

Nunavut Coastal Resource Inventory – Arctic Bay
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EXECUTIVE SUMMARY

This report is derived from the hamlet of Arctic Bay, and represents one component of the second phase of the Nunavut Coastal Resource Inventory (NCRI). The term “coastal inventory”, as used here, refers to the collection of information on coastal resources and activities, gained from community interviews, research, reports, maps, and any other available resources, presented in map format.

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 permit their strategic assessment, leading to the promotion of economic development, coastal management, and conservation opportunities. In Nunavut, the coastal resource inventory has two additional applications: the preservation of traditional knowledge (Inuit Qaujimagatuqangit, or IQ), and the anticipation of forthcoming environmental changes, particularly those driven by climate change.

The Fisheries and Sealing Division, Department of the Environment, initiated this inventory by conducting a feasibility study, followed by a pilot project, in Iglulik, Nunavut. Upon completion of the pilot (Phase I), four additional communities (Kugluktuk, Chesterfield Inlet, Arctic Bay and Kimmirut) were approached to assess their interest in participating in the inventory (Phase II). All four agreed, and interviews for Arctic Bay were completed in February 2009.

Inventory deliverables include the:

- provision of a final report that provides coastal resource data in a GIS database;
- provision of resource inventory maps for each community;
- provision of all documents used, and methodology employed, throughout the coastal inventory process; and,
- thorough evaluation of the methodology and supporting materials that were used to carry out the entire inventory process.

The interview team was made up of five individuals: the interviewer, a translator, a recorder, an oceanographer, and a student observer. The interviews lasted between two to six hours, depending on the amount of detail elicited in the responses, and the amount of clarification required during the interview. The entire interview followed a predefined survey, where the first round of questions elicited information on the interviewee’s early life history. These questions were followed by resource-based topics, in a specific order, that were directly tied to photographs of species. Responses were documented in real-time, with data amenable to mapping drawn on the charts provided, and all proceedings were recorded using audio and video equipment. Upon completion of the interviews, data was compiled into spreadsheets, and the map information was scanned, digitized, and prepared for analysis.

An array of maps, aggregated into categories (Archaeological Sites, Mammals, Fish, Birds, Invertebrates, Marine Plants, Areas of High Diversity and Other), are provided in this report. Additional maps illustrate Nunavut, the extent of the interview area, a reproduction of the study area extracted from the Nunavut Atlas, and the survey area with place names in Inuktitut (both syllabics and transliteration). The map format was chosen, given the broad geographic reach of the interviewee’s responses, to provide a synoptic view of the collected data. Every effort was made to keep the scale of the maps the same and with the same extent in order to permit convenient comparisons to be made from one map to another. In addition, the maps are complemented by extensive tabular information.



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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. Even though interviews with elders have become commonplace throughout the Territory, community differences are sufficiently important to warrant a focused approach in the manner in which this information is elicited. Each community is unique in terms of its physical environment, oceanographic setting, the organisms present and the interests and approaches of its hunters and trappers. One might even suggest that each community has been treated as one in a series of “pilot projects”. This approach significantly limits those things that can be “taken for granted” and simultaneously encourages a continuous process of refinement in interview materials and methodologies.

THE COASTAL RESOURCE INVENTORY

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

The information obtained was then augmented with additional data obtained from scientific articles, unpublished reports, government documents, environmental assessments, maps, etc. All of the community-specific data was then digitized and spatially 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 margins, notably on our Atlantic and western coasts, where the information gained from this approach provided: the foundation for integrated coastal management plans; essential insights to protect important coastal areas; and, information facilitating environmental impact assessments, sensitivity mapping, and community planning. Coastal resource inventories have also provided different levels of government with the tools to engage in strategic assessments, informed development and enlightened stewardship.

The principle source of information for community-based coastal inventories is traditional knowledge (Inuit

Qaujimajatuqangit in Inuktitut, or IQ) gathered through interviews. Over the past fifty years, the Inuit have gone from a resource-based nomadic life style to a wage-based

economy. Nevertheless, coastal and land-based activities are still extremely important, contributing to Inuit quality of life, providing income and food, and as a significant part

Figure 1 Map of Nunavut





of Inuit culture. To ensure that we retain this traditional understanding and the above associated benefits, knowledgeable individuals (usually community elders) were engaged using a defined survey that addresses the presence, distribution and characteristics of various coastal resources. In addition, visual surveys of the coastline and the community provide diverse information on important coastal features, including the types and condition of infrastructure such as wharves and fish plants, as well as the location of different coastal activities or impacts, such as town dumps or sewage sites.

Such information may provide insights regarding the potential for future fisheries development. Given the high unemployment rates in many of Nunavut's communities, it is increasingly important to identify areas for potential economic development. Establishing a new fishery requires reliable species-specific information on the size and location of fish stocks, to determine the feasibility of the initiative as well as its long-term sustainability. Having community resource information gathered in one central location could be an important first step towards fishery commercialization; or could lead to the identification and eventual development of coastal parks and related tourism opportunities, related to sensitive coastal areas, breeding grounds, species locations and populations, and unique habitats.

Fundamental to this process is the recognition that traditional knowledge (IQ) embodies both historical and contemporary information that might help with future decision-making, as well as having importance in its own right. Some communities have expressed interest in exploring development options using an information 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 together of extant knowledge into a form that could assist informed decision-

making. There is thus an increasing urgency throughout the Territory to identify, record, and conserve traditional biological, cultural, and ecological knowledge about Nunavut's coastal areas.

Another factor is the growing concern over the potential impacts of climate change on the Arctic environment. From February to November 2007, the Intergovernmental Panel on Climate Change released four reports, in which they reinforced and extended all of their earlier predictions regarding both the potential for change and the impacts expected when those changes occur (IPCC 2007 a, b, c, and d). Conclusions drawn from these documents indicate that the Inuit can expect significant environmental changes in sea ice, fast ice, coastal erosion, animal behaviour and population abundances, to mention but a few. For instance, apparent changes in polar bear health and abundance have been linked to shifts in sea ice formation and movement, which in turn have been tied to global warming.

ORIGIN OF THE COASTAL INVENTORY

The Fisheries and Sealing Division of the Nunavut Department of Environment initiated the development and implementation of a community-based coastal zone inventory for Nunavut. In their April 2007 report, "Nunavut Coastal Resource Inventory: Assessment and Planning", a consulting team from Dalhousie University recommended that the Nunavut Coastal Resource Inventory Project begin with a pilot project in order to define, test and document methodologies, primarily those dealing with the critical process of documenting IQ.

During community consultations in Iglulik in February 2007, community members, including the local Hunters and Trappers Organization, met with the NCRI staff and consultants to discuss the potential of this initiative for the

community. The outcome of that meeting, supported by additional later communications, was keen interest in, and support for, the pilot project.

Iglulik was chosen as the pilot community as it possesses resources that supported the project's success, including the satellite office of the Nunavut Research Institute (NRI) that runs the IQ and Oral History project, which has been underway for more than two decades. The staff in this remarkable unit has extensive experience in the collection of Inuit Qaujimagatuqangit, which is stored in an extensive computer-accessible database. Collaboration with NRI, especially the opportunity to learn from their extensive experience, was an important initial benefit. In addition, officials of the Hamlet of Iglulik were very positive about the potential benefits to their community, as well as providing important administrative support.

The pilot project was an intense learning process that had the dual goals of a database with depth and breadth, and a well-vetted process for the interviews, data recording, topic choice, data reduction, digitization, analysis, GIS integration, and presentation. Although the pilot project was successful, Phase II inventories have demonstrated the need for continuous adjustment and adaptation of the process, in order to improve its efficiency and better adhere to the project's goals. The four communities interviewed during Phase II were Kugluktuk (Kitikmeot region) in October 2008, Chesterfield Inlet (Kivalliq region) in November 2008, Arctic Bay (Qikiqtaaluk region) in February 2009, and Kimmirut (Qikiqtaaluk region) in March 2009.

FUNDING, PERSONNEL AND PROJECT DELIVERABLES

The second phase of the Nunavut Coastal Resource Inventory received primary financial support from Indian and Northern Affairs (Government of Canada), the Departments of Environment (DoE) and Economic Development and Transportation (EDT) (Government of Nunavut), and secondary funding from the Department of Fisheries and Oceans (Government of Canada). The Nunavut Research Institute generously gave in-kind GIS support services to the project team.

Overall project leadership was provided by Wayne Lynch, Director, Fisheries and Sealing Division, and his staff, Janelle Kennedy, Project Coordinator, and Corenna Nuyalia Community Liaison. Consulting on the project, and participating in all interviews, was Dr. Robert Fournier, Marine Affairs Program and Department of Oceanography, Dalhousie University.

Project deliverables include the:

- provision of a final report;
- provision of the coastal resource inventory in a GIS database;
- provision of a series of resource-inventory maps for each community;
- provision of all documents used in the interviews, along with the methodology employed throughout the coastal inventory process; and,
- thorough evaluation of the methodology and supporting materials used to carry out the entire inventory process.

METHODOLOGY

This section is composed of two parts: a broad introductory overview of the philosophy, approach and execution of the interview process, followed by a more detailed examination of the methodology as implemented in Arctic Bay. Refer to Appendix 4 for an in-depth Field Guide of all the methods employed.

AN OVERVIEW OF THE PROCESS

The process began with the selection of a community that would be prepared to participate in the interview process. Criteria to assist in this selection were devised early in the development of the project and, as one might expect, have since undergone continuous revision. Once a provisional choice was made each community was visited with the purpose of determining whether it wished to participate in the inventory, and if so, then who were the individuals that would be most appropriate for the interviews. The above questions were directed principally at the local Hunter-Trapper Organization (HTO), where agreement was quickly reached and an annotated list of potential candidates was provided. Further, queries were made and discussions held with individuals who might serve as interpreters and translators, in conjunction with the interview process. Suitable dates and venues were then selected for the interviews.

The interview team was made up of five individuals: the interviewer, a translator, a recorder, a science consultant, and a student observer. The process varied from 2-6 hours, depending on the amount of detail elicited in the response and the amount of clarification required during the interview. Each interview followed the same format (refer to Survey in appendices). The first round of questions requested information about the interviewee's early life history and general knowledge and familiarity of the local area. These were followed by questions that referred to specific animals in a set order. Responses were documented using maps prepared in advance that could be annotated by the interviewee. The entire proceedings, with permission, were recorded using audio and video equipment. Upon completion of all the interviews planned for the community, data was compiled into spreadsheets, and the map information was scanned, digitized and prepared for data analysis.

DETAILS OF THE PROCESS

Community Selection

Criteria to guide community selection were established prior to the start of the interview process and were based on a series of interviews with a broad range of individuals, all of whom had some prior experience working with traditional knowledge and/or communities. Criteria underwent continuous refinement as knowledge and insights improved. Community selection did not depend on a suitable response to every single criterion, but rather on the general picture conveyed by the responses to these queries. The present criteria are as follows:

- Is the selected community willing to participate in the project?
- Is the community considered to be an important source of data on coastal resources?
- Are any other projects underway in the community that might be considered to be complementary to the coastal inventory?
- Does the community possess an existing repository of oral history that could be made available to the project?
- Does the community have a strong but under-utilized or under-managed connection with a particular resource animal, such that inventory data could prove to be useful?
- Does the community wish to acquire or use any of the coastal inventory data produced by the project?
- Is the community presently involved in a commercial fishery?
- Is the community currently seeking infrastructure for which the coastal inventory study might prove supportive?

- Does the community have a strong and broadly acceptable leadership available to the project?
- Does the community have a close association with a park or a protected area?

Initial Community Visit

Communities are visited on three occasions; an initial scoping/consultation meeting, followed by a visit of 7-10 days during which interviews are conducted and finally a follow-up trip to present the finished report and support materials to the community. The scoping session was designed to put in place the elements that would be required to conduct the planned interviews. This process depended on the support and participation of the Hunter-Trapper Organizations (HTOs) and the Hamlet office. Both the HTO and the Hamlet were asked at the outset to formally support this initiative through the provision of names of potential interviewees. They provided annotated lists of local Inuit hunters and trappers which, 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 was made by NCRI project personnel. These individuals were contacted and tentative interview schedules were established. In addition, HTO and Hamlet personnel also provided the names of individuals who could act as student observers and be used as translators. The final order of business was to select a venue that would accommodate the interview process.

Interview Preparation

Preparations for the planned interviews were focused on the definition and acquisition of all the information that was necessary to compile the resource inventory. This ranged from digital voice and video recorders to coloured pencils. The latter would be used by both interviewees and project personnel to draw and code information directly on prepared maps. It also involved the definition of the



subject matter that would be addressed in the interviews, including: contextual material such as early life history or the location of camp sites, the geographic extent of the maps, the species of interest (animal and plant), and supporting environmental information such as time of occurrence, condition on occurrence (breeding, migrating, feeding etc). Once these decisions were made the results were translated into maps that covered the area normally used by hunters and fishers (Fig. 2), into photos of the target species and into questions that would later be posed (refer to appendices for photos and species list).

Interview Strategy

The manner in which the interviews were to be conducted was repeatedly discussed over a considerable period, and ultimately reflected the advice that NCRI personnel received from many different sources. The goal of this process is to allow Inuit hunters to speak in comfortable surroundings on the subject of living coastal resources, based on their life experiences. Recording this information recognizes the finite nature of human life, the wealth of information that is contained within individuals, and the importance of that information from both cultural and management standpoints. With this in mind considerable attention was devoted to the realization of these goals. Two related issues are worthy of some comment: Inuit hunters have often been interviewed over the years but they were pleased to learn that for the first time the process would comprehensively embrace a broad range of living marine resources; and, in addition, a promise by NCRI staff to provide each HTO with a copy of all data collected from the interviews in its community was viewed as a very positive contribution.

The Interviews

Six persons were present during each interview: the interviewee, interviewer, translator, recorder, science consultant, and student observer. The interviewer followed a defined protocol that placed a strong emphasis on:

series of predetermined questions and photographs of various living resources known to occur in the area. Maps, covering the area of interest, were provided in order to allow the interviewees to write directly on them and thereby to annotate their verbal remarks. Questions were asked and the interviewees responded both verbally and by drawing on the maps before them. Specific categories addressed in the interviews included: interviewee life-history information; location of outpost camps; archaeological sites; travel routes; hunting/fishing areas frequented; the geographic occurrence of mammals, fish, birds, invertebrates and plants; and finally, some discussion about the linkages between coastal resources, present and future environmental changes and potential economic development (e.g. the possibility of an emergent fishery).

Because of the fundamental importance to the interview process of the annotated maps every annotation to those documents was accompanied by the immediate application of a code that would 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 selective portions were immediately recorded manually. Manual recording was used to maintain a running record of all map annotations and codes. This permitted work to proceed with the maps without the need for transcription of the audio tapes. The interview process varied from 2-6 hours, depending on the individual being interviewed.

Post-Interview Methodology

During and immediately following each interview rigorous file management protocols were employed. All recording modes (Audio, Video and Manual) were carefully synchronized with the information noted on the maps. All of the manually recorded data was entered on a spreadsheet which was updated as information became available. The

Figure 2: Extent of study area with selected place names..



maps used in the interviews were scanned and the hand-drawn data was digitized. The end result was the creation of a coherent and workable database, which when used with the maps provides a complementary visualization of that data. The maps were planned from the outset as the cornerstone of the interview process and the resulting community reports.

Non-Interview Data Acquisition

Data on marine resources can be found scattered throughout many different sources that range from scientific papers, government reports, environmental impact assessments and maps. However, three surveys exist, with similar geographic breadth and goals, have proven to be especially useful. There is the three-volume “Inuit Land Use and Occupancy Study”, which was undertaken in the early 70’s 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 as to residency and land use. The resulting study contains detailed information on traditional land use up to that time. It focused on hunting, trapping and fishing and used topographic maps to outline fishing, hunting and trap line regions associated with each community in Nunavut over three periods: pre-contact, the trading period up to the 1950s, and the present (early 1970s). One of the volumes is an atlas that maps the results, based on interviews with Inuit in each community. The original research is available in Ottawa at the National Archives. A copy of the three volume report is also available in the Legislative Library in Iqaluit.

A second document is the one volume Nunavut Atlas co-published in 1992 by the Canadian Circumpolar Institute and the Tungavik Federation of Nunavut. This atlas relies largely on data collected for the Inuit Land Use and Occupancy Study and although the presentation of resource data and maps is reasonably accessible the information provided is approximately 35 years old. Relevant maps

from this volume are presented in this report (refer to the Resource Inventory – end of this section).

The third document is the Nunavut Wildlife Harvest Study produced by the Nunavut Wildlife Management Board in August 2004. This study was mandated by the Nunavut Land Claim Agreement. Harvest data was collected monthly from Inuit hunters for a total of five years from 1996 to 2001. The purpose of the study was “to determine (the then) 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 plotted, when appropriate, on working maps, while the final representations occur on all inventory maps. The scale is large, in keeping with the size of the geographic area under discussion. Keeping a scale common to all maps was done to permit relatively easy inter-comparability. Also, on the inventory maps 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 that will be effectively accessed by users with diverse interests.

Data management also includes protecting the confidentiality of the data. Each interviewee provided their consent to be interviewed, as well as audio and video taped (see Appendix 10 – for consent form used). Post interview, if any person or organization wishes to access the data collected they must provide written justification to the NCRI Steering Committee and agree to the terms outlined in the Data Release Form (see Appendix 11 – for sample of data release form).

GIS Interface

Once the inventory maps and database are complete they are entered into a Geographic Information System (GIS), leading to the creation of 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 species name, source, population level, etc. Mapped data are linked to additional information in the corresponding database. Photos accompany the data where applicable.



MARINE RESOURCES IN AN OCEANOGRAPHIC CONTEXT (Arctic Bay)

INTRODUCTION

The coastal communities of Nunavut are diverse. They extend over 27° of latitude and 60° of longitude, so in addition to different geomorphologies, climates and wildlife, they also experience widely different ocean 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, are essential 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 impending climate change. Many organisms will experience the impact of global warming directly through changes in their physiology; but many others will also receive indirect indications from their surrounding physical and 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

Recurring open water sites extend across a continuum that reflects local geography and ice conditions, and includes large polynyas, pack ice edges, shore-fast leads, and smaller polynyas driven by upwelling or tidal mixing. Positive correlations between open water in ice-covered seas and abundance of marine organisms have been noted for some time. In fact, Stirling (1980, 1997) specifically identified increases in abundance of birds, seals, and whales with proximity to ice edges, polynyas, and pack ice. The reasons for this observed correlation are many, varied, and not mutually exclusive. For instance, animals may be drawn to these sites for practical reasons such as the availability of breathing holes, a platform to haul out, predator avoidance, pupping, or moulting (Stirling, 1997). What they all have in common is that they encourage a non-homogeneous distribution of animals, which is ultimately linked to greater biological productivity.

Ultimately, the availability of food, the product of primary production in phytoplankton or ice algae, is a major contributing force. Both algal groups are important, although their relative contributions can vary depending on ice conditions and available light. In some locations, ice algae represent 5% of the total primary production, while in others it could be as high as 30% (Alexander, 1974; Harrison and Cota, 1991; Legendre et al., 1992). With the thinning of ice in the spring, sunlight sufficient to drive photosynthesis - especially ice algae - is available sooner, thereby extending both the growing and grazing seasons, in some cases by as much as two months. Bradstreet and Cross (1982) believe that the aggregation of food items preferred by or acceptable to invertebrates and vertebrates, on the ice under-surface is also a factor of some significance. Once plant material is available it is grazed and enters into the food web where it becomes available to invertebrates (e.g. copepods, amphipods or shellfish), who in turn feed fish

(e.g. arctic cod), mammals (seals, narwhal, walrus or polar bears) and birds (such as thick billed murre, northern fulmars, black legged kittiwakes or black guillemots). This results in a form of "oasis" or "hotspot" in an otherwise ice-covered area.

In addition, these open water sites appear to have been of some importance to native peoples who have occupied the Arctic for several thousand years. Zooarchaeological 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, a close association usually existed between the location of settlements and reasonable proximity of game, which often meant areas of recurrent open water. Schledermann also found a close correlation between the distribution of recurring polynyas in the eastern Canadian high Arctic and the abundance of archaeological sites from the Thule culture, which specialized in hunting marine mammals.

OCEANOGRAPHIC FACTORS THAT CONTRIBUTE TO OPEN WATER

The presence of open water in winter can be a chance occurrence that reflects ephemeral conditions. Sites formed in this manner would be largely unpredictable and of limited usefulness to animals and humans. On the other hand, recurrent open water sites are the physical manifestation of one or several predictable physical processes that result in spatial and temporal reliability. The different processes that contributing to this reliability are reviewed below.

