

Appendix 1. Frequency of Occurrence of each species in each Transect at Aramoana. Species listed but with no frequencies were not present at Aramoana.						
	Total	1	2	3	4	5
Species / Quadrats	184	41	37	34	39	33
<i>Acanthochiton zelandicus</i>						
<i>Actinothoe albacineta</i>	3	0	3	0	0	0
<i>Adenocystis ultricularis</i>	22	4	11	2	2	3
<i>Amaurochiton glaucus</i>	6	1	0	2	3	0
<i>Anthopleura aureoradiata</i>	8	1	5	0	0	2
<i>Apophloea sinclairii</i>	18	4	2	1	1	10
Black Lichen	10	4	3	0	1	2
<i>Buccinulum multilineum</i>						
<i>Chamaespiho brunnea</i>	5	0	3	1	0	1
<i>Chaemosipho columna</i>	10	4	3	1	0	2
<i>Cellana denticulata</i>						
<i>Cellana flava</i>	2	0	1	1	0	0
<i>Carpophyllum flexuosum</i>						
<i>Cominella glandiformis</i>	30	4	5	8	13	0
<i>Cominella maculosa</i>	30	6	8	11	3	2
<i>Carpophyllum maschalocarpum</i>						
<i>Cellana ornata</i>	3	1	1	0	0	1
<i>Carpophyllum plumosum</i>	3	1	1	1	0	0
<i>Cellana radians</i>	11	3	5	1	1	1
<i>Cystophora retroflexa</i>	12	5	0	4	0	3
<i>Cystophora torulosa</i>	18	8	2	5	0	3
<i>Cantharidella tessellata</i>						
<i>Carodiloma coracina</i>						
<i>Caulerpa brownii</i>						
<i>Codium adhaerans</i>	103	18	26	17	23	19
<i>Colpomenia sinuosa</i>	81	15	16	24	12	14
<i>Cookia sulcata</i>	1	0	0	1	0	0
<i>Corallina</i> spp	158	31	34	31	36	26
<i>Coscinasterias calamaria</i>						
<i>Cyclograpsus laevauxi</i>	2	0	1	1	0	0
<i>Diloma arida</i>						
<i>Diloma bicanalicuta</i>						
<i>Diloma nigerrima</i>						
<i>Diloma</i> spp						

Appendix 1. Frequency of Occurrence of each species in each Transect at Aramoana. Species listed but with no frequencies were not present at Aramoana.						
	Total	1	2	3	4	5
<i>Epopella plicata</i>	4	0	3	0	0	1
<i>Enteromorpha</i> spp						
<i>Evechinus chloroticus</i>	2	1	1	0	0	0
grey lichen						
<i>Glossophora kunthii</i>						
<i>Hemigrapsus edwardsii</i>	3	1	2	0	0	0
<i>Halicarcinus whitei</i>	2	1	1	0	0	0
<i>Halopterus spicigera</i>	1	1	0	0	0	0
<i>Haustrum haustorium</i>	22	6	4	6	2	4
hermit crab	30	7	4	10	9	0
<i>Heterozius rotundifrons</i>						
<i>Haliotis iris</i>	2	0	0	2	0	0
<i>Hormosira banksii</i>	153	32	32	26	37	26
<i>Ischnochiton maorianus</i>	6	0	2	1	3	0
<i>Isactinia</i> sps	9	4	4	0	0	1
<i>Isocladus armatus</i>						
<i>Isocradactis magna</i>	1	0	0	1	0	0
Isopods						
<i>Jania micrarthroidia</i>	2	0	0	2	0	0
<i>Lepsiella scobina</i>	33	10	8	6	3	6
<i>Lithothamnion</i> spp						
<i>Littorina</i> spp	59	5	21	17	12	4
<i>Mitella spinosa</i>						
<i>Melagraphia aethiops</i>	120	28	23	18	30	21
<i>Microzonia velutina</i>						
<i>Mytilus edulis aoteanus</i>						
<i>Nerita atramentosa milanotragus</i>						
<i>Notomithrax ursus</i>	2	1	1	0	0	0
<i>Notheia anomala</i>						
<i>Onchidella nigricans</i>						
orange anemone						
<i>Oulactis muscosa</i>						
<i>Ozius truncatus</i>						
<i>Patelloidialia corticata</i>	1	0	1	0	0	0
<i>Patierella regularis</i>	6	0	0	5	1	0

