# Data Record on Sediment Attributes and Infaunal Diversity on Beam-Trawl and Trap-Line Transects in Clio Channel, British Columbia, Canada

Peter M. Troffe, Colin D. Levings,Terri F. Sutherland, Howard Chang, G. Elizabeth Piercey, Shane A. Petersen, Victor Keong, Perry Poon, Mike McDermid, and Jennifer Sunday

Fisheries and Oceans Canada
Science Branch - Pacific Region
Ecosystem Science Division
Pacific Science Enterprise Centre
4160 Marine Drive, West Vancouver, B.C., V7V 1N6

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# DATA RECORD ON SEDIMENT ATTRIBUTES AND INFAUNAL DIVERSITY ON BEAM-TRAWL AND TRAP-LINE TRANSECTS IN CLIO CHANNEL, BRITISH COLUMBIA, CANADA

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Fisheries and Oceans Canada
Science Branch – Pacific Region
Ecosystem Science Division
Pacific Science Enterprise Centre
4160 Marine Drive, West Vancouver, BC, V7V 1N6

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## ABSTRACT

Troffe, P.M., Levings, C.D., Sutherland, T.F., Chang, H., Piercey, G.E., Petersen, S.A., Keong, V., Poon, P., McDermid, M., and Sunday, J. 2024. Data record on sediment attributes and Infaunal diversity on Beam-Trawl and Trap-Line transects in Clio Channel, British Columbia, Canada. Can. Data Rep. Fish. Aquat. Sci. 1388: viii + 32 p.

As part of a larger assessment project on the central coast of British Columbia investigating potential modification of marine ecosystems by shrimp trawling and trapping, we collected infauna and sediment samples before and after fishing with beam trawls and traps. Both Turnour Bay and Bones Bay, located in Clio Channel, were chosen to collect sediment and infaunal samples and carry out beam-trawling and trapping activities in January and March, 2002. Tabulated data are presented on both meiofauna and macrofauna abundance as well as sediment attributes including sediment grain size, porosity, carbon and nitrogen content, trace metal and chlorophyll concentrations.

## RÉSUMÉ

Troffe, P.M., Levings, C.D., Sutherland, T.F., Chang, H., Piercey, G.E., Petersen, S.A., Keong, V., Poon, P., McDermid, M., and Sunday, J. 2024. Data record on sediment attributes and Infaunal diversity on Beam-Trawl and Trap-Line transects in Clio Channel, British Columbia, Canada. Can. Data Rep. Fish. Aquat. Sci. 1388: viii + 32 p.

Dans le cadre d'un projet d'étude des modifications des écosystèmes marins de la côte centrale de la Colombie-Britannique qui peuvent résulter de la pêche commerciale des crevettes au chalut et au casier, nous avons prélevé des échantillons d'endofaune et de sédiments avant et après les opérations de pêche.  ainsi que deux baies du chenal Clio en janvier et mars 2002. Sont présentées dans ce rapport les données tabulées sur l'abondance de la macrofaune et de la méiofaune, ainsi que sur les caractéristiques des sédiments, y compris la taille des particules, la porosité et les teneurs en carbone, en azote, en métaux-traces et en chlorophylle.

## 1.0 INTRODUCTION

Sediment attributes and infaunal abundance (meiofauna, macrofauna) were characterized in Clio Channel, located off Johnstone Strait in the south central coast of British Columbia, Canada. Seafloor sampling was conducted before and after the deployment of two types of commercial shrimp fishing gear in two bays on Clio Channel: 1) beam trawl and trap-lines (Turnour Bay); and 2) traps (Bones Bay). Although the program's over-arching objective was to compare potential benthic impacts of two fishing methods on sediment characteristics and infaunal communities, this report is focused solely on data presentation before and after fishing activities. A parallel study took place in Simoom Sound, British Columbia, Canada and the data record for Simoom Sound can be found in Sutherland et al. 2024. Analysis of fishing gear impacts on sea whips (*Balticina willemoesi)* (Kölliker, 1870) (formerly *Halipteris willemoesi)* and sediments at Turnour Bay and Bones Bay was published in Troffe et al (2005). In this Data Report we present raw data that were given in summary form in Troffe et al (2005).

## 2.0 STUDY AREA

Clio Channel is a narrow marine waterway bordered by both Turnour Island and West Cracroft Island and oriented in a southwest-northeast bearing off Johnstone Strait. Turnour Bay has a length of 1.5 km, a width of 1.0 km, and is located on the southwest side of Turnour Island. The seafloor slopes from the northeast end of the bay (25 m) to the north-west entrance (40m). Sediment texture mainly consisted of sand mixed with small boulders, and sporadic rocky outcrops. Bones Bay is located on the northeast end of Clio Channel on the northwest side of West Cracroft Island. The bay has a length of 1.5 km, a width of 1.5 km, and a depth range of 64 m (northeast) and 74 m (southwest). Although the seafloor sloped across the bay, the sediment texture was consistent with muddy sediments. In the past, a salmon cannery, logging camp, and log storage were located in Bones Bay.

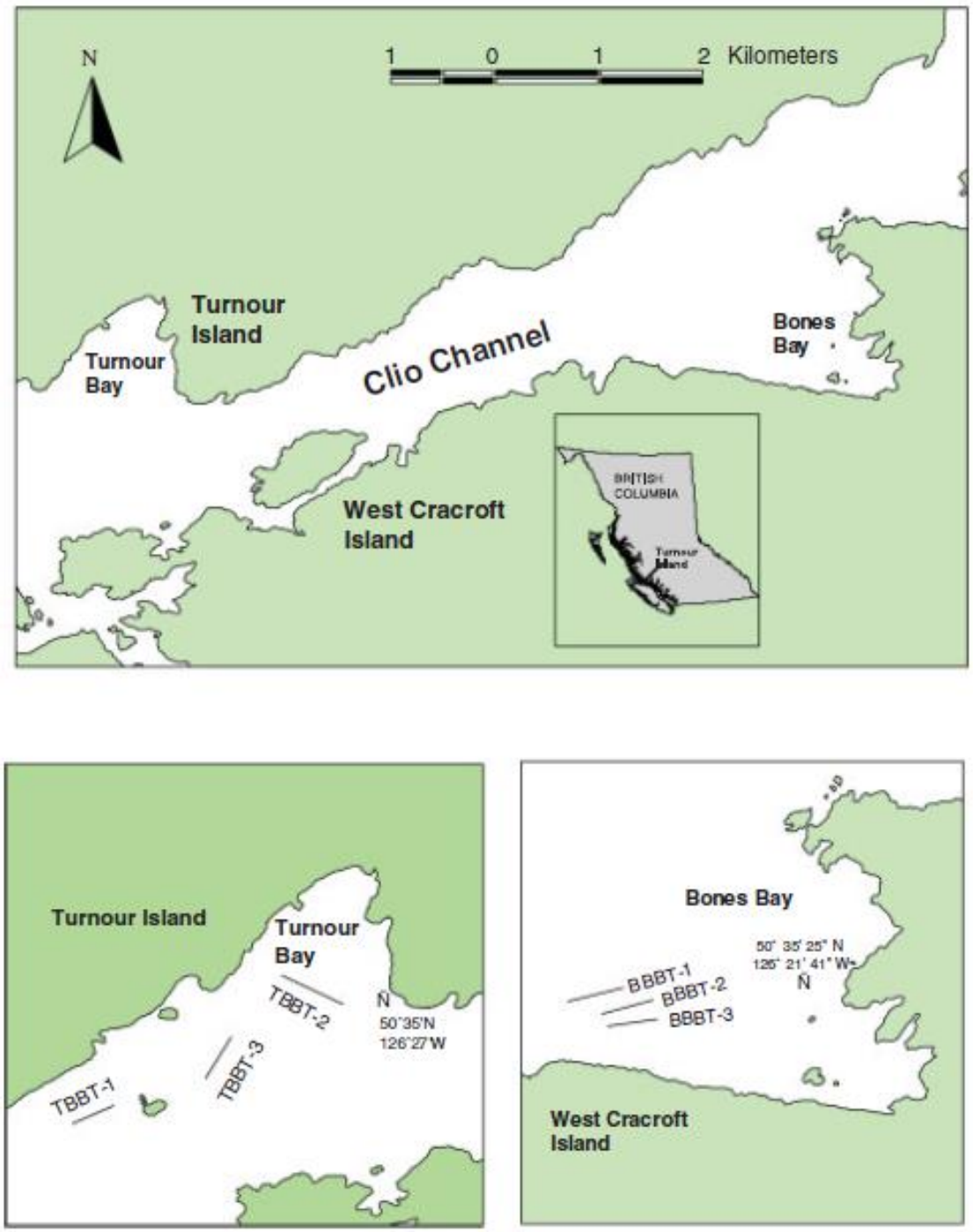


FIGURE 1: Map of the study areas and fishing lines in Clio Channel located on the central coast of British Columbia, Canada (from Troffe et al. 2005). TBBT = Turnour Bay Beam Trawl; BBBT = Bones Bay Beam Trawl; 1, 2, 3 = replicate trawl transects.

## 3.0 MATERIALS AND METHODS

The type of fishing gear and deployment methods used in this study were representative of fishing activities used at that time in the commercial shrimp fishery in British Columbia.

***Beam trawling:*** A beam-trawl was towed once on each of three replicate transects (Figure 1) in Turnour Bay (January, 2002) and Bones Bay (October, 2001). The aluminium beam pole was 14 m long, while the net (codend size: 44 mm) was hung from rounded skids with a height of approximately 1.5 m. The footrope was attached about 30 cm from the bottom of the skids. The 11 m vessel (Amethyst II) towing the net was equipped with a 138 kw engine. Position information was obtained at 1-min intervals using a differential global positioning system in the wheelhouse of the vessel. The duration and length of the trawling transects ranged between 8 and 19 min and 311 to 419 m, respectively (Table 1).

***Trapping:*** In March 2002, 40 baited traps were set and hauled five times by overlaying a trapline on each of the beam-trawling transects in Turnour Bay. The 12.6 m prawn vessel Eric Jane was deployed for this work. These repetitive trap deployments resulted in a total of 600 traps set and retrieved. The traps were set approximately 15 m apart on a rope groundline. Each semi-conical trap weighed 1.4 kg and measured 76.2 x 30.5 x 71.1 cm, with a stretch mesh size averaging 45 mm.

***Fishing Gear Description:*** Complete details of fishing gear specifications and catches of shrimp and fish by species and abundance are described in Ong et al. (2002) and Troffe et al. 2003) In terms of this study, the three replicate transects to be fished within each gear block were plotted on *Nobeltec Visual Navigation Suite 5.0* before sample collection and the mid-point of each fishing transect was identified as the location for sediment sampling.

***Sediment and infaunal sampling:*** A Van Veen grab (0.1 $m^2$) was used to collect sediment samples for both sediment and infaunal samples. At Turnour Bay, four grab samples were obtained 3.5 h before and 23 h after the trawling. Grab sampling (up to four replicate grabs at each station) was conducted while the traps were deployed at Turnour Bay in March 2002. At Bones Bay, samples were only obtained after trawling; four grab samples were obtained in March 2002, about five months after beam trawling.

***Grab deployment:*** The coordinates for each grab location were recorded from a *dGPS* unit (differential global positioning system) located in the vessel's wheelhouse. At Turnour Bay and Bones Bay, CCGS VECTOR provided a platform for grab sampling. On this vessel a hand held GPS (Garmin GPS 12) was used to obtain the position of the grab sample by holding the GPS unit close to the cable while the grab was being lowered into the water.

Sediment collected from the first two grabs in Turnour Bay was used for macrofaunal processing, while the sediment collected from the third and fourth grab deployments was reserved for the collection of meiofauna and sediment samples to be analysed at the laboratory. Grab samples were obtained during minimal ship-drift when the line used to lower the grab was vertical to obtain an accurate station position. Water depth was recorded from the ship's depth sounder. Prior to sample processing, a photograph of the labelled sediment surface was collected and a description of the grab sample (volume, colour) was documented.

***Sediment sampling pre and post trawling**:* At Turnour Bay, before and after each trawl, four grab sediment samples were collected at the mid-point station on each transect. Multiple attempts of grab deployments were required at all the stations in Turnour Bay before sufficient sample volumes were obtained. Two grab deployments at each mid-transect supported macrofaunal samples, while the other two grab deployments were dedicated for meiofauna taxa and sediment attributes (Table 2). The grab samples were obtained after trawling activity on transects 1 and 3, and approximately 3.5 h after trawling on transect 2.

