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Appendix 1. Hydrographic data collected during benthic sampling in the Charleston Harbor Ocean Disposal Area and vicinity.

Station	Date	Station Depth	Depth	Temp. (C)	Salinity (°/oo)	D.O. (mg/l)	Turbidity (FTU)	Nutrients (µg/l)				Solids	
								Nitrate	Nitrite	Silicate	Phosphate	Total	Settleable
DS01	8- 7-78	8.0	Surface	28.9	31.32	6.4	3.7	-	-	337.2	18.0	-	-
			Bottom	28.0	34.36	5.5	8.7	1.8	1.0	70.2	48.0	-	-
DS02	8- 7-78	8.0	Surface	28.7	33.03	4.0	1.8	2.4	1.1	56.2	3.0	-	-
			Bottom	28.3	33.99	5.6	6.8	1.4	0.7	49.2	31.0	-	-
DS03	8- 7-78	9.0	Surface	28.9	32.99	6.4	3.5	2.0	1.8	49.2	11.5	-	-
			Bottom	28.2	33.90	5.5	5.7	2.7	0.8	91.3	32.0	111.6	5.2
DS04	8- 7-78	9.0	Surface	29.0	32.04	6.5	4.3	1.4	1.4	77.3	21.0	90.0	10.8
			Bottom	28.2	34.20	5.1	10.0	10.6	1.3	105.4	78.5	132.8	31.2
DS05	8- 7-78	8.0	Surface	28.3	31.57	6.5	8.6	-	-	175.6	57.5	106.4	6.0
			Bottom	29.2	33.94	5.1	6.9	-	-	112.4	46.5	-	-
DS06	8- 8-78	9.0	Surface	28.6	31.54	6.6	2.5	-	-	189.7	66.0	74.0	13.6
			Bottom	28.2	34.63	5.7	-	3.4	1.5	56.2	21.0	108.0	41.6
DS07	8- 8-78	9.0	Surface	28.8	33.67	6.6	1.3	5.1	1.5	105.4	0.0	-	-
			Bottom	28.2	34.63	5.7	0.7	1.8	1.4	70.2	8.0	-	-
DS08	8- 8-78	10.2	Surface	28.8	33.65	6.8	0.7	-	-	70.2	0.0	-	-
			Bottom	28.3	34.61	5.7	4.9	1.4	1.4	28.1	3.0	-	-
DS09	8- 9-78	12.0	Surface	29.0	32.90	6.2	1.8	-	-	70.2	4.5	-	-
			Bottom	28.0	34.71	5.9	2.0	2.1	0.3	56.2	9.5	-	-
DS10	8- 9-78	11.0	Surface	29.3	31.70	6.8	1.8	2.0	0.4	140.5	0.0	88.4	5.6
			Bottom	28.0	34.48	5.7	6.0	1.7	0.4	28.1	0.0	-	-
DS11	8- 9-78	12.6	Surface	29.3	-	6.6	1.6	2.8	0.4	133.5	0.0	-	-
			Bottom	28.0	34.77	5.8	3.2	2.5	0.3	42.2	9.5	83.2	2.4
DS12	8- 9-78	12.5	Surface	29.5	32.20	6.9	1.4	4.0	0.6	105.4	6.5	-	-
			Bottom	28.3	34.73	5.7	2.0	2.9	0.3	42.2	6.5	108.0	5.6
DS13	8- 8-78	11.5	Surface	29.2	34.20	6.4	0.7	7.7	0.7	42.9	8.0	-	-
			Bottom	28.1	34.74	5.8	2.0	4.9	0.3	42.2	0.0	-	-
DS14	8- 8-78	11.5	Surface	29.2	34.27	6.5	0.7	2.8	0.0	35.1	0.0	72.0	16.8
			Bottom	28.2	34.68	6.7	1.1	2.9	0.3	35.1	4.5	72.4	18.8
DS15	8- 8-78	12.0	Surface	29.3	34.15	6.4	0.7	7.7	1.1	70.2	0.0	86.8	21.2
			Bottom	28.2	34.70	5.6	3.7	5.7	0.3	105.4	13.0	113.6	40.8
DS16	8- 8-78	12.0	Surface	29.2	34.27	6.5	1.0	4.1	0.1	28.1	0.0	1.0	-
			Bottom	28.2	34.73	5.9	1.3	3.2	0.0	28.1	0.0	1.3	-

Appendix 1. (Continued)

Station	Date	Station Depth	Depth	Temp. (C)	Salinity (°/oo)	D.O. (mg/l)	Turbidity (FTU)	Nutrients (µg/l) Nitrate	Nitrite	Silicate	Phosphate	Solids Total	Settleable
DS17	8- 9-78	13.6	Surface	30.0	32.66	6.6	1.2	3.7	70.2	0.0	1.2	82.4	34.8
			Bottom	28.3	34.77	6.6	2.3	3.4	84.3	8.0	2.3	124.4	78.8
DS18	8- 9-78	11.2	Surface	29.2	33.43	6.5	1.0	2.7	0.1	35.1	-	91.6	32.0
			Bottom	28.3	34.85	6.0	1.1	3.2	0.0	42.2	0.0	115.2	55.6
DS19	8-10-78	12.3	Surface	28.9	32.92	6.8	0.6	3.8	0.0	63.2	13.0	-	-
			Bottom	28.0	34.91	6.0	1.6	3.8	0.0	35.1	3.0	-	-
DS20	8-10-78	12.8	Surface	29.1	33.00	6.7	0.7	2.4	0.0	63.2	19.5	74.8	12.0
			Bottom	28.2	35.05	6.1	3.0	2.1	0.0	28.1	19.5	109.2	27.2
DS21	8-10-78	12.8	Surface	29.0	33.33	6.5	1.1	2.8	0.0	56.2	-	78.8	14.8
			Bottom	28.0	34.98	6.0	1.5	2.4	0.0	42.2	0.0	76.4	9.6
DS22	8-10-78	12.9	Surface	29.2	32.61	6.6	1.0	2.8	0.0	84.3	0.0	86.8	26.4
			Bottom	28.2	35.01	6.2	2.3	2.0	0.1	28.1	0.0	89.2	19.2
DS23	8-10-78	14.0	Surface	30.1	32.61	6.9	0.7	2.5	0.3	35.1	11.5	69.2	7.6
			Bottom	28.5	35.01	6.3	1.9	2.9	0.3	98.4	3.0	86.0	16.4
DS24	8-10-78	15.2	Surface	29.6	33.60	6.5	1.2	2.9	0.3	49.2	6.5	-	-
			Bottom	28.5	35.05	6.2	0.7	2.5	0.3	49.2	2.0	-	-
DS25	8-11-78	14.1	Surface	28.0	33.48	6.4	1.2	1.8	0.3	35.1	0.0	77.2	8.4
			Bottom	27.8	35.15	6.0	1.4	1.1	0.3	21.1	0.0	108.4	22.0
DS26	8-11-78	15.1	Surface	28.8	33.80	6.5	0.7	1.4	0.0	21.1	0.0	-	-
			Bottom	27.8	35.21	6.0	1.0	1.3	0.1	21.1	0.0	-	-
DS27	8-11-78	12.5	Surface	29.0	33.73	6.5	1.0	1.8	0.0	28.1	8.0	63.2	1.6
			Bottom	28.0	35.17	6.1	1.1	1.8	0.0	21.1	0.0	63.6	2.8
DS28	8-11-78	11.6	Surface	29.0	33.74	6.5	1.0	1.0	0.1	21.1	0.0	-	-
			Bottom	28.0	35.17	6.0	2.0	2.1	0.0	35.1	0.0	-	-
DS29	8-11-78	14.6	Surface	29.2	33.72	6.6	1.0	2.3	0.1	49.2	13.0	67.2	9.6
			Bottom	28.0	35.25	6.0	4.0	3.4	0.4	63.2	35.5	86.8	24.0
DS30	8-14-78	14.8	Surface	29.3	34.13	6.3	0.9	2.8	0.0	56.2	0.0	73.2	23.2
			Bottom	27.4	35.76	5.6	1.0	5.1	0.1	49.2	0.0	93.2	39.2
DS31	8-14-78	13.2	Surface	29.4	33.98	6.5	1.0	2.4	0.0	49.2	0.0	76.0	17.6
			Bottom	27.4	35.77	5.3	1.0	4.2	0.0	21.1	0.0	97.2	37.2
DS32	8-10-78	13.8	Surface	29.6	33.72	6.5	0.6	3.5	0.3	42.2	13.0	84.0	10.4
			Bottom	28.2	35.22	6.4	1.0	7.1	0.3	28.1	19.5	94.4	24.4
DS33	8-14-78	14.5	Surface	28.6	33.70	5.5	0.9	0.4	0.3	14.1	0.0	-	-
			Bottom	26.5	35.79	5.3	0.5	7.4	0.0	28.1	0.1	-	-

Appendix 1. (Continued)

Station	Date	Station Depth	Depth	Temp. (C)	Salinity (°/oo)	D.O. (mg/l)	Turbidity (FTU)	Nutrients (µg/l)				Solids	
								Nitrate	Nitrite	Silicate	Phosphate	Total	Settleable
DS34	8-14-78	15.0	Surface	28.7	34.54	6.4	0.8	3.2	0.0	28.1	0.0	-	-
			Bottom	26.5	35.80	5.5	0.4	4.6	0.0	21.1	0.0	-	-
DS35	8-14-78	15.1	Surface	28.8	34.56	6.4	1.0	2.8	0.0	28.1	0.0	63.2	11.6
			Bottom	26.8	35.80	5.4	0.5	6.3	0.0	42.2	0.0	70.4	16.4
DS36	8-14-78	14.2	Surface	28.8	34.56	6.3	0.6	3.2	0.0	28.1	0.0	71.6	20.4
			Bottom	26.7	35.82	5.5	0.4	6.0	0.0	28.1	0.0	88.4	36.0
DS37	8-14-78	15.0	Surface	29.0	34.64	6.4	0.5	3.2	0.0	28.1	0.0	76.4	9.6
			Bottom	26.9	35.81	5.5	0.7	9.0	0.1	105.4	0.0	94.4	15.6
DS38	8-14-78	17.1	Surface	29.0	34.72	6.4	0.6	3.2	0.0	21.1	0.0	77.6	16.4
			Bottom	27.0	35.81	5.3	0.6	4.3	0.6	28.1	0.0	-	-
DS39	8-14-78	15.5	Surface	29.4	34.74	6.2	0.7	2.7	0.1	14.1	0.0	83.6	34.4
			Bottom	27.0	35.88	5.6	0.5	2.8	0.4	14.1	0.0	98.0	46.4
DS40	8-14-78	15.3	Surface	30.0	34.80	6.6	0.8	3.4	0.1	56.2	0.0	-	-
			Bottom	26.9	35.87	5.9	0.6	4.2	0.4	28.1	0.0	-	-

Appendix 2. Sediment composition and quartz grain size distribution for the forty stations sampled in and adjacent to the Charleston Harbor Ocean Disposal Area.

STATIONS	COMPOSITION (Weight %) Quartz Sand	$CaCO_3$ Shell	Silt	Clay	QUARTZ SAND GRAIN SIZE Mean ϕ	St. Dev. (ϕ units)
DS01	93	7			2.68	.413
DS02	88	7	2	3	2.83	.426
DS03	87	1	3	9	3.01	.474
DS04	67	10	10	13	2.88	.734
DS05	70	30			2.00	.626
DS06	65	31	2	2	0.99	1.198
DS07	--	--	--	--	--	--
DS08	70	16	--	14	2.29	.960
DS09	72	28			2.03	.541
DS10	86	14			2.15	.528
DS11	94	6			2.58	.374
DS12	93	7			2.69	.381
DS13	70	30			1.09	1.363
DS14	95	5			2.60	.384
DS15	82	18			2.26	.509
DS16	74	26			1.20	.924
DS17	82	18			2.51	.526
DS18	58	42			2.11	.916
DS19	87	13			2.42	.470
DS20	78	22			2.44	.698
DS21	91	9			2.60	.478
DS22	92	8			2.40	.435
DS23	94	6			2.41	.377
DS24	89	11			2.50	.485
DS25	92	8			2.53	.432
DS26	64	36			1.72	.849
DS27	79	21			2.27	.532
DS28	90	10			2.06	.511
DS29	75	25			1.98	.670
DS30	44	56			1.82	.782
DS31	52	38			1.39	.762
DS32	88	12			1.05	.849
DS33	59	41			1.19	.967
DS34	51	49			1.73	.778
DS35	68	32			1.53	.767
DS36	76	24			2.10	.498
DS37	70	30			1.69	.650
DS38	67	33			0.26	1.122
DS39	--	--			--	--
DS40	70	30			1.15	.932

Appendix 3. Geochemical analysis of sediments from stations in and near Charleston Harbor Ocean Disposal Area (expressed as percent by weight, dry basis).