Appendix 1. Frequency of Occurrence of each species in each Transect at Aramoana. Species listed but with no frequencies were not present at Aramoana.						
	Total	1	2	3	4	5
<i>Petrolithes elongatus</i>						
<i>Phlyctenactis tuberculosa</i>						
<i>Plagusia chabrus</i>						
<i>Plocamium costatum</i>						
<i>Pomatoceros cariniferus</i>	1	1	0	0	0	0
<i>Porphyra colombina</i>						
<i>Pterocladia</i> spp						
<i>Sargassum sinclairii</i>	1	1	0	0	0	0
<i>Scutus breviculus</i>	1	0	0	1	0	0
<i>Scytothamnus australis</i>	16	7	3	2	1	3
<i>Siphonaria zelandica</i>						
<i>Spirobis</i> sp	33	11	5	7	10	0
<i>Splachnidium rugosum</i>						
<i>Sypharochiton</i> sps	56	18	13	3	7	15
<i>Thais orbita</i>						
top shells						
Tunicates						
<i>Turbo smaragdus</i>	109	19	23	24	29	14
<i>Ulva lactuca</i>	7	0	4	2	1	0
<i>Xenostrobus pulex</i>						
<i>Xymene plebeius</i>						
Yellow Lichen						
<i>Zeacumantus subcarinatus</i>	58	12	18	11	14	3
<i>Zonaria angusta</i>	6	2	0	4	0	0
<i>Zostera muelleri</i>	22	10	1	4	6	1

Appendix 2. Frequency of Occurrence of each species in the 8 transects at Blackhead. Species listed but with no frequencies were not present at Blackhead.									
	Total	1	2	3	4	5	6	7	8
Species / Quadrats	189	38	34	24	16	24	21	19	13
<i>Acanthochiton zelandicus</i>									
<i>Actinothoe albacineta</i>									
<i>Adenocystis ultricularis</i>									
<i>Amaurochiton glaucus</i>	4	2	1	0	0	0	0	0	1
<i>Anthopleura aureoradiata</i>									
<i>Apophloea sinclairii</i>	16	4	0	4	1	0	1	1	5
Black Lichen	9	2	2	4	0	0	1	0	0
<i>Buccinulum multilinum</i>									
<i>Chamaespiho brunnea</i>	13	3	0	4	4	0	1	1	0
<i>Chaemosipho columna</i>	19	4	2	5	4	0	2	2	0
<i>Cellana denticulata</i>	1	0	0	0	1	0	0	0	0
<i>Cellana flava</i>	8	0	4	1	2	0	0	1	0
<i>Carpophyllum flexuosum</i>	2	0	0	1	1	0	0	0	0
<i>Cominella glandiformis</i>	2	0	2	0	0	0	0	0	0
<i>Cominella maculosa</i>	24	7	3	1	0	11	1	1	0
<i>Carpophyllum maschalocarpum</i>	13	2	1	3	1	1	1	3	1
<i>Cellana ornata</i>	15	2	2	5	4	0	1	1	0
<i>Carpophyllum plumosum</i>	18	3	4	4	1	1	2	1	2
<i>Cellana radians</i>	27	3	5	6	6	0	2	3	2
<i>Cystophora retroflexa</i>	12	1	4	1	0	0	3	2	1
<i>Cystophora torulosa</i>	26	3	8	7	0	0	3	3	2
<i>Cantharidella tessellata</i>									
<i>Carodiloma coracina</i>									
<i>Caulerpa brownii</i>									
<i>Codium adhaerans</i>	70	19	14	6	7	5	5	7	7
<i>Colpomenia sinuosa</i>	54	6	11	7	1	4	8	9	8
<i>Cookia sulcata</i>	4	0	0	0	1	0	0	1	2
<i>Corallina</i> spp	158	28	30	19	15	20	17	17	12
<i>Coscinasterias calamaria</i>	2	0	1	1	0	0	0	0	0
<i>Cyclograpsus laevauxi</i>	1	0	0	0	0	0	1	0	0
<i>Diloma arida</i>									
<i>Diloma bicanalicuta</i>									
<i>Diloma nigerrima</i>									
<i>Diloma</i> spp									
<i>Epopella plicata</i>	10	0	1	2	4	0	1	2	0
<i>Enteromorpha</i> spp									
<i>Evechinus chloroticus</i>	12	1	1	1	0	0	4	5	0



