

Appendix A
Avian Field Records

Table A-1 Species observed near Belcher Islands polynyas in winter (Gilchrist and Robertson 2000)

Species Group	Common Name	Scientific Name
Birds	Hudson Bay Common Eider	<i>Somateria mollissima sedentaria</i>
	King Eider	<i>Somateria spectabilis</i>
	Long-tailed Duck	<i>Clangula hyemalis</i>
	Common Merganser	<i>Mergus merganser</i>
	Black Guillemot	<i>Cepphus grylle</i>
	Glaucous Gull	<i>Larus hyperboreus</i>
	Common Raven	<i>Corvus corax</i>
	Rock Ptarmigan	<i>Lagopus muta</i>
Mammals	Red Fox	<i>Vulpes vulpes</i>
	Arctic Fox	<i>Vulpes lagopus</i>
	Polar Bear	<i>Ursus maritimus</i>
	Ringed Seal	<i>Pusa hispida</i>
	Bearded Seal	<i>Erignathus barbatus</i>
	Walrus	<i>Odobenus rosmarus</i>
	Beluga Whale	<i>Delphinapterus leucas</i>

Table A-2 Bird Species Potentially Occurring in the Study Area

Common Name	Scientific Name	Priority Status		Field Survey Observations	Timing of Occurrence and Confirmed Breeder Status on Belcher Islands
		COSEWIC	SARA		
Red Knot	<i>Calidris canutus</i>	Endangered	Endangered		Migration
Short-eared Owl	<i>Asio flammeus</i>	Threatened	Special Concern		Unknown
Peregrine Falcon	<i>Falco peregrinus</i>	Not at Risk	Special Concern		Summer, confirmed breeder
Harlequin Duck	<i>Histrionicus histrionicus</i>	Special Concern	Special Concern		Unknown
Red-necked Phalarope	<i>Phalaropus lobatus</i>	Special Concern	Special Concern		Summer, confirmed breeder
Redpoll sp.	<i>Acanthis sp.</i>				Unknown (possible breeder)
Northern Pintail	<i>Anas acuta</i>				Summer, confirmed breeder
Green-winged Teal	<i>Anas carolinensis</i>				Unknown
American Black Duck	<i>Anas rubripes</i>				Extralimital occurrence
Greater White-fronted Goose	<i>Anser albifrons</i>				Extralimital occurrence
Snow Goose	<i>Anser caerulescens</i>			Spring and fall migration	Migration
Ross's Goose	<i>Anser rossii</i>				Migration
American Pipit	<i>Anthus rubescens</i>				Summer, confirmed breeder
Sandhill Crane	<i>Antigone canadensis</i>				Migration
Ruddy Turnstone	<i>Arenaria interpres</i>				Migration (?)
Greater Scaup	<i>Aythya marila</i>				Extralimital occurrence
Brant	<i>Branta bernicla</i>				Migration
Canada Goose	<i>Branta canadensis</i>			Spring and fall migration, summer (incidental)	Confirmed breeder and migration

Common Name	Scientific Name	Priority Status		Field Survey Observations	Timing of Occurrence and Confirmed Breeder Status on Belcher Islands
		COSEWIC	SARA		
Cackling Goose	<i>Branta hutchinsii</i>				Migration
Snowy Owl	<i>Bubo scandiacus</i>			Spring and fall migration	Year-round, including confirmed breeder and winter at sea
Common Goldeneye	<i>Bucephala clangula</i>				Fall moulting and staging
Barrow's Goldeneye	<i>Bucephala islandica</i>				Moult migration
Rough-legged Hawk	<i>Buteo lagopus</i>			Spring migration	Summer, confirmed breeder
Lapland Longspur	<i>Calcarius lapponicus</i>				Summer, confirmed breeder
Sanderling	<i>Calidris alba</i>				Migration
Dunlin	<i>Calidris alpina</i>				Migration
Baird's Sandpiper	<i>Calidris bairdii</i>				Migration
White-rumped Sandpiper	<i>Calidris fuscicollis</i>				Migration
Purple Sandpiper	<i>Calidris maritima</i>				Summer, confirmed breeder
Pectoral Sandpiper	<i>Calidris melanotos</i>				Possible breeder
Least Sandpiper	<i>Calidris minutilla</i>				Possible breeder
Semipalmated Sandpiper	<i>Calidris pusilla</i>				Summer, confirmed breeder
Black Guillemot	<i>Cepphus grylle</i>				Year-round, breeder
Semipalmated Plover	<i>Charadrius semipalmatus</i>				Summer, confirmed breeder
Long-tailed Duck	<i>Clangula hyemalis</i>				Year-round including confirmed breeder
Northern Flicker	<i>Colaptes auratus</i>				Extralimital occurrence
Common Raven	<i>Corvus corax</i>			Spring migration, winter	Year-round, confirmed breeder
Tundra Swan	<i>Cygnus columbianus</i>			Spring migration,	Migration (and historic breeder)

