NUNAVUT
COASTAL RESOURCE INVENTORY

Taloyoak

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Department of Environment
Avatiliqiyikkut
Ministère de l'Environnement

NCRI

Nunavut Coastal Resource Inventory – Taloyoak
2014

Department of Environment
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EXECUTIVE SUMMARY

This report is derived from the Hamlet of Taloyoak 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. This data is 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 Qaujimajatuqangit, 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 Igloolik, Nunavut. The NCRI has 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, Repulse Bay, and Grise Fiord
- 2013 Pangnirtung
- 2014 Coral Harbour, Clyde River, and Taloyoak

This report presents the findings of the coastal resource inventory of Taloyoak, which was conducted in March, 2014.

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 Geographic Information System (GIS) database;
- Large-format resource inventory maps for the Hamlet of Taloyoak, Nunavut; and
- Key recommendations on both the use of this study as well as future initiatives.

During the course of this project, Taloyoak was visited on two occasions. In February 2014, a community visit and meeting with the Hunter and Trappers Organization determined there was community interest in participating. In March 2014, on-site interview sessions were conducted. Nine interviews with eleven interviewees 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 that we provided. We used photographs to help participants identify the species they have seen. The interviews varied from 2.5 - 6 hours, 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: Marine Mammals, Fish, Birds, Invertebrates, Marine Plants, Areas of High Diversity, and Other.

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INTRODUCTION

This document is one in a series of reports produced by the Nunavut Coastal Resource Inventory (NCRI). The overall goal of this initiative is to conduct inventories in all 26 of Nunavut's coastal communities. Each community is unique in terms of its physical environment, oceanographic setting, organisms present, and the interests and approaches of its hunters and trappers..

THE COASTAL RESOURCE INVENTORY

A coastal resource inventory is a collection of information on coastal and aquatic resources and activities gained principally from interviews with elders and hunters in each community. Coastal resources are defined as the animals and plants that live near the coast, on the beaches, on and around islands, above and below the surface of the ocean, above and below sea ice, on the sea floor, and in lakes and rivers.

All of the community-specific data is digitized and mapped using a Geographic Information System (GIS). This approach can be an effective tool to assist with management, development, and conservation of coastal areas.

Resource inventories have been conducted along Canada's Atlantic and Pacific coasts. The information has been used to provide the foundation for an integrated coastal management plan, to assist with the protection of important coastal areas, and to facilitate environmental impact assessments, sensitivity mapping, and community planning. Coastal resource inventories have also provided different levels of government with the tools to engage in strategic assessments, informed development, and enlightened stewardship.

The principle source of information for community-based coastal inventories is traditional knowledge or, in Inuktitut, Inuit Qaujimajatuqangit (IQ), gathered through interviews. Over the past 50 years, Inuit have transitioned from a resource-based nomadic life style to a wage-based economy. Coastal and land-based activities remain extremely important, contributing to Inuit quality of life, providing income and food, and as a significant part of the Inuit culture. The NCRI aims to retain some of this valuable knowledge by engaging community elders, hunters and fishers to document the presence, distribution, and characteristics of various coastal resources. IQ is unique in that it is qualitative, intuitive, holistic, spiritual, empirical, personal, and often based on a long time-series of observations (Berkes 2002). It is particularly useful for recording historical data that are unattainable in any other manner. A complementary coupling of IQ and scientific knowledge may provide a means to better understand and manage coastal resources.

Information on coastal resources may provide insights regarding the potential for future fisheries development or other economic opportunities. Given the high unemployment rates in many of Nunavut's coastal communities, it is increasingly important to identify areas of potential economic development. In order to determine both feasibility and long-term sustainability of a new fishery, information on species-specific abundance and distribution of fish stocks (or other coastal resources) must be obtained. Combining communal knowledge of local resources can be a vital step in establishing a commercialized fishery. This information could also lead to the identification of potential coastal parks and related tourism opportunities. This may include sensitive coastal areas, breeding grounds, important species, and unique habitats. Attaining this information comes with much responsibility, however, and should be accompanied by a vision for the resource, coupled with an implementation plan. The resource should be thoughtfully governed from the outset to avoid unsustainable exploitation.

Inuit Qaujamajatuqangit (IQ) embodies both tangible and intangible Inuit knowledge. Conserving this knowledge has importance in its own right and for its potential to

Figure 1. Map of Nunavut

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 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, 2008b, Moore and Huntington 2008). Additionally, the Intergovernmental Panel on Climate Change 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 Taloyoak was conducted by North/South Consultants Inc., a Winnipeg firm under the direction of the Department of Environment (DOE). Overall project leadership was provided by Devin Imrie, Acting Director, Fisheries and Sealing Division.

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

After receiving community support for the project in February 2014, the community was visited for on-site interview sessions in March 2014. A scoping session was designed to put into place all of the elements that were required to properly conduct the interviews. This process depended on the support and participation of the Taloyoak HTO and the Hamlet office. The HTO agreed to support this initiative by providing a formal letter of support. The HTO also provided a 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 eleven interviewees (Appendix 1) was made by NCRI project personnel in consultation with HTO members. In addition, HTO personnel recommended the names of individuals who could be used as translators and the school principal provided the name of a student intern. The HTO office was selected to accommodate the interviews.

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 for 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; locations 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 2.5 - 6 hours, 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. 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 48-58).

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, 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: ncriatlas. ca and http://www.gov.nu.ca/environment/ information/ nunavut-coastal-resource-inventory

Figure 2. The study area extent discussed in the Taloyoak interviews

MARINE RESOURCES IN A PHYSICAL SETTING

The coastal communities of Nunavut are diverse, extending 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 have 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 reoccurring open water locations is 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; Harrisson 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 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 also 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 that specialized in hunting marine mammals.

OCEANOGRAPHIC FACTORS THAT CONTRIBUTE TO OPEN WATER

The Hamlet of Taloyoak is located in the high arctic on the Boothia Peninsula, in the Kitikmeot region, lying at 69°32'12"N, 93°31'37"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. 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 breath, 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. The process is controlled by wind and/or ocean currents, which remove any ice formed at the site. Other factors include turbulence from 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 (Hannah et al 2009).

Recurring polynyas typically occur between near shoals and islands, within the land-fast ice. There are two types of polynyas that reoccur each year: those that remain open all year long and those that only 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.

Although strong tidal currents, sometimes associated with the formation of polynyas, have been observed on the west side of King William Island, there are no known polynyas in this area. This may be due to the lack of a deep basin in the area to act as a reservoir for warm water (Hannah et al 2009).

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 (Sterling 1981). The physical presence of this ice cover modifies tidal and wind energy, dramatically changing circulation (George 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 warmer 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, Johannesen 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 global warming, 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.

RESOURCE INVENTORY

The observations below provide highly personal and very useful insights that could be worthy of additional investigation.

MARINE ENVIRONMENT

The geographic area identified by interviewees as the normal range of their hunting and fishing activities include both coasts of the Boothia Peninsula and many inland lakes. This large area extends on the west side from Franklin Lake on the Back River system in the south to areas around Prince of Wales and King William islands and extends north to the Bellot Strait. On the east side, use occurs from Kuugaruk to Fort Ross with the most use occurring in Lord Mayor Bay.

HUNTING/FISHING

Taloyoak hunters/fishers depend on a broad array of animals to supply their country food needs. Ensuring access to and availability of country food continues to be an issue of importance and concern for the community.

MARINE MAMMALS IN GENERAL

- Marine mammals, specifically whales and seals, were noted by two interviewees to be more abundant on the east side of the Boothia Peninsula. The west side was noted to be mountainous.

Polar Bear

- Several of the interviewees reported an increase in the number of polar bears along the eastern coast of the peninsula in recent years, particularly in the Lord Mayor and Thom Bay areas. The bears appear to be more abundant inland near the community of Taloyoak than they were in the past and less so on the

coast and ice where they used to be commonly found. Interviewees felt this increase may pose a threat to the community. One interviewee noted that the ratio of juvenile bears to adult bears has also increased in the last few years. Some believe the higher numbers are a direct result of the restrictions imposed on bear hunting in the region initiated in the 1970s.

- One interviewee noted that polar bear populations fluctuate from year to year but do not seem to be increasing or decreasing.

Seals

- An elder interviewee noted an increase in the number of ringed seals on the east side of the peninsula and around Lord Mayor and Thom bays. However, there appears to be fewer along the coast on the west side of the peninsula.

- Ringed seal abundance was considered by one interviewee to be in decline in general. Based on having hunted seal for many years, he recently has had to wait longer by a seal hole when hunting.

- Ringed seals were noted to be abundant in Lord Mayor Bay and bearded seal were abundant on the north side of King William Island.

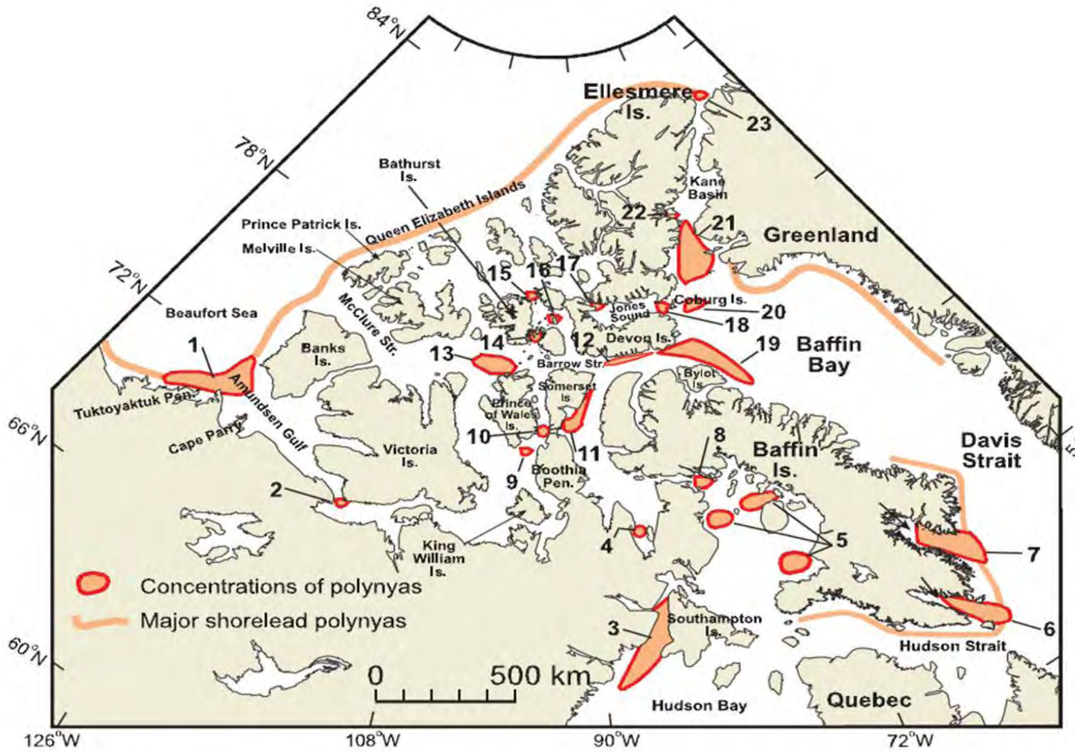
- Another interviewee noted that seals are no longer afraid of hunters and people.

- Bearded seal were noted to occasionally move up river to Netsilik Lake.

Walrus

- Walrus numbers are increasing in Josephine Bay, Lady Murchison Bay and in the Franklin Strait area (3_110-112) and are getting closer to the community. While in the past, the interviewee would only see walrus every few years, their presence has recently become an annual occurrence.

Figure 3. Map of known polynyas in Nunavut



1 Cape Bathurst
2 Lambert Channel
3 Roes Welcome Sound
4 Committee Bay
5 Foxe Basin
6 Frobisher Bay
7 Cumberland Sound
8 Fury and Hecla Strait
9 Franklin Strait
10 Bellot Strait
11 Prince Regent Inlet
12 Lancaster Sound
13 Viscount Melville Sound
14 Karluk Brooman
15 Queens Channel and Penny Strait
16 Dundas Island
17 Hell Gate – Cardigan Strait
18 Lady Ann Strait
19 Bylot Island
20 Coburg Island
21 North Water (NOW)
22 Flagler Bay
23 Lincoln Sea

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 Schledermann (1980) and Brown and Nettleship (1981).

Whales

- Interviewees described natural annual variations in whale abundance, with unusually high numbers of beluga and narwhal passing near the community every few years. This comment was made with particular reference to whales in St. Roch Basin.
- One interviewee noted that the overall abundance of whales in the Lord Mayor Bay vicinity seems to have generally decreased since his youth.
- Beluga abundance is considered to fluctuate from year to year, however, every three or four years, the numbers spike. The late 1980s was memorable for an exceptionally high harvest. Similarly, in 2010, hunters captured approximately 100 belugas in Spence Bay.
- According to one interviewee, bowhead whales (known as Right whales to older interviewees) appear to be increasing in abundance year after year in Lord Mayor Bay. In September 2012 and 2013 hunters from Taloyoak and Gjoa Haven, respectively, each succeeded in the capture of a single Bowhead Whale from Lord Mayor Bay.[1]

Fish

- Fish were noted to be generally abundant in Netsilik Lake.
- Two interviewees noted an increase in the abundance of fish since their youths.
- All lakes containing fish were noted to be good for continuous fishing.
- One interviewee observed a significant decrease in the number of sea-run char available (unnamed lake 2_33) in the last five years.
- Char catch in Redfish Lake has declined over the past five years from 4,000 to 2,000-3,000 over a two month period.
- Land-locked Char are believed to have been extirpated from Redfish Lake during the 1970s and 1980s due to overfishing for dog food.
- Another participant observed a decline in the abundance of Lake Trout in Middle, Krusenstern and Pangnikto lakes since the late 1980s.
- The Murchison River, as well as most lakes, were noted for an abundance and diversity of fish species
- Increasing incidences of hook avoidance by Lake Trout and Landlocked Char was reported in Netsilik Lake. Thirty years ago, hook avoidance was not a problem and the interviewee suggested it may be in response to increased fishing pressure.

Invertebrates

- Invertebrates were not noted to be harvested by any interviewees.

Birds

- Harvest of ptarmigan and geese for food has not changed.
- Egg harvesting was noted to be a significant food source.

HEALTH, SIZE, AND PRESENCE

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

Wildlife in general

- One interviewee described a change in the behaviour of most wildlife in recent years. Wildlife is no longer afraid of the hunters and land users.
- Although no species specific information was provided, one interviewee noted that some species were getting larger, while others were getting smaller.
- The use of tags in the scientific monitoring of wildlife populations is of concern to one interviewee who feels that it is at least partially responsible for the declining abundance and health of a variety of species of wildlife.

Whales

- Some harvested beluga are showing changes in the structure of their skin. The layer of skin is now thinner than the layer between the skin and the fat. The thickness and consistency of the fat itself does not appear to have changed.
- Beluga and Narwhal have changed their historical migratory patterns along the western coastline of the Boothia Peninsula in recent years. One interviewee noted that beluga and narwhal are increasingly avoiding the path into the St. Roch Basin area on the east side of King William Island, and are instead migrating directly to the west side of the island.

Fish

- One interviewee who frequently fishes at Middle Lake has noticed a decrease in the average size of the Lake Trout harvested from this lake.
- One interviewee indicated that fish are generally healthy.
- One interviewee described fish in general as having become smaller, thinner and less meaty, regardless of the location at which they were captured.
- Some localized changes in fish health and appearance have been noted recent years:
  - Arctic Char in an inland lake upstream of Abernethy Bay were noted to have been skinnier this spring (2014) than they have been in previous years. The interviewee suggests a correlation with the low water levels in the last few years.
  - Arctic Char with cysts, lesions or pustules in the flesh have been captured by one interviewee occasionally.
  - One quarter to one half of the Arctic Char captured in Redfish Lake appeared to be suffering from an illness. Symptoms included red spots, sores, lumpy flesh, and scarring of the flesh. These ill fish are skinnier than the average fish, with less fat. The interviewee described a parasitic infection of the gut in many fish.
  - In the last few years, one interviewee reported that Lake Trout captured in Middle Lake tend to be smaller in size compared to previous years.
  - Another interviewee noted that the fish from the east and west sides of the Boothia Peninsula are tasting more similar every year. The interviewee explained that, in their youth, the fish from the two regions had distinctly different flavours. It was thought that the richer food base on the east side, compared to the west side of the peninsula was responsible for the difference.

Invertebrates

- Interviewees have not noticed changes in the abundance of marine invertebrates, except for a single report of an increase in the abundance of Jellyfish since the 1980s.
- Invertebrates are noted to be more abundant on the east side of the Boothia Peninsula as opposed to the west side.

1 In each case it was the first bowhead captured in a generation (Nunatsiaq Online September 07, 2012, Nunatsiaq Online September 26, 2013). Hunters counted 25 to 30 bowhead in the bay while hunting in 2013, describing many of them as too large to be hunted. (Nunatsiaq Online September 26, 2013).

- Clams were noted to be more abundant near and on shore between Oscar and Josephine bays.

- Amphipods were noted to be abundant everywhere.

Birds

- Interviewees remarked on the increasing abundance of geese over the years and an increase in the abundance and diversity of birds in general near their community.

- The Canada Goose was noted to have appeared in the area in 1990.

- Some birds are smaller and less healthy than they used to be. Wetlands are not as clean as they used to be. The decrease in size and health of the species in question may have to do with pollution.

- Two interviewees indicated that new species of birds have been observed in the last five to six years. One specified that new species of ducks, geese and other birds were arriving in the area surrounding Taloyoak.

- Birds near the town are not as numerous as they used to be and appear to be sick.

CHANGES UNDERWAY

- One interviewee expressed concerns about water and air pollution and its effects on the animals and the people who consume them.

- Water was noted to not be as good as it used to be. No significant effects were noted to date but the interviewee was concerned about the future.

- Food security was noted to be a concern for one interviewee as food prices were too high.

- Climate change was noticeable to one interviewee as in the last five years unstable ice conditions, ponds drying up (2010), little snow (winter 2013/2014), and unpredictable weather have been observed. The same interviewee noted that rare wind patterns have been observed such as higher clouds moving in opposite direction than lower clouds. Char were also observed gathering in a deep hole in Spence Bay during the summer which was considered unusual.

- One participant noted that little snow in 2013/2014 resulted in a shortage of country foods. A lack of food in the community freezer appeared to confirm this.

- One interviewee did not note any changes specifically but indicated that there have been cooler springs and summers and warmer winters recently.

- A change of the Narwhal and Beluga migration routes: these species are now moving towards Cambridge Bay rather than following the coast of the Boothia Peninsula. The interviewee believed the change is connected to the recent installation of sonic devices in Pasley Bay and Oscar Bay. The interviewee believed the change may be due to the sounds or vibrations emitted by these devices.

- One interviewee expressed concern for future generations once the snow no longer comes. While he understands the need for jobs in his community; he was concerned with the effects of mining on the environment and his community.

- Polar Bear hunting restrictions were regarded by two participants as unfair to hunters which seems to be resulting in an increase in the abundance of bears. Tagging programs for scientific purposes may be having a negative impact on the animals' health and abundance.

- Birds were noted to arrive in their territory skinnier than they used to be in the past. This may be the result of pollution or poor food sources in the south. Concerns were raised about air traffic/ bird collisions, partially as a result of the airport being too close to the garbage dump.

ECONOMIC DEVELOPMENT

- Interviewees listed valued existing infrastructure such as:

  - the community freezer;
  - the new dock (2013) for the barge; and
  - locally owned boats.

- Interviewees listed commercial fishing, whaling (Beluga and Narwhal), and caribou hunting as potential sources of income either in the form of guided hunting expeditions or supplying meat for the commercial market.

- Several interviewees believe there is great opportunity for eco-tourism as the land is rich in birds (particularly around Lady Melville and Netsilik lakes), bears, whales and other wildlife. One interviewee has been considering creating an outpost camp.

- There are tourism opportunities for bird photography south west of Lady Melville and Netsilik lakes.

- As part of encouraging economic development in the future, one interviewee suggested creating an outpost camp in order to teach youth to hunt and travel on the land.

- Netsilik and Lord Lindsay lakes were identified as having enough fish to sustain a commercial harvest, with the latter currently being used for subsistence fishing by the HTO.

- Lord Lindsay Lake, Thom Bay and Lord Mayor Bay were identified as regions with enough Arctic Char to support a fishery.

- Netsilik Lake, Lord Lindsay Lake and Murchison River were identified as supporting abundant populations of fish in general, enough to support a commercial harvest.

- Interviewees identified the need for:

  - a structure which would provide a suitable space to process and dry fish, process seal skins, smoke and dry country meat;
  - a tannery to process seal skins;
  - a workshop in which sleds could be built and maintained;
  - a community owned fishing vessel approximately 30 feet in length, like the one currently in Gjoa Haven;
  - safe anchorage in the bay near town for larger vessels which cannot tie to the dock; and
  - a second, or larger community freezer.

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.

Generally, maps comprise groupings of several species or a single species as reported in multiple interviews. Species and interviews are normally color-coded and locations are labeled with a number. The first number in the label refers to a specific interview while the second is a location identifier. These labels can be used to look-up relevant information in the table associated with each map.

Table 1. Guide to map codes

CATEGORY	MAP CODE
Present {2005 and later}	Appended with 'P'
Historic {2004 and before}	Appended with an 'H'
Everywhere (seen all over/no specific place/only where they go)	Appended with a lower case 'e'
High Abundance	Appended with an 'A'
Migration (use arrows to indicate direction)	Appended with an 'M'
Spawning / Nesting / Denning / Calving / Pupping areas	Appended with an 'S'
Nursery Area	Appended with an 'N'
Significant Area of High Diversity	SADP
Significant Unique Area	SAUP
Significant Area for Other Reason	SAOP
Other	OTH
Area Known Best (area most familiar with or a travel route)	AKB
Camp / Cabin (typically modern)	CAMP
Camp / Cabin (typically modern)	CAMP

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.

Figure 4. Historic and current camp sites, cabins and grave sites

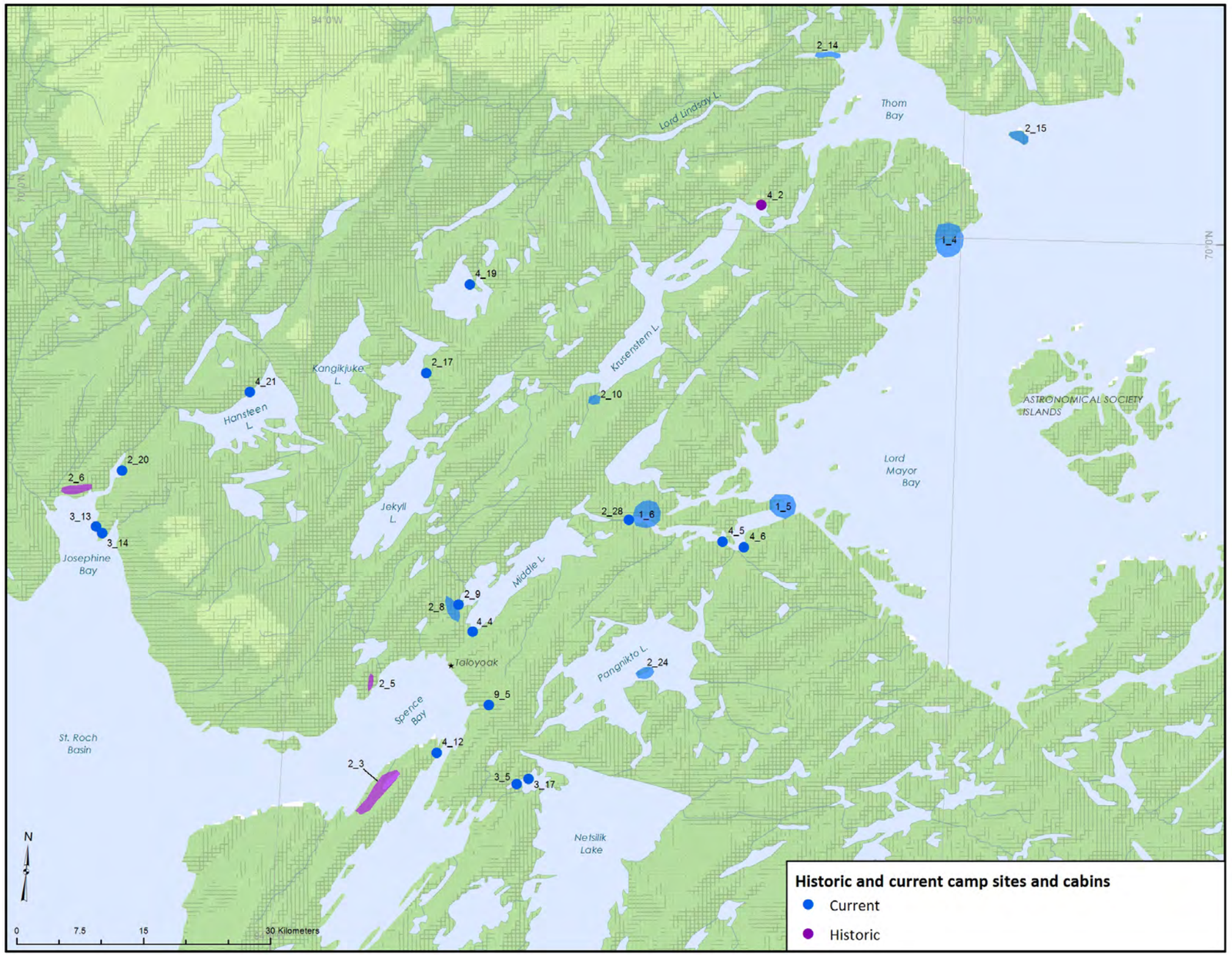


Table 2. Historic and current camp sites, cabins and grave sites

MAP CODE	INTERVIEW CODE	CATEGORY	MONTHS	COMMENTS
1_4	Tayk_1_0314	camp site	-	-
1_5	Tayk_1_0314	camp site	-	used mainly for sealing
1_6	Tayk_1_0314	camp site	-	used mainly for Char fishing
2_3H	Tayk_2_0314	camp site	-	tent rings; historic camp site
2_4H	Tayk_2_0314	grave site	-	-
2_5H	Tayk_2_0314	camp site	-	used by grandfather
2_6H	Tayk_2_0314	camp site	-	tent rings; historic camp site
2_8	Tayk_2_0314	camp site	-	-
2_9	Tayk_2_0314	cabin	-	cabin
2_10	Tayk_2_0314	cabin	-	currently used; two cabins
2_14	Tayk_2_0314	camp site	-	used for hunting seal
2_15	Tayk_2_0314	camp site	-	used for hunting seal
2_17	Tayk_2_0314	camp site	-	used for fishing for Lake Trout
2_20	Tayk_2_0314	camp site	-	fishing camp
2_24	Tayk_2_0314	camp site	May	Spring camp: area is a good source of goose eggs
2_28	Tayk_2_0314	cabin	year-round	cabins
3_2	Tayk_3_0314	grave site	-	-
3_3	Tayk_3_0314	grave site	-	-
3_5	Tayk_3_0314	camp site	summer	near the river; used primarily in the summer
3_8	Tayk_3_0314	cabin	summer	Pasley Bay; cabins
3_9	Tayk_3_0314	cabin	summer	Abernethy Bay; cabins
3_12	Tayk_3_0314	cabin	summer	Oscar Bay; cabins
3_13	Tayk_3_0314	cabin	summer	Josephine Bay; cabin
3_14	Tayk_3_0314	cabin	summer	Josephine Bay; cabin
3_17	Tayk_3_0314	camp site	summer	hunts mostly around Netsilik Lake for fish, caribou, fox, wolverine and polar bear
4_2H	Tayk_4_0314	camp site	May, early June	spring sealing camp
4_4	Tayk_4_0314	cabin	July through September	cabin at Middle Lake with boat
4_5	Tayk_4_0314	camp site	summer	on points of land
4_6	Tayk_4_0314	camp site	summer	for sealing (Ring, Harp and Bearded seals); broken ice in the area all summer long
4_12	Tayk_4_0314	camp site	summer	favoured spot for camp
4_15	Tayk_4_0314	camp site	May	for hunter/guide training (mid-May)
4_19	Tayk_4_0314	camp site	April	uses this site frequently
4_21	Tayk_4_0314	camp site	May	late May
7_4	Tayk_7_0314	grave site	-	grave in which a small boy and his toys were buried
9_1	Tayk_9_0314	camp site	-	-
9_5	Tayk_9_0314	cabin	spring, summer	cabin built 1.5 years ago; uses it from May/ June all summer

Figure 5. Historic and current travel routes and travel obstacles

Table 3. Historic and current travel routes and travel obstacles

MAP CODE	INTERVIEW CODE	CATEGORY	MONTHS	COMMENTS
1_8	Tayk_1_0314	travel route	-	used mainly for hunting bear
1_9	Tayk_1_0314	travel route	-	used mainly for hunting bear, short cut to travel route 1_8
1_10	Tayk_1_0314	travel route	-	used mainly for hunting caribou and muskox
1_11	Tayk_1_0314	travel route	-	used mainly for hunting caribou and muskox
1_12H	Tayk_1_0314	travel route	-	used mainly for hunting caribou
1_13	Tayk_1_0314	travel route	summer	still an active route occasionally for hunting caribou and beluga
1_14H	Tayk_1_0314	travel route	-	to Henry Larson's crews' grave
1_16	Tayk_1_0314	travel route	winter	used mainly for fishing in the winter
1_17H	Tayk_1_0314	travel route	summer	summer travel route for hunting caribou
1_18	Tayk_1_0314	travel route	summer	summer travel route for hunting bearded seal
1_19	Tayk_1_0314	travel route	winter	winter travel route for hunting bearded seal
1_20	Tayk_1_0314	travel route	winter	used mainly for bear hunting
1_21	Tayk_1_0314	travel route	winter	used mainly for fishing in the winter
1_22	Tayk_1_0314	travel route	winter	used mainly for fishing in the winter
2_13	Tayk_2_0314	travel route	-	used for hunting seal when young
2_16	Tayk_2_0314	travel route	-	used for fishing for Lake Trout
2_18	Tayk_2_0314	travel route	-	frequented with parents for hunting muskox, seal, caribou and fishing Char
2_21	Tayk_2_0314	travel route	winter	winter travel route
2_22	Tayk_2_0314	travel obstacle	-	impassable crack in the ice between April and June, has been there for years
2_23	Tayk_2_0314	travel route	May	spring travel route
2_25	Tayk_2_0314	travel route	October, November	Fall travel route to Lord Lindsay Lake
2_26	Tayk_2_0314	travel route	October, November	fall travel route to set nets for Char
2_27	Tayk_2_0314	travel route	year-round	year-round travel route for fishing
2_29	Tayk_2_0314	travel obstacle	-	hunter has been swallowed whole by a large fish. story is a warning to stay away from this area.
3_18	Tayk_3_0314	travel route	summer	-
3_19	Tayk_3_0314	travel route	winter	-
3_20	Tayk_3_0314	travel route	August and September	-

