Nunavut Coastal Resource Inventory

Foxe Basin Walrus

Prepared for:

The NWMB's Establishment of a Walrus Management Unit and Total Allowable Harvest in Foxe Basin

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Introduction

This document is one in a series of reports produced by the Nunavut Coastal Resource Inventory (NCRI). The overall goal of this initiative is to conduct inventories in all 26 of Nunavut's coastal communities. Each community is unique in terms of its physical environment, oceanographic setting, the organisms present and the interests and approaches of its hunters and trappers. One might even suggest that each community has been treated as one in a series of "pilot projects".

The Coastal Resource Inventory

"Coastal Resource Inventory", as used in this report, is an information compendium on coastal resources and activities, gained principally from interviews with elders in each community. Coastal resources are defined as the animals and plants that live near the coast, on the beaches, on and around islands, above and below the surface of the ocean, above and below sea ice, and on the sea floor. Consequently, the extent of the survey varied by community, and "near the coast" can include species and activities up to 50 and sometimes 100 miles inland (mainly lakes and river systems).

Resource inventories have been conducted along Canada's margins, notably on our Atlantic and western coasts, where the information gained from this approach provided: the foundation for integrated coastal management plans; essential insights to protect important coastal areas; and, information facilitating environmental impact assessments, sensitivity mapping, and community planning. Coastal resource inventories have also provided different levels of government with the tools to engage in strategic assessments, informed development and enlightened stewardship.

The principle source of information for community-based coastal inventories is traditional knowledge (Inuit Qaujimajatuqangit in Inuktitut, or IQ) gathered through interviews. Over the past fifty years, the Inuit have gone from a resource-based nomadic life style to a wage-based economy. Nevertheless, coastal and land-based activities are still extremely important, contributing to Inuit quality of life, providing income and food, and as a significant part of Inuit culture. To ensure that we retain this traditional understanding and the above associated benefits, knowledgeable individuals (usually community elders) were engaged using a defined survey that addresses the presence, distribution and characteristics of various coastal resources. In addition, visual surveys of the coastline and the community provide diverse information on important coastal features, including the types and condition of infrastructure such as wharves and fish plants, as well as the location of different coastal activities or impacts, such as town dumps or sewage sites.

Fundamental to this process is the recognition that traditional knowledge (IQ) embodies both historical and contemporary information that might help with future decision-making, as well as having importance in its own right.

The Fisheries and Sealing Division of the Nunavut Department of Environment initiated the development and implementation of a community-based coastal zone inventory for Nunavut.

Project deliverables include the: provision of a final report; provision of the coastal resource inventory in a GIS database; provision of a series of resource-inventory maps for each community; provision of all documents used in the interviews, along with the methodology employed throughout the coastal

inventory process; and, thorough evaluation of the methodology and supporting materials used to carry out the entire inventory process.

As each coastal inventory is completed more organizations and programs are realizing the breadth of baseline data collection the inventories offer. They add tremendous value to our understanding of Inuit knowledge and species locations and they are one of only a handful of projects attempting to document Inuit Qaujimajatuqangit in Nunavut. Every inventory contributes to a species map of Nunavut (Figures 1 through 6), giving wildlife researchers, managers and communities vital information to our understanding of migration routes, areas of species occupation and land use patterns.

The areas drawn in the maps provided in this document are places people in the adjacent communities have been, and include all walrus observations that the participants were able to provide. Communities around the Foxe Basin area that have participated in the NCRI and are included in this report are: Coral Harbour, Chesterfield Inlet, Igloolik, and Kimmirut.

Guide to the Maps and Tables

The following group of maps summarizes the geographic context, species locations, and information from earlier studies (derived from the *Nunavut Atlas*). The maps are accompanied by data in tabular form, which provides additional detail, along with descriptive information. In some instances certain codes are used to describe some of this information, these codes and their definitions are listed below.

P – Present (occurring within the 10 most recent years, as of the interview date)

H – Historical (occurring prior to 10 years before the interview date)

