

**ASSESSMENT OF THE ENVIRONMENTAL
IMPACTS OF CONSTRUCTION AND OPERATION
OF THE HART AND MILLER ISLANDS
CONTAINMENT FACILITY**

DATA REPORT

1982 - 1983

**Chesapeake Research Consortium, Inc.
with**

Contributions from

**Chesapeake Biological Laboratory
Center for Environmental and Estuarine Studies
University of Maryland**

**Chesapeake Bay Institute
The Johns Hopkins University**

**Maryland Geological Survey
Department of Natural Resources
State of Maryland**

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CHAPTER V

BENTHIC BIOTA DATA

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BENTHOS METHODS

Four scientific cruises to Hart and Miller Islands were made aboard the University of Maryland Center for Environmental and Estuarine Studies Research Vessel Aquarius on 23-25 August, and 15-17 November, 1982; 21-23 February, and 16-18 May, 1983.

The stations monitored for the second year of study were in the same locations as the previous year (Fig. 1). The coordinates for these stations along with station designation numbers from the DNR benthic study of 1972-78 are given in Table 1.

At each station three replicate bottom samples were taken with a vanVeen grab which takes a $.1m^2$ area of the sediments varying from 6 to 15 cm in depth depending on the softness of the bottom. The data print-out identifies these as Grab 1, 2, and 3, and they were washed through a 1.0mm screen. Grab 1, however, was further collected on a .5mm screen to obtain smaller juvenile forms. This is so indicated on the print-out (Tables 2, 3, 4, 5). The samples were preserved in the field with 10% formalin colored with a small amount of rose Bengal to facilitate sorting specimens from detritus.

The number of each species was counted and recorded separately for each of the replicate grabs. Specimens which were damaged and in parts were included in the count only if the head portion could be identified.

Water temperatures and salinities were taken by means of an induction salinometer near the bottom of the water column at selected stations (Tables 6, 7, 8, 9). Depths were recorded from the ship's recording fathometer and stations were located by means of the radar unit and Lorar C.

A small volume of sediment from one of the triplicate samples at each station was removed for sediment grain size analysis (Tables 5, 6, 7). The sample was processed in the laboratory by washing through a No. 230 (62 microns) U.S. Standard Sieve to collect a sample of the silts and clays in the filtrate. The sand fraction which remained on the screen was dried in an oven at approximately 100C and sieved through a nest of sieves No. 35 (500 microns), No. 60 (250 microns), and No. 120 (125 microns). The sample of the filtrate which contained the silts and clays was then filtered through a Millipore GF/C filter and dried to a constant weight. A second aliquot of the filtrate was used for clay analysis after it was allowed to sit undisturbed for exactly two hours. This 5Cml sample was also filtered through a Millipore filter and then allowed to dry in a dessicator before weighing. The percentage of the weights for the various sands, silts and clay fractions were then determined, based on the weight of the original sample.

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TABLE 1
BIOTA STATION COORDINATES

<u>UMCEES BENTHOS STATION</u>	<u>DNR BENTHOS STATION</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>
HM1	XIF5911	39°15'54"	76°21'05"
HM3	XIF4430	39°14'21"	76°23'00"
HM6	XIF5917	39°15'36"	76°22'37"
HM7	XIF6388	39°16'15"	76°20'50"
HMB	XIF5904	39°15'52"	76°20'24"
HM9	XIF5297	39°15'33"	76°19'53"
HM10	XIG5592	30°15'31"	76°19'11"
HM14	XIF4327	39°14'16"	76°22'25"
HM15	XIF3675	39°17'50"	76°22'16"
HM16	XIF3325	39°13'17"	76°22'30"
HM17	XIF3064	39°13'33"	76°23'47"
HM19		39°16'35"	76°20'51"
HM20		30°17'36"	76°19'29"
HM21		39°17'22"	76°19'47"
HM22		39°16'58"	76°18'51"
HM23		39°12'20"	76°15'21" 76 15 21
HM24		39°12'46"	76°25'24"
HM25		39°12'03"	76°25'06"
HM26		39°14'39"	76°23'91"
<u>FISH (Beach Seine)</u>			
HMS1	XIF5713	39°15'44"	76°21'17"
HMS2	XIF5616	39°15'37"	75°21'37"
HMS3	XIF5030	39°15'00"	76°22'59"
HMS4	XIF4631	39°14'34"	76°23'04"
HMS5	XIF3935	39°13'53"	76°24'36"
HMS6	XIF3446	39°13'25"	76°24'36"
<u>FISH AND CRAB (Trawl)</u>			
HMT1	XIF7823	39°17'50"	76°22'16"
HMT2	XIF3325	39°13'17"	76°22'30"
HMT3	XIF4105	39°14'04"	76°22'30"
HMT4	XIF3601	39°13'37"	76°20'08"
HMT5	XIF5904	39°14'52"	76°20'24"
HMT6	XIF6308	30°16'15"	76°20'50"
HMT7	XIF5626	39°15'36"	76°22'37"
HMT8	XIF5423	39°15'24"	76°22'16"
HMT9	XIF3638	30°13'33"	76°23'47"
HMT10	XIF3142	39°13'04"	76°24'14"

