

APPENDIX 2: SUPPLEMENTARY RESULTS

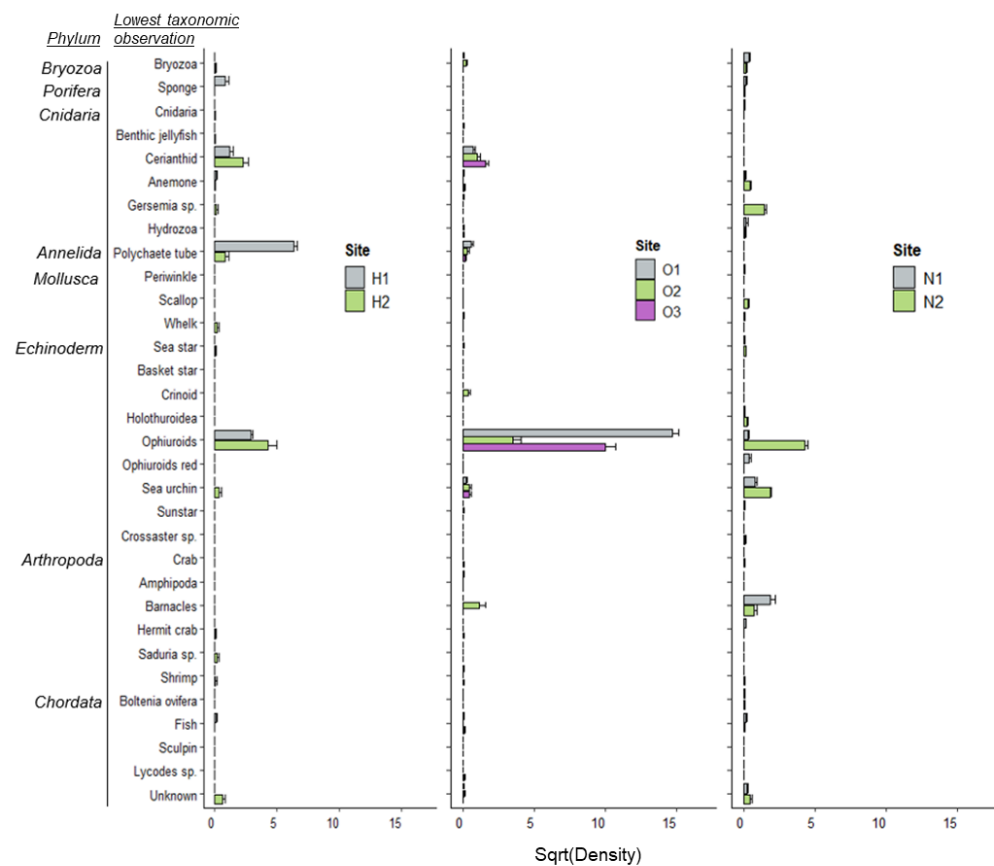


Figure A2.1. Square-root of density (# individuals / m²) of epibenthic taxa observed from video surveys conducted during the 2019 Imappivut Expedition. Mean square-root density with standard error for each taxon is displayed for each site. Most taxa were identified at high taxonomic levels due to lack of physical sampling associated with the imagery.