At Bones Bay, samples for sediment analyses were obtained in January 2002. The grab was deployed 19 times at this location. Sediments from the two macrofaunal grab samples were sieved through two stacked sieves (1.0 cm, 0.5 mm) using sea water. The retained sample on the sieve table was transferred to sample bottles and fixed with buffered formalin. Samples were scanned with a binocular dissecting microscope. Surface sediments from the other two grab samples were obtained to determine grain size. The samples were frozen and later submitted to an analytical laboratory and analyzed using standard methods

***Water properties:*** Bottom-water properties within the two bays were determined from CCGS VECTOR with a rosette sampler. In September 2001, and January, May and December 2002, temperature, salinity, dissolved oxygen, and fluorescence were measured at two stations in Clio Channel, one near Turnour Bay and another near Bones Bay.

### 3.1 SEDIMENT ATTRIBUTES: MEIOFAUNA, CHLOROPHYLL AND GEOTECHNICAL ANALYSES

Once the grab sample had settled on the boat deck, temperature was measured with a hand-held thermometer inserted into the top 10 cm of the sediment and held in position until the temperature stabilized.

A syringe-core was used to obtain a vertical profile of chlorophyll concentration by carefully inserting the syringe-core into the intact sediment surface of the grab sample. Once the syringe-core was retracted from the sediment, it was capped, sealed, and kept upright in a cooler for storage. An additional syringe-core was also deployed into the grab for meiofauna sampling. Each core was sliced every 1 cm and placed into individual 50-ml jars filled to 1/3 of the jar volume with 4% buffered formalin. Surface sediments were also collected for geotechnical analyses (Table 4) prior to removing the meiofauna and chlorophyll syringe cores from the grab sediment. Sediment samples from the top 2-cm of the grab sediment were obtained using plastic putty knives. The first sample (500 ml) was reserved for grain size analysis, while the second sample (100 ml) was collected for porosity and organic content measurements, carbon and nitrogen content, and trace-element concentrations.

Sediment grain size analysis was conducted by Pacific Soil Analysis according to the size fractions in Table 3. Samples were wet sieved through a 63 μm mesh to separate coarse and fine fractions while percent silt and clay fractions were determined by pipette analysis as outlined by McKeague (1978). Porosity (% water content) was determined at the Pacific Science Enterprise Centre by weighing the sediments before and after drying at 55°C for 2 days and percent organic content was determined by comparing weights of dried and ashed sediment samples after they had been fired in a furnace at 550°C for two hours. Total Carbon, Total Nitrogen , and % Organic Carbon analyses were conducted at the Department of Earth and Ocean Sciences, University of British Columbia using a Carlo-Erba CHN analyser (precision ± 1.2%) and the concentrations of semi-trace metals (strong acid

leachable) were conducted by Norwest Labs with ultrasonic nebulization and inductively coupled plasma optical emission spectroscopy.

The second syringe-core was removed from the grab sample following the collection of the surface sediments, sealed at the base using a plastic bag and electrician's tape, and stored vertically at -20°C. In the laboratory, chlorophyll concentration was determined with the acidification method as described by Arar and Collins (1997). Once in the lab, the chlorophyll syringe cores were partially thawed while clamp mounted to an apparatus stand. Starting with the surface layer, 0.5 cm increments were extruded with an inverted core plunger and sediments removed with a clean razor blade. Each 0.5 cm sediment increment was transferred to a scintillation vial with 10 ml of 90% acetone. These samples were stored in a dark refrigerator at 4°C for 24 hours. The acetone supernatant of each sample was transferred to a cuvette and the fluorescence readings recorded using Turner Designs 10-AU Fluorometer to measure chlorophyll a ($F_a$). Two drops of 10% HCL were then mixed into the aqueous extraction and the solution was re-assayed with the fluorometer to measure chlorophyll b ($F_b$).

### 3.2 MEIOFAUNA SAMPLING

Meiofauna samples were collected from two Turnour Bay grab samples deployed before and after fishing activity. A 60cc syringe-core was carefully inserted into the deepest portion of the grab sample before the grab was emptied. The syringe-core sample for meiofauna analysis was carefully removed from the grab sample to extrude sediment-core using the syringe plunger. The sediment-core was sliced to provide 1-cm depth intervals of the sediment profile. Each of the 1-cm (5 ml) sediment slices was placed in a labelled jar with 4% formalin. At the laboratory, the meiofauna samples were captured on a 63-μm mesh to remove formalin and soaked overnight in an alcohol rose-bengal solution. Meiofauna were identified and sorted to 21 different taxonomic categories (Table 5). A binocular dissecting microscope (35-400 X) was used for taxa sorting.

### 3.3 MACROFAUNAL SAMPLING

Infaunal sieving was conducted using a stack of two sieves (1.0 cm, 0.5 mm mesh size; 70 x 70 cm frame dimensions) set on the deck. The contents of the grabs were transferred into a 65-Litre tote and then gently washed with seawater onto the sieves. Larger invertebrates retained on the 1.0 cm sieve were removed with forceps and put into labelled jars. The washed contents remaining on the 0.5 mm mesh were then transferred to a 0.5 mm Tyler sieve (approx. 20.5 cm diameter) and then into a sample jar and fixed with 10% formalin and seawater. Once in the laboratory, samples were washed through a 0.5 mm sieve, stained with an alcohol rose-bengal solution overnight, and preserved in 70% isopropanol. Macrofauna identification to the lowest taxonomic category possible was conducted under a binocular dissecting scope at 60-500 times resolving power. Damaged animals were only counted as individuals when the head or shell hinge (in the case of bivalves) were present and intact.

## 4.0 RESULTS

The result section consists of data tables associated with sediment attributes and the diversity of both meiofauna and macrofauna taxa along trawling and trapping transects in Clio Channel.

TABLE 1: Position data associated with beam-trawling at Turnour Bay, January 18-19, 2002. Start and end locations of each trawl-line are presented. PST = Pacific Standard Time; TBBT=Turnour Bay beam trawl; 1,2,3 = replicate trawl transect; * = starting position of trawling transect.

| Date | Time (PST) | Trawl | Latitude (°N) | Longitude (°W) | Depth Range (m) | Transect |
|---|---|---|---|---|---|---|
| 18-Jan-02 | 13:37 | TBBT1* | 50 34.570 | 126 28.834 | 40.8 - 46.8 | Start* |
| 18-Jan-02 | 13:47 | TBBT1 | 50 34.465 | 126 29.098 | | End |
| 19-Jan-02 | 10:15 | TBBT2* | 50 35.010 | 126 27.312 | 31.5 - 34.7 | Start* |
| 19-Jan-02 | 10:34 | TBBT2 | 50 35.070 | 126 27.694 | | End |
| 18-Jan-02 | 15:29 | TBBT3* | 50 34.887 | 126 27.866 | 40.6 - 43.3 | Start* |
| 18-Jan-02 | 15:37 | TBBT3 | 50 34.743 | 126 28.009 | | End |

TABLE 2: Position data for grab deployments at Turnour Bay, January 17-19, 2002. Sediment, meiofauna, and macrofauna samples were collected before (pre) and after (post) beam trawling. TBBT = Turnour Bay beam trawl, 1,2,3 = replicate trawl transects; sed = sediment.

| Date | Time (PST) | Location | Sample type | Lat. (°N) | Long. (°W) | Depth (m) | % grab fullness | Temp (°C) | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 17-Jan-02 | 15:38 | TBBT1-PRE | A / macrofauna | 50 34.547 | 126 28.940 | 43.8 | 18 | - | sandy mud, grey brown |
| 17-Jan-02 | 16:00 | TBBT1-PRE | B / macrofauna | 50 34.517 | 126 28.926 | 41.3 | 25 | - | shells softer mud, grey green. |
| 17-Jan-02 | 16:06 | TBBT1-PRE | C / meiofauna/sed | 50 34.527 | 126 28.941 | 43.1 | 15 | 7 | green brown mud |
| 17-Jan-02 | 16:20 | TBBT1-PRE | D / meiofauna/sed | 50 34.518 | 126 28.916 | 42.1 | 20 | 7 | sea whip |
| 18-Jan-02 | 11:52 | TBBT3-PRE | A / macrofauna | 50 34.823 | 126 27.922 | 39.0 | 18 | - | olive green, sea whip (0.914m) |
| 18-Jan-02 | 12:01 | TBBT3-PRE | B / macrofauna | 50 34.819 | 126 27.928 | 39.9 | 20 | - | olive green with some wood debris |
| 18-Jan-02 | 12:15 | TBBT3-PRE | C / meiofauna/sed | 50 34.822 | 126 27.909 | 39 | 15 | - | olive green with some slumping |
| 18-Jan-02 | 12:23 | TBBT3-PRE | D / meiofauna/sed | 50 34.821 | 126 27.923 | 39.5 | 15 | - | olive green with some slumping, only chlorophyll taken |
| 18-Jan-02 | 18:01 | TBBT2-PRE | A / macrofauna | 50 35.043 | 126 27.526 | 33.4 | 15 | - | sandy gravel and mud |
| 18-Jan-02 | 18:07 | TBBT2-PRE | B / macrofauna | 50 35.037 | 126 27.526 | 32.6 | 12 | - | grey sand and mud |
| 18-Jan-02 | 18:11 | TBBT2-PRE | C / meiofauna/sed | 50 35.041 | 126 27.527 | 33.4 | 15 | 7 | slightly muddy but dominated by sand; sea whip (length-0.94m) |
| 18-Jan-02 | 18:23 | TBBT- PRE | D / meiofauna/sed | 50 35.041 | 126 27.527 | 32.7 | 10 | 7 | Sand, gravel, wood bits |
| 19-Jan-02 | 12:53 | TBBT-1-POST | A / macrofauna | 50 34.555 | 126 28.917 | 42.0 | 13 | - | greyish sand and mud |
| 19-Jan-02 | 13:02 | TBBT-1-POST | B / macrofauna | 50 34.544 | 126 28.935 | 43.0 | 18 | - | brownish green mud |
| 19-Jan-02 | 13:18 | TBBT-1-POST | C / meiofauna/sed | 50 34.572 | 126 28.952 | 42.5 | 18 | 8 | greenish grey sand and mud |
| 19-Jan-02 | 13:30 | TBBT-1-POST | D / meiofauna/sed | 50 34.523 | 126 28.948 | 41.5 | 15 | 7.5 | green brown mud and sand |
| 19-Jan-02 | 14:05 | TBBT-2-POST | A / macrofauna | 50 35.025 | 126 27.473 | 33.0 | 12 | - | |
| 19-Jan-02 | 14:11 | TBBT-2-POST | B / macrofauna | 50 35.014 | 126 27.488 | 32.0 | 18 | - | Brownish green sandy mud |
| 19-Jan-02 | 14:37 | TBBT-2-POST | C / meiofauna/sed | 50 35.032 | 126 27 543 | 33.6 | 14 | 7 | Greenish grey sandy mud |
| 19-Jan-02 | 14:56 | TBBT-2-POST | D / meiofauna/sed | 50 35.033 | 126 27.543 | 34.0 | 9 | 7 | Sample kept. |
| 19-Jan-02 | 15:16 | TBBT-3-POST | A / macrofauna | 50 34.835 | 126 27.925 | 38.6 | 12 | - | greenish grey mud |
| 19-Jan-02 | 15:21 | TBBT-3-POST | B / macrofauna | 50 34.830 | 126 27.928 | 40.4 | 12 | - | greenish mud and sand |
| 19-Jan-02 | 15:40 | TBBT-3-POST | C / meiofauna/sed | 50 34.836 | 126 27.861 | 39.8 | 9 | 7 | greenish brown mud |
| 19-Jan-02 | 15:50 | TBBT-3-POST | D / meiofauna/sed | 50 34.833 | 126 27.937 | 40.0 | 9 | 7 | green grey muddy sand |

TABLE 3: Percent proportions of sediment grain-size categories collected before (pre) and after (post) beam trawling in Turnour Bay, January 17-19, 2002. TBBT = Turnour Bay beam trawl; 1,2,3 = replicate trawl transects; C,D = sample type (see Table 2).

