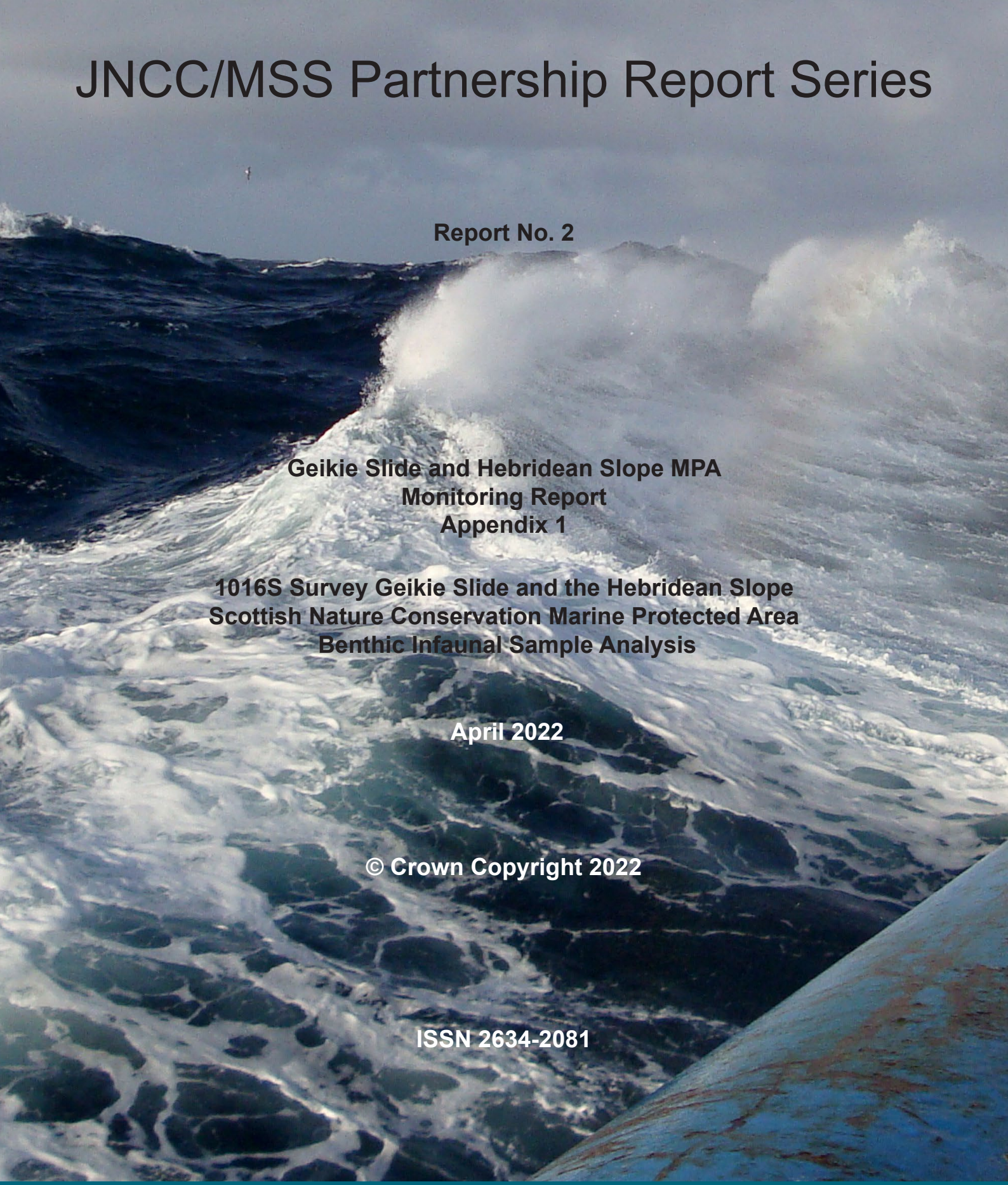

JNCC/MSS Partnership Report Series

Report No. 2

Geikie Slide and Hebridean Slope MPA Monitoring Report Appendix 1

1016S Survey Geikie Slide and the Hebridean Slope Scottish Nature Conservation Marine Protected Area Benthic Infaunal Sample Analysis

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Appendix 1

1016S Survey Geikie Slide and the Hebridean Slope Scottish Nature Conservation Marine Protected Area Benthic Infaunal Sample Analysis

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Executive Summary

The Joint Nature Conservation Committee (JNCC) and Marine Scotland Science (MSS) undertook an offshore seabed survey of Geikie Slide and the Hebridean Slope (GSH) Scottish Nature Conservation Marine Protected Area (NCMPA) on the Marine Research Vessel Scotia (survey code 1016S) from 18 July 2016 to 3 August 2016.

Fifty-six faunal and Particle Size Analysis (PSA) samples were collected using a 0.25 m^2 surface area United States Navy Electronics Laboratory (USNEL) type box corer, in addition to underwater video footage. Sediment samples were collected at sites within and adjacent to the GSH NCMPA site boundary, from depths ranging between 200 m and 900 m.

Faunal samples were analysed as two fractions, with all material greater than 0.5 mm analysed separately to the 0.25 to 0.5 mm fraction. Fauna were extracted and identified to the lowest taxonomic level practicable.

Results show the majority of samples were dominated by *Glycera* sp. and other Polychaetes. Notable species found include deep water Cumacea and Isopoda. The PMFs ‘offshore deep sea muds’ and ‘offshore subtidal sands and gravels’ are believed to be present, with results indicating that this area contains variants of the component biotopes currently listed for these PMFs. Additionally, the diversity of fauna and range of species found at the site that are rare or infrequently recorded means that the site holds conservation importance.

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1. Introduction

The Joint Nature Conservation Committee (JNCC) and Marine Scotland Science (MSS) undertook an offshore seabed survey of Geikie Slide and the Hebridean Slope (GSH) Scottish Nature Conservation Marine Protected Area (NCMPA) on the Marine Research Vessel (MRV) Scotia (survey code 1016S). The survey departed Aberdeen on 18 July 2016 and arrived back into Aberdeen on 3 August 2016.

Benthic sediments and biological communities were sampled using a 0.25 m^2 surface area United States Navy Electronics Laboratory (USNEL) type box corer. 56 samples were collected from within and adjacent to the GSH NCMPA site boundary, from water depths of 200 m to 900 m (Figure 1).

