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AUSTRAL AUTUMN AND WINTER SEASONAL AFFECTS ON BENTHIC FORAMINIFERAL COMMUNITIES: BRANSFIELD AND NORTHERN GERLACHE STRAITS

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by

Laura Bordelon

B.S., University of Southern Indiana, 2006

A Thesis
Submitted in Partial Fulfillment of the Requirements for the
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Approved by:

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The Southern Ocean has unique seasonal qualities due to the Antarctic Circumpolar Current (ACC) thermo-isolating the Antarctic continent. During summer months, surface primary productivity from algal blooms is very high. In the winter months, limited daylight hours (4 in winter) and formation of sea ice prevents sun light from reaching surface waters, therefore limiting productivity. The short seasons of productivity and long winters in Antarctica combined with seasonal changes in deep ocean temperatures, salinity, and fluxes of organic matter impact foraminiferal population dynamics. Fluctuations in surface primary productivity, as well as living foraminiferal assemblages have been documented around the Antarctica Peninsula, but the impact on benthic foraminiferal assemblages is poorly understood. This is a study of seasonal affects on benthic foraminiferal assemblages in the southern Bransfield-northern Gerlache Straits of the Southern Ocean. Surface sediment samples from 600 meters and 1200 meters water depth were collected during two seasonal cruises: early April to record the productivity of the end-of-summer bloom and late June to sample the less-productive winter period. Three hundred and sixty samples were collected from 7 sites and processed using standard techniques. To identify living foraminifera, samples were treated with Rose Bengal, and CellTracker Green on

a select set of samples for comparison. Ninety total species were identified; seventy species from June and seventy-one from April, fifteen species of foraminifera unique to April, thirteen to June and two unique species in the CellTracker Green samples. The abundance of total living (stained tests) opportunistic benthic foraminiferal species from the 7 sampled sites show distinct temporal differences related to seasonality. An assemblage of deep water species was also found, as well as an assemblage of shallow water species. ANOVA and post hoc Tukey tests showed that the full cores must be analyzed to determine seasonal species assemblage changes. Cluster analysis and species abundances in CellTracker Green samples showed a marked difference from the Rose Bengal samples, consistent with literature that suggests the two methods differ. Fluctuating populations of foraminifera in fossil samples can be interpreted as changes in local or global climate. This study stands as a modern analog for fossil foraminiferal assemblages, and provides important information to help interpret paleoenvironmental conditions related to seasonality by defining seasonally and geographically distinct species assemblages.

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CHAPTER 1

INTRODUCTION

The Southern Ocean surrounds Antarctica (roughly around 50º south latitude) and has unique seasonal qualities due to the Antarctic Circumpolar Current (ACC), which thermally isolates the continent (Pickard, and Emery, 1982). During summer months, surface primary productivity of phytoplankton is very high. In the winter months, formation of sea ice and shortened daylight hours reduce the amount of sunlight reaching organisms in the surface waters, thereby limiting productivity. High accumulation rates of organic matter from surface primary productivity have been correlated with certain species of foraminifera or foraminiferal assemblages (Altenbach and Sarnthein, 1989). Fluctuations in organic matter as food magnify seasonal variations of foraminiferal populations (Altenbach and Sarnthein, 1989) and have an important impact on the ecosystems of benthic foraminiferal communities. Benthic foraminifera make up a major portion of the total biomass (up to 50%) of the deep ocean and provide a record of nutrient flux and ultimately of sea surface productivity. Studies by Hayward et al. (2002) and Szarek et al. (2004) have identified two main factors that control benthic foraminiferal population dynamics. One factor is the availability of organic carbon and the other is the dissolved oxygen in sediment pore sediment pore waters. Deposition of organic matter on the sea floor is inversely related to oxygen concentrations at the sediment surface. Foraminifera are important organic matter proxies for paleoclimatology because they are ubiquitous and morphologically diverse in both modern and fossil assemblages (Altenbach and Sarnthein, 1989).

Hypothesis

This study tests seasonal variability in benthic foraminiferal communities and characterizes opportunistic benthic foraminiferal species using population abundances of total living (stained tests) species. This study is important because benthic foraminifera from the Antarctic Peninsula have been used for paleoenvironmental reconstructions. Multiple factors may control their distributions; one of them is organic flux. Fluctuations in ocean surface primary productivity, as well as living foraminiferal assemblages have been documented around the Antarctica Peninsula, but the impact of surface productivity on these foraminiferal assemblages is poorly understood. Antarctica is the ideal place for a study in seasonal variation of foraminiferal assemblages because the extreme temperatures magnify differences in primary productivity and therefore organic flux to the sea floor. The temperature extremes influence the floral and faunal communities mostly by the melting and forming of annual sea ice, which limits the availability of sunlight, primary productivity and the influx of nutrients. The short seasons of productivity and long winters in Antarctica, combined with seasonal changes in deep ocean temperatures, salinity, and fluxes of organic matter (demanding stresses on polar marine ecosystems), make it very likely that the population dynamics of foraminifera will change from season to season.

Antarctic Oceanography

The Southern Ocean has no northern land boundary. Waters of the Pacific, Atlantic and Indian Oceans mix in regions of decreasing surface temperatures at the Subtropical Convergence, where water temperature decreases by 2-3°C. At the

Antarctic Polar Front (APF), temperature decreases by approximately 4°C and the salinity decreases 0.5 parts per thousand (from approximately 33.0 ppt). The APF extends north to 50° south latitude in the Indian and Atlantic Oceans, and 60° south latitude in the Pacific Ocean (Pickard and Emery, 1982). The APF forms the southern boundary of the Sub-Antarctic Front and the northern boundary (approximately along lines of 40° south latitude) of the Antarctic Circumpolar Current (ACC) (Fig. 1).

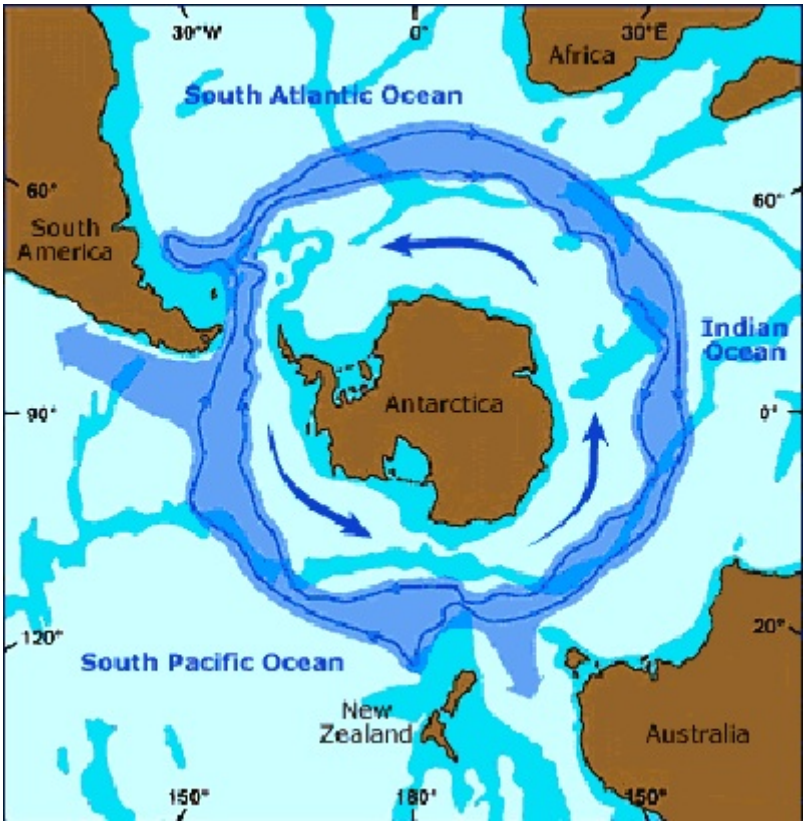


Figure 1. Dark Blue area surrounding Antarctica represents the Antarctic Circumpolar Current (ACC). All arrows indicate both wind and water flow direction. Dark blue lines that bound the ACC are the Antarctic Polar Front to the south and the Subantarctic Front to the north. The largest arrows are emanating from the ACC and represent movement of deep water. Taken from the Natural Environmental Research Counsel http://www.nerc.ac.uk/.

Convergences between these boundaries divide the surface waters into two main zones, the Antarctic Zone from the Antarctic continent to the APF, and the Subtropical Zone from the APF to the Subtropical convergence. In general, the surface

waters of the Antarctic Zone are above freezing only in the summer, when they reach an average of 4° C. The Subtropical Zone surface waters are, on average, above freezing year round and can reach an average of 14° C in the summer (Pickard, and Emery, 1982).

The Southern Ocean has two main influences acting upon it; ocean currents and the expanse of ice controlled by atmospheric seasonality. The currents are split into two types, geostrophic surface currents and bottom currents. Bottom currents around the Antarctic Peninsula bring in Circumpolar Deep Water (> 150 meters) from the Pacific Ocean that mixes with the waters of the Bransfield Strait coming from the Weddell Sea (Hofmann et al., 1996). Circumpolar Deep Water is influenced seasonally by the degree of mixing between Upper Circumpolar Deep Water (Temp = 1.5° to 2.0° C) and Winter Water (Temp< 0° C) (Hofmann & Klinck, 1998; Smith et al., 1999). In contrast, the surface waters (< 150 meters) are affected seasonally only by sea ice and atmospheric changes. In winter, low-pressure systems develop; producing westward flowing surface currents termed East Wind Drift. These, coupled with the westerlies to the north (West Wind Drift) produce Ekman transport that drives deep-sea upwelling in the Antarctic Divergence Zone (Smith et al. 1999; Pickard, and Emery, 1982). Past sea ice records show that in March, ice surface area is at an average minimum and reaches an average maximum in August (Stammerjohn and Smith, 1996).

The Study Area

The study area (Fig. 2) is located in the southern Bransfield and northern Gerlache Straits of the Southern Ocean west of the Antarctic Peninsula. In this area, summer depletions in carbon dioxide reflect high surface primary productivity seasonally and spatially around the Antarctic Peninsula (AP) (Karl et al., 1990). The time of highest primary productivity is in December and January (Holm-Hansen & Mitchell, 1991; Anadón and Estrada, 2002). At this time chlorophyll *a* concentrations are an order of magnitude higher in the southern Bransfield and northern Gerlache Straits than in the northern Bransfield Strait, the Drake Passage and the Weddell Sea (Karl et al., 1990). Because of this, the southern Bransfield and northern Gerlache Straits regions are mostly affected by seasonal surface primary productivity (Ishman and Domack, 1994). Seasons of high phytoplankton blooms bring a flux of organics to the ocean floor resulting in the net removal of inorganic carbon from surface waters of the region (Karl et al., 1990). Phytoplankton blooms begin with the stabilization of the water column, a product of ice melt (Smith et al., 1995). March marks the end of the autumn phytoplankton bloom with a significant reduction in Chlorophyll *a* and an increase in dissolved inorganic carbon (Holm-Hansen & Mitchell, 1991; Karl et al., 1990). The autumn bloom is followed by a period of low surface productivity. This time of low organic influx to bottom waters leads to a temporal balance for total flux of organic material between the seasonally high productivity of the northern Gerlache- southern Bransfield region and the more seasonally stable outer shelf (Karl et al., 1990).

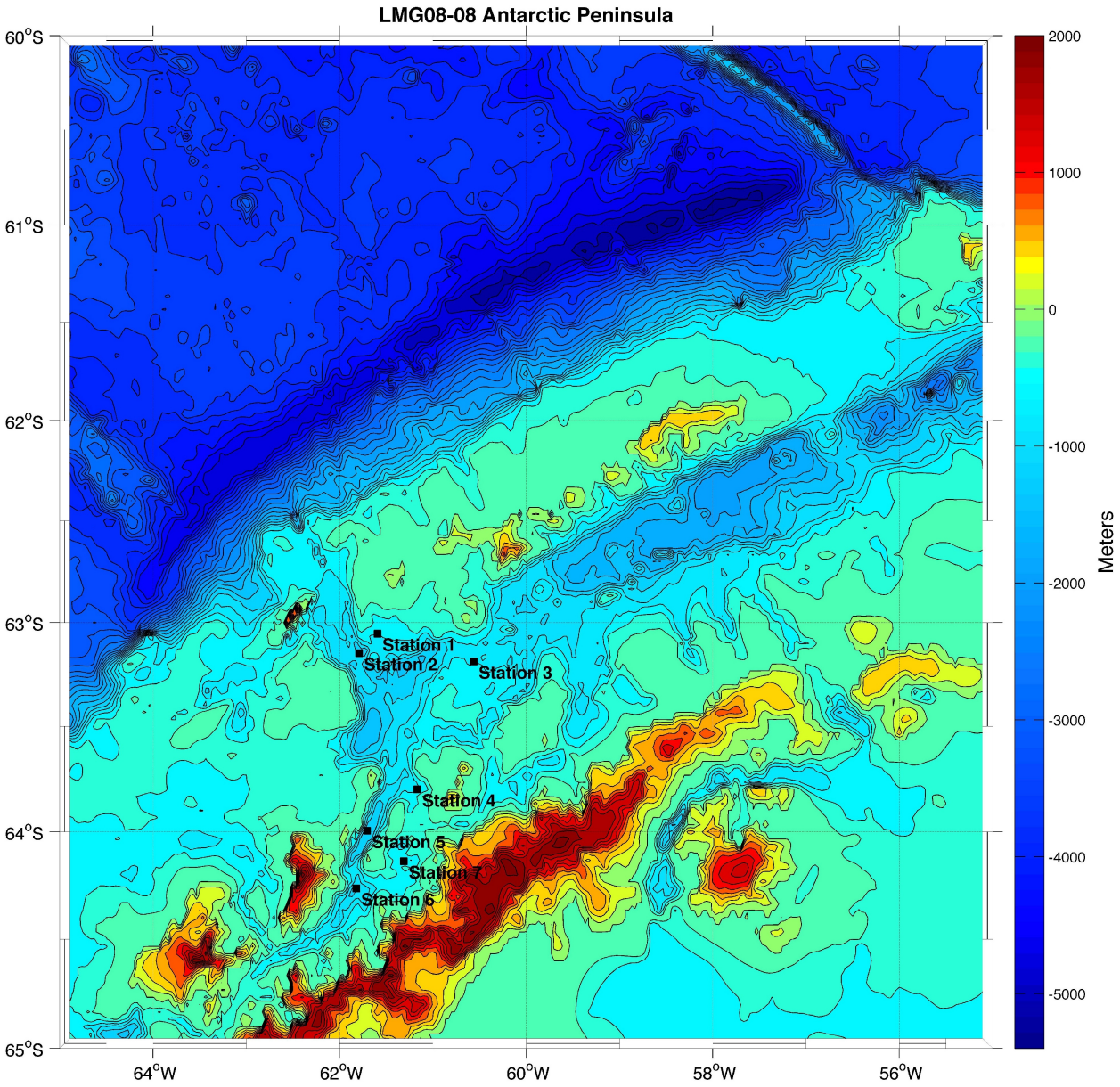


Figure 2. Location map of the area around the Bransfield and Gerlache Straits, including all seven surface samples sites visited during the cruises. Each site is marked. Map by Zach Ishman.

Background

Studies have investigated variations in organic carbon supply resulting from seasonal fluctuations of surface productivity and its affects on modern benthic foraminiferal populations (Gooday and Rathburn, 1999; Kitazato et al., 2000; Wollenburg and Kuhnt, 2000). Settling rates of photosynthetic produced organic matter

range from 100–200 meters a day (Gooday and Turley, 1990). Gooday and Lambshead (1989) showed that the lag time of surface organics to benthic foraminifera is about one month. Graf (1989) found that deep-sea benthic communities respond to pulses in natural organic matter within days. Thomas and Gooday (1996) speculated that high foraminiferal species abundances in the rock record (especially at high latitudes) are in part due to opportunistic benthic foraminifera that exploit surface influxes of phytodetritus.

CHAPTER 2

METHODS

Sediment samples for foraminiferal analyses were collected on two separate cruises in 2008 aboard the R/V *L.M. Gould*; the first, at the beginning of April (LMG08-04) and the second at the end of June (LMG08-08). Sampling was done at seven sites (Fig. 2) to sample the high spatial variability following seasons of both high (March autumn bloom) and low (winter June) surface primary productivity.

Shipboard Methods

On both cruises, the R/V *L.M. Gould* provided five science days of ship time for collecting sediment samples for foraminiferal and pore water analyses. Sediment samples were taken using a multicore device that could be loaded with 12 plastic cores, 10 cm in diameter. Three drops were taken at each of the seven sample sites (Fig. 2 and 3). The mulitcore samples were collected at sites where water depths were approximately 600 meters and 1200 meters (Table 1).

The sediment cores were taken to the aquarium room of the ship as soon as the cores were removed from the multicorer, where samples for Rose Bengal treatment were extruded and sliced at one-half centimeter intervals to a core depth of 3 cm and then at one centimeter intervals to a 10 cm core depth. The slices were washed with distilled water into labeled Nalgene bottles and taken into the wet laboratory, where they were immediately preserved with a mixture of 37% formaldehyde, filtered seawater and borax to attain a concentration of 4% formaldehyde in each sample, and then

refrigerated at 4° C. CellTracker Green (CTG) was used as a protein marker to identify foraminifera living at the time the samples were collected. One sample for CTG analysis was taken at each of the seven sites from the 0-1 cm interval. A solution of CTG was prepared as per Bernhard et al. (2006), added to each sample, and then incubated for 24 hours at ambient ocean water temperature to allow the protein marker to be metabolized by the live foraminifera in the sample. After this time,

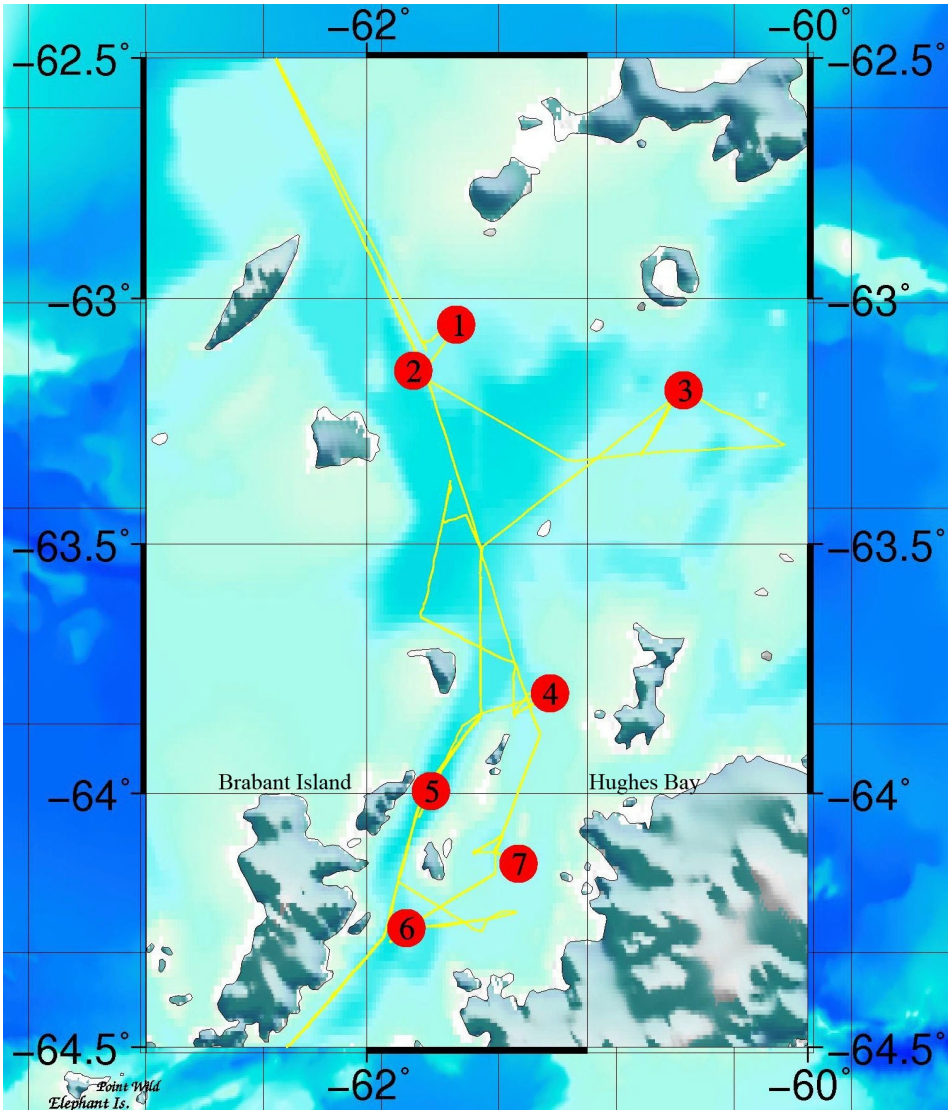


Figure 3. Map showing the seven stations. Darker blue indicates areas of deeper water.

a buffered formula of 800-200 ml filtered seawater to 37% formaldehyde was added to

the jar and supersaturated with borax (buffer) before the sample was refrigerated at 4° C. Samples were collected for pore water chemistry, and oceanographic data (salinity, temperature and oxygen) were collected for each station using a SeaCat CTD (Conductivity, Temperature, and Depth) unit.

TABLE 1: THE SEVEN SAMPLE SITES WITH DEPTH AND LOCATION INFORMATION.

	Depth	Latitude	Longitude
April Site 1	630m	-63.30.24	-61.35.24
April Site 2	1226m	-63.08.86	-61.47.38
April Site 3	600m	-63.11.28	-60.33.72
April Site 4	638m	-63.48.01	-61.10.07
April Site 5	1227m	-63.59.73	-61.42.46
April Site 6	1187m	-64.16.07	-61.49.21
April Site 7	615m	-64.08.35	-61.18.53
June Site 1	580m	-63.33.06	-61.35.53
June Site 2	1226m	-63.09.02	-61.77.35
June Site 3	616m	-63.11.27	-60.33.81
June Site 4	647m	-63.48.03	-61.10.01
June Site 5	1173m	-63.59.74	-61.42.44
June Site 6	1199m	-64.16.10	-61.49.59
June Site 7	626m	-64.08.09	-61.75.84

Laboratory methods

A solution of Rose Bengal was mixed at a ratio of 1 gram per 900 ml of distilled water and 100 ml of formaldehyde. Sixty five ml of the Rose Bengal solution was added to the preserved samples (except the samples containing CellTracker Green, where 4% ethanol was used), and they soaked in the solution for 3 weeks to allow the stain to set. The Rose Bengal stained samples were washed into a graduated cylinder with 150 ml of distilled water. The amount of sediment with water was measured and recorded on a spread sheet of volumes (Appendix A). The samples were then sieved with nested 63 and 150 micron mesh (for every 100 ml of sieved material, 25 ml of Rose Bengal, ½

teaspoon of borax and 4% formalin was added to preserve the sample). All of the 63 micron samples were split using a Folsom splitter, as well as the 150 micron station 2 samples because they contained high volumes of sandy sediments. None of the samples were split to more than 1/32 of the original; most were split to 1/8 or 1/4 (Appendix A). The unused split portions of the samples were preserved in the same manner as the original sieved material. Whole splits or whole samples of all foraminifera were wet picked using a small brush, counted, sorted and analyzed for each sediment interval. For the CTG samples, a fluorescence light microscope was used in the picking and identification of living foraminifera in order to differentiate the living specimens from the dead with the tracker (vital fluorogenic probe 5-chloromethylfluorescein diacetate). The tracker adheres to proteins in the foraminiferal cytoplasm, making it fluoresce (Bernhard et al., 2006). The foraminifera were considered to be alive on capture if at least one chamber fluoresced with CTG or was stained with Rose Bengal, depending on the sample (cytoplasm of living foraminifera is present in all chambers of the test) (Fig. 4). Light stained coating on the outside of the test was not considered to indicate a live foraminiferan.

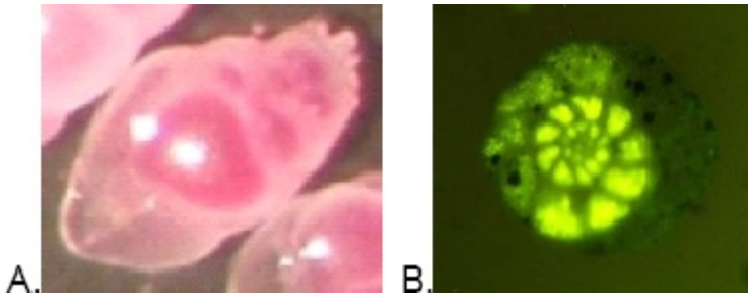


Figure 4. Shows foraminifera considered to be living in this study. A. the Rose Bengal stained foraminiferan (*Bulinina aculeata*) B. The CTG foraminiferan (*Labrospira wiesneri*).

Foraminifera were identified using Igarashi et al. (2001) but species

Haplophragmodies parkerae, Trochammina intremedia, Trochammina wiesneri, Reophax distans and *Bulinina gibba* were identified using Pflum (1966) and McKnight (1962).

Statistical Methods

Diversity of the samples was measured using the Shannon-Wiener Index (H):

$$H = - \sum(P_i(\ln P_i))$$

Where P_i is the percentage of the species in the sample (Buzas, 1979). This measurement is used to determine if patterns exist in diversity (spatially and seasonally) and discriminates between species evenness and dominance. A value of 0 indicates that there is only one species in the assemblage (high dominance) and, as values increase, so does the evenness of the species' abundances. Multivariate analyses included Heirachical Cluster Analysis (HCA) and Principal Component Factor Analysis (PC) using SYSTAT. HCA was used to determine foraminiferal assemblages (R - mode) and sample site groupings (Q – mode), and used the complete linkage of Euclidian distance Pearson correlation coefficient method. PC was applied to discern factors contributing to the most variation within the foraminiferal assemblages. Core plots were constructed in order to track populations of the seasonally dominant species at all sliced intervals of the cores at each sample site. An analysis of variance (ANOVA) was used to further correlate seasonal foraminifera counts to each other, as well as CTG data to Rose Bengal data. A post-hoc Tukey test was conducted after the ANOVA in order to determine which seasonal assemblages group together and which were statistically considered to be different sample assemblages.

The Shannon-Wiener Diversity Index and ANOVA utilized all species found in the samples with the HCA and PC using only species accounting for more than 1% abundance in each season.

CHAPTER 3

RESULTS

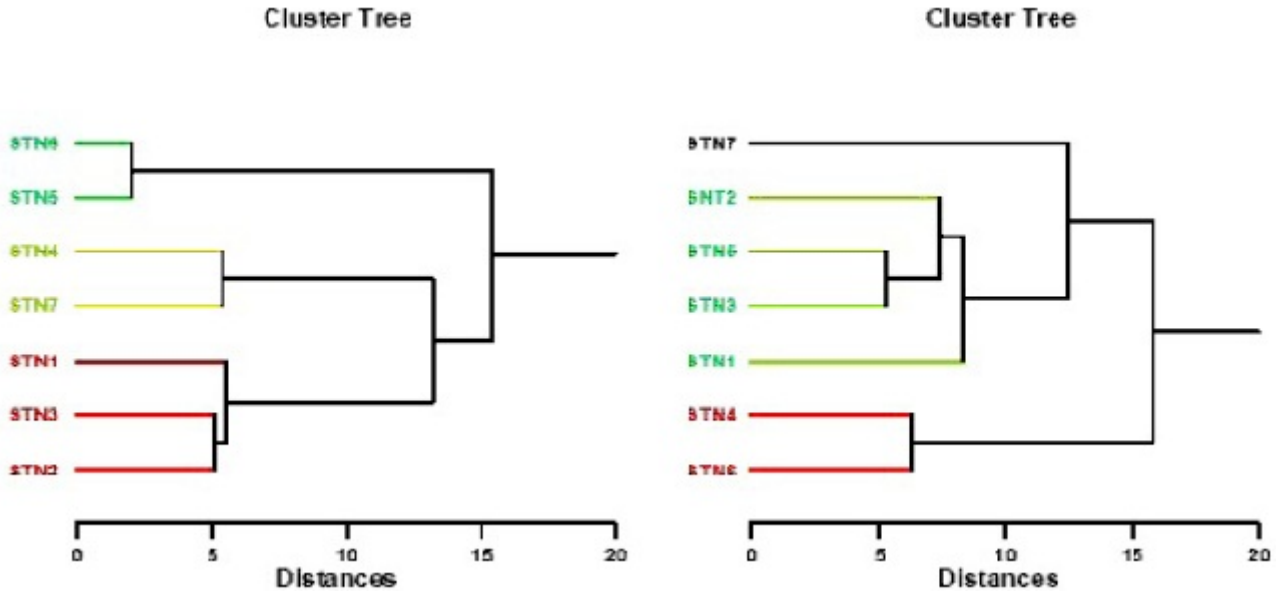
Sample Data

A total of 88 Rose Bengal stained species were identified. Seventy species were found in June and seventy-one in April; fifteen species of foraminifera were unique to April and thirteen to June. Forty-one species were found in the CellTracker Green samples, two of which were unique species, bringing the total number of species identified in this study to 90. Foraminiferal abundance was greater in the 63 micron size fraction in both seasons, but the 150 micron size fraction had greater diversity of species. (Appendix A). Although processed separately, the size fractions were combined for all statistical analyses. The April Rose Bengal species used in the cluster and PC analyses were *Adercotryma glomeratum, Ammodiscus sp., Astrononion echolsi, Bolivina pseudopunctata, Epistominella exigua, Fursenkoina fusiformis, Haplophragmoides parkerae, Labrosipra jeffreysii, Lagenammina difflugiformis, Miliammina lata, Miliammina oblonga, Nodulina dentaliniformis, Nodulina kerguelenensis, Nonionella iridea, Portatrochammina stenhousei, Saccammina sp.* and *Trochammina intermedia.* The June Rose Bengal species used for these analyses were *Adercotryma glomeratum, Ammodiscus sp., Astrononion echolsi, Bolivina pseudopunctata, Bulimina aculeata, Epistominella exigua, Fursenkoina fusiformis, Globocassidulina subglobosa, Haplophragmoides parkerae, Lagenammina difflugiformis, Miliammina oblonga, Nodulina dentaliniformis, Nonionella iridea, Portatrochammina stenhousei, Saccammina sp., Textularia wiesneri* and *Trochammina*

intermedia.

Rose Bengal Data

The Shannon-Weiner Diversity Index resulted in numbers for total diversity in each season that are very similar to each other (2.71 in April and 2.77 in June) showing that the biodiversity changes little from season to season. The resulting numbers are middle range values, indicating a foraminiferal assemblage of some high abundance species but also much species evenness.



A. B.

Figure 5. Results of Q-Mode Hierarchical cluster analysis, seven stations. A is the clusters of April stations: B the cluster of June stations.

Q-mode HCA show different results for April and June (Fig. 5). Sites 1, 2 and 3 group together in both months. In April, sites 5 and 6 group and 4 and 7 group, while in June site 5 is grouped with 1-3, 4 and 6 grouping together, and site 7 is an outlier.

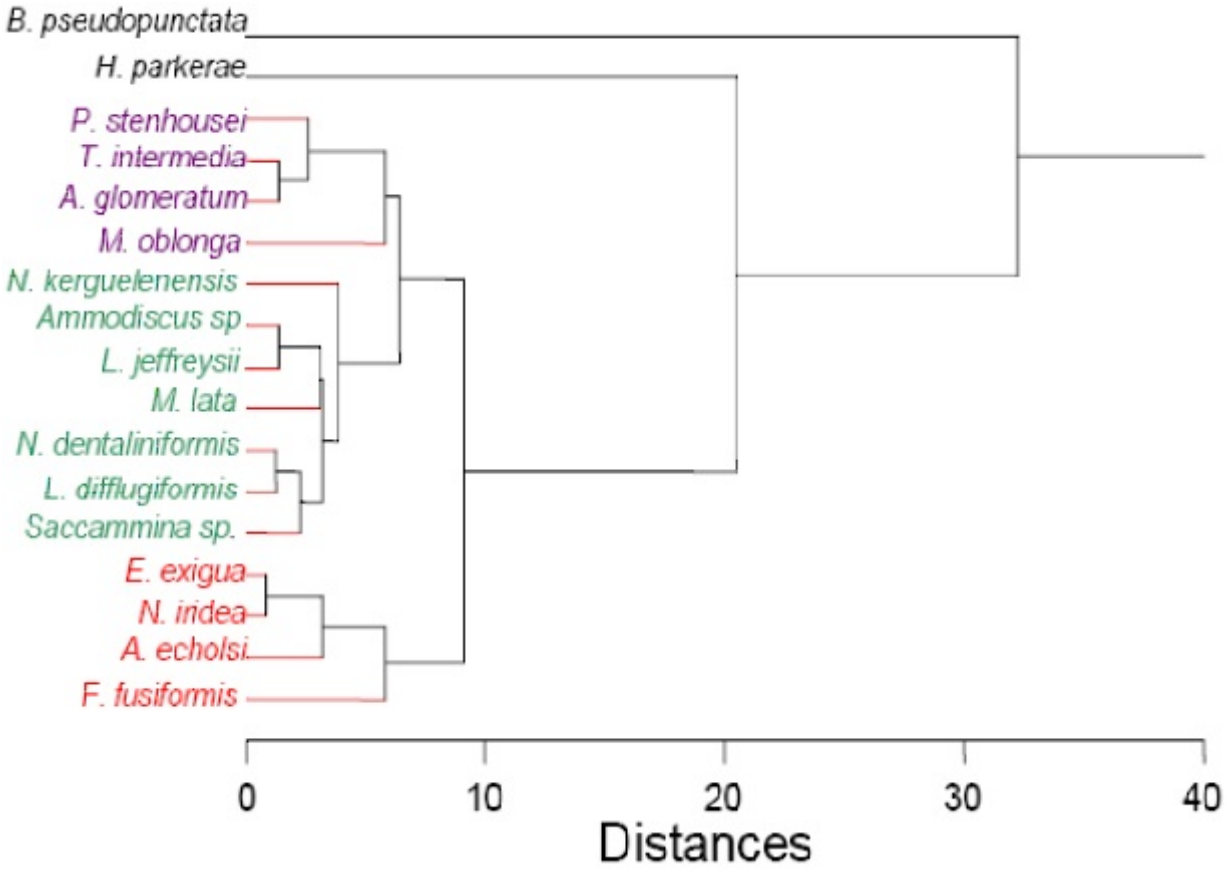


Figure 6. Results of Rose Bengal April cluster analysis of species (R-Mode hierarchical cluster analysis).

R-mode HCA results show three groupings and two outlier species in April. The two species *Bolivina pseudopunctata* and *Haplophragmoides parkerae* far exceed the other species in abundances for both seasons and are outliers in April and June (Figs 6 and 7). Species *Bulimina aculeata,* and *Textularia wiesneri* are abundant above 1% only in June and cluster together in June (Fig. 7). The species *Miliammina lata,Labrospira jeffreysii* and *Nodulina kerguelensis,* are present in abundances over 1% only in April and cluster together. (Figs 6 and 7).

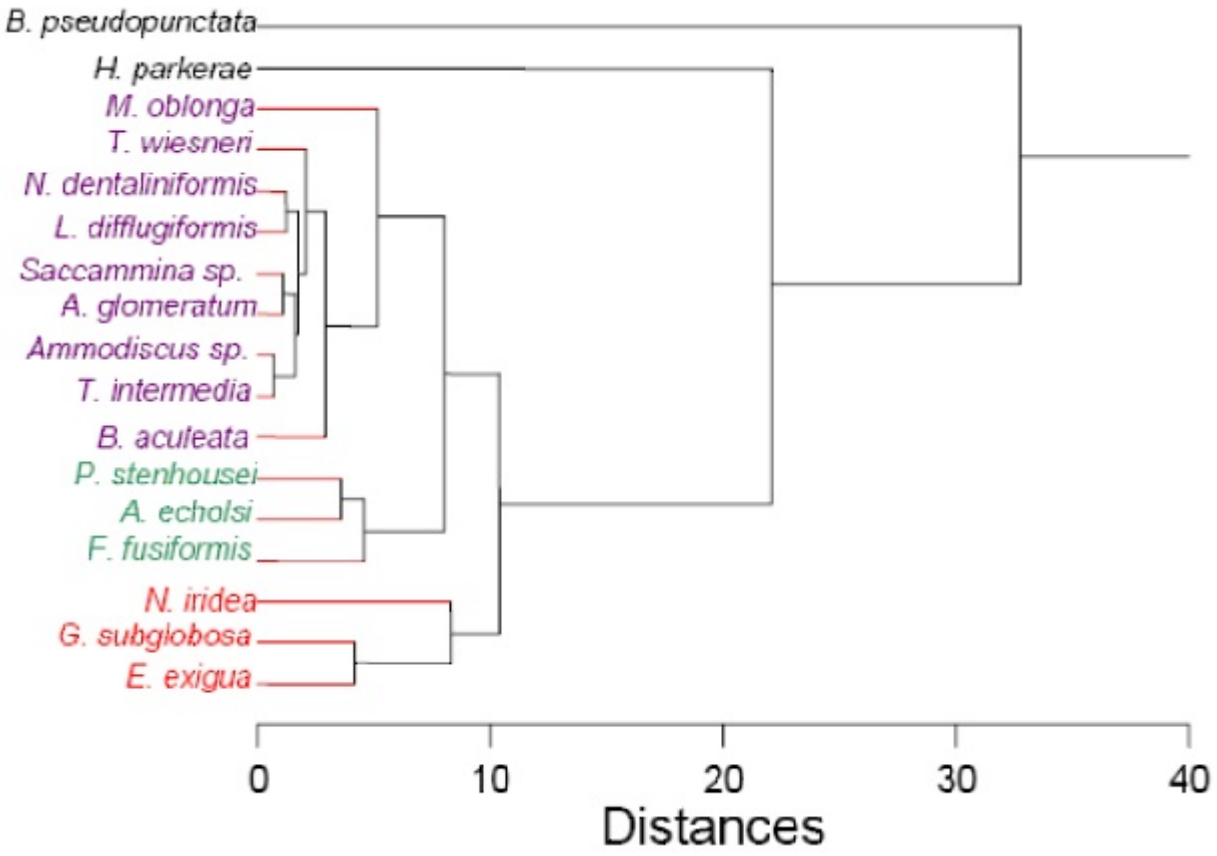


Figure 7. Results of Rose Bengal June cluster analysis of species (R-Mode hierarchical cluster analysis).