These Lat/Long
 coordinates are
 given for XIF4324
 in the electronic
 file.

Table 2. Benthic species collected during the August 1982 sampling cruise.

		DATE: AUG82			
STATION	SPECIES	GRAH #1 .5-1.0MM	GRAH #1 1.0MM	GRAH #2 1.0MM	GRAH #3 1.0MM
HM01	02 MICRURA LEIDYI	0	1	0	0
HM01	05 NEREIS SUCCINEA	0	1	0	0
HM01	21 RANGIA CUNEATA	0	1	0	1
HM01	34 NEOHAUSTORIUS	0	13	3	2
HM03	03 HETEROMASTUS FILIFORMIS	2	0	0	0
HM03	09 POLYDURA LIGNI	0	0	5	9
HM03	11 STREHLUSPIO BENEDECTI	8	0	0	1
HM03	21 RANGIA CUNEATA	0	0	0	1
HM06	02 MICRURA LEIDYI	4	1	0	1
HM06	05 NEREIS SUCCINEA	0	2	4	2
HM06	19 MACOMA BALTHICA	0	1	0	3
HM06	21 RANGIA CUNEATA	0	1	2	0
HM06	36 LEPTOCHIERUS PLUMULOSUS	20	11	14	4
HM07	02 MICRURA LEIDYI	0	1	0	1
HM07	05 NEREIS SUCCINEA	0	0	0	1
HM07	11 STREHLUSPIO BENEDECTI	28	0	0	0
HM07	19 MACOMA BALTHICA	0	5	10	4
HM07	21 RANGIA CUNEATA	0	0	1	1
HM07	36 LEPTOCHIERUS PLUMULOSUS	74	30	21	40
HM08	02 MICRURA LEIDYI	0	2	1	1
HM08	10 SCOLECOLEPIDES VIRIDIS	24	6	11	0
HM08	14 PELOSCOLEX SP.	12	0	0	0
HM08	21 RANGIA CUNEATA	4	0	0	1
HM08	33 EDOTEA TRILOHA	10	0	0	0
HM08	41 CHIRODOTEA ALMYRA	0	0	5	0
HM09	02 MICRURA LEIDYI	0	1	0	1
HM09	05 NEREIS SUCCINEA	0	10	31	10
HM09	10 SCOLECOLEPIDES VIRIDIS	0	1	0	0
HM09	14 PELOSCOLEX SP.	8	0	0	0
HM09	17 CONGERIA LEUCOPHAETA	24	330	205	401
HM09	27 BALANUS SP.	4	127	277	141
HM09	30 CYATHURA POLITA	15	1	1	2
HM09	37 CUROPHIUM LACUSTRE	26	17	14	20
HM09	40 MELITA NITIDA	14	2	5	0
HM10	02 MICRURA LEIDYI	2	0	1	1
HM10	05 NEREIS SUCCINEA	0	0	1	1
HM10	11 STREHLUSPIO BENEDECTI	8	0	0	0
HM10	20 MACOMA MITCHELLI	0	3	2	0
HM10	30 CYATHURA POLITA	22	3	10	12
HM14	02 MICRURA LEIDYI	4	0	0	0
HM15	02 MICRURA LEIDYI	0	0	1	1
HM15	05 NEREIS SUCCINEA	0	9	7	0
HM15	11 STREHLUSPIO BENEDECTI	32	0	1	0
HM15	17 CONGERIA LEUCOPHAETA	0	0	0	2
HM15	20 MACOMA MITCHELLI	0	0	2	1
HM15	30 CYATHURA POLITA	4	19	19	15
HM15	37 CUROPHIUM LACUSTRE	4	0	0	0

Table 2. cont'd.