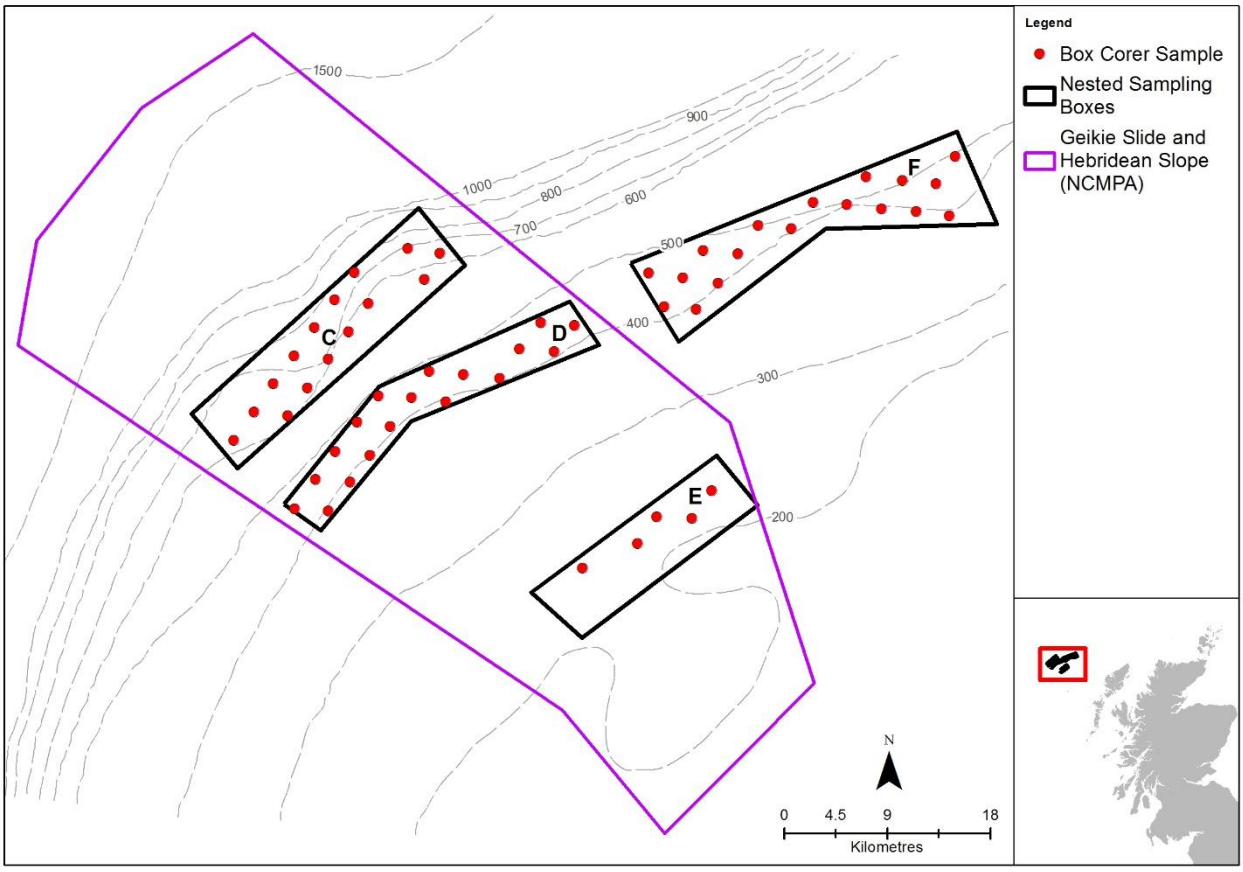

Figure 1. 1016S infaunal sample locations and boundary of Geikie Slide and the Hebridean Slope NCMPA.

The Geikie Slide and Hebridean Slope NCMPA, located north-west of Scotland, protects a 2,215 km^2 area of seabed descending from the Hebridean continental shelf at 200 m depth down to 1700 m towards the Rockall Trough. The Geikie Slide, named after the Scottish geologist Sir Archibald Geikie, resulted from a sub-marine landslide and the Rockall Trough is a deep-sea channel extending to 1,757 m below sea level. The site is believed to be significant for the health of Scotland's seas due to the Hebridean slope affecting the movement of water currents that bring with them an abundance of food, resulting in an increase in biological productivity in the area.

The GSH NCMPA conserves a range of sediment types and associated biological communities. The habitat types and associated biological communities change with depth

down the slope due to different species' tolerances to the harsh environmental conditions of the deep sea. These habitats support a diverse array of animals including mud shrimp, deep-sea crabs and sea urchins, as well as commercially important fish.

Previously, biotope analysis has been undertaken at the site based on underwater photographs taken over a ten-year period up to 1998 (Hughes *et al.* 2014). However, this is the first time that such detailed analysis of sediment samples has been undertaken. The samples were processed at Thomson Unicomarine's Marine Sciences Laboratory in Guildford.

2. Methodology

2.1 Sample Processing

The top 150 mm of each box core sample was processed on board. Sediment samples for Particle Size Analysis (PSA) were extracted from the centre of the sample using a 55 mm diameter acrylic sub-sampler. The remaining top 150 mm of the box core sample was sieved in the field using stacked 0.5 mm and 0.25 mm mesh diameter sieves, with both fractions retained separately and preserved in 5% formaldehyde solution buffered with borax. Samples were then shipped to Thomson Unicomarine's Marine Sciences Laboratory for analysis.

Analyses of the macrobenthic samples were carried out according to the agreed specifications, using Thomson Unicomarine's standard operating procedures. All biological analyses were conducted at Thomson Unicomarine's Marine Sciences Laboratory by Thomson Unicomarine staff with internal quality control procedures implemented at each stage of processing.

Samples were fractionated at 0.5 mm, with all material greater than 0.5 mm analysed separately to the 0.25 to 0.5 mm fraction. The samples were sieved over a stack of sieves (4 mm, 2mm, 1 mm, 0.5 mm and 0.25 mm) in a ventilated washroom. Lighter animals, such as Polychaetes and smaller Crustaceans, were removed from each size fraction of the sample by elutriation. The greater than 2 mm fractions were sorted by eye in white trays to extract all fauna, while the less than 2 mm fractions were examined using low power stereomicroscopes.

In-house quality control procedures were carried out, to reduce the risk of biota being missed. All sorted trays were checked by a second analyst and the lighter material separated by elutriation was also checked by a second analyst for every sample. Feedback was given to the original analyst on any biota consistently missed. For at least 10 % of samples, the sediment remaining after elutriation was also checked, with at least one sample processed by each analyst involved in the project being checked in full.

After these procedures were completed, the sediment residues (sediment from which biota had been extracted) were returned to their original bucket and stored in 4% formaldehyde. The extracted biota were preserved in 70% industrial denatured alcohol (IDA) and passed to an experienced analyst for identification.

Countable fauna removed from the samples were identified to the lowest taxonomic level practicable, usually species, and enumerated. Where no heads were present for a given taxon, posterior ends were counted. Non-countable taxa, such as colonial fauna, were recorded as present ('P'). High power compound microscopes were used to confirm the identity of species whenever necessary. In each instance of a new taxon being recorded the

identification was checked by a Principal Taxonomist. Specimens with difficult taxonomic characters were also routinely checked.

2.2 Sponge Sample Analysis

Samples of encrusting sponges were taken from boulders collected in samples D09 S69 A1 and D11 S61 A1 and preserved in 100 % ethanol. These samples were processed as above and all fauna in addition to the sponges were identified. The sponges were then sent to Dr Claire Goodwin, a specialist in sponge identification at the Atlantic Reference Centre, for species level identification.

2.3 Data Analysis

The data were reviewed and the most abundant and any noteworthy species in each sample identified. The data review was used to assess for the potential presence of any Priority Marine Features (PMFs).

3. Results

3.1 Summary

Box C, in which samples were collected from between 600 and 900 m depth, was characterised by Polychaetes, in particular *Glycera* sp. along with *Pseudexogone dineti*, *Paramphinome jeffreysi*, Paraonidae (in particular *Levinsenis flava)*, *Prionospio* sp. (specimens too damaged to confidently assign a species), Polynoidae and *Spiophanes kroyeri*. There were also relatively high numbers of Myodocopida and juvenile Asteroidea in the majority of samples. The *Glycera* specimens were not in good enough condition to be confidently assigned to a species, although were likely *Glycera capitata* as this was the only species of this genus recorded in the area.

Samples from Box D ranged from 431 to 508 m depth and were again dominated by Polychaetes. *Glycera* sp. were again abundant, but in this area only the species *Glycera lapidum* was recorded. Also present in high numbers were the Polychaetes Polynoidae, *Exogone verugera, Paramphinome jeffreysi* and Paraonidae. *Levinsenia flava* was the most abundant of the Paraonidae, but there was also a large range of other Paraonid species, especially of the genus *Aricidea*. *Prionospio steenstrupi* and *P. cf. dubia* were the most common of those specimens of this genus that were identifiable. There were also relatively high numbers of other Polychaetes such as *Aonides paucibranchiata, Spiophanes kroyeri*, Capitellidae (including *Notomastus* sp. and *Peresiella clymenoides*), Ampharetidae (specimens too damaged to confidently assign a species) and Sabellidae.

