

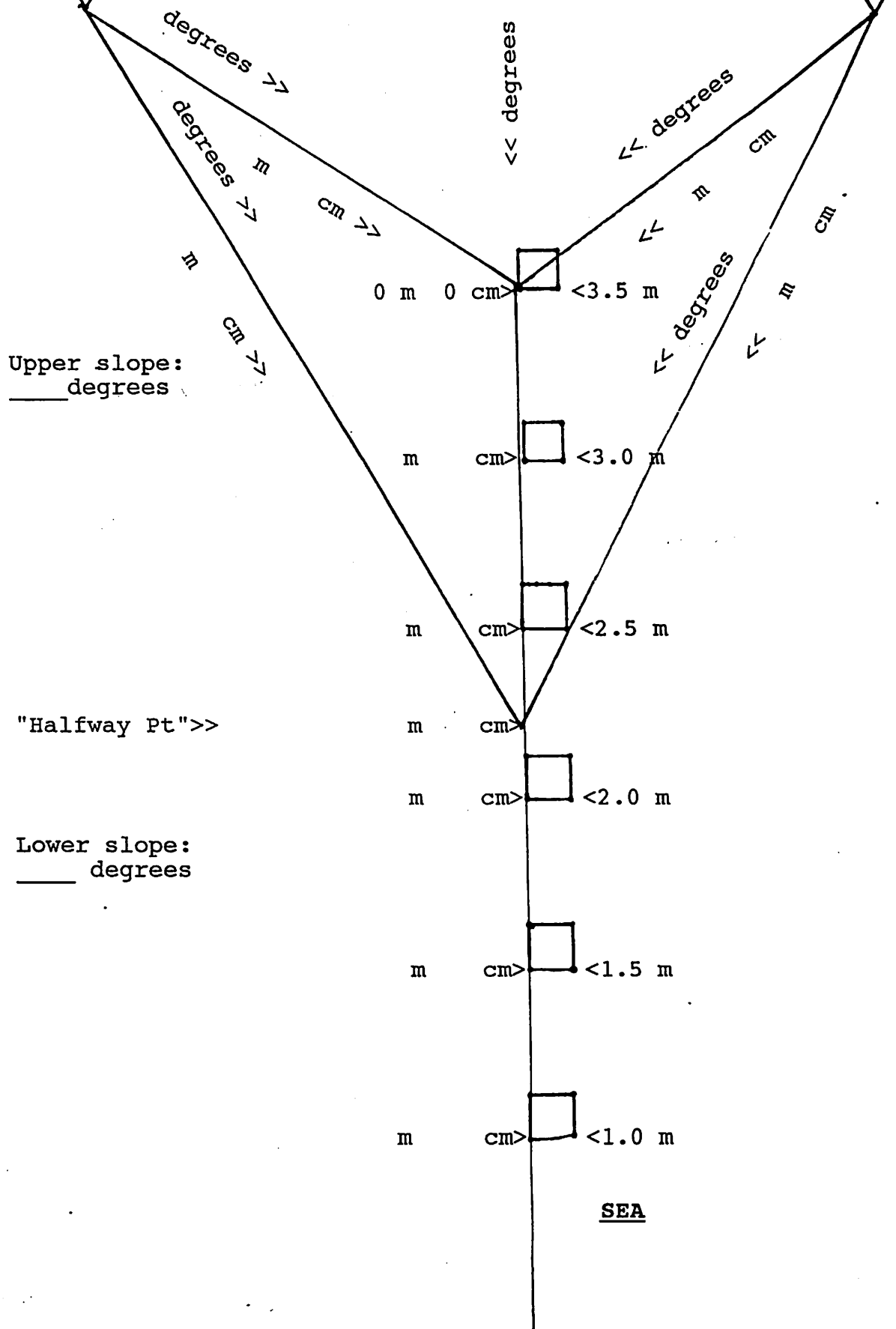
STATION ____/9____year; TRANSECT ____.

Khoyatan

LAND

Left Landmark

Right Landmark



ROCKY SHORE QUADRAT STUDIES: PRIMARY QUADRAT FORM

Khoyatan Marine Laboratory

Station: 12 /97 yr.; Transect Letter: B; Height 3.0 meters;Circle (1+: Bedrock; Boulder; Cobble; Pebble; Gravel; Shell; Sand; Muddy-sand; Mud
25+cm 6-25cm 4mm-6cm 2-4mmQuadrat size WITHIN strings: 50x50cm=1/4 square meter; Abundance 1,2, Few=3-10, Common=10+
[cover] [abundance] [cover] [abundance]