DATE: AUG 82

STATION	SPECIES	GRAB #1 .5-1.0MM	GRAB #1 1.0MM	GRAB #2 1.0MM	GRAB #3 1.0MM
HM25	02 MICRURA LEIDYI	0	0	0	4
HM25	05 NEREIS SUCCINEA	0	24	20	14
HM25	11 STREBLOSPIO BENEDECTI	44	1	1	1
HM25	14 PELOSCOLEX SP.	6	0	0	0
HM25	19 MACOMA BALTHICA	0	6	3	13
HM25	21 RANGIA CUNEATA	2	0	0	2
HM25	36 LEPTOCHIERUS PLUMULOSUS	106	55	37	50
HM26	02 MICRURA LEIDYI	0	2	0	5
HM26	05 NEREIS SUCCINEA	0	10	10	5
HM26	10 SCOLECOLEPIDES VIRIDIS	0	3	1	5
HM26	13 LIMNODRILUS HOFFMEISTERI	70	0	0	0
HM26	18 LITTORIDINOPS SP.	10	0	0	0
HM26	20 MACOMA MITCHELLI	0	0	1	2
HM26	30 CYATHURA POLITA	0	16	7	15
HM26	36 LEPTOCHIERUS PLUMULOSUS	210	56	40	49
HM26	41 CHIRODOTEA ALMYRA	0	2	0	0

Table 3. cont'd.

		DATE: NOV 82			
STATION	SPECIES	GRAB #1 .5-1.0MM	GRAB #1 1.0MM	GRAB #2 1.0MM	GRAB # 1.0MM
HM14	03 HETEROMASTUS FILIFORMIS	0	0	0	1
HM14	08 ETEONE HETEROPODA	16	0	0	0
HM14	11 STREBLOSPIO BENEDECTI	16	0	0	0
HM14	19 MACOMA HALTHICA	76	1	1	0
HM14	22 MYA ARENARIA	4	0	0	0
HM14	37 COROPHIUM LACUSTRE	32	3	0	1
HM15	03 HETEROMASTUS FILIFORMIS	8	2	4	4
HM15	10 SCOLECOLEPIDES VIRIDIS	0	0	2	1
HM15	14 PELOSCOLEX SP.	224	0	0	0
HM15	20 MACOMA MITCHELLI	16	2	6	2
HM15	30 CYATHURA POLITA	4	9	9	5
HM15	40 MELITA NITIDA	76	0	1	4
HM16	02 MICRURA LEIDYI	4	0	3	1
HM16	05 NEREIS SUCCINEA	4	7	3	6
HM16	11 STREBLOSPIO BENEDECTI	100	0	0	0
HM16	19 MACOMA HALTHICA	62	48	54	49
HM16	21 RANGIA CUNEATA	10	0	1	0
HM16	36 LEPTOCHIERUS PLUMULOSUS	442	308	323	245
HM17	03 HETEROMASTUS FILIFORMIS	40	4	30	26
HM17	08 ETEONE HETEROPODA	0	0	0	1
HM17	11 STREBLOSPIO BENEDECTI	4	0	0	1
HM17	17 CUNGERIA LEUCOPHAETA	0	2	3	43
HM17	20 MACOMA MITCHELLI	16	18	33	20
HM17	22 MYA ARENARIA	2	0	0	0
HM17	30 CYATHURA POLITA	2	1	2	10
HM17	36 LEPTOCHIERUS PLUMULOSUS	150	48	152	58
HM19	02 MICRURA LEIDYI	0	3	2	2
HM19	05 NEREIS SUCCINEA	8	2	0	2
HM19	11 STREBLOSPIO BENEDECTI	32	0	0	0
HM19	19 MACOMA HALTHICA	0	4	7	5
HM19	21 RANGIA CUNEATA	0	0	2	0
HM19	36 LEPTOCHIERUS PLUMULOSUS	784	350	554	401
HM19	39 GAMMARUS PALUSTRIS	0	0	0	1
HM19	43 CHIRONOMID SP.	0	0	1	1
HM20	03 HETEROMASTUS FILIFORMIS	8	0	0	0
HM20	15 Capitella capitata	8	0	0	0
HM20	21 RANGIA CUNEATA	0	2	0	0
HM20	30 CYATHURA POLITA	0	1	0	1
HM20	37 COROPHIUM LACUSTRE	24	1	2	0
HM21	02 MICRURA LEIDYI	0	0	1	1
HM21	05 NEREIS SUCCINEA	0	0	0	3
HM21	11 STREBLOSPIO BENEDECTI	40	0	1	0
HM21	17 CUNGERIA LEUCOPHAETA	0	0	2	0
HM21	20 MACOMA MITCHELLI	8	2	5	2
HM21	30 CYATHURA POLITA	8	8	10	0
HM21	36 LEPTOCHIERUS PLUMULOSUS	1032	478	579	440
HM21	40 MELITA NITIDA	16	2	1	0