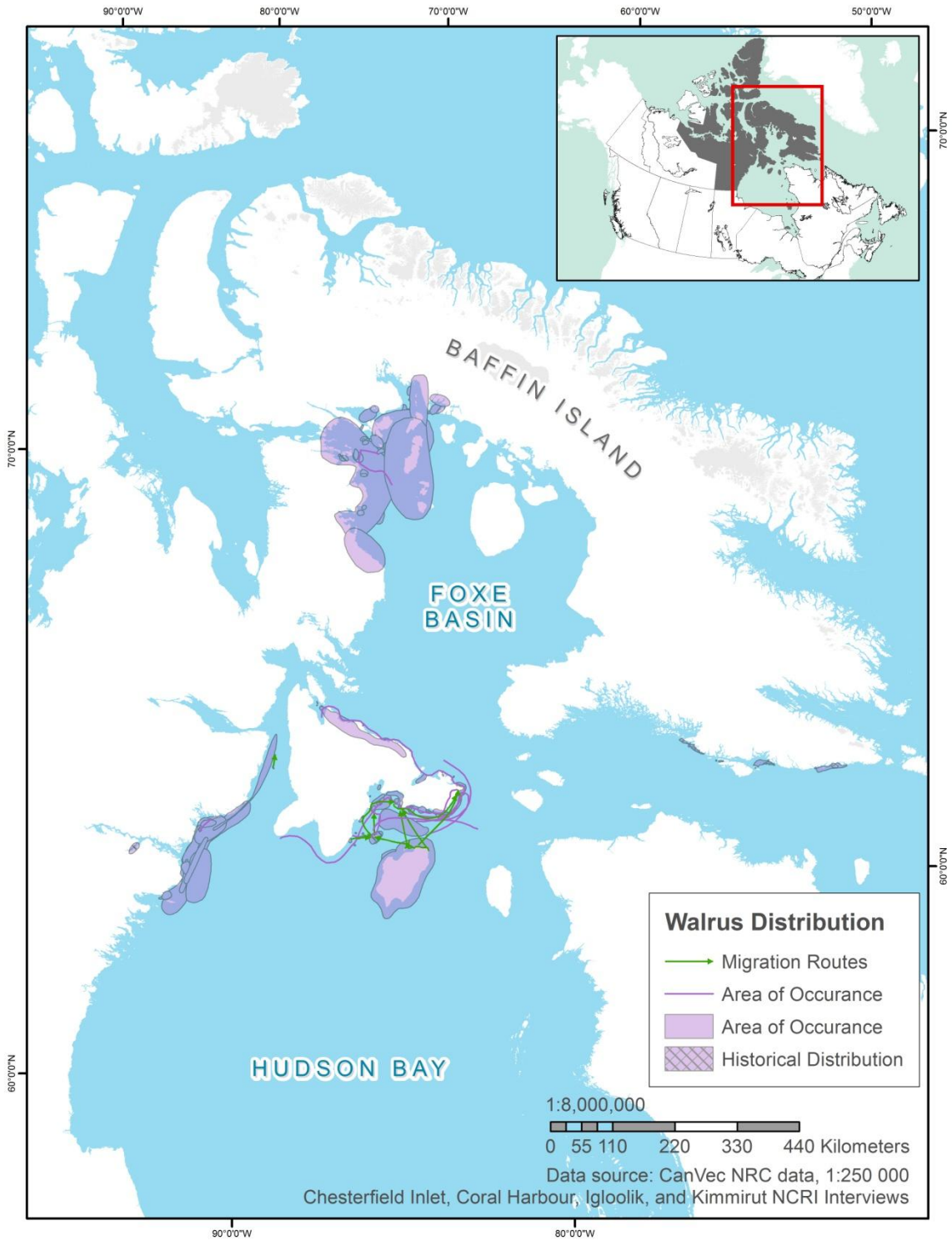
A – High abundance

M – Migration (arrowheads indicate direction)

S – Spawning / Nesting / Denning / Calving / Pupping areas

Foxe Basin

Figure 1: Foxe Basin walrus distribution



Coral Harbour (2014)

