

Nunavut Coastal Resource Inventory – Hall Beach
2018



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EXECUTIVE SUMMARY

This report is derived from the Hamlet of Hall Beach and represents one component of the Nunavut Coastal Resource Inventory (NCRI). “Coastal inventory”, as used here, refers to the collection of information on coastal resources and activities gained from community interviews, research, reports, maps, and other resources. These data are presented in a series of maps.

Coastal resource inventories have been conducted in many jurisdictions throughout Canada, notably along our Atlantic and Pacific coasts. These inventories have been used as a means of gathering reliable information on coastal resources to facilitate their strategic assessment, leading to the promotion of economic development, coastal management, and conservation opportunities. In Nunavut, the coastal resource inventory has two additional applications: the preservation of traditional knowledge (Inuit Qaujimagatuqangit, or IQ) and the preparation for forthcoming environmental changes, particularly those driven by climate change.

The Fisheries and Sealing Division of the Department of Environment (DOE) initiated this inventory in 2007 by conducting a pilot project in the community of Igloodik, Nunavut. NCRI's have since been completed in the following communities:

- 2008 Kugluktuk and Chesterfield Inlet
- 2009 Arctic Bay and Kimmirut
- 2010 Sanikiluaq
- 2011 Qikiqtarjuaq and Gjoa Haven
- 2012 Iqaluit, Naujaat and Grise Fiord
- 2013 Pangnirtung
- 2014 Coral Harbour, Clyde River and Taloyoak
- 2015 Cambridge Bay, Kugaaruk and Rankin Inlet
- 2016 Pond Inlet
- 2017 Cape Dorset, Hall Beach and Resolute Bay

This report presents the findings of the coastal resource inventory of Hall Beach conducted in March 2017.

Inventory deliverables include:

- A final report summarizing all of the activities undertaken as part of this project;
- Provision of the coastal resource inventory in a GIS database;
- Large-format resource inventory maps for the Hamlet of Hall Beach, Nunavut; and
- Key recommendations on both the use of this study as well as future initiatives.

During the course of this project, Hall Beach was visited on one occasion in March 2017 to conduct on-site interview sessions. Community consultations were conducted through phone conferencing and emails. A total of ten interviews were conducted. During the interviews we asked participants about the coastal species they currently observe or have previously observed in the area and had them draw the location of their observations on the maps we provided. We used photographs to help participants identify the species they have seen. The interviews varied from 1.5 - 3 hours in length, depending on the participant. The data collected throughout the interviews was compiled into a database and the maps were digitized and analyzed.

The maps produced in the interviews are presented here, organized into the following categories: Well-known areas, Fish, Invertebrates, Marine Mammals, Birds, and Marine Plants.



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IQ embodies both tangible and intangible Inuit knowledge. Conserving this knowledge has importance in its own right and for its potential to inform future management plans. Some communities have expressed an interest in exploring development options using a database that has its origins in the living memories, experience, history, and skills of the people who live there. Other communities have opted for a continuation of existing practices: the gathering of extant knowledge into a form that could assist informed decision-making. Regardless, there is growing urgency throughout the Territory to identify, record, and conserve Nunavut's traditional, biological, cultural and ecological knowledge.

There is increasing concern over the potential impact of climate change on the Arctic environment. Over the past 20 years, an increasing number of arctic researchers have commented on the predicted impacts of climate change on the marine environment (Tynan and DeMaster 1997, Michel et al. 2006, Ford et al. 2008a and 2008b, Moore and Huntington 2008). Additionally, the Intergovernmental Panel on Climate Change (IPCC) has reported that the increase in global temperatures is very likely caused by human activity, and that warming is predicted to occur faster in the Polar Regions than anywhere else on the planet (IPCC 2007, 2014). Many changes are predicted to occur in recurrent open water sites, with the potential to affect various coastal resources. Specific impacts can be expected on water stratification and its role in nutrient renewal, the balance between multi-year and annual ice, the duration and location of open water, and the impacts of tidal mixing and topographic upwelling. These physical changes could influence the marine food web through the prevalence of ice algae, the timing and magnitude of primary and secondary production, and changes in the distribution, abundance and success of traditional species. Inuit can expect significant environmental changes in sea ice, fast ice, coastal erosion, animal behaviour, and population abundances, to name a few. For instance, apparent changes in polar bear health and

abundance have been linked to climate change driven shifts in sea ice formation and movement. The coastal resource inventory provides a means of collecting information on environmental changes observed by community members.

PERSONNEL AND PROJECT DELIVERABLES

The Coastal Resource Inventory of Hall Beach was conducted by Department of Environment (DOE) staff. Overall project leadership was provided by Janelle Kennedy, Acting Director, Fisheries and Sealing Division and her staff: Angela Young, Senior Fisheries Science Advisor; Teresa Tufts, Fisheries Scientist; Jade Owen, Social Science Advisor; and Manasie Kendall, NCRI Coordinator.

Project deliverables include:

- A final report summarizing project activities;
- The Nunavut Coastal Resource Inventory in a GIS database;
- A series of large-format resource inventory maps;
- Access to all documentation pertaining to project completion; and
- Recommendations on the use of this study and future initiatives.

METHODOLOGY

COMMUNITY VISITS

Hall Beach was visited in March 2017 for on-site interviews. Correspondence via email and telephone was used before the on-site interviews to put into place all of the elements that were required to properly conduct the interviews. This process was strongly dependent upon the Hall Beach Hunters and Trappers Association (HTA) and the Hamlet office. The HTA formally agreed to support this initiative by providing an annotated list of local Inuit hunters and trappers who, in their opinion, were among the most knowledgeable and accomplished members of the community and could best satisfy the requirements of the interview process. The final selection of ten interviewees (Appendix 1) was made by NCRI project personnel. In addition, HTA personnel recommended the names of individuals who could be used as translators and student observers. These individuals were contacted, and tentative interview schedules were established.

THE INTERVIEWS

Six individuals were present during each interview: the interviewee, an interviewer, a translator, a recorder, a science consultant, and a student observer. The interviewer followed a defined protocol that placed emphasis on a series of predetermined questions and photographs of various living resources thought to occur in the area. Maps covering the area of interest and colour coded pencils were provided to interviewees to illustrate locations of interest. Interviewees were encouraged to supplement their responses by drawing on the maps provided to annotate their verbal remarks. Specific categories addressed in the interviews included: interviewee life-history information; location of outpost camps; archaeological sites; travel routes and hunting/fishing areas frequented; the geographic

occurrence of mammals, fish, birds, invertebrates, and plants; linkages between coastal resources; present and future environmental changes; and potential economic development (e.g., the possibility of an emergent fishery). Qualitative data was gathered in the form of individual opinions, assumptions, and conclusions.

Annotations on the maps were coded to enable future identification and reference. Follow-up questions were asked of the interviewee, clarifications were elicited, and, if appropriate, discussion ensued about the information presented. The entire process was recorded using audio and video equipment, while selected portions were simultaneously manually recorded. Manual recording was used to maintain a running record of all map annotations and codes. This permitted the analysis of interviews to proceed without first transcribing the audiotapes. The interviews varied from 1.5 - 3 hours in length, depending on the individual being interviewed.

POST-INTERVIEW METHODOLOGY

All of the data manually recorded throughout the interview was entered into a spreadsheet, using audio and video data for verification when needed. The maps were scanned and the hand drawn data was digitized using Geographic Information System (GIS).

NON-INTERVIEW DATA ACQUISITION

Data on marine resources can be found scattered throughout many different sources including scientific papers, government reports, environmental impact assessments, and maps. However, three surveys with similar geographic breadth and goals have proven to be especially useful. The three-volume "Inuit Land Use and Occupancy Study" was undertaken in the early 1970s and published in 1976 by Indian and Northern Affairs. It grew out of the documentation required by the land

claim process and was used to substantiate Inuit claims to residency and land use. The study contained detailed information on traditional land use up to that time, based on interviews with Inuit in each community. It used topographic maps to outline regions associated with hunting, trapping, and fishing activities for every community in Nunavut over three periods: pre-contact; the trading period up to the 1950s; and the present (early 1970s). The third volume is an atlas that displays the results. The original research is available in Ottawa at the National Archives and a copy is also available in the Legislative Library in Iqaluit.

The second is the Nunavut Atlas co-published in 1992 by the Canadian Circumpolar Institute and the Tunngavik Federation of Nunavut (now Nunavut Tunngavik Incorporated or NTI). This atlas is largely data collected for the Inuit Land Use and Occupancy Study. The resource data and maps are great resources but the information is approximately 35 years old. Relevant maps from this volume are presented in this report (Figures 48-50).

The third document is the Nunavut Wildlife Harvest Study produced by the Nunavut Wildlife Management Board in 2004 as mandated by the Nunavut Land Claim Agreement. Harvest data was collected monthly from Inuit hunters from 1996 to 2001. The purpose of the study was to determine the current harvesting levels and patterns of Inuit use of wildlife resources. Once completed this information was to be used to manage wildlife resources in Nunavut.

DATA MANAGEMENT AND ANALYSIS

Data collected through interviews and research were, when appropriate, plotted on working maps. In order to stay within the size of the geographic area under discussion, the scale of the map is kept relatively small. The scale was common to all maps to permit relatively easy comparisons. Information was separated

according to resource categories and all information associated with a specific geographic location was entered into a tabular database. The development, care, and maintenance of this tabular database are extremely important, not only as a storage facility for information, but as an active repository accessed by users with diverse interests.

Data management also included protecting the confidentiality of the data. Each interviewee provided their consent to be interviewed, as well as audio and video taped. Any person or organization wishing to access NCRI data must provide written justification to the NCRI Steering Committee and agree to the terms outlined in the Data Release Form.

GIS INTERFACE

Once the inventory maps and database were completed, they were entered into a GIS which creates computer generated maps. It also links information to the geographic locations contained in the database. Attributes associated with each piece of data include information such as the species name, the interviewee source, and the time of year it was observed.

INTERACTIVE ATLAS

The NCRI results are published in community-specific reports that are shared with project partners (community HTOs / HTAs, Hamlets, high schools, and all interviewees) and that are publicly available in hard-copy and PDF formats.

Reports are currently produced in English and Inuktitut. The results from all communities are also displayed online in an interactive atlas, with this information available within a year of interviews in a community. The reports can take up to two years to produce. Links to access the Atlas and CRI reports: ncriatlas.ca and <http://www.gov.nu.ca/environment/information/nunavut-coastal-resource-inventory>.



Figure 2. The study area extent discussed in the Hall Beach interviews



RESOURCE INVENTORY

The observations below provide highly personal insights that could warrant additional investigation.

MARINE ENVIRONMENT

The geographic area examined by these interviews spans approximately 600km north to south, 400km east to west, and includes: the Foxe Basin and northern portions of the Foxe Channel, Fury and Hecla Strait, and southwestern portions of the Gulf of Boothia including Committee Bay.

HUNTING/FISHING AND OTHER

Hall Beach hunters and fishers rely on a variety of animals to supply themselves both nutritionally and economically. Special emphasis is given to the consumption of country food and its health benefits, particularly the presence of walrus for domestic consumption. For example, three participants noted that walrus populations were abundant and sufficient to harvest commercially or to share with relatives in other communities. One participant suggested that scientists go further south to Freuchen Bay before hunting quotas are set as walrus populations are understood to be higher than scientists think.

HEALTH, SIZE, AND PRESENCE

Throughout the course of the interviews references were repeatedly made regarding the health, size, or presence/ absence of different species:

- One participant would like to see walrus tested around Hall Beach. Some walrus that were tagged with metal tags were more sick and infected than untagged walrus. The participant noted an improvement since tagging technology has been updated.
- Two participants noted that new birds were appearing and provided examples such as a new duck with a pointed head and birds similar to ravens, but smaller in size.

CHANGES UNDERWAY

Participants commented on changes in their local area regarding species and climate change:

- Two participants indicated that ringed seal taste different now. One suggested that the difference in taste was due to the seals' consumption of more capelin and less cod. One observed that the seals also cook faster and have softer fur. This was observed only in seals caught from shallow waters and these changes may be the result of climate change.
- Two participants stated that polar bear populations are rising, one of whom said polar bear sightings used to be rare in the area.
- Four participants commented on changes to caribou. One thought that numbers seemed to be dropping, one thinks more are coming and one noted that caribou numbers fluctuate. One noted a change to the caribou hide which is thinner than in the past.

Participants commented on changes in ice and snow:

- Five participants noted that ice formed later in the fall. For example one noted that ice used to form around October 15 and it now forms around November 11. Polar bear hunts were noted to be delayed due to a longer wait for safe ice. One

participant noted that the melt occurs at the same time in mid-June.

- Change to the quality of the ice was noted by four people. Participants noted that the ice was not as thick and it is now rougher and more dangerous, including at the floe edge. Snow was noted by one person to be less solid.
- Change to ice types and coverage was also noted by two participants. Two noted that multi-year ice is found in smaller patches and covers less area. The multi-year ice has been replaced with new ice.

ECONOMIC DEVELOPMENT

The interviewees discussed the following with regards to social changes and economic development in their area:

- One participant noted that some lakes have large Lake Trout and could be used commercially.
- One participant noted that there is enough Arctic Char to support a local commercial fishery and two were in support of a fish plant being located in the community. One participant noted that fish were sold to locations such as Ottawa approximately 25 years ago.

MARINE RESOURCES IN A PHYSICAL SETTING

The coastal communities of Nunavut are diverse. They extend over 27° of latitude and 60° of longitude. In addition to different geomorphologies, climates, and wildlife they also experience widely different marine environments. These include significant differences in residual circulation, tidal range, tidal currents, tidal mixing, shore-fast leads, ice-edge upwelling, topographic upwelling, and polynyas, all of which

influence the abundance, diversity and concentration of marine animals and plants. The oceanographic context in which these organisms occur, especially the causal mechanisms that contribute to population dynamics, is an essential prerequisite to understanding changes that occur over time.

One of the stated goals of this initiative is to develop the capacity to monitor Nunavut's marine resources within the context of climate change. Organisms will experience the impacts of climate change both directly and indirectly, through changes in their physiology and through variations in their physical or biological environments. Responsible monitoring of marine resources will require more than just a quantitative assessment of certain species; it will require an ecosystem approach that, by definition, includes the physical factors at play in that system.

RECURRENT OPEN WATER AND ARCTIC BIOLOGY

The presence of open water in winter can be a chance occurrence that reflects either temporary or recurring conditions. Temporary open water sites are largely unpredictable and of limited usefulness to animals and humans. Alternatively, recurrent open water sites are a physical indicator of one or several predictable physical processes that result in spatial and temporal reliability.

The formation of recurring open water sites in ice-covered seas, including polynyas, pack ice edges, and shore-fast leads reflect local geography, ice conditions, and water movements such as upwelling and tidal mixing. There is a positive correlation between recurrent open water sites and abundance of marine organisms. Stirling (1980, 1997) identified increases in the abundance of birds, seals, and whales with proximity to ice edges, polynyas, and pack ice. In some cases, animals are drawn to these sites for practical reasons such as the availability of breathing



holes, a platform to haul out and rest, predator avoidance, pupping, or moulting (Stirling 1997). Ultimately, recurrent open water sites encourage a non-homogeneous distribution of animals that is linked to greater biological productivity.

Major contributing factors in the abundance of marine organisms observed at recurrent open water are due to food availability, the product of primary production in phytoplankton, ice algae and marine plants. Algal groups are important, but their relative contributions can vary depending on ice conditions and available light. Ice algae can represent 5 to 30% of the total primary production (Alexander, 1974; Harrison and Cota, 1991; Legendre et al. 1992). Plant material is grazed and enters into the food web, supplying energy to invertebrates such as copepods, amphipods, and shellfish, to fish such as Arctic Cod, to mammals such as seals, Narwhal, Walrus, and Polar Bears and to birds such as Thick-Billed Murres, Northern Fulmars, Black-Legged Kittiwakes, and Black Guillemots. This results in a form of oasis or hotspot in an otherwise ice-covered area. With climate change, the sea ice is thinning faster and earlier in the spring and sunlight sufficient to drive photosynthesis, especially in ice algae, is available sooner. These conditions are extending both the growing and grazing seasons, in some cases by as much as two months.

These open water sites appear to have great importance to the peoples that have occupied the Arctic for several thousand years. Archaeological data obtained from historic Inuit habitation sites, coupled with modern sea-ice extremes, have been used to infer a strong causal relationship between polynyas and historic Inuit settlement patterns (Henshaw 2003). Schledermann (1980) drew attention to the fact that the early settlers of present-day Nunavut did not create settlements in random fashion. Since they depended almost entirely on food resources obtained through hunting, settlements were usually located within reasonable proximity of game, which often meant

areas of recurrent open water. Schledermann (1980) also found a close correlation between the distribution of recurring polynyas in the eastern Canadian High Arctic and the abundance of archaeological sites from the Thule culture which specialized in hunting marine mammals.

OCEANOGRAPHIC FACTORS THAT CONTRIBUTE TO OPEN WATER

The Hamlet of Hall Beach is located in the Qikiqtaaluk region of Nunavut on the eastern shores of Foxe Basin, over 250 km north of the Arctic Circle at 68° 46' 38"N, 81° 13' 27"W.

TIDAL MIXING

Even at somewhat limited velocities, tidal currents can produce sufficient turbulence to generate the vertical mixing capable of forming and maintaining a polynya. A slow-moving tidal current that encounters a shallow and/or narrow strait increases in velocity, promoting vertical mixing. Warmer, deeper water moves to the surface slowing or preventing the formation of ice. Tidal mixing also delivers nutrients, which promote plant and algal growth when sufficient light is available, especially in summer months. Examples of this phenomenon are the well-known polynyas in Fury and Hecla Strait at the head of Foxe Basin (Hannah et al. 2009).

POLYNYAS

If the Arctic were covered with a thick, seamless layer of sea-ice, many of the organisms that currently exist there and contribute to the region's productivity would find it impossible to survive. Polynyas and leads provide the necessary breaks in the ice that permit sunlight to penetrate and photosynthesis to proceed (in both planktonic and ice-based algae), allow mammals to breathe, and permit over-wintering birds to feed. Wind, water movement, and heat transfer are among the

primary factors that contribute to the establishment and maintenance of these open water sites.

Polynyas have long been viewed as extraordinary because of the obvious contradiction of open water occurring in conditions that promote ice. The explanation for this phenomenon is twofold: in some cases the introduction of heat forestalls ice formation, while in others any newly formed ice is rapidly removed. This process is controlled by wind and/or ocean currents, which remove any ice formed at the site. Other factors include turbulence from the surface waves or currents that can inhibit ice formation, adjacent coastlines, and shore-fast ice or ice bridges that prevent ice from drifting into polynyas.

Recurring polynyas typically occur near shoals and between islands, within the land-fast ice. There are two types of polynyas that recur each year: those that remain open all year long; and those that freeze over for one or two of the coldest months of the year. Animals such as seals, walrus and some migratory sea birds use these polynyas as important over-wintering areas.

Recurring polynyas have been identified near Hall Beach. Two are present in the Foxe Basin in Foster Bay and northwest of Prince Charles Island. A third is located at the eastern end of Fury and Hecla Strait.

LAND-FAST LEADS (FLAW LEADS)

Extensive systems of land-fast leads occur throughout the Arctic. Land-fast ice generally comprises first-year ice, possibly mixed with multi-year remnants, that is fixed to the coast. This ice platform extends outward, eventually merging with offshore pack ice (Stirling and Cleater 1981). The physical presence of this ice cover modifies tidal and wind energy, dramatically changing circulation (George et al. 2004). Eventually, a fracture or crack may develop between the attached ice and the free-floating pack ice due to offshore winds, or through the actions of coastal currents. These leads are

normally linear in shape and run parallel to shorelines. They are recurrent and predictable in their location and are among the areas where open water is found most consistently during winter and early spring. Because of these factors, land-fast lead systems are of great biological importance.

The boundary between the ice edge and the beginning of the lead is an ecosystem that is very important and has been identified as biologically rich and diverse by many elders and previous research. For instance:

- The land-fast ice edge is an important Inuit hunting site (Crawford and Jorgenson 1990);
- During late spring and early summer, large numbers of sea birds and marine mammals congregate at the edges of land-fast ice (McLaughlin et al. 2005);
- Ringed seals and polar bears are the only marine animals that regularly occupy extensive land-fast coastal ice (Tynan and DeMaster 1997);
- Bearded seals prefer relatively shallow water (<150 m) with thin shifting ice and leads kept open by strong currents (Tynan and DeMaster 1997);
- Along with polynyas, land-fast lead systems and ice edges play key roles in influencing the abundance and distribution of marine mammals and sea birds (McLaughlin et al. 2005);
- Satellite observations of polar bears in multi-year ice show that they are often associated with leads (Stirling 1997);
- High densities of arctic cod are found immediately below the edge of land-fast sea ice, linked to the availability of high concentrations of copepod prey (Crawford and Jorgenson 1990);
- Near the ice edge the diet of adult ringed seals and narwhal is composed primarily of arctic cod while amphipods and copepods are consumed in smaller numbers (Bradstreet and Cross 1982).

The reasons for greater biological abundance and diversity associated with land-fast leads and ice edges are largely the same as those outlined above for recurrent open water. However, upwelling is an additional mechanism that appears to occur at shore-fast and pack ice edges.

UPWELLING: TOPOGRAPHIC AND ICE-EDGE

Upwelling is a mechanism by which colder, deeper water is moved to the surface, where it can create and/or maintain ice-free open water. Topographic upwelling occurs where a current moving through cold subsurface water is deflected or welled upward toward the surface by a bottom structure such as a sill, bank, or ridge (Tee et al. 1993).

Ice-edge upwelling occurs when wind blows parallel to the ice edge and causes surface water to move away from the edge. The surface water is then replaced from below (Tang and Ikeda 1989). The upwelling zone may be several kilometres wide and draw subsurface water from depths of up to 100 metres. This phenomenon has been observed in the Bering Sea (Alexander and Niebauer 1981), the Arctic Ocean (Buckley et al. 1979, Johannessen et al. 1983) and off the coast of Newfoundland (Tang and Ikeda 1989).

Upwelled water usually carries nutrients into the upper layer where, with sufficient light, both phytoplankton and ice algae can grow and provide a strong stimulus to the local food web. This is one explanation for why polynyas and shore-fast leads are so productive.

MARINE RESOURCES IN THE CONTEXT OF CLIMATE CHANGE

Over the past 20 years, many Arctic researchers have commented on the impending probability of climate change, with its predicted impacts on the marine environment as well as the abundance, diversity, and well-being of marine organisms (Tynan and DeMaster 1997, Michel et al. 2006, Moore and Huntington 2008). Changes may occur affecting water stratification and its role in nutrient renewal, the balance between multi-year and annual ice, the relative importance of ice algae, the timing and magnitude of primary and secondary production, changes in traditional species distributions and hunting sites, amongst others. Each of these changes could exert some influence on the food web and the state of the resources as they are presently defined.

Figure 3. Map of known polynyas in Nunavut



FIG. 1. A map of known polynyas in the Canadian Arctic, adapted from Barber and Massom (2007) and Stirling (1981). The Karluk Brooman polynyas were identified by Schliedermann (1980) and Brown and Nettleship (1981).



GUIDE TO 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 tables, which provides additional detail, along with descriptive information, when available. Table 1 describes the map codes used in the tables.

Table 1. Guide to maps and tables

CATEGORY	MAP CODE
Areas known best	'AKB'
High abundance	'A'
Observed change / different from past	'C'
Concern	'Con'
Camp/Cabin	'Camp'
Historic (before year 2007)	'H'
Hazard area	'Haz'
Harvest area	'Harv'
Human use	'Use'
Ecological observation	'Ecol'
Everywhere	'E'
Feeding area	'F'
Floe edge observation	'Floe'
Ice observation	'Ice'
Migration (arrows indicate direction)	'M'
Spawning / Nesting / Denning / Calving / Popping areas	'S'
Nursery area	'N'
Polynya	'Poly'
Travel route	'Travel'

Generally, maps comprise groupings of single or several species as reported in multiple interviews. Species and interviews are normally colour-coded and locations are labelled with a number. These labels can be used to look-up relevant information in the table associated with each map.

The species identified by interviewees as being distributed “Everywhere” are not mapped in this report. The designation of “Everywhere” was used when interviewees felt that the organism under discussion has been observed everywhere throughout their travels and places with which they are very familiar. Giving a species an “Everywhere” designation does not confer any information about abundance nor should it be presumed to be ubiquitous; it is only a measure of distribution relative to where the interviewee has been. “Everywhere” data is provided in the table of data following the maps.

Some species were described by a portion of the interviewees as being “Everywhere” while other interviewees provided specific locations for the same species. In these cases, an asterisk has been placed after the species name in the title of the map. For example, arctic char is written as “Arctic Char*” in the map title because it was reported in specific locations, as well as being “Everywhere”. The asterisk simply provides a visual cue that the species has two designations.

Please note that the data presented on birds has been further qualified in Appendix 3. Of all the species presented to the interviewees, birds (e.g., sandpipers or gulls) present the greatest challenge in proper identification; a challenge often encountered by even the keenest observers. To assist in interpreting the data, Appendix 3 compares observations recorded through the inventory with literature and sightings by other authors. In the future, inventory work will endeavour to qualify all species reported in a similar way.

Note: The asterisk (*) after some species names in the titles of the maps indicates that the species was also considered to be seen “Everywhere” by some interviewees. Species identified as being “Everywhere Only” are shown by the use of a solid bullet in the map legend.

MAPS AND TABLES

Figure 4. Historic and current camps and travel routes

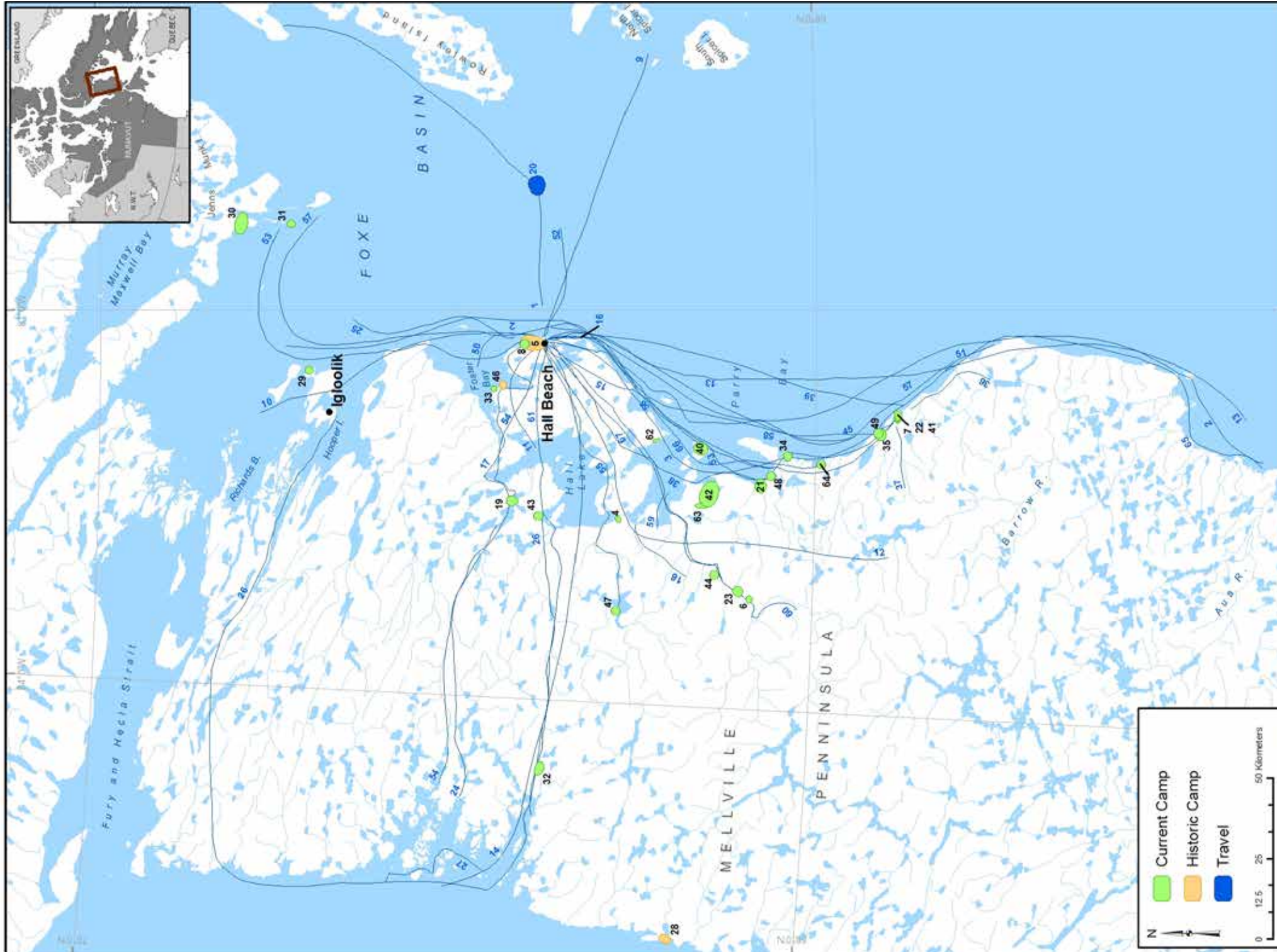




Table 2. Historic and current camps and travel routes

MAP #	INTERVIEW	CODE	CATEGORY	MONTHS	COMMENTS
1	1		Travel		Boating route in the summer.
2	1		Travel		Travel route by boat to go caribou and narwhal hunting near Naujaat.
3	1		Travel		Travel route used when going caribou hunting.
4	1		Camp		Fishing camp.
5	1	H	Camp		Outpost camp where he grew up. Before there was the Hall Beach settlement.
6	1		Camp		Cabin used when caribou hunting.
7	1		Camp		Cabin used when caribou hunting.
8	2		Camp	Jul (Early)	The place where he was born.
9	2		Travel	Sep	Travel route by boat to go walrus hunting.
10	2		Travel		Travel route by skidoo to go fishing.
11	2		Travel		Travel route by ATV.
12	2		Travel		Travel route by ATV to go to caribou hunting area.
13	2		Travel		Travel route by boat to go to caribou hunting area.
14	2		Travel		Travel route by skidoo to go polar bear hunting.
15	3		Travel		Skidoo route. Better to travel on the ice as the land is quite rough.
16	3		Travel		Skidoo route. Better to travel on the ice as the land is quite rough.
17	3		Travel		ATV travel route to the cabin. A 2 hour ride from town.
18	3		Travel		Travel route by ATV to go to caribou hunting area.
19	3		Camp		Year-round camp. Accessed by ATV in the summer. Lots of mosquitos here.
20	3		Travel		Boat route to go egg picking.
21	3		Camp		
22	3		Camp		
23	3		Camp		
24	4		Travel		
25	4	C	Travel		Used to travel this route to the camp but now it is open water.
26	4		Travel		He was a guide on a dog team trip in the spring of 1988. This was their travel route.

