DP020	3	12	-	-	-	1	-	3
DP021	-	4	-	-	-	-	-	2
DP022	-	-	-	-	-	-	-	-
DP023	-	-	-	-	-	-	-	-
DP024	-	-	-	-	-	-	-	-
DP025	-	-	-	-	-	-	-	-
DP026	-	-	-	-	-	-	-	-
DP027	8	42	4	4	5	16	-	-
DP028	110	79	36	-	308	22	1	86
DP029	58	43	2	238	463	41	9	173
DP030	127	76	1	-	88	18	108	71
DP031	16	62	3	232	222	62	10	76
DP032	8	17	-	29	-	8	3	15
DP033	39	17	1	0	40	5	0	11
DP034	0	148	0	0	0	7	0	0
DP035	42	8	0	498	1	2	79	1

APPENDIX 13

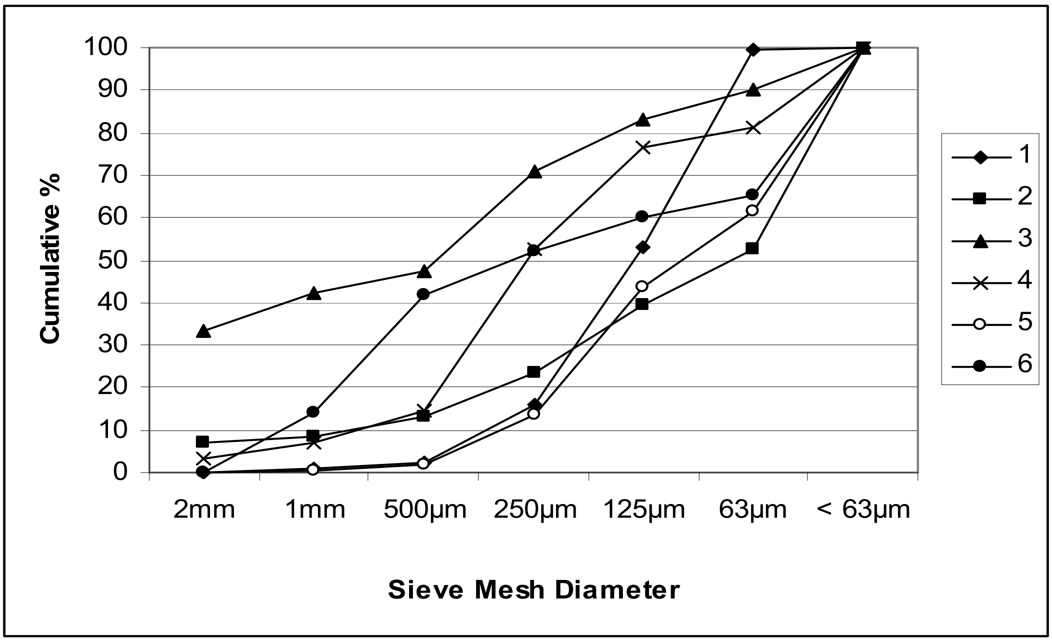
a: Brownsea Island Lagoon salinity, measured 6 November 2009.
See Fig 12 for sampling locations

Site	**BS1**	**BS2**	**BS3**	**BS4**	**BS5**	**BS6**	**Sluice**
Salinity (ppt)	22	26	26	26	29	26	29

b: Brownsea Island Lagoon. Particle Size Analysis and Organic content of sediments. Data shows % of each size fraction, and % organic content.

	% of each size Fraction							
Site	**2mm**	**1mm**	**500µm**	**250µm**	**125µm**	**63µm**	**<63µm**	**% Organic**
BS1	0.0	0.9	1.5	13.7	36.7	46.5	0.6	2.95
BS2	7.1	1.5	4.8	10.3	15.6	13.4	47.4	2.38
BS3	33.5	8.9	5.0	23.7	11.9	7.3	9.7	2.08
BS4	3.4	3.7	7.5	38.1	23.9	4.7	18.6	3.41
BS5	0.2	0.1	1.5	11.7	30.1	18.0	38.4	2.99
BS6	0.2	14.0	27.6	10.4	7.9	5.4	34.5	4.90

c: Brownsea Island Lagoon. Particle Size Analysis of sediments.
Cumulative % of all sediment fractions at each site (BS1-BS6).



APPENDIX 14a : Brownsea Island Lagoon. Mean density of fauna (No. per m^2) recorded from core samples (n = 3) obtained from six sites around the lagoon.

Site	BS1	BS2	BS3	BS4	BS5	BS6	Mean No. per m^2
ACTINIARIA							
Nematostella vectensis	4444	4825	254	762	5799	3048	**3189**
PHYLUM NEMATODA	85	0	0	0	85	0	**28**
PHYLUM ANNELIDA							
Aphelochaeta marioni	2667	4656	974	7365	127	11513	**4550**
Capitella capitata	42	212	127	85	169	0	**106**
Desdemona ornata	42	0	0	85	0	0	**21**
Hediste diversicolor	1228	2582	1481	4868	0	1439	**1933**
Polydora cornuta	4148	3386	381	3344	42	3132	**2406**
Pygospio elegans	254	0	0	0	0	0	**42**
Streblospio shrubsolii	0	212	0	42	42	42	**56**
Tubificoides benedii	6561	12783	2286	2540	11725	9354	**7541**
Tubificoides pseudogaster	0	212	0	0	0	0	**35**
PHYLUM CRUSTACEA							
Ostracoda sp.	0	0	42	0	0	0	**7**
Praunus inermis	0	42	0	0	0	42	**14**
Amphipoda							
Corophium insidiosum	15788	2624	3598	10116	1185	466	**5630**
Corophium volutator	0	127	169	0	42	0	**56**
Melita palmata	85	0	42	42	0	0	**28**
Isopoda							
Idotea chelipes	0	42	127	42	169	42	**71**
Sphaeroma rugicauda	42	0	42	0	42	0	**21**
Decapopda							
Palaemonetes varians	0	0	0	0	0	42	**7**
PHYLUM MOLLUSCA							
Abra tennuis	7365	550	85	1608	85	85	**1630**
Hydrobia ventrosa	12317	3471	12190	10243	2286	423	**6822**
PHYLUM INSECTA							
Chironomidae	85	0	0	0	0	0	**14**
Insecta indet	42	85	85	42	42	0	**49**
Total individuals per m^2	55279	35895	21971	41274	21932	29723	34258

APPENDIX 14b. Brownsea Island Lagoon Species Diversity Indices:
S =Total No. of species; N= Total No. of individuals; d = Margalef species richness; d J'= Pielous evenness; H= Shannon Diversity Index; 1-λ' =Simpsons Diversity Index; Δ =Taxonomic Diversity; Δ* =Taxonomic Distinctness.

Site	S	N	d	J'	H'(loge)	1-λ'	Δ	Δ*	Δ+	sΔ+	λ+
BS1	16	1304	2.09	0.69	1.92	0.82	80.05	97.37	93.47	1495.56	181.93
BS2	15	846	2.08	0.72	1.94	0.81	74.55	92.13	91.59	1373.81	281.08
BS3	15	517	2.24	0.55	1.48	0.65	63.31	98.03	92.38	1385.71	232.96
BS4	14	973	1.89	0.71	1.88	0.82	77.73	94.75	91.58	1282.05	222.06
BS5	14	516	2.08	0.49	1.29	0.63	62.46	99.38	93.59	1310.26	236.69
BS6	12	700	1.68	0.62	1.53	0.73	62.43	86.02	92.17	1106.06	212.29

APPENDIX 14c: Brownsea Island Lagoon. Fauna (No. individuals) recorded in algal samples (approx 1L volume) collected at each sampling point, where possible. CL denotes *Chaetomorpha linum*; UL denotes *Ulva lactuca*; GL denotes *Gracilariopsis longissima;* P denotes 'Present'

Site	**1**	**2**	**3**	**4**	**5**	**6**	**Sluice**
Alga	CL			UL	GL		GL
CRUSTACEA							
Amphipoda							
Corophium insidiosum	1			2			
Corophium volutator	1			1			
Gammarus locusta							**3**
Isopoda							
Idotea chelipes					120		**13**
Decapopda							
Crangon crangon							**1**
MOLLUSCA							
Abra tennuis	7						
Cerastoderma glaucum	1						
Crepidula fornicata							**P**
Hydrobia ventrosa				12			

APPENDIX 14d: Brownsea Island Lagoon. No. of the prawn *Palaeomonetes varians* recorded in three pond-net sweeps at each site. SA denotes 'Superabundant' ie >20

Site/Sweep	**1**	**2**	**3**	**4**	**5**	**6**	**Sluice**
1	4	5	0	3	0	0	SA
2	5	4	2	4	0	0	SA
3	0	0	0	0	0	0	SA
Mean	3.0	3.0	0.7	2.3	0	0	SA
SD	2.6	2.6	1.2	2.1	0	0	

APPENDIX 14e: Brownsea Island Lagoon. Algal species recorded. R denotes 'Rare'; 'P' denotes 'Present'.

Site	1	2	3	4	5	6	Sluice
Chaetomorpha linum	O	F	A				
Ulva sp.	P	F		R	R	O	
Sargassum muticum							**R**
Aglaothamnion ?*hookeri,*							**P**
Ceramium pallidum							**P**
Ceramium secundatum							**P**
*Gracilariopsis longissima (*Tspore)	F	O			O		**P**
Polysiphonia denudata							**P**
Polysiphonia elongata							**P**
Total % cover *C.linum* & *Ulva* sp.	10	40	70	5	3	10	