Admiralty Inlet

The community of Arctic Bay, unlike others involved in this series (to date - Igloolik, Kugluktuk, Chesterfield Inlet and Kimmirut), is not directly associated with a major body of water. Admiralty Inlet, which is the major focus for most community hunting/fishing activities, is an offshoot of Lancaster Sound, and as such, it is only peripherally impacted by the oceanographic influences that occur in the latter body. In addition, limited research has been carried out in Admiralty Inlet, making it difficult to develop as complete a picture of physical phenomena as in the earlier communities.

Arctic Bay and its surroundings have been occupied for nearly 5000 years by nomadic peoples moving from the west. The town is located in the northern part of Borden Peninsula on Baffin Island. Its Inuit name is Ikpiarjuk, which means "the pocket", because of the high hills that surround the almost landlocked bay. Arctic Bay opens to the south on Adams Sound, which, in turn, connects to Admiralty Inlet, sandwiched between Brodeur and Borden Peninsulas. Admiralty Inlet is between 3 and 32 kilometres wide and between 200 and 400 metres deep, and extends approximately 370 kilometres south from Lancaster Sound. It contains a number of smaller inlets, bays and sounds, as well as many islands. Shoreline relief around Admiralty Inlet reaches heights of up to 500 metres.

Residual Circulation

Lancaster Sound, Jones Sound, and Hudson Strait are three important conduits in the Canadian Arctic Archipelago for water flowing from the Arctic Ocean to the Atlantic via Baffin Bay and the Labrador Sea (Ingram et al., 2005). This water movement occurs principally because of differences in sea level between the two oceans (Michel et al., 2006). Actual flow rates are not well known because ice cover makes year-round observations exceedingly difficult. In addition, a westward-directed flow, coming from northern Baffin Bay and Smith Sound, moves in along the south coast of Devon Island.

Since Admiralty Inlet is sealed at its southern end, it does not permit any flow-through, thereby largely removing the influence of residual circulation. However, Lancaster Sound does influence the timing and extent of polynyas throughout Admiralty Inlet, through the action of tidal currents and tidal mixing. In addition, Welch et al. (1992) suggest that Lancaster Sound has a higher rate of primary production relative to other areas in the Canadian Arctic Archipelago, due to a significant influx of nutrients in currents flowing from the east.

Tidal Range and Currents

The tidal range and tidal currents in Admiralty Inlet are not routinely monitored, but both can be reasonably predicted using the Web Tide model created by Department of Fisheries and Oceans scientists (DFO, 2009). The model predicts varying tidal elevations between 0.5 metres and 1.25 metres over the length of the inlet, with the highest values at the southern end, tapering closer to Lancaster Sound. Tidal currents are predicted in the range of 3-15 cm/s (0.06 – 0.3 knots), and these too are greatest in the south, and decrease towards Lancaster Sound.

Tidal Mixing

Tidal currents can, under the right circumstances, produce sufficient turbulence to generate vertical mixing capable of forming and maintaining a polynya (Hannah et al., 2009). A slow-moving tidal current that encounters shallow water and/or a narrow strait will increase its velocity, which promotes vertical mixing. Mixing can move warmer subsurface water to the surface, where it slows or eliminates ice formation. It also delivers nutrients that promote plant growth whenever sufficient light is available. Examples of this phenomenon are the well-known polynyas in Fury and Hecla Straits at the head of Foxe Basin (Hannah et al., 2009) and the Roes Welcome polynya in Hudson Bay (Greenberg, 2009). In each case, tidal currents interact with irregularities on the ocean bottom, resulting in sufficient turbulence to produce nearly homogeneous water throughout the water column. Water depths in Lancaster Sound and most of Admiralty Inlet are sufficiently deep to preclude this type of mixing. However, the lower third of Admiralty Inlet is shallower, tidal currents are higher, and a number of ice-free locations were reported during the interview process.

Polynyas

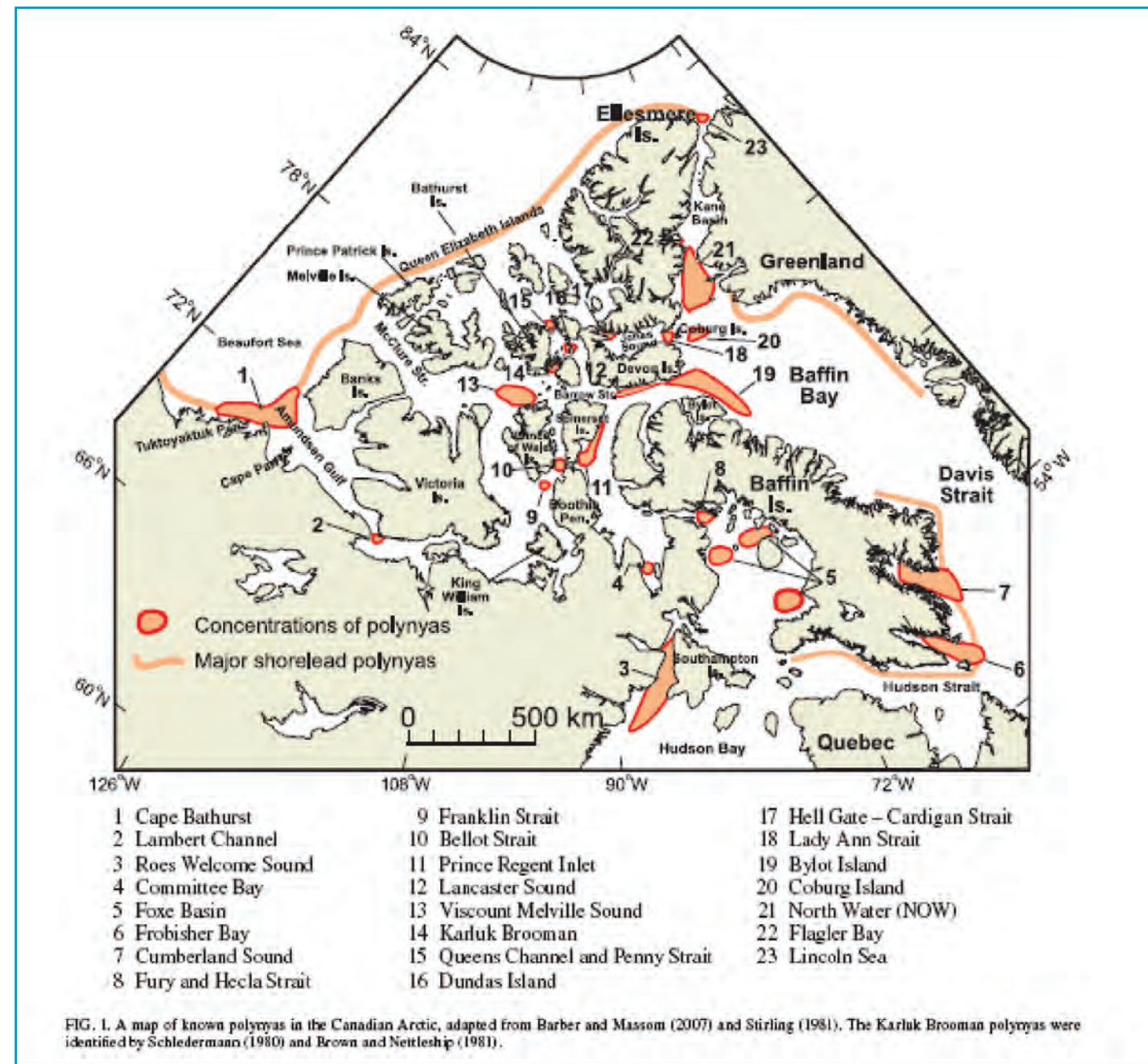
If the Arctic were covered with a thick, seamless layer of sea ice, many of the organisms that currently exist there, and contribute to the region’s productivity, would find it impossible to survive. Polynyas and leads provide the necessary breaks in the ice that: permit sunlight to penetrate and photosynthesis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

Polynyas have long been viewed as extraordinary because of the obvious contradiction of open water occurring in conditions that promote ice. The explanation for this

phenomenon is twofold: in some cases, the introduction of heat forestalls ice formation, while in others the newly formed ice is rapidly removed. These mechanisms are not mutually exclusive and sometimes work in concert. The first

process involves a continuous transfer of warmer, deeper waters to the surface, to slow or eliminate ice formation. In the second, once ice has formed, wind and/or ocean currents remove this ice from the site. Additionally, some

Figure 3: Map of known polynyas in the Canadian Arctic (Hannah et al 2009).





heat is given off during the process of ice formation, which further slows subsequent ice-making activities. Hannah et al. (2009) review these mechanisms and point out several additional factors, such as turbulence from surface waves or currents that can inhibit ice formation, and adjacent coastlines, shore-fast ice or ice bridges that can prevent ice from drifting into the polynya site.

Recurring polynyas are present throughout the Canadian Arctic Archipelago (see Figure 3).

Several have been identified in Lancaster Sound, with the largest at the eastern end where the Sound joins Baffin Bay. Extending westward from the polynya, along the southern coast of Devon Island to approximately Prince Regent Inlet, is an extensive landfast lead. Depending on the source (Smith and Rigby, 1981), this extensive lead has been reported to circle back in an easterly direction, passing through a large polynya at the mouth of Admiralty Inlet to cover essentially the entire perimeter of Lancaster Sound. The above polynya was noted by many elders in their interviews.

Admiralty Inlet has not been well studied, so very little information on polynyas or landfast leads is available in the scientific literature. However, interviews with elders repeatedly mentioned both, and it was emphasized that they play an important role within the context of wildlife availability for the elders hunting activities. These locations are identified on the accompanying maps (see section Maps and Tables).

Landfast Leads (Flaw Leads)

Extensive systems of landfast leads occur throughout the Arctic. Stirling (1981) nicely summarizes their many characteristics. Landfast ice is generally composed of 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. George (2004)

suggests that the physical presence of this ice cover modifies tidal and wind energy such that circulation changes dramatically. At some point, a fracture or crack may develop between the attached ice and the free-floating pack due to wind blowing offshore, or to a lesser extent 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, landfast leads are of enormous biological importance.

The boundary between the ice-edge and the beginning of the lead is an ecosystem that is very important, extremely interesting, and a place that many observers have identified as biologically rich and diverse. Below is a sampling of observations:

- The landfast 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 landfast ice (McLaughlin et al., 2005)
- Ringed seals and polar bears are the only marine animals that regularly occupy extensive landfast coastal ice (Tynan and DeMaster, 1997)
- Bearded seals prefer relatively shallow water (<150m) with thin, shifting ice and leads kept open by strong currents (Tynan and DeMaster, 1997)
- Along with polynyas, shore-lead systems and ice edges play key roles in influencing the abundance and distribution of marine mammals and sea birds (McLaughlin et al., 2005)
- Near the ice edge, the diet of adult ringed seals and narwhal was composed primarily of arctic cod, while amphipods and copepods were consumed in smaller numbers (Bradstreet and Cross, 1982)

- Satellite observations show that polar bears in multi-year ice are often associated with leads (Stirling, 1997)
- Admiralty Inlet has the highest densities of arctic cod immediately below the edge of landfast sea ice, apparently due to the availability of high concentrations of copepod prey (Crawford and Jorgenson, 1990)

The reasons for greater biological abundance and diversity associated with landfast leads and ice edges are largely the same as those outlined above when discussing recurrent open water. However, one additional mechanism, upwelling, also appears to operate at landfast or pack ice edges, and is discussed below.

Elder interviews were very clear that leads in Admiralty Inlet were generally located perpendicular to points of land. The process (physical or tidal) that creates leads at these points is not known. However, the interviewees were emphatic that both seal breathing holes and polar bears were readily found at these leads.

Upwelling

Upwelling is a mechanism whereby warmer, deeper water is moved to the surface, thereby creating and/or maintaining ice-free open water. Topographic upwelling occurs where a current moving through warmer subsurface water is deflected (“welled upward”) by some bottom structure (such as a sill, bank, or ridge) toward the surface, where it can melt ice or help maintain an ice-free area (Tee et al., 1993).

Ice-edge upwelling 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). This occurs when wind blows parallel to the ice edge and causes surface water to move away from the edge. It is then replaced by water moving from below (Tang and Ikeda, 1989). The upwelling

zone can be several kilometres wide and draw subsurface water from depths of up to 100 metres.

In addition to a greater heat flux to the surface, upwelling 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. Several locations were identified in the southern end of Admiralty Inlet where the water is shallower and tidal currents are faster, where tidal mixing or topographic upwelling could be creating open water conditions.

MARINE RESOURCES IN THE CONTEXT OF CLIMATE CHANGE

Many Arctic researchers over the past 20 years have commented on the impending probability of global warming, with its expected impact on the marine environment as well as the abundance, diversity, and well-being of marine organisms (Tynan and DeMaster, 1997; Michel, Ingram and Harris, 2006; Moore and Huntington, 2008). Many changes will occur, both positive and negative, that directly affect the role that recurrent open water sites play in the overall success of marine coastal resources. Impacts can be expected on 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 and 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. In other words, we can expect change to occur in our physical world that will in turn, alter the biological system, including the human component.

RESOURCE INVENTORY

Interviews obtained from each community contain two kinds of information: that which has been elicited from direct questions; and that offered anecdotally for greater context, to provide additional depth or breadth, to “colour” a response, or simply to offer some causal interpretation regarding the species under discussion. The first type has specific geographic coordinates or involves quantitative estimates that lend themselves to eventual representation within a GIS format. The second, in the form of individual opinions, assumptions and conclusions, offers qualitative information that helps to humanize the responses and mappings. These observations were generally made without any additional information or corroboration, although some were accompanied by a correlation to some other environmental change (however, a correlation does not necessarily signify causality, despite the convictions of the interviewee). Even though they often require additional observation and investigation, these comments nevertheless provide highly personal and sometimes very useful insights.

The following comments are loosely grouped into categories to facilitate their review.

AREAL EXTENT

- The geographic locus of almost every interview was Admiralty Inlet and its contiguous environs. Occasionally, Inuit hunters described travels to Devon Island in the north, the Gulf of Boothia in the west, Foxe Basin in the south or Navy Board Inlet in the east. However, their attention was overwhelmingly directed at Admiralty Inlet, extending from the ice edge with Lancaster Sound at its mouth, down to – and often including – Bernier Bay and its approaches. Conversely, very little attention was paid to the land adjacent to the marine environment – except for the Char fishery in freshwater lakes, and a few travel routes to Polar Bear hunting grounds – now that cyclic migrations of Caribou have greatly reduced their numbers in the vicinity. Further north, on both the Brodeur and Borden peninsulas, the adjacent lands were least used, due to fewer lakes, rougher terrain, and more permanent ice cover.
- Big lakes are considered less desirable places to fish relative to smaller lakes, for reasons that are not clear. One suggestion offered was that big lakes are less productive, that is, contain fewer fish; while an alternative view is that smaller lakes were “designated” by elders, and continue to be used in a traditional manner. The latter explanation begs additional information.

SEA ICE

- Landfast leads in Admiralty Inlet are extensive cracks and openings that run perpendicular to the shore. They are commonly used by seals for breathing holes in the otherwise solid ice cover. The leads were routinely patrolled by Polar Bears looking for seals that were attempting to surface for a breath. Leads are reportedly associated with points of land along the coast, although no mechanism was suggested as to why ice would fracture specifically at those locations.

ARCHAEOLOGICAL REMAINS

- As with reports from other communities, archaeological sites are abundant and widely distributed over much of the coastline. This is not surprising, considering that many authorities suggest that this area has been occupied by human hunters and fishers for between 3500 and 5000 years, embracing Thule, Dorset and Inuit cultures.

HUNTING/FISHING

MAMMALS

- Ringed Seals are the single most important species to the Inuit hunters of Arctic Bay. One interviewee suggested that they might be viewed as a reliable indicator of the general health of the ocean.
- Ringed Seals prefer annual landfast ice, although they are found in multiyear ice.
- Bearded Seals are often observed in and around drifting ice floes, although they also frequent shallower water, where they feed on benthic crustaceans and molluscs.
- Walrus were generally located near bivalve feeding sites in winter, where recurrent open water and haul-out sites were available. These conditions occurred at the mouth of Admiralty Inlet, near points of land at the ice floe edge.
- Killer Whales generally avoid adult Walrus because of the latter’s size and ability to inflict severe injury with their tusks. However, smaller, less mature Walrus are frequently attacked.
- Killer Whales are not hunted. One suggestion offered was that they were too difficult to approach. Another was that they had greater value as herders of Narwhal. Apparently, Narwhal occur regularly in Lancaster Sound and Admiralty Inlet. Killer Whales influence

their movement and minimize their potential for escape by driving them closer to shore. This benefits both the Killer Whales and Inuit hunters.

- A Narwhal’s diet is thought to be predominantly Arctic Cod, Greenland Halibut, cephalopods and crustaceans.
- Polar Bears have never been as abundant on Baffin Island as the present, but many hunters report that a significant number appear emaciated. This may be due to intense competition for food as a direct result of the higher numbers. As they do not eat significant amounts of terrestrial food, even when forced on land, their ecology is tied to that of Ringed Seals.
- Polar Bears are closely linked to the shear zones between shore-fast and multi-year ice pack floes, where the likelihood of encountering a Ringed Seal is considerably higher.

FISH

- One report suggested that two fjords, Strathcona Sound and Adams Sound, do not appear to contain any fish at their upper ends. However, their innermost reaches were said to contain large numbers of an unknown swimming invertebrate. Whether the presence of one is a cause for the absence of the other is moot. For the moment it appears that unusual conditions exist that warrant some additional scrutiny.
- Every lake considered in these interviews contains Landlocked Char, unless the lake is so shallow that it freezes entirely to the bottom.
- Sea-run Arctic Char are not considered common in the high Arctic, but they sometimes occur where outflows are substantial enough to ensure a return migration in August.
- Some interviewees reported that there are variations in the taste, size and color of Arctic Char. Lakes may vary in their chemistry across the reporting area in



a manner that could affect the color and/or taste of the Arctic Char. Changes in chemistry would most likely reflect variations in the underlying geology of individual lakes. Fish eaten from lakes further north are considered more desirable.

- One interviewee reported that seriously disturbing a site will drive the fish out for good, for example, when local prospectors used dynamite to fish in a lake. No one fishes in that lake any longer.

INVERTEBRATES

- Amphipods appear to play a sizable role in the local food web. There is ample evidence from observation and stomach analyses that they are important secondary producers, supporting a variety of organisms such as birds, fish and especially seals. Seal stomachs filled with amphipods are sometimes tied off at both ends, cooked, and then eaten. This is considered a delicacy.
- A form of amphipod, “cyamids” or “whale lice”, colonizes thickened patches of hard skin on Bowhead Whales.
- Bottom-dwelling invertebrates are not important in the diets of Arctic Bay hunters, due partly to the considerable depth of Admiralty Inlet

BIRDS

- The presence or absence of birds is difficult to establish given their highly mobile nature. Knowledgeable birders draw attention to the presence of “accidentals”, that is, birds that have been displaced outside of their normal range. These can be considered false positives until disproved by additional sightings.
- Over-wintering bird populations frequently use polynyas as feeding areas.

HEALTH, SIZE AND PRESENCE

- The marine mammals commonly observed near Arctic Bay are Killer Whales, Bowhead Whales, Beluga, Ringed Seals, Narwhal, and Walrus.
- Bowhead Whales are plankton feeders. They draw in large volumes of water and filter out euphausiids (krill), copepods and Hyperiid amphipods. Each of these organisms has an especially high lipid content with a high caloric value. Stomach contents also show that Bowhead Whales also consume mysids, fish, isopods and cumaceans (sea cucumbers).
- Caribou undergo 30-50 year cyclic migrations that greatly influence local abundances. Presently, their numbers are greatly reduced on the Brodeur and Borden Peninsulas.
- Clams have a strong correlation with the presence of Walrus and Bearded Seals, since they form a significant component in the diets of each species.

CHANGES REPORTED/ANTICIPATED

- Although presently abandoned, the Nanasivik mine (lead and zinc ore), when fully operational, was thought to be responsible for some observations of liver problems in seals. Subsequent analyses by experts acknowledge that increases in these heavy metals were in fact noticed in sediments and biota near the effluent from the mine.
- Some concern was registered about the possible future loss of ice in summer in the Northwest Passage, and the potential impact of increased ship traffic on the wildlife in the area. Increased ship traffic could contribute higher levels of ambient noise, chemical pollution (including hydrocarbons), solid waste, open water, and invasive species (transported attached to ship hulls or through the discharge of ballast water).

- Ringed Seals have been observed to replace the hair they shed in the spring at a much slower rate than previously noted. One suggestion was that this might be due to a warmer summer, or a warmer spring/fall with warmer water temperatures. No qualitative changes were noted in seal meat or fat.