Common Name	Scientific Name	Priority Status		Field Survey Observations	Timing of Occurrence and Confirmed Breeder Status on Belcher Islands
		COSEWIC	SARA		
				summer (incidental)	
Horned Lark	<i>Eremophila alpestris</i>				Summer, confirmed breeder
Gyrfalcon	<i>Falco rusticolus</i>				Year-round (likely)
Northern Fulmar	<i>Fulmarus glacialis</i>				Extralimital occurrence
Common Loon	<i>Gavia immer</i>				Summer, confirmed breeder
Pacific Loon	<i>Gavia pacifica</i>				Summer, confirmed breeder
Red-throated Loon	<i>Gavia stellata</i>				Summer, confirmed breeder
Common Yellowthroat	<i>Geothlypis trichas</i>				Extralimital occurrence
Dark-eyed Junco	<i>Junco hyemalis</i>				Extralimital occurrence
Rock Ptarmigan	<i>Lagopus muta</i>				Year-round and confirmed breeder
Herring Gull	<i>Larus argentatus</i>				Summer, confirmed breeder
Iceland Gull	<i>Larus glaucoides</i>				Migration
Glaucous Gull	<i>Larus hyperboreus</i>				Year-round, confirmed breeder
Great Black-backed Gull	<i>Larus marinus</i>				Migration
American Wigeon	<i>Mareca americana</i>				Extralimital occurrence
Black Scoter	<i>Melanitta americana</i>				Fall moulting and staging
White-winged Scoter	<i>Melanitta fusca</i>				Summer at sea
Surf Scoter	<i>Melanitta perspicillata</i>				Summer at sea
Lincoln's Sparrow	<i>Melospiza lincolnii</i>				Unknown
Common Merganser	<i>Mergus merganser</i>				Year-round, breeding not reported
Red-breasted Merganser	<i>Mergus serrator</i>				Summer at sea, possible breeder
Whimbrel	<i>Numenius phaeopus</i>				Migration

Common Name	Scientific Name	Priority Status		Field Survey Observations	Timing of Occurrence and Confirmed Breeder Status on Belcher Islands
		COSEWIC	SARA		
Orange-crowned Warbler	<i>Oreothlypis celata</i>				Extralimital occurrence
Tennessee Warbler	<i>Oreothlypis peregrina</i>				Extralimital occurrence
Savannah Sparrow	<i>Passerculus sandwichensis</i>				Summer, confirmed breeder
Snow Bunting	<i>Plectrophenax nivalis</i>			Summer (incidental)	Summer, confirmed breeder
American Golden-Plover	<i>Pluvialis dominica</i>				Migration
Black-bellied Plover	<i>Pluvialis squatarola</i>				Migration
Pied-billed Grebe	<i>Podilymbus podiceps</i>				Extralimital occurrence
Purple Martin	<i>Progne subis</i>				Extralimital occurrence
Black-throated Blue Warbler	<i>Setophaga caerulea</i>				Extralimital occurrence
Bay-breasted Warbler	<i>Setophaga castanea</i>				Extralimital occurrence
Yellow-rumped Warbler	<i>Setophaga coronata</i>				Extralimital occurrence
Magnolia Warbler	<i>Setophaga magnolia</i>				Extralimital occurrence
Common Eider	<i>Somateria mollissima</i>				Year-round, confirmed breeder
King Eider	<i>Somateria spectabilis</i>				Year-round, confirmed breeder
Northern Shoveler	<i>Spatula clypeata</i>				Extralimital occurrence
American Tree Sparrow	<i>Spizelloides arborea</i>				Extralimital occurrence
Long-tailed Jaeger	<i>Stercorarius longicaudus</i>				Summer at sea
Parasitic Jaeger	<i>Stercorarius parasiticus</i>				Summer, possible breeder
Arctic Tern	<i>Sterna paradisaea</i>				Summer, confirmed breeder
Brown Thrasher	<i>Toxostoma rufum</i>				Extralimital occurrence

