

Supplementary Material

1 Supplementary Appendices

Appendix 1a. Abundances and percentages of total numbers for all taxa from the West Protected Intertidal subdivision across both 1993 and 2010 datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Heteromastus filiformis</i>	1	0.039
Annelida	Polychaeta	Cirratulida	Paraonidae	<i>Paraonis fulgens</i>	93	3.673
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos fragilis</i>	81	3.199
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos foliosus</i>	1	0.039
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Orbinia riseri</i>	1	0.039
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Neanthes micromma</i>	1	0.039
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Phyllodoce</i> sp.	2	0.079
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Brania wellfleetensis</i>	1	0.039
Annelida	Polychaeta	Phyllodocida	Tomopteridae	<i>Tomopteris</i> sp.	3	0.118
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolecopsis squamata</i>	996	39.336
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora</i> sp.	2	0.079
Arthropoda	Copepoda			<i>Clausidium</i> sp.	3	0.118
Arthropoda	Malacostraca	Amphipoda	Corophiidae	<i>Corophium acherusicum</i>	3	0.118
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	461	18.207
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Lepidactylus</i> sp. A	373	14.731
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Photis</i> sp. C	2	0.079
Arthropoda	Malacostraca	Amphipoda	Ischyroceridae	<i>Erichthonius brasiliensis</i>	1	0.039
Arthropoda	Malacostraca	Amphipoda	Oedicerotidae	<i>Synchelidium americanum</i>	1	0.039
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Spilocuma watlingi</i>	3	0.118
Arthropoda	Malacostraca	Decapoda	Callinassidae	<i>Callichirus</i> sp.	1	0.039
Arthropoda	Malacostraca	Decapoda	Hippidae	<i>Emerita talpoida</i>	3	0.118
Arthropoda	Malacostraca	Decapoda	Pinnotheridae	<i>Pinnixa behreae</i>	4	0.158
Arthropoda	Malacostraca	Isopoda	Scyphacidae	<i>Scyphacella Arenicola</i>	47	1.856
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Exosphaeroma diminutum</i>	419	16.548

Arthropoda	Malacostraca	Tanaidacea	Kalliapseudidae	<i>Kalliapseudes</i> sp. A	4	0.158
Arthropoda	Malacostraca	Tanaidacea	Paratanaidae	<i>Hargeria rapax</i>	1	0.039
Mollusca	Bivalvia	Veneroida	Crassatellidae	<i>Goniocuna dalli</i>	18	0.711
Mollusca	Bivalvia	Veneroida	Donacidae	<i>Donax</i> sp.	5	0.197
Mollusca	Gastropoda	Mesogastropoda	Crepidulidae	Unid. Crepidulidae	1	0.039
Total					2532	100

Appendix 1b. Abundances and percentages of total numbers for all taxa from the West Protected Subtidal subdivision across both datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Amphinomida	Amphinomidae	<i>Linopherus ambigua</i>	5	0.024
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Heteromastus filiformis</i>	2	0.010
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Capitella capitata</i>	190	0.916
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Mediomastus californiensis</i>	94	0.453
Annelida	Polychaeta	Cirratulida	Paraonidae	<i>Paraonis fulgens</i>	2583	12.451
Annelida	Polychaeta	Eunicida	Arabellidae	<i>Drilonereis</i> sp.	2	0.010
Annelida	Polychaeta	Eunicida	Onuphidae	<i>Mooreonuphis</i> sp.	2	0.010
Annelida	Polychaeta	Magelonida	Magelonidae	<i>Magelona</i> sp. G	1	0.005
Annelida	Polychaeta	Opheliida	Opheliidae	<i>Armandia</i> sp.	3	0.014
Annelida	Polychaeta	Opheliida	Opheliidae	<i>Travisia hobsonae</i>	2	0.010
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos fragilis</i>	63	0.304
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Orbinia riseri</i>	1	0.005
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos foliosus</i>	1	0.005
Annelida	Polychaeta	Phyllodocida	Glyceridae	<i>Hemipodus roseus</i>	1	0.005
Annelida	Polychaeta	Phyllodocida	Hesionidae	<i>Gyptis brevipalpa</i>	19	0.092
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys simoni</i>	19	0.092
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys bucera</i>	12	0.058
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Neanthes micromma</i>	3	0.014
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Neanthes succinea</i>	98	0.472
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Laeonereis culveri</i>	17	0.082

Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Phyllodoce</i> sp.	11	0.053
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Hypereteone foliosus</i>	4	0.019
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Hypereteone heteropoda</i>	1	0.005
Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Ancistrosyllis hartmanae</i>	3	0.014
Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Ancistrosyllis</i> sp. C	1	0.005
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Brania wellfleetensis</i>	309	1.489
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Sphaerosyllis taylori</i>	1353	6.522
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Sphaerosyllis labyrinthophila</i>	519	2.502
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Parapionosyllis longicirrata</i>	308	1.485
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Streptosyllis pettiboneae</i>	144	0.694
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Parapionosyllis</i> sp. A	122	0.588
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Sphaerosyllis aciculata</i>	105	0.506
Annelida	Polychaeta	Phyllodocida	Tomopteridae	<i>Tomopteris</i> sp.	4	0.019
Annelida	Polychaeta	Polygordiida	Polygordiidae	<i>Polygordius</i> sp. A	549	2.646
Annelida	Polychaeta	Spionida	Poecilochaetidae	<i>Poecilochaetus johnsoni</i>	2	0.010
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolecopsis squamata</i>	481	2.319
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora</i> sp.	2	0.010
Annelida	Polychaeta	Spionida	Spionidae	<i>Spiophanes bombyx</i>	137	0.660
Annelida	Polychaeta	Spionida	Spionidae	<i>Dispio uncinata</i>	25	0.121
Annelida	Polychaeta	Spionida	Spionidae	<i>Carazziella hobsonae</i>	3	0.014
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora socialis</i>	2	0.010
Annelida	Polychaeta	Spionida	Spionidae	<i>Microspio pigmentata</i>	1	0.005
Arthropoda	Copepoda			<i>Clausidium</i> sp.	13	0.063
Arthropoda	Malacostraca	Amphipoda	Ampeliscidae	<i>Ampelisca holmesi</i>	7	0.034
Arthropoda	Malacostraca	Amphipoda	Corophiidae	<i>Corophium acherusicum</i>	12	0.058
Arthropoda	Malacostraca	Amphipoda	Corophiidae	<i>Corophium</i> sp.	1	0.005
Arthropoda	Malacostraca	Amphipoda	Gammaridae	<i>Gammarus mucronatus</i>	2	0.010
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	185	0.892
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Lepidactylus</i> sp. A	9912	47.778
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Acanthohaustorius</i> sp. B	99	0.477
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Acanthohaustorius uncinus</i>	14	0.067
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Parahaustorius</i> cf <i>longimerus</i>	9	0.043
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Microprotopus raneyi</i>	5	0.024
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Photis</i> cf <i>macromana</i>	1	0.005