Appendix 2. Frequency of Occurrence of each species in the 8 transects at Blackhead. Species listed but with no frequencies were not present at Blackhead.									
	Total	1	2	3	4	5	6	7	8
<i>Pterocladia</i> spp	1	0	1	0	0	0	0	0	0
<i>Sargassum sinclairii</i>	3	1	2	0	0	0	0	0	0
<i>Scutus breviculus</i>	1	0	0	1	0	0	0	0	0
<i>Scytothamnus australis</i>	12	3	5	2	0	0	0	2	0
<i>Siphonaria zelandica</i>	3	2	1	0	0	0	0	0	0
<i>Spirobis</i> sp	6	4	1	0	0	0	0	0	1
<i>Splachnidium rugosum</i>									
<i>Sypharochiton</i> sps	55	9	13	4	10	2	4	9	4
<i>Thais orbita</i>	1	0	1	0	0	0	0	0	0
top shells									
Tunicates									
<i>Turbo smaragdus</i>	115	19	25	16	9	17	7	12	10
<i>Ulva lactuca</i>	34	12	1	5	0	0	11	2	3
<i>Xenostrobus pulex</i>	2	0	0	0	1	0	1	0	0
<i>Xymene plebeius</i>									
Yellow Lichen									
<i>Zeacumantus subcarinatus</i>	24	14	3	3	0	1	3	0	0
<i>Zonaria angusta</i>	14	1	4	2	0	0	3	3	1
<i>Zostera muelleri</i>	16	4	3	3	0	4	1	0	1

Appendix 3. Frequency of Occurrence of each species in the 5 transects at Kairakau. Species listed but with no frequencies were not present at Kairakau.

Species /	Transects Quadrats	Total	1	2	3	4	5
<i>Acanthochiton zelandicus</i>		1	1	0	0	0	0
<i>Actinothoe albacineta</i>							
<i>Adenocystis ultricularis</i>							
<i>Amaurochiton glaucus</i>		14	5	4	2	3	0
<i>Anthopleura aureoradiata</i>		1	0	0	1	0	0
<i>Apophloea sinclairii</i>		15	3	5	3	3	1
Black Lichen		8	1	2	2	2	1
<i>Buccinulum multilineum</i>							
<i>Chamaespiho brunnea</i>		7	0	2	1	2	2
<i>Chaemosipho columna</i>		11	5	3	2	1	0
<i>Cellana denticulata</i>		4	0	1	0	3	0
<i>Cellana flava</i>							
<i>Carpophyllum flexuosum</i>		3	0	0	0	3	0
<i>Cominella glandiformis</i>		4	0	3	1	0	0
<i>Cominella maculosa</i>		5	1	3	0	1	0
<i>Carpophyllum maschalocarpum</i>		5	1	0	0	3	1
<i>Cellana ornata</i>		11	2	2	1	4	2
<i>Carpophyllum plumosum</i>		18	6	3	0	6	3
<i>Cellana radians</i>		20	2	7	4	4	3
<i>Cystophora retroflexa</i>		5	1	4	0	0	0
<i>Cystophora torulosa</i>		26	6	7	1	6	6
<i>Cantharidella tessellata</i>							
<i>Carodiloma coracina</i>							
<i>Caulerpa brownii</i>							
<i>Codium adhaerans</i>		6	0	0	5	1	0
<i>Colpomenia sinuosa</i>		35	12	11	4	3	5
<i>Cookia sulcata</i>							
<i>Corallina</i> spp		69	16	15	19	12	7
<i>Coscinasterias calamaria</i>							
<i>Cyclograpsus laevauxi</i>		1	0	0	0	0	1
<i>Diloma arida</i>							
<i>Diloma bicanalicuta</i>		4	0	0	0	3	1
<i>Diloma nigerrima</i>		10	2	0	2	3	3
<i>Diloma</i> spp							
<i>Epopella plicata</i>		1	0	0	1	0	0
<i>Enteromorpha</i> spp							
<i>Evechinus chloroticus</i>							
grey lichen							