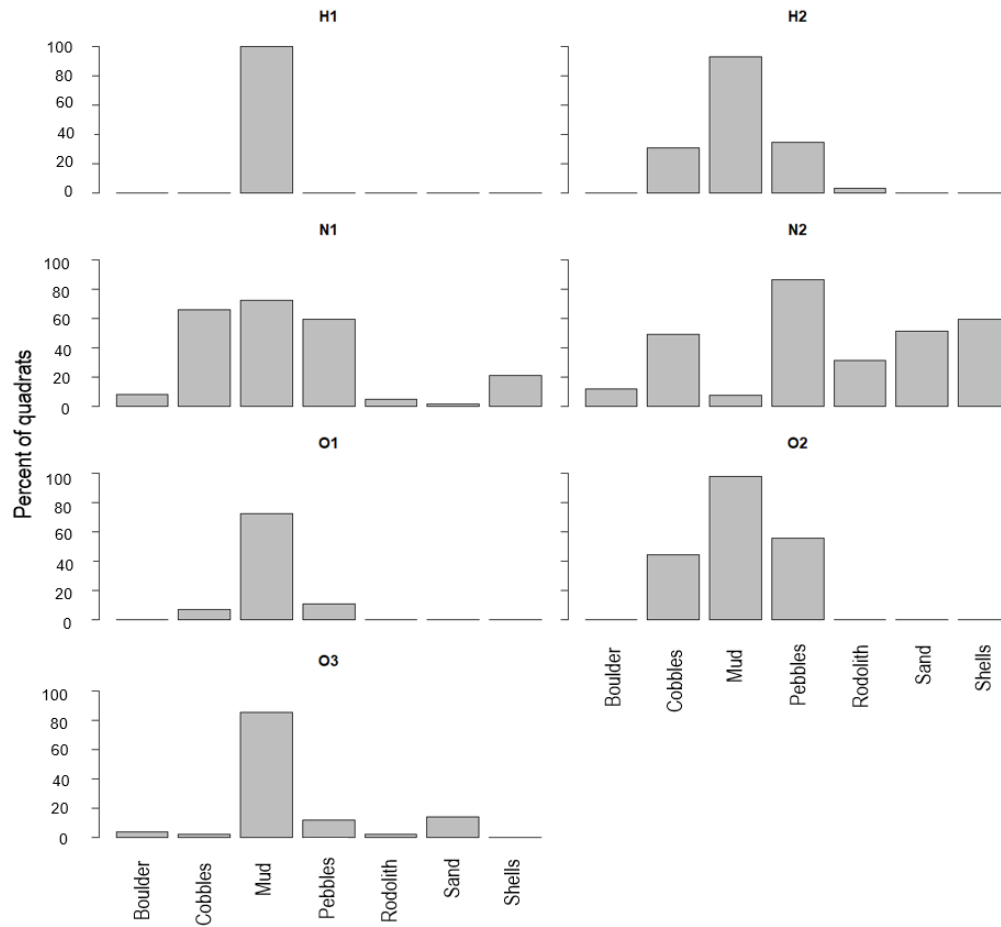


Figure A2.2. Percent of quadrats at each site containing some proportion of each substrate type. Observed from drop-camera quadrat sampling conducted during the 2019 Imappivut Expedition. H1 = Hebron outer, H2 = Hebron inner; N1 = Nain outer, N2 = Nain inner; O1 = Okak outer North, O2 = Okak inner, O3 = Okak outer South.

Table A2.1. A comparison of fauna species between video transects and drop camera quadrats from the Imappivut expedition in 2019. All fauna were identified to the lowest taxon level possible with non-invasive methodology. When a number is provided beside a taxa name it indicates that more than one distinct type of that taxa was seen, but could not be identified further. If taxa could be identified to the species level, that identification is noted.

A2.1a. Presence of fauna observed in transects and quadrats at Hebron sites 1 and 2.

Taxa	Presence in transects	Presence in quadrats
Amphipoda	X	
Anemone	X	X
Benthic fish	X	
Benthic jellyfish	X	X
Bryozoa	X	X
Cerianthid	X	X
Cerianthid field	X	
Coral, <i>Gersemia sp.</i>	X	X
Crab sp.	X	
Crab, hermit		X
Crab, toad	X	
Crinoid	X	
Crustacea	X	
Fish	X	X
Holothuroidea	X	

<i>Lycodes</i> sp.	X	
Ophiuroid	X	X
Ophiuroid field	X	
Polychaete tube	X	X
Rhodolith		X
Sea star	X	X
Sea urchin	X	
Sea urchin field	X	X
Shrimp	X	X
Sponge sp.	X	X
Sunstar sp.	X	
Sunstar, <i>Solaster</i> sp.	X	
Sunstar, <i>Crossaster</i> sp.	X	
Whelk	X	X
Unknown	X	X

A2.1b Presence of fauna observed in transects and quadrats at Okak sites 1, 2, and 3.