Arthropoda	Malacostraca	Amphipoda	Ischyroceridae	<i>Erichthonius brasiliensis</i>	2	0.010
Arthropoda	Malacostraca	Amphipoda	Oedicerotidae	<i>Monoculodes nyei</i>	1	0.005
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Spilocuma watlingi</i>	115	0.554
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Spilocuma salomani</i>	9	0.043
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Cyclaspis cf varians</i>	4	0.019
Arthropoda	Malacostraca	Cumacea	Diastylidae	<i>Oxyurostylis</i> sp. A	62	0.299
Arthropoda	Malacostraca	Decapoda	Callianassidae	<i>Callichirus</i> sp.	6	0.029
Arthropoda	Malacostraca	Decapoda	Pinnotheridae	<i>Pinnixa behrae</i>	32	0.154
Arthropoda	Malacostraca	Decapoda	Pinnotheridae	<i>Pinnixa</i> sp. A	1	0.005
Arthropoda	Malacostraca	Isopoda	Idoteidae	<i>Edotia triloba</i>	2	0.010
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Exosphaeroma diminutum</i>	1500	7.230
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Bowmaniella floridana</i>	23	0.111
Arthropoda	Malacostraca	Stomatopoda	Nannosquillidae	<i>Coronis scolopendra</i>	1	0.005
Arthropoda	Malacostraca	Tanaidacea	Kalliapseudidae	<i>Kalliapseudes</i> sp. A	1143	5.509
Arthropoda	Malacostraca	Tanaidacea	Paratanaidae	<i>Hargeria rapax</i>	1	0.005
Arthropoda	Merostomata	Xiphosurida	Limulidae	<i>Limulus polyphemus</i>	11	0.053
Chordata	Leptocardii	Amphioxi	Branchiostomidae	<i>Branchiostoma cf floridae</i>	8	0.039
Cnidaria	Anthozoa	Actiniaria	Edwardsiidae	<i>Edwardsia</i> cf sp.	1	0.005
Echinodermata	Asteroidea	Platyasterida	Luidiidae	<i>Luidia clathrate</i>	1	0.005
Echinodermata	Echinoidea	Clypeasteroidea	Scutellidae	<i>Mellita quinquiesperforata</i>	21	0.101
Echinodermata	Holothuroidea	Apodida	Synaptidae	<i>Leptosynapta crassipatina</i>	12	0.058
Mollusca	Bivalvia	Veneroidea	Crassatellidae	<i>Goniocuna dalli</i>	238	1.147
Mollusca	Bivalvia	Veneroidea	Crassatellidae	<i>Crassinella martinicensis</i>	1	0.005
Mollusca	Bivalvia	Veneroidea	Donacidae	<i>Donax</i> sp.	17	0.082
Mollusca	Bivalvia	Veneroidea	Solenidae	<i>Ensis minor</i>	6	0.029
Mollusca	Gastropoda	Mesogastropoda	Vitrinellidae	<i>Cyclotremiscus</i> sp. A	1	0.005
Nemertea				Nemertea sp. F	47	0.227
Nemertea				Nemertea sp. A	4	0.019
Sipuncula				Unid. Sipuncula	12	0.058
Total					20746	100

Appendix 1c. Abundances and percentages of total numbers for all taxa from the West Exposed Intertidal subdivision across both datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Cirratulida	Paraonidae	<i>Paraonis fulgens</i>	23	1.718
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys bucera</i>	2	0.149
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolelepis squamata</i>	619	46.229
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora</i> sp.	1	0.075
Annelida	Polychaeta	Spionida	Spionidae	<i>Spiophanes bombyx</i>	3	0.224
Arthropoda	Malacostraca	Amphipoda	Corophiidae	<i>Corophium</i> cf <i>tuberculatum</i>	1	0.075
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	148	11.053
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Microprotopus raneyi</i>	1	0.075
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Photis pugnator</i>	7	0.523
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Spilocuma salomani</i>	5	0.373
Arthropoda	Malacostraca	Decapoda	Hippidae	<i>Emerita talpoida</i>	43	3.211
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Exosphaeroma diminutum</i>	3	0.224
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Ancinus depressus</i>	7	0.523
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Bowmaniella floridana</i>	1	0.075
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Metamysidopsis swifti</i>	11	0.822
Echinodermata	Echinoidea	Clypeasteroidea	Scutellidae	<i>Mellita quinquiesperforata</i>	1	0.075
Echinodermata	Holothuroidea	Dendrochirotida	Cucumariidae	<i>Allothyone mexicana</i>	1	0.075
Mollusca	Bivalvia	Veneroidea	Crassatellidae	<i>Goniocuna dalli</i>	138	10.306
Mollusca	Bivalvia	Veneroidea	Donacidae	<i>Donax</i> sp.	323	24.122
Mollusca	Bivalvia	Veneroidea	Lucinidae	<i>Lucina radians</i>	1	0.075
Total					1339	100

Appendix 1d. Abundances and percentages of total numbers for all taxa from the West Exposed Subtidal subdivision across both datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Cirratulida	Paraonidae	<i>Paraonis fulgens</i>	879	31.551
Annelida	Polychaeta	Magelonida	Magelonidae	<i>Magelona</i> sp. A	1	0.036
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos fragilis</i>	76	2.728
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys simoni</i>	21	0.754
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys bucera</i>	25	0.897
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Phyllodoce</i> sp.	10	0.359
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Brania wellfleetensis</i>	1	0.036
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolecopsis squamata</i>	748	26.849
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora</i> sp.	10	0.359
Annelida	Polychaeta	Spionida	Spionidae	<i>Spiophanes bombyx</i>	74	2.656
Annelida	Polychaeta	Spionida	Spionidae	<i>Dispio uncinata</i>	2	0.072
Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio pygmaea</i>	1	0.036
Arthropoda	Copepoda			<i>Clausidium</i> sp.	1	0.036
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	431	15.470
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Lepidactylus</i> sp. A	1	0.036
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Parahaustorius</i> cf <i>longimerus</i>	6	0.215
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Acanthohaustorius</i> sp. A	1	0.036
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Microprotopus raneyi</i>	1	0.036
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Photis pugnator</i>	5	0.179
Arthropoda	Malacostraca	Amphipoda	Oedicerotidae	<i>Synchelidium americanum</i>	40	1.436
Arthropoda	Malacostraca	Amphipoda	Oedicerotidae	<i>Monoculodes nyei</i>	1	0.036
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Spilocuma watlingi</i>	5	0.179
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Spilocuma salomani</i>	142	5.097
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Cyclaspis</i> cf <i>varians</i>	2	0.072
Arthropoda	Malacostraca	Cumacea	Diastylidae	<i>Oxyurostylis</i> sp. A	1	0.036
Arthropoda	Malacostraca	Decapoda	Callinassidae	<i>Callichirus</i> sp.	1	0.036