STATIONS IN DISPOSAL AREA

	DS11	DS12	DS13	DS14	DS19	DS20	DS21	DS22	DS27	DS28	DS29	DS30
Volatile Solids	0.86	1.16	1.27	1.69	1.74	1.48	1.47	0.88	1.74	0.70	1.30	1.54
Total Org. Carbon	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
C.O.D.	0.27	0.33	0.16	0.24	0.31	0.33	0.28	0.17	0.20	0.15	0.22	0.26
Nitrogen Kjeldahl	0.01	<0.01	<0.01	0.02	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01
NH_3-N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NO_2-N	0.00001	0.00002	0.00002	0.00002	0.00002	0.00001	0.00002	0.00001	0.00002	0.00001	0.00002	0.00001
NO_3-N	0.00009	0.00004	0.00008	0.00006	0.00008	0.00015	0.00002	0.00009	0.00005	0.00009	0.00008	0.00011
Oil and Grease	0.022	0.003	0.013	0.012	0.008	0.014	0.007	0.010	0.009	0.007	0.011	0.007
Lead	<0.00005	<0.00005	<0.00005	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00006
Zinc	0.0014	0.0008	0.0013	0.0012	0.0015	0.0016	0.0015	0.0008	0.0015	0.0006	0.0008	0.0016
Mercury	0.000020	0.000015	0.00019	0.000014	0.000030	0.000017	0.000012	0.000021	0.000018	0.000113	0.000015	0.000021
Soluble PO_4-P	0.00005	0.00012	0.00013	0.00005	0.00005	0.00002	0.00007	0.00005	<0.00001	0.00003	0.00008	0.00008
Total PO_4-P	0.23	0.19	0.21	0.07	1.06	0.64	0.16	0.19	0.77	0.25	0.22	0.25
Iron	0.32	0.34	0.33	0.33	0.27	0.31	0.32	0.22	0.20	0.19	0.19	0.20
Cadmium	<0.00001	0.00001	<0.00001	<0.00001	0.00004	0.00002	0.00001	<0.00001	0.00003	<0.00001	<0.00001	<0.00001
Arsenic	0.00015	0.00018	0.00040	0.00014	0.00014	0.00029	0.00015	0.00011	0.00013	0.00014	0.00018	0.00020
Chromium	0.0031	0.0027	0.0022	0.0027	0.0027	0.0022	0.0022	0.0017	0.0022	0.0020	0.0022	0.0022
Nickel	0.00006	0.00010	0.00018	0.00018	0.00073	0.00021	0.00023	<0.00005	0.00018	<0.00005	0.00006	<0.00005
Copper	0.0018	0.0016	0.0024	0.0016	0.0008	0.0012	0.0022	0.0008	0.0010	0.0010	0.0012	0.0014
Beryllium	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Selenium	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	0.00037	0.00005	0.00010	0.00037	0.00030	0.00020	0.00010	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005

STATIONS OUTSIDE DISPOSAL AREA

	DS01	DS04	DS08	DS09	DS16	DS17	DS24	DS25	DS32	DS33	DS36	DS40
Volatile Solids	1.48	2.34	2.17	1.65	1.45	1.26	1.70	1.44	0.89	1.95	1.15	1.70
Total Org. Carbon	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
C.O.D.	0.10	0.86	0.30	0.26	0.36	0.41	0.26	0.22	0.14	0.32	0.20	0.36
Nitrogen Kjeldahl	<0.10	0.02	0.02	0.02	0.01	<0.01	0.01	0.01	<0.01	0.02	0.01	0.02
NH_3-N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NO_2-N	0.00002	<0.00001	0.00001	0.00002	0.00002	0.00002	0.00001	0.00002	0.00001	0.00002	0.00001	0.00002
NO_3-N	0.00006	0.00019	0.00009	0.00006	0.00004	0.00006	0.00008	0.00005	0.00010	0.00007	0.00011	0.000013
Oil and Grease	0.008	0.010	0.007	<0.01	0.002	0.010	0.003	0.010	<0.001	0.012	0.007	0.008
Lead	<0.00005	<0.00005	<0.00005	<0.00005	0.00019	<0.00005	<0.00005	<0.00005	<0.00005	0.00025	<0.00005	<0.00005
Zinc	0.0028	0.0016	0.0010	0.0012	0.0010	0.0014	0.0012	0.0010	0.0006	0.0008	0.0007	0.0008
Mercury	0.000020	0.000036	0.000022	0.000007	0.000042	0.000037	0.000022	0.000029	0.000006	0.000043	0.000015	0.000018
Soluble PO_4-P	0.00014	0.00001	0.00006	0.00004	0.00005	0.00006	0.00006	0.00006	0.00010	0.00007	0.00001	0.00022
Total PO_4-P	0.56	0.35	0.20	1.38	0.21	0.56	0.13	0.12	1.17	0.19	0.16	0.15
Iron	0.38	0.68	0.63	0.36	0.54	0.34	0.31	0.31	0.12	0.41	0.19	0.18
Cadmium	0.00003	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Arsenic	0.00017	0.00024	0.00040	0.00055	0.00070	0.00020	0.00020	0.00017	0.00012	0.00100	0.00029	0.00018
Chromium	0.0027	0.0038	0.0031	0.0021	0.0022	0.0007	0.0022	0.0022	0.0017	0.0031	0.0022	0.0017
Nickel	0.00008	0.00021	<0.00005	0.00008	0.00003	0.00018	0.00016	0.00006	<0.00005	<0.00005	<0.00005	<0.00005
Copper	0.0016	0.0027	0.0018	0.0018	0.0016	0.0016	0.0012	0.0010	0.0012	0.0010	0.0012	0.0018
Beryllium	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Selenium	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	<0.00005	0.00030	0.00010	<0.00005	0.00020	0.00020	<0.00005	<0.00005	<0.00005	0.00020	<0.00005	<0.00005

Appendix 4.1 Occurrence of epifaunal invertebrates in dredge collections at the 28 stations located outside the Charleston Ocean Disposal Area.

Species	STATION NUMBER																											
	1	2	3	4	5	6	7	8	9	10	15	16	17	18	23	24	25	26	31	32	33	34	35	36	37	38	39	40
Phylum Porifera																												
Cliona sp.					x	x	x										x	x			x	x	x			x		x
Clathrina coriacea								x					x								x						x	x
Porifera (undet.)																										x		x
Phylum Cnidaria																												
Clytia cylindrica			x		x	x	x				x	x	x	x			x	x	x			x	x	x			x	x
Astrangia danae				x	x	x	x				x	x	x				x				x					x		
Turritopsis nutricula					x		x					x	x				x	x			x	x	x			x	x	x
Schizotricha tenella				x								x	x	x			x	x		x						x	x	
Eudendrium sp.				x	x		x	x			x		x				x	x								x		
Dynamena cornicina				x	x							x	x				x					x	x				x	
Telesto sanguinea							x				x		x	x			x											x
Ectopleura dumortieri														x			x			x	x	x				x	x	x
Halecium dysymmetrum					x												x	x				x				x		
Telesto fruticulosa						x	x	x			x		x				x		x									
Leptogorgia setacea																		x			x		x	x			x	
Zanclea costata																	x				x							x
Actiniaria (undet.)													x															
Halecium sp.						x											x											
Lovenella grandis								x													x			x	x			
Titanideum frauenfeldii					x				x																			
Chysaora quinquecirrha							x													x								
Leptogorgia virgulata						x																						
Lovenella gracilis						x												x										
Monostaechas quadridens				x																								
Proboscidactyla ornata							x																					
Bougainvillia sp.					x																							
Campanulina sp.				x																								
Clytia fragilis				x																								
Clytia kincaidi				x																								
Clytia paulensis				x																								
Epizoanthus americanus																										x		
Hydractinia echinata					x																							
Pandeidae (undet.)				x																								
Phylum Entoprocta																												
Barentsia sp.				x																								
Entoproct (undet.)																										x		
Phylum Bryozoa																												
Parasmittina nitida						x	x					x	x				x	x	x	x	x	x	x		x	x	x	x
Membranipora tenuis				x	x	x	x	x	x			x	x	x			x	x	x	x	x		x	x		x	x	x
Microporella ciliata					x	x	x				x	x	x	x			x	x	x	x		x	x		x	x	x	x
Schizoporella cornuta					x	x	x	x			x	x	x				x							x		x	x	
Aetea anguina											x	x	x				x	x			x	x	x			x		
Cribrilaria radiata													x				x	x	x	x	x	x	x			x	x	x
Hippopleurifera mucronata													x				x	x		x	x	x		x		x	x	x
Hippoporina verrilli						x	x	x			x	x	x	x			x			x							x	
Phylactellipora aviculifera													x				x	x		x	x	x	x				x	x
Trypsostega venusta													x				x	x			x	x	x			x	x	
Cleidochasma porcellanum																	x	x		x	x	x				x	x	
Cyclostomata A (undet.)																	x	x		x	x	x				x	x	

Appendix 4.1 (Continued)

Species	STATION NUMBER 1	2	3	4	5	6	7	8	9	10	15	16	17	18	23	24	25	26	31	32	33	34	35	36	37	38	39	40
Phylum Bryozoa																												
Schizoporella errata						x	x						x	x			x											
Bowerbankia gracilis							x				x						x									x		
Crisia sp.								x			x						x									x		
Floridina parvicella																	x			x	x	x	x			x		
Hippoporella uvulifera													x					x		x	x				x			
Copidozoum tenuirostre												x	x				x			x		x						
Lichenopora sp.																					x	x	x		x	x	x	
Celleporidae (undet.)								x																				
Reptadeonella violacea													x													x		
Sundanella sibogae																	x											
Aeverrillia setigera																x												
Amathia distans																					x					x		
Caulibugula pearsei																										x		
Reginella floridana																					x					x		
Cryptosula pallasiana							x							x														
Hippaliosina rostrigera																										x		
Hippoporina contracta																	x											
Alcyonidium hauffi							x																					
Amathia alternata												x																
Amathia sp.																x												
Anasca A (undet.)																					x							
Celleporina hassalli											x																	
Discoporella umbellata																	x											
Electra monostachys						x																						
Membranipora arborescens					x																							
Nolella stipata																										x		
Phylum Mollusca																												
Chama macerophylla						x	x					x	x				x	x	x	x	x	x	x		x	x	x	x
Crepidula fornicata			x			x	x	x				x	x	x			x					x						
Anadara transversa						x	x				x	x		x			x	x	x			x					x	
Ostrea equestris						x	x	x					x	x				x		x		x						
Anomia simplex						x	x	x			x	x		x			x											
Chaetopleura apiculata													x				x	x			x	x				x		
Crepidula plana			x		x		x	x						x			x	x								x		
Mitrella lunata								x						x			x	x	x									
Octopus vulgaris							x														x							
Anachis translirata																			x									
Musculus lateralis							x					x					x									x		
Oliva sayana									x									x		x								
Polinices duplicatus				x							x																	
Eupleura caudata																		x										
Modiolus modiolus squamosus				x							x																	
Acanthodoris pilosa																			x									
Dinocardium robustum											x																	
Diplothyra smithi							x																					
Fasciolaria lilium hunteria													x															
Lithophaga bisulcata																										x		
Muricidae (undet.)																	x											
Turbo castanea																					x							
Urosalpinx cinerea								x																				

Appendix 4.1 (Continued)

Species	STATION NUMBER 1	2	3	4	5	6	7	8	9	10	15	16	17	18	23	24	25	26	31	32	33	34	35	36	37	38	39	40
Phylum Arthropoda																												
Balanus venustus			x		x	x	x	x			x	x	x	x			x	x	x	x	x	x	x		x	x	x	x
Balanus calidus							x					x	x				x	x	x		x	x				x	x	x
Ovalipes stephensoni	x							x	x		x			x		x		x		x	x		x					
Kochlinine floridana							x										x				x	x				x		
Xanthidae (undet.)							x	x					x					x										
Pilumnus sayi								x														x						
Portunus gibbesii		x															x	x			x							
Pagurus pollicaris			x		x		x																					
Podochela sidneyi																					x							
Libinia dubia			x	x																								
Ovalipes ocellatus					x																							
Portunus spinimanus								x										x										
Squilla empusa			x				x																					
Balanus improvisus									x																			
Callinectes sapidus				x																								
Chelonibia patula																		x										
Hepatus pudibundus														x														
Hypoconcha sabulosa																						x						
Metoporhaphis calcarata								x																				
Paguridae (undet.)													x				x											
Pilumnus sayi													x															
Synalpheus townsendi													x															
Tanystylum orbiculare								x																				
Phylum Echinodermata																												
Arbacia punctulata					x		x					x	x				x	x	x		x	x					x	x
Astropecten duplicatus							x							x			x	x	x									
Ophiothrix angulata							x	x				x	x				x	x									x	
Asterias forbesi				x	x		x														x		x			x	x	x
Mellita quinquiesperforata	x	x	x	x	x			x			x																	
Luidia clathrata			x																							x		
Clypeaster rosaceus													x								x							
Lytechinus variegatus																	x									x		
Astropecten articulatus											x															x		
Luidia bernasconiae								x																				
Ophioderma appressum																										x		
Phylum Chordata																												
Didemnum candidum						x	x					x	x				x				x	x				x	x	
Ascidiacea A (undet.)							x				x	x	x				x											
Ascidiacea B (undet.)						x						x					x									x		
Ascidiacea C (undet.)																					x							
Ascidiacea (undet.)								x																				
Amaroucium sp.								x																				
Amaroucium constellatum		x											x															
Styela plicata								x										x				x						
Clavelina picta								x																				
Styela sp.														x														

Appendix 4.2 Occurrence of epifaunal invertebrates in dredge collections at the 12 stations located in the Charleston Ocean Disposal Area.