Common Name	Scientific Name	Priority Status		Field Survey Observations	Timing of Occurrence and Confirmed Breeder Status on Belcher Islands
		COSEWIC	SARA		
Greater Yellowlegs	<i>Tringa melanoleuca</i>				Extralimital occurrence
Thick-billed Murre	<i>Uria lomvia</i>				Summer at sea
White-throated Sparrow	<i>Zonotrichia albicollis</i>				Extralimital occurrence
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>				Summer, possible breeder

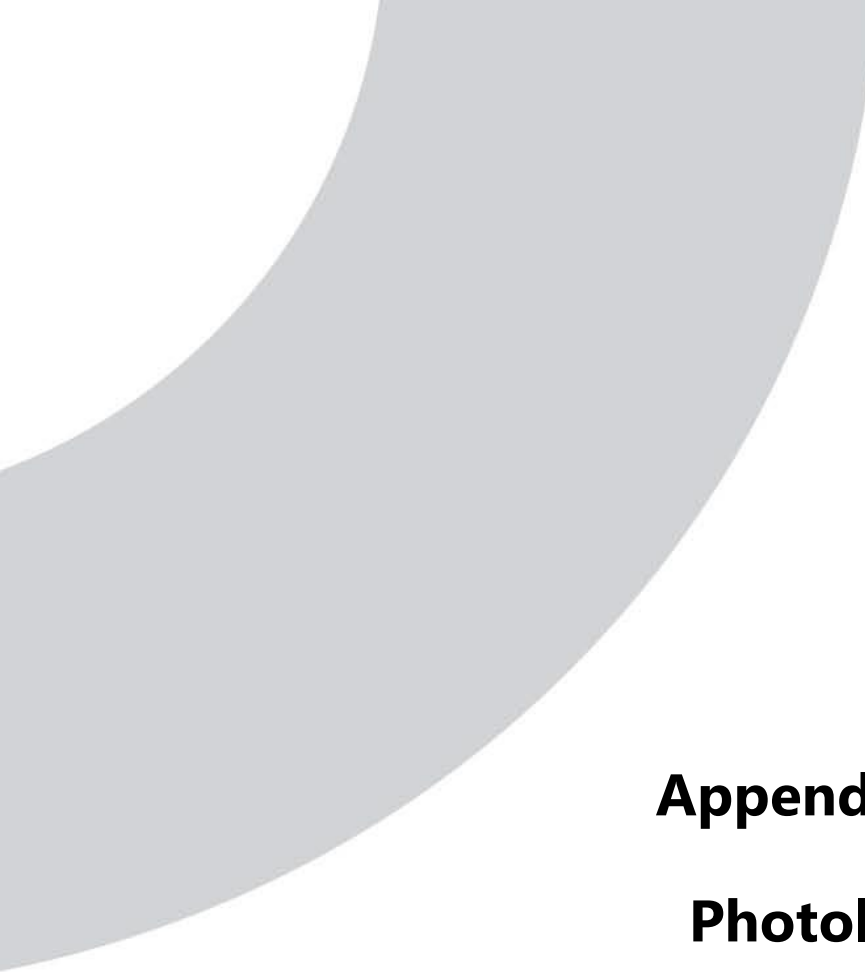
Table A-3 SARA-Listed Species in Nunavut and Potential Presence in Study Area. Species further assessed in the EIS are indicated in bold.