Samples were collected from between 220 and 272 m depth in Box E. The Polychaete *Glyphohesione klatti* was present in all samples from this area. Other abundant Polychaetes included *Synmerosyllis lamelligera*, *Poecilochaetus serpens*, Oweniidae (*Galathowenia* sp. and *Owenia* sp.) and Spionidae (*Aonides paucibranchiata, Spiophanes bombyx*, *Prionospio* sp. and *Pseudopolydora* sp.). *Glycera* spp. were again present in relatively high numbers, with *G. alba* and *G. lapidum* identified. The most abundant of the identifiable Paraonidae was *Aricidea (Aricidea) wassi*. This was the only area where no species of *Levinsenia* were recorded. Other than Polychaetes, *Ampelisca* spp. and juvenile Ophiuroidea were also common.

In Box F, located outside of the GSH NCMPA boundary (Figure 1), samples were collected from between 404 and 487 m depth. The most abundant Polychaetes included

Polynoidae, *Glyphohesione klatti, Paramphinome jeffreysii*, Capitellidae (including *Notomastus* sp. and *Peresiella clymenoides*), Ampharetidae (mainly *Eclysippe* sp.), Terebellidae and Sabellidae. *Glycera* sp. were again abundant, with *Glycera lapidum* as the only species of this genus recorded. Paraonidae, in particular *Levinsenis flava* and *Aricidea (Aricidea) wassi* were also present in high numbers. Abundant Spionidae included *Aonides paucibranchiata*, Prionospio (*P. cf dubia, P. fallax* and *P. steenstrupi*) and *Spiophanes* spp., in particular *S. kroeyeri*.

All boxes had high abundances of Nematoda, the majority of which were present in the 0.25 mm fractions. Average abundances were very similar for boxes C and D, with an average of 297 and 282 individuals per sample, respectively. More taxa were present in Box D, however, with an average of 74 taxa per sample, compared to 61 taxa per sample in Box C. Box B had a higher average abundance of 391 individuals per sample, with an average of 63 taxa per sample. Box F showed similar abundances and diversity to Box D, with an average abundance per sample of 283 individuals and an average of 74 taxa per sample.

3.2 Identification

The following are explanations of how problematic taxa were identified:

***Tharyx killariensis* (Southern, 1914)**

These Cirratulidae were identified using Blake and Goeransson (2015). Specimens of this species were formerly recorded in British waters as *Tharyx* sp. A.

***Haploops setosa* Boeck, 1871**

Identified using the latest re-description by Kaim-Malka *et al.* (2016).

***Apseudes grossimanus* Noman & Stebbing, 1886**

According to Patricia Esquete (pers. comm.), an expert in the identification of Tanaidacea, *Apseudes grossimanus* should be included in the genus *Atlantapseudes* (Bacescu 1978) and changed to *Atlantapseudes grossimanus* (Noman & Stebbing 1886). This information was received during a Tanaidacea workshop run by RESOMAR (www.resomar.cnrs.fr), a network of French marine laboratories and stations, supported by the French Ministery of Education and Research. However, as this change is not yet accepted in WoRMS, this taxon has been recorded as *Apseudes grossimanus* in this project.

BIVALVIA

Unidentifiable bivalves were left at BIVALVIA in the 0.5 mm fractions as they could be either small-sized adults or juveniles. Those from the 0.25 mm fractions were all assumed to be juveniles and thus were recorded as BIVALVIA (juv.).

3.3 Sponge Sample Analysis

There were three sponge species present in the two sponge samples. *Hymedesmia (Hymedesmia) paupertas* was present in sample D11 S61 A1 and sample D09 S69 A1 contained both *Geodia nodastrella* and *Sphaerotylus capitatus.* These species are typical of the depth and region. The complete abundance and biomass matrices showing additional fauna present in the sponge samples can be found in Appendix 1.

4. External Quality Assurance

Three complete samples (5% of the total number of samples) were sent to an external contractor, Aquatic Environments Ltd., for audit. The data matrix was provided to the auditor and samples were randomly selected. All fauna and residues for each selected sample were sent to the auditor to be checked. The audit was carried out in line with the NMBAQC Own Sample Module, where the identifications, counts and biomass are checked, and the residue is re-sorted to check for missed taxa. A pass/fail criterion is applied to the samples using a Bray Curtis Similarity Index. This system, as taken from www.nmbaqcs.org, is given below;

100% BCSI - Excellent

95 - <100% BCSI - Good

90 - 95% BCSI - Acceptable

85 - 90% BCSI - Fail Poor - Remedial action suggested

<85% BCSI - Fail Bad - Remedial action required

The full audit results can be found in Appendix 2 and a summary is given in Table 1 below. As all fractions received a BCSI of >95%, no remedial action was necessary.

Table 1. External QA Results.

Sample	BCSI (%)
C05 S41 A1 (0.25 mm)	99.61
C05 S41 A1 (0.50 mm)	99.49
D03 S83 A1 (0.25 mm)	99.86
D03 S83 A1 (0.50 mm)	98.05
F03 S91 A1 (0.25 mm)	99.36
F03 S91 A1 (0.50 mm)	99.19

5. Discussion

Many species of Polychaete that are infrequently recorded, as they are typical of deeper waters than are generally surveyed, were present in these samples from the GSH NCMPA. These include: *Eusthenelais hibernica, Paranaitis cf. uschakovi, Linopherus hemuli, Samythella elongata, Pseudexogone dineti,* Syllidae such as *Parexogone longicirris* and *Exogone sorbei,* and Paraonidae such as *Levinsenia flava, L. kantaurensis* and *Paradoneis mikeli.*

There was a high diversity of Crustacea in the survey area. Boreal amphipods recorded included *Liljeborgia ossiani, Syrrhoe crenulata, Laetmatophilus armatus* and *Xenodice frauenfeldti.* The rare Cumacea *Styloptocuma gracillimum, Platysympus typicus* and *Makrokylindrus josephinae* were encountered mainly in samples from Box C. Isopoda typical of deeper waters, such as members of the families Anthuridae, Munnopsidae and Desmosomatidae were found in Boxes C, D and F. The deep sea Tanaidacea *Neotanais*

americanus and *N. giganteus* were only present in Box C. Additionally, the deep-water decapods *Dorhynchus thomsoni* and *Cymonomus granulatus* were recorded in Box C and Box D, respectively.

The deep water Ophiuroidea, *Ophiacantha abyssicola*, *Ophiocten abyssicolum* and *Dictenophiura carnea,* were present in Boxes C, D and F. Molluscs typical of deeper waters included the Gastropoda *Amphissa acutecostata,* present in Boxes C and D, and Bivalvia belonging to the family Nuculanidae, which were found in Boxes C, D and F.

Also of note were the Maldanidae specimens recorded as *Lumbriclymene* sp. 1, which were present in Boxes C, D and F. This is potentially a new species that requires describing, as the observed characters fit those described for *Lumbriclymene minor* sensu Wesenberg-Lund (1948), but do not match those for *Lumbriclymene minor* Arwidsson, 1906. Specimens of *Lumbriclymene minor* (Arwidsson, 1906) were also recorded in this project.

Species level identification of the fauna was hampered by the poor condition of the fauna. This was especially true for fragile Polychaetes, such as Ampharetidae. Where specimens were fragmented or otherwise damaged, the features necessary for species level identification were often missing.

Hughes *et al.* (2014) predict an *Ophiocten gracilis* zone between 600 and 1020 m in this area, based on archive underwater photography and biotope analysis. Box C falls within this depth band, however specimens present in this project were identified as *Ophiocten abyssicolum* in Boxes C, D and F and as *Ophiocten affinis* in Box E. These identifications were made using Paterson *et al.* (1982). *Ophiocten* spp. cannot be reliably identified to species level from photography due to the nature of the features used to distinguish between them.