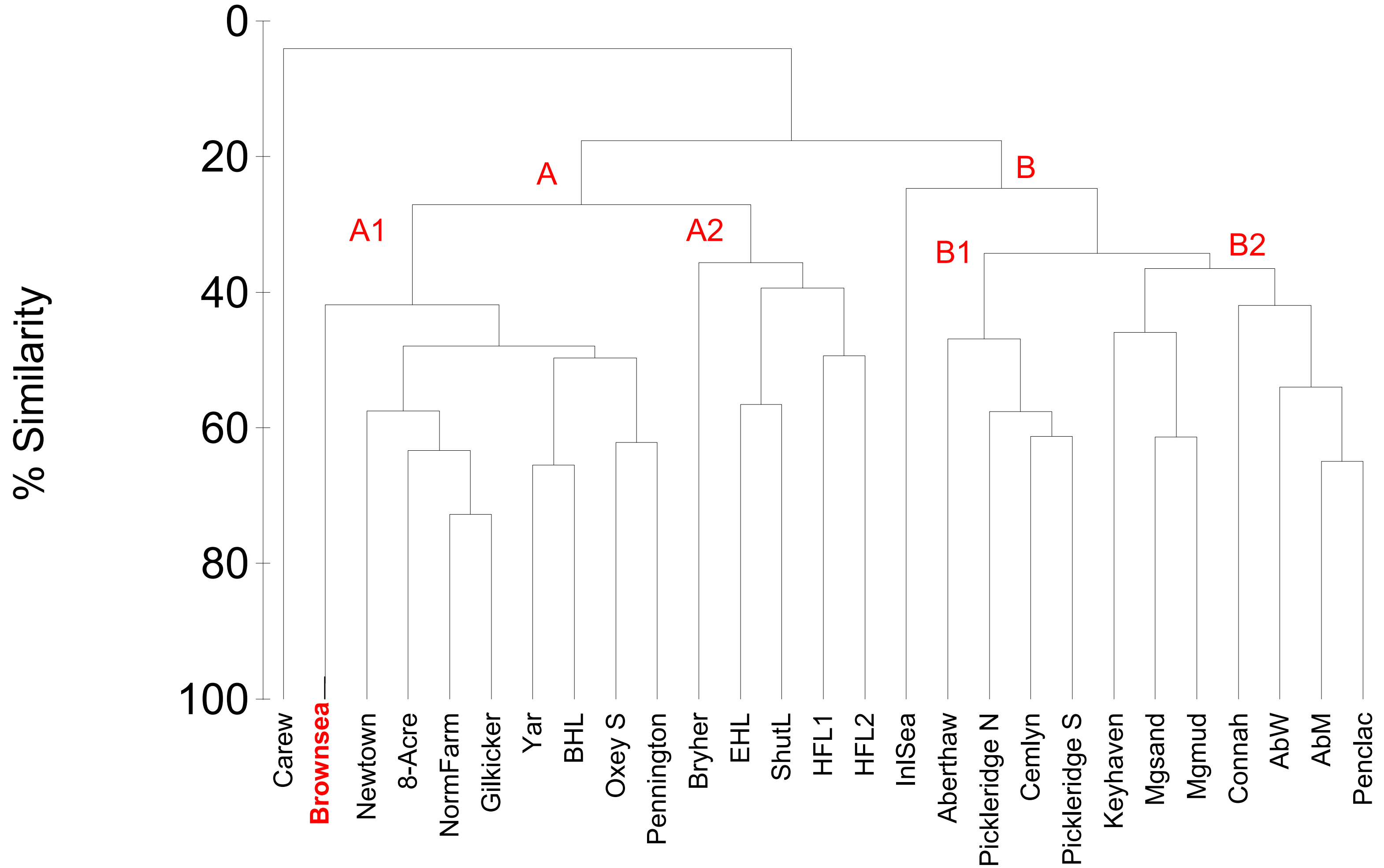
APPENDIX 15 Average biomass (mg AFDW m-2) of taxa found in Brownsea Lagoon, November 2010. Mean density calculated from 3 core samples obtained from 6 sites around the edge of the lagoon. Biomass calculated from regression equations of length-weight in Thomas et al 2004. The anemone *Nematostella vectensis* was excluded from the calculations.

Taxa	Mean Biomass Mg AFDW m^{-2}
Hediste diversicolor	8090.14
Abra tenuis	2112.78
Ventrosa ventrosa	4316.05
Corophium spp.	1497.72
Small worms*	17786.24
Other crustaceans**	49.92
Total	**33852.87**

* Small worms includes:
PHYLUM NEMATODA
Tubificoides sp.
Tubificoides benedii
Tubificoides pseudogaster
Aphelochaeta marioni
Capitella capitata
Desdemona ornata
Polydora cornuta
Pygospio elegans
Streblospio shrubsolii
Hediste <=5mm

** Other crustaceans includes:
Praunus inermis
Idotea chelipes
Sphaeroma rugicauda
Melita palmata
Palaemonetes varians

APPENDIX 16. Dendrogram showing similarity of UK Lagoon invertebrate assemblages, with Brownsea lagoon included. Cluster A are more saline than Cluster B. Many lagoons in Cluster A1 have Scheduled species (Bamber *in prep*).



APPENDIX 17: Poole Harbour Survey Core Sample Matrix

Data show No. of individuals in each core (10cm diameter) from each of five samples obtained from each site.

Site				1							2							3							4							5
Numbers per core	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D
PHYLUM CNIDARIA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ACTINIARIA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	6	23	5	11	3	9.6	8.0	6	6	32	16
Anemonia viridis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cereus pedunculatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nematostella vectensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMATODA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMERTEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM HIRUDINEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ANNELIDA	11	9	33	30	12	19.0	11.5	12	8	12	16	11	11.8	2.9	15	12	18	5	8	11.6	5.2	19	14	35	13	8	17.8	10.4	28	51	67	62
Polychaeta total	11	7	18	19	10	13.0	5.2	11	7	12	16	11	11.4	3.2	13	8	14	5	7	9.4	3.9	19	13	35	13	8	17.6	10.5	7	8	21	9
Ampharete balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Anaitides mucosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aonides oxycephala	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aphelochaeta marioni	0	0	0	0	0	0.0	0.0	1	1	2	3	2	1.8	0.8	0	0	0	0	0	0.0	0.0	0	0	8	0	0	1.6	3.6	1	0	0	0
Arenicola marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Capitella capitata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Chaetozone christii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirratulidae (indet.)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirriformia tentaculata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Caulleriella zetlandica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cossura longe	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Desdemona ornata	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	5	3	14	1	1	4.8	5.4	1	0	3	0
Eteone foliosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eteone longa	2	0	2	3	0	1.4	1.3	0	0	0	0	0	0.0	0.0	0	0	1	1	0	0.4	0.5	3	2	2	0	1	1.6	1.1	0	0	0	1
Eumida cf sanguinea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eumida punctifera	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Glycera tridactyla	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hediste diversicolor	5	6	11	16	8	9.2	4.4	6	6	8	11	4	7.0	2.6	13	6	10	4	7	8.0	3.5	9	8	10	8	6	8.2	1.5	3	7	9	7
Janua pagenstecheri	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Malacoceros tetraceros	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Mediomastus fragilis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Melinna palmata	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microphthalmus cf similis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Neanthes virens	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nemertina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Neoamphitrite figulus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nephtys hombergii	0	0	0	0	0	0.0	0.0	2	0	2	2	5	2.2	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nephtys kersivalensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Notomastus latericeus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Paraplonosyllis minuta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polycirrus sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polydora cornuta	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	2	1	2	0
Polydora sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	2	0
Pomatoceros lamarki	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pseudopolydora paucibranchia	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pygospio elegans	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sabella pavonina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scolelepsis sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scoloplos armiger	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Serpulidae sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spio martinensis	0	0	0.	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spionidae sp	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Streblospio shrubsolii	4	1	2	0	2	1.8	1.5	1	0	0	0	0	0.2	0.4	0	2	3	0	0	1.0	1.4	2	0	1	2	0	1.0	1.0	0	0	5	1
Oligochaeta total	0	2	15	11	2	6.0	6.6	1	1	0	0	0	0.4	0.5	2	4	4	0	1	2.2	1.8	0	1	0	0	0	0.2	0.4	21	43	46	53
Tubificoides sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Tubificoides benedii	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	2	4	0	0	0	1.2	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0
Tubificoides pseudogaster	0	2	15	11	2	6.0	6.6	1	0	0	0	0	0.2	0.4	0	0	4	0	1	1.0	1.7	0	1	0	0	0	0.2	0.4	21	43	46	53
PHYLUM CRUSTACEA	5	3	7	3	9	5.4	2.6	1	1	3	0	1	1.2	1.1	2	8	9	5	3	5.4	3.0	77	90	42	100	37	69.2	28.4	17	9	11	7
Ostracoda sp.	0	0	2	0	2	0.8	1.1	0	0	1	0	0	0.2	0.4	0	6	4	0	0	2.0	2.8	0	0	0	0	0	0.0	0.0	12	2	1	0
Eusarsiella zostericola	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Copepoda: Harpacticoida	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pranus inermis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirripedia total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphibalanus improvisus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Isopoda total	5	3	5	1	7	4.2	2.3	1	1	1	0	1	0.8	0.4	2	1	5	5	3	3.2	1.8	0	6	2	1	3	2.4	2.3	5	6	10	6
Apseudes latreillii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cyathura carinata	5	3	5	1	7	4.2	2.3	1	1	1	0	1	0.8	0.4	2	1	5	5	3	3.2	1.8	0	6	2	1	3	2.4	2.3	5	6	10	6
Idotea balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Idotea chelipes	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sphaeroma rugicauda	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipoda total	0	0	0	2	0	0.4	0.9	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	77	84	40	99	34	66.8	28.4	0	1	0	1
Ampelisca brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bathyporeia indet.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium arenarium	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	34	6.8	15.2	0	0	0	0
Corophium insidiosum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium volutator	0	0	0	2	0	0.4	0.9	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	77	84	40	99	0	60.0	40.0	0	1	0	1
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gammarus locusta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Melita palmata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microdeutopus gryllotalpus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microprotopus maculeatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Phtisica marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Urothoe brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Decapopda total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
Carcinus maenas	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Crangon crangon	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
Liocarcinus arcuatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Palaemonetes varians	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM MOLLUSCA	1	1	2	3	2	1.8	0.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	9	13	16	10
Abra tennuis	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Alderia modesta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cerastoderma edule	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cerastoderma glaucum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Crepidula fornicata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dosinia lupinus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gibbula umbilicalis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Haminoea navicula	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hinia reticulata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hydrobia ulvae	1	1	1	3	2	1.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	4	7	9	9
Hydrobia ventrosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Leptochitona cinereus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina littorea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina saxatilis agg.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Macoma balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Mya arenaria	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Mytilus edulis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Parvicardium exiguum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa obtusa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa ovata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes decussatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes phillipinarum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scrobicularia plana	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	5	6	7	1
Solen marginatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Venerupis saxatilis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ECHINODERMATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipholis squamata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM INSECTA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Chironomidae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dolichopodidae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta indet	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta larvae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM CHORDATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pomatochistus sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Other (incl algae)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bryozoa indef.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Total number of individuals per (	17	13	42	36	23	26	12	13	9	15	16	12	13	3	17	20	27	10	11	17	7	102	127	82	124	46	97	33	60	79	126	95
Total number of individuals per (	2165	1655	5348	4584	2928	3336	1579	1655	1146	1910	2037	1528	1655	349	2165	2546	3438	1273	1401	2165	887	12987	16170	10441	15786	6112	12299	4164	7639	10059	16043	12096