MAP CODE	INTERVIEW CODE	CATEGORY	MONTHS	COMMENTS
3_21	Tayk_3_0314	travel route	summer and winter	over land route via snowmobile/ATV in the winter and summer to cabin at Netsilik Lake (3_5)
3_22	Tayk_3_0314	travel route	summer	route via river to cabin at Netsilik Lake (3_5)
4_1H	Tayk_4_0314	travel route	May, early June	spring travel route
4_3H	Tayk_4_0314	travel route	May, early June	spring travel route; not done since 1998
4_7	Tayk_4_0314	travel route	summer	for sealing (Ring, Harp and Bearded seals)
4_8	Tayk_4_0314	travel route	summer	not used much anymore due to unpredictable ice conditions; for sealing (Ring, Harp and Bearded seals)
4_9	Tayk_4_0314	travel route	summer	route to access good berry picking area; this route is an alternate route when the eastern routes are unfavourable
4_10	Tayk_4_0314	travel route	summer	good berry picking and Char fishing
4_13	Tayk_4_0314	travel route	summer	sealing day trips
4_14	Tayk_4_0314	travel route	-	for hunter/guide training
4_17	Tayk_4_0314	travel route	May	fishing at Lady Melville lake via snowmobile; mid-May
4_18	Tayk_4_0314	travel route	April	frequent travel route for fishing and muskox hunting towards Lord Lindsay Lake
4_20	Tayk_4_0314	travel route	May	to fishing derby site where giant trout can be found
4_22	Tayk_4_0314	travel route	May	fishing location; late May
4_23	Tayk_4_0314	travel route	June through August	fishing; uses this route regularly/frequently
4_28	Tayk_4_0314	travel route	-	-
5_1	Tayk_5_0314	travel route	May	Polar Bear survey; sealing and hunting along the way; no permanent camp locations
5_2	Tayk_5_0314	travel route	August	whale hunting in mid-August
5_3	Tayk_5_0314	travel route	May	by snowmobile in May, Char fishing
5_4	Tayk_5_0314	travel route	May	by snowmobile to Matee Island
5_5	Tayk_5_0314	travel route	May	by snowmobile
5_6	Tayk_5_0314	travel route	May	by snowmobile
5_7	Tayk_5_0314	travel route	April, May	by snowmobile
5_8	Tayk_5_0314	travel route	June, July	by boat
5_9	Tayk_5_0314	travel route	May	by snowmobile
5_10	Tayk_5_0314	travel route	May	by snowmobile
5_11	Tayk_5_0314	travel route	April, May	by snowmobile
5_12	Tayk_5_0314	travel route	April, May	by snowmobile
5_13	Tayk_5_0314	travel route	April, May	by snowmobile
5_14	Tayk_5_0314	travel route	December, March to August	-
5_15	Tayk_5_0314	travel route	April, May	by snowmobile; Thom Bay
5_16	Tayk_5_0314	travel route	March, April, May	by snowmobile
5_17	Tayk_5_0314	travel route	March, April, May	by snowmobile
6_4	Tayk_6_0314	travel route	May, June	sealing route by dog sled team
6_5	Tayk_6_0314	travel route	March, April	polar bear hunting; has only done the trip once in the last few years
7_16	Tayk_7_0314	travel route	summer and fall	travel route for hunting seal in the warm season
7_18	Tayk_7_0314	travel route	winter	Polar Bear hunting from November to May
7_19	Tayk_7_0314	travel route	January through April	travel route for fishing by snowmobile; does the full circuit; come may he sticks close to the community or goes seal hunting
7_20	Tayk_7_0314	travel route	spring and fall	travel route for Char fishing
7_21	Tayk_7_0314	travel route	spring	spring Char fishing travel route
7_22	Tayk_7_0314	travel route	May	travel route to Josephine Bay for Char harvest
7_23	Tayk_7_0314	travel route	-	travel route to small lake for Char harvest
9_7	Tayk_9_0314	travel route	year-round	travel route for sealing, used regularly and year-round
9_8	Tayk_9_0314	travel route	-	travel route for sealing
9_9	Tayk_9_0314	travel route	summer and winter	travel route for sealing
9_10	Tayk_9_0314	travel route	winter	captured muskox
9_11	Tayk_9_0314	travel route	spring	travel route to 9_5
9_12	Tayk_9_0314	travel route	summer	travel route to 9_5 by boat
9_13	Tayk_9_0314	travel route	-	travel route by ATV to camp
9_17	Tayk_9_0314	travel route	March	travel route to muskox hunting area; travel over the ice in March
9_18	Tayk_9_0314	travel route	June, July, August	travel route for hunting beluga and narwhal; open water route
9_19	Tayk_9_0314	travel route	winter	travel route to location for Char gillnetting

Figure 6. Special places and areas important for other reasons

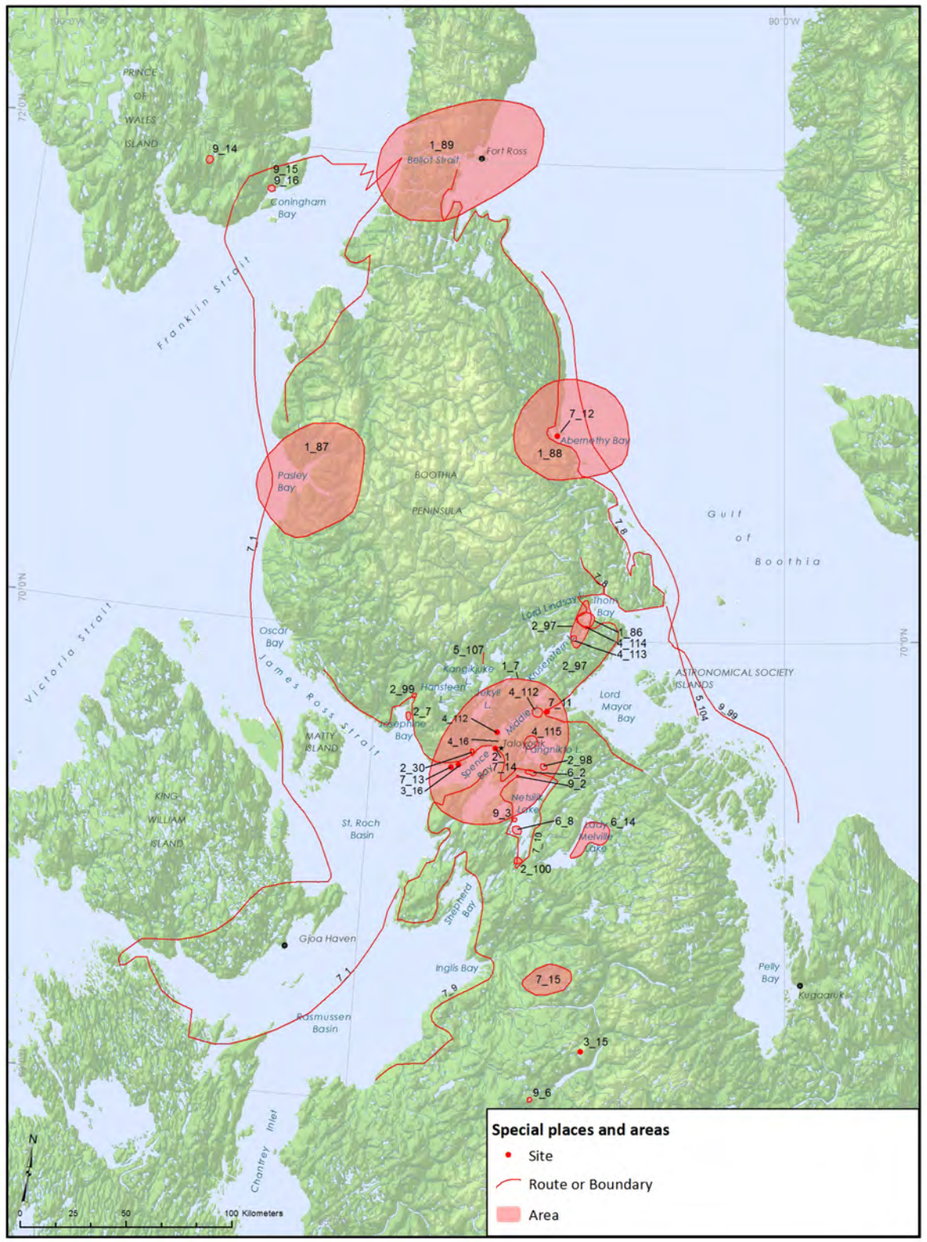


Table 4. Special places and areas important for other reasons

MAP CODE	INTERVIEW CODE	CATEGORY	MONTHS	COMMENTS
1_1	Tayk_1_0314	special places	-	sod house; Thom Bay
1_2	Tayk_1_0314	special places	-	rock house
1_7	Tayk_1_0314	special places	-	general hunting area
1_15	Tayk_1_0314	special places	-	grave site for Henry Larson's crew (1930s or 1940s). The site is still intact, having gone through some modifications by the RCMP in the 1970s
1_86	Tayk_1_0314	other reason	July, August, September	waterfall
1_87	Tayk_1_0314	other reason	July, August, September	waterfall, beautiful; Pasley Bay
1_88	Tayk_1_0314	other reason	July, August, September	Abernethy Bay - beautiful
1_89	Tayk_1_0314	other reason	July, August, September	Bellot Strait - beautiful
2_1H	Tayk_2_0314	special places	-	food cache built by the RCMP
2_2H	Tayk_2_0314	special places	-	rock house and church. church is made of wood
2_7H	Tayk_2_0314	special places	-	Point of interest- ship wreck: Interviewees explain that each time locals attempt to show outsiders the wreck they are unable to find it.
2_30	Tayk_2_0314	other reason	-	area surrounding camp; area known best
2_31	Tayk_2_0314	special places	-	area surrounding camp; area known best
2_97	Tayk_2_0314	other reason	-	rugged hills, scenic
2_98	Tayk_2_0314	other reason	-	waterfall
2_99	Tayk_2_0314	other reason	-	waterfall
2_100	Tayk_2_0314	other reason	-	waterfall
3_1	Tayk_3_0314	special places	-	rock house, damaged, near/above the river by half a mile or so
3_11	Tayk_3_0314	special places	-	Church at Thom Bay
3_15	Tayk_3_0314	special places	-	soapstone
3_16	Tayk_3_0314	special places	-	soapstone
4_16	Tayk_4_0314	special places	-	rock shelter; fox trap or cache; at 4_4
4_112	Tayk_4_0314	special places	-	river remains open year-round
4_113	Tayk_4_0314	other reason	-	waterfall
4_114	Tayk_4_0314	other reason	-	waterfall
4_115	Tayk_4_0314	other reason	-	abundance of berries; scenic

MAP CODE	INTERVIEW CODE	CATEGORY	MONTHS	COMMENTS
5_104	Tayk_5_0314	special places	year-round	floe edge which remains open much of the year, freezing over only temporarily
5_106	Tayk_5_0314	other reason	-	waterfall
5_107	Tayk_5_0314	other reason	-	waterfall
6_1	Tayk_6_0314	special places	-	stone house at Netsilik River
6_2	Tayk_6_0314	special places	-	unusual red rock which cannot be touched without inflicting pain or a curse of some kind.
6_3	Tayk_6_0314	special places	-	soapstone .quarried by people from both Taloyoak and Gjoa Haven; accessed via Murchison River or along a creek which empties into Rasmussen Bay, it is near a round lake
6_8H	Tayk_6_0314	special places	-	area was popular for fishing historically
6_14	Tayk_6_0314	special places	-	huge man eating fish in Lady Melville Lake, warning to stay away from the center
7_1	Tayk_7_0314	special places	-	marks hunting boundary (past and present)
7_2	Tayk_7_0314	special places	-	rock house at Thom Lake; many additional rock and sod houses
7_3	Tayk_7_0314	special places	-	rock house
7_5	Tayk_7_0314	special places	-	rock house
7_6	Tayk_7_0314	special places	-	fox trap made of stones/rock
7_7	Tayk_7_0314	special places	-	tent rings can be found all along the shoreline up to Cape Victoria and Fort Ross
7_8	Tayk_7_0314	special places	-	tent rings can be found all along the shoreline up to Cape Victoria and Fort Ross
7_9	Tayk_7_0314	special places	-	tent rings can be found all along the shoreline
7_10	Tayk_7_0314	special places	-	tent rings can be found all along the shoreline
7_11	Tayk_7_0314	special places	-	soapstone quarry
7_12	Tayk_7_0314	special places	-	source of red soapstone
7_13	Tayk_7_0314	special places	-	source of hard soapstone
7_14	Tayk_7_0314	special places	-	source of hard soapstone
7_15	Tayk_7_0314	special places	-	soapstone quarry
9_2	Tayk_9_0314	special places	spring	spring fishing
9_3	Tayk_9_0314	special places	summer	summer fishing
9_4	Tayk_9_0314	special places	-	rock house
9_6	Tayk_9_0314	special places	-	soapstone quarry has been there since his early teens >50 years ago
9_14	Tayk_9_0314	special places	-	muskox hunting area
9_15	Tayk_9_0314	special places	-	hunting area for beluga; Coningham Bay
9_16	Tayk_9_0314	special places	-	hunting area for narwhal; Coningham Bay
9_99	Tayk_9_0314	special places	winter	location of floe edge beyond which is open water throughout the winter; bearded seal overwinter there

Figure 7. Areas with significant diversity

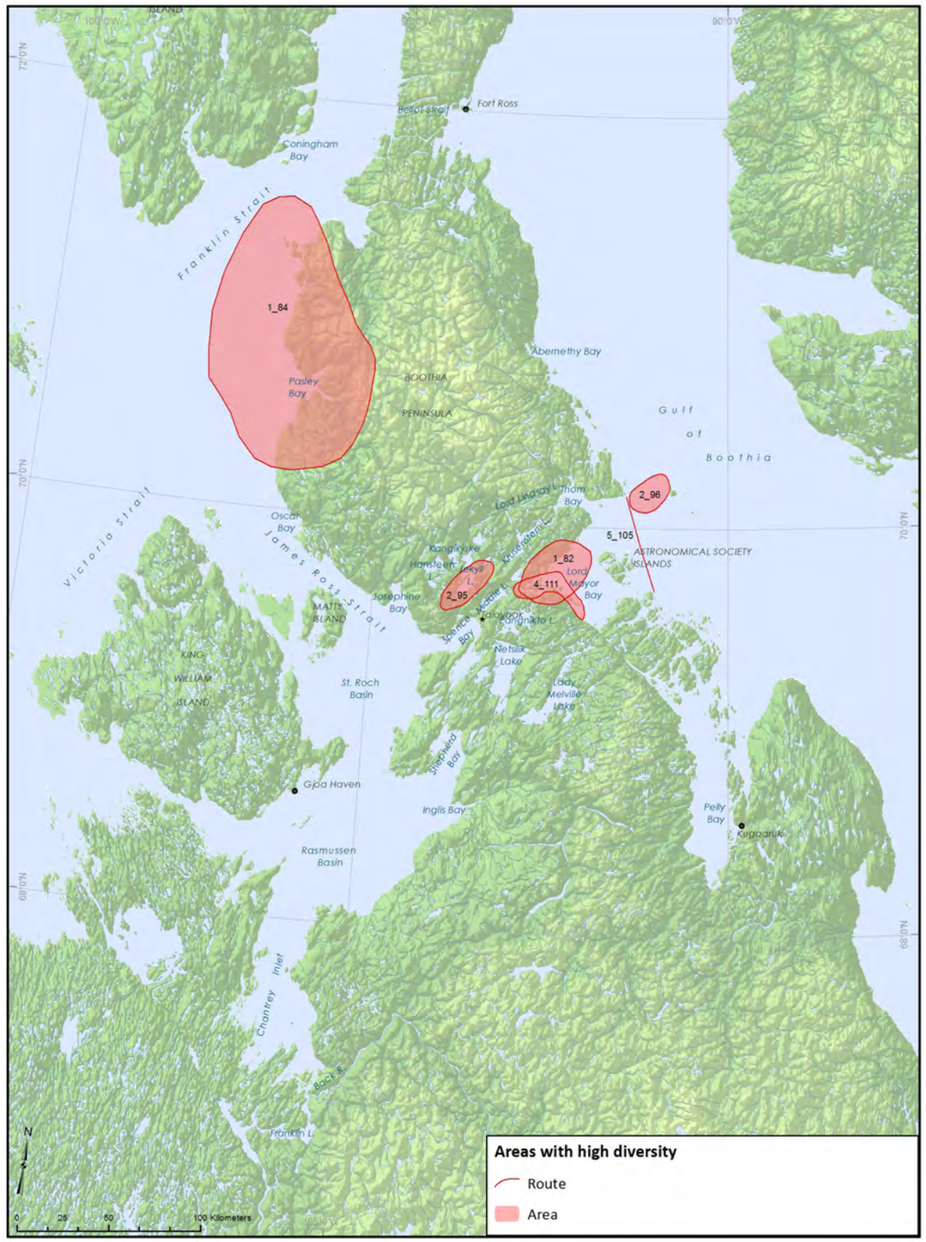


Table 5. Areas with significant diversity

MAP CODE	INTERVIEW CODE	CATEGORY	MONTHS	COMMENTS
1_82	Tayk_1_0314	diversity	-	ducks, seals, fish, bears, caribou, whale
1_84	Tayk_1_0314	diversity	-	ducks, seals, fish, bears, caribou, whale (not as good as at 1_82)
2_95	Tayk_2_0314	diversity	April to June	Many species, also lemmings weasels, foxes, wolves, birds
2_96	Tayk_2_0314	diversity	winter	King Eiders overwinter in this open area
4_111	Tayk_4_0314	diversity	-	Lord Mayor Bay
5_105	Tayk_5_0314	diversity	year-round	relatively high diversity along the floe edge

Figure 8. Sea-run Arctic Char probability of occurrence

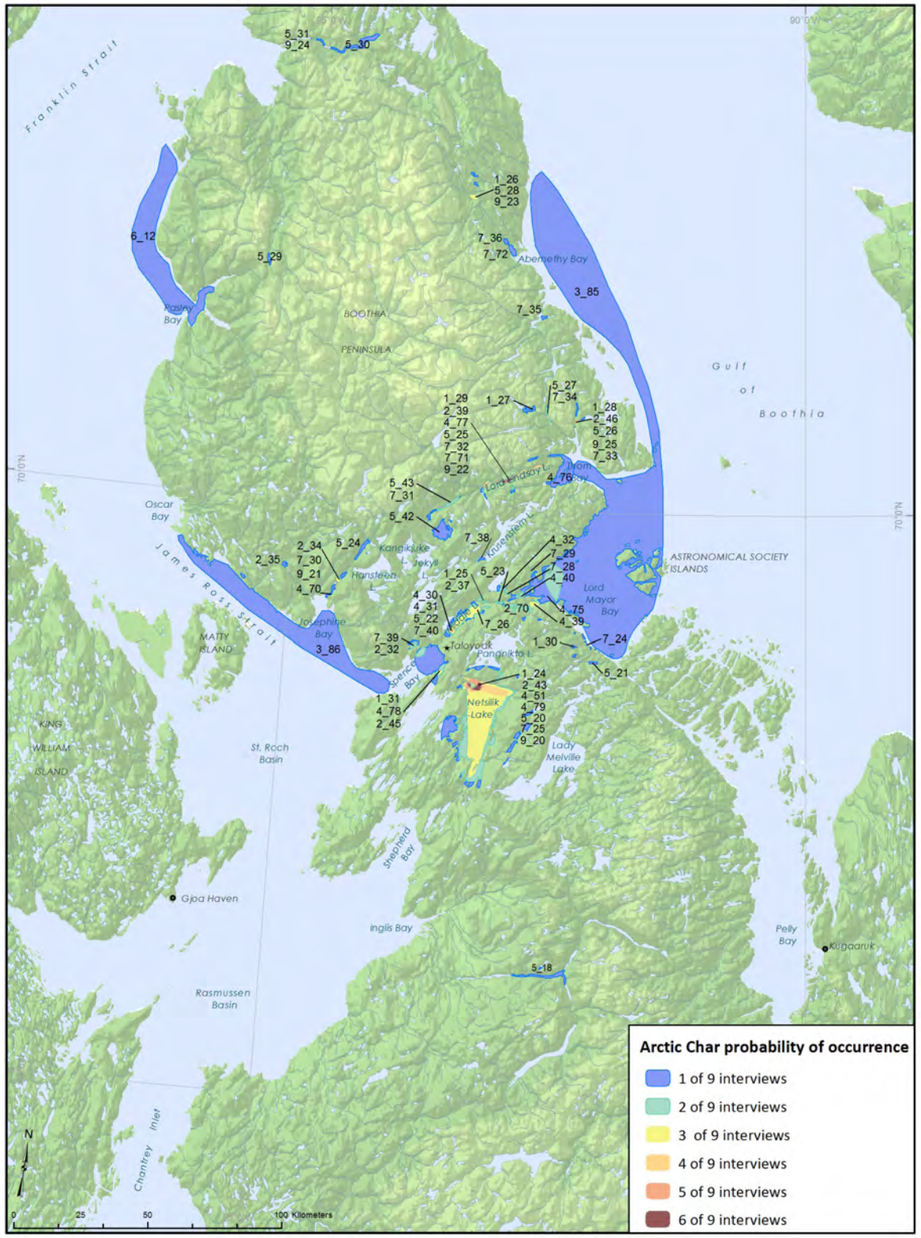


Table 6a. Sea-run Arctic Char areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_24N,A	Tayk_1_0314	Arctic Char (Sea Run)	year-round	abundant
1_25N	Tayk_1_0314	Arctic Char (Sea Run)	year-round	-
1_26	Tayk_1_0314	Arctic Char (Sea Run)	year-round	-
1_27	Tayk_1_0314	Arctic Char (Sea Run)	year-round	-
1_28	Tayk_1_0314	Arctic Char (Sea Run)	year-round	-
1_29A	Tayk_1_0314	Arctic Char (Sea Run)	year-round	Char are abundant
1_30	Tayk_1_0314	Arctic Char (Sea Run)	year-round	-
1_31	Tayk_1_0314	Arctic Char (Sea Run)	July, August, September	-
2_32	Tayk_2_0314	Arctic Char (Sea Run)	-	lake
2_34A	Tayk_2_0314	Arctic Char (Sea Run)	-	few people go to this location anymore
2_35	Tayk_2_0314	Arctic Char (Sea Run)	-	lake
2_37	Tayk_2_0314	Arctic Char (Sea Run)	-	two lakes
2_39AS	Tayk_2_0314	Arctic Char (Sea Run)	-	lake
2_43A	Tayk_2_0314	Arctic Char (Sea Run)	-	lake
2_45	Tayk_2_0314	Arctic Char (Sea Run)	fall	fall fishing; many gill nets set for Char; Char seem to travel around the bay
2_46	Tayk_2_0314	Arctic Char (Sea Run)	-	fall fishing
2_70A	Tayk_2_0314	Arctic Char (Sea Run)	-	-
3_85A	Tayk_3_0314	Arctic Char (Sea Run)	-	more abundant on the east side fo the Boothia Peninsula than on the west
3_86	Tayk_3_0314	Arctic Char (Sea Run)	-	more abundant on the east side fo the Boothia Peninsula than on the west
4_30A	Tayk_4_0314	Arctic Char (Sea Run)	-	-
4_31	Tayk_4_0314	Arctic Char (Sea Run)	-	-
4_32	Tayk_4_0314	Arctic Char (Sea Run)	-	-
4_36A	Tayk_4_0314	Arctic Char (Sea Run)	-	gillnetting
4_39A	Tayk_4_0314	Arctic Char (Sea Run)	-	coastal
4_40A	Tayk_4_0314	Arctic Char (Sea Run)	-	coastal
4_51	Tayk_4_0314	Arctic Char (Sea Run)	-	lake
4_70A	Tayk_4_0314	Arctic Char (Sea Run)	-	fish weirs set up to capture fish from this river at Josephine Bay as they move both upstream and downstream; mix of sea run char and "redfish"
4_75A	Tayk_4_0314	Arctic Char (Sea Run)	-	enough Char present to use commercially

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
4_75A	Tayk_4_0314	Arctic Char (Sea Run)	-	enough Char present to use commercially
4_76A	Tayk_4_0314	Arctic Char (Sea Run)	-	enough Char present to use commercially
4_77A	Tayk_4_0314	Arctic Char (Sea Run)	-	enough Char present to use commercially
4_78A	Tayk_4_0314	Arctic Char (Sea Run)	-	enough Char present to use commercially
4_79A	Tayk_4_0314	Arctic Char (Sea Run)	-	enough Char present to use commercially
5_18	Tayk_5_0314	Arctic Char (Sea Run)	-	-
5_20	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_21	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_22	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_23	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_24	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_25	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_26	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_27	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_28	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_29	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_30	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_31	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_42S	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_43S	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
6_12	Tayk_6_0314	Arctic Char (Sea Run)	-	Char are only in the river emptying into Pasley Bay and the coastal region of Pasley Bay
7_24	Tayk_7_0314	Arctic Char (Sea Run)	-	-
7_25	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_26	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_28	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_29	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_30	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_31A	Tayk_7_0314	Arctic Char (Sea Run)	-	lake; south end of the lake when the river begins running
7_32A	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_33	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_34	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_35	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_36	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_38	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_39	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_40	Tayk_7_0314	Arctic Char (Sea Run)	-	lake
7_71A	Tayk_7_0314	Arctic Char (Sea Run)	spring	in the spring when the ice comes off
7_72A	Tayk_7_0314	Arctic Char (Sea Run)	-	-
9_20	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot
9_21	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot
9_22	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot
9_23A	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot
9_24	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot
9_25	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot

Table 6b. Sea-run Arctic Char everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_23e	Tayk_1_0314	Arctic Char (Sea Run)	July, August, September	-

Figure 9. Sea-run Arctic Char migratory paths and spawning areas

Table 7. Sea-run Arctic Char migratory paths and spawning areas

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_50S	Tayk_1_0314	Arctic Char (Sea Run)	-	-
1_51M	Tayk_1_0314	Arctic Char (Sea Run)	August, September	upstream movement late August, September
1_52M	Tayk_1_0314	Arctic Char (Sea Run)	July	downstream to the sea in July
1_53M	Tayk_1_0314	Arctic Char (Sea Run)	July	downstream to the sea in July
1_54M	Tayk_1_0314	Arctic Char (Sea Run)	July	downstream to the sea in July
1_55M	Tayk_1_0314	Arctic Char (Sea Run)	July	downstream to the sea in July
2_33M	Tayk_2_0314	Arctic Char (Sea Run)	-	to sea
2_36M	Tayk_2_0314	Arctic Char (Sea Run)	-	to sea
2_38S	Tayk_2_0314	Arctic Char (Sea Run)	-	river; spawning is dependent upon the conditions
2_40M	Tayk_2_0314	Arctic Char (Sea Run)	-	to sea
2_41S	Tayk_2_0314	Arctic Char (Sea Run)	August	river; late August
2_42S	Tayk_2_0314	Arctic Char (Sea Run)	-	river has been drying up the last couple of years
2_44M	Tayk_2_0314	Arctic Char (Sea Run)	-	to sea
3_78M	Tayk_3_0314	Arctic Char (Sea Run)	August, September	ocean bound in June, lake bound in August/September
3_79M	Tayk_3_0314	Arctic Char (Sea Run)	June, August/September	ocean bound in June, lake bound in August/September
3_80M	Tayk_3_0314	Arctic Char (Sea Run)	June, August/September	ocean bound in June, lake bound in August/September
3_81M	Tayk_3_0314	Arctic Char (Sea Run)	June, August/September	ocean bound in June, lake bound in August/September
3_82M	Tayk_3_0314	Arctic Char (Sea Run)	June, August/September	ocean bound in June, lake bound in August/September
3_83M	Tayk_3_0314	Arctic Char (Sea Run)	June, August/September	ocean bound in June, lake bound in August/September
3_84M	Tayk_3_0314	Arctic Char (Sea Run)	June, August/September	ocean bound in June, lake bound in August/September
4_29M	Tayk_4_0314	Arctic Char (Sea Run)	-	-
4_33M	Tayk_4_0314	Arctic Char (Sea Run)	-	-
4_37M	Tayk_4_0314	Arctic Char (Sea Run)	July	move upstream in July
4_52M	Tayk_4_0314	Arctic Char (Sea Run)	August, September	to sea (late August to early September)
4_74S	Tayk_4_0314	Arctic Char (Sea Run)	-	enough Char present to use commercially
5_19M	Tayk_5_0314	Arctic Char (Sea Run)	June/July, September	June, July (seaward); September (lakeward)
5_32M	Tayk_5_0314	Arctic Char (Sea Run)	June/July	seaward in late June, July
5_33M	Tayk_5_0314	Arctic Char (Sea Run)	June/July	seaward in late June, July
5_34M	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_35M	Tayk_5_0314	Arctic Char (Sea Run)	July, September	July (seaward); September (lakeward)
5_36M	Tayk_5_0314	Arctic Char (Sea Run)	July, September	July (seaward); September (lakeward)
5_37M	Tayk_5_0314	Arctic Char (Sea Run)	July, September	July (seaward); September (lakeward)

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
5_38M	Tayk_5_0314	Arctic Char (Sea Run)	July, September	July (seaward); September (lakeward)
5_39M	Tayk_5_0314	Arctic Char (Sea Run)	July, September	July (seaward); September (lakeward)
5_40M	Tayk_5_0314	Arctic Char (Sea Run)	July, September	July (seaward); September (lakeward)
5_41M	Tayk_5_0314	Arctic Char (Sea Run)	July, September	July (seaward); September (lakeward)
5_42S	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_43S	Tayk_5_0314	Arctic Char (Sea Run)	-	lake
5_44MS	Tayk_5_0314	Arctic Char (Sea Run)	September	spawn in September
5_45MS	Tayk_5_0314	Arctic Char (Sea Run)	September	spawn in September
6_13M	Tayk_6_0314	Arctic Char (Sea Run)	-	-
6_7M	Tayk_6_0314	Arctic Char (Sea Run)	-	-
7_27S	Tayk_7_0314	Arctic Char (Sea Run)	-	"redfish" observed in September
9_26S	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot
9_27S	Tayk_9_0314	Arctic Char (Sea Run)	-	regular char fishing spot

Figure 10. Land-locked Char probability of occurrence

Table 8a. Land-locked Char probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_32	Tayk_1_0314	Red Lake Trout (Land-Locked Char)	year-round	-
1_33	Tayk_1_0314	Red Lake Trout (Land-Locked Char)	year-round	-
1_34A	Tayk_1_0314	Red Lake Trout (Land-Locked Char)	year-round	north end of Netsilik Lake
2_63A	Tayk_2_0314	Red Lake Trout (Land-Locked Char)	-	lakes
2_65A	Tayk_2_0314	Red Lake Trout (Land-Locked Char)	-	lakes
2_67A	Tayk_2_0314	Red Lake Trout (Land-Locked Char)	-	lakes
4_42	Tayk_4_0314	Red Lake Trout (Land-Locked Char)	-	lake
4_45	Tayk_4_0314	Red Lake Trout (Land-Locked Char)	-	-
4_46	Tayk_4_0314	Red Lake Trout (Land-Locked Char)	-	lakes
4_48	Tayk_4_0314	Red Lake Trout (Land-Locked Char)	-	lakes
4_49	Tayk_4_0314	Red Lake Trout (Land-Locked Char)	-	collection of lakes
7_47	Tayk_7_0314	Red Lake Trout (Land-Locked Char)	-	lake
7_49	Tayk_7_0314	Red Lake Trout (Land-Locked Char)	-	Char larger here than in most other lakes