MAP #	INTERVIEW	CODE	CATEGORY	MONTHS	COMMENTS
27	4		Travel	Apr	Travel route to go polar bear hunting.
28	4	H	Camp		This was a DEW line base camp in 1974.
29	4		Camp		Where he was born.
30	4		Camp		Place he grew up.
31	4		Camp		Place he grew up.
32	4		Camp		Outpost camp where the military used to stay.
33	5		Camp		The place where he was born.
34	5		Camp		Summer camp when he was growing up.
35	5		Camp		Winter camp when he was growing up.
36	6		Travel	Aug-Oct	ATV travel route for caribou hunting.
37	6		Travel		ATV travel route.
38	6		Travel		Skidoo travel route.
39	6		Travel		Boating route.
40	6		Camp		Cabins here. Used when people go to this area for seal hunting.
41	6		Camp	Aug-Oct	3-4 cabins here. Used during caribou hunting and fishing.
42	7		Camp		

Figure 4. Historic and current camps and travel routes (continued)

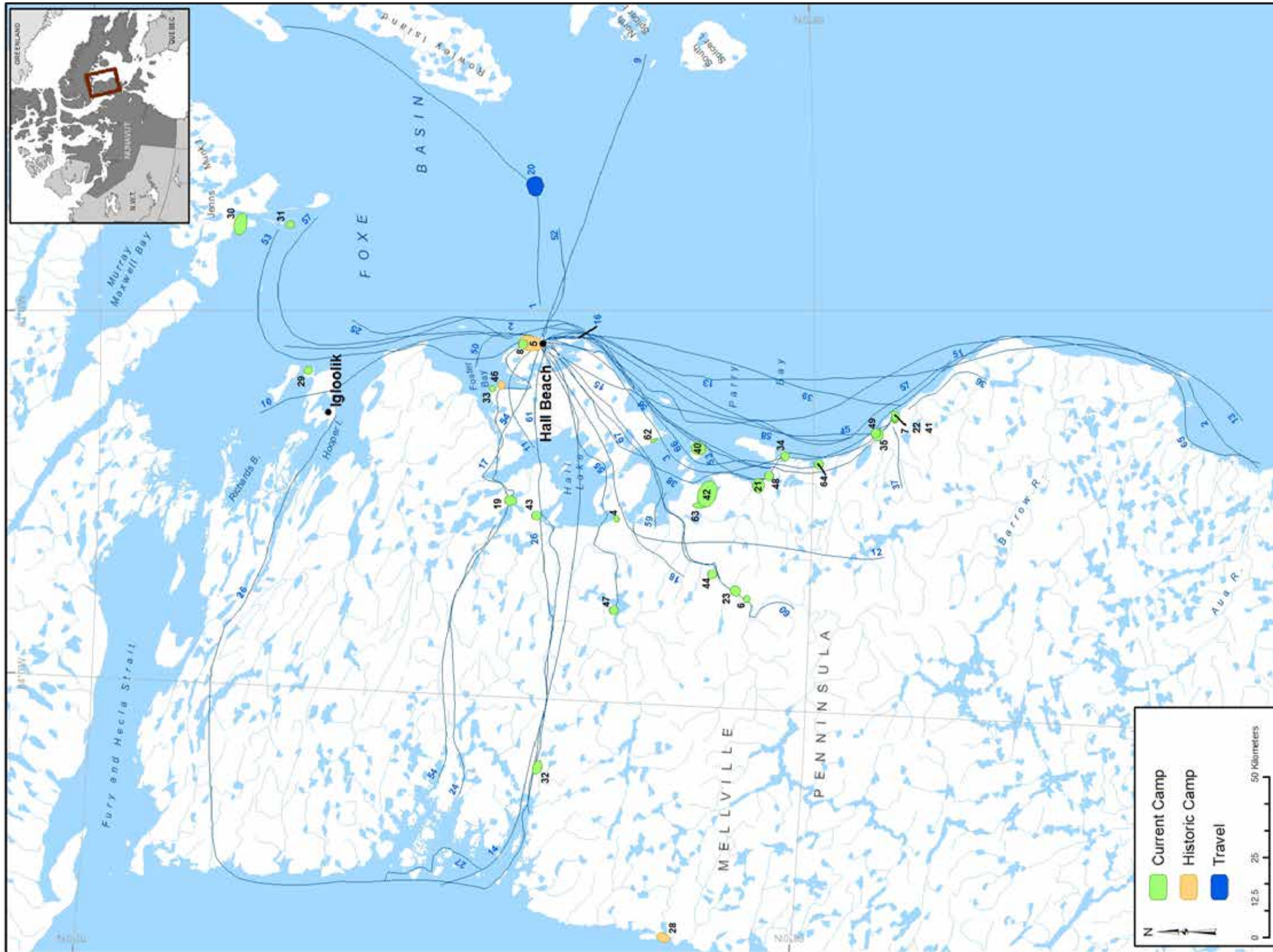




Table 2. Historic and current camps and travel routes (continued)

MAP #	INTERVIEW	CODE	CATEGORY	MONTHS	COMMENTS
43	8		Camp		
44	8		Camp		
45	8		Travel		Route to caribou hunting and fishing area.
46	8	H	Camp	Nov(Mid)	Outpost camp where he was born.
47	9		Camp		
48	9		Camp		Used while caribou hunting.
49	9		Camp		Used while caribou hunting.
50	9		Travel		Boating route to seal hunting area.
51	9		Travel		Route for a day trip to caribou hunt.
52	9		Travel		Boating route for walrus hunting.
53	9		Travel		Route to go Polar Bear hunting.
54	9		Travel		Route to go Polar Bear hunting.
55	9		Travel		Route to cabin.
56	9		Travel		Boat route.
57	9		Travel		Boat route.
58	9		Travel		Snowmobile route for caribou hunting.
59	9		Travel		Snowmobile route for caribou hunting.
60	9		Travel		Snowmobile route for fishing and caribou hunting.
61	9		Travel		Route to go Polar Bear hunting.
62	9		Camp		Personal Camp. Used while seal hunting.
63	9		Camp		Used while caribou hunting.
64	10		Camp		Caribou hunting also takes place in this area in the winter.
65	10		Travel		
66	10		Travel		Snowmobile route to camp.
67	10		Travel		Snowmobile/Dog team route.

NUNAVUT COASTAL RESOURCE INVENTORY

Figure 5. Historic and current harvest areas, landmarks and other observations

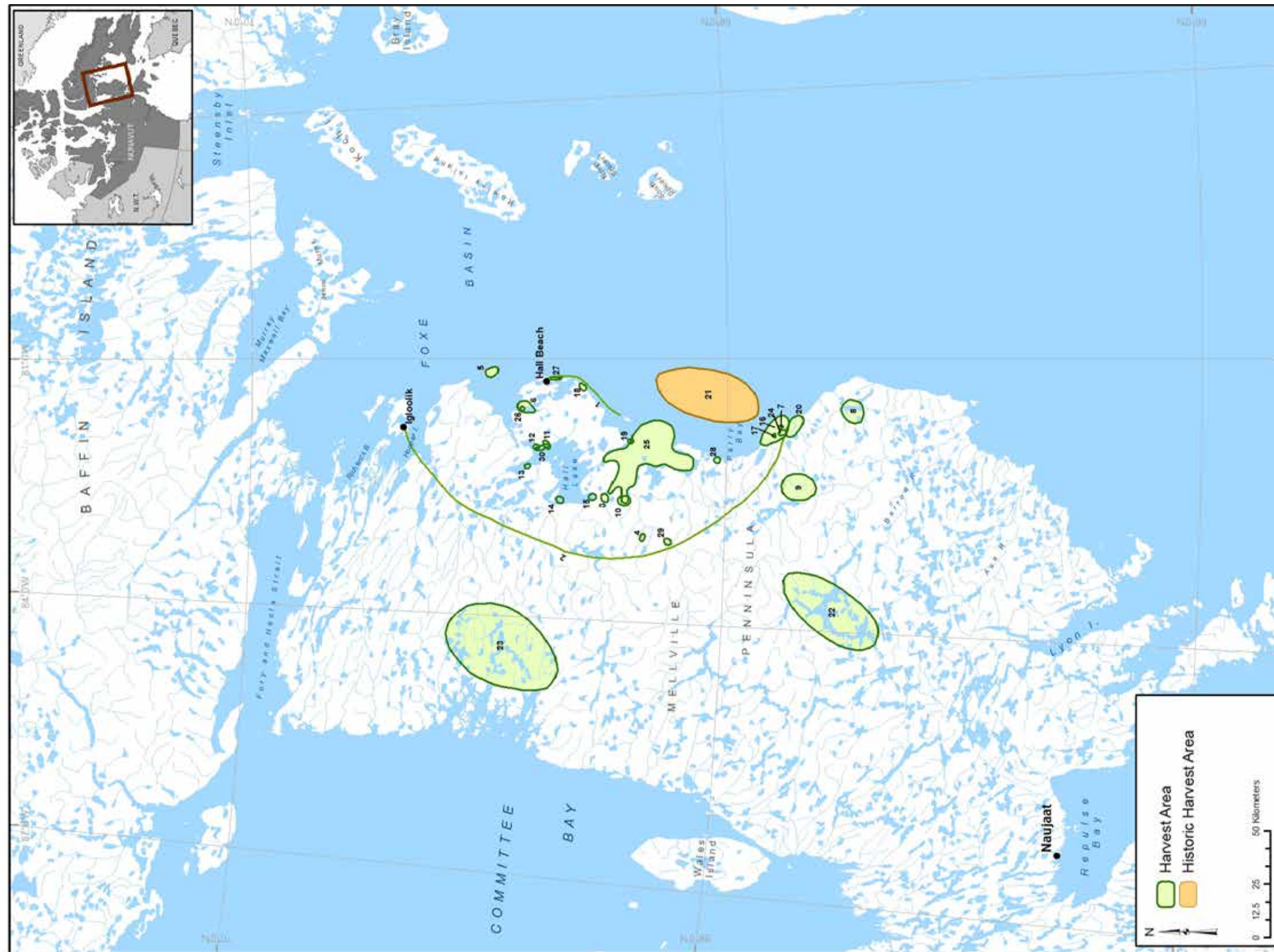




Table 3. Historic and current harvest areas, landmarks and other observations

MAP #	INTERVIEW	CODE	CATEGORY	MONTHS	COMMENTS
1	2		Harvest	Sep	Area for walrus hunting.
2	3		Harvest		Hunts this whole area.
3	3		Harvest		Area for hunting caribou.
4	3		Harvest		Caribou hunting area.
5	3		Harvest		Area for egg picking.
6	5		Harvest		Area where you go fishing with a fishing rod.
7	6		Harvest		Son caught a muskox here in 2016.
8	6		Harvest		Caribou hunting area.
9	6		Harvest		Caribou hunting area.
10	6		Harvest		Set nets in this area.
11	6		Harvest		Fishing spot.
12	6		Harvest		Fishing spot.
13	6		Harvest		Fishing spot.
14	6		Harvest		Fishing spot.
15	6		Harvest		Fishing spot.
16	6		Harvest		While caribou hunting, you can fish here.
17	6		Harvest		Kids fish for small fish in this lake.
18	6		Harvest		Fishing spot.
19	6		Harvest	Jul(Early)	Annual Canada Day fishing spot.
20	7		Harvest		A muskox was harvested south of Hall Beach.
21	8	H	Harvest		Walrus hunting area.
22	9		Harvest		Caribou hunting area.
23	9		Harvest		Caribou hunting area.
24	9	C	Harvest		A muskox was shot here. Very uncommon to see them.
25	9		Harvest		Seal hunting area.
26	10		Harvest		Fishing area.
27	10		Harvest		Fish nets set here.
28	10		Harvest		Fishing area.
29	10		Harvest		Fishing takes place in this area. 2 cabins are also located here.
30	10		Harvest		Place fish nets here.

Figure 6. Floe edges, polynyas and other observed ice or water feature





Table 4. Floe edges, polynyas and other observed ice or water feature

MAP #	INTERVIEW	CODE	CATEGORY	MONTHS	COMMENTS
1	1	Floe	Ice Floe		Usual winter floe edge.
2	2	Floe	Ice Floe		The usual floe edge.
3	4	C, Floe	Ice Floe		Floe edge now (March 22, 2017). When the weather is colder the floe edge would be closer to the land because it would break off. Now it's warmer so the floe edge is further away. It's not as cold as it used to be.
4	4	H, C, Floe	Ice Floe		The floe edge usually breaks off here but nowadays it doesn't (on the map 17) is the new norm.
5	4	Floe	Ice Floe		Floe edge.
6	6	H, Floe	Ice Floe		The floe edge isn't as far anymore. Use to be out here.
7	6	Floe	Ice Floe		Floe edge near camp. Not as frozen as it used to get.
8	7	H, C, Floe	Ice Floe		
9	7	C, Floe	Ice Floe		
10	8	Floe	Ice Floe		The floe edge is here most years. Hasn't changed too much. Always close to the island.
11	8	Floe	Ice Floe		
12	9	Floe	Ice Floe		
13	2	C, Ice	Ice Other		Old ice usually came down past Hall Beach from Igloodik but this doesn't happen anymore. The ice thaws faster now because that old ice doesn't come anymore. Ice is breaking up earlier each year.
14	2	C, Ice	Ice Other		Old ice usually came down past Hall Beach from Igloodik but this doesn't happen anymore. The ice thaws faster now because that old ice doesn't come anymore. Ice is breaking up earlier each year.
15	3	Ice	Ice Other		In the summer this area has lots of ice still.
16	4	C, Ice	Ice Other		This area used to be frozen over. Now it's open water. Can't travel this way anymore in the winter.
17	6	Ice	Ice Other		Ice breaks off here.
18	6	Ice	Ice Other		Rough ice in this area.
19	7	Ice	Ice Other	Jun	Thin ice in this area, becomes very dangerous. Large currents in these waters.

MAP #	INTERVIEW	CODE	CATEGORY	MONTHS	COMMENTS
20	7	Ice	Ice Other		Ice melts earlier, becomes dangerous. Large currents in these waters.
21	8	Ice	Ice Other		The ice has become thinner in June than ever before.
22	1	Haz, Poly	Ice Polynya		
23	4	Poly	Ice Polynya		This area takes longer to freeze up than the rest of the area. Uses it as a fishing spot.
24	4	Poly	Ice Polynya		This area takes longer to freeze up than the rest of the area.
25	4	Poly	Ice Polynya		This area takes longer to freeze up than the rest of the area. Uses it as a fishing spot.
26	4	Haz, Poly	Ice Polynya		
27	4	Haz, Poly	Ice Polynya		
28	4	Poly	Ice Polynya		Very shallow - only ~2 feet deep but never freezes over.
29	4	H, C, Floe	Ice Polynya		
30	4	Haz, Poly	Ice Polynya		
31	4	Haz, Poly	Ice Polynya		
32	4	Haz, Poly	Ice Polynya		
33	6	Poly	Ice Polynya	Nov	Usually freezes later than the rest of the ice.
34	6	Poly	Ice Polynya	Nov	Usually freezes later than the rest of the ice
35	9	C, Poly	Ice Polynya		Area has more open water now than ever before.
36	9	Poly	Ice Polynya		Strong currents in this area.
37	9	Poly	Ice Polynya		Strong currents in this area.
38	9	Poly	Ice Polynya		Strong currents in this area.

Figure 7. Historic and current areas known best





Table 5. Historic and current areas known best

MAP #	INTERVIEW	CODE	CATEGORY	MONTHS	COMMENTS
1	2	AKB, C	Known		This area is getting shallower, almost like the seabed is rising.
2	2	AKB	Known		Growing up he lived all along the coast in little outpost camps.
3	6	AKB	Known		
4	6	AKB	Known		Rough snow in this area.
5	7	AKB	Known		Wolf Den.
6	7	AKB	Known		Wolf Dens.
7	7	AKB	Known		Wolf Dens.
8	7	AKB	Known		Strong currents here.
9	8	AKB	Known		Fishing and caribou hunting area.
10	8	AKB	Known		Fishing area.
11	8	AKB, H	Known		Area where he grew up.

Figure 8. Arctic Char Frequency of Occurrence

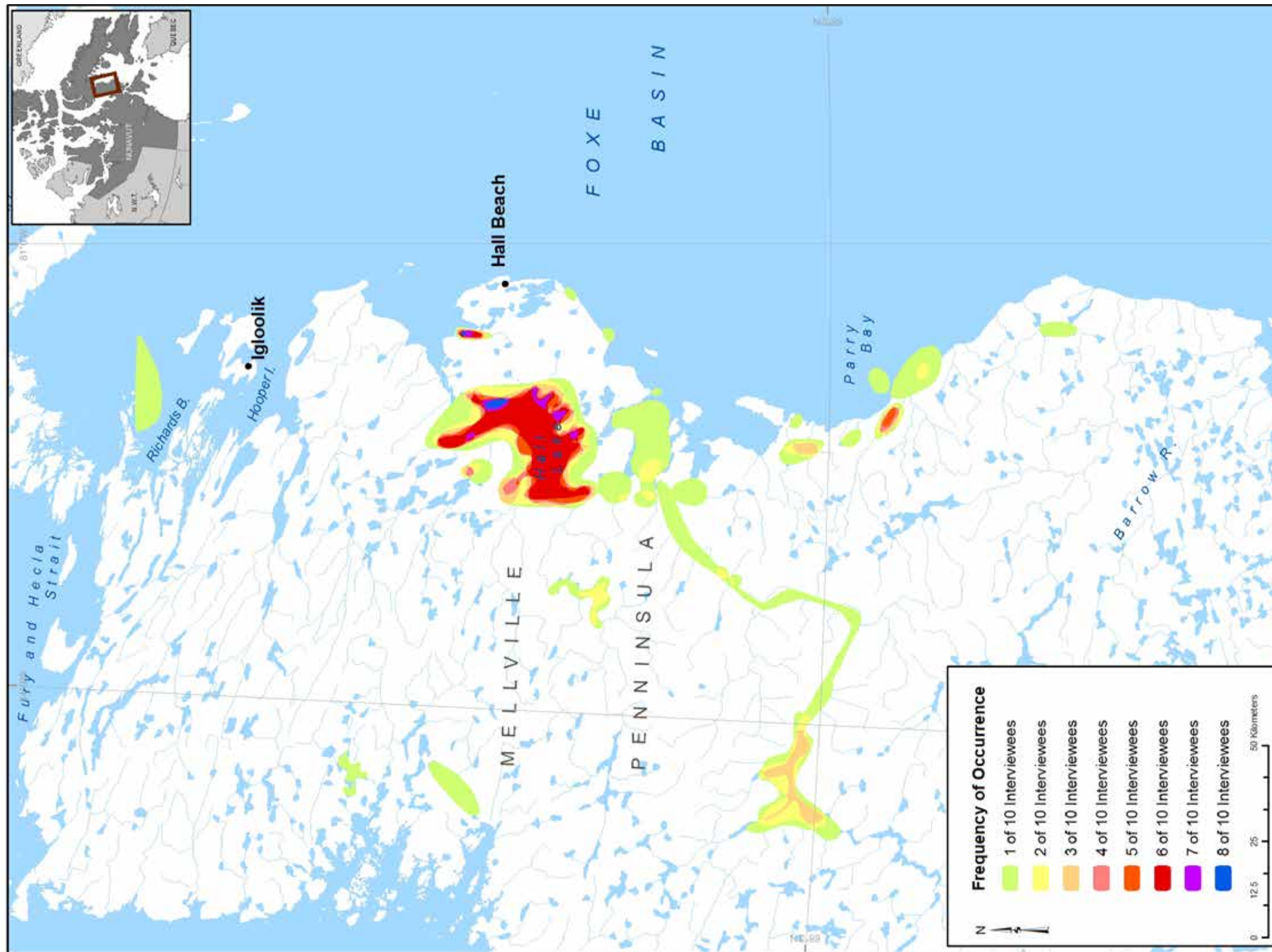




Figure 9. Arctic Char Areas of Occurrence



NUNAVUT COASTAL RESOURCE INVENTORY

Table 6. Arctic Char Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1			Big char here. Souter Lake.
2	2	M		Migrate from the ocean to Hall Lake.
3	2	S		
4	2			
5	3		Jul, Aug(Mid)	All along the shore.
6	3			
7	3	C, H		Dwarf char "Nutiliajuk" used to be in this lake but not anymore.
8	3			Dwarf char, call them "Nutiliajuk".
9	3	S		This is a deep lake with char. It has the biggest spawning char - they can be over 2 feet long. They're skinny with a big head.
10	3	S		
11	3			Only char in this lake. No lake trout.
12	3			
13	3			
14	4	S		
15	4	S		
16	4	S		
17	4	S		
18	5			Used to go here for fishing.
19	5	M, S		Migrate through this river between the lake and the ocean.
20	5	S		
21	5	A		Lots of smaller fish.
22	5	S		
23	5	H		
24	5			Used to go here for fishing.
25	5			Used to go here for fishing.
26	5			Used to go here for fishing.
27	5	S		
28	5	S		Used to go here for fishing.

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
29	6	M		
30	6	M		
31	6	M		Great fish.
32	6			
33	6		Jul	
34	6			Fish here when the ice starts to melt and breakup. Fish are small here.
35	6			Fishing spot.
36	6			Set nets in this area.
37	6			
38	6			
39	6			
40	7	M		
41	7	M		
42	7	M		
43	7	M		
44	7	M		
45	7	S		In the little bays of Hall Lake.
46	7	S		In the little bays of Hall Lake.
47	7			
48	7			
49	7			
50	7			
51	7			
52	7			
53	7	S		In the little bays of Hall Lake.
54	7	S		In the little bays of Hall Lake.
55	8	S		Best tasting fish are here. Thinks the water in fresher.
56	8			
57	8			



MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
58	8	S		
59	8	S		
60	8	S		
61	8			
62	8	S		
63	8	S		
64	8	S		
65	8	A	Jul	
66	9			Along the river.
67	9			All along the coast.
68	9			Along the river.
69	9			In fisherman's lake.
70	9	S	Oct(Late), Nov(Early)	
71	9	S	Oct(Late), Nov(Early)	
72	9	S	Oct(Late), Nov(Early)	
73	9	S	Oct(Late), Nov(Early)	
74	9			
75	9			
76	9			
77	10			
78	10			
79	10	S		

Table 7. Arctic Char Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1		In all the big rivers.
2		In all the lakes.
4		Along the coast all year long.

Figure 10. Landlocked Char Areas of Occurrence

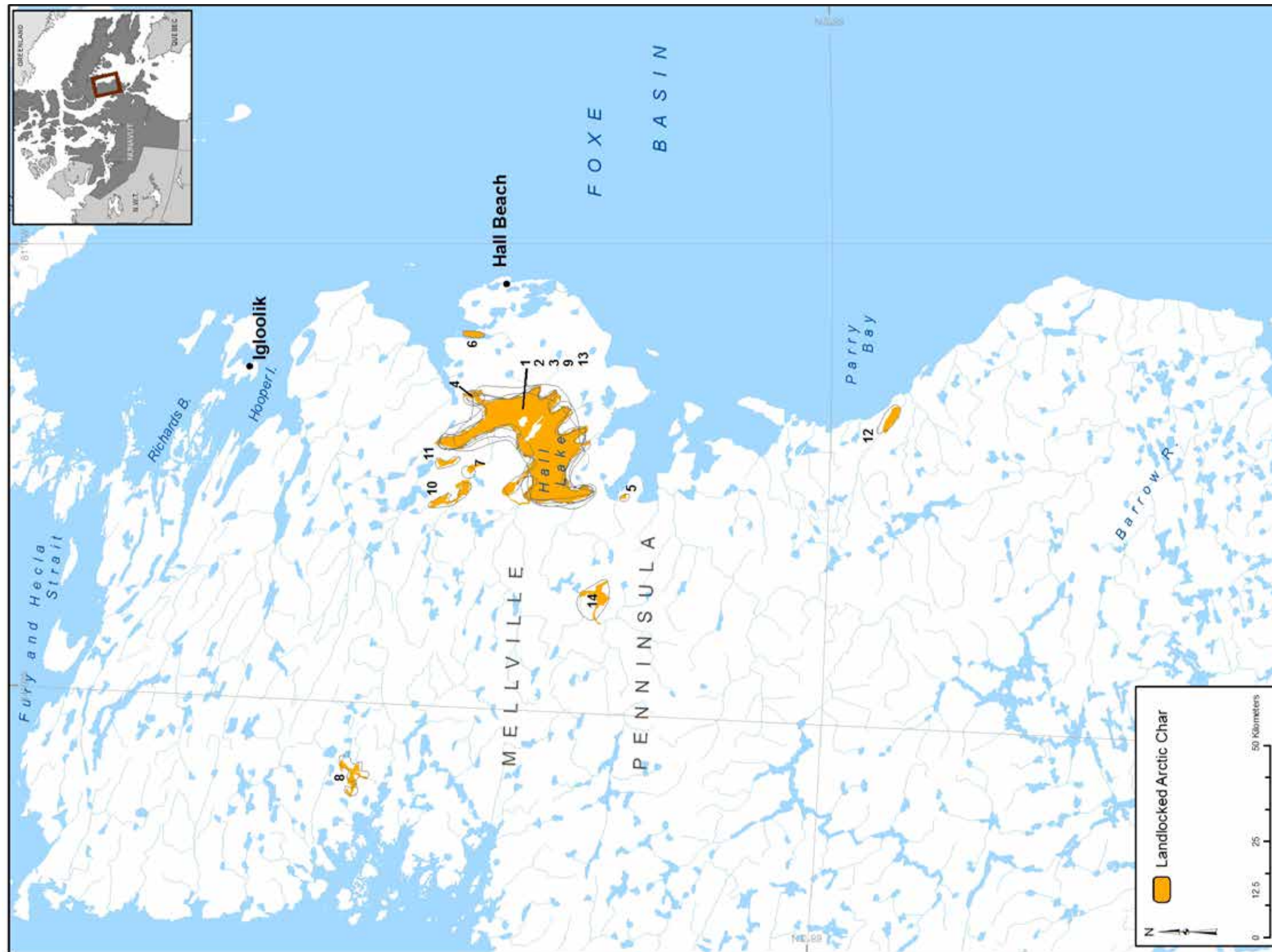




Table 8. Landlocked Char Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1			
2	2			
3	3			
4	3			
5	3			
6	3			
7	3			
8	4			
9	4			
10	4			No sea-running char in this lake, only land locked char.
11	4			No sea-running char in this lake, only land locked char.
12	9			
13	9			
14	9			

Table 9. Landlocked Char Everywhere Data

INTERVIEW	MONTHS	COMMENTS
2		In all the lakes in the area

Figure 11. Lake and Bull Trout Areas of Occurrence



Table 10. Lake and Bull Trout Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1		Lake Trout		There are 2 types of lake trout - light and dark.
2	2		Lake Trout		
3	2	M	Lake Trout		Migrate from the ocean to Hall Lake.
4	2		Lake Trout		Enormous trout in this lake - can even see them from a helicopter! When putting in fishing nets you have to watch out for lake trout that try to eat you.
5	2		Lake Trout	Jun-Aug	
6	2		Lake Trout	Jun-Aug	
7	2		Lake Trout	Jun-Aug	
8	2		Lake Trout	Jun-Aug	
9	3		Lake Trout		
10	3		Lake Trout		
11	4		Lake Trout		
12	4		Lake Trout		
13	4		Lake Trout		
14	4		Lake Trout		
15	4		Lake Trout		
16	4		Lake Trout		
17	4		Lake Trout		
18	4		Lake Trout		
19	5		Lake Trout		
20	5		Lake Trout		
21	5		Lake Trout		Spring is the best time to go fishing for them.
22	5		Lake Trout		
23	5		Lake Trout		Hall Lake.
24	6	A	Lake Trout		In Hall Lake.
25	7		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
26	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
27	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
28	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.