Arthropoda	Malacostraca	Decapoda	Hippidae	<i>Emerita talpoida</i>	1	0.036
Arthropoda	Malacostraca	Decapoda	Pinnotheridae	<i>Pinnixa behreae</i>	3	0.108
Arthropoda	Malacostraca	Decapoda	Pinnotheridae	<i>Pinnixa chacei</i>	1	0.036
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Exosphaeroma diminutum</i>	4	0.144
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Ancinus depressus</i>	63	2.261
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Bowmaniella floridana</i>	49	1.759
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Metamysidopsis swifti</i>	15	0.538
Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	<i>Ophiophragmus moorei</i>	1	0.036
Mollusca	Bivalvia	Veneroida	Crassatellidae	<i>Goniocuna dalli</i>	75	2.692
Mollusca	Bivalvia	Veneroida	Crassatellidae	<i>Crassinella martinicensis</i>	1	0.036
Mollusca	Bivalvia	Veneroida	Donacidae	<i>Donax</i> sp.	87	3.123
Total					2786	100

Appendix 1e. Abundances and percentages of total numbers for all taxa from the East Protected Intertidal subdivision across both datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Capitella capitata</i>	15	0.678
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Neanthes succinea</i>	3	0.136
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Laeonereis culveri</i>	28	1.266
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Sphaerosyllis taylori</i>	1	0.045
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolecopsis squamata</i>	31	1.401
Annelida	Polychaeta	Spionida	Spionidae	<i>Spiophanes bombyx</i>	1	0.045
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	465	21.022
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Lepidactylus</i> sp. A	1541	69.665
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Photis</i> sp. C	1	0.045
Arthropoda	Malacostraca	Cumacea	Nannastacidae	<i>Almyracuma</i> sp.	34	1.537
Arthropoda	Malacostraca	Decapoda	Hippidae	<i>Emerita talpoida</i>	4	0.181
Arthropoda	Malacostraca	Isopoda	Scyphacidae	<i>Scyphacella arenicola</i>	13	0.588
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Exosphaeroma diminutum</i>	29	1.311
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Metamysidopsis swifti</i>	13	0.588
Arthropoda	Malacostraca	Tanaidacea	Paratanaidae	<i>Hargeria rapax</i>	3	0.136
Cnidaria	Hydrozoa	Hydroida	Campanularidae	<i>Clytia cylindrica</i>	1	0.045
Mollusca	Bivalvia	Veneroida	Veneridae	<i>Parastarte triquetra</i>	19	0.859

Mollusca	Bivalvia	Veneroida	Veneridae	<i>Anomalocardia auberiana</i>	9	0.407
Mollusca	Gastropoda	Neogastropoda	Marginellidae	<i>Marginella apicina</i>	1	0.045
Total					2212	100

Appendix 1f. Abundances and percentages of total numbers for all taxa from the East Protected Subtidal subdivision across both datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Amphinomida	Amphinomidae	<i>Linopherus ambigua</i>	5	0.070
Annelida	Polychaeta	Capitellida	Arenicolidae	<i>Arenicola cristata</i>	1	0.014
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Heteromastus filiformis</i>	171	2.400
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Capitella capitata</i>	66	0.926
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Mediomastus californiensis</i>	5	0.070
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Dasybranchus lumbricoides</i>	7	0.098
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Capitella jonesi</i>	1	0.014
Annelida	Polychaeta	Capitellida	Maldanidae	<i>Axiiothella</i> cf <i>mucosa</i>	100	1.404
Annelida	Polychaeta	Capitellida	Maldanidae	<i>Euclymene</i> nr sp. B	1	0.014
Annelida	Polychaeta	Chaetopterida	Chaetopteridae	<i>Spiochaetopterus costarum</i>	1	0.014
Annelida	Polychaeta	Cirratulida	Paraonidae	<i>Paraonis fulgens</i>	488	6.849
Annelida	Polychaeta	Cirratulida	Paraonidae	<i>Aricidea philbinae</i>	6	0.084
Annelida	Polychaeta	Magelonida	Magelonidae	<i>Magelona pettiboneae</i>	26	0.365
Annelida	Polychaeta	Opheliida	Opheliidae	<i>Travisia hobsonae</i>	1	0.014
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos fragilis</i>	5	0.070
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Orbinia riseri</i>	1	0.014
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos foliosus</i>	1	0.014
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Leitoscoloplos robustus</i>	213	2.989
Annelida	Polychaeta	Phyllodocida	Glyceridae	<i>Glycera</i> sp.	9	0.126
Annelida	Polychaeta	Phyllodocida	Hesionidae	<i>Gyptis brevipalpa</i>	5	0.070
Annelida	Polychaeta	Phyllodocida	Hesionidae	<i>Microphthalmus szcelkowi</i>	173	2.428
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys bucera</i>	1	0.014
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Neanthes succinea</i>	20	0.281

Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Laeonereis culveri</i>	367	5.151
Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Nereis falsa</i>	6	0.084
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Phyllodoce</i> sp.	10	0.140
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Hypereteone foliosus</i>	16	0.225
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Hypereteone heteropoda</i>	78	1.095
Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Ancistrosyllis hartmanae</i>	1	0.014
Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Parandalia americana</i>	13	0.182
Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Ancistrosyllis carolinensis</i>	5	0.070
Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Sigambra tentaculata</i>	3	0.042
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Brania wellfleetensis</i>	1	0.014
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Sphaerosyllis taylori</i>	377	5.291
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Streptosyllis pettiboneae</i>	70	0.982
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Sphaerosyllis aciculata</i>	2	0.028
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Grubeosyllis clavata</i>	15	0.211
Annelida	Polychaeta	Phyllodocida	Syllidae	<i>Exogone dispar</i>	2	0.028
Annelida	Polychaeta	Polygordiida	Polygordiidae	<i>Polygordius</i> sp. A	18	0.253
Annelida	Polychaeta	Sabellida	Sabellidae	<i>Chone</i> sp. A	14	0.196
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolecopsis squamata</i>	91	1.277
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora</i> sp.	6	0.084
Annelida	Polychaeta	Spionida	Spionidae	<i>Spiophanes bombyx</i>	30	0.421
Annelida	Polychaeta	Spionida	Spionidae	<i>Dispio uncinata</i>	1	0.014
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora socialis</i>	1	0.014
Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio heterobranchia</i>	21	0.295
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolecopsis texana</i>	12	0.168
Annelida	Polychaeta	Terebellida	Ampharetidae	<i>Hobsonia florida</i>	1	0.014
Annelida	Polychaeta	Terebellida	Pectinariidae	<i>Pectinaria gouldii</i>	2	0.028
Arthropoda	Malacostraca	Amphipoda	Ampeliscidae	<i>Ampelisca holmesi</i>	1	0.014
Arthropoda	Malacostraca	Amphipoda	Gammaridae	<i>Gammarus mucronatus</i>	2	0.028
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	52	0.730
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Lepidactylus</i> sp. A	3541	49.698
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Acanthohaustorius uncinus</i>	245	3.439
Arthropoda	Malacostraca	Amphipoda	Ischyroceridae	<i>Erichthonius brasiliensis</i>	2	0.028
Arthropoda	Malacostraca	Amphipoda	Oedicerotidae	<i>Monoculodes nyei</i>	3	0.042
Arthropoda	Malacostraca	Amphipoda	Oedicerotidae	<i>Monoculodes</i> sp. A	38	0.533

Arthropoda	Malacostraca	Amphipoda	Talitridae	<i>Americorchestia salomani</i>	4	0.056
Arthropoda	Malacostraca	Cumacea	Diastylidae	<i>Oxyurostylis</i> sp. A	27	0.379
Arthropoda	Malacostraca	Cumacea	Nannastacidae	<i>Almyracuma</i> sp.	8	0.112
Arthropoda	Malacostraca	Cumacea	Nannastacidae	<i>Almyracuma</i> cf <i>proximoculi</i>	4	0.056
Arthropoda	Malacostraca	Decapoda	Alpheidae	<i>Leptalpheus forceps</i>	2	0.028
Arthropoda	Malacostraca	Decapoda	Callianassidae	<i>Lepidophthalmus louisianensis</i>	1	0.014
Arthropoda	Malacostraca	Isopoda	Hyssuridae	<i>Xenanthura brevitelson</i>	2	0.028
Arthropoda	Malacostraca	Isopoda	Idoteidae	<i>Erichsonella attenuata</i>	1	0.014
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Exosphaeroma diminutum</i>	8	0.112
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Bowmaniella floridana</i>	22	0.309
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Taphromysis bowmani</i>	8	0.112
Arthropoda	Malacostraca	Tanaidacea	Kalliapseudidae	<i>Kalliapseudes</i> sp. A	3	0.042
Arthropoda	Malacostraca	Tanaidacea	Paratanaidae	<i>Hargeria rapax</i>	1	0.014
Chordata	Leptocardii	Amphioxi	Branchiostomidae	<i>Branchiostoma</i> cf <i>floridae</i>	16	0.225
Cnidaria	Anthozoa	Actiniaria	Edwardsiidae	<i>Edwardsia</i> cf sp.	8	0.112
Cnidaria	Anthozoa	Ceriantharia	Cerianthidae	<i>Ceriantheopsis</i> sp.	2	0.028
Echinodermata	Holothuroidea	Apodida	Synaptidae	<i>Leptosynapta crassipatina</i>	29	0.407
Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	<i>Ophiophragmus</i> cf <i>filograneus</i>	1	0.014
Mollusca	Bivalvia	Mytiloida	Mytilidae	<i>Geukensia demissa</i>	5	0.070
Mollusca	Bivalvia	Pholadomyoida	Lyonsiidae	<i>Lyonsia hyalina</i>	25	0.351
Mollusca	Bivalvia	Veneroida	Corbiculidae	<i>Corbicula fluminea</i>	2	0.028
Mollusca	Bivalvia	Veneroida	Leptonidae	<i>Mysella planulata</i>	52	0.730
Mollusca	Bivalvia	Veneroida	Lucinidae	<i>Lucina radians</i>	3	0.042
Mollusca	Bivalvia	Veneroida	Solecurtidae	<i>Tagelus plebeius</i>	10	0.140
Mollusca	Bivalvia	Veneroida	Solenidae	<i>Ensis minor</i>	59	0.828
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Tellina lineata</i>	28	0.393
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Macoma</i> sp.	8	0.112
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Tellina tampaensis</i>	7	0.098
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Tellina texana</i>	1	0.014
Mollusca	Bivalvia	Veneroida	Veneridae	<i>Parastarte triquetra</i>	138	1.937
Mollusca	Bivalvia	Veneroida	Veneridae	<i>Anomalocardia auberiana</i>	60	0.842
Mollusca	Gastropoda	Cephalaspidea	Acteocinidae	<i>Acteocina canaliculata</i>	7	0.098

Mollusca	Gastropoda	Mesogastropoda	Naticidae	<i>Natica pusilla</i>	1	0.014
Mollusca	Gastropoda	Mesogastropoda	Vitrinellidae	<i>Teinostoma</i> sp. C	2	0.028
Mollusca	Gastropoda	Neogastropoda	Marginellidae	<i>Marginella apicina</i>	5	0.070
Mollusca	Gastropoda	Neogastropoda	Marginellidae	<i>Granulina ovuliformis</i>	5	0.070
Mollusca	Gastropoda	Neogastropoda	Nassaridae	<i>Nassarius vibex</i>	4	0.056
Nemertea				Nemertea sp. F	16	0.225
Nemertea				Nemertea sp. A	5	0.070
Nemertea				Nemertea sp. B	164	2.302
Nemertea				Nemertea sp. D	5	0.070
Nemertea				Nemertea sp. C	2	0.028
Sipuncula				Unid. Sipuncula	10	0.140
Total					7125	100

Appendix 1g. Abundances and percentages of total numbers for all taxa from the East Exposed Intertidal subdivision across both datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolelepis squamata</i>	406	39.882
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	30	2.947
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Microprotopus raneyi</i>	1	0.098
Arthropoda	Malacostraca	Decapoda	Hippidae	<i>Emerita talpoida</i>	39	3.831
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Metamysidopsis swifti</i>	3	0.295
Mollusca	Bivalvia	Veneroida	Cardiidae	<i>Laevicardium mortoni</i>	1	0.098
Mollusca	Bivalvia	Veneroida	Donacidae	<i>Donax</i> sp.	537	52.750
Mollusca	Bivalvia	Veneroida	Veneridae	<i>Anomalocardia auberiana</i>	1	0.098
Total					1018	100

Appendix 1h. Abundances and percentages of total numbers for all taxa from the East Exposed Subtidal subdivision across both datasets used for this study.