Figure 2: Coral Harbour walrus distribution

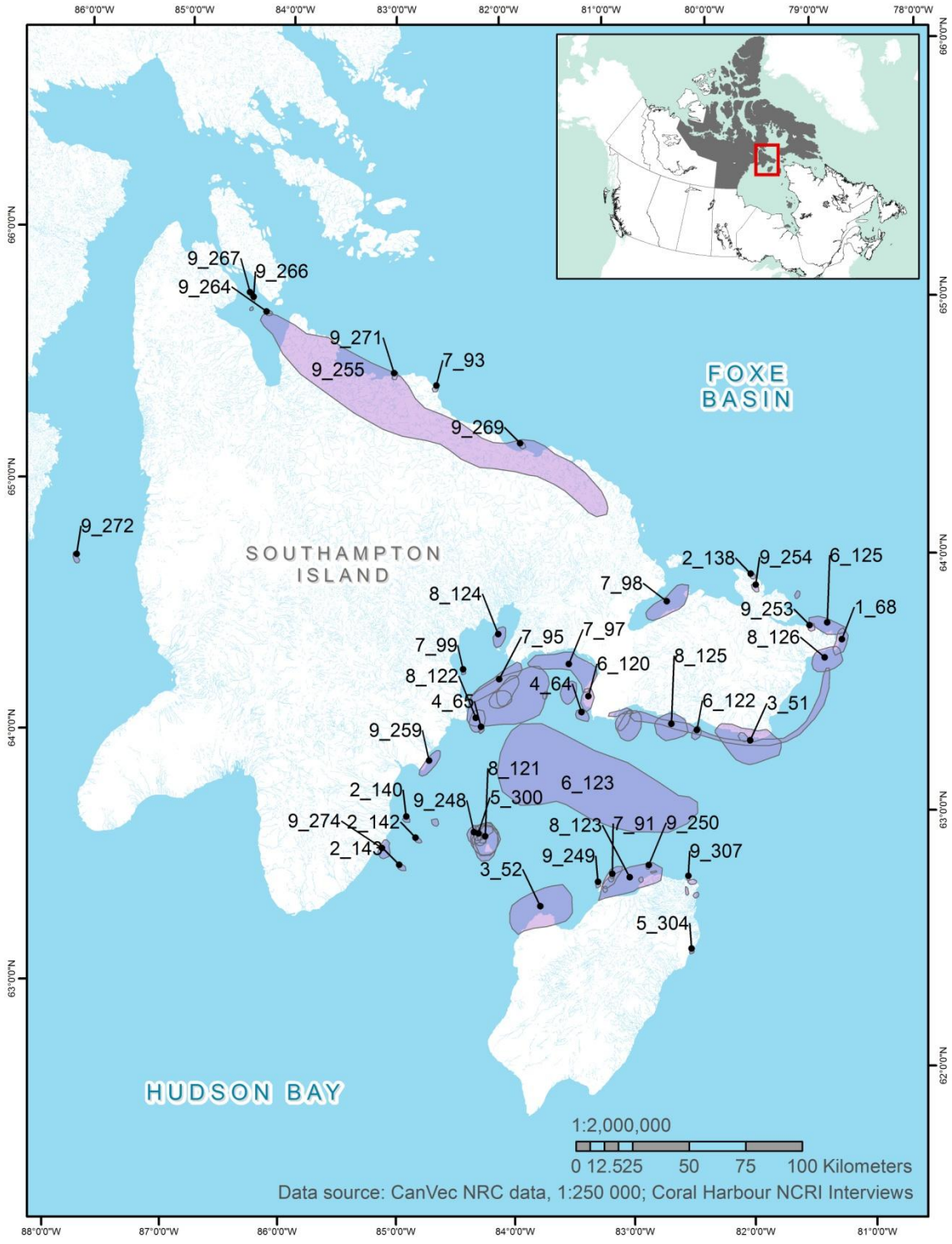


Table 1: Coral Harbour walrus distribution

Map Label	Present - P Historical - H	Special Coding	Months	Comments
1_66	P			
1_67	P			
1_68	P			
1_69	P			
2_135	P	S		
2_136	P			
2_137	P			
2_138	P			
2_140	P			
2_141	P			
2_142	P			
2_143	P			
3_51	P		Aug	
3_52	P		Aug	
4_61	P		Summer to Autumn	
4_62	P		Summer to Autumn	
4_63	P		Summer to Autumn	
4_64	P		Feb, Mar	
4_65	P		Feb, Mar	

Map Label	Present - P Historical - H	Special Coding	Months	Comments
5_297	P		Autumn	
5_298	P		Autumn	
5_299	P		Autumn	
5_300	P		Summer	
5_301	P		Summer	
5_302	P		Summer	
5_304	P		Summer	
5_305	P	M		
6_119	P		Jul, Aug	
6_120	P		Jul, Aug	
6_122	P		Jul, Aug	
6_123	P		Dec, Jan	
6_125	P		Summer	
7_90	P		Summer	Spend time at the flow edge
7_91	P		Summer	
7_92	P		Summer	
7_93	P		Summer	
7_94	P		Summer	
7_95	P		Winter	
7_96	P		Summer	
7_97	P		Summer	

Map Label	Present - P Historical - H	Special Coding	Months	Comments
7_98	P		Summer	
7_99	P			Walrus stopped coming here 15 years ago
8_121	P		Jul, Aug	
8_122	P		Aug	
8_123	P		Jul, Aug	
8_124	P		Aug	
8_125	P		Jan	
8_126	P			
8_127	P			
9_248	P			Haulout locaton
9_249	P		Aug	Haulout
9_250	P		Aug	Haulout
9_251	P		Aug	Haulout
9_253	P		Aug	Haulout
9_254	P		Aug	Haulout
9_255	P		Aug	Haulout
9_257	P		Aug	Haulout
9_259	P		Winter	
9_264	P		Aug	Haulout
9_265	P		Aug	Haulout
9_266	P		Aug	Haulout

Map Label	Present - P Historical - H	Special Coding	Months	Comments
9_267	P		Aug	Haulout
9_269	P			Haulouts on points on east coast
9_271	P			Haulouts on points on east coast
9_272	P			Breathing holes in ice bridge
9_274	P			
9_307	P			
9_308	P			