"Species" No. intersects 1,2,F,C "Species" No. intersects 1,2,F,C

SUBSTRATE			LIMPETS		
rock	✓✓✓✓✓		ribbed limpet	✓	2
shell			shield limpet		C
sand			mask limpet		F
mud			plate limpet		
SEAWEED CRUSTS			tiny limpet		
green crust			SNAILS		
brown crust		F	checked winkle		C
black crust			spiral winkle		
pink crust			frilled whelk		
FILAMENTS			banded whelk		
Brown beard			dire whelk		
green filament			leafyhornmouth		
sausage links			SEA SLUGS		
red sea hair			yellow seaslug		
LEAFY			brown seaslug		
sea lettuce			BIVALVES		
green ribbon			blue mussel	✓✓✓✓✓✓✓✓✓✓	C
purple tissue			rectangle clam		
shiny blade			CRUSTACEANS		
			commonbarnacle	✓✓✓✓✓✓✓✓✓✓	CAQUCT
tancauliflower			brown barnacle		
yellow sacs			thatchbarnacle		
blacknob blade			pill bug		
black brush			seaweed isopod		
rock weed	✓✓	F	hermit crab		
japanese weed			purple crab		
acid kelp			drab crab		
RR strap			SEA URCHINS		
SPONGES			green urchin		
yellow sponge			SEA STARS		
purple sponge			purp-brwn star		
ANEMONES			mottled star		
green anemone			6 armed star		
white/tan anem			leather star		
red-green anem			blood star		
WORMS			sunflower star		
pale ribbonworm			SEA SQUIRTS		
mussel worm			red sea squirt		
whitetube worm			OTHER		
CHITONS			UNID MAT red	✓✓✓✓✓✓✓✓	C
mossy chiton			GIGARTINA	✓	F
lined chiton					

Polysiphonia sp.

Khoyatan Marine Laboratory

25+cm 6-25cm 4mm-6cm 2-4mm

[cover]		[abundance]		[cover]		[abundance]	
"Species"	No. intersects	1,2,F,C	"Species"	No. intersects	1,2,F,C	"Species"	No. intersects
1	1	1	1	1	1	1	1
2	1	1	2	1	1	2	1
3	1	1	3	1	1	3	1
4	1	1	4	1	1	4	1
5	1	1	5	1	1	5	1
6	1	1	6	1	1	6	1
7	1	1	7	1	1	7	1
8	1	1	8	1	1	8	1
9	1	1	9	1	1	9	1
10	1	1	10	1	1	10	1
11	1	1	11	1	1	11	1
12	1	1	12	1	1	12	1
13	1	1	13	1	1	13	1
14	1	1	14	1	1	14	1
15	1	1	15	1	1	15	1
16	1	1	16	1	1	16	1
17	1	1	17	1	1	17	1
18	1	1	18	1	1	18	1
19	1	1	19	1	1	19	1
20	1	1	20	1	1	20	1
21	1	1	21	1	1	21	1
22	1	1	22	1	1	22	1
23	1	1	23	1	1	23	1
24	1	1	24	1	1	24	1
25	1	1	25	1	1	25	1
26	1	1	26	1	1	26	1
27	1	1	27	1	1	27	1
28	1	1	28	1	1	28	1
29	1	1	29	1	1	29	1
30	1	1	30	1	1	30	1
31	1	1	31	1	1	31	1
32	1	1	32	1	1	32	1
33	1	1	33	1	1	33	1
34	1	1	34	1	1	34	1
35	1	1	35	1	1	35	1
36	1	1	36	1	1	36	1
37	1	1	37	1	1	37	1
38	1	1	38	1	1	38	1
39	1	1	39	1	1	39	1
40	1	1	40	1	1	40	1
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42	1	1	42	1	1	42	1
43	1	1	43	1	1	43	1
44	1	1	44	1	1	44	1
45	1	1	45	1	1	45	1
46	1	1	46	1	1	46	1
47	1	1	47	1	1	47	1
48	1	1	48	1	1	48	1
49	1	1	49	1	1	49	1
50	1	1	50	1	1	50	1
51	1	1	51	1	1	51	1
52	1	1	52	1	1	52	1
53	1	1	53	1	1	53	1
54	1	1	54	1	1	54	1
55	1	1	55	1	1	55	1
56	1	1	56	1	1	56	1
57	1	1	57	1	1	57	1
58	1	1	58	1	1	58	1
59	1	1	59	1	1	59	1
60	1	1	60	1	1	60	1
61	1						