PHYLUM	CLASS	ORDER	FAMILY	TAXON	Number	Percent
Annelida	Polychaeta	Cirratulida	Paraonidae	<i>Paraonis fulgens</i>	18	0.183
Annelida	Polychaeta	Phyllodocida	Hesionidae	<i>Microthalmus scelkowi</i>	2	0.020
Annelida	Polychaeta	Phyllodocida	Hesionidae	<i>Microthalmus</i> sp. B	6	0.061
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys simoni</i>	2	0.020
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys bucera</i>	3	0.031
Annelida	Polychaeta	Phyllodocida	Polynoidae	<i>Perolepis</i> sp. B	2	0.020
Annelida	Polychaeta	Phyllodocida	Tomopteridae	<i>Tomopteris</i> sp.	1	0.010
Annelida	Polychaeta	Spionida	Spionidae	<i>Scolecopsis squamata</i>	7637	77.825
Annelida	Polychaeta	Spionida	Spionidae	<i>Spiophanes bombyx</i>	1	0.010
Arthropoda	Copepoda			<i>Clausidium</i> sp.	1	0.010
Arthropoda	Malacostraca	Amphipoda	Haustoriidae	<i>Haustorius jayneae</i>	154	1.569
Arthropoda	Malacostraca	Amphipoda	Isaeidae	<i>Microprotopus raneyi</i>	1	0.010
Arthropoda	Malacostraca	Amphipoda	Ischyroceridae	<i>Erichthonius brasiliensis</i>	1	0.010
Arthropoda	Malacostraca	Amphipoda	Platyischnopidae	<i>Eudevenopus honduranus</i>	1	0.010
Arthropoda	Malacostraca	Cumacea	Bodotriidae	<i>Spilocuma salomani</i>	44	0.448
Arthropoda	Malacostraca	Decapoda	Albuneidae	<i>Lepidopa benedicti</i>	2	0.020
Arthropoda	Malacostraca	Decapoda	Hippidae	<i>Emerita talpoida</i>	22	0.224
Arthropoda	Malacostraca	Decapoda	Hippidae	<i>Emerita benedicti</i>	1	0.010
Arthropoda	Malacostraca	Decapoda	Pinnotheridae	<i>Pinnixa behreae</i>	1	0.010
Arthropoda	Malacostraca	Isopoda	Sphaeromatidae	<i>Ancinus depressus</i>	5	0.051
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Bowmaniella floridana</i>	4	0.041
Arthropoda	Malacostraca	Mysidacea	Mysidae	<i>Metamysidopsis swifti</i>	1376	14.022
Mollusca	Bivalvia	Veneroida	Cardiidae	<i>Laevicardium mortoni</i>	2	0.020
Mollusca	Bivalvia	Veneroida	Donacidae	<i>Donax</i> sp.	524	5.340
Mollusca	Bivalvia	Veneroida	Solenidae	<i>Ensis minor</i>	1	0.010
Mollusca	Gastropoda	Neogastropoda	Terebridae	<i>Hastula salleana</i>	1	0.010
Total					9813	100

Appendix 1i. Comprehensive summary of macrofaunal samples across combined 1993 and 2010 datasets. DstSideHab – District Side Habitat subdivisions, Tot # = total number, # Sam = number of box-cores, Area = total area sampled (i.e., # Sam × 0.016 m²), Total dens = total density (i.e., Tot #/Area), S = species richness (i.e., number of taxa), Hyd = Hydrozoans; Anth = Anthozoans; Poly = Polychaetes; Amph = Amphipods; Cum = Cumaceans; Deca = Decapods; Iso = Isopods; Tan = Tanaids; Mysd = Mysids; Stom = Stomatopods; Cope = Copepods; Limu = Limulid; Bival = Bivalves; Gast = Gastropods; Echin = Echinoderms; Nem = Nemerteans; Sip = Sipunculids; Branch = Branchiostomatids .

DstSideHab	Tot #	# Sam	Area	Total dens	S	S/m ²	Hyd	Anth	Poly	Amph	Cum	Deca	Iso	Tan	Mysd	Stom	Cope	Limu	Bival	Gast	Echin	Nem	Sip	Branch
West Prot Intertidal	2,532	58	0.928	2,728.45	29	31.25	0	0	11	6	1	3	2	2	0	0	1	0	2	1	0	0	0	0
West Prot Subtidal	20,746	85	1.360	15,254.41	83	61.03	0	1	42	13	4	3	2	2	1	1	1	1	4	1	3	2	1	1
West Exp Intertidal	1,339	50	0.800	1,673.75	20	25.00	0	0	5	4	1	1	2	0	2	0	0	0	3	0	2	0	0	0
West Exp Subtidal	2,786	69	1.104	2,523.55	37	33.51	0	0	12	8	4	4	2	0	2	0	1	0	3	0	1	0	0	0
East Prot Intertidal	2,212	47	0.752	2,941.49	19	25.27	1	0	6	3	1	1	2	1	1	0	0	0	2	1	0	0	0	0
East Prot Subtidal	7,125	75	1.200	5,937.50	100	83.33	0	2	49	9	3	2	3	2	2	0	0	0	13	6	2	5	1	1
East Exp Intertidal	1,018	30	0.480	2,120.83	8	16.67	0	0	1	2	0	1	0	0	1	0	0	0	3	0	0	0	0	0
East Exp Subtidal	9,813	45	0.720	13,629.17	26	36.11	0	0	9	4	1	4	1	0	2	0	1	0	3	1	0	0	0	0
Totals	47,571	459	7.344	6,477.53	159	21.65	1	2	68	21	6	9	6	2	3	1	1	1	17	9	5	5	1	1

Appendix 2a. PERMDISP Distance-based tests for homogeneity of multivariate dispersions (PERMDISP) Transformation: Fourth root; Resemblance measure: S17 Bray-Curtis dissimilarity; metric: deviations from centroid – (bold = significant by Holm’s sequential Bonferroni correction for multiple testing). (YearHab – Year/Habitat; DisSid – District/Side; DisHab – District/Habitat; SidHab – Side/Habitat; DisSidHab – District/Side/Habitat; West – Western district; east – Eastern district; Prot – Protected sites; Exp – Exposed sites; Inter – Intertidal habitat; Sib – Subtidal habitat).