Table 4. Benthic species collected during the February 1983 sampling cruise.

DATE: Feb 83

STATION	SPECIES	GRAB #1 .5-1.0MM	GRAB #1 1.0MM	GRAB #2 1.0MM	GRAB #3 1.0MM
HM01	10 SCOLECOLEPIDES VIRIDIS	0	2	6	0
HM01	19 MACOMA BALTHICA	0	5	5	4
HM01	21 RANGIA CUNEATA	0	1	3	9
HM01	30 CYATHURA POLITA	2	0	3	1
HM01	37 COROPHIUM LACUSTRE	2	1	4	2
HM03	03 HETEROMASTUS FILIFORMIS	2	0	0	0
HM03	08 ETEONE HETEROPODA	1	0	0	1
HM03	19 MACOMA BALTHICA	0	3	0	5
HM03	21 RANGIA CUNEATA	0	2	1	3
HM03	30 CYATHURA POLITA	0	0	2	0
HM03	36 LEPTOCHIERUS PLUMULOSUS	0	24	19	17
HM06	02 MICRURA LEIDYI	0	0	0	9
HM06	05 NEREIS SUCCINEA	0	0	0	1
HM06	10 SCOLECOLEPIDES VIRIDIS	70	0	0	0
HM06	14 PELOSCOLEX SP.	76	0	0	0
HM06	20 MACOMA MITCHELLI	0	4	6	5
HM06	30 CYATHURA POLITA	8	15	12	15
HM06	36 LEPTOCHIERUS PLUMULOSUS	366	275	429	347
HM06	40 MELITA NITIDA	14	0	0	0
HM07	02 MICRURA LEIDYI	3	6	3	4
HM07	05 NEREIS SUCCINEA	0	0	2	0
HM07	11 STREBLOSPIO BENEDECTI	28	0	0	0
HM07	19 MACOMA BALTHICA	6	30	9	20
HM07	21 RANGIA CUNEATA	0	0	1	0
HM07	30 CYATHURA POLITA	3	24	16	16
HM07	37 COROPHIUM LACUSTRE	2	1	1	1
HM07	41 CHIRODOTEA ALMYRA	0	1	0	0
HM08	03 HETEROMASTUS FILIFORMIS	0	0	2	1
HM08	09 POLYDORA LIGNI	0	0	0	2
HM08	11 STREBLOSPIO BENEDECTI	12	0	0	0
HM08	04 GLYCINDE SOLITARIA	0	0	1	0
HM08	17 CONGERIA LEUCOPHAETA	0	321	529	642
HM08	21 RANGIA CUNEATA	0	0	2	0
HM08	27 BALANUS SP.	0	359	810	1180
HM08	30 CYATHURA POLITA	0	2	0	0
HM08	36 LEPTOCHIERUS PLUMULOSUS	20	114	167	99
HM08	39 GAMMARUS PALUSTRIS	0	1	0	0
HM09	03 HETEROMASTUS FILIFORMIS	1	0	1	0
HM09	08 ETEONE HETEROPODA	0	0	0	1
HM09	11 STREBLOSPIO BENEDECTI	16	0	0	3
HM09	16 Ischadium recurvum	0	1	1	3
HM09	19 MACOMA BALTHICA	0	0	2	7
HM09	21 RANGIA CUNEATA	1	0	0	0
HM09	27 BALANUS SP.	0	567	837	755
HM09	30 CYATHURA POLITA	0	2	1	0
HM09	36 LEPTOCHIERUS PLUMULOSUS	0	126	144	190
HM09	38 GAMMARUS DATRERI	0	1	0	1
HM09	40 MELITA NITIDA	31	16	29	31

Table 4. cont'd.