Figure 3: Coral Harbour walrus migration routes

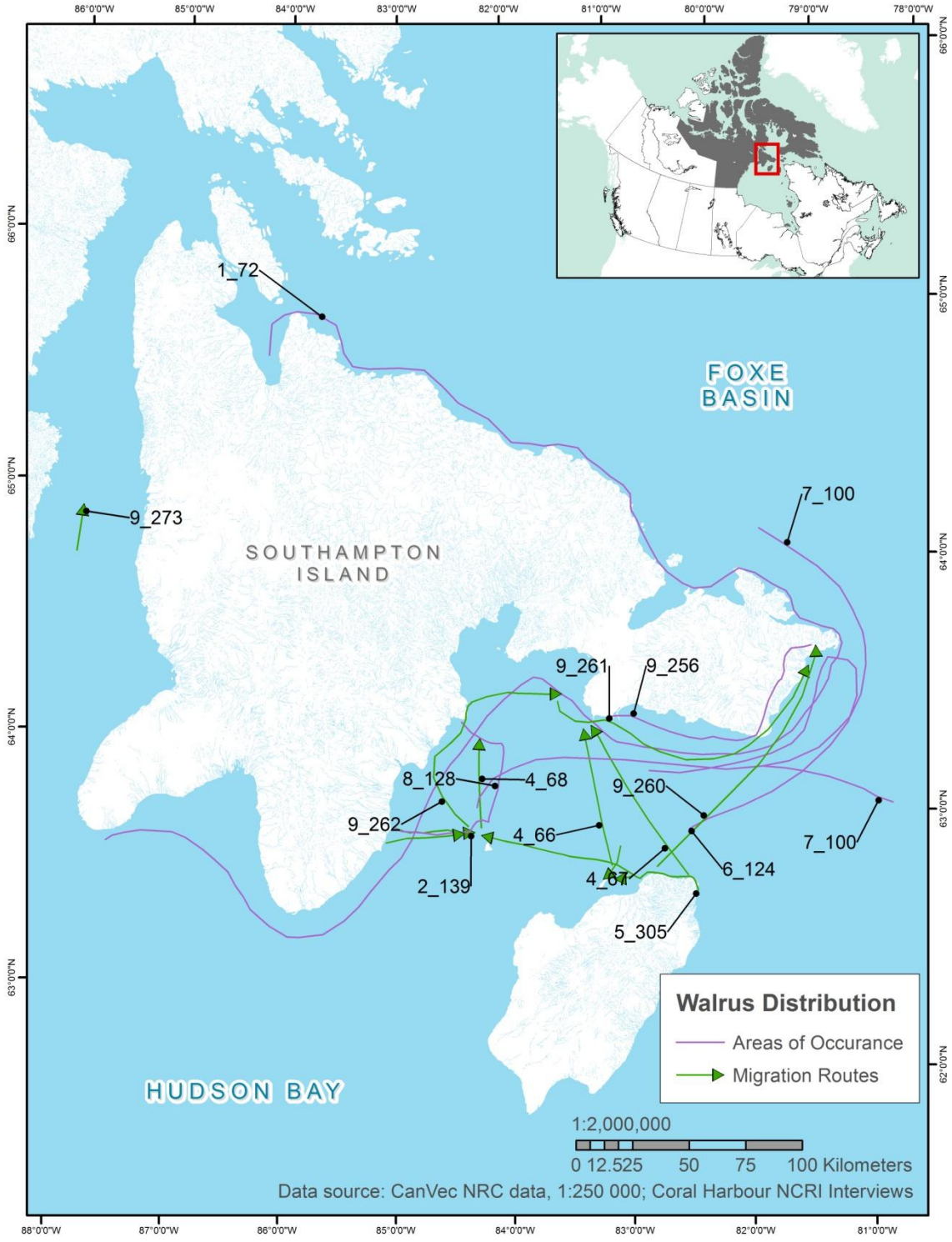


Table 2: Coral Harbour walrus migration

Map Label	Present - P Historical - H	Special Coding	Months	Comments
1_72	P			
2_139	P	M		
4_68	P	M	Oct., Nov.	
4_67	P	M	Oct., Nov.	
4_66	P	M	Oct., Nov.	
5_305	P	M		
5_305	P	M		
6_124	P		Summer	
7_100	P		Summer	Summer movement
7_100	P		Summer	Summer movement
8_128	P			
9_273	P	M		Northern movement from breathing holes during freeze up.
9_261	P	M	Aug. to fall	
9_260	P	M	Aug. to fall	
9_275	P	M	Summer	
9_262	P	M	Winter and Summer	
9_276	P	M		
9_256	P			In water in Aug

Chesterfield Inlet (2008)