The PC Factor Analysis included depth, nitrate, oxygen, temperature, salinity, and species abundances to determine the factors contributing to the highest amount of variation between species (Table 2 and Appendix C). Four factors in April and three in June explain nearly all of the variation in the data, with the first factor accounting for over 35% of the variance in both seasons. In April four factors account for 100% of the variability, and in June three factors account for 91% of the variation. With the cutoff of 0.70, all the environmental conditions except temperature scored high in the first factor for April. A number of species also scored high, including *Epistominella exigua, Fursenkoina fusiformis, Miliammina lata, Miliammina oblonga, Nodulina dentaliniformis,*

Nonionella iridea and *Trochammina intermedia*. In the first factor for June, temperature and salinity scored high. Oxygen and depth have high negative scores in the second factor. Nitrate scores high in the third factor. The high scoring species in the first factor for June were *Astrononion echolsi, Bulimina aculeata, Fursenkoina fusiformis,* and *Portatrochammina stenhousei.* Salinity and temperature have high positive scores with these species and oxygen has a high negative score.

TABLE 2. RESULTS OF THE PC FACTOR ANALYSIS OF BOTH SEASONS OF ROSE BENGAL SAMPLES.

	April Factor Scores				June Factor Scores			
	PC Factor 1	PC Factor 2	PC Factor 3	PC Factor 4	PC Factor 1	PC Factor 2	PC Factor 3	PC Factor 4
Depth	-0.83	0.075	-0.499	-0.238	0.289	0.35	**-0.887**	-0.05
Nitrate	**0.885**	0.035	0.45	-0.117	-0.231	**-0.903**	0.044	0.281
Oxygen	**0.929**	-0.17	-0.32	0.061	**-0.837**	-0.451	0.079	0.152
Temperature	-0.625	-0.15	**0.722**	0.254	**0.879**	0.277	0.363	0.116
Salinity	**-0.777**	0.168	0.601	0.083	**0.964**	0.026	-0.223	-0.014
Adercotryma glomeratum	0.672	0.631	0.362	-0.135	0.143	**-0.843**	-0.257	-0.445
Ammodiscus sp.	-0.612	-0.36	0.571	0.412	-0.18	-0.385	-0.591	0.371
Astrononion echolsi	-0.55	**0.835**	-0.001	0.013	**0.762**	-0.59	0.007	0.264
Bolivina pseudopunctata	0.178	-0.72	-0.325	-0.591	-0.419	0.502	**-0.733**	-0.132
Bulimina aculeata	0	0	0	0	**0.961**	0.008	-0.234	0.016
Epistominella exigua	**-0.828**	0.306	-0.229	0.41	-0.351	**-0.81**	0.393	0.011
Fursenkoina fusiformis	**-0.809**	-0.01	0.552	-0.203	**0.982**	0.102	-0.156	-0.007
Globocassidulina subglobosa	0	0	0	0	-0.125	**-0.95**	0.034	-0.246
Haplophragmoides parkerae	-0.307	**0.916**	-0.16	0.204	-0.454	0.5	0.567	0.399
Labrospira jeffreysii	0.608	-0.67	0.321	0.289	0	0	0	0
Lagenammina difflugiformis	0.585	-0.04	-0.249	**0.77**	0.673	0.156	**0.704**	0.11
Miliammina lata	**0.779**	0.503	0.368	-0.07	0	0	0	0
Miliammina oblonga	**0.821**	0.507	0.147	0.217	0.309	0.194	0.691	-0.344
Nodulina dentaliniformis	**0.878**	0.17	0.084	0.44	-0.431	0.147	0.505	**0.726**
Nodulina kerguelenensis	0.361	-0.62	0.525	0.464	0	0	0	0
Nonionella iridea	**-0.805**	0.29	-0.302	0.42	0.616	**-0.732**	0.145	-0.137
Portatrochammina stenhousei	0.335	0.85	0.278	-0.297	**0.843**	0.101	0.449	0.143
Saccammina sp.	-0.097	0.026	**-0.811**	0.577	-0.044	-0.168	0.51	**-0.751**
Textularia wiesneri	0	0	0	0	-0.411	0.472	-0.303	-0.567
Trochammina intermedia	**0.905**	0.403	0.129	0.042	0.152	-0.356	-0.752	0.426
Percent Variance of Factors	47.957	22.141	18.244	11.658	36.394	23.937	21.611	11.049

Vertical distribution of dominant species

Down core plots were done for the dominant Rose Bengal species (Fig 8). Each plot is a record of the actual species abundances found in each incremental slice of the cores at the seven stations.

The species with highest overall abundances, *Bolivina pseudopunctata* and *Haplophragmoides parkerae,* are found predominately above 3 cm in each core in both seasons. *Haplophragmoides parkerae* occurs 80 -100% of the time in the 0 to 2 cm range of the cores. *Bolivina pseudopunctata* occurs 80 -100% of the time in the 1 to 3 cm interval in the cores with the exception of three stations, 4 and 5 in April (some data missing) and station 2 in June. *Bulimina aculeata* and *Saccammina sp.* of the April assemblage occur mainly in the upper 2 cm of the cores. *Labrospira jeffreysii*, *Ammodiscus sp*., *Lagenammina difflugiformis* and *Nodulina dentaliniformis* of the June assemblage are most abundant in the upper 2 cm with few exceptions.

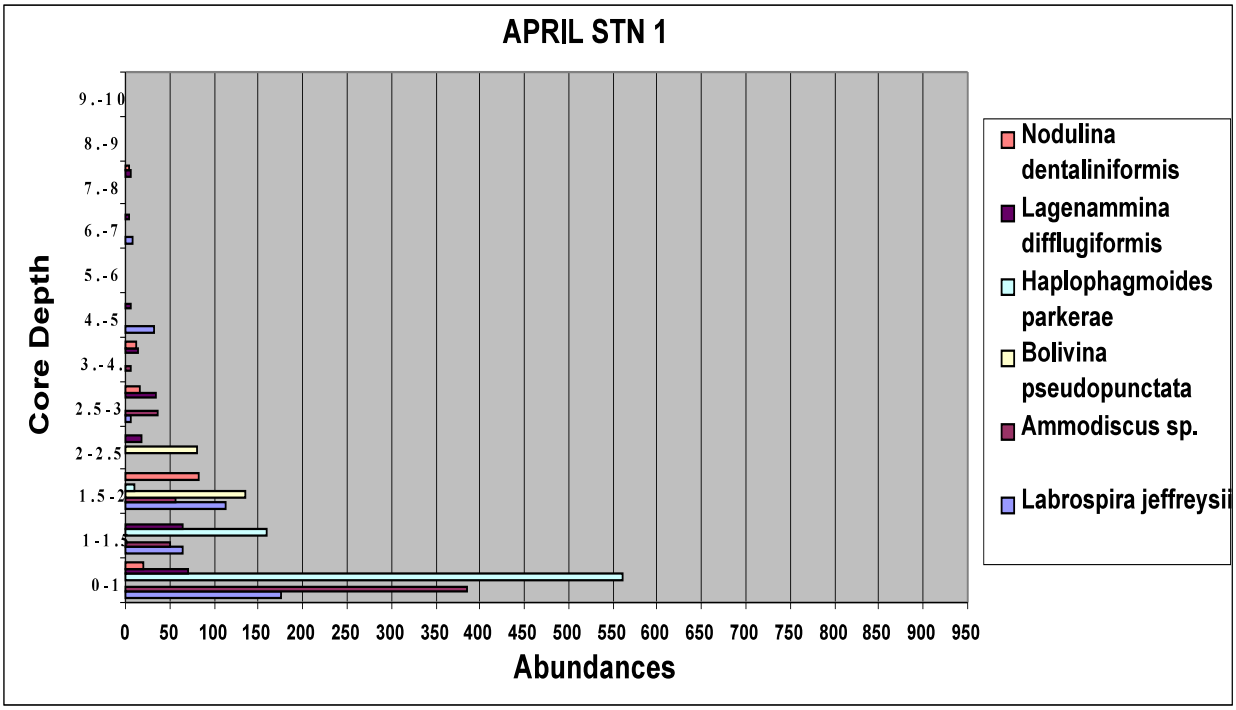
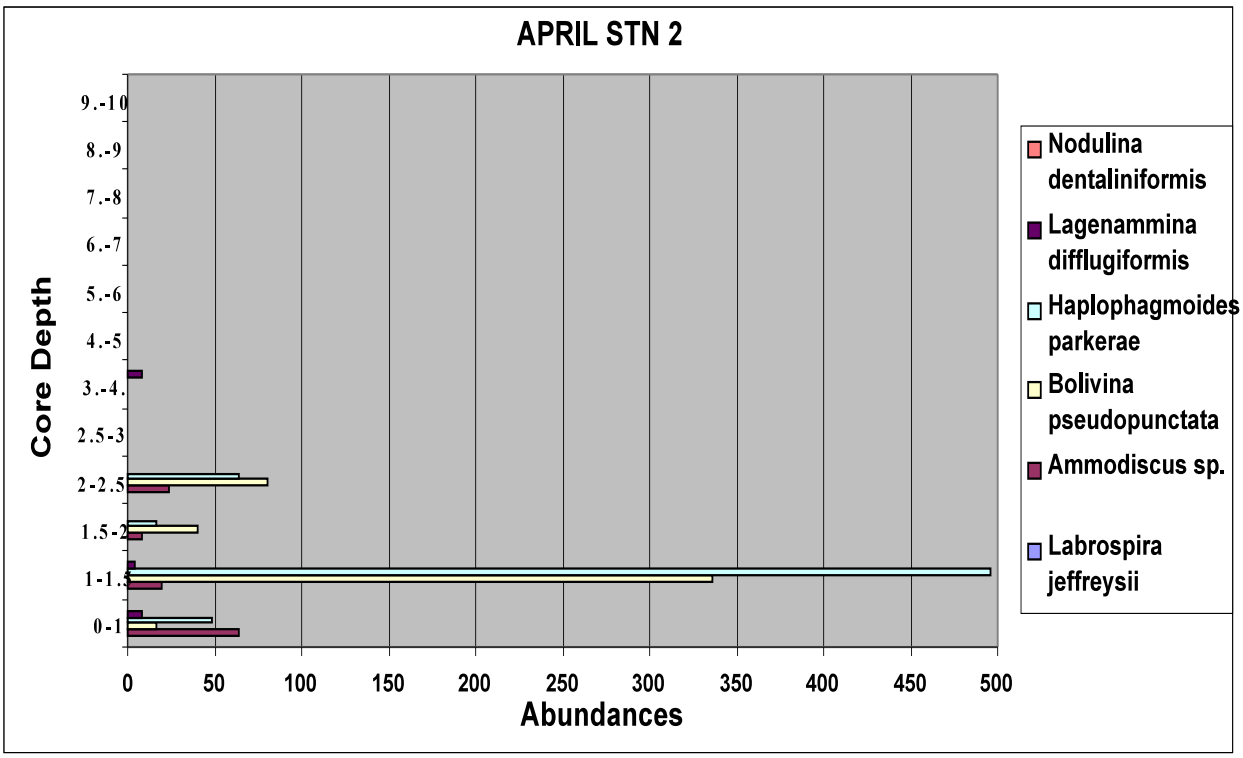


Figure 8A.



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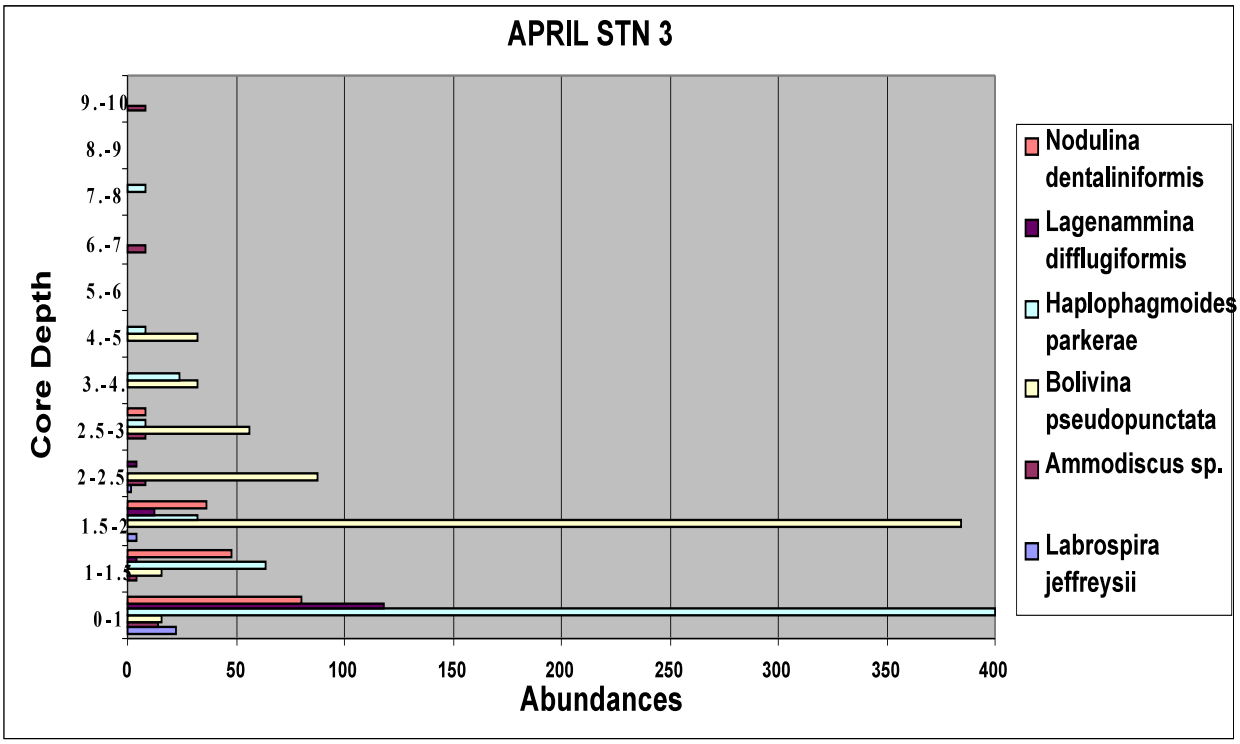

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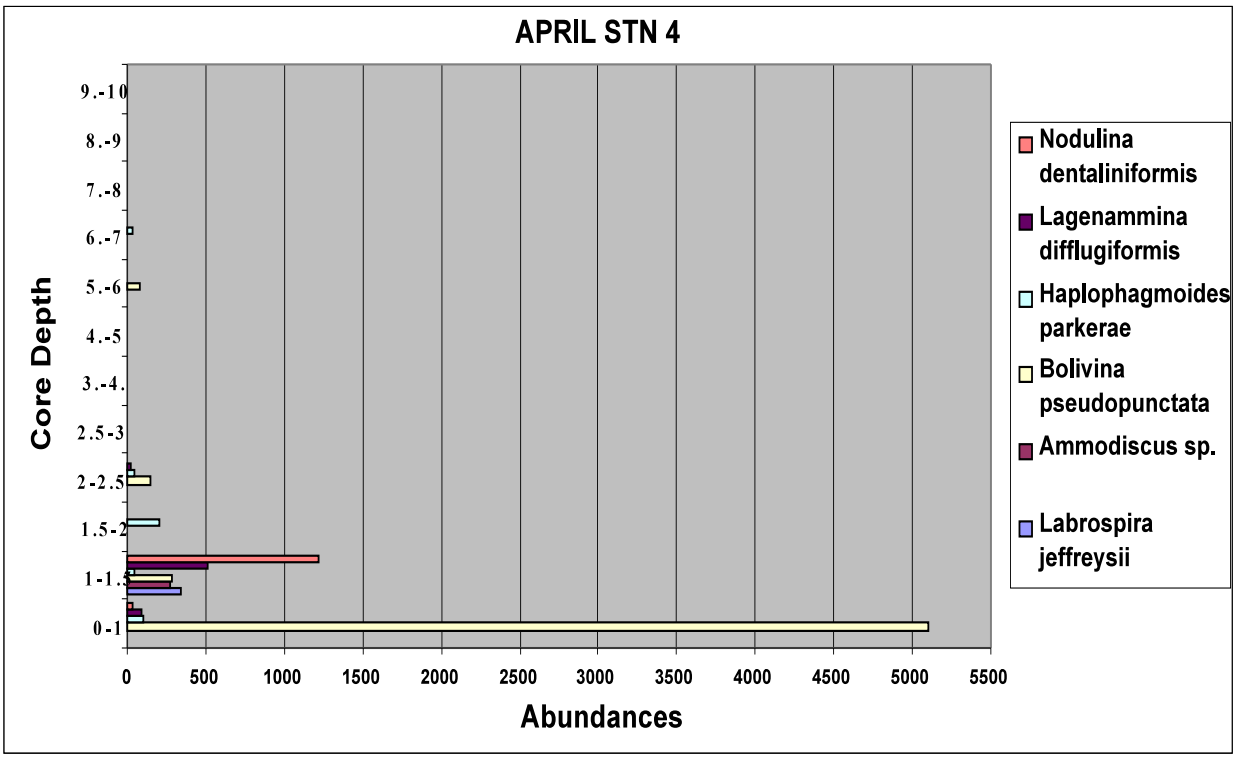

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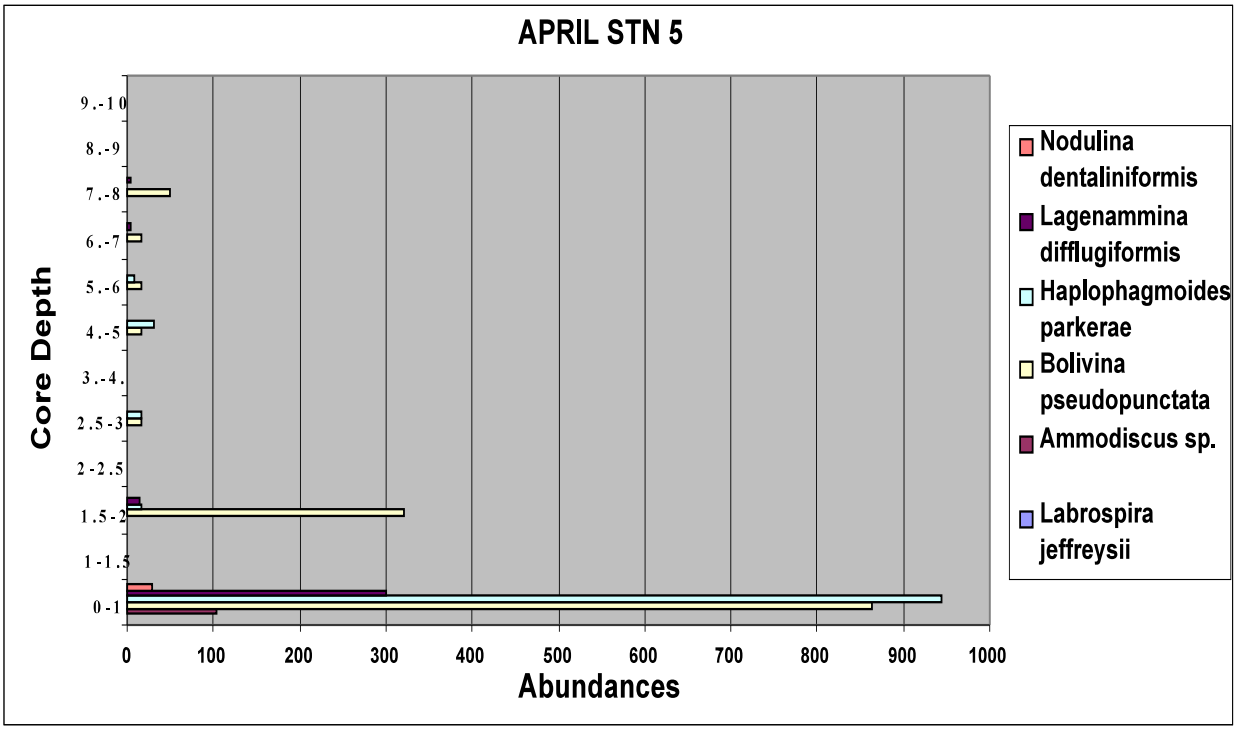

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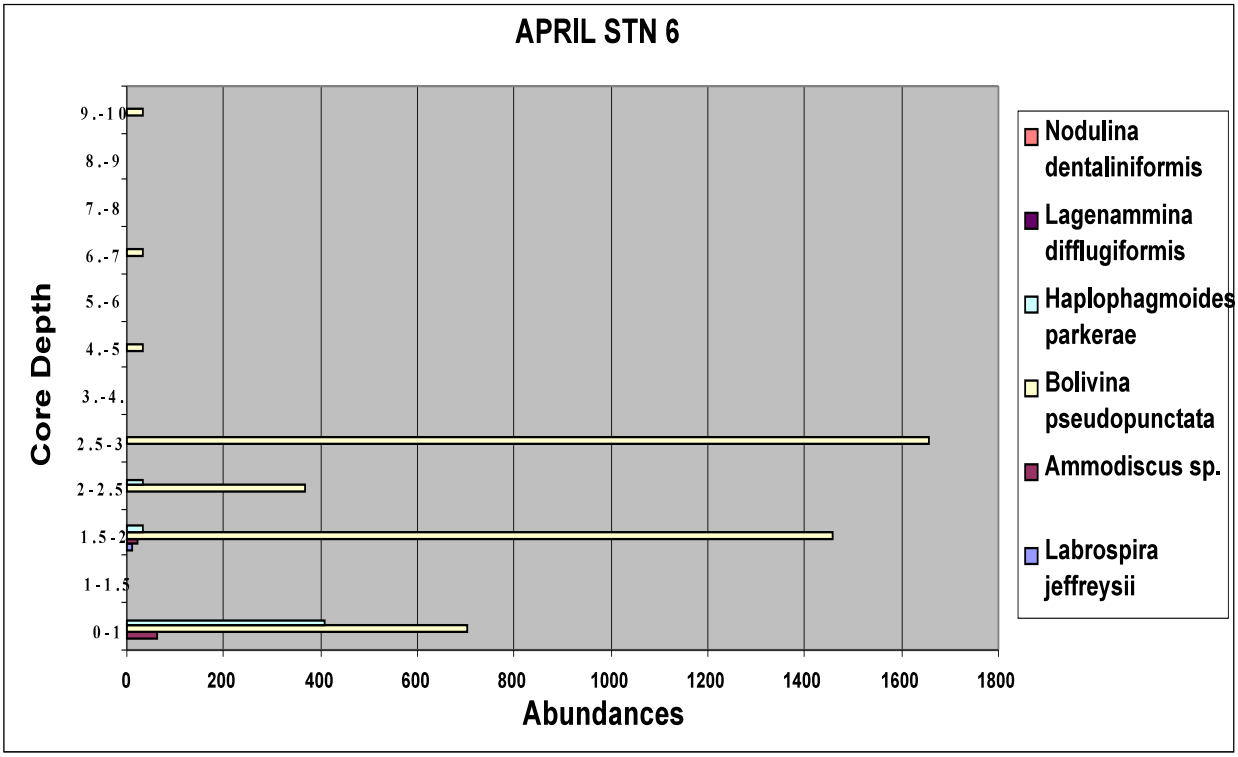

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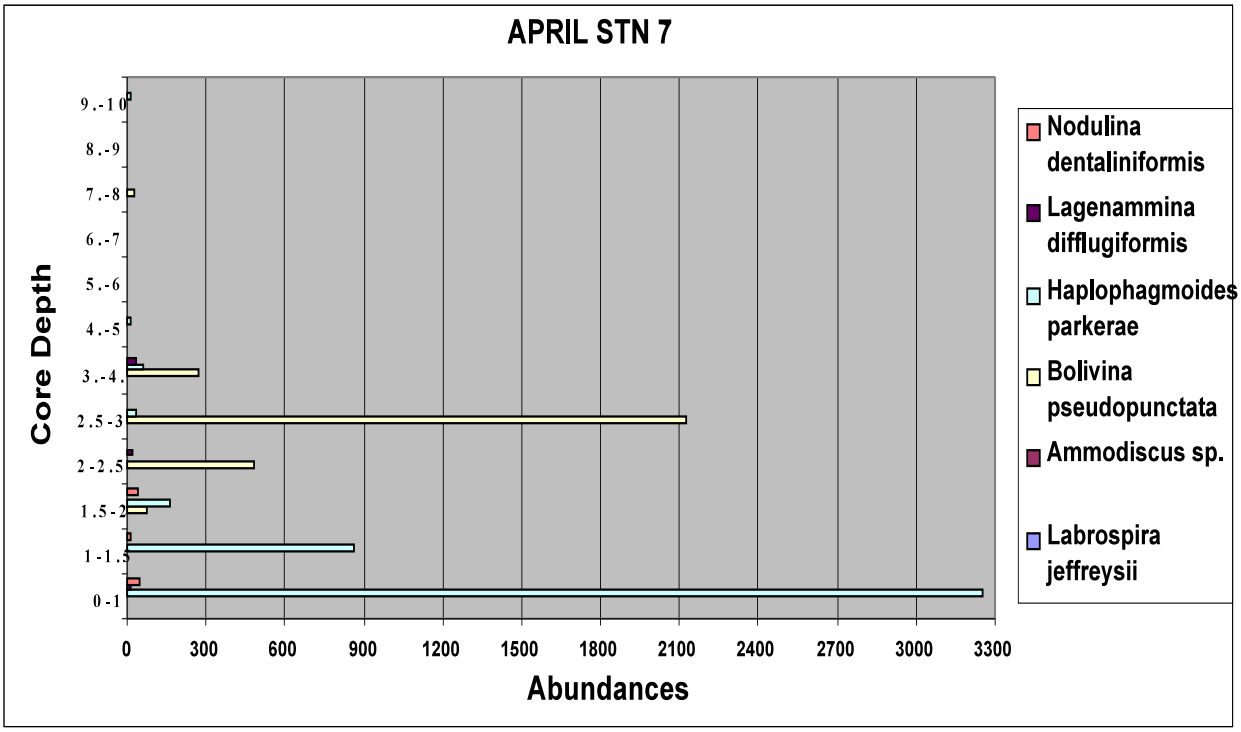


Figure 8G.

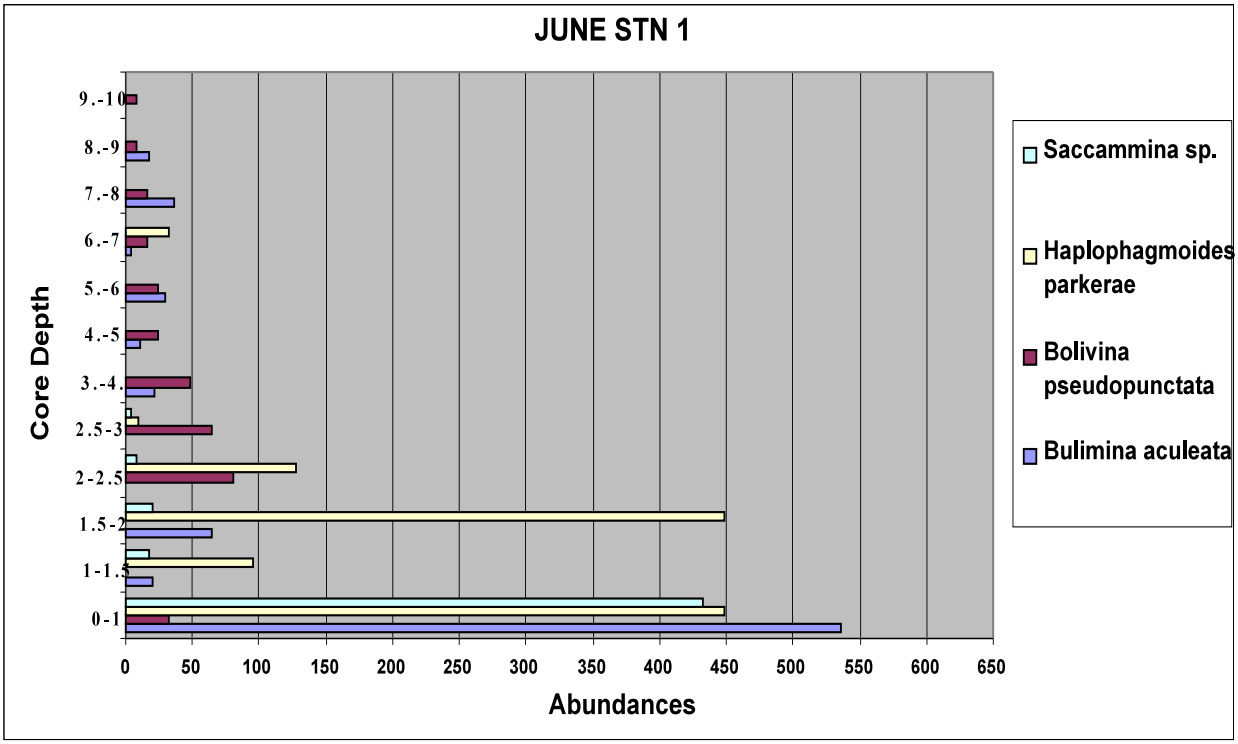


Figure 8H.

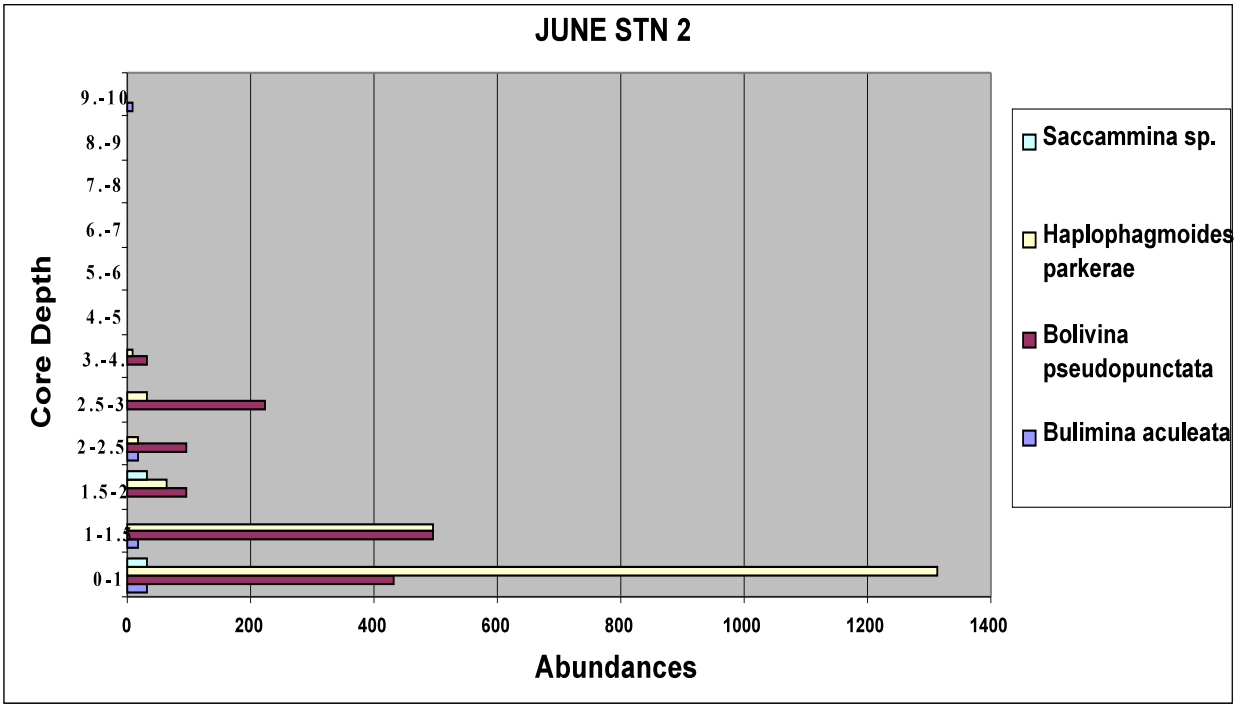
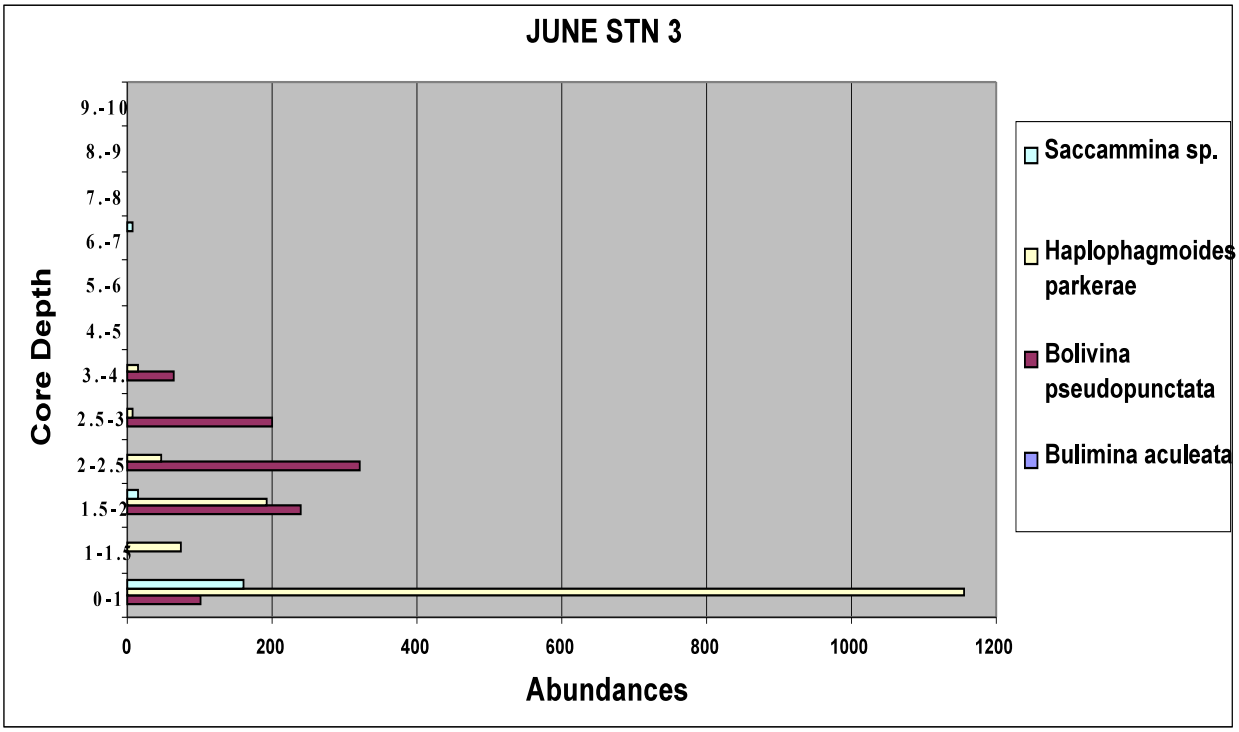


Figure 8I.



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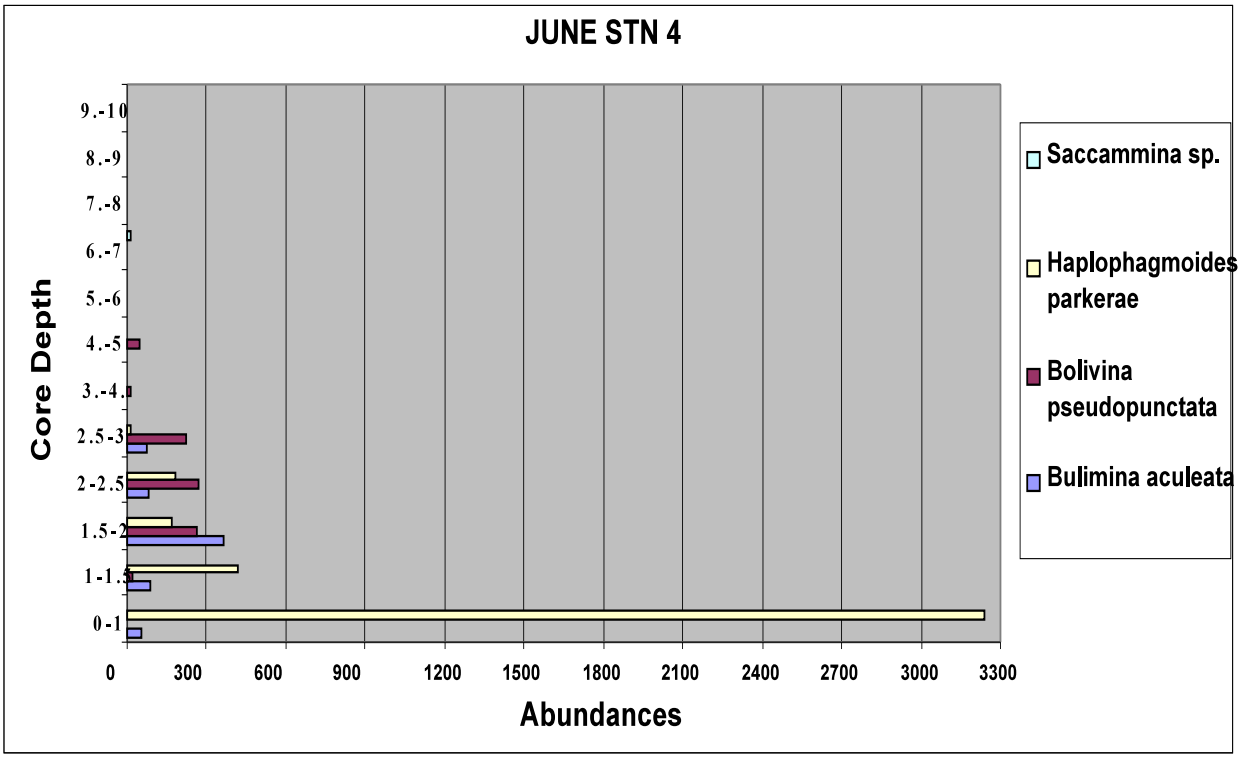

Figure 8K.