Table 8b. Land-locked Char everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_47e	Tayk_2_0314	Red Lake Trout (Land-Locked Char)	-	lakes
5_47e	Tayk_5_0314	Red Lake Trout (Land-Locked Char)	-	-
9_28e	Tayk_9_0314	Red Lake Trout (Land-Locked Char)	-	-

Figure 11. Lake Trout probability of occurrence

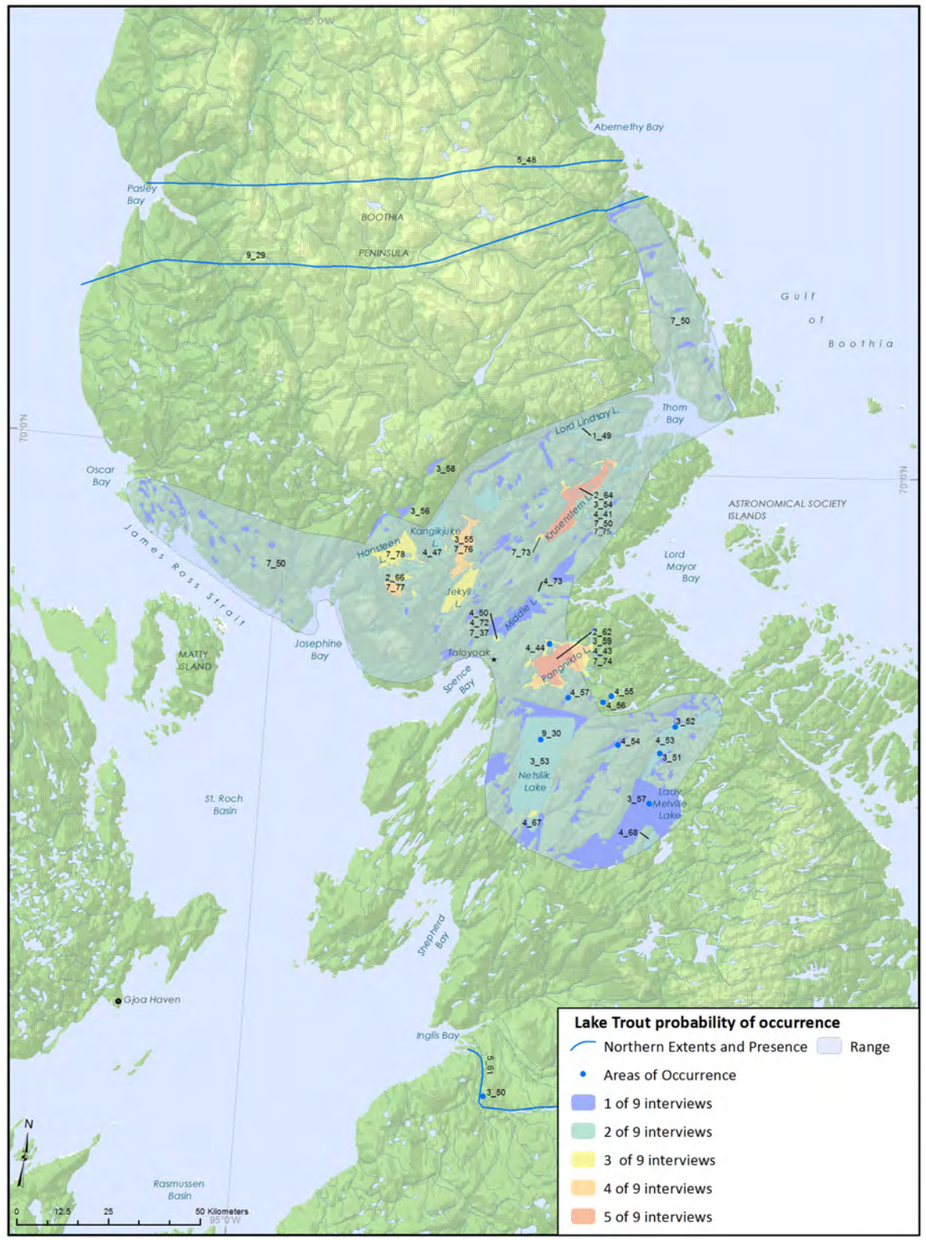


Table 9a. Lake Trout and Bull Trout probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_35u	Tayk_1_0314	Bull Trout	September	seen in the fall while gillnetting at Netsilik Lake (not shown on map)
1_49A	Tayk_1_0314	Lake Trout	-	Lake Trout and Char are abundant
2_62A	Tayk_2_0314	Lake Trout	-	lakes
2_64A	Tayk_2_0314	Lake Trout	-	lakes
2_66A	Tayk_2_0314	Lake Trout	-	lakes
3_48	Tayk_3_0314	Bull Trout	-	Franklin Lake (not shown on map)
3_49	Tayk_3_0314	Lake Trout	-	Franklin Lake and River (not shown on map)
3_50	Tayk_3_0314	Lake Trout	-	deep spot in the river
3_51	Tayk_3_0314	Lake Trout	-	-
3_52	Tayk_3_0314	Lake Trout	-	-
3_53	Tayk_3_0314	Lake Trout	-	Netsilik Lake
3_54	Tayk_3_0314	Lake Trout	-	-
3_55	Tayk_3_0314	Lake Trout	-	-
3_56	Tayk_3_0314	Lake Trout	-	-
3_57	Tayk_3_0314	Lake Trout	-	-
3_58	Tayk_3_0314	Lake Trout	-	-
3_59	Tayk_3_0314	Lake Trout	-	-
4_41	Tayk_4_0314	Lake Trout	-	lake
4_43	Tayk_4_0314	Lake Trout	-	-
4_44	Tayk_4_0314	Lake Trout	-	regular fishing location
4_47	Tayk_4_0314	Lake Trout	-	lakes
4_50	Tayk_4_0314	Lake Trout	-	collection of lakes
4_53	Tayk_4_0314	Lake Trout	-	lake
4_54	Tayk_4_0314	Lake Trout	-	lake
4_55	Tayk_4_0314	Lake Trout	-	lake
4_56	Tayk_4_0314	Lake Trout	-	lake
4_57	Tayk_4_0314	Lake Trout	-	lake
4_67A	Tayk_4_0314	Lake Trout	-	abundant
4_68A	Tayk_4_0314	Lake Trout	-	abundant
4_72S	Tayk_4_0314	Lake Trout	October	mid-October
4_73S	Tayk_4_0314	Lake Trout	October	mid-October

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
5_48	Tayk_5_0314	Lake Trout	-	northern limit of distribution
5_61	Tayk_5_0314	Lake Trout	-	river
7_37	Tayk_7_0314	Lake Trout	-	lake
7_50	Tayk_7_0314	Lake Trout	-	northern extent of Lake Trout
7_73	Tayk_7_0314	Lake Trout	-	abundant enough to potentially fish commercially, dried trout
7_74	Tayk_7_0314	Lake Trout	-	abundant enough to potentially fish commercially
7_75	Tayk_7_0314	Lake Trout	-	abundant enough to potentially fish commercially
7_76	Tayk_7_0314	Lake Trout	-	abundant enough to potentially fish commercially
7_77	Tayk_7_0314	Lake Trout	-	abundant enough to potentially fish commercially
7_78	Tayk_7_0314	Lake Trout	-	abundant enough to potentially fish commercially
9_29	Tayk_9_0314	Lake Trout	-	northern extent of lake trout distribution, only Char are found north of this line
9_30	Tayk_9_0314	Bull Trout	-	bull trout (Netsilik Lake and surrounding lakes) are more abundant SE of the Taloyoak area though they also occur to the NE

Table 9b. Lake Trout and Bull Trout everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_48e	Tayk_2_0314	Lake Trout	-	lakes
2_49e	Tayk_2_0314	Bull Trout	-	lakes
5_49e	Tayk_5_0314	Lake Trout	-	occur everywhere south of LT_5_48
9_31e	Tayk_9_0314	Lake Trout	-	south of 9_29, in large lakes

Figure 12. Whitefish probability of occurrence

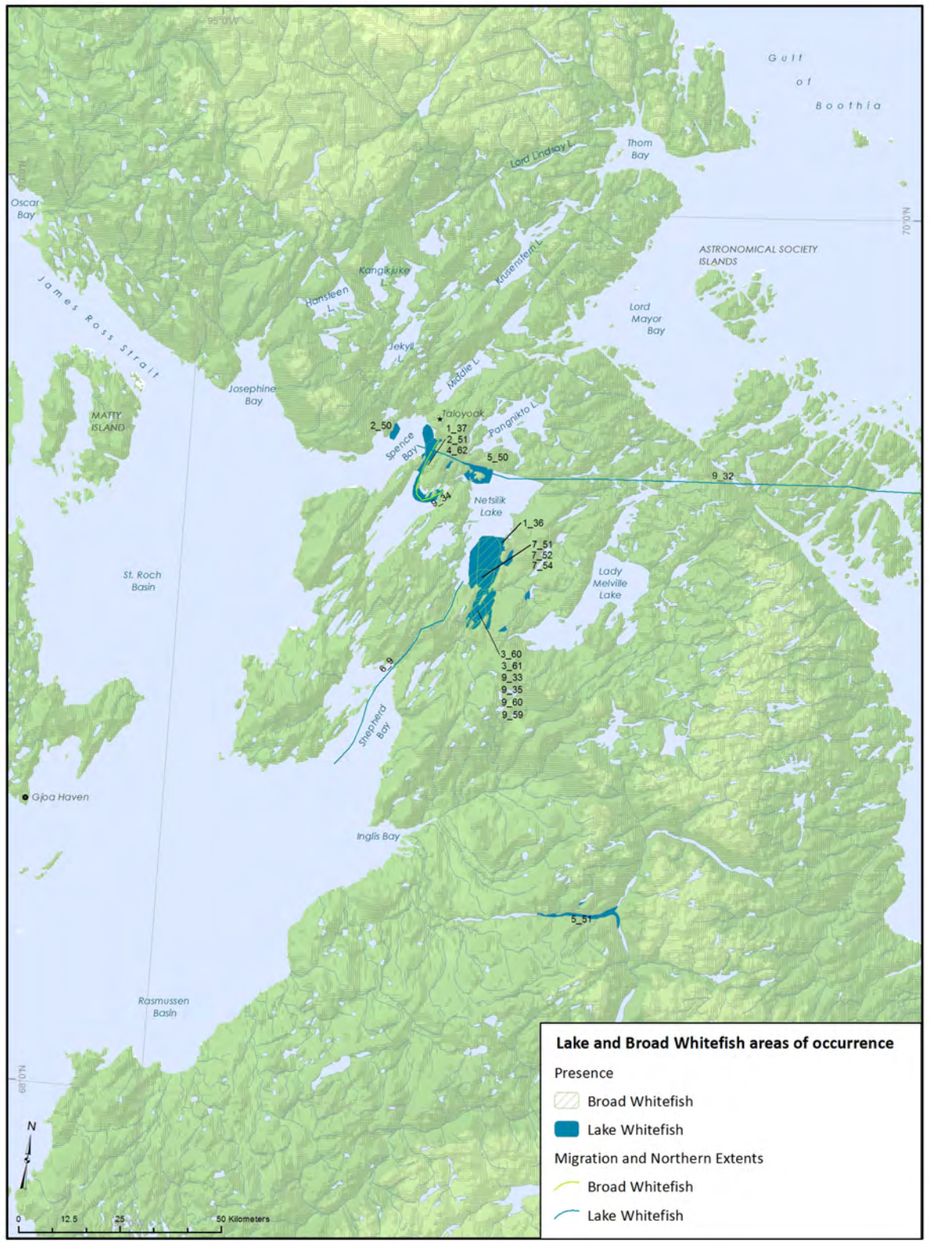


Table 10. Whitefish probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_36A	Tayk_1_0314	Lake Whitefish	September, October	abundant in Netsilik Lake
1_37	Tayk_1_0314	Lake Whitefish	September	-
1_38	Tayk_1_0314	Lake Whitefish	April	-
2_50	Tayk_2_0314	Lake Whitefish	August	nearshore by Redfish Lake; late August
2_51	Tayk_2_0314	Lake Whitefish	August	captured in the gill nets; late August
3_60A	Tayk_3_0314	Lake Whitefish	-	fishing location
3_61	Tayk_3_0314	Broad Whitefish	-	-
4_62	Tayk_4_0314	Lake Whitefish	-	lake; captured in gill nets
5_50	Tayk_5_0314	Lake Whitefish	-	lake
5_51	Tayk_5_0314	Lake Whitefish	-	lake
6_9	Tayk_6_0314	Lake Whitefish	-	Whitefish in Netsilik are very large, larger than elsewhere
7_51	Tayk_7_0314	Lake Whitefish	-	Netsilik Lake
7_52	Tayk_7_0314	Broad Whitefish	-	-
7_54	Tayk_7_0314	Broad Whitefish	-	-
9_32	Tayk_9_0314	Lake Whitefish	-	northern extent of lake whitefish distribution; otherwise occur in the same lakes as the lake trout
9_33S	Tayk_9_0314	Lake Whitefish	-	-
9_34	Tayk_9_0314	Broad Whitefish	-	-
9_35S	Tayk_9_0314	Broad Whitefish	-	-
9_59	Tayk_9_0314	Lake Whitefish	-	potential for commercial fishing
9_60	Tayk_9_0314	Broad Whitefish	-	potential for commercial fishing

Figure 13. Flatfish and Cod areas of occurrence

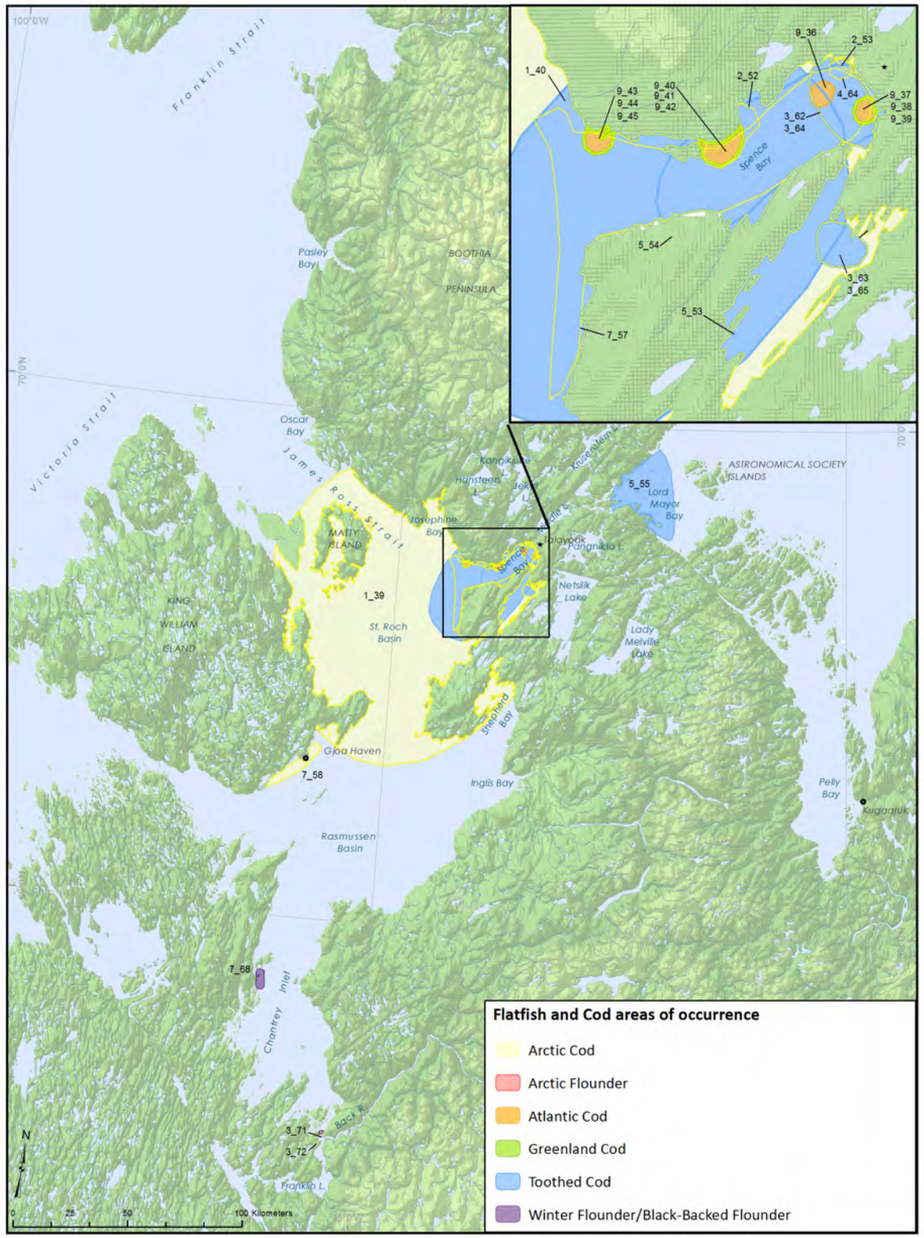


Table 11. Flatfish and Cod areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_39	Tayk_1_0314	Arctic Cod	year-round	not present on the Kugaaruk side of the peninsula
1_40	Tayk_1_0314	Toothed Cod	year-round	-
2_52A	Tayk_2_0314	Arctic Cod	May	seen mainly where there are cracks in the ice in the spring; late May
2_53A	Tayk_2_0314	Arctic Cod	May	spring; late May
3_62	Tayk_3_0314	Arctic Cod	-	fished summer and fall; location in which most people fish for cod
3_63	Tayk_3_0314	Arctic Cod	-	fished summer and fall
3_64	Tayk_3_0314	Toothed Cod	-	fished summer and fall
3_65	Tayk_3_0314	Toothed Cod	-	fished summer and fall
3_71	Tayk_3_0314	Winter Flounder/Black-Backed Flounder	-	-
3_72	Tayk_3_0314	Arctic Flounder	-	-
4_64	Tayk_4_0314	Arctic Cod	-	-
5_53	Tayk_5_0314	Arctic Cod	-	described as being dark in colour
5_54	Tayk_5_0314	Toothed Cod	-	described as being green in colour
5_55	Tayk_5_0314	Toothed Cod	-	-
5_62u	Tayk_5_0314	Flounder sp.	-	species of flounder
7_57	Tayk_7_0314	Arctic Cod	-	described as a smaller fish approximately 1 ft in length
7_58	Tayk_7_0314	Arctic Cod	-	described as a smaller fish approximately 1 ft in length; near Schwatka Bay, King William Island
7_68	Tayk_7_0314	Winter Flounder/Black-Backed Flounder	-	-
9_36	Tayk_9_0314	Atlantic Cod	-	captured by hook in the winter and summer
9_37	Tayk_9_0314	Atlantic Cod	-	-
9_38	Tayk_9_0314	Greenland Cod	-	captured by hook in the winter and summer
9_39	Tayk_9_0314	Arctic Cod	-	captured by hook in the winter and summer
9_40	Tayk_9_0314	Atlantic Cod	-	captured by hook in the winter and summer
9_41	Tayk_9_0314	Greenland Cod	-	captured by hook in the winter and summer
9_42	Tayk_9_0314	Arctic Cod	-	captured by hook in the winter and summer
9_43	Tayk_9_0314	Atlantic Cod	-	captured by hook in the winter and summer
9_44	Tayk_9_0314	Greenland Cod	-	captured by hook in the winter and summer
9_45	Tayk_9_0314	Arctic Cod	-	captured by hook in the winter and summer

Figure 14. Lumpfish and Snailfish areas of occurrence

Table 12. Lumpfish and Snailfish areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_45	Tayk_1_0314	Bartail Seasnail	year-round	in the sea
2_57	Tayk_2_0314	Leatherfin Lumpsucker	-	found dead in seal hole
7_65	Tayk_7_0314	Atlantic Spiny Lumpsucker	-	observed dead in a seal breathing hole

Figure 15. Sculpin areas of occurrence

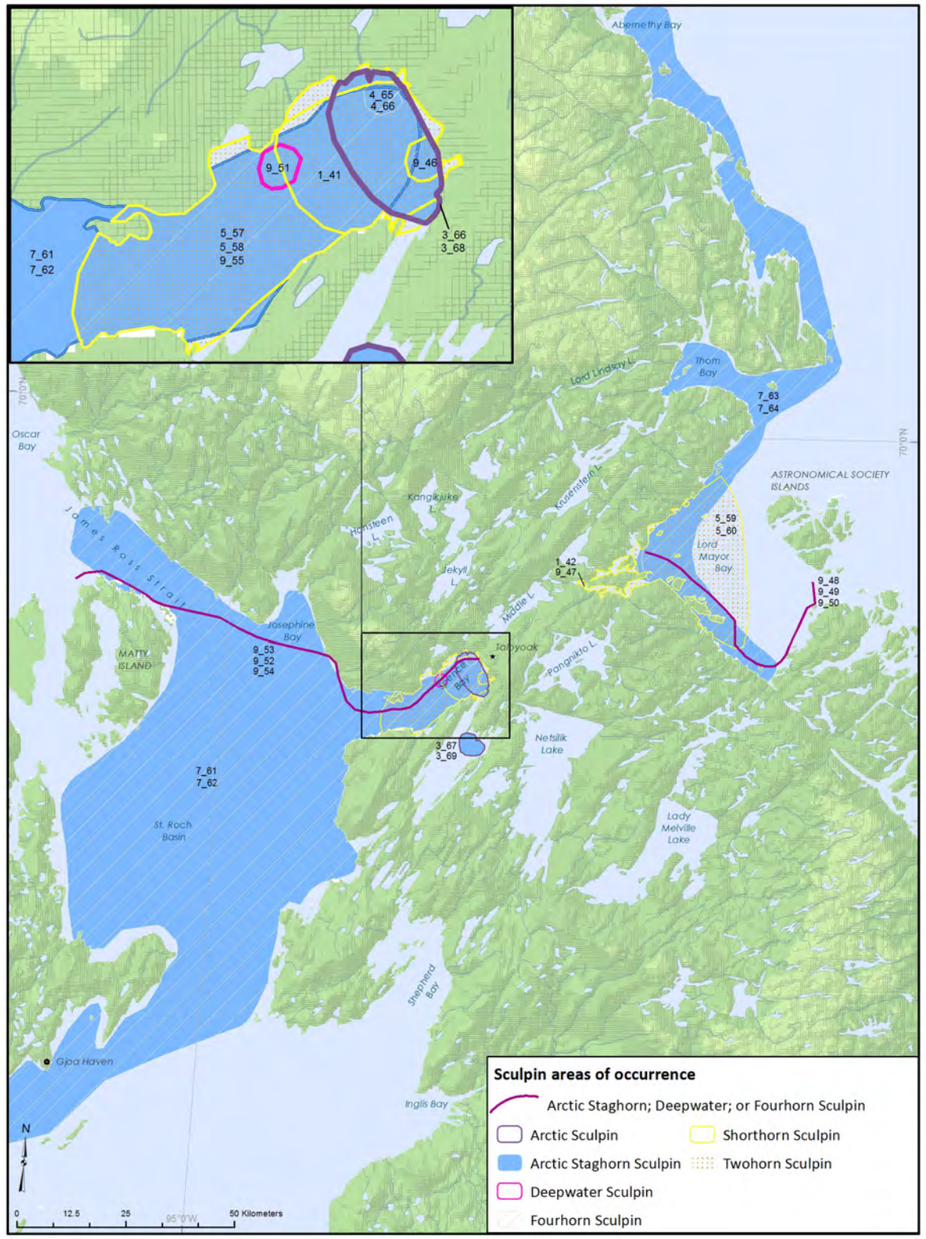


Table 13a. Sculpin areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_41	Tayk_1_0314	Shorthorn Sculpin	year-round	sculpin found in freshwater lakes
1_42	Tayk_1_0314	Shorthorn Sculpin	year-round	-
1_43u	Tayk_1_0314	Sculpin	year-round	in freshwater lake (Netsilik Lake); smaller than shorthorn sculpin
1_44u	Tayk_1_0314	Sculpin	year-round	in freshwater; Pangnikto Lake; smaller than shorthorn sculpin
3_66	Tayk_3_0314	Arctic Staghorn Sculpin	-	easily seen in summer
3_67	Tayk_3_0314	Arctic Staghorn Sculpin	-	easily seen in summer
3_68	Tayk_3_0314	Arctic Sculpin	-	easily seen in summer
3_69	Tayk_3_0314	Arctic Sculpin	-	easily seen in summer
4_65	Tayk_4_0314	Arctic Staghorn Sculpin	-	found in the intertidal zone
4_66	Tayk_4_0314	Fourhorn Sculpin	-	found in the intertidal zone
5_57	Tayk_5_0314	Shorthorn Sculpin	-	-
5_58	Tayk_5_0314	Twohorn Sculpin	-	-
5_59	Tayk_5_0314	Shorthorn Sculpin	-	-
5_60	Tayk_5_0314	Twohorn Sculpin	-	-
7_61	Tayk_7_0314	Arctic Staghorn Sculpin	-	-
7_62	Tayk_7_0314	Fourhorn Sculpin	-	-
7_63	Tayk_7_0314	Arctic Staghorn Sculpin	-	-
7_64	Tayk_7_0314	Fourhorn Sculpin	-	-
9_46	Tayk_9_0314	Shorthorn Sculpin	-	-
9_47	Tayk_9_0314	Shorthorn Sculpin	-	-
9_48	Tayk_9_0314	Arctic Staghorn Sculpin	-	these sculpin seem to co-exist in Lord Mayor Bay
9_49	Tayk_9_0314	Fourhorn Sculpin	-	these sculpin seem to co-exist in Lord Mayor Bay
9_50	Tayk_9_0314	Deepwater Sculpin	-	these sculpin seem to co-exist in Lord Mayor Bay
9_51	Tayk_9_0314	Deepwater Sculpin	-	-
9_52	Tayk_9_0314	Arctic Staghorn Sculpin	-	more numerous than fourhorn sculpin; common in the west coastal region
9_53	Tayk_9_0314	Deepwater Sculpin	-	more numerous than fourhorn sculpin; common in the west coastal region
9_54	Tayk_9_0314	Fourhorn Sculpin	-	not as common as the deepwater and arctic staghorn sculpin, although it occupies similar habitat
9_55	Tayk_9_0314	Twohorn Sculpin	-	relatively rare; occurs mainly/only in Spence Bay

Table 13b. Sculpin everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_55e	Tayk_2_0314	Fourhorn Sculpin	-	often found nearshore

Figure 16. Eelpout, Stickleback, Smelt and Capelin areas of occurrence

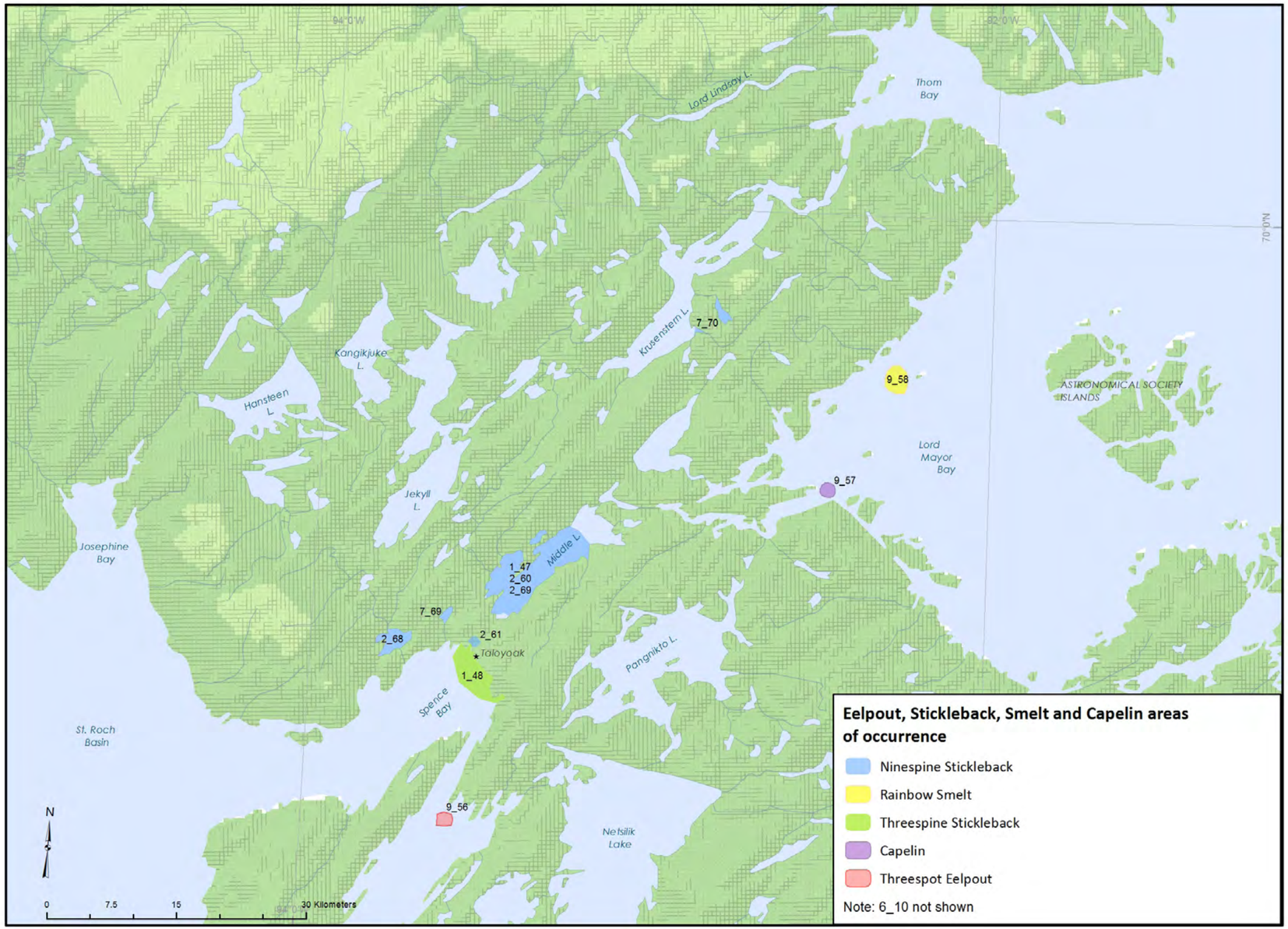


Table 14. Eelpout, Stickleback, Smelt and Capelin areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_47	Tayk_1_0314	Ninespine Stickleback	July, August	fresh water
1_48	Tayk_1_0314	Threespine Stickleback	July, August	salt water
2_60	Tayk_2_0314	Ninespine Stickleback	-	rivers
2_61	Tayk_2_0314	Ninespine Stickleback	-	rivers
2_68N	Tayk_2_0314	Ninespine Stickleback	-	-
2_69N	Tayk_2_0314	Ninespine Stickleback	-	-
6_10	Tayk_6_0314	Arctic Skate	-	-
7_69	Tayk_7_0314	Ninespine Stickleback	-	swampy areas
7_70	Tayk_7_0314	Ninespine Stickleback	-	south side of Krusenstern
9_56	Tayk_9_0314	Threespot Eelpout	-	rare; captured twice by hook and line; approximately 2 feet long
9_57	Tayk_9_0314	Capelin	-	observed in schools in Lord Mayor Bay
9_58	Tayk_9_0314	Rainbow Smelt	-	Lord Mayor Bay; approximately 10 cm long, often in schools; in seal stomachs in the winter; in seal breathing holes; in open water along cracks in the winter