Figure 4: Chesterfield Inlet walrus distribution

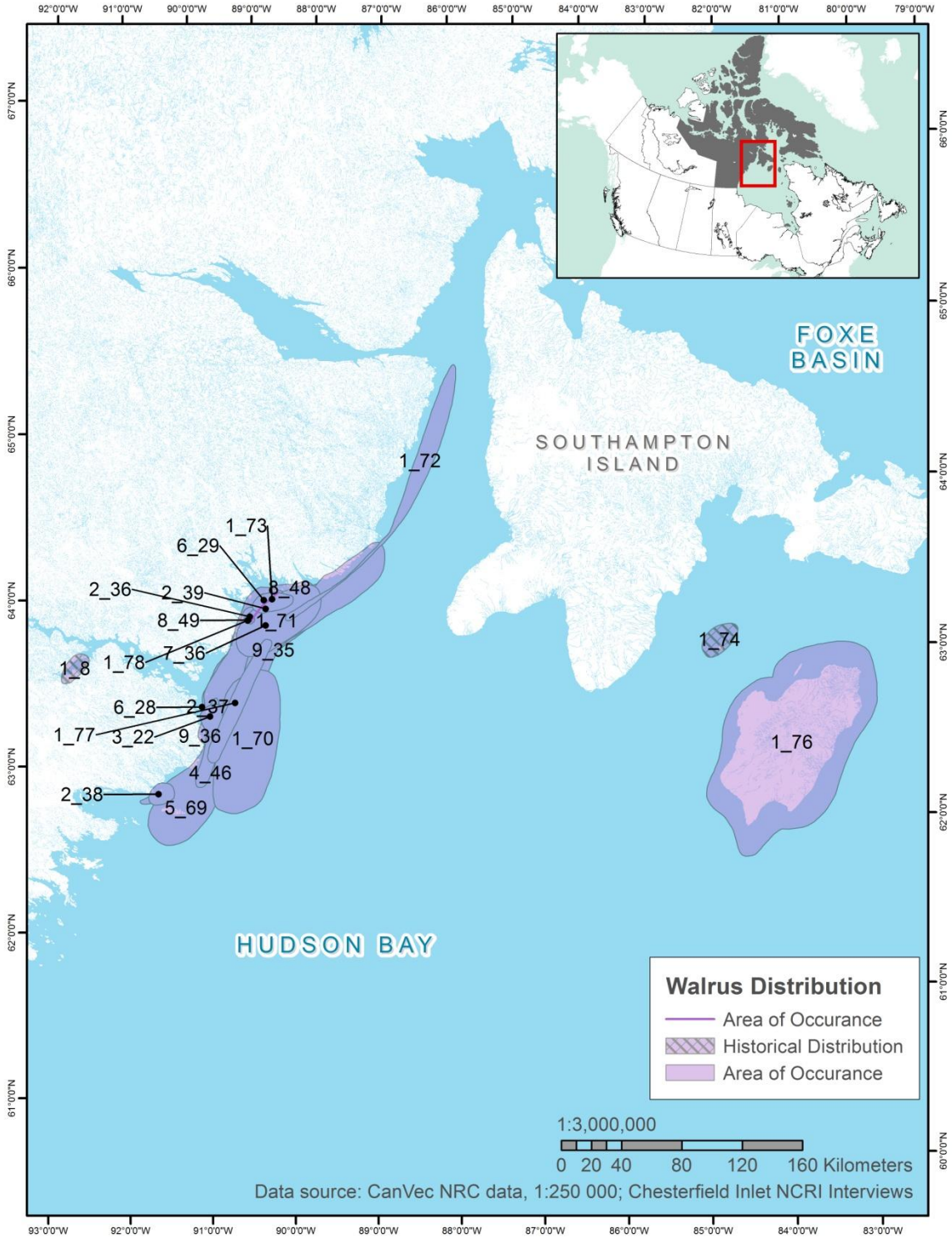


Table 3: Chesterfield Inlet walrus distribution

Map Label	Present - P Historical - H	Special Coding	Months	Comments
1_8	H			
1_70	P	A	May and June	Seen mostly in June at Depot Island
1_71	P		Dec., May, June	Seen mostly in June
1_72	P		May and June	
1_73	P		May and June	
1_74	H		May and June	
1_76	P		May and June	
1_77	P		May and June	
1_78	P	A	May and June	
2_36	P		Year round	Sees them at Pikiuliq (place name) year round; as long as there is a flow edge
2_37	P		Year round	
2_38	P		Year round	Between Marble Island and Rabbit Island
2_39	P		Year round	
3_22	P		May and June	
4_46	P		Year round	
5_69	P		May and June	Whenever there is ice
6_28	P		Oct. to Apr.	Could be seen at flow edge
7_36	H	A		
8_48	P		Feb., Mar., May, June	Along the flow edge during spring

Map Label	Present - P Historical - H	Special Coding	Months	Comments
8_49	P	A	Dec. to Mar., May and June	
9_35	P		Year round	June is considered to be walrus hunting season
9_36	P		Year round	June is considered to be walrus hunting season

Igloolik (2007)