Species	STATION NUMBER 11	12	13	14	19	20	21	22	27	28	29	30
Phylum Porifera												
Cliona sp.			x				x					x
Clathrina coriacea												x
Spheciospongia vesparia		x										
Phylum Cnidaria												
Clytia cylindrica		x	x	x	x		x		x	x	x	x
Astrangia danae			x			x	x	x	x		x	x
Turritopsis nutricula			x				x		x	x		x
Schizotricha tenella			x		x		x			x	x	x
Eudendrium sp.		x	x		x		x				x	x
Dynamena cornicina		x	x				x					x
Telesto sanguinea		x					x			x		x
Ectopleura dumortieri						x	x			x	x	
Halecium dysymmetrum					x						x	x
Telesto fruticulosa			x									
Leptogorgia setacea		x	x									
Zanclea costata							x					
Actiniaria (undet.)		x					x					
Halecium sp.							x					x
Lovenella grandis							x					
Titanideum frauenfeldii		x										
Plumularia floridana			x							x		
Proboscidactyla ornata		x										
Cuspidella humilis									x			
Lophogorgia hebes		x										
Sertularella conica							x					
Phylum Bryozoa												
Parasmittina nitida			x	x		x	x	x	x	x	x	x
Membranipora tenuis			x	x		x	x				x	x
Microporella ciliata					x		x	x				x
Schizoporella cornuta		x	x			x	x	x		x	x	
Aetea anguina			x				x				x	x
Cribrilaria radiata							x				x	x
Hippopleurifera mucronata							x	x			x	
Hippoporina verrilli			x				x				x	
Phylactellipora aviculifera							x					x
Trypsostega venusta							x					
Cleidochasma porcellanum							x					
Cyclostomata A (undet.)												x
Schizoporella errata						x	x				x	
Bowerbankia gracilis		x	x				x					
Crisia sp.		x	x				x					
Floridina parvicella							x					
Hippoporella uvulifera							x	x				
Copidozoum tenuirostre			x									
Celleporidae (undet.)		x	x				x					
Reptadeonella violacea							x					
Sundanella sibogae			x				x					
Aeverrillia setigera			x									

Appendix 4.2 (Continued)

Species	STATION NUMBER 11	12	13	14	19	20	21	22	27	28	29	30
Phylum Bryozoa												
Caulibugula pearsei							x					
Hippaliosina rostrigera							x					
Anasca A (undet.)							x					
Ctenostomata (undet.)		x										
Phylum Mollusca												
Chama macerophylla			x				x	x	x		x	x
Crepidula fornicata			x				x				x	x
Anadara transversa			x								x	x
Ostrea equestris			x	x			x				x	
Anomia simplex			x				x				x	
Chaetopleura apiculata			x									x
Crepidula plana											x	
Mitrella lunata			x			x					x	x
Octopus vulgaris							x				x	
Anachis translirata		x					x					
Musculus lateralis		x	x									
Polinices duplicatus											x	
Eupleura caudata												x
Argopecten gibbus												x
Diodora cayenensis							x					
Gastropoda (undet.)												x
Prunum apicinum			x									
Sinum perspectivum					x							
Phylum Arthropoda												
Balanus venustus			x	x	x	x	x		x	x	x	x
Balanus calidus		x										x
Ovalipes stephensoni									x	x	x	
Kochlinine floridana			x				x					
Xanthidae (undet.)		x	x				x				x	
Pilumnus sayi		x	x									x
Portunus gibbesii												x
Podochela sidneyi		x					x					
Balanus galeatus		x										
Micropanope xanthiformis						x						
Trachypenaeus constrictus	x											
Phylum Echinodermata												
Arbacia punctulata			x				x					x
Astropecten duplicatus	x	x	x					x		x		
Ophiothrix angulata			x			x	x					x
Asterias forbesi			x									
Mellita quinquiesperforata									x			
Luidia clathrata				x								
Ophiolepis elegans											x	
Phylum Chordata												
Didemnum candidum		x	x				x					
Ascidiacea A (undet.)			x				x					x
Styela plicata		x	x				x					x
Ascidiacea B (undet.)			x				x					
Amaroucium sp.		x					x				x	
Amaroucium constellatum		x										
Ascidiacea C (undet.)		x										
Ascidiacea D (undet.)		x										
Molgulidae (undet.)												

Appendix 5.1 Abundance of macroinvertebrate species in grab collections from station DS01. (A = Amphipoda; Cn = Cnidaria; D = Decapoda; E = Echinodermata; I = Isopoda; M = Mollusca; P = Polychaeta).

DS01

Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Nephtys picta (P)	28	5.6	1.5	56	1.0
Nemertina (undet.) A	10	2.0	1.0	20	2.0
Tellina probrina (M)	8	1.6	1.5	16	3.0
Eudevenopus honduranus (A)	7	1.4	1.3	14	4.0
Tellina texana (M)	5	1.0	2.2	10	5.0
Protohaustorius nr. deichmannae (A)	4	0.8	0.8	8	7.5
Renilla reniformis (Cn)	4	0.8	0.4	8	7.5
Strigilla mirabilis (M)	4	0.8	0.8	8	7.5
Magelona rosea (P)	4	0.8	1.1	8	7.5
Trichophoxus epistomus (A)	3	0.6	1.3	6	11.0
Mellita quinquiesperforata (E)	3	0.6	0.9	6	11.0
Tharyx marioni (P)	3	0.6	0.9	6	11.0
Dissodactylus mellitae (D)	2	0.4	0.9	4	15.5
Lucinidae (undet.) A (M)	2	0.4	0.5	4	15.5
Glycera sp. (Gar.) (P)	2	0.4	0.5	4	15.5
Goniada littorea (P)	2	0.4	0.5	4	15.5
Onuphis eremita (P)	2	0.4	0.5	4	15.5
Haploscoloplos fragilis (P)	2	0.4	0.5	4	15.5
Trachypeneus constrictus (D)	1	0.2	0.4	2	23.0
Leptochela serratorbita (D)	1	0.2	0.4	2	23.0
Pinnixa sayana (D)	1	0.2	0.4	2	23.0
Gastrosaccus sp. A (My)	1	0.2	0.4	2	23.0
Chiridotea stenops (I)	1	0.2	0.4	2	23.0
Nemertina (undet.) B	1	0.2	0.4	2	23.0
Glycera capitata (P)	1	0.2	0.4	2	23.0
Spiophanes bombyx (P)	1	0.2	0.4	2	23.0
Spiochaetopterus costarum oculatus (P)	1	0.2	0.4	2	23.0

Appendix 5.2 Abundance of macroinvertebrate species in grab collections from station DS02. (A = Amphipoda; C = Cumacea; Cn = Cnidaria; D = Decapoda; E = Echinodermata; M = Mollusca; P = Polychaeta).

	DS02				
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Nephtys picta (P)	93	18.6	4.7	186	1.0
Magelona rosea (P)	33	6.6	3.8	66	2.0
Spiophanes bombyx (P)	17	3.4	2.6	34	3.0
Cirratulus sp. (P)	12	2.4	0.9	24	4.0
Dissodactylus mellitae (D)	8	1.6	2.6	16	5.0
Tharyx marioni (P)	6	1.2	1.1	12	6.5
Mellita quinquiesperforata (E)	6	1.2	2.2	12	6.5
Tellina probrina (M)	5	1.0	1.4	10	8.0
Onuphis eremita (D)	5	1.0	1.2	10	8.0
Haploscoloplos fragilis (P)	5	1.0	1.0	10	8.0
Oxyurostylis smithi (C)	4	0.8	1.1	8	11.0
Renilla reniformis (Cn)	4	0.8	0.8	8	11.0
Glycera dibranchiata (P)	4	0.8	1.3	8	11.0
Ogyrides limicola (D)	3	0.6	0.9	6	16.0
Pinnixa sayana (D)	3	0.6	0.5	6	16.0
Nemertina (undet.) A	3	0.6	0.5	6	16.0
Nemertina (undet.) B	3	0.6	1.3	6	16.0
Strigilla mirabilis (M)	3	0.6	0.9	6	16.0
Tellina texana (M)	3	0.6	0.9	6	16.0
Goniada littorea (P)	3	0.6	0.5	6	16.0
Brachyura (undet.) A (D)	2	0.4	0.5	4	21.5
Eudevenopus honduranus (A)	2	0.4	0.9	4	21.5
Owenia fusiformis (P)	2	0.4	0.5	4	21.5
Paraprionospio pinnata (P)	2	0.4	0.5	4	21.5
Leptochela serratorbita (D)	1	0.2	0.4	2	28.0
Pagurus longicarpus (D)	1	0.2	0.4	2	28.0
Decapoda larvae (undet.)	1	0.2	0.4	2	28.0
Batea catharinensis (A)	1	0.2	0.4	2	28.0
Natica pusilla (M)	1	0.2	0.4	2	28.0
Mulinia lateralis (M)	1	0.2	0.4	2	28.0
Scoloplos rubra (P)	1	0.2	0.4	2	28.0
Glycera capitata (P)	1	0.2	0.4	2	28.0
Ceratonereis irritablis (P)	1	0.2	0.4	2	28.0

Appendix 5.3 Abundance of macroinvertebrate species in grab collections from station DS03. (A = Amphipoda; C = Cumacea; Cn = Cnidaria; D = Decapoda; M = Mollusca; P = Polychaeta).

DS03

Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Spiophanes bombyx (P)	81	16.2	8.2	162	1.0
Nephtys picta (P)	70	14.0	4.4	140	2.0
Magelona phyllisae (P)	12	2.4	2.3	24	3.0
Notomastus lobatus (P)	9	1.8	1.8	18	4.5
Prionospio dayi (P)	9	1.8	1.1	18	4.5
Haploscoloplos fragilis (P)	7	1.4	0.9	14	6.0
Callianassa atlantica (D)	6	1.2	0.8	12	7.5
Phyllodoce arenae (P)	6	1.2	1.1	12	7.5
Nemertina (undet.) A	5	1.0	0.7	10	10.5
Tellina iris (M)	5	1.0	0.7	10	10.5
Cirratulus sp. (P)	5	1.0	1.0	10	10.5
Aglaophamus verrilli (P)	5	1.0	0.7	10	10.5
Ogyrides limicola (D)	4	0.8	0.4	8	14.5
Solen viridis (M)	4	0.8	1.3	8	14.5
Glycera dibranchiata (P)	4	0.8	0.8	8	14.5
Onuphis eremita (P)	4	0.8	1.1	8	14.5
Brachyura (undet.) B (D)	3	0.6	0.9	6	18.5
Tharyx marioni (P)	3	0.6	0.5	6	18.5
Goniada littorea (P)	3	0.6	0.5	6	18.5
Magelona rosea (P)	3	0.6	0.9	6	18.5
Magelona sp. (Day '73) (P)	2	0.4	0.9	4	22.5
Scoloplos rubra (P)	2	0.4	0.5	4	22.5
Paraprionospio pinnata (P)	2	0.4	0.5	4	22.5
Sthenelais limicola (P)	2	0.4	0.9	4	22.5
Leptochela serratorbita (D)	1	0.2	0.4	2	33.0
Albunea paretii (D)	1	0.2	0.4	2	33.0
Pinnixa sayana (D)	1	0.2	0.4	2	33.0
Listriella barnardi (A)	1	0.2	0.4	2	33.0
Oxyurostylis smithi (C)	1	0.2	0.4	2	33.0
Eudevenopus honduranus (A)	1	0.2	0.4	2	33.0
Renilla reniformis (Cn)	1	0.2	0.4	2	33.0
Natica pusilla (M)	1	0.2	0.4	2	33.0
Odostomia sp. A (M)	1	0.2	0.4	2	33.0
Lucinidae (undet.) A (M)	1	0.2	0.4	2	33.0
Abra aequalis (M)	1	0.2	0.4	2	33.0
Lumbrineris impatiens (P)	1	0.2	0.4	2	33.0
Glycera sp. (Gar.) (P)	1	0.2	0.4	2	33.0
Eteone lactea (P)	1	0.2	0.4	2	33.0
Lumbrineris latreilli (P)	1	0.2	0.4	2	33.0
Owenia fusiformis (P)	1	0.2	0.4	2	33.0
Magelona papillicornis (P)	1	0.2	0.4	2	33.0

Appendix 5.4 Abundance of macroinvertebrate species in grab collections from station DS04. (A = Amphipoda; C = Cumacea; Cn = Cnidaria; D = Decapoda; E = Echinodermata; M = Mollusca; P = Polychaeta; St = Stomatopoda).

	DS04				
Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Spiophanes bombyx (P)	96	19.2	10.6	192	1.0
Magelona sp. (Day 73) (P)	62	12.4	7.6	124	2.0
Nephtys picta (P)	34	6.8	3.2	68	3.0
Onuphis eremita (P)	18	3.6	2.1	36	4.5
Notocirrus spiniferus (P)	18	3.6	1.1	36	4.5
Callianassa atlantica (D)	9	1.8	1.9	18	7.5
Tiron tropakis (A)	9	1.8	1.1	18	7.5
Cirratulus sp. (P)	9	1.8	1.5	18	7.5
Clymenella torquata (P)	9	1.8	1.9	18	7.5
Pinnixa sayana (D)	8	1.6	1.5	16	10.0
Loimia medusa (P)	7	1.4	1.5	14	11.5
Owenia fusiformis (P)	7	1.4	1.1	14	11.5
Tellina texana (M)	6	1.2	2.2	12	15.5
Pelecypoda (undet.) B	6	1.2	1.3	12	15.5
Tharyx marioni (P)	6	1.2	0.8	12	15.5
Notomastus hemipodus (P)	6	1.2	1.6	12	15.5
Glycera dibranchiata (P)	6	1.2	1.3	12	15.5
Haploscoloplos fragilis (P)	6	1.2	1.8	12	15.5
Nemertina (undet.) A	5	1.0	1.2	10	20.5
Sigambra tentaculata (P)	5	1.0	1.2	10	20.5
Magelona phyllisae (P)	5	1.0	1.4	10	20.5
Phyllodoce arenae (P)	5	1.0	1.7	10	20.5
Glycera americana (P)	4	0.8	0.8	8	24.0
Scoloplos rubra (P)	4	0.8	0.8	8	24.0
Goniada littorea (P)	4	0.8	0.8	8	24.0
Dissodactylus mellitae (D)	3	0.6	1.3	6	28.0
Batea catharinensis (A)	3	0.6	0.9	6	28.0
Solen viridis (M)	3	0.6	0.5	6	28.0
Macroclymene zonalis (P)	3	0.6	0.9	6	28.0
Armandia agilis (P)	3	0.6	0.9	6	28.0
Oxyurostylis smithi (C)	2	0.4	0.5	4	32.5
Nemertina (undet.) B	2	0.4	0.9	4	32.5
Mellita quinquiesperforata (E)	2	0.4	0.9	4	32.5
Tellina iris (M)	2	0.4	0.5	4	32.5
Brachyura (undet.) A (D)	1	0.2	0.4	2	45.5
Pagurus longicarpus (D)	1	0.2	0.4	2	45.5
Squilla neglecta (St)	1	0.2	0.4	2	45.5
Eudevenopus honduranus (A)	1	0.2	0.4	2	45.5
Melita appendiculata (A)	1	0.2	0.4	2	45.5
Actiniaria (undet.) (Cn)	1	0.2	0.4	2	45.5
Ophiuroidea (undet.) B (E)	1	0.2	0.4	2	45.5
Turbonilla sp. A (M)	1	0.2	0.4	2	45.5
Busycon carica (M)	1	0.2	0.4	2	45.5
Abra aequalis (M)	1	0.2	0.4	2	45.5
Terebra dislocata (M)	1	0.2	0.4	2	45.5
Unknown Taxon A	1	0.2	0.4	2	45.5
Sabellaria vulgaris (P)	1	0.2	0.4	2	45.5
Glycera sp. (Gar.) (P)	1	0.2	0.4	2	45.5
Aglaophamus verrilli (P)	1	0.2	0.4	2	45.5
Lumbrineris latreilli (P)	1	0.2	0.4	2	45.5
Paranaitis polynoides (P)	1	0.2	0.4	2	45.5
Pectinaria gouldii (P)	1	0.2	0.4	2	45.5
Arabella iricolor (P)	1	0.2	0.4	2	45.5
Drilonereis magna (P)	1	0.2	0.4	2	45.5
Paraprionospio pinnata (P)	1	0.2	0.4	2	45.5
Prionospio dayi (P)	1	0.2	0.4	2	45.5

Appendix 5.5 Abundance of macroinvertebrate species in grab collections from station DS05. (A = Amphipoda; Br = Brachipoda; Cc = Cephalochordata; D = Decapoda; E = Echinodermata; I = Isopoda; M = Mollusca; P = Polychaeta; S = Sipunculida).