POTENTIAL COMMERCIAL OPPORTUNITIES

- Among respondents, the almost unanimous response to this question was to maximize tourism. The ramifications of this goal are the need to develop supporting infrastructure and persons trained in the hospitality trade.
- Several mentions were made of the potential to provide authentic cultural experiences not only to tourists but also to local youth and researchers.



MAPS AND TABLES

The following group of maps brings together geographic context, species locations, and a brief look at some earlier studies (derived from the Nunavut Atlas). The following maps are numbered sequentially. Each map is accompanied by data in tabular form that provides additional detail as well as descriptive information, when available. Captions below each map provide a description as well. All historic data is presented at the end of this section. Use Table 1 to interpret Map Codes provided in the tables accompanying the maps.

Table 1: Guide to map codes

MAPPING CODES GUIDE	
Anything unsure or unreliable	Appended with a lower case 'u'
Changes from one spot to another (same group of animals)	Appended with lower case 'c'
Present {since year 2000}	Appended with 'P'
Historic {before year 2000}	Appended with an 'H'
Everywhere (seen all over/no specific place/only where they go)	Appended with a lower case 'e' — Note that an asterisk (*) has been placed after species names in map titles to indicate that the species is also seen 'everywhere'.
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'
Feeding Areas	Appended with an 'F'
Significant Area of High Diversity	SADP
Significant Unique Area	SAUP
Significant Area for Other Reason	SAOP
Archeological / Historic / Camp Site (old and very old)	ARCH
Other	OTH
Area Known Best (area most familiar with or a travel route)	AKB
Camp / Cabin (typically modern)	CAMP
Example: CHAR_1_AP: First Arctic Char area drawn by interviewee that is also presently (after year 2000) an area of high abundance.	

Generally, maps comprise groupings of several species or a single species as reported in multiple interviews. Species and interviews are normally color-coded and both locations are accompanied by a numeric label. 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.

Locations reported by the interviewee as “unsure” have not been included in this report.

In some cases no locations were drawn on a map because one or more interviewees considered the distribution to be classified as “everywhere”. The designation of “Everywhere” was used when interviewees felt that the organism under discussion had been observed everywhere throughout their travels and places they are very familiar with. 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 only” data is not represented on the map, but is provided as a table of data following the map.

In addition to “everywhere only” designations, some species were described by interviewees as being “everywhere” and some interviewees provided locations for them. In these cases, where the species have been drawn on the map by some, but considered “everywhere” by others, 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 species presented to an interviewee, those in the bird category present the

greatest challenge in proper identification; a challenge often encountered by even the most keen observer of birds (e.g. sandpipers or gulls). To assist in the interpretation of the data the additional appendix compares observations recorded for the inventory with literature and sightings by other authors. In the future, inventory work will endeavor 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. Species identified as being “Everywhere Only” are shown by the use of a solid bullet in the Map legend.





Table 2: Travel routes and areas of greatest familiarity.

Map Code	Map Label	Present – P Historic – H	Comments
AKB_8	1_8	P	Common travel route to Pond Inlet.
AKB_4	1_4	P	Travel route to a fishing area.
AKB_2	1_2	P	Area where seal are hunted.
AKB_1	1_1	P	Narwhal hunting at floe edge.
AKB_3	1_3	P	Area where narwhal are hunted.
AKB_7	1_7	P	Winter fishing area.
AKB_5	1_5	P	Area where goose eggs are collected / Geese are hunted.
AKB_6	1_6	P	Spring / Summer fishing area.
AKB_4	2_128	P	The interviewee was born on Southeastern part of Bylot Island. He saw Arctic Flounder floating on surface of the ice in Springs, there were big piles of Cod and Flounder; so big they thought it was a small island.
AKB_8	2_134	P	
AKB_3	2_3	P	Travel route to hunt caribou.
AKB_6	2_130	P	
AKB_5	2_129	P	
AKB_7	2_131	P	
AKB_2	2_2	H	Travel route to hunt polar bear.
AKB_1	2_1	P	Travel route.
AKB_13	5_13	P	Travel route.
AKB_18	5_18	P	Travel route.
AKB_14	5_14	P	Travel route.
AKB_10	5_10	P	Travel route to Igloodlik.
AKB_16	5_16	P	Travel route to hunt caribou.
AKB_7	5_7	P	Travel route.
AKB_6	5_6	P	Travel route.
AKB_15	5_15	P	Travel route.
AKB_5	5_5	P	Travel route to Pond Inlet.
AKB_21	5_21	P	Travel route.
AKB_4	5_4	P	Travel route; warmer are than Arctic Bay.
AKB_8	5_8	P	Travel route to a lake.
AKB_2	5_2	P	Travel route down to Igloodlik.
AKB_9	5_9	P	Travel route.
AKB_19	5_19	P	Travel route.
AKB_11	5_11	P	Travel route.
AKB_3	5_3	P	Travel route.
AKB_12	5_12	P	Travel route.
AKB_17	5_17	P	Travel route.
AKB_20	5_20	P	Travel route.
AKB_22	5_242	P	
AKB_24	5_244	P	
AKB_23	5_243	P	
AKB_25	5_245	P	
AKB_26	5_246	P	
AKB_2	6_2	P	A Cabin in the area.
AKB_3	6_3	P	There is dog team trail to hunt polar bears.
AKB_4	6_4	P	Travel route to hunt narwhal; Boating area during the summer.
AKB_3	7_3	P	Travel route to fishing area.
AKB_2	7_2	P	Hunting area.
AKB_4	7_4	P	Travel route to hunt polar bear.
AKB_5	7_5	P	Fishing travel route.
AKB_5	9_5	P	Travel route.
AKB_4	9_4	P	Travel route.
AKB_3	9_3	P	Travel route to fishing area.
AKB_2	9_2	P	Travel route in winter.
AKB_1	10_1	P	Year round travel route.

“Everywhere” Coded Data — Travel routes and areas of greatest familiarity.

Interview	Map Code	Present – P Historic – H	Comments
3	AKB_1_e	P	Hunting area. Whole map and more.
4	AKB_1_e	P	Travel area; whole map.
8	AKB_1_e	P	Hunting area. The whole area and even more.
9	AKB_1_e	P	Everywhere on map, except the top of Brodeur Peninsula.
11	AKB_1_e	P	Hunting area / Camp site. Everywhere on the map and more.

Figure 5: Archaeological sites and areas of cultural significance.

Archaeological sites and areas of cultural significance

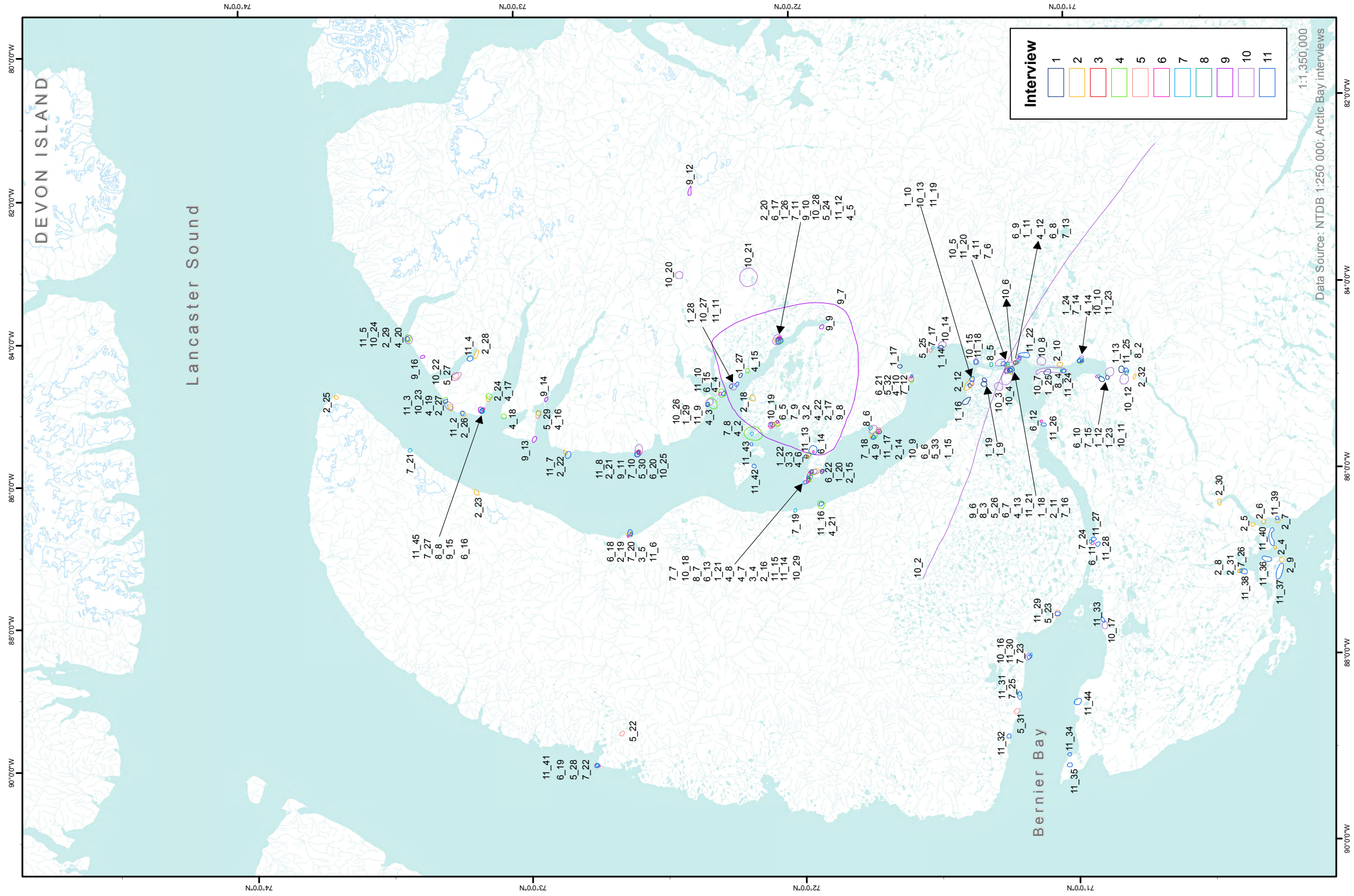




Table 3: Archaeological sites and areas of cultural significance.

Map Code	Map Label	Present – P Historic – H	Comments
Arch_5	1_13	H	Fishing weir / Spears in the soil.
Arch_15	1_23	H	Sod houses / Camp site.
Arch_4	1_12	H	Sod houses.
Arch_17	1_25	H	Circle of rocks where geese are trapped.
Arch_3	1_11	H	Sod houses.
Arch_10	1_18	H	Sod house / Landlocked Char.
Arch_11	1_19	H	Sod houses.
Arch_1	1_9	H	Row of Inuksugait used to blind caribou.
Arch_2	1_10	H	Sod houses at Mumiqvik. The interviewee grew up at this location. He remembers using Peterhead boats, rowing boats, and qajaq when hunting.
Arch_6	1_14	H	Sod houses where interviewee lived.
Arch_9	1_17	H	Sod houses.
Arch_7	1_15	H	Sod houses.
Arch_12	1_20	H	Sod houses / Camp site.
Arch_13	1_21	H	Sod houses / Camp site.
Arch_14	1_22	H	Sod houses / Camp site.
Arch_18	1_26	H	Sod houses.
Arch_20	1_28	H	Sod houses.
Arch_19	1_27	H	Sod houses.
Arch_21	1_29	H	Sod houses.
Arch_16	1_24	H	Sod houses / Spring camp site.
Arch_8	1_16	H	Tunititjuat sod houses / Camp site.
Arch_22	2_25	H	Sod house / Camp site / Grave site / Meat cache.
Arch_26	2_29	H	Stone structures.
Arch_21	2_24	H	Sod house / Camp site at Aqvaatuuq.
Arch_23	2_26	H	Sod house / Camp site.
Arch_24	2_27	H	Camp site.
Arch_16	2_19	H	Camp site.
Arch_20	2_23	H	Sod house / Camp site.
Arch_19	2_22	H	Sod house / Camp site.
Arch_18	2_21	H	Sod house.
Arch_14	2_17	H	Camp site.
Arch_15	2_18	H	Camp site.
Arch_17	2_20	H	Sod house / Camp site.
Arch_13	2_16	H	Sod house / Camp site.
Arch_12	2_15	H	Sod houses / Camp site at Itruukkuvik.
Arch_11	2_14	H	Sod houses / Winter camp / Seal hunting.
Arch_9	2_12	H	Old camp site.
Arch_8	2_11	H	Old camp site.
Arch_7	2_10	H	Sod houses / Stone structures / Inuksugait; The sod houses can be found along the length of the coast.
Arch_29	2_32	H	Fishing weir; 1969.
Arch_27	2_30	H	Fishing weir.
Arch_2	2_5	H	Sod house / Camp site.
Arch_3	2_6	H	Sod house / Camp site.
Arch_4	2_7	H	Sod house / Camp site.
Arch_1	2_4	H	Sod house / Camp site.
Arch_6	2_9	H	Sod house / Camp site.
Arch_5	2_8	H	Sod house / Camp site.
Arch_28	2_31	H	Fishing weir.
Arch_25	2_28	H	Old camp site.
Arch_2	3_3	H	Sod house at Itruukkuvik.
Arch_3	3_4	H	Sod house.
Arch_1	3_2	H	Sod house frame at Angugaatiaqalik.
Arch_4	3_5	H	Sod house; This location is the grave site of the interviewee's grandparents and father.
Arch_13	4_14	H	Spring camp.
Arch_11	4_12	H	Sod house / Camp site.
Arch_12	4_13	H	Sod house / Camp site.
Arch_10	4_11	H	Sod house / Camp site.
Arch_9	4_10	H	Sod house / Camp site.
Arch_8	4_9	H	Sod house / Camp site.
Arch_6	4_7	H	Sod houses.
Arch_7	4_8	H	Sod houses; Iglulik travelers' camp in this area.
Arch_20	4_21	H	Tent rings.
Arch_5	4_6	H	Sod houses.
Arch_21	4_22	H	Camp site.
Arch_1	4_2	H	Sod houses.
Arch_4	4_5	H	Sod houses.
Arch_14	4_15	H	Missionary establishment / Church; Where they celebrated Christmas and New Years.
Arch_3	4_4	H	Sod houses.
Arch_2	4_3	H	Sod houses.
Arch_15	4_16	H	Hudson Bay Company Trading Post.
Arch_16	4_17	H	Camp site.
Arch_18	4_19	H	Camp site.
Arch_17	4_18	H	Camp site.
Arch_19	4_20	H	Camp site.
Arch_9	5_30	H	Sod house at Iqalulik.
Arch_3	5_24	H	Sod house at Ikpikituajuk.
Arch_12	5_33	H	Sod house.
Arch_11	5_32	H	Sod house.
Arch_4	5_25	H	Sod house at Nuvukuitaaq.

Table 3 (continued): Archaeological sites and areas of cultural significance.

Map Code	Map Label	Present – P Historic – H	Comments
Arch_2	5_23	H	Sod house.
Arch_10	5_31	H	Sod house.
Arch_7	5_28	H	Sod house.
Arch_1	5_22	H	Old barrel / Travel marker.
Arch_5	5_26	H	Sod house.
Arch_6	5_27	H	Sod house.
Arch_8	5_29	H	Oldest sod house at Uukat.
Arch_14	6_18	H	Sod house.
Arch_16	6_20	H	Sod house.
Arch_11	6_15	H	Sod house.
Arch_1	6_5	H	Sod houses.
Arch_9	6_13	H	Three sod houses.
Arch_10	6_14	H	Sod house.
Arch_18	6_22	H	Sod house.
Arch_2	6_6	H	Sod houses.
Arch_17	6_21	H	Sod house.
Arch_3	6_7	H	Interviewee's parent's sod house at Imiq.
Arch_5	6_9	H	Sod house.
Arch_4	6_8	H	Sod house.
Arch_6	6_10	P	Sod house.
Arch_8	6_12	H	Sod house.
Arch_7	6_11	H	A lot of sod houses, very beautiful.
Arch_15	6_19	H	Sod house.
Arch_12	6_16	H	Sod house.
Arch_13	6_17	H	Sod house.
Arch_16	7_21	H	Sod house / Camp.
Arch_22	7_27	H	Sod house / Camp.
Arch_5	7_10	H	Travel route to hunt caribou.
Arch_6	7_11	H	Sod house / Camp.
Arch_12	7_17	H	Sod house / Camp.
Arch_7	7_12	H	Sod house / Camp.
Arch_3	7_8	H	Sod house / Camp.
Arch_4	7_9	H	Sod house / Camp.
Arch_2	7_7	H	Older sod houses.
Arch_14	7_19	H	Sod house / Camp.
Arch_13	7_18	H	Sod house / Camp.
Arch_15	7_20	H	Sod house / Camp.
Arch_1	7_6	H	Sod house / Camp.
Arch_11	7_16	H	Sod house / Camp.
Arch_8	7_13	H	Sod house / Camp.
Arch_9	7_14	H	Sod house / Camp at Sirmik.
Arch_10	7_15	H	Sod house / Camp.
Arch_21	7_26	H	Sod house / Camp.
Arch_20	7_25	H	Sod house / Camp.
Arch_18	7_23	H	Sod house / Camp.
Arch_17	7_22	H	Sod house / Camp.
Arch_19	7_24	H	Sod house / Camp.
Arch_7	8_8	H	Sod house; Interviewee lived there; it was his last time living in a sod house.
Arch_6	8_7	H	Sod house; Interviewee lived there for a few years.
Arch_5	8_6	H	Sod house at Tikiraqjuq.
Arch_4	8_5	H	Sod house; Interviewee lived there for a few years.
Arch_2	8_3	H	Sod house / Meat cache at Imiq.
Arch_3	8_4	H	Sod house at Qunnguq.
Arch_1	8_2	H	Sod house / Fish cache at Saputi.
Arch_11	9_16	H	Sod houses at Qaggitalik.
Arch_10	9_15	H	Sod houses at Aqyaatuuq.
Arch_9	9_14	H	Sod houses.
Arch_8	9_13	H	Sod houses.
Arch_6	9_11	H	Sod houses.
Arch_5	9_10	H	Sod houses.
Arch_4	9_9	H	Thule sod houses.
Arch_3	9_8	H	Sod houses.
Arch_2	9_7	H	Cache markers, caribou blind, fishing area, trail marker, a mark to show someone was there; lots of Inuksugait.
Arch_1	9_6	H	Sod houses.
Arch_7	9_12	H	Older sod houses.
Arch_23	10_24	H	High abundance of animals, that is why Inuit lived there; sod houses are present.
Arch_21	10_22	H	Sod houses.
Arch_22	10_23	H	Sod houses.
Arch_24	10_25	H	High abundance of animals, that is why Inuit lived there; sod houses are present.
Arch_25	10_26	H	Interviewee still relies on older camp sites for hunting; older sod houses are still present.
Arch_26	10_27	H	Older sod houses are there.
Arch_18	10_19	H	Sod house and meat cache.
Arch_17	10_18	H	Sod houses; Tools there are made of bone only.
Arch_28	10_29	H	Sod house.
Arch_8	10_9	H	Sod houses.
Arch_13	10_14	H	Sod houses.
Arch_14	10_15	H	Sod houses.
Arch_12	10_13	H	Spring camps and older sod houses.

Table 3 (continued): Archaeological sites and areas of cultural significance.