Figure 5: Igloolik walrus distribution

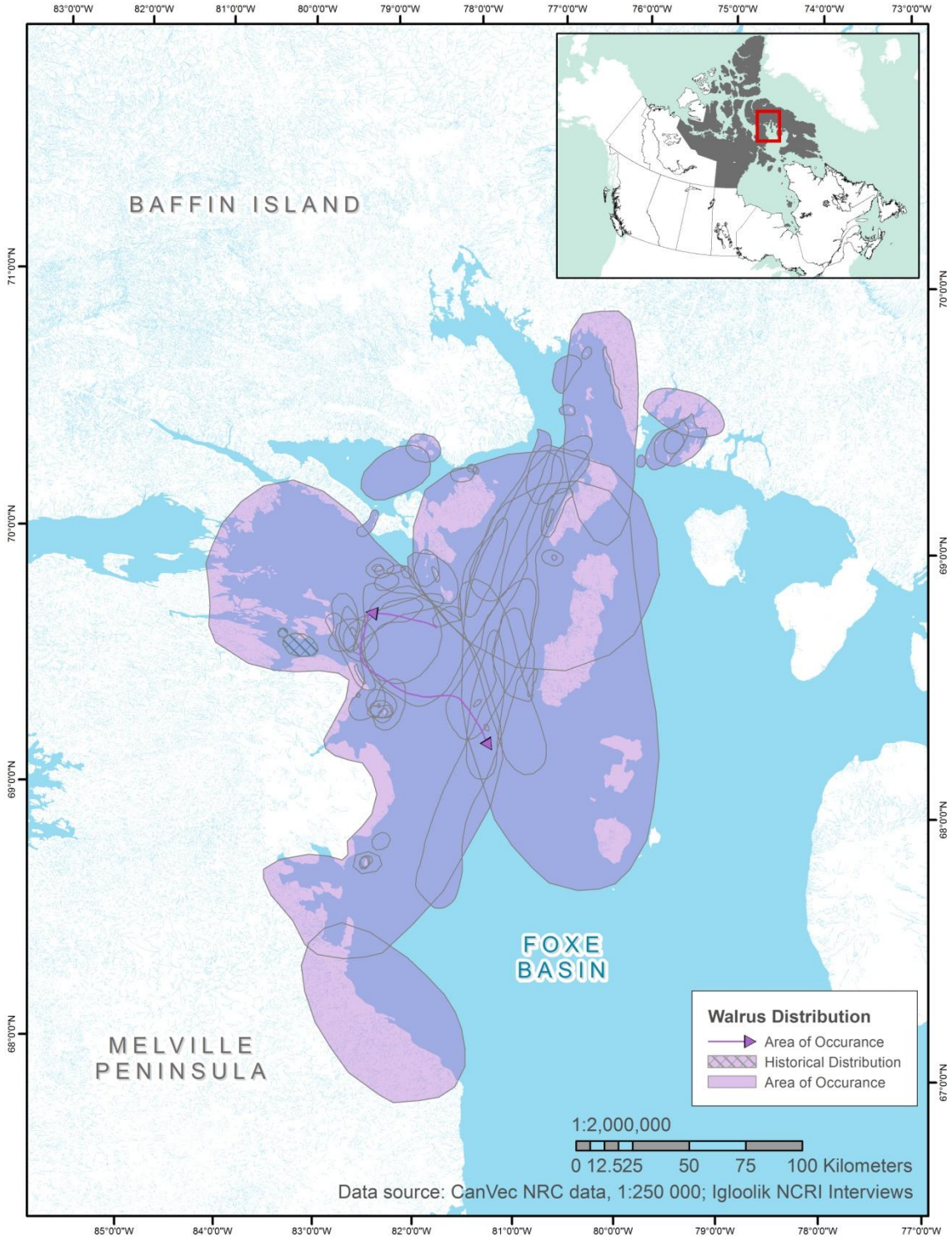


Figure 6: Igloolik walrus distribution; observations from Interviewees 1-5

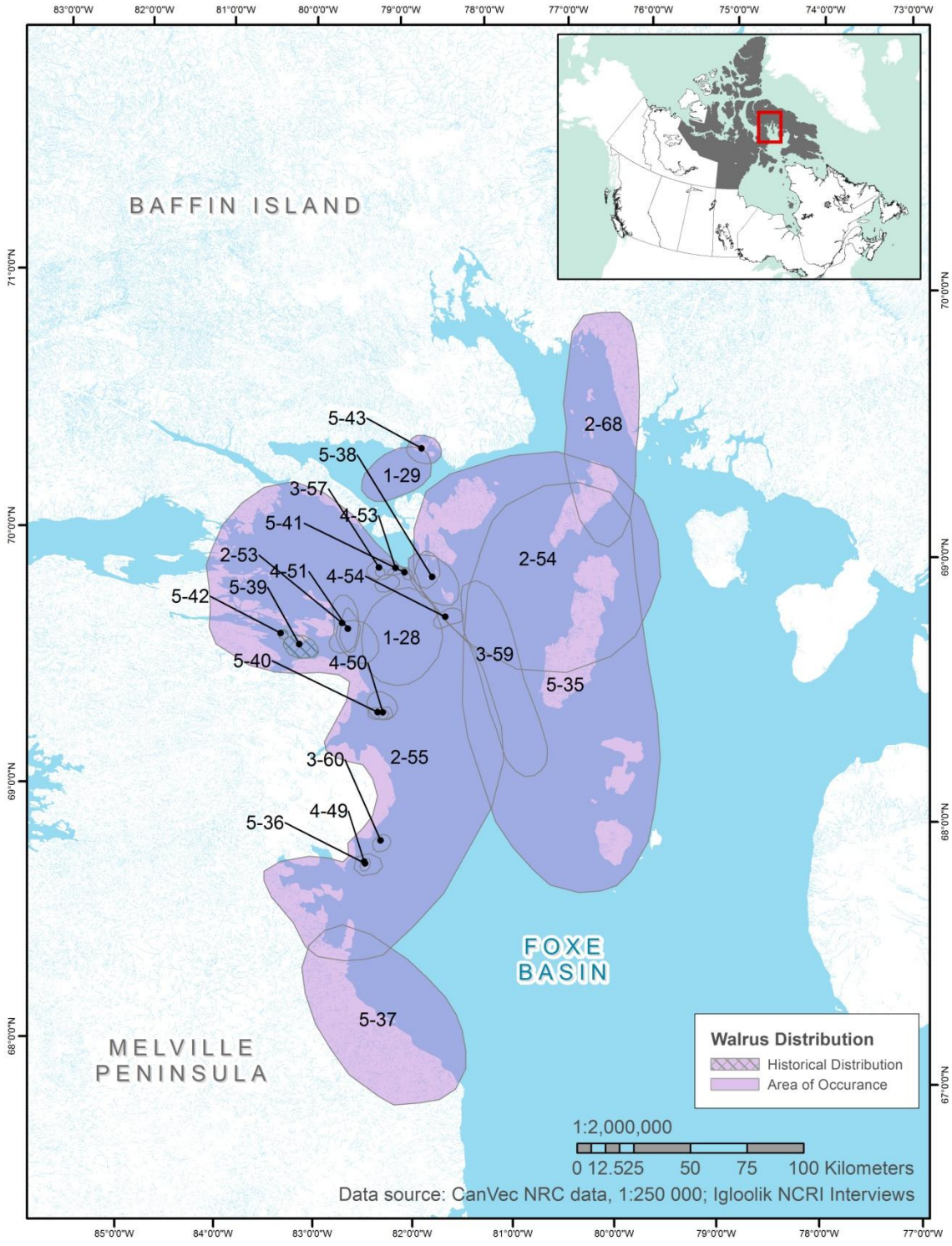


Figure 7: Igloolik walrus distribution; observations from Interviewees 6-11

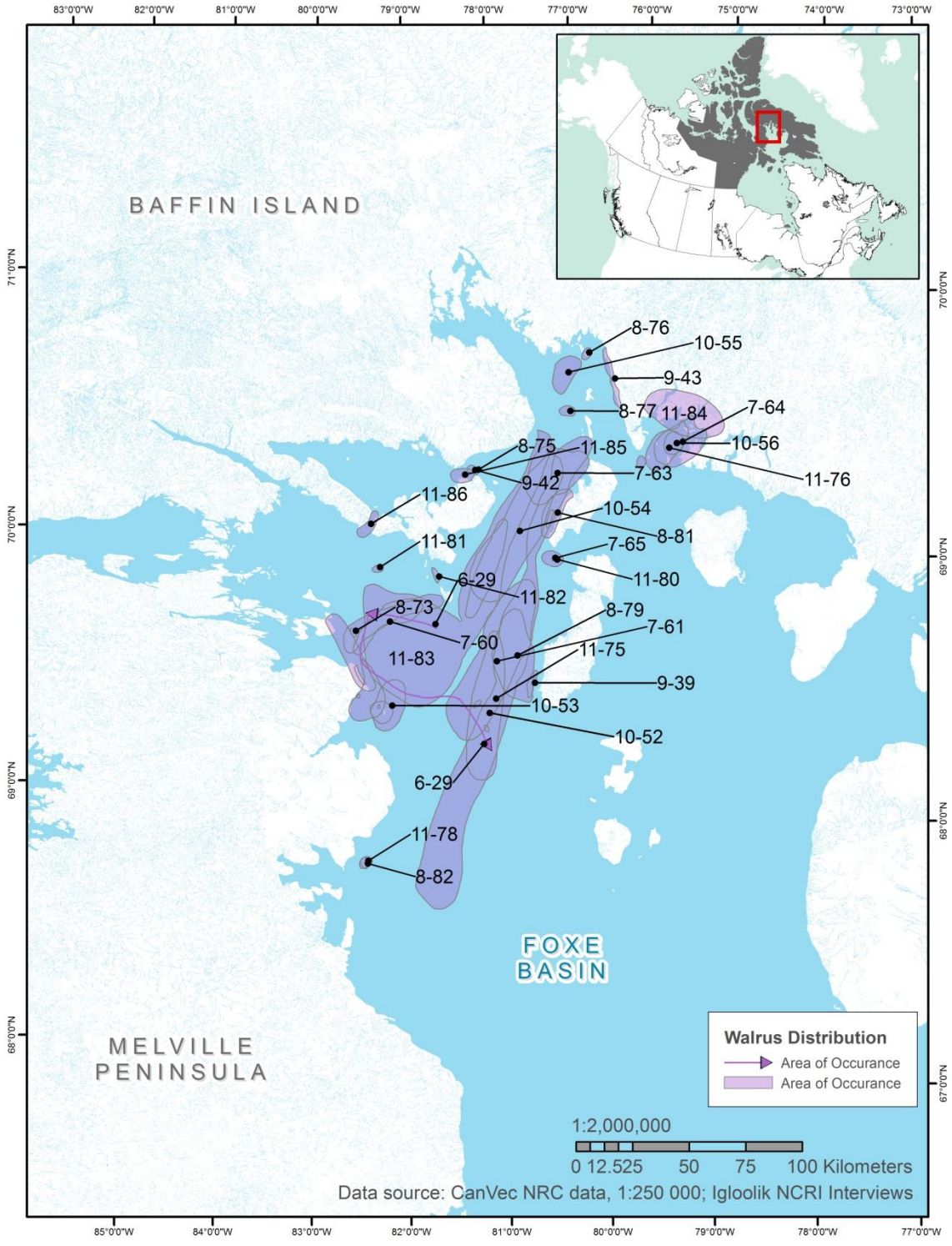


Table 4: Igloolik walrus distribution

Map Label	Present - P Historical - H	Special Coding	Months	Comments
1_28				
1_29				
2_53				
2_54				
2_55				
2_68	P	A		
3_55				
3_56				
3_57				
3_58				
3_59				
3_60				
4_48	P	A		
4_49	P	A		
4_50	P	A		
4_51				
4_52				
4_53				
4_54				

Map Label	Present - P Historical - H	Special Coding	Months	Comments
5_35	P	A		
5_36				
5_37				
5_38				
5_39	H			
5_40				
5_41				
5_42	H			
5_43				
6_28				Males
6_29				First arrow showing location along floe edge
6_29				Continuation of first arrow following floe edge
7_30				All along the floe edge
7_60				Winter, floe edge
7_61				Smaller animals
7_63				Bigger animals
7_64				
7_65				Island not on map
7_66				Along coast
8_73				Floe edge

Map Label	Present - P Historical - H	Special Coding	Months	Comments
8_74				
8_75				
8_76				On land
8_77				
8_79	P	A		Plenty in area
8_80	P	A		Plenty in area
8_81	P	A		On land and beach
8_82	P	A		Abundant on island
9_39				Have to go further south to get them
9_40				
9_41				
9_42				Only in Spring and Summer
9_43				Along shore; only in spring and summer
9_44				
9_45				
9_46				All along shore; used to be a lot, but these days there are fewer
10_52				Igunaq from these areas tastes different
10_53				Igunaq from these areas tastes different
10_54				
10_55				

Map Label	Present - P Historical - H	Special Coding	Months	Comments
10_56				
11_75				Summer, less ice
11_76				
11_77				Calving ground
11_78				
11_79				
11_80				Island not on map
11_81				
11_82				
11_83				Closer to land in winter
11_84				
11_85				
11_86				