	DS05				
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Branchiostoma caribaeum (Cc)	68	13.6	9.6	136	1.0
Tharyx marioni (P)	60	12.0	9.2	120	2.0
Prionospio cristata (P)	55	11.0	3.4	110	3.0
Pseudeurythoe ambigua (P)	37	7.4	7.0	74	4.0
Nematoda (undet.)	36	7.2	4.2	72	5.0
Crassinella lunulata (M)	30	6.0	10.7	60	6.0
Sabellaria vulgaris (P)	26	5.2	11.1	52	7.5
Nephtys picta (P)	26	5.2	1.9	52	7.5
Goniadides carolinae (P)	25	5.0	5.2	50	9.0
Tiron tropakis (A)	20	4.0	5.7	40	10.0
Spiophanes bombyx (P)	14	2.8	1.9	28	11.0
Cirratulidae (undet.) B (P)	12	2.4	2.3	24	12.0
Glycera oxycephala (P)	11	2.2	2.2	22	13.5
Sigambra bassi (P)	11	2.2	1.8	22	13.5
Armandia maculata (P)	8	1.6	1.5	16	15.0
Nemertina (undet.) A	7	1.4	1.1	14	17.0
Tellina texana (M)	7	1.4	1.3	14	17.0
Glycera dibranchiata (P)	7	1.4	1.5	14	17.0
Ancinus depressus (I)	6	1.2	1.6	12	19.5
Eudevenopus honduranus (A)	6	1.2	0.4	12	19.5
Tellina probrina (M)	5	1.0	1.0	10	21.0
Mellita quinquiesperforata (E)	4	0.8	0.4	8	24.0
Crassinella martinicensis (M)	4	0.8	1.3	8	24.0
Magelona sp. (Day 73) (P)	4	0.8	0.8	8	24.0
Ancistrosyllis jonesi (P)	4	0.8	1.3	8	24.0
Drilonereis magna (P)	4	0.8	0.4	8	24.0
Pagurus longicarpus (D)	3	0.6	0.9	6	28.5
Apanthura magnifica (I)	3	0.6	0.9	6	28.5
Aspidosiphon spinalis (S)	3	0.6	1.3	6	28.5
Schistomeringos rudolphi (P)	3	0.6	0.9	6	28.5
Brachyura (undet.) A (D)	2	0.4	0.9	4	37.5
Dissodactylus mellitae (D)	2	0.4	0.9	4	37.5
Listriella barnardi (A)	2	0.4	0.9	4	37.5
Corophium sp. (A)	2	0.4	0.9	4	37.5
Ophiuroidea (undet.) B (E)	2	0.4	0.5	4	37.5
Glottidia pyramidata (Br)	2	0.4	0.5	4	37.5
Ervilia concentrica (M)	2	0.4	0.9	4	37.5
Abra aequalis (M)	2	0.4	0.5	4	37.5
Polycirrus sp. (P)	2	0.4	0.9	4	37.5
Notomastus latericeus (P)	2	0.4	0.5	4	37.5
Prionospio fallax (P)	2	0.4	0.9	4	37.5
Nereis succinea (P)	2	0.4	0.5	4	37.5
Phyllodoce arenae (P)	2	0.4	0.9	4	37.5
Prionospio dayi (P)	2	0.4	0.9	4	37.5
Pinnixa sayana (D)	1	0.2	0.4	2	51.5
Portunidae (undet.) (D)	1	0.2	0.4	2	51.5
Synchelidium americanum (A)	1	0.2	0.4	2	51.5
Dentalium eboreum (M)	1	0.2	0.4	2	51.5
Nucula proxima (M)	1	0.2	0.4	2	51.5
Spisula solidissima (M)	1	0.2	0.4	2	51.5
Cirrophorus branchiatus (P)	1	0.2	0.4	2	51.5
Aricidea suecica (P)	1	0.2	0.4	2	51.5
Onuphis eremita (P)	1	0.2	0.4	2	51.5
Eteone heteropoda (P)	1	0.2	0.4	2	51.5
Exogone dispar (P)	1	0.2	0.4	2	51.5
Caulleriella killariensis (P)	1	0.2	0.4	2	51.5
Magelona rosea (P)	1	0.2	0.4	2	51.5
Phyllodocidae (undet.) (P)	1	0.2	0.4	2	51.5

Appendix 5.6 Abundance of macroinvertebrate species in grab collections from station DS06. (A = Amphipoda; Br = Brachiopoda; C = Cumacea; Cc = Cephalochordata; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; My = Mysidacea; P = Polychaeta; Py = Pycnogonida; S = Sipunculida).

DS06					
Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Nereis succinea (P)	182	36.4	17.1	364	1.0
Polycirrus eximius (P)	95	19.0	11.9	190	2.0
Crassinella lunulata (M)	78	15.6	5.1	156	3.0
Eulalia sanguinea (P)	46	9.2	6.3	92	4.0
Onuphis nebulosa (P)	39	7.8	4.1	78	5.0
Sabellaria vulgaris (P)	33	6.6	4.2	66	6.0
Cupuladria doma (Ec)	30	6.0	6.5	60	7.0
Spiophanes bombyx (P)	29	5.8	4.0	58	8.0
Lumbrineris tenuis (P)	27	5.4	4.3	54	9.0
Nematoda (undet.)	24	4.8	5.2	48	10.0
Mysidopsis bigelowi (My)	21	4.2	3.3	42	11.0
Axiothella mucosa (P)	20	4.0	1.6	40	12.5
Glycera dibranchiata (P)	20	4.0	1.9	40	12.5
Ophiuroidea (undet.) E (E)	19	3.8	3.9	38	14.0
Nephtys picta (P)	17	3.4	4.5	34	15.0
Tharyx marioni (P)	16	3.2	4.0	32	16.0
Pelecypoda (undet.) B	15	3.0	3.2	30	18.0
Magelona sp. (Day 73) (P)	15	3.0	4.5	30	18.0
Loimia medusa (P)	15	3.0	2.8	30	18.0
Natica pusilla (M)	14	2.8	3.8	28	20.0
Batea catharinensis (A)	13	2.6	3.6	26	21.0
Cyathura burbancki (I)	12	2.4	2.3	24	22.5
Nemertina (undet.) A	12	2.4	1.7	24	22.5
Lucinidae (undet.) A (M)	11	2.2	2.3	22	24.0
Hydroides uncinata (P)	10	2.0	3.9	20	25.0
Pectinaria gouldii (P)	8	1.6	1.7	16	27.0
Scolelepis texana (P)	8	1.6	1.5	16	27.0
Spiophanes wigleyi (P)	8	1.6	1.9	16	27.0
Euceramus praelongus (D)	7	1.4	1.1	14	31.5
Pagurus longicarpus (D)	7	1.4	1.7	14	31.5
Polydora sp. C (P)	7	1.4	1.7	14	31.5
Lumbrineris latreilli (P)	7	1.4	1.1	14	31.5
Aricidea suecica (P)	7	1.4	1.5	14	31.5
Chrysopetalidae (undet.) (P)	7	1.4	1.7	14	31.5
Brachyura (undet.) A (D)	6	1.2	1.3	12	38.5
Ampelisca vadorum (A)	6	1.2	1.6	12	38.5
Nucula proxima (M)	6	1.2	0.8	12	38.5
Golfingia sp. A (S)	6	1.2	1.3	12	38.5
Cirrophorus lyriformis (P)	6	1.2	0.8	12	38.5
Diopatra cuprea (P)	6	1.2	1.8	12	38.5
Drilonereis magna (P)	6	1.2	2.2	12	38.5
Lepidonotus sublevis (P)	6	1.2	1.1	12	38.5
Unciola serrata (A)	5	1.0	0.7	10	45.0
Chaetopleura apiculata (M)	5	1.0	1.7	10	45.0
Goniadides carolinae (P)	5	1.0	1.4	10	45.0
Phyllodoce arenae (P)	5	1.0	1.4	10	45.0
Ceratonereis irritablis (P)	5	1.0	2.2	10	45.0
Pinnixa sp. B (D)	4	0.8	0.4	8	52.5
Callianasidae (undet.) (D)	4	0.8	1.1	8	52.5
Tiron tropakis (A)	4	0.8	0.8	8	52.5
Corophium tuberculatum (A)	4	0.8	1.8	8	52.5
Tellina texana (M)	4	0.8	1.3	8	52.5
Macominae (undet.) A (M)	4	0.8	1.1	8	52.5
Calyptraea centralis (M)	4	0.8	0.8	8	52.5
Pelecypoda (undet.) C	4	0.8	1.3	8	52.5
Pherusa sp. (P)	4	0.8	1.8	8	52.5
Hydroides dianthus (P)	4	0.8	1.3	8	52.5
Acetes americanus (D)	3	0.6	1.3	6	64.0
Upogebia sp. (D)	3	0.6	0.9	6	64.0
Glyptoplax smithii (D)	3	0.6	0.9	6	64.0
Discoporella umbellata (Ec)	3	0.6	0.9	6	64.0
Turbonilla sp. E (M)	3	0.6	0.9	6	64.0

Appendix 5.6 (Cont.)

DS06

Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Hypsicomus sp. (P)	3	0.6	0.9	6	64.0
Cirratulus sp. (P)	3	0.6	0.9	6	64.0
Owenia fusiformis (P)	3	0.6	0.5	6	64.0
Onuphis eremita (P)	3	0.6	1.3	6	64.0
Arabella iricolor (P)	3	0.6	1.3	6	64.0
Odontosyllis fulgurans (P)	3	0.6	0.9	6	64.0
Mediomastus californiensis (P)	3	0.6	0.9	6	64.0
Clymenella torquata (P)	3	0.6	1.3	6	64.0
Trachypeneus constrictus (D)	2	0.4	0.9	4	81.5
Panopeus sp. (D)	2	0.4	0.9	4	81.5
Brachyura (undet.) B (D)	2	0.4	0.9	4	81.5
Calappidae (undet.) (D)	2	0.4	0.9	4	81.5
Pinnixa retinens (D)	2	0.4	0.5	4	81.5
Processa hemphilli (D)	2	0.4	0.9	4	81.5
Eudevenopus honduranus (A)	2	0.4	0.5	4	81.5
Nemertina (undet.) B	2	0.4	0.9	4	81.5
Glottidia pyramidata (Br)	2	0.4	0.5	4	81.5
Tellina iris (M)	2	0.4	0.9	4	81.5
Turridae (undet.) A (M)	2	0.4	0.9	4	81.5
Anachis obesa (M)	2	0.4	0.5	4	81.5
Mitrella lunata (M)	2	0.4	0.5	4	81.5
Aspidosiphon spinalis (S)	2	0.4	0.5	4	81.5
Sabellaria floridensis (P)	2	0.4	0.9	4	81.5
Nereis sp. B (P)	2	0.4	0.9	4	81.5
Glycera oxycephala (P)	2	0.4	0.5	4	81.5
Autolytus dentalius (P)	2	0.4	0.9	4	81.5
Glycinde solitaria (P)	2	0.4	0.9	4	81.5
Haploscoloplos fragilis (P)	2	0.4	0.5	4	81.5
Paraprionospio pinnata (P)	2	0.4	0.9	4	81.5
Hemipodus roseus (P)	2	0.4	0.9	4	81.5
Branchiostoma caribaeum (Cc)	1	0.2	0.4	2	109.0
Latreutes parvulus (D)	1	0.2	0.4	2	109.0
Hepatus epheliticus (D)	1	0.2	0.4	2	109.0
Heterocrypta granulata (D)	1	0.2	0.4	2	109.0
Portunidae (undet.) (D)	1	0.2	0.4	2	109.0
Gastrosaccus sp. A (My)	1	0.2	0.4	2	109.0
Oxyurostylis smithi (C)	1	0.2	0.4	2	109.0
Anoplodactylus petiolatus (Py)	1	0.2	0.4	2	109.0
Ophiolepis elegans (E)	1	0.2	0.4	2	109.0
Astropecten sp. (E)	1	0.2	0.4	2	109.0
Asteroidea (undet.) (E)	1	0.2	0.4	2	109.0
Odostomia sp. B (M)	1	0.2	0.4	2	109.0
Pelecypoda (undet.) E	1	0.2	0.4	2	109.0
Ervilia concentrica (M)	1	0.2	0.4	2	109.0
Asthenothaerus sp. (M)	1	0.2	0.4	2	109.0
Gastrochaena hians (M)	1	0.2	0.4	2	109.0
Episcynia sp. (M)	1	0.2	0.4	2	109.0
Dentalium eboreum (M)	1	0.2	0.4	2	109.0
Anomia simplex (M)	1	0.2	0.4	2	109.0
Chama macerophylla (M)	1	0.2	0.4	2	109.0
Arcinella cornuta (M)	1	0.2	0.4	2	109.0
Ensis directus (M)	1	0.2	0.4	2	109.0
Melinnopsis atlantica (P)	1	0.2	0.4	2	109.0
Scoloplos rubra (P)	1	0.2	0.4	2	109.0
Ancistrosyllis jonesi (P)	1	0.2	0.4	2	109.0
Aedicira belgicae (P)	1	0.2	0.4	2	109.0
Armandia maculata (P)	1	0.2	0.4	2	109.0
Hesionidae (undet.) (P)	1	0.2	0.4	2	109.0
Ampharete americana (P)	1	0.2	0.4	2	109.0
Schistomeringos rudolphi (P)	1	0.2	0.4	2	109.0
Sigambra bassi (P)	1	0.2	0.4	2	109.0
Sthenelais limicola (P)	1	0.2	0.4	2	109.0
Polyodontes lupinus (P)	1	0.2	0.4	2	109.0

Appendix 5.7 Abundance of macroinvertebrate species in grab collections from station DS07. (A = Amphipoda; Br = Brachiopoda; C = Cumacea; Cc = Cephalochordata; Cn = Cnidaria; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; My = Mysidacea; P = Polychaeta; S = Sipunculida).