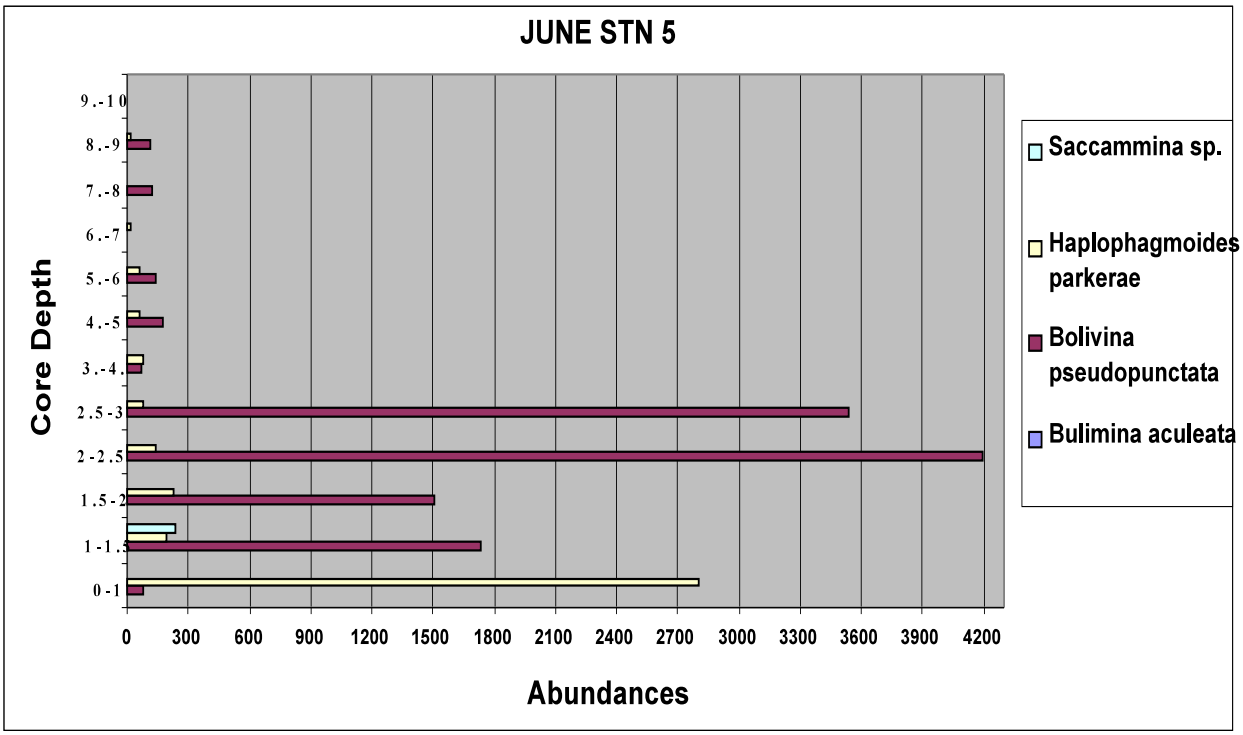

Figure 8 L.

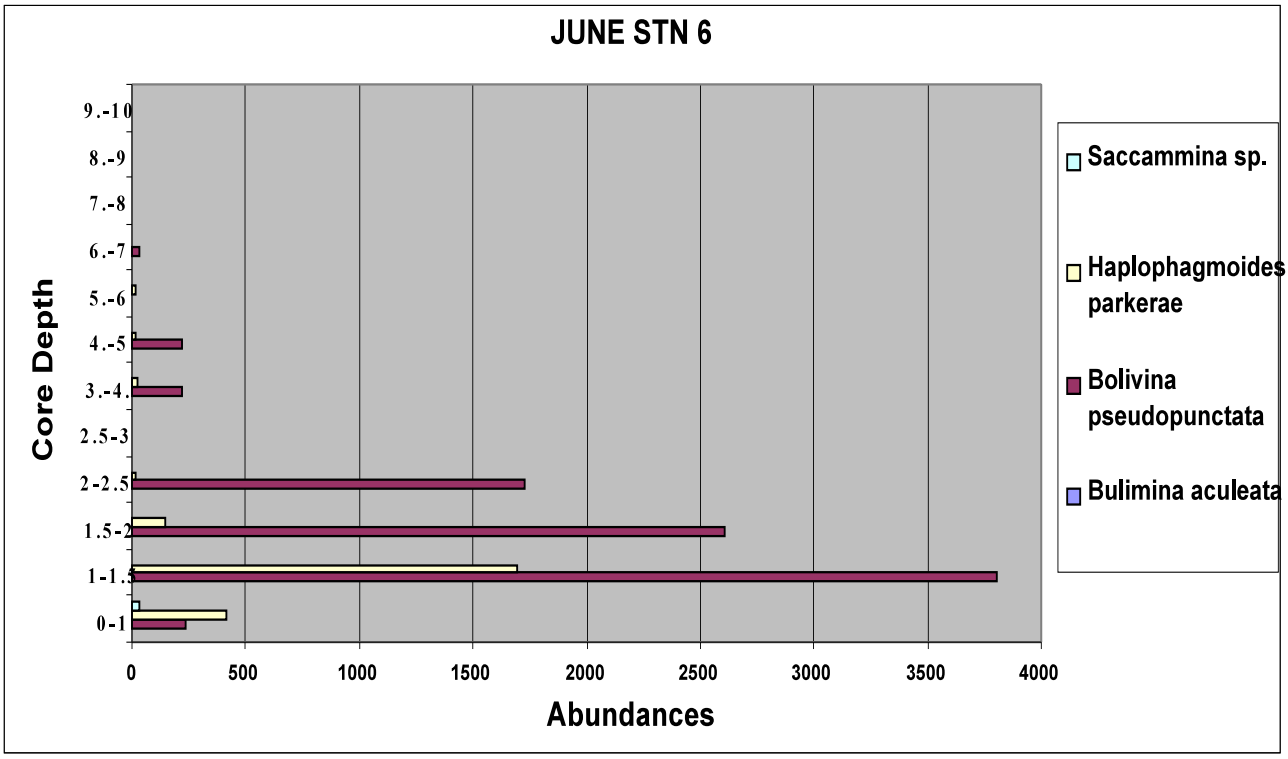

Figure 8M.

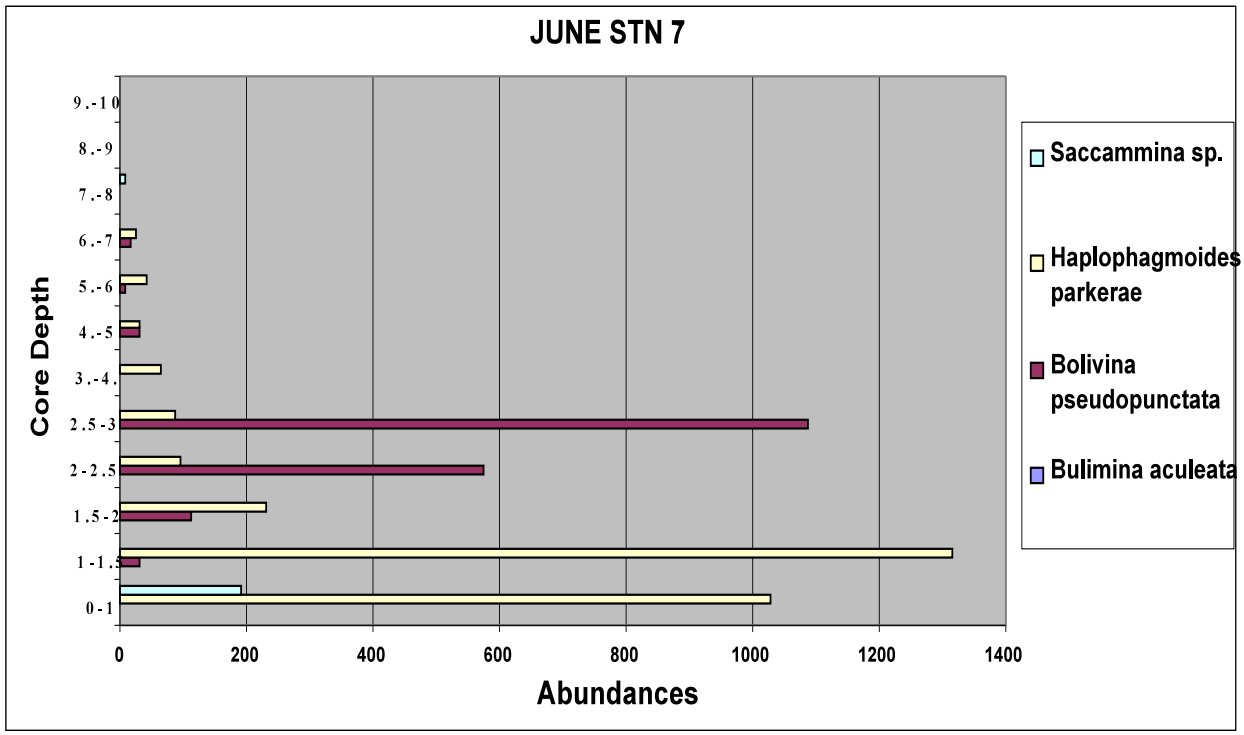

Figure 8N. 8 A-N: Core plots for all seven stations in both April and June showing species abundances in the 0-10 cm intervals of the sample cores.

CellTracker Green Samples

The Shannon-Wiener Diversity Indices were much lower in the CTG data compared to the Rose Bengal, but are similar seasonally. Within the April samples, stations 1, 2 and 3 are most similar 1.78, 1.93 and 1.79, respectively, and station 4 has the lowest value, 0.95. The June values are similar to each other except for station 2, which is higher (2.21) compared to the others. Station 7 is low (1.10) with station 4 having the lowest value (0.88) (Appendix B).

In the HCA of the April CTG data (Fig. 9), species separate one by one to reveal only a single cluster. This cluster consists of species *Fursenkoina fusiformis, Miliammina oblonga, Pullenia subsphaerica, Portatrochammina stenhousei,* and *Textularia wiesneri.*

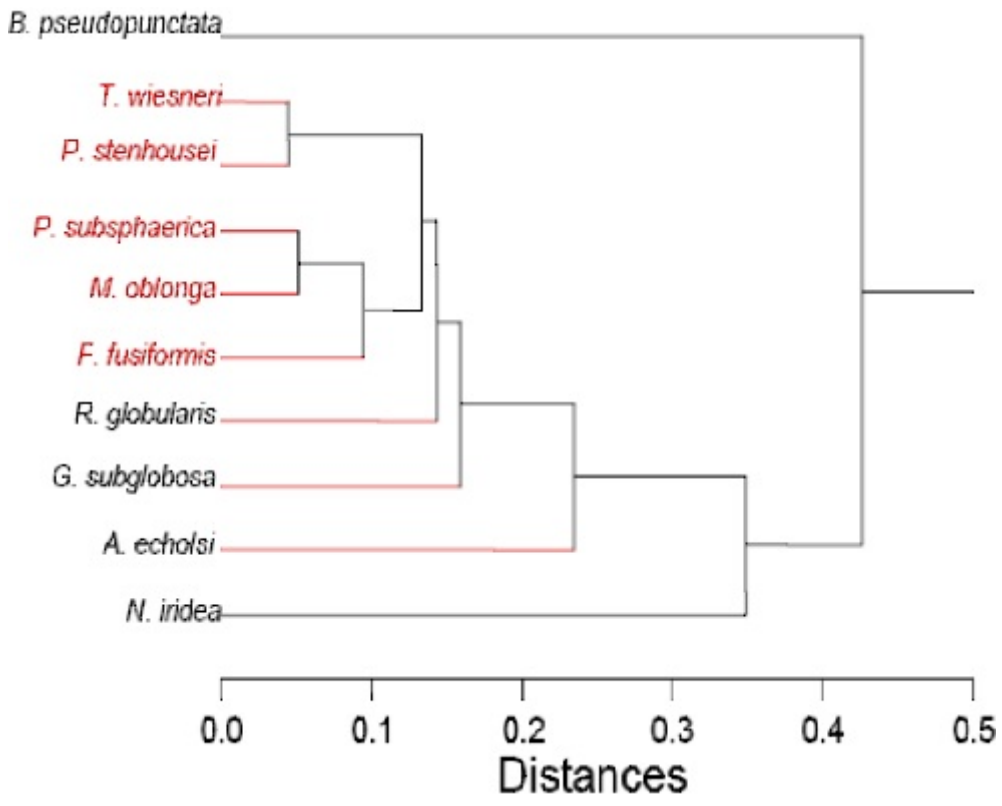

Figure 9. Cluster diagram for the April CTG data.

The June data shows three main clusters, two groups of two species each and a larger cluster of five species: Cluster 1, *Fursenkoina fusiformis* and *Bolivina pseudopunctata*; Cluster 2, *Rhummblerella* and *Astrononion echolsi;* and Cluster 3, *Trochammina intermedia, Paratrochammina tricamerata, Portatrochammina stenhousei, Ammodiscus sp., Labrospira wiesneri* and *Miliammina lata* (Fig. 10).

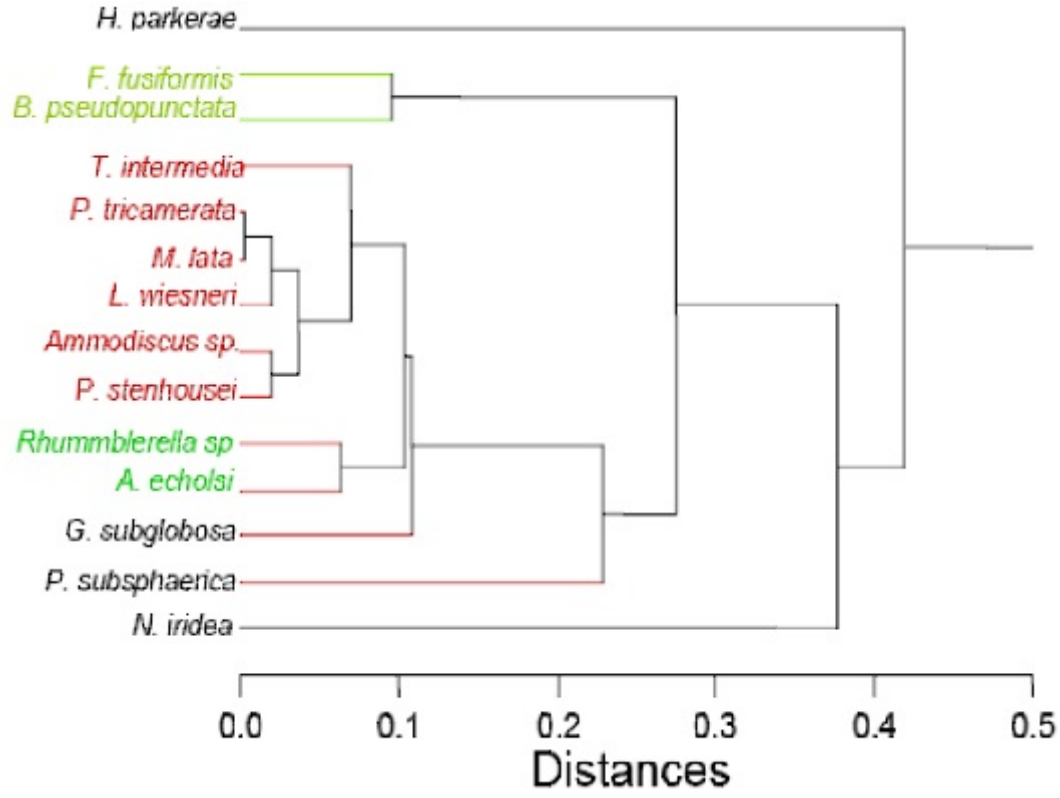

Figure 10. Cluster diagram for the June CTG data.

PC Factor analysis shows two factors in the April data account for 71% of the variance and in June, four factors account for 91% of the variance in the data. Oxygen and salinity have high positive scores with *Astrononion echolsi, Portatrochammina stenhousei* and *Pullenia subsphaerica* in the first factor. In the second factor depth, *Bolivina pseudopunctata* and *Fursenkoina fusiformis* have high negative factor scores

when nitrate and *Miliammina oblonga* have high positive scores. In June species *Paratrochammina tricamerata, Portatrochammina stenhousei, Pullenia subsphaerica, Rhummblerella* and *Trochammina intermedia* have high positive factor one scores. In the second factor, *Ammodiscus sp., Miliammina lata*, *Astrononion echolsi* salinity and temperature have high positive scores. In the third factor, nitrate and *Fursenkoina fusiformis* have high negative scores and the fourth factor has one high score in the species *Haplophagmoides parkerae*. (Table 3).

TABLE 3. THE PC FACTOR ANALYSIS FOR APRIL AND JUNE CTG DATA.

	April Factor Scores		June Factor Scores			
	PC Factor 1	PC Factor 2	PC Factor 1	PC Factor 2	PC Factor 3	PC Factor 4
Depth	-0.541	**-0.752**	0.554	-0.218	-0.638	0.472
Nitrate	0.211	**0.728**	-0.19	0.177	**0.895**	0.196
Oxygen	**0.776**	0.314	0.182	**0.906**	-0.361	0.053
Temperature	0	0	-0.235	**-0.85**	0.331	-0.124
Salinity	**-0.993**	0.02	-0.057	**-0.704**	0.432	0.133
Ammodiscus sp.	0	0	0.306	**-0.743**	-0.453	0.382
Astrononion echolsi	**-0.835**	0.52	-0.403	**-0.804**	0.377	-0.126
Bolivina pseudopunctata	0.337	**-0.861**	-0.284	0.149	-0.597	-0.135
Fursenkoina fusiformis	0.244	**-0.705**	-0.114	-0.308	**-0.806**	0.424
Globocassidulina subglobosa	-0.483	0.506	**0.961**	0.08	-0.006	0.041
Haplophragmoides parkerae	0	0	-0.341	0.349	0.417	**0.758**
Labrospira wiesneri	0	0	0.67	-0.602	0.427	-0.075
Miliammina lata	0	0	0.177	**-0.811**	-0.078	0.31
Miliammina oblonga	0.261	**0.826**	0	0	0	0
Nonionella iridea	0.454	0.623	-0.318	0.439	0.522	0.653
Paratrochammina tricamerata	0	0	**0.981**	0.078	0.164	0.016
Portatrochammina stenhousei	**-0.753**	0.563	**0.979**	0.03	0.189	0.019
Pullenia subsphaerica	**-0.803**	-0.344	**0.974**	-0.106	0.113	0.107
Rosalina globularis	0.309	0.063	0	0	0	0
Rhummblerella sp.	0	0	**0.981**	0.078	0.164	0.016
Trochammina intermedia	0	0	**0.944**	0.189	0.118	-0.158
Percent Variance of Factors	39.521	31.908	35.749	28.163	18.943	8.987

In both the CTG and Rose Bengal data sets, *Miliammina oblonga* score positively with nitrate and negatively with depth. *Bolivina pseudopunctata* scores positively with

depth and *Fursenkoina fusiformis,* but negatively with nitrate in both seasons as well as in both Rose Bengal and CTG samples.

Univariate Comparisons of Means: ANOVA

A univariate ANOVA test was done to compare the top one centimeter of the April Rose Bengal data, the June Rose Bengal data, the April CTG data and the June CTG data. A P-value of .207 was found for all data indicating that the combined samples were not significantly different from each other (Appendix D). To determine whether the season or the staining method samples significantly differed from each other, a post-hoc Tukey test was conducted on the data (Table 4). Tukey comparison of means showed the CTG samples were most alike followed by similarity of the two Rose Bengal samples.

TABLE 4. ALL SAMPLE SET COMPARISONS. TUKEY COMPARISONS ARE CONSIDERED TO BE DIFFERENT POPULATIONS WHEN THE SIGNIFICANCE VALUE IS 0.05 AND BELOW.

(I) season	(J) season	Mean Difference (I-J)	Sig.
April Rose	June Rose	-29.72222	.992
	April Green	174.07778	.342
	June Green	148.68889	.484
June Rose	April Rose	29.72222	.992
	April Green	203.80000	.207
	June Green	178.41111	.319
April Green	April Rose	-174.07778	.342
	June Rose	-203.80000	.207
	June Green	-25.38889	.995
June Green	April Rose	-148.68889	.484
	June Rose	-178.41111	.319
	April Green	25.38889	.995

TABLE 5. SAMPLES ARE ARRANGED IN SUBSETS WHEN MEAN COUNTS IN THE SAMPLES ARE SIGNIFICANT AT THE 0.05 LEVEL. THE VALUES IN THE SUBSETS ACROSS FROM EACH SEASONAL GROUP ARE MEAN FORAMINIFERAL COUNTS. N IS THE NUMBER OF SPECIES.

		Subset for alpha = .05
season	N	Means
April Green	90	80.4333
June Green	90	105.8222
April rose	90	254.5111
June Rose	90	284.2333
Sig.		.207

Means for groups in homogeneous subsets are displayed.
Alpha Uses Harmonic Mean Sample Size = 90.

Their relationships can be more easily seen in Table 5, where all foraminiferal communities are shown to be similar with a significance of 0.207. This indicates that in the top one centimeter of sediment, the samples in each season and the samples using both staining methods are all part of the same statistical population.

CHAPTER 4

DISCUSSION

Rose Bengal Sample Statistics

The Shannon-Wiener Diversity Index was used to test species evenness seasonally and in each of the seven stations. The diversity data did not show relationships with any pore water chemical parameter, environmental condition, or depth in either season. When the diversity index is calculated on species abundances by stations, some interesting patterns emerge. In the month of June, similar species diversities can occur in three main geographical locations; stations located far to the north (stations 1, 2 and 3), stations near Brabant Island (stations 5 and 6) and stations located to the east of Brabant Island in Hughes Bay (stations 4 and 7) (Fig. 2). Station 1 is far above any other site with a value of 4.14. Values from stations 2, 3, 4, and 5 are all very similar and the values of stations 6 and 7 are similar. Therefore, diversity trends exist in June with stations 1, 2 and 3 in the north, stations 5 and 6 near Brabant, and stations 4 and 7 in east Hughes Bay. In the month of April this pattern is not apparent.

Results of the HCA showed the three northern sample sites clustered together in both seasons but the Brabant Island and Hughes Bay areas did not cluster in June. The difference in the clustering of sites 5, 6, 4 and 7 may be due to the dominance of *Haplophragmoides parkerae* and *Bolivina pseudopunctata,* the two species that group outside all others species in the HCAs (Fig. 11). The dominance of these species change seasonally (Figs 6 and 7) with *Bolivina pseudopunctata* most abundant at stations 4 and 7 in April and dominant in 5 and 6 in June*,* and *Haplophragmoides parkerae* most abundant at the 5 and 6 sites in April, becoming more abundant in June

at sites 4 and 7.

HCA reveals that April and June can be differentiated by species assemblages (Fig.11). In April, species *Miliammina lata, Labrospira jeffreysii and Nodulina kerguelensis* group together and are in abundances over 1% in April only. The June assemblage is differentiated by the species *Bulimina aculeata* and *Textularia wiesneri*, which cluster together and are in abundances over 1% only in June.

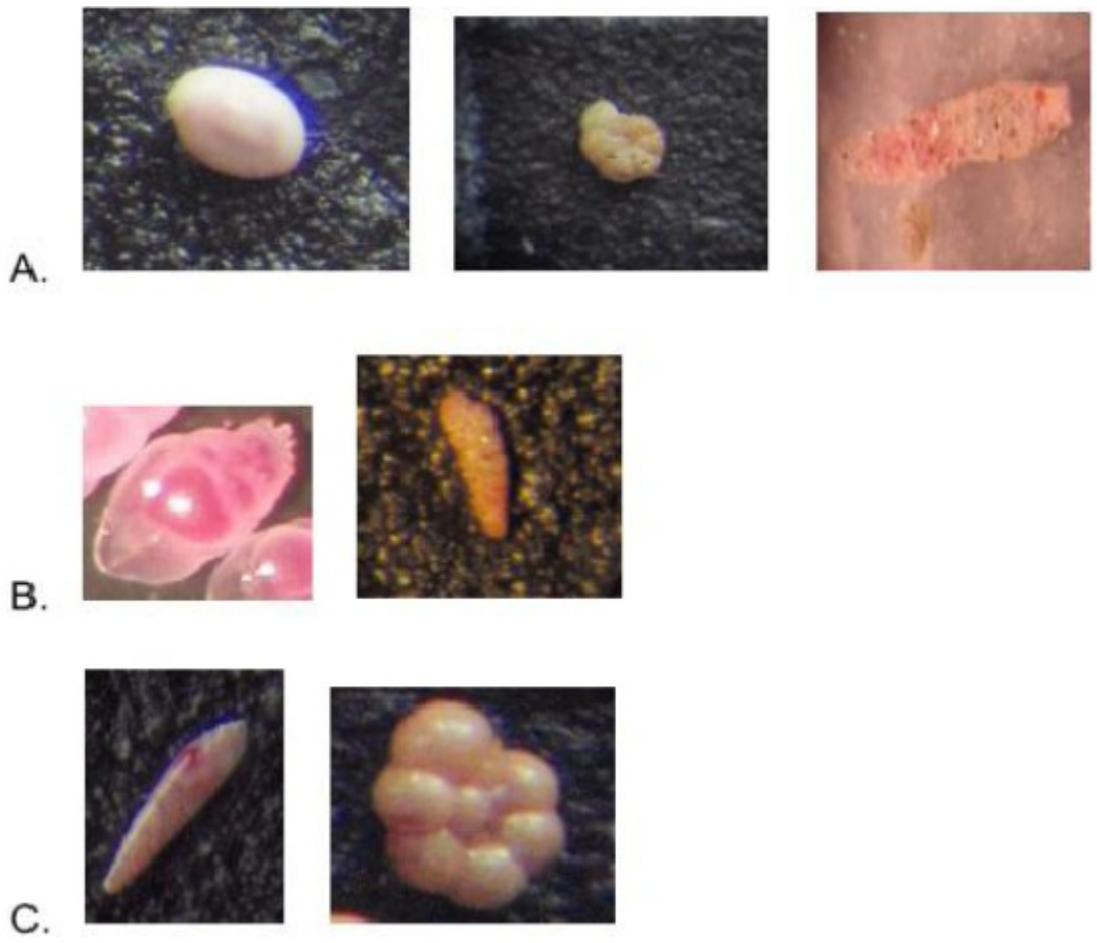

Figure 11. Seasonal assemblages species named from left to right: A. The April assemblage, *Miliammina lata, Labrospira jeffreysii* and *Nodulina kerguelensis*. B. The June assemblage *Bulimina aculeata* and *Textularia wiesneri* C. Two most abundant species in study are outliers in cluster analyses, *Bolivina pseudopunctata* and *Haplophragmoides parkerae*.

Seasonal clusters can be grouped according to geography, as shown in the diversity and station cluster results. In April species cluster in the three northern sites are and have abundances of *Portatrochammina stenhousei* (16%, 3%, 4%), *Miliammina oblonga* (5%, 1%, 13%), *Trochammina intermedia* (13%, 1%, 8 %), and *Adercotryma glomeratum* (13%, 2%, 7%) respectively. The April species cluster of *Astrononion echolsi* (7%, 4%), *Epistominella exigua* (11%, 2%), *Nonionella iridea* (10%, 2%), *Fursenkoina fusiformis* (0%, 7%) and *Ammodiscus sp.* (2%, 1%) occurs in the Brabant Island area (sites 5 and 6). The only two species that are abundant in site 7 are *Haplophragmoides parkerae* (48%) and *Bolivina pseudopunctata* (32%).

In June, the largest species cluster grouped together because they have low abundances in all stations. The two species *Bulimina aculeata* and *Saccammina sp.* have their highest abundances in the northern sites (station 1 abundances are 5% and 7% respectively). *Portatrochammina stenhousei, Astrononion echolsi* and *Fursenkoina fusiformis* in cluster 3, also have high abundances in the three northern sites in June. *Haplophragmoides parkerae* and *Bolivina pseudopunctata* have high abundances in sites 5, 6 and 7.

These patterns define regional assemblages in both seasons (Table 6). The April northern sites (southern Bransfield) assemblage contains the species *Portatrochammina stenhousei*, *Miliammina oblonga*, *Trochammina intermedia* and *Adercotryma glomeratum,* dominated by species *Portatrochammina stenhousei*, which will bare the name of the assemblage. Near Brabant Island, the *Epistominella exigua* assemblage includes *Astrononion echolsi, Epistominella exigua, Nonionella iridea, Fursenkoina fusiformis* and *Ammodiscus sp.* Near Hughes Bay the *Haplophragmoides*

parkerae and *Bolivina pseudopunctata* assemblage occurs in April. In June *Bulimina aculeata* and *Saccammina sp.* have high abundances in the northern station sites and are also the species that define the season as a whole. Two clusters in June exhibit similar patterns, and so group into one assemblage that is higher in abundances in the three northern sites. These species are *Portatrochammina stenhousei, Astrononion echolsi* and *Fursenkoina fusiformis* in one cluster and *Epistominella exigua, Globocassidulina subglobosa,* and *Nonionella iridea* of the other cluster. *Nonionella iridea* is the name given to this assemblage for having highest abundances in these three northern sites. (Table 6, Appendix B).

TABLE 6. SPECIES ASSEMBLAGES IN THE THREE GEOGRAPHICAL REGIONS IN APRIL AND JUNE.

Location	Northern Sites (Northern Bransfield Strait)	Brabant Island Sites	Hughes Bay Sites
April Assemblage	***Portatrochammina stenhousei*****:** *Miliammina oblonga*, *Trochammina intermedia Adercotryma glomeratum*, *Portatrochammina stenhousei*	***Epistominella exigua:*** *Astrononion echolsi, Epistominella exigua, Nonionella iridea, Fursenkoina fusiformis, Ammodiscus sp.*	***Haplophragmoides parkerae, Bolivina pseudopunctata***
June Assemblage	***Nonionella iridea:*** *Portatrochammina stenhousei, Astrononion echolsi Fursenkoina fusiformis Epistominella exigua, Globocassidulina subglobosa, Nonionella iridea*	*Bolivina pseudopunctata*	*Haplophragmoides parkerae*

Some of the species that cluster together have similar environmental preferences. Although no species that define the total April assemblage have high scores on the PC analysis, *Fursenkoina fusiformis, Epistominella exigua* and *Nonionella iridea* form an assemblage of high depth species because of their high abundances only in deep sites and high PC scores in factor 1 with depth and salinity. A shallow assemblage can also be deduced from factor 1 of species *Miliammina oblonga, Miliammina lata* and *Trochammina intermedia* because they score high with but are inversely related to depth. These species are associated with nitrate and oxygen (high positive PC scores). The two seasons can be compared to each other only on one point. *Portatrochammina stenhousei* retains a positive relationship with salinity and a negative relationship with oxygen in both seasons, as shown by the high factor scores both in April and June.

Bulimina aculeata of the June species assemblage is associated with Circumpolar Deep Water, characterized by temperatures around 1-2° C and high salinities (34.7 ppt), moderately oxygenated environments and organic rich sediments (Ishman and Sperlng, 2002). This is consistent with this study, where *Bulimina aculeata* is inversely related to oxygen, and positively related to temperature and salinity (in factor 1 of June). Nitrate and *Epistominella exigua, Globocassidulina subsphaerica* and *Nonionella iridea* have a positive relationship. Species *Portatrochammina stenhousei, Astrononion echolsi* and *Fursenkoina fusiformis* of the June northern site assemblage relate positively with salinity, temperatures and negatively with oxygen. *Bolivina sp*. and *Bulimina aculeata* are deep water, high organic and low oxygen tolerant species

(Bergen, and O'Neil, 1979; Mackensen et al. 1995). The dominance of *Bulimina aculeata* in June could be due to the flow of Deep Circumpolar Water to the area, with which the species has been associated (Ishman and Sperling, 2002). *Lagenammina difflugiformis,* and *Nodulina dentaliniformis* of the April Rose Bengal seasonal assemblage, show a negative relationship with depth in this study and are also considered a shallow water species in a study by Lukina, (2001). *Lagenammina difflugiformis*, in a study by Heinz and Hemleben (2003), was found to be a species positively correlated with oxygen concentrations and low food supplies in the Arabian Sea. In this study, *Lagenammina difflugiformis* in June explains 21% of the variation with *Bolivina pseudopunctata* and *Trochammina intermedia*, making it a dominant species in times of low food supply. The *Fursenkoina fusiformis* and *Bolivina pseudopunctata* cluster, as well as species *Globocassidulina subglobosa, Epistominella exigua, Saccammina sp* and *Nonionella iridea* have been found to be a low oxygen tolerant species (Bernhard and Bowser, 1999; Rasmussen et al., 2002; Szarek, et al. 2002). In contrast, *Miliammina* sp. has been associated with well oxygenated environments (Hanagata, 2003). *Globocassidulina subglobosa* has the largest abundances in the shallow sites, consistent with this study; it has also been identified to be a warm, shallow water species in a study by Yasuda in 1997. The presence of *Bolivina pseudopunctata* indicates a high organic carbon environment while *Epistominella exigua, Globocassidulina subglobosa, Nonionella sp.* and *Haplophragmoides parkerae* are characteristic of environments with seasonal organic flux (Rasmussen et al., 2002; Hanagata, 2003; Heinz, and Hemleben, 2003; Rathburn et al., 2001; Yasuda, 1997). *Epistominella exigua, Globocassidulina subglobosa,*

Nonionella iridea and *Haplophragmoides parkerae* cluster together in the June northern sites. The replacement of the April assemblage with this June assemblage (season of low productivity) shows further evidence that they may be opportunistic species. These species could be dominating over species that are not as tolerant of low organic matter conditions. In the regional seasonal assemblages, the northern Bransfield Strait (stations 1-3) species show changes in abundances that indicate they are opportunistic. The April *Portatrochammina stenhousei* assemblage becomes less abundant June when the in *Nonionella iridea* species assemblage (*Portatrochammina stenhousei, Astrononion echolsi* and *Fursenkoina fusiformis, Epistominella exigua, Globocassidulina subglobosa,* and *Nonionella iridea*) becomes dominant. *Bulimina aculeata* and *Saccammina sp* increase in abundances in June in the northern sites, where their abundances were below 1% in April, showing evidence that they maybe opportunistic. Two other opportunistic species are *Haplophragmoides parkerae* and *Bolivina pseudopunctata.* In June *Haplophragmoides parkerae* and *Bolivina pseudopunctata* are dominant in the Brabant Island area (station 5: 19% and 59% and station 6: 15% and 57%, respectively), where no other species show abundances higher than 2%, and, to a lesser extent, in the Hughes Bay region (stations 4 and 7), making up 20-40% of the assemblages. These two species are dominating in these regions in June (*Haplophragmoides parkerae*: 18% in 5 and 15% in 6 and *Bolivina pseudopunctata*: 58% in 5 and 57% in 6), when no other species are as abundant.

Comparing the Rose Bengal to the CellTracker Green Samples

It has been argued that the Rose Bengal method of staining foraminifera could be biased. Bernhard et al. (2006) suggests that Rose Bengal can stain protoplasm in

the test after the foraminifer has died; depending on sediment depth and oxygen concentrations of the bottom waters. If this is the case, more foraminifera could be counted as being alive than were actually alive in the seasons collected. This would make the season's foraminifera seem artificially rich in diversity, as well as overestimating species' population sizes and creating false assemblages of species for each season. To address this problem, a protein tracker called CellTracker Green (CTG) was used to compare the results to the Rose Bengal stained samples.

The lower Shannon-Wiener Diversity values for the CTG data show overall less species evenness and more dominance of a few or a single species. This is especially striking for station 4, where both April and June values are below 1 (0.95, and 0.88), showing the least species evenness of any station in the entire study. The numbers reflect that the species *Nonionella iridea* makes up more than 75% of the population in these samples. The station 2 value is the highest of the CTGs in both seasons; in June, is the only value that exceeds 2, giving it the most species evenness of the CTG stations.

The lack of clear clustering in the April species is puzzling. Five species in the sample do not cluster but separate from the rest of the data one by one. The species that make up most of the sample abundances in April are: *Bolivina pseudopunctata* 37%; *Nonionella iridea,* 22%; *Astrononion echolsi,* 10%; *Globocassidulina subglobosa,* 8%; and *Rosalina globularis,* over 2%. The cluster that does emerge for the April data, *Pullenia subsphaerica, Miliammina oblonga*, *Fursenkoina fusiformis*, *Textularia wiesneri* and *Portatrochammina stenhousei*, remains in the combination April and June cluster analyses with the exception of *Fursenkoina fusiformis* and *Portatrochammina*

stenhousei. The data clusters for June are intuitive. *Fursenkoina fusiformis* and *Bolivina pseudopunctata* are almost exclusively found in the 63 micron sized samples, often occur in similar numbers, and are both low-oxygen tolerant species and indicators of organically rich sediments (Ishman and Sperling, 2002; Bernhard, and Bowse, 1999; Rasmussen et al., 2002). The species *Haplophragmoides parkerae, Nonionella iridea, Astrononion echolsi* and *Globocassidulina subglobosa* group outside the other clusters because they have very high abundances in the June samples and occur often with all other species.

None of the species that form the seasonal assemblage in the Rose Bengal data are present in numbers higher than 1% in the CTG April data. This leads to completely different seasonal assemblages for the CTG samples. The assemblage that emerges for April is the species *Pullenia subsphaerica, Miliammina oblonga* and *Textularia wiesneri*. The CTG assemblage for the month of June is *Ammodiscus sp., Labrospira wiesneri, Miliammina lata* and *Paratrochamina tricamerata*.

Even though the CTG incubation method is more exact in differentiating the living from dead foraminifera, the CTGs were more difficult to pick and identify, which could partially account for these differences in assemblages from the Rose Bengal samples. Three separate fluorescent microscopes and one light microscope where used to pick and identify the CTG samples; only one of the microscopes was specially made to pick such samples. Some of the differences in the Rose Bengal data compared to the CTG data may be accounted for in the changes of equipment, environment and of the questionable nature of the equipment used. Some of the microscopes may have had fluorescent filters that illuminated the living foraminifera better than others; also, the

rooms that the microscopes were housed in had different darkness levels. Viewing the samples with different levels of light in the room can be distracting and could have affected the final counts. Evidence for this can be seen in the wide ranges in the number of living foraminifera found between samples.

It is also possible that the Rose Bengal samples were partially biased due to residual cytoplasm in the test. Evidence for this is in the lower average CTGs abundances compared to the Rose Bengal (around 180 in both seasons). Or finally, the diversity and cluster analyses of the CTG samples cannot be compared to the Rose Bengal samples because the top 1cm does not accurately describe the species assemblages.

Correlating Seasons, Rose Bengal to CTG data and Vertical Distributions

The ANOVA and post-hoc Tukey tests show that the same-season data sets are significantly similar. These samples should be from similar foraminiferal communities under similar environmental and geochemical conditions. The two CTG data sets are the most similar possibly because the sample sizes are very similar (Table 2, Fig. 5). It is hard to say why all of the data sets correlate. This correlation was only done on the 0-1 cm interval of sediment, (CTG samples were only collected at that interval). From this analysis, it appears that in order see the seasonal changes in foraminiferal populations and assemblages, more than this interval must be sampled. This lack of clear seasonal assemblages in the top one centimeter suggests that distributions throughout the sediments are important in studying foraminiferal populations and assemblages.