Samples collected from Boxes D and F fall mainly within the ‘upper slope zone’, which is predicted to have sparse visible fauna, but those present will mainly be echinoderms such as *Spatangus raschi, Gracilechinus* sp. and the Holothurian *Stichopus tremulus* (Hughes *et al.* 2014). In Box D, 6 samples contained Echinoidea, Echinidea or *Gracilechinus* sp. In Box F, Echinoidea were recorded in one sample and *Gracilechinus* sp. in two samples. Both boxes contained relatively high numbers of juvenile Echinoidea, Echinidea and Spatangoida, although these would not be readily visible. *Stichopus tremulus* was not recorded in any samples, however Holothuroidea were occasionally recorded in all boxes. Although *Spatangus raschi* was not recorded, many Echinoidea were too small or damaged to confidently assign to a species. As there was little other fauna that would be visible *in situ*, Boxes D and F appear to broadly fit with the description of the area by Hughes *et al.* (2014).

The depths of the samples collected in Box E fall between the ‘upper slope zone’ and the ‘outer shelf and shelf break zone’ according to Hughes *et al.* (2014). The ‘outer shelf and shelf break zone’ is also predicted to have sparse visible fauna, with the visible fauna present comprising mainly urchins, such as *Cidaris cidaris*, and Asteroidea (Hughes *et al.* 2014). No *Cidaris cidaris* specimens were found in this project, although many Echinoidea specimens could not be assigned to a species. Boxes C and D were the only areas where adult Asteroidea were found. Box E had the fewest echinoderms of each of the areas, and so does not fit with the descriptions of either of these zones.

5.1 Priority Marine Features

Past data from the Geodatabase for Marine Habitats and Species in Scotland (GeMS)[1] show the PMF ‘burrowed mud’ in Box C and the PMF ‘offshore deep sea mud’ in Box D. Although the infaunal data do not match exactly with the component biotopes or species listed for

these PMFs, other biotopes may occur within the PMFs and variants of the component biotopes are known to occur (JNCC 2014).

Fauna characteristic of the PMF 'burrowed mud' include seapens, the Fireworks anemone (*Pachycerianthus multiplicatus*) and burrowing megafauna such as *Nephrops norvegicus*. These species are not reliably sampled using grabs or box corers, which may explain their absence in the infaunal data. Therefore, this habitat should only be identified in combination with video or stills imagery and ideally PSA data. The PSA results for this survey showed that the majority of samples consisted of sandy mud.

The mud shrimp *Calocaris macandreae* and *Callianassa subterranea*, along with *Nephrops norvegicus*, are typical burrowing fauna of the biotope 'Burrowing megafauna and *Maxmuelleria lankesteri* in circalittoral mud' (SS.SMu.CFiMu.MegMax), which is a component biotope of the 'burrowed mud' PMF. Two individuals of *Callianassa subterranea* were found in one sample in Box E, however apart from this single record no other mud shrimps were recorded in the project. Also, the echiurans *Maxmuelleria lankesteri* are frequent in this biotope and this species was not present in any of the samples. Finally, the mud burrowing amphipod, *Maera loveni*, which is a component species of the 'burrowed mud' PMF, was not recorded.

Within the PMF 'offshore deep sea muds' is the biotope '*Levinsenia gracilis* and *Heteromastus filifirmis* in offshore circalittoral mud and sandy mud' (SS.SMu.OMu.LevHet). Only a few specimens of the Paraonidae *Levinsenia gracilis*, a member of the SS.SMu.OMu.LevHet biotope[1], were present in Boxes C, D and F. However, *L. flava* was present in nearly every sample from these areas. *Levinsenia flava* is a typical deep water species and was originally found in the West Pacific. Its presence in the Atlantic (Cap Breton Canyon) was first noted by Aguirrezabalaga and Gil (2009) and its presence is now also confirmed for the slope and bathyal areas of the Geikie Slide. *Heteromastus filiformis*, the other main species in the SS.SMu.OMu.LevHet biotope, was not present in any samples so the SS.SMu.OMu.LevHet biotope cannot be assigned.

The Amphinomidae *Paramphinome jeffreysii* and members of the bivalve family Thyasiridae were regularly present in the majority of samples, which fits with the '*Paramphinome jeffreysii*, *Thyasira* spp. and *Amphiura filiformis* in offshore circalittoral sandy mud' (SS.SMu.OMu.PjefThyAfil) biotope within the 'offshore deep sea muds' PMF. However, *Amphiura filiformis* was only exceptionally recorded. Thus the classification of any samples as examples of the SS.SMu.OMu.PjefThyAfil biotope is not justified. The key species of the remaining component biotopes of this PMF, such as *Ampharete falcata* and *Myrtea spinifera,* were not present in the samples.

The infaunal data do, however, fit with the Level 4 biotope 'offshore circalittoral mud' (SS.SMu.OMu), which is dominated by Polychaetes and often has high numbers of *Thyasira* spp., echinoderms and foraminifera. Samples from all boxes had high abundances and diversity of Polychaetes compared to other groups, with bivalves of the Thyasiridae family and a variety of echinoderms often present. In combination with the PSA data, which show that the majority of samples were sandy mud, the PMF 'offshore deep sea muds' is valid for this area. The results may show variations of existing level 5 biotopes or represent new biotopes for this PMF.

Polychaetes of the genus *Glycera* were found in nearly all samples of the project. Those in good condition were mainly identified as either *Glycera lapidum* or *G. capitata*, both species that are widely recorded in the Northeast Atlantic and known to have a eurybathic distribution. However, no specimens of *Amythasides macroglossus* were found, so no

[1] 1 GeMS Version 2 Iteration 14.

samples could be assigned to the SS.SCS.OCS.GlapThyAmy biotope within the ‘offshore subtidal sands and gravels’ PMF.

The samples did not match the other component biotopes of the ‘offshore subtidal sands and gravels’ PMF either. *Protodorvillea kefersteini* was regularly present in samples from Boxes C, D and F. However, as *Hesionura elongata* was not recorded, these samples do not fit into the SS.SCS.OCS.HeloPkef biotope. Maldanids of the genus *Lumbriclymene* were present in many of the deeper samples (in Boxes C, D and F). However no specimens of *Eudorellopsis deformis* were found, thus classification into SS.SSa.OSa.MalEdef is not justified.

Boxes C and F may represent variants of the component biotopes of the ‘offshore subtidal sands and gravels’ PMF. For both of these areas, the PSA results show over a quarter of samples were not sandy mud but muddy sand (and in once instance in Box C gravel was recorded). In combination with the PSA results, the results from these two areas fit fairly well with the level 4 biotope ‘offshore circalittoral coarse sediment’ (SS.SCS.OCS). This biotope is described as having high numbers of juvenile *Modiolus modiolus* in some areas and, although this species was not recorded, boxes C and F are the only areas where Mytilidae bivalves were found. These specimens were too small or damaged to assign to a species.

In the two sponge samples, only three species of sponge were found. *Hymedesmia paupertas* and *Sphaerotylus capitatus* are not uncommon and are also found in shallower waters. For the sponge sample D09 S69 A1, the presence of the deep-sea sponge *Geodia nodastrella* was confirmed. However, the scarceness of sponge tissue found within the two sponge samples and across the project does not justify the classification of these stations as the PMF ‘deep-sea sponge aggregations’.

There is one record of the Ling, *Molva molva,* in the project from sample F08 S95 A2. However, this specimen has been recorded with a question mark to show it is an uncertain identification. The specimen was not in good condition, and was very small (~4 cm) while adult Ling can reach lengths of up to 2 m.

The diversity of fauna and range of species found in the samples that are rare or infrequently recorded mean that this site holds conservation importance. As many of the component species of the PMFs are not reliably sampled in infaunal samples, analysis of the infaunal data in combination with the underwater video footage results may give a clearer indication of any PMFs present. However, the PMFs ‘offshore deep sea muds’ and ‘offshore subtidal sands and gravels’ are believed to be present.