	DS07				
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Cupuladria doma (Ec)	337	67.4	25.8	674	1.0
Goniadides carolinae (P)	96	19.2	18.9	192	2.0
Crassinella lunulata (M)	54	10.8	15.0	108	3.0
Polycirrus eximius (P)	45	9.0	6.0	90	4.0
Prionospio cristata (P)	38	7.6	6.5	76	5.0
Lumbrineris latreilli (P)	30	6.0	3.8	60	6.0
Nereis succinea (P)	23	4.6	3.6	46	7.0
Hemipodus roseus (P)	22	4.4	5.0	44	8.0
Nematoda (undet.)	21	4.2	4.0	42	10.0
Nucula proxima (M)	21	4.2	4.4	42	10.0
Oligochaeta (undet.)	21	4.2	5.4	42	10.0
Branchiostoma caribaeum (Cc)	18	3.6	3.7	36	12.5
Eulalia sanguinea (P)	18	3.6	3.9	36	12.5
Tellina probrina (M)	15	3.0	3.2	30	15.0
Nephtys picta (P)	15	3.0	1.4	30	15.0
Mediomastus californiensis (P)	15	3.0	2.5	30	15.0
Calyptraea centralis (M)	14	2.8	1.3	28	17.0
Axiothella mucosa (P)	13	2.6	2.6	26	18.0
Batea catharinensis (A)	12	2.4	5.4	24	19.5
Spiophanes bombyx (P)	12	2.4	1.1	24	19.5
Armandia maculata (P)	11	2.2	2.8	22	21.0
Tellina texana (M)	10	2.0	0.0	20	23.0
Abra aequalis (M)	10	2.0	2.3	20	23.0
Aspidosiphon spinalis (S)	10	2.0	2.3	20	23.0
Pinnixa sayana (D)	8	1.6	1.1	16	25.5
Crassinella martinicensis (M)	8	1.6	1.8	16	25.5
Nemertina (undet.) A	7	1.4	2.1	14	28.5
Lumbrineris impatiens (P)	7	1.4	3.1	14	28.5
Tharyx marioni (P)	7	1.4	2.6	14	28.5
Ceratonereis irritablis (P)	7	1.4	3.1	14	28.5
Glottidia pyramidata (Br)	6	1.2	0.8	12	32.0
Pseudeurythoe ambigua (P)	6	1.2	1.1	12	32.0
Onuphis eremita (P)	6	1.2	1.3	12	32.0
Lembos unicornis (A)	5	1.0	1.4	10	35.5
Natica pusilla (M)	5	1.0	1.0	10	35.5
Phyllodoce arenae (P)	5	1.0	1.7	10	35.5
Clymenella torquata (P)	5	1.0	1.7	10	35.5
Trachypeneus constrictus (D)	4	0.8	1.3	8	41.5
Glyptoplax smithii (D)	4	0.8	1.8	8	41.5
Pelecypoda (undet.) F (M)	4	0.8	1.3	8	41.5
Acteocina candei (M)	4	0.8	1.3	8	41.5
Lucinidae (undet.) A (M)	4	0.8	0.8	8	41.5
Anachis obesa (M)	4	0.8	0.4	8	41.5
Aspidosiphon misakiensis (S)	4	0.8	0.8	8	41.5
Lumbrineris tenuis (P)	4	0.8	1.3	8	41.5
Mysidopsis bigelowi (My)	3	0.6	1.3	6	49.5
Tiron tropakis (A)	3	0.6	0.5	6	49.5
Macominae (undet.) A (M)	3	0.6	0.9	6	49.5
Cirratulus sp. (P)	3	0.6	0.9	6	49.5
Pista cristata (P)	3	0.6	0.9	6	49.5
Nephtys incisa (P)	3	0.6	1.3	6	49.5
Pectinaria gouldii (P)	3	0.6	0.5	6	49.5
Haploscoloplos fragilis (P)	3	0.6	0.9	6	49.5
Leptochela serratorbita (D)	2	0.4	0.5	4	62.5
Latreutes parvulus (D)	2	0.4	0.9	4	62.5
Brachyura (undet.) A (D)	2	0.4	0.9	4	62.5
Pagurus longicarpus (D)	2	0.4	0.9	4	62.5
Liljeborgia sp. (A)	2	0.4	0.5	4	62.5
Gastrosaccus sp. (My)	2	0.4	0.5	4	62.5
Melita nitida (A)	2	0.4	0.9	4	62.5
Oxyurostylis smithi (C)	2	0.4	0.9	4	62.5

Appendix 5.7 (Cont.)

DS07

Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Pelecypoda (undet.) B (M)	2	0.4	0.5	4	62.5
Turridae (undet.) B (M)	2	0.4	0.5	4	62.5
Mitrella lunata (M)	2	0.4	0.5	4	62.5
Chaetopleura apiculata (M)	2	0.4	0.9	4	62.5
Chama macerophylla (M)	2	0.4	0.9	4	62.5
Glycera oxycephala (P)	2	0.4	0.5	4	62.5
Onuphis nebulosa (P)	2	0.4	0.9	4	62.5
Owenia fusiformis (P)	2	0.4	0.5	4	62.5
Glycera dibranchiata (P)	2	0.4	0.5	4	62.5
Magelona rosea (P)	2	0.4	0.5	4	62.5
Brachyura (undet.) B (D)	1	0.2	0.4	2	95.0
Euceramus praelongus (D)	1	0.2	0.4	2	95.0
Calappidae (undet.) (D)	1	0.2	0.4	2	95.0
Heterocrypta granulata (D)	1	0.2	0.4	2	95.0
Callianassa atlantica (D)	1	0.2	0.4	2	95.0
Rudilemboides sp. (A)	1	0.2	0.4	2	95.0
Cumacea (undet.) E	1	0.2	0.4	2	95.0
Isopoda (undet.) A	1	0.2	0.4	2	95.0
Ampelisca verrilli (A)	1	0.2	0.4	2	95.0
Unciola serrata (A)	1	0.2	0.4	2	95.0
Cyathura burbancki (I)	1	0.2	0.4	2	95.0
Actiniaria (undet.) (Cn)	1	0.2	0.4	2	95.0
Ophiuroidea (undet.) B (E)	1	0.2	0.4	2	95.0
Holothuroidea (undet.) A (E)	1	0.2	0.4	2	95.0
Holothuroidea (undet.) B (E)	1	0.2	0.4	2	95.0
Tellina sp. D (M)	1	0.2	0.4	2	95.0
Odostomia sp. B (M)	1	0.2	0.4	2	95.0
Turbonilla sp. C (M)	1	0.2	0.4	2	95.0
Ervilia concentrica (M)	1	0.2	0.4	2	95.0
Solenidae (undet.) (M)	1	0.2	0.4	2	95.0
Epitonium multistriatum (M)	1	0.2	0.4	2	95.0
Anachis avara (M)	1	0.2	0.4	2	95.0
Pteromeris perplana (M)	1	0.2	0.4	2	95.0
Turridae (undet.) C (M)	1	0.2	0.4	2	95.0
Polyplacophora (undet.) A (M)	1	0.2	0.4	2	95.0
Corbula barrattiana (M)	1	0.2	0.4	2	95.0
Peristichia toreta (M)	1	0.2	0.4	2	95.0
Calliostoma sp. (M)	1	0.2	0.4	2	95.0
Anatina anatina (M)	1	0.2	0.4	2	95.0
Solen viridis (M)	1	0.2	0.4	2	95.0
Sabellaria vulgaris (P)	1	0.2	0.4	2	95.0
Loimia medusa (P)	1	0.2	0.4	2	95.0
Cirrophorus lyriformis (P)	1	0.2	0.4	2	95.0
Ancistrosyllis jonesi (P)	1	0.2	0.4	2	95.0
Lumbrineris sp. A (P)	1	0.2	0.4	2	95.0
Laonice cirrata (P)	1	0.2	0.4	2	95.0
Hydroides protulicola (P)	1	0.2	0.4	2	95.0
Nephtys squamosa (P)	1	0.2	0.4	2	95.0
Syllidae (undet.) A (P)	1	0.2	0.4	2	95.0
Syllis regulata carolinae (P)	1	0.2	0.4	2	95.0
Diopatra cuprea (P)	1	0.2	0.4	2	95.0
Arabella iricolor (P)	1	0.2	0.4	2	95.0
Drilonereis magna (P)	1	0.2	0.4	2	95.0
Aricidea sp. A (P)	1	0.2	0.4	2	95.0
Paraprionospio pinnata (P)	1	0.2	0.4	2	95.0
Marphysa sanguinea (P)	1	0.2	0.4	2	95.0
Polydora caeca (P)	1	0.2	0.4	2	95.0

Appendix 5.8 Abundance of macroinvertebrate species in grab collections from station DS08. (A = Amphipoda; C = Cumacea; Cc = Cephalochordata; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; My = Mysidacea; P = Polychaeta; S = Sipunculida).

DS08					
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Cupuladria doma (Ec)	101	20.2	22.1	202	1.0
Nematoda (undet.)	63	12.6	13.2	126	2.0
Tellina texana (M)	37	7.4	4.1	74	3.0
Nephtys picta (P)	35	7.0	6.2	70	4.0
Pagurus longicarpus (D)	27	5.4	5.2	54	5.0
Crassinella lunulata (M)	25	5.0	6.4	50	6.5
Onuphis eremita (P)	25	5.0	3.7	50	6.5
Tiron tropakis (A)	16	3.2	1.3	32	8.0
Nemertina (undet.) A	15	3.0	1.2	30	9.0
Magelona sp. (Day 73) (P)	14	2.8	3.0	28	10.0
Polycirrus eximius (P)	13	2.6	2.5	26	11.0
Corbula barrattiana (M)	10	2.0	3.1	20	12.0
Trachypeneus constrictus (D)	8	1.6	0.9	16	13.5
Mysidopsis bigelowi (My)	8	1.6	3.0	16	13.5
Eudevenopus honduranus (A)	7	1.4	1.1	14	18.5
Mellita quinquiesperforata (E)	7	1.4	0.9	14	18.5
Ophiophragmus sp. A (E)	7	1.4	2.2	14	18.5
Ervilia concentrica (M)	7	1.4	1.1	14	18.5
Goniadides carolinae (P)	7	1.4	2.6	14	18.5
Spiophanes bombyx (P)	7	1.4	2.1	14	18.5
Eulalia sanguinea (P)	7	1.4	1.9	14	18.5
Phyllodoce arenae (P)	7	1.4	0.9	14	18.5
Latreutes parvulus (D)	6	1.2	1.1	12	24.5
Brachyura (undet.) B (D)	6	1.2	2.2	12	24.5
Discoporella umbellata (Ec)	6	1.2	1.8	12	24.5
Nereis succinea (P)	6	1.2	1.6	12	24.5
Ogyrides limicola (D)	5	1.0	1.0	10	29.5
Aspidosiphon spinalis (S)	5	1.0	0.7	10	29.5
Axiothella mucosa (P)	5	1.0	0.7	10	29.5
Pectinaria gouldii (P)	5	1.0	1.0	10	29.5
Haploscoloplos fragilis (P)	5	1.0	0.7	10	29.5
Spio setosa (P)	5	1.0	1.4	10	29.5
Branchiostoma caribaeum (Cc)	4	0.8	1.3	8	37.5
Leptochela serratorbita (D)	4	0.8	1.1	8	37.5
Processa hemphilli (D)	4	0.8	1.3	8	37.5
Ophiuroidea (undet.) E (E)	4	0.8	1.3	8	37.5
Natica pusilla (M)	4	0.8	1.1	8	37.5
Calyptraea centralis (M)	4	0.8	0.8	8	37.5
Pelecypoda (undet.) G	4	0.8	0.8	8	37.5
Nucula proxima (M)	4	0.8	1.3	8	37.5
Loimia medusa (P)	4	0.8	1.3	8	37.5
Prionospio cristata (P)	4	0.8	1.1	8	37.5
Euceramus praelongus (D)	3	0.6	0.5	6	47.0
Hypoconcha sabulosa (D)	3	0.6	1.3	6	47.0
Pinnixa retinens (D)	3	0.6	0.9	6	47.0
Batea catharinensis (A)	3	0.6	0.9	6	47.0
Oxyurostylis smithi (C)	3	0.6	0.5	6	47.0
Holothuroidea (undet.) B (E)	3	0.6	0.9	6	47.0
Lucinidae (undet.) A (M)	3	0.6	0.9	6	47.0
Anachis obesa (M)	3	0.6	0.9	6	47.0
Goniada littorea (P)	3	0.6	0.9	6	47.0
Trichophoxus floridanus (A)	2	0.4	0.9	4	58.5
Cyclaspis varians (C)	2	0.4	0.5	4	58.5
Erichthonius brasiliensis (A)	2	0.4	0.5	4	58.5
Turbonilla sp. A (M)	2	0.4	0.5	4	58.5
Cylichnella bidentata (M)	2	0.4	0.5	4	58.5
Polinices duplicatus (M)	2	0.4	0.5	4	58.5
Olivella floralia (M)	2	0.4	0.5	4	58.5
Goniada sp. A (P)	2	0.4	0.9	4	58.5
Glycera sp. (Gar.) (P)	2	0.4	0.9	4	58.5
Glycera oxycephala (P)	2	0.4	0.5	4	58.5
Onuphis nebulosa (P)	2	0.4	0.9	4	58.5
Glycera dibranchiata (P)	2	0.4	0.9	4	58.5
Odontosyllis fulgurans (P)	2	0.4	0.9	4	58.5
Armandia maculata (P)	2	0.4	0.5	4	58.5

Appendix 5.8 (Cont.)