SUBSTRATE		LIMPETS	
rock	✓	ribbed limpet	
shell		shield limpet	C
sand		mask limpet	
mud		plate limpet	
SEAWEED CRUSTS		tiny limpet	
green crust		SNAILS	
brown crust	F	checked winkle	C
black crust		spiral winkle	
pink crust		frilled whelk	
FILAMENTS		banded whelk	
Brown beard		dire whelk	
green filament		leafyhornmouth	
sausage links		SEA SLUGS	
red sea hair		yellow seaslug	
LEAFY		brown seaslug	
sea lettuce		BIVALVES	
green ribbon		blue mussel	✓ C
purple tissue		rectangle clam	
shiny blade		CRUSTACEANS	
		commonbarnacle	✓ C
tancauliflower		brown barnacle	
yellow sacs		thatchbarnacle	
blacknob blade		pill bug	
black brush	✓	seaweed isopod	
rock weed	F	hermit crab	
japanese weed		purple crab	
acid kelp		drab crab	2
RR strap		SEA URCHINS	
SPONGES		green urchin	
yellow sponge		SEA STARS	
purple sponge		purp-brwn star	
ANEMONES		mottled star	
green anemone		6 armed star	
white/tan anem		leather star	
red-green anem		blood star	
WORMS		sunflower star	
pale ribbonworm		SEA SQUIRTS	
mussel worm		red sea squirt	
whitetube worm		OTHER	
CHITONS			
mossy chiton		caudoventral	✓ F
lined chiton		Haliphanella	2
		Amphipod	1

Station: 12 / 99 yr.; Transect Letter: B; Height 3.0 meters;Circle 1+: Bedrock; Boulder; Cobble; Pebble; Gravel; Shell; Sand; Muddy-sand; Mud
25+cm 6-25cm 4mm-6cm 2-4mmQuadrat size WITHIN strings: 50x50cm=1/4 square meter; Abundance 1,2, Few=3-10, Common=10+
[cover] [abundance]

"Species" No. intersects 1,2,F,C "Species" No. intersects 1,2,F,C

SUBSTRATE			LIMPETS		
rock	✓	//////	ribbed limpet		
shell			shield limpet		
sand			mask limpet		C
mud			plate limpet		
SEAWEED CRUSTS			tiny limpet		
green crust			SNAILS		
brown crust			checked winkle		C
black crust			spiral winkle		
pink crust			frilled whelk		
FILAMENTS			banded whelk		
Brown beard			dire whelk		
green filament			leafyhornmouth		
sausage links			SEA SLUGS		
red sea hair			yellow seaslug		
LEAFY			brown seaslug		
sea lettuce			BIVALVES		
green ribbon			blue mussel	✓✓✓✓	F
purple tissue			rectangle clam		
shiny blade			CRUSTACEANS		
			common barnacle	✓✓✓✓✓✓✓✓	C
tancauliflower			brown barnacle		
yellow sacs			thatch barnacle		
blacknob blade			pill bug		
black brush			seaweed isopod		
rock weed		F	hermit crab		
japanese weed			purple crab		
acid kelp			drab crab		1
RR strap			SEA URCHINS		
SPONGES			green urchin		
yellow sponge			SEA STARS		
purple sponge			purp-brwn star		
ANEMONES			mottled star		
green anemone			6 armed star		
white/tan anem			leather star		
red-green anem			blood star		
WORMS			sunflower star		
pale ribbonworm			SEA SQUIRTS		
mussel worm			red sea squirt		
whitetube worm			OTHER		
CHITONS			gigartina	✓✓	F
mossy chiton			pet. ucelis		F
lined chiton					

Station: 12 2400 yr.; Transect Letter: B; Height 3.0 meters;

Circle 1+: Bedrock; Boulder; Cobble; Pebble; Gravel; Shell; Sand; Muddy-sand; Mud

Quadrat size WITHIN strings: 50x50cm=1/4 square meter; Abundance 1,2, Few=3-10, Common=10+

"Species"	[cover] No. intersects	[abundance] 1,2,F,C	"Species"	[cover] No. intersects	[abundance] 1,2,F,C
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SUBSTRATE	NO. INTERSECTS	1, 2, F, ...
rock		
shell		COM
sand		
mud		
SEAWEED CRUSTS		
green crust		
brown crust		
black crust	FEW	
pink crust		
FILAMENTS		
Brown beard		
green filament		
sausage links		
red sea hair		
LEAFY		
sea lettuce		
green ribbon		FEW
purple tissue		
shiny blade		
tancauliflower		COM
yellow sacs		
blacknob blade		
black brush		
rock weed		FEW
japanese weed		
acid kelp		
RR strap		
SPONGES		
yellow sponge		
purple sponge		
ANEMONES		
green anemone		
white/tan anem		
red-green anem		
WORMS		
pale ribbonworm		
mussel worm		
whitetube worm		
CHITONS		
mossy chiton		FEW
lined chiton		

Khoyatan Marine Laboratory

Station: 12/80 yr.; Transect Letter: B₁; Height 3.0 meters;