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Appendix 1

Sponge sample analysis results

	D11 S61 A1	D09 S69 A1
Hymedesmia (Hymedesmia) paupertas	P	-
Geodia nodastrella	-	P
Sphaerotylus capitatus	-	P
NEMATODA	-	1
Exogoninae (epitoke)	1	-
Syllis	-	1
Serpulidae	-	1
Apseudidae*	-	1
Hiatella arctica	-	7
Ophiactis balli	-	3
CYCLOSTOMATA	P	-

* Apseudidae: Posterior fragment

	D11 S61 A1	D09 S69 A1
Hymedesmia (Hymedesmia) paupertas	-	-
Geodia nodastrella	-	-
NEMATODA	-	0.0001
Exogoninae (epitoke)	0.0001	-
Syllis	-	0.0008
Serpulidae	-	0.0093
Apseudidae	-	0.0004
Hiatella arctica	-	1.3402
Ophiactis balli	-	0.1267
CYCLOSTOMATA	-	-

Appendix 2

Results of external Quality Assurance from Aquatic Environments Ltd.

Taxon Name	C05 S41 A1 0.25 mm	C05 S41 A2 (AE) 0.25 mm	C05 S41 A1 0.25 mm	C05 S41 A1 (AE) 0.25 mm
ANIMALIA (eggs)	P	P	-	-
NEMERTEA	4	4	0.0004	0.0003
NEMATODA	96	94	0.007	0.006
POLYCHAETA	P	P	0.0007	0.0005
Polynoidae	16	16	0.0002	0.0002
Phyllodoce	2	2	0.0001	0.0001
Glycera	18	18	0.0007	0.0008
Pseudexogone dineti	7	7	0.0001	0.0001
Exogone sorbei	1	1	0.0001	0.0001
Exogone verugera	5	5	0.0003	0.0003
Lumbrineridae	2	2	0.0004	0.0004
Protodorvillea kefersteini	4	4	0.0001	0.0001
Paraonidae	6	6	0.0001	0.0001
Levinsenia flava	3	3	0.0001	0.0001
Spiophanes kroyeri	1	1	0.0001	0.0001
Spiophanes wigleyi	1	1	0.0012	0.001
Cirratulidae	1	1	0.0001	0.0001
Capitellidae	1	1	0.0001	0.0001
Notomastus	1	1	0.0001	0.0001
Ophelina abranchiata	1	1	0.0001	0.0001
Ampharetidae	1	1	0.0001	0.0001
Terebellidae	2	2	0.0002	0.0002
Polycirrinae	4	4	0.0002	0.0002
Terebellides	1	1	0.0001	0.0001
Serpulidae	1	1	0.0001	0.0001
COPEPODA	17	17	0.0004	0.0004
MYODOCOPIDA	3	3	0.0001	0.0001
PODOCOPIDA	8	8	0.0001	0.0001
Harpinia	3	3	0.0001	0.0001
Leptophoxus falcatus	1	1	0.0001	0.0001
Unciola planipes	1	1	0.0001	0.0001
Gnathiidae (larva)	1	1	0.0001	0.0001
Desmosomatidae	1	1	0.0001	0.0001
TANAIDACEA	15	15	0.0001	0.0001
Typhlotanais aequiremis	1	1	0.0001	0.0001
Nannastacidae	2	2	0.0001	0.0001
SOLENOGASTRES	1	1	0.0002	0.0002
GADILIDA	3	3	0.0001	0.0001
BIVALVIA (juv.)	16	16	0.0001	0.0001
ASTEROIDEA (juv.)	2	2	0.0001	0.0001
Ophiuridae	P	P	0.0002	0.0002
HOLOTHURIOIDEA sp.1	2	2	0.0001	0.0001
Taxa	**39**	**39**		
Abundance	**256**	**254**		
Biomass			**0.0149**	**0.0135**
Sorting Taxa found	none			

Taxon Name	C05 S41 A1 0.5 mm	C05 S41 A1 (AE) 0.5 mm	C05 S41 A1 0.5 mm	C05 S41 A1 (AE) 0.5 mm
DEMOSPONGIAE	P	P	-	-
CNIDARIA	1	1	-	-
Podocoryna	P	P	0.0003	0.0003
NEMERTEA	2	2	0.0019	0.0018
NEMATODA	55	55	0.0206	0.0211
SIPUNCULA	4	4	0.0012	0.0012
Onchnesoma squamatum	1	1	0.0004	0.0004
Onchnesoma steenstrupi	1	1	0.0014	0.0013
Aspidosiphon muelleri	2	2	0.0767	0.076
POLYCHAETA	P	P	0.0143	0.0151
Polynoidae	6	6	0.0047	0.0047
Harmothoe glabra	1	1	0.0049	0.0046
Eusthenelais hibernica	1	1	0.0809	0.0781
Glycera capitata	1	1	0.0022	0.0023
Hesionidae	1	1	0.0008	0.0008
Pseudexogone dineti	6	6	0.0001	0.0001
Nephtys kersivalensis	2	2	0.0888	0.0922
Eunicidae	P	P	0.0032	0.003
Augeneria	4	4	0.0164	0.0161
Oenonidae	P	P	0.0175	0.0182
Protodorvillea kefersteini	1	1	0.0001	0.0001
Orbiniidae	1	1	0.0094	0.0096
Paraonidae	2	2	0.0001	0.0001
Cirrophorus	1	1	0.0001	0.0001
Levinsenia flava	4	4	0.0003	0.0003
Spionidae	1	1	0.0035	0.0032
Dipolydora coeca (agg.)	1	1	0.0009	0.0009
Spiophanes kroyeri	9	9	0.0055	0.0053
Spiochaetopterus	1	1	0.0135	0.0139
Flabelligeridae	1	1	0.001	0.001
Capitellidae	11	10	0.038	0.035
Notomastus	7	7	0.0065	0.006
Peresiella clymenoides	2	2	0.0003	0.0003
Lumbriclymeninae	2	2	0.0644	0.0671
Ophelina	1	1	0.0004	0.0004
Scalibregma	1	1	0.0004	0.0004
Oweniidae	P	P	0.0008	0.0008
TEREBELLOMORPHA	2	2	0.0084	0.0079
Ampharetidae	1	1	0.0009	0.0008
Melinna albicincta	3	3	0.0925	0.0933
Terebellidae	3	3	0.0005	0.0005
Pista	3	3	0.0066	0.0061
Polycirrinae	1	1	0.0002	0.0002
Terebellides	1	1	0.0007	0.0007
Serpulidae	1	1	0.0003	0.0003
Grania	1	1	0.0001	0.0001
MYODOCOPIDA	5	5	0.0013	0.0012
PODOCOPIDA	2	2	0.0001	0.0001
Urothoe elegans	3	3	0.001	0.001
Harpinia	1	1	0.0001	0.0001
Harpinia pectinata	1	1	0.0002	0.0002