Appendix 3. Frequency of Occurrence of each species in the 5 transects at Kairakau. Species listed but with no frequencies were not present at Kairakau.						
Transects	Total	1	2	3	4	5
<i>Glossophora kunthii</i>						
<i>Hemigrapsus edwardsii</i>						
<i>Halicarcinus whitei</i>						
<i>Halopterus spicigera</i>	4	0	4	0	0	0
<i>Haustrum haustorium</i>	6	2	2	0	1	1
hermit crab	10	5	2	3	0	0
<i>Heterozius rotundifrons</i>	3	1	1	0	0	1
<i>Haliotis iris</i>						
<i>Hormosira banksii</i>	58	14	11	18	9	6
<i>Ischnochiton maorianus</i>	9	2	4	2	1	0
<i>Isactinia</i> sps	3	1	0	2	0	0
<i>Isocladus armatus</i>						
<i>Isocradactis magna</i>						
Isopods	1	0	1	0	0	0
<i>Jania micrarthroidia</i>						
<i>Lepsiella scobina</i>	8	0	2	4	1	1
<i>Lithothamnion</i> spp	4	1	1	0	1	1
<i>Littorina</i> spp	23	4	5	3	6	5
<i>Mitella spinosa</i>	1	0	0	1	0	0
<i>Melagraphia aethiops</i>	64	14	13	16	15	6
<i>Microzonia velutina</i>	3	1	1	0	0	1
<i>Mytilus edulis aoteanus</i>						
<i>Nerita atramentosa milanotragus</i>	3	0	0	0	2	1
<i>Notomithrax ursus</i>						
<i>Notheia anomala</i>	6	2	2	2	0	0
<i>Onchidella nigricans</i>						
orange anemone	1	1	0	0	0	0
<i>Oulactis muscosa</i>						
<i>Ozius truncatus</i>	12	2	1	4	5	0
<i>Patelloidialia corticata</i>						
<i>Patierella regularis</i>	3	0	0	2	1	0
<i>Petrolithes elongatus</i>	25	7	5	5	7	1
<i>Phlyctenactis tuberculosa</i>						
<i>Plagusia chabrus</i>	1	0	0	1	0	0
<i>Plocamium costatum</i>						
<i>Pomatoceros cariniferus</i>	11	4	1	4	2	0
<i>Porphyra colombina</i>	2	0	0	0	0	2
<i>Pterocladia</i> spp	3	3	0	0	0	0
<i>Sargassum sinclairii</i>	4	0	2	1	1	0



Appendix 3. Frequency of Occurrence of each species in the 5 transects at Kairakau. Species listed but with no frequencies were not present at Kairakau.

Transects	Total	1	2	3	4	5
<i>Scutus breviculus</i>						
<i>Scytothamnus australis</i>	15	7	5	1	2	0
<i>Siphonaria zelandica</i>	2	0	0	0	1	1
<i>Spirobis</i> sp	11	5	2	2	2	0
<i>Splachnidium rugosum</i>						
<i>Sypharochiton</i> sps	38	12	7	6	9	4
<i>Thais orbita</i>	1	0	0	0	0	1
top shells						
Tunicates	1	0	1	0	0	0
<i>Turbo smaragdus</i>	67	14	17	11	17	8
<i>Ulva lactuca</i>	1	1	0	0	0	0
<i>Xenostrobus pulex</i>						
<i>Xymene plebeius</i>						
Yellow Lichen	2	1	0	1	0	0
<i>Zeacumantus subcarinatus</i>	8	2	2	3	1	0
<i>Zonaria angusta</i>	6	0	0	0	3	3
<i>Zostera muelleri</i>	33	7	6	14	6	0

Appendix 4. Frequency of Occurrence of each species in the 5 transects at Mangakuri. Species listed but with no frequencies were not present at Mangakuri.

Transects	Total	1	2	3	4	5
Species / Quadrats	104	18	20	24	21	21
<i>Acanthochiton zelandicus</i>						
<i>Actinothoe albacineta</i>	3	0	0	2	1	0
<i>Adenocystis ultricularis</i>						
<i>Amaurochiton glaucus</i>	27	7	4	2	8	6
<i>Anthopleura aureoradiata</i>						
<i>Apophloea sinclairii</i>	13	8	0	3	1	1
Black Lichen	11	2	0	1	5	3
<i>Buccinulum multilineum</i>	1	1	0	0	0	0
<i>Chamaespiho brunnea</i>	3	0	1	0	2	0
<i>Chaemosipho columna</i>	13	3	1	2	4	3
<i>Cellana denticulata</i>	4	3	0	0	0	1
<i>Cellana flava</i>						
<i>Carpophyllum flexuosum</i>						
<i>Cominella glandiformis</i>						
<i>Cominella maculosa</i>	3	1	0	0	0	2
<i>Carpophyllum maschalocarpum</i>	2	0	0	2	0	0
<i>Cellana ornata</i>	17	4	3	2	5	3