Figure 17. Arthropod (Amphipod, Mysid and Northern Shrimp, and Northern Krill) areas of occurrence

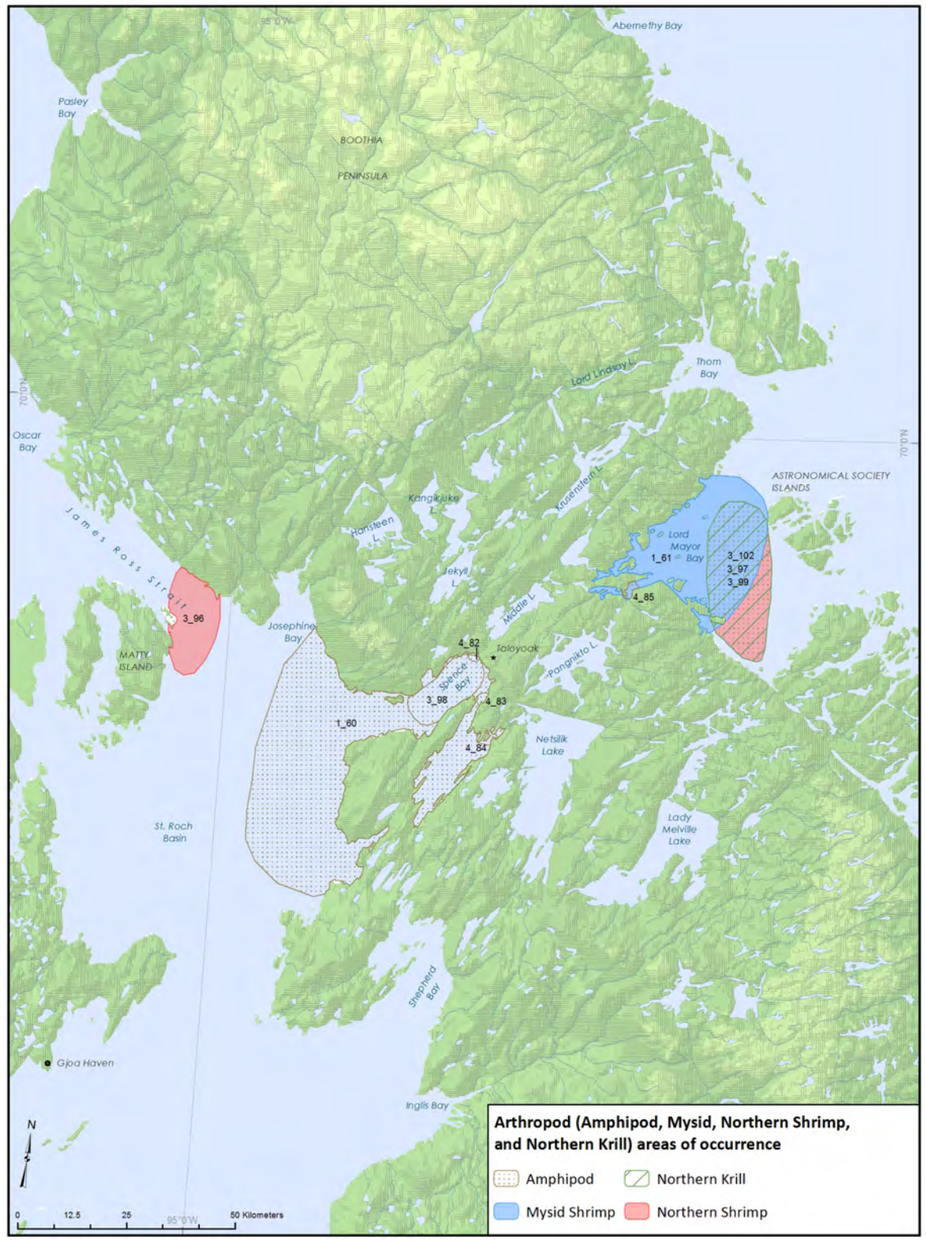


Table 15a. Arthropod (Amphipod, Mysid and Northern Shrimp, and Northern Krill) areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_60	Tayk_1_0314	Amphipod	July, August, September	-
1_61	Tayk_1_0314	Mysid Shrimp	August, September	associated with lots of bowhead whales
3_96	Tayk_3_0314	Northern Shrimp	-	-
3_97	Tayk_3_0314	Northern Shrimp	-	-
3_98	Tayk_3_0314	Amphipod	-	-
3_99	Tayk_3_0314	Amphipod	-	-
3_102	Tayk_3_0314	Northern Krill	-	-
4_82	Tayk_4_0314	Amphipod	-	-
4_83	Tayk_4_0314	Amphipod	-	-
4_84	Tayk_4_0314	Amphipod	-	-
4_85	Tayk_4_0314	Amphipod	-	very small

Table 15b. Arthropod (Amphipod, Mysid and Northern Shrimp, and Northern Krill) everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_72e,A	Tayk_2_0314	Amphipod	-	ocean
5_72e	Tayk_5_0314	Amphipod	-	-
7_60e	Tayk_7_0314	Amphipod	-	-

Figure 18. Bivalve (Truncate Softshell Clam, Blue Mussel and cockle) and sea snail (Arctic Moonsnail, Whelk, Naked Sea butterfly) areas of occurrence

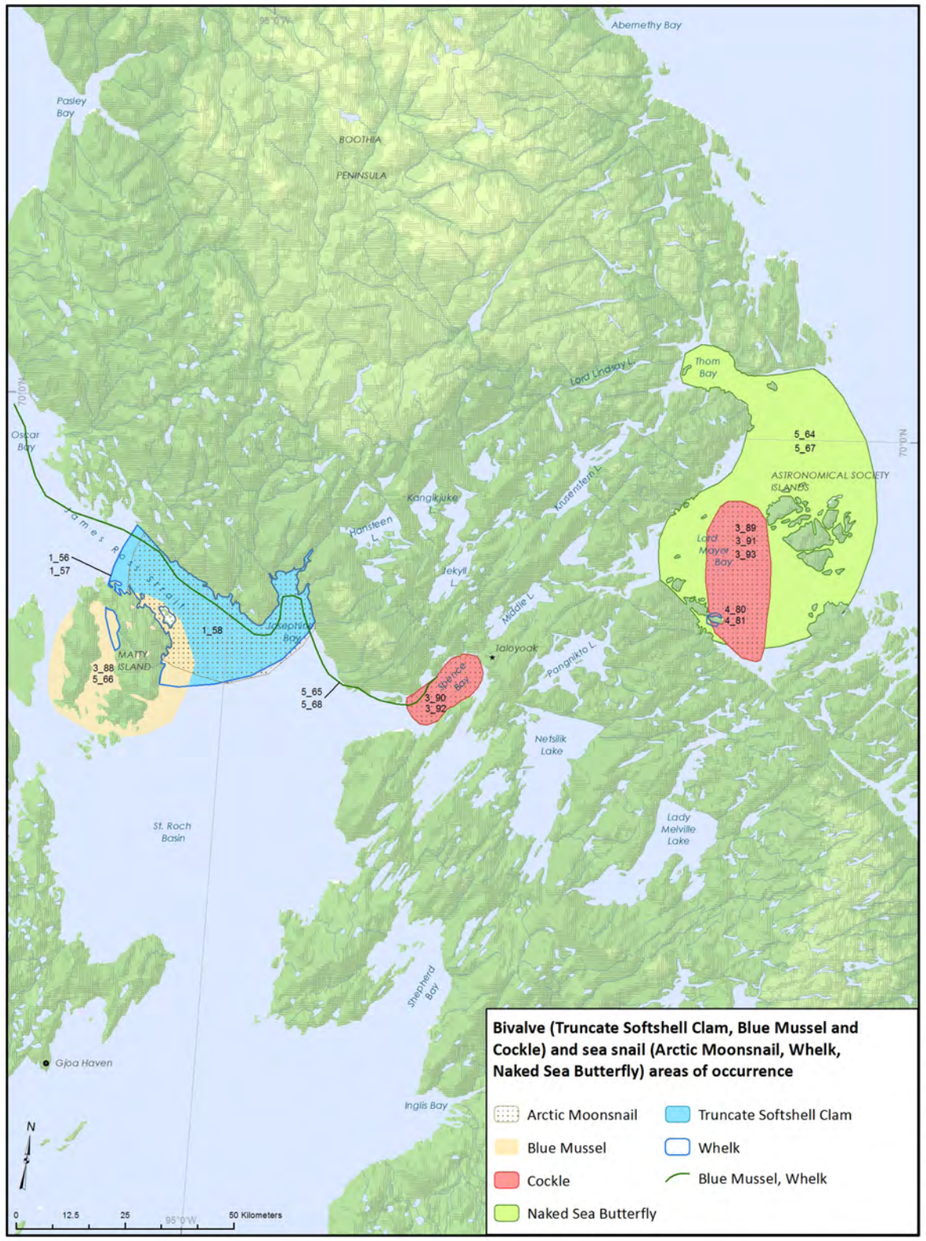


Table 16. Bivalve (Truncate Softshell Clam, Blue Mussel and cockle) and sea snail (Arctic Moonsnail, Whelk, Naked Sea butterfly) areas of occurrence.

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_56A	Tayk_1_0314	Truncate Softshell Clam	-	abundant near/on shore between Oscar Bay and Josephine Bay
1_57	Tayk_1_0314	Whelk	August	-
1_58	Tayk_1_0314	Arctic Moonsnail	August	-
2_71A.u	Tayk_2_0314	Truncate Softshell Clam	-	clams of 1 inch in diameter found mainly on plants as the tide goes out
3_88	Tayk_3_0314	Blue Mussel	-	mussel may be new to the area
3_89	Tayk_3_0314	Cockle	-	-
3_90	Tayk_3_0314	Cockle	-	-
3_91	Tayk_3_0314	Arctic Moonsnail	-	-
3_92	Tayk_3_0314	Arctic Moonsnail	-	-
3_93	Tayk_3_0314	Naked Sea Butterfly	-	-
4_80	Tayk_4_0314	Whelk	-	-
4_81	Tayk_4_0314	Arctic Moonsnail	-	-
5_64	Tayk_5_0314	Truncate Softshell Clam	-	usually found in seal stomachs
5_65	Tayk_5_0314	Blue Mussel	-	fresh dead on shorelines
5_66	Tayk_5_0314	Blue Mussel	-	fresh dead on shorelines
5_67	Tayk_5_0314	Naked Sea Butterfly	-	-
5_68	Tayk_5_0314	Whelk	-	-

Figure 19. Sea star, Sea Urchin, Ctenophore, Flexed Gyro and Jellyfish areas of occurrence

Table 17a. Sea Star, Sea Urchin, Ctenophore, Flexed Gyro and Jellyfish areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_59	Tayk_1_0314	Flexed Gyro	August	-
1_62	Tayk_1_0314	Jellyfish	July, August, September	-
3_94	Tayk_3_0314	Flexed Gyro	-	-
3_95	Tayk_3_0314	Flexed Gyro	-	-
3_103	Tayk_3_0314	Jellyfish	-	-
3_104	Tayk_3_0314	Jellyfish	-	-
4_86	Tayk_4_0314	Jellyfish	-	very small
4_87	Tayk_4_0314	Jellyfish	-	very small
4_88	Tayk_4_0314	Jellyfish	-	very small
4_89	Tayk_4_0314	Ctenophore	-	very small
5_69A	Tayk_5_0314	Pale Sea Urchin	-	caught in a lobster trap (in vicinity of Felix Harbour)
5_70A	Tayk_5_0314	Polar Sea Star	-	(in vicinity of Felix Harbour)
5_71	Tayk_5_0314	Polar Sea Star	-	-
5_74A	Tayk_5_0314	Ctenophore	-	seen only on the east side of the peninsula

Table 17b. Sea Star, Sea Urchin, Ctenophore, Flexed Gyro and Jellyfish everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_73e	Tayk_2_0314	Jellyfish	-	ocean; abundant in the early 1980s, they have since decreased significantly in abundance
5_73e	Tayk_5_0314	Jellyfish	-	-

Figure 20. Polar Bear probability of occurrence

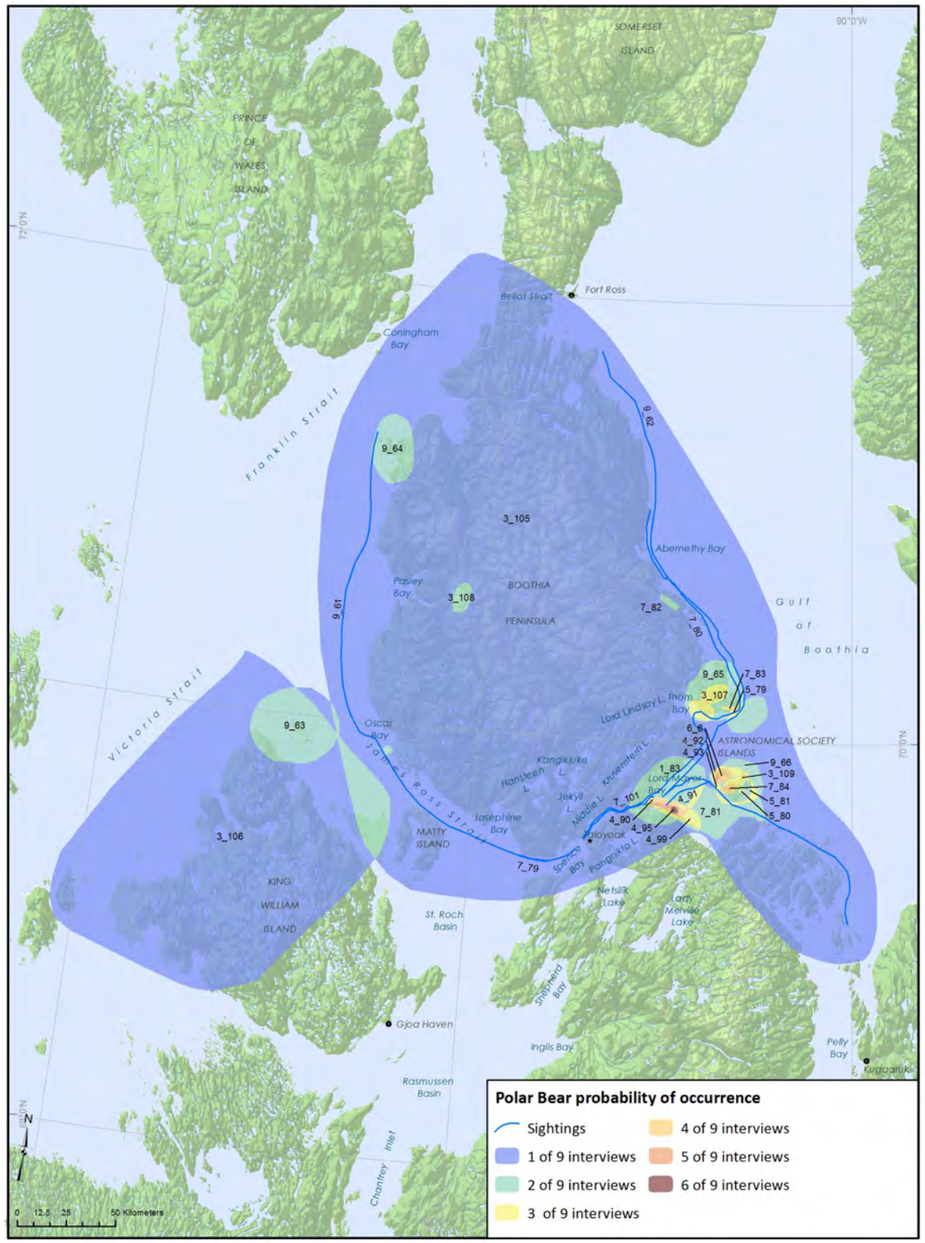


Table 18a. Polar Bear probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_83	Tayk_1_0314	Polar Bear	-	abundance fluctuates year to year
3_105	Tayk_3_0314	Polar Bear	-	understood to be in this region year-round
3_106	Tayk_3_0314	Polar Bear	-	-
3_107u	Tayk_3_0314	Polar Bear	-	denning sites
3_108S	Tayk_3_0314	Polar Bear	-	denning sites
3_109S	Tayk_3_0314	Polar Bear	-	denning sites
4_90A	Tayk_4_0314	Polar Bear	-	-
4_91	Tayk_4_0314	Polar Bear	-	three or four polar bears seen each day often swimming from the island (Astronomical Society Islands) to the mainland
4_92	Tayk_4_0314	Polar Bear	-	sighting
4_93	Tayk_4_0314	Polar Bear	-	sighting
4_95	Tayk_4_0314	Polar Bear	-	PB hair only; unusual sighting
4_99A	Tayk_4_0314	Polar Bear	-	three or four seen per day; swimming from island to the mainland
5_79S	Tayk_5_0314	Polar Bear	-	known denning area
5_80S	Tayk_5_0314	Polar Bear	winter	known denning area
5_81S	Tayk_5_0314	Polar Bear	winter	known denning area
6_6	Tayk_6_0314	Polar Bear	-	captured a PB
7_101	Tayk_7_0314	Polar Bear	-	bear sightings increasing inland around the community rather than along the coast and on the ice where they used to be in the summer
7_79	Tayk_7_0314	Polar Bear	-	came into town in 2013
7_80	Tayk_7_0314	Polar Bear	-	bear sightings increasing (since his childhood) in Thom Bay and Lord Mayor Bay; there appears to be more cubs relative to adult bears than in the past
7_81	Tayk_7_0314	Polar Bear	-	-
7_82S	Tayk_7_0314	Polar Bear	-	inland from Ilaunnalik Bay, south of Cape Palmerston
7_83S	Tayk_7_0314	Polar Bear	-	Cape Margaret
7_84S	Tayk_7_0314	Polar Bear	-	Astronomical Society Islands
9_61	Tayk_9_0314	Polar Bear	-	polar bears found all along the west coast north of Taloyoak; captured bears
9_62	Tayk_9_0314	Polar Bear	-	polar bears found all along the east coast north of Taloyoak
9_63	Tayk_9_0314	Polar Bear	-	-
9_64S,A	Tayk_9_0314	Polar Bear	-	denning area
9_65S,A	Tayk_9_0314	Polar Bear	-	denning area
9_66S,A	Tayk_9_0314	Polar Bear	-	denning area

Table 18b. Polar Bear everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_63e	Tayk_1_0314	Polar Bear	year-round	-
5_78e	Tayk_5_0314	Polar Bear	-	-

Figure 21. Ringed Seal probability of occurrence

Table 19a. Ringed Seal probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_76A	Tayk_2_0314	Ringed Seal	-	-
2_77	Tayk_2_0314	Ringed Seal	-	-
2_78	Tayk_2_0314	Ringed Seal	-	-
2_79	Tayk_2_0314	Ringed Seal	-	along cracks in ice
2_80	Tayk_2_0314	Ringed Seal	-	along crack in ice
2_82	Tayk_2_0314	Ringed Seal	-	-
3_113A	Tayk_3_0314	Ringed Seal	-	-
3_114A	Tayk_3_0314	Ringed Seal	-	-
4_96A	Tayk_4_0314	Ringed Seal	-	-
4_97A	Tayk_4_0314	Ringed Seal	-	near summer camp
4_98	Tayk_4_0314	Ringed Seal	-	not nearly as abundant in Spence Bay as at Felix Harbour and Lord Mayor Bay (4_96, 97)
6_19	Tayk_6_0314	Ringed Seal	-	decreased in abundance over time
6_20	Tayk_6_0314	Ringed Seal	-	increased in abundance over time
6_21	Tayk_6_0314	Ringed Seal	-	frequent this river
6_22	Tayk_6_0314	Ringed Seal	-	occasionally move into Netsilik Lake
7_100	Tayk_7_0314	Ringed Seal	-	emaciated ringed seal captured by harpoon
7_98	Tayk_7_0314	Ringed Seal	-	ringed seal stomach infected, pussy with more liquid than is normal
7_99	Tayk_7_0314	Ringed Seal	-	ring seal phallus was infected - swollen and white
9_68	Tayk_9_0314	Ringed Seal	-	ringed seal hunting area
9_69	Tayk_9_0314	Ringed Seal	-	ringed seal hunting area
9_70	Tayk_9_0314	Ringed Seal	-	ringed seal hunting area
9_71	Tayk_9_0314	Ringed Seal	-	ringed seal hunting area
9_72	Tayk_9_0314	Ringed Seal	-	ringed seal hunting area
9_73	Tayk_9_0314	Ringed Seal	-	seen along the coast
9_74	Tayk_9_0314	Ringed Seal	-	seal hunting area
9_82M	Tayk_9_0314	Ringed Seal	-	occasionally ringed seal move up river toward Netsilik Lake
9_83	Tayk_9_0314	Ringed Seal	-	ringed seal are sometimes observed in Netsilik Lake

Table 19b. Ringed Seal everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_64e	Tayk_1_0314	Ringed Seal	year-round	-
5_82e	Tayk_5_0314	Ringed Seal	-	abundant everywhere
7_85e	Tayk_7_0314	Ringed Seal	-	-

Figure 22. Bearded Seal probability of occurrence

Table 20. Bearded Seal probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_67	Tayk_1_0314	Bearded Seal	August	-
1_68	Tayk_1_0314	Bearded Seal	August	-
2_83A	Tayk_2_0314	Bearded Seal	-	spring
2_84	Tayk_2_0314	Bearded Seal	-	-
3_115A	Tayk_3_0314	Bearded Seal	-	-
3_116A	Tayk_3_0314	Bearded Seal	-	-
5_86	Tayk_5_0314	Bearded Seal	-	-
5_87	Tayk_5_0314	Bearded Seal	-	-
7_88	Tayk_7_0314	Bearded Seal	-	abundant in the summer in Lord Mayor Bay and Thom Bay
7_89	Tayk_7_0314	Bearded Seal	-	abundant in the Storis Passage and Simpson Strait
9_77M	Tayk_9_0314	Bearded Seal	-	bearded seal move south along the coast towards Spence Bay
9_78	Tayk_9_0314	Bearded Seal	-	bearded seal can be found here year-round, but mainly in the winter and spring; they move into Spence Bay in the summer
9_79	Tayk_9_0314	Bearded Seal	-	bearded seal gather here in the summer
9_80	Tayk_9_0314	Bearded Seal	-	bearded seal gather here in the summer
9_81	Tayk_9_0314	Bearded Seal	-	bearded seal gather here in the summer
9_84	Tayk_9_0314	Bearded Seal	-	in or near open water
9_85	Tayk_9_0314	Bearded Seal	-	in or near open water
9_86	Tayk_9_0314	Bearded Seal	-	in or near open water
9_87	Tayk_9_0314	Bearded Seal	-	in or near open water
9_88	Tayk_9_0314	Bearded Seal	-	in or near open water
9_89	Tayk_9_0314	Bearded Seal	-	in or near open water
9_90	Tayk_9_0314	Bearded Seal	-	bearded seal overwinter east of the floe edge marked by this line in water which remains open year-round; few seal breathing holes in Lord Mayor Bay

Figure 23. Harp Seal probability of occurrence

Table 21. Harp Seal probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_65	Tayk_1_0314	Harp Seal	August	rare
1_66	Tayk_1_0314	Harp Seal	August	rare
2_81	Tayk_2_0314	Harp Seal	-	-
3_117	Tayk_3_0314	Harp Seal	-	seen in only in this area (Franklin Strait)
5_83A	Tayk_5_0314	Harp Seal	-	-
5_84	Tayk_5_0314	Harp Seal	-	observed but not abundant
5_85	Tayk_5_0314	Harp Seal	-	observed but not abundant
7_87	Tayk_7_0314	Harp Seal	-	low numbers in the Thom Bay area
9_75A	Tayk_9_0314	Harp Seal	-	-
9_76A	Tayk_9_0314	Harp Seal	-	-

Figure 24. Beluga probability of occurrence

Table 22. Beluga probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_69	Tayk_1_0314	Beluga	August, September	late August, September
1_81A	Tayk_1_0314	Beluga	-	shed or molt in one of the bays in the Franklin Strait by the thousands
1_93	Tayk_1_0314	Beluga	-	whales have been seen corralling cod into the shore
2_85N,A	Tayk_2_0314	Beluga	-	Abundance fluctuates from year to year. However, every 3 or 4 years the numbers really spike. Late 1980s was memorable for an exceptionally high harvest. In 2010 hunters captured approximately 100 Belugas
2_86A	Tayk_2_0314	Beluga	-	-
2_87	Tayk_2_0314	Beluga	-	probably molting; Pasley Bay
3_119A	Tayk_3_0314	Beluga	-	visited annually
4_100	Tayk_4_0314	Beluga	-	-
5_90A	Tayk_5_0314	Beluga	-	frequent beluga hunting area
6_24	Tayk_6_0314	Beluga	-	-
9_97	Tayk_9_0314	Beluga	-	hunting area in Coningham Bay

Figure 25. Beluga migratory routes

Table 23. Beluga migratory routes

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
5_89M	Tayk_5_0314	Beluga	-	-
5_99M	Tayk_5_0314	Beluga	-	this is a relatively new migration route which may have coincided with the installation of sonar devices in Pasley and Oscar Bay; moving southward; do not remain long in the south, generally returning north in September
5_100M	Tayk_5_0314	Beluga	-	moving southward; do not remain long in the south, generally returning north in September
7_102M,A	Tayk_7_0314	Beluga	-	Beluga are very abundant in vicinity of Coningham Bay and occasionally venture south towards Spence Bay
7_90M	Tayk_7_0314	Beluga	-	observed all along coastlines on the east and west side of the peninsula; observed passing eastward through the Bellot Strait; as far south as Kugaaruk but more abundant in the north

Figure 26. Narwhal probability of occurrence

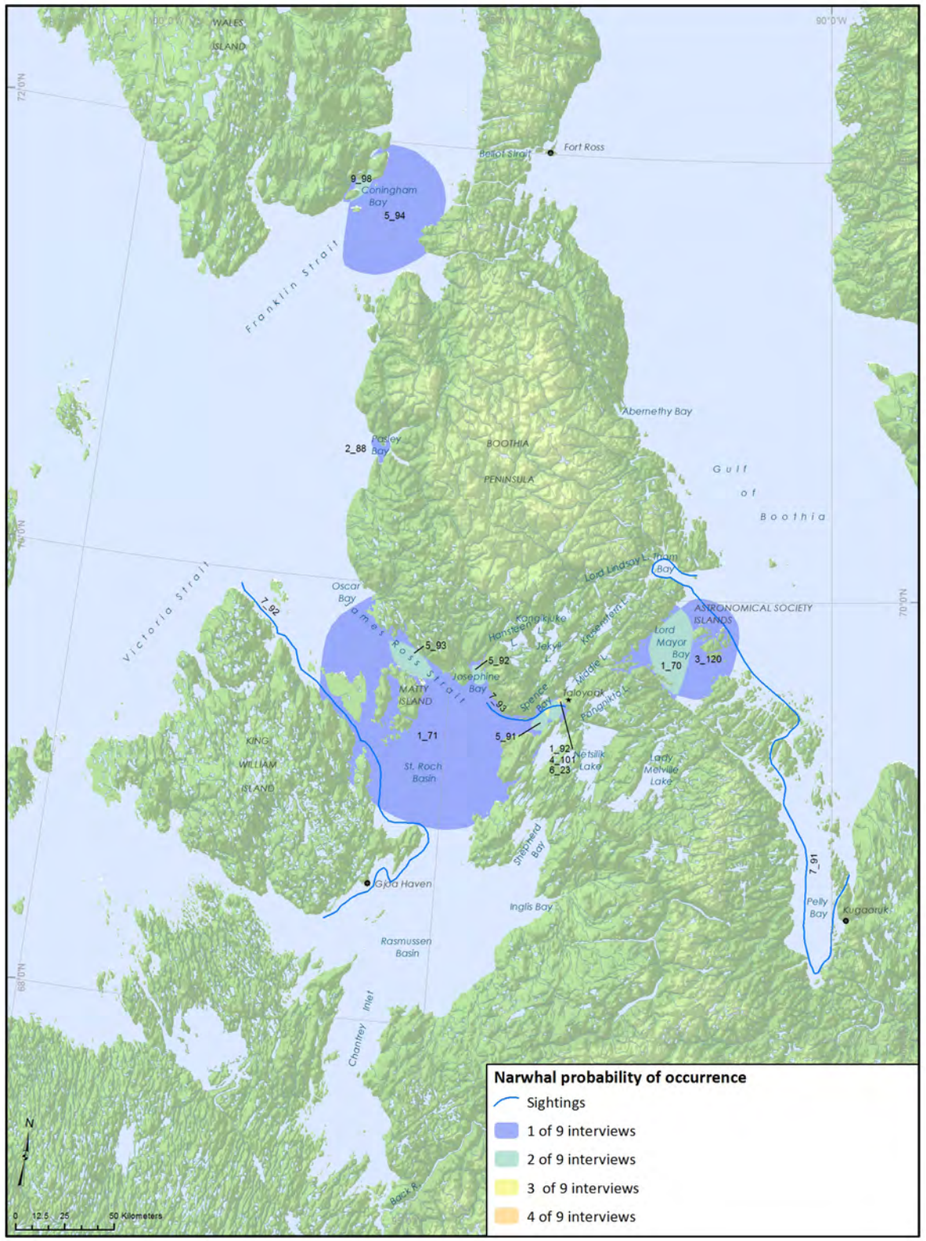


Table 24. Narwhal probability of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_70	Tayk_1_0314	Narwhal	August, September	late August, September
1_71	Tayk_1_0314	Narwhal	August, September	late August, September
1_92	Tayk_1_0314	Narwhal	-	whales have been seen corralling cod into the shore
2_88	Tayk_2_0314	Narwhal	-	probably moulting; Pasley Bay
3_120A	Tayk_3_0314	Narwhal	-	-
4_101	Tayk_4_0314	Narwhal	-	-
5_91	Tayk_5_0314	Narwhal	-	-
5_92	Tayk_5_0314	Narwhal	-	-
5_93	Tayk_5_0314	Narwhal	-	-
5_94A	Tayk_5_0314	Narwhal	-	-
6_23	Tayk_6_0314	Narwhal	-	-
7_91A	Tayk_7_0314	Narwhal	-	abundant in Thom Bay; observed as far south as Kugaaruk; more abundant on the east side of the peninsula vs. the west side
7_92	Tayk_7_0314	Narwhal	-	observed along the eastern coastline of King William Island
7_93	Tayk_7_0314	Narwhal	-	observed in Spence Bay
9_98	Tayk_9_0314	Narwhal	-	hunting area in Coningham Bay