Table 11. Lake and Bull Trout Everywhere Data

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
29	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
30	8		Lake Trout		Caught in the ocean! Unusual to see them there. Resembled a bull trout, changing colour in the ocean.
31	8		Lake Trout		
32	8	A	Lake Trout		
33	8		Lake Trout		
34	8		Lake Trout		
35	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
36	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
37	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
38	8		Lake Trout		During summer, the skin changes and it looks more silver, like a bull trout.
39	8		Lake Trout		
40	9		Lake Trout		
41	9		Lake Trout		
42	9		Lake Trout		
43	9		Lake Trout		
44	9		Lake Trout		
45	9		Lake Trout		
46	9		Lake Trout		
47	9		Lake Trout		
48	10		Lake Trout		
49	10		Lake Trout		
50	2		Bull Trout		

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		Lake Trout	In all the lakes around Hall Beach area.
2		Lake Trout	Can be found in any open lakes. More in the big lakes but some in the small lakes too.
4		Lake Trout	In any large lake.
6		Lake Trout	Except Fisherman's Lake.
7		Lake Trout	In all small lakes.
8		Lake Trout	Except Fisherman's Lake.
9		Lake Trout	In all lakes, even in small lakes that do not show up on the map.
10		Lake Trout	Every lake except Fisherman's Lake.
2		Bull Trout	In all the lakes.

Figure 12. Arctic Grayling, Ninespine Stickleback and Walleye Areas of Occurrence



Table 12. Arctic Grayling, Ninespine Stickleback and Walleye Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	5	C, P	Arctic Grayling		Seen just in recent years.
2	7		Arctic Grayling		Hunters seen them flying out of the water.
3	9	A	Arctic Grayling		
4	3		Ninespine Stickleback		
5	3		Ninespine Stickleback		
6	8	A	Ninespine Stickleback		In small lakes near the Dew Line site.
7	5	H	Walleye		Used to see them when he was young.
8	5	H	Walleye		Used to see them when he was young.
9	5	H	Walleye		Used to see them when he was young.
10	10		Walleye		If there are birds flying around a certain area, you know these fish are there. Birds and seals eat them.



Figure 13. Arctic, Atlantic, Greenland, Toothed and unknown Cod Areas of Occurrence



Table 13. Arctic, Atlantic, Greenland, Toothed and unknown Cod Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	3		Arctic Cod		Along the coast.
2	3		Arctic Cod		Can see them in ice cracks and seal holes in late spring.
3	4		Arctic Cod		
4	5		Arctic Cod		Around breathing holes.
5	5	A	Arctic Cod		
6	6		Arctic Cod		
7	7		Arctic Cod		
8	7		Arctic Cod		Large cod here.
9	10		Arctic Cod		Small/young fish. ~1ft in length.
10	3		Atlantic Cod	Aug(Late), Sep(Early)	Has only caught 3 in his lifetime.
11	8		Greenland Cod		Saw them while seal hunting.
12	10		Greenland Cod		Sets nets here.
13	8		Toothed Cod		Not many, approximately 1-2 ft. in length.
14	1		Cod		Big ones seen in the ice. Either Atlantic or Green-land cod, not sure.
15	6	U	Cod		Knows there are cod here. Unsure of what kind.

Table 14. Arctic Cod Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1		
9		

Figure 14. Arctic and Shorthorn Sculpin Areas of Occurrence

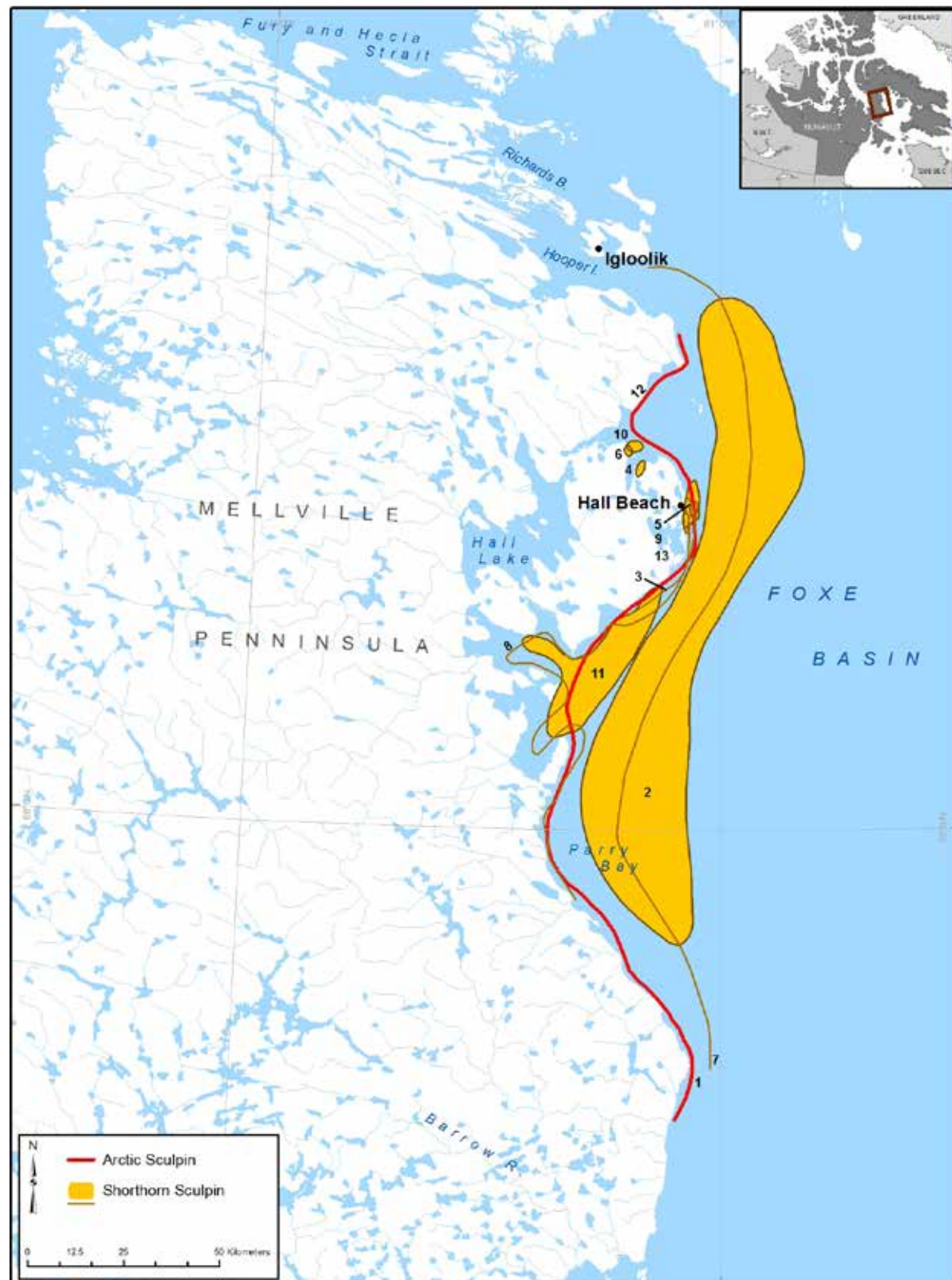


Table 15. Arctic and Shorthorn Sculpin Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	9		Arctic Sculpin		All along the coast.
2	2		Shorthorn Sculpin		Doesn't fish for them because he doesn't really eat them.
3	3		Shorthorn Sculpin		Doesn't eat this fish.
4	3		Shorthorn Sculpin		In this shallow bay.
5	3		Shorthorn Sculpin		A big, 3 foot sculpin got caught in his fishing nets once. He released it, doesn't really eat them.
6	4		Shorthorn Sculpin		Caught one with a rod once that was 2 feet long.
7	5		Shorthorn Sculpin		When he was young these were the main fish he would catch in the summertime.
8	5		Shorthorn Sculpin		Sees them when fishing for char.
9	7		Shorthorn Sculpin		Small ones.
10	8		Shorthorn Sculpin		Sees these while fishing for other species.
11	8		Shorthorn Sculpin		Sees while fishing for other species.
12	9		Shorthorn Sculpin		All along the coast.
13	10		Shorthorn Sculpin		Sees all ages.

Table 16. Arctic, Fourhorn, Shorthorn, and Arctic Staghorn Sculpin Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		Arctic Sculpin	
1	Jul-Sep	Arctic Staghorn Sculpin	He used to fish for sculpin for fun and his grandmother would cook it for them. Doesn't bother with them anymore now.
1		Fourhorn Sculpin	
1		Shorthorn Sculpin	



Figure 15. Arctic Rockling, Capelin, Eelpout, Saddled Eelpout, Greenland Shark, and Lump sucker Areas of Occurrence

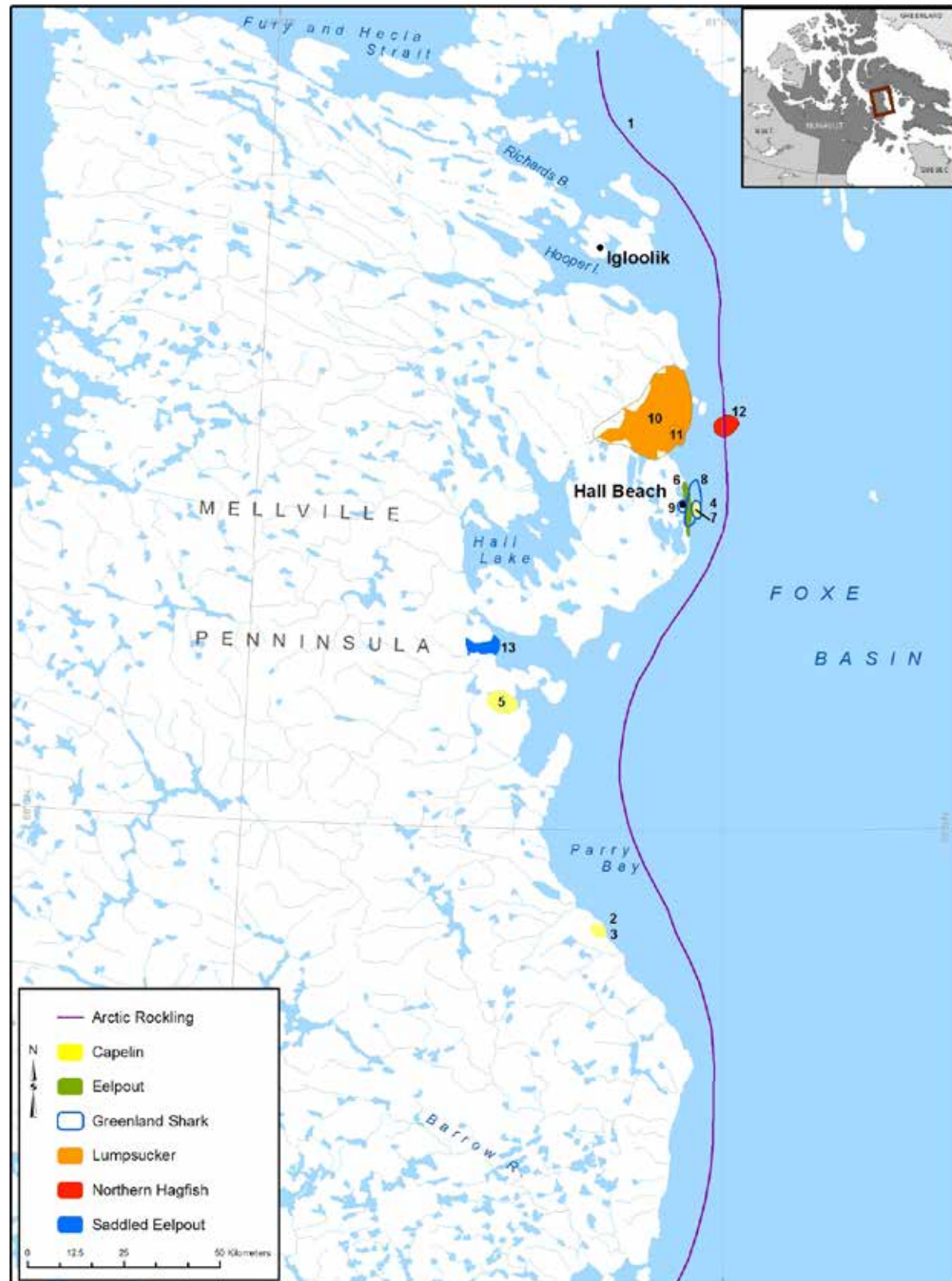


Table 17. Arctic Rockling, Capelin, Eelpout, Saddled Eelpout, Greenland Shark, and Lump sucker Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	4		Arctic Rockling		Along the coastline. Char eat them.
2	1	A	Capelin		
3	3		Capelin		
4	3		Capelin		
5	7		Capelin		Saw a school once.
6	1		Eelpout		A reddish/brown eelpout, not sure which species. Looks like seaweed.
7	3		Greenland Shark		In 2001 one washed up on shore.
8	7		Greenland Shark		The skin alone washed up to shore.
9	9	H	Greenland Shark		A carcass washed up once before.
10	1		Lumpsucker		Seen just once, in a seal breathing hole. Was very round like a ball.
11	3	U	Lumpsucker		Seen a lumpsucker with rough, bumpy skin but is unsure which species.
12	8		Northern Hag-fish		Sees while walrus hunting.
13	1		Saddled Eel-pout		Sees them by the beach near town.

Figure 16. Northern Sand Lance, Rock Grenadier, Smooth Lumpfish, Wolffish and unknown fish Areas of Occurrence



Table 18. Northern Sand Lance, Rock Grenadier, Smooth Lumpfish, Wolffish and unknown fish Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	8		Northern Sand Lance		Approximately 1 ft. in length.
2	8		Rock Grenadier		Stick to your body like Velcro.
3	3		Smooth Lumpfish		Seen one swimming in a seal breathing hole.
4	10		Smooth Lumpfish		Sees them, but not every year.
5	7		Wolffish		Saw one while surveying. Not sure which one.
6	7		Unknown Fish		Mouth was on the bottom, was long like an eel. Seen it when scuba diving.



Figure 17. Common Cockle and Truncate Softshell Clam Areas of Occurrence

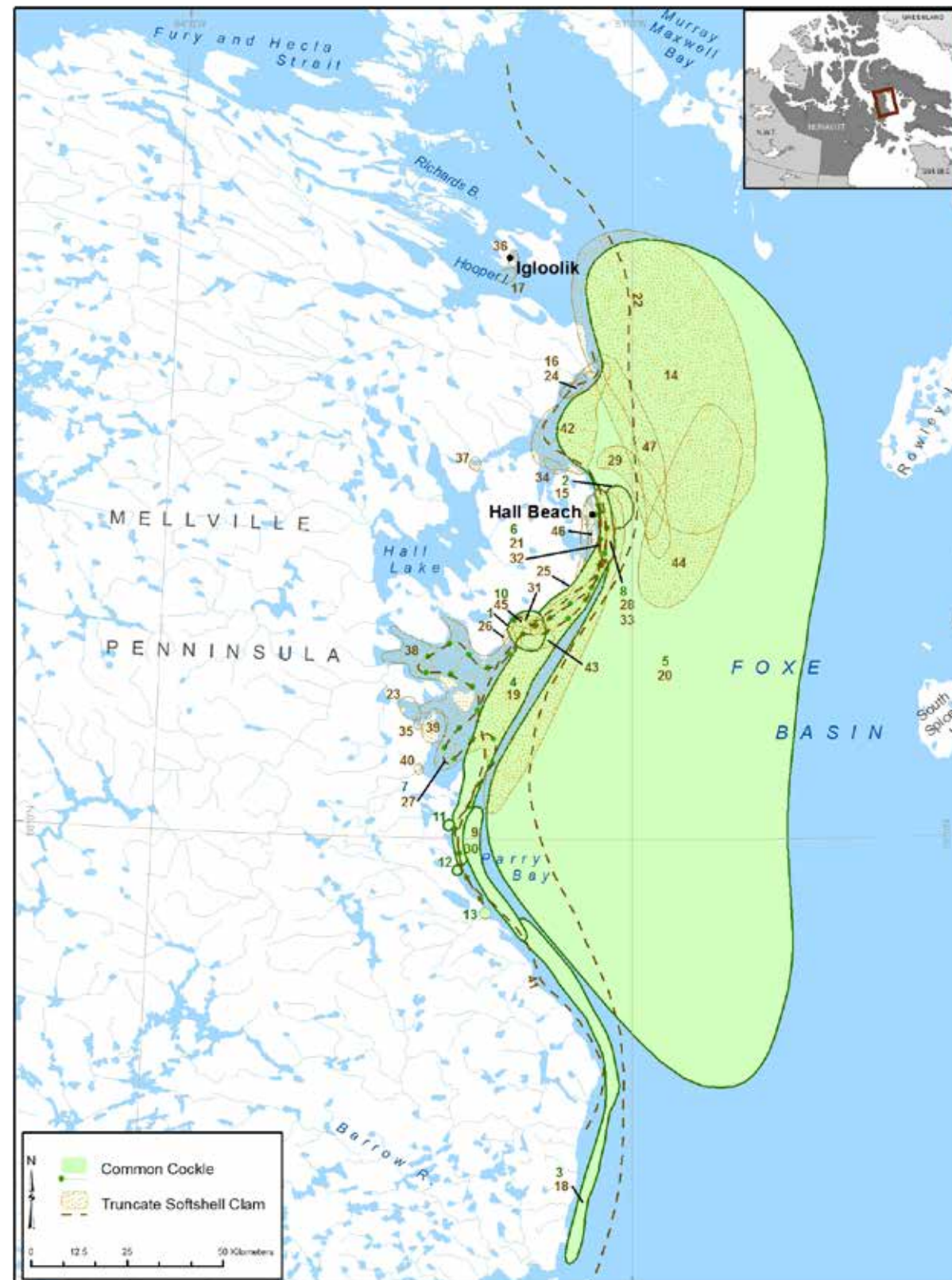


Table 19. Common Cockle and Truncate Softshell Clam Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1		Common Cockle		Sees the shells on the beach after a storm. The seagulls eat the meat out of them pretty fast.
2	1		Common Cockle		Washed up on the beach after there's been strong winds.
3	2		Common Cockle		
4	2		Common Cockle		
5	2		Common Cockle		In walrus stomach.
6	3		Common Cockle		Has seen just the shells on the beach.
7	5		Common Cockle		
8	5		Common Cockle		
9	5	H	Common Cockle		Near the camp where he grew up.
10	6		Common Cockle		They wash up on the beach after a storm.
11	8		Common Cockle		Lots inside walrus stomach.
12	8		Common Cockle		Lots inside walrus stomachs.
13	9		Common Cockle		Always washed up.
14	1		Truncate Softshell Clam		Walrus eat them.
15	1		Truncate Softshell Clam		Where to pick clams.
16	1	H	Truncate Softshell Clam		There was a big accident where several people died and recovery teams searched for the bodies in the ocean using lines with hooks. Got lots of clams on the hooks.
17	1		Truncate Softshell Clam		
18	2		Truncate Softshell Clam		They wash up on shore after a storm, you don't have to dig for them. Sometimes the birds get to them first.
19	2		Truncate Softshell Clam		Washed up on shore after a storm.
20	2		Truncate Softshell Clam		In walrus stomach.
21	3		Truncate Softshell Clam		Found in walrus stomach and along the coast.
22	4		Truncate Softshell Clam		Has seen all sizes in this area.
23	4		Truncate Softshell Clam		Big ones.

Table 19. Common Cockle and Truncate Softshell Clam Areas of Occurrence (continued)

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
24	4		Truncate Softshell Clam		Small in this area.
25	4		Truncate Softshell Clam		Medium sized in this area.
26	4		Truncate Softshell Clam		Bigger in this area.
27	5		Truncate Softshell Clam		
28	5		Truncate Softshell Clam		
29	5		Truncate Softshell Clam		Inside walrus stomach.
30	5	H	Truncate Softshell Clam		Near the camp where he grew up.
31	6		Truncate Softshell Clam		They wash up on the beach after a storm.
32	6		Truncate Softshell Clam		They wash up on the beach after a storm.
33	7	A	Truncate Softshell Clam		
34	7	A	Truncate Softshell Clam		
35	7	A	Truncate Softshell Clam		
36	7		Truncate Softshell Clam		Sandy bottom, found here.
37	8	A	Truncate Softshell Clam		Sees lots of holes in the mud at low tide.
38	8		Truncate Softshell Clam		
39	8		Truncate Softshell Clam	Sep	Empty shells on the beach.
40	8		Truncate Softshell Clam		His friend saw one here and tried to catch it, but scared it back into its hole.
41	9		Truncate Softshell Clam		
42	9		Truncate Softshell Clam		
43	9		Truncate Softshell Clam		

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
44	9		Truncate Softshell Clam		Sees the walrus feeding on them here.
45	10		Truncate Softshell Clam		Wash up on shore when there are big waves.
46	10		Truncate Softshell Clam		Wash up on shore when there are big waves.
47	10		Truncate Softshell Clam		Found in walrus stomachs.

Table 20. Truncate Softshell Clam Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1		



Figure 18. Amphipod, Blue Mussel and Northern Horsemussel Areas of Occurrence



Table 21. Amphipod, Blue Mussel, Northern Horsemussel Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	3		Amphipod	Jan-Dec	
2	5		Amphipod		All year-round along the coast.
3	6		Amphipod		If you set nets here, they will be attached to your net.
4	6		Amphipod		
5	7		Amphipod		
6	9		Amphipod		More black in colour, different than the ones further north.
7	2		Blue Mussel		
8	2		Blue Mussel		
9	2		Blue Mussel		In walrus stomach.
10	3		Blue Mussel		Mostly seen washed up along the coast but also seen in walrus stomachs.
11	2		Northern Horsemussel		In walrus stomach.
12	6		Northern Horsemussel		The shells wash up on the beach after a storm.
13	8		Northern Horsemussel		Usually find them where you see clams.

Table 22. Amphipod Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1		Some are small, some big. If there's meat in the ocean they will eat it. Can put bones/skulls in the water to get them cleaned by the amphipods.
4		Sees them all year round everywhere in the ocean. If you hold it in your hand you can see it having babies.
6		
8		Caught a large one once, tried to cook it, but it was too skinny to eat.
9		
10		

Figure 19. Barnacle, Crayfish, unknown Crab, Hermit Crab, Icelandic Scallop, Northern Shrimp and Oyster Areas of Occurrence

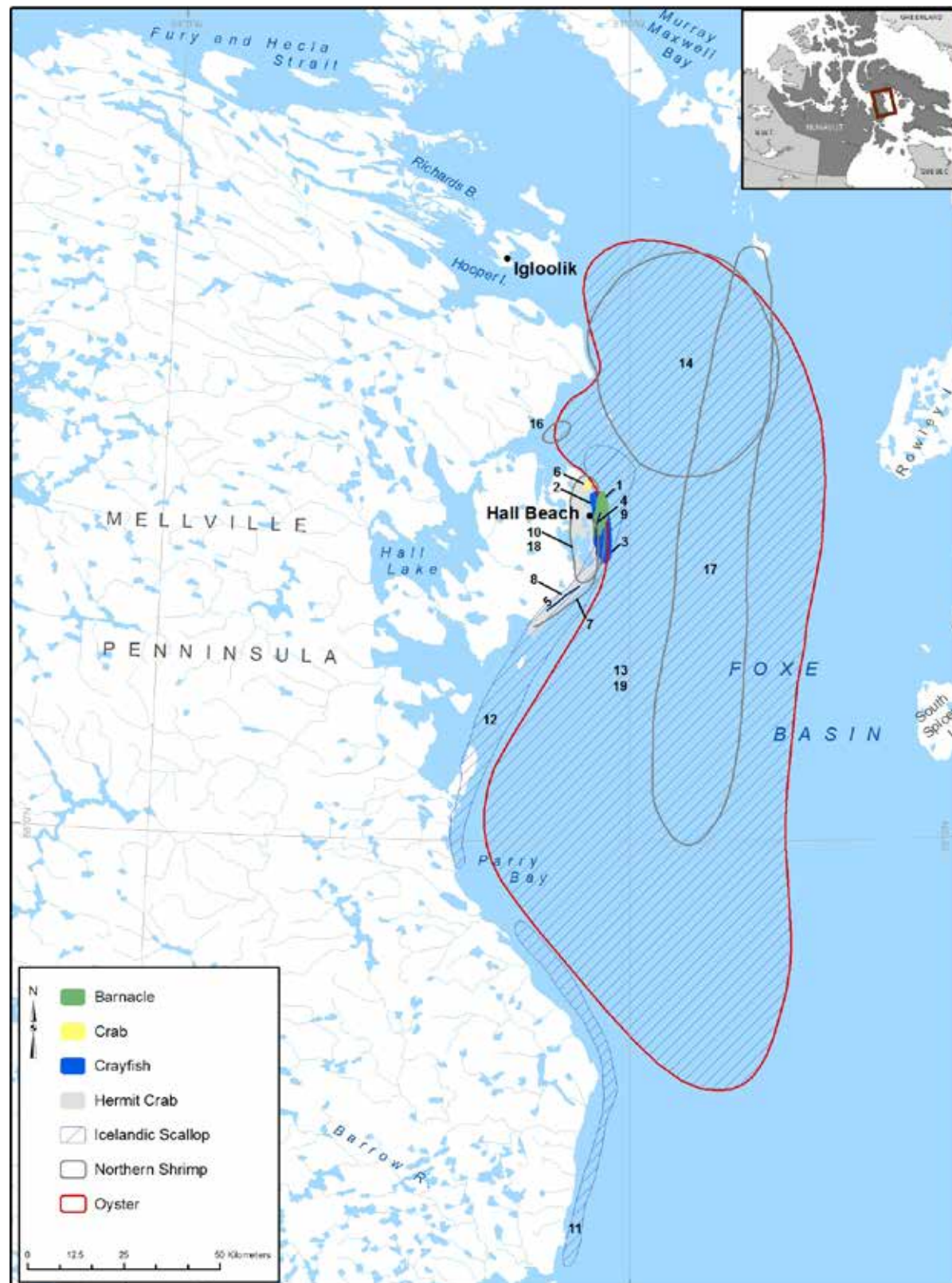


Table 23. Barnacle, Crayfish, unknown Crab, Hermit Crab, Icelandic Scallop, Northern Shrimp and Oyster Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	7		Barnacle		On the bottom of the ocean and also wash up on shore.
2	1		Crayfish		Sees them along the shore after strong north-easterly winds.
3	5		Crayfish		Washed up along the coast.
4	6		Crayfish		Their shells wash up on the beach after a storm.
5	6		Crayfish		Sees when hunting for shells in this area.
6	8		Crab		Saw a leg washed up on shore close to town.
7	3		Hermit Crab		Has only seen them washed up, dead.
8	4		Hermit Crab		
9	6		Hermit Crab		Small ones wash up on the beach outside of town.
10	9		Hermit Crab		Always washed up.
11	2		Icelandic Scallop		
12	2		Icelandic Scallop		
13	2		Icelandic Scallop		In walrus stomach.
14	1		Northern Shrimp		Found in deeper water. Only seen when inside the stomach of a seal.
15	2		Northern Shrimp		Close to shore, near his summer camp.
16	3		Northern Shrimp		Sees them in Foster Bay and in seal stomachs.
17	4		Northern Shrimp		Seen in deeper waters when looking for walrus.
18	9		Northern Shrimp		Always washed up.
19	2		Oyster		In walrus stomach.