| Date | Location | >2mm | <2mm | <1mm | <.5mm | <.25mm | <.10mm | <63 microns | <4 microns | <2 microns |
|---|---|---|---|---|---|---|---|---|---|---|
| 17-Jan-02 | TBBT-1 PRE-C | 0 | 0 | 0.6 | 8.3 | 82.3 | 2.4 | 2.5 | 0.4 | 3.5 |
| 17-Jan-02 | TBBT-1 PRE-D | 0.2 | 0.2 | 1.1 | 17.8 | 73.0 | 1.0 | 2.5 | 0.4 | 3.8 |
| 18-Jan-02 | TBBT-2 PRE-C | 1.30 | 0.80 | 3.30 | 14.40 | 74.10 | 1.40 | 2.10 | 0.10 | 2.50 |
| 18-Jan-02 | TBBT-2 PRE-D | 0 | 1.0 | 3.4 | 17.1 | 72.2 | 1.6 | 1.9 | 0.1 | 2.7 |
| 18-Jan-02 | TBBT-3 PRE-C | 0.3 | 1.6 | 6.5 | 21 | 62.1 | 5.3 | 0.8 | 0.8 | 1.6 |
| 18-Jan-02 | TBBT-3 PRE-D | 0.2 | 1.5 | 6.5 | 18.8 | 60.7 | 7 | 1.6 | 0.8 | 2.9 |
| 19-Jan-02 | TBBT-1 POST-C | 0 | 0 | 0.6 | 13.6 | 79.3 | 2.2 | 1.7 | 0.7 | 1.9 |
| 19-Jan-02 | TBBT-1 POST-D | 0 | 0 | 8 | 18.0 | 73.1 | 1.5 | 2.3 | 0.2 | 4.1 |
| 19-Jan-02 | TBBT-2 POST-C | 7.90 | 2.60 | 6.10 | 17.10 | 61.20 | 0.90 | 1.60 | 0.20 | 2.40 |
| 19-Jan-02 | TBBT-2 POST-D | 0.6 | 1.0 | 4.9 | 17.0 | 69.2 | 3.2 | 1.4 | 0.1 | 2.6 |
| 19-Jan-02 | TBBT-3 POST-C | 0.6 | 2.3 | 8 | 20.0 | 59.9 | 4.6 | 1.2 | 1.2 | 2.2 |
| 19-Jan-02 | TBBT-3 POST-D | 0.1 | 0.5 | 2.3 | 10.7 | 80.9 | 1.7 | 1.3 | 0.1 | 2.4 |

TABLE 4: Water content and organic content of sediment samples collected before (pre) and after (post) beam trawling in Turnour Bay, January 17-19, 2002. TBBT=Turnour Bay beam trawl; 1,2,3 = replicate trawl transect; C,D = sediment sample type (see Table 2).

| Date | Location | Organic content (%) | Water content (%) |
|---|---|---|---|
| 17-Jan-02 | TBBT-1 PRE-C | 1.94 | 30.51 |
| 17-Jan-02 | TBBT-1 PRE-D | 1.90 | 33.27 |
| 18-Jan-02 | TBBT-2 PRE-C | 1.45 | 31.15 |
| 18-Jan-02 | TBBT-2 PRE-D | 1.39 | 32.29 |
| 18-Jan-02 | TBBT-3 PRE-C | 1.00 | 28.31 |
| 18-Jan-02 | TBBT-3 PRE-D | 1.33 | 26.71 |
| 19-Jan-02 | TBBT-1 POST-C | 1.01 | 26.00 |
| 19-Jan-02 | TBBT-1 POST-D | 1.66 | 32.02 |
| 19-Jan-02 | TBBT-2 POST-C | 1.53 | 27.97 |
| 19-Jan-02 | TBBT-2 POST-D | 1.24 | 25.84 |
| 19-Jan-02 | TBBT-3 POST-C | 0.94 | 24.73 |
| 19-Jan-02 | TBBT-3 POST-D | 0.97 | 24.33 |

TABLE 5: Macrofauna abundance from grab samples obtained before (pre) beam trawling in Turnour Bay, January 17-19, 2002. P = present. Note that macrofauna data are standardised per volume of sediment ($dm^3$) with a standard surface area of collection (0.1 $m^2$ Van Veen grab). TBBT=Turnour Bay beam trawl; 1,2,3 = replicate trawl transect; A, B = macrofauna sample type (see Table 2).

| Taxonomic Division | Genus/Species | 17-Jan-02 TBBT-1 PREA[1,2] | 17-Jan-02 TBBT-1 PREB | 18-Jan-02 TBBT-2 PREA[1] | 18-Jan-02 TBBT-2 PREB[1,3] | 18-Jan-02 TBBT-3 PREA[1,4] | 18-Jan-02 TBBT-3 PREB[1,5] |
|---|---|---|---|---|---|---|---|
| **P. Annelida** | | | | | | | |
| **Cl. Polychaeta** | | 3.11[*] | 3.41[*] | 7.15[*] | 9.50[*] | 0 | 6.83[*] |
| Ampharetidae | | 0.03 | 0.01 | 0.12 | 0 | 0 | 0.06 |
| Arabellidae | | 0 | 0 | 0 | 0 | 0 | 0.03 |
| Capitellidae | | 0.18[6] | 0.15 | 1.26[6] | 1.89[6] | 0.01 | 0.2 |
| Chaetopteridae | | 0 | 0.01 | 0 | 0 | 0 | 0 |
| Cirratulidae | | 0.23 | 0.17 | 0.49 | 0.47 | 0.11 | 0.43 |
| Cossuridae | | 0 | 0.01 | 0.01 | 0.01 | 0 | 0 |
| Dorvilledae | | 0.02 | 0 | 0 | 0 | 0 | 0 |
| Glyceridae | | 0.04 | 0.03 | 0.11 | 0.07 | 0.03 | 0.06 |
| Goniadae | | 0 | 0.01 | 0 | 0 | 0 | 0 |
| Goniadidae | | 0 | 0 | 0.01 | 0.01 | 0 | 0.01 |
| Lumbrinaridae | | 0.19 | 0.16 | 0.1 | 0.07 | 0.07 | 0.24 |
| Magelonidae | | 0 | 0 | 0 | 0 | 0 | 0.01 |
| Maldanidae | | 0.35 | 0.26 | 0.61 | 1.22 | 0.08 | 0.81 |
| Nephtyidae | | 0 | 0.07 | 0.20 | 0 | 0.03 | 0.12 |
| | *Nephtys sp.* | 0.07 | 0 | 0 | 0.24 | 0 | 0 |
| Nereidae | | 0.01 | 0.03 | 0.03 | 0 | 0 | 0.07 |
| Onuphidae | | 0.03 | 0.07 | 0.21 | 0.14 | 0.04 | 0.16 |
| Orbinidae | | 0.25 | 0.17 | 0.15 | 0.35 | 0.03 | 0.20 |
| Owenidae | | 0.68 | 0.27 | 3.05 | 6.83 | 0.046 | 1.42 |
| Paraonidae | | 0.08 | 0.33 | 0.06 | 0.11 | 0.12 | 0.50 |
| Pectinaridae | | 0 | 0 | 0 | 0.01 | 0 | 0.01 |
| Phyllodocidae | | 0.03 | 0.06 | 0.10 | 0.26 | 0.06 | 0.04 |

[1] Unknown egg cases present
[2] Bryozoa present on shell
[3] Unknown organisms (possibly *Urochordata*) present
[4] Sponge bits present
[5] *hydroidia polyps* present
[*] Miscellaneous pieces
[6] Possibly *Notomastus tenuis*

TABLE 5: (continued)

| Taxonomic Division | Genus/Species | 17-Jan-02 TBBT1-A PRE-A | 17-Jan-02 TBBT-1 PRE-B | 18-Jan-02 TBBT-2 PRE-A | 18-Jan-02 TBBT-2 PRE-B | 18-Jan-02 TBBT-3 PRE-A | 18-Jan-02 TBBT-3 PRE-B |
|---|---|---|---|---|---|---|---|
| Polydontidae | | 0 | 0 | 0 | 0.10 | 0 | 0 |
| Polynoidae | | 0.10 | 0.16 | 0.38 | 0.39 | 0.20 | 0.67 |
| Sabellariidae | | 0 | 0.01 | 0 | 0.01 | 0 | 0 |
| Sabellidae | | 0.40 | 0.23 | 0.50 | 0.76 | 0.05 | 0.46 |
| Scalabregmidae | | 0.06 | 0.15 | 0.01 | 0 | 0 | 0.17 |
| Siglionidae | | 0 | 0.01 | 0 | 0 | 0 | 0 |
| Sphaerodoridae | | 0.21 | 0.17 | 0.31 | 0.15 | 0.09 | 0.24 |
| Spionidae | | 1.27 | 0.77 | 2.19 | 1.47 | 0.14 | 1.5 |
| Syllidae | | 1.55 | 0.69 | 2.89 | 5.24 | 0.37 | 3.59 |
| Terrebelidae | | 0.02 | 0.01 | 0 | 0.03 | 0.01 | 0.01 |
| Trichobranchidae | | 0 | 0.01 | 0.01 | 0 | 0 | 0.04 |
| OTHER | | 0.01[1] | 0 | 0.21[1] | 0 | 0 | 0 |
| **Cl. Oligocheata** | | 0 | 0 | 0 | 0.08 | 0 | 0.04 |
| **P. Mollusca** | | | | | | | |
| **Cl. Gastropoda** | | | | | | | |
| F. Cerithiidae | *Bittium sp.* | 0.04 | 0.01 | 0.03 | 0.06 | 0.01 | 0.04 |
| | *Bittium munitum* | 0 | 0.01 | 0 | 0 | 0 | 0 |
| F. Columbellidae | *Astyris gausapata* | 0.07 | 0.01 | 0.05 | 0.10 | 0.03 | 0.04 |
| F. Cylichnidae | *Cylichna attonsa* | 0.03 | 0.01 | 0 | 0.06 | 0.04 | 0 |
| | *Cylichna alba* | 0 | 0 | 0.04 | 0 | 0 | 0 |
| F. Hydatinidae | *Parvamplustrum sp.* | 0.18 | 0 | 0 | 0 | 0.01 | 0 |
| F. Muricidae | *Ocenebra sp.* | 0.01[2] | 0 | 0.01 | 0 | 0 | 0 |
| F. Naticidae | *Euspira pallida* | 0 | 0.01 | 0 | 0 | 0 | 0 |
| F. Philinidae | | | | | | | |
| | *Philine sp.* | 0 | 0 | 0.01 | 0 | 0 | 0 |
| F. Pyramedellidae | *Turbonilla sp.* | 0.01 | 0.01 | 0.06 | 0.01 | 0.03 | 0.09 |
| | *Odostomia sp.* | 0 | 0 | 0.07 | 0 | 0 | 0.04 |

[1] Too small or damaged to positively identify
[2] Possibly *O. orpheus*

TABLE 5: (continued)

| Taxonomic Division | Genus/Species | 17-Jan-02 TBBT-1 PRE-A | 17-Jan-02 TBBT-1 PRE-B | 18-Jan-02 TBBT-2 PRE-A | 18-Jan-02 TBBT-2 PRE-B | 18-Jan-02 TBBT-3 PRE-A | 18-Jan-02 TBBT-3 PRE-B |
|---|---|---|---|---|---|---|---|
| F. Rossoidae | *Alvania rosana* | 0.07 | 0.09 | 0.05 | 0.11 | 0.07 | 0.09 |
| | *Alvania sp.* | 0 | 0 | 0.01 | 0 | 0 | 0.08 |
| F. Trichotropidae | *Trichotropis concellata* | 0 | 0 | 0.02 | 0 | 0 | 0 |
| F. Trochidae | *Solarialla vancouverensis* | 0.08 | 0.01 | 0.05 | 0.03 | 0.02 | 0 |
| F. Turridae | *Oenopota sp.* | 0.01 | 0 | 0 | 0 | 0 | 0 |
| OTHER[1] | | 0.08 | 0.04 | 0.26 | 0.5 | 0.08 | 0.48 |
| **Cl. Bivalvia** | | | | | | | |
| F. Astartidae | *Astarte esquimalti* | 0 | 0.01 | 0 | 0 | 0 | 0 |
| F. Cardiidae | *Clinocardium sp.* | 0 | 0 | 0 | 0.03 | 0.01 | 0.01 |
| | *Clinocardium nutellii* | 0 | 0 | 0.01 | 0 | 0 | 0 |
| | *Nemocardium centifilosum* | 0 | 0 | 0 | 0.01 | 0 | 0 |
| F. Cuspidariidae | *Cardiomya pectinata* | 0.01 | 0 | 0.03 | 0.04 | 0 | 0.01 |
| F. Lasaeidae | *Rochefortia tumida* | 0 | 0.03 | 0 | 0 | 0 | 0.03 |
| F. Lucinidae | *Parvilucina tenuisculpta* | 1.16 | 1.14 | 0.77 | 0.63 | 0.72 | 1.12 |
| | *Lucinoma annulatum* | 0 | 0.01 | 0 | 0 | 0 | 0.02 |
| F. Lyonsidae | *Lyonsia arenosa* | 0.01 | 0 | 0.02 | 0.03 | 0 | 0 |
| F. Mactridae | *Mactrometris polynema* | 0 | 0.01 | 0 | 0.01 | 0 | 0 |
| F. Mytilidae | *Mytilus sp.* | 0.01 | 0 | 0 | 0 | 0 | 0 |
| | *Solamen columbianum* | 0 | 0.01 | 0.03 | 0.08 | 0.01 | 0.04 |
| | *Vilasina seminuda* | 0 | 0 | 0 | 0.03 | 0 | 0 |
| F. Nuculanidae | *Nuculana minuta* | 0.03 | 0.01 | 0.02 | 0.08 | 0.04 | 0.06 |
| F. Nuculidae | *Eunucula tenuis* | 0.54 | 0.43 | 0.69 | 0.76 | 0.31 | 0.77 |
| | *Acila castrensis* | 0 | 0.01 | 0.28 | 0 | 0.5 | 0.57 |
| | *Lucinoma annulatum* | 0 | 0 | 0 | 0 | 0.04 | 0 |
| | unknown | 0 | 0 | 0.63 | 0 | 0 | 0.47 |
| F. Pandoridae | *Pandora bilirata* | 0.03 | 0.03 | 0.02 | 0 | 0.01 | 0 |
| F. Pectinidae | *Cyclopecten bistiatus* | 0 | 0 | 0.01 | 0 | 0 | 0 |