Figure 27. Narwhal migratory routes

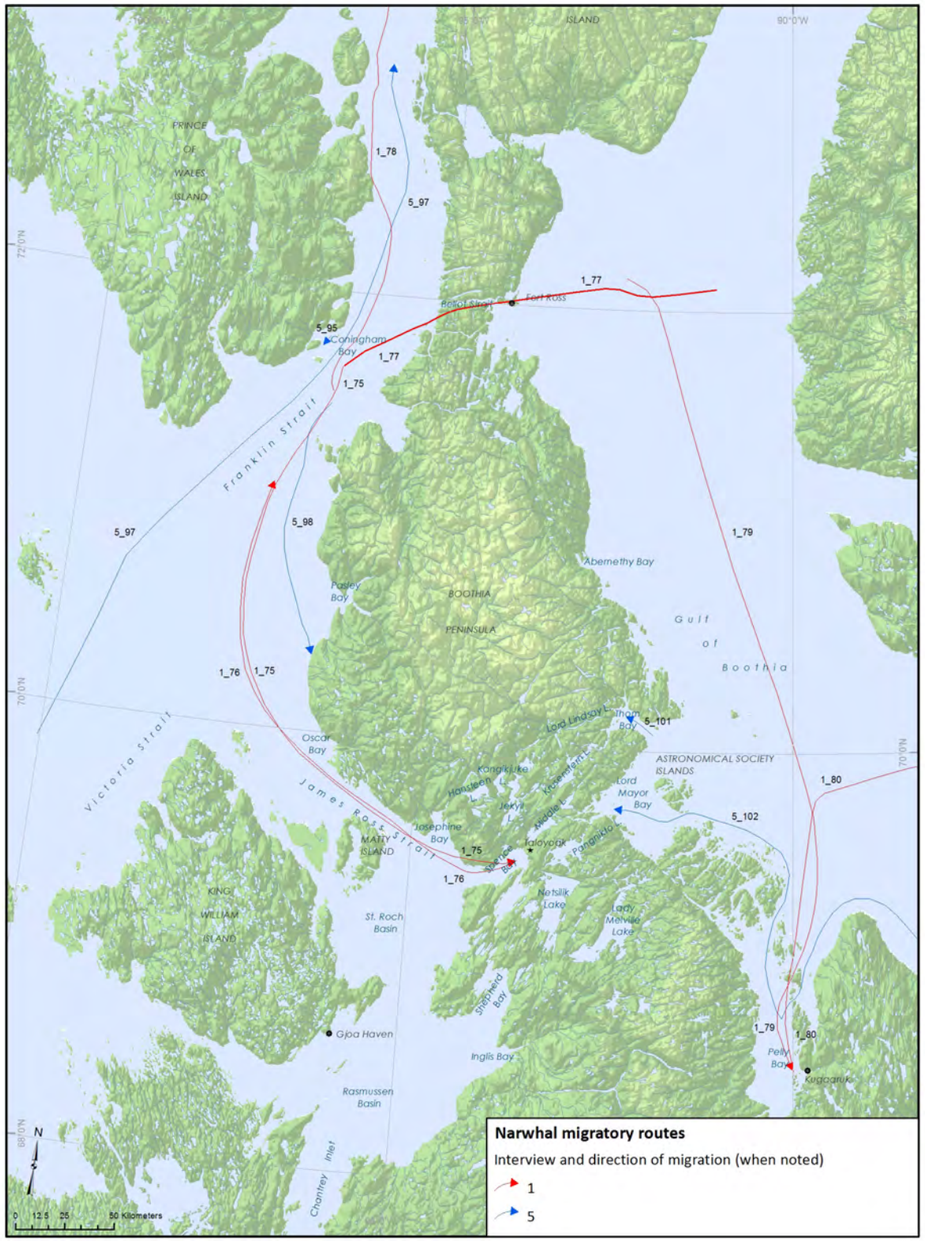


Table 25. Narwhal migratory routes

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_75M	Tayk_1_0314	Narwhal	August	southward; late August
1_76M	Tayk_1_0314	Narwhal	-	northward
1_77M	Tayk_1_0314	Narwhal	-	-
1_78M	Tayk_1_0314	Narwhal	-	-
1_79M	Tayk_1_0314	Narwhal	-	southward
1_80M	Tayk_1_0314	Narwhal	-	northward
5_95M	Tayk_5_0314	Narwhal	August	southbound from Coningham Bay region in August
5_97M	Tayk_5_0314	Narwhal	-	this is a relatively new migration route which may have coincided with the installation of sonar devices in Pasley and Oscar Bay; few are spotted moving southward; do not remain long in the south, generally returning north in September;
5_98M	Tayk_5_0314	Narwhal	-	few are spotted moving southward; do not remain long in the south, generally returning north in September
5_101M	Tayk_5_0314	Narwhal	-	remain in Thom Bay for a couple of weeks
5_102M	Tayk_5_0314	Narwhal	-	Narwhal migrate from Wales Island to Kugaaruk and continue northward to Lord Mayor Bay

Figure 28. Bowhead and Right Whale areas of occurrence

Table 26. Bowhead and Right Whale areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
1_73N	Tayk_1_0314	Bowhead Whale	August	harvested by the community of Taloyoak in 2012; observed a calf in August
1_74	Tayk_1_0314	Bowhead Whale	-	harvested by the community of Gjoa Haven in 2013
3_121	Tayk_3_0314	Bowhead Whale	-	Franklin Strait
3_122	Tayk_3_0314	Bowhead Whale	-	Lord Mayor Bay
4_103N	Tayk_4_0314	Bowhead Whale	-	Bowhead seem to be getting more abundant in the last few years; more than average observed two and four years ago
5_88	Tayk_5_0314	Bowhead Whale	-	Bowhead whales observed being pushed into Lord Mayor Bay by Killer Whales 2013
9_93H,u	Tayk_9_0314	Right Whale	-	sighting
9_94u	Tayk_9_0314	Right Whale	-	a single whale captured by hunters from Taloyoak
9_95u	Tayk_9_0314	Right Whale	-	a single whale captured by hunters from Gjoa Haven

Figure 29. Killer and Minke Whale areas of occurrence

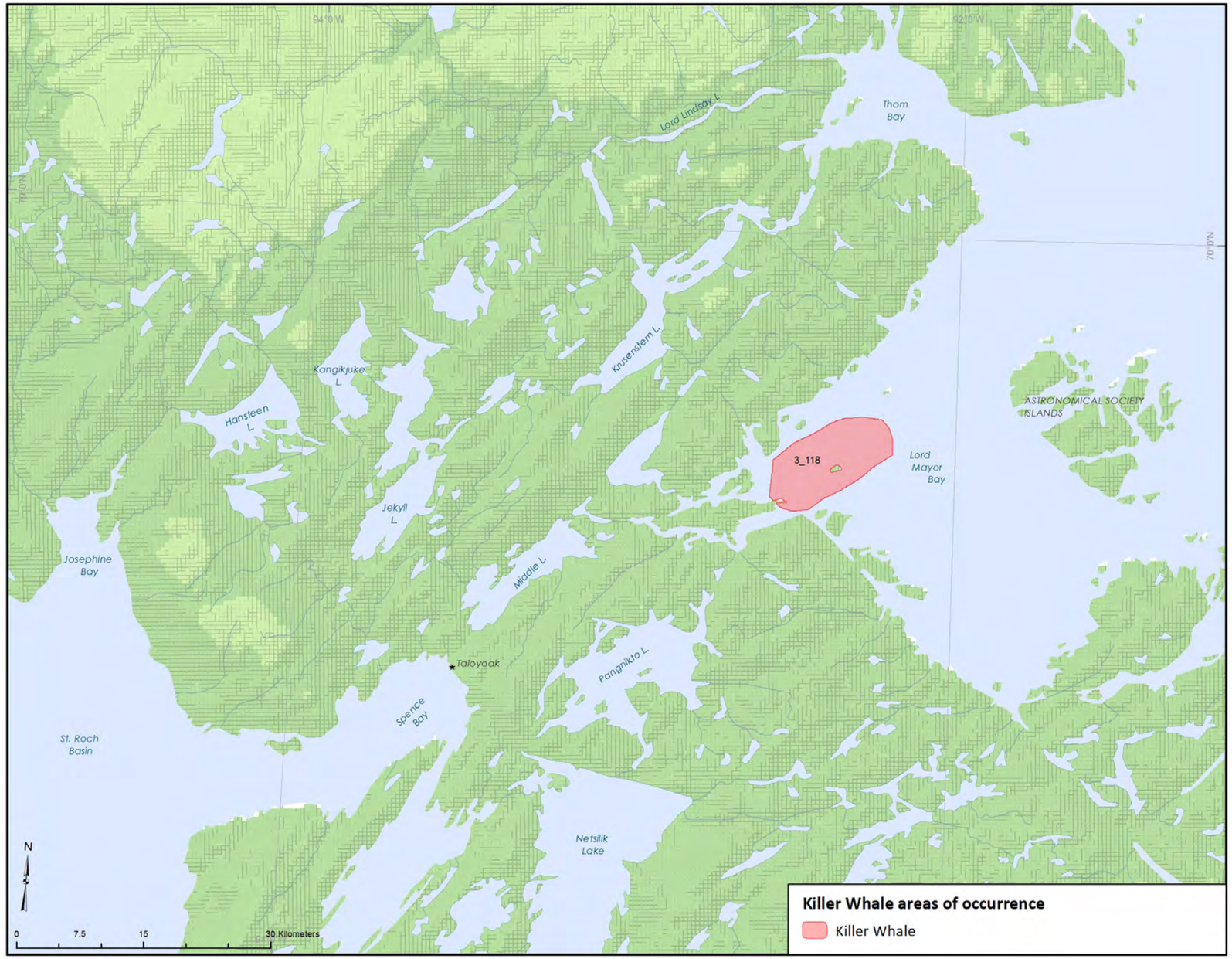


Table 27. Killer and Minke Whale areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
3_118	Tayk_3_0314	Killer Whale	-	a pod of more than 10 individuals have appeared each year for the last 3 or 4 years; not seen previously
5_96u	Tayk_5_0314	Minke Whale	-	first spotted in 2009 and observed annually; sometimes with juveniles/calves

Figure 30. Walrus areas of occurrence

Table 28. Walrus areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
3_110	Tayk_3_0314	Walrus	-	not abundant; increasing in abundance
3_111	Tayk_3_0314	Walrus	-	not abundant; increasing in abundance
3_112	Tayk_3_0314	Walrus	-	not abundant; increasing in abundance
5_75	Tayk_5_0314	Walrus	-	new to the area; recent sightings by other community members
5_76	Tayk_5_0314	Walrus	-	new to the area; recent sightings by other community members
5_77	Tayk_5_0314	Walrus	-	harvested in the 1990s in Pasley Bay and seen since
9_67	Tayk_9_0314	Walrus	-	sighting

Figure 31. Tundra Swan areas of occurrence

Table 29. Tundra Swan areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_29S	Tayk_8_0314	Tundra Swan	-	-
8_30S	Tayk_8_0314	Tundra Swan	-	-
8_31S	Tayk_8_0314	Tundra Swan	-	-
8_32S	Tayk_8_0314	Tundra Swan	-	-
8_33S	Tayk_8_0314	Tundra Swan	-	-
8_34S	Tayk_8_0314	Tundra Swan	-	-
8_35S	Tayk_8_0314	Tundra Swan	-	-
8_36S	Tayk_8_0314	Tundra Swan	-	-
8_37S	Tayk_8_0314	Tundra Swan	-	-
8_38S	Tayk_8_0314	Tundra Swan	-	-
8_39S	Tayk_8_0314	Tundra Swan	-	-

Figure 32. Goose areas of occurrence

Table 30. Goose areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_1	Tayk_8_0314	Greater White Fronted Goose	-	-
8_2S	Tayk_8_0314	Greater White Fronted Goose	-	-
8_3	Tayk_8_0314	Snow Goose	-	-
8_4	Tayk_8_0314	Snow Goose	-	-
8_5S	Tayk_8_0314	Snow Goose	-	-
8_6	Tayk_8_0314	Cackling Goose	-	-
8_7S	Tayk_8_0314	Greater White Fronted Goose	-	-
8_8S	Tayk_8_0314	Greater White Fronted Goose	-	-
8_9S	Tayk_8_0314	Greater White Fronted Goose	-	-
8_10S	Tayk_8_0314	Greater White Fronted Goose	-	-
8_11S	Tayk_8_0314	Greater White Fronted Goose	-	-
8_12S	Tayk_8_0314	Snow Goose	-	-
8_13S	Tayk_8_0314	Snow Goose	-	-
8_14S	Tayk_8_0314	Snow Goose	-	-
8_15S	Tayk_8_0314	Snow Goose	-	-
8_16S	Tayk_8_0314	Snow Goose	-	-
8_17S	Tayk_8_0314	Cackling Goose	-	-
8_18S	Tayk_8_0314	Cackling Goose	-	-
8_19S	Tayk_8_0314	Cackling Goose	-	-
8_20S	Tayk_8_0314	Cackling Goose	-	-
8_21S	Tayk_8_0314	Cackling Goose	-	-
8_23S	Tayk_8_0314	Barnacle Goose	-	-
8_24S	Tayk_8_0314	Barnacle Goose	-	-
8_25S	Tayk_8_0314	Barnacle Goose	-	-
8_26S	Tayk_8_0314	Canada Goose	-	new to the area since 1990
8_27S	Tayk_8_0314	Canada Goose	-	new to the area since 1990
8_28S	Tayk_8_0314	Canada Goose	-	new to the area since 1990
8_119A	Tayk_8_0314	Canada Goose	-	-

Figure 33. Duck areas of occurrence

Table 31. Duck areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_40	Tayk_8_0314	Lesser Scaup	-	seen only one at a time
8_41S	Tayk_8_0314	Stellar's Eider	-	-
8_42S	Tayk_8_0314	King Eider	June	spends most of its time out on the ice, but nests on land in June; the male does not remain at the nesting sites
8_43S	Tayk_8_0314	Long-tailed Duck	-	-

Table 32. Perching bird everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_113e	Tayk_8_0314	Common Raven	-	nests anywhere
8_114e	Tayk_8_0314	Snow Bunting	-	common; nests everywhere, under boulders
8_115e	Tayk_8_0314	Lapland Longspur	May – September	late May through early September resident
8_116e,u	Tayk_8_0314	Pine Siskin	-	identified as the female lapland longspur as they are always seen in pairs together

Table 33. Shorebird (American Golden Plover, Pomarine Jaeger, Killdeer, Baird's Sandpiper, Red Phalarope, Red-Knot and Buff Breasted Sandpiper) everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_85e	Tayk_8_0314	American Golden Plover	-	-
8_86e,u	Tayk_8_0314	Killdeer	-	
8_87e	Tayk_8_0314	Baird's Sandpiper	-	-
8_88e	Tayk_8_0314	Red Knot	-	
8_89e	Tayk_8_0314	Buff Breasted Sandpiper	-	-
8_90e	Tayk_8_0314	Gray Phalarope	-	
8_105e	Tayk_8_0314	Arctic Tern	-	found along shorelines; nests in sand
8_106e	Tayk_8_0314	Pomarine Jaeger	May to September	Female looks like a pomarine jaeger and the male looks like a long-tailed jaeger; both are rare; May through early September

Figure 34. Gull (Mew, Thayer's, Bonaparte's, Herring Gull) areas of occurrence

Table 34a. Gull (Mew, Thayer's, Bonaparte's, Herring Gull) areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_91S,u	Tayk_8_0314	Bonaparte's Gull	-	first gull to arrive; nest along shorelines (sand); often found on small islands
8_92S,u	Tayk_8_0314	Bonaparte's Gull	-	first gull to arrive; nest along shorelines (sand); often found on small islands
8_93S,u	Tayk_8_0314	Bonaparte's Gull	-	first gull to arrive; nest along shorelines (sand); often found on small islands
8_94S,u	Tayk_8_0314	Bonaparte's Gull	-	first gull to arrive; nest along shorelines (sand); often found on small islands
8_95S,u	Tayk_8_0314	Bonaparte's Gull	-	first gull to arrive; nest along shorelines (sand); often found on small islands
8_97u	Tayk_8_0314	Mew Gull	-	nests on cliffs, islands, hills; close to Taloyoak
8_98	Tayk_8_0314	Herring Gull	-	close to Taloyoak
8_99	Tayk_8_0314	Thayer's Gull	-	close to Taloyoak
8_100	Tayk_8_0314	Glaucous Gull	-	close to Taloyoak
8_101u	Tayk_8_0314	Mew Gull	-	Spence Bay area
8_102	Tayk_8_0314	Herring Gull	-	Spence Bay area
8_103	Tayk_8_0314	Thayer's Gull	-	Spence Bay area
8_104	Tayk_8_0314	Glaucous Gull	-	Spence Bay area
8_120A	Tayk_8_0314	gulls in general	-	gulls in the area near Taloyoak are abundant

Table 34b. Gull (Mew, Thayer's, Bonaparte's, Herring Gull) everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_96e,u	Tayk_8_0314	Mew Gull	-	-

Figure 35. Tern and Petrel areas of occurrence

Table 35. Tern and Petrel (Northern Fulmar and Short-tailed Shearwater) areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_77u	Tayk_8_0314	Short-tailed Shearwater	-	-
8_78M	Tayk_8_0314	Northern Fulmar	-	-

Figure 36. Raptor (Bald Eagle, Peregrine Falcon, Gyrfalcon) and Owl (Snowy and Short-eared Owl) areas of occurrence

Table 36. Raptor (Bald Eagle, Peregrine Falcon, Gyrfalcon) and Owl (Snowy and Short-eared Owl) areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
7_94	Tayk_7_0314	Bald Eagle	-	eagle observed at Krusenstern Lake in the spring of 2013
8_81	Tayk_8_0314	Peregrine Falcon	-	not as common as the Gyrfalcon
8_82	Tayk_8_0314	Gyrfalcon	-	observed year-round but common in spring and summer with Peregrine Falcon
8_83	Tayk_8_0314	Gyrfalcon	-	-
8_84	Tayk_8_0314	Gyrfalcon	-	-
8_112S	Tayk_8_0314	Snowy Owl	-	nest with young observed
8_121	Tayk_8_0314	Short-eared Owl	-	rare; seen once at Middle Lake

Figure 37. Ptarmigan and Crane areas of occurrence

Table 37. Ptarmigan and Crane areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_22u	Tayk_8_0314	Crane-like	-	brown, bald, red eyes, less than 2 ft tall, mimicked call
8_44S	Tayk_8_0314	Willow Ptarmigan	-	-
8_45	Tayk_8_0314	Rock Ptarmigan	-	-
8_46S,A	Tayk_8_0314	Willow Ptarmigan	-	abundant food source in the area
8_47S,A	Tayk_8_0314	Willow Ptarmigan	-	abundant food source in the area
8_48S,A	Tayk_8_0314	Willow Ptarmigan	-	abundant food source in the area
8_49S,A	Tayk_8_0314	Rock Ptarmigan	-	abundant food source in the area
8_50S,A	Tayk_8_0314	Rock Ptarmigan	-	abundant food source in the area
8_51S,A	Tayk_8_0314	Rock Ptarmigan	-	abundant food source in the area
8_52u	Tayk_8_0314	White-tailed Ptarmigan	-	-
8_53S,u	Tayk_8_0314	White-tailed Ptarmigan	-	possible nesting site
8_54u	Tayk_8_0314	White-tailed Ptarmigan	-	-
8_55u	Tayk_8_0314	White-tailed Ptarmigan	-	-

Figure 38. Loon (Arctic/Pacific, Red-throated and Yellow Billed loon) areas of occurrence

Table 38. Loon (Arctic/Pacific, Red-throated and Yellow Billed loon) areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_56	Tayk_8_0314	Red-throated Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_57u	Tayk_8_0314	Arctic Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_58	Tayk_8_0314	Yellow-billed Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_59	Tayk_8_0314	Red-throated Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_60u	Tayk_8_0314	Arctic Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_61	Tayk_8_0314	Yellow-billed Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_62	Tayk_8_0314	Red-throated Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_63u	Tayk_8_0314	Arctic Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_64	Tayk_8_0314	Yellow-billed Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_65	Tayk_8_0314	Red-throated Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_66u	Tayk_8_0314	Arctic Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_67	Tayk_8_0314	Yellow-billed Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_68	Tayk_8_0314	Red-throated Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_69u	Tayk_8_0314	Arctic Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_70	Tayk_8_0314	Yellow-billed Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_71	Tayk_8_0314	Red-throated Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_72u	Tayk_8_0314	Arctic Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
8_73	Tayk_8_0314	Yellow-billed Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_74	Tayk_8_0314	Red-throated Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_75	Tayk_8_0314	Arctic Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female
8_76	Tayk_8_0314	Yellow-billed Loon	June	arrive in June with the Long-tailed duck; male generally leaves earlier than the female

Figure 39. Marine and terrestrial plant areas of occurrence

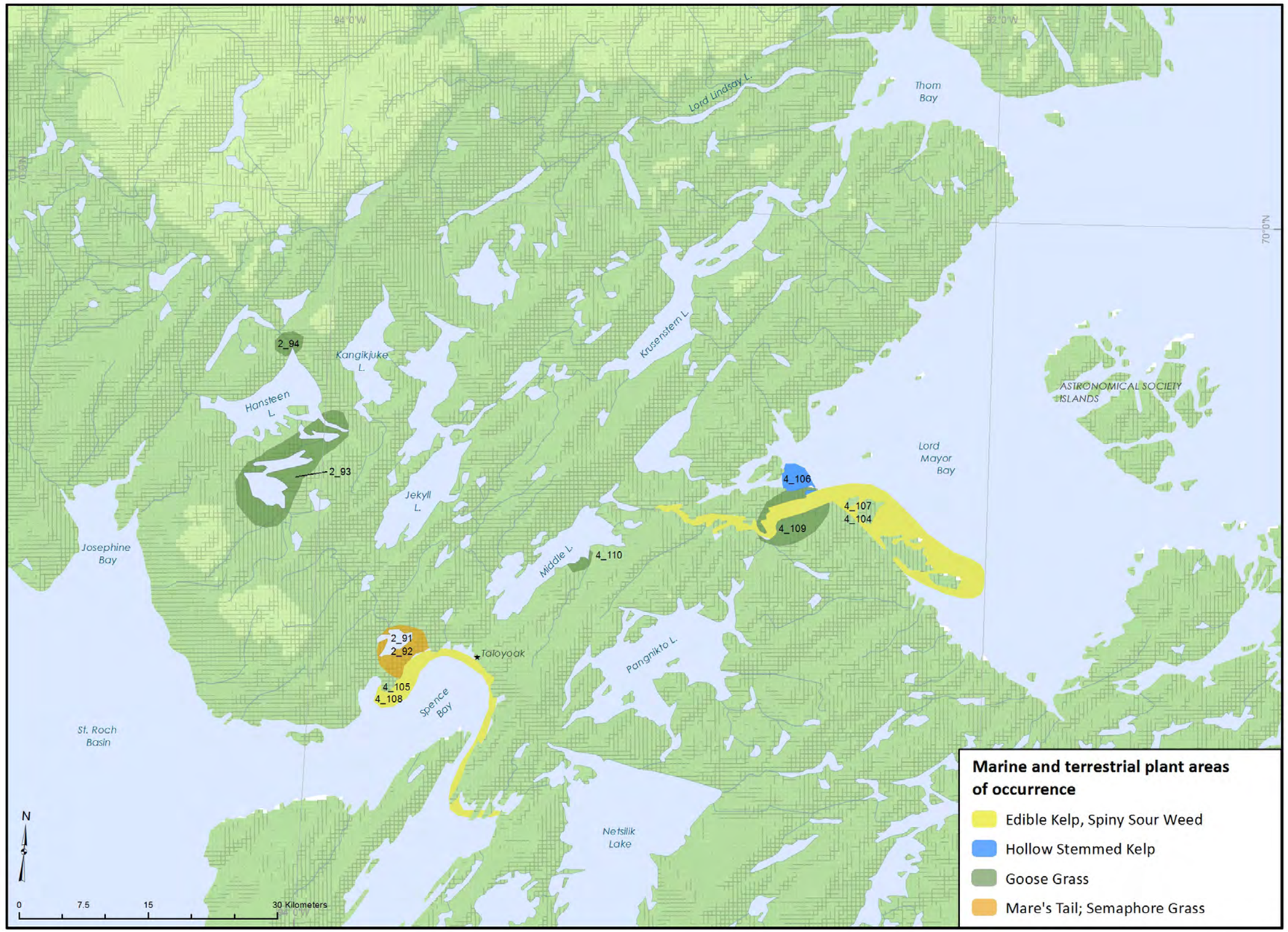


Table 39a. Marine and terrestrial plant areas of occurrence

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_91	Tayk_2_0314	Semaphore Grass	-	-
2_92u	Tayk_2_0314	Mare's Tail	-	at Redfish Lake; unsure of species, described as similar to Mare's Tail
2_93	Tayk_2_0314	Goose Grass	-	found in the riparian zones of creeks
2_94	Tayk_2_0314	Goose Grass	-	found in the riparian zones of creeks
4_104	Tayk_4_0314	Edible Kelp	-	-
4_105	Tayk_4_0314	Edible Kelp	-	-
4_106	Tayk_4_0314	Hollow Stemmed Kelp	-	-
4_107	Tayk_4_0314	Spiny Sour Weed	-	-
4_108	Tayk_4_0314	Spiny Sour Weed	-	-
4_109	Tayk_4_0314	Goose Grass	-	-
4_110	Tayk_4_0314	Goose Grass	-	-

Table 39b. Marine plant everywhere data

MAP CODE	INTERVIEW CODE	SPECIES	MONTHS	COMMENTS
2_89e,A	Tayk_2_0314	Edible Kelp	-	-
2_90e	Tayk_2_0314	Hollow Stemmed Kelp	-	-
4_118e	Tayk_4_0314	Spiny Sour Weed	-	-
5_103e	Tayk_5_0314	Edible Kelp	-	-

Figure 40. Historic (pre-2005) species observations

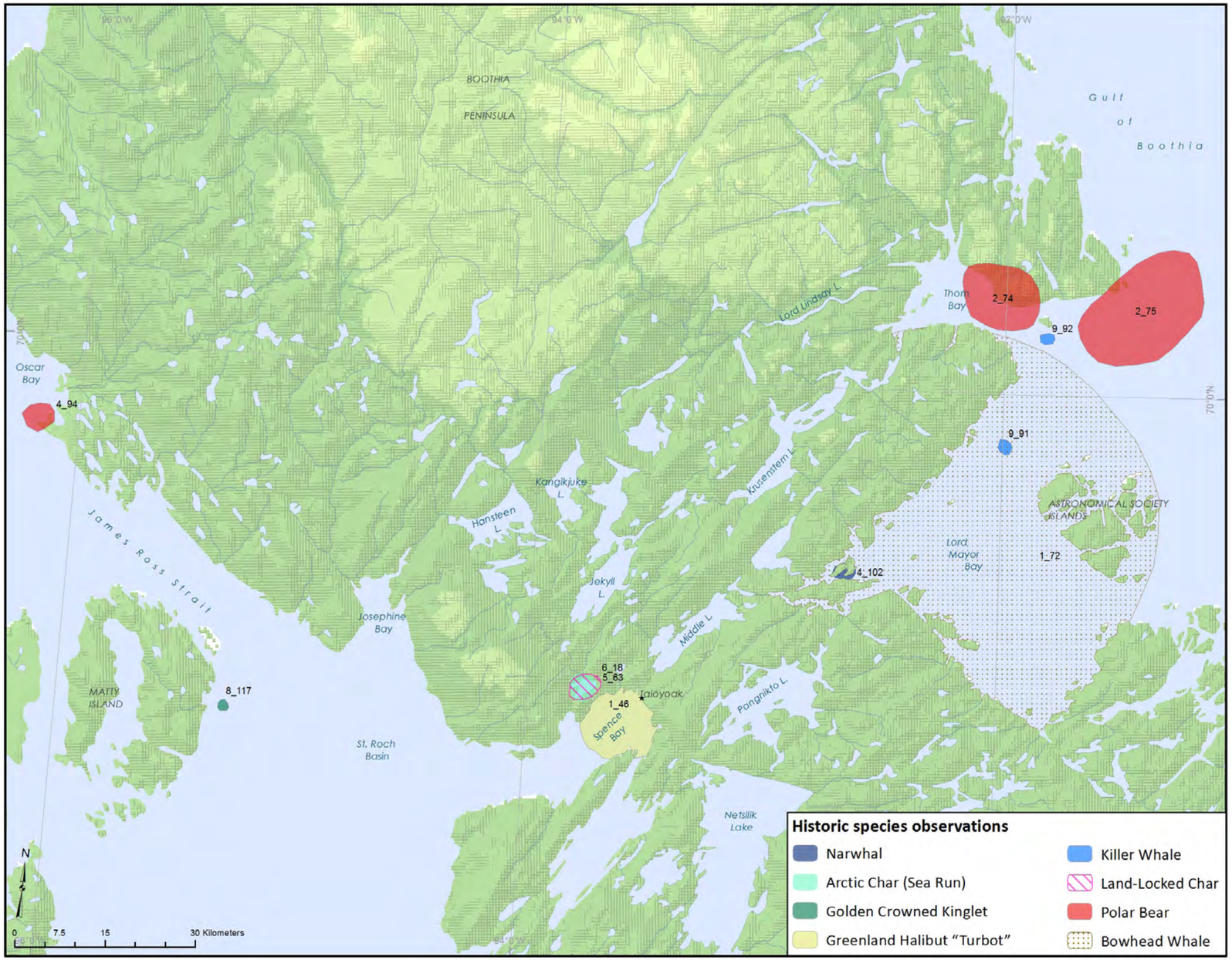


Table 40. Historic (pre-2005) species observations

MAP CODE	INTERVIEW CODE	SPECIES	YEAR	MONTHS	COMMENTS
1_46H	Tayk_1_0314	Greenland Halibut	~1970	June	captured approximately 35 years ago in late June
1_72H	Tayk_1_0314	Bowhead Whale	-	September	general observation some years ago
2_74H	Tayk_2_0314	Polar Bear	late 1990s	-	sightings ; late April, May
2_75H	Tayk_2_0314	Polar Bear	late 1990s	-	sightings ; late April, May
4_94H	Tayk_4_0314	Polar Bear	2004	-	saw a PB during 10 day hunter training expedition
4_102H	Tayk_4_0314	Narwhal	2004	-	seen moving out of the bay (Spence Bay) to open water
5_63H	Tayk_5_0314	Arctic Char (Sea Run)	-	-	fish stopped migration years ago, possibly due to drop in water levels; no longer a fishing location
6_18H	Tayk_6_0314	Land-Locked Char	1980s	-	Redfish no longer occur in Redfish Lake; history of overfishing in the 1970s and 1980s for dog food.
8_117H	Tayk_8_0314	Golden Crowned Kinglet	1970s	-	rare: seen only once 1970s when it was trapped in her tent
9_91H	Tayk_9_0314	Killer Whale	1960s or 1970s	-	killer whales are rare; one observed in the 1960s or 1970s
9_92H	Tayk_9_0314	Killer Whale	1960s or 1970s	-	killer whales are rare; one observed in the 1960s or 1970s

MAPS - HISTORIC

The results of the Inuit Land Use and Occupancy Project (ILUOP) were published in 1976 in three volumes. Figures 41-47 are an excerpt from this study displaying trapping and hunting over three time periods: pre-1948, 1949-1962 and 1963-1974. The map legend follows the six maps.