Figure 20. Basket Star, Mud Star, Polar Sea Star, Sea Cucumber and Sea Urchin Areas of Occurrence

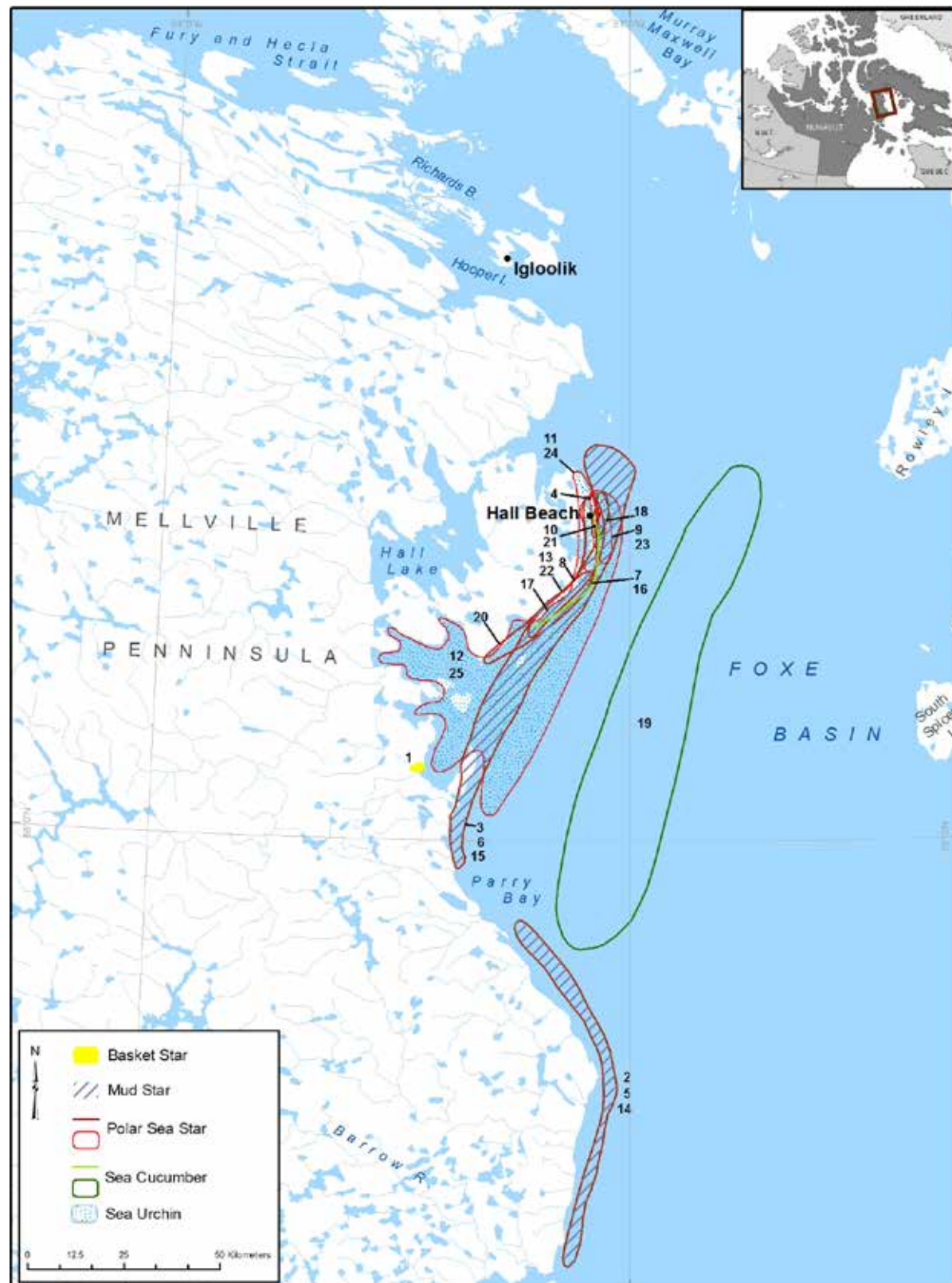


Table 24. Basket Star, Mud Star, Polar Sea Star, Sea Cucumber and Sea Urchin Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	7		Basket Star		Washed up on shore.
2	2		Mud Star		They get washed up on shore after a storm.
3	2		Mud Star		They get washed up on shore after a storm.
4	1	A	Polar Sea Star		Has seen all different sizes and colours. Sees lots of them washed up on the shore after a storm.
5	2		Polar Sea Star		They get washed up on the shore after a storm.
6	2		Polar Sea Star		They get washed up on shore after a storm.
7	3		Polar Sea Star		Has seen them washed up on shore.
8	4		Polar Sea Star		Seen them washed up on shore.
9	5		Polar Sea Star		Washed up along the coast.
10	6		Polar Sea Star		They wash up on the beach after a storm. Usually dead.
11	7		Polar Sea Star		Wash up on the shore. All different colours: red, orange, brown.
12	8		Polar Sea Star		Wash up on shore.
13	10		Polar Sea Star		Wash up on shore.
14	2		Sea Cucumber		They get washed up on shore after a storm.
15	2		Sea Cucumber		They get washed up on shore after a storm.
16	3		Sea Cucumber		Has seen them washed up on shore. Calls them "Ungilanguaq".
17	4		Sea Cucumber		Seen them washed up on shore after a storm.
18	7		Sea Cucumber		Seen them on the bottom of the deep areas.
19	8		Sea Cucumber		Sees them while hunting walrus.
20	10		Sea Cucumber		
21	3		Sea Urchin		Has seen them washed up on shore.
22	4		Sea Urchin		Seen them washed up on shore after a storm.
23	5		Sea Urchin		Washed up along the coast.
24	7		Sea Urchin		Some wash up on shore after a storm, not too many.
25	8		Sea Urchin		Wash up on shore.

Table 25. Polar Sea Star Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1		Has seen living ones in shallow and deep waters.

Figure 21. Ctenophore, Lions Mane and Moon Jellyfish and Arrow Worm Areas of Occurrence





Table 26. Ctenophore, Lions Mane and Moon Jellyfish and Arrow Worm Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1		Ctenophore	Oct	Can see them blinking in the night.
2	3		Ctenophore		Has seen them washed up on shore.
3	3		Ctenophore		Has seen them washed up on shore.
4	4		Ctenophore		In the evenings you can see them when you're boating.
5	5	A	Ctenophore		
6	6		Ctenophore		They move with the waves and light up in the dark.
7	7		Ctenophore		Saw these while scuba diving in the area.
8	8		Ctenophore		All along the coast.
9	9		Ctenophore		
10	4		Lion's Mane Jellyfish		Saw when divers brought them up from deeper water.
11	9		Lion's Mane Jellyfish		
12	1		Moon Jellyfish		Bright green.
13	4		Moon Jellyfish		Saw when divers brought them up from deeper water.
14	5		Moon Jellyfish		Calls them "ikpiaqujak" which means "like a pock-et".
15	6		Moon Jellyfish		Calls it "Ikparjuujaq".
16	7	A	Moon Jellyfish		All around and also get washed up on shore.
17	8		Moon Jellyfish		All along the coast.
18	9		Moon Jellyfish		
19	4		Arrow Worm		Saw when divers brought them up from deeper water.

Table 27. Ctenophore and Moon Jellyfish Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		Ctenophore	
2		Ctenophore	Can see them when you're boating in the dark.
10		Ctenophore	
1		Moon Jellyfish	
3	Jan-Dec	Moon Jellyfish	
10		Moon Jellyfish	

Figure 22. Arctic Moonsnail, Naked and Shelled Sea Butterfly, Whelk and Sea Spider Areas of Occurrence

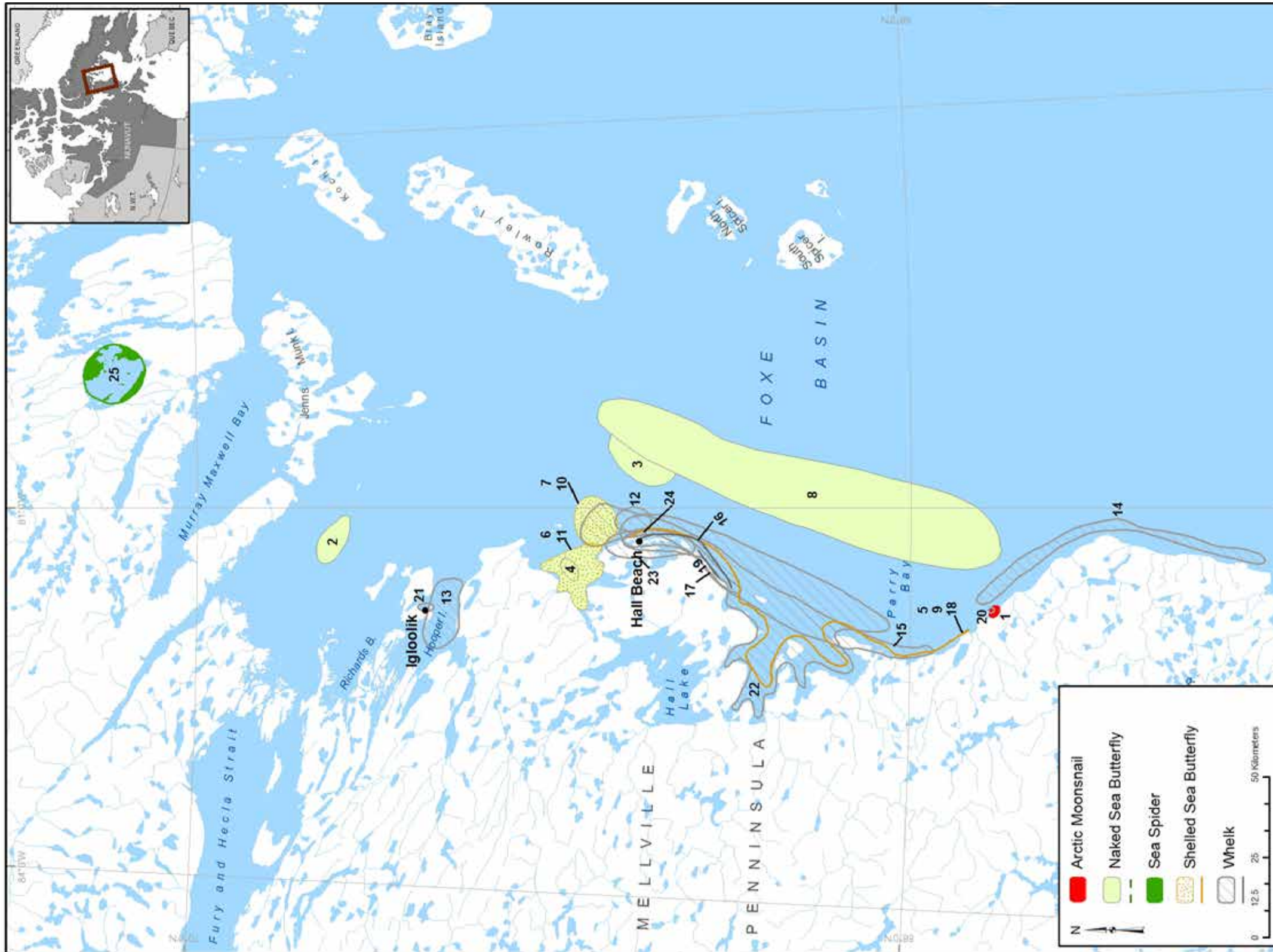




Table 28. Arctic Moonsnail, Naked and Shelled Sea Butterfly, Whelk and Sea Spider Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1	A	Arctic Moonsnail		Seen lots of them on the body of a sunken beluga.
2	1	A	Naked Sea Butterfly		
3	1		Naked Sea Butterfly		Thinks they're in deeper waters.
4	3		Naked Sea Butterfly		
5	5		Naked Sea Butterfly		
6	7		Naked Sea Butterfly		
7	7		Naked Sea Butterfly		
8	8		Naked Sea Butterfly		Sees them while walrus hunting.
9	5		Shelled Sea Butterfly		
10	7		Shelled Sea Butterfly		
11	7		Shelled Sea Butterfly		
12	1		Whelk		Empty shells washed up on beach.
13	1		Whelk		
14	2		Whelk		
15	2		Whelk		
16	3		Whelk		Only sees them when they are washed up on the beach.
17	4		Whelk		Seen them washed up on shore.
18	5		Whelk		
19	6		Whelk		
20	6	H	Whelk		Found large shells here, around 4-6 inches.
21	7		Whelk		A man from Igloodik was catching them with a bait-ed hook.
22	8		Whelk		Washed up on shore.
23	9		Whelk		Always washed up.
24	10		Whelk		On the beach.
25	4		Sea Spider		Saw when divers brought them up from deeper water.

Table 29. Whelk Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1		

Figure 23. Polar Bear Areas of Occurrence

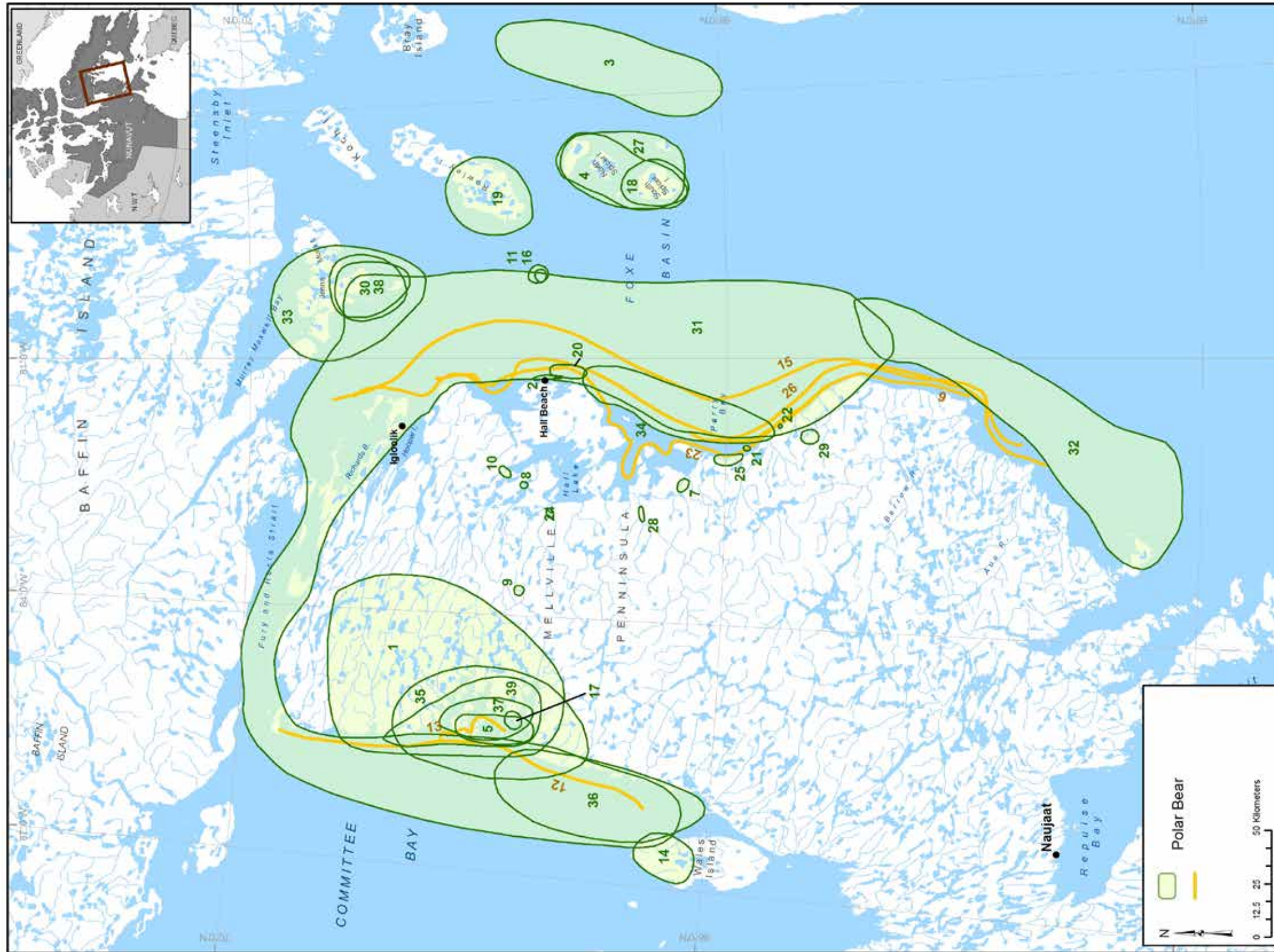




Table 30. Polar Bear Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1			Polar bear hunting area. Doesn't go in cold weather. Now there are so many bears that the price for the skin is too low so he doesn't go anymore. Skins used to get \$7,000-\$8,000 each but now they only go for ~\$2,000 so it's not worth it.
2	1			Bears come close to town.
3	2	C, H		Bigger than polar bear, bear called Talaajuttupk. Used to see them on ice floes but doesn't see them anymore.
4	2			In the summer they travel there by hopping ice patches. Also there in the winter.
5	2			Islands where most polar bears are.
6	3		Jan-Dec	
7	3	S		Saw a mother and cub here. The cub was just the size of a cat.
8	3	S		Saw a mother and cubs here in 2014.
9	3	S	Mar	Saw mother and cubs here in March 2016.
10	3	S	Aug	Saw a mother and cubs in 2007.
11	3			
12	4	C, Ecol, N		It takes polar bears longer to make dens now. There's less snow and it doesn't drift as much as it used to. In April they come out of their dens with their cubs.
13	4	A	Apr	Lots here in April.
14	4	S		Denning area. People from Naujaat go bear hunting here.
15	5			Around all year-round.
16	5			
17	5	H		Took a sport hunter here in 1998.
18	5			
19	5			
20	6			Caught just outside of town.
21	6			This was where he saw the biggest bear he has ever seen.
22	6			Near his camp.
23	7			They come around town.
24	7	N		Last year (2016) there was a den here.

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
25	7			See lots of females.
26	8			All along the coast.
27	8	A		
28	8	N		Seen a cub with the mom.
29	8	S		Around the hills where snow accumulates.
30	8	S		
31	9			All along the coast.
32	9	A		
33	9	A		
34	9	A		
35	9	A		
36	9	A		They go after seal pups in the solid ice in this area.
37	9	P		
38	9	P		
39	10	A		

Table 31. Polar Bear Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1	Apr	Polar bears hunt seal pups all along the coast.
2		All along the coast.
6		Polar bears can even be inland.
7		They fight in April/May.
8		
9		

Figure 24. Walrus Areas of Occurrence

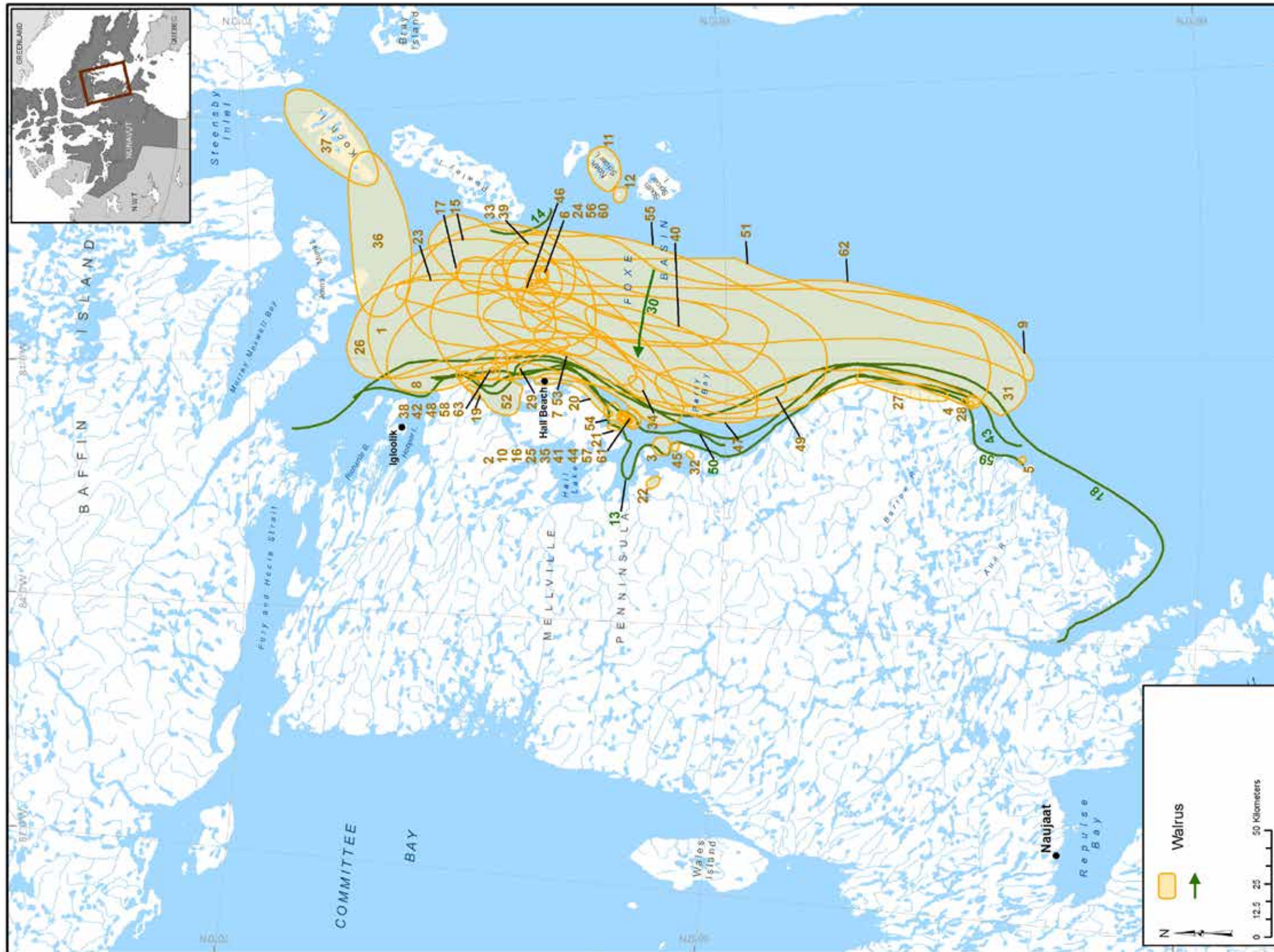




Table 32. Walrus Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1	A, Use	Jul	Walrus are here all year-round but are particularly plentiful in July. Makes igunaq starting in July and takes it out of the ground no earlier than November.
2	1		Sep	In groups.
3	1		Sep	In groups.
4	1		Sep	In groups.
5	1		Sep	In groups.
6	1		Sep	In groups.
7	1	S	Jul	Walrus birthing area on ice floes.
8	1	F		Feeding on clams.
9	2			
10	2			
11	2			
12	2			
13	3		Jan-Dec	
14	3		Jul(Mid)	Hunts for them here in mid-July.
15	3			
16	3	A	Aug(Late) Sep(Early)	
17	3	S		Where they have their babies.
18	4			
19	4	F		Eats the clams in this area.
20	4	F		Eats the clams in this area.
21	4	F		Eats the clams in this area.
22	4	F		Eats the clams in this area.
23	4			
24	5	A		In the fall this area is so warm because of all the walrus. You can walk on land with bare feet because it's so warm. It's stinky though.
25	5			Hunts for them mostly in this area in the fall.
26	5			Hunts for walrus on ice floes in the summer.
27	5			Can see them when you're out boating.
28	5			When walrus get sick (either from a fight with another walrus, from polar bear wounds, or from a hunter) they go to the land to die.
29	5	F		Feeding on clams.
30	6	M		

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
31	6	A		See walrus even when not looking for them.
32	6			Found a skull on the beach. Traded it for a case of pop.
33	6			
34	6		Sep	
35	6			
36	7			People from Igloodik go here to hunt.
37	7			
38	7			
39	7		Jun, Jul	Males in this area. Separated from the females.
40	7			On the ice.
41	7			
42	7			
43	8		Mar	Around the floe edge.
44	8	A	Sep(Late)	
45	8	A	Sep(Late)	
46	8			Main hunting spot.
47	8	H		Use to go hunting here, but there are closer spots to hunt now.
48	8			
49	8			Find clams, mussels, and cockle in their stomachs.
50	9			Along the floe edge.
51	9			
52	9	E		Feeding on clams.
53	9	E		Feeding on clams.
54	9	E		Feeding on clams.
55	9			
56	9			Haul-out area.
57	9			Haul-out area.
58	9			Haul-out area.
59	10	A	Sep	Along the coast.
60	10	A		
61	10	A		
62	10			
63	10			

Figure 25. Walrus Frequency of Occurrence

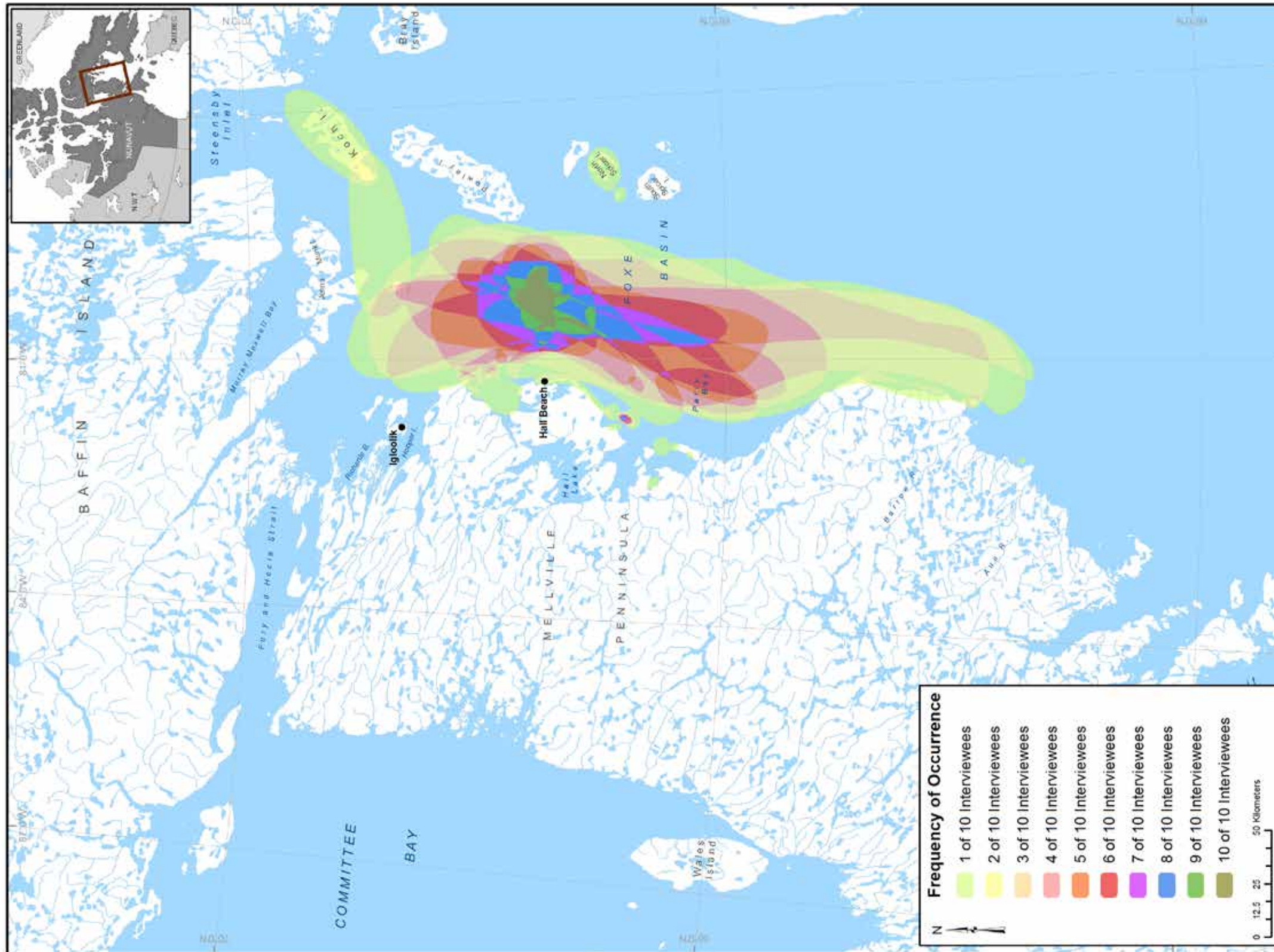




Table 33. Walrus Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1	Jan-Dec	
1		