Circle 1+; Bedrock; Boulder; Cobble; Pebble; Gravel; Shell; Sand; Muddy-sand; Mud
25+cm 6-25cm 4mm-6cm 2-4mm

Quadrat size WITHIN strings: 50x50cm=1/4 square meter; Abundance 1,2, Few=3-10, Common=10+
[cover] [abundance] [cover] [abundance]

[illegible]

[cover]		[abundance]		[cover]		[abundance]	
"Species"	No. intersects	1,2,F,C	"Species"	No. intersects	1,2,F,C	"Species"	No. intersects

SUBSTRATE	NO. INTERSECTS	1, 2, F
rock	✓	
shell	✓	
sand		
mud		
SEAWEED CRUSTS		
green crust		
brown crust	✓	
black crust		
pink crust		
FILAMENTS		
Brown beard		
green filament		
sausage links		
red sea hair		
LEAFY		
sea lettuce		
green ribbon		
purple tissue		
shiny blade		
tan cauliflower		
yellow sacs		
blacknob blade		
black brush		
rock weed	✓	
japanese weed		
acid kelp		
RR strap		
SPONGES		
yellow sponge		
purple sponge		
ANEMONES		
green anemone		
white/tan anem		
red-green anem		
WORMS		
pale ribbonworm		
mussel worm		
whitetube worm		
CHITONS		
moosy chiton		
lined chiton		

ROCKY SHORE QUADRAT STUDIES: PRIMARY QUADRAT FORM

Khoyatan Marine Laboratory

Station: 12/18/02 yr.; Transect Letter: B; Height 3.0 meters;

Circle 1+ Bedrock; Boulder; Cobble; Pebble; Gravel; Shell; Sand; Muddy-sand; Mud
 25+cm 6-25cm 4mm-6cm 2-4mm

Quadrat size WITHIN strings: 50x50cm=1/4 square meter; Abundance 1,2, Few=3-10, Common=10+
 [cover] [abundance]

"Species" No. intersects 1,2,F,C "Species" No. intersects 1,2,F,C

SUBSTRATE			LIMPETS		
rock	✓		ribbed limpet		
shell			shield limpet		A
sand			mask limpet		
mud			plate limpet		
SEAWEED CRUSTS			tiny limpet		
green crust			SNAILS		
brown crust		7	checked winkle	✓	A
black crust			spiral winkle		
pink crust			frilled whelk		
FILAMENTS			banded whelk		
Brown beard			dire whelk		
green filament			leafyhornmouth		
sausage links			SEA SLUGS		
red sea hair			yellow seaslug		
LEAFY			brown seaslug		
sea lettuce			BIVALVES		
green ribbon			blue mussel	✓	A
purple tissue			rectangle clam		
shiny blade			CRUSTACEANS		
			commonbarnacle	✓	A
tancauliflower			brown barnacle		
yellow sacs			thatchbarnacle		
blacknob blade			pill bug		
black brush			seaweed isopod		
rock weed	✓	A	hermit crab		
japanese weed			purple crab		
acid kelp			drab crab		
RR strap			SEA URCHINS		
SPONGES			green urchin		
yellow sponge			SEA STARS		
purple sponge			purp-brwn star		
ANEMONES			mottled star		
green anemone			6 armed star		

Georgia Strait Alliance Quadrat Studies

Primary Quadrat Form

12 Site Code: CC1 Date (Y/M/D): 10/08/03 Repetition: Quadrat Height: 3.0 m Quadrat#

Circle 1: Bedrock Boulder (dinner plate +); Cobble (> apple); Pebble (> pea); Sand (sugar grain); Mud; Shell
Est. total: After doing Intersects, count/estimate every species in quadrat from 1 to 20; if 21+ put an "A"