						6							7							8							9							10		
E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
6	13.2	11.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	1	0	0	0	0.6	0.9	5	3	4	16	16	8.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
42	50.0	15.7	20	24	21	39	21	25.0	8.0	18	9	5	25	1	11.6	9.8	10	15	8	15	13	12.2	3.1	6	4	3	2	2	3.4	1.7	10	103	31	62	203	81.8
11	11.2	5.7	14	22	19	39	19	22.6	9.6	16	9	5	24	1	11.0	9.1	9	13	7	12	9	10.0	2.4	6	0	3	2	2	2.6	2.2	8	20	21	47	120	43.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	8	12	6	27	11	12.8	8.3	9	0	0	11	0	4.0	5.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	2	2	26	96	25.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0		0.3
1	1.0	1.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	0.4	0.5	0	1	0	0	2	0.6	0.9	1	0	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	6	1	1	1.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
6	6.4	2.2	6	9	12	12	6	9.0	3.0	5	8	5	12	1	6.2	4.1	9	13	7	12	9	10.0	2.4	6	0	3	2	2	2.6	2.2	7	12	7	12	18	11.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
2	1.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	2	1	1	1.0
0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	0	6	4	2.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	1.4	2.1	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	3	1	0	1.2
31	38.8	12.7	6	2	2	0	2	2.4	2.2	2	0	0	1	0	0.6	0.9	1	2	1	3	4	2.2	1.3	0	4	0	0	0	0.8	1.8	2	83	10	15	83	38.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	0	0	1	0	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	2	1	3	4	2.2	1.3	0	4	0	0	0	0.8	1.8	2	8	0	0	2	2.4
31	38.8	12.7	6	2	2	0	2	2.4	2.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	75	10	15	81	36.2
9	10.6	3.8	4	0	1	2	18	5.0	7.4	0	2	0	0	0	0.4	0.9	15	20	14	11	15	15.0	3.2	22	20	12	49	11	22.8	15.4	5	7	7	9	7	7.0
0	3.0	5.1	3	0	0	0	15	3.6	6.5	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
9	7.2	2.2	0	0	1	2	3	1.2	1.3	0	2	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	4	4	5	9	6	5.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
9	7.2	2.2	0	0	1	2	3	1.2	1.3	0	2	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	4	4	5	9	6	5.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.4	0.5	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	15	19	14	11	15	14.8	2.9	22	19	12	49	11	22.6	15.5	1	3	2	0	1	1.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.4	0.5	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	15	19	14	11	14	14.6	2.9	22	19	12	49	11	22.6	15.5	0	3	2	0	1	1.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
2	10.0	5.2	1	2	0	0	16	3.8	6.9	1	2	1	3	2	1.8	0.8	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	1	5	1	8	9	4.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	1	0.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	6.0	3.5	0	1	0	0	8	1.8	3.5	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	1	0	5	5	2.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	0.2	0.4	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	1	1	0	0	4	1.2	1.6	1	2	1	1	2	1.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	1	0	0	0.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2
0	3.8	3.1	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	1	0	2	3	1.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
59	84	28	25	26	22	41	55	34	14	19	13	6	28	3	14	10	25	35	22	26	28	27	5	31	25	15	51	13	27	15	21	118	43	95	235	102
7512	10670	3551	3183	3310	2801	5220	7003	4304	1777	2419	1655	764	3565	382	1757	1284	3183	4456	2801	3310	3565	3463	620	3947	3183	1910	6494	1655	3438	1948	2674	15024	5475	12096	29921	13038

				11							12							13							14							15				
SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
6.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
76.3	247	24	74	39	162	109.2	93.8	1	3	10	2	2	3.6	3.6	16	5	24	5	11	12.2	8.0	2	39	22	36	69	33.6	24.6	36	26	27	25	24	27.6	4.8	3
45.2	246	24	72	39	159	108.0	93.2	1	3	9	2	2	3.4	3.2	16	5	22	5	11	11.8	7.3	1	38	22	36	65	32.4	23.5	34	24	27	22	24	26.2	4.7	3
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
40.9	224	15	59	22	119	87.8	86.6	0	2	2	0	1	1.0	1.0	0	0	0	0	0	0.0	0.0	1	6	8	8	0	4.6	3.8	5	1	4	0	3	2.6	2.1	2
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	45	9.0	20.1	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	1	0	0	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
2.5	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
4.5	21	8	13	14	37	18.6	11.3	1	1	6	1	1	2.0	2.2	16	5	22	4	11	11.6	7.6	0	29	14	28	19	18.0	11.9	24	22	23	22	21	22.4	1.1	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.7	0	0	0	1	3	0.8	1.3	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	3	0	0	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0
2.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	4	0	0	0	0	0.8	1.8	0
40.8	1	0	2	0	3	1.2	1.3	0	0	1	0	0	0.2	0.4	0	0	2	0	0	0.4	0.9	1	1	0	0	4	1.2	1.6	2	2	0	3	0	1.4	1.3	0
0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
3.3	1	0	2	0	3	1.2	1.3	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	2	2	0	0	0	0.8	1.1	0
38.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	1	0	0	4	1.2	1.6	0	0	0	3	0	0.6	1.3	0
1.4	2	3	3	1	1	2.0	1.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	3	0	0	0.8	1.3	4	6	4	1	12	5.4	4.1	0
0.0	0	3	0	0	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4	0.9	1	0	0	0	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
2.1	1	0	3	1	1	1.2	1.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
2.1	1	0	3	1	1	1.2	1.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.1	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	3	6	3	1	12	5.0	4.3	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.3	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	1	0	3	1.0	1.2	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	3	5	2	1	9	4.0	3.2	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
3.8	3	3	2	1	3	2.4	0.9	1	2	1	0	1	1.0	0.7	3	0	6	1	35	9.0	14.7	34	36	30	3	48	30.2	16.6	7	3	2	8	3	4.6	2.7	0
0.0	0	1	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	7	0	5	0	8	4.0	3.8	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.5	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	1	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	2	0	0.4	0.9	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
2.6	0	1	0	0	1	0.4	0.5	0	0	1	0	0	0.2	0.4	2	0	5	0	33	8.0	14.1	27	34	22	0	40	24.6	15.4	7	1	2	5	2	3.4	2.5	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	2	0	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	1	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0
0.9	1	1	0	0	2	0.8	0.8	1	2	0	0	1	0.8	0.8	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	1	0	1	1	0.6	0.5	0
1.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	2	0	2	0	0.8	1.1	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
84	252	31	79	41	166	114	94	2	5	11	2	3	5	4	19	6	31	6	46	22	17	37	77	55	39	117	65	33	47	35	33	34	39	38	6	3
10659	32086	3947	10059	5220	21136	14489	11942	255	637	1401	255	382	586	481	2419	764	3947	764	5857	2750	2184	4711	9804	7003	4966	14897	8276	4227	5984	4456	4202	4329	4966	4787	729	382

		16							17							18							19							20			
B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	1	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
9	16	18	62	21.6	23.4	21	47	18	23	21	26.0	11.9	3	4	2	5	8	4.4	2.3	4	11	9	10	2	7.2	4.0	38	17	42	50	21	33.6	14.1
9	16	18	62	21.6	23.4	21	29	14	6	19	17.8	8.5	3	4	2	5	7	4.2	1.9	4	11	9	10	2	7.2	4.0	24	13	27	33	14	22.2	8.6
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
1	9	12	53	15.4	21.5	0	5	2	4	0	2.2	2.3	1	2	0	2	3	1.6	1.1	0	4	4	5	1	2.8	2.2	13	4	21	6	8	10.4	6.8
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	3	0.6	1.3	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	1	0.4	0.5
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
7	7	6	6	5.4	2.5	20	21	10	2	19	14.4	8.2	2	2	1	1	2	1.6	0.5	3	7	2	5	0	3.4	2.7	9	9	6	27	5	11.2	9.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	2	1	0.6	0.9	1	0	1	0	1	0.6	0.5	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
1	0	0	0	0.2	0.4	1	2	0	0	0	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	18	4	17	2	8.2	8.6	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	14	4	15	17	7	11.4	5.6
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	12	1	17	2	6.4	7.6	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	12	0	15	3	1	6.2	6.8
0	0	0	0	0.0	0.0	0	6	3	0	0	1.8	2.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	4	0	14	6	5.2	5.4
2	0	0	3	1.0	1.4	81	7	100	18	0	41.2	46.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	2	100	16	0	23.6	43.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	2	5	0	0	1.4	2.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	95	16	0	22.2	41.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
2	0	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
2	0	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	80	4	0	1	0	17.0	35.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	79	2	0	0	0	16.2	35.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	1	2	0	1	0	0.8	0.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	1	1	0	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	3	10	3	7	1	4.8	3.6	3	5	0	4	7	3.8	2.6	1	0	1	2	1	1.0	0.7	3	0	0	0	0	0.6	1.3
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	1	0	1	0	0	0.4	0.5	0	0	0	0	1	0.2	0.4	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	4	1.0	1.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	0	6	0	0	0	1.2	2.7	0	1	0	2	1	0.8	0.8	1	0	0	0	0	0.2	0.4	3	0	0	0	0	0.6	1.3
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	1	1	0.4	0.5	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	1	0	0	0	0.4	0.5	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	1	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	1	2	0	6	1	2.0	2.3	0	1	0	2	0	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	2	0	0	0	0.4	0.9	0	1	0	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
11	16	18	66	23	25	105	65	122	48	22	72	41	6	9	2	9	15	8	5	5	11	10	12	3	8	4	41	17	42	50	21	34	14
1401	2037	2292	8403	2903	3162	13369	8276	15534	6112	2801	9218	5216	764	1146	255	1146	1910	1044	607	637	1401	1273	1528	382	1044	504	5220	2165	5348	6366	2674	4354	1831

