

APPENDIX 4C SURVEY DATA OF SUBTIDAL AND BENTHIC ASSEMBLAGES

Table 4C.1 Subtidal Soft Bottom Survey Raw Data - Wet Season Abundance

Kingdom	Phylum	Class	Order	Family	Sample ID	WCKH1		WCKH2		WCKH3		WCKH4		WCKH5	
						Number	Biomass (g)	Number	Biomass (g)	Number	Biomass (g)	Number	Biomass (g)	Number	Biomass (g)
Animalia	Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Micronephtys sphaerocirrata</i>	1	0.0019	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Animalia	Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Sigambra hanaokai</i>	3	0.0012	0	0.0000	10	0.0055	4	0.0050	2	0.0011
Animalia	Annelida	Polychaeta	Spionida	Spionidae	<i>Malacoceros</i> sp.	0	0.0000	0	0.0000	7	0.0017	0	0.0000	0	0.0000
Animalia	Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio cirrifera</i>	0	0.0000	0	0.0000	4	0.0050	2	0.0005	0	0.0000
Animalia	Arthropoda	Malacostraca	Amphipoda	Liljeborgiidae	<i>Idunella</i> sp.	1	0.0001	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Animalia	Chordata	Cephalochordata	Amphioxiformes	Branchiostomatidae	<i>Branchiostoma belcheri</i>	2	0.0168	1	0.0009	0	0.0000	0	0.0000	0	0.0000
Animalia	Mollusca	Scaphopoda	Dentaliida	Gadiliniidae	<i>Episiphon kiaochoowanense</i>	0	0.0000	0	0.0000	0	0.0000	1	0.0251	0	0.0000

Table 4C.2 Subtidal Soft Bottom Survey Raw Data - Dry Season Abundance

Kingdom	Phylum	Class	Order	Family	Sample ID Species	WCKH1		WCKH2		WCKH3		WCKH4		WCKH5	
						Number	Biomass (g)	Number	Biomass (g)	Number	Biomass (g)	Number	Biomass (g)	Number	Biomass (g)
Animalia	Annelida	Polychaeta	Phyllodocida	Glyceridae	<i>Glycera alba</i>	0	0.0000	1	0.0019	0	0.0000	0	0.0000	0	0.0000
Animalia	Annelida	Polychaeta	Phyllodocida	Goniadidae	<i>Glycinde bonhourei</i>	0	0.0000	0	0.0000	0	0.0000	1	0.0021	0	0.0000
Animalia	Annelida	Polychaeta	Phyllodocida	Hesionidae	<i>Oxydromus angustifrons</i>	0	0.0000	0	0.0000	1	0.0029	0	0.0000	0	0.0000
Animalia	Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Aglaophamus sinensis</i>	1	0.0073	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Animalia	Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Micronephtys sphaerocirrata</i>	19	0.0226	15	0.0293	8	0.0084	18	0.0332	26	0.0293
Animalia	Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Nephtys sp.</i>	1	0.0009	1	0.0010	0	0.0000	0	0.0000	3	0.0015
Animalia	Annelida	Polychaeta	Phyllodocida	Nereididae	<i>Perinereis cultrifera</i>	1	0.0113	1	0.0186	0	0.0000	0	0.0000	22	0.0022
Animalia	Annelida	Polychaeta	Phyllodocida	Pilargidae	<i>Sigambra hanaokai</i>	37	0.0270	27	0.0183	12	0.0103	35	0.0278	51	0.0298
Animalia	Annelida	Polychaeta	Phyllodocida	Polynoidae	<i>Harmothoe sp.</i>	0	0.0000	1	0.0085	1	0.0070	0	0.0000	0	0.0000
Animalia	Annelida	Polychaeta	Phyllodocida	Sigalionidae	<i>Ehlersileanira incisa</i>	1	0.0003	1	0.0010	1	0.0011	1	0.0010	6	0.0217
Animalia	Annelida	Polychaeta	Spionida	Poecilochaetidae	<i>Poecilochaetus tricirratus</i>	0	0.0000	1	0.4050	2	0.0760	0	0.0000	0	0.0000
Animalia	Annelida	Polychaeta	Spionida	Spionidae	<i>Malacoceros sp.</i>	0	0.0000	0	0.0000	0	0.0000	1	0.0013	0	0.0000
Animalia	Annelida	Polychaeta	Spionida	Spionidae	<i>Paraprionospio pinnata</i>	0	0.0000	0	0.0000	0	0.0000	0	0.0000	1	0.0064
Animalia	Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio cirrifera</i>	7	0.0004	6	0.0005	0	0.0000	13	0.0019	0	0.0000
Animalia	Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio ehlersi</i>	13	0.0054	8	0.0176	1	0.0053	13	0.0075	23	0.0039
Animalia	Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio malmgreni</i>	13	0.0036	13	0.0056	5	0.0009	10	0.0047	32	0.0064
Animalia	Arthropoda	Hexanauplia	--	--	--	1	0.0003	2	0.0003	3	0.0008	4	0.0009	1	0.0008
Animalia	Echinodermata	Echinoidea	Camarodonta	Temnopleuridae	<i>Temnopleurus toreumaticus</i>	0	0.0000	0	0.0000	0	0.0000	1	0.0069	0	0.0000
Animalia	Mollusca	Bivalvia	Cardiida	Tellinidae	<i>Jitlada culter</i>	1	0.0606	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Animalia	Mollusca	Bivalvia	Cardiida	Tellinidae	<i>Nitidotellina lischkei</i>	0	0.0000	5	0.4602	3	0.0066	20	0.6163	11	0.8321
Animalia	Mollusca	Bivalvia	Myiida	Corbulidae	<i>Corbula sinensis</i>	1	0.0193	0	0.0000	0	0.0000	1	0.0013	1	0.0225
Animalia	Mollusca	Bivalvia	Venerida	Semelidae	<i>Theora lata</i>	5	0.3052	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Animalia	Mollusca	Gastropoda	Cephalaspidea	Philinidae	<i>Philine sp.</i>	4	0.0382	3	0.0272	1	0.0099	1	0.0028	2	0.0068
Animalia	Nemertea	--	--	--	--	5	0.0030	1	0.0001	2	0.0005	3	0.0011	4	0.0009