Kimmirut (2010)

Figure 8: Kimmirut walrus distribution

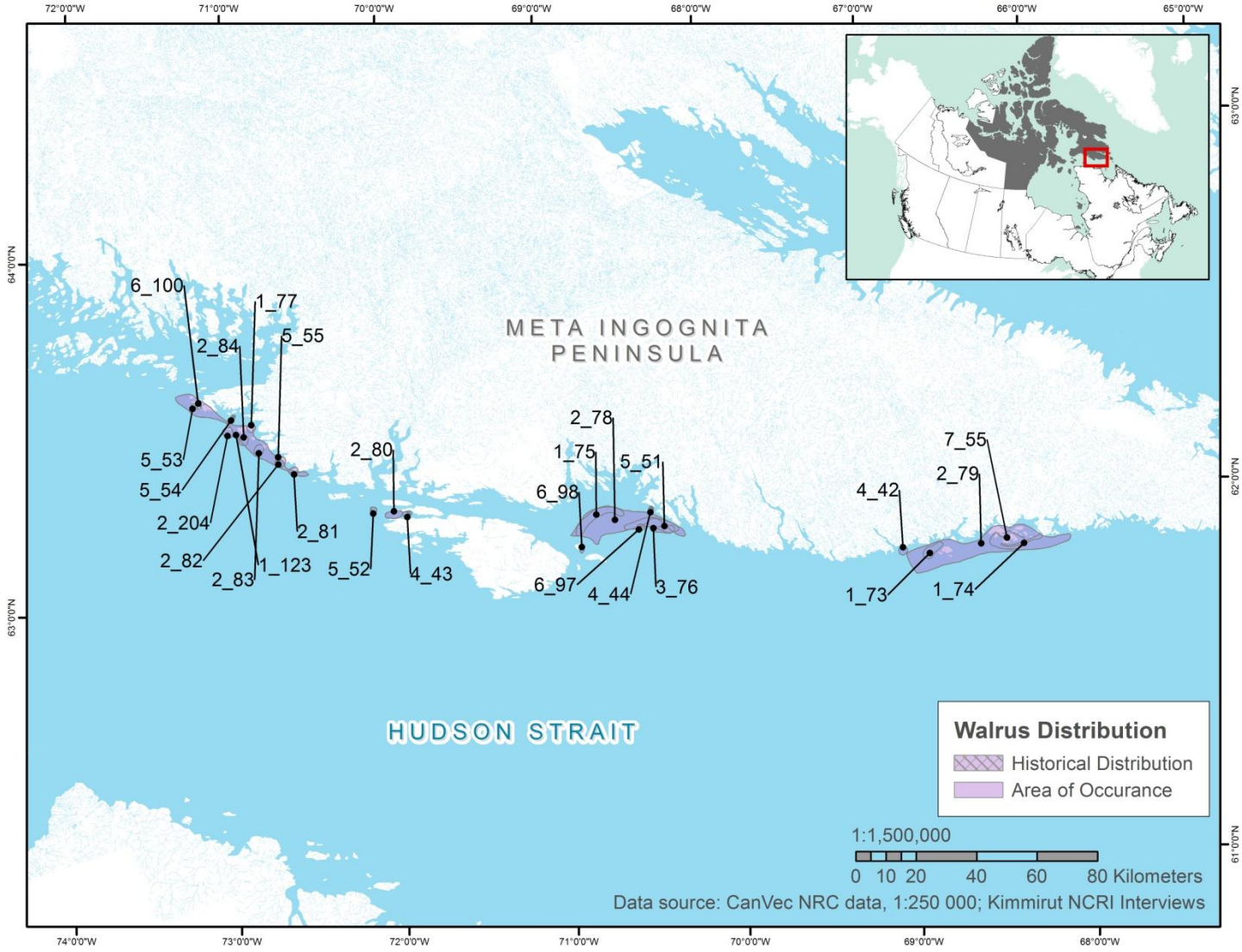


Table 5: Kimmirut walrus distribution

Map Label	Present - P Historical - H	Special Coding	Months	Comments
1_73	H		Sept.	
1_74	H	A	Jan., Feb., Mar., Apr.	
1_75	P		Jan., Feb., Mar., Apr.	
1_77	P	A	July, Aug.	Island is covered because there is so much walrus
1_123	P	A	July, Aug.	
2_78	P		Mar., Apr., May	At the floe edge
2_79	P		All year	Sees clam shells on ice
2_80	P		July, Aug.	Sees walrus where there are points
2_81	P		July, Aug.	Sees walrus where there are points
2_82	P		July, Aug.	Sees walrus where there are points
2_83	P		July, Aug.	Sees walrus where there are points
2_84	P		July, Aug.	Sees walrus where there are points
2_204	P			
3_76	P		Mar., Apr.	
4_42	P		June, July	end on June
4_43	H		Aug.	
4_44	H		June	caught a walrus
5_51	P		Jan.	
5_52	H		May, June	Island was full of walrus in 1989
5_53	H		Aug.	

Map Label	Present - P Historical - H	Special Coding	Months	Comments
5_54	H		Aug.	
5_55	H		Aug.	
6_97	P		Mar., Apr.	Walrus come into the area first then the beluga. Both animals travel in the same direction
6_98	P		Mar., Apr.	
6_100	H		Aug.	
7_55	P	A	Sept.	