[1] Too small or damaged to positively identify

TABLE 5: (continued)

| Taxonomic Division | Genus/Species | 17-Jan-02 TBBT-1 PRE-A | 17-Jan-02 TBBT-1 PRE-B | 18-Jan-02 TBBT-2 PRE-A | 18-Jan-02 TBBT-2 PRE-B | 18-Jan-02 TBBT-3 PRE-A | 18-Jan-02 TBBT-3 PRE-B |
|---|---|---|---|---|---|---|---|
| F. Prisiglomidae | *Pseudoglomus fragilis* | 0 | 0 | 0 | 0.03 | 0 | 0 |
| F. Tellinidae | *Macoma sp.* | 0.07 | 0.05 | 0.93 | 0.29 | 0.08 | 0.62 |
| | *Macoma elinata* | 0.06 | 0.04 | 0 | 0.06 | 0.12 | 0.02 |
| | *Macoma nasuta* | 0 | 0.15 | 0 | 0 | 0 | 0 |
| F. Thyasiridae | *Thyasira flexuosa* | 0.02 | 0.01 | 0 | 0.01 | 0 | 0.01 |
| | *Axinopsida serricata* | 0 | 0.01 | 0.05 | 0 | 0 | 0.03 |
| | *Nuculana pernula* | 0 | 0.01 | 0 | 0 | 0 | 0 |
| F. Veneridae | *Nutricola lordi* | 0.72 | 0.33 | 0.36 | 0.04 | 0.17 | 0.37 |
| | *Compsomyax subdiaphana* | 0.02 | 0 | 0 | 0 | 0.01 | 0.01 |
| F. Yoldidae | *Yoldia sp.* | 0.02 | 0 | 0 | 0 | 0 | 0.01 |
| | *Yoldia seminuda* | 0.01 | 0 | 0 | 0 | 0 | 0.01 |
| OTHER[1] | | 0.48 | 0.15 | 0.52 | 1.43 | 2.32 | 0.46 |
| **Cl. Scaphopoda** | | 0 | 0 | 0.07 | 0.17 | 0.06 | 0.08 |
| F. Pulsellidae | *Pulsellum salishorum* | 0.34 | 0.26 | 0 | 0 | 0 | 0 |
| **P. Nematoda** | | 0.29 | 0.46 | 0.43 | 1.21 | 0.33 | 2.41 |
| **P. Arthropoda** | | | | | | | |
| **Cl. Copepoda** | | | | | | | |
| O. Harpacticoida | | 0.06 | 0.01 | 0.01 | 0.06 | 0 | 0 |
| O. Calanoida | | 0.04 | 0.01 | 0.04[2] | 0.01 | 0.01 | 0 |
| **Cl. Ostracoda** | | 0.37 | 0.12 | 0.88 | 0.78 | 0.09 | 0.49 |
| **Cl. Malacostraca** | | | | | | | |
| O. Amphipoda | S.O. Gammaridea | 0.78[3] | 0.39 | 1.27 | 1.50 | 0.38 | 0.58 |
| O. Cumacea | | 0.25 | 0.07 | 0.08 | 0.31 | 0.03 | 0.1 |
| O. Isopoda | | | | | | | |
| F. Munnidae | | 0.08 | 0.01 | 0.23 | 0.14 | 0.01 | 0.16 |
| F. Asellota | | 0.01 | 0 | 0 | 0 | 0 | 0 |

[1] Too small or damaged to positively identify
[2] Very damaged
[3] + 3 embryonic juveniles

TABLE 5: (continued)

| Taxonomic Division | Genus/Species | | 17-Jan-02 TBBT-1 PRE-A | 17-Jan-02 TBBT-1 PRE-B | 18-Jan-02 TBBT-2 PRE-A | 18-Jan-02 TBBT-2 PRE-B | 18-Jan-02 TBBT-3 PRE-A | 18-Jan-02 TBBT-3 PRE-B |
|---|---|---|---|---|---|---|---|---|
| Other | | | 0.01[1] | 0 | 0.12 | 0.04 | 0.01 | 0.01 |
| O. Tanaidacea | | | 0.04 | 0.01 | 0.26 | 0.24 | 0.02 | 0.12 |
| **Cl. Cirrapedia** | *Balanus sp.* | | 0.08 | 0 | 0.01 | 0 | 0 | 0 |
| **P. Nemertea** | | | 0.05 | 0.02 | 0.04 | 0.15 | 0.01 | 0.04 |
| | parts | | 0 | 0 | 0.06 | 0 | 0 | 0.04 |
| **P. Sipuncula** | | | 0.01 | 0.01 | 0.09 | 0.14 | 0.01 | 0.06 |
| **P. Echinodermata** | | | | | | | | |
| **Cl. Ophiuroidea** | | | 0.01 | 0 | 0.02 | 0 | 0.01 | 0.01 |
| **Cl. Holothuroidea** | | | 0 | 0 | 0.02 | 0.01 | 0 | 0 |
| **P. Cnidaria** | | | | | | | | |
| O. Pennatulacea | Juvenile | | 0.08 | 0.01 | 0.07 | 0.1 | 0.05 | 0.17 |
| | Adult | | 0 | 0 | 0 | 0 | 0 | 0.01 |
| | | **Totals** | **15.20** | **11.49** | **29.32** | **39.26** | **7.67** | **27.92** |

[1] Too small or damaged to positively identify

TABLE 6: Macrofaunal abundance from grab samples obtained after (post) beam trawling in Turnour Bay, January 19, 2002. P= present. Note that macrofauna data are standardised per volume of sediment ($dm^3$) with a standard surface area of collection (0.1 $m^2$ van Veen grab). TBBT=Turnour Bay beam trawl; 1,2,3, = replicate trawl transect; A and B = sediment sample type (see Table 2).

| Taxonomic Division | Genus/Species | 19-Jan-02 TBBT-1 POST-A | 19-Jan-02 TBBT-1 POST-B | 19-Jan-02 TBBT-2 POST-A | 19-Jan-02 TBBT-2 POST-B[1] | 19-Jan-02 TBBT-3 POST-A[2] | 19-Jan-02 TBBT-3 POST-B[3] |
|---|---|---|---|---|---|---|---|
| **P. Annelida** | | | | | | | |
| **Cl. Polychaeta** | | 3.28[3] | 39.74[4] | 32.29[4] | 122.14[4] | 14.76[4] | 28.89[4] |
| Ampharetidae | | 0.01 | 0.04 | 0.03 | 0.15 | 0 | 0.03 |
| Arabellidae | | 0 | 0 | 0 | 0 | 0 | 0.01 |
| Capitellidae | | 0.08 | 0.21 | 0.05 | 0.87 | 0.02 | 0.01 |
| Cirratulidae | | 0.31 | 0.25 | 0.18 | 0.58 | 0.12 | 0.15 |
| Dorvilleidae | | 0 | 0 | 0 | 0.01 | 0 | 0 |
| Glyceridae | | 0.03 | 0.03 | 0.05 | 0.1 | 0.01 | 0.02 |
| Goniadae | | 0 | 0 | 0 | 0.02 | 0 | 0 |
| Goniadidae | | 0 | 0 | 0.01 | 0 | 0 | 0.01 |
| Lumbrinaridae | | 0.23 | 0.25 | 0.01 | 0.16 | 0.06 | 0.13 |
| Magelonidae | | 0 | 0 | 0.01 | 0.01 | 0 | 0.01 |
| Maldanidae[4] | | 0.5 | 0.56 | 0.24 | 2.86 | 0.07 | 0.19 |
| Nephtyidae | | 0.04 | 0 | 0.11 | 0.08 | 0.08 | 0.03 |
| | *Nephtys sp.* | 0 | 0.09 | 0 | 0 | 0 | 0 |
| Nereidae | | 0.01 | 0.02 | 0.01 | 0.01 | 0.03 | 0.02 |
| Onuphidae | | 0.04 | 0.04 | 0.09 | 0.12 | 0.03 | 0.04 |
| Orbinidae | | 0.22 | 0.35 | 0.11 | 0.04 | 0.1 | 0.12 |
| Owenidae | | 0.62 | 0.55 | 1.81 | 4.76 | 0.24 | 0.5 |
| Paraonidae | | 0.3 | 0.25 | 0.1 | 0.39 | 0.1 | 0.09 |
| Pectinaridae | | 0 | 0 | 0 | 0.03 | 0 | 0 |
| Phyllodocidae | | 0.04 | 0.03 | 0.09 | 0.1 | 0.02 | 0.03 |
| Polynoidae | | 0.13 | 0.21 | 0.11 | 0.41 | 0.17 | 0.24 |
| Sabellidae | | 0.39 | 0.54 | 0.32 | 0.32 | 0.17 | 0.31 |
| Scalabregmidae | | 0.47 | 0.18 | 0 | 0.04 | 0.19 | 0.15 |
| Serpulidae | | 0.01 | 0 | 0 | 0 | 0 | 0 |

[1] *P. Entoprocta*, *P. Bryozoa*, and *P. Porphyra* present. Misc. egg cases and unknown tissue (possibly *Urochordata*) also present.
[2] Unknown egg cases present
[3] Miscellaneous pieces
[4] May include *Chaetopteridae*

TABLE 6: (continued)

| Taxonomic Division | Genus/Species | 19-Jan-02 TBBT-1 POST-A | 19-Jan-02 TBBT-1 POST-B | 19-Jan-02 TBBT-2 POST-A | 19-Jan-02 TBBT-2 POST-B | 19-Jan-02 TBBT-3 POST-A | 19-Jan-02 TBBT-3 POST-B |
|---|---|---|---|---|---|---|---|
| Sphaerodoridae | | 0.17 | 0.2 | 0.09 | 0.13 | 0.11 | 0.25 |
| Spionidae | | 0.95 | 2.02 | 0.87 | 2.36 | 0.39 | 0.5 |
| Syllidae | | 1.03 | 1.03 | 1.07 | 4.46 | 0.5 | 0.83 |
| Terrebelidae | | 0 | 0 | 0.01 | 0.48 | 0 | 0.01 |
| Trichobranchidae | | 0 | 0 | 0 | 0.06 | 0 | 0 |
| OTHER | | 0.01 | 0 | 0 | 0.08 | 0 | 0 |
| **Cl. Oligocheata** | | 0 | 0 | 0.03 | 0.04 | 0 | 0 |
| **P. Mollusca** | | | | | | | |
| **Cl. Gastropoda** | | | | | | | |
| F. Atyidae | Hamanoea sp. | 0 | 0 | 0.01 | 0 | 0 | 0 |
| F. Cerithiidae | *Bittium sp.* | 0.06 | 0.07 | 0.05 | 0 | 0.01 | 0.01 |
| F. Columbellidae | *Astyris gausapata* | 0.11 | 0.05 | 0.11 | 0.03 | 0.05 | 0.04 |
| F. Cylichnidae | *Cylichna attonsa* | 0.02 | 0.01 | 0 | 0 | 0 | 0.01 |
| | *Cylichna alba* | 0 | 0.02 | 0.01 | 0 | 0.05 | 0 |
| | *Cylichna sp.* | 0 | 0 | 0.01 | 0 | 0 | 0 |
| F. Eulimidae | *Balchis micans* | 0 | 0 | 0 | 0.01 | 0 | 0 |
| F. Naticidae | | | | | | | |
| | *Natica clausa* | 0 | 0.01 | 0 | 0 | 0 | 0 |
| F. Philinidae | | 0.01[1] | 0 | 0 | 0 | 0 | 0 |
| F. Pyramedellidae | *Turbonilla sp.* | 0.01 | 0.02 | 0 | 0.01 | 0 | 0.01 |
| | *Odostomia sp.* | 0 | 0.01 | 0.21 | 0.07 | 0.08 | 0 |
| F. Rossoidae | *Alvania rosana* | 0.08 | 0.07 | 0.05 | 0.01 | 0.13 | 0.12 |
| | *Alvania sp.* | 0 | 0 | 0 | 0 | 0.02 | 0 |
| F. Trochidae | *Solarialla vancouverensis* | 0.01 | 0.02 | 0.01 | 0 | 0.01 | 0.02 |
| OTHER[2] | | 0.04 | 0.03 | 0.02 | 0.11 | 0.01 | 0.13 |
| **Cl. Bivalvia** | | | | | | | |

[1] Species uncertain
[2] Too small/damaged to positively identify.