Map Code	Map Label	Present – P Historic – H	Comments
Arch_2	10_3	H	Caribou antlers are found here.
Arch_1	10_2	H	Sod houses; Inuksugait in a row to blind caribou.
Arch_4	10_5	H	A camp where a lot of people died of sickness or starvation; older sod houses are also present.
Arch_3	10_4	H	Sod houses.
Arch_5	10_6	H	Fish cache area.
Arch_7	10_8	H	Older Inuksugait; not as many as other areas.
Arch_6	10_7	H	Saw a bunch of fish caches together.
Arch_9	10_10	H	Sod houses.
Arch_10	10_11	H	Sod houses.
Arch_11	10_12	H	Sod houses.
Arch_16	10_17	H	Sod houses.
Arch_15	10_16	H	Sod houses.
Arch_19	10_20	H	Older tent rings and Inuksugait.
Arch_20	10_21	H	Older sod houses.
Arch_27	10_28	H	Sod house.
Arch_4	11_5	H	Sod houses.
Arch_2	11_3	H	Sod house owned by interviewee's grandparents.
Arch_3	11_4	H	Sod houses.
Arch_44	11_45	H	Sod houses from Tuniiit (Thule) and Inuit.
Arch_1	11_2	H	Sod houses.
Arch_5	11_6	H	Sod houses.
Arch_41	11_42	H	Sod houses.
Arch_42	11_43	H	Sod houses.
Arch_15	11_16	H	Wintering area.
Arch_14	11_15	H	Sod houses.
Arch_13	11_14	H	Sod houses.
Arch_12	11_13	H	Sod houses at Irtukuvik.
Arch_16	11_17	H	Sod houses.
Arch_18	11_19	H	Sod houses.
Arch_17	11_18	H	Sod houses.
Arch_19	11_20	H	Sod houses.
Arch_20	11_21	H	Sod houses.
Arch_21	11_22	H	Sod houses.
Arch_25	11_26	H	Sod houses.
Arch_23	11_24	H	Sod houses.
Arch_22	11_23	H	Sod houses.
Arch_24	11_25	H	Fishing weir / Sod houses.
Arch_38	11_39	H	Sod houses.
Arch_39	11_40	H	Sod houses.
Arch_35	11_36	H	Sod houses at Agu Bay.
Arch_37	11_38	H	Sod houses.
Arch_36	11_37	H	Sod houses.
Arch_34	11_35	H	Sod houses.
Arch_33	11_34	H	Sod houses.
Arch_43	11_44	H	Sod houses.
Arch_32	11_33	H	Sod houses.
Arch_30	11_31	H	Sod houses.
Arch_31	11_32	H	Sod houses.
Arch_29	11_30	H	Sod houses.
Arch_28	11_29	H	Sod houses / Interviewee's camp.
Arch_6	11_7	H	Sod houses.
Arch_9	11_10	H	Sod houses.
Arch_10	11_11	H	Sod houses.
Arch_11	11_12	H	Sod houses.
Arch_8	11_9	H	Sod houses.
Arch_7	11_8	H	Sod houses.
Arch_26	11_27	H	Sod houses.
Arch_27	11_28	H	Sod houses.
Arch_40	11_41	H	Sod houses.



Table 4: Areas with significant diversity and areas important for other reasons.

Map Code	Map Label	Present – P Historic – H	Months	Comments
SADP_2	1_122	P	Year-round	Ringed Seal, Narwhal, Harp Seals, Bearded Seals, and fish observed.
SADP_1	1_121	P	June, July, August and September	Mostly birds observed here. In Moffet Inlet, birds, fish, seals, and polar bears can be seen.
SAOP_2	2_127	P		
SAOP_1	2_126	P	Year round; Igluqjuaq (place name).	The interviewee lived at Igluqjuaq between the ages of 21 and 23, with his wife. They arrived with nothing, but caught a seal the next day. They survived the winter by hunting at the polynas.
SADP_1	2_124	P	July, August and September	A wetland area where many birds nest. Different birds, narwhal and seals observed along the coast.
SADP_2	2_125	P	June to October	Fish, seals, and birds observed.
SAOP_1	3_82	P	May to September	Sauniquiti. The high cliffs are good for mountain climbing and are very scenic.
SAOP_2	3_83	P		Scenic, unusual rock formations; "Cowboy Land".
SADP_1	4_147	P		Geese, Ducks, Gulls, Arctic Terns, Seals, Fish, and Narwhal observed.
SADP_2	4_148	P		Geese, Ducks, Gulls, Arctic Terns, Seals, Fish, and Narwhal observed.
SAOP_1	4_149	P	April, May and June	His family goes back to the area every spring. There's seals, birds, and fish
SAOP_2	5_239	P	June to September	Hoodoos present, very scenic area; "Cowboy Land".
SAOP_1	5_238	P	June to September	Beautiful scenery at Sauniquiti.
SAOP_3	5_240	P		Waterfall from the top of cliff right to the shore; very scenic.
SAOP_4	5_241	P		Waterfall and deep lake; very scenic.
SAOP_1	6_137	P	July, August and September	Area where the interviewee grew up, and returns every summer for fishing and camping.
SAOP_2	6_138	P	August	You can travel by ATV, it is very flat and scenic.
SAOP_4	7_150	P		Different scenery from every cliff.
SAOP_3	7_149	P		"Cowboy Land"; Different rock formations.
SAOP_1	7_147	P	July, August and September	Sand dunes and Hoodoos. A very scenic area.
SADP_1	7_146	P	June	Fishing area where geese and seals are hunted and eggs are collected.
SAOP_2	7_148	P	Year round	"Cowboy Land"; Different rock formations.
SAOP_1	8_94	P		Area where interviewee grew up. A lot of sod houses in this area.
SAOP_3	8_96	P		Sauniquiti (place name). It is possible to boat through the rock formations. A very scenic area.
SAOP_2	8_95	P		Very Scenic area. Hoodoos and different rock formations; "Cowboy Land".
SAOP_1	9_118	P		Very scenic. Thule sod houses in this area.
SADP_1	9_117	P		Lots of fish, birds, and seals in this area.
SAOP_3	9_120	P		Sauniquiti (place name). Very scenic area, different rock formations.
SAOP_2	9_119	P		The interviewee observed Killer whales herding Narwhal along the shore. Also a good fishing spot and very scenic.
SAOP_2	10_152	P	June, July and August	Interviewee's wife does not want this area to be disturbed because there is a sod house where her parents lived. There is also an abundance of fish and land plants such as blueberries and blackberries here.
SAOP_1	10_151	P	June, July and August	This is a great spot to take tourists to see the wildlife, and would also make a great wildlife sanctuary.
SADP_1	10_150	P	June, July and August	Fish, birds, Bearded Seals, Narwhal, and Bowhead Whales were observed here.
SAOP_1	11_142	P		Sod houses from Pre-Dorset to Thule to more recent occupation are located in this area.
SAOP_4	11_145	P		Pre-Dorset archeological site. Very scenic; Would make a great tourist spot.
SAOP_3	11_144	P		A part of the Sirmilik National Park is very scenic.
SAOP_8	11_149	P		Beautiful river and old camps; Pullataujaq (place name).
SAOP_6	11_147	P	July	Caves, different colour stones and fossils at Sauniquiti (place name); Possible tourist spot.
SAOP_7	11_148	P		Fossils of invertebrates and plants on top of a mountain; Pusingajuaq (place name).
SAOP_5	11_146	P		A great site for mountain climbers; Possible tourist spot.
SAOP_2	11_143	P		



Figure 7: Areas of occupation for Arctic Char.
Arctic Char

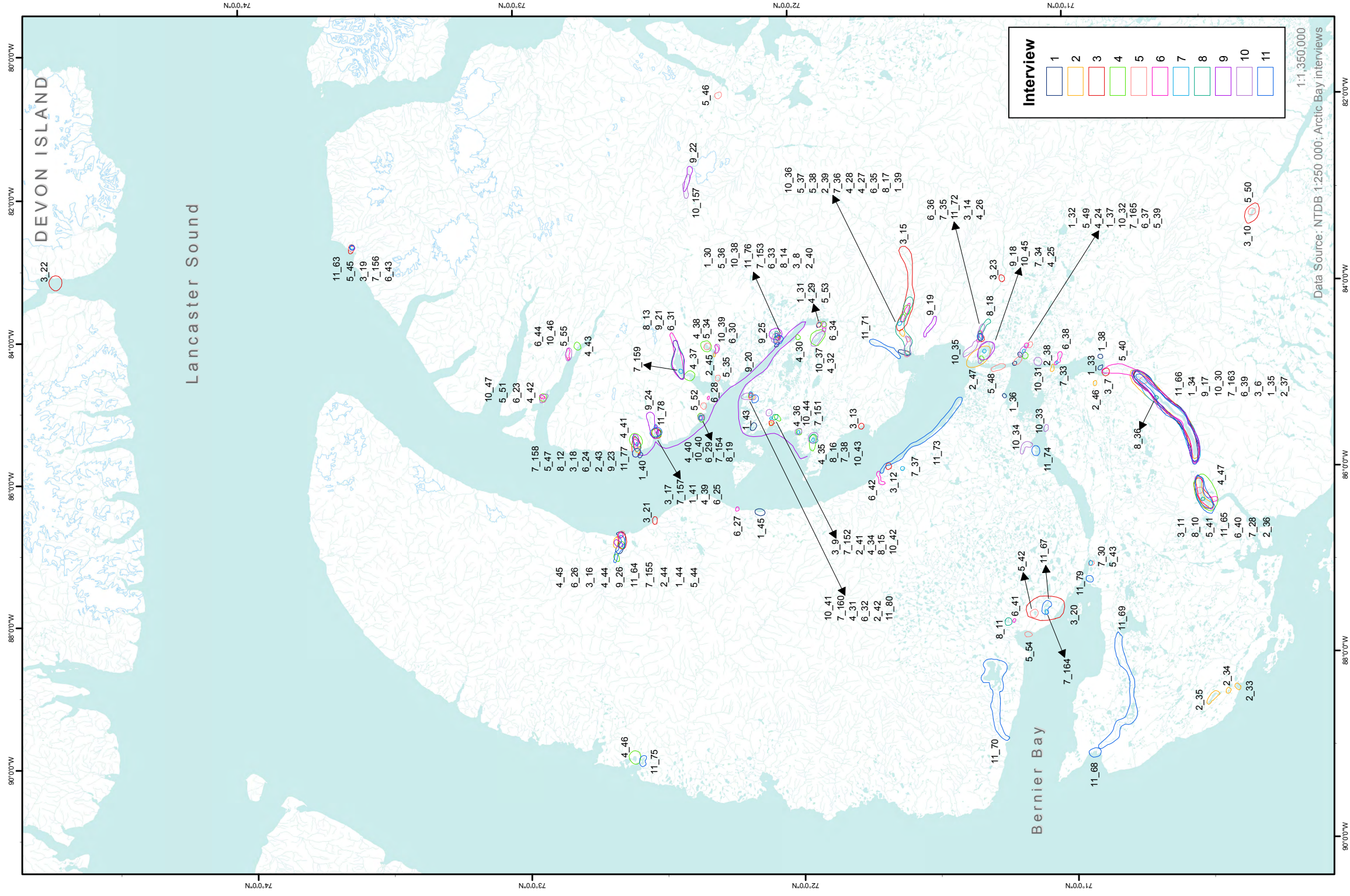




Table 5: Areas of occupation for Arctic Char.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
Char_6	1_35	Arctic Char	P		January to June	
Char_9	1_38	Arctic Char	P		August, September and October	
Char_4	1_33	Arctic Char	P		June, July and August	
Char_7	1_36	Arctic Char	P		August, September and October	
Char_8	1_37	Arctic Char	P		August, September and October	
Char_3	1_32	Arctic Char	P		June, July and August	
Char_10	1_39	Arctic Char	P		August, September and October	
Char_16	1_45	Arctic Char	P		July, August and September	
Char_14	1_43	Arctic Char	P		July, August and September	
Char_2	1_31	Arctic Char	P		June, July and August	
Char_1	1_30	Arctic Char	P		June, July and August	
Char_12	1_41	Arctic Char	P		Year round	
Char_11	1_40	Arctic Char	P		Year round	
Char_15	1_44	Arctic Char	P		July, August and September	
Char_5	1_34	Arctic Char	P		Year round	
Char_12	2_44	Arctic Char	P		July, August and September	The interviewee saw these fish during the narwhal hunting season.
Char_11	2_43	Arctic Char	P		May, October and November	
Char_13	2_45	Arctic Char	P		July, August and September	The interviewee caught these Arctic char while boating.
Char_9	2_41	Arctic Char	P		May to September	
Char_10	2_42	Arctic Char	P		May to September	
Char_8	2_40	Arctic Char	P		May to September	
Char_7	2_39	Arctic Char	P		May to September	
Char_15	2_47	Arctic Char	P			The fish from this area often have tape worm. Qakuqtaquyuq found in the Char's air bladder.
Char_6	2_38	Arctic Char	P		July, August and September	
Char_14_SP	2_46	Arctic Char	P	S	May and June	
Char_5_SP	2_37	Arctic Char	P	S	October to the following April.	
Char_4_H	2_36	Arctic Char	H		May to September	
Char_3_H	2_35	Arctic Char	H		May to September	
Char_1_H	2_33	Arctic Char	H		May to September	
Char_2_H	2_34	Arctic Char	H		May to September	
Char_15_AP	3_20	Arctic Char	P	A	October to the following May	
Char_6	3_11	Arctic Char	P		October to the following April	
Char_1	3_6	Arctic Char	P		May	The Arctic char were observed at Tasialuk.
Char_2	3_7	Arctic Char	P		September	
Char_9	3_14	Arctic Char	P		May and June	These Arctic char were observed at Tulukaat.
Char_10_SP	3_15	Arctic Char	P	S	April, May and November	The interviewee observed these Arctic char at Kuuraajut.
Char_7	3_12	Arctic Char	P		July, August and September	The Arctic char found at Kingairut have white meat.
Char_8	3_13	Arctic Char	P		July, August and September	
Char_3	3_8	Arctic Char	P		Year round	
Char_16	3_21	Arctic Char	P		July and August	
Char_12	3_17	Arctic Char	P		August	
Char_13	3_18	Arctic Char	P		August	These Arctic char move between the ocean and the lake.
Char_11	3_16	Arctic Char	P		April to October	These Arctic char were observed at Kakiak.
Char_14	3_19	Arctic Char	P		May to August	
Char_5	3_10	Arctic Char	P		October to the following April	
Char_18_SP	3_23	Arctic Char	P	S	September and October	
Char_4	3_9	Arctic Char	P		May to August	These Arctic char were observed at Annugaatiaqalik.
Char_17	3_22	Arctic Char	P		August	The interviewee observed these Arctic char on Devon Island.
Char_25	4_47	Arctic Char	P		June, July and August	
Char_2	4_24	Arctic Char	P		July, August and September	
Char_3	4_25	Arctic Char	P		July, August and September	Arctic Char have tape worms in this area.
Char_6	4_28	Arctic Char	P		May	Fishing derby area.
Char_5	4_27	Arctic Char	P		May	
Char_13	4_35	Arctic Char	P		November to the following May	
Char_14	4_36	Arctic Char	P		July, August and September	
Char_12	4_34	Arctic Char	P		May to August	The interviewee fishes by boat in this area.
Char_9	4_31	Arctic Char	P		July and August	
Char_8	4_30	Arctic Char	P		July and August	
Char_10_SP	4_32	Arctic Char	P	S	June, July and August	
Char_7	4_29	Arctic Char	P		June, July and August	Nallaqurvik. Shallow river, therefore, fish swim down river on their sides.
Char_16	4_38	Arctic Char	P		July and August	
Char_15	4_37	Arctic Char	P		July and August	
Char_18	4_40	Arctic Char	P		July and August	
Char_17	4_39	Arctic Char	P		July and August	
Char_19	4_41	Arctic Char	P		Year round	
Char_21	4_43	Arctic Char	P		July and August	

Table 5 (continued): Areas of occupation for Arctic Char.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
Char_20	4_42	Arctic Char	P		July and August	
Char_24_H	4_46	Arctic Char	H		June, July and August	White Narwhal hunting the interviewee also fishes.
Char_23	4_45	Arctic Char	P		June, July and August	
Char_22	4_44	Arctic Char	P		May to August	
Char_4	4_26	Arctic Char	P		April and May	
Char_12	5_45	Arctic Char	P		April	
Char_18	5_51	Arctic Char	P		May	When the interviewee was young he would fish in this area before the fish went down stream. Char fishing derby area for the community.
Char_14	5_47	Arctic Char	P		May and November	Fishing in May before char go down river. Fish in November before ice gets too thick. Numbers of char increasing and getting bigger.
Char_19	5_52	Arctic Char	P		June and August	Seen in late June, also in August while fish are going down river.
Char_2_SP	5_35	Arctic Char	P	S	August	Middle of August.
Char_1_SP	5_34	Arctic Char	P	S	August	Seen in late August.
Char_20	5_53	Arctic Char	P		August	Seen in late August.
Char_3_SP	5_36	Arctic Char	P	S	Year round	
Char_4	5_37	Arctic Char	P		August, October and November	
Char_5	5_38	Arctic Char	P		November to the following March	
Char_15	5_48	Arctic Char	P		August	Seen in late August.
Char_16	5_49	Arctic Char	P		August	Seen in late August.
Char_6	5_39	Arctic Char	P		August and September	Fishing during late August and early September before the Char go back up river.
Char_7	5_40	Arctic Char	P		April and November	
Char_8_SAP	5_41	Arctic Char	P	A, S	April	
Char_17	5_50	Arctic Char	P		May and November	Fishing late November before the ice gets too thick to fish.
Char_10	5_43	Arctic Char	P		August	The Char have red meat.
Char_21	5_54	Arctic Char	P		May	Seen in late May after fish go down river.
Char_9	5_42	Arctic Char	P		April	The best char, big with dark red meat.
Char_13	5_46	Arctic Char	P		May and November	Fishing middle of November before the ice gets too thick.
Char_22	5_55	Arctic Char	P		September and October	Seen in late September/ early October.
Char_11	5_44	Arctic Char	P		August and September	
Char_4	6_26	Arctic Char	P		Year round	
Char_1	6_23	Arctic Char	P		Year round	
Char_22	6_44	Arctic Char	P		Year round	
Char_2	6_24	Arctic Char	P		Year round	
Char_3	6_25	Arctic Char	P		Year round	
Char_7	6_29	Arctic Char	P		Year round	
Char_6	6_28	Arctic Char	P		Year round	
Char_8	6_30	Arctic Char	P		Year round	
Char_9	6_31	Arctic Char	P		Year round	
Char_10	6_32	Arctic Char	P		Year round	
Char_5	6_27	Arctic Char	P		Year round	
Char_13	6_35	Arctic Char	P		Year round	
Char_14	6_36	Arctic Char	P		Year round	
Char_15	6_37	Arctic Char	P		Year round	
Char_16	6_38	Arctic Char	P		Year round	
Char_17	6_39	Arctic Char	P		Year round	
Char_18	6_40	Arctic Char	P		Year round	
Char_19	6_41	Arctic Char	P		Year round	
Char_20	6_42	Arctic Char	P		Year round	
Char_21	6_43	Arctic Char	P		Year round	
Char_11	6_33	Arctic Char	P		Year round	
Char_12	6_34	Arctic Char	P		Year round	
Char_17	7_156	Arctic Char	P		Year round	
Char_19	7_158	Arctic Char	P		Year round	
Char_18	7_157	Arctic Char	P		Year round	
Char_15	7_154	Arctic Char	P		Year round	
Char_20	7_159	Arctic Char	P		Year round	
Char_14	7_153	Arctic Char	P		Year round	
Char_9	7_36	Arctic Char	P		Year round	
Char_10	7_37	Arctic Char	P		Year round	
Char_13	7_152	Arctic Char	P		Year round	
Char_16	7_155	Arctic Char	P		Year round	
Char_8	7_35	Arctic Char	P		Year round	
Char_7	7_34	Arctic Char	P		Year round	
Char_5	7_165	Arctic Char	P		Year round	
Char_6	7_33	Arctic Char	P		Year round	
Char_2	7_163	Arctic Char	P		Year round	
Char_1	7_28	Arctic Char	P		Year round	
Char_4	7_164	Arctic Char	P		Year round	
Char_21	7_160	Arctic Char	P		Year round	
Char_12	7_151	Arctic Char	P		Year round	
Char_11	7_38	Arctic Char	P		Year round	
Char_3	7_30	Arctic Char	P		Year round	
Char_4	8_12	Arctic Char	P		Year round	
Char_11	8_19	Arctic Char	P		Year round	
Char_7	8_15	Arctic Char	P		Year round	



Table 5 (continued): Areas of occupation for Arctic Char.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
Char_8	8_16	Arctic Char	P		Year round	Char seen at Ittukkuvik.
Char_9	8_17	Arctic Char	P		Year round	
Char_10	8_18	Arctic Char	P		Year round	
Char_1_H	8_36	Arctic Char	P		Year round	
Char_2_H	8_10	Arctic Char	H		Year round	
Char_3	8_11	Arctic Char	P		Year round	
Char_6	8_14	Arctic Char	P		Year round	Char meat is whiter now than it was in the past.
Char_5	8_13	Arctic Char	P		Year round	
Char_7	9_23	Arctic Char	P		Year round	
Char_8	9_24	Arctic Char	P		June, July and August	
Char_5_SP	9_21	Arctic Char	P	S	June, July and August	
Char_9	9_25	Arctic Char	P		Year round	
Char_3	9_19	Arctic Char	P		November to the following March	
Char_2	9_18	Arctic Char	P		June, July and August	
Char_10	9_26	Arctic Char	P		July, August, and October to the following March	
Char_1_H	9_17	Arctic Char	H		November to the following April	
Char_6_H	9_22	Arctic Char	H		April to August	Seen towards Pond Inlet in 1970.
Char_4	9_20	Arctic Char	P		June, July and August	The Char go up river mid August.
Char_19	10_157	Arctic Char	P		July, August and September	
Char_11	10_40	Arctic Char	P		June, July and August	
Char_12	10_41	Arctic Char	P		June, July and August	
Char_13	10_42	Arctic Char	P		June, July and August	
Char_15	10_44	Arctic Char	P		June, July and August	
Char_14	10_43	Arctic Char	P		June, July and August	
Char_7	10_36	Arctic Char	P		June, July and August	
Char_6_AP	10_35	Arctic Char	P	A	June, July and August	
Char_16_AP	10_45	Arctic Char	P	A	October and November	
Char_3	10_32	Arctic Char	P		June, July and August	
Char_2	10_31	Arctic Char	P		June, July and August	The Char go up river mid August.
Char_1	10_30	Arctic Char	P		June, July and August	The Char go up river mid August.
Char_4	10_33	Arctic Char	P		June, July and August	
Char_5	10_34	Arctic Char	P		June, July and August	
Char_17	10_46	Arctic Char	P		October and November	The Char go up river mid August.
Char_18	10_47	Arctic Char	P		October and November	
Char_10	10_39	Arctic Char	P		June, July and August	
Char_9	10_38	Arctic Char	P		June, July and August	
Char_8	10_37	Arctic Char	P		June, July and August	
Char_1	11_63	Arctic Char	P		September, October and November	
Char_2_SP	11_64	Arctic Char	P	S	September, October and November	
Char_11	11_73	Arctic Char	P			
Char_9	11_71	Arctic Char	P			
Char_10	11_72	Arctic Char	P			
Char_4_H	11_66	Arctic Char	H		August	
Char_3_H	11_65	Arctic Char	H		August	
Char_6_H	11_68	Arctic Char	H		August	
Char_7_H	11_69	Arctic Char	H		August	
Char_5_H	11_67	Arctic Char	H		August	Great fishing area.
Char_8_H	11_70	Arctic Char	H		August	
Char_18	11_80	Arctic Char	P			
Char_14	11_76	Arctic Char	P		September, October and November	
Char_15	11_77	Arctic Char	P		September, October and November	
Char_16	11_78	Arctic Char	P		September, October and November	
Char_17_H	11_79	Arctic Char	H			
Char_12	11_74	Arctic Char	P			
Char_13_H	11_75	Arctic Char	H			



Table 6: Areas of occupation for Land Locked Char.