Factor terms	Number of Groups	Dev Centroid F-value	df1	df2	P	Factor Level; mean ± se (n)	Pairwise comparisons, t, P(perm)		
Year	2	0.00005	1	457	0.992	1993; 56.703 ± 0.632 (255)	-----		-----
						2010; 56.709 ± 0.640 (204)	-----		-----
District	2	34.851	1	457	0.001	West; 53.489 ± 0.600 (262)	-----		-----
						East; 58.522 ± 0.575 (197)	-----		-----
Side	2	143.41	1	457	0.001	Prot; 56.812 ± 0.593 (265)	-----		-----
						Exp; 44.214 ± 0.925 (194)	-----		-----
Habitat	2	2.9191	1	457	0.102	Inter; 54.248 ± 0.909 (185)	-----		-----
						Sub; 55.916 ± 0.516 (274)	-----		-----
YearHab	4	6.0783	3	455	0.003	1993 Inter; 52.425 ± 1.377 (85)	(1993inter,1993sub) 1.1335 0.325		-----
						1993 Sub; 53.882 ± 0.673 (170)	(1993inter,2010sub) 1.0366 0.333		-----
						2010 Inter; 51.128 ± 1.209 (100)	(1993inter,2010inter) 2.3536 0.039		-----
						2010 Sub; 56.978 ± 0.754 (104)	(1993sub,2010sub) 2.967 0.008		-----
						-----	(1993sub,2010inter) 2.1579 0.053		-----
						-----	(2010sub,2010inter) 4.1382 0.002		-----
DisSid	4	38.587	3	455	0.001	WestProt; 51.798 ± 0.871 (143)	(Westprot,Westexpo) 5.2182 0.001		-----
						WestExp; 44.523 ± 1.114 (119)	(Westprot,Eastprot) 2.1992 0.054		-----
						EastProt; 54.630 ± 0.949 (122)	(Westprot,Eastexpo) 7.9854 0.001		-----
						EastExp; 39.083 ± 1.442 (75)	(Westexpo,Eastprot) 6.9196 0.001		-----
						-----	(Westexpo,Eastexpo) 3.0051 0.004		-----
						-----	(Eastprot,Eastexpo) 9.3888 0.001		-----
DisHab	4	16.012	3	455	0.001	WestInter; 50.349 ± 1.205 (108)	(Westinter,Westsub) 0.40522 0.710		-----
						WestSub; 50.869 ± 0.663 (154)	(Westinter,Eastinter) 2.277 0.038		-----
						EastInter; 54.458 ± 1.306 (77)	(Westinter,Eastsub) 5.8031 0.001		-----
						EastSub; 57.817 ± 0.560 (120)	(Westsub,Eastinter) 2.7281 0.005		-----
						-----	(Westsub,Eastsub) 7.7264 0.001		-----
						-----	(Eastinter,Eastsub) 2.6706 0.014		-----
SidHab	4	25.779	3	455	0.001	ProtInter; 52.633 ± 1.364 (105)	(protinter,protsub) 0.15739 0.886		-----
						ProtSub; 52.407 ± 0.745 (160)	(protinter,exposub) 5.3166 0.001		-----
						ExplInter; 40.863 ± 1.78 (80)	(protinter,expointer) 5.3474 0.001		-----
						ExpSub; 43.595 ± 1.041 (114)	(protsub,exposub) 7.0742 0.001		-----
						-----	(protsub,expointer) 7.0458 0.001		-----
						-----	(exposub,expointer) 1.4097 0.215		-----
DisSidHab	8	11.271	7	451	0.001	WestProtInter; 48.406 ± 1.8032 (58)	(Westprotinter,Westprotsub) 3.2231 0.006	(Westexposub,Eastprotinter) 0.68139 0.552	
						WestProtSub; 42.546 ± 0.863 (85)	(Westprotinter,Westexposub) 2.200 0.041	(Westexposub,Eastprotsub) 5.4779 0.001	
						WestExpInter; 40.759 ± 2.145 (50)	(Westprotinter,Westexpointer) 2.7474 0.011	(Westexposub,Eastexposub) 3.1318 0.003	
						WestExpSub; 43.485 ± 1.382 (69)	(Westprotinter,Eastprotinter) 0.99606 0.411	(Westexposub,Eastexpointer) 2.8215 0.009	
						EastProtInter; 45.338 ± 2.600 (47)	(Westprotinter,Eastprotsub) 2.1729 0.040	(Westexpointer,Eastprotinter) 1.3646 0.225	
						EastProtSub; 52.590 ± 0.962 (75)	(Westprotinter,Eastexposub) 4.7883 0.001	(Westexpointer,Eastprotsub) 5.6052 0.001	
						EastExpInter; 35.308 ± 3.046 (30)	(Westprotinter,Eastexpointer) 3.9365 0.002	(Westexpointer,Eastexposub) 1.3727 0.186	
						EastExpSub; 37.242 ± 1.264 (45)	(Westprotsub,Westexposub) 0.59792 0.604	(Westexpointer,Eastexpointer) 1.4977 0.205	
							(Westprotsub,Westexpointer) 0.89686 0.397	(Eastprotinter,Eastprotsub) 3.0381 0.004	
							(Westprotsub,Eastprotinter) 1.2405 0.271	(Eastprotinter,Eastexposub) 2.7619 0.018	
							(Westprotsub,Eastprotsub) 7.7922 0.001	(Eastprotinter,Eastexpointer) 2.4676 0.024	
							(Westprotsub,Eastexposub) 3.5343 0.001	(Eastprotsub,Eastexposub) 9.7028 0.001	
							(Westprotsub,Eastexpointer) 3.1305 0.007	(Eastprotsub,Eastexpointer) 7.0624 0.001	
							(Westexposub,Westexpointer) 1.1154 0.317	(Eastexposub,Eastexpointer) 0.66131 0.547	

Appendix 3a: Similarity percentage (SIMPER) comparisons interpreting macrofaunal differences between years for the two districts, within habitats for the two districts, and within habitats for exposed and protected sites representing the two districts. Comparisons comprise either the top 20 taxa or the number of taxa making up ≥ 90 percent of the cumulative macrofaunal abundance. (MS – Western district; FL – Eastern district; inter – Intertidal habitat; subti – Subtidal habitat; prot – Protected site; expo – Exposed site; Abund – Abundance; Diss – Bray Curtis dissimilarity).