TABLE 6: (continued)

| Taxonomic Division | Genus/Species | 19-Jan-02 TBBT1 POST-A | 19-Jan-02 TBBT1 POST-B | 19-Jan-02 TBBT2 POST-A | 19-Jan-02 TBBT2 POST-B | 19-Jan-02 TBBT3 POST-A | 19-Jan-02 TBBT3 POST-B |
|---|---|---|---|---|---|---|---|
| F. Cardiidae | | | | | | | |
| | *Nemocardium centifilosum* | 0 | 0 | 0 | 0.01 | 0 | 0 |
| F. Cuspidariidae | *Cardiomya pectinata* | 0 | 0.01 | 0.01 | 10.01 | 0 | 0 |
| F. Lasaeidae | *Rochefortia tumida* | 0.01 | 0.02 | 0 | 0 | 0 | 0.01 |
| F. Lucinidae | *Parvilucina tenuisculpta* | 1.29 | 1.37 | 0.39 | 0.15 | 0.8 | 1.1 |
| | *Lucinoma annulatum* | 0 | 0 | 0 | 0.02 | 0 | 0 |
| F. Lyonsidae | *Lyonsia arenosa* | 0 | 0.01 | 0.01 | 0 | 0.01 | 0 |
| F. Mytilidae: | *Mytilus sp.* | 0 | 0 | 0 | 0.03 | 0 | 0 |
| | *Solamen columbianum* | 0.01 | 0 | 0.01 | 0.04 | 0.01 | 0.01 |
| | *Musculus sp.* | | | | 0.01 | | |
| F. Nuculanidae | *Nuculana minuta* | 0.01 | 0 | 0.01 | 0.04 | 0.01 | 0.05 |
| | *Nuculana pernula* | 0.01 | 0 | 0 | 0 | 0.01 | 0 |
| F. Nuculidae | *Eunucula tenuis* | 0.48 | 0.67 | 0.23 | 0.08 | 0.31 | 0.59 |
| | *Acila castrensis* | 0.01 | 0.1 | 0.31 | 0.24 | 0.33 | 0.57 |
| | unknown | 0.13 | 0 | 0.17 | 0.4[1] | 0.2 | 0.12 |
| F. Pandoridae | *Pandora bilirata* | 0.01 | 0.04 | 0.03 | 0 | 0.01 | 0.01 |
| F. Prisiglomidae | | | | | | | |
| | *Axinopsida serricata* | 0 | 0 | 0.01 | 0 | 0 | 0 |
| F. Tellinidae | *Macoma sp.* | 0.01 | 0.06 | 0.25 | 0.19 | 0.37 | 0.08 |
| | *Macoma carlottenses* | 0.01 | 0.1 | 0.01 | 0 | 0 | 0.09 |
| | *Macoma crussula* | 0 | 0 | 0 | 0 | 0.01 | 0 |
| | *Macoma identata* | 0.02 | 0 | 0 | 0 | 0 | 0 |
| | *Macoma elimata* | 0.06 | 0.05 | 0.01 | 0.05 | 0 | 0.05 |
| | *Macoma nasuta* | 0.01 | 0 | 0.01 | 0 | 0 | 0.05 |
| F. Thraciidae | *Thracia (Ixartia) curta* | 0.01 | 0 | 0 | 0 | 0 | 0 |
| F. Thyasiridae | *Thyasira flexuosa* | 0 | 0 | 0.01 | 0 | 0 | 0 |
| | *Axinopsida serricata* | 0 | 0 | 0 | 0 | 0.01 | 0 |

[1] Too young to positively identify

TABLE 6: (continued)

| Taxonomic Division | Genus/Species | 19-Jan-02 TBBT--1 POST-A | 19-Jan-02 TBBT-1 POST-B | 19-Jan-02 TBBT-2 POST-A | 19-Jan-02 TBBT-2 POST-B | 19-Jan-02 TBBT-3 POST-A | 19-Jan-02 TBBT-3 POST-B |
|---|---|---|---|---|---|---|---|
| | *Adontorhina cyclia* | 0.01 | 0 | 0 | 0 | 0 | 0 |
| | *Mendicula ferruginosa* | 0 | 0 | 0.01 | 0 | 0 | 0 |
| F. Veneridae | *Nutricola lordi* | 0.49 | 0.66 | 0.09 | 0 | 0.25 | 0.29 |
| | *Compsomyax subdiaphana* | 0.01 | 0.01 | 0.01 | 0 | 0 | 0.01 |
| OTHER[1] | | 0.41 | 0.1 | 0.11 | 0.24 | 0.74 | 0.15 |
| **Cl. Scaphopoda** | | 0.3 | 0.32 | 0 | 0 | 0.1 | 0.09 |
| **P. Nematoda** | | 0.38 | 0.54 | 0.15 | 1.2 | 0.19 | 0.36 |
| **P. Arthropoda** | | | | | | | |
| **Cl. Copepoda** | | | | | | | |
| O. Harpacticoida | | 0.05 | 0.06 | 0.01 | 0.02 | 0 | 0.01 |
| O. Calanoida | | 0.01[2] | 0.02 | 0.03 | 0.01 | 0.31[3] | 0.09 |
| O. Poecilostomatoida | | 0 | 0 | 0 | 0.02 | 0 | 0 |
| **Cl. Ostracoda** | | 0.15 | 0.19 | 0.3 | 0.3 | 0.19 | 0.17 |
| **Cl. Malacostraca** | | | | | | | |
| O. Amphipoda | S.O. Gammeridea | 1.00 | 0.94 | 0.63[4] | 1.38 | 0.38 | 0.55 |
| O. Cumacea | | 0.1 | 0.22 | 0.07 | 0.09 | 0.03 | 0.05 |
| O. Decapoda | *unknown crabs* | 0.01 | 0 | 0 | 0 | 0 | 0 |
| | *Penixa eberna* | 0 | 0 | 0 | 0 | 0 | 0 |
| O. Isopoda | | | | | | | |
| F. Munnidae | | 0.07 | 0.06 | 0.07 | 0.08 | 0.01 | 0.05 |
| F. Asellota | | 0 | 0 | 0 | 0 | 0.01 | 0 |
| other | | 0.01 | 0 | 0.14[5] | 0.03 | 0.01 | 0.03 |
| O. Tanaidacea | | 0.01 | 0.03 | 0.02 | 0.11 | 0.06 | 0.05[6] |
| Unknown arthropod | | 0 | 0 | 0 | 0.06 | 0 | 0 |
| **P. Nemertea** | | 0.01 | 0.01 | 0.01 | 0.09 | 0 | 0.02 |

[1] Too small/damaged to positively identify
[2] Molt
[3] Many quite damaged
[4] +1 embryonic
[5] +1 molt
[6] One with brood

TABLE 6: (continued)

| Taxonomic Division | Genus/Species | | 19-Jan-02 TBBT-1 POST-A | 19-Jan-02 TBBT-1 POST-B | 19-Jan-02 TBBT-2 POST-A | 19-Jan-02 TBBT-2 POST-B | 19-Jan-02 TBBT-3 POST-A | 19-Jan-02 TBBT-3 POST-B |
|---|---|---|---|---|---|---|---|---|
| | parts | | 0 | 0.04 | 0.05 | 0.03 | 0 | 0.01 |
| **P. Sipuncula** | | | 0.01 | 0 | 0.02 | 0.23 | 0.01 | 0.01 |
| **P. Echinodermata** | | | 0 | 0 | 0 | 0 | 0 | 0 |
| **Cl. Ophiuroidea** | | | 0.01 | 0.02 | 0 | 0 | 0 | 0 |
| **Cl. Holothuroidea** | | | 0.01 | 0 | 0 | 0 | 0.01 | 0 |
| **P. Cnidaria** | | | 0 | 0 | 0 | 0 | 0 | 0 |
| O. Pennatulacea | Juvenile | | 0.01 | 0.08 | 0.04 | 0.08 | 0.11 | 0.09[1] |
| | | **Totals** | **5.25** | **5.72** | **3.25** | **4.97** | **4.45** | **4.73** |

[1] *Haipteris willemosi*

TABLE 7: Meiofauna taxonomic abbreviations referred to in Tables 11, 12, and 13.

| Abbreviated Name | Taxa | Stage |
|---|---|---|
| ACAR | Acari | adult |
| AMPH | Amphipoda | adult |
| BIVA | Bivalvia | larvae |
| CALN | Calanoida | adult |
| COPN | Copepoda | nauplii |
| CUMA | Cumacea | adult |
| EGG | Invertebrate | |
| FORA | Foraminifera | |
| GASA | Gastropoda | adult |
| HARP | Harpacticoida | adult |
| HYDR | Hydroida | sessile |
| ISOP | Isopoda | adult |
| KINO | Kinorhyncha | adult |
| NEMA | Nematoda | adult |
| NEMR | Nemertea | adult |
| OLIG | Oligochaeta | adult |
| OSTR | Ostracoda | adult |
| POLA | Polychaeta | adult |
| ROTI | Rotifera | adult |
| SCAP | Scaphopoda | adult |
| TURB | Turbellaria | adult |

TABLE 8: Meiofaunal abundance (No. $ml^{-1}$) sampled from grab samples deployed before (pre) and after (post) beam trawling in Turnour Bay, January 17-19, 2002. Refer to Table 5 for taxa abbreviations. Each core-depth interval was 1-cm in depth, 5.5 ml in volume, and 5.5 $cm^2$ in surface area. TBBT= Turnour Bay beam trawl; 1,2,3 = replicate trawl transects; C,D = sample type (see Table 2).