DATE: Feb83

STATION	SPECIES	GRAB #1 .5-1.0MM	GRAB #1 1.0MM	GRAB #2 1.0MM	GRAB #3 1.0MM
HM20	09 POLYDORA LIGNI	0	0	1	0
HM20	14 PELOSCOLEX SP.	0	1	0	0
HM20	17 CONGERIA LEUCOPHAETA	0	0	5	0
HM20	22 MYA ARENARIA	0	0	6	2
HM20	36 LEPTOCHIERUS PLUMULOSUS	0	8	15	11
HM20	43 CHIRONOMID SP.	0	0	1	0
HM21	02 MICRURA LEIDYI	0	1	0	0
HM21	05 NEREIS SUCCINEA	4	1	0	3
HM21	11 STREBLOSPIO BENEDECTI	12	0	0	0
HM21	17 CONGERIA LEUCOPHAETA	0	4	0	0
HM21	20 MACOMA MITCHELLI	4	13	12	10
HM21	22 MYA ARENARIA	0	1	3	5
HM21	33 EDOTEA TRILOBIA	0	0	0	1
HM21	37 COROPHIUM LACUSTRE	36	3	4	2
HM22	02 MICRURA LEIDYI	1	0	0	1
HM22	05 NEREIS SUCCINEA	0	1	0	0
HM22	11 STREBLOSPIO BENEDECTI	4	0	0	0
HM22	19 MACOMA BALTHICA	12	35	42	53
HM22	21 RANGIA CUNEATA	1	3	1	1
HM22	30 CYATHURA POLITA	9	18	21	18
HM22	37 COROPHIUM LACUSTRE	1	1	1	1
HM23	02 MICRURA LEIDYI	1	0	0	0
HM23	10 SCOLECOLEPIDES VIRIDIS	0	1	0	0
HM23	19 MACOMA BALTHICA	0	0	1	0
HM23	34 NEOHAUSTORIUS	0	0	0	1
HM23	37 COROPHIUM LACUSTRE	1	0	0	0
HM24	03 HETEROMASTUS FILIFORMIS	1	1	0	0
HM24	11 STREBLOSPIO BENEDECTI	1	0	0	0
HM24	20 MACOMA MITCHELLI	0	2	2	3
HM24	30 CYATHURA POLITA	0	1	1	0
HM24	36 LEPTOCHIERUS PLUMULOSUS	4	10	20	18
HM25	01 DIADUMENE LEUCOLENA	2	0	0	0
HM25	03 HETEROMASTUS FILIFORMIS	18	20	17	24
HM25	08 ETEUNE HETEROPODA	2	0	0	1
HM25	11 STREBLOSPIO BENEDECTI	27	2	1	0
HM25	17 CONGERIA LEUCOPHAETA	0	7	0	1
HM25	20 MACOMA MITCHELLI	12	3	5	5
HM25	22 MYA ARENARIA	0	0	1	4
HM25	25 Doridella obscura	0	1	0	1
HM25	30 CYATHURA POLITA	4	5	10	4
HM25	36 LEPTOCHIERUS PLUMULOSUS	91	308	230	230
HM25	40 MELITA NITIDA	1	0	0	0
HM26	02 MICRURA LEIDYI	4	4	3	3
HM26	05 NEREIS SUCCINEA	16	13	9	17
HM26	10 SCOLECOLEPIDES VIRIDIS	392	6	2	8
HM26	13 LIMNODRILUS HOFFMEISTERI	4	0	0	0
HM26	19 MACOMA BALTHICA	4	76	69	45
HM26	21 RANGIA CUNEATA	0	4	0	2
HM26	30 CYATHURA POLITA	0	11	7	13
HM26	36 LEPTOCHIERUS PLUMULOSUS	436	348	279	304
HM26	40 MELITA NITIDA	28	4	1	2