DS08					
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Majidae (undet.) A (D)	1	0.2	0.4	2	86.0
Mesorhoea sexspinosa (D)	1	0.2	0.4	2	86.0
Glyptoplax smithii (D)	1	0.2	0.4	2	86.0
Elasmopus levis (A)	1	0.2	0.4	2	86.0
Trichophoxus epistomus (A)	1	0.2	0.4	2	86.0
Rudilemboides sp. (A)	1	0.2	0.4	2	86.0
Jerbarnia sp. (A)	1	0.2	0.4	2	86.0
Lembos smithi (A)	1	0.2	0.4	2	86.0
Unciola serrata (A)	1	0.2	0.4	2	86.0
Apanthura magnifica (I)	1	0.2	0.4	2	86.0
Turbellaria (undet.)	1	0.2	0.4	2	86.0
Nemertina (undet.) B	1	0.2	0.4	2	86.0
Ophiothrix angulata (E)	1	0.2	0.4	2	86.0
Hemichordata (undet.)	1	0.2	0.4	2	86.0
Olivella mutica (M)	1	0.2	0.4	2	86.0
Acteocina candei (M)	1	0.2	0.4	2	86.0
Pandora trilineata (M)	1	0.2	0.4	2	86.0
Terebra sp. A (M)	1	0.2	0.4	2	86.0
Pelecypoda (undet.) C	1	0.2	0.4	2	86.0
Mitrella lunata (M)	1	0.2	0.4	2	86.0
Crassispira sp. (M)	1	0.2	0.4	2	86.0
Anadara transversa (M)	1	0.2	0.4	2	86.0
Mercenaria mercenaria (M)	1	0.2	0.4	2	86.0
Ensis directus (M)	1	0.2	0.4	2	86.0
Aspidosiphon misakiensis (S)	1	0.2	0.4	2	86.0
Cirratulus sp. (P)	1	0.2	0.4	2	86.0
Tharyx marioni (P)	1	0.2	0.4	2	86.0
Lumbrineris latreilli (P)	1	0.2	0.4	2	86.0
Armandia agilis (P)	1	0.2	0.4	2	86.0
Aricidea suecica (P)	1	0.2	0.4	2	86.0
Prionospio fallax (P)	1	0.2	0.4	2	86.0
Owenia fusiformis (P)	1	0.2	0.4	2	86.0
Drilonereis magna (P)	1	0.2	0.4	2	86.0
Magelona papillicornis (P)	1	0.2	0.4	2	86.0
Paraprionospio pinnata (P)	1	0.2	0.4	2	86.0
Oligochaeta (undet.)	1	0.2	0.4	2	86.0
Mediomastus californiensis (P)	1	0.2	0.4	2	86.0
Ampharete americana (P)	1	0.2	0.4	2	86.0
Notocirrus spiniferus (P)	1	0.2	0.4	2	86.0
Prionospio dayi (P)	1	0.2	0.4	2	86.0
Chrysopetalidae (undet.) (P)	1	0.2	0.4	2	86.0

Appendix 5.9 Abundance of macroinvertebrate species in grab collections from station DS09. (A = Amphipoda; C = Cumacea; Oc = Cephalochordata; Cn = Cnidaria; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; My = Mysidacea; P = Polychaeta; S = Sipunculida; T = Tanaidacea).

DS09					
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Branchiostoma caribaeum (Cc)	67	13.4	10.0	134	1.0
Protohaustorius nr. deichmannae (A)	29	5.8	6.0	58	2.0
Tellina probrina (M)	25	5.0	4.4	50	3.0
Onuphis eremita (P)	23	4.6	2.5	46	4.0
Glycera oxycephala (P)	19	3.8	3.1	38	5.0
Acanthohaustorius millsi (A)	18	3.6	4.0	36	7.5
Aspidosiphon spinalis (S)	18	3.6	2.6	36	7.5
Nephtys picta (P)	18	3.6	2.1	36	7.5
Prionospio cristata (P)	18	3.6	6.4	36	7.5
Acanthohaustorius sp. (A)	15	3.0	2.4	30	10.0
Mellita quinquiesperforata (E)	12	2.4	2.8	24	11.5
Ervilia concentrica (M)	12	2.4	1.5	24	11.5
Nematoda (undet.)	10	2.0	1.4	20	13.5
Cupuladria doma (Ec)	10	2.0	1.6	20	13.5
Apanthura magnifica (I)	8	1.6	0.9	16	15.5
Crassinella martinicensis (M)	8	1.6	2.5	16	15.5
Oligochaeta (undet.)	7	1.4	1.7	14	17.0
Trichophoxus floridanus (A)	6	1.2	0.4	12	20.0
Strigilla mirabilis (M)	6	1.2	1.6	12	20.0
Prionospio fallax (P)	6	1.2	2.2	12	20.0
Diopatra cuprea (P)	6	1.2	2.2	12	20.0
Hemipodus roseus (P)	6	1.2	2.2	12	20.0
Oxyurostylis smithi (C)	5	1.0	1.2	10	24.0
Ancinus depressus (I)	5	1.0	1.0	10	24.0
Nemertina (undet.) A	5	1.0	1.2	10	24.0
Nemertina (undet.) B	4	0.8	0.8	8	27.5
Discoporella umbellata (Ec)	4	0.8	1.8	8	27.5
Abra aequalis (M)	4	0.8	1.1	8	27.5
Spio pettiboneae (P)	4	0.8	1.8	8	27.5
Trichophoxus epistomus (A)	3	0.6	1.3	6	32.5
Cyathura burbancki (I)	3	0.6	1.3	6	32.5
Eudevenopus honduranus (A)	3	0.6	0.9	6	32.5
Semele nuculoides (M)	3	0.6	1.3	6	32.5
Cirratulidae (undet.) B (P)	3	0.6	0.9	6	32.5
Spiophanes bombyx (P)	3	0.6	0.5	6	32.5
Pagurus longicarpus (D)	2	0.4	0.9	4	41.0
Pinnixa sayana (D)	2	0.4	0.5	4	41.0
Amphipoda (undet.) A	2	0.4	0.5	4	41.0
Gastrosaccus sp.A (My)	2	0.4	0.5	4	41.0
Leptognatha caeca (T)	2	0.4	0.5	4	41.0
Crepidula sp. (M)	2	0.4	0.9	4	41.0
Spisula solidissima (M)	2	0.4	0.5	4	41.0
Crassinella lunulata (M)	2	0.4	0.9	4	41.0
Goniadides carolinae (P)	2	0.4	0.9	4	41.0
Paraonis sp. A (P)	2	0.4	0.9	4	41.0
Nephtys bucera (P)	2	0.4	0.9	4	41.0
Emerita talpoida (D)	1	0.2	0.4	2	61.0
Pinnixa sp. (D)	1	0.2	0.4	2	61.0
Maera caroliniana (A)	1	0.2	0.4	2	61.0
Melita nitida (A)	1	0.2	0.4	2	61.0
Lembos smithi (A)	1	0.2	0.4	2	61.0
Tiron tropakis (A)	1	0.2	0.4	2	61.0
Actiniaria (undet.) (Cn)	1	0.2	0.4	2	61.0
Turbellaria (undet.)	1	0.2	0.4	2	61.0
Ophiothrix angulata (E)	1	0.2	0.4	2	61.0
Ophiophragmus sp. A (E)	1	0.2	0.4	2	61.0
Natica pusilla (M)	1	0.2	0.4	2	61.0
Acteocina candei (M)	1	0.2	0.4	2	61.0
Corbula barrattiana (M)	1	0.2	0.4	2	61.0
Mitrella lunata (M)	1	0.2	0.4	2	61.0
Magelona sp. (Day '73) (P)	1	0.2	0.4	2	61.0

Appendix 5.9 (Cont.)

Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
DS09					
Goniada littorea (P)	1	0.2	0.4	2	61.0
Lumbrineris latreilli (P)	1	0.2	0.4	2	61.0
Ancistrosyllis jonesi (P)	1	0.2	0.4	2	61.0
Nephtys incisa (P)	1	0.2	0.4	2	61.0
Notomastus hemipodus (P)	1	0.2	0.4	2	61.0
Polydora sp. A (P)	1	0.2	0.4	2	61.0
Polydora sp. B (P)	1	0.2	0.4	2	61.0
Nemertina (undet.) C	1	0.2	0.4	2	61.0
Synelmis albini (P)	1	0.2	0.4	2	61.0
Prionospio cirrobranchiata (P)	1	0.2	0.4	2	61.0
Armandia maculata (P)	1	0.2	0.4	2	61.0
Caulleriella killariensis (P)	1	0.2	0.4	2	61.0
Phyllodoce arenae (P)	1	0.2	0.4	2	61.0
Ceratonereis irritablis (P)	1	0.2	0.4	2	61.0

Appendix 5.10 Abundance of macroinvertebrate species in grab collections from station DS10. (A = Amphipoda; C = Cumacea; Cc = Cephalochordata; E = Echinodermata; Ec = Ectoprocta); I = Isopoda; M = Mollusca; P = Polychaeta).

DS10

Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Strigilla mirabilis (M)	63	12.6	4.2	126	1.0
Tellina probrina (M)	40	8.0	1.2	80	2.0
Mellita quinquiesperforata (E)	27	5.4	3.2	54	3.0
Protohaustorius nr. deichmannae (A)	15	3.0	2.3	30	4.0
Trichophoxus epistomus (A)	13	2.6	1.8	26	5.0
Nemertina (undet.) A	9	1.8	1.5	18	6.0
Glycera oxycephala (P)	7	1.4	1.1	14	7.5
Acanthohaustorius sp. (A)	7	1.4	1.7	14	7.5
Nephtys picta (P)	6	1.2	0.8	12	9.0
Tellina texana (M)	5	1.0	1.0	10	10.0
Spiophanes bombyx (P)	4	0.8	0.8	8	12.5
Eudevenopus honduranus (A)	4	0.8	0.8	8	12.5
Bathyporeia parkeri (A)	4	0.8	0.8	8	12.5
Tellina sp. (M)	4	0.8	0.8	8	12.5
Onuphis eremita (P)	3	0.6	0.9	6	15.5
Olivella mutica (M)	3	0.6	0.5	6	15.5
Nematoda (undet.)	2	0.4	0.5	4	17.0
Glycera americana (P)	1	0.2	0.4	2	24.5
Crassinella martinicensis (M)	1	0.2	0.4	2	24.5
Ervilia concentrica (M)	1	0.2	0.4	2	24.5
Tiron tropakis (A)	1	0.2	0.4	2	24.5
Oxyurostylis smithi (C)	1	0.2	0.4	2	24.5
Ancinus depressus (I)	1	0.2	0.4	2	24.5
Oligochaeta (undet.)	1	0.2	0.4	2	24.5
Ophiophragmus sp. A (E)	1	0.2	0.4	2	24.5
Nemertina (undet.) B	1	0.2	0.4	2	24.5
Discoporella umbellata (Ec)	1	0.2	0.4	2	24.5
Pareulepis sp. (P)	1	0.2	0.4	2	24.5
Branchiostoma caribaeum (Cc)	1	0.2	0.4	2	24.5
Natica pusilla (M)	1	0.2	0.4	2	24.5
Hesionidae (undet.) A (P)	1	0.2	0.4	2	24.5

Appendix 5.11 Abundance of macroinvertebrate species in grab collections from station DS11. (A = Amphipoda; C = Cumacea; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; P = Polychaeta).

DS11					
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Strigilla mirabilis (M)	56	11.2	6.5	112	1.0
Discoporella umbellata (Ec)	44	8.8	5.4	88	2.0
Protohaustorius nr. deichmannae (A)	33	6.6	5.6	66	3.0
Tellina texana (M)	15	3.0	2.0	30	4.0
Spiophanes bombyx (P)	14	2.8	2.2	28	5.5
Nephtys picta (P)	14	2.8	2.0	28	5.5
Nemertina (undet.) A	10	2.0	1.0	20	7.0
Trichophoxus epistomus (A)	7	1.4	1.9	14	8.0
Onuphis eremita (P)	6	1.2	0.8	12	9.0
Ophiophragmus sp. A. (E)	5	1.0	1.0	10	10.0
Lucinidae (undet.) A (M)	4	0.8	0.8	8	12.0
Glycera oxycephala (P)	4	0.8	1.3	8	12.0
Magelona papillicornis (P)	4	0.8	0.8	8	12.0
Tellina sp. (M)	3	0.6	0.9	6	14.5
Terebra concava (M)	3	0.6	0.5	6	14.5
Trachypeneus constrictus (D)	2	0.4	0.5	4	18.0
Acanthohaustorius sp. (A)	2	0.4	0.5	4	18.0
Gastrosaccus sp. A (My)	2	0.4	0.5	4	18.0
Oxyurostylis smithi (C)	2	0.4	0.9	4	18.0
Aricidea sp. A	2	0.4	0.5	4	18.0
Brachyura (undet.) A (D)	1	0.2	0.4	2	30.5
Brachyura (undet.) B (D)	1	0.2	0.4	2	30.5
Pagurus longicarpus (D)	1	0.2	0.4	2	30.5
Albunea paretti (D)	1	0.2	0.4	2	30.5
Lepidopa websteri (D)	1	0.2	0.4	2	30.5
Mysidacea (undet.) A	1	0.2	0.4	2	30.5
Chiridotea stenops (I)	1	0.2	0.4	2	30.5
Eudevenopus honduranus (A)	1	0.2	0.4	2	30.5
Turbellaria (undet.)	1	0.2	0.4	2	30.5
Mellita quinquiesperforata (E)	1	0.2	0.4	2	30.5
Turbonilla sp. B (M)	1	0.2	0.4	2	30.5
Ervilia concentrica (M)	1	0.2	0.4	2	30.5
Turridae (undet.) A (M)	1	0.2	0.4	2	30.5
Goniada littorea (P)	1	0.2	0.4	2	30.5
Lumbrineris latreilli (P)	1	0.2	0.4	2	30.5
Armandia agilis (P)	1	0.2	0.4	2	30.5
Notomastus latericeus (P)	1	0.2	0.4	2	30.5
Owenia fusiformis (P)	1	0.2	0.4	2	30.5
Armandia maculata (P)	1	0.2	0.4	2	30.5
Prionospio dayi (P)	1	0.2	0.4	2	30.5

Appendix 5.12 Abundance of macroinvertebrate species in grab collections from station DS12. (A = Amphipoda; C = Cumacea; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; M = Mollusca; My = Mysidacea; S = Sipunculida; P = Polychaeta; Ph = Phoronida).