| | | | Taxonomic Division | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Location | Depth (cm) | FORA | HYDR | TURB | KINO | ROTI | NEMA | OLIG | POLA | BIVA | GASA | SCAP | NEMR | ACAR | HARP | COPN | OSTR | ISOP | AMPH | CUMA | EGG |
| 17-Jan-02 | TBBT-1 PRE-C | 1 | 0.0 | 0.0 | 0.0 | 7.3 | 0.0 | 67.3 | 0.0 | 6.9 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 19.0 | 4.5 | 2.4 | 0.0 | 0.0 | 0.0 | 0.2 |
| 17-Jan-02 | TBBT-1 PRE-C | 2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 25.2 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 17-Jan-02 | TBBT-1 PRE-C | 3 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 30.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 102.1 |
| 17-Jan-02 | TBBT-1 PRE-C | 4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 19.9 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 102.1 |
| 17-Jan-02 | TBBT-1 PRE-C | 5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 35.9 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 1.5 |
| 17-Jan-02 | TBBT-1 PRE-C | 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 32.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 17-Jan-02 | TBBT-1 PRE-D | 1 | 0.7 | 0.0 | 0.0 | 3.6 | 0.0 | 43.2 | 0.0 | 5.1 | 0.9 | 0.0 | 0.0 | 0.2 | 0.0 | 4.2 | 1.6 | 1.1 | 0.0 | 0.0 | 0.2 | 0.5 |
| 17-Jan-02 | TBBT-1 PRE-D | 2 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 20.1 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 17-Jan-02 | TBBT-1 PRE-D | 3 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 25.9 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 17-Jan-02 | TBBT-1 PRE-D | 4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17-Jan-02 | TBBT-1 PRE-D | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17-Jan-02 | TBBT-1 PRE-D | 6 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Jan-02 | TBBT-1 POST- C | 1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 24.1 | 0.0 | 3.6 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Jan-02 | TBBT-1 POST-C | 2 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 13.4 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Jan-02 | TBBT-1 POST-C | 3 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 19-Jan-02 | TBBT-1 POST-C | 4 | 0.4 | 0.0 | 0.0 | 0.4 | 0.0 | 8.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Jan-02 | TBBT-1 POST-C | 5 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 19-Jan-02 | TBBT-1 POST-D | 1 | 0.9 | 0.0 | 0.0 | 2.0 | 0.0 | 41.5 | 0.0 | 2.2 | 1.1 | 0.0 | 0.2 | 0.0 | 0.2 | 5.6 | 1.6 | 0.5 | 0.0 | 0.0 | 0.2 | 0.4 |
| 19-Jan-02 | TBBT-1 POST-D | 2 | 0.5 | 0.0 | 0.0 | 0.4 | 0.0 | 43.3 | 0.0 | 0.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.4 |
| 19-Jan-02 | TBBT-1 POST-D | 3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5 | 0.0 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.5 |
| 19-Jan-02 | TBBT-1 POST-D | 4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 20.5 | 0.0 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.4 |
| 19-Jan-02 | TBBT-1 POST-D | 5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 16.7 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 |
| 19-Jan-02 | TBBT-1 POST-D | 6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 14.5 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Jan-02 | TBBT-2 PRE-C | 1 | 14.3 | 0.0 | 0.0 | 3.8 | 0.0 | 103.0 | 0.0 | 7.6 | 1.3 | 0.2 | 0.0 | 0.2 | 0.0 | 19.0 | 8.9 | 2.7 | 0.0 | 0.4 | 0.0 | 0.7 |
| 18-Jan-02 | TBBT-2 PRE-C | 2 | 6.9 | 0.0 | 0.0 | 0.9 | 0.0 | 85.6 | 0.0 | 6.3 | 0.4 | 0.0 | 0.0 | 0.2 | 0.0 | 4.5 | 1.6 | 0.9 | 0.0 | 0.0 | 0.0 | 2.2 |
| 18-Jan-02 | TBBT-2 PRE-D | 1 | 9.2 | 0.0 | 0.0 | 2.4 | 0.0 | 108.6 | 0.0 | 9.6 | 2.0 | 0.4 | 0.0 | 0.4 | 0.0 | 15.4 | 5.3 | 2.2 | 0.0 | 0.0 | 0.0 | 1.6 |
| 18-Jan-02 | TBBT-2 PRE-D | 2 | 10.5 | 0.0 | 0.0 | 0.2 | 0.0 | 50.6 | 0.0 | 3.4 | 0.4 | 0.2 | 0.2 | 0.0 | 0.0 | 1.1 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 1.3 |
| 18-Jan-02 | TBBT-2 PRE-D | 3 | 2.4 | 0.0 | 0.0 | 0.2 | 0.0 | 25.4 | 0.0 | 1.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 19-Jan-02 | TBBT-2 POST-C | 1 | 2.5 | 0.4 | 0.2 | 3.8 | 0.2 | 62.9 | 0.0 | 10.0 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 21.8 | 6.3 | 2.2 | 0.4 | 0.2 | 0.2 | 2.2 |
| 19-Jan-02 | TBBT-2 POST-C | 2 | 5.3 | 0.0 | 0.2 | 0.5 | 0.0 | 67.1 | 0.7 | 7.4 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 7.4 | 0.2 | 2.5 | 0.0 | 0.0 | 0.0 | 1.1 |
| 19-Jan-02 | TBBT-2 POST-C | 3 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 36.6 | 0.0 | 2.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 19-Jan-02 | TBBT-2 POST-C | 4 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 31.0 | 0.0 | 1.5 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.4 |
| 19-Jan-02 | TBBT-2 POST-D | 1 | 0.5 | 0.0 | 0.0 | 3.4 | 0.0 | 61.3 | 0.0 | 6.5 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 17.2 | 4.5 | 3.1 | 0.2 | 0.0 | 0.2 | 1.3 |
| 19-Jan-02 | TBBT-2 POST-D | 2 | 11.2 | 0.0 | 0.0 | 1.5 | 0.0 | 74.3 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 4.5 | 0.5 | 3.8 | 0.4 | 0.0 | 0.2 | 0.5 |
| 19-Jan-02 | TBBT-2 POST-D | 3 | 9.1 | 0.0 | 0.0 | 0.0 | 0.0 | 50.8 | 0.0 | 1.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.5 |

TABLE 8: (continued)

Taxonomic Division

| Date | Location | Depth (cm) | FORA | HYDR | TURB | KINO | ROTI | NEMA | OLIG | POLA | BIVA | GASA | SCAP | NEMR | ACAR | HARP | COPN | OSTR | ISOP | AMPH | CUMA | EGG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18-Jan-02 | TBBT-3 PRE-C | 1 | 0.2 | 0.0 | 0.0 | 2.5 | 0.0 | 40.1 | 0.0 | 1.5 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 1.8 | 0.0 | 0.4 | 0.0 | 0.5 |
| 18-Jan-02 | TBBT-3 PRE-C | 2 | 1.6 | 0.0 | 0.0 | 0.2 | 0.0 | 56.8 | 0.0 | 0.9 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 1.3 | 0.0 | 0.2 | 0.0 | 0.2 |
| 18-Jan-02 | TBBT-3 PREC | 3 | 0.5 | 0.0 | 0.0 | 0.9 | 0.0 | 31.0 | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Jan-02 | TBBT-3 PREC | 4 | 0.5 | 0.0 | 0.0 | 0.4 | 0.0 | 18.9 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.9 |
| 18-Jan-02 | TBBT-3 PREC | 5 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 22.8 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.2 |
| 18-Jan-02 | TBBT-3 PRED | 1 | 2.5 | 0.0 | 0.0 | 2.9 | 0.0 | 63.1 | 0.0 | 10.2 | 3.4 | 0.4 | 0.0 | 0.0 | 0.0 | 18.1 | 4.5 | 2.9 | 0.0 | 0.0 | 0.0 | 0.7 |
| 18-Jan-02 | TBBT-3 PRED | 2 | 0.9 | 0.0 | 0.2 | 1.8 | 0.0 | 43.5 | 0.2 | 3.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 1.6 | 0.0 | 0.0 | 0.2 | 0.5 |
| 18-Jan-02 | TBBT-3 PRED | 3 | 3.4 | 0.0 | 0.0 | 0.2 | 0.0 | 26.7 | 0.0 | 1.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 1.6 | 0.0 | 0.0 | 0.0 | 2.2 |
| 18-Jan-02 | TBBT-3 PRED | 4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 8.2 | 0.0 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 38.4 |
| 19-Jan-02 | TBBT-3 POSTC | 1 | 2.0 | 0.0 | 0.0 | 0.2 | 0.0 | 11.4 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.2 | 2.5 | 0.0 | 0.0 | 0.0 | 1.8 |
| 19-Jan-02 | TBBT-3 POSTC | 2 | 3.3 | 16.5 | 0.0 | 0.4 | 0.0 | 6.5 | 0.0 | 0.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.4 | 0.0 | 0.2 | 0.0 | 0.2 |
| 19-Jan-02 | TBBT-3 POSTC | 3 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 |
| 19-Jan-02 | TBBT-3 POSTC | 4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Jan-02 | TBBT-3 POSTC | 5 | 0.2 | 0.0 | 0.2 | 0.2 | 0.0 | 11.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Jan-02 | TBBT-3 POSTD | 1 | 1.5 | 0.0 | 0.2 | 1.1 | 0.0 | 62.2 | 0.0 | 0.9 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 0.9 | 0.0 | 0.0 | 0.0 | 0.4 |
| 19-Jan-02 | TBBT-3 POST-D | 2 | 1.1 | 0.0 | 0.7 | 4.2 | 0.0 | 103.7 | 0.0 | 8.7 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 12.9 | 2.9 | 4.7 | 0.0 | 0.5 | 0.4 | 9.2 |
| 19-Jan-02 | TBBT-3 POST-D | 3 | 2.0 | 0.0 | 0.0 | 0.2 | 0.0 | 59.5 | 0.0 | 2.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6 | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.7 |

TABLE 9: Carbon (C) and Nitrogen (N) content of sediment samples collected from Turnour Bay collected before (pre) and after (post) beam trawling, January 17-19, 2002. TBBT = Turnour Bay Beam Trawl; 1,2,3 = replicate trawl transects; C,D = sample type (see Table 2).

| Date | Location | %Total N | %Total C | % Org C |
|---|---|---|---|---|
| 17-Jan-02 | TBBT-1 PRE C | 0.06 | 0.52 | 0.46 |
| 17-Jan-02 | TBBT-1 PRE D | 0.07 | 0.75 | 0.67 |
| 18-Jan-02 | TTBT-2 PRE C | 0.04 | 0.37 | 0.35 |
| 18-Jan-02 | TTBT-2 PRE D | 0.04 | 0.33 | 0.31 |
| 18-Jan-02 | TTBT-3 PRE C | 0.04 | 0.36 | 0.35 |
| 18-Jan-02 | TTBT-3 PRE D | 0.05 | 0.41 | 0.39 |
| 19-Jan-02 | TBBT-1 POST C | 0.03 | 0.28 | 0.26 |
| 19-Jan-02 | TBBT-1 POST D | 0.06 | 0.72 | 0.65 |
| 19-Jan-02 | TBBT-2 POST C | 0.04 | 0.41 | 0.38 |
| 19-Jan-02 | TBBT-2 POST D | 0.04 | 0.33 | 0.31 |
| 19-Jan-02 | TTBT-3 POST C | 0.03 | 0.20 | 0.19 |
| 19-Jan-02 | TTBT-3 POST D | 0.04 | 0.28 | 0.26 |

TABLE 10: Sediment chlorophyll concentration (μg $mL^{-1}$ sediment) of grab samples collected from Turnour Bay collected before (pre) and after (post) beam trawling, January 17-19, 2002. Depth refers to core depth-interval. TBBT = Turnour Bay Beam Trawl; 1,2,3 = replicate trawl transects; C.D = sample type (see Table 2).

| Date | Location | Depth (mm) | [chl-a] (μg $mL^{-1}$) | [pheo] (μg $mL^{-1}$) |
|---|---|---|---|---|
| 17-Jan-02 | TBBT-1 PRE C | 0-5 | 0.346 | 2.890 |
| 17-Jan-02 | TBBT-1 PRE C | 5-10 | 0.354 | 2.708 |
| 17-Jan-02 | TBBT-1 PRE C | 10-15 | 0.404 | 2.519 |
| 17-Jan-02 | TBBT-1 PRE C | 15-20 | 0.375 | 2.613 |
| 17-Jan-02 | TBBT-1 PRE C | 20-25 | 0.368 | 2.438 |
| 17-Jan-02 | TBBT-1 PRE D | 0-5 | 0.361 | 2.635 |
| 17-Jan-02 | TBBT-1 PRE D | 5-10 | 0.382 | 2.387 |
| 17-Jan-02 | TBBT-1 PRE D | 10-15 | 0.281 | 2.466 |
| 17-Jan-02 | TBBT-1 PRE D | 15-20 | 0.318 | 2.598 |
| 17-Jan-02 | TBBT-1 PRE D | 20-25 | 0.354 | 2.489 |
| 18-Jan-02 | TBBT-2 PRE C | 0-5 | 0.960 | 6.438 |
| 18-Jan-02 | TBBT-2 PRE C | 5-10 | 1.313 | 7.513 |
| 18-Jan-02 | TBBT-2 PRE C | 10-15 | 0.411 | 2.818 |
| 18-Jan-02 | TBBT-2 PRE C | 15-20 | 0.447 | 2.723 |
| 18-Jan-02 | TBBT-2 PRE C | 20-25 | 0.433 | 2.636 |
| 18-Jan-02 | TBBT-2 PRE D | 0-5 | 0.390 | 2.919 |
| 18-Jan-02 | TBBT-2 PRE D | 5-10 | 0.404 | 2.919 |
| 18-Jan-02 | TBBT-2 PRE D | 10-15 | 0.411 | 2.694 |
| 18-Jan-02 | TBBT-2 PRE D | 15-20 | 0.397 | 2.599 |
| 18-Jan-02 | TBBT-2 PRE D | 20-25 | 0.339 | 2.591 |
| 18-Jan-02 | TBBT-3 PRE C | 0-5 | 0.404 | 3.007 |
| 18-Jan-02 | TBBT-3 PRE C | 5-10 | 0.303 | 2.634 |
| 18-Jan-02 | TBBT-3 PRE C | 10-15 | 0.245 | 2.123 |
| 18-Jan-02 | TBBT-3 PRE C | 15-20 | 0.231 | 1.978 |
| 18-Jan-02 | TBBT-3 PRE C | 20-25 | 0.260 | 1.912 |
| 18-Jan-02 | TBBT-3 PRE D | 0-5 | 0.568 | 2.686 |
| 18-Jan-02 | TBBT-3 PRE D | 5-10 | 0.114 | 0.808 |
| 18-Jan-02 | TBBT-3 PRE D | 10-15 | 0.118 | 0.749 |