Map Code	Map Label	Species	Present – P Historic – H	Months	Comments
LLC_2	1_47	Land Locked Char	P	Year round	
LLC_3	1_48	Land Locked Char	P	April to December	The interviewee fished at this location in April 2008.
LLC_4	1_49	Land Locked Char	P	Year round	
LLC_1	1_46	Land Locked Char	P	October to the following June.	
LLC_1	2_48	Land Locked Char	P	October to the following April.	
LLC_1	3_24	Land Locked Char	P	October and November	
LLC_1	4_48	Land Locked Char	P	Year round	The interviewee only fished there twice. The interviewee had a lot of fun fishing Land Locked Char.
LLC_2	4_49	Land Locked Char	P	April and May	
LLC_3	4_50	Land Locked Char	P	Year round	
LLC_5	4_52	Land Locked Char	P	Year round	Most abundant in May and June.
LLC_6	4_53	Land Locked Char	P	July and August	
LLC_4	4_51	Land Locked Char	P	Year round	
LLC_7	4_54	Land Locked Char	P	Year round	
LLC_8	4_55	Land Locked Char	P	Year round	
LLC_9	4_56	Land Locked Char	P	Year round	
LLC_10	4_57	Land Locked Char	P	November and December	
LLC_4	5_59	Land Locked Char	P		Around all year.
LLC_5	5_60	Land Locked Char	P		Around all year.
LLC_1	5_56	Land Locked Char	P	Year round	
LLC_2	5_57	Land Locked Char	P	October	Seen in late October.
LLC_3	5_58	Land Locked Char	P	September	Seen in late September.
LLC_4	6_48	Land Locked Char	P	Year round	
LLC_2	6_46	Land Locked Char	P	Year round	
LLC_1	6_45	Land Locked Char	P	Year round	
LLC_4	8_23	Land Locked Char	P	Year round	
LLC_5	8_24	Land Locked Char	P	Year round	
LLC_6	8_25	Land Locked Char	P	Year round	
LLC_3	8_22	Land Locked Char	P	Year round	
LLC_1	8_20	Land Locked Char	P	Year round	
LLC_2	8_21	Land Locked Char	P	Year round	
LLC_7	8_26	Land Locked Char	P	Year round	
LLC_9	9_35	Land Locked Char	P	October and November	
LLC_4	9_30	Land Locked Char	P	October and November	
LLC_5	9_31	Land Locked Char	P	October and November	
LLC_6	9_32	Land Locked Char	P	October and November	
LLC_2	9_28	Land Locked Char	P	October and November	Large individuals.
LLC_3	9_29	Land Locked Char	P	October and November	
LLC_1	9_27	Land Locked Char	P	November to the following March	
LLC_7	9_33	Land Locked Char	P	October and November	
LLC_8_H	9_34	Land Locked Char	H	October and November	
LLC_5	10_53	Land Locked Char	P	October and November	
LLC_4	10_52	Land Locked Char	P	October and November	
LLC_3	10_51	Land Locked Char	P	October and November	
LLC_2	10_50	Land Locked Char	P	June, July and August	The Char go up river mid August.
LLC_1	10_49	Land Locked Char	P	June, July and August	The Char go up river mid August.
LLC_6	10_54	Land Locked Char	P	October and November	
LLC_7	10_55	Land Locked Char	P	July, August and September	
LLC_3	11_48	Land Locked Char	P	September, October and November	
LLC_2	11_47	Land Locked Char	P	September, October and November	
LLC_17	11_62	Land Locked Char	P		
LLC_9	11_54	Land Locked Char	P	September, October and November	
LLC_10_H	11_55	Land Locked Char	H	September, October and November	
LLC_11_H	11_56	Land Locked Char	H	September, October and November	
LLC_13_H	11_58	Land Locked Char	H	September, October and November	
LLC_12_H	11_57	Land Locked Char	H	September, October and November	
LLC_15_H	11_60	Land Locked Char	H	August	
LLC_16_H	11_61	Land Locked Char	H	August	
LLC_6	11_51	Land Locked Char	P	September, October and November	
LLC_8	11_53	Land Locked Char	P	September, October and November	
LLC_5	11_50	Land Locked Char	P	September, October and November	
LLC_4	11_49	Land Locked Char	P	September, October and November	
LLC_7	11_52	Land Locked Char	P	September, October and November	
LLC_14_H	11_59	Land Locked Char	H	September, October and November	

“Everywhere” Coded Data — Land Locked Char.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
7	LLC_1_e	Landlocked Char	P	Year round	
11	LLC_1_e	Landlocked Char	P	September to November	As long as the lake does not freeze all the way to the bottom Landlocked char can be found.

Figure 9: Areas of occupation for Wolfish, Arctic Cod, Arctic Ocean Pout, Arctic Flounder, Capelin, Atlantic Herring, Ninespine Stickleback and Threespine Stickleback.

Wolfish, Arctic Cod*, Arctic Ocean Pout*, Arctic Flounder, Capelin*, Atlantic Herring*, Ninespine Stickleback and Threespine Stickleback

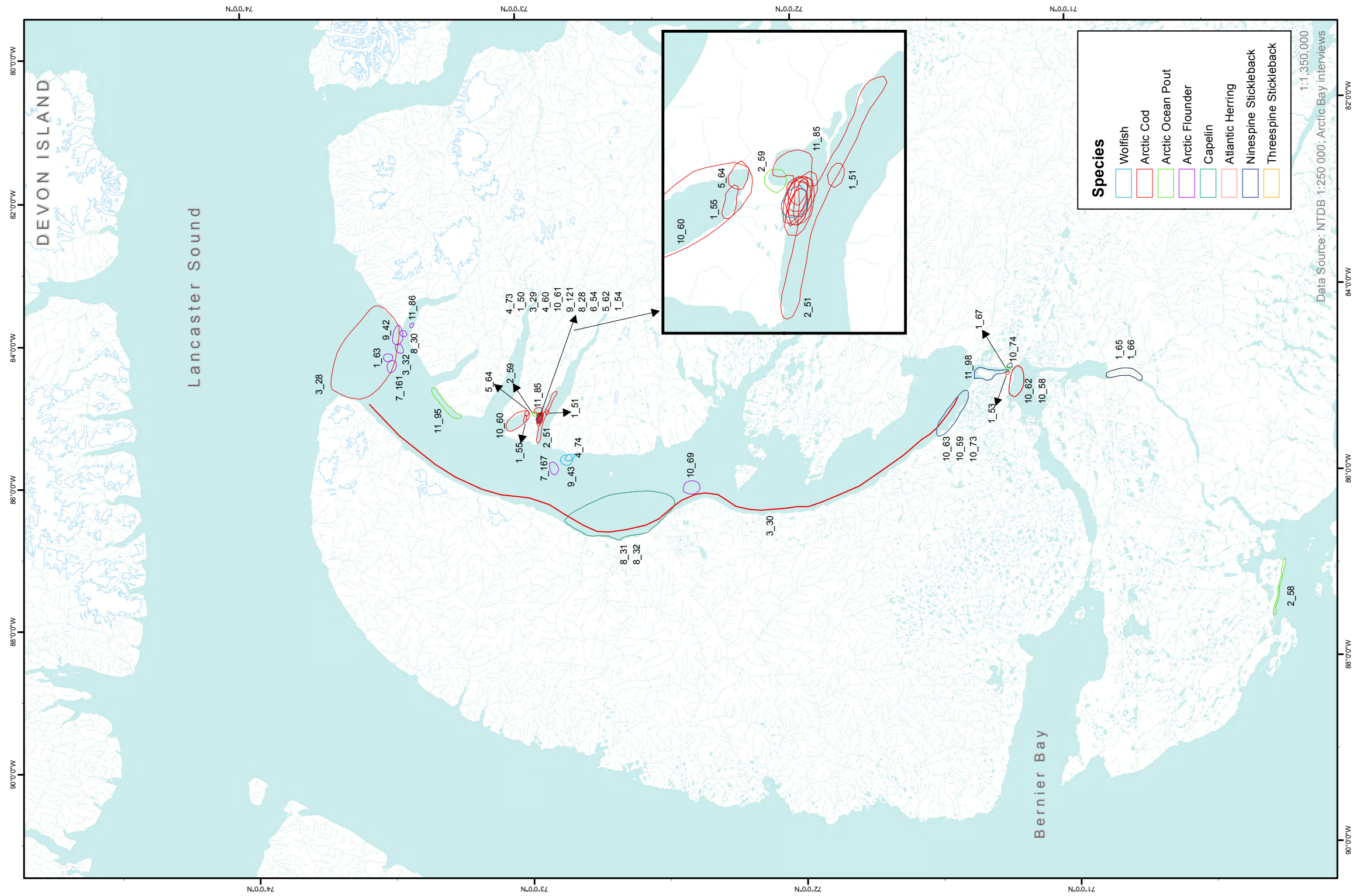


Table 7: Areas of occupation for Wolfish, Arctic Cod, Arctic Ocean Pout, Arctic Flounder, Capelin, Atlantic Herring, Ninespine Stickleback and Threespine Stickleback.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
Wolf_2_H	4_74	Wolfish	H		July, August and September	
Wolf_1_H	4_73	Wolfish	H		July, August and September	
Wolf_1_H	9_43	Wolfish	H		November to the following May	
Wolf_1_H	10_73	Wolfish	H		July, August and September	Mostly on/around rocks and seaweed.
AOP_1_H	1_67	Arctic Ocean Pout	H		July, August and September	
AOP_3	2_59	Arctic Ocean Pout	P		July, August and September	The interviewee observed these Arctic ocean pouts in 2006.
AOP_1_H	2_57	Arctic Ocean Pout	H		July, August and September	
AOP_2_H	2_58	Arctic Ocean Pout	H		July, August and September	
AOP_2_H	11_95	Arctic Ocean Pout	H		September to August	
AFL_1	1_63	Arctic Flounder	P		October to the following June.	The interviewee saw an Arctic flounder in a seal hole.
AFL_1	3_32	Arctic Flounder	P		November to the following March	
AFL_2	7_161	Arctic Flounder	P		November to the following April	
AFL_1	7_167	Arctic Flounder	P		November to the following April	
AFL_1	8_30	Arctic Flounder	P		Year round	The interviewee found one dead in seal hole.
AFL_1_H	9_42	Arctic Flounder	P		November to the following April	
AFL_1_H	10_69	Arctic Flounder	H			Found in winter in a seal hole.
AFL_1_H	11_86	Arctic Flounder	H		November to the following June	The interviewee found one dead in seal hole.
Cape_1	8_31	Capelin	P		Year round	Mostly observed in the summer. On a clear day you can see them on the surface.
AHerr_1	8_32	Atlantic Herring	P		Year round	
NStb_1	1_65	Ninespine Stickleback	P		July, August and September	
NStb_1_H	10_74	Ninespine Stickleback	H			Found in summer.
NStb_1_H	11_98	Ninespine Stickleback	H		November to the following June	
TStb_1	1_66	Threespine Stickleback	P		July, August and September	
Cod_4_H	1_53	Arctic Cod	H		May and June	
Cod_2_AP	1_51	Arctic Cod	P	A	June	
Cod_1_AP	1_50	Arctic Cod	P	A	June	Interviewee received income from cod in summer 2008. He also sent fish samples to DFO (purpose unknown).
Cod_5_AP	1_55	Arctic Cod	P	A	June	Interviewee received income from cod in summer 2008. He also sent fish samples to DFO (purpose unknown).
Cod_3_AP	1_54	Arctic Cod	P	A	June	
Cod_1_AP	2_51	Arctic Cod	P	A	May to September	Arctic cod are especially abundant in the spring. Both seals and narwhal feed on cod, depending on the season.
Cod_2	3_29	Arctic Cod	P		July, August and September	
Cod_1	3_28	Arctic Cod	P		June and July	The Arctic cod were seen at the floe edge.
Cod_3	3_30	Arctic Cod	P		July, August and September	The Arctic cod follow the leads between the ice floes.
Cod_2_AP	4_60	Arctic Cod	P	A	Year round	Narwhal feed on the abundant cod in the inlet.
Cod_2_AP	5_64	Arctic Cod	P	A	May and June	
Cod_1_AP	5_62	Arctic Cod	P	A	May and June	Seen in late May and early June.
Cod_1_AP	6_54	Arctic Cod	P	A	April, May and June	
Cod_1	8_28	Arctic Cod	P		Year round	Sometimes found dead in seal holes.
Cod_2	9_121	Arctic Cod	P		Year round	
Cod_4_AP	10_61	Arctic Cod	P		June to September	
Cod_3_AP	10_60	Arctic Cod	P	A		Seen in all leads.
Cod_1_AP	10_58	Arctic Cod	P	A	June to September	
Cod_5_AP	10_62	Arctic Cod	P	A		
Cod_2_AP	10_59	Arctic Cod	P	A	June to September	
Cod_6_AP	10_63	Arctic Cod	P	A		
Cod_2	11_85	Arctic Cod	P		November to the following May	

"Everywhere" Coded Data — Arctic Cod, Arctic Ocean Pout, Capelin, Atlantic Herring, Pacific Herring

Interview	Map Code	Species	Present - P Historic - H	Months	Comments
1	AOP_2_e	Arctic Ocean Pout	P	July, August and September	Found along the shore after a storm.
7	AOP_1_e	Arctic Ocean Pout	P		
10	AOP_1_He	Arctic Ocean Pout	H	July, August and September	Arctic Ocean Pout are found mostly on/around rocks and seaweed.
11	AOP_1_e	Arctic Ocean Pout	P	June to September	Where ever there is exposed bedrock Arctic Ocean Pout can be found.
1	Cape_1_e	Capelin	P	July to September	
4	Cape_1_e	Capelin	P	July to September	
10	Cape_1_e	Capelin	P		Spring/Summer.
11	Cape_1_e	Capelin	P	May and June	
10	Aherr_1_e	Atlantic Herring	P		Spring/Summer.
11	Aherr_1_e	Atlantic Herring	P	May and June	The interviewee usually sees them around and in the leads.
1	Cod_3_e	Arctic Cod	P	June	Seals and Narwhal feed on the Arctic Cod.
2	Cod_1_e	Arctic Cod	P	May and June	Arctic Cod can be seen in cracks in the ice during spring, and also in the stomach contents of Narwhal and Ringed seal.
2	Cod_2_e	Arctic Cod	P	May to September	
4	Cod_1_e	Arctic Cod	P	Year round	
5	Cod_3_e	Arctic Cod	P	June and July	Early July.
6	Cod_1_e	Arctic Cod	P	Year round	Arctic Cod seen in Admiralty Inlet.
7	Cod_1_e	Arctic Cod	P		
8	Cod_1_e	Arctic Cod	P	Year round	
9	Cod_1_e	Arctic Cod	P	Year round	Arctic Cod is found all along the coast.
9	Cod_2_e	Arctic Cod	P	Year round	
10	Cod_3_Ape	Arctic Cod	P	April, May and June	
11	Cod_1_e	Arctic Cod	P	November to the following June	
10	Pherr_1_e	Pacific Herring	P		Spring/Summer.
11	Pherr_1_e	Pacific Herring	P	May and June	The interviewee usually sees them around and in leads.



Figure 10: Areas of occupation for Deepwater Sculpin, Arctic Staghorn Sculpin, Slimy Sculpin, Arctic Skate and Arctic Lamprey, Deepwater Sculpin*, Arctic Staghorn Sculpin*, Slimy Sculpin*, Arctic Skate and Arctic Lamprey





Table 8: Areas of occupation for Deepwater Sculpin, Arctic Staghorn Sculpin, Slimy Sculpin, Arctic Skate and Arctic Lamprey.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
DScul_1	1_59	Deepwater Sculpin	P		June and July	
DScul_2	4_63	Deepwater Sculpin	P		July and August	
DScul_1_H	11_93	Deepwater Sculpin	H		Year round	Lives in deep waters; seen in 1946.
SScul_2_AP	11_92	Slimy Sculpin	P	A		
ASS_3_AP	5_68	Arctic Staghorn Sculpin	P	A	June and July	All year but mostly seen during the summer; Healthier in early fall before freeze up.
ASS_2_AP	5_67	Arctic Staghorn Sculpin	P	A	June and July	All year but mostly seen during the summer; Healthier in early fall before freeze up.
Lamp_1_H	4_72	Arctic Lamprey	H		July, August and September	
Skate_1	1_71	Arctic Skate	P			
Skate_1_H	3_37	Arctic Skate	H		July, August and September	
Skate_1_H	6_57	Arctic Skate	H		August	The interviewee saw an Arctic Skate while working for an Arctic Flounder test fishery.

“Everywhere” Coded Data — Deepwater Sculpin, Slimy Sculpin, Arctic Staghorn Sculpin.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
2	Dscul_1_e	Deepwater Sculpin	P	May to September	
4	Dscul_1_e	Deepwater Sculpin	P	Year round	
7	Dscul_1_e	Deepwater Sculpin	P		
10	Dscul_1_e	Deepwater Sculpin	P	Year round	
2	Sscul_1_e	Slimy Sculpin	P	May to September	
4	Sscul_1_e	Slimy Sculpin	P	Year round	
11	Sscul_1_e	Slimy Sculpin	P	Year round	Found mostly from June to September, on sandy bottoms.
1	ASS_1_e	Arctic Staghorn Sculpin	P	April to December	Arctic Staghorn Sculpins are harder to catch during the winter, also they are found along the coast.
2	ASS_1_e	Arctic Staghorn Sculpin	P	May to September	
3	ASS_1_e	Arctic Staghorn Sculpin	P		
5	ASS_1_e	Arctic Staghorn Sculpin	P	Year round	Seen all year but mostly June to early July. They are healthier in early fall before freeze up.
6	ASS_1_e	Arctic Staghorn Sculpin	P		
7	ASS_1_e	Arctic Staghorn Sculpin	P		
8	ASS_1_e	Arctic Staghorn Sculpin	P	Year round	
9	ASS_1_e	Arctic Staghorn Sculpin	P	Year round	
10	ASS_1_e	Arctic Staghorn Sculpin	P	Year round	
11	ASS_1_e	Arctic Staghorn Sculpin	P	Year round	Arctic Staghorn Sculpins are found mostly on rocky bottom substrate.