	DS12				
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Protohaustorius nr. deichmannae (A)	97	19.4	13.4	194	1.0
Mellita quinquiesperforata (E)	47	9.4	3.8	94	2.0
Pagurus longicarpus (D)	29	5.8	9.1	58	3.0
Tellina texana (M)	23	4.6	1.9	46	4.0
Spiophanes bombyx (P)	21	4.2	3.6	42	5.0
Discoporella umbellata (Ec)	17	3.4	2.4	34	6.5
Onuphis eremita (P)	17	3.4	1.3	34	6.5
Strigilla mirabilis (M)	12	2.4	2.5	24	8.0
Eudevenopus honduranus (A)	10	2.0	1.6	20	9.5
Nephtys picta (P)	10	2.0	1.6	20	9.5
Trichophoxus epistomus (A)	8	1.6	0.9	16	11.0
Ervilia concentrica (M)	7	1.4	1.1	14	12.0
Trachypeneus constrictus (D)	6	1.2	1.1	12	15.0
Ogyrides limicola (D)	6	1.2	0.8	12	15.0
Nemertina (undet.) A	6	1.2	1.1	12	15.0
Magelona papillicornis (P)	6	1.2	1.3	12	15.0
Prionospio dayi (P)	6	1.2	1.3	12	15.0
Magelona sp. (Day '73) (P)	5	1.0	1.2	10	19.0
Armandia maculata (P)	5	1.0	0.7	10	19.0
Ophiophragmus sp. A (E)	5	1.0	1.2	10	19.0
Oxyurostylis smithi (C)	4	0.8	0.8	8	22.0
Goniada littorea (P)	4	0.8	1.3	8	22.0
Polydora sp. B (P)	4	0.8	0.8	8	22.0
Synchelidium americanum (A)	3	0.6	0.9	6	25.5
Gastrosaccus sp. A (My)	3	0.6	0.5	6	25.5
Natica pusilla (M)	3	0.6	0.5	6	25.5
Cylichnella bidentata (M)	3	0.6	1.3	6	25.5
Leptochela serratorbita (D)	2	0.4	0.5	4	36.0
Brachyura (undet.) A (D)	2	0.4	0.5	4	36.0
Brachyura (undet.) B (D)	2	0.4	0.5	4	36.0
Albunea paretii (D)	2	0.4	0.5	4	36.0
Ostracoda (undet.)	2	0.4	0.5	4	36.0
Tiron tropakis (A)	2	0.4	0.9	4	36.0
Nemertina (undet.) B	2	0.4	0.5	4	36.0
Nematoda (undet.)	2	0.4	0.5	4	36.0
Tellina iris (M)	2	0.4	0.5	4	36.0
Acteocina candei (M)	2	0.4	0.5	4	36.0
Aspidosiphon misakiensis (S)	2	0.4	0.5	4	36.0
Aspidosiphon spinalis (S)	2	0.4	0.5	4	36.0
Aglaophamus verrilli (P)	2	0.4	0.5	4	36.0
Lumbrineris latreilli (P)	2	0.4	0.5	4	36.0
Scoloplos acmeceps (P)	2	0.4	0.9	4	36.0
Owenia fusiformis (P)	2	0.4	0.5	4	36.0
Prionospio cristata (P)	2	0.4	0.5	4	36.0
Acanthohaustorius sp. (A)	1	0.2	0.4	2	54.0
Luconacia incerta (A)	1	0.2	0.4	2	54.0
Phoronis sp. A (Ph)	1	0.2	0.4	2	54.0
Olivella mutica (M)	1	0.2	0.4	2	54.0
Turridae (undet.) C (M)	1	0.2	0.4	2	54.0
Corbula barrattiana (M)	1	0.2	0.4	2	54.0
Polinices duplicatus (M)	1	0.2	0.4	2	54.0
Lucinidae (undet.) A (M)	1	0.2	0.4	2	54.0
Dentalium eboreum (M)	1	0.2	0.4	2	54.0
Tellina sp. (M)	1	0.2	0.4	2	54.0
Terebra concava (M)	1	0.2	0.4	2	54.0
Epitonium angulatum (M)	1	0.2	0.4	2	54.0
Nereis acuminata (P)	1	0.2	0.4	2	54.0
Tharyx marioni (P)	1	0.2	0.4	2	54.0
Nephtys incisa (P)	1	0.2	0.4	2	54.0
Aricidea sp. A (P)	1	0.2	0.4	2	54.0
Paraprionospio pinnata (P)	1	0.2	0.4	2	54.0
Ceratocephale sp. (P)	1	0.2	0.4	2	54.0
Magelona rosea (P)	1	0.2	0.4	2	54.0

Appendix 5.13 Abundance of macroinvertebrate species in grab collections from station DS13. (A = Amphipoda; Br = Brachiopoda; C = Cumacea; Cc = Cephalochordata; Cn = Cnidaria; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; My = Mysidacea; P = Polychaeta; S = Sipunculida).

DS13					
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Nematoda (undet.)	195	39.0	26.9	390	1.0
Polycirrus eximius (P)	112	22.4	19.4	224	2.0
Lumbrineris latreilli (P)	96	19.2	16.0	192	3.0
Ceratonereis irritablis (P)	93	18.6	19.8	186	4.0
Goniadides carolinae (P)	86	17.2	18.1	172	5.0
Spiophanes bombyx (P)	78	15.6	10.0	156	6.0
Eulalia sanguinea (P)	57	11.4	8.4	114	7.0
Nereis succinea (P)	54	10.8	14.0	108	8.0
Crassinella lunulata (M)	51	10.2	9.2	102	9.0
Cyathura burbancki (I)	47	9.4	7.6	94	10.5
Prionospio cristata (P)	47	9.4	12.3	94	10.5
Maera caroliniana (A)	46	9.2	7.0	92	12.5
Magelona sp. (Day '73) (P)	46	9.2	12.2	92	12.5
Sabellaria vulgaris (P)	41	8.2	10.4	82	14.0
Axiothella mucosa (P)	30	6.0	5.5	60	15.0
Cirrophorus lyriformis (P)	29	5.8	3.9	58	16.5
Onuphis eremita (P)	29	5.8	6.2	58	16.5
Lembos smithi (A)	26	5.2	6.6	52	18.5
Lucinidae (undet.) A (M)	26	5.2	5.5	52	18.5
Discoporella umbellata (Ec)	22	4.4	2.5	44	21.5
Minuspio cirrifera (P)	22	4.4	6.7	44	21.5
Laonice cirrata (P)	22	4.4	6.8	44	21.5
Nephtys picta (P)	22	4.4	4.2	44	21.5
Melita appendiculata (A)	20	4.0	7.4	40	25.0
Scolelepis texana (P)	20	4.0	5.8	40	25.0
Phyllodoce arenae (P)	20	4.0	3.3	40	25.0
Nemertina (undet.) A	19	3.8	1.6	38	27.5
Chrysopetalidae (undet.) (P)	19	3.8	3.3	38	27.5
Spiophanes wigleyi (P)	18	3.6	3.4	36	29.0
Pagurus longicarpus (D)	17	3.4	2.9	34	30.5
Onuphis nebulosa (P)	17	3.4	3.9	34	30.5
Tiron tropakis (A)	16	3.2	2.4	32	32.5
Corophium tuberculatum (A)	16	3.2	2.8	32	32.5
Tellina texana (M)	15	3.0	3.5	30	34.0
Glycera dibranchiata (P)	14	2.8	2.3	28	36.0
Mediomastus californiensis (P)	14	2.8	2.8	28	36.0
Nereis sp. (P)	14	2.8	2.2	28	36.0
Glyptoplax smithii (D)	13	2.6	3.3	26	39.5
Erichthonius brasiliensis (A)	13	2.6	3.2	26	39.5
Oxyurostylis smithi (C)	13	2.6	1.1	26	39.5
Crepidula sp. (M)	13	2.6	3.8	26	39.5
Diopatra cuprea (P)	12	2.4	2.7	24	42.0
Batea catharinensis (A)	11	2.2	2.7	22	43.5
Cirratulidae (undet.) (P)	11	2.2	2.5	22	43.5
Tharyx marioni (P)	10	2.0	1.9	20	46.0
Macroclymene zonalis (P)	10	2.0	2.9	20	46.0
Prionospio cirrobranchiata (P)	10	2.0	2.0	20	46.0
Goneplacidae (undet.) (D)	9	1.8	2.2	18	50.0
Eudevenopus honduranus (A)	9	1.8	1.1	18	50.0
Ophiuroidea (undet.) E (E)	9	1.8	1.8	18	50.0
Glycera sp. (Gar.) (P)	9	1.8	1.3	18	50.0
Capitellidae (undet.) (P)	9	1.8	4.0	18	50.0
Leptochela serratorbita (D)	8	1.6	0.9	16	54.5
Parapionosyllis longicirrata (P)	8	1.6	1.8	16	54.5
Ancistrosyllis jonesi (P)	8	1.6	1.8	16	54.5
Isolda pulchella (P)	8	1.6	1.8	16	54.5
Ampelisca vadorum (A)	7	1.4	1.7	14	58.0
Glottidia pyramidata (Br)	7	1.4	0.9	14	58.0
Exogone dispar (P)	7	1.4	2.1	14	58.0

Appendix 5.13 (Cont.)

Species	DS13 Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Synchelidium americanum (A)	6	1.2	1.3	12	64.0
Calyptraea centralis (M)	6	1.2	0.8	12	64.0
Anomia simplex (M)	6	1.2	1.3	12	64.0
Aricidea fauveli (P)	6	1.2	1.3	12	64.0
Hydroides protulicola (P)	6	1.2	1.3	12	64.0
Polydora sp. B (P)	6	1.2	2.2	12	64.0
Owenia fusiformis (P)	6	1.2	1.6	12	64.0
Pectinaria gouldii (P)	6	1.2	1.6	12	64.0
Aricidea sp. A (P)	6	1.2	1.1	12	64.0
Cyclaspis varians (C)	5	1.0	1.0	10	71.5
Photis sp. (A)	5	1.0	2.2	10	71.5
Ophiuroidea (undet.) B (E)	5	1.0	1.2	10	71.5
Chama macerophylla (M)	5	1.0	1.4	10	71.5
Aspidosiphon spinalis (S)	5	1.0	1.0	10	71.5
Drilonereis magna (P)	5	1.0	0.7	10	71.5
Trachypeneus constrictus (D)	4	1.0	1.2	8	78.0
Pinnixa sp. A (D)	4	0.8	0.8	8	78.0
Holothuroidea (undet.) B (E)	4	0.8	1.1	8	78.0
Asthenothaerus sp. (M)	4	0.8	0.8	8	78.0
Pherusa sp. (P)	4	0.8	1.3	8	78.0
Lepidonotus sublevis (P)	4	0.8	1.3	8	78.0
Magelona rosea (P)	4	0.8	0.8	8	78.0
Branchiostoma caribaeum (Cc)	3	0.6	0.9	6	86.5
Brachyura (undet.) A (D)	3	0.6	0.5	6	86.5
Heterocrypta granulata (D)	3	0.6	0.9	6	86.5
Elasmopus levis (A)	3	0.6	0.9	6	86.5
Trichophoxus epistomus (A)	3	0.6	1.3	6	86.5
Ostracoda (undet.)	3	0.6	0.5	6	86.5
Cupuladria doma (Ec)	3	0.6	1.3	6	86.5
Natica pusilla (M)	3	0.6	0.5	6	86.5
Loimia medusa (P)	3	0.6	0.5	6	86.5
Arabella iricolor (P)	3	0.6	0.5	6	86.5
Brachyura (undet.) B (D)	2	0.4	0.5	4	106.0
Calappidae (undet.) (D)	2	0.4	0.9	4	106.0
Upogebia sp. (D)	2	0.4	0.9	4	106.0
Maera williamsi (A)	2	0.4	0.9	4	106.0
Ophiuroidea (undet.) G (E)	2	0.4	0.5	4	106.0
Ophiuroidea (undet.) C (E)	2	0.4	0.5	4	106.0
Strigilla mirabilis (M)	2	0.4	0.5	4	106.0
Pelecypoda (undet.) G	2	0.4	0.9	4	106.0
Musculus lateralis (M)	2	0.4	0.9	4	106.0
Chaetopleura apiculata (M)	2	0.4	0.9	4	106.0
Nucula proxima (M)	2	0.4	0.5	4	106.0
Anadara transversa (M)	2	0.4	0.5	4	106.0
Ensis directus (M)	2	0.4	0.5	4	106.0
Abra aequalis (M)	2	0.4	0.5	4	106.0
Aspidosiphon misakiensis (S)	2	0.4	0.5	4	106.0
Sipunculida (undet.)	2	0.4	0.5	4	106.0
Polydora sp. C (P)	2	0.4	0.5	4	106.0
Sthenelais boa (P)	2	0.4	0.5	4	106.0
Scoloplos rubra (P)	2	0.4	0.5	4	106.0
Aricidea suecica (P)	2	0.4	0.5	4	106.0
Nephtys incisa (P)	2	0.4	0.9	4	106.0
Notomastus hemipodus (P)	2	0.4	0.5	4	106.0
Syllis cornuta (P)	2	0.4	0.5	4	106.0
Armandia maculata (P)	2	0.4	0.5	4	106.0
Hemipodus roseus (P)	2	0.4	0.9	4	106.0
Ampharete americana (P)	2	0.4	0.9	4	106.0
Notocirrus spiniferus (P)	2	0.4	0.5	4	106.0

Appendix 5.13 (Cont.)