Table 4C.3 Seabed Attributes along the Survey Transects at Wong Chuk Kok Hoi

	Transect					
	T1		T2		T3	
	Shallow	Deep	Shallow	Deep	Shallow	Deep
Transect depth (mCD)	-3 to -4	-5 to -6	-3 to -4	-5 to -7	-3 to -4	-5 to -6
Substratum attributes						
Bedrock	0	0	0	0	0	0
Continuous pavement	0	0	0	0	0	0
Rocks (<26 cm)	3	2	2	2	2	2
Large boulders (>50 cm)	4	1	0	0	4	2
Small boulders (<50 cm)	3	2	2	2	0	2
Rubble	1	1	3	3	0	2
Sand	1	4	5	5	4	4
Mud/ Silt	3	3	0	0	0	0
Other	0	0	0	0	0	0
Ecological attributes						
Hard coral	2	1	2	2	2	1
Dead Coral	0	1	0	0	0	0
Octocoral (Soft corals and gorgonians)	0	0	0	0	0	0
Black coral	0	0	0	0	0	0
Dead standing coral	0	0	0	0	0	0
Macroalgae	1	0	0	0	0	0
Other Benthos (including sponges, zoanthids, ascidians and bryozoans)	1	1	0	1	1	1

Notes:

(1) 0 = 0%, 1 = <5%, 2 = 5 - 10%, 3 = 11 - 30%, 4 = 31 - 50%, 5 = 51 - 75%, 6 = 76 - 100%

Table 4C.4 Benthic Communities Recorded Along the Survey Transects at Wong Chuk Kok Hoi

	Transect					
	T1		T2		T3	
	Shallow	Deep	Shallow	Deep	Shallow	Deep
Transect depth (mCD)	-3 to -4	-5 to -6	-3 to -4	-5 to -7	-3 to -4	-5 to -6
Hard corals						
<i>Acanthastrea echinata</i>	0	0	1	0	0	0
<i>Acropora digitifera</i>	0	0	1	0	0	0
<i>Bernardpora stutchburyi</i>	1	1	0	1	0	2
<i>Coelastrea aspera</i>	0	0	1	1	0	0
<i>Cyphastrea chalcidicum</i>	1	0	1	1	0	0
<i>Cyphastrea serailia</i>	1	1	0	0	0	0
<i>Dipsastraea danae</i>	0	0	0	0	0	1
<i>Dipsastraea maritima</i>	0	0	1	0	0	1
<i>Dipsastraea rotumana</i>	1	0	2	2	0	1
<i>Duncanopsammia peltata</i>	0	0	0	0	0	1
<i>Echinophyllia aspera</i>	0	0	1	0	0	0
<i>Favites abdita</i>	0	0	2	1	0	0
<i>Favites chinensis</i>	0	0	1	1	0	0
<i>Favites flexuosa</i>	0	0	0	1	1	1
<i>Favites pentagona</i>	0	0	2	0	0	0
<i>Goniopora columna</i>	0	0	0	0	0	1
<i>Goniopora lobata</i>	0	0	1	0	1	0
<i>Hydnophora exesa</i>	1	0	1	0	0	0
<i>Leptastrea purpurea</i>	0	0	0	0	0	1
<i>Lithophyllon undulatum</i>	1	0	1	0	0	0
<i>Montipora mollis</i>	0	0	0	0	0	1
<i>Oulastrea crispata</i>	3	1	0	1	2	1
<i>Pavona decussata</i>	0	0	1	0	1	0
<i>Platygyra carnosa</i>	0	0	3	0	0	0
<i>Plesiastrea versipora</i>	0	0	1	2	2	2
<i>Porites</i> sp.	4	3	1	0	3	2
<i>Psammocora profundacella</i>	0	0	0	1	0	0
Other benthos						
<i>Dofleinia armata</i>	0	2	0	0	0	0
<i>Spheractis cheungae</i>	0	0	0	0	2	1
<i>Entacmaea quadricolor</i>	0	1	0	0	0	0

Survey Data of Subtidal and Benthic Assemblages

Encrusting Sponge	0	0	0	0	0	1
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Notes:

- (2) 0=absent, 1=rare, 2=uncommon, 3=common, 4=abundant, 5=dominant
- (3) The ranks shown in the Table above indicate the relative abundance of each coral in relation to other corals in the community. In other words, these broad categories rank taxa in terms of relative abundance of individuals, rather than the contribution to benthic cover along each transect. The ranks are subjective assessments of abundance, rather than quantitative counts of each taxon. For instance, if a coral is ranked as 'common', it means it was more frequent than other coral species along the transect. It should be borne in mind that coral cover along all of the transects where corals occurred was low (<10% cover).