Figure 11: Areas of occupation for Greenlandic Shark.
Greenlandic Shark*

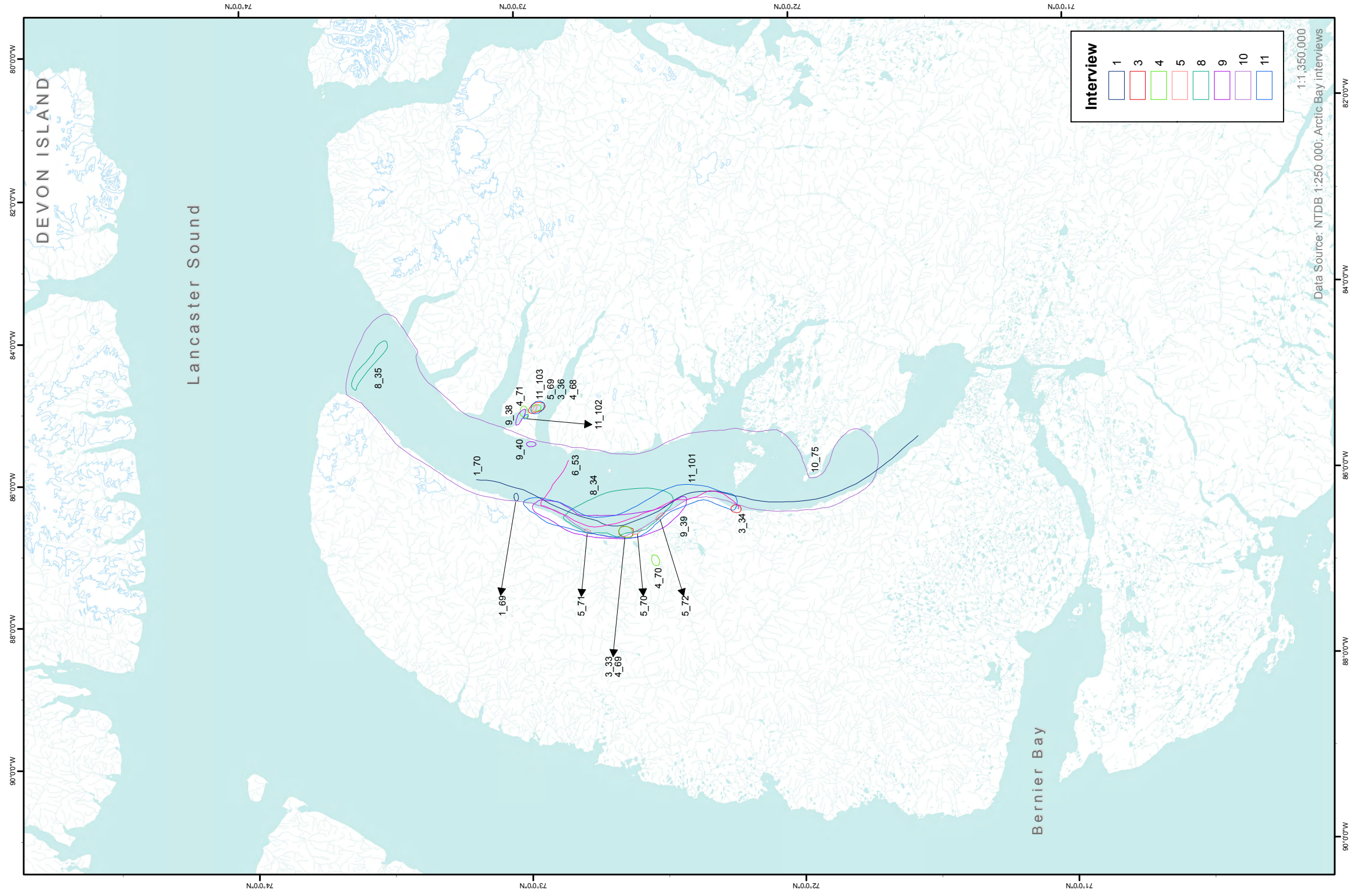




Table 9: Areas of occupation for Greenlandic Shark.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
GS_1	1_69	Greenlandic Shark	P		August	Greenlandic sharks were seen feeding on narwhal in mid-August.
GS_2	1_70	Greenlandic Shark	P		August	
GS_2	3_34	Greenlandic Shark	P		August and September	
GS_1_AP	3_33	Greenlandic Shark	P	A	August and September	
GS_4	3_36	Greenlandic Shark	P		August and September	
GS_1	4_68	Greenlandic Shark	P		July, August and September	
GS_4	4_71	Greenlandic Shark	P		July, August and September	
GS_2	4_69	Greenlandic Shark	P		July, August and September	The interviewee observed the Greenlandic shark while Narwhal hunting.
GS_3	4_70	Greenlandic Shark	P		July, August and September	
GS_1	5_69	Greenlandic Shark	P		July and August	Seen in late August.
GS_3	5_71	Greenlandic Shark	P		August and September	Seen in late August/ early September.
GS_2_AP	5_70	Greenlandic Shark	P	A	August and September	Seen late August/ early September.
GS_4	5_72	Greenlandic Shark	P		August and September	Seen in late August/ early September.
GS_2	6_53	Greenlandic Shark	P		August and September	The whole of Admiralty Inlet.
GS_2_H	8_35	Greenlandic Shark	H		Year round	In 1983, while doing research, the interviewee saw a Greenlandic Shark.
GS_1	8_34	Greenlandic Shark	P		Year round	The interviewee saw a Greenlandic shark in 2008.
GS_1	9_38	Greenlandic Shark	P		June to September	Greenlandic shark seen eating seals.
GS_3	9_40	Greenlandic Shark	P		June to September	One shark was caught in a net in 2000.
GS_2_AP	9_39	Greenlandic Shark	P	A	June to September	
GS_1	10_75	Greenlandic Shark	P		Year round	Dog team owners sometimes make a hole in the ice to thaw out seal meat and Greenlandic shark will often feed on the meat.
GS_2	11_102	Greenlandic Shark	P			
GS_3	11_103	Greenlandic Shark	P			
GS_1_AP	11_101	Greenlandic Shark	P	A		The interviewee has seen them in the past, while narwhal hunting, during the summer.

“Everywhere” Coded Data — Deepwater Sculpin, Slimy Sculpin, Arctic Staghorn Sculpin.

Interview	Map Code	Species	Present - P Historic - H	Months	Comments
2	GS_1_e	Greenlandic Shark	P	July to September	Greenlandic Shark can be found in Admiralty Inlet during Narwhal hunting season.
6	GS_1_e	Greenlandic Shark	P	August and September	In Admiralty Inlet.
7	GS_1_e	Greenlandic Shark	P		Found in Admiralty Inlet.
10	Dscul_1_e	Deepwater Sculpin	P	Year round	
2	Sscul_1_e	Slimy Sculpin	P	May to September	

Figure 12: Areas of occupation for Round Whitefish, Broad Whitefish, Burbot, White Sucker, Trout Perch, Rainbow Smelt, Brook Trout, and Least Cisco.

Round Whitefish, Broad Whitefish, Burbot*, White Sucker, Trout Perch*, Rainbow Smelt, Brook Trout, and Least Cisco

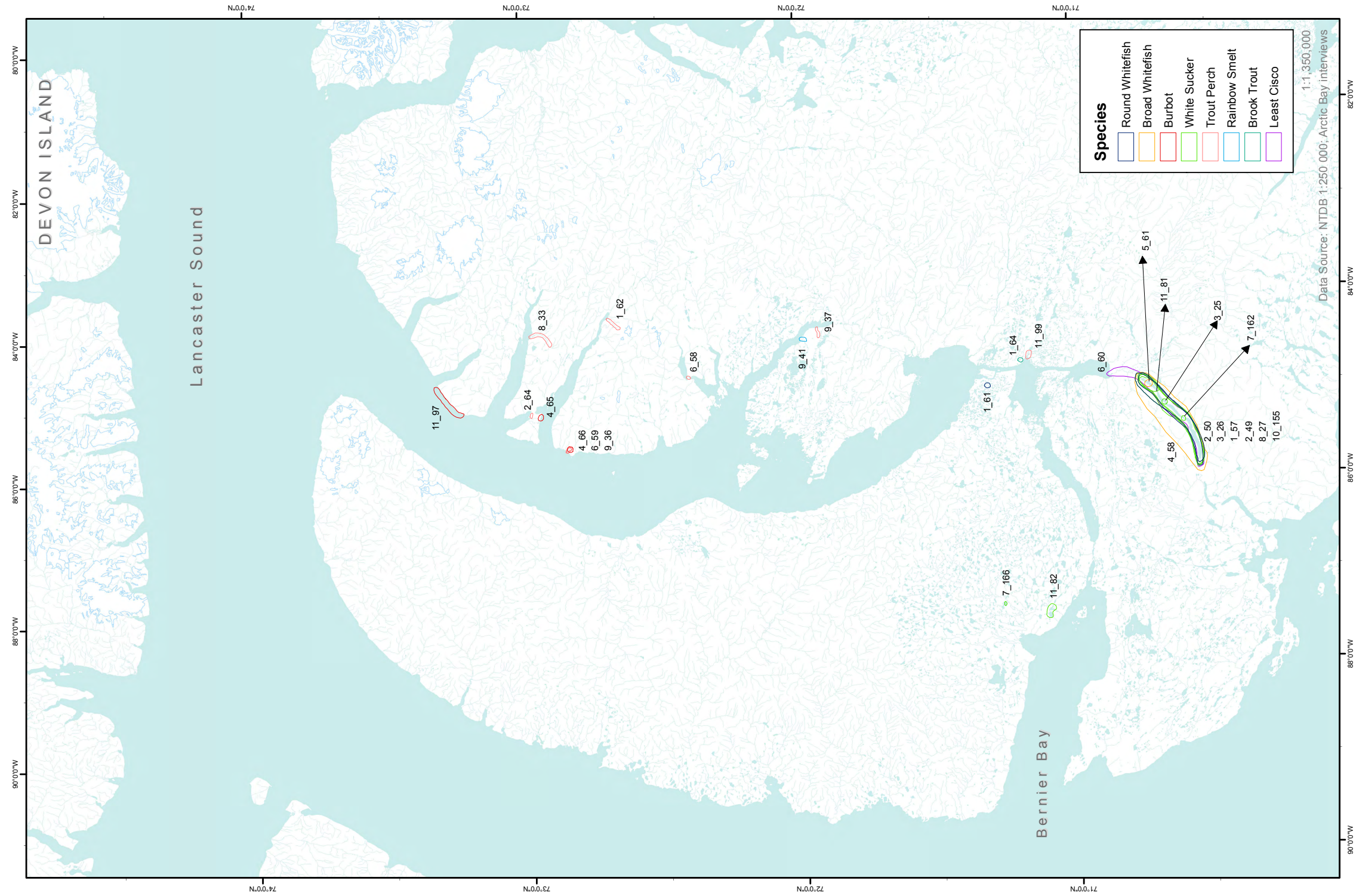


Table 10: Areas of occupation for Round Whitefish, Broad Whitefish, Burbot, White Sucker, Trout Perch, Rainbow Smelt, Brook Trout, and Least Cisco.

Map Code	Map Label	Species	Present - P Historic - H	Months	Comments
RWh_1_H	1_61	Round Whitefish	H	May and June, and October and November	
RWh_1	2_50	Round Whitefish	P	October to the following April.	
RWh_1	3_26	Round Whitefish	P	March	
BWh_1	4_58	Broad Whitefish	P	Year round	The interviewee only fished there twice.
BWh_1	5_61	Broad Whitefish	P	April and November	
Bur_2_H	4_66	Burbot	H	July and August	
Bur_1_H	4_65	Burbot	H	July and August	
Bur_2_H	11_97	Burbot	H	June to September	
Wsu_1	1_57	White Sucker	P	April	
Wsu_1	2_49	White Sucker	P	October to the following April	
Wsu_1	3_25	White Sucker	P	May	
Wsu_2	7_162	White Sucker	P	November to the following April	
Wsu_1	7_166	White Sucker	P		
Wsu_1_H	8_27	White Sucker	P	Year round	
Wsu_1	10_155	White Sucker	P	June, July and August	The Char go up river mid August.
Wsu_1_H	11_81	White Sucker	H	Year round	
Wsu_2_H	11_82	White Sucker	H	August	
TP_1	1_62	Trout Perch	P	July, August and September	
TP_1	2_64	Trout Perch	P	October to the following April	
TP_2	6_59	Trout Perch	P	August and September	
TP_1	6_58	Trout Perch	P	August and September	
TP_1	8_33	Trout Perch	P	Year round	
TP_1	9_36	Trout Perch	P	June, July and August	
TP_2	9_37	Trout Perch	P	June, July and August	
TP_1_H	11_99	Trout Perch	H		Trout Perch was observed to live in rivers where there are rocks.
RBS_1_H	9_41	Rainbow Smelt	H	June, July and August	
BTr_1_H	1_64	Brook Trout	H	June	The lake where the brook trout were observed is too small to see on the map.
LEC_1	6_60	Least Cisco	P	May	

“Everywhere” Coded Data — Burbot and Trout Perch.

Interview	Map Code	Species	Present - P Historic - H	Months	Comments
7	Bur_1_e	Burbot	P		Burbot is not as visible in salt water.
11	Bur_1_e	Burbot	P	June to September	
7	TP_1_e	Trout Perch	P		Trout Perch can be found in a lake as long as it does not freeze to the bottom.
11	TP_2_e	Trout Perch	P	November to the following June	Found in char lakes.



Figure 13: Areas of occupation for Clam, Mussel, Cockle, Whelk, Tortoiseshell Limpet, Mysis Shrimp, Polar Sea Star, Mud Star, Amphipod, Naked Sea Butterfly, Ctenophore, Jellyfish, Sea Anemone, Sea Cucumber and Sea Urchin.

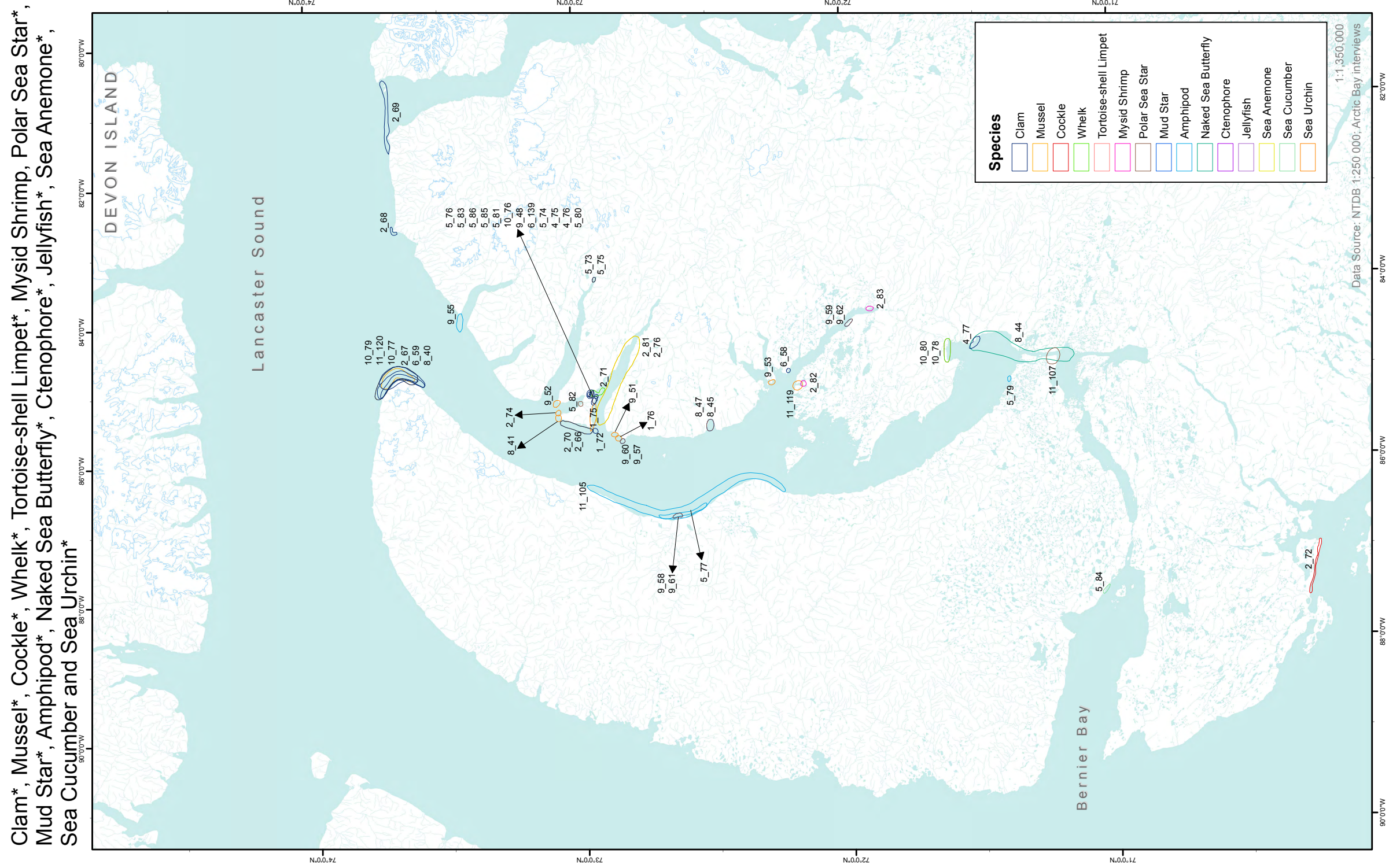


Table 1.1: Areas of occupation for Clam, Mussel, Cockle, Whelk, Tortoiseshell Limpet, Mysid Shrimp, Polar Sea Star, Mud Star, Amphipod, Naked Sea Butterfly, Ctenophore, Jellyfish, Sea Anemone, Sea Cucumber and Sea Urchin.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
Clam_1_H	1_72	Clam	H		September	
Clam_4	2_69	Clam	P		May	
Clam_3	2_68	Clam	P		May	
Clam_2	2_67	Clam	P		May	
Clam_1	2_66	Clam	P		July, August and September	
Clam_3	4_77	Clam	P		July and August	
Clam_2	4_76	Clam	P		July and August	
Clam_1	4_75	Clam	P		July and August	
Clam_2	5_74	Clam	P		June, July and August	
Clam_1	5_73	Clam	P		June, July and August	
Clam_2	6_59	Clam	P			
Clam_3	6_139	Clam	P			
Clam_1	6_58	Clam	P		July, August and September	
Clam_1	9_48	Clam	P			
Clam_1	10_76	Clam	P		June to September	Divers collect the Clams during the summer.
Clam_2	10_77	Clam	P		June to September	Small Clams in this area.
Clam_1	11_120	Clam	P			The area where these Clams are found is quite shallow.
Mus_1	2_70	Mussel	P		July, August and September	
Mus_1	5_75	Mussel	P		June, July and August	Very few Mussels observed.
Mus_1	8_40	Mussel	P			Walrus feed on the Mussels in shallow water.
Mus_1	10_79	Mussel	P		June to September	Empty mussel shells are found on the ice.
CkL_1_H	2_72	Cockle	H		July, August and September	
Whe_1	2_71	Whelk	P		July, August and September	
Whe_1	10_78	Whelk	P		June to September	
TL_1	10_80	Tortoiseshell Limpet	P		June to September	
Mys_1	2_82	Mysid Shrimp	P			
Mys_2	2_83	Mysid Shrimp	P			
PStar_2	5_83	Polar Sea Star	P		August and September	The Interviewee observed the Sea Star in the bay.
PStar_1_AP	5_82	Polar Sea Star	P	A	August and September	
PStar_1_AP	8_45	Polar Sea Star	P	A		
PStar_1	9_57	Polar Sea Star	P			
PStar_2	9_58	Polar Sea Star	P			
PStar_3	9_59	Polar Sea Star	P			
PStar_2_H	11_107	Polar Sea Star	H			
MStar_1_AP	8_47	Mud Star	P	A		
MStar_1	9_60	Mud Star	P			
MStar_2	9_61	Mud Star	P			
MStar_3	9_62	Mud Star	P			
Amph_4	5_80	Amphipod	P		June, July and August	In 2003 the interviewee observed a lot of amphipods covering Narwhals, but since then there have been less.
Amph_1_AP	5_77	Amphipod	P	A	June, July and August	
Amph_3_AP	5_79	Amphipod	P	A	June, July and August	
Amph_2_AP	9_55	Amphipod	P	A		Amphipods were found eating a seal caught in a net.
Amph_2_AP	11_105	Amphipod	P	A	Year round	
NSB_1_AP	5_81	Naked Sea Butterfly	P	A	June to October	Early October.
NSB_1_AP	8_44	Naked Sea Butterfly	P	A		More abundant further into the inlet.
NSB_2_AP	8_44	Naked Sea Butterfly	P	A		
Cten_1	5_85	Ctenophore	P		August and September	
Jelly_1	5_86	Jellyfish	P			
San_1	2_81	Sea Anemone	P			
SCuc_1	5_84	Sea Cucumber	P		August and September	Found washed up on the shore.
SU_2	1_76	Sea Urchin	P		May to September	
SU_1	1_75	Sea Urchin	P		May and June	
SU_1	2_74	Sea Urchin	P		October to the following April	
SU_3	2_76	Sea Urchin	P		Year round	
SU_1	5_76	Sea Urchin	P		June, July and August	
SU_1	8_41	Sea Urchin	P			Come up in the seal nets.
SU_2	9_52	Sea Urchin	P			Come up in seal nets.
SU_1	9_51	Sea Urchin	P			Come up in seal nets.
SU_3	9_53	Sea Urchin	P			
SU_1	11_119	Sea Urchin	P			



Table 11 (continued): Areas of occupation for Clam, Mussel, Cockle, Whelk, Tortoiseshell Limpet, Mysis Shrimp, Polar Sea Star, Mud Star, Amphipod, Naked Sea Butterfly, Ctenophore, Jellyfish, Sea Anemone, Sea Cucumber and Sea Urchin.