Common Name	Scientific Name	Priority Status		Field Survey Observations	Potential Presence in the Study Area
		COSEWIC	SARA		
Red Knot (rufa subspecies)	<i>Calidris canutus rufa</i>	Endangered	Endangered	-	Possible
Eskimo Curlew	<i>Numenius borealis</i>	Endangered	Endangered	-	Highly unlikely
Ivory Gull	<i>Tringa flavipes</i>	Endangered	Endangered	-	Unlikely
Short-Eared Owl	<i>Asio flammeus</i>	Threatened	Special Concern	-	Possible
Red Knot (islandica subspecies)	<i>Calidris canutus islandica</i>	Not at Risk	Special Concern	-	Unlikely
Rusty Blackbird	<i>Euphagus carolinus</i>	Special Concern	Special Concern	-	Unlikely
Peregrine Falcon	<i>Falco peregrinus tundrius</i>	Not at Risk	Special Concern	-	Likely
Harlequin Duck	<i>Histrionicus histrionicus</i>	Special Concern	Special Concern	-	Possible
Red-Necked Phalarope	<i>Phalaropus lobatus</i>	Special Concern	Special Concern	-	Likely
Horned Grebe	<i>Podiceps auritus</i>	Special Concern	Special Concern	-	Unlikely
Buff-breasted Sandpiper	<i>Tryngites subruficollis</i>	Special Concern	Special Concern	-	Unlikely
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern	Threatened	-	Unlikely
Olive-Sided Flycatcher	<i>Contopus cooperi</i>	Special Concern	Threatened	-	Unlikely
Barn Swallow	<i>Hirundo rustica</i>	Special Concern	Threatened	-	Unlikely
Ross's Gull	<i>Rhodostethia rosea</i>	Endangered	Threatened	-	Unlikely

Table A-4 Bird Species Observed During Field Surveys in the Study Area

Common Name	Scientific Name	Priority Status	Average Number of Individuals Per Survey			Incidental Observations *
			Winter (2 surveys)	Spring Migration (4 surveys)	Fall Migration (6 surveys)	
Snow Goose	<i>Anser caerulescens</i>		0	0.75	98.5	
Canada Goose	<i>Branta canadensis</i>		0	152.5	219.3	X
Snowy Owl	<i>Bubo scandiacus</i>		0	0.8	0.3	
Rough-legged Hawk	<i>Buteo lagopus</i>		0	0.3	0	
Common Raven	<i>Corvus corax</i>		4	1.25	1.25	
Tundra Swan	<i>Cygnus columbianus</i>		0	0.5	0	X
Snow Bunting	<i>Plectrophenax nivalis</i>		0	0	0	X
Duck sp.			0	0.5	0	
Gull sp.			0	3	0.8	
Unidentified sp.			0	2.5	0	

* Note: X indicates the species was observed incidentally during aquatics surveys conducted at the Project site on 19 August 2021.



wood.

Appendix B
Photolog



Photo 1: WL1
Downstream

Direction: East
608486 6267367



Photo 2: WL1 Upstream

Direction: Southwest
608482 6267363

	Photo 3: Vegetation Plot Example – WL1
	Photo 4: WL2 Direction: Northeast 608617 6267157