Figure 26. Ringed Seal Areas of Occurrence

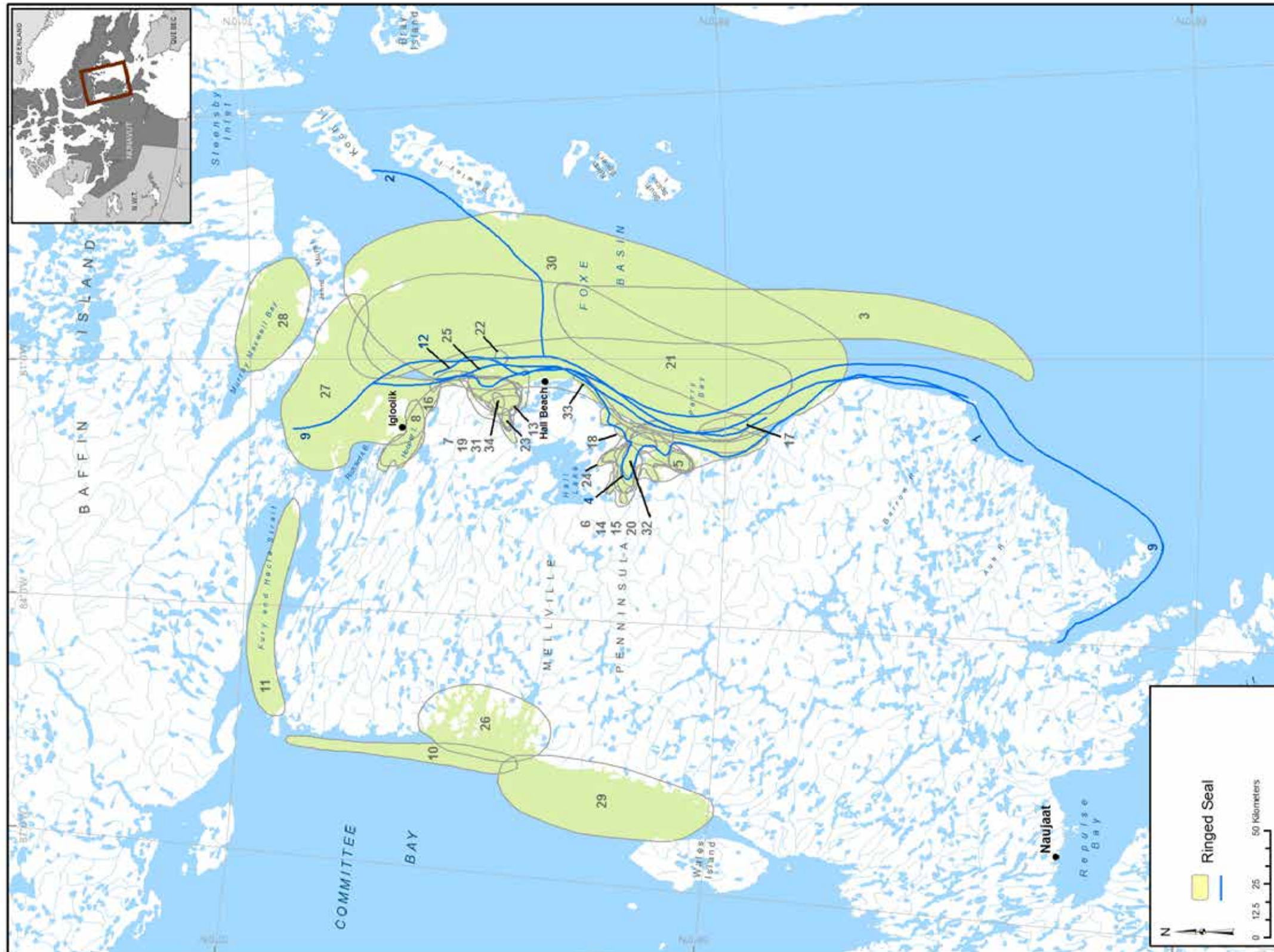




Table 34. Ringed Seal Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1			Stay in the area all year-round.
2	1		Jan-Dec	
3	2			
4	3		Jan-Dec	
5	3	S		Where they have their pups.
6	3	S		Where they have their pups.
7	3	S		Where they have their pups.
8	3	S		Where they have their pups.
9	4			
10	4	A		
11	4			
12	5			Can see them while boating.
13	5			Accessed by skidoo.
14	5			Accessed by skidoo.
15	5	S		Where they have their pups.
16	5	S		Pupping area.
17	6			Mostly here.
18	7			All over the floe edge.
19	7	A		
20	7			
21	8	A		
22	8			
23	8			
24	9	N	Mar(Late), Apr(Early)	Pupping in areas of solid ice.
25	9	N	Mar(Late), Apr(Early)	Pupping in areas of solid ice.
26	9	N	Mar(Late), Apr(Early)	Pupping in areas of solid ice.
27	9	N	Mar(Late), Apr(Early)	Pupping in areas of solid ice.
28	9	N	Mar(Late), Apr(Early)	Pupping in areas of solid ice.
29	9	N	Mar(Late), Apr(Early)	Pupping in areas of solid ice.
30	9			
31	9			
32	9			
33	10	C, H		Use to see them in this area, not as many anymore.
34	10			

Table 35. Ringed Seal Everywhere Data

INTERVIEW	MONTHS	COMMENTS
4		
6		
9		

Figure 27. Bearded Seal Areas of Occurrence





Table 36. Bearded Seal Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1			Sees them all along his boating route in the summer.
2	1			Sees them along his travel route. They are around all year-round. They don't migrate south.
3	1			Opened the stomach of a baby seal and found shrimp in the stom-ach.
4	2			
5	3		Jan-Dec	
6	4	A		
7	4			Fewer in this area.
8	4			Lots of breathing holes in this area.
9	4			
10	5	A		
11	5	A		
12	5	S		Where they have pups.
13	6			
14	6			Mostly here.
15	6			
16	7			
17	8		Feb	
18	9	N	Mar	Pupping areas on moving ice.
19	9			
20	9			
21	10			Along the coast.

Table 37. Bearded Seal Everywhere Data

INTERVIEW	MONTHS	COMMENTS
4		
5		
8		
9		

Figure 28. Harbour, Harp and Hooded Seal Areas of Occurrence

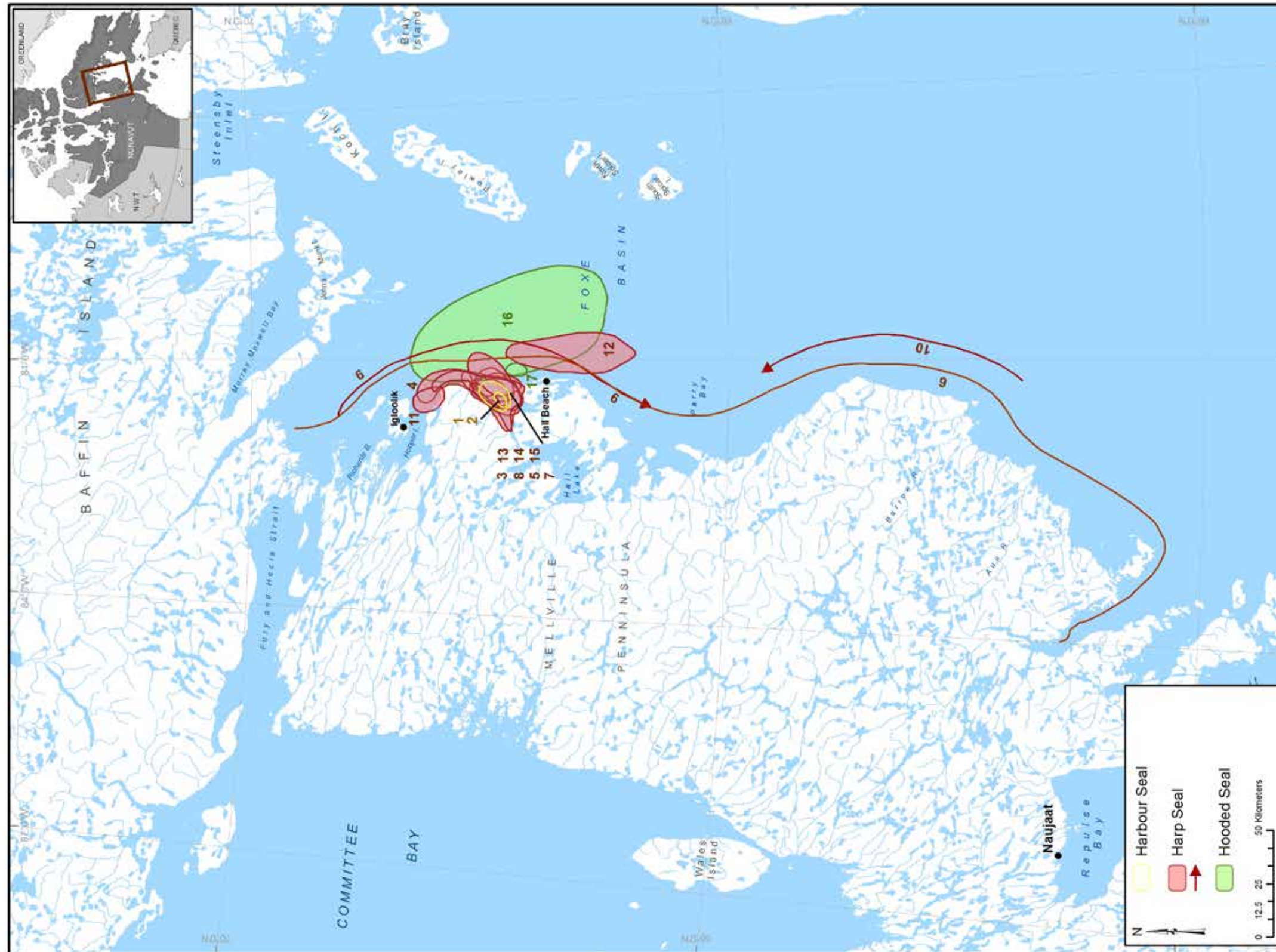




Table 38. Harbour, Harp and Hooded Seal Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	3		Harbour Seal; Ranger Seal		Doesn't see them every year. When he does see them, it's only in the summer. They don't stay year-round, similar to harp seal.
2	8		Harbour Seal; Ranger Seal		
3	1		Harp Seal		Not seen near Hall Beach very often. When they are seen, they're always in groups. They're hard to catch because they sink really fast.
4	2		Harp Seal		
5	3		Harp Seal	Aug(Late), Sep(Early)	Only seen in late summer.
6	4		Harp Seal		
7	5		Harp Seal		Hunts them mainly in this area and closer to Naujaat. Harp seal are thinner and longer than ringed seal and have less fat so they sink faster.
8	6		Harp Seal		Only sees once and a while.
9	7	M	Harp Seal		Travel south from north of Igloodik.
10	7	M	Harp Seal	Aug	
11	9		Harp Seal		
12	9		Harp Seal		
13	9		Harp Seal		
14	9		Harp Seal		
15	10		Harp Seal		
16	2	H	Hooded Seal; Crested Seal		Very rare to see them. Only sees them once in a while during the summers.
17	9	H	Hooded Seal; Crested Seal		Seen one once. 1998/1999.

Table 39. Harp Seal Everywhere Data

INTERVIEW	MONTHS	COMMENTS
4		

Figure 29. Beluga Areas of Occurrence

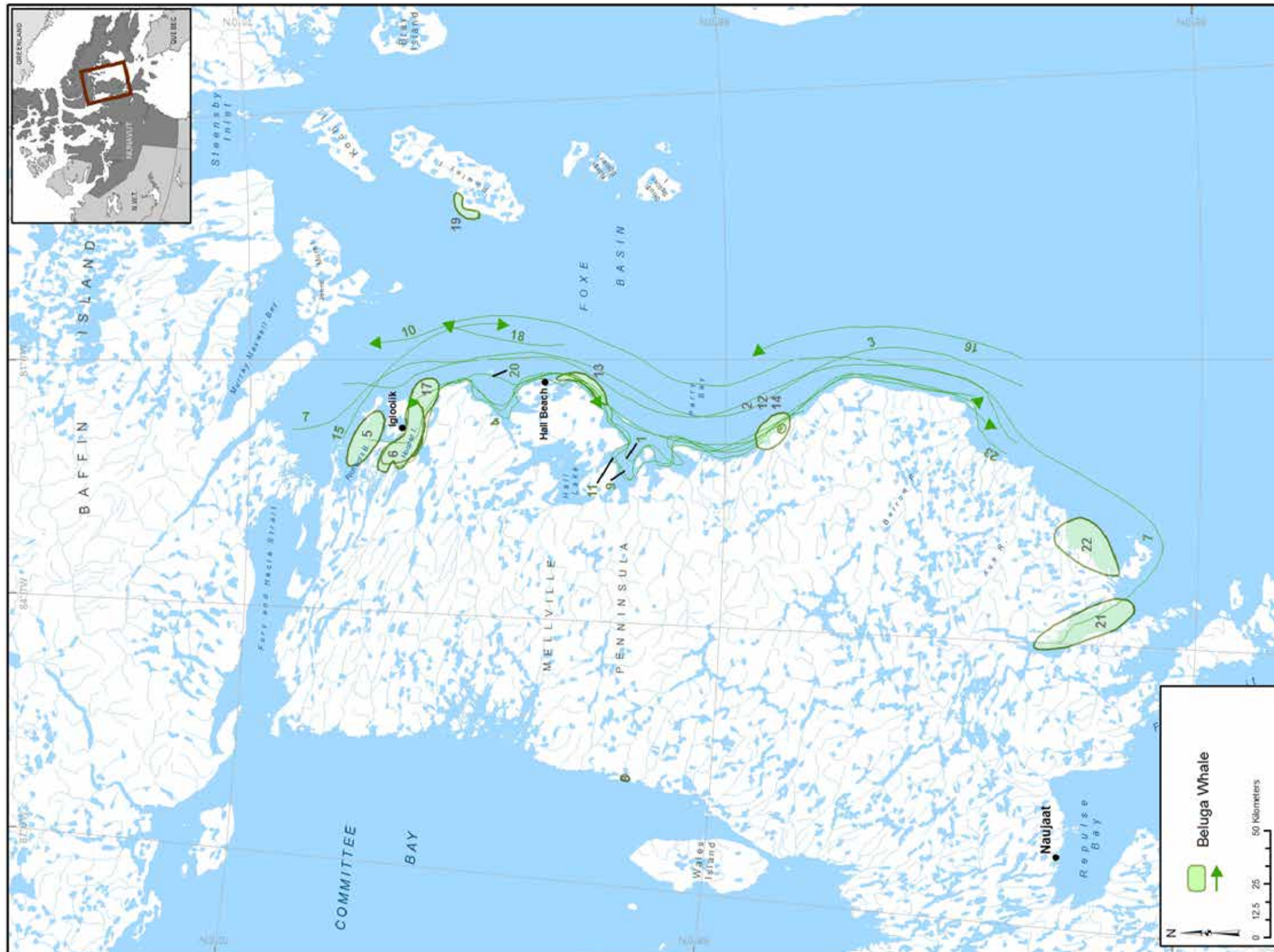




Table 40. Beluga Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1			Sees them passing through in the summer. Did not see any in the summer of 2016. Most beluga are in Naujaat.
2	1			A hunted beluga that was lost - was on the bottom of shallow water. Had lots of snails on the body.
3	2			Sees them every summer along the coast.
4	3			In late summer they pass by here on their way south for the winter.
5	3		Aug(Late), Sep(Early)	Hunts for them in this area in late summer.
6	3		Aug(Late), Sep(Early)	Hunts for them in this area in late summer.
7	4			
8	4	H		2 were sighted in this area, near the old DEW line site.
9	5			Can usually see them all along the coast when they're passing by. However, in the summer of 2016 there wasn't any.
10	5	M	Jun	Going north.
11	5	M	Sep	Going south.
12	5	A, H		When he was a kid he would see lots here.
13	6			Don't always see them. They go south in September.
14	6			
15	7	M		Just pass by, heading south.
16	7	M		Just pass by heading north.
17	7			Don't stay long. Find more around Igloodik.
18	8	M		See them heading north on this path. Water is shallow here, so don't see them often.
19	8			
20	9	M	Sep	Travel north and then back south on the same path close to shore. All within the same month before the ice freezes.
21	9			
22	9			
23	10		Sep	Hunting spot near Naujaat. Off the map.

Figure 30. Narwhal Areas of Occurrence

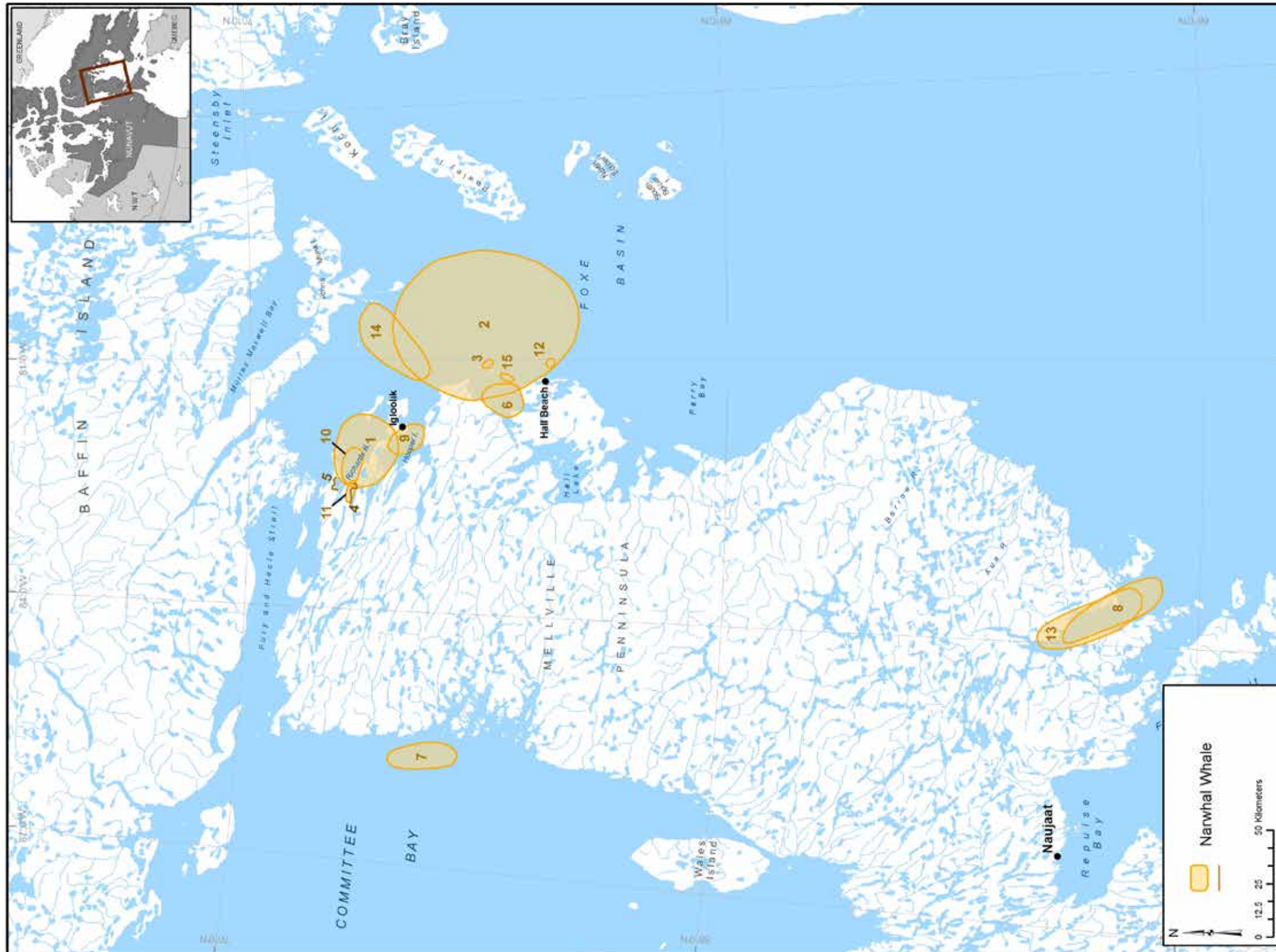




Table 41. Narwhal Areas of Occurrence

MAP #	INTERVIEW	CODE	MONTHS	COMMENTS
1	1			Not near Hall Beach very often. They prefer the deeper ocean.
2	1			
3	3			
4	4	C		There used to be narwhal here every year but last year (2016) there weren't any.
5	4			There are usually narwhal here.
6	4	H		In 1998 there were 2 narwhal here for about 2 days. They haven't been seen here since then.
7	4	C, H		There were narwhal here in the past.
8	4	A	Aug	There are lots here in the summers. Has seen them here ever since 1961. It's deeper water.
9	5			
10	5			
11	7			Hall Beach waters are too shallow for Narwhal. Need to head north of Igloodik to find them.
12	8		Aug	Spotted one in 2015 here while on route to caribou hunting area.
13	9			
14	9	C		More common for them to stay all winter. Area has more open wa-ter now.
15	9			Harvested one here. There was a group of 8.

Figure 31. Bowhead Whale Areas of Occurrence

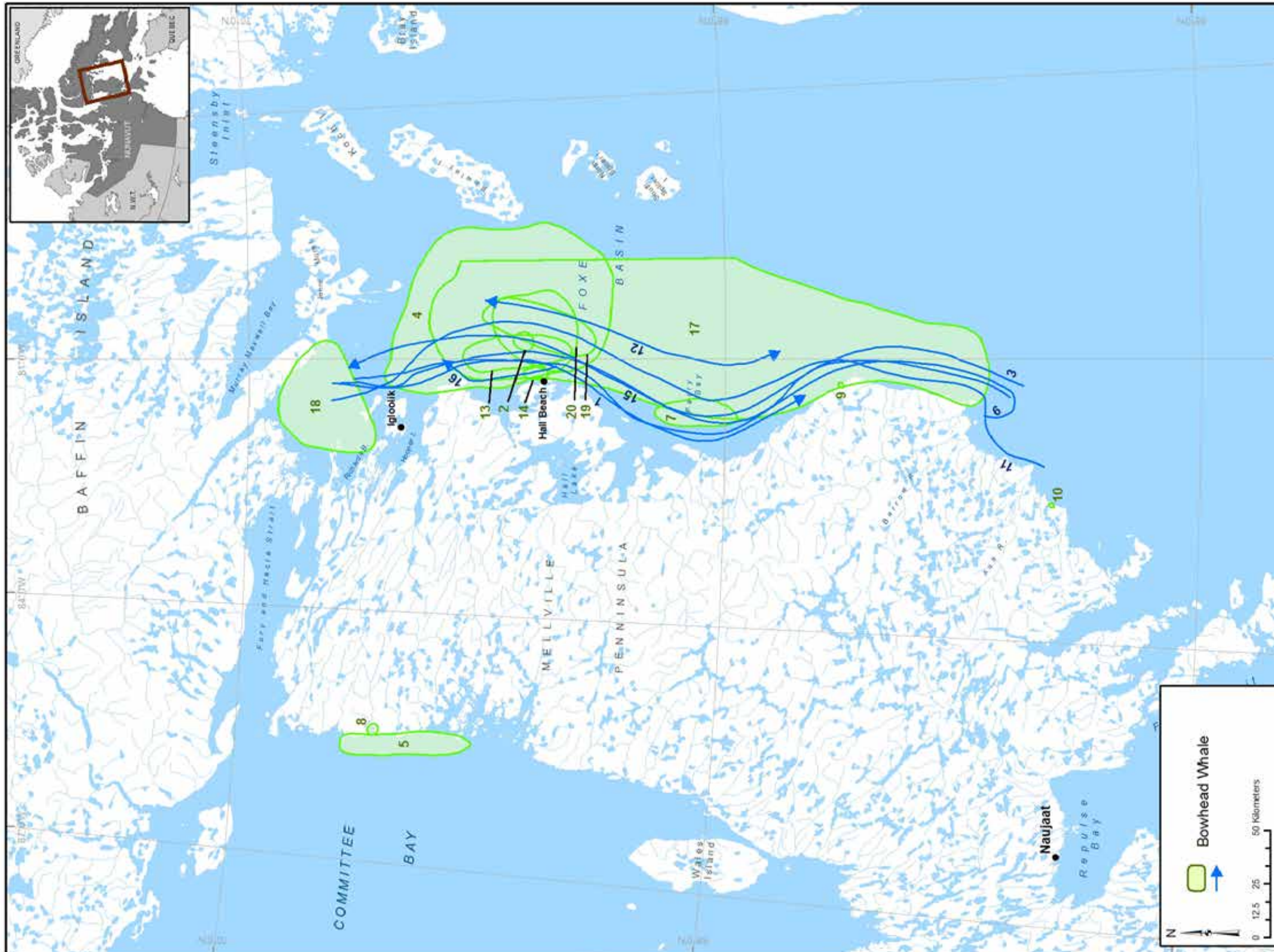




Table 42. Bowhead Whale Areas of Occurrence

MAP #	INTERVIEW CODE	MONTHS	COMMENTS	
1	1	A	Jun, Jul	Passing through.
2	1	H		Hunted one in 2004 or 2005 in a community hunt.
3	2			
4	2			
5	2			Hall Beach area is too shallow, they stay in deeper waters.
6	3			
7	3			Seen while boating.
8	4			Dead one washed up.
9	4			Dead one washed up.
10	4			Dead one washed up.
11	5			
12	5	M		When he's walrus hunting he sees them migrating north. They mi-grate back south in September.
13	5	A		
14	6			Can see them from the town.
15	7	M	Jun, Jul	Lots pass by heading north. Usually followed by killer whales.
16	8	M	Jul	Come this way heading north, travel on a different route when head-ing back south.
17	9	A		
18	9	A		
19	9			Its body had shark bites all over it.
20	10			Sees while walrus hunting.