DATE: MAY83

STATION	SPECIES	GRAB #1 .5-1.0MM	GRAB #1 1.0MM	GRAB #2 1.0MM	GRAB #3 1.0MM
111100	10 SCOLECOLEPIDES VIRIDIS	14	2	9	7
111100	17 CONGERIA LEUCOPHAETA	0	0	0	0
111100	21 RANGIA CUNEATA	0	0	0	0
111100	27 BALANUS IMPROVISUS	0	0	0	0
111100	28 BALANUS SUBALBIDUS	0	0	0	0
111100	30 CYATHURA POLITA	0	0	0	0
111100	36 LEPTOCHIERUS PLUMULOSJS	0	0	1	13
111100	37 COROPHIUM LACUSTRE	2	36	0	1
111100	38 GAMMARUS DAIBERI	0	0	0	0
111100	39 GAMMARUS TIGRINUS	0	0	1	0
111100	41 CHIRODOTEA ALMYRA	0	0	0	0
111100	42 MONOCULODES EDWARDSI	0	1	1	0
111101	03 NEREIS SUCCINEA	0	1	0	1
111101	10 SCOLECOLEPIDES VIRIDIS	0	10	18	1
111101	19 MACOMA BALTHICA	0	3	0	0
111101	MACOMA MITCHELLI	0	4	0	0
111101	1 RANGIA CUNEATA	8	0	0	0
111101	30 CYATHURA POLITA	2	0	0	0
111101	36 LEPTOCHIERUS PLUMULOSUS	36	32	25	32
111101	37 COROPHIUM LACUSTRE	8	8	4	2
111101	38 GAMMARUS DAIBERI	0	0	0	0
111101	39 GAMMARUS TIGRINUS	0	3	0	3
111101	40 MELITA VITIDA	0	1	0	1
111101	43 CHIRONOMID SP.	16	0	0	0
111101	45 GAMMARUS MUCRONATUS	0	0	1	0
111102	02 MICRURA LEIDYI	0	3	0	0
111102	10 SCOLECOLEPIDES VIRIDIS	8	7	0	1
111102	19 MACOMA BALTHICA	0	1	0	0
111102	MACOMA MITCHELLI	0	2	0	0
111102	1 RANGIA CUNEATA	0	1	0	0
111102	30 CYATHURA POLITA	8	10	1	7
111102	36 LEPTOCHIERUS PLUMULOSJS	25	21	17	22
111102	37 COROPHIUM LACUSTRE	0	0	0	0
111102	39 GAMMARUS TIGRINUS	0	1	1	1
111102	40 MELITA VITIDA	16	1	0	0
111102	43 CHIRONOMID SP.	16	1	0	0
111103	10 SCOLECOLEPIDES VIRIDIS	16	1	1	2
111103	MACOMA MITCHELLI	0	0	0	1
111103	MYA ARENARIA	0	0	0	0
111103	30 CYATHURA POLITA	0	0	0	0
111103	36 NEOHAUSTORIUS BIARTICULATUS	0	0	0	0
111103	37 LEPTOCHIERUS PLUMULOSUS	0	0	0	0
111103	42 COROPHIUM LACUSTRE	2	1	0	0
111103	MONOCULODES EDWARDSI	1	8	0	1
111104	02 MICRURA LEIDYI	0	0	0	1
111104	03 PETEROMASTUS FILIFORMIS	5	2	0	4
111104	05 NEREIS SUCCINEA	0	0	0	0
111104	10 SCOLECOLEPIDES VIRIDIS	0	1	0	2
111104	17 CONGERIA LEUCOPHAETA	0	2	0	9
111104	19 MACOMA BALTHICA	0	4	0	0
111104	MACOMA MITCHELLI	0	7	0	0
111104	1 RANGIA CUNEATA	0	2	5	3
111104	30 MYA ARENARIA	0	5	0	0
111104	36 BALANUS IMPROVISUS	0	0	1	5
111104	37 BALANUS SUBALBIDUS	0	0	0	0
111104	38 CYATHURA POLITA	0	1	0	0
111104	39 EDOTEA TRILOBA	0	0	0	7
111104	40 LEPTOCHIERUS PLUMULOSJS	26	0	8	1
111104	41 COROPHIUM LACUSTRE	8	10	7	17
111104	42 GAMMARUS TIGRINUS	0	0	1	2
111104	40 MELITA VITIDA	8	1	0	0
111104	42 MONOCULODES EDWARDSI	0	8	0	0
111104	43 NITHROPANOPAEUS HARRISII	0	1	0	0

Table 6. Results of water quality and physical data obtained at the sampling stations during the August 1982 cruise. Listed figures are percentages. Sediments samples were sieved through the given sieve mesh sizes.