Figure 41a. Spence Bay Trapping, Period I (pre-1948) - excerpt from Inuit Land Use and Occupancy 1976 (north half of map)

Figure 41b. Spence Bay Trapping, Period I (pre-1948) - excerpt from Inuit Land Use and Occupancy 1976 (south half of map)

Figure 42a. Spence Bay Hunting, Period I (pre-1948) - excerpt from Inuit Land Use and Occupancy 1976 (north half of map)

Figure 42b. Spence Bay Hunting, Period I (pre-1948) - excerpt from Inuit Land Use and Occupancy 1976 (south half of map)

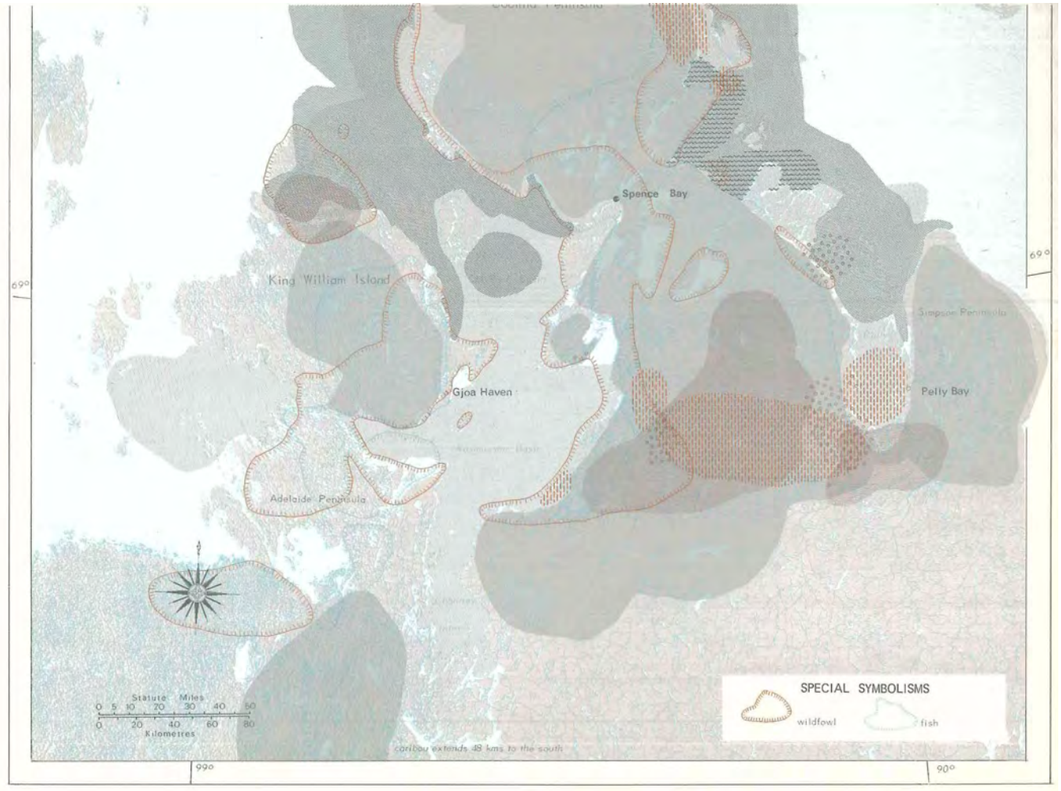


Figure 43a. Spence Bay Hunting, Period II (1949-1962) - excerpt from Inuit Land Use and Occupancy 1976 (north half of map)

Figure 43b. Spence Bay Hunting, Period II (1949-1962) - excerpt from Inuit Land Use and Occupancy 1976 (south half of map)

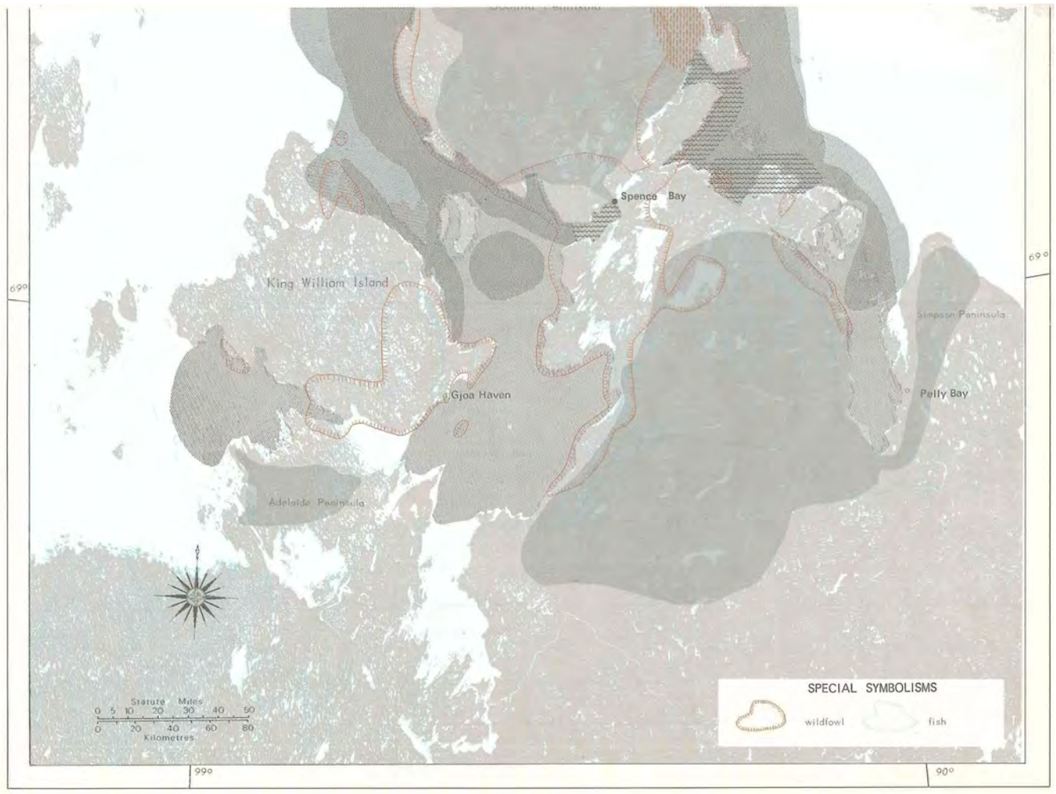


Figure 44. Spence Bay Trapping, Period II (1949-1962) - excerpt from Inuit Land Use and Occupancy 1976

Figure 45. Spence Bay Trapping, Period III (1963-1974) - excerpt from Inuit Land Use and Occupancy 1976

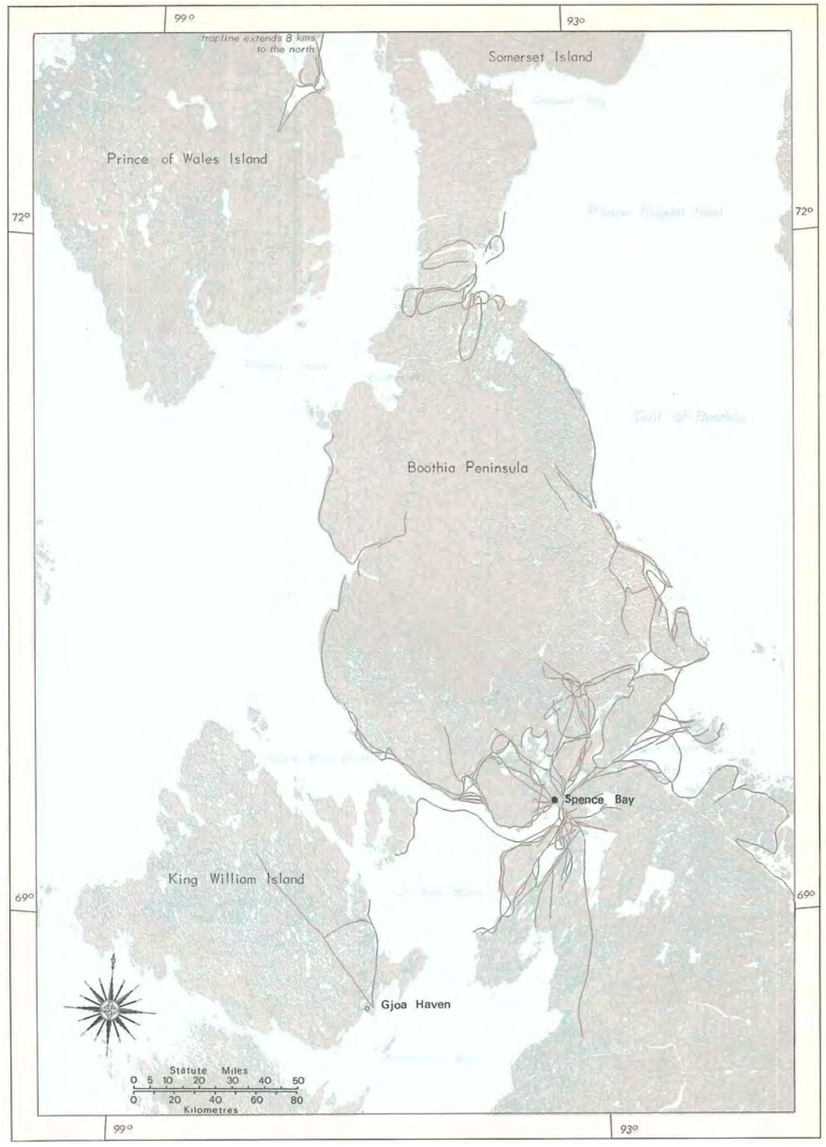


Figure 46a. Spence Bay Hunting, Period III (1963-1974) - excerpt from Inuit Land Use and Occupancy 1976 (north half of map)

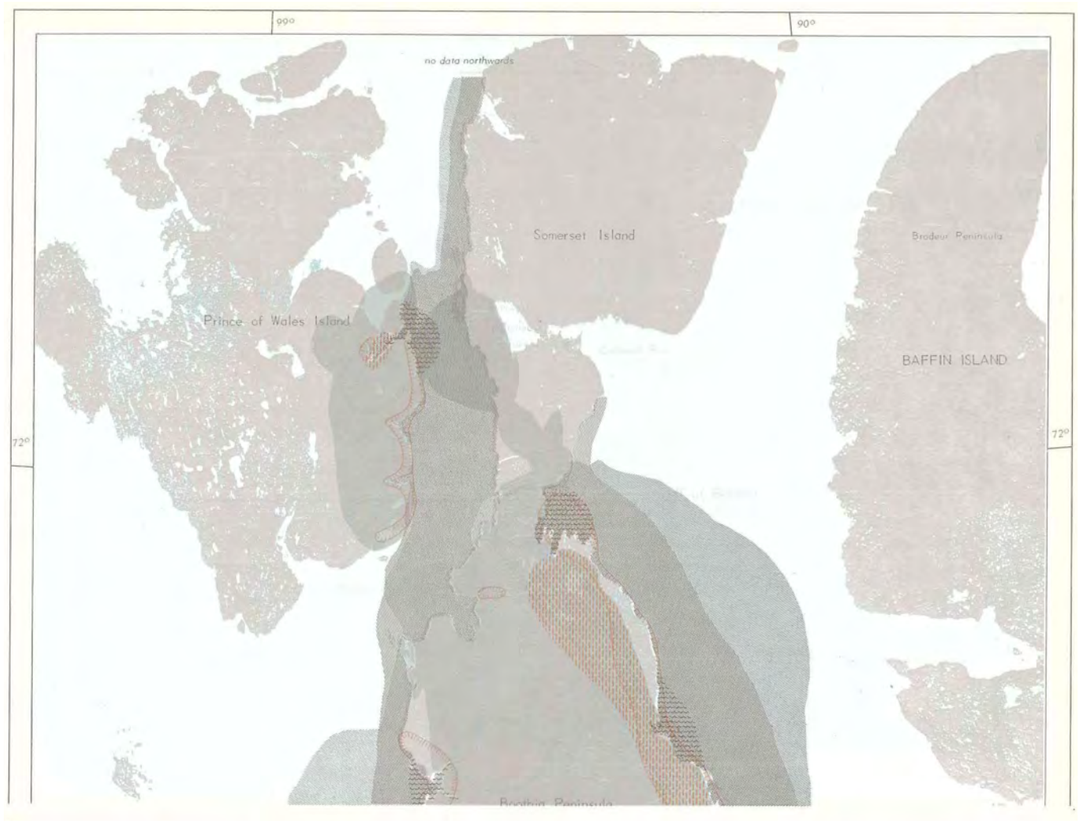


Figure 46b. Spence Bay Hunting, Period III (1963-1974) - excerpt from Inuit Land Use and Occupancy 1976 (south half of map)

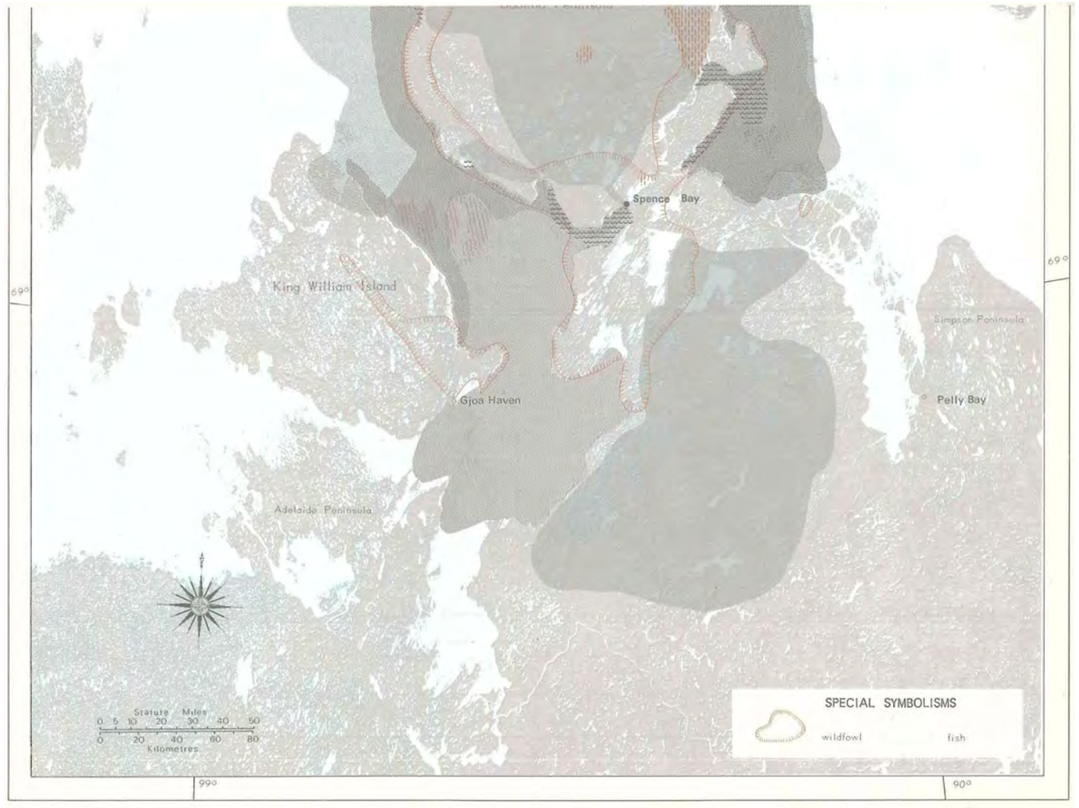
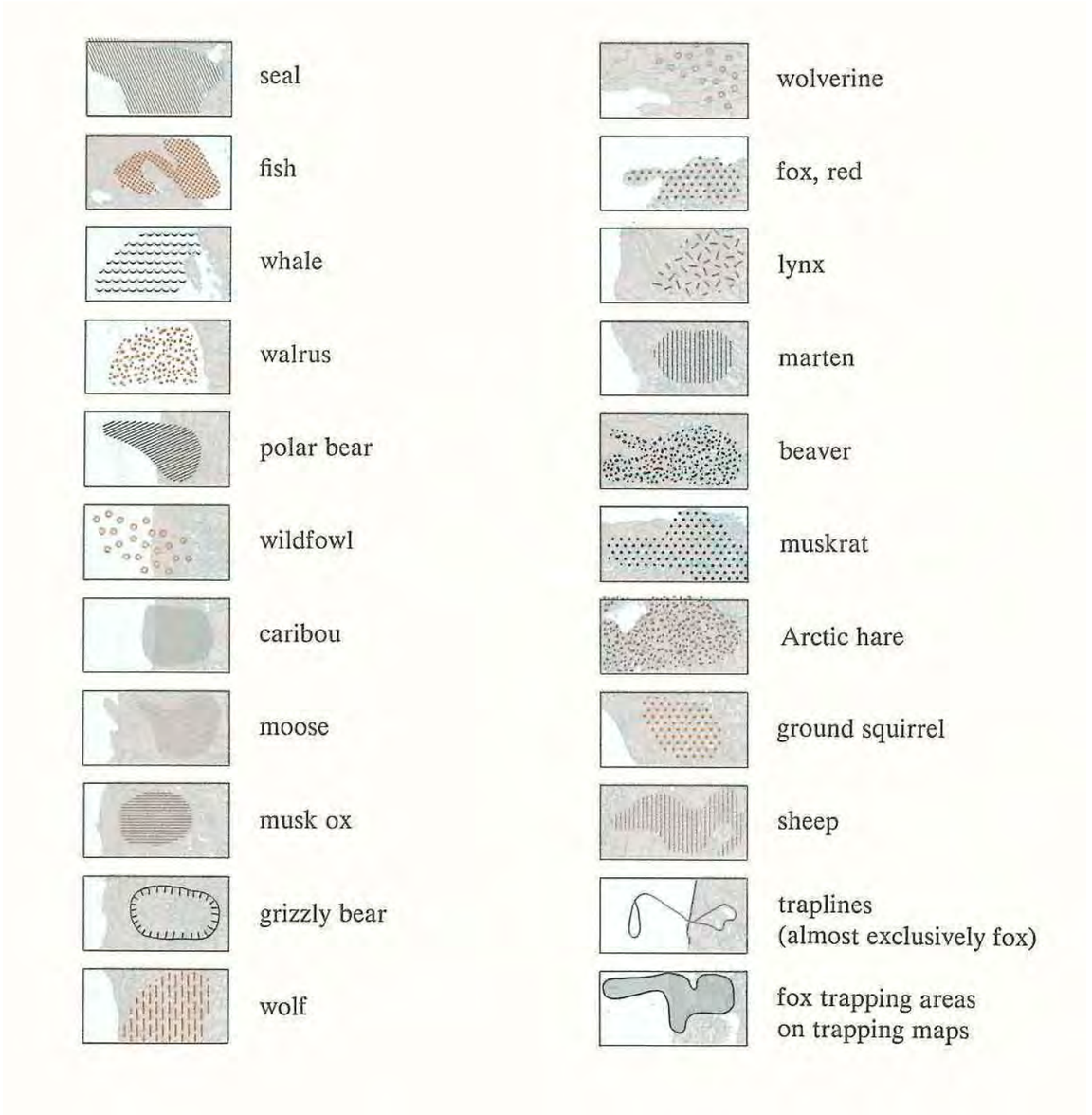


Figure 47. Legend for the Spence Bay Region - excerpt from Inuit Land Use and Occupancy 1976



Symbolism is consistent throughout Part II, except in Spence Bay where wildfowl and fish are denoted by specially identified symbolism.

Scale in Part II is 1:2,000,000.

1992 NUNAVUT ATLAS

The Nunavut atlas partitions the Taloyoak study area into five sections (Prince of Wales Island, M'Clintock Channel, Boothia Peninsula, Rae Strait and Chantrey Inlet) each with two subsections: Land use and fishing; and Wildlife. Figure 48 displays the community map for Spence Bay (now Taloyoak) and Figures 49-58 describe each of the five sections and their subsections.

The summary provided below describes Rae Strait where the majority of land use by Taloyoak residents occurs.

The following text on land use and fishing is reprinted verbatim from the 1992 Nunavut Atlas (map shown in Figure 55) though it has been filtered to present information specific to species of interest in the coastal resource inventory.

1GH
This portion of King William Island is heavily trapped for Arctic fox each winter. The 80 General Hunting License holders trapped over 5,000 Arctic fox in a recent winter in this area which extends westward on King William Island. The Swan Lakes vicinity is heavily fished for migrating Arctic char and for lake trout during spring and fall. The area around the Gjoa Haven settlement is heavily hunted for waterfowl (especially geese) each spring.

2GH & SB
Most of Rasmussen Basin is currently little used for resource harvesting. One Gjoa Haven family has applied for a government-funded Outpost Camp at Cape Britannia northeast of Chantrey Inlet. Hunters and trappers from both Gjoa Haven and Pelly Bay have hunted seals and waterfowl throughout this area in the past.

6SB & PB
While much of this area is currently of little use for resource harvesting, Spence Bay hunters and trappers have hunted caribou and trapped Arctic fox here in the past and Pelly Bay hunters have hunted caribou here.

7GH, SB & PB
This winter travel route is heavily used by residents of Gjoa Haven, Spence Bay and Pelly Bay for travel between the three settlements.

8GH & PB
This travel route is well used for travel by Inuit between Gjoa Haven and Pelly Bay during winter and spring.

9GH
Fisheries and Oceans Canada has established a test fishery at the mouth of the Murchison River and a commercial quota is being determined. White fronted and snow geese are hunted periodically during some summers by Gjoa Haven hunters at the mouth of the Inglis and Murchison Rivers.

10GH
Hunters and trappers from Gjoa Haven use this important travel route to reach the Chantrey Inlet Outpost Camp. This route is used year round by snowmobile in winter and by motor boat during summer. Caribou are hunted when seen along the route. Gjoa Haven residents also use this route for travel to the Back River for Arctic char, lake trout and whitefish fishing during May and June and for waterfowl and seal hunting during summer, seals are hunted on the ice during mid-April to June.

11PB
Most of the 50 Pelly Bay General Hunting License holders utilize the many fish and wildlife resources of the entire Pelly Bay vicinity. A government quota of 5 narwhals has been established for Pelly Bay. Up to 10 Polar bears are taken each year, mostly along the west shore of Pelly Bay. Most Pelly Bay hunters harvest ringed seals and some bearded seals throughout Pelly Bay, hunting by motor boat during the open water period and on the ice during winter. Arctic foxes have been heavily trapped on both sides of Pelly Bay in past years. Many Pelly Bay families establish spring and summer Arctic char fishing camps at the numerous river mouths along the west shore of the bay. Waterfowl are commonly hunted at this time in conjunction with summer seal hunting.

13PB & RB
These travel routes between Pelly Bay and Repulse Bay, and along Committee Bay, are used by residents of both settlements each winter, travelling by snowmobile. Caribou or seals may be hunted if seen while travelling. The Government of the Northwest Territories has established an annual quota of 15 polar bears for this area each winter by Pelly Bay hunters. Fisheries and Oceans Canada has established a test fishery in Keith Bay with a quota of 4,500 kg of Arctic char.

14PB
This is the main Arctic fox trapping area for Pelly Bay residents. Most of Pelly Bay's annual harvest of 1,000 foxes comes from this area. The mouth of the Kellett River has had an annual commercial quota of 9,000 kg of Arctic char established by Fisheries and Oceans Canada; however, the Pelly Bay residents prefer to use the char resource for domestic consumption. Virtually every resident fishes for Arctic char under the ice each winter at the mouth of the Kellett River. Several hunters from Pelly Bay travel south along the Kellett, Atorquait and Arrowsmith rivers by snowmobile each winter to hunt caribou.

15PB
Most residents of Pelly Bay fish for Arctic char during winter under the ice of Barrow Lake and the mouth of Kugajuk River. Char are also taken with nets during summer in St. Peter Bay. This entire area is heavily trapped for Arctic fox during the winter.

16SB & GH
Spence Bay and Gjoa Haven hunters and trappers formerly hunted polar bears and ringed seals and trapped Arctic fox in Lord Mayor Bay and in the vicinity of the Astronomical Society Islands and Ross Peninsula in early fall. Now the polar bear hunting season has been changed to later in the winter and the rough ice present at that time precludes use of this area.

18PB
Pelly Bay hunters hunt polar bears and ringed seals throughout winter and also hunt seals during summer using motor boats on the open water from the Harrison Islands south throughout Pelly Bay.

19SB
Much of this area is currently little used for resource harvesting; however, Spence Bay residents used these areas in the past for caribou and waterfowl hunting and Arctic fox trapping.

20PB & SB
This winter travel route is used by residents of Pelly Bay for travel by snowmobile between the two settlements.

21SB
Virtually all of the approximately 50 General Hunting License holders use this area around the Spence Bay settlement for hunting, fishing and trapping year round. The Northwest Territories Wildlife Service reports that approximately 700 caribou may be shot in this area and north to Thom Bay, mostly during winter. Arctic fox trap lines are set primarily along the coast and the Wildlife Service estimates a current annual winter harvest of 1,500 foxes. Harvest 20 years ago often exceeded 6,000 foxes around Spence Bay. Fall camps for spearing of Arctic char are established at the mouth of the Garry River where an estimated 900 kg of char are harvested yearly by 4 to 5 families and upstream from Sagjak Inlet during the fall and spring. Lake trout are taken during fall, winter and spring by jigging through the ice, and by rod during the summer. Hansteen, Jekyll, Ishlutuk and Kangikjuke Lakes are important for lake trout fishing and Redfish Lake is used for both char and trout fishing. Netsilik Lake has had a commercial quota established of 5,500 kg of lake trout and whitefish. Many families camp on Middle Lake during summer. Four to five families camp at the outlet of Netsilik Lake during spring and summer and several at Netsiksiuvik Inlet. Most landlocked Arctic char are caught during fall by jigging through the ice. Waterfowl hunting is generally done in conjunction with seal hunting from motor boats during

open water. Polar bears are seldom hunted near Spence Bay but are hunted further north, mostly during December, March and April.

22SB
Josephine and Spence bays are heavily utilized year-round by most Spence Bay residents for Arctic char fishing and ringed seal hunting. Arctic char are netted both under ice in fall and spring and by boat in open water during summer. Seals are hunted during winter (October) on the ice and during summer (July and August) by motor boat in open water. The Northwest Territories Wildlife Service estimates the current annual seal harvest at 400 during summer and 100 during winter. Seals are hunted along James Ross Strait to Cape Victoria and a sealing camp is set up at Josephine Bay during summer. James Ross Strait is used as a year-round travel route by Spence Bay hunters, both en route to polar bear hunting areas in the north during winter and occasionally during summer, en route to caribou hunting areas.

23SB
This travel route is used during winter by many hunters and fishermen from Spence Bay travelling by snowmobile to hunt caribou, seal and polar bear and to fish for Arctic char and lake trout further north.

24SB &PB
This travel route is used during winter by residents of both Spence Bay and Pelly Bay for travel by skidoo between the two settlements. Arctic fox traps are set along the route by some Spence Bay trappers.

25GH & SB
Most of St. Roch Basin is currently little used for resource harvesting. Hunters and trappers from both Gjoa Haven and Spence Bay hunted polar bears, seals and waterfowl and trapped Arctic fox along portions of St. Roch Basin during past years.

Notes on Domestic and Commercial Fisheries
Fish, particularly anadromous Arctic char, are an important food for residents of Spence Bay. Between March and December, fishermen from the community range south to Sheperd Bay and north to the lakes near Bellot Strait. Travelling by snowmobile in the spring and fall and by boat in the summer, they net, jig, spear or angle Arctic char, lake trout, lake whitefish, cod and cisco.

From March to June and October to December, fish are netted or jigged through the ice of fresh water lakes and marine bays. Land-locked Arctic char and lake trout are caught in Pangnikto, Jekyll, Kangikjuke, Ishluktuk, Redfish and Hansteen lakes; anadromous Arctic char, lake trout, possibly anadromous, are caught in Middle and Krusenstern lakes and the lakes east of Balfour Bay (e.g. 69°08'N, 94°00'W). During this period, cod are jigged for through the ice of Spence Bay and Willersted Inlet.

During July and August, nets are set along the shores of Spence Bay and Netsiksiuvik Inlet to catch Arctic char and cod. Arctic char and lake trout are angled and sometimes netted, usually from shore, at summer camps and near the community.

In late August and early September, anadromous Arctic char are netted or speared in the rivers as they return upstream to overwinter in fresh water. The Garry and Netsilik rivers and outlet streams to Middle and Krusenstern lakes are netted annually and char are speared at a saputit on the outlet to Krusenstern Lake and in the Garry River.

During October and November, commercial fishermen from Spence Bay net Arctic char in Lord Lindsay Lake, Netsilik Lake and the Agnew River area. Lord Lindsay Lake has been fished annually since 1977 and has an anadromous char quota of 3,000 kg round weight. Netsilik Lake was last commercially fished in 1978 and there are no catch statistics available for the Agnew River area which has a char quota of 4,500 kg round weight.

In 1981, commercial test-fishing permits were issued for Netsilik, Lady Melville and Pangnikto lakes. Further data is not available.

The following text on wildlife is reprinted verbatim from the 1992 Nunavut Atlas (map shown in Figure 56).

1. WATERFOWL
This is only a very small portion of a large wildlife area which extends onto the adjacent map area to the north and west, and which encompasses all of Adelaide Peninsula, King William Island and many of the adjacent small islands. This wildlife area provides very important habitat for a large number and diversity of birds. Much of this entire region is characterized by extensive well-vegetated lowlands that are interspersed with numerous small, shallow tundra ponds and lakes. These areas provide prime nesting habitat for many of the bird species that breed in the region and include such species as Canada goose, king eider, oldsquaw, whistling swan, sandhill crane, glaucous and Sabine's gulls, Arctic tern, Arctic loon, red-throated and yellow-billed loons, pomarine and parasitic jaegers, long-tailed jaeger, snowy owl, rock ptarmigan and several species of shorebirds.