TABLE 10: (continued)

| Date | Location | Depth (mm) | [chl-a] ($\mu g\ mL^{-1}$) | [pheo] ($\mu g\ mL^{-1}$) |
|---|---|---|---|---|
| 18-Jan-02 | TBBT-3 PRE D | 15-20 | 0.132 | 0.736 |
| 18-Jan-02 | TBBT-3 PRE D | 20-25 | 0.111 | 0.681 |
| 19-Jan-02 | TBBT-1 POST C | 0-5 | 0.361 | 3.007 |
| 19-Jan-02 | TBBT-1 POST C | 5--10 | 0.253 | 2.430 |
| 19-Jan-02 | TBBT-1 POST C | 10--15 | 0.339 | 2.489 |
| 19-Jan-02 | TBBT-1 POST C | 15--20 | 0.296 | 2.379 |
| 19-Jan-02 | TBBT-1 POST C | 20-25 | 0.274 | 2.510 |
| 19-Jan-02 | TBBT-1 POST D | 0-5 | 0.361 | 2.861 |
| 19-Jan-02 | TBBT-1 POST D | 5-10 | 0.354 | 3.036 |
| 19-Jan-02 | TBBT-1 POST D | 10-15 | 0.390 | 2.810 |
| 19-Jan-02 | TBBT-1 POST D | 15-20 | 0.332 | 2.722 |
| 19-Jan-02 | TBBT-1 POST D | 20-25 | 0.354 | 2.729 |
| 19-Jan-02 | TBBT-2 POST C | 0-5 | 0.361 | 3.174 |
| 19-Jan-02 | TBBT-2 POST C | 5-10 | 0.375 | 2.912 |
| 19-Jan-02 | TBBT-2 POST C | 10-15 | 0.267 | 2.707 |
| 19-Jan-02 | TBBT-2 POST C | 15-20 | 0.375 | 2.504 |
| 19-Jan-02 | TBBT-2 POST C | 20-25 | 0.375 | 2.438 |
| 19-Jan-02 | TBBT-2 POST D | 0-5 | 0.390 | 2.970 |
| 19-Jan-02 | TBBT-2 POST D | 5-10 | 0.346 | 3.174 |
| 19-Jan-02 | TBBT-2 POST D | 10-15 | 0.354 | 3.057 |
| 19-Jan-02 | TBBT-2 POST D | 15-20 | 0.426 | 2.759 |
| 19-Jan-02 | TBBT-2 POST D | 20-25 | 0.318 | 2.707 |
| 19-Jan-02 | TBBT-3 POST C | 0-5 | 0.303 | 3.013 |
| 19-Jan-02 | TBBT-3 POST C | 5-10 | 0.260 | 2.167 |
| 19-Jan-02 | TBBT-3 POST C | 10-15 | 0.267 | 2.182 |
| 19-Jan-02 | TBBT-3 POST-C | 15-20 | 0.267 | 2.109 |
| 19-Jan-02 | TBBT-3 POST C | 20-25 | 0.318 | 2.496 |
| 19-Jan-02 | TBBT-3 POST D | 0-5 | 0.397 | 3.065 |
| 19-Jan-02 | TBBT-3 POST D | 5-10 | 0.411 | 2.992 |
| 19-Jan-02 | TBBT-3 POST D | 10-15 | 0.339 | 3.057 |
| 19-Jan-02 | TBBT-3 POST D | 15-20 | 0.361 | 2.657 |

TABLE 11: Concentrations of trace-elements (μg $g^{-1}$ dry weight sediment) for sediments at Turnour Bay collected before (pre) and after (post) beam trawling January 17-19, 2002. TBBT = Turnour Bay Beam Trawl; 1,2,3 = replicate trawl transects.

| | 17-Jan-02 TBBT-1 PRE | 18-Jan-02 TBBT-2 PRE | 18-Jan-02 TBBT-3 PRE | 19-Jan-02 TBBT-1 POST | 19-Jan-02 TBBT-2 POST | 19-Jan-02 TBBT-3 POST |
|---|---|---|---|---|---|---|
| Aluminium | 4800 | 4230 | 4780 | 4970 | 4540 | 4740 |
| Antimony | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | <1.0 | 3.5 | 1 | 5 | 1 | 1.5 |
| Barium | 14.4 | 11.9 | 13.5 | 11.7 | 13.7 | 12.3 |
| Beryllium | <0.02 | 0.035 | 0.02 | 0.03 | <0.02 | 0.04 |
| Bismuth | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Cadmium | 0.427 | 0.434 | 0.463 | 0.469 | 0.414 | 0.48 |
| Calcium | 8750 | 4020 | 4330 | 4500 | 4460 | 4620 |
| Chromium | 4.22 | 4.04 | 4.28 | 4.94 | 4.79 | 4.5 |
| Cobalt | 1.59 | 1.65 | 1.89 | 1.99 | 1.79 | 1.95 |
| Copper | 5.47 | 3.74 | 4.18 | 4.19 | 4.14 | 3.9 |
| Iron | 6460 | 4990 | 4930 | 5730 | 5330 | 4950 |
| Lead | <0.2 | 0.85 | <0.2 | 0.65 | 0.9 | 1.1 |
| Lithium | 2.4 | 2.4 | 2.2 | 2.3 | 2.54 | 2.1 |
| Magnesium | 2050 | 1890 | 2030 | 2000 | 2070 | 2040 |
| Manganese | 55.2 | 54.3 | 61.3 | 58.8 | 66.3 | 60.9 |
| Molybdenum | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Nickel | 2.63 | 2.59 | 2.79 | 3.14 | 2.79 | 2.8 |
| Phosphorus | 390 | 449 | 447 | 381 | 465 | 504 |
| Potassium | 890 | 753 | 772 | 798 | 877 | 719 |
| Selenium | <2 | <2 | <2 | <2 | <2 | <2 |
| Silicon | 39.8 | 19 | 22 | 20 | 21 | 33.5 |
| Silver | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| Sodium | 7160 | 4180 | 3850 | 3690 | 3950 | 3620 |
| Strontium | 27.1 | 21.1 | 21.9 | 23.3 | 23 | 23.8 |
| Sulphur | 850 | 1050 | 618 | 628 | 623 | 579 |
| Thorium | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 1.7 |
| Tin | <0.2 | 0.45 | <0.2 | 0.3 | 0.6 | 0.45 |
| Titanium | 302 | 268 | 321 | 336 | 296 | 336 |
| Uranium | <3 | <3 | <3 | <3 | <3 | <3 |
| Vanadium | 11.7 | 11.6 | 11.7 | 13.2 | 12.3 | 12.3 |
| Zinc | 10.1 | 9.62 | 9.91 | 9.77 | 10.4 | 9.69 |
| Zirconium | 0.84 | 0.95 | 1.1 | 1.2 | 1 | 1.2 |

TABLE 12: Position data and duration for trapping at Turnour Bay, March 11-13, 2002. Start and end locations of traps for each trap line presented. TTR = Turnour Bay trap lines; 1,2,3 = replicate trap-line transects.

| Date | Time (PST) | Location | Lat. (°N) | Long. (°W) | Depth Range (m) | Comments | Line Retrieval |
|---|---|---|---|---|---|---|---|
| 11-Mar-02 | 17:30 | TTR-1 | 50 35.332 | 126 26.946 | | start trap | |
| 12-Mar-02 | 8:45 | TTR-1 | 50 34.530 | 126 28.867 | 67.6-78.6 | end trap | 12-Mar-02 07:53 |
| 12-Mar-02 | 9:04 | TTR-3 | 50 34.908 | 126 27.845 | | start trap | |
| 12-Mar-02 | 9:09 | TTR-3 | 50 34.575 | 126 28.138 | 38.0 | end trap | 12-Mar-02 09:55 |
| 12-Mar-02 | 10:05 | TTR-2 | 50 35.038 | 126 27.799 | | start trap | |
| 12-Mar-02 | 10:12 | TTR-2 | 50 35.039 | 126 27.331 | 34.0 | end trap | 12-Mar-02 10:52 |
| 12-Mar-02 | 11:14 | TTR-1 | 50 34.562 | 126 28.733 | | start trap | |
| 12-Mar-02 | 11:19 | TTR-1 | 50 34.399 | 126 29.305 | 41.3 | end trap | 12-Mar-02 12:28 |
| 12-Mar-02 | 12:42 | TTR-3 | 50 34.709 | 126 28.163 | | start trap | |
| 12-Mar-02 | 12:48 | TTR-3 | 50 34.937 | 126 27.765 | 37.0 | end trap | 12-Mar-02 14:45 |
| 12-Mar-02 | 14:51 | TTR-2 | 50 35.072 | 126 27.814 | | start trap | |
| 12-Mar-02 | 14:57 | TTR-2 | 50 35.014 | 126 27.242 | 31.0 | end trap | 12-Mar-02 15:58 |
| 12-Mar-02 | 16:14 | TTR-1 | 50 34.554 | 126 28.827 | | start trap | |
| 12-Mar-02 | 16:16 | TTR-1 | 50 34.371 | 126 29.432 | 46.0-58.0 | end trap | 12-Mar-02 17:12 |
| 12-Mar-02 | 17:23 | TTR-3 | 50 34.692 | 126 28.110 | | start trap | |
| 12-Mar-02 | 17:28 | TTR-3 | 50 35.045 | 126 27.787 | 37.5 | end trap | 13-Mar-02 08:50 |
| 13-Mar-02 | 9:01 | TTR-2 | 50 35.076 | 126 27.768 | | start trap | |
| 13-Mar-02 | 9:06 | TTR-2 | 50 35.008 | 126 27.089 | 39.5 | end trap | 13-Mar-02 11:31 |
| 13-Mar-02 | 11:40 | TTR-1 | 50 34.558 | 126 28.815 | | start trap | |
| 13-Mar-02 | 11:46 | TTR-1 | 50 34.374 | 126 29.359 | | end trap | 13-Mar-02 14:13 |
| 13-Mar-02 | 14:20 | TTR-3 | 50 34.986 | 126 27.813 | | start trap | |
| 13-Mar-02 | 14:26 | TTR-3 | 50 34.650 | 126 28.114 | | end trap | 13-Mar-02 15:20 |
| 13-Mar-02 | 15:31 | TTR-2 | 50 35.083 | 126 27.821 | | start trap | |
| 13-Mar-02 | 15:36 | TTR-2 | 50 35.034 | 126 27.244 | | end trap | 13-Mar-02 16:22 |
| 13-Mar-02 | 16:37 | TTR-1 | 50 34.565 | 126 28.752 | | start trap | |
| 13-Mar-02 | 16:44 | TTR-1 | 50 34.398 | 126 29.296 | | end trap | 13-Mar-02 17:33 |
| 13-Mar-02 | 17:41 | TTR-3 | 50 34.644 | 126 28.085 | 33.2 | start trap | |
| 13-Mar-02 | 17:45 | TTR-3 | 50 35.018 | 126 27.775 | | end trap | 13-Mar-02 18:42 |
| 13-Mar-02 | 18:47 | TTR-2 | 50 35.089 | 126 27.743 | | start trap | |
| 13-Mar-02 | 18:51 | TTR-2 | 50 35.000 | 126 27.103 | | end trap | 14-Mar-02 08:49 |

TABLE 13: Position data for sediment chemistry grab locations in Turnour Bay, March 12-13, 2002. T = grabs.