Leptophoxus falcatus	1	1	0.0001	0.0001
Argissa hamatipes	1	1	0.0004	0.0004
Nototropis guttatus (?)	4	4	0.0068	0.0074
Ampeliscidae	8	8	0.0052	0.0053
Ampelisca gibba	9	9	0.0244	0.0278
Ampelisca macrocephala	2	2	0.0365	0.0395
Byblis gaimardii	5	5	0.0069	0.0067
Unciola planipes	3	3	0.002	0.002
ISOPODA	1	1	0.0001	0.0001
Calathura	1	1	0.0004	0.0004
Eurydice truncata	7	7	0.0311	0.0289
Campecopea (?)	1	1	0.0004	0.0004
Munna limicola	1	1	0.0009	0.0009
Desmosomatidae	2	2	0.0001	0.0001
Ilyarachna	3	2	0.0051	0.0063
Akanthophoreus gracilis	2	2	0.0001	0.0001
Typhlotanais aequiremis	2	2	0.0005	0.0005
Cyclaspis longicaudata	2	2	0.0004	0.0004
Lampropidae	1	1	0.0004	0.0004
Diastylidae	3	3	0.0013	0.0012
Munida	2	2	0.0082	0.0089
GASTROPODA	6	6	0.011	0.0101
Naticidae	7	7	0.0093	0.009
Amphissa acutecostata	1	1	0.033	0.033
CEPHALASPIDEA	4	4	0.0006	0.0006
Antalis	2	2	0.0707	0.0721
Cadulus	5	5	0.0023	0.0026
BIVALVIA	5	5	0.0015	0.0016
Ledella	1	1	0.0044	0.0053
Yoldiella	2	2	0.0128	0.0132
Limopsis	1	1	0.0003	0.0003
Limopsis minuta	2	2	0.108	0.121
Anomiidae	1	1	0.0001	0.0001
Astarte sulcata	3	3	2.729	2.668
Thyasiridae	3	3	0.0014	0.0014
Cardiidae	1	1	0.0012	0.0012
Abra longicallus	2	2	0.1707	0.1787
ASTEROIDEA (juv.)	5	5	0.0002	0.0002
Ophiuridae	2	2	0.0018	0.0016
ECHINIDEA (juv.)	12	12	0.0019	0.0018
SPATANGOIDA (juv.)	7	7	0.0018	0.0016
Labidoplax	1	1	0.0008	0.0007
Polycarpa fibrosa	1	1	0.0001	0.0001
Taxa	**88**	**88**		
Abundance	297	295		
Biomass			**3.8886**	**3.8563**

Sorting Taxa found				
SIPUNCULA		1		0.0004

Taxon Name	D03 S83 A1 0.25 mm	D03 S83 A1 (AE) 0.25 mm	D03 S83 A1 0.25 mm	D03 S83 A1 (AE) 0.25 mm
NEMERTEA	2	2	0.0002	0.0002
NEMATODA	160	157	0.0013	0.0015
Nephasoma	6	5	0.0002	0.0002
POLYCHAETA	P	P	0.0002	0.0002
Polynoidae	3	3	0.0004	0.0004
Phyllodocidae	1	1	0.0001	0.0001
Phyllodoce	1	1	0.0001	0.0001
Glycera	27	27	0.0025	0.0026
Exogone verugera	10	10	0.0002	0.0002
Synmerosyllis lamelligera	4	4	0.0002	0.0002
Paramphinome jeffreysii	3	3	0.0009	0.001
Lumbrineris aniara (agg.)	3	3	0.0006	0.0005
Protodorvillea kefersteini	1	1	0.0001	0.0001
Orbiniidae	1	1	0.0001	0.0001
Paraonidae	6	6	0.0002	0.0002
Aricidea (Strelzovia)	1	1	0.0001	0.0001
Aricidea (Acmira) catherinae	2	2	0.0001	0.0001
Aricidea (Aricidea) wassi	4	4	0.0001	0.0001
Levinsenia flava	2	2	0.0001	0.0001
Aonides paucibranchiata	6	6	0.0003	0.0003
Prionospio	2	2	0.0003	0.0003
Spiophanes bombyx	1	1	0.0001	0.0001
Spiophanes kroyeri	4	4	0.0002	0.0002
Cirratulidae	1	1	0.0001	0.0001
Notomastus	2	2	0.0005	0.0006
Peresiella clymenoides	2	2	0.0004	0.0004
Opheliidae	2	2	0.0001	0.0001
Ophelina abranchiata	1	1	0.0005	0.0005
Ophelina cylindricaudata (?)	1	1	0.0001	0.0001
Pectinaria	1	1	0.0001	0.0001
Ampharetidae	6	6	0.0001	0.0001
Terebellidae	2	2	0.0004	0.0004
Polycirrinae	3	3	0.0003	0.0003
Sabellidae	7	7	0.0011	0.001
COPEPODA	15	15	0.0002	0.0002
MYODOCOPIDA	3	3	0.0001	0.0001
PODOCOPIDA	3	3	0.0001	0.0001
AMPHIPODA	1	1	0.0001	0.0001
Synchelidium maculatum	1	1	0.0001	0.0001
Liljeborgia	1	1	0.0001	0.0001
Ampeliscidae	2	2	0.0001	0.0001
Unciola planipes	7	7	0.0003	0.0003
Desmosomatidae	1	1	0.0001	0.0001
Ilyarachna	4	4	0.0001	0.0001
Akanthophoreus gracilis	9	9	0.0002	0.0002
Tanaopsis graciloides	1	1	0.0001	0.0001
Typhlotanais aequiremis	3	3	0.0001	0.0001
Anapagurus laevis (eggs)	P	P	-	-
Munida	P	P	0.0001	0.0001
SOLENOGASTRES	2	2	0.0001	0.0001
GASTROPODA	1	1	0.0001	0.0001
GADILIDA	5	5	0.0002	0.0002
BIVALVIA (juv.)	19	19	0.0001	0.0001
CHEILOSTOMATIDA	P	P	-	-

ASTEROIDEA (juv.)	1	1	0.0001	0.0001
OPHIUROIDEA (juv.)	1	1	0.0001	0.0001
Ophiuridae	P	P	0.0225	0.0205
DENDROCHIROTIDA	4	4	0.0002	0.0002
Taxa	**53**	**53**		
Abundance	**362**	**358**		
Biomass			0.0375	0.0358

Sorting Taxa found

Nematoda		3		0.0001
Paraonidae abdomen		P		-
Cirratulidae tentacle		P		-

Taxon Name	D03 S83 A1 0.5 mm	D03 S83 A1 (AE) 0.5 mm	D03 S83 A1 0.5 mm	D03 S83 A1 (AE) 0.5 mm
ANIMALIA	P	P	0.0109	0.0109
PORIFERA	P	P	-	-
DEMOSPONGIAE	P	P	-	-
ACTINIARIA	3	3	0.0014	0.0014
NEMERTEA	1	1	0.0651	0.0651
NEMATODA	8	8	0.0001	0.0001
Nephasoma	3	3	0.0009	0.0009
POLYCHAETA	1	P	0.0693	0.0654
Polynoidae	1	1	0.0001	0.0001
Harmothoe glabra	1	1	0.0063	0.0063
Malmgrenia castanea	1	1	0.0001	0.0001
Eusthenelais hibernica	1	1	0.327	0.306
Phyllodoce	1	1	0.0001	0.0001
Glycera	13	13	0.0072	0.0072
Litocorsa stremma	1	1	0.0001	0.0001
Nephtys	2	2	0.0024	0.0024
Paramphinome jeffreysii	2	2	0.001	0.001
Lumbricalus campoyi	1	1	0.0547	0.0521
Lumbrineris aniara (agg.)	7	7	0.0182	0.0182
Phylo	1	1	0.0008	0.0008
Paraonidae	1	1	0.0001	0.0001
Aricidea (Strelzovia)	1	1	0.0002	0.0002
Aricidea (Acmira) laubieri	1	1	0.0003	0.0003
Aricidea (Acmira) simonae	1	1	0.0001	0.0001
Aricidea (Aricidea) wassi	1	1	0.0001	0.0001
Levinsenia flava	3	3	0.0002	0.0002
Poecilochaetus serpens	1	1	0.0009	0.0009
Aonides paucibranchiata	2	2	0.0001	0.0001
Dipolydora coeca (agg.)	4	4	0.0047	0.0047
Laonice	1	1	0.0004	0.0003
Laonice sarsi	1	1	0.0041	0.0045
Prionospio	7	7	0.0014	0.0016
Prionospio steenstrupi	3	3	0.0004	0.0004
Spiophanes kroyeri	4	4	0.0014	0.0014
Magelona minuta	1	1	0.0001	0.0001
Spiochaetopterus	P	P	0.0141	0.0156
Aphelochaeta	1	1	0.009	0.009
Kirkegaardia	1	1	0.0017	0.0015
Notomastus	8	8	0.026	0.0244
Peresiella clymenoides	12	12	0.0024	0.0026
Lumbriclymene cylindricauda	1	1	0.0395	0.0417