This also leads to the possibility of seasonal vertical migration. Studies of vertical distribution patterns have not been done with Antarctic foraminifera but have

been studied in other locations (Ohga and Kitazato,1997). The top 0-1 cm of sediment has been shown to contain a major portion of stained foraminifera (58%), but it was noted that the vertical distributions changed through time (to the upper 2cm of sediment) (Hess et al. 2005). In a study by Mincks et al (2005), it is hypothesized that organic material on the sediment surfaces can remain viable for months after influxes from surface productivity, but that it most greatly affects organisms in the top 2 cm of sediment. The lack of statistically significant changes in benthic foraminiferal assemblages in the top sediment interval is consistent with this hypothesis. It appears from the vertical distributions that all species studied can still be described as infaunal. Distributions range throughout the full 10 cm of sediment in the cores but all species are most abundant in the top 2 cm. Foraminifera are considered microbioturbators and have been known to migrate seasonally through sediments. Ohga and Kitazato (1997) found evidence of foraminifera in the Sagami Bay near Japan migrating deeper through sediments in winter months in response to sediment oxygen concentrations. Consistent with the hypothesis, seasonal assemblage species in stations 5 and 6 in this study show some migration down core in the month of June (Fig. 7).

The top centimeter of sediment contains the largest abundances of foraminiferal species because it is most oxygenated. In previous studies, sediments below 2cm are considered to be anoxic, but that burrowing animals such as worms will help to oxygenate sediment far down into the sediment (Hess et al. 2005). A study by Ohga and Kitazato (1997) recognizes the possibility of oxygenated pockets of sediment around polychaete tubes within the top 10 cm. This bioturbation and open borrow oxidizing of sediments is supported in this study in that many worms were found stained

throughout the full 10 cm of sample cores. The stained worms were not found below 2 cm in station 2, which had very coarsely-grained sandy sediments and was also nearly devoid of living foraminifera in larger than 150 microns and had many fewer in the 63-150 micron size fraction. The vertical distribution of the dominant seasonal species in June show higher total abundances in lower intervals of the cores compared to April. There is no decrease in abundances in the top intervals, but the higher abundances in lower intervals of the core show that more species are capable of living in deeper sediments in winter months. (Fig. 8A-N).

Pore Water Chemistry and Environmental Conditions

Temperature, salinity, and oxygen were the environmental conditions recorded with the collection of the sediment samples, and sediment pore waters were collected and analyzed for nitrate, alkalinity, and phosphate by colleagues from the University of Florida. Oxygen, salinity and temperature do not significantly differ from season to season.

An increase of phosphate and alkalinity concentrations within the upper 30 cm of the sediment cores indicates rapid reduction of the sediments and can relate to productivity in the sediments. This measure cannot be used for seasonal comparisons because phosphate was not collected in the month of April. However, it is a valuable measure to compare regional patterns in the individual station sites. Stations 5 and 6 have significantly higher values of pore water phosphate and alkalinity than any of the other stations in June. The alkalinity values for stations 5 and 6 were also high in April. This indicates that the area around stations 5 and 6, Brabant Island, may have been

more productive than the other sites in this study. These two stations have high foraminiferal abundances in the Rose Bengal, as well as the CTG samples. The June Rose Bengal samples total foraminifera counts for this region are double that of the abundances in stations 2, 3, 4 and 7. The species abundances in April stations fluctuate less, though stations 2 and 3 have smaller total counts than the other stations. Phosphate, alkalinity and nitrate concentrations in the northern stations, 1, 2 and 3, are slightly lower than the other sample sites.

Values of nitrate and alkalinity show significant seasonal differences, but only in the 3 northern sample sites. This indicates seasonal changes in pore water geochemistry in the Bransfield strait region. Foraminiferal distributions are influenced by water masses in the Bransfield Strait region (Szymcek et al. 2007) and it was hypothesized in a proposal by Ishman et al. (2008) that foraminiferal communities in the southern Bransfield would differ from those of the northern Gerlache Strait due to productivity differences observed by Anadon and Estrada (2002) that showed that the Bransfield strait was the least productive region of the western Antarctic Peninsula area studied.

Seasonal Differences in the Regions of the Study Area

It is not debated that Austral winter is the time of lowest productivity and the spring bloom brings fluxes of organics to benthos on the western margin of the Antarctic Peninsula (Mincks et al., 2005; Holm-Hansen & Mitchell, 1991; Anadón & Estrada, 2002; Karl et al. 1990). In a study by Anadon and Estrada (2002), fluorescence was studied during the summer bloom (December-January) and after the summer bloom

(February). They found a fluorescence of about 0.1 in the summer months of all regions sampled in this study. After the summer bloom, however, the fluorescence changed regionally from around 0.05 in the Northern sites of this study to 0.2 - 0.3 in Hughes Bay and values of 0.4 in the southern Brabant Island region. The data are consistent with the geographic foraminiferal groupings in this study, but it is uncertain whether these patterns remain in the non-bloom winter periods.

CHAPTER 5

SUMMARY

The purpose of this study was to identify seasonal variations in benthic foraminifera for Austral autumn and winter in the northern Bransfield and southern Gerlache straits and to characterize species with respect to environmental conditions. Seasonal variations were found in the cluster analysis and in the PC factor analysis. The cluster analysis identified two overall seasonal species assemblages from the data: an April assemblage of *Miliammina lata, Labrospira jeffreysii and Nodulina kerguelensis* and a June assemblage characterized by the species *Bulimina aculeata* and *Textularia wiesneri.* Regional species assemblages show evidence for opportunistic species in April with the *Nonionella iridea* assemblage, the *Bulimina aculeata* and *Saccammina sp* assemblage and June with the *Haplophragmoides parkerae* and *Bolivina pseudopunctata* assemblage. A deep water species assemblage can also be defined in the month of April with the species *Fursenkoina fusiformis, Epistominella exigua* and *Nonionella iridea* and a corresponding shallow assemblage of species *Miliammina oblonga, Miliammina lata* and *Trochammina intermedia*. Principal Component Factor analyses indicate that the species in the June assemblage are negatively affected by oxygen concentrations, while the species in the April assemblage cannot be strongly correlated with any of the environmental conditions measured. Biodiversity, as indicated by the Shannon-Wiener Diversity Index, shows a relationship with stations that can be

grouped into three geographical regions, which are also consistent with the cluster analysis of the stations.

Ninety species were found in three-hundred and sixty processed samples from seven sites collected in April and June using two methods of staining, Rose Bengal and CTG. The species assemblages of the CTG samples do not compare to the Rose Bengal samples. There are two main possibilities for the discrepancy. First, papers have been published disputing the reliability of the Rose Bengal staining method because of the possible bias toward more species and higher population sizes, and support for the CTG incubation method is argued to be a more reliable measure of living assemblages. Secondly, laboratory and equipment variability when analyzing and identifying the CTG samples permitted for high equipment and user error. The species in the Rose Bengal samples were more diverse and had larger abundances, possibly due to the staining of residual cytoplasm in the foraminiferal test or because there were more Rose Bengal samples collected than CTG samples.

From the ANOVA and Tukey tests, all the sample sets correlate with each other, showing that species assemblages in the top one centimeter of sediment are not significantly different. Cluster analysis and core plot analysis do show species seasonality, demonstrating that foraminiferal populations should be sampled in deeper sediment intervals in order to fully understand assemblage dynamics.

Phosphate and alkalinity measures suggests a region of high productivity in June around Brabant Island. Differences in seasonal alkalinity and nitrate values in the three northern, more oligotrophic, sample sites show further evidence of strong regional affects on benthic foraminiferal communities. *Epistominella exigua, Globocassidulina subglobosa, Nonionella iridea* and *Haplophragmoides parkerae* cluster together in June Rose Bengal samples and are characterized as high organic flux species (opportunistic) for their assemblage dominance in the June northern sites. Species *Bulimina aculeata* and *Bolivina pseudopunctata* are dominant in the Brabant Island and Hughes Bay region and are the only species with high abundances in the Brabant Island sites in June, showing evidence that they are also opportunistic. (Rasmussen et al., 2002; Hanagata, 2003; Heinz, and Hemleben, 2003; Rathburn et al., 2001; Yasuda, 1997).

This study will serve as a modern analog for fossil foraminiferal assemblages from the western AP, and provide important information to help interpret paleoclimactic conditions through the species assemblages identified. Understanding the population dynamics and geochemistry of these samples will improve our ability to assess past ecological conditions and make clearer the difference between paleoclimate changes and seasonally produced environmental changes.

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APPENDICES

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	1	81	3		18	1					
1-1.5	1	51			2						
1.5-2	1	41			1						
2-2.5	1	41		1							
2.5-3	1	31			33						
3.-4.	1	61			2						
4.-5	1	91									
5.-6	1	71			1						
6.-7	1	61									
7.-8	1	61									
8.-9	1	61									
9.-10	1	61									
Totals			3	1	57	1	0	0	0	0	0

63µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	16	81	928	0	368	0	0	0	0	0	0
1-1.5	16	51	0	0	48	0	0	0	0	0	0
1.5-2	8	41	0	0	56	0	0	0	0	0	136
2-2.5	8	41	0	0	0	0	0	0	0	0	80
2.5-3	4	31	0	0	4	0	0	0	0	0	0
3.-4.	4	61	0	0	4	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	8	0

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	1	81						4			
1-1.5	1	51				13					
1.5-2	1	41	5			8					
2-2.5	1	41									
2.5-3	1	31				9		5			
3.-4.	1	61				3					
4.-5	1	91				5					
5.-6	1	71				2					
6.-7	1	61									
7.-8	1	61				4					
8.-9	1	61				4					
9.-10	1	61									
Totals			5	0	0	48	0	9	0	0	0

63µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	16	81	o	o	o	o	o	o	o	o	o
1-1.5	16	51	0	0	0	0	16	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	0	0
2-2.5	8	41	0	0	0	0	0	0	0	0	0
2.5-3	4	31	0	0	0	0	0	0	0	0	0
3.-4.	4	61	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	1	81									
1-1.5	1	51									
1.5-2	1	41									
2-2.5	1	41									2
2.5-3	1	31									1
3.-4.	1	61									
4.-5	1	91									
5.-6	1	71									
6.-7	1	61									
7.-8	1	61									
8.-9	1	61									
9.-10	1	61									
Totals			0	0	0	0	0	0	0	0	3

63µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	16	81	0	0	0	0	0	0	0	0	560
1-1.5	16	51	0	0	0	0	0	0	0	0	160
1.5-2	8	41	0	0	0	0	0	0	0	0	120
2-2.5	8	41	0	0	0	0	0	112	0	0	8
2.5-3	4	31	0	0	0	0	0	0	0	0	0
3.-4.	4	61	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	1	81	9	5	4	1				71	5
1-1.5	1	51			2					17	9
1.5-2	1	41									13
2-2.5	1	41		3						19	2
2.5-3	1	31			5			3	10	34	7
3.-4.	1	61						1		15	6
4.-5	1	91								7	19
5.-6	1	71								3	13
6.-7	1	61								4	4
7.-8	1	61								6	10
8.-9	1	61				3					12
9.-10	1	61								1	17
Totals			9	8	11	4	0	4	10	177	117

63µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	16	81	0	0	0	0	0	176	0	0	0
1-1.5	16	51	0	0	0	0	0	64	0	48	0
1.5-2	8	41	0	0	0	0	0	112	0	0	0
2-2.5	8	41	0	0	0	0	0	0	0	0	0
2.5-3	4	31	0	0	0	0	0	4	4	0	8
3.-4.	4	61	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	32	0	0	0

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	1	81	18	20	2						
1-1.5	1	51			19						
1.5-2	1	41	3	11		2	1	1			
2-2.5	1	41	2		47			4			
2.5-3	1	31	2	16	17	4		1			
3.-4.	1	61	5	12							
4.-5	1	91	11		19			4			
5.-6	1	71	22								
6.-7	1	61	14	2							
7.-8	1	61	5	5							
8.-9	1	61	18					1			
9.-10	1	61	38					1			
Totals			138	66	104	6	1	12	0	0	0

63µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	16	81	16	0	0	0	0	48	0	0	0
1-1.5	16	51	0	0	32	0	0	16	0	0	0
1.5-2	8	41	32	72	0	0	0	0	0	0	0
2-2.5	8	41	16	0	0	0	0	0	0	0	0
2.5-3	4	31	24	0	0	0	0	4	0	0	0
3.-4.	4	61	8	0	0	0	0	4	0	0	0
4.-5	8	91	32	0	0	0	0	0	0	0	0

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	1	81					4	1			
1-1.5	1	51		1			4				
1.5-2	1	41					1		1		
2-2.5	1	41									
2.5-3	1	31	1								4
3.-4.	1	61									
4.-5	1	91				2					
5.-6	1	71									
6.-7	1	61									
7.-8	1	61									
8.-9	1	61						1			
9.-10	1	61									
Totals			1	1	0	2	9	2	1	0	4

63µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	16	81	0	176	0	0	720	0	0	0	0
1-1.5	16	51	0	48	0	0	224	0	0	0	0
1.5-2	8	41	0	0	0	0	56	0	0	0	0
2-2.5	8	41	0	8	0	0	8	0	0	0	0
2.5-3	4	31	0	0	0	0	20	0	0	0	0
3.-4.	4	61	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	32	0	0	0	0

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	1	81			29		55		4		
1-1.5	1	51									
1.5-2	1	41				7	2	3			
2-2.5	1	41									
2.5-3	1	31	1		4		16	23	2		1
3.-4.	1	61			1		2				1
4.-5	1	91						2			
5.-6	1	71									
6.-7	1	61						1			
7.-8	1	61									
8.-9	1	61						2			
9.-10	1	61									
Totals			1	0	34	7	75	31	6	0	2

63µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	16	81	0	0	32	0	48	0	0	0	0
1-1.5	16	51	0	0	32	0	32	0	0	0	0
1.5-2	8	41	0	0	0	0	61	32	0	0	0
2-2.5	8	41	0	0	0	0	0	0	0	0	8
2.5-3	4	31	0	0	0	0	0	0	0	0	0
3.-4.	4	61	0	0	4	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0

LMG 08-04
STN:1 D:A POS: 4
150µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	1	81						1			255
1-1.5	1	51						1			68
1.5-2	1	41									59
2-2.5	1	41						20			100
2.5-3	1	31				9	1	15		3	227
3.-4.	1	61									48
4.-5	1	91									69
5.-6	1	71									41
6.-7	1	61									25
7.-8	1	61									30
8.-9	1	61									41
9.-10	1	61									57
Totals			0	0	0	9	1	37	0	3	1020

63µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	16	81	0	0	0	0	0	352	0	16	3440
1-1.5	16	51	0	0	0	0	0	416	0	16	1152
1.5-2	8	41	0	0	8	0	0	56	0	0	696
2-2.5	8	41	0	0	0	0	0	8	0	0	248
2.5-3	4	31	0	0	0	0	0	32	0	0	104
3.-4.	4	61	0	0	0	0	0	8	0	0	28
4.-5	8	91	0	0	24	0	0	16	0	0	144

5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	8	61	0	0	0	0	0	0	0	0	0
9.-10	8	61	0	0	0	0	0	0	0	0	0
Totals			928	0	480	0	0	0	0	8	216

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	8	51	0	0	32	0	80	0	0	8	0
1-1.5	4	61	0	0	4	0	0	0	0	0	0
1.5-2	16	31	0	0	0	0	0	0	0	32	0
2-2.5	8	61	8	0	24	0	0	0	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			8	0	60	0	80	0	0	40	0

63µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	16	51	16	0	32	0	0	0	0	0	16

5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	8	61	0	0	0	0	0	0	0	0	0
9.-10	8	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	16	0	0	0	0

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	8	51	56	0	16	40	0	0	0	0	0
1-1.5	4	61	0	0	0	4	0	0	0	0	0
1.5-2	16	31	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	0	0	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			56	0	16	44	0	0	0	0	0

63µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	16	51	48	0	0	0	0	0	0	0	0

5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	8	61	0	0	0	0	0	0	0	0	0
9.-10	8	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	112	0	0	848

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	8	51	0	0	0	8	8	0	0	0	0
1-1.5	4	61	0	0	0	0	0	0	0	0	0
1.5-2	16	31	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	0	0	0	0	64
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	8	8	0	0	0	64

63µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	16	51	0	0	528	0	0	176	16	0	48

5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	8	0	0	8
7.-8	8	61	0	0	0	0	0	0	0	0	8
8.-9	8	61	0	0	0	0	0	0	0	0	8
9.-10	8	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	396	4	48	32

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	8	51	0	0	0	0	0	0	0	8	0
1-1.5	4	61	0	0	0	0	0	0	8	4	0
1.5-2	16	31	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	0	0	40	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	8	0
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	48	20	0

63µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	16	51	0	0	0	0	0	0	16	0	0

5.-6	8	71	56	0	0	0	0	16	0	0	0
6.-7	8	61	8	0	0	0	0	0	0	0	0
7.-8	8	61	16	0	0	0	0	0	0	0	0
8.-9	8	61	24	0	0	0	0	0	0	0	0
9.-10	8	61	24	0	0	0	0	0	0	0	0
Totals			256	72	32	0	0	88	0	0	0

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	8	51	0	0	96	0	0	0	0	0	0
1-1.5	4	61	0	0	4	0	0	0	0	0	0
1.5-2	16	31	0	0	32	0	0	0	0	0	0
2-2.5	8	61	16	0	0	0	0	0	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			16	0	132	0	0	0	0	0	0

63µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	16	51	16	0	0	32	0	0	0	0	0

5.-6	8	71	0	0	0	0	24	0	0	0	0
6.-7	8	61	0	0	0	0	24	0	0	0	0
7.-8	8	61	0	0	0	0	8	0	0	0	0
8.-9	8	61	0	0	0	0	16	0	0	0	0
9.-10	8	61	0	0	0	0	8	0	0	0	0
Totals			0	232	0	0	1140	0	0	0	0

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	8	51	0	0	0	0	8	0	8	80	0
1-1.5	4	61	0	0	0	0	0	0	0	0	0
1.5-2	16	31	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	16	0	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	24	0	8	80	0

63µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	16	51	0	0	0	0	64	0	0	0	0

5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	8	61	0	0	0	0	0	0	0	0	0
9.-10	8	61	0	0	0	0	0	0	0	0	0
Totals			0	0	68	0	100	32	0	0	8

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	8	51	0	0	0	0	0	0	0	0	0
1-1.5	4	61	0	0	0	0	0	0	0	0	0
1.5-2	16	31	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	0	8	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	8	0	0	0

63µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	16	51	0	0	0	0	0	64	0	0	0

5.-6	8	71	0	0	8	0	0	0	0	0	104
6.-7	8	61	0	0	8	0	0	0	0	0	56
7.-8	8	61	0	0	8	0	0	0	0	0	40
8.-9	8	61	0	0	0	0	0	0	0	0	48
9.-10	8	61	0	0	0	0	0	0	0	0	32
Totals			0	0	56	0	0	888	0	32	6092

STN:2 D:A POS:10
150µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	8	51	0	0	0	0	0	0	0	0	448
1-1.5	4	61	0	0	0	0	0	0	0	0	24
1.5-2	16	31	0	0	0	0	0	0	0	0	64
2-2.5	8	61	0	0	0	0	0	24	0	0	200
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	8
4.-5	16	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	4	71	0	0	0	0	0	0	0	0	0
7.-8	16	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	16	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	24	0	0	744

63µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	16	51	0	0	0	0	0	16	0	0	1088

1-1.5	16	61	48	0	16	0	0	0	0	304	336
1.5-2	8	31	0	0	8	0	0	0	0	32	40
2-2.5	16	61	0	0	0	0	0	0	0	16	80
2.5-3	8	61	0	0	0	0	0	0	0	8	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	8	71	0	0	0	0	0	0	0	8	0
7.-8	4	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	4	61	4	0	0	0	0	0	0	0	0
Totals			68	0	56	0	0	0	0	368	472

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	2	101	14	0	14	0	0	0	0	0	0
1-1.5	2	41	0	0	4	0	0	0	0	0	0
1.5-2	4	51	0	0	0	0	0	0	0	0	0
2-2.5	2	61	0	0	8	0	0	0	0	8	0
2.5-3	4	41	0	0	0	0	0	0	0	0	0
3.-4.	1	61	0	0	0	0	0	0	0	0	0
4.-5	1	61	0	0	1	0	0	0	0	3	0
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	2	91	0	0	0	0	0	0	0	0	0
7.-8	8	101	0	0	0	0	0	0	0	0	0
8.-9	1	81	0	0	0	0	0	0	0	0	0
9.-10	2	101	0	0	0	0	0	0	0	0	0
Totals			14	0	27	0	0	0	0	11	0

63µm

1-1.5	16	61	0	0	16	0	0	0	0	0	0
1.5-2	8	31	0	0	0	0	0	0	0	0	0
2-2.5	16	61	0	0	0	0	0	0	0	0	0
2.5-3	8	61	8	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	8	71	0	0	0	0	0	0	0	0	0
7.-8	4	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	4	61	0	0	0	0	0	0	0	0	0
Totals			56	0	16	0	0	0	0	0	0

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	2	101	0	0	0	28	0	0	0	0	4
1-1.5	2	41	0	0	0	30	0	0	0	0	0
1.5-2	4	51	0	0	0	8	0	0	0	0	0
2-2.5	2	61	0	0	0	0	0	0	0	0	0
2.5-3	4	41	0	0	0	0	0	0	0	0	0
3.-4.	1	61	0	0	0	0	0	0	0	0	0
4.-5	1	61	0	0	0	1	0	0	0	0	0
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	2	91	0	0	0	2	0	0	0	0	0
7.-8	8	101	0	0	0	8	0	0	0	0	0
8.-9	1	81	0	0	0	0	0	0	0	0	0
9.-10	2	101	0	0	0	0	0	0	0	0	0
Totals			0	0	0	77	0	0	0	0	4

63µm

1-1.5	16	61	0	0	0	0	16	272	0	0	496
1.5-2	8	31	0	0	0	0	0	88	0	0	16
2-2.5	16	61	0	0	0	0	0	368	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	8	71	0	0	0	0	0	0	0	0	0
7.-8	4	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	4	61	0	0	0	0	0	0	0	0	0
Totals			0	0	528	0	16	904	16	0	560

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	2	101	0	0	0	0	0	0	0	0	0
1-1.5	2	41	0	0	0	0	0	0	0	0	0
1.5-2	4	51	0	0	0	0	0	0	0	0	0
2-2.5	2	61	2	0	0	0	0	0	0	0	0
2.5-3	4	41	0	0	0	0	0	0	0	0	0
3.-4.	1	61	0	0	0	0	0	0	0	0	0
4.-5	1	61	0	0	0	0	0	0	0	0	0
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	2	91	0	0	0	0	0	0	0	0	0
7.-8	8	101	0	0	0	0	0	0	0	0	0
8.-9	1	81	0	0	0	0	0	0	0	0	0
9.-10	2	101	0	0	0	0	0	0	0	0	0
Totals			2	0	0	0	0	0	0	0	0

63µm

1-1.5	16	61	0	0	0	0	0	0	0	0	0
1.5-2	8	31	0	0	0	0	0	0	8	0	0
2-2.5	16	61	0	0	0	0	0	0	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	8
4.-5	8	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	8	71	0	0	0	0	0	0	0	0	0
7.-8	4	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	4	61	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	24	0	8

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	2	101	0	0	0	0	0	22	0	118	10
1-1.5	2	41	0	0	0	0	0	0	0	4	4
1.5-2	4	51	0	0	0	0	0	4	0	12	12
2-2.5	2	61	0	0	0	0	0	2	0	4	12
2.5-3	4	41	0	0	0	0	0	0	0	0	12
3.-4.	1	61	0	0	0	0	0	0	0	1	0
4.-5	1	61	0	0	1	0	0	0	0	0	0
5.-6	8	91	0	0	0	0	0	0	0	0	16
6.-7	2	91	0	0	0	0	0	0	0	0	8
7.-8	8	101	0	0	0	0	0	0	0	0	72
8.-9	1	81	0	0	0	0	0	0	1	0	0
9.-10	2	101	0	0	0	0	0	0	0	0	14
Totals			0	0	1	0	0	28	1	139	160

63µm

1-1.5	16	61	0	0	0	368	0	32	0	0	0
1.5-2	8	31	0	0	0	32	0	0	0	0	0
2-2.5	16	61	0	0	0	0	0	16	0	0	0
2.5-3	8	61	8	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	12	0	0	0	0	4	0	0	0
6.-7	8	71	8	0	0	0	0	0	0	0	0
7.-8	4	61	4	0	0	0	0	0	0	0	0
8.-9	4	81	8	0	0	0	0	4	0	0	0
9.-10	4	61	0	0	0	0	0	12	0	0	0
Totals			56	0	0	432	0	68	0	0	0

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	2	101	24	16	12	0	0	0	0	0	0
1-1.5	2	41	0	0	0	18	0	0	0	0	0
1.5-2	4	51	4	20	76	0	0	0	0	0	0
2-2.5	2	61	14	0	4	0	0	0	0	0	0
2.5-3	4	41	28	0	0	0	0	0	0	0	0
3.-4.	1	61	0	0	1	0	0	0	0	0	0
4.-5	1	61	0	0	0	0	0	0	0	0	0
5.-6	8	91	72	0	0	0	0	0	0	0	0
6.-7	2	91	8	0	0	0	0	0	0	0	0
7.-8	8	101	32	0	0	0	0	0	0	0	0
8.-9	1	81	5	0	0	0	0	0	0	0	0
9.-10	2	101	14	0	0	0	0	0	0	0	0
Totals			201	36	93	18	0	0	0	0	0

63µm

1-1.5	16	61	0	16	0	0	32	0	0	64	0
1.5-2	8	31	0	0	0	0	0	0	0	0	0
2-2.5	16	61	0	0	0	0	0	0	0	0	0
2.5-3	8	61	0	0	0	0	8	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	8	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	8	71	0	0	0	0	0	0	0	0	0
7.-8	4	61	0	0	0	0	4	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	4	61	0	0	0	0	16	0	0	0	0
Totals			0	16	0	0	132	0	0	64	0

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	2	101	0	0	0	0	18	0	2	6	0
1-1.5	2	41	0	0	0	0	0	0	0	0	0
1.5-2	4	51	0	0	0	0	0	0	0	0	0
2-2.5	2	61	0	0	0	0	0	0	0	0	0
2.5-3	4	41	0	0	0	0	0	0	0	0	0
3.-4.	1	61	0	0	0	0	0	0	0	0	0
4.-5	1	61	0	0	0	0	0	0	0	1	0
5.-6	8	91	0	8	0	0	0	0	0	0	0
6.-7	2	91	0	0	0	0	0	0	0	0	0
7.-8	8	101	0	0	0	8	0	0	0	0	0
8.-9	1	81	0	0	0	0	0	0	0	0	0
9.-10	2	101	0	0	0	0	0	0	0	0	0
Totals			0	8	0	8	18	0	2	7	0

63µm

1-1.5	16	61	32	0	0	0	0	0	0	0	0
1.5-2	8	31	0	0	0	0	0	0	0	0	0
2-2.5	16	61	0	0	0	0	0	0	0	0	0
2.5-3	8	61	0	0	0	0	0	0	0	0	0
3.-4.	8	81	0	0	0	0	0	0	0	0	0
4.-5	8	91	0	0	0	0	0	0	0	0	0
5.-6	4	71	0	0	0	0	0	0	0	0	0
6.-7	8	71	0	0	0	0	0	0	0	0	0
7.-8	4	61	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	4	61	0	0	0	0	0	0	0	0	0
Totals			32	0	0	0	0	64	0	0	0

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	2	101	0	0	0	0	0	10	0	0	0
1-1.5	2	41	0	0	0	0	0	0	0	0	0
1.5-2	4	51	0	0	0	0	0	0	0	0	0
2-2.5	2	61	0	0	0	0	0	0	2	0	0
2.5-3	4	41	0	0	0	0	0	0	0	0	0
3.-4.	1	61	0	0	0	0	0	1	0	0	0
4.-5	1	61	0	0	0	0	0	0	0	0	0
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	2	91	0	0	0	0	2	0	0	0	0
7.-8	8	101	0	0	0	0	0	8	0	0	0
8.-9	1	81	0	0	0	0	0	0	0	0	0
9.-10	2	101	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	2	19	2	0	0

63µm

1-1.5	16	61	0	0	0	0	0	0	0	0	2048
1.5-2	8	31	0	0	0	0	0	0	0	0	224
2-2.5	16	61	0	0	0	0	0	0	0	0	480
2.5-3	8	61	0	0	0	0	0	0	0	0	32
3.-4.	8	81	0	0	0	0	0	0	0	0	8
4.-5	8	91	0	0	0	0	0	0	0	0	8
5.-6	4	71	0	0	0	0	0	0	0	0	16
6.-7	8	71	0	0	0	0	0	0	0	0	16
7.-8	4	61	0	0	0	0	0	0	0	0	8
8.-9	4	81	0	0	0	0	0	0	0	0	12
9.-10	4	61	0	0	0	0	0	0	0	0	32
Totals			0	0	0	0	0	16	0	0	3972

STN:3 D:A POS: 6
150µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	2	101	0	0	0	0	0	0	0	0	298
1-1.5	2	41	0	0	0	0	10	0	0	0	70
1.5-2	4	51	0	0	0	0	0	8	0	0	144
2-2.5	2	61	0	0	0	0	0	2	0	0	58
2.5-3	4	41	0	0	0	0	0	0	0	0	40
3.-4.	1	61	0	0	0	0	0	0	0	0	3
4.-5	1	61	0	0	0	0	0	0	0	0	7
5.-6	8	91	0	0	0	0	0	0	0	0	96
6.-7	2	91	0	0	0	0	0	0	0	0	20
7.-8	8	101	0	0	0	0	0	0	0	0	128
8.-9	1	81	0	0	0	0	0	0	0	0	6
9.-10	2	101	0	0	0	0	0	0	0	0	28
Totals			0	0	0	0	10	10	0	0	898

63µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	16	101	256	0	0	0	0	0	0	48	16
1-1.5	8	41	0	0	0	0	0	0	0	184	16
1.5-2	8	51	0	0	0	8	0	0	0	0	384
2-2.5	8	61	16	0	0	0	0	0	0	0	88
2.5-3	8	41	24	0	8	0	0	0	0	0	56
3.-4.	8	61	8	0	0	0	0	0	0	0	32
4.-5	8	61	0	0	0	0	0	0	0	0	32
5.-6	8	91	32	0	0	0	0	0	0	0	0
6.-7	8	91	0	0	8	0	0	0	0	24	0
7.-8	8	101	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	8	101	0	0	8	0	0	0	0	0	0
Totals			336	0	24	8	0	0	0	256	624

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	1	131	0	0	2	0	0	1	0	0	0
1-1.5	16	41	0	0	272	0	0	0	0	0	32
1.5-2	4	21	0	0	0	0	0	0	0	4	0
2-2.5	1	51	0	1	0	0	0	0	0	6	0
2.5-3	1	31	0	0	0	0	0	0	0	0	1
3.-4.	1	91	0	0	1	0	0	0	0	0	0
4.-5	4	71	4	0	0	0	0	0	0	0	0
5.-6	1	81	0	0	1	0	0	0	0	0	0
6.-7	1	71	0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	16	101	o	o	o	o	o	o	o	o	o
1-1.5	8	41	0	0	0	0	0	0	0	0	0
1.5-2	8	51	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	0	0	0	0	0
2.5-3	8	41	0	0	0	0	0	0	0	0	0
3.-4.	8	61	0	0	0	0	0	0	0	0	0
4.-5	8	61	0	0	0	0	0	0	0	0	0
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	8	91	24	0	0	0	0	0	0	0	0
7.-8	8	101	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	8	101	0	0	0	0	0	0	0	0	0
Totals			24	0	0	0	0	0	0	0	0

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	1	131	o	o	o	1	o	2	o	o	o
1-1.5	16	41	0	0	0	112	0	32	0	0	0
1.5-2	4	21	0	0	0	0	0	0	0	0	0
2-2.5	1	51	0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	2	0	0	0
3.-4.	1	91	0	0	0	0	0	0	0	0	0
4.-5	4	71	0	0	0	0	0	0	0	0	0
5.-6	1	81	0	0	0	0	0	2	0	0	0
6.-7	1	71	0	0	0	0	0	0	0	1	0

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	16	101	0	0	0	0	0	0	0	0	400
1-1.5	8	41	0	0	0	0	0	24	0	0	64
1.5-2	8	51	0	0	0	0	0	0	0	0	32
2-2.5	8	61	0	0	0	0	0	0	0	0	0
2.5-3	8	41	0	0	0	0	0	0	0	0	8
3.-4.	8	61	0	0	0	0	0	0	0	0	24
4.-5	8	61	0	0	0	0	0	0	0	0	8
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	8	91	0	0	0	0	0	0	0	0	0
7.-8	8	101	0	0	0	0	0	0	0	0	8
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	8	101	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	24	0	0	544

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	1	131	0	0	0	0	0	0	0	0	100
1-1.5	16	41	0	0	0	0	0	0	0	64	16
1.5-2	4	21	0	0	0	0	0	0	0	0	0
2-2.5	1	51	0	0	0	0	0	0	0	9	9
2.5-3	1	31	0	0	0	0	0	0	0	0	3
3.-4.	1	91	0	0	0	0	0	0	0	0	0
4.-5	4	71	0	0	0	0	0	0	0	0	0
5.-6	1	81	0	0	0	0	0	0	0	0	2
6.-7	1	71	0	0	0	0	0	0	0	1	33

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	16	101	0	0	0	0	0	0	0	0	48
1-1.5	8	41	0	0	0	0	0	0	8	0	0
1.5-2	8	51	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	0	0	0	0	0
2.5-3	8	41	0	0	0	0	0	0	0	0	16
3.-4.	8	61	0	0	0	0	0	0	0	0	0
4.-5	8	61	0	0	0	0	0	0	0	0	24
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	8	91	0	0	0	0	0	0	0	0	8
7.-8	8	101	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	8	101	0	0	0	0	0	0	0	0	8
Totals			0	0	0	0	0	0	8	0	104

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	1	131	0	0	0	0	0	0	0	87	4
1-1.5	16	41	0	0	0	0	0	336	16	512	160
1.5-2	4	21	0	0	0	0	0	0	0	4	12
2-2.5	1	51	0	0	0	0	0	0	0	11	2
2.5-3	1	31	0	0	0	0	0	0	0	8	0
3.-4.	1	91	0	0	0	0	0	0	0	6	1
4.-5	4	71	0	0	0	0	0	0	0	4	0
5.-6	1	81	0	0	0	0	0	0	0	9	1
6.-7	1	71	0	0	0	0	0	0	0	4	0

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	16	101	80	64	0	0	0	0	0	0	0
1-1.5	8	41	0	48	0	0	0	0	0	0	0
1.5-2	8	51	32	16	0	0	0	0	0	0	0
2-2.5	8	61	24	0	0	0	0	0	0	0	0
2.5-3	8	41	80	8	0	0	0	0	0	0	0
3.-4.	8	61	0	0	0	0	0	0	0	0	0
4.-5	8	61	72	0	0	0	0	0	0	0	0
5.-6	8	91	8	0	0	0	0	0	0	0	0
6.-7	8	91	32	0	0	0	0	0	0	0	0
7.-8	8	101	8	0	0	0	0	0	0	0	0
8.-9	4	81	8	0	0	0	0	0	0	0	0
9.-10	8	101	16	0	0	0	0	8	0	0	0
Totals			360	136	0	0	0	8	0	0	0

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	1	131	6	0	30	0	0	0	0	1	0
1-1.5	16	41	128	384	1216	80	0	48	0	0	0
1.5-2	4	21	44	0	0	0	0	0	0	0	0
2-2.5	1	51	0	0	6	13	0	0	0	0	0
2.5-3	1	31	6	0	6	0	0	0	0	0	0
3.-4.	1	91	4	0	0	0	0	2	0	0	0
4.-5	4	71	0	0	0	0	0	0	0	0	0
5.-6	1	81	2	5	0	0	0	0	0	0	0
6.-7	1	71	29	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	16	101	0	0	0	0	48	0	0	0	0
1-1.5	8	41	0	0	0	0	16	0	0	0	0
1.5-2	8	51	0	0	0	0	16	0	0	0	0
2-2.5	8	61	0	0	0	0	8	0	0	0	0
2.5-3	8	41	0	0	0	0	8	0	0	0	0
3.-4.	8	61	0	0	0	0	0	0	0	0	0
4.-5	8	61	0	0	0	0	8	0	0	0	0
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	8	91	0	0	0	0	0	0	0	0	0
7.-8	8	101	0	0	0	0	16	0	0	0	0
8.-9	4	81	0	0	0	0	8	0	0	0	0
9.-10	8	101	0	0	0	0	32	0	0	0	0
Totals			0	0	0	0	160	0	0	0	0

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	1	131	0	1	0	0	13	0	0	0	4
1-1.5	16	41	0	0	0	0	0	0	0	0	0
1.5-2	4	21	0	0	0	0	4	0	0	0	0
2-2.5	1	51	0	0	0	0	2	0	1	0	0
2.5-3	1	31	0	0	0	0	18	0	0	0	0
3.-4.	1	91	0	1	0	0	18	0	0	0	0
4.-5	4	71	0	32	0	0	0	0	0	0	0
5.-6	1	81	0	0	0	0	1	0	0	0	0
6.-7	1	71	0	0	0	0	59	0	0	0	0

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	16	101	0	0	0	0	96	16	0	0	0
1-1.5	8	41	0	0	0	0	8	8	0	0	0
1.5-2	8	51	0	0	0	0	0	0	0	0	0
2-2.5	8	61	0	0	0	0	0	0	0	0	0
2.5-3	8	41	0	0	0	0	0	0	0	0	0
3.-4.	8	61	0	0	0	0	0	0	0	0	0
4.-5	8	61	0	0	0	0	8	0	0	0	0
5.-6	8	91	0	0	0	0	0	0	0	0	0
6.-7	8	91	0	0	0	0	0	0	0	0	0
7.-8	8	101	0	0	0	0	0	0	0	0	0
8.-9	4	81	0	0	0	0	0	0	0	0	0
9.-10	8	101	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	112	24	0	0	0