"Species"	# Intersects	Est. total	"Species"	# intersects	Est. total
Substrate			Misc Crustaceans	6	
rock (bigger than pea sized)	✓✓✓		beach hopper gr	Traskorchestia+	
shell (incl dead molluscs, bivalves)			seaweed isopod gr	Idotea sp	
sand (sugar grain to pea size)			ocean pill bug gr	Gnecinosphaeroma+	
mud			shrimplike gr	var tiny amphipods	F
Sponges	14		red velvet mile	Neomolgus littoralis	
bread crumb	Halichondria sp		Sea Stars	16	
			ochre star	Pisaster ochraceus	
Anemones	11 + 5 hydroids + 4 misc		Colonial Tunicates	10	
aggregate green	Anthopleura elegantissima		sea pork	Aplidium californicum	
lined	Haliplanella		lined compound gr	Botryllus+	
Frog Range Worms	7 ribbon + others		Solitary Tunicates	10	
polyclad flatworm gr	Kaburaka+		broadbase squirt	Orenitocarpa finmarkensis	
primitive ribbon	Tubulanus polymorphus		wrinkled squirt	Pyura haustor	
clam worm gr	Nereis+				
scale worm gr	Arctonoe+				
Tube Worms	14		Crusts	3	
calcareous tube	Serpula vermicularis		algal crust	Ralfsia+	✓✓✓ F
spiral tube	Spirobia sp		calcified rock crust	Pseudolithophyllum+	
Bryozoans	8		Blades	17	
encrusting gr	Schizoporella+		eel grass	Zostera marina	
kelp lace	Membranipora sp		sea lettuce gr.	Ulva+	✓ F
Bivalves	7+		green string lettuce	Enteromorpha sp	✓✓✓ F
pacific blue mussel	Mytilus edulis	✓✓✓✓✓ A	rock weed gr.	Fucus+	✓✓✓✓✓ A
Pacific oyster	Crassostrea gigas		purple laver	Porphyra sp	
Chitons	14		turkish washcloth gr.	Mastocarpus+	F
mossy	Mopalia mucosa		tangle incl sugar kelp	Laminaria sp	
lined gr	Tonicella lineata+		cauliflower gr.	Leathesia+	
Nudibranchs & Sea Slugs	25				
barnacle	Onchidaris bilamellata		Filaments & Fuzzes	17	
Limpets	9		green tuft	Cladophora sp	
shield/mask/plate gr	Tectura sp, L. pella+	✓ A	green rope/filament gr.	Acrusiphonia+	
ribbed	Lottia digitalis		fuzzy gr.	Anthamniorella+	
Snails	10		sea moss Caulacanthus	✓ F	
chokered periwinkle	Littorina scutellata	✓ A	sea moss	Endocladia muricata	
silka periwinkle	Littorina altkana		Spaghetti gr.	Gracilaria+	
dogwinkle gr	Nucella sp		Branched	8	
			dead man's fingers	Halosaccion glandiforme	
Barnacles	4	✓✓✓✓	japanese weed	Sargassum muticum	

Georgia Swail Alliance Quadrat Studies

Primary Quadrat Form

 SiteCode: CCI Date (Y/M/D): 04/06/17 Repetition: ✓ Quadrat Height: 3.0 m Quadrat#: ✓

Circle 1 (Bedrock) Boulder (dinner plate +); Cobble (> apple); Pebble (> pea); Sand (sugar grain); Mud; Shell

Est. total: After doing intersects, count/estimate every species in quadrat from 1 to 20; if 21+ put an "A"

"Species"	# Intersects	Est. total	"Species"	# intersects	Est. total
Substrate			Misc Crustaceans	6	
rock (bigger than pea sized)	III		beach hopper gr	Traskorchestia+	F
shell (incl dead molluscs, barnacles)			seaweed isopod gr	Idotea sp	
sand (sugar grain to pea size)			ocean pill bug gr	Gnathosphaeroma+	
mud			shrimplike gr	var tiny amphipods	
Sponges	14		red velvet mille	Neumolgus littoralis	
bread crumb	Halichondria sp		Sea Stars	16	
			ochre star	Pisaster ochraceus	
Anemones	11 + 5 hydroids + 4 misc		Colonial Tunicates	10	
aggregate green	Anthopora elegantissima		sea pork	Aplidium californicum	
lined	Haliplanella	1	lined compound gr	Botryllus+	
Free Range Worms	7 ribbon + others		Solitary Tunicates	10	
polychaet flatworm gr	Kaburaka+		broadbase squirt	Cnemidocarpa linmarkensis	
primitive ribbon	Tubulanus polymorphus		wrinkled squirt	Pyura lichenor	
clam worm gr	Nereis+				
scale worm gr	Aricione+				
Tube Worms	14		Crusta	3	
calcareous tube	Serpula vermicularis		algal crust	Ralfsia+	
spiral tube	Spirobs sp		calcified rock crust	Pseudolithophyllum+	
Bryozoans	8		Blades	17	
encrusting gr	Schizoporella+		eel grass	Zostera marina	
kelp lace	Membranipora sp		sea lettuce gr	Ulva+	F
Bivalves	7+		green string lettuce	Enteromorpha sp	
pacific blue mussel	Mytilus edulis	A	rock weed gr	Fucus+	F
Pacific oyster	Crassostrea gigas		purple laver	Porphyra sp	
Chitons	14		turkish washcloth gr	Mastocarpus+	F
moosy	Mopalia mucosa		tangle incl sugar kelp	Laminaria sp	
lined gr	Tonicella lineata+		cauliflower gr	Leathesia+	
Nudibranchs & Sea Slugs	25				
barnacle	Onchidaris biamellata		Filaments & Fuzzes	17	
Limpets	9		green tuft	Cladophora sp	
shield/mask/plate gr	Tectura sp. l. pelta	A	green rope/filament gr	Acrusiphonia+	
ribbed	Lottia digitalis	2	fuzzy group	Anilhammionella+	
Snails	10		red fuzzy	Caulacanthus	A
checkered periwinkle	Littorina scutellata	A	sea moss	Endocladia muricata	
silica periwinkle	Littorina litorea		Spaghetti gr	Gracilaria+	
dogwinkle gr	Nucella sp		Branched	8	
			dead man's fingers	Halosaccion glandiforme	
Barnacles	4		japanese weed	Sargassum muticum	