Figure 32. Bowhead Whale Frequency of Occurrence

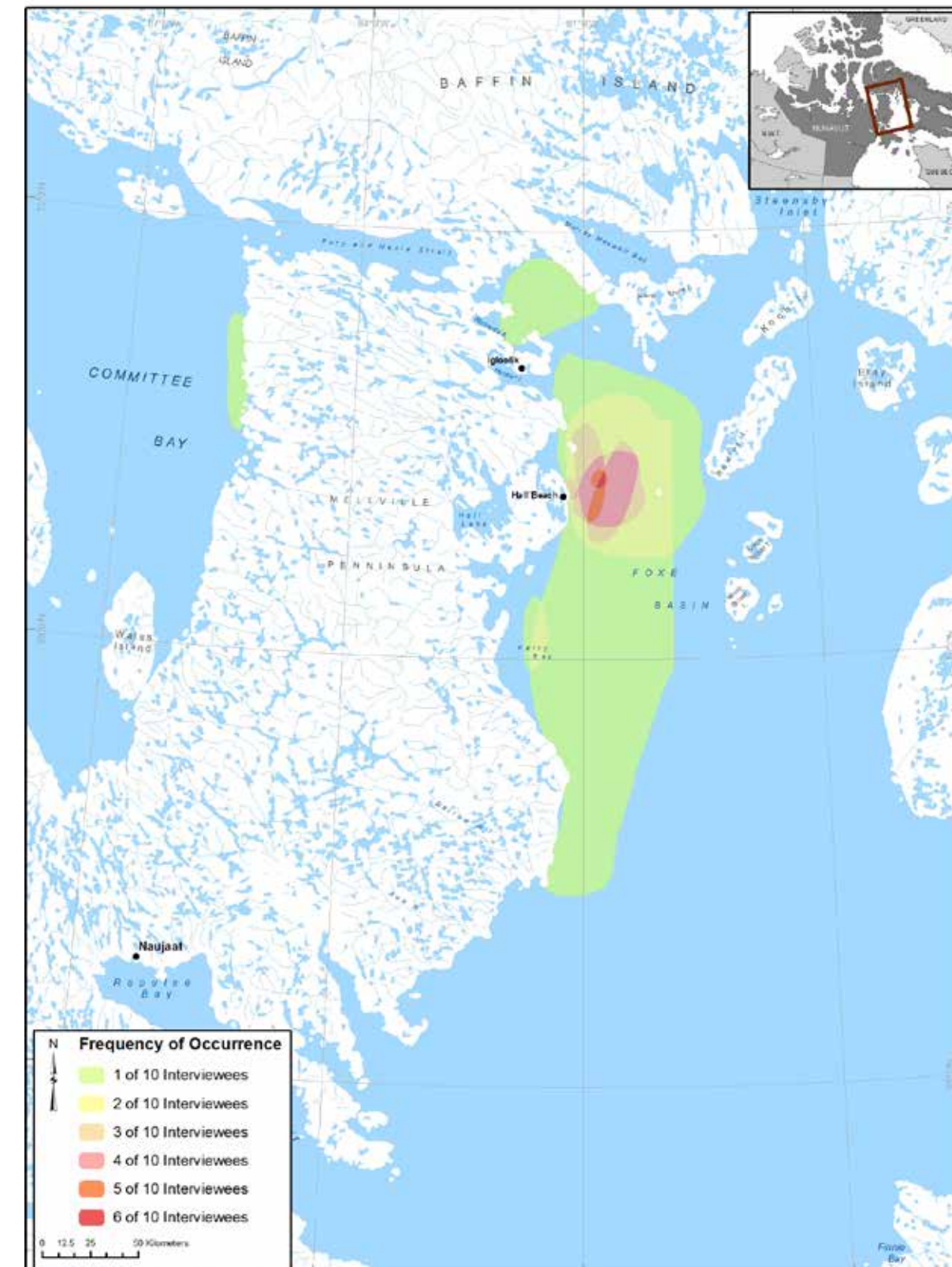


Figure 33. Killer and unknown Whale Areas of Occurrence



Table 43. Killer and unknown Whale Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1		Killer Whale		Passing through.
2	2		Killer Whale		Usually in deeper water. Not normally seen close to town. Maybe afraid of the walrus in the area.
3	4		Killer Whale		Just passing by.
4	4		Killer Whale		Just passing by.
5	4		Killer Whale		Just passing by.
6	6		Killer Whale	Sep(Late)	Only seen one.
7	8		Killer Whale		
8	9		Killer Whale		
9	2		Whale		Seen a white fin. Not sure which type of whale. Might have been a humpback.



Figure 34. Edible and Hollow Stemmed Kelp, Sea Colander and Sea Lungwort Areas of Occurrence



Table 44. Edible and Hollow Stemmed Kelp, Sea Colander and Sea Lungwort Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	2		Edible Kelp		No one goes out looking for them but when they do come across it, they will eat it.
2	4		Edible Kelp		
3	4		Edible Kelp		
4	5		Edible Kelp		
5	8		Edible Kelp		Not often.
6	9		Edible Kelp		
7	2		Hollow Stemmed Kelp		In deeper areas.
8	3		Hollow Stemmed Kelp		Has seen it with an underwater camera.
9	4		Hollow Stemmed Kelp		
10	4		Hollow Stemmed Kelp		Attached to the kelp was a walrus tusk. When he picked it up the tusk disintegrated.
v11	5		Hollow Stemmed Kelp		Washed up on shore.
12	7	A	Hollow Stemmed Kelp		These attach to rocks on the ocean floor, create a forest under the water. After a storm they wash up on shore.
13	8		Hollow Stemmed Kelp		
14	9		Hollow Stemmed Kelp		
15	3		Sea Colander		Along the shore.
16	4		Sea Colander		
17	7		Sea Colander		In the water and also washes up on shore.
18	7		Sea Lungwort		See these in sandy areas.

Table 45. Edible and Hollow Stemmed Kelp, and Sea Colander Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
3		Edible Kelp	All along the shore.
1		Hollow Stemmed Kelp	
6		Hollow Stemmed Kelp	Always floating. Try to avoid while boating.

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Figure 35. Bladder Wrack, Floating Buttercup, Goose Grass, Green Sea Fingers, Semaphore Grass and Spiny Sour Weed Areas of Occurrence

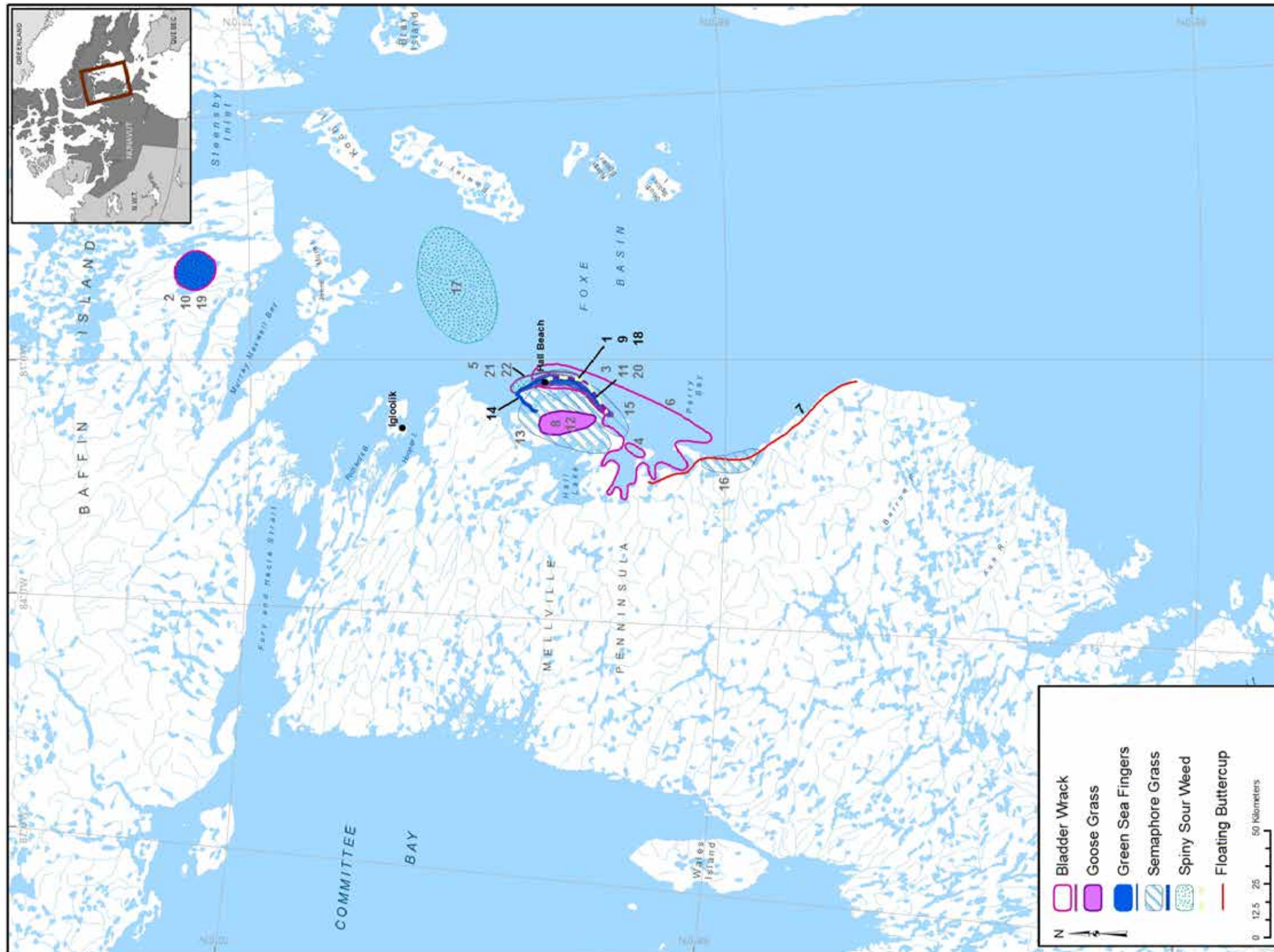




Table 46. Bladder Wrack, Floating Buttercup, Goose Grass, Green Sea Fingers, Semaphore Grass and Spiny Sour Weed Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	3		Bladder Wrack; Rock-weed		
2	4		Bladder Wrack; Rock-weed		
3	4		Bladder Wrack; Rock-weed		
4	6		Bladder Wrack; Rock-weed		Can find in ice "potholes".
5	7		Bladder Wrack; Rock-weed		Just outside of Hall Beach.
6	8		Bladder Wrack; Rock-weed		
7	8		Floating Buttercup		Along the coast.
8	3		Goose Grass		
9	3		Green Sea Fingers		
10	4		Green Sea Fingers		
11	4		Green Sea Fingers		
12	3		Semaphore Grass		
13	6		Semaphore Grass		Find it wherever the land is flat.
14	8		Semaphore Grass		Along the beach.
15	9		Semaphore Grass		
16	9		Semaphore Grass		
17	2		Spiny Sour Weed		
18	3		Spiny Sour Weed		
19	4		Spiny Sour Weed		
20	4		Spiny Sour Weed		
21	5		Spiny Sour Weed		Sees it when putting out fishing nets.
22	7		Spiny Sour Weed		Just outside of Hall Beach.

Table 47. Bladder Wrack, Goose Grass, Sea Colander, Semaphore Grass and Spiny Sour Weed Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		Bladder Wrack	Sees it on rocks on the beach.
6		Bladder Wrack	
5		Goose Grass	
1		Sea Colander	Sees it all along the beach.
5		Semaphore Grass	All over the tundra.
7		Semaphore Grass	Can find it on all flat areas.
1		Spiny Sour Weed	In shallow water. It gets stuck in his fishing nets.
6		Spiny Sour Weed	

Figure 36. Brant, Cackling, Canada, Ross's and Snow Goose Areas of Occurrence

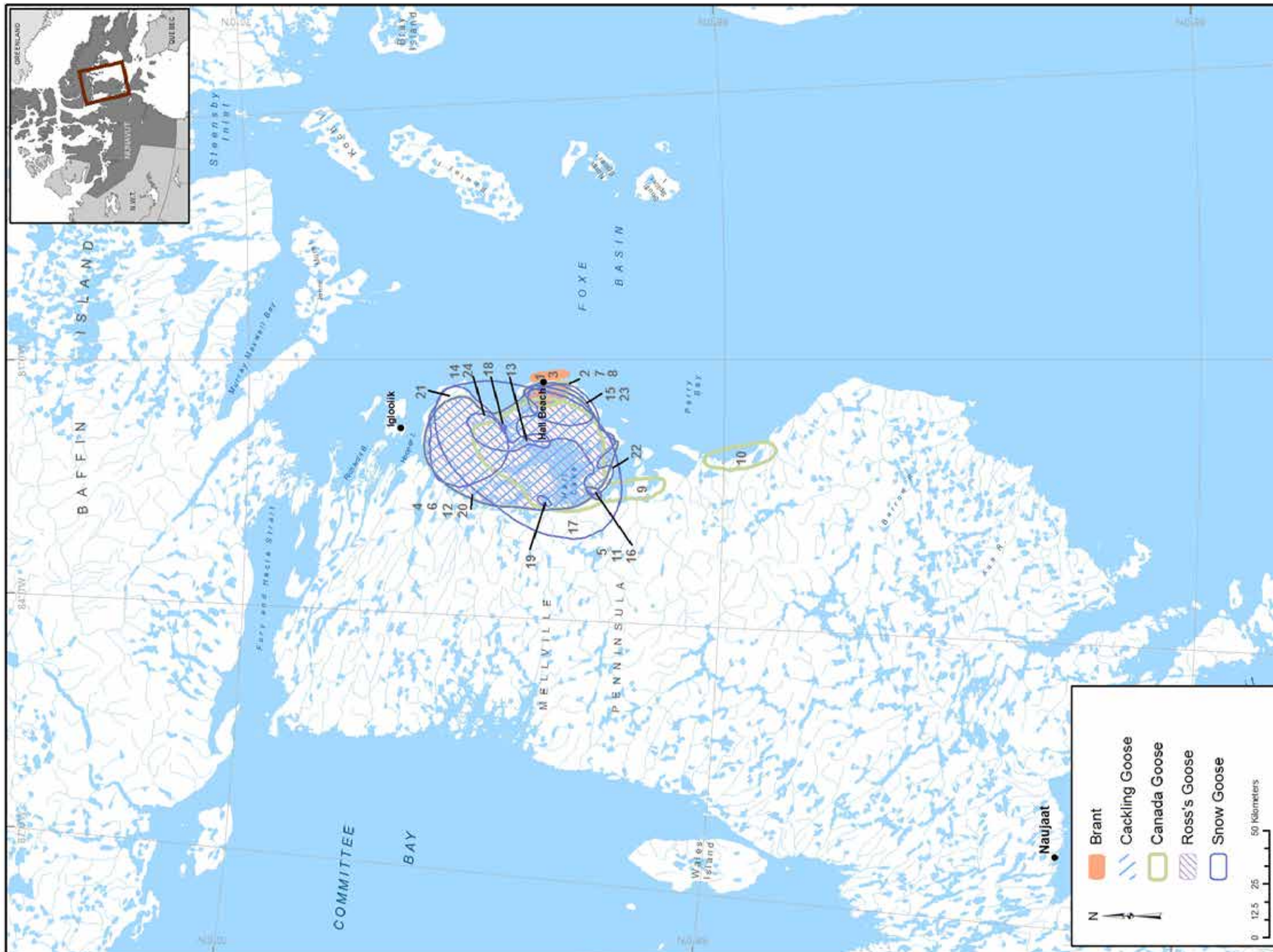




Table 48. Brant, Cackling, Canada, Ross's and Snow Goose Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1	N, S	Brant		
2	3	A	Brant		
3	5	A, M	Brant		Their eggs taste terrible.
4	2	N	Cackling Goose	Jun-Sep(Early)	Nests from June to August. Migrates back south in September. Follows the snow geese.
5	1	N, S	Canada Goose		
6	2		Canada Goose	Jun- Sep(Early)	Nests from June to August. Migrates back south in September.
7	3		Canada Goose		Mostly just passing by.
8	3		Canada Goose		Mostly just passing by.
9	5		Canada Goose		
10	5		Canada Goose		
11	1	A	Ross's Goose	Jun	
12	2	N	Ross's Goose		
13	3		Ross's Goose		
14	5	S	Ross's Goose		
15	5		Ross's Goose		
16	1	N, S	Snow Goose		
17	1		Snow Goose		
18	1	A, C, N, S	Snow Goose		Thousands of birds come. Thinks there's too many. When he was younger there was never this many - he hardly ever saw them. Now there's birds and eggs everywhere.
19	1	C	Snow Goose		Snow geese used to be only in this area before. Now they're everywhere. They cause problems with the airplanes now - getting into the engines.
20	2	N	Snow Goose	Jun,-Sep(Early)	Nests from June to August. Migrates back south in September.
21	3		Snow Goose		
22	3		Snow Goose		
23	5		Snow Goose		
24	5	S	Snow Goose	May(Late), Jun(Early)	Picks eggs here.

Table 49. Cackling, Canada, Ross's and Snow Goose Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		Cackling Goose	
1		Canada Goose	There are fewer Canada geese compared to snow geese. They mix with the snow geese - nesting in the same places.
5		Ross's Goose	They migrate with the snow geese.
5		Snow Goose	Going to infest the land.

Figure 37. Long-tailed Duck, Northern Pintail, Red-breasted Merganser and Tundra Swan Areas of Occurrence

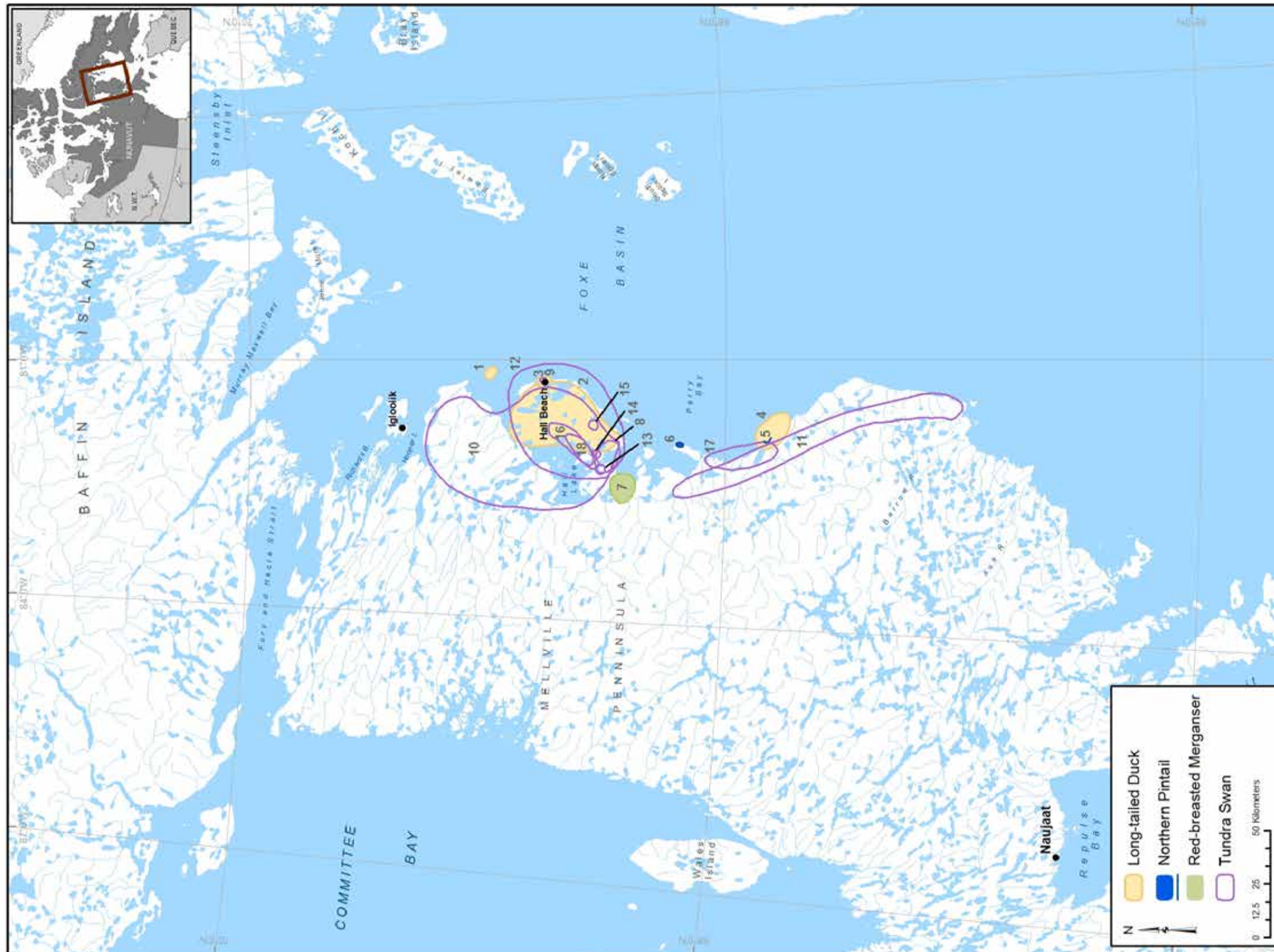




Table 50. Long-tailed Duck, Northern Pintail, Red-breasted Merganser and Tundra Swan Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1	N, S	Long-tailed Duck		On little islands in lakes. Calls them "Aggiarjuk".
2	3		Long-tailed Duck		AKA "Old Squaw".
3	5		Long-tailed Duck		Around all year-round.
4	5	H	Long-tailed Duck		It was hard to sleep sometimes when he was living here as a kid because the ducks were so loud.
5	3		Northern Pin-tail		
6	5		Northern Pin-tail	Jun	Seen in the water past the floe edge.
7	3		Red-breasted Merganser	Jul(Early)	Pass by in early summer but don't stay.
8	1		Tundra Swan		
9	2		Tundra Swan		There is always 2 near town by the DEW line site.
10	2		Tundra Swan		Occasionally here.
11	2		Tundra Swan		
12	3	C	Tundra Swan		Their numbers are increasing.
13	3	S	Tundra Swan		Nests with eggs found here.
14	3	S	Tundra Swan		Nests with eggs found here.
15	3	S	Tundra Swan		Nests with eggs found here.
16	5	S	Tundra Swan		
17	5	S	Tundra Swan		
18	7	N	Tundra Swan		

Table 51. Long-tailed Duck Everywhere Data

INTERVIEW	MONTHS	COMMENTS
5		Around all year-round.

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Figure 38. Arctic Tern, Arctic, Common, Pacific, Red-throated and Yellow-billed Loon, Common and King Eider, and Common Murre Areas of Occurrence

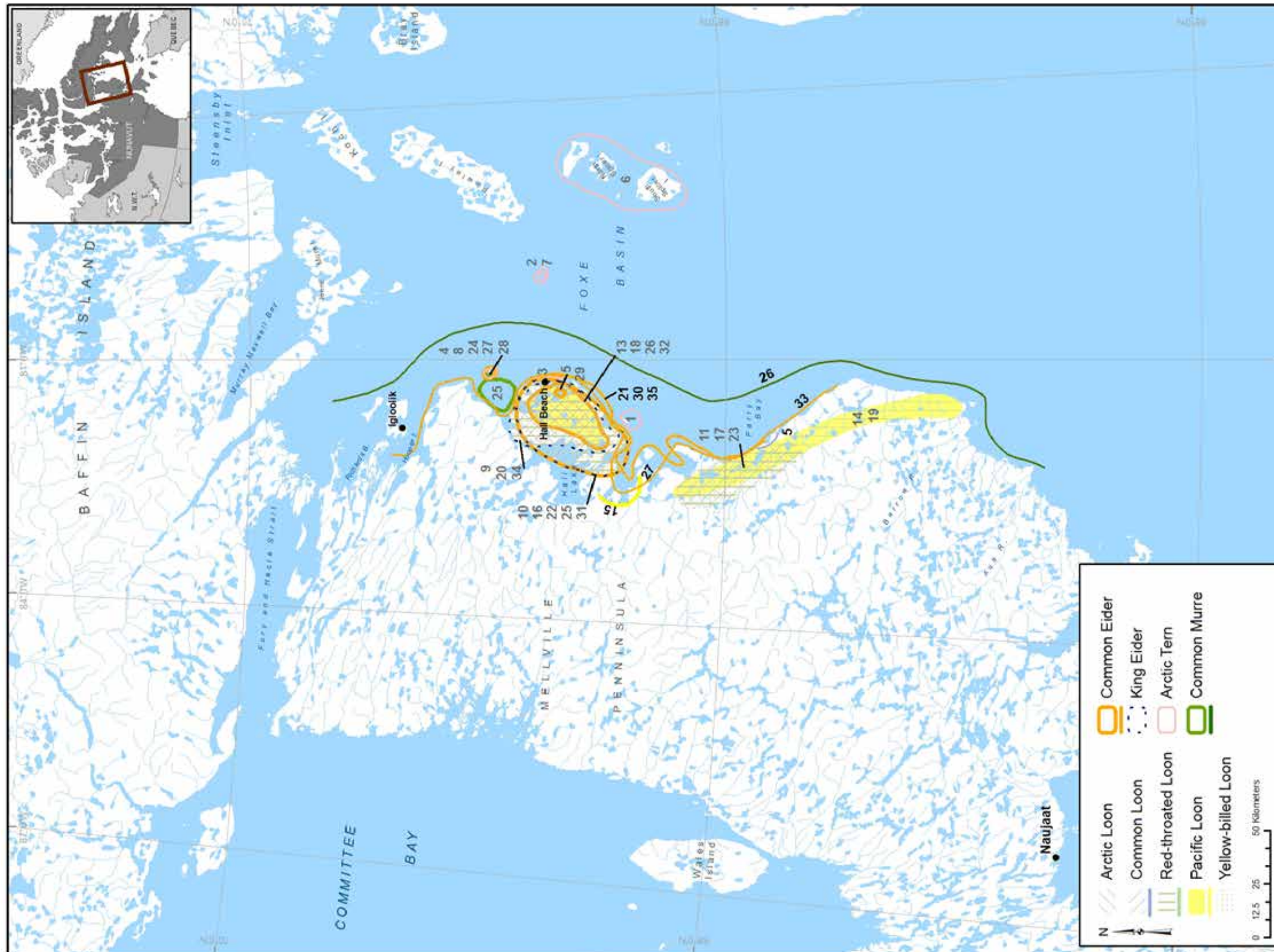




Table 52. Arctic Tern, Arctic, Common, Pacific, Red-throated and Yellow-billed Loon, Common and King Eider, and Common Murre Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1		Arctic Tern		On island.
2	1		Arctic Tern		
3	1		Arctic Tern		
4	1		Arctic Tern		On islands.
5	2		Arctic Tern		
6	2		Arctic Tern		
7	3	N, S	Arctic Tern		Goes here to pick tern eggs.
8	3	N, S	Arctic Tern		
9	3		Arctic Loon		
10	1		Common Loon		In small lakes.
11	1		Common Loon		In small lakes.
12	3		Common Loon		
13	2		Pacific Loon		In small ponds.
14	2		Pacific Loon		
15	3		Pacific Loon		
16	1		Red-throated Loon		In small lakes.
17	1		Red-throated Loon		In small lakes.
18	2		Red-throated Loon		In small ponds.
19	2		Red-throated Loon		
20	3		Red-throated Loon		The smallest of the loons that come around Hall Beach.
21	5		Red-throated Loon		All along the coast. They sound like they're crying.
22	1		Yellow-billed Loon		In small lakes.
23	1		Yellow-billed Loon		In small lakes.
24	1	N, S	Common Ei-der		On little islands in lakes.
25	1	N, S	Common Ei-der		On little islands in lakes.
25	3		Common Murre	Aug(Late), Sep(Early)	Just passes by.
26	2	N	Common Ei-der		Lays eggs near ponds.
26	5		Common Murre		Along the floe edge.
27	3	C	Common Ei-der		Their numbers are increasing.

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
27	5	S	Common Murre		During the winter they can be found under rocks mainly on these islands. He collects their eggs here.
28	3	S	Common Ei-der		
29	3	S	Common Ei-der		Nest on little islands in lakes.
30	5		Common Ei-der		
31	1	N, S	King Eider		
32	2	N	King Eider		They lay eggs near ponds.

Table 53. Common and King Eider Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
5		Common Eider	
5		King Eider	

Figure 39. Glaucous, Herring, Iceland, Ivory, Ross's and Sabine's gull Areas of Occurrence



Table 54. Glaucous, Herring, Iceland, Ivory, Ross's and Sabine's Gull Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	3		Glaucous Gull		
2	1		Herring Gull		Lots in town.
3	2	N	Herring Gull		Lays eggs here in the summer.
4	2		Herring Gull		
5	3		Herring Gull		
6	3		Iceland Gull		
7	3		Ivory Gull	Jul(Early)	Just passing by.
8	3		Ross's Gull		Just passing by in the summer.
9	1		Sabine's Gull	Jul	You can pick their eggs near town.
10	2		Sabine's Gull		
11	3		Sabine's Gull		
12	3	S	Sabine's Gull		Nesting area.