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	1	131	0	0	0	0	0	0	0	0	0
1-1.5	16	41	32	0	112	0	320	192	32	0	16
1.5-2	4	21	0	0	0	0	0	0	0	0	0
2-2.5	1	51	0	0	0	0	0	1	0	0	0
2.5-3	1	31	0	0	0	0	0	0	0	0	0
3.-4.	1	91	0	0	0	0	0	0	0	0	0
4.-5	4	71	0	0	0	0	0	0	0	0	0
5.-6	1	81	0	0	3	0	0	0	0	0	0
6.-7	1	71	0	1	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	16	101	0	0	0	0	0	128	0	0	1248
1-1.5	8	41	0	0	0	0	0	0	0	0	376
1.5-2	8	51	0	0	0	0	0	16	0	0	504
2-2.5	8	61	0	0	0	0	0	0	0	0	136
2.5-3	8	41	0	0	0	0	0	40	0	0	248
3.-4.	8	61	0	0	0	0	0	16	0	0	80
4.-5	8	61	0	0	0	0	0	88	0	0	240
5.-6	8	91	0	0	0	0	0	24	0	0	64
6.-7	8	91	0	0	0	0	0	24	0	0	120
7.-8	8	101	0	0	0	0	0	0	0	0	32
8.-9	4	81	0	0	0	0	0	0	0	0	16
9.-10	8	101	0	0	0	0	0	0	0	0	72
Totals			0	0	0	0	0	336	0	0	3136

STN:4 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	1	131	0	0	0	0	0	3	1	0	256
1-1.5	16	41	16	0	0	0	0	352	0	16	4496
1.5-2	4	21	0	0	0	0	0	8	0	0	76
2-2.5	1	51	0	0	0	0	0	5	0	0	66
2.5-3	1	31	0	0	0	0	0	7	0	0	51
3.-4.	1	91	0	0	0	0	0	0	0	0	33
4.-5	4	71	0	0	0	0	0	0	0	0	40
5.-6	1	81	0	0	0	0	0	1	0	0	27
6.-7	1	71	0	0	0	0	0	7	0	0	135

7.-8	1	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	1	81	0	0	1	0	0	0	0	0	2
Totals			4	1	277	0	0	1	0	10	35

63µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	16	131	0	0	0	0	0	0	0	48	5104
1-1.5	8	41	8	0	0	0	0	0	0	0	248
1.5-2	8	21	8	0	0	0	0	0	0	48	16
2-2.5	8	51	0	0	0	0	0	0	0	0	152
2.5-3	8	31	32	0	0	0	0	0	0	0	0
3.-4.	8	91	32	0	0	0	0	0	0	0	0
4.-5	1	71	2	0	0	0	0	0	0	0	13
5.-6	8	81	0	0	0	0	0	0	0	0	80
6.-7	16	71	144	0	0	0	0	0	0	0	0
7.-8	8	61	8	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	0	0	0	0	0	0	0	0	0
Totals			234	0	0	0	0	0	0	96	5613

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	4	61	0	0	8	0	0	0	0	64	0
1-1.5			0	0	0	0	0	0	0	0	0

7.-8	1	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	2	0	0	0
9.-10	1	81	0	0	0	0	0	33	0	0	0
Totals			0	0	0	113	0	73	0	1	0

63µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	16	131	0	0	0	0	0	0	0	0	0
1-1.5	8	41	0	0	0	0	0	0	0	0	0
1.5-2	8	21	24	0	0	0	0	0	0	0	0
2-2.5	8	51	0	0	0	0	0	0	0	0	0
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.	8	91	0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	8	81	0	0	0	0	0	0	0	0	0
6.-7	16	71	0	0	0	0	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	0	0	0	0	0	0	0	0	0
Totals			24	0	0	0	0	0	0	0	0

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	4	61	0	4	0	44	0	0	4	0	0
1-1.5			0	0	0	0	0	0	0	0	0

7.-8	1	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	1	81	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	0	74	163

63µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	16	131	0	0	0	0	0	288	0	0	0
1-1.5	8	41	0	0	8	0	0	0	0	0	24
1.5-2	8	21	0	0	0	0	0	0	0	0	200
2-2.5	8	51	0	0	0	0	0	0	0	0	32
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.	8	91	0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	1
5.-6	8	81	0	0	0	0	0	0	0	0	0
6.-7	16	71	0	0	0	0	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	0	0	0	0	0	0	0	0	0
Totals			0	0	8	0	0	288	0	0	257

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	4	61	0	0	0	0	0	0	44	0	16
1-1.5			0	0	0	0	0	0	0	0	0

7.-8	1	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	1	0	0	12
9.-10	1	81	0	0	0	0	0	2	0	0	4
Totals			0	0	0	0	0	339	16	645	196

63µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	16	131	0	0	0	0	0	0	0	0	0
1-1.5	8	41	24	0	0	0	0	0	0	0	0
1.5-2	8	21	0	0	0	0	0	0	0	0	0
2-2.5	8	51	0	0	0	0	0	0	0	0	0
2.5-3	8	31	0	0	0	0	0	0	0	8	0
3.-4.	8	91	0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	8	81	0	0	0	0	0	0	0	0	0
6.-7	16	71	112	0	0	16	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	0	0	0	0	0	0	0	0	24
Totals			136	0	0	16	0	0	0	8	24

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	4	61	0	0	0	0	0	0	0	300	0
1-1.5			0	0	0	0	0	0	0	0	0

7.-8	1	61	3	0	0	0	0	2	0	0	0
8.-9	1	71	50	0	0	0	0	0	0	0	0
9.-10	1	81	19	0	0	0	0	0	0	0	0
Totals			291	389	1258	93	0	52	0	1	0

63µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	16	131	0	0	0	0	0	0	0	0	16
1-1.5	8	41	24	0	0	0	0	0	0	0	0
1.5-2	8	21	0	24	0	0	0	0	0	0	0
2-2.5	8	51	24	48	0	0	0	0	0	0	0
2.5-3	8	31	40	0	0	0	0	16	0	0	0
3.-4.	8	91	32	0	0	0	0	0	0	0	0
4.-5	1	71	4	0	1	0	0	1	0	0	0
5.-6	8	81	16	0	0	0	0	8	0	0	0
6.-7	16	71	320	0	0	0	0	0	0	0	0
7.-8	8	61	40	0	0	0	0	24	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	40	0	0	0	0	0	0	0	0
Totals			540	72	1	0	0	49	0	0	16

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	4	61	0	16	28	0	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0

7.-8	1	61	0	0	0	0	26	0	0	0	0
8.-9	1	71	0	0	0	0	19	0	0	0	0
9.-10	1	81	0	6	0	0	0	0	0	0	0
Totals			0	40	0	0	160	0	1	0	4

63µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	16	131	0	0	0	0	16	0	0	0	0
1-1.5	8	41	0	0	0	0	8	0	0	0	0
1.5-2	8	21	0	0	0	0	16	0	0	0	0
2-2.5	8	51	0	0	0	0	24	0	0	0	0
2.5-3	8	31	0	0	0	0	40	0	0	0	0
3.-4.	8	91	0	0	0	0	80	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	8	81	0	0	0	0	0	0	0	0	0
6.-7	16	71	0	0	0	0	0	0	16	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	184	0	16	0	0

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	4	61	0	0	0	0	24	0	8	120	0
1-1.5			0	0	0	0	0	0	0	0	0

7.-8	1	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	1	81	0	0	0	0	2	0	0	12	0
Totals			32	1	115	0	322	193	32	12	16

63µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	16	131	0	0	0	0	0	0	0	0	0
1-1.5	8	41	0	0	0	0	0	0	0	0	0
1.5-2	8	21	0	0	0	0	0	0	0	0	0
2-2.5	8	51	0	0	0	0	0	0	0	0	0
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.	8	91	0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	8	81	0	0	0	0	24	0	0	0	0
6.-7	16	71	0	0	0	0	0	0	0	0	0
7.-8	8	61	0	0	0	0	0	0	0	0	0
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	24	0	0	0	0

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	4	61	4	0	0	4	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0

7.-8	1	61	0	0	0	0	0	13	0	0	44
8.-9	1	71	0	0	0	0	0	19	0	0	103
9.-10	1	81	0	0	0	0	0	8	0	0	89
Totals			16	0	0	0	0	423	1	16	5416

63µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	16	131	0	0	0	0	0	32	0	0	5504
1-1.5	8	41	0	0	8	0	0	0	0	0	352
1.5-2	8	21	0	0	0	0	0	0	0	0	336
2-2.5	8	51	0	0	8	0	0	0	0	0	288
2.5-3	8	31	0	0	16	0	0	0	0	0	152
3.-4.	8	91	0	0	8	0	0	8	0	0	160
4.-5	1	71	0	0	0	0	0	3	0	0	25
5.-6	8	81	0	0	0	0	0	24	0	0	152
6.-7	16	71	0	32	128	0	0	64	0	0	832
7.-8	8	61	0	0	0	0	0	8	0	0	80
8.-9	1	71	0	0	0	0	0	0	0	0	0
9.-10	8	81	0	0	8	0	0	16	0	0	88
Totals			0	32	176	0	0	155	0	0	7969

STN:5 D:A POS: 7
150µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	4	61	0	0	0	0	0	8	0	0	696
1-1.5			0	0	0	0	0	0	0	0	0

1.5-2	1	41	0	0	0	0	0	0	0	8	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	1	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	1	71	0	0	0	0	0	0	0	0	1
6.-7	1	66	1	0	0	0	0	0	0	0	0
7.-8	1	101	0	0	1	0	0	0	0	0	1
8.-9	1	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			1	0	10	0	0	0	0	72	2

63µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	16	61	0	0	96	0	0	0	0	384	864
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	32	320
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	0	0	0	0	0	0	0	0	16
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	0	0	0	0	0	0	0	0	16
5.-6	8	71	0	0	0	0	0	0	0	0	16
6.-7	16	66	16	0	0	0	0	0	0	0	16
7.-8	16	101	48	0	0	0	0	0	0	0	48
8.-9	16	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			64	0	96	0	0	0	0	416	1296

STN:6 D:A POS:7
150µm

1.5-2	1	41	0	0	1	2	0	0	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	1	71	0	0	0	0	0	0	0	0	0
6.-7	1	66	0	0	0	0	0	0	0	0	0
7.-8	1	101	0	0	0	0	0	0	0	0	0
8.-9	1	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	4	1	46	0	0	4	0	0

63µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	16	61	0	0	0	0	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	8	0	0	0	0	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	0	0	0	0	0	0	0	0	0
5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	16	66	0	0	0	0	0	0	0	0	0
7.-8	16	101	0	0	0	0	0	0	0	0	0
8.-9	16	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	8	0	0	0	0	0	0	0

STN:6 D:A POS:7
150µm

1.5-2	1	41	0	0	0	0	0	0	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	1	71	0	0	0	0	0	0	0	0	0
6.-7	1	66	0	0	0	0	0	0	0	0	0
7.-8	1	101	0	0	0	0	0	0	0	0	0
8.-9	1	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	44	0	16

63µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	16	61	0	0	736	0	0	0	128	0	928
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	32	0	0	0	0	0	16
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	0	0	0	0	0	0	0	0	16
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	0	0	0	0	0	0	0	0	32
5.-6	8	71	0	0	8	0	0	0	0	0	8
6.-7	16	66	0	0	0	0	0	0	0	0	0
7.-8	16	101	0	0	0	0	0	0	0	0	0
8.-9	16	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	776	0	0	0	128	0	1000

STN:6 D:A POS:7
150µm

1.5-2	1	41	0	0	0	0	0	0	0	15	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	0	0	1	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	1	71	0	0	0	0	0	0	0	0	0
6.-7	1	66	0	0	0	0	0	0	0	4	0
7.-8	1	101	0	0	0	0	0	0	0	4	0
8.-9	1	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	0	324	0

63µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	16	61	0	0	0	0	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	0	0	0	0	0	0	0	0	0
5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	16	66	0	0	0	0	0	0	0	0	0
7.-8	16	101	0	0	0	0	0	0	0	0	0
8.-9	16	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	0	0	0

STN:6 D:A POS:7
150µm

1.5-2	1	41	1	0	0	0	0	0	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	1	0	2	0	0	5	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	3	0	0	0	0	1	0	0	0
5.-6	1	71	3	2	0	0	0	2	0	0	0
6.-7	1	66	8	1	0	0	0	2	0	0	0
7.-8	1	101	8	0	0	0	0	0	0	0	0
8.-9	1	101	9	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			33	19	30	0	0	10	0	0	0

63µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	16	61	0	128	0	672	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	8	0	0	0	0	0	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	32	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	32	0	0	0	0	0	0	0	0
5.-6	8	71	24	0	0	0	0	0	0	0	0
6.-7	16	66	64	0	0	0	0	16	0	0	0
7.-8	16	101	160	0	0	32	0	0	0	0	0
8.-9	16	101	16	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			336	128	0	704	0	16	0	0	0

STN:6 D:A POS:7
150µm

1.5-2	1	41	0	0	0	0	2	0	0	2	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	3	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	1	0	0	0	0
5.-6	1	71	0	0	0	0	2	0	0	1	0
6.-7	1	66	0	0	0	0	0	0	0	0	0
7.-8	1	101	0	0	0	0	0	0	0	0	0
8.-9	1	101	0	0	0	0	2	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	34	0	8	123	0

63µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	16	61	0	0	0	0	64	0	0	32	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	8	0	16	16	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	0	0	0	0	32	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	0	0	0	0	0	0	0	16	0
5.-6	8	71	0	0	0	0	16	0	0	0	0
6.-7	16	66	0	0	0	0	0	0	0	0	0
7.-8	16	101	0	0	0	0	48	0	0	0	0
8.-9	16	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	168	0	16	64	0

STN:6 D:A POS:7
150µm

1.5-2	1	41	0	0	1	0	0	1	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	0	0	0	0
5.-6	1	71	0	0	0	0	0	0	0	0	0
6.-7	1	66	0	0	0	0	0	0	0	0	0
7.-8	1	101	0	0	0	0	0	0	0	0	0
8.-9	1	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			4	0	1	4	0	1	0	0	0

63µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	16	61	0	0	0	0	96	64	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	0	0
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	0	0	0	0	0	0	0	0	0
5.-6	8	71	0	0	0	0	0	0	0	0	0
6.-7	16	66	0	0	0	0	0	0	0	0	0
7.-8	16	101	0	0	0	0	0	0	0	0	0
8.-9	16	101	0	0	0	0	0	0	0	0	0
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	96	64	0	0	0

STN:6 D:A POS:7
150µm

1.5-2	1	41	0	0	0	0	0	0	0	0	33
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	1	0	0	14
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	71	0	0	0	0	0	2	0	0	7
5.-6	1	71	0	0	0	0	0	2	0	0	13
6.-7	1	66	0	0	0	0	0	1	0	0	17
7.-8	1	101	0	0	0	0	0	0	0	0	14
8.-9	1	101	0	0	0	0	0	0	0	0	11
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	14	0	0	805

63µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	16	61	0	0	0	0	0	128	0	0	4320
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	32	0	0	488
2-2.5			0	0	0	0	0	0	0	0	0
2.5-3	16	31	0	0	32	0	0	32	0	0	160
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	16	71	0	0	0	0	0	0	0	0	96
5.-6	8	71	0	0	16	0	0	0	0	0	88
6.-7	16	66	0	0	176	0	0	0	0	0	288
7.-8	16	101	0	0	96	0	0	0	0	0	432
8.-9	16	101	0	0	48	0	0	0	0	0	64
9.-10			0	0	0	0	0	0	0	0	0
Totals			0	0	368	0	0	192	0	0	5936

STN:6 D:A POS:7
150µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	8	61	0	0	0	0	8	0	16	104	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	0	0	7	0	0	0	1	11	0
2-2.5	1	31	0	0	2	0	0	0	0	4	1
2.5-3	1	31	0	0	4	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	0	0	1	1
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	0	0	3	0	0	0	0	1	2
Totals			0	0	16	0	8	0	17	121	4

63µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	16	61	0	0	64	0	0	0	0	32	704
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	16	0	0	0	0	16	1456
2-2.5	16	31	32	0	0	0	0	0	0	96	368
2.5-3	8	31	40	0	0	0	0	0	0	0	1656
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	0	0	0	0	0	0	0	32
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	8	0	0	0	0	0	0	16	32
7.-8			0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	8	61	o	o	16	o	o	o	o	o	o
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	0	0	0	0	0	0	3	0	0
2-2.5	1	31	0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	0	0	0	0	0	0	0	0	0
Totals			0	0	16	0	0	0	3	0	0

63µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	16	61	o	o	o	o	o	o	o	o	o
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	0	0
2-2.5	16	31	0	0	0	0	0	0	0	0	0
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	8	8	0	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	8	61	0	0	0	0	0	0	8	0	24
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	0	3	0	0	0	0	0	0	1
2-2.5	1	31	0	0	0	0	0	0	0	0	0
2.5-3	1	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	0	0	0	0	0	0	2	0	0
Totals			0	3	0	0	0	0	10	0	25

63µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	16	61	0	0	128	0	0	0	0	0	384
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	416	16	0	32
2-2.5	16	31	0	0	0	0	0	16	0	0	32
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	0	8	0	0	8	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	8	0	0	0
7.-8			0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	8	61	0	0	0	0	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	0	0	0	0	0	12	0	2	0
2-2.5	1	31	0	0	0	0	0	0	0	1	7
2.5-3	1	31	0	0	0	0	0	3	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	3	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	0	0	0	0	0	0	0	0	2
Totals			0	0	0	0	0	18	0	3	9

63µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	16	61	0	0	0	0	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	0	0
2-2.5	16	31	0	0	0	0	0	0	0	0	0
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	0	0	0	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	8	61	0	0	0	0	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	4	0	1	0	0	0	0	0	0
2-2.5	1	31	1	0	0	0	0	0	0	0	0
2.5-3	1	31	1	0	0	2	0	1	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	1	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	2	0	0	0
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	5	0	0	0	0	0	0	0	0
Totals			11	0	1	2	0	4	0	0	0

63µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	16	61	0	0	0	144	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	8	0	0	0	0	0
2-2.5	16	31	0	0	0	0	0	0	0	0	0
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	0	0	8	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	48	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	8	61	0	0	0	0	0	0	72	0	32
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	0	0	0	0	0	0	4	0	5
2-2.5	1	31	0	0	0	0	0	0	0	0	1
2.5-3	1	31	0	0	0	0	2	0	5	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	0	10	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	0	8	0	0
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	0	0	0	0	0	0	5	0	0
Totals			0	0	0	0	2	0	104	0	38

63µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	16	61	0	0	0	0	48	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	0	0
2-2.5	16	31	0	0	0	0	80	0	0	0	0
2.5-3	8	31	0	0	0	0	72	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	0	0	0	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	8	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	8	61	0	0	0	0	0	0	8	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	0	0	0	0	0	0	0	0	0
2-2.5	1	31	0	0	0	0	0	0	1	0	0
2.5-3	1	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	0	0	0	0	0	0	1	0	0
Totals			0	0	0	0	0	0	10	0	0

63µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	16	61	0	0	0	0	0	0	0	0	0
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	0	0	0	0
2-2.5	16	31	0	0	0	0	0	0	0	0	0
2.5-3	8	31	0	0	0	0	0	0	0	0	0
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	0	0	0	0	0	0	0	0
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	0	0	0	0	0	0	0
7.-8			0	0	0	0	0	0	0	0	0

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	8	61	0	0	0	0	0	0	0	0	288
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	1	41	0	1	0	0	0	0	2	0	57
2-2.5	1	31	0	0	0	0	0	0	8	0	26
2.5-3	1	31	0	0	0	0	0	0	11	0	29
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	1	81	0	0	0	0	0	0	5	0	21
5.-6			0	0	0	0	0	0	0	0	0
6.-7	1	61	0	0	0	0	0	1	0	0	11
7.-8			0	0	0	0	0	0	0	0	0
8.-9			0	0	0	0	0	0	0	0	0
9.-10	1	51	0	0	0	0	0	0	0	0	21
Totals			0	1	0	0	0	1	26	0	453

63µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	16	61	0	0	32	0	0	0	0	0	1536
1-1.5			0	0	0	0	0	0	0	0	0
1.5-2	8	41	0	0	0	0	0	16	0	0	1976
2-2.5	16	31	0	0	0	0	0	64	0	0	688
2.5-3	8	31	0	0	0	0	0	64	0	0	1832
3.-4.			0	0	0	0	0	0	0	0	0
4.-5	8	81	0	0	0	0	0	0	0	0	72
5.-6			0	0	0	0	0	0	0	0	0
6.-7	8	61	0	0	8	0	0	0	0	0	128
7.-8			0	0	0	0	0	0	0	0	0

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	0	0	0	0	0	0	0	16	32
Totals			80	0	80	0	0	0	0	176	4280

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	0	81		22	1						
1-1.5	0	51		5							
1.5-2	0	21			1					2	
2-2.5	0	21									
2.5-3	0	16									
3.-4.	0	61								8	
4.-5	0	71									
5.-6	0	61	2			1					
6.-7	0	61									
7.-8	0	31									
8.-9	0	66									
9.-10	0	71									
Totals			2	27	2	1	0	0	0	10	0

63µm

Depths	Split	Volume (mL)	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Ammovertella sp.*	*Angulogerina earlandi*	*Astrammina rara*	*Astrononoin antacticum*	*Astrononion echolsi*	*Bolivina pseudopunctata*
0-1	16	81	32	0	0	0	0	0	0	0	0
1-1.5	16	51	0	0	0	0	0	0	0	0	0
1.5-2	1	21	0	0	2	0	0	0	0	0	76

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	0	0	0	0	0	0	0	0	0
Totals			0	8	8	0	0	0	0	0	0

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	0	81				8					
1-1.5	0	51							3		
1.5-2	0	21				3					
2-2.5	0	21						2			
2.5-3	0	16				1					
3.-4.	0	61									
4.-5	0	71									
5.-6	0	61									
6.-7	0	61									
7.-8	0	31									
8.-9	0	66						3			
9.-10	0	71									
Totals			0	0	0	12	0	5	3	0	0

63µm

Depths	Split	Volume (mL)	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cibicides grossenuncatus*	*Cribrostomoides jeffreysii*	*Cystammina pauciloculata*	*Earlandammina drakensis*	*Earlandammina inconspicua*	*Eggerella nitens*	*Eggerella wiesneri*
0-1	16	81	0	0	0	0	0	0	0	0	0
1-1.5	16	51	0	0	0	0	0	0	0	0	0
1.5-2	1	21	0	0	0	0	0	0	0	0	0

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	0	0	0	0	0	16	0	0	0
Totals			0	0	136	0	0	464	16	0	448

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	0	81									21
1-1.5	0	51									1
1.5-2	0	21									4
2-2.5	0	21									1
2.5-3	0	16									1
3.-4.	0	61									
4.-5	0	71									
5.-6	0	61									
6.-7	0	61									
7.-8	0	31									
8.-9	0	66									1
9.-10	0	71									
Totals			0	0	0	0	0	0	0	0	29

63µm

Depths	Split	Volume (mL)	*Ehrenbergina glabra*	*Epistomaroides bassensis*	*Epistominella exigua*	*Fissurina earlandi*	*Fissurina sp*	*Fursenkoina fusiformis*	*Globocassidulina subsphaerica*	*Globigerina sp.*	*Haplophragmoides parkerae*
0-1	16	81	0	0	0	0	0	0	0	0	3232
1-1.5	16	51	0	0	0	0	0	0	0	0	864
1.5-2	1	21	0	0	0	0	0	4	0	0	158

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	0	0	0

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Haplophragmoides sp.*	*Hormosinella distans*	*Hormosinella ovicula*	*Hyperammina friabilis*	*Kribostomiodes sp.*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagenammina difflugiformis*	*Miliammina lata*
0-1	0	81		11						12	
1-1.5	0	51	2	5	1		13			3	1
1.5-2	0	21								2	
2-2.5	0	21								2	
2.5-3	0	16								2	
3.-4.	0	61								3	
4.-5	0	71									
5.-6	0	61								1	2
6.-7	0	61									
7.-8	0	31									
8.-9	0	66									
9.-10	0	71								1	3
Totals			2	16	1	0	13	0	0	26	6

63µm

Depths	Split	Volume (mL)	o *Haplophragmoides sp.*	o *Hormosinella distans*	o *Hormosinella ovicula*	o *Hyperammina friabilis*	o *Kribostomiodes sp.*	o *Labrospira jeffreysii*	o *Labrospira wiesneri*	o *Lagenammina difflugiformis*	o *Miliammina lata*
0-1	16	81	0	0	0	0	0	0	0	0	0
1-1.5	16	51	0	0	0	0	0	0	32	0	0
1.5-2	1	21	0	0	0	0	0	0	0	0	0

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	16	0	0	0	0	0	0	0	0
Totals			64	0	0	160	0	0	0	0	0

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	0	81	3			4					
1-1.5	0	51						1			
1.5-2	0	21			25						
2-2.5	0	21									
2.5-3	0	16									
3.-4.	0	61									
4.-5	0	71	3								
5.-6	0	61						4			
6.-7	0	61	2								
7.-8	0	31	1								
8.-9	0	66	10								
9.-10	0	71	38								
Totals			57	0	25	4	0	5	0	0	0

63µm

Depths	Split	Volume (mL)	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oridorsalis sidebottomi*	*Paratrochammina lepida*	*Paratrochammina pseudotricamerata*	*Paratrochammina scotiaensis*	*Paratrochammina tricamerata*
0-1	16	81	0	0	48	0	0	16	0	0	160
1-1.5	16	51	0	0	16	0	0	0	0	0	0
1.5-2	1	21	0	0	19	0	0	0	0	0	0

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	208	0	0	0	0

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Polystomammina falklandica*	*Portatrochammina antarctica*	*Portatrochammina malovensis*	*Portatrochammina rossensis*	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Reophax difflugiformis*
0-1	0	81						2			
1-1.5	0	51									
1.5-2	0	21					8		31		
2-2.5	0	21									
2.5-3	0	16					3				
3.-4.	0	61									
4.-5	0	71					2				
5.-6	0	61					21				
6.-7	0	61									
7.-8	0	31					3	3			
8.-9	0	66					7				
9.-10	0	71					5				
Totals			0	0	0	0	49	5	31	0	0

63µm

Depths	Split	Volume (mL)	o *Polystomammina falklandica*	o *Portatrochammina antarctica*	o *Portatrochammina malovensis*	o *Portatrochammina rossensis*	o *Portatrochammina stenhousei*	o *Pseudotrochammina arenacea*	o *Pullenia quinqueloba*	o *Pullenia subsphaerica*	o *Reophax difflugiformis*
0-1	16	81	0	0	0	0	0	0	0	0	0
1-1.5	16	51	0	16	0	0	0	0	0	0	0
1.5-2	1	21	0	0	0	0	0	1	92	0	0

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	0	0	0

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	0	81					2		3		
1-1.5	0	51									
1.5-2	0	21						1			
2-2.5	0	21									
2.5-3	0	16									
3.-4.	0	61									
4.-5	0	71									
5.-6	0	61									
6.-7	0	61					1				
7.-8	0	31									
8.-9	0	66									
9.-10	0	71									
Totals			0	0	0	0	3	1	3	0	0

63µm

Depths	Split	Volume (mL)	*Reophax distans*	*Reophax fusiformis*	*Reophax ovicula*	*Reophax scorpiurus*	*Rhabdammina sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Sigmoilina umbonata*	*Spiroplectammina sp.*
0-1	16	81	0	0	0	0	0	0	0	0	0
1-1.5	16	51	0	0	0	0	0	0	0	0	0
1.5-2	1	21	0	0	0	0	0	0	0	0	0

8.-9			0	0	0	0	0	0	0	0	0
9.-10	16	51	0	0	0	0	0	0	0	0	80
Totals			0	0	40	0	0	144	0	0	6312

STN:7 D:C POS: 6
150µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	0	81									89
1-1.5	0	51									35
1.5-2	0	21									77
2-2.5	0	21									5
2.5-3	0	16									7
3.-4.	0	61									11
4.-5	0	71									5
5.-6	0	61						14			45
6.-7	0	61									3
7.-8	0	31						1			8
8.-9	0	66									21
9.-10	0	71						5			52
Totals			0	0	0	0	0	20	0	0	358

63µm

Depths	Split	Volume (mL)	*Subfischerina sp.*	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina discorbis*	*Trochammina quadricammerata*	*Trochammina intermedia*	*Trochamminopsis parvus*	*Usbekistania charoides*	*Totals*
0-1	16	81	0	0	0	0	0	0	0	0	3488
1-1.5	16	51	0	0	0	0	0	16	0	0	944
1.5-2	1	21	0	0	0	0	0	14	0	0	366

2-2.5	16	21	0	0	0	0	0	0	0	0	480
2.5-3	16	16	0	0	0	0	0	0	0	0	2128
3.-4.	16	61	0	0	0	0	0	0	0	0	272
4.-5	4	71	0	0	0	0	0	0	0	12	0
5.-6	1	61	0	0	0	0	0	0	0	0	0
6.-7	16	61	0	0	0	0	0	0	0	0	0
7.-8	8	31	0	0	0	0	0	0	0	0	24
8.-9	16	66	48	0	0	0	0	0	0	0	0
9.-10	16	71	16	0	0	0	0	0	0	0	0
Totals			96	0	2	0	0	0	0	12	2980

2-2.5	16	21	0	0	0	0	0	0	0	0	0
2.5-3	16	16	0	0	0	0	0	0	0	0	0
3.-4.	16	61	0	0	0	0	0	0	0	0	0
4.-5	4	71	0	0	0	0	0	0	0	0	0
5.-6	1	61	0	0	0	0	0	0	0	0	0
6.-7	16	61	0	0	0	0	0	0	0	0	0
7.-8	8	31	0	0	0	0	0	0	0	0	0
8.-9	16	66	0	0	0	0	0	0	0	0	0
9.-10	16	71	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	0	0	0

2-2.5	16	21	0	0	0	0	0	0	0	0	0
2.5-3	16	16	0	0	0	0	0	0	0	0	32
3.-4.	16	61	0	0	0	0	0	0	0	0	64
4.-5	4	71	0	0	0	0	0	0	0	0	16
5.-6	1	61	0	0	0	0	0	0	0	0	0
6.-7	16	61	0	0	0	0	0	0	0	0	0
7.-8	8	31	0	0	0	0	0	0	0	0	0
8.-9	16	66	0	0	0	0	0	0	0	0	0
9.-10	16	71	0	0	0	0	0	0	0	0	16
Totals			0	0	0	0	0	4	0	0	4382

2-2.5	16	21	0	0	0	0	0	0	0	16	0
2.5-3	16	16	0	0	0	0	0	0	0	0	0
3.-4.	16	61	0	0	0	0	0	0	0	32	0
4.-5	4	71	0	0	0	0	0	0	0	0	0
5.-6	1	61	0	0	0	0	0	0	0	0	0
6.-7	16	61	0	0	0	0	0	0	0	0	0
7.-8	8	31	0	0	0	0	0	0	0	0	0
8.-9	16	66	0	0	0	0	0	0	0	0	48
9.-10	16	71	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	32	48	48

2-2.5	16	21	0	0	0	0	0	0	0	0	0
2.5-3	16	16	0	16	0	0	0	0	0	0	0
3.-4.	16	61	0	0	0	0	0	0	0	0	0
4.-5	4	71	12	0	0	0	0	8	0	0	0
5.-6	1	61	2	0	0	0	0	1	19	0	25
6.-7	16	61	112	0	0	0	0	0	0	0	0
7.-8	8	31	8	0	0	0	0	0	0	0	0
8.-9	16	66	0	0	0	0	0	48	0	0	0
9.-10	16	71	0	0	0	0	0	64	0	0	0
Totals			134	16	83	0	0	137	19	0	185

2-2.5	16	21	0	16	0	0	16	0	0	0	0
2.5-3	16	16	0	0	0	0	48	0	0	0	0
3.-4.	16	61	0	0	0	0	64	0	0	0	0
4.-5	4	71	0	0	0	0	52	0	0	0	0
5.-6	1	61	0	0	0	0	0	0	0	0	0
6.-7	16	61	0	0	0	0	64	0	0	0	0
7.-8	8	31	0	0	0	0	16	0	0	0	0
8.-9	16	66	0	0	0	0	0	0	0	0	0
9.-10	16	71	0	0	0	0	80	0	0	0	0
Totals			0	32	0	0	340	1	92	0	0

2-2.5	16	21	0	0	0	0	0	0	0	0	0
2.5-3	16	16	0	0	0	0	0	0	0	0	0
3.-4.	16	61	0	0	0	0	0	16	0	0	0
4.-5	4	71	0	0	0	0	0	0	0	0	0
5.-6	1	61	0	0	0	0	0	0	0	0	0
6.-7	16	61	0	0	0	0	0	0	0	0	0
7.-8	8	31	0	0	0	0	0	0	0	0	0
8.-9	16	66	0	0	0	0	0	0	0	0	0
9.-10	16	71	0	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	16	0	0	0

2-2.5	16	21	0	0	16	0	0	16	0	0	560
2.5-3	16	16	0	0	0	0	0	0	0	0	2224
3.-4.	16	61	0	0	0	0	0	32	0	0	480
4.-5	4	71	0	0	4	0	0	0	0	0	104
5.-6	1	61	0	0	0	0	0	0	0	0	47
6.-7	16	61	0	0	0	0	0	0	0	0	176
7.-8	8	31	0	0	8	0	0	0	0	0	56
8.-9	16	66	0	0	16	0	0	48	0	0	208
9.-10	16	71	0	0	16	0	0	48	0	0	240
Totals			0	0	60	0	0	174	0	0	8893

LMG 08-08

STN:1 D:A POS:4		Split	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
150µm	Volume (mL)									
0-1	56	8	0	0	0	0	0	16	0	16
1-1.5	26	1	0	9	0	5	0	0	0	0
1.5-2	41	2	0	0	0	22	0	0	0	6
2-2.5	31	2	0	0	0	8	0	0	0	12
2.5-3	11	1	3	0	0	5	0	0	0	1
3.-4.	51	1	0	0	0	0	0	0	0	6
4.-5	71	1	0	0	0	4	1	1	0	3
5.-6	31	1	0	0	0	0	0	3	0	1
6.-7	71	1	0	0	0	4	0	3	0	0
7.-8	46	1	0	0	0	0	0	4	0	0
8.-9	71	1	0	0	0	1	0	4	0	5
9.-10	51	1	0	0	0	0	0	0	0	2
Totals		21	3	9	0	49	1	31	0	52

			Adercotryma glomeratum	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
63µm	Volume (mL)									
0-1	56	16	32	0	0	64	0	0	0	160
1-1.5	26	16	112	0	0	32	0	0	0	16
1.5-2	41	16	128	0	0	192	0	0	0	448
2-2.5	31	8	0	0	0	0	0	0	0	88
2.5-3	11	8	0	0	0	0	0	0	0	0
3.-4.	51	8	0	0	0	8	0	0	0	8
4.-5	71	8	8	0	0	0	0	0	0	0
5.-6	31	8	0	0	0	0	0	0	0	8
6.-7	71	8	32	0	0	0	0	0	0	24
7.-8	46	8	0	0	0	0	0	0	0	32
8.-9	71	8	0	0	0	0	0	0	0	16
9.-10	51	**8**	0	0	0	0	0	0	0	8
Totals		120	312	0	0	296	0	0	0	808

LMG 08-08

STN:1 D:A POS:4		Split	*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
150µm	Volume (mL)									
0-1	56	8	0	280	0	40	0	0	8	0
1-1.5	26	1	0	20	0	0	0	1	0	0
1.5-2	41	2	0	0	0	0	0	0	10	0
2-2.5	31	2	0	2	0	0	0	0	6	0
2.5-3	11	1	0	1	0	0	0	0	1	0
3.-4.	51	1	0	5	0	0	0	0	4	0
4.-5	71	1	0	11	0	2	0	0	1	0
5.-6	31	1	0	22	0	0	0	0	0	0
6.-7	71	1	0	4	0	8	0	0	0	0
7.-8	46	1	0	28	0	2	10	0	2	0
8.-9	71	1	0	10	0	0	0	0	2	0
9.-10	51	1	0	0	0	0	0	0	0	0
Totals		21	0	383	0	52	10	1	34	0

			Bolivina pseudopunctata	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
63µm	Volume (mL)									
0-1	56	16	32	256	0	0	0	32	0	0
1-1.5	26	16	0	0	0	0	0	0	0	0
1.5-2	41	16	0	64	0	0	0	0	0	0
2-2.5	31	8	80	0	0	0	0	0	0	0
2.5-3	11	8	64	0	0	0	0	0	0	0
3.-4.	51	8	48	16	0	0	0	0	0	0
4.-5	71	8	24	0	0	0	0	0	0	0
5.-6	31	8	24	8	0	0	0	0	0	0
6.-7	71	8	16	0	0	0	0	0	0	0
7.-8	46	8	16	8	0	0	0	0	0	0
8.-9	71	8	8	8	0	0	0	0	0	0
9.-10	51	**8**	8	0	0	0	0	0	0	0
Totals		120	320	360	0	0	0	32	0	0

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STN:1 D:A POS:4		Split	*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
150µm	Volume (mL)									
0-1	56	8	0	0	0	0	0	0	0	8
1-1.5	26	1	0	0	0	0	0	0	0	0
1.5-2	41	2	0	32	0	0	0	0	0	0
2-2.5	31	2	0	0	0	0	0	0	0	0
2.5-3	11	1	0	0	0	0	0	0	0	0
3.-4.	51	1	0	0	0	0	0	0	0	0
4.-5	71	1	0	0	0	0	0	0	0	0
5.-6	31	1	0	0	0	0	0	0	0	0
6.-7	71	1	0	0	0	0	0	0	0	0
7.-8	46	1	0	0	0	0	0	0	0	1
8.-9	71	1	0	0	0	0	0	0	0	0
9.-10	51	1	0	0	0	0	0	0	0	0
Totals		21	0	32	0	0	0	0	0	9

63µm	Volume (mL)		*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	56	16	0	0	0	0	512	0	128	416
1-1.5	26	16	0	0	0	0	272	0	48	288
1.5-2	41	16	0	0	0	0	160	0	96	96
2-2.5	31	8	0	0	0	0	40	0	16	8
2.5-3	11	8	0	0	0	0	0	0	240	0
3.-4.	51	8	0	0	0	0	24	0	376	8
4.-5	71	8	0	0	0	0	0	0	24	0
5.-6	31	8	0	0	0	0	40	0	40	0
6.-7	71	8	0	0	0	0	128	0	24	0
7.-8	46	8	0	0	0	0	48	0	40	0
8.-9	71	8	0	0	0	0	0	0	16	8
9.-10	51	**8**	0	0	0	0	8	0	8	0
Totals		120	0	0	0	0	1232	0	1056	824