Georgia Strait Alliance Quadrat Studies

Cortes Island Foreshore Monitoring Primary Quadrat Form

Site name: Coulter Date (Y/M/D): 06/06/27Quadrat Height (m): 3.0Data collection by: Bill Cragg & Sabina

Circle 1+: Bedrock; Boulder (dinner plate); Cobble (>apple); Pebble (> pea); Sand (sugar grain); Mud; Shell

Est. total: After doing Intersects, count/estimate every species in quadrat: Seaweeds: % cover 0-25 / 25-50 / 50-75 / 75-100

Invertebrates: # Ind 0-25 / 25-50 / 50-75 / 75-100 / >100

SPECIES	# INTERSECTS	est. total	SPECIES	# INTERSECTS	est. total
SUBSTRATE			INVERTEBRATES		
rock			Anemones		
shell			aggregate green (<i>Anthopleura</i>)		
SEAWEED			lined (<i>Haliplanella</i>)		
Crusts			Tube Worms		
algal (<i>Ralfsia</i> , <i>Hildenbrandia</i>)		0-25	general grp (<i>Serpula</i> , <i>Spirorbis</i>)		
Filaments/ Fuzz/ Tuft			Chitons		
green filament (<i>Lola</i> , <i>Urospora</i>)			general grp (<i>Mopalia</i> , <i>Tonicella</i>)		
red filament (<i>Polysiphonia</i>)			Limpets		
red fuzz (<i>Caulacanthus</i>)	1	0-25	ribbed limpet (<i>Lottia digitalis</i>)		
green rope (<i>Acrosiphonia</i>)			other limpets (<i>Lottia</i> , <i>Tectura</i>)		25-50
green tuft (<i>Cladophora</i>)			Snails		
Blade			check periwinkle (<i>L. scutulata</i>)	1	7/1000
sea lettuce (<i>Ulva</i>)			sitka periwinkle (<i>L. sitkana</i>)		
green ribbon (<i>Enteromorpha</i>)			Nudibranchs		
purple laver (<i>Porphyra</i>)			general grp (<i>Onchidaris</i>)		
rockweed (<i>Fucus</i>)		0-25	Bivalves		
turk washcloth (<i>Mastocarpus</i>)		0-25	pacific blue mussel (<i>Mytilus</i>)		75-100
sea cauliflower (<i>Leathesia</i>)			pacific oyster (<i>Crassostrea</i>)		
Branched			Barnacles		
black larch (<i>Neorhodomela</i>)			acorn group (<i>Balanus</i>)		7/100
sea bush (<i>Odonthalia</i>)			thatched (<i>Semibalanus</i>)		
red branched (<i>Gelidium</i>)			Isopods and Amphipods		
jointed coralline (<i>Corallina</i>)			amphipod group		
Mat			seaweed isopod (<i>Idotea</i>)		
a.			Crabs		
b.			hermit crabs (<i>Pagurus</i>)		
c.			shore crab grp (<i>Hemigrapsus</i>)		
Other			Sea Stars		
			ochre star (<i>Pisaster</i>)		
			Other		

Cortes Island Foreshore Monitoring Primary Quadrat Form

Data collection by: Bill Crago & Judith

Est. total: After doing intersects, count/estimate every species in quadrat: Seaweeds: % cover 0-25 / 25-50 / 50-75 / 75-100