Code	Species	Group MS1993 Avg. Abund	Group MS2010 Avg. Abund	Avg dissim = 72.10 Avg. Diss	Diss/SD	Contrib%	Cum. %
SCSQ	<i>Scolecopsis squamata</i>	1.32	1.25	4.91	0.96	6.81	6.81
PRFL	<i>Paraonis fulgens</i>	1.17	0.97	4.65	1.18	6.45	13.27
LPSA	<i>Lepidactylus</i> sp. A	1.08	0.51	4.41	0.80	6.11	19.38
EXDM	<i>Exosphaeroma diminutum</i>	0.83	1.00	4.40	1.02	6.10	25.48
HSSA	<i>Haustorius jayneae</i>	1.26	0.79	4.04	1.06	5.60	31.08
DNSP	<i>Donax</i> sp.	0.61	0.65	3.25	0.89	4.51	35.59
CNDL	<i>Goniocuna dalli</i>	0.19	0.61	3.17	0.79	4.40	39.99
KLSA	<i>Kalliapseudes</i> sp. A	0.59	0.47	2.50	0.99	3.47	43.46
SPSL	<i>Spilocuma salomani</i>	0.32	0.28	2.23	0.73	3.09	46.55
SPWT	<i>Spilocuma watlingi</i>	0.38	0.32	1.76	0.91	2.44	48.99
LTFR	<i>Leitoscoloplos fragilis</i>	0.25	0.26	1.75	0.63	2.43	51.42
SHBM	<i>Spiophanes bombyx</i>	0.37	0.28	1.62	0.74	2.24	53.66
SSTA	<i>Sphaerosyllis taylori</i>	0.49	0.16	1.43	0.59	1.99	55.64
NPSM	<i>Nephtys simoni</i>	0.00	0.36	1.39	0.68	1.93	57.57
ANDP	<i>Ancinus depressus</i>	0.05	0.26	1.31	0.56	1.82	59.39
SCAR	<i>Scyphacella arenicola</i>	0.13	0.06	1.28	0.38	1.78	61.17
EMTL	<i>Emerita talpoida</i>	0.13	0.13	1.27	0.50	1.76	62.93
NPBC	<i>Nephtys bucera</i>	0.34	0.00	1.19	0.69	1.65	64.58
BWFL	<i>Bowmaniella dissimilis</i>	0.22	0.22	1.18	0.66	1.63	66.21
PNBH	<i>Austinia behreae</i>	0.15	0.27	1.07	0.73	1.49	67.70
Code	Species	Group FL1993 Av. Abund	Group FL2010 Av. Abund	Avg dissim = 80.52 Av. Diss	Diss/SD	Contrib%	Cum. %
SCSQ	<i>Scolecopsis squamata</i>	0.89	1.46	8.32	1.00	10.34	10.34
LPSA	<i>Lepidactylus</i> sp. A	1.24	0.88	7.85	0.87	9.75	20.09
HSSA	<i>Haustorius jayneae</i>	0.64	0.69	5.01	0.91	6.22	26.31
DNSP	<i>Donax</i> sp.	0.37	0.64	4.41	0.77	5.48	31.79
MTSW	<i>Metamysidopsis swifti</i>	0.56	0.00	3.34	0.67	4.15	35.93
PRFL	<i>Paraonis fulgens</i>	0.60	0.45	3.21	0.99	3.99	39.92
EMTL	<i>Emerita talpoida</i>	0.34	0.25	2.86	0.75	3.55	43.47
LACL	<i>Laeonereis culveri</i>	0.56	0.31	2.69	0.80	3.34	46.81
NESC	<i>Alitta succinea</i>	0.08	0.32	1.91	0.72	2.37	49.18
EXDM	<i>Exosphaeroma diminutum</i>	0.10	0.23	1.66	0.53	2.07	51.25
NMSB	<i>Nemertea</i> sp. B	0.40	0.06	1.45	0.62	1.80	53.05
SHBM	<i>Spiophanes bombyx</i>	0.23	0.18	1.38	0.65	1.72	54.77
HMFL	<i>Heteromastus filiformis</i>	0.29	0.18	1.35	0.55	1.68	56.45
HYLC	<i>Eteone foliosa</i>	0.00	0.27	1.34	0.57	1.66	58.11
SPSL	<i>Spilocuma salomani</i>	0.22	0.04	1.30	0.53	1.62	59.73
CPCP	<i>Capitella capitata</i>	0.32	0.04	1.22	0.57	1.52	61.25
MRSZ	<i>Microphthalmus sczelkowi</i>	0.27	0.15	1.13	0.59	1.40	62.65

AVAU	<i>Anomalocardia auberiana</i>	0.25	0.08	1.09	0.53	1.35	64.00
ENMN	<i>Ensis minor</i>	0.28	0.00	1.04	0.59	1.30	65.30
SSTA	<i>Sphaerosyllis taylori</i>	0.35	0.00	0.90	0.55	1.11	66.42
		Group MS prot inter	Group FL prot inter	Avg dissim = 74.20			
Code	Species	Av.Abund	Av.Abund	Av.Diss	Diss/SD	Contrib%	Cum.%
LPSA	<i>Lepidactylus</i> sp. A	0.46	1.58	14.12	1.06	19.03	19.03
HSSA	<i>Haustorius jayneae</i>	1.38	0.95	10.86	1.21	14.64	33.68
SCSQ	<i>Scolecopsis squamata</i>	0.98	0.26	7.03	0.84	9.48	43.16
EXDM	<i>Exosphaeroma diminutum</i>	1.05	0.30	6.32	0.90	8.51	51.67
SCAR	<i>Scyphacella arenicola</i>	0.44	0.19	4.89	0.69	6.59	58.26
CNDL	<i>Goniocuna dalli</i>	0.24	0.00	2.12	0.51	2.85	61.11
KLSA	<i>Kalliapseudes</i> sp. A	0.23	0.00	2.09	0.65	2.82	63.93
PRFL	<i>Paraonis fulgens</i>	0.29	0.00	1.93	0.47	2.60	66.53
NESC	<i>Alitta succinea</i>	0.00	0.20	1.64	0.65	2.20	68.73
EMTL	<i>Emerita talpoida</i>	0.12	0.09	1.60	0.47	2.16	70.89
MTSW	<i>Metamysidopsis swifti</i>	0.00	0.19	1.46	0.39	1.97	72.87
YHSC	<i>Photis</i> sp. C	0.07	0.07	1.44	0.44	1.94	74.81
DNSP	<i>Donax</i> sp.	0.18	0.00	1.34	0.55	1.80	76.62
TMSP	<i>Tomopteris</i> sp.	0.13	0.00	1.20	0.42	1.62	78.24
CMAC	<i>Monocorophium acherusicum</i>	0.12	0.00	1.04	0.41	1.41	79.65
LTFR	<i>Leitoscoloplos fragilis</i>	0.17	0.00	1.01	0.30	1.36	81.01
AYSZ	<i>Almyracuma</i> sp.	0.00	0.16	0.96	0.30	1.29	82.30
LACL	<i>Laeonereis culveri</i>	0.00	0.15	0.91	0.30	1.23	83.52
HRRP	<i>Hargeria rapax</i>	0.06	0.09	0.86	0.43	1.16	84.68
PETR	<i>Parastarte triquetra</i>	0.00	0.14	0.83	0.30	1.11	85.79
		Group MS prot subti	Group FL prot subti	Avg dissim = 76.25			
Code	Species	Av.Abund	Av.Abund	Av.Diss	Diss/SD	Contrib%	Cum.%
EXDM	<i>Exosphaeroma diminutum</i>	1.93	0.21	3.99	2.25	5.24	5.24
LPSA	<i>Lepidactylus</i> sp. A	2.14	1.87	3.81	1.30	4.99	10.23
KLSA	<i>Kalliapseudes</i> sp. A	1.49	0.06	3.30	1.95	4.33	14.56
SCSQ	<i>Scolecopsis squamata</i>	1.22	0.34	2.66	1.24	3.48	18.04
PRFL	<i>Paraonis fulgens</i>	2.03	1.11	2.62	1.46	3.44	21.47
LACL	<i>Laeonereis culveri</i>	0.13	1.12	2.47	1.57	3.24	24.71
SSTA	<i>Sphaerosyllis taylori</i>	1.01	0.51	2.23	1.06	2.92	27.63
SPWT	<i>Spilocuma watlingi</i>	0.85	0.00	1.98	1.61	2.60	30.24
NMSB	Nemertea sp. B	0.00	0.70	1.61	1.01	2.11	32.35
HSSA	<i>Haustorius jayneae</i>	0.57	0.19	1.60	0.86	2.09	34.44
PPLN	<i>Parapionosyllis longicirrata</i>	0.59	0.00	1.47	0.83	1.93	36.37
PYSA	<i>Polygordius</i> sp. A	0.62	0.14	1.45	0.84	1.91	38.28
SHBM	<i>Spiophanes bombyx</i>	0.76	0.47	1.39	1.10	1.83	40.11
HMFL	<i>Heteromastus filiformis</i>	0.08	0.66	1.38	0.89	1.81	41.92
OXSM	<i>Oxyurostylis smithi</i>	0.62	0.32	1.32	1.06	1.73	43.65
CPCP	<i>Capitella capitata</i>	0.32	0.47	1.28	0.94	1.68	45.33
STPT	<i>Streptosyllis pettiboneae</i>	0.45	0.42	1.22	0.93	1.61	46.93
MDCL	<i>Mediomastus californiensis</i>	0.50	0.15	1.18	0.98	1.55	48.49