“Everywhere” Coded Data — Clam, Mussel, Cockle, Whelk, Tortoiseshell Limpet, Polar Sea Star, Mud star, Amphipod, Naked sea Butterfly, Ctenophore, Jellyfish, Sea Anemone, Scallop, Sea Urchin, Northern Krill, and Northern Shrimp.

Interview	Map Code	Species	Present - P Historic - H	Months	Comments
7	Clam_1_e	Clam	P		Buried in muddy areas.
4	Mus_1_e	Mussel	P	July to September	Found on the shore.
6	Mus_1_e	Mussel	P		Found washed up on the shore.
7	Mus_1_e	Mussel	P		Found along the shore and sometimes on the land.
9	Mus_1_e	Mussel	P		
11	Mus_1_e	Mussel	P		
11	Ckl_1_e	Cockle	P		
4	Whe_1_eH	Whelk	H	July to September	Only empty shells were found.
7	Whe_1_e	Whelk	P		
9	Whe_1_e	Whelk	P		Empty shells found along the shore.
11	Whe_1_e	Whelk	P		
2	TL_1_eu	Tortoiseshell Limpet	P	July to September	Found all along the shore.
7	TL_1_e	Tortoiseshell Limpet	P		
11	TL_1_e	Tortoiseshell Limpet	P		Found washed up on beaches.
2	Pstar_1_e	Polar Sea Star	P	July to September	
3	Pstar_1_e	Polar Sea Star	P	Year round	Found mostly from June to August.
4	Pstar_1_e	Polar Sea Star	P	July to September	
6	Pstar_1_e	Polar Sea star	P		Found washed up on the shore.
7	Pstar_1_e	Polar Sea Star	P		
8	Pstar_2_e	Polar Sea Star	P		
10	Pstar_1_e	Polar Sea Star	P	June to September	Found anywhere on the bottom.
11	Pstar_1_e	Polar Sea Star	P		
1	Mstar_1_e	Mud Star	P	July to September	
2	Mstar_1_e	Mud Star	P	July to September	
3	Mstar_1_e	Mud Star	P	Year round	Found mostly from June to August.
4	Mstar_1_e	Mud Star	P	July to September	
6	Mstar_1_e	Mud Star	P		Found washed up on the shore.
8	Mstar_2_e	Mud Star	P		
10	Mstar_1_e	Mud Star	P	June to September	Found anywhere on the bottom.
11	Mstar_1_e	Mud Star	P		
1	Amph_Ape	Amphipod	P	Year round	Found all along the coast.
2	Amph_1_e	Amphipod	P	Year round	
3	Amph_1_e	Amphipod	P	Year round	Further out of the Inlet there are more amphipods and they are bigger, further into the inlet there are fewer.
4	Amph_1_e	Amphipod	P	Year round	
5	Amph_2_e	Amphipod	P	June, July and August	
6	Amph_1_e	Amphipod	P		
7	Amph_1_e	Amphipod	P		
8	Amph_1_e	Amphipod	P		
9	Amph_1_e	Amphipod	P		
10	Amph_1_e	Amphipod	P	June to September	
11	Amph_1_e	Amphipod	P		
1	NSB_1_e	Naked Sea Butterfly	P	July to September	
2	NSB_1_e	Naked Sea Butterfly	P	Year round	
3	NSB_1_e	Naked Sea Butterfly	P	Year round	Found mostly from June to August.
4	NSB_1_e	Naked Sea Butterfly	P	Year round	
6	NSB_1_e	Naked Sea Butterfly	P	January to May, October and November	Seen in leads.
7	NSB_1_e	Naked Sea Butterfly	P	September and October	
9	NSB_1_e	Naked Sea Butterfly	P		Found along the shore.
10	NSB_1_e	Naked Sea Butterfly	P	June to September	
11	NSB_1_e	Naked Sea Butterfly	P		Often found washed up on beaches. There are not as many as in the past.
6	Cten_1_e	Ctenophore	P		Seen glowing in the water.
7	Cten_1_e	Ctenophore	P	July to November	
8	Cten_1_e	Ctenophore	P		
9	Cten_1_e	Ctenophore	P		
10	Cten_1_e	Ctenophore	P	July to September	
11	Cten_1_e	Ctenophore	P		
1	Jelly_1_e	Jellyfish	P		
2	Jelly_1_e	Jellyfish	P		
3	Jelly_1_e	Jellyfish	P	Year round	Probably year round, but mostly June to September.
6	Jelly_1_e	Jellyfish	P	Year round	
7	Jelly_1_e	Jellyfish	P		
8	Jelly_1_e	Jellyfish	P		
9	Jelly_1_e	Jellyfish	P		
10	Jelly_1_e	Jellyfish	P	June to September	Appears to follow the currents.
11	Jelly_1_e	Jellyfish	P		
6	San_1_e	Sea Anemone	P		Seen in deeper waters.

Table 11 (continued): Areas of occupation for Clam, Mussel, Cockle, Whelk, Tortoiseshell Limpet, Mysid Shrimp, Polar Sea Star, Mud Star, Amphipod, Naked Sea Butterfly, Ctenophore, Jellyfish, Sea Anemone, Sea Cucumber and Sea Urchin.

“Everywhere” Coded Data — Clam, Mussel, Cockle, Whelk, Tortoiseshell Limpet, Polar Sea Star, Mud star, Amphipod, Naked sea Butterfly, Ctenophore, Jellyfish, Sea Anemone, Scallop, Sea Urchin, Northern Krill, and Northern Shrimp.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
7	Scal_1_e	Scallop	P		
11	Scal_1_e	Scallop	P		
2	SU_2_e	Sea Urchin	P	Year round	Interviewee finds them on the bottom of the seals nets.
4	SU_1_e	Sea Urchin	P	July to September	Found on the sea bed.
6	SU_1_e	Sea Urchin	P		Found washed up on the shore.
7	SU_1_e	Sea Urchin	P		
10	SU_1_e	Sea Urchin	P	June to September	Seen where you can see the sea floor.
6	NK_1_e	Northern Krill	P		Seen in the inlet.
7	NS_1_e	Northern Shrimp	P		Found washed up on the shore and in the stomach contents of Bearded Seal.
10	NS_1_e	Northern Shrimp	P	June to September	Found along the beach dried up.
11	NS_1_e	Northern Shrimp	P		Found washed up on beaches.



Figure 14: Areas of occupation for Sea Colander, Spiny Sour Weed, Sea Lungwort, Hollow-stemmed Kelp, Edible Kelp, Dulse and Bladder Wrack.
 Sea Colander*, Spiny Sour Weed, Sea Lungwort*, Hollow-stemmed Kelp*, Edible Kelp*, Dulse*, and Bladder Wrack*



Table 12: Areas of occupation for Sea Colander, Spiny Sour Weed, Sea Lungwort, Hollow-stemmed Kelp, Edible Kelp, Dulse and Bladder Wrack.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
BWra_1	2_115	Bladder Wrack	P		July, August and September	
BWra_1	6_103	Bladder Wrack	P			
BWra_2	6_104	Bladder Wrack	P			
BWra_3	6_105	Bladder Wrack	P			
BWra_4	6_106	Bladder Wrack	P			Sweet tasting Bladder Wrack.
BWra_1	9_94	Bladder Wrack	P		July, August and September	
BWra_2	9_95	Bladder Wrack	P		July, August and September	
BWra_1_AP	10_118	Bladder Wrack	P	A		
BWra_2_AP	10_117	Bladder Wrack	P	A		
Dul_1	2_114	Dulse	P		July, August and September	
Dul_1	2_132	Dulse	P		July, August and September	
Dul_1	5_213	Dulse	P		July, August and September	
Dul_2	6_108	Dulse	P		July, August and September	
Dul_1	6_107	Dulse	P		July, August and September	
Dul_3	10_154	Dulse	P			
Dul_2	10_156	Dulse	P			
EK_3	1_109	Edible Kelp	P		August and September	
EK_2	1_108	Edible Kelp	P		August and September	
EK_1	1_107	Edible Kelp	P		August and September	
EK_2	2_105	Edible Kelp	P		July, August and September	
EK_1	2_104	Edible Kelp	P		July, August and September	
EK_3	2_106	Edible Kelp	P		July, August and September	
EK_2	4_112	Edible Kelp	P		August and September	
EK_1	5_205	Edible Kelp	P		July, August and September	
EK_3	5_207	Edible Kelp	P		July, August and September	
EK_2	5_206	Edible Kelp	P		July, August and September	High current area.
EK_1	6_94	Edible Kelp	P			
EK_2	6_95	Edible Kelp	P			
EK_5	6_98	Edible Kelp	P			Sweet tasting Edible Kelp.
EK_3	6_96	Edible Kelp	P			
EK_4	6_97	Edible Kelp	P			Sweet tasting Edible Kelp.
EK_1	8_75	Edible Kelp	P			
EK_2	8_76	Edible Kelp	P			
EK_3	8_77	Edible Kelp	P			
EK_4	8_78	Edible Kelp	P			
EK_1	9_88	Edible Kelp	P		July, August and September	
EK_2	9_89	Edible Kelp	P		July, August and September	
EK_3_AP	10_112	Edible Kelp	P	A		
EK_2_AP	10_111	Edible Kelp	P	A		
HSK_1	1_105	Hollow-Stemmed Kelp	P		August and September	Hollow-stemmed kelp observed to grow in an area with strong currents.
HSK_2	1_106	Hollow-Stemmed Kelp	P		July, August and September	Hollow-stemmed kelp observed to grow in an area with strong currents.
HSK_2	2_103	Hollow-Stemmed Kelp	P		July, August and September	
EK_2	3_72	Hollow-Stemmed Kelp	P		July and August	
EK_1	3_71	Hollow-Stemmed Kelp	P		July and August	
HSK_1	5_202	Hollow-Stemmed Kelp	P		July, August and September	
HSK_3	5_204	Hollow-Stemmed Kelp	P		July, August and September	
HSK_2	5_203	Hollow-Stemmed Kelp	P		July, August and September	High current area.
HSK_1	6_90	Hollow-Stemmed Kelp	P			
HSK_2	6_91	Hollow-Stemmed Kelp	P			
HSK_3	6_92	Hollow-Stemmed Kelp	P			
HSK_4	6_93	Hollow-Stemmed Kelp	P			Sweet tasting Hollow Stemmed Kelp.
HSK_1	8_71	Hollow-Stemmed Kelp	P		July, August and September	
HSK_2	8_72	Hollow-Stemmed Kelp	P			
HSK_3	8_73	Hollow-Stemmed Kelp	P			
HSK_4	8_74	Hollow-Stemmed Kelp	P			
HSK_1	9_85	Hollow-Stemmed Kelp	P		July, August and September	
HSK_2	9_86	Hollow-Stemmed Kelp	P		July, August and September	
HSK_3_AP	10_109	Hollow-Stemmed Kelp	P	A		
HSK_2_AP	10_108	Hollow-Stemmed Kelp	P	A		
SLW_1	2_116	Sea Lungwort	P		July, August and September	The sea lungwort was observed at Pamitujaq.
SSW_2	2_113	Spiny Sour Weed	P		July, August and September	
SSW_1	2_112	Spiny Sour Weed	P		July, August and September	The interviewee does not often see spiny sour weed.
SCol_3	2_110	Sea Colander	P		July, August and September	
SCol_2	2_109	Sea Colander	P		July, August and September	
SCol_4	2_111	Sea Colander	P		July, August and September	



Table 12 (continued): Areas of occupation for Sea Colander, Spiny Sour Weed, Sea Lungwort, Hollow-stemmed Kelp, Edible Kelp, Dulse and Bladder Wrack.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
SCoL_1	5_208	Sea Colander	P		July, August and September	
SCoL_4	5_211	Sea Colander	P		July, August and September	
SCoL_2	5_209	Sea Colander	P		July, August and September	
SCoL_3	5_210	Sea Colander	P		July, August and September	High current area.
SCoL_1	6_99	Sea Colander	P			
SCoL_2	6_100	Sea Colander	P			
SCoL_3	6_101	Sea Colander	P			
SCoL_4	6_102	Sea Colander	P			Sweet tasting Sea Colander.
SCoL_1	8_80	Sea Colander	P			Seen floating.
SCoL_1	9_91	Sea Colander	P		July, August and September	
SCoL_2	9_92	Sea Colander	P		July, August and September	
SCoL_3_AP	10_115	Sea Colander	P	A		
SCoL_2_AP	10_114	Sea Colander	P	A		



Figure 15: Areas of occupation for Ringed Seal.
Ringed Seal*

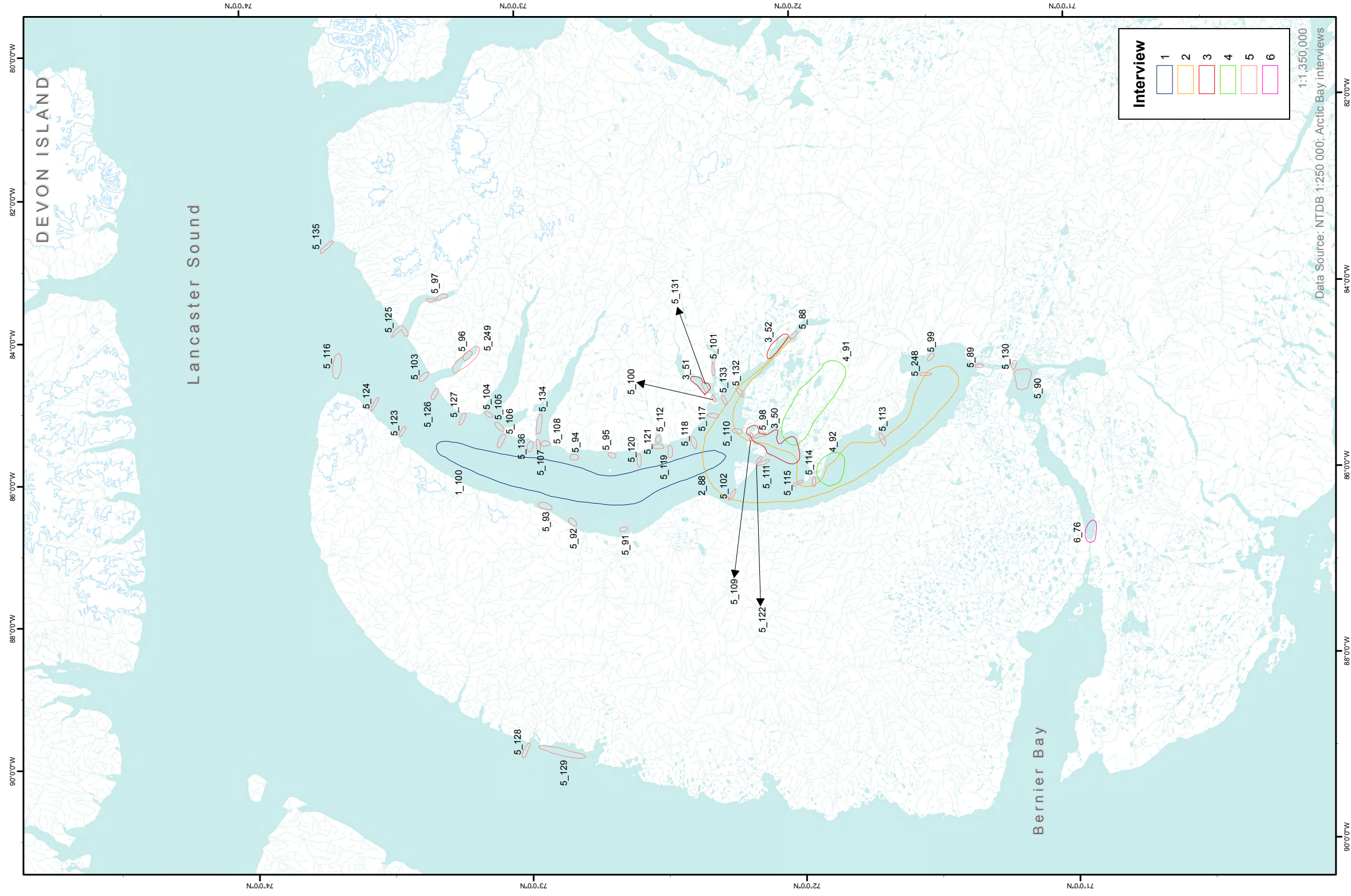




Table 13: Areas of occupation for Ringed Seal.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
RS_2_SP	1_100	Ringed Seal	P	S	June	
RS_1_AP	2_88	Ringed Seal	P	A	May to September	The ringed seals were observed in the inlet, where they were sheltering from killer whales.
RS_2_AP	3_50	Ringed Seal	P	A	September and October	Possibly mating season during the fall.
RS_4_AP	3_52	Ringed Seal	P	A	September and October	
RS_3_AP	3_51	Ringed Seal	P	A	September and October	
RS_3_AP	4_92	Ringed Seal	P	A	July, August and September	
RS_2_APP	4_91	Ringed Seal	P	A, F	July, August and September	Feeding.
RS_49	5_135	Ringed Seal	P		November to the following March	
RS_30	5_116	Ringed Seal	P		March	
RS_39	5_125	Ringed Seal	P		November to the following March	
RS_11	5_97	Ringed Seal	P		August and September	Seen in late August/ early September.
RS_17	5_103	Ringed Seal	P		November to the following March	
RS_40	5_126	Ringed Seal	P		November to the following March	
RS_10	5_96	Ringed Seal	P		August and September	Seen in late August/ early September.
RS_41	5_127	Ringed Seal	P		November to the following March	
RS_18	5_104	Ringed Seal	P		November to the following March	
RS_19	5_105	Ringed Seal	P		November to the following March	
RS_20	5_106	Ringed Seal	P		November to the following March	
RS_50	5_136	Ringed Seal	P		November to the following March	
RS_21	5_107	Ringed Seal	P		November to the following March	
RS_22	5_108	Ringed Seal	P		November to the following March	
RS_7	5_93	Ringed Seal	P		August and September	
RS_6	5_92	Ringed Seal	P		August and September	
RS_5	5_91	Ringed Seal	P		August and September	
RS_8	5_94	Ringed Seal	P		August and September	
RS_9	5_95	Ringed Seal	P		August and September	
RS_34	5_120	Ringed Seal	P		November to the following March	
RS_26	5_112	Ringed Seal	P		November to the following March	
RS_35	5_121	Ringed Seal	P		November to the following March	
RS_33	5_119	Ringed Seal	P		November to the following March	
RS_32	5_118	Ringed Seal	P		November to the following March	
RS_31	5_117	Ringed Seal	P		November to the following March	
RS_45	5_131	Ringed Seal	P		November to the following March	
RS_14	5_100	Ringed Seal	P		August	Seen in late August.
RS_47	5_133	Ringed Seal	P		November to the following March	
RS_15	5_101	Ringed Seal	P		August	Seen in late August.
RS_46	5_132	Ringed Seal	P		November to the following March	
RS_24	5_110	Ringed Seal	P		November to the following March	
RS_12	5_98	Ringed Seal	P		August and September	Seen in late August, early September.
RS_23	5_109	Ringed Seal	P		November to the following March	
RS_36	5_122	Ringed Seal	P		November to the following March	
RS_25	5_111	Ringed Seal	P		November to the following March	
RS_16	5_102	Ringed Seal	P		November to the following March	
RS_29	5_115	Ringed Seal	P		November to the following March	
RS_2_AP	5_88	Ringed Seal	P	A	September	In early September, just before the Char go up river, seals are "teenagers".
RS_28	5_114	Ringed Seal	P		November to the following March	
RS_27	5_113	Ringed Seal	P		November to the following March	
RS_51	5_248	Ringed Seal	P			
RS_13	5_99	Ringed Seal	P		August and September	Seen in late August, early September.
RS_3_AP	5_89	Ringed Seal	P	A	August	Seen in late August.
RS_44	5_130	Ringed Seal	P		November to the following March	
RS_4	5_90	Ringed Seal	P		August and September	Seen in late August/ early September.
RS_38	5_124	Ringed Seal	P		November to the following March	
RS_37	5_123	Ringed Seal	P		November to the following March	
RS_42	5_128	Ringed Seal	P		November to the following March	
RS_43	5_129	Ringed Seal	P		November to the following March	
RS_48	5_134	Ringed Seal	P		November to the following March	
RS_1	5_249	Ringed Seal	P			
RS_2_AP	6_76	Ringed Seal	P	A	Year round	

Table 13 (continued): Areas of occupation for Ringed Seal.