Site				21							22							23							24							25
Numbers per core	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D
PHYLUM CNIDARIA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ACTINIARIA	0	0	0	0	0	0.0	0.0	11	11	19	1	1	8.6	7.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	1
Anemonia viridis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cereus pedunculatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nematostella vectensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMATODA	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMERTEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM HIRUDINEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ANNELIDA	6	0	0	3	3	2.4	2.5	6	144	15	11	13	37.8	59.5	12	19	18	13	13	15.0	3.2	3	2	3	17	7	6.4	6.2	1	5	7	0
Polychaeta total	5	0	0	3	3	2.2	2.2	6	117	4	6	10	28.6	49.5	12	19	18	13	13	15.0	3.2	1	2	3	11	2	3.8	4.1	1	5	7	0
Ampharete balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Anaitides mucosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aonides oxycephala	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aphelochaeta marioni	0	0	0	0	1	0.2	0.4	5	111	2	0	6	24.8	48.2	0	0	0	0	0	0.0	0.0	0	2	0	8	2	2.4	3.3	0	1	0	0
Arenicola marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Capitella capitata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Chaetozone christii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirratulidae (indet.)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirriformia tentaculata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Caulleriella zetlandica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cossura longe	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Desdemona ornata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eteone foliosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eteone longa	0	0	0	0	0	0.0	0.0	0	0	0	1	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0
Eumida cf sanguinea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eumida punctifera	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Glycera tridactyla	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hediste diversicolor	3	0	0	3	2	1.6	1.5	1	1	0	1	1	0.8	0.4	12	19	18	13	13	15.0	3.2	0	0	0	0	0	0.0	0.0	1	3	5	0
Janua pagenstecheri	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Malacoceros tetraceros	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Mediomastus fragilis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Melinna palmata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	2	0
Microphthalmus cf similis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Neanthes virens	1	0	0	0	0	0.2	0.4	0	2	1	0	2	1.0	1.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nemertina	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0
Neoamphitrite figulus	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nephtys hombergii	0	0	0	0	0	0.0	0.0	0	3	1	2	0	1.2	1.3	0	0	0	0	0	0.0	0.0	1	0	3	2	0	1.2	1.3	0	0	0	0
Nephtys kersivalensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Notomastus latericeus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Parapionosyllis minuta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polycirrus sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polydora sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pomatoceros lamarki	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pseudopolydora paucibranchia	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pygospio elegans	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sabella pavonina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scolelepsis sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scoloplos armiger	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Serpulidae sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spio martinensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spionidae sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Streblospio shrubsolii	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Oligochaeta total	1	0	0	0	0	0.2	0.4	0	27	11	5	3	9.2	10.7	0	0	0	0	0	0.0	0.0	2	0	0	6	5	2.6	2.8	0	0	0	0
Tubificoides sp.	1	0	0	0	0	0.2	0.4	0	22	11	5	3	8.2	8.7	0	0	0	0	0	0.0	0.0	0	0	0	2	2	0.8	1.1	0	0	0	0
Tubificoides benedii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	0	0	4	3	1.8	1.8	0	0	0	0
Tubificoides pseudogaster	0	0	0	0	0	0.0	0.0	0	5	0	0	0	1.0	2.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM CRUSTACEA	0	0	0	1	1	0.4	0.5	0	0	1	0	4	1.0	1.7	75	58	157	58	84	86.4	41.0	0	0	0	0	0	0.0	0.0	1	0	0	0
Ostracoda sp.	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	8	1	109	51	58	45.4	43.6	0	0	0	0	0	0.0	0.0	0	0	0	0
Eusarsiella zostericola	0	0	0	0	0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Copepoda: Harpacticoida	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pranus inermis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirripedia total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphibalanus improvisus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Isopoda total	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0
Apseudes latreillii	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cyathura carinata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0
Idotea balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Idotea chelipes	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sphaeroma rugicauda	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipoda total	0	0	0	1	1	0.4	0.5	0	0	0	0	0	0.0	0.0	67	57	48	7	26	41.0	24.3	0	0	0	0	0	0.0	0.0	0	0	0	0
Ampelisca brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bathyporeia indet.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium arenarium	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium insidiosum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium volutator	0	0	0	1	1	0.4	0.5	0	0	0	0	0	0.0	0.0	67	57	48	7	26	41.0	24.3	0	0	0	0	0	0.0	0.0	0	0	0	0
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gammarus locusta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Melita palmata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microdeutopus gryllotalpa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microprotopus maculeatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Phtisica marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Urothoe brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Decapopda total	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Carcinus maenas	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Crangon crangon	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Liocarcinus arcuatus	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Palaemonetes varians	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM MOLLUSCA	0	1	0	1	0	0.4	0.5	0	0	0	1	0	0.2	0.4	7	12	8	11	0	7.6	4.7	1	17	0	3	2	4.6	7.0	3	0	1	1
Abra tennuis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0
Alderia modesta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cerastoderma edule	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	1	0	1	0	0.4	0.5	2	0	1	0
Cerastoderma glaucum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Crepidula fornicata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dosinia lupinus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gibbula umbilicalis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Haminoea navicula	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hinia reticulata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hydrobia ulvae	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	7	12	8	11	0	7.6	4.7	1	14	0	0	0	3.0	6.2	0	0	0	0
Hydrobia ventrosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Leptochitona cinereus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina littorea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina saxatilis agg.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Macoma balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	0
Mya arenaria	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	0	1	0	0.6	0.9	0	0	0	1
Mytilus edulis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Parvicardium exiguum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa obtusa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa ovata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes decussatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes phillipinarum	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scrobicularia plana	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0
Solen marginatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Venerupis saxatilis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ECHINODERMATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipholis squamata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM INSECTA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
Chironomidae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dolichopodidae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta indet	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta larvae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM CHORDATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pomatochistus sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Other (incl algae)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bryozoa indef.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Total number of individuals per (	6	1	0	5	4	3	3	17	155	35	13	19	48	61	94	90	183	82	97	109	42	4	19	3	20	9	11	8	5	5	9	2
Total number of individuals per I	764	127	0	637	509	407	330	2165	19735	4456	1655	2419	6086	7704	11968	11459	23300	10441	12350	13904	5301	509	2419	382	2546	1146	1401	1030	637	637	1146	255

						26							27							28							29							30		
E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
25	7.6	10.1	0	0	4	2	0	1.2	1.8	8	7	6	7	17	9.0	4.5	5	1	6	3	18	6.6	6.7	0	0	1	1	2	0.8	0.8	26	10	21	30	21	21.6
16	5.8	6.4	0	0	2	2	0	0.8	1.1	8	7	6	7	16	8.8	4.1	5	1	5	3	18	6.4	6.7	0	0	1	1	2	0.8	0.8	23	10	18	25	17	18.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
12	2.6	5.3	0	0	1	0	0	0.2	0.4	0	2	0	0	3	1.0	1.4	0	0	4	1	2	1.4	1.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
3	2.4	1.9	0	0	0	1	0	0.2	0.4	8	5	6	7	13	7.8	3.1	4	0	1	1	16	4.4	6.7	0	0	0	0	1	0.2	0.4	23	10	17	25	17	18.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	1	1	0	1	0	0.6	0.5	0	0	1	1	1	0.6	0.5	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2
9	1.8	4.0	0	0	2	0	0	0.4	0.9	0	0	0	0	1	0.2	0.4	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	3	0	3	5	4	3.0
2	0.4	0.9	0	0	2	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	3	0	0	0.6
7	1.4	3.1	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	0	0	1	0	0.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	3	5	11	3.8	4.5	3	6	6	8	7	6.0	1.9	0	0	0	2	0	0.4	0.9	0	0	0	1	0	0.2	0.4	5	0	6	3	21	7.0
0	0.0	0.0	0	0	0	5	5	2.0	2.7	1	5	5	2	2	3.0	1.9	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	4	0	3	1	21	5.8
0	0.0	0.0	0	0	3	0	6	1.8	2.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	2	1	1	6	5	3.0	2.3	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	1	0	1	2	0	0.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	2	1	1	6	5	3.0	2.3	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	1	0	1	1	0	0.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
6	2.2	2.4	14	5	24	10	43	19.2	15.0	6	2	4	18	4	6.8	6.4	1	2	1	2	18	4.8	7.4	2	3	6	5	6	4.4	1.8	13	19	14	25	75	29.2
0	0.2	0.4	1	1	7	7	15	6.2	5.8	1	0	1	2	0	0.8	0.8	0	0	0	0	2	0.4	0.9	1	2	1	2	4	2.0	1.2	9	18	6	4	60	19.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
2	1.0	1.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	13	4	13	0	21	10.2	8.3	5	2	3	16	4	6.0	5.7	0	2	0	1	15	3.6	6.4	1	0	3	2	1	1.4	1.1	4	1	8	19	15	9.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0
4	1.0	1.7	0	0	1	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	1	0	1	0	1	0.6	0.5	0	0	0	0	0	0.0	0.0	0	0	0	2	0	0.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	2	1	6	1.8	2.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	1	1	0	0.6	0.5	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	1	5	2	4	3.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	1	5	2	4	3.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
31	10	12	14	5	31	17	54	24	19	17	15	16	33	28	22	8	6	3	7	7	36	12	14	2	3	7	7	8	5	3	47	30	46	60	122	61
3947	1324	1500	1783	637	3947	2165	6875	3081	2432	2165	1910	2037	4202	3565	2776	1040	764	382	891	891	4584	1502	1735	255	382	891	891	1019	688	344	5984	3820	5857	7639	15534	7767

				31							32							33							34							35				
SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	19	3.8	8.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	2	0	0	0	9	2.2	3.9	1	3	1	1	0	1.2	1.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
7.5	7	26	8	1	12	10.8	9.4	2	3	0	5	65	15.0	28.0	5	5	5	7	5	5.4	0.9	0	7	0	1	2	2.0	2.9	51	85	21	113	20	58.0	40.7	32
5.9	6	19	3	1	7	7.2	7.0	1	3	0	2	42	9.6	18.1	5	5	5	7	5	5.4	0.9	0	4	0	0	0	0.8	1.8	50	85	21	105	20	56.2	38.1	31
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	4	14	0	0	0	3.6	6.1	0	0	0	0	39	7.8	17.4	0	0	0	0	0	0.0	0.0	0	3	0	0	0	0.6	1.3	3	9	2	14	1	5.8	5.5	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	1	0	0	4	1.0	1.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	0	0	0	0.4	0.9	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	1	1	0	0	0.6	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	0	0	0	0.4	0.9	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
5.9	1	0	0	0	0	0.2	0.4	0	2	0	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	47	61	19	88	19	46.8	29.3	29
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	1	4	1	1	2	1.8	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	1	0	1	1	0.6	0.5	2	0	1	1	2	1.2	0.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	1	3	2	1.4	1.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	2	0	3	0	1.2	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	1	0	0	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	11	0	3	0	2.8	4.8	1
1.9	1	7	5	0	5	3.6	3.0	1	0	0	3	23	5.4	9.9	0	0	0	0	0	0.0	0.0	0	3	0	1	2	1.2	1.3	1	0	0	8	0	1.8	3.5	1
1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	23	4.6	10.3	0	0	0	0	0	0.0	0.0	0	3	0	1	2	1.2	1.3	1	0	0	8	0	1.8	3.5	0
1.3	0	7	5	0	5	3.4	3.2	0	0	0	3	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1
8.2	2	15	10	0	2	5.8	6.4	0	1	0	0	1	0.4	0.5	0	0	1	2	0	0.6	0.9	0	0	0	0	3	0.6	1.3	3	12	5	3	6	5.8	3.7	2
8.6	1	0	0	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	3	0.6	1.3	0	5	2	0	4	2.2	2.3	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	2	0	0	0	0.6	0.9	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.8	0	1	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	5	3	3	2	3.0	1.2	2
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.5	0	1	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	5	3	3	2	3.0	1.2	2
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.9	1	14	9	0	2	5.2	6.1	0	0	0	0	0	0.0	0.0	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.9	1	14	9	0	2	5.2	6.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
26.0	0	2	1	1	3	1.4	1.1	7	0	3	1	3	2.8	2.7	0	3	0	1	0	0.8	1.3	6	37	9	7	8	13.4	13.2	1	8	5	5	8	5.4	2.9	2
23.3	0	0	0	0	0	0.0	0.0	0	0	1	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	4	3	1	2	2.2	1.3	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	2	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	1	0.4	0.5	1
0.0	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
7.5	0	0	0	0	0	0.0	0.0	7	0	0	0	0	1.4	3.1	0	2	0	0	0	0.4	0.9	6	37	9	7	8	13.4	13.2	0	1	0	2	2	1.0	1.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	1	0.4	0.5	0
0.9	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	1	0	0	0.4	0.5	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	0	1	2	1.0	1.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	1	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
36	11	43	19	2	26	20	16	10	7	4	7	88	23	36	5	8	6	10	6	7	2	6	44	9	8	13	16	16	55	105	31	121	34	69	41	36
4548	1401	5475	2419	255	3310	2572	1984	1273	891	509	891	11205	2954	4620	637	1019	764	1273	764	891	255	764	5602	1146	1019	1655	2037	2019	7003	13369	3947	15406	4329	8811	5275	4584