Adelaide Peninsula and King William Island appear to be particularly important for swans. Likely between 1,000-2,000 and 3,000-4,000 whistling swans utilize Adelaide Peninsula and King William Island, respectively, for breeding, brood rearing and molting. These areas are also important, particularly during the critical molting period, for large numbers of geese. These geese appear to be mostly non-breeding birds that are likely associated with the goose populations that nest mainly in the Queen Maud Gulf Migratory Bird Sanctuary and in the Rasmussen Basin. Nesting activity by a small percentage of geese, mostly Canada geese, does occur on Adelaide Peninsula and King William Island. Non-breeding geese utilizing this wildlife area likely number 7,000-14,000 snow, 5,000-10,000 Canada geese, 500-1,000 white-fronted geese and 750-1,500 brant. The numbers of geese within this area may fluctuate substantially from year to year and would likely be dependent upon the relative breeding success of the nearby nesting areas. Whistling swans and Canada geese are found widely dispersed throughout this entire area. Concentrations of molting snow geese have been observed in the interior of Adelaide Peninsula, mostly in association with the larger lakes. On King William Island, concentrations of molting snow geese have been observed along the Douglas River system and on the northwest side of the island between Collinson Inlet and Riviere de la Roquette. King eiders and old squaw are common throughout much of this area. Scattered concentrations of molting ducks, likely non-breeders have been observed in coastal areas, mostly in association with the large, ice-free inlets.

2. WATERFOWL
This large area which extends mainly onto the map area to the north, comprises the Rasmussen Basin lowlands - a region of recent marine emergence that is poorly drained, well-vegetated, and contains numerous shallow lakes, ponds and meandering rivers and streams. The region encompassing these lowlands provides both important and critical habitat for a large number and diversity of birds. Up to 46 species of birds have been recorded in this area. Most of these, which include such species as whistling swan, white-fronted goose, Canada and snow geese, brant, king eider, oldsquaw, sandhill crane, snowy owl, glaucous and Sabine's gulls, Arctic tern, Arctic and red-throated loons, pomarine and parasitic jaegers, long-tailed jaeger, rock ptarmigan and at least 12 species of shorebirds, nest within these lowlands. A 1976 estimate has placed the overall summering bird population in the area at over 1,500,000.

The Rasmussen Basin lowlands are particularly important as a breeding and molting area for large numbers of waterfowl, including a significant percentage (3-5%) of the continental populations of whistling swans and white-fronted geese. Estimates (1976) place the waterfowl population utilizing these lowlands of 5,000-6,000 whistling swans, 10,000 white-fronted geese,

5,000-6,000 snow geese, 30,000-35,000 king eiders, 10,000-15,000 old squaws and 500-1,000 Canada geese. A large percentage of the waterfowl found summering on these lowlands are thought to be non-breeding birds. Significant numbers of other birds that are also associated primarily with marine and aquatic habitats that include cranes, loons and an estimated (1976) 500,000 shorebirds, the most numerous being the red phalarope, also utilize this area.

Migratory birds begin arriving on the lowlands in late May and early June. At this time many of the rivers and streams, which provide most of the early open water within the area, are particularly important for waterfowl and other water birds for staging as they await the snow melt off the nesting areas. By mid-September most migratory birds have moved south with the exception of the eiders and oldsquaws, many of which remain in the area until freeze-up.

3. WATERFOWL

This central or core area of the Rasmussen Basin Lowlands which generally lies below 60 meters in elevation is critical habitat for birds. The highest densities of many of the bird species inhabiting the entire lowlands region, particularly whistling swans, white-fronted and snow geese, king eider, oldsquaw and the large variety of shorebirds utilize this area for nesting, brood-rearing and molting. This area is particularly critical for swans and white-fronted geese.

Although snow geese nest in scattered locations throughout the lowland area, most nesting activity is concentrated in three main colonies which are located in the extreme southwest comer and near the north end of this Critical wildlife area, Molting and brood rearing snow geese appear to remain concentrated, mostly in the vicinity of these colonies.

Both king eiders and oldsquaws are common summer residents within this area and are widespread nesters throughout the lowlands. The rivers, larger lakes , and particularly coastal waters are important areas for molting birds. Most brood rearing activity appears to be associated with the coastline and on tundra lakes and ponds, likely near the nesting sites. High densities of shorebirds summer in these lowlands. These birds are widespread through the lowlands. The highest densities have been recorded in coastal areas, particularly north of the Inglis River.

4. WATERFOWL

This area with its many lakes and well-vegetated lowlands provides some important habitat for birds that include waterfowl, loons, gulls and shorebirds. This area may be particularly important for small numbers of nesting, brood-rearing and molting waterfowl that includes Canada geese, snow geese, white-fronted geese and oldsquaws.

The coastal area along the west side of Committee Bay is used most extensively by non-breeding birds - king eiders, oldsquaws, and Canada geese - for molting. These areas also provide some important habitats that are utilized for nesting and brood rearing by a variety of shorebirds, waterfowl, loons and gulls.

6. WATERFOWL

The rivers, coasts, and associated lowlands, within this area, provide some important habitat for birds, particularly waterfowl. These areas receive their greatest use by molting geese, mostly non-breeding Canadas that occur in many small scattered flocks along the rivers and coasts. The rivers themselves and coastal waters are important in that they provide a relatively safe refuge from predators for molting geese, particularly during the flightless period when they are most vulnerable. Some of the small, shallow lakes found throughout this area may be particularly important for small numbers of nestling, brood-rearing and molting waterfowl that include Canada geese, snow geese, white-fronted geese and oldsquaws. Some important habitats for other birds, which include loons, gulls and a variety of shorebirds may also be found within this area.

7. WATERFOWL

Matty Island provides some important habitat for nesting, brood rearing and molting by small numbers of birds that include whistling swans, brant, Canada geese, king eiders, oldsquaws, glaucous gulls, jaegers, loons and a variety of shorebirds.

That portion of the area encompassing Oscar Bay and north contains well-vegetated meadows and many tundra lakes and ponds, and appear to be especially productive for birds, mostly waterfowl. Waterfowl species that utilize this wildlife area for nesting, brood-rearing and molting include snow geese, Canada geese, oldsquaws, king eiders and whistling swans. Coastal areas are of particular importance for molting birds, mostly ducks. Because of the habitats available within this area, other birds utilizing the area would include gulls, jaegers and loons.

8. WATERFOWL

This area, which is well-vegetated and has many ponds and lakes distributed throughout has been reported to contain high densities of breeding birds that include several species of shorebirds, Canada geese, white-fronted geese, oldsquaws and Arctic terns. The larger lakes within this area are likely used most extensively by molting birds.

9. SEABIRDS

This is an important area for a small concentration of gulls that utilize the area for feeding and nesting. The area supports at least three small colonies of nesting glaucous gulls.

10. SEABIRDS

These areas support small to moderate-sized colonies of cliff nesting gulls, Approximately 25-50 breeding pairs of gulls, likely glaucous gulls, nest at the colony near the mouth of the Garry River. The two gull colonies, likely of glaucous gulls, located near Netsiksiuvik and Sagvak Inlets are reported to number approximately 50 and 100 breeding pairs respectively. A mixed colony of Thayer's and glaucous gulls located along the coast to the southwest of Felix Harbour is reported to number approximately 150 breeding pairs. The largest colony is on Korvigdjuak Island and supports approximately 100-200 breeding pairs of gulls. The gull colonies to the north and south of Pelly Bay support about 75-125 breeding pairs. These colonies contain either or both glaucous and Thayer's gulls.

11. SEABIRDS

These areas support small colonies of nesting gulls. The colonies range in size from approximately 15 breeding pairs in the northern-most colony on this map area to about 50 breeding pairs in the Harrison Islands colony. These colonies contain either or both glaucous gulls and Thayer's gulls.

12. RAPTORS

The steep cliffs scattered throughout the Precambrian uplands along the eastern and north-central portions of this area, particularly the escarpment that forms the eastern boundary of the Rasmussen Basin lowlands, contains prime nesting habitat for raptors. Because of their relatively small overall population sizes, nesting success is particularly critical for peregrine and gyrfalcons. All areas used by peregrines and gyrfalcons for nesting are designated critical. Peregrine falcons and rough-legged hawks are reported to be abundant within this area. The occasional gyrfalcon and golden eagle may also nest in the area.

13. RAPTORS

Raptors, mostly rough-legged hawks and peregrine falcons appear to be relatively abundant within this area. The occasional gyrfalcon may also be found nesting here. This area immediately south of Pelly Bay, in the vicinity of the Arrowsmith River, appears to be particularly productive habitat for golden eagles.

14. RAPTORS
Within this area raptors do not appear to be particularly abundant. The area is used most extensively by rough-legged hawks, some peregrine falcons and perhaps the occasional gyrfalcon.

20. SEALS
Inuit from Gjoa Haven and Spence Bay report that ringed seals, occurring in groups of moderate densities, and bearded seals, occurring individually and in much lower densities, are found in all waters surrounding King William Island.

21. SEALS
Inuit hunters report that moderate numbers of ringed seals and a few bearded seals occur year-round in Pelly Bay.

22. SEALS AND POLAR BEARS
Ringed seals are found year-round throughout the marine portion of this map area but are particularly numerous on the stable land-fast ice found along the coastlines. They are not randomly and independently distributed but rather, are found in groups or clumps. The less gregarious bearded seals occur sporadically and in lower numbers. A particular area of concentration seems to be along the northeast coast of King William Island south of Matty Island.

During the winter and spring, polar bears concentrate on the ice to hunt seals, particularly at the floe edges and on the unstable offshore ice. Here are found the greatest concentrations of sub-adult ringed seals which are inexperienced and easier to capture. These yield an energy value equivalent to that of the adult ringed seals found on the more stable ice closer to shore. A few bearded seal are also taken regularly.

23. POLAR BEARS
Matty Island and the southeast coast of the Boothia Peninsula are suspected to be important maternity denning areas. The southwest coast of the Boothia Peninsula and other coastal areas of the map area are inadequately surveyed for polar bear dens.

24. POLAR BEARS
Polar bears are present on the ice in Pelly bay between autumn and spring where they hunt seals prior to breakup in the summer. The persistence of ice in the Bay during the first weeks of summer allows the bears to prolong their hunting of seals.

25. POLAR BEARS
The northern portion of the Simpson Peninsula is known to be a large and important maternity denning area for polar bear. This region, particularly along the east coast from the tip of the peninsula as far south as Keith Bay, constitutes an important feeding ground for bears which range here during winter, and for female bears and their cubs which emerge from their dens in spring.

26. POLAR BEARS
The northern portion of the Simpson Peninsula, the Northern Archipelago and the Harrison and Astronomical Islands make up a large and important maternity denning area for polar bears. This region, particularly along the coasts of the islands and in the bays, also serves as a major feeding area.

27. POLAR BEARS
Polar bears are known to range along the northeast coastline of King William Island. The presence of people at Gjoa Haven discourages the polar bears from moving too close to the settlement.

28. SEALS
Ringed seals are found year-round throughout the marine portion of this area but they are particularly numerous on the land-fast ice in the bays and along the coastlines. Bearded seals, occurring sporadically, are found farther offshore, in areas of moving pack and pan ice.

29. SEALS
Inuit from Pelly Bay report that ringed seals are found throughout the year along the west coast of Committee Bay. They are formerly harvested during the winter off Cape Barclay near the mouth of Keith Bay.

30. SEALS AND WALRUS
The ranges of the harp seal and the Atlantic walrus have been documented to include the northern half of the Gulf of Boothia tapering eastward into Foxe Basin. Both species are absent from most of the study area because of the barrier of solid ice in Queen Maud Gulf, Victoria Strait and M'Clintock Channel.

31. NARWHALS, BELUGAS AND WALRUS
Sightings of both narwhals and belugas in Spence and Lord Mayor Bays have been reported, although in recent years such occurrences have become quite rare. In 1953 it was reported that walruses were sometimes harvested in Lord Mayor Bay. Also reported was a single walrus sighting near the mouth of Spence Bay. The latter is considered to be an extralimital occurrence as it is outside of what is thought to be the usual range of the walrus.

32. NARWHALS AND BELUGAS
In June narwhals leave their wintering grounds in the open pack ice areas of Davis Strait and enter the leads into Pond Inlet, Jones Sound and Lancaster Sound. Some of the whales entering Lancaster Sound turn into Prince Regent Inlet. Periodically the migration route extends into Lord Mayor, Pelly and Committee Bays.

33. NARWHALS, BELUGAS AND WALRUS
Narwhals, belugas and walruses, although uncommon, appear in the Pelly Bay area during years when there is a limited amount of floating ice.

White whales and narwhals, the latter being more abundant, are sometimes hunted along the southwest coast of Pelly Bay. In 1975 the residents of Pelly Bay reported taking seven narwhal.

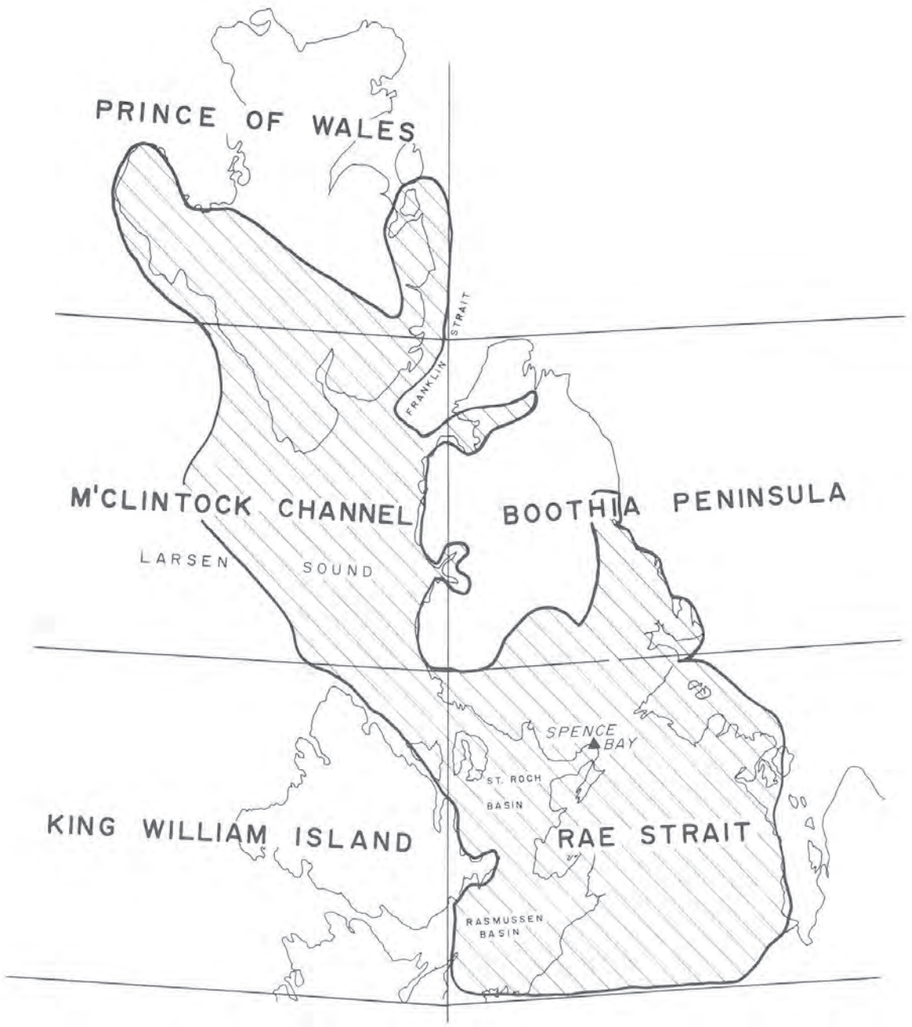
A walrus was shot at Pelly Bay in 1949. Walrus killings in more recent years include one at the mouth of Kellett River and another at the northern end of St. Peter Bay.

34. BELUGAS
Belugas have occasionally been seen as far south as Rasmussen Basin, north of Chantrey Inlet. Two were sighted in this area in August of 1982.

35. WALRUS
Hunters report occasional harvesting of walrus in the mouth of Lord Mayor Bay, particularly in the vicinity of the Astronomical Society Islands.

Figure 48. Community map for Spence Bay – excerpt from The Nunavut Atlas 1992

Girls at Spence Bay — PHOTO: JILL OAKES



SPENCE BAY - TALUGYOAK

Figure 49. Landuse and Fishing map, Prince of Wales Island – excerpt from the Nunavut Atlas 1992

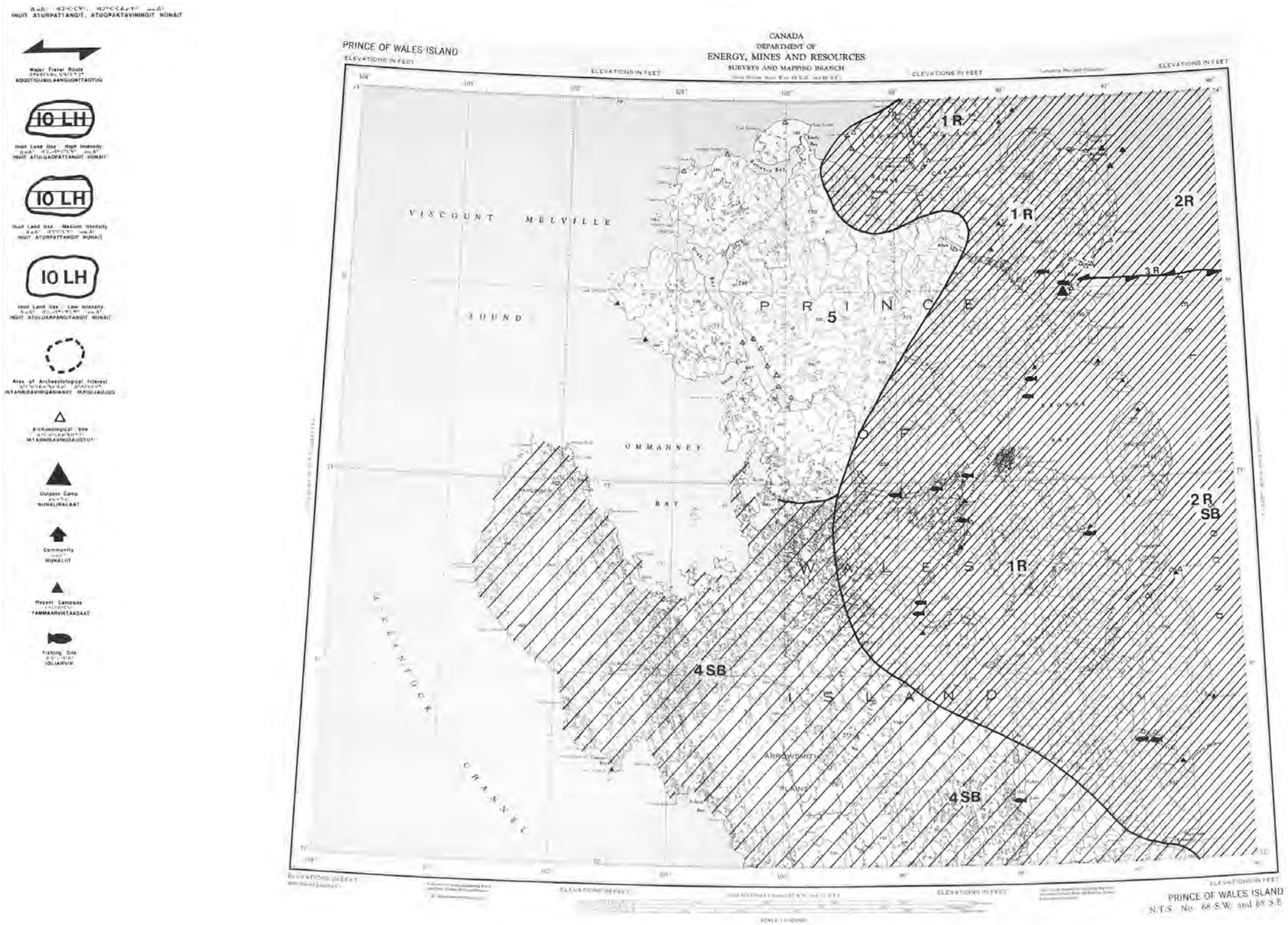


Figure 50. Wildlife Overlay map, Prince of Wales Island – excerpt from the Nunavut Atlas 1992

Figure 51. Landuse and Fishing map, Prince of Wales Island – excerpt from the Nunavut Atlas 1992

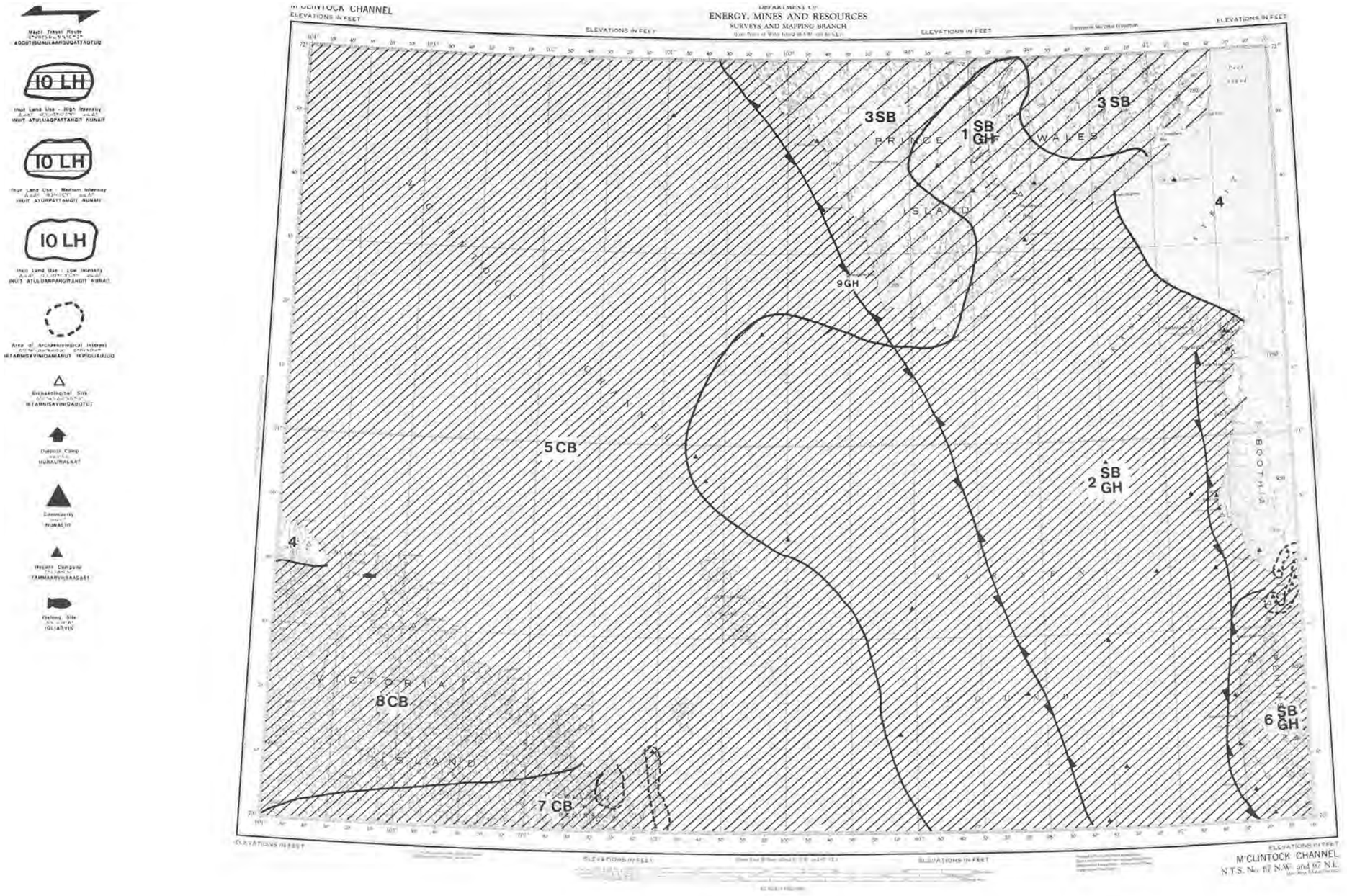


Figure 52. Wildlife Overlay map, M'Clintock Channel – excerpt from the Nunavut Atlas 1992

Figure 53. Landuse and Fishing map, Boothia Peninsula – excerpt from the Nunavut Atlas 1992

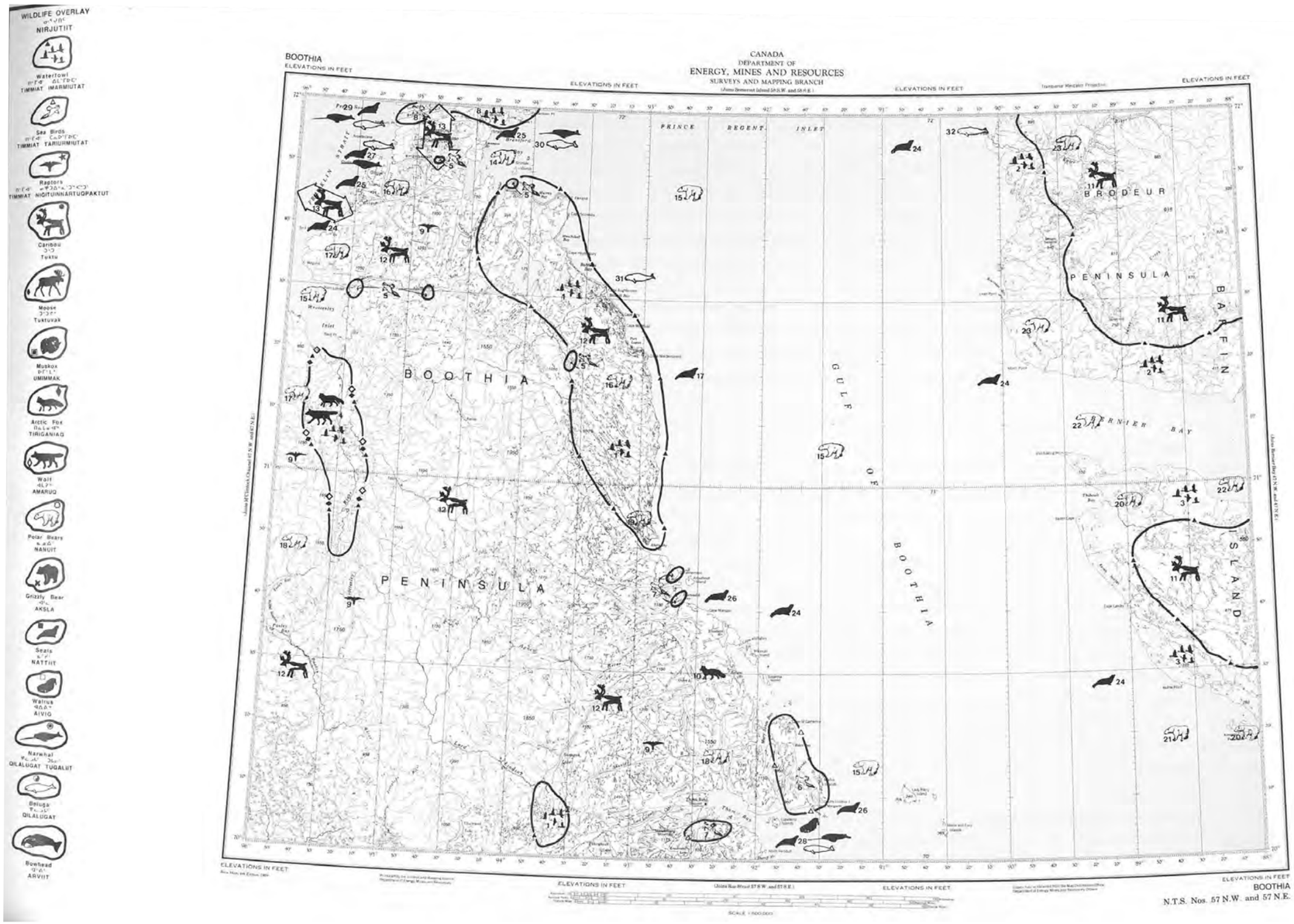


Figure 54. Wildlife Overlay map, Boothia Peninsula – excerpt from the Nunavut Atlas 1992

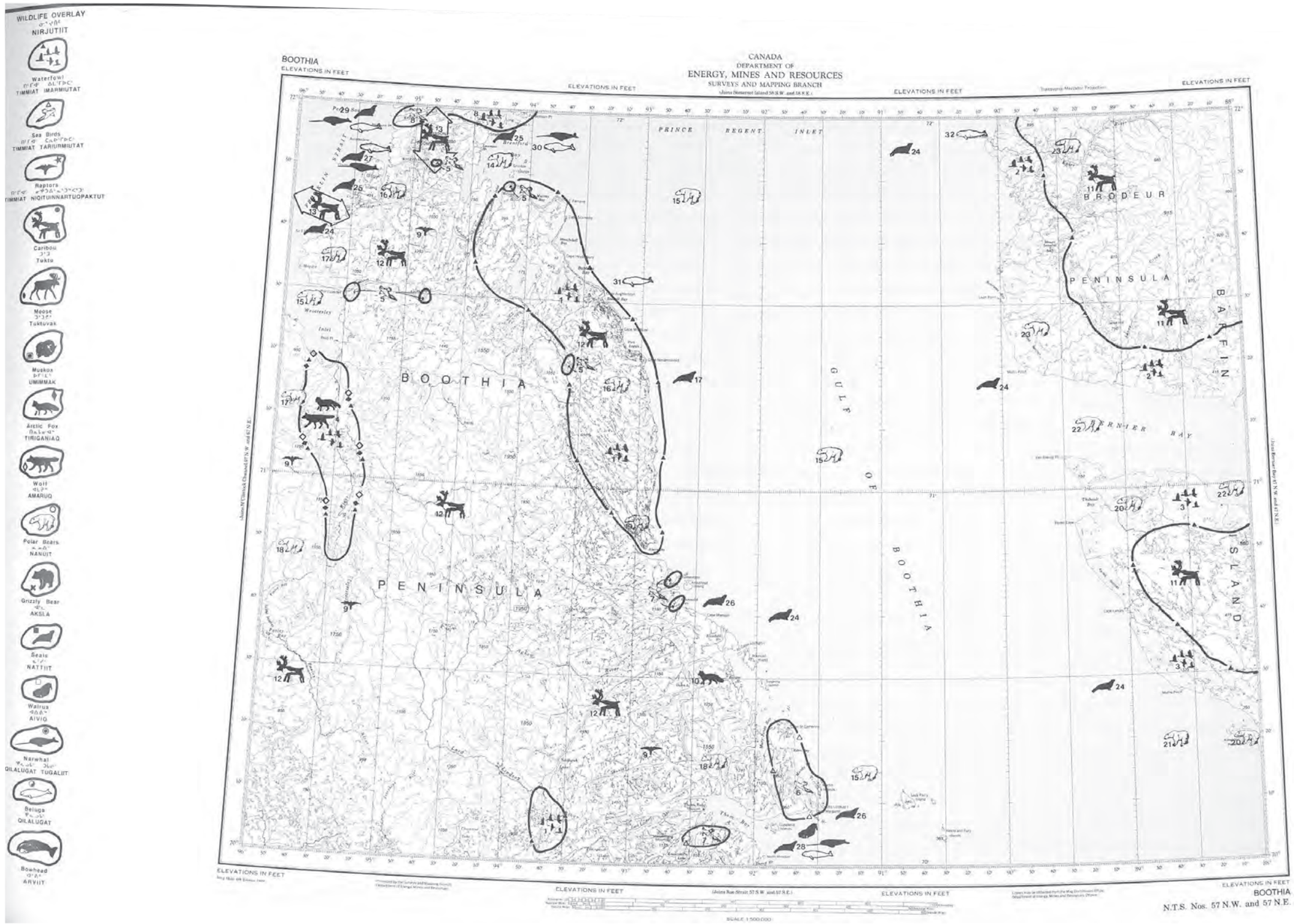


Figure 55. Landuse and Fishing map, Rae Straight – excerpt from the Nunavut Atlas 1992