Taxa	Presence in transects	Presence in quadrats
Amphipoda		X
Anemone	X	X

Anemone 2	X	
Anemone 3	X	
Barnacles	X	X
Basket star	X	
Benthic jellyfish	X	X
Bivalve	X	
Bryozoa	X	X
Cerianthid	X	X
Cerianthid field	X	
Cnidaria	X	X
Coral, <i>Gersemia sp.</i>	X	X
Crab	X	X
Crab 2	X	
Crab, hermit	X	X
Crab, toad	X	
Crinoid	X	X
Crinoid field	X	
Fish	X	X
Holothuroidea	X	
Hydrozoa	X	X
<i>Lycodes sp.</i>	X	X

Mussels	X	
Ophiuroid	X	X
Ophiuroid field	X	
Polychaete tube	X	X
Rhodolith	X	X
Rhodolith — encrusting	X	
Sculpin	X	
Sea star	X	X
Sea urchin	X	X
Sea urchin 2	X	
Sea urchin field	X	
Shrimp	X	X
Shrimp 2	X	
Snail	X	
Sponge	X	
Sponge 2	X	
Sunstar sp.	X	X
Sunstar 2	X	
Sunstar, <i>Crossaster</i> sp.	X	
Whelk	X	X
Unknown	X	X

A2.1c Presence of fauna observed in transects and quadrats at Nain sites 1 and 2.

Taxa	Presence in transects	Presence in quadrats
Anemone	X	X
Ascidian	X	
Asteroidea	X	
Barnacles	X	X
Basket star	X	X
<i>Boltenia ovifera</i>	X	X
Bryozoa	X	X
Cnidaria	X	X
Coral, <i>Gersemia</i> sp.	X	X
Coral, <i>Gorgonian</i> sp.	X	X
Coral, Hard orange- unidentified	X	
Crab	X	X
Crab, hermit	X	
Crab, toad	X	
<i>Cucumaria frondosa</i>	X	
Fish	X	X
Holothuroidea sp.	X	X
Hydrozoa	X	X

<i>Lycodes</i> sp.	X	X
Ophiuroid sp.	X	X
Ophiuroid sp., white	X	X
Ophiuroid sp., red	X	
Polychaete tube	X	X
Rhodolith	X	
Rhodolith — encrusting	X	X
Scallop	X	X
Sculpin	X	X
Sea star	X	X
Sea urchin	X	X
Shells (unidentified, fragments)	X	X
Shrimp	X	X
Snail		X
Sponge sp.	X	X
Sponge sp., black	X	
Sponge sp., orange	X	X
Sponge sp., yellow	X	X
Sunstar sp.	X	
Sunstar, <i>Crossaster</i> sp.	X	X
Sunstar, <i>Solaster</i> sp.	X	

Whelk	X	X
Unknown	X	X

Table A2.2 Observations of taxa from the baited camera drops in the 2019 Imappivut survey across the three locations. Invertebrate observations are shown as presence (X) or absence; fish observations are count data. When a number is provided beside a taxa name it indicates that more than one distinct type of that taxa was seen, but could not be identified further.

A2.2a Hebron

Taxa	Phylum	Heb-BC-1- 08_21_19	Heb-BC-2- 08_21_19	Heb-BC-3- 08_21_19	Heb-BC-4- 08_21_19
Invertebrate presence					
Amphipod	Arthropoda	x	x		
Crab	Arthropoda				
Hermit crab	Arthropoda				
<i>Hyas</i> sp. †	Arthropoda			x	x
Mysids	Arthropoda		x		
<i>Saduria</i> sp.	Arthropoda		x		
Shrimp	Arthropoda	x			
Bryozoa	Bryozoa				
Chaetognaths	Chaetognatha	x	x		x
Polychaeta	Annelida				x
Anemone	Cnidaria		x		
Anemone on whelk	Cnidaria		x		
Cerianthid	Cnidaria				
<i>Crossaster</i> sp.	Echinodermata			x	x
Ctenophore	Ctenophora	x	x	x	x