		36							37							38							39							40			
B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	9	1	3	1	3.4	3.3	0	0	0	0	0	0.0	0.0
0	0	1	0	0.2	0.4	1	2	3	0	4	2.0	1.6	0	0	0	0	0	0.0	0.0	3	6	1	0	0	2.0	2.5	0	0	1	0	1	0.4	0.5
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
40	28	34	1	27.0	15.2	10	28	21	9	9	15.4	8.7	20	9	3	0	2	6.8	8.1	16	22	165	43	2	49.6	66.2	4	35	21	15	5	16.0	12.8
40	27	33	1	26.4	15.0	10	28	21	8	9	15.2	8.9	20	9	2	0	2	6.6	8.2	11	11	73	6	2	20.6	29.5	0	1	3	7	1	2.4	2.8
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	1	3	0	0	0.8	1.3
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
3	1	0	0	0.8	1.3	0	5	2	2	0	1.8	2.0	11	3	0	0	0	2.8	4.8	4	4	56	0	0	12.8	24.2	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4
0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	1	1	0	0.4	0.5	0	0	0	1	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	0	7	0	0	1.8	3.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
35	25	31	1	24.2	13.5	9	21	18	6	7	12.2	6.8	7	5	2	0	2	3.2	2.8	3	3	1	2	1	2.0	1.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	1	0	1	0	1	0.6	0.5	0	1	0	0	0	0.2	0.4	2	2	3	1	1	1.8	0.8	0	0	0	3	0	0.6	1.3
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
2	0	0	0	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	3	1	0	1.2	1.3	0	0	0	0	1	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	2	0	0.6	0.9	0	1	0	0	1	0.4	0.5	1	0	0	0		0.3	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	1	1	0	0.6	0.5	0	0	0	1	0	0.2	0.4	0	0	1	0	0	0.2	0.4	5	11	92	37	0	29.0	38.0	4	34	18	8	4	13.6	12.8
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	5	0	0	0	0	1.0	2.2	0	34	0	0	0	6.8	15.2
0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	11	92	37	0	28.0	38.8	4	0	18	3	0	5.0	7.5
0	0	1	0	0.4	0.5	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	5	4	1.8	2.5
2	0	1	0	1.0	1.0	0	2	2	0	1	1.0	1.0	7	8	6	5	5	6.2	1.3	5	1	1	2	0	1.8	1.9	0	0	2	0	0	0.4	0.9
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0
1	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
1	0	0	0	0.6	0.9	0	2	2	0	1	1.0	1.0	7	6	5	4	3	5.0	1.6	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4	0.9
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
1	0	0	0	0.6	0.9	0	2	2	0	1	1.0	1.0	7	6	5	4	3	5.0	1.6	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	1	1	2	1.2	0.8	4	1	3	0	0	1.6	1.8	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	1	1	2	1.2	0.8	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	4	0	1	0	0	1.0	1.7	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
2	2	1	0	1.4	0.9	0	2	0	0	0	0.4	0.9	1	2	0	1	6	2.0	2.3	2	2	0	0	3	1.4	1.3	0	1	5	1	1	1.6	1.9
1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	2	0.4	0.9	1	0	0	0	2	0.6	0.9	0	0	1	1	1	0.6	0.5
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	1	1	0.6	0.5	0	0	0	0	0	0.0	0.0	0	1	2	0	0	0.6	0.9
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	1	0	0	1	0.4	0.5	0	2	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4	0.9
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	1	0.4	0.5	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
1	1	0	0	0.4	0.5	0	2	0	0	0	0.4	0.9	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
44	30	37	2	30	16	11	34	26	9	14	19	11	29	19	9	6	13	15	9	29	40	168	48	6	58	63	4	36	29	16	7	18	14
5602	3820	4711	255	3794	2077	1401	4329	3310	1146	1783	2394	1370	3692	2419	1146	764	1655	1935	1161	3692	5093	21390	6112	764	7410	8070	509	4584	3692	2037	891	2343	1761

Site				41							42							43							44							45
Numbers per core	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D
PHYLUM CNIDARIA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ACTINIARIA	0	0	0	0	2	0.4	0.9	0		1	0	0	0.3	0.5	1	0	1	0	0	0.4	0.5	0	1	0	0	0	0.2	0.4	3	6	0	0
Anemonia viridis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cereus pedunculatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nematostella vectensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMATODA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMERTEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM HIRUDINEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ANNELIDA	38	25	57	12	27	31.8	16.8	8	3	32	1	2	9.2	13.0	2	7	11	27	12	11.8	9.4	27	41	22	27	19	27.2	8.4	14	23	18	36
Polychaeta total	12	11	24	12	15	14.8	5.4	8	3	32	1	2	9.2	13.0	1	2	1	1	0	1.0	0.7	14	22	17	14	8	15.0	5.1	9	5	4	5
Ampharete balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Anaitides mucosa	0	1	1	0	0	0.4	0.5	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aonides oxycephala	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aphelochaeta marioni	5	2	2	0	1	2.0	1.9	6	1	5	0	0	2.4	2.9	0	0	1	0	0	0.2	0.4	8	19	11	8	3	9.8	5.9	0	0	0	0
Arenicola marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Capitella capitata	0	0	0	0	2	0.4	0.9	0	2	25	0	1	5.6	10.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Chaetozone christii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0
Cirratulidae (indet.)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirriformia tentaculata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Caulleriella zetlandica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cossura longa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Desdemona ornata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eteone foliosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eteone longa	2	0	0	0	0	0.4	0.9	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	1	1	0	0.6	0.5	0	0	0	0
Eumida cf sanguinea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eumida punctifera	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Glycera tridactyla	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hediste diversicolor	2	4	16	4	8	6.8	5.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	3	3	2	4	2.8	0.8	6	5	4	5
Janua pagenstecheri	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Malacoceros tetraceros	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Mediomastus fragilis	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Melinna palmata	0	2	0	4	0	1.2	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microphthalmus cf similis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Neanthes virens	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	2	1	1	1.0	0.7	0	0	0	0
Nemertina	0	0	0	0	0	0.0	0.0	0	0	2	1	1	0.8	0.8	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	0	0
Neoamphitrite figulus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nephtys hombergii	0	1	0	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	0	0	2	0	0.8	1.1	0	0	0	0
Nephtys kersivalensis	0	0	2	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Notomastus latericeus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Paraplonosyllis minuta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polycirrus sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	0	1	0	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0
Polydora cornuta	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polydora sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pomatoceros lamarki	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pseudopolydora paucibranchia	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0
Pygospio elegans	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sabella pavonina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scolelepsis sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scoloplos armiger	1	1	3	3	1	1.8	1.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Serpulidae sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spio martinensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spionidae sp	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Streblospio shrubsolii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Oligochaeta total	26	14	33	0	12	17.0	12.8	0	0	0	0	0	0.0	0.0	1	5	10	26	12	10.8	9.5	13	19	5	13	11	12.2	5.0	5	18	14	31
Tubificoides sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	18	0	0
Tubificoides benedii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	5	10	26	12	10.8	9.5	0	0	0	0	0	0.0	0.0	5	0	14	31
Tubificoides pseudogaster	26	14	33	0	12	17.0	12.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	13	19	5	13	11	12.2	5.0	0	0	0	0
PHYLUM CRUSTACEA	0	1	1	0	1	0.6	0.5	4	13	2	0	6	5.0	5.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	39	29	96	31
Ostracoda sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	1	8	7
Eusarsiella zostericola	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	4	0	0	0
Copepoda: Harpacticoida	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pranus inermis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirripedia total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphibalanus improvisus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Isopoda total	0	0	0	0	0	0.0	0.0	4	11	1	0	5	4.2	4.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Apseudes latreillii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cyathura carinata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Idotea balthica	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Idotea chelipes	0	0	0	0	0	0.0	0.0	4	10	1	0	5	4.0	3.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sphaeroma rugicauda	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipoda total	0	1	1	0	0	0.4	0.5	0	2	1	0	1	0.8	0.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	35	28	88	24
Ampelisca brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bathyporeia indet.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium arenarium	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium insidiosum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium volutator	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	35	28	88	24
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gammarus locusta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Melita palmata	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microdeutopus gryllotalpus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microprotopus maculeatus	0	1	1	0	0	0.4	0.5	0	2	0	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Phtisica marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Urothoe brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Decapopda total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Carcinus maenas	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Crangon crangon	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Liocarcinus arcuatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Palaemonetes varians	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	1.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM MOLLUSCA	0	1	1	1	3	1.2	1.1	11	15	9	2	0	7.4	6.3	50	1	4	1	1	11.4	21.6	0	2	1	0	1	0.8	0.8	14	0	20	25
Abra tenuis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0
Alderia modesta	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cerastoderma edule	0	0	0	1	0	0.2	0.4	1	1	1	0	0	0.6	0.5	1	0	0	0	1	0.4	0.5	0	0	0	0	1	0.2	0.4	0	0	0	1
Cerastoderma glaucum	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	1	1	1	0	0.6	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0
Crepidula fornicata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dosinia lupinus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gibbula umbilicalis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Haminoea navicula	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hinia reticulata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hydrobia ulvae	0	0	0	0	0	0.0	0.0	3	1	0	0	0	0.8	1.3	48	0	3	0	0	10.2	21.2	0	0	0	0	0	0.0	0.0	14	0	18	24
Hydrobia ventrosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Leptochitona cinereus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina littorea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina saxatilis agg.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Macoma balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	1	0	0	0.4	0.5	0	0	0	0
Mya arenaria	0	1	0	0	2	0.6	0.9	1	0	2	0	0	0.6	0.9	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0
Mytilus edulis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Parvicardium exiguum	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa obtusa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa ovata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes decussatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes phillipinarum	0	0	0	0	0	0.0	0.0	0	1	0	1	0	0.4	0.5	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	1	0
Scrobicularia plana	0	0	0	0	0	0.0	0.0	5	12	6	1	0	4.8	4.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Solen marginatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Venerupis saxatilis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ECHINODERMATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipholis squamata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM INSECTA	0	0	0	0	0	0.0	0.0	1	0	2	0	32	7.0	14.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Chironomidae	0	0	0	0	0	0.0	0.0	1	0	2	0	32	7.0	14.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dolichopodidae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta indet	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta larvae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM CHORDATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pomatochistus sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Other (incl algae)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bryozoa indef.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Total number of individuals per (	38	27	59	13	33	34	17	24	31	46	3	40	29	17	54	8	16	28	13	24	18	27	44	23	27	20	28	9	70	58	134	92
Total number of individuals per I	4838	3438	7512	1655	4202	4329	2142	3056	3947	5857	382	5093	3667	2126	6875	1019	2037	3565	1655	3030	2345	3438	5602	2928	3438	2546	3591	1186	8913	7385	17061	11714