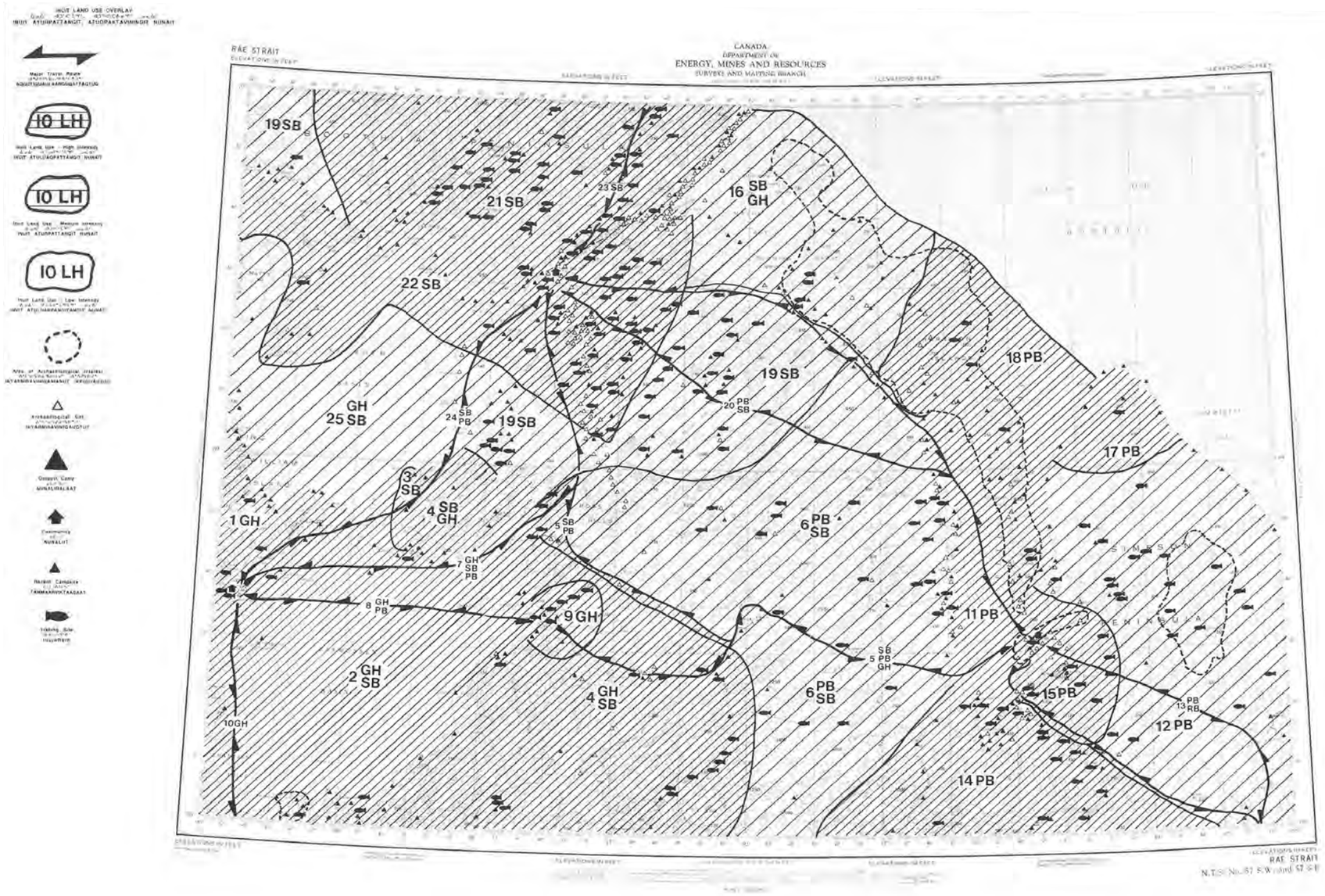


Figure 56. Wildlife Overlay map, Rae Straight – excerpt from the Nunavut Atlas 1992

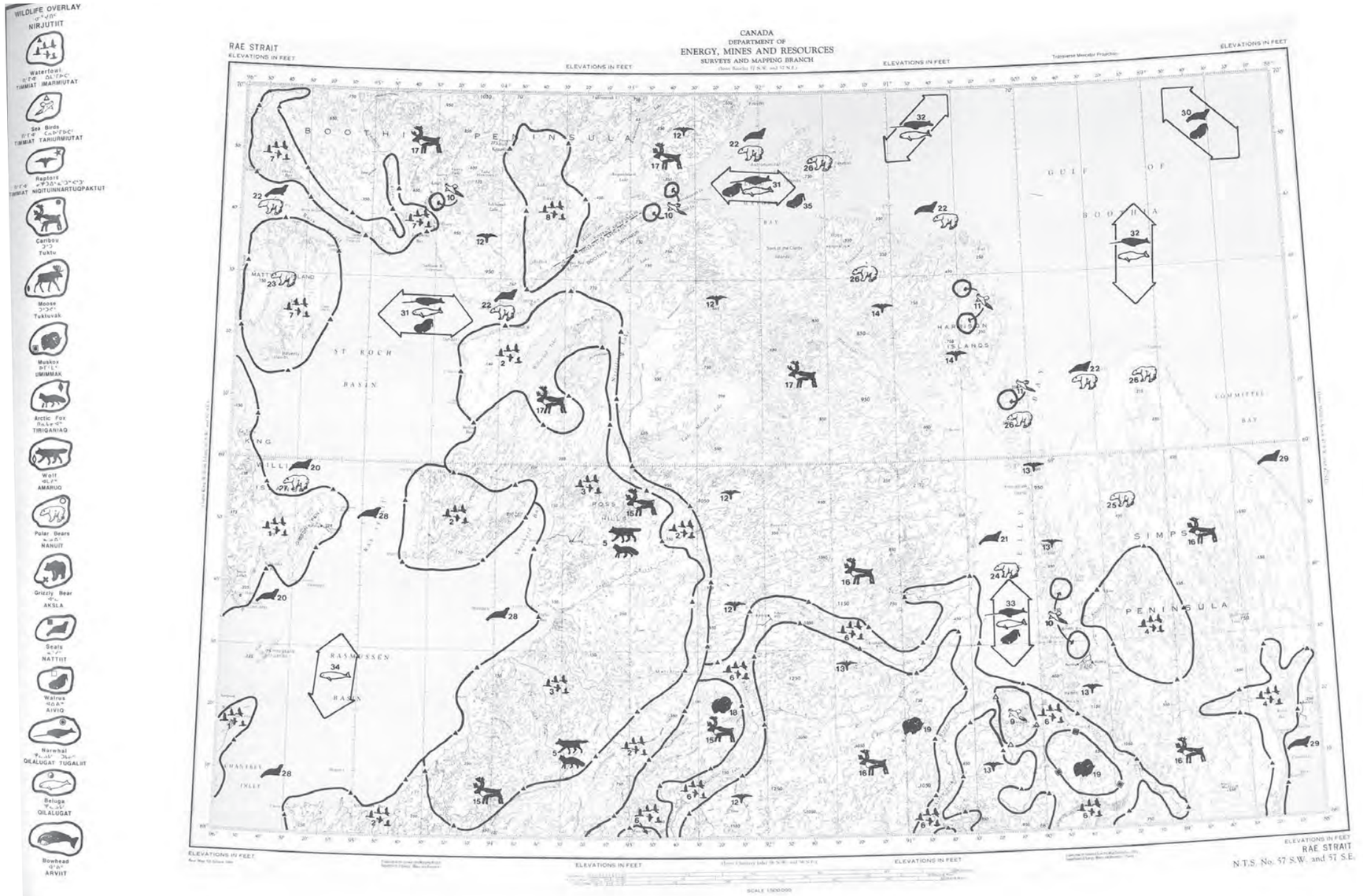


Figure 57. Landuse and Fishing map, Chantrey Inlet – excerpt from the Nunavut Atlas 1992

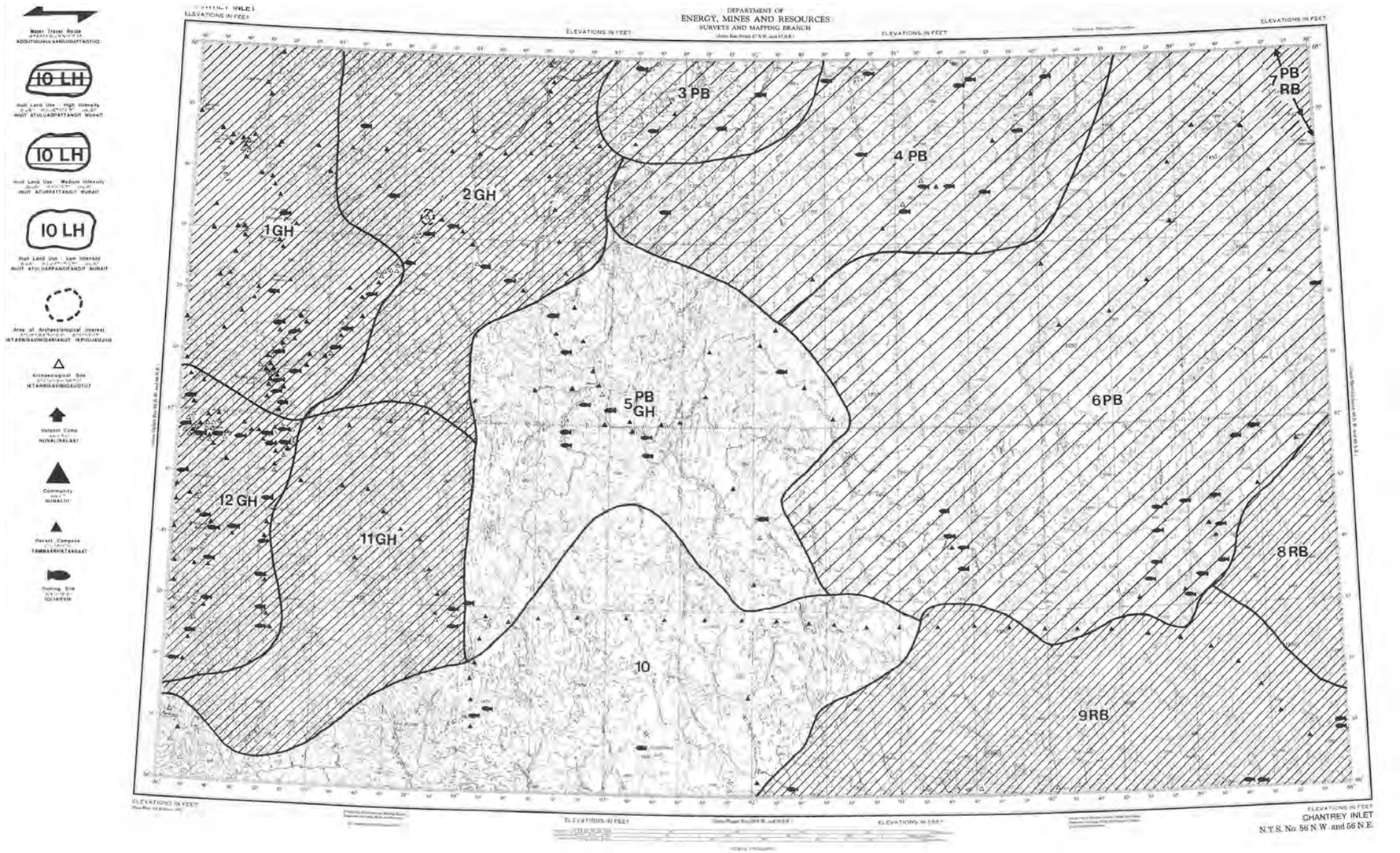


Figure 58. Wildlife Overlay map, Chantrey Inlet – excerpt from the Nunavut Atlas 1992

FINAL THOUGHTS

INTERVIEW PROCESS

The interview process was judged to be especially effective, even though both format and execution were quite relaxed. The process was well defined and the use of photos and maps ensured that the same material was considered from one interview to the next. This provided a solid, reproducible structure that encouraged rigor, permitted immediate interviewee inter-comparisons, and allows for future community assessments. Interviews took from 2.5-6 hours, depending on the depth of the individual's knowledge, the amount of marine-specific information they possessed, and the extent to which responses prompted supplementary questions. Since the process was focused on coastal resources, it generally excluded terrestrial mammals such as caribou, muskoxen, or arctic fox, while embracing polar bears and a broad array of birds that range widely over both coastal and terrestrial areas.

Despite general satisfaction with the process, some prior reservations warrant comment. First, the interview process was initially conducted in the present tense, with the implicit assumption that all responses were addressing contemporary, immediate or very recent experience with the species under discussion. However, unless explicitly excluded, the information offered may represent temporal integration of experiences over some indeterminate period. Hunters who have traveled and hunted these areas for decades could provide responses drawn from observations made indiscriminately in the short, medium, or long term. For these reasons, interviewees were routinely informed that contemporary data was those observations made since 2005, and data offered from observations before that date should be accompanied with an indication of the observation date. These latter observations were analyzed, identified, and archived independently of contemporary data.

A second issue addresses the designation "Everywhere". Sometimes an interviewee, in response to a question about an animal's distribution, indicated that they were observed to be present "Everywhere". This is a very subjective descriptor that, without additional qualifiers, is not very useful. Essentially, it refers to the geographic extent of the respondent's knowledge, and unless that knowledge is further defined, its utility is limited. Consequently, all interviewees were asked at some point to delineate the extent of their travels. That information was recorded and subsequently displayed (see Figure 5) where it can be located and used to identify what is meant by "Everywhere" for a specific interviewee.

MAPS AND DATA

Given the broad geographic reach of the interviewees' responses, the map format was chosen to provide a synoptic view of the collected data. Every effort was made to keep a common scale for all maps in this document, in order to permit comparisons between maps. For some species, the scale showed the breadth of the distribution and the inter-connectedness of seemingly disparate locations; while for others, especially where distributions were modest or localized, the advantages were less obvious.

The scale used in maps obtained from the *Nunavut Atlas* (1992) is larger because the geographic area of interest is smaller. In addition, one must keep in mind that the data collected for the *Nunavut Atlas* was actually collected in the early 1970s and represents conditions that were extant 35 years ago. This is particularly relevant for Taloyoak since the middle-aged and elders of that time would have recorded memories prior to community establishment in 1948. Some comparisons are possible but they must be made with caution.

One of the key objectives of the Nunavut Coastal Resource Inventory (NCRI) is to detect changes in species composition associated with climate change. As such, species identified by interviewees were respected as provided even if some species are not normally reported in the region (e.g., Bull Trout, Broad Whitefish, Rainbow Smelt and Atlantic Cod). IQ shared by participants remains the most current and authoritative source of information available for the arctic.

Harvest data available from the Nunavut Wildlife Management Board (NWMB) Study (NWMB 2004) is not represented in this report. The difference between these two studies is that the NCRI was attempting to ascertain the qualitative geographic distribution of species while the NWMB's primary concern was harvest statistics. Additional inventories should, where possible, document harvest data in the study area.

The present dataset was never conceived as a stand-alone product. It represents a snapshot in time of observations made by individuals within a community who have considerable experience hunting, fishing, and trapping in the region surrounding Taloyoak. These data are considered within the context provided by other studies but have limitations, just as those that preceded it. For a full picture it is necessary to view these findings as one of many complementary datasets.

GOVERNANCE

Collection of resource information through the process of IQ interviews can have many different values for a community, including cultural, social, historical, and economic. All of these, with the exception of the economic value, are more or less self-evident. However, translating a living marine resource into an economic benefit, while simultaneously addressing the issue of sustainability, requires some consideration of resource governance.

Acquiring knowledge about available resources can be empowering and the acquisition of those resources could lead to prosperity and well-being. The NCRI attempts to identify the location and abundance of mammals, fish, birds, invertebrates, and plants for a number of reasons, including the potential for economic development. However, the exploitation of a resource requires considered decision-making, a reasonable definition of expectations and limits, empowerment of individuals, and accountability. In other words, a sustainable approach to resource utilization requires a vision or goals, coupled with an implementation plan. The resource should be thoughtfully governed from the outset.

COMBINING INUIT QAUJIMAJATUQANGIT AND SCIENTIFIC KNOWLEDGE

Inuit Qaujimajatuqangit (IQ) is unique in that it is qualitative, intuitive, holistic, spiritual, empirical, personal, and often based on a long time-series of observations (Mholler et al. 2004). Some of these characteristics are often cited as limitations, due to the reliance on long-term memory or that it is subjective. Conversely, IQ is particularly useful for recording historical data that are unattainable in any other manner. A complementary coupling of IQ and scientific knowledge may provide a means to better understand and manage coastal resources. This combination of knowledge may produce important synergies resulting in a very powerful tool.

The scientific approach embraces all available evidence and postulates a theory that attempts to predict future changes. The accuracy of the prediction is a measure of the completeness of scientific knowledge. Understanding the reasons for change is important because that information is central to any attempt to mitigate or influence long term effects, such as climate change. Addressing the root cause is a more certain approach than attempting to influence the symptoms. A critical factor in the scientific method is the availability and reliability of data available for analysis. The Arctic, because of its size, complexity, and human resource limitations, often does not have an adequate supply of scientific observations. However, one underutilized data source is traditional knowledge where species, locations, processes, and events have been monitored for generations. By bringing traditional knowledge and science together into a complementary working relationship there will be significant benefits for all stakeholders.

CLIMATE CHANGE

Over the past 20 years, an increasing number of arctic researchers have commented on the possibility of climate change and the predicted impacts on the marine environment (Tynan and DeMaster 1997, Michel et al. 2006, Ford et al. 2008a and 2008b, Moore and Huntington 2008, IPCC 2014). Many changes may 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 then 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. In other words, we expect changes to occur in our physical world that could alter the biological system, including the human component.

The Nunavut Coastal Resource Inventory initiative was undertaken to provide information that could inform decision-making in the areas of resource management, economic development, conservation, environmental assessment, and the mitigation of anticipated climate change effects. In order to be effective, each intervention will require baseline resource information plus knowledge about the factors that are driving change. Assessment of environmental change will be considered for both direct human activity (resource extraction) and significant systemic changes (climate change). Climate change will exert its influence through warmer average temperatures, altered wind patterns, changes in precipitation, increasing freshwater input, and modified ocean circulation. Alteration of these factors will directly affect the physical marine environment and, ultimately, coastal marine resources as well. In order to mitigate, ameliorate, or influence these anticipated changes a considerable amount of information about the factors that drive both the physical and biological environments, as well as their interconnectedness is required. There are two immediate sources for that information: traditional ecological knowledge and scientific knowledge.

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Community of Taloyoak

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APPENDIX 1
INTERVIEWEE BIOGRAPHIES

INTERVIEWEE CODE	NAME	BIOGRAPHY
Tayk_1_0314	James Aiyout	Born in Cambridge Bay in 1964, James grew up in the region of Thom Bay and moved to Taloyoak in 1968 where he has lived since. James has been fishing and hunting since he was five or six years of age and continues to do so year-round, whenever possible.
Tayk_2_0314	Willy Mannilaq	Born in Yellowknife in 1968, Willy grew up in the Taloyoak region. Willy spent a year Yellowknife and nine years in Cambridge Bay since 1998, settling in the community of Taloyoak in 2009. Willy has been hunting and fishing since he was five or six years of age and is still an active harvester.
Tayk_2_0314	Sara Jayko	Sara was born in Yellowknife in 1968. She has lived in the Taloyoak region all of her life and has been hunting and fishing for as long as she can remember. She continues to be an active harvester.
Tayk_3_0314	John Ukuqtunnuaq	John was born in Cambridge Bay in 1960. John spent eleven or twelve years of his youth living in Gjoa Haven, and has resided in Taloyoak since. John began hunting and fishing when he was ten years old and continues to actively harvest year-round.
Tayk_4_0314	Elizabeth Aiyout	Elizabeth was born in 1959 in Taloyoak and has lived in or near the community all of her life. She learned to hunt from her mother since her childhood, and has been hunting with her husband and his family for the past twenty years. She continues to actively harvest today.
Tayk_5_0314	George Alak	Born at Redfish Lake in 1965, George has lived and hunted in and around Taloyoak for as long as he can remember. He continues to actively harvest in the spring, summer and fall.

INTERVIEWEE CODE	NAME	BIOGRAPHY
Tayk_6_0314	Joseph Kingatook	Joseph was born on the ice near Pasley Bay in 1940. Shortly after the community of Taloyoak was established in the 1950s, he moved into the community with his family. He has hunted and fished all his life, stopping only recently in 2013 due to health concerns.
Tayk_7_0314	Isaac Panigyak	Isaac was born in the Thom Bay region in 1950. He grew up travelling along the eastern coast of the Boothia Peninsula from Fort Ross to Thom Bay. Isaac has been hunting and fishing since he was a youth (12 years old) and continues to be an active harvester year-round.
Tayk_8_0314	Simon Oleekatalik	Born in Gjoa Haven in 1942, Simon grew up in or near Gjoa Haven, Inglis Bay and Murchison Lake before moving to Taloyoak when he was a young man of nineteen or twenty. He has lived in Taloyoak since. As he has since his youth, he continues to hunt and fish with his wife year-round.
Tayk_8_0314	Nee Oleekatalik	Born at Fort Ross in 1942, Nee grew up on the land along the eastern coastline of the Boothia Peninsula between Fort Ross and Lord Mayor Bay. She has been living in Taloyoak since 1961. She continues to be an active harvester year-round with her husband, Simon.
Tayk_9_0314	Abe Ukuqtunnaq	Abe was born south of Gjoa Haven, near Kaleet Lake in 1944. The first five years of his life were spent on the Back River system and Franklin Lake. When he was five he and his family moved to Taloyoak. He began hunting when he was ten years of age and continues to harvest year-round.

APPENDIX 2
ACRONYMS AND ABBREVIATIONS

CWS – CANADIAN WILDLIFE SERVICE

DFO – DEPARTMENT OF FISHERIES AND OCEANS

DOE – DEPARTMENT OF ENVIRONMENT

GIS – GEOGRAPHIC INFORMATION SYSTEM

HTO – HUNTER/TRAPPER ORGANIZATION

ILUOP – INUIT LAND USE AND OCCUPANCY PROJECT

IQ – INUIT QAUJIMAJATUQANGIT

IPCC – INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

NCRI – NUNAVUT COASTAL RESOURCE INVENTORY

NRI – NUNAVUT RESEARCH INSTITUTE

NWMB – NUNAVUT WILDLIFE MANAGEMENT BOARD

APPENDIX 3 BIRD EVALUATION

SPECIES	GODFREY (1986) *L* SNYDER (1957) *R*	RICHARDS AND WHITE (2008)	CWS	ALLEN (1978)	FRASER (1957)	ELLIS (1956)	HINES ET AL, (2003)	I.B.A.	SHORTT AND PETERS (1942)	JOHNSTON ET AL, (2000)	LGL	MISC.	NCRI INTERVIEW	COMMENTS ON NCRI INTERVIEW(S)
Gr. White-fronted Goose		MB	x	x			B	B		B	B		x	as expected
Snow Goose	B B	MB	x	x				B		B	B	x	x	as expected
Brant	B B	MB		x							B	x		surprised not seen
Cackling Goose		MB					B					B	x	as expected
Canada Goose	B B	MB	x	x	x				x	B	B	x	x	as expected
Tundra Swan	B B	MB	x	x	x		B	B		B	B	x	x	as expected
Northern Pintail		MB	x	x						x	x			surprised not seen
Green-winged Teal		MB									x			
Long-tailed Duck	B B	MBw	x	x	B	x	B			B	B	x	x	as expected
King Eider	B B	MB	x	x	B	B	B	B		B	B	x	x	as expected
Common Eider	B B	MBw		x								x		surprised not seen
Harlequin Duck		A							x					
Red-breasted Merganser		MB		x					x	x	x			surprised not seen
Willow Ptarmigan	B B	PB									x		x	as expected
Rock Ptarmigan	B B	PB		x	x	x				B	B		x	as expected
Red-throated Loon	B B	MB	x	x	B	x	B		B	B	B		s	surprised not seen
Pacific Loon	B B	MB	x	x	B		B	B		B	B		x	as expected
Common Loon									x					
Yellow-billed Loon	B B	MB		x	x	x			x		B	x	x	as expected
Rough-legged Hawk	B B	MB	x	x	B	B				B	B			
Golden Eagle	B	MB												
Gyrfalcon	B B	PB							x				x	as expected
Peregrine Falcon	B B	MB	x	x	B	x		B		B	B	x	x	as expected
American Coot		A							x			x		
Sandhill Crane	B B	MB	x	x			B			B	B	x		surprised not seen
Black-bellied Plover	B B	MB	x	x	x			B		B	B	x		surprised not seen
American Golden-Plover	B B	MB	x	x		x		B		B	B	x	x	as expected

SPECIES	GODFREY (1986) *L* SNYDER (1957) *R*	RICHARDS AND WHITE (2008)	CWS	ALLEN (1978)	FRASER (1957)	ELLIS (1956)	HINES ET AL, (2003)	I.B.A.	SHORTT AND PETERS (1942)	JOHNSTON ET AL, (2000)	LGL	MISC.	NCRI INTERVIEW	COMMENTS ON NCRI INTERVIEW(S)
Semipalmated Plover	B B	MB	x		B				x	B	B	x		surprised not seen
Ruddy Turnstone	B B	MB		x						x	B			surprised not seen
Red Knot	B	MB											x	ok
Sanderling	B	MB			B						B			
Semipalmated Sandpiper	B B	MB	x	x				B		B	B	x		surprised not seen
Least Sandpiper		MB		x								x		ok
White-rumped Sandpiper	B B	MB	x	x	x			B		B	B	x		surprised not seen
Baird's Sandpiper	B B	MB	x	x	x					B	B	x	x	as expected
Pectoral Sandpiper		MB	x	x				B		B	B	x		surprised not seen
Purple Sandpiper									x		x			
Dunlin	B B	MB	x	x						B	B	x		surprised not seen
Stilt Sandpiper		MB	x							B	x	x		surprised not see
Buff-breasted Sandpiper	B	MB	x							x	B		x	as expected
Wilson's Snipe		MB										x		
Red-necked Phalarope									B		B			
Red Phalarope	B B	MB	x	x				B	x	B	B	x	x	as expected
Black-legged Kittiwake		V							x					
Sabine's Gull	B	Mb		x				B		x	B	x		see note end of report
Ivory Gull		A			x									
Ross's Gull		V										x		
Herring Gull	B	MB	x		x						x		x	as expected
Thayer's Gull		MB	x	x			B			x	x		x	as expected
Iceland Gull	B	V												
Glaucous Gull	B B	MB	x	x	B	B	B	x	x	x	B		x	as expected
Arctic Tern	B B	MB		x	x		B		x	x	B		x	as expected
Pomarine Jaeger		MB			x	x					B		x	as expected
Parasitic Jaeger	B B	MB	x	x						B	B		Unsure.	
Long-tailed Jaeger	B B	MB	x	x	B					x	B		x	as expected

SPECIES	GODFREY (1986) *L* SNYDER (1957) *R*	RICHARDS AND WHITE (2008)	CWS	ALLEN (1978)	FRASER (1957)	ELLIS (1956)	HINES ET AL, (2003)	I.B.A.	SHORTT AND PETERS (1942)	JOHNSTON ET AL, (2000)	LGL	MISC.	NCRI INTERVIEW	COMMENTS ON NCRI INTERVIEW(S)
Thick-billed Murre		V							x				x	ok
Black Guillemot		MBw							x					
Snowy Owl	B B	PB		x	B	x			x	x			x	as expected
Short-eared Owl											x		x	as expected
Common Raven	B B	MB	x	x	x				x	x	x		x	as expected
Horned Lark	B B	MB		x					x	x	B	x		surprised not seen
Tree Swallow		V										x		
Northern Wheatear	B	MB										x		
Varied Thrush		-										x		
American Pipit	B B	MB		x		x			x		x			surprised not seen
Lapland Longspur	B B	MB	x	x	B				x	B	B	x	x	as expected
Snow Bunting	B B	MB	x	x	x	x			x	x	B		x	as expected
Savannah Sparrow											x			
White-throated Sparrow											x			
Harris's Sparrow											x			
White-crowned Sparrow		MB							x					
Hoary Redpoll	B	MB												
Black Guillemot	B B	x			B		B	B	B	x	ok			
Snowy Owl	B B	x	B		B	B	x	B	b	x	ok			
Short-eared Owl	b	x	x							x	ok. uncommon			
Eastern Kingbird			x											
Common Raven	B	x	x			x	x	B	x	x	ok			
Horned Lark	B B	x	x			b	B	B	x	x	ok			
Tree Swallow		x	x					x						
Bank Swallow		x								x	ok. rare			
Barn Swallow		x												
Northern Wheatear		x												
Hermit Thrush			x					x						
American Robin		x								x	ok. rare			
European Starling			x											
American Pipit	B B	x				x		B	B	x	ok			

SPECIES	GODFREY (1986) *L* SNYDER (1957) *R*	RICHARDS AND WHITE (2008)	CWS	ALLEN (1978)	FRASER (1957)	ELLIS (1956)	HINES ET AL, (2003)	I.B.A.	SHORTT AND PETERS (1942)	JOHNSTON ET AL, (2000)	LGL	MISC.	NCRI INTERVIEW	COMMENTS ON NCRI INTERVIEW(S)
Lapland Longspur	B B	x	B	B		B	B	B	B	x	ok			
Snow Bunting	B B	x	B			B	B	B	B	x	ok			
Yellow Warbler			x											
Palm Warbler		x												
Yellow-rumped Warbler		x	x					x		x	ok. uncommon			
Savannah Sparrow		x	x					x						
Lincoln's Sparrow		x	x											
White-throated Sparrow		x												
White-crowned Sparrow		x								x	ok. uncommon			
Dark-eyed Junco		x	x					x	x	x	ok			
Common Redpoll	B	x	B					x	x	x	ok			
Hoary Redpoll	B B		B					B	x		They don't seem to differentiate between Common and Hoary as expected			

PREPARED BY: J. RICHARDS

NOTES ON BIRD EVALUATION

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

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Godfrey & Snyder – 'B' in these two columns denote breeding range for each species. It does not mean that the species has actually been recorded as breeding in the specific checklist area itself.

Richards & White (2008) – denotes general status for the geographic area (ie; 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

Codes for species list:

B = breeding

b = breeding suspected

x = reliably observed

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, a map presented by Mallory, et al, as well as a map presented by Sibley was used.

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