STATION	DEPTH(FT)	SALINITY ‰	TEMP-C	500 μ	250 μ	125 μ	63 μ	TOTAL SAND	CLAY	SILT
HM1	2	-	-	12.5	57.2	24.7	4.4	98.8	.5	.7
HM3	2	-	-	9.9	45.4	22.0	3.7	81.0	4.1	14.9
HM6	10	4.5	24.0	10.0	1.1	1.4	1.6	14.1	18.5	67.5
HM7	10	-	-	.6	.5	.2	.3	1.6	33.9	64.5
HM8	10	-	-	4.0	29.0	55.7	7.4	96.0	2.2	1.8
HM9	15	-	-	77.1	2.3	4.4	.7	84.5	2.5	13.0
HM10	20	6.3	24.3	37.0	1.7	26.8	5.1	70.6	4.1	25.2
HM14	10	-	-	.6	.0	.1	.0	.7	38.5	60.8
HM15	15	-	-	27.4	5.1	4.5	2.1	39.0	15.1	45.9
HM16	15	-	-	5.9	1.2	1.2	.8	9.0	30.6	60.4
HM17	10	7.4	24.6	4.5	14.0	17.0	46.3	81.9	4.1	14.0
HM19	15	5.9	24.3	8.8	4.1	4.1	11.2	28.2	30.5	41.4
HM20	2	-	-	-	-	-	-	-	-	-
HM21	10	-	-	7.2	38.2	25.8	4.0	75.2	9.6	15.2
HM22	15	6.0	24.2	2.5	1.4	2.0	2.1	8.1	26.3	65.6
HM23	2	-	-	-	-	-	-	-	-	-
HM24	10	-	-	.1	2.7	83.8	12.6	99.2	.4	.4
HM25	15	8.7	24.7	22.2	20.9	23.0	3.7	69.9	8.4	21.7
HM26	15	-	-	4.2	4.3	0.1	27.8	16.7	12.4	10.2

Table 8. Results of water quality and physical data obtained at the sampling stations during the 21-22 February 1983 cruise. Listed figures are percentages. Sediments samples were sieved through the given sieve mesh sizes.

STATION	DEPTH(FT)	BOTTOM SALINITY ‰	BOTTOM TEMP-C	500 μ	250 μ	125 μ	63 μ	TOTAL SAND	CLAY	SILT
HM1	2	-	-	6.6	25.0	43.0	13.3	87.9	1.6	10.5
HM3	2	-	-	3.3	38.6	50.4	7.1	99.5	0	.5
HM6	10	8.4	2.2	1.4	.4	.6	1.0	3.3	29.8	66.9
HM7	10	-	-	1.9	.2	.3	1.1	3.4	33.3	63.3
HM8	10	-	-	SHELL	-	-	-	-	-	-
HM9	15	-	-	72.2	2.8	8.7	.9	84.7	1.8	13.5
HM10	20	10.0	2.4	2.8	.6	.7	.6	4.7	22.9	72.4
HM14	10	-	-	.2	.1	.1	.2	.5	39.2	60.3
HM15	15	10.6	2.2	10.4	1.1	1.3	.8	13.6	34.2	52.2
HM16	15	-	-	5.7	.8	.9	.7	8.0	22.2	69.8
HM17	10	10.4	2.3	19.5	3.2	10.4	26.5	59.6	8.2	32.2
HM19	15	9.6	2.1	5.8	1.6	2.3	5.1	14.9	13.6	71.5
HM20	2	-	-	23.9	54.6	20.7	.3	99.5	.1	.4
HM21	10	8.4	3.6	31.6	24.5	9.9	2.1	67.9	8.0	24.1
HM22	15	-	-	3.5	1.8	2.7	2.0	10.0	6.3	83.7
HM23	2	-	-	.1	33.1	60.0	6.3	99.5	.0	.5
HM24	10	-	-	.0	2.6	92.9	4.0	99.6	.4	.0
HM25	15	-	-	13.1	12.3	51.4	3.4	80.3	5.9	14.6
HM26	15	8.3	2.7	2.2	1.3	1.8	13.4	18.7	16.4	64.9