						46							47							48							49							50		
E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	1.8	2.7	0	0	0	0	0	0.0	0.0	0	3	0	2	0	1.0	1.4	0	7	0	1	0	1.6	3.0	0	0	0	0	0	0.0	0.0	0	0	0	0	4	0.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
53	28.8	15.9	8	19	27	0	1	11.0	11.7	10	25	10	8	10	12.6	7.0	5	28	2	4	2	8.2	11.1	5	9	15	4	5	7.6	4.6	5	14	4	6	23	10.4
5	5.6	1.9	5	12	26	0	0	8.6	10.9	10	22	9	8	9	11.6	5.9	2	23	1	2	2	6.0	9.5	1	6	0	0	0	1.4	2.6	5	10	4	4	17	8.0
0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
2	0.4	0.9	0	1	0	0	0	0.2	0.4	0	0	0	0	1	0.2	0.4	0	12	1	1	0	2.8	5.2	0	1	0	0	0	0.2	0.4	0	4	0	0	7	2.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	3	0	0	0	0.8	1.3	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	3	0	0	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
3	4.6	1.1	1	1	18	0	0	4.0	7.8	9	14	8	6	5	8.4	3.5	0	3	0	0	0	0.6	1.3	0	1	0	0	0	0.2	0.4	2	4	1	3	6	3.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	5	1	2	3	2.4	1.7	1	6	0	1	2	2.0	2.3	0	0	0	0	0	0.0	0.0	3	2	3	1	4	2.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	3	0	0	0	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	8	6	0	0	2.8	3.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
48	23.2	16.7	3	7	1	0	1	2.4	2.8	0	3	1	0	1	1.0	1.2	3	5	1	2	0	2.2	1.9	4	3	15	4	5	6.2	5.0	0	4	0	2	6	2.4
0	3.6	8.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	4	0	2	6	2.4
48	19.6	19.8	3	7	1	0	1	2.4	2.8	0	2	1	0	1	0.8	0.8	0	0	0	0	0	0.0	0.0	0	0	0	0	5	1.0	2.2	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	5	1	2	0	2.2	1.9	4	3	15	4	0	5.2	5.7	0	0	0	0	0	0.0
46	48.2	27.6	0	1	2	0	2	1.0	1.0	0	1	0	0	0	0.2	0.4	3	1	0	0	0	0.8	1.3	6	1	0	0	0	1.4	2.6	0	1	0	0	4	1.0
1	3.4	3.8	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.8	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
45	44.0	25.9	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	2	1	0	0	0	0.6	0.9	6	1	0	0	0	1.4	2.6	0	1	0	0	4	1.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
45	44.0	25.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	6	1	0	0	0	1.4	2.6	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	2	1	0	0	0	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	4	0.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
6	13.0	10.1	7	5	11	5	9	7.4	2.6	8	9	6	1	0	4.8	4.1	0	1	0	0	0	0.2	0.4	0	1	3	5	0	1.8	2.2	1	1	0	1	10	2.6
0	0.2	0.4	0	0	2	0	3	1.0	1.4	0	3	0	0	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	1	0	0	7	1.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	1	1	0	0.6	0.5	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
5	12.2	9.7	7	1	6	3	6	4.6	2.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	3	4	0	1.6	1.8	0	0	0	1	2	0.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	7	4	5	0	0	3.2	3.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	3	3	2	0	1.6	1.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
105	92	30	15	25	40	5	12	19	14	18	38	16	11	11	19	11	8	37	2	5	2	11	15	11	11	18	9	5	11	5	6	16	4	7	42	15
13369	11688	3805	1910	3183	5093	637	1528	2470	1729	2292	4838	2037	1401	1401	2394	1422	1019	4711	255	637	255	1375	1892	1401	1401	2292	1146	637	1375	600	764	2037	509	891	5348	1910

				51							52							53							54							55				
SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.8	55	3	2	5	22	17.4	22.5	0	0	0	5	1	1.2	2.2	0	0	0	0	0	0.0	0.0	0	1	0	1	0	0.4	0.5	1	0	0	1	3	1.0	1.2	7
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	3	0	0	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
8.1	168	21	175	46	127	107.4	70.5	4	5	2	14	12	7.4	5.3	8	2	2	2	4	3.6	2.6	20	18	19	5	10	14.4	6.6	2	2	1	3	2	2.0	0.7	1
5.6	58	16	103	23	52	50.4	34.5	0	5	2	13	12	6.4	5.9	8	2	2	2	4	3.6	2.6	5	14	9	4	9	8.2	4.0	0	0	0	3	1	0.8	1.3	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	1	1	3	4	1.8	1.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
3.2	8	1	2	1	2	2.8	2.9	0	1	0	7	2	2.0	2.9	0	0	0	0	0	0.0	0.0	0	0	3	0	0	0.6	1.3	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	39	13	99	17	45	42.6	34.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	2	0	0.4	0.9	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	2	1	0	0	1	0.8	0.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.9	0	1	0	0	0	0.2	0.4	0	1	0	0	5	1.2	2.2	6	0	1	1	3	2.2	2.4	1	10	1	0	0	2.4	4.3	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	7	1.4	3.1	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.1	0	0	0	0	0	0.0	0.0	0	1	1	2	1	1.0	0.7	1	2	1	0	1	1.0	0.7	4	4	5	3	2	3.6	1.1	0	0	0	2	1	0.6	0.9	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	8	0	1	3	4	3.2	3.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
2.6	110	5	72	23	75	57.0	42.5	4	0	0	1	0	1.0	1.7	0	0	0	0	0	0.0	0.0	15	4	10	1	1	6.2	6.1	2	2	1	0	1	1.2	0.8	0
2.6	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	110	5	72	23	75	57.0	42.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	2	2	1	0	1	1.2	0.8	0
0.0	0	0	0	0	0	0.0	0.0	4	0	0	0	0	0.8	1.8	0	0	0	0	0	0.0	0.0	15	4	10	1	0	6.0	6.4	0	0	0	0	0	0.0	0.0	0
1.7	12	0	2	0	1	3.0	5.1	2	1	1	8	1	2.6	3.0	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.7	12	0	2	0	1	3.0	5.1	2	1	1	7	1	2.4	2.6	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	1	1	1	0	0.6	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
1.8	12	0	2	0	1	3.0	5.1	2	0	0	6	1	1.8	2.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
4.2	30	10	15	16	12	16.6	7.9	1	3	1	12	31	9.6	12.8	0	1	0	1	0	0.4	0.5	2	0	0	0	0	0.4	0.9	1	1	3	5	4	2.8	1.8	0
3.0	3	0	0	1	0	0.8	1.3	0	1	0	7	28	7.2	12.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	1	0	0.4	0.5	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	2	0.6	0.9	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.9	27	10	15	15	12	15.8	6.6	1	1	0	5	2	1.8	1.9	0	0	0	1	0	0.2	0.4	1	0	0	0	0	0.2	0.4	0	0	3	3	2	1.6	1.5	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	1	0	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0
0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	11	0	6	0	2	3.8	4.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	11	0	6	0	2	3.8	4.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0
16	276	34	200	67	164	148	99	7	12	4	39	45	21	19	8	3	2	5	5	5	2	22	19	19	6	10	15	7	5	3	4	9	9	6	3	9
2009	35141	4329	25465	8531	20881	18869	12556	891	1528	509	4966	5730	2725	2437	1019	382	255	637	637	586	293	2801	2419	2419	764	1273	1935	870	637	382	509	1146	1146	764	360	1146

		56							57							58							59							60			
B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
11	19	3	24	12.8	8.6	21	8	3	10	7	9.8	6.8	0	0	0	0	0	0.0	0.0	0	1	0	5	0	1.2	2.2	0	1	0	2	0	0.6	0.9
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	2	0	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
6	28	5	3	8.6	11.0	17	2	3	136	8	33.2	57.8	3	25	3	4	10	9.0	9.4	3	20	2	39	11	15.0	15.2	18	20	13	5	25	16.2	7.6
2	10	3	1	3.4	3.8	2	2	3	1	7	3.0	2.3	3	25	3	4	9	8.8	9.4	2	6	2	4	2	3.2	1.8	3	6	9	5	5	5.6	2.2
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	1	0.4	0.5
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	2	0	0	0.4	0.9	2	0	0	0	2	0.8	1.1	0	0	1	0	0	0.2	0.4	0	4	0	2	0	1.2	1.8	0	0	1	0	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	3	0	0	0.6	1.3	0	2	1	0	4	1.4	1.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	4	0	0	0	0.8	1.8	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	1	1	0	0.4	0.5	0	0	0	1	0	0.2	0.4	3	20	2	4	9	7.6	7.4	0	1	2	0	0	0.6	0.9	0	1	0	0	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	1	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
2	2	2	1	1.6	0.5	0	0	1	0	1	0.4	0.5	0	1	0	0	0	0.2	0.4	2	0	0	1	2	1.0	1.0	2	5	7	5	3	4.4	1.9
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
4	18	2	2	5.2	7.3	15	0	0	135	1	30.2	58.9	0	0	0	0	1	0.2	0.4	1	14	0	35	9	11.8	14.2	15	14	4	0	20	10.6	8.3
4	18	0	2	4.8	7.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	12	0	24	0	7.2	10.7	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	15	0	0	135	1	30.2	58.9	0	0	0	0	1	0.2	0.4	1	2	0	11	8	4.4	4.8	0	0	0	0	0	0.0	0.0
0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	15	14	4	0	20	10.6	8.3
0	0	0	1	0.4	0.5	0	0	0	1	3	0.8	1.3	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	1	0.2	0.4	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.2	0.4	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	4	3	9	3.2	3.7	1	1	0	0	0	0.4	0.5	21	10	8	14	1	10.8	7.4	1	2	2	1	0	1.2	0.8	0	0	0	1	0	0.2	0.4
0	0	3	5	1.6	2.3	1	0	0	0	0	0.2	0.4	0	1	0	1	0	0.4	0.5	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	3	0	2	1.0	1.4	0	1	0	0	0	0.2	0.4	21	8	6	9	1	9.0	7.4	1	1	2	1	0	1.0	0.7	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	3	0	0.8	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
17	51	11	37	25	18	41	11	6	147	18	45	59	24	35	11	18	11	20	10	4	23	4	46	11	18	18	18	21	13	8	25	17	7
2165	6494	1401	4711	3183	2327	5220	1401	764	18717	2292	5679	7485	3056	4456	1401	2292	1401	2521	1284	509	2928	509	5857	1401	2241	2250	2292	2674	1655	1019	3183	2165	849