Invertebrates: # Incl 1-25 / 25-50 / 50-75 / 75-100 / >100

SPECIES	# INTERSECTS	est. total	SPECIES	# INTERSECTS	est. total
SUBSTRATE			INVERTEBRATES		
rock			Anemones		
shell			aggregate anemone (<i>Anthopleura</i>)		
SEAWEED			lined anemone (<i>Haliplanella</i>)		
Crusts			Tube Worms		
general algal crust group		0-25	general tube worm group		
Filaments/ Fuzz/ Tuft			Chitons		
filamentous green group			general chiton group		
red filamentous group			Limpets		
red fuzz (<i>Caulacanthus</i>)			general limpet group		25-50
green rope (<i>Acrosiphonia</i>)			ribbed limpet (<i>Lottia digitalis</i>)		
green tuft (<i>Cladophora</i>)			Snails		
Blade			checkered periwinkle (<i>L.scutulata</i>)		>100
sea lettuce (<i>Ulva spp.</i>)			sitka periwinkle (<i>L. sitkana</i>)		
green ribbon (<i>Ulva intestinalis</i>)			Nudibranchs		
purple laver (<i>Porphyra</i>)			barnacle nudibanch (<i>Onchidoris</i>)		
rockweed (<i>Fucus spp.</i>)	25-50		Bivalves		
turk washcloth (<i>Mastocarpus</i>)	0-25		pacific blue mussel (<i>Mytilus</i>)	I	50-75
sea cauliflower (<i>Leathesia</i>)			pacific oyster (<i>Crassostrea</i>)		
Branched			Barnacles		
black larch (<i>Neorhodomela</i>)			acorn barnacle group (<i>Balanus</i>)		75-100
sea brush (<i>Odonthalia</i>)			thatched barnacle (<i>Semibalanus</i>)		
red branched (<i>Gelidium</i>)			Isopods and Amphipods		
coralline seaweed (<i>Corallina</i>)			general amphipod group		
Mat			seaweed isopod (<i>Idotea</i>)		
a.			Crabs		
b.			hermit crabs (<i>Pagurus</i>)		
c.			shore crab group (<i>Hemigrapsus</i>)		
Other			Sea Stars		
			ochre star (<i>Pisaster</i>)		
			Other		

Site name:

Coalter Island

Date (Y/M/D):

09/08/22

Quadrat Height (m):

3.0

Data collection by:

Bill Crago & Judith

Circle 1+: Bedrock; Boulder (dinner plate); Cobble (> apple); Pebble (> pea); Sand (sugar grain); Mud; Shell

Est. total: After doing Intersects, count/estimate every species in quadrat: Seaweeds: % cover 0-25 / 25-50 / 50-75 / 75-100

Invertebrates: # Ind 1-25 / 25-50 / 50-75 / 75-100 / >100

SPECIES	# INTERSECTS	est. total	SPECIES	# INTERSECTS	est. total
SUBSTRATE			INVERTEBRATES		
rock	II	0-25	Anemones		
shell			aggregate anemone (<i>Anthopleura</i>)		
SEAWEED			lined anemone (<i>Haliplanella</i>)		
Crusts			Tube Worms		
general algal crust group			general tube worm group		
Filaments/ Fuzz/ Tuft			Chitons		
filamentous green group			general chiton group		
red filamentous group			Limpets		
red fuzz (<i>Caulacanthus</i>)			general limpet group		
green rope (<i>Acrosiphonia</i>)			ribbed limpet (<i>Lottia digitalis</i>)		
green tuft (<i>Cladophora</i>)			Snails		
Blade			checkered periwinkle (<i>L. scutulata</i>)		
sea lettuce (<i>Ulva</i> spp.)			sitka periwinkle (<i>L. sitkana</i>)		50-75
green ribbon (<i>Ulva intestinalis</i>)			Nudibranchs		
purple laver (<i>Porphyra</i>)			barnacle nudibanch (<i>Onchidoris</i>)		
rockweed (<i>Fucus</i> spp.)	III III III I	20-50	Bivalves		
turk washcloth (<i>Mastocarpus</i>)			pacific blue mussel (<i>Mytilus</i>)		
sea cauliflower (<i>Leathesia</i>)			pacific oyster (<i>Crassostrea</i>)		
Branched			Barnacles		
black larch (<i>Neorhodomela</i>)			acorn barnacle group (<i>Balanus</i>)	III III II	20-50
sea brush (<i>Odonthalia</i>)			thatched barnacle (<i>Semibalanus</i>)		
red branched (<i>Gelidium</i>)			Isopods and Amphipods		
coralline seaweed (<i>Corallina</i>)			general amphipod group		
Mat			seaweed isopod (<i>Idotea</i>)		
a.			Crabs		
b.			hermit crabs (<i>Pagurus</i>)		
c.			shore crab group (<i>Hemigrapsus</i>)		
Other			Sea Stars		
			ochre star (<i>Pisaster</i>)		
			Other		

⑦✓

1335 Street

Est. total: After doing intersects, count/estimate every species in quadrat: Seaweeds: % cover 0-25 / 25-50 / 50-75 / 75-100