Figure 40. Bald and Golden Eagle, Gyrfalcon, Peregrine Falcon, Rough-legged Hawk and Snowy Owl Areas of Occurrence



Table 55. Bald and Golden Eagle, Gyrfalcon, Peregrine Falcon, Rough-legged Hawk and Snowy Owl Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	8		Bald Eagle		Spotted a few times up in the high mountains.
2	8		Bald Eagle		Spotted a few times up in the high mountains.
3	8		Bald Eagle		Spotted a few times up in the high mountains.
4	3		Golden Eagle		
5	1		Gyrfalcon		
6	3		Gyrfalcon		
7	5	H	Gyrfalcon		Used to see them here when he was a kid.
8	5		Gyrfalcon		Can be found here mostly. They eat lots of the ptarmigan but because they are protected he can't shoot them.
9	3		Peregrine Falcon		
10	5		Peregrine Falcon		
11	1	F	Rough-legged Hawk		Has seen them hunting ptarmigan.
12	1		Snowy Owl		
13	2		Snowy Owl		
14	3		Snowy Owl		The snow geese try to nest around here where the owls are because the owls drive away the foxes.
15	5		Snowy Owl		

Table 56. Golden Eagle Everywhere Data

INTERVIEW	MONTHS	COMMENTS
5		

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Figure 41. Black Guillemot, Long-tailed, Parasitic, Pomarine Jaeger, Northern Fulmar, American Crow and Common Raven Areas of Occurrence

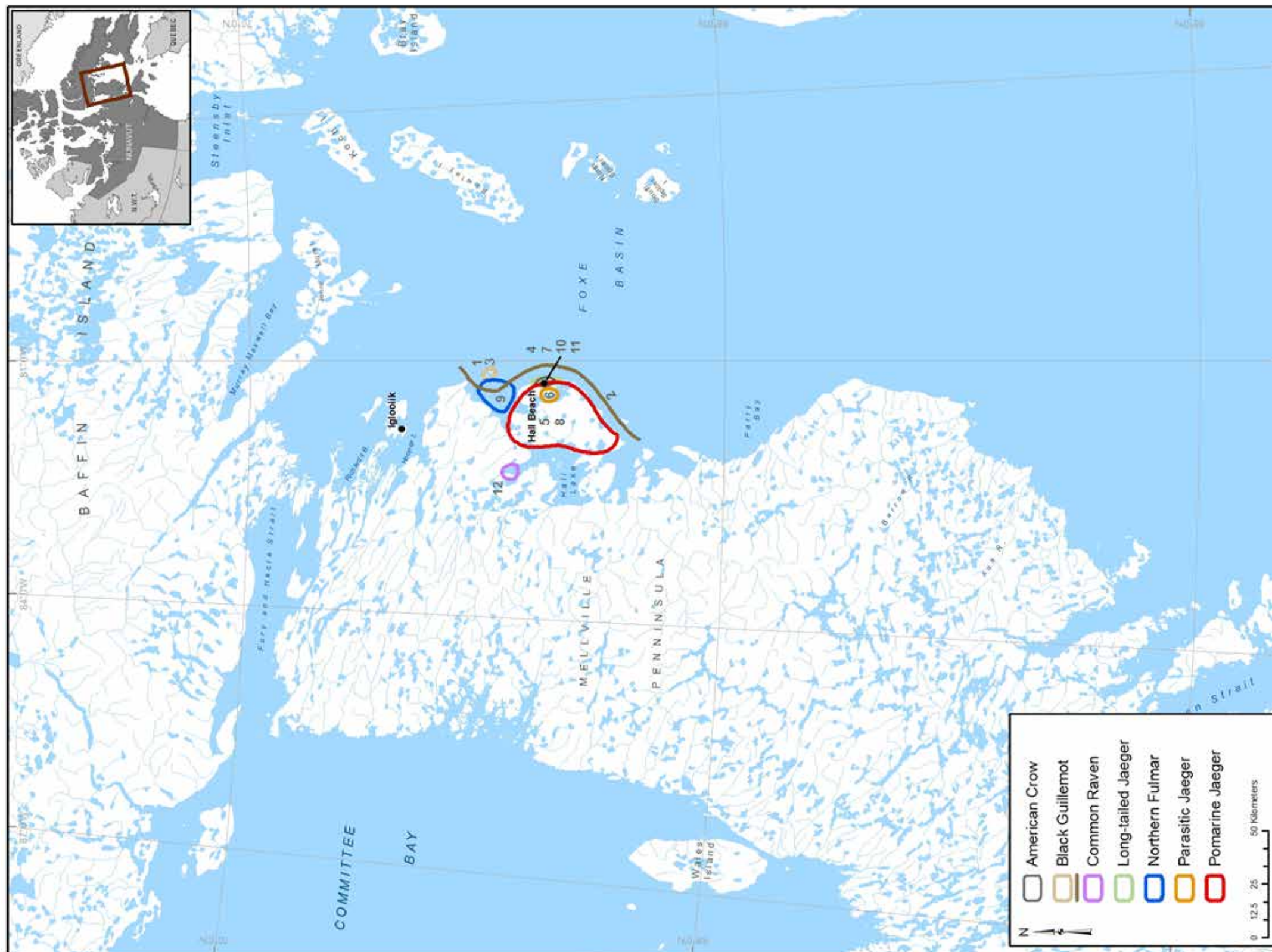




Table 57. Black Guillemot, Long-tailed, Parasitic and Pomarine Jaeger, Northern Fulmar, American Crow and Common Raven Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1		Black Guil-lemot		Stays all year-round. Colour changes in the sum-mer from white to black. Stays at the floe edge. Lays eggs under rock.
2	3		Black Guil-lemot		
3	3	S	Black Guil-lemot	Jul(Late), Aug(Early)	Usually the last bird to nest.
4	1		Long-tailed Jaeger		
5	3		Long-tailed Jaeger		
6	3		Parasitic Jae-ger		Not many.
7	1		Pomarine Jaeger		
8	3		Pomarine Jaeger		
9	3		Northern Ful-mar	Aug(Late), Sep(Early)	Just passes by in late summer.
10	3		American Crow		Saw one in town. Took a picture of it.
11	2		Common Ra-ven		
12	3	C, S	Common Ra-ven		Nesting area. Their numbers are increasing.

Table 58. Common Raven Everywhere Data

INTERVIEW	MONTHS	COMMENTS
1		Up until the 1980s there were no ravens around. Now there are so many everywhere.
3	May	Usually the first bird to lay eggs.

Figure 42. Sandhill Crane, Whimbrel, Killdeer, Rock and Willow Ptarmigan, Bairds, Least, Pectoral and Semipalmated Sandpiper, Snow Bunting and Red-necked Phalarope Areas of Occurrence

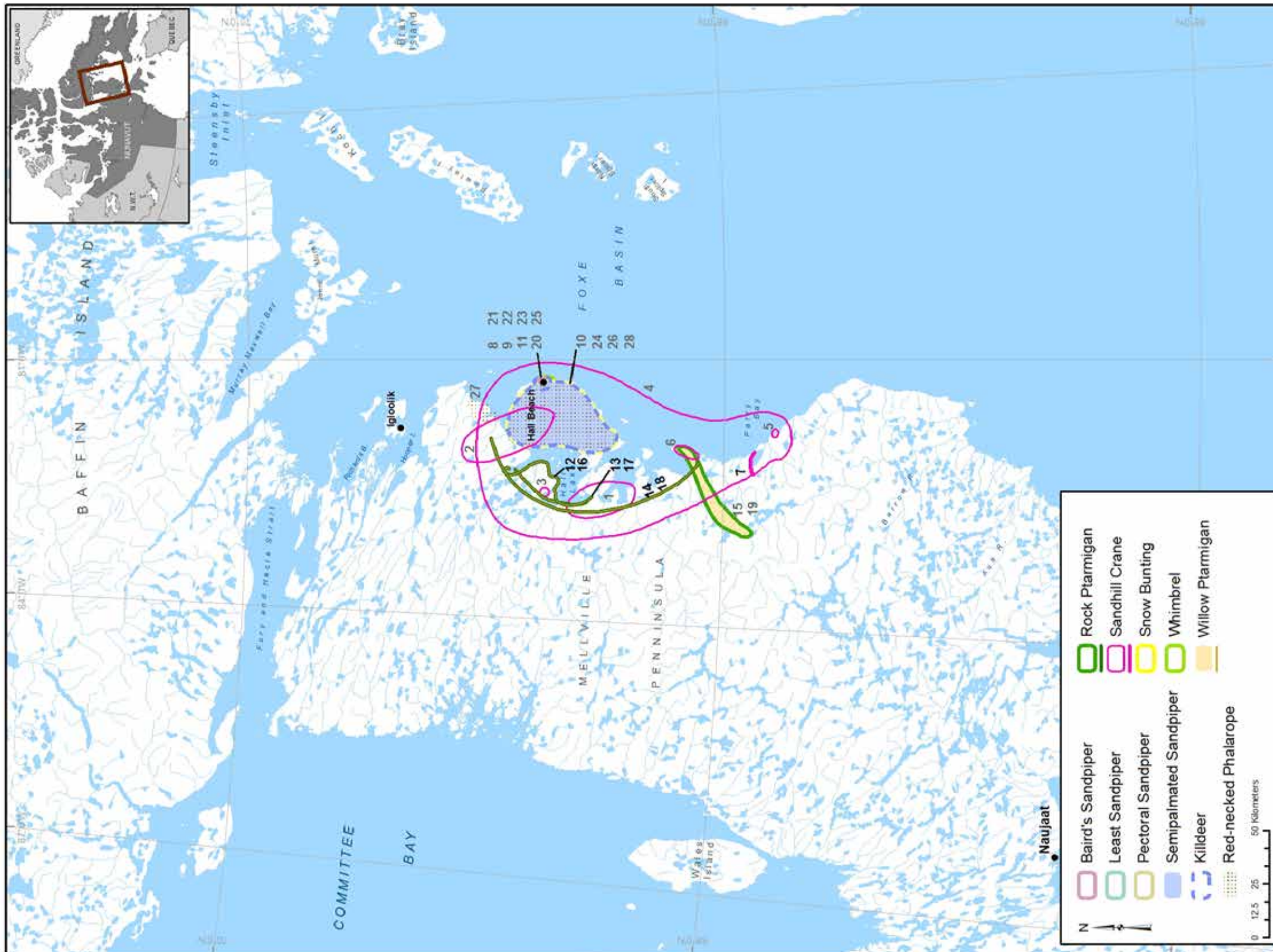




Table 59. Sandhill Crane, Whimbrel, Killdeer, Rock and Willow Ptarmigan, Bairds, Least, Pectoral and Semipalmated Sandpiper, Snow Bunting and Red-necked Phalarope Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	1		Sandhill Crane		
2	2		Sandhill Crane		
3	3	S	Sandhill Crane		Nests here.
4	3	C	Sandhill Crane		Their numbers are increasing.
5	3	S	Sandhill Crane		Nests here.
6	5	N, S	Sandhill Crane		Has seen mother with babies.
7	7		Sandhill Crane		Marshy area.
8	3		Whimbrel		
9	2		Killdeer		
10	3		Killdeer		Not many.
11	5		Killdeer		
12	1		Rock Ptarmigan		Mostly sees them along the coast.
13	2		Rock Ptarmigan		Around all year.
14	3		Rock Ptarmigan		
15	5	A	Rock Ptarmigan		
16	1		Willow Ptarmigan		
17	2		Willow Ptarmigan		
18	3		Willow Ptarmigan		
19	5	A	Willow Ptarmigan		
20	2		Baird's Sandpiper		
21	2		Least Sandpiper		
22	2		Pectoral Sandpiper		
23	2		Semipalmated Sandpiper		
24	3		Semipalmated Sandpiper		
25	2		Snow Bunting	Apr-Oct(Early)	
26	3		Snow Bunting		
27	3		Red-necked Phalarope		
28	3		Red-necked Phalarope		

Table 60. Killdeer and Snow Bunting Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		Killdeer	
1	Mar(Late), Apr(Early)	Snow Bunting	Arrive in late March/early April.

Figure 43. American Golden-plover, Bank and Fox Swallow, Chipping Sparrow, Dovekie, Horned Lark, and Lapland Longspur Areas of Occurrence



Table 61. American Golden-plover, Bank and Fox Swallow, Chipping Sparrow, Dovekie, Horned Lark, and Lapland Longspur Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	3		American Golden-Plover		Annoying little bird - it makes noise when it sees humans and it alerts the caribou.
2	3		Bank Swallow		
3	3		Bank Swallow		Has seen these here since he was a kid.
4	3		Chipping Sparrow		
6	3		Dovekie	Aug(Late), Sep(Early)	Just passing by.
5	3		Fox Sparrow		His sister had one as a pet.
7	3	C	Horned Lark		Their numbers are decreasing.
8	2		Lapland Longspur		
9	3		Lapland Longspur		
10	1		Northern Harrier		
11	2		Northern Harrier		

Table 62. American Golden-plover, American Tree Sparrow, Lapland Longspur and Short-billed Dowitcher Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		American Golden-Plover	
5		American Golden-Plover	
1		American Tree Sparrow	
1		Lapland Longspur	Around in the spring and summer. Leave in September.
1		Short-billed Dowitcher	Sees it on land.



Figure 44. Red Knot, Ruddy Turnstone, Sanderling, Semipalmated Plover and unknown bird Areas of Occurrence



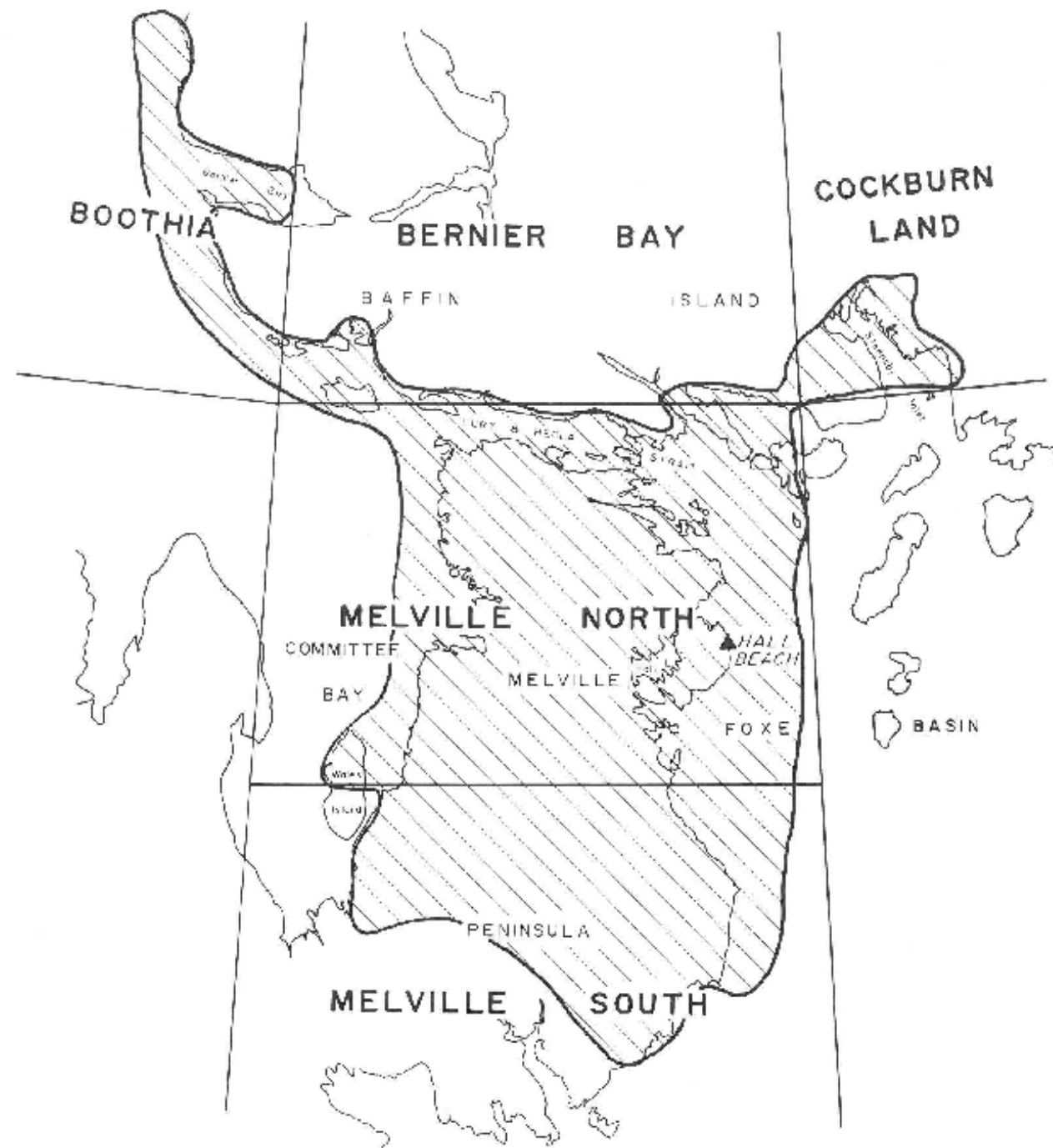
Table 63. Red Knot, Ruddy Turnstone, Sanderling, Semipalmated Plover and unknown bird Areas of Occurrence

MAP #	INTERVIEW	CODE	SPECIES	MONTHS	COMMENTS
1	3		Red Knot		
2	5		Red Knot		
3	2		Ruddy Turn-stone		
4	3		Ruddy Turn-stone		
5	5		Ruddy Turn-stone		When he was a kid he'd practice hunting on birds. The ruddy turnstone was the hardest to catch.
6	3		Sanderling		
7	2		Semipalmated Plover		
8	3		Semipalmated Plover		
9	3	C	Unknown Bird		Small bird with a yellow belly. Started seeing it just in recent years.

Table 64. Red Knot, Ruddy Turnstone, Sanderling, and Semipalmated Plover Everywhere Data

INTERVIEW	MONTHS	SPECIES	COMMENTS
1		Red Knot	Friendly bird, can get close to it. Can be found in the ponds and lakes everywhere, even in the ocean.
1		Ruddy Turnstone	In little ponds. Scared of humans.
3		Sanderling	
1		Semipalmated Plover	
5		Semipalmated Plover	These birds are loud and annoying. They warn the caribou that you're around.

Figure 45. Nunavut Atlas – Hall Beach Community Map



HALL BEACH - ᕿᕐᕐᕐᕐ



Figure 46. Nunavut Atlas – Hall Beach Land Use Map

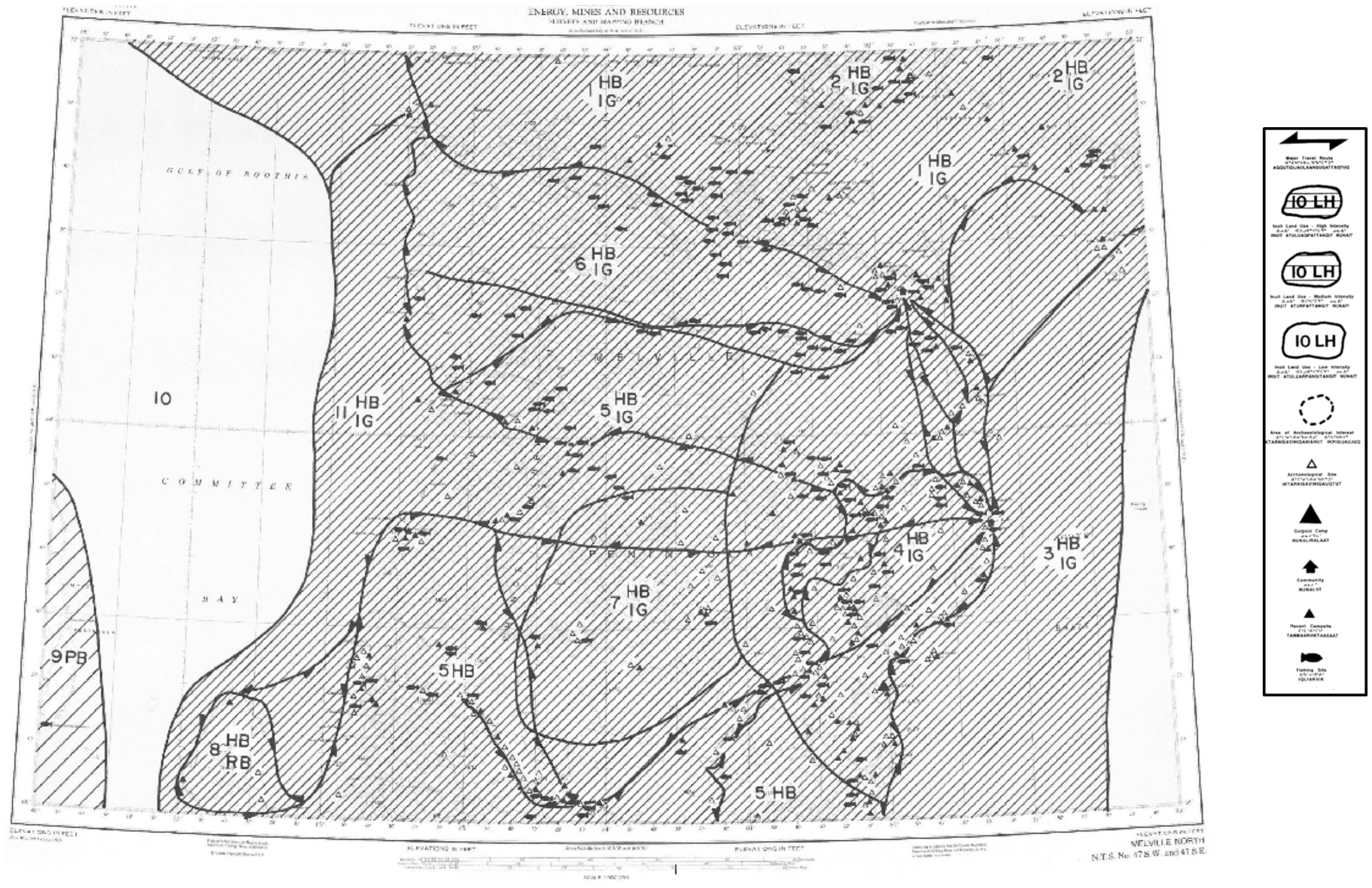
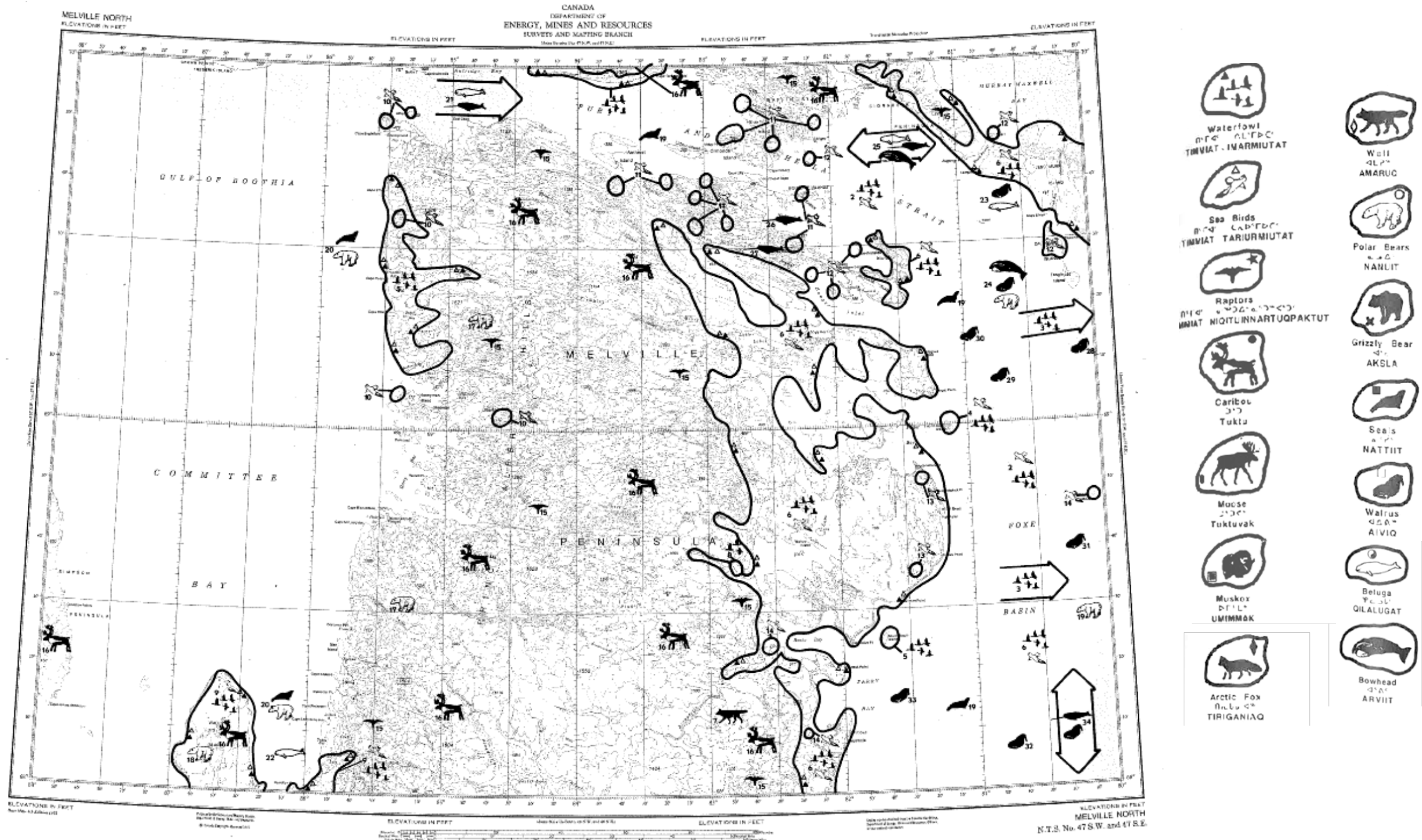


Figure 47. Nunavut Atlas – Hall Beach Wildlife Map





HALL BEACH

NUNAVUT ATLAS: INUIT LAND USE

IHB & IG

Most of Igloolik's annual quota of 18 polar bears are harvested in this portion of Fury and Hecla Strait each winter. The Richards Bay area is especially important. Most of Igloolik's annual quota of 25 Narwhals is harvested near the Bouverie Islands and in Richards Bay and Hooper Inlet and near Cape Hallowell during open water. Several dozen beluga whales and some bowhead whales are hunted each summer east of Igloolik Island. Ringed and bearded seals are hunted in Fury and Hecla Strait. The NWT Wildlife Service estimates that more than 300 walrus are harvested annually by Igloolik hunters. Eider ducks are hunted for food along the floe edge in late spring-early summer. Eggs from eiders, oldsquaws and some seabirds are gathered during mid-summer.

2HB & IG

This portion of Baffin Island and the area around Murray Maxwell Bay are used for Arctic fox trapping by Igloolik trappers. Summer seal hunting and Arctic char fishing camps are located at prominent points along the coast. This area is also important for caribou hunting and waterfowl hunting and eggging.

3HB & IG

Hall Beach and Igloolik hunters use this entire area of the Foxe Basin for ringed and bearded seal hunting. The seals are hunted on the ice in winter, at breathing holes and cracks along the floe edge during late spring, and by boat during summer. Walrus are hunted in drifting pack ice in the late winter and close to the floe edge and in the open leads in spring. They are sometimes taken under thin ice during fall. The Northwest Territories

Wildlife Service reports that the more than 50 General Hunting License holders from Hall Beach may harvest up to 200 walrus in a good year. Polar bears are hunted throughout this portion of the Foxe Basin between January and March. The Northwest Territories Wildlife Service has established annual quotas of 7 bears and 10 narwhals for Hall Beach. Narwhals are hunted during summer by boat and along the floe edge and in loose ice during spring. Nets are set in open water for Arctic char along virtually the entire coast, generally in conjunction with seal hunting during summer. Eider ducks are hunted for food along the floe edge in late spring-early summer. Eider, oldsquaw and some seabird eggs are gathered during mid-summer.