Site				61							62							63							64							65
Numbers per core	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D
PHYLUM CNIDARIA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ACTINIARIA	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	14	0	0	2.8	6.3	0	0	0	0	0	0.0	0.0	0	0	1	0
Anemonia viridis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cereus pedunculatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nematostella vectensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMATODA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM NEMERTEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM HIRUDINEA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ANNELIDA	12	62	9	6	159	49.6	65.4	16	14	27	7	19	16.6	7.3	3	3	2	2	0	2.0	1.2	15	13	8	14	59	21.8	21.0	5	0	155	72
Polychaeta total	5	20	6	1	21	10.6	9.2	0	2	0	0	1	0.6	0.9	0	2	1	0	0	0.6	0.9	3	6	8	3	5	5.0	2.1	3	0	16	15
Ampharete balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Anaitides mucosa	1	0	6	1	9	3.4	3.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aonides oxycephala	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Aphelochaeta marioni	3	20	0	0	12	7.0	8.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	3	0	0	0	0.6	1.3	1	0	3	4
Arenicola marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Capitella capitata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	12	0
Chaetozone christii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirratulidae (indet.)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirriformia tentaculata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Caulleriella zetlandica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cossura longe	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Desdemona ornata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eteone foliosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eteone longa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eumida cf sanguinea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	4
Eumida punctifera	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Glycera tridactyla	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hediste diversicolor	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	2	1	0	0	0.6	0.9	0	1	1	2	2	1.2	0.8	1	0	1	1
Janua pagenstecheri	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Malacoceros tetraceros	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Mediomastus fragilis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Melinna palmata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microphthalmus cf similis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Neanthes virens	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nemertina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Neoamphitrite figulus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Nephtys hombergii	0	0	0	0	0	0.0	0.0	0	1	0	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	3	2	6	1	0	2.4	2.3	0	0	0	0
Nephtys kersivalensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	3	0.6	1.3	0	0	0	0
Notomastus latericeus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Parapionosyllis minuta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polycirrus sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Polydora sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pomatoceros lamarki	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pseudopolydora paucibranchiata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pygospio elegans	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sabella pavonina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0
Scolelepsis sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scoloplos armiger	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	6
Serpulidae sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spio martinensis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Spionidae sp	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Streblospio shrubsolii	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Oligochaeta total	7	42	3	5	138	39.0	57.6	16	12	27	7	18	16.0	7.4	3	1	1	2	0	1.4	1.1	12	7	0	11	54	16.8	21.3	2	0	139	57
Tubificoides sp.	0	0	0	0	138	27.6	61.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	0	0	57
Tubificoides benedii	7	0	0	0	0	1.4	3.1	16	12	27	7	0	12.4	10.1	3	1	1	2	0	1.4	1.1	0	0	0	0	6	1.2	2.7	0	0	1	0
Tubificoides pseudogaster	0	42	3	5	0	10.0	18.0	0	0	0	0	18	3.6	8.0	0	0	0	0	0	0.0	0.0	12	7	0	11	48	15.6	18.7	0	0	138	0
PHYLUM CRUSTACEA	37	134	114	39	120	88.8	46.9	0	0	0	0	0	0.0	0.0	1	0	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	1	1
Ostracoda sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Eusersiella zostericola	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Copepoda: Harpacticoida	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0
Pranus inermis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cirripedia total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphibalanus improvisus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Isopoda total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Apseudes latreillii	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cyathura carinata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Idotea balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Idotea chelipes	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Sphaeroma rugicauda	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipoda total	37	134	114	39	120	88.8	46.9	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
Ampelisca brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bathyporeia indet.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium arenarium	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium insidiosum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Corophium volutator	37	134	114	39	120	88.8	46.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Elminius modestus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gammarus locusta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
Melita palmata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microdeutopus gryllotalpus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Microprotopus maculeatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Phtisica marina	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Urothoe brevicornis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Decapopda total	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	1
Carcinus maenas	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Crangon crangon	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	1
Liocarcinus arcuatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Palaemonetes varians	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM MOLLUSCA	1	0	0	1	9	2.2	3.8	0	0	0	0	0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	4	1	4	0
Abra tennuis	0	0	0	0	4	0.8	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Alderia modesta	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Cerastoderma edule	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
Cerastoderma glaucum	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Crepidula fornicata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dosinia lupinus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Gibbula umbilicalis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Haminoea navicula	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hinia reticulata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Hydrobia ulvae	0	0	0	1	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	0	2	0
Hydrobia ventrosa	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Leptochitona cinereus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina littorea	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Littorina saxatilis agg.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Macoma balthica	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Mya arenaria	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	1	2	0
Mytilus edulis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Parvicardium exiguum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa obtusa	0	0	0	0	4	0.8	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Retusa ovata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes decussatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0
Ruditapes phillipinarum	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0		0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Scrobicularia plana	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Solen marginatus	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Venerupis saxatilis	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM ECHINODERMATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Amphipholis squamata	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM INSECTA	1	0	0	0	2	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Chironomidae	1	0	0	0	2	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Dolichopodidae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta indet	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Insecta larvae	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
PHYLUM CHORDATA	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Pomatochistus sp.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Other (incl algae)	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Bryozoa indef.	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0
Total number of individuals per core	51	196	123	46	291	141	104	16	14	27	7	19	17	7	4	3	16	3	4	6	6	15	13	8	14	59	22	21	9	1	161	73
Total number of individuals per m^2	6494	24956	15661	5857	37051	18004	13197	2037	1783	3438	891	2419	2114	930	509	382	2037	382	509	764	715	1910	1655	1019	1783	7512	2776	2670	1146	127	20499	9295

						66							67							68							69							70
E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.2	0.4	0	0	0	1	13	2.8	5.7	0	0	0	0	0	0.0	0.0	0	6	1	0	0	1.4	2.6	0	missing	11	missing	missing	5.5	7.8	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	4	0	0	2	1.2	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
156	77.6	76.6	221	122	39	53	90	105.0	72.5	14	13	5	2	1	7.0	6.1	6	38	6	7	7	12.8	14.1	19	missing	209	missing	missing	114.0	134.4	2	3	1	missing
5	7.8	7.3	1	6	2	9	16	6.8	6.1	5	3	5	2	1	3.2	1.8	5	9	6	5	4	5.8	1.9	6	missing	4	missing	missing	5.0	1.4	2	3	1	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	5	1	0	3	1.8	2.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	1.6	1.8	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	2.4	5.4	0	0	0	9	11	4.0	5.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	1	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.8	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
1	0.8	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4	0.9	2	missing	0	missing	missing	1.0	1.4	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	1	0	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	3	5	0	0	2.2	2.2	5	9	4	4	4	5.2	2.2	4	missing	0	missing	missing	2.0	2.8	1	1	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	2	1	0.8	0.8	0	0	0	0	0	0.0	0.0	0	missing	4	missing	missing	2.0	2.8	0	0	1	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
4	1.0	1.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	1.2	2.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	2	0	missing
0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
151	69.8	72.5	220	116	37	44	74	98.2	74.9	9	10	0	0	0	3.8	5.2	1	29	0	2	3	7.0	12.3	13	missing	205	missing	missing	109.0	135.8	0	0	0	missing
151	42.0	65.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.2	0.4	220	116	37	44	74	98.2	74.9	0	10	0	0	0	2.0	4.5	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	27.6	61.7	0	0	0	0	0	0.0	0.0	9	0	0	0	0	1.8	4.0	0	29	0	2	3	6.8	12.5	13	missing	205	missing	missing	109.0	135.8	0	0	0	missing
0	0.4	0.5	7	69	9	21	47	30.6	26.7	0	0	2	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	2	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	7	68	9	21	47	30.4	26.4	0	0	2	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	2	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	2	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	2	0	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	2	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	5	68	9	21	47	30.0	26.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
3	2.4	1.8	150	159	99	105	182	139.0	35.8	0	2	0	2	0	0.8	1.1	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	4	0	1	missing
0	0.0	0.0	16	8	7	1	5	7.4	5.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	2	0	2	0	0.8	1.1	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	1	1	0	2	1	1.0	0.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	4	0	1	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
3	1.6	1.5	130	145	90	101	175	128.2	34.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	1	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.8	0.8	2	1	1	0	0	0.8	0.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	3	0	0	1	0.8	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	15	72	12	22	20	28.2	24.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	15	72	12	22	20	28.2	24.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	1	0	0	0	0	0.2	0.4	1	0	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	1	0	0	0	0	0.2	0.4	1	0	1	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	missing	0	missing	missing	0.0	0.0	0	0	0	missing
159	81	78	394	426	159	202	354	307	119	15	15	8	4	2	9	6	6	44	7	7	7	14	17	19	0	220	0	0	48	97	8	3	2	0
20245	10262	9889	50166	54240	20245	25719	45073	39088	15181	1910	1910	1019	509	255	1120	771	764	5602	891	891	891	1808	2122	2419	0	28011	0	0	6086	12301	1019	382	255	0