Ophelina abranchiata	4	4	0.0021	0.0021
Scalibregma	1	1	0.0001	0.0001
Oweniidae	P	P	0.0009	0.0008
Galathowenia	3	3	0.0006	0.0006
Ampharetidae	5	5	0.0012	0.0011
Ampharete lindstroemi (agg.)	1	1	0.0005	0.0005
Eclysippe	4	4	0.001	0.001
Terebellidae	1	1	0.0001	0.0001
Pista	4	4	0.0036	0.0037
Polycirrinae	6	6	0.0031	0.003
Terebellides	1	1	0.0001	0.0001
Sabellidae	3	3	0.005	0.0045
Serpulidae	3	3	0.0031	0.0031
Ditrupa arietina	1	1	0.0446	0.0471
CRUSTACEA	P	P	0.0001	0.0001
COPEPODA	2	2	0.0001	0.0001
MYODOCOPIDA	9	9	0.0025	0.0024
AMPHIPODA	4	6	0.0012	0.0012
Monoculodes	1	1	0.0022	0.0021
Urothoe	1	1	0.0009	0.0008
Harpinia	3	3	0.0003	0.0003
Harpinia antennaria	2	2	0.0015	0.0013
Harpinia pectinata	2	2	0.0003	0.0003
Tmetonyx	2	2	0.0194	0.0192
Syrrhoe crenulata	1	1	0.0006	0.0006
Ampelisca	4	4	0.0033	0.0031
Ampelisca gibba	1	1	0.0016	0.0014
Byblis gaimardii	6	6	0.0078	0.0082
Aoridae	1	1	0.0001	0.0001
Unciola planipes	10	11	0.0046	0.0049
Eurydice truncata	1	1	0.0001	0.0001
Natatolana borealis	1	1	0.0386	0.0409
Eugerda tenuimana	1	1	0.0001	0.0001
Akanthophoreus gracilis	4	4	0.0003	0.0003
Typhlotanais aequiremis	5	5	0.0011	0.001
Apseudes grossimanus	4	4	0.0068	0.0071
CUMACEA	1	1	0.0001	0.0001
Hemilamprops	1	1	0.0016	0.0015
Diastyloides biplicatus	1	1	0.0003	0.0003
Anapagurus laevis	1	1	0.051	0.056
Anapagurus laevis (eggs)	P	P	-	-
Munida	1	1	0.0037	0.0037
CONOIDEA	1	1	0.021	0.0205
Solariella amabilis	1	1	0.0007	0.0007
Naticidae	4	4	0.0026	0.0028
Philine	2	2	0.0025	0.0025
Scaphander punctostriatus	1	1	0.0018	0.0019
GADILIDA	1	1	0.0001	0.0001
Antalis vulgaris	4	4	0.3551	0.3492
Cadulus	4	4	0.0013	0.0013
BIVALVIA	17	17	0.0031	0.0034
Arcidae	1	1	0.0021	0.002
Astarte	4	4	0.0057	0.006
Thyasiridae	1	1	0.0001	0.0001
Mendicula ferruginosa	4	4	0.0063	0.0063
Parvicardium pinnulatum	14	10	0.1102	0.1125
Timoclea ovata	1	1	0.0347	0.034

Annectocymidae	P	P		
Phoronis	1	1	0.0001	0.0001
ASTEROIDEA (juv.)	5	5	0.0003	0.0003
Ophiuridae	P	P	0.2723	0.2655
Ophiocten abyssicolum	20	20	0.2405	0.2495
Ophiura (Dictenophiura) carnea	1	1	0.052	0.052
ECHINOIDEA	P	P	0.0591	0.0629
ECHINOIDEA (juv.)	5	5	0.0003	0.0003
ECHINIDEA (juv.)	1	1	0.0008	0.0008
DENDROCHIROTIDA	1	1	0.0047	0.0052
Synaptidae	1	1	0.0034	0.0031
ASCIDIACEA	1	1	-	-
Taxa	**100**	**99**		
Abundance	306	304		
Biomass			**2.0699**	**2.056**

Sorting Taxa found				
Aspidosiphon muelleri		1		0.1975
Dipolydora coeca (agg.)		1		0.0022
Polycirrinae		1		0.0004

Taxon Name	F03 S91 A1 0.25 mm	F03 S91 A1 (AE) 0.25 mm	F03 S91 A1 0.25 mm	F03 S91 A1 (AE) 0.25 mm
CNIDARIA	3	3	0.0007	0.0007
NEMATODA	90	88	0.0019	0.0018
SIPUNCULA	1	1	0.0001	0.0001
POLYCHAETA	1	P	0.0007	0.0006
Aphroditidae (juv.)	2	2	0.0001	0.0001
Polynoidae	5	5	0.0003	0.0003
Glycera	13	13	0.0015	0.0013
Goniadidae	1	1	0.0001	0.0001
Sphaerodoridium claparedii	1	1	0.0001	0.0001
Glyphohesione klatti	1	1	0.0002	0.0002
Exogone verugera	14	12	0.0008	0.0006
Synmerosyllis lamelligera	2	2	0.0001	0.0001
Nephtyidae	1	1	0.0001	0.0001
Paramphinome jeffreysii	5	5	0.0002	0.0002
Lumbrineridae	2	2	0.0021	0.002
Paraonidae	15	15	0.0016	0.0015
Aricidea (Aricidea) wassi	8	8	0.0002	0.0002
Levinsenia flava	5	5	0.0003	0.0003
Apistobranchus	3	3	0.0002	0.0002
Poecilochaetus serpens	1	1	0.0002	0.0002
Spionidae	1	1	0.0001	0.0001
Aonides paucibranchiata	5	5	0.0012	0.0012
Dipolydora coeca (agg.)	1	1	0.0001	0.0001
Prionospio	2	2	0.0002	0.0002
Spiophanes kroyeri	5	5	0.0002	0.0002
Cirratulidae	2	2	0.0001	0.0001
Notomastus	4	4	0.0007	0.0007
Peresiella clymenoides	1	1	0.0002	0.0002
Ophelina abranchiata	1	1	0.0001	0.0001
Ophelina cylindricaudata (?)	1	1	0.0001	0.0001
Galathowenia	2	2	0.0001	0.0001
Ampharetidae	6	6	0.0006	0.0006
Terebellidae	3	3	0.0005	0.0005

Pista	1	1	0.0001	0.0001
Polycirrinae	1	1	0.0001	0.0001
Sabellidae	11	11	0.0006	0.0006
Euchone	2	2	0.0001	0.0001
Serpulidae	2	2	0.0001	0.0001
CRUSTACEA	P	P	0.0002	0.0002
COPEPODA	23	23	0.0005	0.0005
PODOCOPIDA	2	2	0.0001	0.0001
AMPHIPODA	16	16	0.0015	0.0018
Amphilochus manudens	2	2	0.0001	0.0001
Harpinia	1	1	0.0005	0.0005
Liljeborgia ossiani	1	1	0.0001	0.0001
TANAIDACEA	8	8	0.0001	0.0001
Akanthophoreus gracilis	6	6	0.0005	0.0005
Eudorella truncatula	1	1	0.0001	0.0001
NUDIBRANCHIA	1	1	0.0001	0.0001
GADILIDA	5	5	0.0007	0.0007
BIVALVIA (juv.)	15	14	0.0003	0.0003
ASTEROIDEA (juv.)	3	3	0.0001	0.0001
OPHIUROIDEA (juv.)	2	2	0.0001	0.0001
Ophiuridae	P	P	0.0107	0.0115
DENDROCHIROTIDA	5	5	0.0003	0.0003
Taxa	**53**	**52**		
Abundance	**316**	**310**		
Biomass			**0.0327**	**0.033**