Sea star	Echinodermata				
Sea urchin	Echinodermata				x
Whelk	Mollusca	x	x	x	x
Unknown	Unknown	x			
Enumerated mobile taxa					
<i>Hyas</i> sp. †	Arthropoda				3
Cottidae	Chordata		1	1	
Gadidae	Chordata	1	1		
Fish	Chordata				
Fish 1	Chordata	1			
Fish 2	Chordata	2			
<i>Mallotus villosus</i>	Chordata				
<i>Myoxocephalus</i> sp.	Chordata			7	11
Skate	Chordata				
Stichaeidae	Chordata				
<i>Stichaeus punctatus</i>	Chordata				5

† *Hyas* sp. could be enumerated in some instances, so are included both in presence absence and fauna counts.

A2.2b Okak

Taxa	Phylum	Okak-BC-1-08_22_19	Okak-BC-2-08_22_19	Okak-BC-3-08_22_19	Okak-BC-1-08_23_19	Okak-BC-1-08_24_19
Invertebrate presence						
Amphipod	Arthropoda	x	x		x	
Crab	Arthropoda		x		x	x
Hermit crab	Arthropoda			x		x

<i>Hyas</i> sp. †	Arthropoda	x			x	x
Mysids	Arthropoda	x	x		x	
<i>Saduria</i> sp.	Arthropoda					
Shrimp	Arthropoda	x		x		x
Bryozoa	Bryozoa			x		
Chaetognaths	Chaetognatha	x	x			
Polychaeta	Annelida		x			
Anemone	Cnidaria					
Anemone on whelk	Cnidaria					
Cerianthid	Cnidaria					
<i>Crossaster</i> sp.	Echinodermata			x		
Ctenophore	Ctenophora		x	x	x	
Sea star	Echinodermata			x		
Sea urchin	Echinodermata					
Whelk	Mollusca					
Unknown	Unknown					
Enumerated mobile taxa						
<i>Hyas</i> sp.	Arthropoda	11			11	16
Cottidae	Chordata			4		
Gadidae	Chordata					
Fish	Chordata	15	2	1		8
Fish 1	Chordata		1			
Fish 2	Chordata					
<i>Mallotus villosus</i>	Chordata	29	3			
<i>Myoxocephalus</i> sp.	Chordata	12		2		
Skate	Chordata					
Stichaeidae	Chordata			1		

<i>Stichaeus punctatus</i>	Chordata	1	1	2		
Cottidae	Chordata			4		

† *Hyas* sp. could be enumerated in some instances, so are included both in presence absence and fauna counts

A2.2c Nain

Taxa	Phylum	Nain-BC-1-08_25_19	Nain-BC-2-08_25_19	Nain-BC-1-08_26_19
Invertebrate presence				
Amphipod	Arthropoda			
Crab	Arthropoda		x	x
Hermit crab	Arthropoda	x	x	
<i>Hyas</i> sp. †	Arthropoda	x	x	x
Mysids	Arthropoda		x	x
Saduria sp.	Arthropoda			
Shrimp	Arthropoda	x		
Bryozoa	Bryozoa			
Chaetognaths	Chaetognatha			
Polychaeta	Annelida	x		
Anemone	Cnidaria			
Anemone on whelk	Cnidaria			
Cerianthid	Cnidaria	x		
Ctenophore	Ctenophora	x	x	x
<i>Crossaster</i> sp.	Echinodermata			
Sea star	Echinodermata			
Sea urchin	Echinodermata			

Whelk	Mollusca			
Unknown	Unknown			
Enumerated mobile taxa				
<i>Hyas</i> sp. †	Arthropoda	8	7	3
Cottidae	Chordata	5		
Gadidae	Chordata			
Fish	Chordata	3	3	
Fish 1	Chordata			
Fish 2	Chordata	2		
<i>Mallotus villosus</i>	Chordata			
<i>Myoxocephalus</i> sp.	Chordata	6	10	5
Skate	Chordata			9
Stichaeidae	Chordata			
<i>Stichaeus punctatus</i>	Chordata			

† *Hyas* sp. could be enumerated in some instances, so are included both in presence absence and fauna counts