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STN:1 D:A POS:4		Split	*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
150µm	Volume (mL)									
0-1	56	8	0	0	0	0	0	0	0	0
1-1.5	26	1	1	0	0	0	0	0	1	0
1.5-2	41	2	0	0	0	0	0	0	28	0
2-2.5	31	2	0	0	0	0	0	0	24	0
2.5-3	11	1	1	0	0	0	0	0	1	0
3.-4.	51	1	0	0	0	0	0	0	1	0
4.-5	71	1	0	0	0	0	0	0	3	0
5.-6	31	1	0	0	0	0	0	0	1	0
6.-7	71	1	0	0	0	0	0	0	1	0
7.-8	46	1	1	0	0	0	0	0	0	0
8.-9	71	1	0	0	0	0	0	0	0	0
9.-10	51	1	0	0	0	0	0	0	0	0
Totals		21	3	0	0	0	0	0	60	0

			Haplophragmoides parkerae	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
63µm	Volume (mL)									
0-1	56	16	448	0	0	0	0	0	0	0
1-1.5	26	16	96	0	0	0	0	32	0	0
1.5-2	41	16	448	0	0	0	0	416	0	0
2-2.5	31	8	128	0	0	0	0	0	0	0
2.5-3	11	8	8	0	0	0	0	0	0	0
3.-4.	51	8	0	0	0	0	0	0	0	0
4.-5	71	8	0	0	0	0	0	0	0	0
5.-6	31	8	0	0	0	0	0	0	0	0
6.-7	71	8	32	0	0	0	0	0	0	0
7.-8	46	8	0	0	0	0	0	0	0	0
8.-9	71	8	0	0	0	0	0	0	0	0
9.-10	51	**8**	0	0	0	0	0	0	0	0
Totals		120	1160	0	0	0	0	448	0	0

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STN:1 D:A POS:4		Split	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
150µm	Volume (mL)									
0-1	56	8	136	40	0	56	56	0	0	0
1-1.5	26	1	38	5	1	16	0	0	0	0
1.5-2	41	2	48	8	2	0	0	0	0	0
2-2.5	31	2	14	2	4	8	20	0	0	0
2.5-3	11	1	8	0	0	17	4	0	0	0
3.-4.	51	1	15	5	3	7	1	0	0	0
4.-5	71	1	6	3	3	0	3	0	0	0
5.-6	31	1	13	0	1	0	2	0	0	8
6.-7	71	1	17	1	2	0	5	0	0	0
7.-8	46	1	36	5	11	0	12	0	0	6
8.-9	71	1	10	2	8	0	4	0	0	0
9.-10	51	1	2	5	2	0	0	0	0	0
Totals		21	343	76	37	104	107	0	0	14

			Lagenammina difflugiformis	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
63µm	Volume (mL)									
0-1	56	16	0	0	32	96	0	0	0	0
1-1.5	26	16	0	0	16	0	0	0	0	0
1.5-2	41	16	0	0	0	64	0	0	0	0
2-2.5	31	8	0	0	0	0	0	0	0	0
2.5-3	11	8	0	0	0	0	0	0	0	0
3.-4.	51	8	0	0	8	0	0	0	0	0
4.-5	71	8	0	8	16	0	0	0	0	0
5.-6	31	8	0	0	16	0	0	0	0	0
6.-7	71	8	0	0	24	0	0	0	0	0
7.-8	46	8	0	24	0	0	0	0	0	0
8.-9	71	8	0	0	16	0	0	0	0	0
9.-10	51	**8**	0	0	24	0	0	0	0	0
Totals		120	0	32	152	160	0	0	0	0

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STN:1 D:A POS:4		Split	*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
150µm	Volume (mL)									
0-1	56	8	0	0	8	0	8	0	0	0
1-1.5	26	1	0	1	0	0	5	0	0	0
1.5-2	41	2	0	0	0	0	16	0	0	0
2-2.5	31	2	0	0	0	0	4	0	0	0
2.5-3	11	1	0	0	0	0	5	0	0	0
3.-4.	51	1	0	0	0	0	5	0	0	0
4.-5	71	1	0	0	0	0	3	0	0	0
5.-6	31	1	0	0	0	0	1	0	0	0
6.-7	71	1	0	0	0	0	0	0	0	0
7.-8	46	1	0	0	0	0	0	0	0	0
8.-9	71	1	1	0	0	0	0	0	0	0
9.-10	51	1	0	0	0	0	0	0	0	0
Totals		21	1	1	8	0	47	0	0	0

			Paratrochammina lepida	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
63µm	Volume (mL)									
0-1	56	16	0	0	0	0	0	0	0	0
1-1.5	26	16	0	0	0	0	16	0	0	0
1.5-2	41	16	0	0	0	0	64	0	0	0
2-2.5	31	8	0	0	0	0	24	0	0	0
2.5-3	11	8	0	0	0	0	0	0	0	0
3.-4.	51	8	0	0	0	0	0	0	0	0
4.-5	71	8	0	0	0	0	0	0	0	0
5.-6	31	8	0	0	0	0	0	0	0	0
6.-7	71	8	0	0	0	0	8	0	0	0
7.-8	46	8	0	0	0	0	0	0	0	0
8.-9	71	8	0	0	0	0	0	0	0	0
9.-10	51	**8**	0	0	0	0	0	0	0	0
Totals		120	0	0	0	0	112	0	0	0

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STN:1 D:A POS:4		Split	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
150µm	Volume (mL)									
0-1	56	8	0	0	0	24	0	0	0	0
1-1.5	26	1	3	0	0	5	0	1	0	0
1.5-2	41	2	4	0	0	0	0	0	0	0
2-2.5	31	2	0	0	0	2	0	0	0	0
2.5-3	11	1	0	0	0	4	0	0	0	0
3.-4.	51	1	1	0	0	0	0	1	0	0
4.-5	71	1	1	0	0	0	0	0	0	0
5.-6	31	1	0	0	0	0	0	0	0	0
6.-7	71	1	2	0	0	5	0	0	0	0
7.-8	46	1	0	0	0	3	0	0	0	0
8.-9	71	1	0	0	0	1	0	0	0	0
9.-10	51	1	0	0	0	0	0	0	0	0
Totals		21	11	0	0	44	0	2	0	0

			Portatrochammina stenhousei	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
63µm	Volume (mL)									
0-1	56	16	640	0	0	0	0	0	0	0
1-1.5	26	16	192	0	0	0	0	0	0	0
1.5-2	41	16	224	0	0	0	0	0	0	0
2-2.5	31	8	16	0	0	0	0	0	0	0
2.5-3	11	8	8	0	0	0	0	0	0	0
3.-4.	51	8	16	0	0	0	0	0	0	0
4.-5	71	8	24	0	0	0	0	0	0	0
5.-6	31	8	24	0	0	0	0	0	0	0
6.-7	71	8	8	0	0	0	0	0	0	0
7.-8	46	8	16	0	0	0	0	0	0	0
8.-9	71	8	0	0	0	0	0	0	0	0
9.-10	51	**8**	0	0	0	0	0	0	0	0
Totals		120	1168	0	0	0	0	0	0	0

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STN:1 D:A POS:4		Split	*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
150µm	Volume (mL)									
0-1	56	8	8	32	0	8	0	16	0	8
1-1.5	26	1	10	1	0	5	0	17	0	3
1.5-2	41	2	6	22	0	4	0	20	0	0
2-2.5	31	2	0	0	0	0	0	8	0	2
2.5-3	11	1	0	0	0	2	0	4	0	0
3.-4.	51	1	0	1	0	0	0	2	0	1
4.-5	71	1	2	2	0	0	0	0	0	0
5.-6	31	1	0	0	0	0	0	0	0	0
6.-7	71	1	0	0	0	0	0	0	0	0
7.-8	46	1	0	0	0	0	0	0	0	0
8.-9	71	1	0	0	0	0	0	0	0	0
9.-10	51	1	0	0	0	0	0	0	0	0
Totals		21	26	58	0	19	0	67	0	14

			Reophax oviculata	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
63µm	Volume (mL)									
0-1	56	16	96	0	0	0	32	416	0	32
1-1.5	26	16	0	0	0	16	64	0	0	0
1.5-2	41	16	96	0	0	0	32	0	0	0
2-2.5	31	8	0	0	0	0	0	0	0	8
2.5-3	11	8	0	0	0	0	0	0	0	0
3.-4.	51	8	0	0	0	0	0	0	0	0
4.-5	71	8	0	0	0	8	0	0	0	0
5.-6	31	8	0	0	0	0	0	0	0	0
6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	46	8	0	0	0	0	0	0	0	0
8.-9	71	8	0	0	0	0	0	0	0	0
9.-10	51	**8**	0	0	0	0	0	0	0	0
Totals		120	192	0	0	24	128	416	0	40

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STN:1 D:A POS:4		Split	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
150µm	Volume (mL)								
0-1	56	8	0	0	0	0	0	0	768
1-1.5	26	1	0	0	1	0	1	0	150
1.5-2	41	2	0	0	6	0	2	0	236
2-2.5	31	2	0	0	2	0	0	0	118
2.5-3	11	1	0	0	0	1	0	0	58
3.-4.	51	1	0	0	1	0	0	0	59
4.-5	71	1	0	0	1	1	0	0	51
5.-6	31	1	0	0	3	0	0	0	55
6.-7	71	1	0	0	0	0	0	0	52
7.-8	46	1	0	0	0	0	0	0	121
8.-9	71	1	0	0	0	0	0	0	48
9.-10	51	1	0	0	0	0	0	0	11
Totals		21	0	0	14	2	3	0	1727

63µm	Volume (mL)		*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	56	16	0	32	0	0	0	0	3456
1-1.5	26	16	0	32	32	0	0	0	1264
1.5-2	41	16	0	0	128	0	0	0	2656
2-2.5	31	8	0	0	24	0	0	0	432
2.5-3	11	8	0	0	8	0	0	0	328
3.-4.	51	8	0	0	8	0	0	0	520
4.-5	71	8	0	0	0	0	0	0	112
5.-6	31	8	0	0	16	0	0	0	176
6.-7	71	8	0	8	16	0	0	0	320
7.-8	46	8	0	0	24	0	0	0	208
8.-9	71	8	0	0	16	0	0	0	88
9.-10	51	**8**	0	0	8	0	0	0	64
Totals		120	0	72	280	0	0	0	9624

STN:2 D:B POS:12		Split	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
150µm	Volume (mL)									
0-1	61	16	0	0	0	0	0	32	0	0
1-1.5	26	4	4	0	0	4	0	4	0	68
1.5-2	41	8	0	0	0	0	0	0	0	0
2-2.5	31	4	0	0	0	0	0	0	0	4
2.5-3	31	4	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	0	8
4.-5	56	4	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	0	0	0	0	0	0	0
Totals		88	4	0	0	4	0	36	0	80

63µm	Volume (mL)		*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
0-1	61	16	32	0	0	0	0	0	0	304
1-1.5	26	16	48	0	0	16	0	0	0	288
1.5-2	41	16	0	0	0	16	0	0	0	128
2-2.5	31	16	0	0	0	0	0	0	0	64
2.5-3	31	16	32	0	0	0	0	0	0	48
3.-4.	65	8	0	0	0	0	0	0	0	0
4.-5	56	8	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	51	8	0	0	0	0	0	0	0	8
9.-10	61	**8**	0	0	0	0	0	8	0	0

STN:2 D:B POS:12		Split	*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
150µm	Volume (mL)									
0-1	61	16	0	0	0	0	0	0	48	0
1-1.5	26	4	0	16	0	0	0	4	20	0
1.5-2	41	8	0	0	0	0	0	0	16	0
2-2.5	31	4	0	0	0	0	0	4	20	0
2.5-3	31	4	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	16	0
4.-5	56	4	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	8	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	8	0	0	0	0	0	0
Totals		88	0	24	0	0	0	8	128	0

			Bolivina pseudopunctata	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
63µm	Volume (mL)									
0-1	61	16	432	32	0	0	0	48	0	0
1-1.5	26	16	496	0	0	0	0	16	0	0
1.5-2	41	16	96	0	0	0	0	16	0	0
2-2.5	31	16	96	16	0	0	0	16	0	0
2.5-3	31	16	224	0	0	0	0	32	0	0
3.-4.	65	8	32	0	0	0	0	0	0	0
4.-5	56	8	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	51	8	0	0	0	0	0	0	0	0
9.-10	61	**8**	0	0	0	0	0	0	0	0

STN:2 D:B POS:12		Split	*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
150µm	Volume (mL)									
0-1	61	16	0	0	0	0	0	0	0	0
1-1.5	26	4	0	0	0	0	0	0	0	0
1.5-2	41	8	0	0	0	0	0	0	0	0
2-2.5	31	4	0	0	0	0	0	0	0	0
2.5-3	31	4	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	0	0
4.-5	56	4	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	0	0	0	0	0	0	0
Totals		88	0	0	0	0	0	0	0	0

63µm	Volume (mL)		*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	61	16	0	0	0	0	0	16	432	112
1-1.5	26	16	0	0	0	0	0	0	272	0
1.5-2	41	16	0	0	0	0	0	0	80	16
2-2.5	31	16	0	0	0	0	0	0	272	0
2.5-3	31	16	0	0	0	0	0	0	272	16
3.-4.	65	8	0	0	0	0	0	0	88	0
4.-5	56	8	0	0	0	0	0	0	32	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	51	8	0	0	0	0	0	0	0	0
9.-10	61	**8**	0	0	0	0	0	0	0	0

STN:2 D:B POS:12		Split	*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
150µm	Volume (mL)									
0-1	61	16	0	0	0	0	0	0	48	0
1-1.5	26	4	0	0	0	4	0	20	0	0
1.5-2	41	8	0	0	0	0	0	0	0	0
2-2.5	31	4	0	0	0	0	0	0	0	0
2.5-3	31	4	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	8	0
4.-5	56	4	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	0	0	0	0	0	0	0
Totals		88	0	0	0	4	0	20	56	0

63µm	Volume (mL)		*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrospira jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	61	16	1312	0	0	0	0	16	0	0
1-1.5	26	16	496	0	0	0	0	0	0	0
1.5-2	41	16	64	0	0	0	0	0	0	0
2-2.5	31	16	16	0	0	0	0	0	0	0
2.5-3	31	16	32	0	0	0	0	0	0	0
3.-4.	65	8	8	0	0	0	0	0	0	0
4.-5	56	8	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	51	8	0	0	0	0	0	0	0	0
9.-10	61	**8**	0	0	0	0	0	0	0	0

STN:2 D:B POS:12		Split	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
150µm	Volume (mL)									
0-1	61	16	80	32	16	0	64	0	0	0
1-1.5	26	4	16	0	12	0	0	0	0	0
1.5-2	41	8	16	0	8	0	16	0	0	0
2-2.5	31	4	0	4	0	0	0	0	0	0
2.5-3	31	4	0	0	4	0	0	0	0	0
3.-4.	65	8	0	0	0	0	8	0	0	0
4.-5	56	4	0	0	8	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	0	20	0	0	0	0	0
Totals		88	112	36	68	0	88	0	0	0

63µm	Volume (mL)		*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
0-1	61	16	64	16	32	16	0	1040	0	0
1-1.5	26	16	0	0	0	0	0	368	0	0
1.5-2	41	16	32	0	16	0	0	0	0	0
2-2.5	31	16	0	16	0	0	0	0	0	0
2.5-3	31	16	0	0	112	0	0	16	0	0
3.-4.	65	8	0	0	16	0	0	0	0	0
4.-5	56	8	0	0	32	0	0	0	0	0
5.-6	61	8	0	8	40	0	0	0	0	0
6.-7	61	8	0	0	24	0	0	0	0	0
7.-8	61	8	0	0	16	0	0	0	0	0
8.-9	51	8	0	0	8	0	0	0	0	0
9.-10	61	**8**	0	0	8	0	0	0	0	0

STN:2 D:B POS:12		Split	*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
150µm	Volume (mL)									
0-1	61	16	0	0	0	0	0	0	0	0
1-1.5	26	4	0	0	0	0	0	0	0	0
1.5-2	41	8	0	0	0	0	8	0	0	0
2-2.5	31	4	0	0	0	0	0	0	0	0
2.5-3	31	4	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	0	0
4.-5	56	4	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	0	0	0	0	0	0	0
Totals		88	0	0	0	0	8	0	0	0

63µm	Volume (mL)		*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	61	16	0	0	0	0	0	0	0	0
1-1.5	26	16	32	0	0	0	16	0	0	0
1.5-2	41	16	0	0	0	0	0	0	0	0
2-2.5	31	16	0	0	0	16	0	0	0	0
2.5-3	31	16	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	0	0
4.-5	56	8	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	8	48	0	0	0	0	0	0	0
8.-9	51	8	0	0	0	0	0	0	0	0
9.-10	61	**8**	8	0	0	0	0	0	0	0

STN:2 D:B POS:12		Split	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
150µm	Volume (mL)									
0-1	61	16	16	0	0	64	0	0	0	0
1-1.5	26	4	8	0	0	32	4	0	0	0
1.5-2	41	8	0	0	0	0	0	0	0	0
2-2.5	31	4	0	0	0	0	0	0	0	0
2.5-3	31	4	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	8	0	0	0	0
4.-5	56	4	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	0	0	0	0	0	0	0
Totals		88	24	0	0	104	4	0	0	0

			Portatrochammina stenhousei	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
63µm	Volume (mL)									
0-1	61	16	160	0	0	96	0	32	0	0
1-1.5	26	16	32	0	0	64	0	32	0	0
1.5-2	41	16	64	0	32	0	0	0	0	0
2-2.5	31	16	64	0	0	0	0	0	0	0
2.5-3	31	16	48	0	0	0	0	0	0	0
3.-4.	65	8	16	0	0	0	0	0	0	0
4.-5	56	8	8	0	0	0	0	0	0	0
5.-6	61	8	24	0	0	0	0	0	0	0
6.-7	61	8	8	0	0	0	0	0	0	0
7.-8	61	8	24	0	0	0	0	0	0	0
8.-9	51	8	8	0	0	0	0	0	0	0
9.-10	61	**8**	16	0	0	0	0	0	0	0

STN:2 D:B POS:12		Split	*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
150µm	Volume (mL)									
0-1	61	16	16	16	0	32	0	32	0	0
1-1.5	26	4	0	0	0	0	0	0	0	0
1.5-2	41	8	0	0	0	8	0	0	0	0
2-2.5	31	4	0	8	0	0	0	0	0	0
2.5-3	31	4	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	0	0
4.-5	56	4	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	8	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0	0
9.-10	61	4	0	4	0	0	0	0	0	0
Totals		88	16	28	0	48	0	32	0	0

63µm	Volume (mL)		*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	61	16	0	0	0	0	0	0	0	0
1-1.5	26	16	0	0	0	0	0	0	0	0
1.5-2	41	16	0	0	0	0	0	32	0	0
2-2.5	31	16	0	0	0	0	0	0	0	0
2.5-3	31	16	0	0	0	0	0	0	0	0
3.-4.	65	8	0	0	0	0	0	0	0	0
4.-5	56	8	0	0	0	0	0	0	0	0
5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	51	8	0	0	0	0	0	0	0	0
9.-10	61	**8**	0	0	0	0	0	0	0	0

STN:2 D:B POS:12		Split	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
150µm	Volume (mL)								
0-1	61	16	0	0	48	0	0	16	560
1-1.5	26	4	0	0	0	0	4	0	220
1.5-2	41	8	0	0	0	0	0	0	72
2-2.5	31	4	0	0	0	0	0	0	40
2.5-3	31	4	0	0	0	0	0	0	4
3.-4.	65	8	0	0	0	0	0	0	48
4.-5	56	4	0	0	0	0	0	0	8
5.-6	61	8	0	0	0	0	0	0	16
6.-7	61	8	0	0	0	0	0	0	0
7.-8	61	16	0	0	0	0	0	0	0
8.-9	51	4	0	0	0	0	0	0	0
9.-10	61	4	0	0	0	0	0	0	32
Totals		88	0	0	48	0	4	16	1000

63µm	Volume (mL)		*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	61	16	0	0	0	0	0	0	4192
1-1.5	26	16	0	0	0	0	0	0	2176
1.5-2	41	16	0	0	16	0	0	0	608
2-2.5	31	16	0	16	0	0	0	0	592
2.5-3	31	16	0	0	64	0	0	0	896
3.-4.	65	8	0	0	16	0	0	0	176
4.-5	56	8	0	0	16	0	0	0	88
5.-6	61	8	0	0	0	0	0	0	72
6.-7	61	8	0	0	0	0	0	0	32
7.-8	61	8	0	0	0	0	0	0	88
8.-9	51	8	0	0	0	0	0	0	24
9.-10	61	**8**	0	0	0	0	0	0	40

Totals		136	112	0	0	32	0	8	0	840

STN:3 D:B POS:7		Split	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
150µm	Volume (mL)									
0-1	46	2	2	0	0	8	0	0	0	0
1-1.5	56	1	3	0	0	3	0	0	22	22
1.5-2	36	1	3	0	0	3	0	0	0	0
2-2.5	46	1	1	0	0	0	0	0	0	7
2.5-3	31	2	0	0	0	2	0	0	0	0
3.-4.	71	2	0	0	0	0	0	0	0	0
4.-5	81	2	0	0	0	0	0	0	0	0
5.-6	96	2	0	0	0	2	0	0	0	0
6.-7	81	2	0	0	0	0	0	0	0	0
7.-8	91	2	0	0	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	0	0
Totals		20	9	0	0	18	0	0	22	29

63µm	Volume (mL)		*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
0-1	46	16	64	0	0	32	0	0	0	416
1-1.5	56	8	24	0	0	64	0	0	0	0
1.5-2	36	16	64	0	0	0	0	0	0	192
2-2.5	46	16	32	0	0	0	16	0	0	48
2.5-3	31	8	0	0	0	0	0	0	0	16
3.-4.	71	8	0	0	0	8	0	0	0	72
4.-5	81	4	0	0	0	0	0	0	0	20
5.-6	96	8	48	0	0	0	0	0	0	0
6.-7	81	8	8	8	0	0	0	0	0	0
7.-8	91	8	0	0	0	0	0	0	0	0
8.-9	91	8	8	0	0	0	0	0	0	0

Totals		136	1376	48	0	0	0	128	0	0

STN:3 D:B POS:7		Split	*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
150µm	Volume (mL)									
0-1	46	2	6	0	0	0	0	0	28	0
1-1.5	56	1	0	1	0	0	0	1	25	0
1.5-2	36	1	0	1	0	0	0	0	25	0
2-2.5	46	1	0	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	2	0
3.-4.	71	2	0	0	0	0	0	0	2	0
4.-5	81	2	0	0	0	0	0	0	6	0
5.-6	96	2	0	0	0	0	0	0	2	0
6.-7	81	2	0	0	0	0	0	0	0	0
7.-8	91	2	0	0	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	0	0
Totals		20	6	2	0	0	0	1	90	0

63µm	Volume (mL)		*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
0-1	46	16	96	0	0	0	0	0	0	0
1-1.5	56	8	0	0	0	0	0	0	0	0
1.5-2	36	16	240	0	0	0	0	0	0	0
2-2.5	46	16	320	0	0	0	0	0	0	0
2.5-3	31	8	200	0	0	0	0	0	0	0
3.-4.	71	8	64	0	0	0	0	0	0	0
4.-5	81	4	0	0	0	0	0	0	0	0
5.-6	96	8	0	0	0	0	0	0	0	0
6.-7	81	8	0	0	0	0	0	0	0	0
7.-8	91	8	0	0	0	0	0	0	0	0
8.-9	91	8	0	0	0	0	0	0	0	0

Totals		136	0	0	0	0	0	16	1448	144

STN:3 D:B POS:7		Split	*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
150µm	Volume (mL)									
0-1	46	2	0	0	0	6	0	2	0	108
1-1.5	56	1	0	0	0	0	0	0	0	3
1.5-2	36	1	0	0	0	0	0	0	0	3
2-2.5	46	1	0	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	71	2	0	0	0	0	0	0	0	0
4.-5	81	2	0	0	0	0	0	0	0	0
5.-6	96	2	0	0	0	0	0	0	0	0
6.-7	81	2	0	0	0	0	0	0	0	0
7.-8	91	2	0	0	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	0	0
Totals		20	0	0	0	6	0	2	0	114

63µm	Volume (mL)		*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	46	16	0	0	0	0	1408	0	0	1504
1-1.5	56	8	0	0	0	0	0	0	0	24
1.5-2	36	16	0	0	0	0	32	0	64	32
2-2.5	46	16	0	0	0	0	0	0	80	0
2.5-3	31	8	0	0	0	0	0	0	56	0
3.-4.	71	8	0	0	0	0	0	0	16	16
4.-5	81	4	0	0	0	0	8	0	0	8
5.-6	96	8	0	0	0	0	0	0	0	0
6.-7	81	8	0	0	0	0	0	0	0	0
7.-8	91	8	0	0	0	0	0	0	0	0
8.-9	91	8	0	0	0	0	0	0	0	0

Totals		136	1928	0	0	0	0	16	0	0

STN:3 D:B POS:7		Split	*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
150µm	Volume (mL)									
0-1	46	2	4	0	0	0	0	2	0	0
1-1.5	56	1	1	0	0	0	0	2	0	0
1.5-2	36	1	1	0	0	0	0	0	0	0
2-2.5	46	1	0	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	71	2	0	0	0	0	0	0	0	0
4.-5	81	2	0	0	0	0	0	0	0	0
5.-6	96	2	0	0	0	0	0	0	0	0
6.-7	81	2	0	0	0	0	0	0	0	0
7.-8	91	2	0	0	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	0	0
Totals		20	6	0	0	0	0	4	0	0

63µm	Volume (mL)		*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	46	16	1152	0	0	0	0	0	0	0
1-1.5	56	8	72	0	0	0	0	0	0	0
1.5-2	36	16	192	0	16	0	0	0	0	0
2-2.5	46	16	48	0	0	0	0	0	0	0
2.5-3	31	8	8	0	0	0	0	0	0	0
3.-4.	71	8	16	0	0	0	0	0	0	0
4.-5	81	4	0	0	0	0	0	0	0	0
5.-6	96	8	0	0	0	0	0	0	0	0
6.-7	81	8	0	0	0	0	0	0	0	0
7.-8	91	8	0	0	0	0	0	0	0	0
8.-9	91	8	0	0	0	0	0	0	0	0

Totals		136	96	40	304	16	0	1424	0	0

STN:3 D:B POS:7		Split	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
150µm	Volume (mL)									
0-1	46	2	18	8	8	36	0	0	0	0
1-1.5	56	1	4	2	0	0	0	0	0	0
1.5-2	36	1	4	2	14	0	0	0	0	0
2-2.5	46	1	4	3	6	0	2	0	0	0
2.5-3	31	2	0	4	4	0	0	0	0	0
3.-4.	71	2	0	4	0	0	0	0	0	0
4.-5	81	2	0	10	0	6	0	2	0	0
5.-6	96	2	2	4	4	0	0	0	0	0
6.-7	81	2	2	0	6	0	0	0	0	0
7.-8	91	2	0	2	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	6	0	0	0	0	0	0
Totals		20	34	45	42	42	2	2	0	0

			Lagenammina difflugiformis	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
63µm	Volume (mL)									
0-1	46	16	0	32	160	32	0	1536	0	0
1-1.5	56	8	0	0	16	8	0	72	0	0
1.5-2	36	16	64	0	32	0	0	32	0	0
2-2.5	46	16	0	0	64	0	48	0	0	0
2.5-3	31	8	0	0	8	0	0	0	0	0
3.-4.	71	8	0	0	0	0	0	0	0	0
4.-5	81	4	0	0	12	0	0	0	0	0
5.-6	96	8	0	0	0	0	0	0	0	0
6.-7	81	8	0	16	0	0	0	0	0	0
7.-8	91	8	0	0	32	0	0	0	0	0
8.-9	91	8	0	0	16	0	0	8	0	0

Totals		136	88	0	0	16	16	0	0	0

STN:3 D:B POS:7		Split	*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
150µm	Volume (mL)									
0-1	46	2	0	0	0	0	0	0	0	0
1-1.5	56	1	0	0	0	0	0	0	0	0
1.5-2	36	1	0	0	0	0	0	0	0	0
2-2.5	46	1	0	0	0	0	0	0	0	0
2.5-3	31	2	2	0	0	0	0	0	0	0
3.-4.	71	2	0	0	0	0	0	0	0	0
4.-5	81	2	0	0	0	0	0	0	0	0
5.-6	96	2	0	0	0	0	0	0	0	0
6.-7	81	2	0	0	0	0	0	0	0	0
7.-8	91	2	2	0	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	0	0
Totals		20	4	0	0	0	0	0	0	0

			Paratrochammina lepida	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
63µm	Volume (mL)									
0-1	46	16	32	0	0	0	0	0	0	0
1-1.5	56	8	0	0	0	0	0	0	0	0
1.5-2	36	16	0	0	0	0	0	0	0	0
2-2.5	46	16	16	0	0	0	0	0	0	0
2.5-3	31	8	0	0	0	0	0	0	0	0
3.-4.	71	8	0	0	0	0	0	0	0	0
4.-5	81	4	0	0	0	0	0	0	0	0
5.-6	96	8	0	0	0	0	0	0	0	0
6.-7	81	8	0	0	0	0	0	0	0	0
7.-8	91	8	0	0	0	0	0	0	0	0
8.-9	91	8	0	0	0	0	0	0	0	0

Totals		136	472	0	32	160	0	64	0	0

STN:3 D:B POS:7		Split	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
150µm	Volume (mL)									
0-1	46	2	4	0	34	24	0	0	0	0
1-1.5	56	1	0	0	6	9	0	0	0	0
1.5-2	36	1	0	0	0	9	0	0	0	0
2-2.5	46	1	0	5	0	1	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	71	2	0	0	0	0	0	0	0	0
4.-5	81	2	0	0	0	0	0	0	0	0
5.-6	96	2	0	0	0	0	0	0	0	0
6.-7	81	2	0	0	0	0	0	0	0	0
7.-8	91	2	0	0	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	0	0
Totals		20	4	5	40	43	0	0	0	0

			Portatrochammina stenhousei	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
63µm	Volume (mL)									
0-1	46	16	224	0	0	64	0	0	0	0
1-1.5	56	8	24	0	0	0	0	0	0	0
1.5-2	36	16	0	0	0	0	0	0	0	0
2-2.5	46	16	0	0	0	0	0	0	0	0
2.5-3	31	8	0	0	0	0	0	0	0	0
3.-4.	71	8	16	0	0	0	0	0	0	0
4.-5	81	4	4	0	0	0	0	0	0	0
5.-6	96	8	8	0	0	0	0	0	0	0
6.-7	81	8	0	0	0	0	0	0	0	0
7.-8	91	8	8	0	0	0	0	0	0	0
8.-9	91	8	0	0	0	0	0	0	0	0

Totals		136	0	0	0	0	0	32	0	0

STN:3 D:B POS:7		Split	*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
150µm	Volume (mL)									
0-1	46	2	0	0	2	0	0	0	0	0
1-1.5	56	1	0	0	0	0	0	0	0	0
1.5-2	36	1	0	0	0	0	0	0	0	0
2-2.5	46	1	0	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	71	2	0	0	0	0	0	0	0	0
4.-5	81	2	0	0	0	0	0	0	0	0
5.-6	96	2	0	0	0	0	0	0	0	0
6.-7	81	2	0	0	0	0	0	0	0	0
7.-8	91	2	0	0	0	0	0	0	0	0
8.-9	91	1	0	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	0	0
Totals		20	0	0	2	0	0	0	0	0

			Reophax oviculata	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
63µm	Volume (mL)									
0-1	46	16	0	0	0	0	224	160	0	0
1-1.5	56	8	0	0	0	0	0	0	0	0
1.5-2	36	16	0	0	0	0	0	16	0	0
2-2.5	46	16	0	0	0	0	0	0	0	0
2.5-3	31	8	0	0	0	0	0	0	0	0
3.-4.	71	8	0	0	0	0	8	0	0	0
4.-5	81	4	0	0	0	0	0	0	0	0
5.-6	96	8	0	0	0	0	0	0	0	0
6.-7	81	8	0	0	0	0	0	8	0	0
7.-8	91	8	0	0	0	0	0	0	0	0
8.-9	91	8	0	0	0	0	0	0	0	0

Totals		136	0	16	112	0	0	0	8984

STN:3 D:B POS:7		Split	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
150µm	Volume (mL)								
0-1	46	2	0	0	4	0	0	0	304
1-1.5	56	1	0	0	1	0	0	0	105
1.5-2	36	1	0	0	0	0	0	0	65
2-2.5	46	1	0	0	0	0	0	0	29
2.5-3	31	2	0	0	2	0	0	0	16
3.-4.	71	2	0	0	0	0	0	0	6
4.-5	81	2	0	0	0	0	0	0	24
5.-6	96	2	0	0	0	0	0	0	14
6.-7	81	2	0	0	0	0	0	0	8
7.-8	91	2	0	0	0	0	0	0	4
8.-9	91	1	0	0	0	0	0	0	0
9.-10	101	2	0	0	0	0	0	0	6
Totals		20	0	0	7	0	0	0	581

63µm	Volume (mL)		*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	46	16	0	0	96	0	0	0	7232
1-1.5	56	8	0	0	0	0	0	0	304
1.5-2	36	16	0	0	0	0	0	0	976
2-2.5	46	16	0	0	0	0	0	0	672
2.5-3	31	8	0	0	0	0	0	0	288
3.-4.	71	8	0	0	16	0	0	0	232
4.-5	81	4	0	0	8	0	0	0	60
5.-6	96	8	0	8	16	0	0	0	80
6.-7	81	8	0	0	8	0	0	0	48
7.-8	91	8	0	0	0	0	0	0	40
8.-9	91	8	0	0	8	0	0	0	40

9.-10	101	**8**	0	0	0	0	0	0	0	16
Totals		116	248	8	0	104	16	0	0	780

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
0-1	41	0				4				56
1-1.5	31	0							3	91
1.5-2	21	0		2						43
2-2.5	41	0								15
2.5-3	61	0								7
3.-4.	61	0				2				
4.-5	61	0								1
5.-6	81	0								
6.-7	71	0								
7.-8	51	0			1	1				
8.-9	61	0								
9.-10	91	0								
Totals			0	2	1	7	0	0	3	213

63µm	Volume (mL)		*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	0	0	0	0	0	0	32	320
2-2.5	41	16	0	0	0	0	0	0	0	64
2.5-3	61	8	0	0	0	0	0	0	0	64
3.-4.	61	8	0	0	0	0	0	0	0	0
4.-5	61	8	0	0	0	0	0	0	0	0
5.-6	81	8	0	0	0	0	0	0	0	0
6.-7	71	8	16	0	0	0	0	0	0	0
7.-8	51	8	8	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	0	0	0	0	0	0
Totals		116	920	0	0	0	0	0	0	0

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
0-1	41	0								
1-1.5	31	0	1	2					1	
1.5-2	21	0								
2-2.5	41	0		1						
2.5-3	61	0								
3.-4.	61	0								
4.-5	61	0								
5.-6	81	0								
6.-7	71	0								
7.-8	51	0								
8.-9	61	0								
9.-10	91	0								
Totals			1	3	0	0	0	0	1	0

63µm	Volume (mL)		*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	528	0	0	0	0	0	0	0
2-2.5	41	16	136	0	0	16	0	0	0	0
2.5-3	61	8	224	0	0	0	0	0	0	0
3.-4.	61	8	32	0	0	0	0	0	0	0
4.-5	61	8	48	0	0	0	0	0	0	0
5.-6	81	8	0	0	0	0	0	0	0	0
6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	51	8	0	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	0	0	0	8	0	0
Totals		116	0	0	0	0	1448	8	216	1584

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	41	0		14						18
1-1.5	31	0		6						
1.5-2	21	0								1
2-2.5	41	0		2						
2.5-3	61	0								
3.-4.	61	0								
4.-5	61	0								
5.-6	81	0								
6.-7	71	0								
7.-8	51	0								
8.-9	61	0								
9.-10	91	0								
Totals			0	22	0	0	0	0	0	19

63µm	Volume (mL)		*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	0	0	0	0	48	0	0	0
2-2.5	41	16	0	0	0	0	40	0	48	0
2.5-3	61	8	0	0	0	0	136	0	80	0
3.-4.	61	8	0	0	0	0	48	0	64	0
4.-5	61	8	0	0	0	0	0	0	8	0
5.-6	81	8	0	0	0	0	0	0	0	0
6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	51	8	0	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	0	0	0	0	0	0
Totals		116	1488	0	16	0	0	0	0	0

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	41	0	68							
1-1.5	31	0	35							
1.5-2	21	0	6							
2-2.5	41	0	3							
2.5-3	61	0								
3.-4.	61	0	1							
4.-5	61	0								
5.-6	81	0								
6.-7	71	0								
7.-8	51	0								
8.-9	61	0								
9.-10	91	0								
Totals			113	0	0	0	0	0	0	0

63µm	Volume (mL)		*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	320	0	0	0	0	0	0	0
2-2.5	41	16	88	0	0	0	0	0	0	0
2.5-3	61	8	16	0	0	0	0	0	0	0
3.-4.	61	8	16	0	0	0	0	0	0	0
4.-5	61	8	0	0	0	0	0	0	0	0
5.-6	81	8	8	0	0	0	0	0	0	0
6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	51	8	0	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	16	0	0	0	0	0
Totals		116	64	48	356	40	48	1648	0	0

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
0-1	41	0	104	2			2	2		
1-1.5	31	0	23	4		3	34			
1.5-2	21	0	14	3			92			
2-2.5	41	0	29	1	2	4				
2.5-3	61	0	21		2					
3.-4.	61	0	2	1						
4.-5	61	0								
5.-6	81	0			2					
6.-7	71	0	1	2						
7.-8	51	0		2						
8.-9	61	0		1						
9.-10	91	0								
Totals			194	16	6	7	128	2	0	0

63µm	Volume (mL)		*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	0	0	48	208	0	0	0	0
2-2.5	41	16	0	0	16	32	0	0	0	0
2.5-3	61	8	0	0	32	8	0	0	0	0
3.-4.	61	8	0	0	16	0	0	16	0	0
4.-5	61	8	0	0	16	0	0	0	0	0
5.-6	81	8	0	0	16	0	0	0	0	0
6.-7	71	8	0	0	0	8	0	0	0	0
7.-8	51	8	0	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	0	0	0	0	0	0
Totals		116	48	0	0	0	0	0	0	0