| Date | Time (PST) | Location | Sample Type | Lat. (°N) | Long. (°W) | Depth (m) | % grab fullness | Comments |
|---|---|---|---|---|---|---|---|---|
| 13-Mar-02 | 9:43 | T1 | A/chemistry | 50 34.478 | 126 29.055 | 37.5 | 30 | brown / olive |
| 13-Mar-02 | 9:56 | T1 | B/chemistry | 50 34.521 | 126 28.909 | 37.8 | 30 | brown / olive . Sea whip 1.77m |
| 13-Mar-02 | 10:07 | T1 | C/chemistry | 50 34.470 | 126 29.087 | 43.3 | 20 | brown / olive |
| 13-Mar-02 | 15:50 | T1 | D/chemistry | 50 34.480 | 126 29.056 | | 60 | brown olive |
| | | | | | | | | |
| 12-Mar-02 | 10:22 | T2 | A/chemistry | 50 35.053 | 126 27.515 | 34 | 10 | sandy olive green |
| 13-Mar-02 | 10:45 | T2 | B/chemistry | 50 35.048 | 126 27.496 | 33.1 | 30 | brown / olive , seawhip attached |
| 13-Mar-02 | 11:02 | T2 | C/chemistry | 50 35.043 | 126 27.455 | 31.8 | 35 | brown / olive |
| 13-Mar-02 | 14:51 | T2 | D/chemistry | 50 35.046 | 126 27.454 | 32.2 | 20 | olive brown |
| | | | | | | | | |
| 13-Mar-02 | 9:29 | T3 | A/chemistry | 50 34.807 | 126 27.951 | 39.5 | 50 | |
| 13-Mar-02 | 11:40 | T3 | B/chemistry | 50 34.742 | 126 28.004 | 43.1 | 20 | brown / olive |
| 13-Mar-02 | 11:45 | T3 | C/chemistry | | | 43.1 | 10 | brown / olive |
| 13-Mar-02 | 12:08 | T3 | D/chemistry | 50 34.860 | 126 27.914 | 42.6 | 15 | brown / olive |

TABLE 14: Percent proportions of grain size categories from sediment samples collected during trapping (T) in Turnour Bay, between March 12-13, 2002. 1,2,3 = Trap line replicate transects.

| Date | Location | Sample Type | >2mm | <2mm | <1mm | <.5mm | <.25mm | <.10mm | <63µm | <4µm | <2 µm |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13-Mar-02 | T1 | A/chemistry | | 0.1 | 0.6 | 8.1 | 71.5 | 10.6 | 4.8 | 0.9 | 3.4 |
| 13-Mar-02 | T1 | B/chemistry | | 0.1 | 0.3 | 5.5 | 76.1 | 9.8 | 4.5 | 1.4 | 2.3 |
| 13-Mar-02 | T1 | C/chemistry | | | 0.4 | 14.7 | 75.1 | 6.6 | 1.6 | 0.2 | 1.4 |
| 13-Mar-02 | T1 | D/chemistry | | | 0.5 | 11 | 72.3 | 10.4 | 2.8 | 0.5 | 2.5 |
| 12-Mar-02 | T2 | A/chemistry | 0.4 | 0.6 | 2.7 | 13.6 | 70.8 | 7 | 2.6 | 0.7 | 1.6 |
| 13-Mar-02 | T2 | B/chemistry | 1.2 | 1.6 | 5.6 | 20.8 | 60.9 | 5 | 2.6 | 0.2 | 2.1 |
| 13-Mar-02 | T2 | C/chemistry | 2.7 | 2.9 | 8.4 | 21.4 | 53.2 | 6.7 | 2.6 | 0.2 | 1.9 |
| 13-Mar-02 | T2 | D/chemistry | 4.1 | 2.3 | 6.5 | 21.8 | 55.2 | 5.4 | 2.5 | 0.5 | 1.7 |
| 13-Mar-02 | T3 | A/chemistry | | 0.5 | 2.9 | 12.1 | 75.2 | 6.1 | 1.6 | 0.2 | 1.4 |
| 13-Mar-02 | T3 | B/chemistry | | | 0.8 | 6.7 | 81.6 | 5.8 | 2.8 | 0.2 | 2.1 |
| 13-Mar-02 | T3 | C/chemistry | | 0.2 | 1 | 7 | 80.9 | 5.7 | 2.6 | 0.5 | 2.1 |
| 13-Mar-02 | T3 | D/chemistry | 0.3 | 1 | 2.9 | 8.3 | 77.4 | 5.6 | 2.6 | 0.5 | 1.4 |

TABLE 15: Position data for macrofauna and meiofauna/sediment grab locations at Bones Bay on, 17 January, 2002. BBBT = Bones Bay Beam Trawl. 1,2,3 = replicate transects.

| Date | Time (PST) | Location | Sample type | Lat. (°N) | Long. (°W) | Depth (m) | % grab fullness | Temp (°C) | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 17-Jan-02 | 08:53 | BBBT-1 | A/macrofauna | 50 35.363 | 126 22.532 | 74 | 70 | - | Olive green unconsolidated mud |
| 17-Jan-02 | 09:02 | BBBT-1 | B/macrofauna | 50 35.368 | 126 22.600 | 74.2 | 65 | - | Olive green unconsolidated mud |
| 17-Jan-02 | 09:13 | BBBT-1 | C/meiofauna/sed | 50 35.375 | 126 22.597 | 73.6 | 30 | 7.5 | Olive green unconsolidated mud |
| 17-Jan-02 | 09:30 | BBBT-1 | D/meiofauna/sed | 50 35.359 | 126 22.610 | 74.6 | 30 | 7.5 | Olive green unconsolidated mud |
| 17-Jan-02 | 09:41 | BBBT-2 | A/macrofauna | 50 35.354 | 126 22.431 | 71.4 | 80 | 7.5 | Olive green lumpy mud |
| 17-Jan-02 | 09:54 | BBBT-2 | B/macrofauna | 50 35.361 | 126 22.432 | 71.3 | 60 | - | Olive green unconsolidated mud |
| 17-Jan-02 | 10:15 | BBBT-2 | C/meiofauna/sed | 50 35.346 | 126 22.448 | 70.9 | 80 | 7.5 | Olive green mud |
| 17-Jan-02 | 10:42 | BBBT-2 | D/meiofauna/sed | 50 35.348 | 126 22.464 | 71.4 | 78 | 7 | Olive green mud |
| 17-Jan-02 | 11:01 | BBBT-3 | A/macrofauna | 50 35.296 | 126 22.421 | 71.8 | 55 | - | Olive green mud |
| 17-Jan-02 | 11:10 | BBBT-3 | B/macrofauna | 50 35.262 | 126 22.430 | 71.5 | 55 | - | green gray mud |
| 17-Jan-02 | 12:05 | BBBT-3 | C/meiofauna/sed | 50 35.298 | 126 22.411 | 71 | 30 | 8 | grey-green mud with some slumping |
| 17-Jan-02 | 12:25 | BBBT-3 | D/meiofauna/sed | 50 35 293 | 126 22.439 | 73.4 | 68 | 7 | Olive green with black streaks |

TABLE 16: Percent proportion of grain size categories from sediment samples collected from Bones Bay, January 17, 2002. BBBT = Bones Bay Beam Trawl; 1,2,3 = replicate beam trawl transects; C,D = sediment sample type, see Table 2).

| Date | Station | >2mm | <2mm | <1mm | <.5mm | <.25mm | <.10mm | <63 µm | <4 µm | <2 µm |
|---|---|---|---|---|---|---|---|---|---|---|
| 17-Jan-02 | BBBT-1 C | 4.1 | 3 | 4.8 | 7.9 | 33 | 28 | 9 | 1.4 | 8.8 |
| 17-Jan-02 | BBBT-1 D | - | 1 | 3.2 | 6.9 | 49.1 | 20.4 | 9.5 | 1.6 | 8.3 |
| 17-Jan-02 | BBBT-2 C | 0.5 | 0 | 0.6 | 2 | 31.8 | 41.8 | 11.8 | 1.2 | 10.3 |
| 17-Jan-02 | BBBT-2 D | - | 0.1 | 0.5 | 1.9 | 50.6 | 24.5 | 13 | 2.8 | 6.6 |
| 17-Jan-02 | BBBT-3 C | 5.5 | 0.6 | 1.4 | 3.4 | 27.5 | 38.6 | 9.8 | 2.4 | 10.8 |
| 17-Jan-02 | BBBT-3 D | 0.7 | 0.1 | 1.1 | 3.5 | 51 | 23.6 | 10.3 | 2.5 | 7.2 |

TABLE 17: Sediment chlorophyll concentration (µg $mL^{-1}$ sediment) of grab samples from Bones Bay (BB) collected in January 17, 2002.

| Date | Location | Core depth (mm) | [chl-a] (µg $mL^{-1}$) | [pheo] (µg $mL^{-1}$) |
|---|---|---|---|---|
| 17-Jan-02 | BBBT-1 C | 0-5 | 0.202 | 1.241 |
| 17-Jan-02 | BBBT-1 C | 5-10 | 0.281 | 2.824 |
| 17-Jan-02 | BBBT-1 C | 10-15 | 0.318 | 2.904 |
| 17-Jan-02 | BBBT-1 C | 15-20 | 0.325 | 2.736 |
| 17-Jan-02 | BBBT-1 C | 20-25 | 0.281 | 2.168 |
| 17-Jan-02 | BBBT-1 D | 0-5 | 0.382 | 2.985 |
| 17-Jan-02 | BBBT-1 D | 5-10 | 0.361 | 2.730 |
| 17-Jan-02 | BBBT-1 D | 10-15 | 0.346 | 2.372 |
| 17-Jan-02 | BBBT-1 D | 15-20 | 0.382 | 2.118 |
| 17-Jan-02 | BBBT-1 D | 20-25 | 0.354 | 2.314 |
| 17-Jan-02 | BBBT-2 C | 0-5 | 0.397 | 2.854 |
| 17-Jan-02 | BBBT-2 C | 5-10 | 0.397 | 2.220 |
| 17-Jan-02 | BBBT-2 C | 10-15 | 0.332 | 2.474 |
| 17-Jan-02 | BBBT-2 C | 15-20 | 0.325 | 2.255 |
| 17-Jan-02 | BBBT-2 C | 20-25 | 0.318 | 2.343 |
| 17-Jan-02 | BBBT-2 D | 0-5 | 1.263 | 8.635 |
| 17-Jan-02 | BBBT-2 D | 5-10 | 0.390 | 2.416 |
| 17-Jan-02 | BBBT-2 D | 10-15 | 0.332 | 2.277 |
| 17-Jan-02 | BBBT-2 D | 15-20 | 0.318 | 2.146 |
| 17-Jan-02 | BBBT-2 D | 20-25 | 0.274 | 2.058 |

TABLE 17: (continued)

| Date | Location | Core-depth (mm) | [chl-a] (μg $mL^{-1}$) | [pheo] (μg $mL^{-1}$) |
|---|---|---|---|---|
| 17-Jan-02 | BBBT-3 C | 0-5 | 0.411 | 2.723 |
| 17-Jan-02 | BBBT-3 C | 5-10 | 0.303 | 2.197 |
| 17-Jan-02 | BBBT-3 C | 10-15 | 0.354 | 2.270 |
| 17-Jan-02 | BBBT-3 C | 15-20 | 0.368 | 2.183 |
| 17-Jan-02 | BBBT-3 C | 20-25 | 0.354 | 2.044 |
| 17-Jan-02 | BBBT-3 D | 0-5 | 0.361 | 2.853 |
| 17-Jan-02 | BBBT-3 D | 5-10 | 0.267 | 2.415 |
| 17-Jan-02 | BBBT-3 D | 10-15 | 0.404 | 2.380 |
| 17-Jan-02 | BBBT-3 D | 15-20 | 0.339 | 2.183 |
| 17-Jan-02 | BBBT-3 D | 20-25 | 0.354 | 2.248 |

TABLE 18: Bottom water characteristics at oceanographic station near Turnour Bay and Bones Bay in 2001 and 2002. NA = not available (Troffe et al. 2005)

| Variable | Sept. 27, 2001 | Jan 25, 2002 | May 21, 2002 | Dec 14, 2002 |
|---|---|---|---|---|
| Temperature (°C) | 8.4 / 8.4 | 7.5 / 7.7 | 7.7 / 7.7 | 7.9 / 7.9 |
| Salinity (psu) | 31.31 / 31.49 | 30.63 / 30.74 | 31.04 / 31.16 | 31.28 / 31.39 |
| Dissolved oxygen (mg $L^{-1}$) | 2.76 / 2.85 | 5.43 / 4.87 | NA / 5.97 | 3.61 / 3.56 |

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