Sorting Taxa found

Nematoda		2		0.0001

Taxon Name	F03 S91 A1 0.5 mm	F03 S91 A1 (AE) 0.5 mm	F03 S91 A1 0.5 mm	F03 S91 A1 (AE) 0.5 mm
DEMOSPONGIAE	P	P	-	-
CNIDARIA	11	11	0.011	0.013
NEMERTEA	1	1	0.0002	0.0002
NEMATODA	14	14	0.001	0.0011
Golfingia vulgaris	1	1	0.0184	0.0192
Nephasoma	4	4	0.0014	0.0014
Aphroditidae (juv.)	1	1	0.0001	0.0001
Polynoidae	2	2	0.0002	0.0002
Phyllodoce	1	1	0.0004	0.0004
Glycera	13	14	0.0182	0.0187
Goniada maculata	2	2	0.007	0.0071
Glyphohesione klatti	3	3	0.002	0.0022
Exogone verugera	3	3	0.0003	0.0003
Nephtys kersivalensis	1	1	0.2956	0.2987
Hyalinoecia tubicola	1	1	0.0013	0.0013
Lumbrineris aniara (agg.)	5	5	0.0219	0.0234
Phylo grubei	1	1	0.0373	0.0375
Paraonidae	7	7	0.0015	0.0014
Aricidea (Acmira) catherinae	2	2	0.0002	0.0002
Aricidea (Acmira) laubieri	1	1	0.0017	0.0016
Aricidea (Acmira) simonae	1	1	0.002	0.0018
Levinsenia flava	5	5	0.0022	0.0019
Poecilochaetus serpens	5	5	0.0066	0.0067
Aonides paucibranchiata	2	2	0.0006	0.0006

Dipolydora coeca (agg.)	3	3	0.0065	0.0064
Prionospio	1	1	0.003	0.0032
Prionospio cf. dubia	1	1	0.0011	0.001
Spiophanes bombyx	1	1	0.0004	0.0004
Spiophanes kroyeri	4	4	0.0027	0.0029
Spiochaetopterus	1	1	0.0474	0.0438
Cirratulidae	1	1	0.002	0.0023
Chaetozone	1	1	0.0002	0.0002
Notomastus	4	4	0.005	0.0052
Peresiella clymenoides	5	5	0.0031	0.003
Lumbriclymeninae	1	1	0.124	0.116
Ophelina	4	4	0.001	0.0012
Galathowenia	1	1	0.0003	0.0003
Ampharetidae	3	3	0.0032	0.0032
Eclysippe	2	2	0.0006	0.0006
Sosane wireni	2	2	0.0029	0.0028
Terebellidae	1	1	0.0007	0.0007
Pista	3	3	0.0035	0.0033
Polycirrinae	1	1	0.0001	0.0001
Sabellidae	4	4	0.0044	0.0046
Euchone	2	2	0.0005	0.0005
Serpulidae	2	2	0.0207	0.0189
CRUSTACEA	P	P	0.0027	0.0026
COPEPODA	2	2	0.0011	0.0012
MYODOCOPIDA	12	12	0.0106	0.0101
PODOCOPIDA	5	5	0.001	0.0012
Monoculodes	1	1	0.0023	0.0025
Perioculodes longimanus	1	1	0.0001	0.0001
Urothoe elegans	2	2	0.002	0.0019
Harpinia laevis	4	4	0.0024	0.0024
Harpinia pectinata	1	1	0.0012	0.0012
Tryphosites longipes	1	1	0.0023	0.0023
Epimeria cornigera	1	1	0.0071	0.007
Liljeborgia ossiani	1	1	0.0043	0.0044
Ampeliscidae	4	4	0.0013	0.0013
Ampelisca	4	4	0.0037	0.0037
Ampelisca gibba	2	2	0.0053	0.0053
Byblis gaimardii	5	5	0.0301	0.0281
Unciola planipes	4	4	0.0045	0.0044
Ericthonius	1	1	0.0003	0.0003
ISOPODA	1	1	0.0031	0.003
Eurydice truncata	5	5	0.0118	0.0121
Natatolana borealis	34	36	0.6057	0.6122
Akanthophoreus gracilis	3	3	0.0007	0.0007
Cyclaspis longicaudata	1	1	0.0009	0.0009
Eudorella truncatula	1	1	0.0005	0.0005
Munida	2	2	0.022	0.0235
GASTROPODA	1	1	0.0001	0.0001
Naticidae	6	6	0.0154	0.0163
Epitonium trevelyanum	1	1	0.0077	0.0072
GADILIDA	3	3	0.0029	0.0027
Antalis	1	1	0.1043	0.1019
BIVALVIA	1	1	0.0001	0.0001
Yoldiella philippiana	2	2	0.018	0.0189
Arcidae	1	1	0.0005	0.0005
Limatula	1	1	0.0002	0.0002

Similipecten	1	1	0.0022	0.0021
Astarte	3	3	0.0033	0.0031
Astarte sulcata	1	1	1.784	1.8053
Axinulus croulinensis	3	3	0.0012	0.0011
Mendicula ferruginosa	2	2	0.0011	0.0011
Parvicardium pinnulatum	6	6	0.0534	0.0546
BRACHIOPODA	2	2	0.0165	0.0155
Annectocymidae	P	P	-	-
Amphiblestrum	P	P	-	-
Phoronis	2	2	0.031	0.0312
ASTEROIDEA (juv.)	8	8	0.0026	0.0026
Ophiothrix	1	1	0.0007	0.0007
Ophiuridae	P	P	0.1602	0.1581
Ophiocten abyssicolum	15	15	0.3537	0.3649
Ophiura (Dictenophiura) carnea	1	1	0.05	0.05
SPATANGOIDA (juv.)	10	10	0.0083	0.0085
DENDROCHIROTIDA	1	1	0.0045	0.0044
Labidoplax	1	1	0.0094	0.009
Polycarpa fibrosa	1	1	-	-
Taxa	**94**	**94**		
Abundance	**308**	**311**		
Biomass			**4.0227**	**4.0526**

Sorting Taxa found

Phascolion strombus		1		0.0066
BRACHIOPODA		1		0.0393
Cirratulidae abdomen		P		-

Total taxa extraction/ Sorting efficiency

	Sorting Efficiency - Total taxa	Additional taxa in residue
C05 S41_A1a 65468	100%	0
C05 S41_A1b 65469	100%	0
D03 S83_A1a 65498	100%	0
D03 S83_A1b 65499	99%	1
F03 S91_A1a 65544	98%	0
F03 S91_A1b 65545	100%	1

Extraction/ Sorting enumeration efficiency

	Enumeration efficiency	Variance from AE results
C05 S41_A1a 65468	99%	0%
C05 S41_A1b 65469	99%	1%
D03 S83_A1a 65498	~100%	2%
D03 S83_A1b 65499	~100%	3%
F03 S91_A1a 65544	98%	3%
F03 S91_A1b 65545	98%	2%

Biomass estimation accuracy

	Biomass estimation against AE results
C05 S41_A1a 65468	91%
C05 S41_A1b 65469	99%
D03 S83_A1a 65498	95%
D03 S83_A1b 65499	99%
F03 S91_A1a 65544	99%
F03 S91_A1b 65545	99%

Bray Curtis similarity percentage

Sample	Bray-Curtis
C05 S41_A1a 65468	99.61%
C05 S41_A1b 65469	99.49%
D03 S83_A1a 65498	99.86%
D03 S83_A1b 65499	98.05%
F03 S91_A1a 65544	99.36%
F03 S91_A1b 65545	99.19%

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