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	41	0								
1-1.5	31	0	1				2			
1.5-2	21	0	2							
2-2.5	41	0								
2.5-3	61	0	1							
3.-4.	61	0	3							
4.-5	61	0								
5.-6	81	0								
6.-7	71	0								
7.-8	51	0					91			
8.-9	61	0	1							
9.-10	91	0	1							
Totals			9	0	0	0	93	0	0	0

63µm	Volume (mL)		*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	0	0	0	0	0	0	0	0
2-2.5	41	16	0	0	0	0	0	0	0	0
2.5-3	61	8	0	0	0	0	0	0	0	0
3.-4.	61	8	0	0	0	0	0	0	0	0
4.-5	61	8	16	0	0	0	0	0	0	0
5.-6	81	8	0	0	0	0	0	0	0	0
6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	51	8	8	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	0	0	0	0	0	0
Totals		116	284	0	0	64	0	0	0	0

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
0-1	41	0	2			16				
1-1.5	31	0	1			5				
1.5-2	21	0								
2-2.5	41	0	1			1				
2.5-3	61	0	6							
3.-4.	61	0			6	1				
4.-5	61	0	3							
5.-6	81	0	7							
6.-7	71	0	39							
7.-8	51	0		2						
8.-9	61	0	11							
9.-10	91	0	3							
Totals			73	2	6	23	0	0	0	0

63µm	Volume (mL)		*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	0	32	0	0	0	0	0	0
2-2.5	41	16	0	0	0	0	0	0	0	0
2.5-3	61	8	0	0	0	0	0	0	0	0
3.-4.	61	8	0	0	0	0	0	0	0	0
4.-5	61	8	0	24	0	0	0	0	0	0
5.-6	81	8	0	0	0	0	0	0	0	0
6.-7	71	8	0	16	0	0	0	0	0	0
7.-8	51	8	0	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	0	0	0	0	0	0
Totals		116	0	0	0	0	232	184	0	0

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	41	0						6		
1-1.5	31	0						1		
1.5-2	21	0						1		
2-2.5	41	0	1				1			
2.5-3	61	0								
3.-4.	61	0								
4.-5	61	0								
5.-6	81	0						1		
6.-7	71	0								
7.-8	51	0								
8.-9	61	0								
9.-10	91	0								
Totals			1	0	0	0	1	9	0	0

63µm	Volume (mL)		*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	41	16	0	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0	0
1.5-2	21	8	0	0	0	0	0	0	16	0
2-2.5	41	16	0	0	0	0	0	0	0	0
2.5-3	61	8	0	0	0	0	0	8	0	0
3.-4.	61	8	0	0	0	0	0	0	0	0
4.-5	61	8	0	0	0	0	0	0	0	0
5.-6	81	8	0	0	0	0	0	0	0	0
6.-7	71	8	0	0	0	0	0	16	0	0
7.-8	51	8	0	0	0	0	0	0	0	0

9.-10	101	**8**	0	0	0	0	0	0	40
Totals		116	0	8	152	0	0	0	10012

STN:4 D:B POS:5

150µm	Volume (ml	Split	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	41	0							294
1-1.5	31	0			2				215
1.5-2	21	0			11				175
2-2.5	41	0			3				64
2.5-3	61	0							37
3.-4.	61	0			4				20
4.-5	61	0			1				5
5.-6	81	0							10
6.-7	71	0			8				50
7.-8	51	0							97
8.-9	61	0							13
9.-10	91	0							4
Totals			0	0	29	0	0	0	984

63µm	Volume (mL)		*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	41	16	0	0	0	0	0	0	0
1-1.5	31	8	0	0	0	0	0	0	0
1.5-2	21	8	0	16	0	16	0	0	1584
2-2.5	41	16	0	0	0	0	0	0	440
2.5-3	61	8	0	0	0	0	0	0	568
3.-4.	61	8	0	0	0	16	0	0	208
4.-5	61	8	0	0	0	0	0	0	112
5.-6	81	8	0	0	0	0	0	0	24
6.-7	71	8	0	0	0	0	0	0	56
7.-8	51	8	0	0	8	24	0	0	48

8.-9	61	8	16	0	0	0	0	0	0	0
9.-10	91	**8**	0	0	0	0	0	0	0	0
Totals		112	40	0	0	0	0	0	32	448

STN:5 D:B POS:5

150µm	Volume (mL)	Split	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
0-1	61	1	0	0	0	2	0	0	0	14
1-1.5	21	8	0	0	0	0	0	0	0	0
1.5-2	31	1	0	0	0	0	0	0	0	0
2-2.5	31	1	0	0	0	2	0	0	0	2
2.5-3	31	2	0	0	0	0	0	0	0	4
3.-4.	51	1	0	0	0	0	0	0	0	0
4.-5	71	1	0	0	0	0	0	0	0	0
5.-6	51	1	3	0	0	0	0	0	0	0
6.-7	81	1	0	0	0	1	0	0	0	0
7.-8	61	1	0	0	0	0	1	0	0	0
8.-9	21	1	0	0	0	0	0	0	0	0
9.-10	36	1	0	0	0	0	0	0	0	0
Totals			3	0	0	5	1	0	0	20

63µm	Volume (mL)		*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
0-1	61	16	0	0	0	0	0	0	0	144
1-1.5	21	8	8	0	0	0	0	0	0	72
1.5-2	31	8	0	0	0	0	0	0	0	24
2-2.5	31	16	0	0	0	0	0	0	0	32
2.5-3	31	16	0	0	0	0	0	0	0	0
3.-4.	51	8	8	0	0	0	0	0	8	8
4.-5	71	16	0	0	0	0	0	0	0	0
5.-6	51	16	0	0	0	0	0	0	0	0
6.-7	81	16	176	0	0	0	0	0	0	0

8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	91	**8**	0	0	0	0	0	0	0	0
Totals		112	968	0	0	16	0	0	0	0

STN:5 D:B POS:5		Split	*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
150µm	Volume (mL)									
0-1	61	1	0	0	0	0	0	0	2	1
1-1.5	21	8	104	0	0	0	0	0	0	0
1.5-2	31	1	2	0	0	0	0	0	0	0
2-2.5	31	1	2	1	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	51	1	0	0	0	0	0	0	0	0
4.-5	71	1	0	0	0	0	0	0	0	0
5.-6	51	1	0	0	0	0	0	0	0	0
6.-7	81	1	0	0	0	0	0	0	1	0
7.-8	61	1	0	0	0	0	0	0	0	0
8.-9	21	1	0	0	0	0	0	0	0	0
9.-10	36	1	0	0	0	0	0	0	0	0
Totals			108	1	0	0	0	0	3	1

			Bolivina pseudopunctata	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
63µm	Volume (mL)									
0-1	61	16	80	0	0	0	0	0	0	0
1-1.5	21	8	1632	0	0	0	0	0	0	0
1.5-2	31	8	1504	0	0	0	0	0	0	0
2-2.5	31	16	4192	0	0	0	0	0	0	0
2.5-3	31	16	3536	0	0	0	0	0	0	0
3.-4.	51	8	72	0	0	0	0	0	0	0
4.-5	71	16	176	0	0	0	0	0	0	0
5.-6	51	16	144	0	0	0	0	0	0	0
6.-7	81	16	0	0	0	0	0	0	0	0

8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	91	**8**	0	0	0	0	0	0	0	0
Totals		112	0	0	0	0	272	0	200	0

STN:5 D:B POS:5		Split	*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
150µm	Volume (mL)									
0-1	61	1	3	1	0	0	0	0	0	4
1-1.5	21	8	0	0	0	0	0	0	0	0
1.5-2	31	1	0	0	0	0	0	0	0	3
2-2.5	31	1	0	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	51	1	0	0	0	0	0	0	0	0
4.-5	71	1	0	0	0	0	0	0	0	0
5.-6	51	1	0	0	0	0	0	0	0	0
6.-7	81	1	0	0	0	0	0	0	0	0
7.-8	61	1	0	0	0	0	0	0	0	0
8.-9	21	1	0	0	0	0	0	0	0	0
9.-10	36	1	0	0	0	0	0	0	0	0
Totals			3	1	0	0	0	0	0	7

63µm	Volume (mL)		*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	61	16	0	0	0	0	448	0	0	96
1-1.5	21	8	0	0	0	0	48	0	0	0
1.5-2	31	8	0	0	0	0	0	0	0	0
2-2.5	31	16	0	0	0	0	0	0	400	32
2.5-3	31	16	0	0	0	0	0	0	0	0
3.-4.	51	8	0	0	0	0	0	0	0	0
4.-5	71	16	0	0	0	0	32	0	0	0
5.-6	51	16	0	0	0	0	0	0	0	0
6.-7	81	16	0	0	0	0	0	0	0	0

8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	91	**8**	0	0	0	0	0	0	0	0
Totals		112	448	0	0	0	0	0	0	0

STN:5 D:B POS:5

150µm	Volume (mL)	Split	*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	61	1	4	0	0	0	0	0	0	0
1-1.5	21	8	192	0	0	0	0	0	0	0
1.5-2	31	1	0	0	0	0	0	0	0	0
2-2.5	31	1	0	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	51	1	0	0	0	0	0	0	0	0
4.-5	71	1	0	0	0	0	0	0	0	0
5.-6	51	1	0	0	0	0	0	0	0	0
6.-7	81	1	0	0	0	0	0	0	0	0
7.-8	61	1	0	0	0	0	0	0	0	0
8.-9	21	1	0	0	0	0	0	0	0	0
9.-10	36	1	0	0	0	0	0	0	0	0
Totals			196	0	0	0	0	0	0	0

63µm	Volume (mL)		*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	61	16	2800	0	0	0	0	0	0	0
1-1.5	21	8	0	0	0	0	0	0	0	0
1.5-2	31	8	224	0	0	0	0	0	0	0
2-2.5	31	16	144	0	0	0	0	0	0	0
2.5-3	31	16	80	0	0	0	0	0	0	0
3.-4.	51	8	80	0	0	0	0	0	0	0
4.-5	71	16	64	0	0	0	0	0	0	0
5.-6	51	16	64	0	0	0	0	0	0	0
6.-7	81	16	16	0	0	0	0	0	0	0

8.-9	61	8	0	0	24	0	0	0	0	0
9.-10	91	**8**	0	16	0	0	0	0	0	0
Totals		112	0	16	168	256	0	16	0	0

STN:5 D:B POS:5		Split	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
150µm	Volume (mL)									
0-1	61	1	26	1	2	0	4	0	0	0
1-1.5	21	8	56	0	8	0	0	0	0	0
1.5-2	31	1	13	0	2	0	17	1	0	0
2-2.5	31	1	2	0	2	0	0	0	0	0
2.5-3	31	2	10	0	4	0	0	0	0	0
3.-4.	51	1	10	1	4	0	3	0	0	0
4.-5	71	1	3	0	1	2	0	0	0	0
5.-6	51	1	0	0	4	0	0	0	0	0
6.-7	81	1	2	0	4	0	0	0	0	0
7.-8	61	1	0	0	10	1	0	0	0	0
8.-9	21	1	0	0	3	1	0	0	0	0
9.-10	36	1	0	0	7	0	0	0	0	0
Totals			122	2	51	4	24	1	0	0

63µm	Volume (mL)		*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
0-1	61	16	0	0	0	48	0	416	0	0
1-1.5	21	8	0	0	0	16	0	0	0	0
1.5-2	31	8	0	0	0	0	0	0	0	0
2-2.5	31	16	0	0	16	0	0	0	0	0
2.5-3	31	16	0	0	32	16	0	0	0	0
3.-4.	51	8	0	0	8	0	0	0	0	0
4.-5	71	16	0	0	0	0	0	0	0	0
5.-6	51	16	0	0	112	0	0	0	0	0
6.-7	81	16	0	0	32	0	0	0	0	0

8.-9	61	8	16	0	0	0	0	0	0	0
9.-10	91	**8**	0	0	0	0	0	0	0	0
Totals		112	40	0	0	0	0	0	0	0

STN:5 D:B POS:5		Split	*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
150µm	Volume (mL)									
0-1	61	1	0	0	0	0	0	0	0	0
1-1.5	21	8	8	0	0	0	8	0	0	0
1.5-2	31	1	0	0	0	0	0	0	0	3
2-2.5	31	1	0	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	51	1	0	0	0	0	0	0	0	0
4.-5	71	1	0	0	0	2	0	0	0	0
5.-6	51	1	0	0	0	0	0	0	0	0
6.-7	81	1	1	0	0	0	0	0	0	0
7.-8	61	1	0	0	0	0	0	0	0	0
8.-9	21	1	0	0	0	0	0	0	0	0
9.-10	36	1	1	0	0	0	0	0	0	0
Totals			10	0	0	2	8	0	0	3

63µm	Volume (mL)		*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	61	16	0	0	0	0	0	0	0	0
1-1.5	21	8	0	0	0	0	0	0	0	0
1.5-2	31	8	8	0	0	0	0	0	0	0
2-2.5	31	16	0	0	0	0	0	0	0	0
2.5-3	31	16	16	0	0	0	0	0	0	0
3.-4.	51	8	16	0	0	0	0	0	0	0
4.-5	71	16	0	0	0	0	0	0	0	0
5.-6	51	16	128	0	0	0	0	0	0	0
6.-7	81	16	48	0	0	0	0	0	0	0

8.-9	61	8	0	56	0	0	0	0	0	0
9.-10	91	**8**	0	0	0	0	0	0	0	0
Totals		112	0	128	0	0	0	0	0	0

STN:5 D:B POS:5		Split	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
150µm	Volume (mL)									
0-1	61	1	3	0	0	20	0	0	0	2
1-1.5	21	8	8	0	0	0	0	0	0	0
1.5-2	31	1	3	0	0	0	0	0	0	0
2-2.5	31	1	2	0	0	2	0	0	0	0
2.5-3	31	2	0	0	2	26	0	0	0	0
3.-4.	51	1	0	0	2	4	0	0	0	0
4.-5	71	1	0	0	0	0	0	0	0	0
5.-6	51	1	3	0	0	0	0	0	0	0
6.-7	81	1	0	0	0	0	0	0	0	0
7.-8	61	1	0	0	0	0	0	0	0	0
8.-9	21	1	0	0	0	0	0	0	0	0
9.-10	36	1	0	0	0	0	0	0	0	0
Totals			19	0	4	52	0	0	0	2

			Portatrochammina stenhousei	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
63µm	Volume (mL)									
0-1	61	16	64	0	0	32	0	0	0	0
1-1.5	21	8	16	0	0	8	0	0	0	0
1.5-2	31	8	0	0	0	0	0	0	0	0
2-2.5	31	16	32	0	0	0	0	0	0	0
2.5-3	31	16	32	0	0	32	0	0	0	0
3.-4.	51	8	0	0	0	0	0	0	0	0
4.-5	71	16	0	0	0	0	0	0	0	0
5.-6	51	16	96	0	0	0	0	0	0	0
6.-7	81	16	0	0	0	0	0	0	0	0

8.-9	61	8	0	0	0	0	0	8	0	0
9.-10	91	**8**	0	0	0	0	0	0	0	0
Totals		112	0	0	0	0	0	32	16	0

STN:5 D:B POS:5		Split	*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
150µm	Volume (mL)									
0-1	61	1	0	0	0	0	0	0	0	0
1-1.5	21	8	0	0	0	0	0	240	0	0
1.5-2	31	1	3	0	0	0	0	0	0	0
2-2.5	31	1	1	0	0	0	0	0	0	0
2.5-3	31	2	0	0	0	0	0	0	0	0
3.-4.	51	1	0	0	0	0	0	0	0	0
4.-5	71	1	0	0	0	0	0	1	0	0
5.-6	51	1	1	0	0	0	0	0	0	0
6.-7	81	1	0	0	0	0	0	2	0	0
7.-8	61	1	0	0	0	0	0	0	0	0
8.-9	21	1	0	0	0	0	0	0	0	0
9.-10	36	1	0	0	0	0	0	0	0	0
Totals			5	0	0	0	0	243	0	0

63µm	Volume (mL)		*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	61	16	0	0	0	16	16	0	0	0
1-1.5	21	8	0	0	0	0	0	0	0	0
1.5-2	31	8	0	0	0	0	0	0	0	0
2-2.5	31	16	0	0	0	0	0	0	0	0
2.5-3	31	16	0	0	0	0	0	0	0	0
3.-4.	51	8	0	0	0	0	0	0	0	0
4.-5	71	16	0	0	0	0	0	0	0	0
5.-6	51	16	0	0	0	0	0	0	0	0
6.-7	81	16	0	0	0	32	32	0	0	0

8.-9	61	8	0	0	32	8	0	0	160
9.-10	91	**8**	0	0	8	0	0	0	24
Totals		112	0	16	48	64	0	0	3224

STN:5 D:B POS:5		Split	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
150µm	Volume (mL)								**Totals**
0-1	61	1	0	0	0	0	0	0	89
1-1.5	21	8	0	0	8	0	0	0	632
1.5-2	31	1	0	0	1	0	0	0	48
2-2.5	31	1	0	0	0	0	0	0	16
2.5-3	31	2	0	0	0	0	0	0	46
3.-4.	51	1	0	0	0	0	0	0	24
4.-5	71	1	0	0	0	0	0	0	9
5.-6	51	1	0	0	0	0	0	0	11
6.-7	81	1	0	0	5	0	0	0	16
7.-8	61	1	0	0	1	0	0	0	13
8.-9	21	1	0	0	3	0	0	0	7
9.-10	36	1	0	0	1	0	0	0	9
Totals			0	0	19	0	0	0	920

63µm	Volume (mL)		*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	61	16	0	0	0	0	0	0	4160
1-1.5	21	8	0	0	8	0	0	0	1808
1.5-2	31	8	0	0	0	0	0	0	1760
2-2.5	31	16	0	0	48	0	0	0	4896
2.5-3	31	16	0	0	32	0	0	0	3776
3.-4.	51	8	0	0	0	0	0	0	200
4.-5	71	16	0	16	16	0	0	0	304
5.-6	51	16	0	112	0	0	0	0	656
6.-7	81	16	0	496	0	0	0	0	832

7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	21	16	16	0	0	0	0	0	0	0
9.-10	36	**8**	8	0	0	0	0	0	0	0
Totals			216	0	0	0	0	0	8	280

STN:6 D:B POS:8		Split	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
150µm	Volume (mL)									
0-1	61	1				19				
1-1.5	41	1				11				
1.5-2	31	1				10	3			15
2-2.5	31	1				9				13
2.5-3	31	1			4	10	2			
3.-4.	61	1				7		1		8
4.-5	61	1								
5.-6	71	1								
6.-7	71	1				1				
7.-8	56	1								
8.-9	61	1				1				
9.-10	56	1								
Totals			0	0	4	68	5	1	0	36

63µm	Volume (mL)		*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
0-1	61	16	16	0	0	144	0	0	0	64
1-1.5	41	16	0	0	0	96	0	0	0	704
1.5-2	31	16	16	0	0	16	0	0	0	0
2-2.5	31	8	0	0	0	24	0	0	0	24
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	24	0	0	8	0	8	0	24
4.-5	61	16	0	0	0	16	0	0	0	0
5.-6	71	8	0	0	0	0	0	0	0	8

7.-8	61	8	120	0	0	0	0	0	0	0
8.-9	21	16	112	0	0	0	0	0	0	0
9.-10	36	**8**	0	0	0	0	0	0	0	0
Totals			11568	0	0	0	0	0	0	0

STN:6 D:B POS:8		Split	*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
150µm	Volume (mL)									
0-1	61	1			2			10		
1-1.5	41	1						3		
1.5-2	31	1		1						
2-2.5	31	1			1			1		
2.5-3	31	1	2							
3.-4.	61	1	1	2				3		
4.-5	61	1								
5.-6	71	1				1		1		
6.-7	71	1		2						
7.-8	56	1								
8.-9	61	1								
9.-10	56	1								
Totals			3	5	3	1	0	18	0	0

63µm	Volume (mL)		*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
0-1	61	16	240	0	0	16	0	0	0	0
1-1.5	41	16	3808	0	0	0	0	0	0	0
1.5-2	31	16	2608	0	0	0	0	0	0	0
2-2.5	31	8	1728	0	0	0	0	0	0	0
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	216	0	0	8	0	0	0	0
4.-5	61	16	224	0	0	0	0	0	0	0
5.-6	71	8	0	0	0	0	0	16	0	0

7.-8	61	8	0	0	0	0	0	0	24	8
8.-9	21	16	0	0	0	0	0	0	0	0
9.-10	36	**8**	0	0	0	0	0	0	0	0
Totals			0	0	0	0	528	0	424	136

STN:6 D:B POS:8		Split	*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
150µm	Volume (mL)									
0-1	61	1								10
1-1.5	41	1								5
1.5-2	31	1		3						
2-2.5	31	1								7
2.5-3	31	1								2
3.-4.	61	1								12
4.-5	61	1								4
5.-6	71	1								2
6.-7	71	1								
7.-8	56	1								
8.-9	61	1								
9.-10	56	1								
Totals			0	3	0	0	0	0	0	42

63µm	Volume (mL)		*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	61	16	0	0	0	0	0	0	16	224
1-1.5	41	16	0	0	0	0	0	0	224	64
1.5-2	31	16	0	0	0	0	96	0	256	0
2-2.5	31	8	0	0	0	0	0	0	8	0
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	0	0	0	0	0	0	16	0
4.-5	61	16	0	0	0	0	0	0	0	0
5.-6	71	8	0	0	0	0	24	0	0	0

7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	21	16	16	0	0	0	0	0	0	0
9.-10	36	**8**	8	0	0	0	0	0	0	0
Totals			3496	0	0	0	0	0	0	0

STN:6 D:B POS:8

150µm	Volume (mL)	Split	*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	61	1								
1-1.5	41	1	1						14	
1.5-2	31	1	1					3		
2-2.5	31	1	1					6		
2.5-3	31	1	2							1
3.-4.	61	1	1							
4.-5	61	1								
5.-6	71	1								
6.-7	71	1						6		
7.-8	56	1						1		
8.-9	61	1								
9.-10	56	1								
Totals			6	0	0	0	0	16	14	1

63µm	Volume (mL)		*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	61	16	416	0	0	0	0	0	48	0
1-1.5	41	16	1696	0	0	0	0	0	0	0
1.5-2	31	16	144	0	0	0	0	0	0	0
2-2.5	31	8	16	0	0	0	0	0	0	0
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	24	0	0	0	0	0	0	0
4.-5	61	16	16	0	0	0	0	0	0	0
5.-6	71	8	16	0	0	0	0	0	0	0

7.-8	61	8	0	0	16	0	0	0	0	0
8.-9	21	16	0	0	48	0	0	0	0	0
9.-10	36	**8**	0	0	8	0	0	0	0	0
Totals			0	0	272	80	0	416	0	0

STN:6 D:B POS:8

150µm	Volume (mL)	Split	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
0-1	61	1	5	1						
1-1.5	41	1			1	1		8		
1.5-2	31	1			3					
2-2.5	31	1	1	2			3			
2.5-3	31	1		9		2	2			
3.-4.	61	1	2		6					
4.-5	61	1		1	2					
5.-6	71	1		3					1	
6.-7	71	1	1		7		2			
7.-8	56	1			7					
8.-9	61	1								
9.-10	56	1			1					
Totals			9	16	27	3	7	8	1	0

63µm	Volume (mL)		*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
0-1	61	16	48	0	0	0	0	0	0	0
1-1.5	41	16	0	0	0	320	0	0	0	0
1.5-2	31	16	0	0	0	16	0	0	0	0
2-2.5	31	8	0	0	0	0	0	0	0	0
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	0	0	16	0	0	0	0	0
4.-5	61	16	0	0	0	0	0	0	0	0
5.-6	71	8	0	0	64	0	0	8	0	0

7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	21	16	0	0	0	0	0	0	0	0
9.-10	36	**8**	0	0	0	0	0	0	0	0
Totals			216	0	0	0	0	0	0	0

STN:6 D:B POS:8

150µm	Volume (mL)	Split	*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	61	1	1							
1-1.5	41	1					6			
1.5-2	31	1								
2-2.5	31	1								
2.5-3	31	1	1							
3.-4.	61	1							1	
4.-5	61	1			1					
5.-6	71	1	1							
6.-7	71	1						1		
7.-8	56	1	1							
8.-9	61	1								
9.-10	56	1								
Totals			4	0	1	0	6	1	1	0

63µm	Volume (mL)		*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	61	16	16	0	0	0	0	0	0	0
1-1.5	41	16	0	0	0	0	32	0	0	0
1.5-2	31	16	0	0	0	0	0	0	0	0
2-2.5	31	8	0	0	0	8	0	0	0	0
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	0	0	0	0	0	0	0	0
4.-5	61	16	0	0	0	0	0	0	0	0
5.-6	71	8	0	0	0	0	0	0	0	0

7.-8	61	8	16	0	0	0	0	0	0	0
8.-9	21	16	32	0	0	0	0	0	0	0
9.-10	36	**8**	0	0	0	0	0	0	0	0
Totals			288	0	0	72	0	0	0	0

STN:6 D:B POS:8		Split	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
150µm	Volume (mL)									
0-1	61	1	16		14	15				
1-1.5	41	1	8			3				
1.5-2	31	1		3		5				
2-2.5	31	1	3			6				
2.5-3	31	1			8	11				
3.-4.	61	1	1			9				
4.-5	61	1	3			1				
5.-6	71	1	3			4				
6.-7	71	1	2		40	1				
7.-8	56	1								
8.-9	61	1	5			1				
9.-10	56	1	3							
Totals			44	3	62	56	0	0	0	0

63µm	Volume (mL)		*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
0-1	61	16	112	0	0	32	0	0	0	0
1-1.5	41	16	160	0	0	0	0	0	0	0
1.5-2	31	16	64	0	0	0	0	0	0	0
2-2.5	31	8	8	0	0	0	0	0	0	0
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	8	0	0	0	0	0	0	0
4.-5	61	16	0	0	0	0	0	0	0	0
5.-6	71	8	0	0	0	0	0	0	0	0

7.-8	61	8	0	0	0	0	0	0	0	0
8.-9	21	16	0	0	0	0	0	0	0	0
9.-10	36	**8**	0	0	0	0	0	0	0	0
Totals			0	0	0	48	48	0	0	0

STN:6 D:B POS:8

150µm	Volume (mL)	Split	*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	61	1								
1-1.5	41	1								
1.5-2	31	1								
2-2.5	31	1						1		
2.5-3	31	1								
3.-4.	61	1								
4.-5	61	1								
5.-6	71	1								
6.-7	71	1								
7.-8	56	1								
8.-9	61	1								
9.-10	56	1						1		
Totals			0	0	0	0	0	2	0	0

63µm	Volume (mL)		*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	61	16	0	0	0	0	0	32	0	0
1-1.5	41	16	0	0	0	0	0	0	0	0
1.5-2	31	16	0	0	0	0	16	0	0	0
2-2.5	31	8	0	0	0	0	0	8	0	0
2.5-3	31		0	0	0	0	0	0	0	0
3.-4.	61	8	0	0	0	0	0	0	0	0
4.-5	61	16	0	0	0	0	0	0	0	0
5.-6	71	8	0	0	0	0	0	0	0	0

7.-8	61	8	0	0	8	0	0	0	192
8.-9	21	16	0	176	0	0	0	0	400
9.-10	36	**8**	0	0	0	0	0	0	24
Totals			0	800	112	0	0	0	19008

STN:6 D:B POS:8		Split	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
150µm	Volume (mL)								0
0-1	61	1			11				104
1-1.5	41	1			8				69
1.5-2	31	1			15				62
2-2.5	31	1			15				69
2.5-3	31	1			8				64
3.-4.	61	1			18				72
4.-5	61	1			5				17
5.-6	71	1			6				22
6.-7	71	1			2				65
7.-8	56	1			7				16
8.-9	61	1			3				10
9.-10	56	1			1				6
Totals			0	0	99	0	0	0	576

63µm	Volume (mL)		*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	61	16	0	48	16	0	0	0	1488
1-1.5	41	16	0	0	96	0	0	0	7200
1.5-2	31	16	0	0	144	0	0	0	3376
2-2.5	31	8	0	0	40	0	0	0	1864
2.5-3	31		0	0	0	0	0	0	0
3.-4.	61	8	0	0	40	0	0	0	392
4.-5	61	16	0	0	48	0	0	0	304
5.-6	71	8	0	0	0	0	0	0	136

6.-7	71	8	16	0	0	0	0	0	0	8
7.-8	56	8	0	0	0	8	0	0	0	24
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	56	**4**	12	0	0	8	0	0	0	0
Totals			84	0	0	320	0	8	0	856

STN:7 D:B POS:12		Split	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
150µm	Volume (mL)									
0-1	51	0		22		1				
1-1.5	21	0								
1.5-2	31	0								50
2-2.5	51	0								12
2.5-3	41	0		3						
3.-4.	51	0								
4.-5	91	0								3
5.-6	61	0								
6.-7	61	0								
7.-8	56	0								
8.-9	61	0								
9.-10	81	0								1
Totals			0	25	0	1	0	0	0	66

			Adercotryma glomeratum	*Alterammina alternans*	*Ammobaculites sp.*	*Ammodiscus sp.*	*Ammovertellina sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
63µm	Volume (mL)									
0-1	51	16	0	0	0	0	0	0	0	0
1-1.5	21	16	0	0	0	0	0	0	0	80
1.5-2	31	16	0	0	0	0	0	0	0	32
2-2.5	51	16	0	0	0	0	0	0	0	144
2.5-3	41	8	0	0	0	0	0	0	0	64
3.-4.	51	16	0	0	0	0	0	0	0	0
4.-5	91	32	0	0	0	0	0	0	0	0

6.-7	71	8	32	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	56	**4**	0	0	0	0	0	0	0	0
Totals			8856	0	0	24	0	16	0	0

STN:7 D:B POS:12

150µm	Volume (mL)	Split	*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
0-1	51	0							8	
1-1.5	21	0							1	
1.5-2	31	0								
2-2.5	51	0								
2.5-3	41	0								
3.-4.	51	0								
4.-5	91	0								
5.-6	61	0								
6.-7	61	0								
7.-8	56	0								
8.-9	61	0								
9.-10	81	0								
Totals			0	0	0	0	0	0	9	0

63µm	Volume (mL)		*Bolivina pseudopunctata*	*Bulimina aculeata*	*Bulimina gibba*	*Cassidulinoides parvus*	*Cassidulinoides porrectus*	*Cibicides grossepunctatus*	*Cribrostomoides jeffreysii*	*Cruciloculina triagularis*
0-1	51	16	0	0	0	0	0	0	0	0
1-1.5	21	16	32	0	0	0	0	0	0	0
1.5-2	31	16	112	0	0	0	0	0	0	0
2-2.5	51	16	576	0	0	0	0	0	0	0
2.5-3	41	8	1088	0	0	0	0	0	0	0
3.-4.	51	16	0	0	0	0	0	0	0	0
4.-5	91	32	32	0	0	0	0	0	0	0

6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	8	0
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	56	**4**	0	0	0	0	0	0	0	0
Totals			0	0	0	0	120	0	528	288

STN:7 D:B POS:12

150µm	Volume (mL)	Split	*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	51	0								
1-1.5	21	0		13						
1.5-2	31	0								
2-2.5	51	0		2						
2.5-3	41	0								
3.-4.	51	0								
4.-5	91	0								
5.-6	61	0								
6.-7	61	0		1						
7.-8	56	0								
8.-9	61	0								
9.-10	81	0		1						1
Totals			0	17	0	0	0	0	0	1

63µm	Volume (mL)		*Dentalina communis*	*Earlandammina drakensis*	*Eggerella nitens*	*Episomaroides bassensis*	*Epistominella exigua*	*Fissurina sp.*	*Furenkoina fusiformis*	*Globocassidulina subglobosa*
0-1	51	16	0	0	0	0	208	0	0	0
1-1.5	21	16	0	0	0	0	0	0	0	0
1.5-2	31	16	0	0	0	0	0	0	64	0
2-2.5	51	16	0	0	0	0	0	0	80	0
2.5-3	41	8	0	16	0	0	0	0	296	0
3.-4.	51	16	0	0	0	0	0	0	0	0
4.-5	91	32	0	0	0	0	0	0	0	0

6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	56	**4**	0	0	0	0	0	0	0	0
Totals			2328	0	0	0	0	0	48	0

STN:7 D:B POS:12 Split

150µm	Volume (mL)		*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	51	0	21	11						
1-1.5	21	0	4							
1.5-2	31	0	8							
2-2.5	51	0	1							
2.5-3	41	0					1			
3.-4.	51	0								
4.-5	91	0								
5.-6	61	0	1							
6.-7	61	0								
7.-8	56	0								
8.-9	61	0								
9.-10	81	0								
Totals			35	11	0	0	1	0	0	0

63µm	Volume (mL)		*Haplophragmoides parkerae*	*Hormosinella distans*	*Hormosinella oviculata*	*Hyalinonetrion sahulense*	*Ioanella tumidula*	*Labrosipra jeffreysii*	*Labrospira wiesneri*	*Lagena sp.*
0-1	51	16	1008	0	0	0	0	0	0	0
1-1.5	21	16	1312	0	0	0	0	0	0	0
1.5-2	31	16	224	0	0	0	0	0	0	0
2-2.5	51	16	96	0	0	0	0	0	0	0
2.5-3	41	8	88	0	0	0	0	0	0	0
3.-4.	51	16	64	0	0	0	0	0	0	0
4.-5	91	32	32	0	0	0	0	0	0	0

6.-7	71	8	0	0	32	0	0	0	0	0
7.-8	56	8	0	0	16	0	0	0	0	0
8.-9	61	8	0	0	8	0	0	0	0	0
9.-10	56	**4**	0	0	12	0	0	0	0	0
Totals			48	0	148	336	0	8	0	0

STN:7 D:B POS:12		Split	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
150µm	Volume (mL)									
0-1	51	0	12		3			4		
1-1.5	21	0						37		
1.5-2	31	0	3			4				
2-2.5	51	0	6	1						
2.5-3	41	0	3					2		
3.-4.	51	0								
4.-5	91	0								
5.-6	61	0		1						
6.-7	61	0								
7.-8	56	0	1		1					
8.-9	61	0	1							
9.-10	81	0								
Totals			26	2	4	4	0	43	0	0

			Lagenammina difflugiformis	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*	*Nodulina kerguelensis*	*Nonionella iridea*	*Oolina globosacaudigera*	*Parafissurina sp.*
63µm	Volume (mL)									
0-1	51	16	48	0	816	96	0	0	0	0
1-1.5	21	16	128	0	32	80	0	0	0	0
1.5-2	31	16	16	0	0	0	0	80	0	0
2-2.5	51	16	0	0	0	32	0	0	0	0
2.5-3	41	8	16	0	16	0	0	0	0	0
3.-4.	51	16	0	0	0	0	0	0	0	0
4.-5	91	32	0	0	0	0	0	0	0	0

6.-7	71	8	0	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	8	0	0	0	0	0	0	0
9.-10	56	**4**	36	0	0	0	0	0	0	0
Totals			60	0	0	8	32	0	0	0

STN:7 D:B POS:12 Split

150µm	Volume (mL)		*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	51	0								
1-1.5	21	0								
1.5-2	31	0								
2-2.5	51	0								
2.5-3	41	0								
3.-4.	51	0								
4.-5	91	0								
5.-6	61	0								
6.-7	61	0	1							
7.-8	56	0			1					
8.-9	61	0	1							
9.-10	81	0								
Totals			2	0	1	0	0	0	0	0

63µm	Volume (mL)		*Paratrochammina lepida*	*Paratrochammina scotiaensis*	*Polymorphinella sp.*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*	*Portatrochammina bipolaris*	*Portatrochammina malovensis*	*Portatrochammina scotiaensis*
0-1	51	16	0	0	0	480	0	0	0	0
1-1.5	21	16	32	0	0	0	0	0	0	0
1.5-2	31	16	0	0	0	0	0	0	0	0
2-2.5	51	16	0	0	0	0	0	0	0	0
2.5-3	41	8	0	0	0	0	0	0	0	0
3.-4.	51	16	0	0	0	0	0	0	0	0
4.-5	91	32	64	0	0	0	0	0	0	0

6.-7	71	8	32	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	8	0	0	0	0	0	0	0
9.-10	56	**4**	4	0	0	0	0	0	0	0
Totals			396	0	0	32	0	0	0	0

STN:7 D:B POS:12

150µm	Volume (mL)	Split	*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
0-1	51	0		2						
1-1.5	21	0								
1.5-2	31	0								
2-2.5	51	0								
2.5-3	41	0								
3.-4.	51	0			3					
4.-5	91	0								
5.-6	61	0								
6.-7	61	0								
7.-8	56	0								
8.-9	61	0								
9.-10	81	0								
Totals			0	2	3	0	0	0	0	0

63µm	Volume (mL)		*Portatrochammina stenhousei*	*Pseudotrochammina arenacea*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Recurvoides contrortus*	*Reophax distans*	*Reophax fusiformis*	*Reophax pulifer*
0-1	51	16	0	0	0	0	0	0	0	0
1-1.5	21	16	128	0	0	0	0	0	0	0
1.5-2	31	16	16	0	0	0	0	0	0	0
2-2.5	51	16	0	0	0	0	0	0	0	0
2.5-3	41	8	88	0	0	0	0	0	0	0
3.-4.	51	16	96	0	0	0	0	0	0	0
4.-5	91	32	64	0	0	0	0	0	0	0

6.-7	71	8	0	0	0	0	8	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	0	0	0	0	8	0	0	0
9.-10	56	**4**	0	0	0	0	0	0	0	0
Totals			0	0	0	0	32	40	0	0

STN:7 D:B POS:12

150µm	Volume (mL)	Split	*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	51	0				5			3	
1-1.5	21	0					1	1		
1.5-2	31	0								
2-2.5	51	0						1	1	
2.5-3	41	0						1		
3.-4.	51	0								
4.-5	91	0						1		
5.-6	61	0								
6.-7	61	0								
7.-8	56	0								
8.-9	61	0								
9.-10	81	0								
Totals			0	0	0	5	1	4	4	0

63µm	Volume (mL)		*Reophax oviculata*	*Reophax scorpiurus*	*Robertinoides sp.*	*Rhabdammina sp.*	*Rhumblerella sp.*	*Saccammina sp.*	*Saccorhiza sp.*	*Spiroplectammina sp.*
0-1	51	16	0	0	0	0	0	192	0	0
1-1.5	21	16	0	0	0	0	0	0	0	0
1.5-2	31	16	0	0	0	0	0	0	0	0
2-2.5	51	16	0	0	0	0	0	0	0	0
2.5-3	41	8	0	0	0	0	0	0	0	0
3.-4.	51	16	0	0	0	0	0	0	0	0
4.-5	91	32	0	0	0	0	0	0	0	0