DS13

Species	Total Number	Number/0.1m^2 $\bar{x}$	Number/0.1m^2 SD	Estimated Number/m^2	Rank by Number
Prionospio dayi (P)	2	0.4	0.5	4	106.0
Schistomeringos rudolphi (P)	2	0.4	0.5	4	106.0
Alpheus normanni (D)	1	0.2	0.4	2	144.5
Latreutes parvulus (D)	1	0.2	0.4	2	144.5
Euceramus praelongus (D)	1	0.2	0.4	2	144.5
Brachyura (undet.) C (D)	1	0.2	0.4	2	144.5
Portunidae (undet.) (D)	1	0.2	0.4	2	144.5
Processa hemphilli (D)	1	0.2	0.4	2	144.5
Bathyporeia parkeri (A)	1	0.2	0.4	2	144.5
Lembos unicornis (A)	1	0.2	0.4	2	144.5
Rudilemboides sp. (A)	1	0.2	0.4	2	144.5
Liljeborgia sp. (A)	1	0.2	0.4	2	144.5
Lysianopsis alba (A)	1	0.2	0.4	2	144.5
Mysidacea (undet.) C	1	0.2	0.4	2	144.5
Mysidopsis bigelowi (My)	1	0.2	0.4	2	144.5
Cumacea (undet.)	1	0.2	0.4	2	144.5
Actiniaria (undet.) (Cn)	1	0.2	0.4	2	144.5
Nemertina (undet.) B	1	0.2	0.4	2	144.5
Ophiothrix angulata (E)	1	0.2	0.4	2	144.5
Arbacia punctulata (E)	1	0.2	0.4	2	144.5
Turridae (undet.) C (M)	1	0.2	0.4	2	144.5
Corbula barrattiana (M)	1	0.2	0.4	2	144.5
Pelecypoda (undet.) C	1	0.2	0.4	2	144.5
Anachis avara (M)	1	0.2	0.4	2	144.5
Turbonilla sp. E (M)	1	0.2	0.4	2	144.5
Turbonilla sp. F (M)	1	0.2	0.4	2	144.5
Pelecypoda (undet.) K	1	0.2	0.4	2	144.5
Pelecypoda (undet.)	1	0.2	0.4	2	144.5
Lyonsia hyalina (M)	1	0.2	0.4	2	144.5
Eulalia macroceros (P)	1	0.2	0.4	2	144.5
Serpulus vermicularis granulosa (P)	1	0.2	0.4	2	144.5
Megalomma sp. B (P)	1	0.2	0.4	2	144.5
Marphysa sp. B (Gar.) (P)	1	0.2	0.4	2	144.5
Cirratulus sp. (P)	1	0.2	0.4	2	144.5
Protodorvillea kefersteini (P)	1	0.2	0.4	2	144.5
Goniada littorea (P)	1	0.2	0.4	2	144.5
Pista cristata (P)	1	0.2	0.4	2	144.5
Notomastus latericeus (P)	1	0.2	0.4	2	144.5
Glycera oxycephala (P)	1	0.2	0.4	2	144.5
Spiochatopterus costarum oculatus (P)	1	0.2	0.4	2	144.5
Autolytus dentalius (P)	1	0.2	0.4	2	144.5
Eteone heteropoda (P)	1	0.2	0.4	2	144.5
Eunicidae (undet.) (P)	1	0.2	0.4	2	144.5
Paraprionospio pinnata (P)	1	0.2	0.4	2	144.5
Spio pettiboneae (P)	1	0.2	0.4	2	144.5
Oligochaeta (undet.)	1	0.2	0.4	2	144.5
Brania clavata (P)	1	0.2	0.4	2	144.5
Sigambra bassi (P)	1	0.2	0.4	2	144.5
Spio setosa (P)	1	0.2	0.4	2	144.5
Pionosyllis sp. (P)	1	0.2	0.4	2	144.5

Appendix 5.14 Abundance of macroinvertebrate species in grab collections from station DS14. (A = Amphipoda; C = Cumacea; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; P = Polychaeta; S = Sipunculida).

	DS14				
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Protohaustorius nr. deichmannae (A)	36	7.2	4.0	72	1.0
Spiophanes bombyx (P)	28	5.6	3.8	56	2.0
Strigilla mirabilis (M)	25	5.0	1.9	50	3.0
Discoporella umbellata (Ec)	24	4.8	2.2	48	4.0
Nephtys picta (P)	22	4.4	3.4	44	5.0
Nemertina (undet.) A	19	3.8	3.0	38	6.5
Tellina texana (M)	19	3.8	2.6	38	6.5
Aspidosiphon misakiensis (S)	10	2.0	2.9	20	8.0
Tellina probrina (M)	9	1.8	2.5	18	9.0
Trichophoxus epistomus (A)	6	1.2	1.6	12	11.0
Onuphis eremita (P)	6	1.2	0.8	12	11.0
Prionospio dayi (P)	6	1.2	1.3	12	11.0
Acanthohaustorius sp. (A)	5	1.0	0.7	10	14.0
Eudevenopus honduranus (A)	5	1.0	0.7	10	14.0
Lucinidae (undet.) A (M)	5	1.0	1.2	10	14.0
Chiridotea stenops (I)	4	0.8	1.3	8	17.0
Magelona papillicornis (P)	4	0.8	0.8	8	17.0
Magelona rosea (P)	4	0.8	0.8	8	17.0
Mysidacea (undet.) A	3	0.6	0.5	6	21.5
Erichthonius brasiliensis (A)	3	0.6	0.9	6	21.5
Oxyurostylis smithi (C)	3	0.6	0.5	6	21.5
Ophiuroidea (undet.) A (E)	3	0.6	0.9	6	21.5
Nephtys incisa (P)	3	0.6	0.9	6	21.5
Armandia maculata (P)	3	0.6	0.5	6	21.5
Pagurus longicarpus (D)	2	0.4	0.9	4	28.0
Pinnixa sayana (D)	2	0.4	0.9	4	28.0
Mellita quinquiesperforata (E)	2	0.4	0.5	4	28.0
Nematoda (undet.)	2	0.4	0.5	4	28.0
Cirratulus sp. (P)	2	0.4	0.9	4	28.0
Lumbrineris latreilli (P)	2	0.4	0.5	4	28.0
Glycera oxycephala (P)	2	0.4	0.9	4	28.0
Trachypeneus constrictus (D)	1	0.2	0.4	2	45.0
Latreutes parvulus (D)	1	0.2	0.4	2	45.0
Brachyura (undet.) A (D)	1	0.2	0.4	2	45.0
Euceramus praelongus (D)	1	0.2	0.4	2	45.0
Lepidopa websteri (D)	1	0.2	0.4	2	45.0
Heterocrypta granulata (D)	1	0.2	0.4	2	45.0
Bathyporeia parkeri (A)	1	0.2	0.4	2	45.0
Parametopella cypris (A)	1	0.2	0.4	2	45.0
Actiniaria (undet.)	1	0.2	0.4	2	45.0
Ophiuroidea (undet.) C (E)	1	0.2	0.4	2	45.0
Tellina iris (M)	1	0.2	0.4	2	45.0
Turbonilla sp. B (M)	1	0.2	0.4	2	45.0
Anachis avara (M)	1	0.2	0.4	2	45.0
Dentaliidae (undet.) A (M)	1	0.2	0.4	2	45.0
Pandora trilineata (M)	1	0.2	0.4	2	45.0
Terebra concava (M)	1	0.2	0.4	2	45.0
Goniada littorea (P)	1	0.2	0.4	2	45.0
Glycera capitata (P)	1	0.2	0.4	2	45.0
Armandia agilis (P)	1	0.2	0.4	2	45.0
Pareulepis sp. (P)	1	0.2	0.4	2	45.0
Naineris laevigata (P)	1	0.2	0.4	2	45.0
Arabella mutans (P)	1	0.2	0.4	2	45.0
Owenia fusiformis (P)	1	0.2	0.4	2	45.0
Haploscoloplos fragilis (P)	1	0.2	0.4	2	45.0
Aricidea sp. A (P)	1	0.2	0.4	2	45.0
Prionospio cristata (P)	1	0.2	0.4	2	45.0
Sigambra bassi (P)	1	0.2	0.4	2	45.0

Appendix 5.15 Abundance of macroinvertebrate species in grab collections from station DS15. (A = Amphipoda; C = Cumacea; Cc = Cephalochordata; D = Decapoda; E = Echinodermata; Ec = Ectoprocta; I = Isopoda; M = Mollusca; My = Mysidacea; P = Polychaeta; S = Sipunculida).

DS15					
Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Tellina probrina (M)	41	8.2	4.3	82	1.0
Trichophoxus floridanus (A)	38	7.6	2.8	76	2.0
Branchiostoma caribaeum (Cc)	32	6.4	2.6	64	3.0
Strigilla mirabilis (M)	31	6.2	1.5	62	4.5
Nephtys picta (P)	31	6.2	2.3	62	4.5
Nematoda (undet.)	24	4.8	3.8	48	6.0
Tellina texana (M)	22	4.4	2.6	44	7.0
Spiophanes bombyx (P)	14	2.8	0.8	28	8.0
Glycera oxycephala (P)	12	2.4	2.1	24	9.0
Tiron tropakis (A)	9	1.8	1.6	18	10.0
Trachypeneus constrictus (D)	8	1.6	1.5	16	11.0
Acanthohaustorius sp. (A)	7	1.4	1.7	14	12.0
Apanthura magnifica (I)	6	1.2	2.2	12	14.5
Nemertina (undet.) A	6	1.2	1.6	12	14.5
Cupuladria doma (Ec)	6	1.2	1.1	12	14.5
Goniadides carolinae (P)	6	1.2	2.2	12	14.5
Ervilia concentrica (M)	5	1.0	1.2	10	17.0
Bathyporeta parkeri (A)	4	0.8	1.1	8	20.5
Erichthonius brasiliensis (A)	4	0.8	1.3	8	20.5
Oxyurostylis smithi (C)	4	0.8	0.4	8	20.5
Semele nuculoides (M)	4	0.8	0.4	8	20.5
Lumbrineris laterilli (P)	4	0.8	0.4	8	20.5
Onuphis nebulosa (P)	4	0.8	0.8	8	20.5
Trichophoxus epistomus (A)	3	0.6	0.9	6	30.5
Liljeborgia sp. (A)	3	0.6	0.9	6	30.5
Ophiophragmus sp. A (E)	3	0.6	0.9	6	30.5
Discoporella umbellata (Ec)	3	0.6	0.5	6	30.5
Natica pusilla (M)	3	0.6	0.9	6	30.5
Pandora trilineaia (M)	3	0.6	0.9	6	30.5
Abra aequalis (M)	3	0.6	0.5	6	30.5
Crassinella lunulata (M)	3	0.6	0.5	6	30.5
Aspidosiphon misakiensis (S)	3	0.6	0.9	6	30.5
Aricidea cerruti (P)	3	0.6	0.9	6	30.5
Axiothella mucosa (P)	3	0.6	0.5	6	30.5
Armandia maculata (P)	3	0.6	0.5	6	30.5
Phyllodoce arenae (P)	3	0.6	0.5	6	30.5
Prionospio cristata (P)	3	0.6	0.5	6	30.5
Brachyura (undet.) A (D)	2	0.4	0.5	4	42.0
Gastrosaccus sp. A (My)	2	0.4	0.9	4	42.0
Acanthohaustorius millsi (A)	2	0.4	0.5	4	42.0
Cyathura burbancki (I)	2	0.4	0.5	4	42.0
Turbellaria (undet.)	2	0.4	0.5	4	42.0
Lucinidae (undet.) A (M)	2	0.4	0.9	4	42.0
Polycirrus eximius (P)	2	0.4	0.9	4	42.0
Onuphis eremita (P)	2	0.4	0.9	4	42.0
Magelona rosea (P)	2	0.4	0.5	4	42.0
Latreutes parvulus (D)	1	0.2	0.4	2	63.5
Brachyura (undet.) B (D)	1	0.2	0.4	2	63.5
Pinnixa sayana (D)	1	0.2	0.4	2	63.5
Portunidae (undet.) (D)	1	0.2	0.4	2	63.5
Jerbarnia sp. (A)	1	0.2	0.4	2	63.5
Colomastix halichondriae (A)	1	0.2	0.4	2	63.5
Ampelisca verrilli (A)	1	0.2	0.4	2	63.5
Eudevenopus honduranus (A)	1	0.2	0.4	2	63.5
Cyclaspis varians (C)	1	0.2	0.4	2	63.5
Sclerodactyla briareus (E)	1	0.2	0.4	2	63.5
Mellita quinquiesperforaia (E)	1	0.2	0.4	2	63.5
Olivella mutica (M)	1	0.2	0.4	2	63.5
Crepidula sp. (M)	1	0.2	0.4	2	63.5
Caecum pulchellum (M)	1	0.2	0.4	2	63.5
Terebra sp. A (M)	1	0.2	0.4	2	63.5

Appendix 5.15 (Cont.)

DS15

Species	Total Number	Number/0.1m^2 $\bar{x}$	SD	Estimated Number/m^2	Rank by Number
Oliva sayana (M)	1	0.2	0.4	2	63.5
Dentalium eboreum (M)	1	0.2	0.4	2	63.5
Aspidosiphon spinalis (S)	1	0.2	0.4	2	63.5
Sipunculida (undet.)	1	0.2	0.4	2	63.5
Scoloplos rubra (P)	1	0.2	0.4	2	63.5
Glycera sp. (Gar.) (P)	1	0.2	0.4	2	63.5
Goniada littorea (P)	1	0.2	0.4	2	63.5
Macroclymene zonalis (P)	1	0.2	0.4	2	63.5
Cirratulidae (undet.) B (P)	1	0.2	0.4	2	63.5
Tharyx marioni (P)	1	0.2	0.4	2	63.5
~~Nephtys incisa~~ (P)	1	0.2	0.4	2	63.5
Polydora sp. A (P)	1	0.2	0.4	2	63.5
Aedicira belgicae (P)	1	0.2	0.4	2	63.5
Phyllodoce castanea (P)	1	0.2	0.4	2	63.5
Glycera dibranchiata (P)	1	0.2	0.4	2	63.5
Haploscoloplos fragilis (P)	1	0.2	0.4	2	63.5
Aricidea sp. A (P)	1	0.2	0.4	2	63.5
Oligochaeta (undet.)	1	0.2	0.4	2	63.5
Cirratulidae (undet.) (P)	1	0.2	0.4	2	63.5

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