Photo 5: WL3
Downstream

Direction: East 607861
6264349



Photo 6: WL4
Downstream

Direction: North 608054
626624



Photo 7: WL5

Direction: Northeast
56° 31' 55" N 79° 14' 11" W



Photo 8: WL5 Hummocks

Direction: South
56° 31' 54" N 79° 14' 13" W



Photo 9: AWL1
Downstream

Direction: Northeast
56° 31' 40"N 79° 13' 55"W



Photo 10: AWL 2
Downstream

Direction: East
56° 31' 33"N 79° 13' 54"W



Photo 11: AWL3
Downstream

Direction: East
56° 31' 22"N 79° 13' 52"W



Photo 12: AWL4 Creek

Direction: Northeast
56° 31' 7"N 79° 13' 36"W



Photo 13: AWL5
Upstream

Direction: East
56° 30' 45" N 79° 13' 59" W



Photo 14: AWL 6
Downstream

Direction: Southeast
56° 29' 44" N 79° 14' 56" W



Appendix C

Wetland Field Data

Appendix C - Vegetation Plot Data

Common Name	Scientific Name	WL1	WL2	WL3	WL4	WL5	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	VA1	VA2	VA3	VA4	VA5	VA6
Bog-Rosemary	<i>Alectoria sp.</i>				x		x	x	x		x	x	x	x		x	x				x	
Black Torpedoberry	<i>Andromeda polifolia</i>																					
Sea Thrift	<i>Arctous alpinus</i>					x		x									x	x				
Mountain Groove-Moss	<i>Armeria maritima</i>				x																	
	<i>Aulacomnium turgidum</i>												x									x
	<i>Bart alp***</i>					x												x				
Apline Bistort	<i>Bistorta vivipara</i>	x		x	x	x																
	<i>Brachythecium sp.</i>				x												x	x				
Leafy Tussock Sedge	<i>Carex aquatilis</i>		x			x	x		x				x	x	x	x						
Hoary Hedge	<i>Carex canescens</i>					x																
	<i>Carex cap. *two that it could be*</i>			x	x																	
Low Northern Sedge	<i>Carex concinna</i>				x																	
Short Lead Sedge	<i>Carex fuliginosa</i>								x													
Fragile-Seed sedge	<i>Carex membranacea</i>	x	x	x		x																
Curly Sedge	<i>Carex rupestris</i>	x			x	x		x									x	x	x	x	x	
Canadian Single-Spike Sedge	<i>Carex scirpoidea</i>										x											
Sparse-Flower Sedge	<i>Carex tenuiflora</i>					x																
White Arctic Mountain-Heather	<i>Cassiope tetragona</i>																x	x				
	<i>Cent niv***</i>									x												
Arctic Mouse-Ear Chickweed	<i>Cerastium arcticum</i>										x											
Lichen	<i>Cetraria cucullata</i>																x	x				
	<i>Cetraria nig***</i>																x	x	x	x		
Lichen	<i>Cetraria nivalis</i>	x			x		x	x		x	x	x	x	x	x	x						x
Broad-Leaf Fireweed	<i>Chamaenerion latifolium</i>									x	x	x										
Dwarf Fireweed	<i>Chamerion latifolium</i>	x																				
Green Reindeer Lichen	<i>Cladina mitis</i>									x		x			x						x	x
Grey Reindeer Lichen	<i>Cladina rangiferina</i>						x											x				
	<i>Cladina sp.</i>						x											x				x
Star-Tipped Reindeer Lichen	<i>Cladina stellaris</i>						x	x						x	x			x		x		x
	<i>Diap lap***</i>				x		x															
White-Mountain Avens	<i>Dryas integrifolia</i>	x			x	x			x			x					x	x		x	x	
Crowberry	<i>Empetrum nigrum</i>	x		x	x		x	x	x	x		x		x	x	x		x		x	x	
Field Horsetail	<i>Equisetum arvens</i>	x			x																	
Variegated Scouring-Rush	<i>Equisetum variegatum</i>	x																				
Tall Cotton-Grass	<i>Eriophorum angustifolium</i>	x	x	x	x	x																
Mare's Tail	<i>Hippuris Vulgaris</i>				x																	
Baltic Rush	<i>Juncus balticus</i>	x	x		x	x																
Bog Laurel	<i>Kalmia polifolia</i>													x								
American Lyme Grass	<i>Leymus mollis</i>	x																				
	<i>Lichen sp.</i>																					
Northern Firmoss	<i>Lycopodium selago</i>			x						x	x	x	x			x			x		x	x
	<i>Orth sec***</i>					x																
Parnassis	<i>Parnassia sp.</i>	x																				
Capitate Lousewort	<i>Pedicularis capitata</i>				x																	
	<i>Pedicularis sp.</i>																x					
	<i>Pleu sch***</i>																					x
Arctic Bluegrass	<i>Poa arctica</i>	x	x								x								x			
	<i>Polytrichum sp.</i>										x								x			
	<i>Pote hyp***</i>										x											
Arctic Wintergreen	<i>Pyrola grandiflora</i>	x			x								x					x	x			x
	<i>Raco lan***</i>				x		x		x		x		x	x	x							
Little Yellow-Rattle	<i>Rhinanthus minor</i>			x																		
Lapland Rhododendron	<i>Rhododendron lapponicum</i>								x	x							x	x				
Cloudberry	<i>Rubus chamaemorus</i>				x											x						
Arctic Willow	<i>Salix arctica</i>	x	x		x					x							x	x	x	x	x	x
Northern Willow	<i>Salix arctophila</i>			x		x			x													
Dwarf Willow	<i>Salix herbacea</i>																x					
Net-Veined Willow	<i>Salix reticulata</i>	x		x	x	x																x
Yellow Mountain Saxifrage	<i>Saxifraga aizoides</i>				x																	
Yellow Marsh Saxifrage	<i>Saxifraga hirculus</i>				x																	
Prickly Saxifrage	<i>Saxifraga tricuspidata</i>																					
Cushion-Pink	<i>Silene acaulis</i>										x											
Tufted Leafless-Bulrush	<i>Trichophorum caespitosum</i>								x											x		
Alpine Blueberry	<i>Vaccinium uliginosum</i>	x			x	x		x	x	x		x	x	x		x	x	x	x	x	x	x
Northern Mountain-Cranberry	<i>Vaccinium vitis-idaea</i>						x	x	x	x					x	x			x	x		x



wood.