6.-7	71	8	0	0	8	0	0	0	136
7.-8	56	8	0	0	0	0	0	0	56
8.-9	61	8	0	0	0	0	0	0	32
9.-10	56	**4**	0	8	8	0	0	0	88
Totals			0	56	400	0	0	0	15072

STN:7 D:B POS:12

150µm	Volume (mL)	Split	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	51	0							92
1-1.5	21	0			2				59
1.5-2	31	0				1			66
2-2.5	51	0							24
2.5-3	41	0							10
3.-4.	51	0							3
4.-5	91	0							4
5.-6	61	0							2
6.-7	61	0							2
7.-8	56	0							3
8.-9	61	0							2
9.-10	81	0							3
Totals			0	0	2	1	0	0	270

63µm	Volume (mL)		*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochammina quadricamerata*	*Usbekistania charoides*	*Zavodovskina careyi*	**Totals**
0-1	51	16	0	0	0	0	0	0	2848
1-1.5	21	16	0	0	0	0	0	0	1824
1.5-2	31	16	0	0	0	0	0	0	544
2-2.5	51	16	0	0	0	0	0	0	928
2.5-3	41	8	0	16	0	0	0	0	1688
3.-4.	51	16	0	0	0	0	0	0	160
4.-5	91	32	0	0	0	0	0	0	192

5.-6	61	8	0	0	0	0	0	0	0	8
6.-7	61	8	0	0	0	0	0	0	0	8
7.-8	56	8	0	0	0	0	0	0	0	8
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	81	**8**	0	0	0	0	0	0	0	0
Totals			0	0	0	0	0	0	0	344

5.-6	61	8	8	0	0	0	0	0	0	0
6.-7	61	8	16	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	81	**8**	0	0	0	0	0	0	0	0
Totals			1864	0	0	0	0	0	0	0

5.-6	61	8	0	0	0	0	0	8	0	0
6.-7	61	8	0	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	8	0
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	81	**8**	0	0	0	0	0	0	0	0
Totals			0	16	0	0	208	8	448	0

5.-6	61	8	40	0	0	0	0	0	0	0
6.-7	61	8	24	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	81	**8**	0	0	0	0	0	80	0	0
Totals			2888	0	0	0	0	80	0	0

5.-6	61	8	0	0	24	0	0	0	0	0
6.-7	61	8	0	0	32	0	0	0	0	0
7.-8	56	8	0	0	56	0	0	0	0	0
8.-9	61	8	0	0	24	0	0	0	0	0
9.-10	81	**8**	0	0	0	0	0	184	0	0
Totals			208	0	1000	208	0	264	0	0

June Rose Bengal Foraminiferal Counts

5.-6	61	8	0	0	0	0	0	0	0	0
6.-7	61	8	8	0	0	0	0	0	0	0
7.-8	56	8	8	0	0	56	0	0	0	0
8.-9	61	8	16	0	0	48	0	0	0	0
9.-10	81	**8**	0	0	0	0	0	0	0	0
Totals			128	0	0	584	0	0	0	0

June Rose Bengal Foraminiferal Counts

5.-6	61	8	24	0	0	0	0	0	0	0
6.-7	61	8	8	0	0	0	0	0	0	0
7.-8	56	8	0	0	0	0	0	0	0	0
8.-9	61	8	48	0	0	0	0	0	0	0
9.-10	81	**8**	32	0	0	0	0	0	0	0
Totals			504	0	0	0	0	0	0	0

5.-6	61	8	0	0	0	24	0	0	0	0
6.-7	61	8	0	0	0	0	8	0	0	0
7.-8	56	8	0	0	0	0	0	8	0	0
8.-9	61	8	0	0	0	0	0	0	0	0
9.-10	81	**8**	0	0	0	0	0	0	0	0
Totals			0	0	0	24	8	200	0	0

5.-6	61	8	0	0	0	0	0	0	136
6.-7	61	8	0	0	0	0	0	0	104
7.-8	56	8	0	8	0	0	0	0	152
8.-9	61	8	0	32	0	0	0	0	168
9.-10	81	**8**	0	0	0	0	0	0	296
Totals			0	56	0	0	0	0	9040

Cell Tracker Green Foraminiferal Counts

CTG 08-04

STATION 1	SPLIT	POSITION	DROP	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
150	1	2	C	0	4	0	0	0	4
63	32			0	0	0	0	0	128
STATION 2	SPLIT	POSITION	DROP						
150	16	9	B	0	0	0	16	0	32
63	32			0	0	0	0	0	224
STATION 3	SPLIT	POSITION	DROP						
150	8	4	A	16	0	0	0	0	128
63	32			0	0	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	1	7	A	0	0	0	0	0	10
63	32			0	0	0	0	0	128
STATION 5	SPLIT	POSITION	DROP						
150	1	3	A	0	0	1	0	0	0
63	32			0	0	0	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	1	12	A	0	0	8	0	0	12
63	32			0	0	0	0	0	32
STATION 7	SPLIT	POSITION	DROP						
150	2	8	A	0	0	0	0	4	28
63	32			0	0	0	0	0	0
TOTAL APRIL				16	4	9	16	4	726

CTG 08-08

STATION 1	SPLIT	POSITION	DROP	*Adercotryma glomeratum*	*Alterammina alternans*	*Ammodiscus sp.*	*Angulogerina earlandi*	*Astrononion antarcticum*	*Astrononion echolsi*
150	1	10	A	0	0	6	0	0	8
63	32			0	0	0	0	0	96
STATION 2	SPLIT	POSITION	DROP						
150	8	11	B	0	0	16	0	0	48

Cell Tracker Green Foraminiferal Counts

CTG 08-04

				Bolivina pseudopunctata	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cribrostomoides jeffreysii*	*Cystammina argentea*	*Earlandammina drakensis*
STATION 1	SPLIT	POSITION	DROP						
150	1	2	C	0	12	0	4	0	0
63	32			32	0	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	16	9	B	0	48	16	0	0	0
63	32			0	0	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150	8	4	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	1	7	A	0	0	2	0	0	0
63	32			128	0	0	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	1	3	A	0	0	0	0	0	0
63	32			992	0	0	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	1	12	A	0	0	8	21	0	0
63	32			1504	0	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	8	A	0	0	0	0	0	16
63	32			32	0	0	0	0	0
TOTAL APRIL				2688	60	26	25	0	16

CTG 08-08

				Bolivina pseudopunctata	*Bulimina aculeata*	*Cassidulinoides parvus*	*Cribrostomoides jeffreysii*	*Cystammina argentea*	*Earlandammina drakensis*
STATION 1	SPLIT	POSITION	DROP						
150	1	10	A	0	16	0	0	0	0
63	32			0	0	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	8	11	B	0	0	0	0	0	0

Cell Tracker Green Foraminiferal Counts

CTG 08-04

STATION 1	SPLIT	POSITION	DROP	*Fursenkoina fusiformis*	*Globocassidulina subglobosa*	*Haplophragmoides parkerae*	*Hormosinella oviculata*	*Ioanella tumidula*	*Labrosipra jeffreysii*
150	1	2	C	0	0	0	4	0	4
63	32			0	0	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	16	9	B	0	32	0	0	0	0
63	32			0	96	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150	8	4	A	0	88	0	0	0	8
63	32			0	64	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	1	7	A	0	1	4	0	2	2
63	32			0	0	0	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	1	3	A	0	0	0	0	0	3
63	32			96	0	0	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	1	12	A	0	0	0	0	0	0
63	32			544	160	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	8	A	0	0	4	0	0	0
63	32			0	0	32	0	0	0
TOTAL APRIL				640	441	40	4	2	17

CTG 08-08

STATION 1	SPLIT	POSITION	DROP	*Fursenkoina fusiformis*	*Globocassidulina subglobosa*	*Haplophragmoides parkerae*	*Hormosinella oviculata*	*Ioanella tumidula*	*Labrosipra jeffreysii*
150	1	10	A	0	0	0	0	0	0
63	32			0	32	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	8	11	B	0	8	0	0	0	8

Cell Tracker Green Foraminiferal Counts

CTG 08-04

STATION 1	SPLIT	POSITION	DROP	*Labrospira wiesneri*	*Lagena sp.*	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*
150	1	2	C	0	0	8	8	0	1
63	32			0	0	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	16	9	B	32	0	0	0	0	16
63	32			0	0	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150	8	4	A	0	0	0	8	32	0
63	32			0	0	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	1	7	A	0	0	2	0	2	0
63	32			0	0	0	0	32	0
STATION 5	SPLIT	POSITION	DROP						
150	1	3	A	3	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	1	12	A	0	0	0	8	4	4
63	32			0	0	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	8	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
TOTAL APRIL				35	0	10	24	70	21

CTG 08-08

STATION 1	SPLIT	POSITION	DROP	*Labrospira wiesneri*	*Lagena sp.*	*Lagenammina difflugiformis*	*Miliammina lata*	*Miliammina oblonga*	*Nodulina dentaliniformis*
150	1	10	A	0	0	2	0	0	0
63	32			0	0	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	8	11	B	8	0	0	0	0	0

Cell Tracker Green Foraminiferal Counts

CTG 08-04

STATION 1	SPLIT	POSITION	DROP	*Nodulina kerguelenensis*	*Nonionella iridea*	*Parafissurina sp.*	*Paratrochammina scotiaensis*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*
150	1	2	C	4	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	16	9	B	0	0	16	0	0	0
63	32			0	32	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150	8	4	A	16	0	0	0	0	0
63	32			0	160	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	1	7	A	0	2	0	0	0	0
63	32			0	1056	0	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	1	3	A	0	0	0	0	0	0
63	32			0	224	0	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	1	12	A	16	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	8	A	0	4	0	0	0	0
63	32			0	128	0	0	0	0
TOTAL APRIL				36	1606	16	0	0	0

CTG 08-08

STATION 1	SPLIT	POSITION	DROP	*Nodulina kerguelenensis*	*Nonionella iridea*	*Parafissurina sp.*	*Paratrochammina scotiaensis*	*Paratrochamina tricamerata*	*Portatrochammina antarctica*
150	1	10	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	8	11	B	8	0	0	0	0	8

Cell Tracker Green Foraminiferal Counts

CTG 08-04

STATION 1	SPLIT	POSITION	DROP	*Portatrochammina malovensis*	*Portatrochammina stenhousei*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Rhumblerella sp.*	*Rosalina globularis*
150	1	2	C	0	2	0	0	0	0
63	32			0	64	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	16	9	B	0	16	0	64	0	0
63	32			0	32	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150	8	4	A	0	16	0	0	0	0
63	32			0	0	0	0	0	32
STATION 4	SPLIT	POSITION	DROP						
150	1	7	A	0	1	0	0	0	0
63	32			0	64	0	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	1	3	A	0	0	52	12	0	0
63	32			0	0	0	96	0	32
STATION 6	SPLIT	POSITION	DROP						
150	1	12	A	0	1	0	4	0	0
63	32			0	0	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	8	A	0	4	0	0	0	0
63	32			0	0	0	0	0	96
TOTAL APRIL				0	200	52	176	0	160

CTG 08-08

STATION 1	SPLIT	POSITION	DROP	*Portatrochammina malovensis*	*Portatrochammina stenhousei*	*Pullenia quinqueloba*	*Pullenia subsphaerica*	*Rhumblerella sp.*	*Rosalina globularis*
150	1	10	A	0	0	0	10	0	0
63	32			0	32	0	0	0	0
STATION 2	SPLIT	POSITION	DROP						
150	8	11	B	0	16	0	24	0	0

Cell Tracker Green Foraminiferal Counts

CTG 08-04

STATION 1	SPLIT	POSITION	DROP	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochamminopsis parvus*
150	1	2	C	0	0	0	1
63	32			0	96	0	0
STATION 2	SPLIT	POSITION	DROP				
150	16	9	B	0	0	0	0
63	32			0	0	0	0
STATION 3	SPLIT	POSITION	DROP				
150	8	4	A	0	0	0	0
63	32			0	0	0	0
STATION 4	SPLIT	POSITION	DROP				
150	1	7	A	0	0	0	0
63	32			0	0	0	0
STATION 5	SPLIT	POSITION	DROP				
150	1	3	A	0	0	0	0
63	32			0	0	0	0
STATION 6	SPLIT	POSITION	DROP				
150	1	12	A	0	0	0	0
63	32			0	0	0	0
STATION 7	SPLIT	POSITION	DROP				
150	2	8	A	0	0	0	2
63	32			0	0	0	0
TOTAL APRIL				0	96	0	3

CTG 08-08

STATION 1	SPLIT	POSITION	DROP	*Stainforthia davisi*	*Textularia wiesneri*	*Trochammina intermedia*	*Trochamminopsis parvus*
150	1	10	A	0	0	0	0
63	32			0	0	0	0
STATION 2	SPLIT	POSITION	DROP				
150	8	11	B	0	8	0	0

63	32			0	0	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150		4	A	0	0	0	0	0	0
63	32			0	0	0	0	0	64
STATION 4	SPLIT	POSITION	DROP						
150	2	4	A	0	0	0	0	0	10
63	32			0	0	0	0	0	128
STATION 5	SPLIT	POSITION	DROP						
150	2	8	A	0	0	6	0	0	6
63	32			0	0	96	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	16	5	A	0	0	144	0	0	176
63	32			0	0	0	0	0	288
STATION 7	SPLIT	POSITION	DROP						
150	2	1	A	0	0	0	0	0	6
63	32			0	0	0	0	0	0
TOTAL JUNE				0	0	268	0	0	830

63	32			32	0	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150		4	A	0	0	0	0	0	0
63	32			192	0	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	2	4	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	2	8	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	16	5	A	0	0	16	0	0	0
63	32			960	0	32	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	1	A	0	0	0	0	0	0
63	32			0	0	0	0	32	0
TOTAL JUNE				1184	16	48	0	32	0

63	32			0	32	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150		4	A	0	0	0	0	0	0
63	32			256	0	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	2	4	A	0	0	4	0	0	0
63	32			0	0	32	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	2	8	A	0	0	0	0	0	0
63	32			0	0	1568	0	0	0
STATION 6	SPLIT	POSITION	DROP						
150	16	5	A	0	112	0	0	0	0
63	32			1696	160	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	1	A	0	0	0	0	0	0
63	32			0	0	128	0	0	0
TOTAL JUNE				1952	344	1732	0	0	8

63	32			0	0	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150		4	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	2	4	A	0	2	4	0	2	0
63	32			0	0	0	0	64	0
STATION 5	SPLIT	POSITION	DROP						
150	2	8	A	0	0	16	0	2	2
63	32			0	0	0	96	0	0
STATION 6	SPLIT	POSITION	DROP						
150	16	5	A	32	16	0	0	0	0
63	32			96	0	0	32	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	1	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
TOTAL JUNE				136	18	22	128	68	2

63	32			0	64	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150		4	A	0	0	0	0	0	0
63	32			0	32	0	0	0	0
STATION 4	SPLIT	POSITION	DROP						
150	2	4	A	0	4	0	8	0	0
63	32			0	960	0	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	2	8	A	2	0	0	0	0	0
63	32			0	0	0	0	96	0
STATION 6	SPLIT	POSITION	DROP						
150	16	5	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	1	A	2	0	0	0	0	0
63	32			0	0	0	0	0	0
TOTAL JUNE				12	1060	0	8	96	8

63	32			0	0	0	0	0	0
STATION 3	SPLIT	POSITION	DROP						
150		4	A	0	0	0	0	0	0
63	32			0	0	0	0	0	32
STATION 4	SPLIT	POSITION	DROP						
150	2	4	A	0	6	0	0	0	0
63	32			0	0	0	0	0	0
STATION 5	SPLIT	POSITION	DROP						
150	2	8	A	0	8	0	4	0	0
63	32			0	576	0	96	576	0
STATION 6	SPLIT	POSITION	DROP						
150	16	5	A	0	0	0	0	0	0
63	32			0	0	0	0	0	0
STATION 7	SPLIT	POSITION	DROP						
150	2	1	A	4	0	0	0	0	0
63	32			0	0	0	0	0	0
TOTAL JUNE				4	638	0	134	576	32

63	32			0	0	0	0
STATION 3	SPLIT	POSITION	DROP				
150		4	A	0	0	0	0
63	32			0	0	0	0
STATION 4	SPLIT	POSITION	DROP				
150	2	4	A	0	0	0	0
63	32			32	0	0	0
STATION 5	SPLIT	POSITION	DROP				
150	2	8	A	0	0	0	0
63	32			0	0	96	0
STATION 6	SPLIT	POSITION	DROP				
150	16	5	A	0	0	0	0
63	32			0	0	0	0
STATION 7	SPLIT	POSITION	DROP				
150	2	1	A	0	0	0	0
63	32			0	0	32	0
TOTAL JUNE				32	8	128	0

Appendix B

Shannon-Wiener Diversity Index

Rose Bengal	April
STN:1	
Depth	600m
position	North
Diversity Index	-4.146002
STN:2	
Depth	1126m
position	North
Diversity Index	-2.651086
STN:3	638m
Depth	North
position	
Diversity Index	-2.653365
STN:4	
Depth	630m
position	BAY
Diversity Index	-2.415798
STN:5	
Depth	1173m
position	ISLAND
Diversity Index	-2.571242
STN:6	
Depth	1187m
position	ISLAND
Diversity Index	-1.586062
STN:7	
Depth	615m
position	BAY
Diversity Index	-1.57893

Rose Bengal	June
STN:1	580m
Depth	
position	North
Diversity Index	-2.852864
STN:2	
Depth	1226m
position	North
Diversity Index	-3.060973
STN:3	
Depth	616m
position	North
Diversity Index	-2.957534
STN:4	
Depth	647m
position	BAY
Diversity Index	-1.985435
STN:5	
Depth	1173m
position	ISLAND
Diversity Index	-1.574394
STN:6	
Depth	1199m
position	ISLAND
Diversity Index	-1.716428
STN:7	
Depth	626m
position	BAY
Diversity Index	-2.229735

CTG April

STN: 1

Diversity Index -1.77814

STN: 2

Diversity Index -1.93037

STN: 3

Diversity Index -1.79128

STN: 4

Diversity Index -0.95249

STN: 5

Diversity Index -1.15008

STN: 6

Diversity Index -1.05238

STN: 7

Diversity Index -1.65006

CTG June

Diversity Index -1.42536

STN: 2

Diversity Index -2.21115

STN: 3

Diversity Index -1.29191

STN: 4

Diversity Index -0.88215

STN: 5

Diversity Index -1.54671

STN: 6

Diversity Index -1.51536

STN: 7

Diversity Index -1.09974

Appendix C
Combination Data Table

Rose Bengal April

	STN 1	STN 2	STN 3	STN 4	STN 5	STN 6	STN 7	PC Factor 1	PC Factor 2	PC Factor 3	PC Factor 4
Depth (m)	600	1226	638	630	1173	1187	615	-1	0.1	-0.5	-0.24
Nitrate (µM)	5.44	7.24	27.99	21.71	4.72	11.7	0	1	0	0.45	-0.12
Oxygen (ml/l)	.	5.61	6.19	6.21	6.05	6.02	5.83	1	-0.2	-0.32	0.061
Temperature (C)	.	-0.41	-0.9	-0.7	-0.9	-0.9	-0.6	-1	-0.2	0.72	0.254
Salinity (ppt)	34.6	34.7	34.6	34.6	34.6	34.6	34.6	-1	0.2	0.6	0.083
Adercotryma glomeratum	13.09	1.61	8.68	1.78	0.96	1.18	1.06	1	0.6	0.36	-0.14
Ammodiscus sp.	7.55	2.46	1.26	2.07	1.57	1.42	0.04	-1	-0.4	0.57	0.412
Astrononion echolsi	0.11	8.65	6.62	0.79	7.24	4.39	0.24	-1	0.8	-0	0.013
Bolivina pseudopunctata	3.04	10.01	15.47	42.2	19.26	63.3	32.21	0	-0.7	-0.33	-0.59
Bulimina aculeata	0	0	0	0	0	0	0	0	0	0	0
Epistominella exigua	0	11.19	0	0.06	11.51	2.01	0	-1	0.3	-0.23	0.41
Fursenkoina fusiformis	1.57	19.17	0.59	2.15	0	6.86	0.04	-1	-0	0.55	-0.2
Globocassidulina subglobosa	0	0	0	0	0	0	0	0	0	0	0
Haplophragmoides parkerae	11.96	13.23	13.48	3.14	15.07	6.99	47.68	-0	0.9	-0.16	0.204
Labrospira jeffreysii	5.62	0	0.69	2.53	0	0.27	0	1	-0.7	0.32	0.289
Lagenammina difflugiformis	3.16	0.42	3.44	4.88	4.81	0.04	0.8	1	-0	-0.25	0.77
Miliammina lata	2.09	0.17	6.54	1.64	0	0.13	0.58	1	0.5	0.37	-0.07
Miliammina oblonga	5.54	1.53	13.91	6.21	5.47	1.11	2.06	1	0.5	0.15	0.217
Nodulina dentaliniformis	1.94	0	4.26	3.44	2.18	0	0.17	1	0.2	0.08	0.44
Nodulina kerguelenensis	1.91	2.8	2.3	9.41	0.44	0.01	1.17	0	-0.6	0.53	0.464
Nonionella iridea	0.08	9.16	0.45	0.69	10.44	2.39	0.04	-1	0.3	-0.3	0.42
Portatrochammina stenhousei	16.16	3.31	4.41	2.57	2.99	3.1	4.2	0	0.9	0.28	-0.3
Saccammina sp.	0.79	0	0	1.31	5.46	0.59	0.65	-0	0	-0.81	0.577
Textularia wiesneri	0	0	0	0	0	0	0	0	0	0	0
Trochammina intermedia	13.01	0.85	8.58	4.32	3.05	2.14	2.1	1	0.4	0.13	0.042
Shannon-Weiner Diversity	-4.15	-2.65	-2.65	-2.41	-2.57	-1.59	-1.58				
Percent Variance of Factors								48	22	18.2	11.66

Rose Bengal June

	STN 1	STN 2	STN 3	STN 4	STN 5	STN 6	STN 7	PC Factor 1	PC Factor 2	PC Factor 3	PC Factor 4
Depth (m)	580	1226	616	647	1173	1199	626	0	0.4	-0.89	-0.05
Nitrate (µM)	5.92	0.5	5.07	9.05	3.53	0	0.68	-0	-0.9	0.04	0.281
Oxygen (ml/l)	5.48	6.08	6.39	6.35	6.35	6.3	6.49	-1	-0.5	0.08	0.152
Temperature (C)	0.6	-0.3	-0.9	-0.6	-0.7	-0.5	-0.5	1	0.3	0.36	0.116
Salinity (ppt)	34.7	34.6	34.6	34.6	34.6	34.6	34.5	1	0	-0.22	-0.01
Adercotryma glomeratum	3.09	1.44	2.82	0.41	1.1	0.54	0	0	-0.8	-0.26	-0.45
Ammodiscus sp.	3.39	0.45	1.34	0.07	0.02	2.48	0.01	-0	-0.4	-0.59	0.371
Astrononion echolsi	8.44	11.44	8.89	6.65	1.5	5.7	4.4	1	-0.6	0.01	0.264
Bolivina pseudopunctata	3.14	17.11	10.18	8.67	58.59	56.6	20.02	-0	0.5	-0.73	-0.13
Bulimina aculeata	7.29	0.89	0.02	0.03	0	0.03	0	1	0	-0.23	0.016
Epistominella exigua	12.09	0	15.91	11.62	2.65	0.77	2.23	-0	-0.8	0.39	0.011
Fursenkoina fusiformis	10.36	18	2.37	2.22	2.13	3.37	4.81	1	0.1	-0.16	-0.01
Globocassidulina subglobosa	8.18	1.79	18.66	2.17	0.72	2.11	0.01	-0	-1	0.03	-0.25
Haplophragmoides parkerae	7.25	1.41	15.83	41.56	18.53	14.9	31.39	-0	0.5	0.57	0.399
Labrospira jeffreysii	0	0	0	0	0	0	0	0	0	0	0
Lagenammina difflugiformis	3.37	2.59	1.08	2.16	0.61	0.36	2.51	1	0.2	0.7	0.11
Miliammina lata	0	0	0	0	0	0	0	0	0	0	0
Miliammina oblonga	1.85	4.63	4.37	1.62	1.62	1.12	10.78	0	0.2	0.69	-0.34
Nodulina dentaliniformis	2.59	0.2	0.9	3.12	0.42	2.17	2.28	-0	0.1	0.51	0.726
Nodulina kerguelenensis	0	0	0	0	0	0	0	0	0	0	0
Nonionella iridea	0	17.71	18.13	9.01	2.09	0.1	3.29	1	-0.7	0.15	-0.14
Portatrochammina stenhousei	11.57	6.17	3.16	3.64	1.54	2.81	5.41	1	0.1	0.45	0.143
Saccammina sp.	4.74	0.79	2.02	0.34	1.22	0.27	2.19	-0	-0.2	0.51	-0.75
Textularia wiesneri	0.71	0.2	0.09	0.49	4.01	0.36	0.6	-0	0.5	-0.3	-0.57
Trochammina intermedia	2.88	1.99	1.75	0.79	0.66	3.19	0.02	0	-0.4	-0.75	0.426
Shannon-Weiner Diversity	-2.85	-3.06	-2.96	-1.98	-1.57	-1.71	-2.23				
Percent Variance of Factors								36	24	21.6	11.05

CTG April

	STN 1	STN 2	STN 3	STN 4	STN 5	STN 6	STN 7	PC Factor 1	PC Factor 2
Depth (m)	600	1226	638	630	1173	1187	615	-0.541	-0.752
Nitrate (µM)	5.44	7.24	27.99	21.71	4.72	11.71	0	0.211	0.728
Oxygen (ml/l)	.	5.61	6.19	6.21	6.05	6.02	5.83	0.776	0.314
Temperature (C)	.	-0.41	-0.9	-0.7	-0.9	-0.9	-0.6	0	0
Salinity (ppt)	34.6	34.7	34.6	34.6	34.6	34.6	34.6	-0.993	0.02
Ammodiscus sp.	0	0	0	0	0	0	0	0	0
Astrononion echolsi	35.11	38.09	22.53	9.61	0	1.89	1.14	-0.835	0.52
Bolivina pseudopunctata	8.51	0	0	8.91	65.65	64.66	8	0.337	-0.861
Fursenkoina fusiformis	0	0	0	0	6.35	23.39	0	0.244	-0.705
Globocassidulina subglobosa	0	19.05	26.76	6.96	0	6.88	0	-0.483	0.506
Haplophragmoides parkerae	0	0	0	0.28	0	0	10.28	0	0
Labrospira wiesneri	0	0	0	0	0	0	0	0	0
Miliammina lata	0	0	0	0	0	0	0	0	0
Miliammina oblonga	0	0	5.63	2.37	0	0.17	0	0.261	0.826
Nonionella iridea	0	47.62	28.17	73.68	14.82	0	37.71	0.454	0.623
Paratrochammina tricamerata	0	0	0	0	0	0	0	0	0
Portatrochammina stenhousei	17.55	7.14	2.82	4.53	0	0.04	1.14	-0.753	0.563
Pullenia subsphaerica	0	9.52	0	0	7.15	0.17	0	-0.803	-0.344
Rosalina globularis	0	0	5.63	0	2.12	0	27.43	0.309	0.063
Rhummblerella sp.	0	0	0	0	0	0	0	0	0
Trochammina intermedia	0	0	0	0	0	0	0	0	0
Shannon-Weiner Diversity	-1.77	-1.93	-1.79	-0.95	-1.15	-1.05	-1.65		
Percent Variance of Factors								39.521	31.908

CTG June	STN 1	STN 2	STN 3	STN 4	STN 5	STN 6	STN 7	PC Factor 1	PC Factor 2	PC Factor 3	PC Factor 4
Depth (m)	580	1226	616	647	1173	1199	626	0.554	-0.218	-0.638	0.472
Nitrate (µM)	5.92	0.5	5.07	9.05	3.53	0	0.68	-0.19	0.177	0.895	0.196
Oxygen (ml/l)	5.48	6.08	6.39	6.35	6.35	6.3	6.49	0.182	0.906	-0.361	0.053
Temperature (C)	0.6	-0.3	-0.9	-0.6	-0.7	-0.5	-0.5	-0.235	-0.85	0.331	-0.124
Salinity (ppt)	34.7	34.6	34.6	34.6	34.6	34.6	34.5	-0.057	-0.704	0.432	0.133
Ammodiscus sp.	2.97	5.71	0	0	3.14	3.83	0	0.306	-0.743	-0.453	0.382
Astrononion echolsi	51.49	17.14	11.11	10.99	0.18	12.34	2.94	-0.403	-0.804	0.377	-0.126
Bolivina pseudopunctata	0	11.43	33.33	0	0	25.53	0	-0.284	0.149	-0.597	-0.135
Fursenkoina fusiformis	0	0	44.44	0	0	45.11	0	-0.114	-0.308	-0.806	0.424
Globocassidulina subsglobosa	15.84	14.29	0	0	0	7.23	0	0.961	0.08	-0.006	0.041
Haplophragmoides parkerae	0	0	0	2.87	48.3	0	62.74	-0.341	0.349	0.417	0.758
Labrospira wiesneri	0	2.86	0	0	0	3.4	0	0.67	-0.602	0.427	-0.075
Miliammina lata	0	0	0	0	2.96	0.85	0	0.177	-0.811	-0.078	0.31
Miliammina oblonga		0	0	0	0	0	0	0	0	0	0
Nonionella iridea	0	22.86	5.56	76.75	0	0	0	-0.318	0.439	0.522	0.653
Paratrochammina tricamerata	0	0	0	0	2.96	0	0	0.981	0.078	0.164	0.016
Portatrochammina stenhousei	15.84	5.71	0	0.48	17.99	0	0	0.979	0.03	0.189	0.019
Pullenia subsphaerica	4.95	8.57	0	0	3.08	0	0	0.974	-0.106	0.113	0.107
Rosalina globularis		0	0	0	0	0	0	0	0	0	0
Rhummblerella sp.	0	0	0	0	17.74	0	0	0.981	0.078	0.164	0.016
Trochammina intermedia	0	0	0	0	2.96	0	15.69	0.944	0.189	0.118	-0.158
Shannon-Weiner Diversity	-1.42	-2.21	-1.29	-0.88	-1.54	-1.51	-1.09				
Percent Variance of Factors								35.749	28.163	18.943	8.987

Appendix D ANOVA Table

ANOVA

percent

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2864350	3	954783.219	1.951	.121
Within Groups	1.7E+008	356	489343.185		
Total	1.8E+008	359			

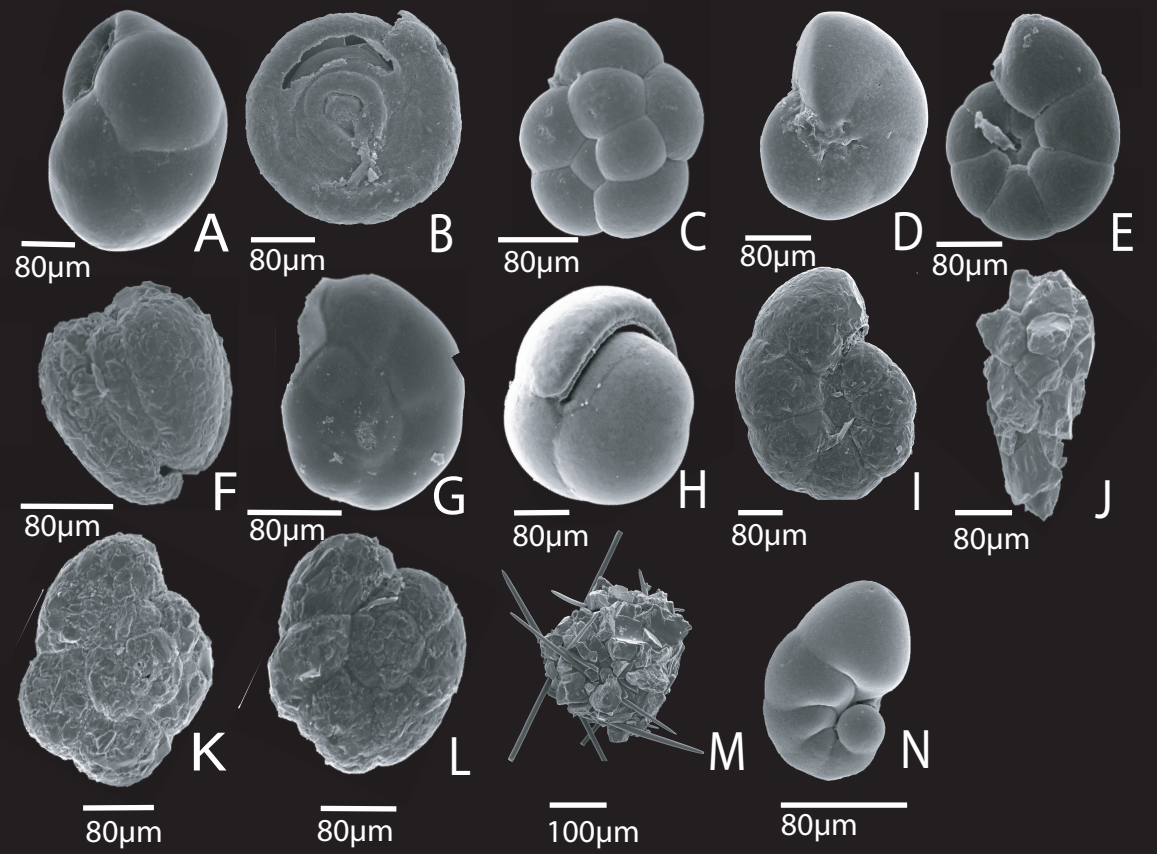

Plate 1: A. *Globocassidulina subglobosa*. B. *Ammodiscus sp.*. C. *Haplophragmoides parkerae* D. *Astrononion echolsi*. E. *Labrospira wiesneri*. F. *Adercotryma glomeratum*. G. *Rosalina globularis*. H. *Pullenia subsphaerica*. I. *Labrosipra jeffreysii*. J. *Lagenammina difflugiformis*. K. *Portatrochammina stenhousei*. L. *Trochammina intermedia*. M. *Saccammina sp.*. N. *Nonionella iridea*.

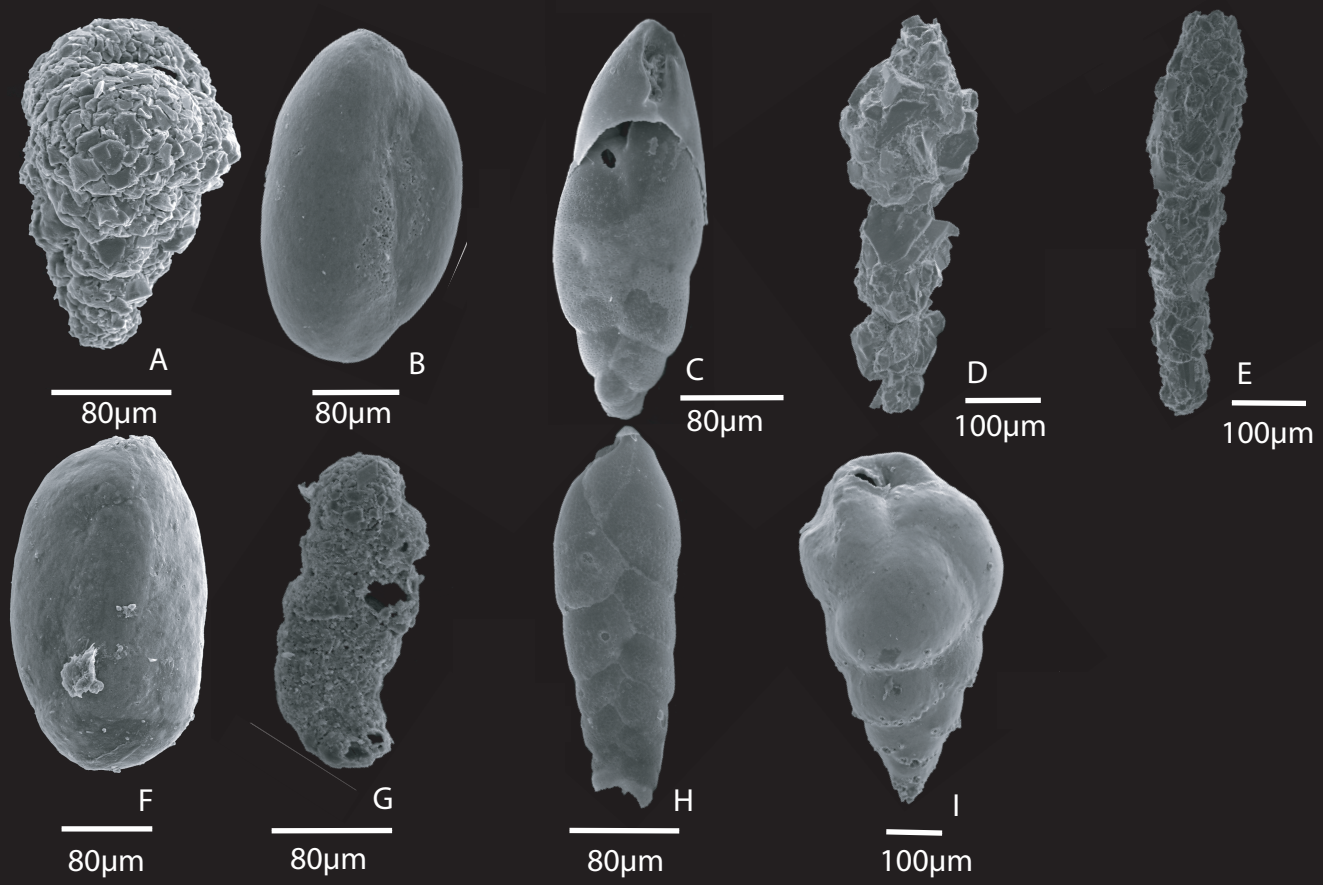

Plate 2: A. *Rhummblerella sp.* B. *Miliammina lata.* C. *Bolivina pseudopunctata.* D. *Nodulina dentaliniformis.* E. *Nodulina kerguelenensis.* F. *Miliammina oblonga.* G. *Textularia wiesneri.* H. *Fursenkoina fusiformis.* I. *Bulimina aculeata.*

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Major Professor: Scott Ishman