Invertebrates: # Incl 1-25 / 25-50 / 50-75 / 75-100 / >100

SPECIES	# INTERSECTS	est. total	SPECIES	# INTERSECTS	est. total
SUBSTRATE			INVERTEBRATES		
rock			Anemones		
shell			aggregate anemone (<i>Anthopleura</i>)		
SEAWEED			lined anemone (<i>Haliplanella</i>)		
Crusts			Tube Worms		
general algal crust group		0-25	general tube worm group		
Filaments/ Fuzz/ Tuft			Chitons		
filamentous green group			general chiton group		
red filamentous group			Limpets		
red fuzz (<i>Caulacanthus</i>)		0-25	general limpet group		75-100
green rope (<i>Acrosiphonia</i>)			ribbed limpet (<i>Lottia digitalis</i>)		
green tuft (<i>Cladophora</i>)			Snails		
Blade			checkered periwinkle (<i>L. scutulata</i>)		> 100.
sea lettuce (<i>Ulva</i> spp.)		0-25	sitka periwinkle (<i>L. sitkana</i>)		
green ribbon (<i>Ulva intestinalis</i>)			Nudibranchs		
purple laver (<i>Porphyra</i>)			barnacle nudibranch (<i>Onchidoris</i>)		
rockweed (<i>Fucus</i> spp.)		0-25	Bivalves		
turk washcloth (<i>Mastocarpus</i>)		0-25	pacific blue mussel (<i>Mytilus</i>)		> 100.
sea cauliflower (<i>Leathesia</i>)			pacific oyster (<i>Crassostrea</i>)		
Branched			Barnacles		
black larch (<i>Neorhodomela</i>)			acorn barnacle group (<i>Balanus</i>)		> 100 spots med. juv.
sea brush (<i>Odonthalia</i>)			thatched barnacle (<i>Semibalanus</i>)		
red branched (<i>Gelidium</i>)			Isopods and Amphipods		
coralline seaweed (<i>Corallina</i>)			general amphipod group		
Mat			seaweed isopod (<i>Idotea</i>)		
a.			Crabs		
b.			hermit crabs (<i>Pagurus</i>)		
c.			shore crab group (<i>Hemigrapsus</i>)		
Other			Sea Stars		
			ochre star (<i>Pisaster</i>)		
			Other		

Data collection by: SLM

Est. total: After doing intersects, count/estimate every species in quadrat: Seaweeds: % cover 0-25 / 25-50 / 50-75 / 75-100

Invertebrates: # Ind 1-25 / 25-50 / 50-75 / 75-100 / >100

* Note: have nodes, surfaces, nodes as
nodes are covered in henna like
spat.
that size.

+ Note most of mussels in photo are dead

Data collection by: SLM & DAL

Est. total: After doing intersects, count/estimate every species in quadrat: Seaweeds: % cover 0-25 / 25-50 / 50-75 / 75-100

Invertebrates: # Ind 1-25 / 25-50 / 50-75 / 75-100 / >100

SPECIES	# INTERSECTS	est. total	SPECIES	# INTERSECTS	est. total
SUBSTRATE			INVERTEBRATES		
rock			Anemones		
shell			aggregate anemone (<i>Anthopleura</i>)		3
SEAWEED			lined anemone (<i>Haliplanella</i>)		
Crusts			Tube Worms		
general algal crust group		0-25	general tube worm group		
Filaments/ Fuzz/ Tuft			Chitons		
filamentous green group			general chiton group		
red filamentous group			Limpets		
red fuzz (<i>Caulacanthus</i>)			general limpet group		1-25
green rope (<i>Acrosiphonia</i>)			ribbed limpet (<i>Lottia digitalis</i>)		
green tuft (<i>Cladophora</i>)			Snails		
Blade			checkered periwinkle (<i>L.scutulata</i>)		7100
sea lettuce (<i>Ulva spp.</i>)			sitka periwinkle (<i>L. sitkana</i>)		
green ribbon (<i>Ulva intestinalis</i>)			Nudibranchs		
purple laver (<i>Porphyra</i>)			barnacle nudibanch (<i>Onchidoris</i>)		
rockweed (<i>Fucus spp.</i>)	 	75-100	Bivalves		
turk washcloth (<i>Mastocarpus</i>)		0-25	pacific blue mussel (<i>Mytilus</i>)	 	75-100
sea cauliflower (<i>Leathesia</i>)			pacific oyster (<i>Crassostrea</i>)		
Branched			Barnacles		
black larch (<i>Neorhodomela</i>)			acorn barnacle group (<i>Balanus</i>)	 	7100
sea brush (<i>Odonthalia</i>)			thatched barnacle (<i>Semibalanus</i>)		
red branched (<i>Gelidium</i>)			Isopods and Amphipods		
coralline seaweed (<i>Corallina</i>)			general amphipod group		
Mat			seaweed isopod (<i>Idotea</i>)		
a.			Crabs		
b.			hermit crabs (<i>Pagurus</i>)		
c.			shore crab group (<i>Hemigrapsus</i>)		
Other			Sea Stars		
 			ochre star (<i>Pisaster</i>)		
			Other		