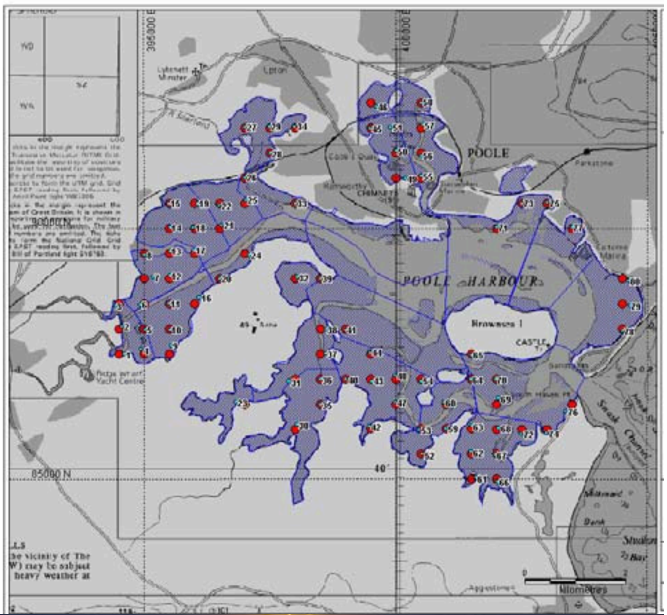
						71							72							73							74							75		
E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	4	4	1		0	2.3	2.1	0	0	0	0	0	0.0	0.0	9	3	14	1	2	5.8	5.5	0	0	0	2	0	0.4	0.9	0	1	0	0	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	1.5	1.3	160	72	75	15	40	72.4	54.8	7	2	2	4	3	3.6	2.1	141	80	28	31	22	60.4	50.7	181	40	107	206	1	107.4	88.6	27	61	93	132	74	77.4
0	1.5	1.3	29	9	31	11	19	19.8	10.1	7	1	2	4	3	3.4	2.3	45	63	6	6	15	27.0	25.7	55	5	8	53	1	24.4	27.1	26	61	87	129	73	75.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	2	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2
0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	11	0	6	0	1	3.6	4.8	0	0	0	0	0	0.0	0.0	2	4	0	0	0	1.2	1.8	40	2	5	43	0	18.0	21.6	8	30	1	104	21	32.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.3	0.5	1	0	1	0	3	1.0	1.2	0	0	0	0	0	0.0	0.0	34	58	2	0	3	19.4	25.7	2	0	0	4	0	1.2	1.8	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	71	0	0	14.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	4	0	0.8	1.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	9	4	0	7	1	4.2	3.8	0	0	0	0	0	0.0	0.0	0	0	1	0	4	1.0	1.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	1	0	0.4	0.5	0	0	0	0	0	0.0
0	0.0	0.0	3	1	1	2	0	1.4	1.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	3	0	4	1.6	1.8	0	0	0	0	0	0.0	0.0	7	0	1	0	1	1.8	2.9	10	3	3	4	0	4.0	3.7	15	25	5	11	31	17.4
0	0.0	0.0	3	0	18	0	0	4.2	7.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	1	0	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.5	0.6	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0
0	0.3	0.5	0	0	0	0	0	0.0	0.0	2	0	0	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	1	3	0	0	1	1.0	1.2	2	0	0	2	0	0.8	1.1	1	0	0	2	6	1.8	2.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	3	2	4	1	13	4.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	3	0.6	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	2	2	1.0	1.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	1	0	0.4
0	0.0	0.0	1	0	0	0	3	0.8	1.3	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2
0	0.5	1.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	0	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	3	6	7	8	4.8
0	0.0	0.0	131	63	44	4	21	52.6	49.2	0	1	0	0	0	0.2	0.4	96	17	22	25	7	33.4	35.7	126	35	99	155	0	83.0	64.2	1	0	6	3	1	2.2
0	0.0	0.0	0	0	0	0	18	3.6	8.0	0	0	0	0	0	0.0	0.0	96	17	22	25	7	33.4	35.7	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	40	0	0	8.0	17.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	123	22	99	155	0	79.8	66.3	0	0	0	0	0	0.0
0	0.0	0.0	131	63	4	4	3	41.0	56.5	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	3	13	0	0	0	3.2	5.6	1	0	6	3	1	2.2
1	0.8	1.0	21	20	29	33	36	27.8	7.1	0	1	0	1	1	0.6	0.5	2	0	0	0	0	0.4	0.9	1	0	1	0	0	0.4	0.5	8	13	6	7	12	9.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	13	0	0	0	2.6	5.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	13	0	0	0	2.6	5.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	9	6	5	4	30	10.8	10.9	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	8	13	5	6	12	8.8
0	0.0	0.0	9	6	5	4	29	10.6	10.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	8	13	5	6	12	8.8
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	0.8	1.0	12	1	24	29	6	14.4	11.8	0	1	0	1	1	0.6	0.5	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	1	1	0	0.4
0	0.5	1.0	0	0	0	0	0	0.0	0.0	0	1	0	1	1	0.6	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	1	0	0	0.2
0	0.0	0.0	6	0	3	29	0	7.6	12.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	0.3	0.5	6	1	21	0	5	6.6	8.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	1.3	1.9	5	5	4	1	1	3.2	2.0	1	0	0	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	1	1	0	0	0.4	0.5	2	2	16	0	0	4.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	1.3	1.9	1	1	0	1	0	0.6	0.5	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	1	0	0	0.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	1	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	1	1	0	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	1	0	0	0.4	0.5	0	1	11	0	0	2.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	1	1	1	0	0	0.6	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	2	0	0	0.6
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	2	0	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	1	0	0	0.4
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	7	0	6	5	25	8.6	9.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	7	0	6	5	25	8.6	9.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
0	0.0	0.0	0	0	2	0	1	0.6	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0
1	3	3	197	101	117	54	103	114	52	8	3	3	5	5	5	2	152	83	42	32	24	67	53	182	41	109	211	1	109	89	37	77	115	139	86	91
127	357	397	25083	12860	14897	6875	13114	14566	6612	1019	382	382	637	637	611	261	19353	10568	5348	4074	3056	8480	6731	23173	5220	13878	26865	127	13853	11392	4711	9804	14642	17698	10950	11561

				76							77							78							79							80			
SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD	A	B	C	D	E	Mean	SD
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	1	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	17	2	9	5.6	7.4
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
38.9	4	2	3	9	23	8.2	8.7	24	1	3	19	11	11.6	9.9	12	8	9	12	18	11.8	3.9	10	23	20	21	8	16.4	6.9	10	14	46	24	18	22.4	14.2
37.6	4	2	3	8	2	3.8	2.5	2	1	2	4	2	2.2	1.1	12	8	9	12	18	11.8	3.9	10	23	20	20	8	16.2	6.7	2	1	10	3	3	3.8	3.6
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	2	0	3	2	1.4	1.3	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
41.4	0	0	0	0	1	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	3	0	0.6	1.3	0	0	0	0	0	0.0	0.0	2	2	0	0	1	1.0	1.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
31.8	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	2	0	0	0	0.4	0.9	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
10.5	3	0	1	0	0	0.8	1.3	0	0	1	3	1	1.0	1.2	0	0	0	0	0	0.0	0.0	4	1	3	3	1	2.4	1.3	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	1	0	0	0.2	0.4	0	1	0	0	0	0.2	0.4	0	0	0	1	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	1	0.4	0.5	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	0	1	0.4	0.5	2	0	3	6	0	2.2	2.5	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	2	1	0	0	0.6	0.9	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
4.8	1	0	0	5	0	1.2	2.2	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	10	3	7	10	16	9.2	4.8	3	20	14	8	5	10.0	7.0	1	1	10	2	3	3.4	3.8
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
3.3	0	0	0	0	1	0.2	0.4	1	0	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
2.4	0	0	0	1	21	4.4	9.3	22	0	1	15	9	9.4	9.3	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	8	13	36	21	15	18.6	10.8
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	1	0	0.2	0.4	0	0	1	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	1	0	0.2	0.4	0	13	36	21	15	17.0	13.1
2.4	0	0	0	0	21	4.2	9.4	22	0	0	15	9	9.2	9.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	8	0	0	0	0	1.6	3.6
3.1	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	12	11	1	0	15	7.8	6.8	18	3	9	23	23	15.2	8.9	0	2	1	0	0	0.6	0.9
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	1	0	0	0.2	0.4
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
3.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
3.6	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	12	11	1	0	15	7.8	6.8	18	3	9	23	23	15.2	8.9	0	2	0	0	0	0.4	0.9
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	2	0.4	0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	2	1	0	0	0	0.6	0.9	0	1	0	0	0	0.2	0.4
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	12	11	1	0	13	7.4	6.3	16	2	9	23	23	14.6	9.1	0	1	0	0	0	0.2	0.4
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
6.8	1	0	0	0	0	0.2	0.4	2	0	0	0	0	0.4	0.9	0	0	0	0	0	0.0	0.0	1	2	0	1	0	0.8	0.8	0	0	0	0	0	0.0	0.0
0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.5	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	1	0	1	0	0.4	0.5	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	1	1	0	0	0	0.4	0.5	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
4.8	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	1	0	0	0	0	0.2	0.4	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.9	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.5	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0.0
39	5	3	3	9	23	9	8	26	1	3	19	11	12	11	25	19	10	12	33	20	9	29	28	29	45	31	32	7	10	16	64	26	27	29	21
4938	637	382	382	1146	2928	1095	1071	3310	127	382	2419	1401	1528	1347	3183	2419	1273	1528	4202	2521	1206	3692	3565	3692	5730	3947	4125	907	1273	2037	8149	3310	3438	3641	2676

APPENDIX 18. Brownsea Island lagoon core sample matrix. Data shows No. of individuals in each core (10cm diameter) in samples ABC from each site.

Site No (as on Database)	82			83			84			85			86			87		
Site No. New (as on Fig 41)	**1**			**2**			**3**			**4**			**5**			**6**		
Core	**A**	**B**	**C**	**A**	**B**	**C**	**A**	**B**	**C**	**A**	**B**	**C**	**A**	**B**	**C**	**A**	**B**	**C**
ACTINIARIA																		
Nematostella vectensis	32	44	29	6	71	37	2	2	2	4	14	0	12	62	63	23	23	26
PHYLUM NEMATODA	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
PHYLUM ANNELIDA																		
Oligochaeta																		
Tubificoides sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubificoides benedii	3	78	74	11	102	189	2	49	3	60	0	0	26	108	143	64	73	84
Tubificoides pseudogaster	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polychaeta																		
Aphelochaeta marioni	12	20	31	30	31	49	14	5	4	71	99	4	1	2	0	103	105	64
Capitella capitata	0	0	1	1	2	2	0	3	0	2	0	0	2	1	1	0	0	0
Desdemona ornata	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Hediste diversicolor	8	6	15	24	13	24	20	2	13	7	90	18	0	0	0	11	10	13
Polydora cornuta	2	65	31	7	38	35	5	2	2	6	73	0	0	1	0	23	21	30
Pygospio elegans	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Streblospio shrubsolii	0	0	0	0	1	4	0	0	0	0	1	0	0	1	0	0	1	0
PHYLUM CRUSTACEA																		
Ostracoda sp.	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Praunus inermis	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Isopoda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Idotea chelipes	0	0	0	1	0	0	1	0	2	0	0	1	3	0	1	1	0	0
Sphaeroma rugicauda	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
Amphipoda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corophium insidiosum	157	172	44	37	19	6	2	35	48	22	213	4	10	16	2	0	1	10
Corophium volutator	0	0	0	1	0	2	4	0	0	0	0	0	0	0	1	0	0	0
Melita palmata	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
Decapopda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Palaemonetes varians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
PHYLUM MOLLUSCA																		
Abra tenuis	47	81	46	3	3	7	1	0	1	7	21	10	0	2	0	1	0	1
Ventrosa ventrosa	130	95	66	8	52	22	161	83	44	97	67	78	3	13	38	0	7	3
PHYLUM INSECTA																		
Chironomidae	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insecta indet	0	0	1	1	1	0	0	0	2	1	0	0	0	0	1	0	0	0


RNLI


POOLE
POOLE HARBOUR
Brownsea I
CASTLE
85000 N
Kilometres


Lifeboats


RNLI
RNLI


H-001