CNDL	<i>Goniocuna dalli</i>	0.43	0.00	1.13	0.53	1.48	49.96
PNBH	<i>Austinixa behreae</i>	0.51	0.00	1.08	0.97	1.42	51.38
		Group MS expo inter	Group FL expo inter	Avg dissim = 47.56			
Code	Species	Av.Abund	Av.Abund	Av.Diss	Diss/SD	Contrib%	Cum.%
DNSP	<i>Donax</i> sp.	1.24	1.09	8.95	1.42	18.83	18.83
SCSQ	<i>Scolecopsis squamata</i>	1.51	1.78	7.46	1.21	15.68	34.51
EMTL	<i>Emerita talpoida</i>	0.46	1.00	6.75	1.34	14.18	48.69
CNDL	<i>Goniocuna dalli</i>	0.61	0.00	4.84	0.75	10.17	58.86
HSSA	<i>Haustorius jayneae</i>	1.01	0.88	4.79	0.85	10.07	68.94
PRFL	<i>Paraonis fulgens</i>	0.30	0.00	2.03	0.60	4.27	73.21
MTSW	<i>Metamysidopsis swifti</i>	0.12	0.24	1.82	0.58	3.82	77.02
MCRN	<i>Microprotopus raneyi</i>	0.07	0.11	1.49	0.52	3.13	80.15
ANDP	<i>Ancinus depressus</i>	0.18	0.00	1.35	0.49	2.84	82.99
SPSL	<i>Spilocuma salomani</i>	0.16	0.00	1.26	0.49	2.64	85.63
YHPG	<i>Photis pugnator</i>	0.11	0.00	0.79	0.33	1.65	87.29
LVMR	<i>Laevicardium mortoni</i>	0.00	0.11	0.77	0.36	1.62	88.91
AVAU	<i>Anomalocardia auberiana</i>	0.00	0.11	0.71	0.37	1.48	90.39
		Group MS expo subti	Group FL expo subti	Avg dissim = 58.15			
Code	Species	Av.Abund	Av.Abund	Av.Diss	Diss/SD	Contrib%	Cum.%
SCSQ	<i>Scolecopsis squamata</i>	1.47	2.92	7.36	1.14	12.66	12.66
MTSW	<i>Metamysidopsis swifti</i>	0.09	1.11	6.01	1.17	10.34	23.01
PRFL	<i>Paraonis fulgens</i>	1.12	0.57	4.73	1.24	8.14	31.14
HSSA	<i>Haustorius jayneae</i>	1.30	0.98	4.32	1.15	7.43	38.58
DNSP	<i>Donax</i> sp.	0.89	1.41	3.76	1.11	6.47	45.05
SPSL	<i>Spilocuma salomani</i>	0.89	0.66	3.27	1.26	5.62	50.66
EMTL	<i>Emerita talpoida</i>	0.05	0.58	3.07	1.27	5.28	55.95
ANDP	<i>Ancinus depressus</i>	0.45	0.19	2.26	0.93	3.89	59.84
LTFR	<i>Leitoscoloplos fragilis</i>	0.47	0.00	2.23	0.86	3.83	63.67
BWFL	<i>Bowmaniella dissimilis</i>	0.31	0.11	1.58	0.71	2.71	66.38
SHBM	<i>Spiophanes bombyx</i>	0.24	0.07	1.47	0.55	2.53	68.91
NPBC	<i>Nephtys buccera</i>	0.23	0.10	1.43	0.66	2.45	71.37
SNAM	<i>Americhelidium americanum</i>	0.26	0.00	1.28	0.52	2.21	73.57
MRSB	<i>Microphthalmus</i> sp. B	0.00	0.19	1.05	0.55	1.80	75.38
SPWT	<i>Spilocuma watlingi</i>	0.24	0.00	1.04	0.66	1.79	77.17
CNDL	<i>Goniocuna dalli</i>	0.34	0.00	0.99	0.44	1.70	78.88
POSP	<i>Phyllodoce</i> sp.	0.24	0.00	0.95	0.60	1.64	80.52
EXDM	<i>Exosphaeroma diminutum</i>	0.15	0.00	0.76	0.52	1.31	81.83
LDBN	<i>Lepidopa benedicti</i>	0.00	0.15	0.73	0.50	1.26	83.09
PILN	<i>Parahaustorius cf longimerus</i>	0.16	0.00	0.67	0.53	1.15	84.24