DATE: MAY83

STATION	SPECIES	GRAB #1 .5-1.0MM	GRAB #1 1.0MM	GRAB #2 1.0MM	GRAB #3 1.0MM
H406	02 MICRURA LEIDYI	0	0	1	0
H406	03 HETEROMASTUS FILIFORMIS	0	0	0	1
H406	05 NEREIS SUCCINEA	0	0	1	1
H406	10 SCOLECOLEPIDES VIRIDIS	8	6	2	6
H406	16 ISCHADIIUM RECURVUS	0	0	0	0
H406	19 MACOMA BALTHICA	0	5	7	6
H406	20 MACOMA MITCHELLI	0	1	2	0
H406	21 RANGIA CUNEATA	0	1	2	0
H406	30 CYATHURA POLITA	0	2	5	0
H406	36 LEPTOCHIERUS PLUMULOSUS	206	34	35	14
H406	37 COROPHIUM LACUSTRE	12	4	4	3
H406	38 GAMMARUS DAIBERI	0	4	0	2
H406	39 GAMMARUS TIGRINUS	0	4	0	2
H406	40 MELITA VITIDA	0	0	1	1
H406	42 MONOCULODES EDWARDSI	0	0	2	1
H406	43 CHIRONOMID SP.	16	3	4	1
H407	02 MICRURA LEIDYI	0	1	0	1
H407	10 SCOLECOLEPIDES VIRIDIS	12	6	4	7
H407	19 MACOMA BALTHICA	0	4	6	1
H407	20 MACOMA MITCHELLI	0	1	8	5
H407	21 RANGIA CUNEATA	0	0	1	1
H407	30 CYATHURA POLITA	4	8	7	1
H407	36 LEPTOCHIERUS PLUMULOSUS	102	31	32	26
H407	37 COROPHIUM LACUSTRE	4	3	5	5
H407	40 MELITA VITIDA	16	1	0	1
H407	42 MONOCULODES EDWARDSI	0	1	1	0
H407	43 CHIRONOMID SP.	8	1	0	0
H407	44 RITHROPANOPEUS HARRISII	0	0	0	1
H408	02 MICRURA LEIDYI	0	0	1	0
H408	05 NEREIS SUCCINEA	52	77	69	99
H408	10 SCOLECOLEPIDES VIRIDIS	12	3	0	0
H408	14 PELOSCOLEX SP.	76	0	0	1
H408	16 ISCHADIIUM RECURVUS	0	0	2	5
H408	17 CONGERIA LEUCOPHAETA	0	37	27	28
H408	21 RANGIA CUNEATA	0	1	1	0
H408	27 BALANUS IMPROVISUS	0	48	21	30
H408	28 BALANUS SUBALBIDUS	0	207	104	151
H408	30 CYATHURA POLITA	0	0	1	1
H408	36 LEPTOCHIERUS PLUMULOSUS	8	1	1	0
H408	37 COROPHIUM LACUSTRE	20	8	2	10
H408	40 MELITA VITIDA	4	2	2	0
H408	44 RITHROPANOPEUS HARRISII	0	3	16	49
H409	02 MICRURA LEIDYI	0	2	1	1
H409	03 HETEROMASTUS FILIFORMIS	4	2	0	0
H409	05 NEREIS SUCCINEA	0	2	1	0
H409	10 SCOLECOLEPIDES VIRIDIS	0	1	2	3
H409	17 CONGERIA LEUCOPHAETA	0	0	0	4
H409	19 MACOMA BALTHICA	4	4	4	2
H409	20 MACOMA MITCHELLI	0	3	4	2
H409	21 RANGIA CUNEATA	0	1	4	1
H409	30 CYATHURA POLITA	16	1	0	1
H409	36 LEPTOCHIERUS PLUMULOSUS	260	25	15	11
H409	37 COROPHIUM LACUSTRE	16	9	22	17
H409	38 GAMMARUS DAIBERI	0	10	10	5
H409	39 GAMMARUS TIGRINUS	4	1	0	2
H409	45 GAMMARUS MUCRONATUS	0	2	0	0