Appendix 4. Frequency of Occurrence of each species in the 5 transects at Mangakuri. Species listed but with no frequencies were not present at Mangakuri.						
Transects	Total	1	2	3	4	5
<i>Carpophyllum plumosum</i>	3	0	0	2	1	0
<i>Cellana radians</i>	33	13	5	4	5	6
<i>Cystophora retroflexa</i>	4	0	2	1	1	0
<i>Cystophora torulosa</i>	30	2	8	6	8	6
<i>Cantharidella tessellata</i>						
<i>Carodiloma coracina</i>						
<i>Caulerpa brownii</i>						
<i>Codium adhaerans</i>	8	1	1	0	3	3
<i>Colpomenia sinuosa</i>	4	1	1	0	0	2
<i>Cookia sulcata</i>	1	0	0	1	0	0
<i>Corallina</i> spp	65	2	17	15	16	15
<i>Coscinasterias calamaria</i>						
<i>Cyclograpsus laevauxi</i>	6	2	0	0	3	1
<i>Diloma arida</i>						
<i>Diloma bicanalicuta</i>	1	1	0	0	0	0
<i>Diloma nigerrima</i>						
<i>Diloma</i> spp						
<i>Epopella plicata</i>						
<i>Enteromorpha</i> spp						
<i>Evechinus chloroticus</i>	1	0	0	0	0	1
grey lichen						
<i>Glossophora kunthii</i>						
<i>Hemigrapsus edwardsii</i>	3	2	0	0	1	0
<i>Halicarcinus whitei</i>						
<i>Halopteris spicigera</i>	13	2	0	10	1	0
<i>Haustrum haustorium</i>	11	1	2	0	5	3
hermit crab	4	2	0	2	0	0
<i>Heterozius rotundifrons</i>						
<i>Haliotis iris</i>	1	0	0	1	0	0
<i>Hormosira banksii</i>	64	10	17	9	14	14
<i>Ischnochiton maorianus</i>	13	1	2	1	6	3
<i>Isactinia</i> sps	1	0	0	0	1	0
<i>Isocladus armatus</i>	1	0	0	0	1	0
<i>Isocradactis magna</i>	1	0	0	0	0	1
Isopods						
<i>Jania micrarthroidia</i>						
<i>Lepsiella scobina</i>	14	5	2	2	1	4
<i>Lithothamnion</i> spp	10	1	1	4	0	4
<i>Littorina</i> spp	18	2	0	6	5	5

Appendix 4. Frequency of Occurrence of each species in the 5 transects at Mangakuri. Species listed but with no frequencies were not present at Mangakuri.						
Transects	Total	1	2	3	4	5
<i>Mitella spinosa</i>						
<i>Melagraphia aethiops</i>	55	14	12	5	11	13
<i>Microzonia velutina</i>	1	0	0	1	0	0
<i>Mytilus edulis aoteanus</i>						
<i>Nerita atramentosa milanotragus</i>						
<i>Notomithrax ursus</i>	0	0	0	0	0	0
<i>Notheia anomala</i>	5	0	0	0	2	3
<i>Onchidella nigricans</i>	3	0	0	0	1	2
orange anemone						
<i>Oulactis muscosa</i>						
<i>Ozius truncatus</i>						
<i>Patelloidia corticata</i>	0	0	0	0	0	0
<i>Patierella regularis</i>	3	0	2	0	1	0
<i>Petrolithes elongatus</i>	18	6	1	2	6	3
<i>Phlyctenactis tuberculosa</i>						
<i>Plagusia chabrus</i>						
<i>Plocamium costatum</i>	0	0	0	0	0	0
<i>Pomatoceros cariniferus</i>	15	4	1	3	5	2
<i>Porphyra colombina</i>						
<i>Pterocladia spp</i>						
<i>Sargassum sinclairii</i>	2	0	2	0	0	0
<i>Scutus breviculus</i>						
<i>Scytothamnus australis</i>	42	8	13	7	5	9
<i>Siphonaria zelandica</i>						
<i>Spirobis sp</i>	31	4	4	7	12	4
<i>Splachnidium rugosum</i>						
<i>Sypharochiton sps</i>	57	14	12	8	12	11
<i>Thais orbita</i>						
top shells						
Tunicates						
<i>Turbo smaragdus</i>	60	11	17	9	13	10
<i>Ulva lactuca</i>						
<i>Xenostrobus pulex</i>	2	0	0	0	1	1
<i>Xymene plebeius</i>						
Yellow Lichen	10	5	0	4	1	0
<i>Zeacumantus subcarinatus</i>	7	1	0	2	3	1
<i>Zonaria angusta</i>	4	0	3	1	0	0
<i>Zostera muelleri</i>	9	3	4	1	0	1