4HB & IG

A heavy concentration of Arctic fox trapping, between late fall and April, has occurred throughout this area in the recent past, especially around Foster, Roche and Party Bays and Hall Lake. Caribou are hunted throughout this part of the Melville Peninsula, especially west of Hall Lake and inland from Party Bay during winter and spring. Caribou are also hunted by small boat along the coast. The entire coastal area is used for Arctic char fishing, as are Hall Lake and other large lakes. Nets are set under newly formed ice in lakes for spawning lake trout and Arctic char in late fall and early winter, jigging is used during spring. Large lake trout are caught in Hall Lake, which has a commercial quota of 3,600 kg (8,000 lbs). Numerous fishing and seal hunting camps, including several cabins, are situated along the coast and around Hall Lake, especially at the outlets of the lake. The Hall Beach Hunters and Trappers Association plans to establish sport fishing camps around Hall Lake in the future. Two families have established an Outpost Camp at Ingeratok Point in Parry Bay. The Hall Beach Hunters and Trappers Association has initiated a sport caribou hunting program and travels by small boat south along the coast, seeking trophy caribou.

5HB & IG

Hunters from both Hall Beach and Igloolik hunt caribou in the Garry Bay vicinity during late fall. Wolves and Wolverine are also hunted on the west side of Melville Peninsula each winter. Fishing is also important in this area.

6HB & IG

Arctic fox traplines extend up Quilliam Bay and into the Grinnell Lake and Brevoort River from Igloolik during winter. Caribou are hunted throughout the northern Melville Peninsula. Quilliam Bay and Mogg Bay are used for Arctic char fishing. An Outpost Camp has been applied for by an Igloolik family south of Amherst Island. Summer seal hunting and Arctic char fishing camps are located at prominent points along the coast and in Quilliam Bay.

7HB & IG

The Kingora River and Sarcpa Lake area is used by Hall Beach and Igloolik hunters for caribou hunting and char fishing.

8RB & HB

This area was used by hunters and trappers from Repulse Bay and Hall Beach. Arctic fox were trapped along the coast on Wales Island during March and April. Polar bears were hunted during winter, south along the coast.

11HB & IG

Hunters from Igloolik harvest several polar bears annually along the west side of Melville Peninsula.

NOTES ON DOMESTIC AND COMMERCIAL FISHERIES

Fish, particularly anadromous Arctic char, is an important food for residents of Hall Beach. Their fishing efforts are concentrated at rivers, lakes and coastal waters near the community and along southwestern Baffin Island. They travel by boat in summer and by snowmobile for the rest of the year. They catch lake trout, Arctic char, cod, and sculpin using gillnets, jigs, spears, and rod and reel. The trout and char are used, mainly for human consumption while most cod are fed to the dogs. The sculpin, which was caught incidentally during the fishing, are occasionally eaten or fed to the dogs.

In the summer, mid-July until mid-September, anadromous Arctic char are caught in gillnets set along the coasts of Roche and Foster Bays, north of Amitioko Peninsula, and between Lligliak and Umilgaarjuk Points. From mid-August until mid-September, most nets are set near river mouths, particularly near the Ajagutalik and Ikerasak Rivers, which empty into Roche Bay.

In the fall and winter, mid-September to the end of February, fishermen gillnet Arctic char in the Ajagutalik River, near the river mouth and about 9 km up stream, and lake trout and Arctic char in Hall Lake. Fishing continues until it is too dark to travel and resumes when the light returns. When the ice gets too thick to set gillnets, fishermen switch to jigging with hooked lures.

Throughout the winter, commercial fishermen from Igloolik travel by snowmobile to Hall Lake and Baffin Island to gillnet lake trout and Arctic char. The major fishing areas and their quotas are: Hall Lake, 3,600 kg round weight; Erichsen Lake, 9,100 kg; Grifford River, 3,600 kg; Kukaluk River, 4,500 kg; Neergaard Lake, 4,500 kg; Ravn River, 9,100 kg; and Navarana Lake, 4,500 kg. Many of these areas are also fished by fishermen from Hall Beach. Anadromous Arctic char are the major fish caught except in Erichsen Lake,

where the char are landlocked and in Hall Lake, where large lake trout are also caught. The catch quotas are generally filled at Erichsen Lake and the Gifford, Kukaluk, and Ravn rivers.

Fishing is a source of quick cash income for Igloodik residents. The fish are sold either to other members of the community or to the Igloodik Co-operative, which markets them within the community or in Frobisher Bay. The fish are sold either gutted or whole, usually frozen.

A sport fishing camp near the mouth of the Kingora River attracts tourists to angle for trophy lake trout and Arctic char in Hall Lake. The camp operates from mid-July until the end of August and attracts from 30 to 50 guests annually. Between 1979 and 1982, the camp was operated by Viking Adventures Limited. Since 1982, the Hall Beach Co-operative and the Hunters and Trappers Association have operated the camp.

There is a quota of 4,500 kg (round) on commercially caught anadromous Arctic char at a river which flows into Keith Bay on the west side of Committee bay (68° 15'N, 88°18'W). A test fishery in 1980 found that char population using the river is being moderately exploited by fishermen from Pelly Bay and recommended that the quota remain in effect. The most recent record of commercial fishing was in 1980, when 2,331 kg of char were caught.

During July, August, and early September, employees of the DEW Line site at Mackar Inlet angle for anadromous Arctic char at Bagnall Lake, along the coast of Smith Bay, and the mouth of the Adamson and Bagnall rivers. Lake trout were also caught in Bagnall Lake.

NUNAVUT ATLAS: WILDLIFE

1 WATERFOWL

This is a small portion of a very extensive area of generally well-vegetated lowlands which covers major portions of map areas to the north and northwest. The area provides important habitat for birds, particularly waterfowl, mainly snow geese.

2 WATERFOWL AND SEABIRDS

The waters of northern Foxe Basin, including Fury and Hecla Strait, are important feeding and staging areas for many species of aquatic birds that inhabit the region. In winter, the recurring polynyas and open leads in this area provide feeding sites for overwintering aquatic birds, mostly black guillemots. These areas of open water are thought to be particularly important during spring as staging areas for aquatic birds, such as eiders, oldsquaws, Arctic terns, gulls and loons that are waiting to move inland onto nesting areas once they become snow free. During years when the spring snowmelt is delayed, these areas are particularly crucial. The shallow coastal waters are used extensively by aquatic species during summer for brood rearing and molting, and in fall for staging for the southward migration.

3 WATERFOWL

During early July of 1983, tens of thousands of predominantly male king eiders were observed along the flow edges throughout the southeast quarters of this map area. They were particularly numerous in the vicinity of the North Ooglit Islands and Foster Bay.

In the Eastern Arctic population of king eiders, it is believed that the males, upon completion of breeding, undertake an eastward migration to molting areas along the west coast of Greenland. Northern Foxe Basin

appears to be a major staging area and migration route for this eastward migration.

4 WATERFOWL

The North Ooglit Islands are an important breeding area for birds. This small gravelly island is particularly important for Arctic terns. Upwards of several thousand Arctic terns are thought to nest on this island. A variety of other species, such as Sabine's gull, black guillemots, common eider, snow goose, brant, oldsquaw, red-throated loon, long tailed jaeger, red phalarope and ruddy turnstone, some in significant numbers, also breed on these islands.

5 WATERFOWL

Except for the coast of Baffin Island, this is the only portion of the map-area that contains habitat of any significance to waterfowl. Small numbers of snow geese breed in scattered locations throughout the area. A few Canada geese utilize the area for moulting. Other waterfowl species found in the area including King eider, oldsquaw and probably common eider.

6 WATERFOWL AND SEABIRDS

This extensive area which encompasses the generally well-vegetated lowlands of Neerlonakto Island, Igloodik Island, Jens Munk Island, Siorarsuk Peninsula and the eastern side of Melville Peninsula, provides important habitats for birds. These areas generally support a large variety and number of breeding birds, particularly waterfowl. Many hundreds of pairs of greater snow geese breed within the area. They are concentrated mostly on the well-vegetated lowlands that encompass: Mogg Bay, the Lailor lakes, the mouth of the Crozier River, the south end of the Siorarsuk Peninsula, and the north eastern portion of Jens Munk Island. Within the northern Foxe Basin, greater snow geese tend to nest as widely scattered pairs often well removed from any water body. With the completion of

the hatch, around mid-July, snow geese will disperse throughout much of the area to wherever suitable feeding meadows are found in close association with water bodies that provide protection from predators. Most brood rearing and molting geese appear generally to remain in close proximity to the breeding areas. Small numbers of lesser snow geese are also thought to occur in the area, but only as non-breeders. A few Canada geese breed within the scattered locations, mostly in association with the coastal lowlands. Small numbers of brant breed in the area. Neerlonakto Island appears to support the highest nesting density of brant within the map-area, likely between 100-200 breeding pairs. Oldsquaws, and to a lesser extent king eiders, are abundant and widespread breeders throughout. Common eiders are less numerous. Nesting by this species is restricted mostly to the small scattered offshore islands.

Arctic terns and, to a lesser extent, Sabine's gulls are widespread within the area and quite numerous in some locations. A breeding concentration of several hundred Arctic terns occur on the southeast end of Igloodik Island. The nesting distribution of Arctic terns and Sabine's is generally restricted to coastal areas, most often small islands in lakes or in coastal waters.

Three other species of gull also occur here, although only herring gulls and glaucous gulls are thought to breed within the boundaries of this wildlife unit. Thayer's gulls, although common along the coastal portions of much of this area, are restricted in their breeding distribution to the rugged, usually coastal cliffs. Herring gulls and to a lesser extent, glaucous gulls nest mostly as scattered, isolated pairs within this area. Favoured nesting sites are usually offshore boulders or small islands along the coast or in tundra lakes or ponds.

All three species of jaegers are present in the area. Of the three, the long-tailed jaeger is by far the most common breeding species. Red-throated loons are very



abundant and widespread breeders, particularly in the lowlands adjacent to the coast. Arctic loons are much less common in the area. A few sandhill cranes may also breed within the area.

A large number and variety of shorebirds are found in this area, including semipalmated plover, golden plover, back-bellied plover, ruddy turnstone, white-rumped sandpiper, Baird's sandpiper, and red phalarope. The coastal lowlands and adjacent tidal flats may be important staging areas during migration. Snowy owls are abundant breeders within the area during years when lemmings are abundant. A few short eared owls nest within this area.

7 WOLVES

Wolves have been observed denning in this vicinity by Inuit hunters.

8 WATERFOWL

A small colony of snow geese nest on the cliffs tops of the narrow canyon along this stretch of the Kingora River. In July 1983, approximately 20 pairs of snow geese were observed in the area.

9 SEABIRDS AND WATERFOWL

Wales Island is the only area of significance for the entire west side of Melville Peninsula. The island which consists mainly of well-vegetated lowlands, supports a moderate number of breeding birds including Canada goose, whistling swan, oldsquaw, king eider, snow goose, herring gull, glaucous gull, Sabine's gull, Arctic tern, long-tailed jaeger, parasitic jaeger, and a variety of shorebirds.

The remainder of this wildlife area, to the south, provides some important habitat for a variety of aquatic birds. Waterfowl are fairly common within the area. Small numbers of Canada geese, belonging to a large

race that occurs in the area only as non-breeding molt migrants from populations that breed in southern Canada, are found here mostly associated with Folster Lake. Other species that occur in the area include small numbers of oldsquaw, king eider, and the occasional snow goose and whistling swan. One of the islands in Folster Lake supports a small breeding colony of gulls.

10 SEABIRDS

These cliffs support colonies of Thayer's and glaucous gulls. A total of 100-125 breeding pairs of gulls nest along the cliffs on the east side of Alfred Island. The area northeast of Cape Englefield supports breeding gull colonies at two cliff sites with 30 breeding pairs and 150-200 breeding pairs, respectively. The small island colony south of Cape Ellice is inhabited by 30-35 breeding pairs. The small island west of Honeyman Island supports a colony of 30-40 breeding pairs. A cliff immediately north of Blacks Inlet supports a breeding colony of 50-60 pairs. All of these colonies are predominantly Thayer's gulls.

11 SEABIRDS

These areas support nesting colonies of gulls. All are predominantly Thayer's gull. A small island in the channel between the southeast end of Elder Island and the northeast end of Ormonde Island supports a small colony of likely 20-40 pairs of herring gulls. A small number of glaucous gulls nest in association with the other gulls at all or most of these sites. All of the indicated areas contain only one site where nesting occurs except for the Coxe Island (3 sites), west of Richards Bay (2 sites) and north of Sevigney Point (2 sites). These gull colonies range in size from about 20 pairs to possibly as high as 400 pairs at one of the colonies immediately west of Richards Bay.

12 SEABIRDS

These islands support nesting colonies of Arctic terns. Within the areas marked by this symbol, the smallest colonies, likely numbering one to two hundred pairs, are found in Hooper Inlet. The largest colony occurs on the eastern most Calthorpe Island, and may number two to four thousand pairs. Some of the islands in these areas also support small numbers of nesting black guillemots and common eiders.

13 SEABIRDS

These areas support nesting colonies of gulls. The sites to the south of Nugsanarsuk Point are used by upwards of 50 breeding pairs of Sabine's gulls. A colony of 15-25 breeding pairs of what are thought to be herring gulls nest on a small island in the lake west of Umiligaarjuk Point.

14 SEABIRDS

These islands support nesting colonies of Arctic terns. The colonies south of Roche Bay are small, and appear to support only a few dozen pairs. The Manning Islands are used by upwards of several hundred breeding pairs.

15 RAPTORS

The numerous cliffs scattered throughout this area, particularly along the coast, may provide optimal nesting habitat for raptors, including peregrine falcons, rough-legged hawks and the occasional gyrfalcon. Because of their relatively small overall population size, nesting success for peregrines and gyrfalcons is especially critical.

The exact status of these raptors within the map area is unknown. Peregrines and gyrfalcons are likely rare or absent as the densities of most prey species for these raptors is thought to be low. Rough-legged hawks are thought to be abundant in the area at times. Breeding activity of rough-legged hawks is highly cyclical, and is

dependent upon the abundance of its prey, lemmings. The cliffs within this area also provide suitable nesting sites for ravens which may nest in the area.

16 CARIBOU

The map area provides range for barren-ground caribou of the Melville herd. The most recent population estimate (1986) places the size of the Melville herd at 50,000 to 100,000.

The seasonal distribution of this herd, particularly during winter, is largely undocumented. Generally, the seasonal range of the north Melville herd are considered to encompass the northern half of Melville Peninsula. Calving is thought to take place in the interior of Melville Peninsula, to the northeast of Garry Bay. The seasonal range of the south Melville herd are considered to include the southern half of Melville Peninsula. Calving is believed to be confined mainly to the rolling uplands that lie in the interior of southern Melville Peninsula. Overlap in seasonal distributions of these two herds almost certainly occurs within the map area. Few if any caribou appear to utilize the northeastern end of Melville Peninsula at any season, particularly that portion of the Peninsula covered by this map which encompasses the area south of Hooper Inlet.

Small numbers of barren-ground caribou are found, likely throughout much of the year, within the portion of Baffin Inlet shown on this map sheet.

The rugged, windswept uplands likely provide important wintering range for caribou. In summer, many caribou concentrate on the well-vegetated coastal lowlands and the better vegetated interior meadowlands. In July 1983, caribou were fairly common in the southeast corner of the map area and on the lowlands along the west coast of Melville Peninsula. Small numbers of caribou were also found on Wales Island. The island is likely used most extensively as summer range.

The east side of Simpson Peninsula may provide occasional range, for a few caribou. Most extensive use of the area is likely during spring and summer. The herd affiliation of the caribou that utilize Simpson Peninsula is unknown.

17 POLAR BEARS

Maternity denning may occur along most of Committee Bay's east coast.

18 POLAR BEARS

Polar bears are known to have maternity dens on Wales Island. This area also constitutes an important feeding ground for polar bears. The complexity of the coastline delays the breakup of ice and hastens the freeze up, thus prolonging the period during which polar bears are able to hunt seals.

19 SEALS

Although ubiquitous and plentiful throughout all of northern Foxe Basin, ringed seals are most abundant in the Fury and Hecla Strait area. The coastline is very complex and fast ice may remain until the end of July, providing excellent conditions for breeding and pupping. Prevailing cool climatic conditions and a general absence of strong currents or extreme tides also contributes to the retention of favourable ice conditions. Arctic cod and amphipods are foods commonly in the diets of ringed seals in this area.

Bearded seals thrive in the shallow mollusc-bearing waters of northwestern Foxe Basin. With reduction of available ice pans in summer, bearded seals move inshore where they sometimes haul-out on sandbars or rocks. During the fall and winter freeze up they move offshore with the growing ice edge and establish themselves in the winter pack ice. The most common food items are molluscs, shrimps and Arctic cod.

Harp seals are rarely, although recurrently, sighted in northwestern Foxe Basin.

20 SEALS AND POLAR BEARS

Ringed seals are abundant along the western coastline of Melville Peninsula, particularly in bays and inlets where fast ice persists well into summer. Bearded seals are less common, and prefer the pack and pan ice over the shallow waters of the map area. Polar bears occur in moderate numbers in Committee Bay. During winter and spring, polar bears concentrate at the floe edges and on the unstable offshore ice to hunt ringed and bearded seals.

21 BELUGAS AND NARWHALS

Belugas and narwhals may migrate eastwards through Fury and Hecla Strait in August and September. Narwhals are present around Richards Bay in late summer.

22 WALRUSES AND BELUGAS

Belugas are hunted by Repulse Bay hunters in the narrows separating Wales Island and the east coast of Committee Bay.

23 WALRUSES AND BELUGAS

Large numbers of walrus are found in and around Jens Munk Island. Beluga have also been sighted in this area in a recent survey.

24 BOWHEADS, WALRUSES AND POLAR BEARS

Numerous sightings of bowhead have been reported in the Igloodik area. During aerial and boat survey's five bowheads were observed here in the summer of 1982, and fifteen were seen during aerial surveys in the summer of 1983. Concentrations of walrus are found

in northwestern Foxe Basin. Optimal conditions for walrus are met here as feeding shallows are extensive and ice is abundant throughout the year. During February, thousands of walrus have been seen at the floe edge in northern Foxe Basin. The diet of walrus here is mainly molluscs and sea slugs. Polar bears are rare in northwestern Foxe Basin. During summer, a few are seen, but these bears probably drifted in on ice pans from Committee Bay.

25 BELUGAS, NARWHALS AND BOWHEADS

Belugas and narwhals migrate eastwards through Fury and Hecla Strait in August and September. Narwhals are present around Richards Bay in late summer. It has been postulated that bowhead whales may also enter Foxe Basin via Fury and Hecla Strait.

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COMMUNITY OF HALL BEACH

Hamlet of Hall Beach

Hall Beach HTA Board Members and Chairpersons

DEPARTMENT OF ENVIRONMENT, GOVERNMENT OF NUNAVUT

INTERVIEWEES – HALL BEACH

Enoki Irgittuq, Daniel Arvaluk, Lou Nattuk, James Kukkiq, Jopie Kaernerik, Jack Kammuka, Andrew Qaunaq, Sam Arnardjuak, Manasie Naullaq and Peter Siakuluk.

DEPARTMENT OF FISHERIES AND OCEANS CANADA

INDEPENDENT COLLABORATOR

Jim Richards, Arctic Bird Specialist, Ontario, Canada. Jim compared bird observations recorded through the inventory with literature. Results of this evaluation are located in Appendix 3.



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APPENDIX 1 INTERVIEWEE BIOGRAPHIES

INTERVIEW	NAME	BIOGRAPHY
1	Enoki Iqittuq	Enoki was born in 1955 at an outpost camp on Baffin Island and has lived in Hall Beach since he was 1 or 2. He started hunting and fishing at the age of 6 or 7. As a kid, he used to hunt small birds but doesn't anymore. He still hunts all other animals when they are available.
2	Daniel Arvaluk	Daniel was born in 1947 at Usuaqjuk, one of the main outpost camps. He has lived in Hall Beach since July of 1955. He started hunting when he was 13 or 14 years old and continues to go hunting as long as he has access to transportation. He hunts as much as possible because it's free, fresh food.
3	Lou Nattuk	-
4	James Kukkiq	James was born in 1949 near Igloodik and has been living in Hall Beach since 1964. He started hunting and fishing at the age of 7 and was going alone by the time he was 8. He is still an active hunter and fisher.
5	Jopie Kaernerik	Jopie was born in 1952 at Fisherman's Lake and has lived in Hall Beach since the 1970s. When he was 16, he started hunting with his father and still continues today.
6	Jack Kammuka	Jack was born in 1949 in Igloodik and grew up on Baffin Island. He has lived in Hall Beach for 59 years. He started hunting and fishing at a young age with his dad and uncles and began hunting alone in the 1970s. He is still active but does not hunt as much as he used to.
7	Andrew Qaunaq	-
8	Sam Arnardjuak	Sam was born in 1951 at an outpost camp and has been in Hall Beach for 52 years. At the age of 7, he started fishing with his family. He remains active at hunting and fishing.
9	Manasie Naullaq	Manasie was born in 1980 in Frobisher Bay and has lived in Hall Beach his entire life. He started hunting and fishing at the age of 7 and remains active.
10	Peter Siakuluk	Peter was born in 1949 in an area north of Igloodik and spent some of his time growing up in Pond Inlet. He has been in Hall Beach for 61 years. Peter started hunting and fishing when he was 7 and doesn't do it as often as he used to but still hunts caribou and fishes.



APPENDIX 2

ACRONYMS AND ABBREVIATIONS

CRI – COASTAL RESOURCE INVENTORY

DFO – DEPARTMENT OF FISHERIES AND OCEANS

DOE – DEPARTMENT OF ENVIRONMENT

GIS – GEOGRAPHIC INFORMATION SYSTEM

HTA – HUNTER/TRAPPER ASSOCIATION

HTO – HUNTER/TRAPPER ORGANIZATION

IHT – INUIT HERITAGE TRUST

INAC – INDIGENOUS AND NORTHERN AFFAIRS CANADA, GOVERNMENT OF CANADA

IQ – INUIT QAUJIMAJATUQANGIT

IPCC – INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

NRI – NUNAVUT RESEARCH INSTITUTE

NTI – NUNAVUT TUNNGAVIK INCORPORATED

NWMB – NUNAVUT WILDLIFE MANAGEMENT BOARD

TK – TRADITIONAL KNOWLEDGE

APPENDIX 3 BIRD EVALUATION

SPECIES	GODFREY (1986)	SNYDER (1957)	CWS	JOHNSTON ET AL. (2000)	MONTGOMERIE ET AL. (1983)	RICHARDS AND WHITE (2008)	NCRI INTERVIEW: 2017	COMMENTS ON NCRI SPECIES LIST
Snow Goose	B		x		x	B	B	Interesting that the numbers are growing.
Ross's Goose						B	B	New breeding species for the area.
Brant	B				x	B	B	As expected
Cackling Goose	B	B				B	B	As expected
Canada Goose	B	B	x		x	B	B	As expected
Tundra Swan						B	B	New breeder for the area
Northern Pintail						B	x	Interesting sighting; unexpected
#King Eider	B	B	x		B	B	B	As expected
Common Eider	B	B	x			B	B	As expected
Long-tailed Duck	B	B	x		B	B	B	As expected
Red-breasted Merganser		B			b	B	x	As expected
Willow Ptarmigan	B	B			x	P	x	As expected
Rock Ptarmigan	B	B			B	P	x	As expected
Red-throated Loon	B		x		B	B	x	As expected
Pacific Loon	B	B	x		B	B	x	As expected
Common Loon						B	x	Rare for this area
Yellow-billed Loon					x	B	x	Expected
Northern Fulmar							x	Rare sighting here
Bald Eagle							x	Uncommon sighting here
Northern Harrier							x	Rare here
Rough-legged Hawk	B	B	x		B	B	x	As expected
Golden Eagle							x	Uncommon here
Gyrfalcon	B	B			x	B	x	As expected
Peregrine Falcon	B	B	x		x	B	x	As expected
Sandhill Crane	B	B				B	B	As expected
Killdeer							x	Rare here
Black-bellied Plover	B	B	x		b	B	?	<i>Expected; not recorded</i>
American Golden-Plover	B	B	x	B	B	B	x	As expected
Semipalmated Plover	B	B	x	B	B	B	x	As expected



SPECIES	GODFREY (1986)	SNYDER (1957)	CWS	JOHNSTON ET AL. (2000)	MONTGOMERIE ET AL. (1983)	RICHARDS AND WHITE (2008)	NCRI INTERVIEW: 2017	COMMENTS ON NCRI SPECIES LIST
Whimbrel		B				B	x	Uncommon here
Ruddy Turnstone	B	B	x		B	B	x	As expected
Red Knot	B				x	B	x	Expected
Sanderling	B	B			x	B	x	Expected
Semipalmated Sandpiper	?		x	B	B	B	x	As expected
Least Sandpiper						B	x	Uncommon here
White-rumped Sandpiper	B	B	x	B	B	B	?	<i>Hard to ID if not familiar with this species</i>
Baird's Sandpiper	B	B	x	B	B	B	x	As expected
Pectoral Sandpiper				B	B	B	x	As expected
Purple Sandpiper	?		x		x	b	?	<i>Expected; not recorded</i>
Dunlin			x	B	B	B	?	<i>Expected; not recorded</i>
Short-billed Dowitcher							x	Rare sighting here
Red-necked Phalarope							x	Very rare here
Red Phalarope	B	B	x	B	B	B	?	<i>Expected; not recorded</i>
Ivory Gull							x	Rare sighting here
Sabine's Gull	B	B	x		b	b	B	As expected
Ross's Gull							x	Very rare sighting here
Herring Gull		B	x		B	B	B	As expected
Iceland Gull	B		x		x	B	x	As expected
Glaucous Gull	?	B	x		B	B	x	As expected
Arctic Tern	B	B	x		B	B	B	As expected
Pomarine Jaeger		B	x		x	B	x	As expected
Parasitic Jaeger	B	B	x		x	B	x	As expected

SPECIES	GODFREY (1986)	SNYDER (1957)	CWS	JOHNSTON ET AL. (2000)	MONTGOMERIE ET AL. (1983)	RICHARDS AND WHITE (2008)	NCRI INTERVIEW: 2017	COMMENTS ON NCRI SPECIES LIST
Long-tailed Jaeger	B	B	x		B	B	x	As expected
Dovekie							x	Rare sighting here
Common Murre							x	See note below
Black Guillemot	B	B	x			B	B	As expected
Snowy Owl	B	B	x		x	B	B	As expected
Common Raven	B	B	x		b	B	B	As expected
American Crow							x	Rare sighting. Photo should be seen
Horned Lark	B	B	x		B	B	?	<i>Expected; not recorded</i>
Bark Swallow							x	Rare sighting here
American Pipit	B	B	x		B	B	?	See note below
Chipping Sparrow							x	Rare sighting here
Fox Sparrow							x	Rare sighting here
Lapland Longspur	B	B	x		B	B	x	As expected
Snow Bunting	B	B	x		B	B	x	As expected
White-crowned Sparrow					x	B	?	<i>Not to be expected</i>
Am. Tree Sparrow							x	Rare sighting here



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Godfrey & Snyder – ‘B’ in these two columns denote breeding range for each species, and that it includes the region subject to this survey. It does not mean that the species has actually been recorded as breeding in the specific area itself.

Richards & White (2008) – denotes general status for the geographic area (i.e.: Arctic Islands (north of 60), James Bay Islands, or Mainland), and does not imply that a record exists for each species in the specific checklist area.

Names and arrangement according to: American Ornithologists Union Check-List of North American Birds, 1998, and annual Supplements.

Richards & White codes:

P = Present: all or part of the population present throughout the year

M = Migrant: migrates to/from or through the region on a regular basis

V = Vagrant: uncommon migrant, or outside of normal range

A = Accidental: rare; very few records

E = Extinct

B = Breeding confirmed: active nest or flightless young

b = Breeding suspected: pair in suitable habitat or in courtship

w = Winter records available when /where open water, ice floe-edge, polynyas exist

Codes for species list here:

B = breeding

b = breeding suspected

x = reliably observed

? = unknown

- species shown in italics have been recorded by others but not listed during the interviews, and some, like Horned Lark, Dunlin, Red Phalarope, Purple Sandpiper, and Black-bellied Plover are to be expected.

Canada Goose was split by the AOU in 2004 into Canada Goose and Cackling Goose. The literature prior to 2004 does not always differentiate between the two. For current breeding range, I have used a map presented by Mallory, et al. 2005, as well as a map presented by Sibley, 2004.





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