“Everywhere” Coded Data — Ringed Seal.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
2	RS_2_e	Ringed Seal	P	year round	
3	RS_1_e	Ringed Seal	P	September and October	The interviewee thinks the mating season might be in the fall.
4	RS_1_e	Ringed Seal	P	Year round	Ringed seals congregate in the leads during the winter. There are leads on all points and that is where he goes seal hunting.
5	RS_1_e	Ringed Seal	P	June to October	
6	RS_1_e	Ringed Seal	P	Year round	
7	RS_1_e	Ringed Seal	P	Year round	
8	RS_1_e	Ringed Seal	P	Year round	Found in Admiralty Inlet.
9	RS_1_e	Ringed Seal	P	Year round	Found in Admiralty Inlet.
10	RS_1_e	Ringed Seal	P	Year round	
11	RS_1_e	Ringed Seal	P	Year round	



Figure 16: Areas of occupation for Bearded Seal.

Bearded Seal*

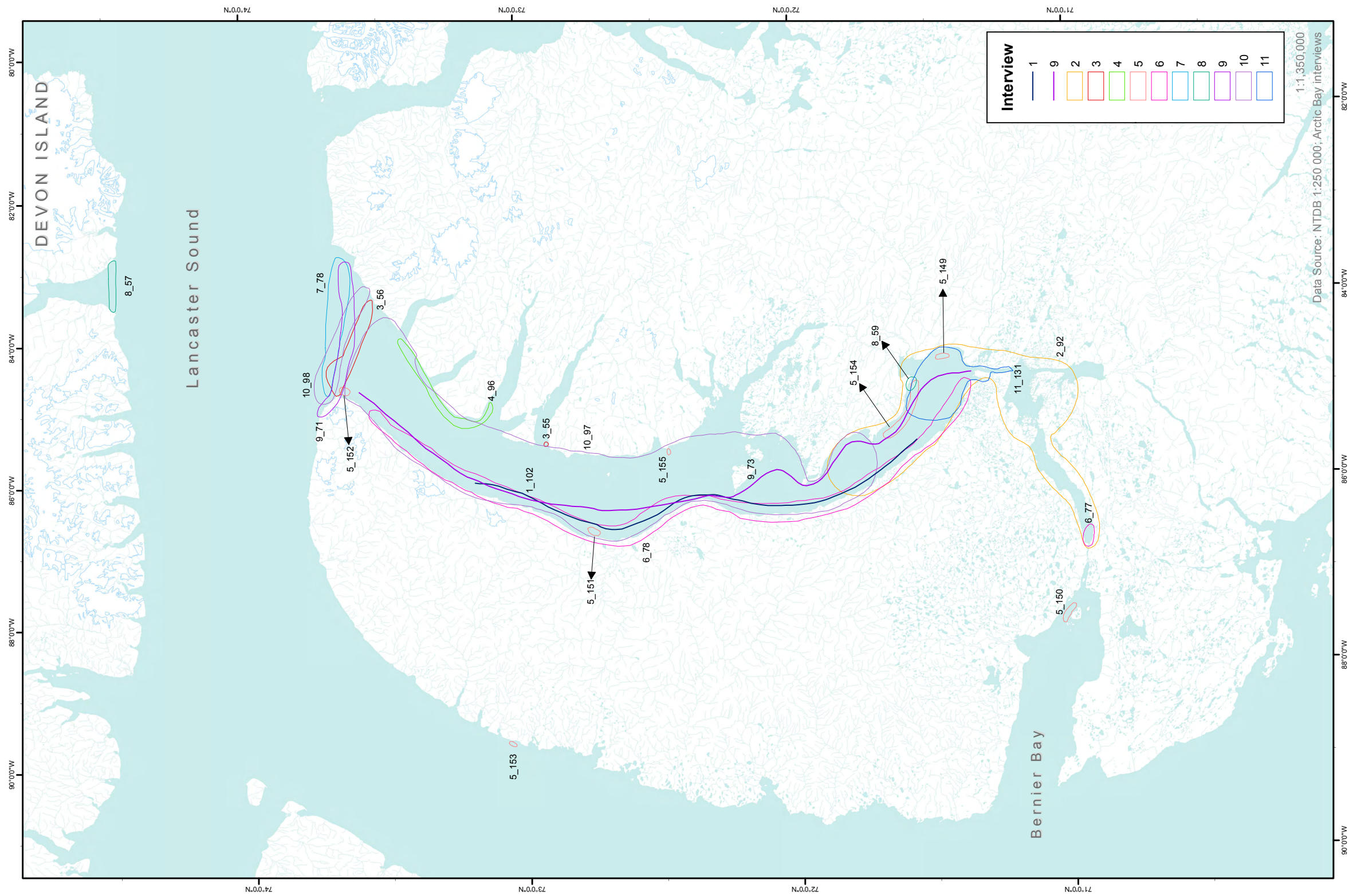




Table 14: Areas of occupation for Bearded Seal.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
BS_1_MP	1_102	Bearded Seal	P	M	June to October/ November	Bearded seals migrate into the inlet in June, and leave again in October or November.
BS_1	2_92	Bearded Seal	P		July, August and September	
BS_1	3_55	Bearded Seal	P		November	The interviewee caught a bearded seal in this area.
BS_2	3_56	Bearded Seal	P		February	
BS_2_AP	4_96	Bearded Seal	P	A	August	
BS_4	5_152	Bearded Seal	P		April	
BS_3	5_151	Bearded Seal	P		August and September	Seen in late August/early September.
BS_7	5_155	Bearded Seal	P		November	
BS_6_AP	5_154	Bearded Seal	P	A	July, August and September	The seals come in late July and leave the inlet by late September/ early October.
BS_1	5_149	Bearded Seal	P		August and September	Seen in late August/early September.
BS_2_AP	5_150	Bearded Seal	P	A	August and September	Seen in late August/early September.
BS_5	5_153	Bearded Seal	P		March	Seen in late March in seal holes.
BS_1_AP	6_77	Bearded Seal	P	A	July to October	
BS_2	6_78	Bearded Seal	P		July to October	
BS_1	7_78	Bearded Seal	P		November to the following June	
BS_3_AP	8_59	Bearded Seal	P	A		
BS_1	8_57	Bearded Seal	P			
BS_1	9_71	Bearded Seal	P		July	
BS_3	9_73	Bearded Seal	P		July, August and September	
BS_2	10_98	Bearded Seal	P		Year round	
BS_1	10_97	Bearded Seal	P		July to October	
BS_2_AP	11_131	Bearded Seal	P	A	July to October	

“Everywhere” Coded Data — Bearded Seal.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
4	BS_1_e	Bearded Seal	P		Bearded Seal are found in shallow waters everywhere.
7	BS_2_e	Bearded Seal	P	July to October	
8	BS_2_e	Bearded Seal	P	July to October	
9	BS_2_e	Bearded Seal	P	July to September	Bearded Seal are found on/near the shore line.
11	BS_1_e	Bearded Seal	P	Year round	

Figure 17: Areas of occupation for Harp Seal and Hooded Seal.

Harp* Seal and Hooded Seal

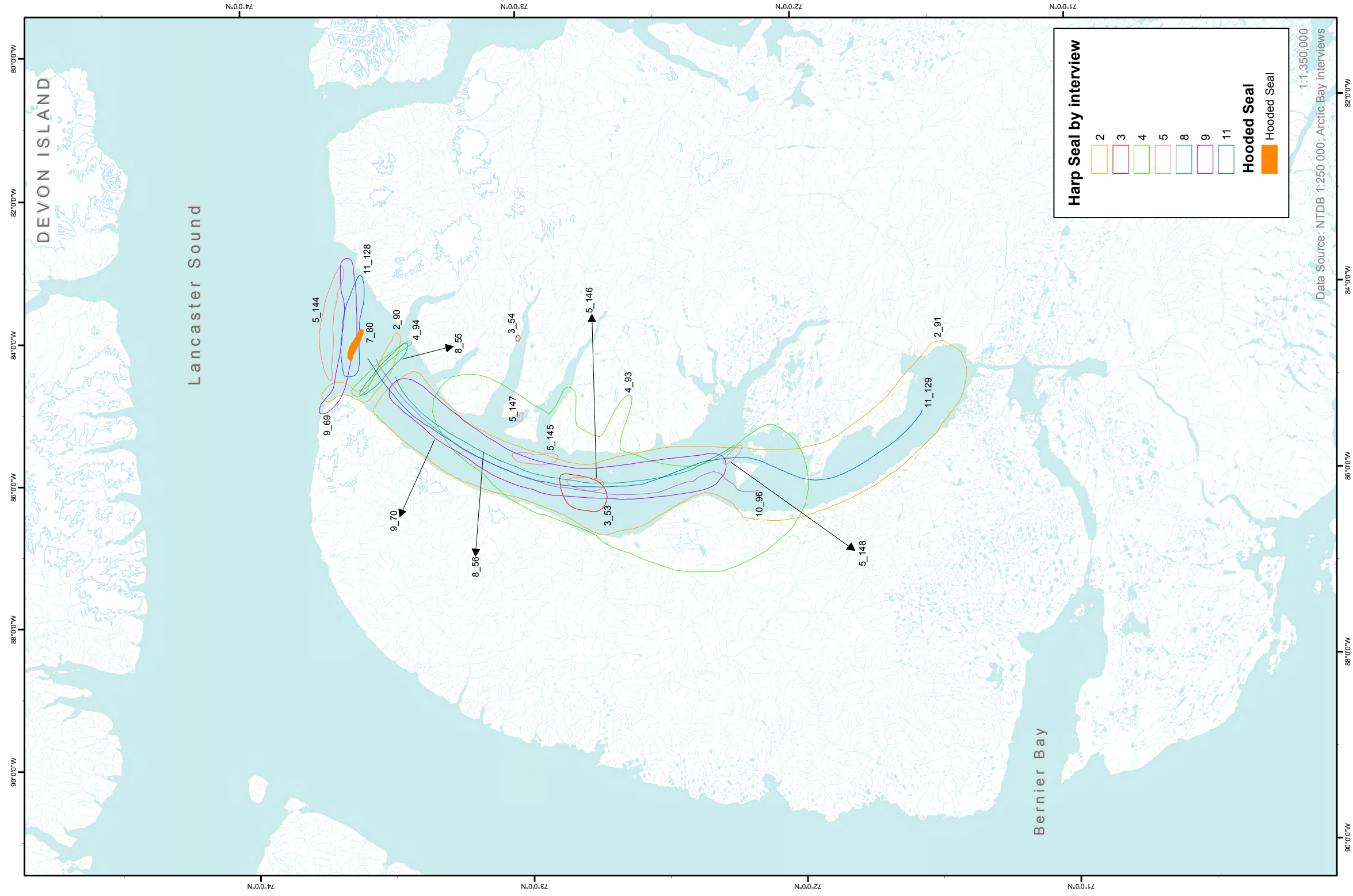




Table 15: Areas of occupation for Harp Seal and Hooded Seal.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
HoS_1	7_80	Hooded Seal	P		November to the following June	Seen in 2007.
HS_1	2_90	Harp Seal	P		July, August and September	The interviewee observed the harp seals in winter.
HS_2	2_91	Harp Seal	P		July, August and September	The interviewee observed the harp seals in the summer, when the season was ice-free.
HS_1_AP	3_53	Harp Seal	P	A	August, September and October	The harp seals were observed in deep water.
HS_2	3_54	Harp Seal	P		August, September and October	The harp seals were feeding on cod, alongside narwhal.
HS_1	4_93	Harp Seal	P		May to September	
HS_2	4_94	Harp Seal	P		July	
HS_1	5_144	Harp Seal	P		May and June	
HS_4	5_147	Harp Seal	P		August and September	Seen in late August and early September.
HS_2	5_145	Harp Seal	P		August and September	Seen in late August and early September.
HS_3_AP	5_146	Harp Seal	P	A	August and September	Seen in late August and early September.
HS_5	5_148	Harp Seal	P		August and September	Seen in late August and early September.
HS_1	8_55	Harp Seal	P		July to June	
HS_2	8_56	Harp Seal	P		July to October	
HS_1	9_69	Harp Seal	P		July	
HS_2	9_70	Harp Seal	P		August	
HS_1	11_128	Harp Seal	P		June	Seen at the floe edge in June.
HS_1	10_96	Harp Seal	P		June, July, September and October	The seals arrive in June/July and leave in September/October.
HS_2	11_129	Harp Seal	P		July and August	

“Everywhere” Coded Data — Harp Seal.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
1	HS_1_e	Harp Seal	P	Year round	All over Admiralty Inlet.
6	HS_1_e	Harp Seal	P	July to September	Harp seals found in Admiralty Inlet and in the smaller inlets.
7	HS_1_e	Harp Seal	P	July to September	Harp Seals seen in Admiralty Inlet.

Figure 18: Areas of occupation for Walrus.

Walrus

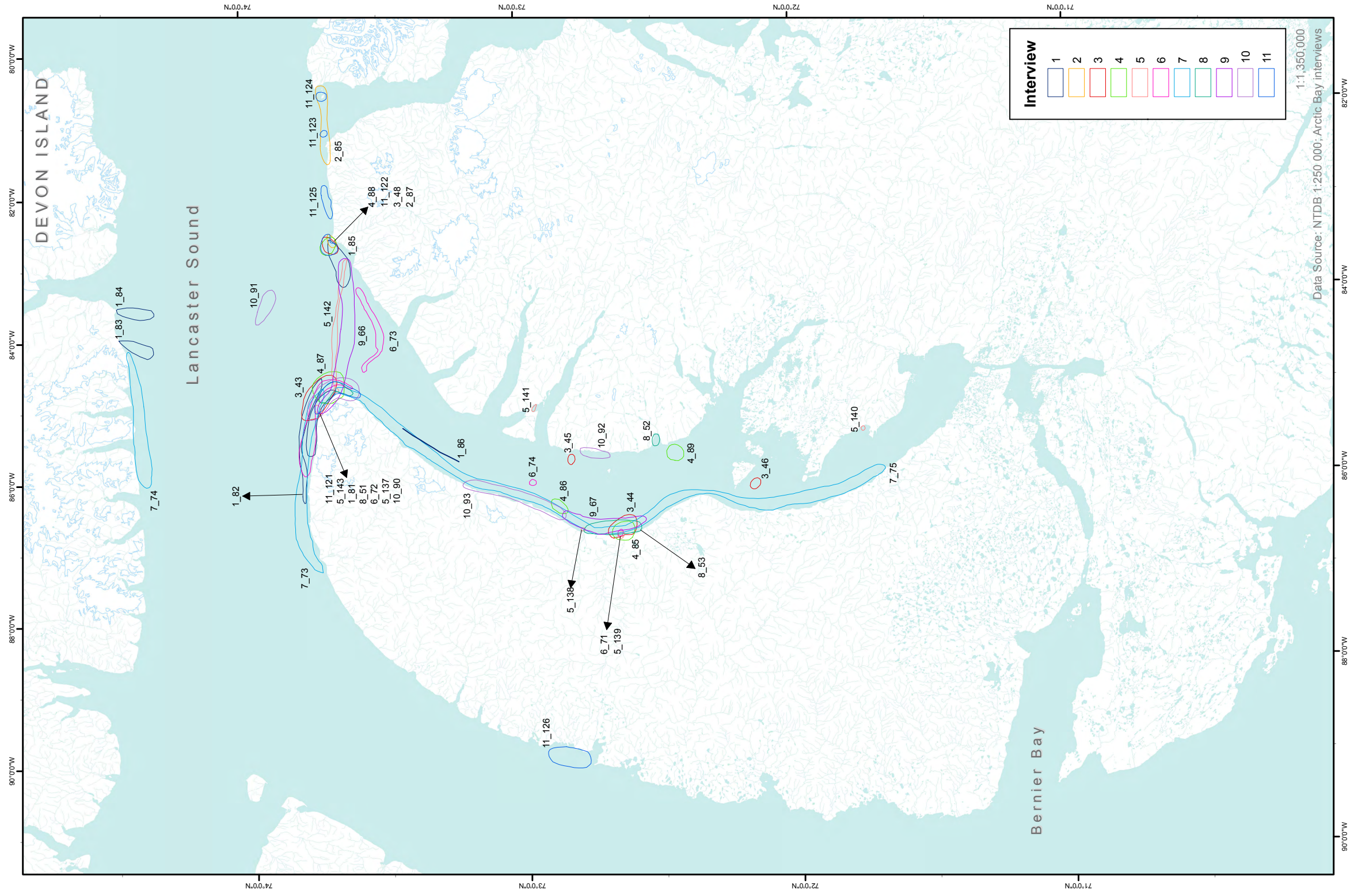




Table 16: Areas of occupation for Walrus.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
Wal_3	1_83	Walrus	P			
Wal_4	1_84	Walrus	P			
Wal_5	1_85	Walrus	P			
Wal_1	1_81	Walrus	P			
Wal_2	1_82	Walrus	P			
Wal_6	1_86	Walrus	P		September and October	The walrus were observed leaving Admiralty Inlet.
Wal_1	2_85	Walrus	P		May	
Wal_2	2_86	Walrus	P		May	
Wal_3	2_87	Walrus	P		May	
Wal_4	3_46	Walrus	P		July, August and September	The interviewee observed approximately three walrus, eating seals.
Wal_2	3_44	Walrus	P		July, August and September	The walrus were observed eating seals.
Wal_3	3_45	Walrus	P		July, August and September	The walrus were observed eating seals.
Wal_1	3_43	Walrus	P		April, May and June	The walrus were observed eating clams.
Wal_6	3_48	Walrus	P		April and May	The walrus were observed eating clams.
Wal_5	4_89	Walrus	P		August	
Wal_1	4_85	Walrus	P		August	
Wal_2	4_86	Walrus	P		July and August	The interviewee caught a walrus in this area.
Wal_3	4_87	Walrus	P		May	
Wal_4	4_88	Walrus	P		July	
Wal_1	5_137	Walrus	P		May and June	The interviewee saw four or five walrus from May to Early June.
Wal_6	5_142	Walrus	P		May and June	Seen at the floe edge.
Wal_5	5_141	Walrus	P		September and October	The interviewee saw two, both caught in 2004.
Wal_2	5_138	Walrus	P		August	Seen in late August; a mother and baby.
Wal_3	5_139	Walrus	P		August	Seen in late August; a mother and baby.
Wal_4	5_140	Walrus	P		August	Seen in late August; a baby Walrus washed up on shore.
Wal_7	5_143	Walrus	P		October	Seen through cracks in the ice.
Wal_3	6_73	Walrus	P		April, May and June	
Wal_1	6_71	Walrus	P		April, May and June	
Wal_4	6_74	Walrus	P		April, May and June	
Wal_2	6_72	Walrus	P		April, May and June	
Wal_1_AP	7_73	Walrus	P	A	November to the following March	
Wal_3	7_75	Walrus	P		June to September	
Wal_2_AP	7_74	Walrus	P	A	November to the following March	
Wal_1	8_51	Walrus	P		February to June	
Wal_2	8_52	Walrus	P		August	
Wal_3	8_53	Walrus	P		August	
Wal_1	9_66	Walrus	P		July	Seen at the floe edge.
Wal_2	9_67	Walrus	P		August	
Wal_2	10_91	Walrus	P		April	The interviewee saw one crawling on the ice towards open water at Lancaster Sound.
Wal_3	10_92	Walrus	P		July, August and September	The interviewee caught a mother and baby walrus.
Wal_1	10_90	Walrus	P		April and May	Walrus come and go in this area.
Wal_4	10_93	Walrus	P		July, August and September	
Wal_4	11_124	Walrus	P		Year round	
Wal_3	11_123	Walrus	P		June	
Wal_5	11_125	Walrus	P		March and April	
Wal_2	11_122	Walrus	P		Year round	
Wal_1	11_121	Walrus	P		Year round	
Wal_6_H	11_126	Walrus	H		November	

Figure 19: Areas of occupation for Polar Bear.
Polar Bear*

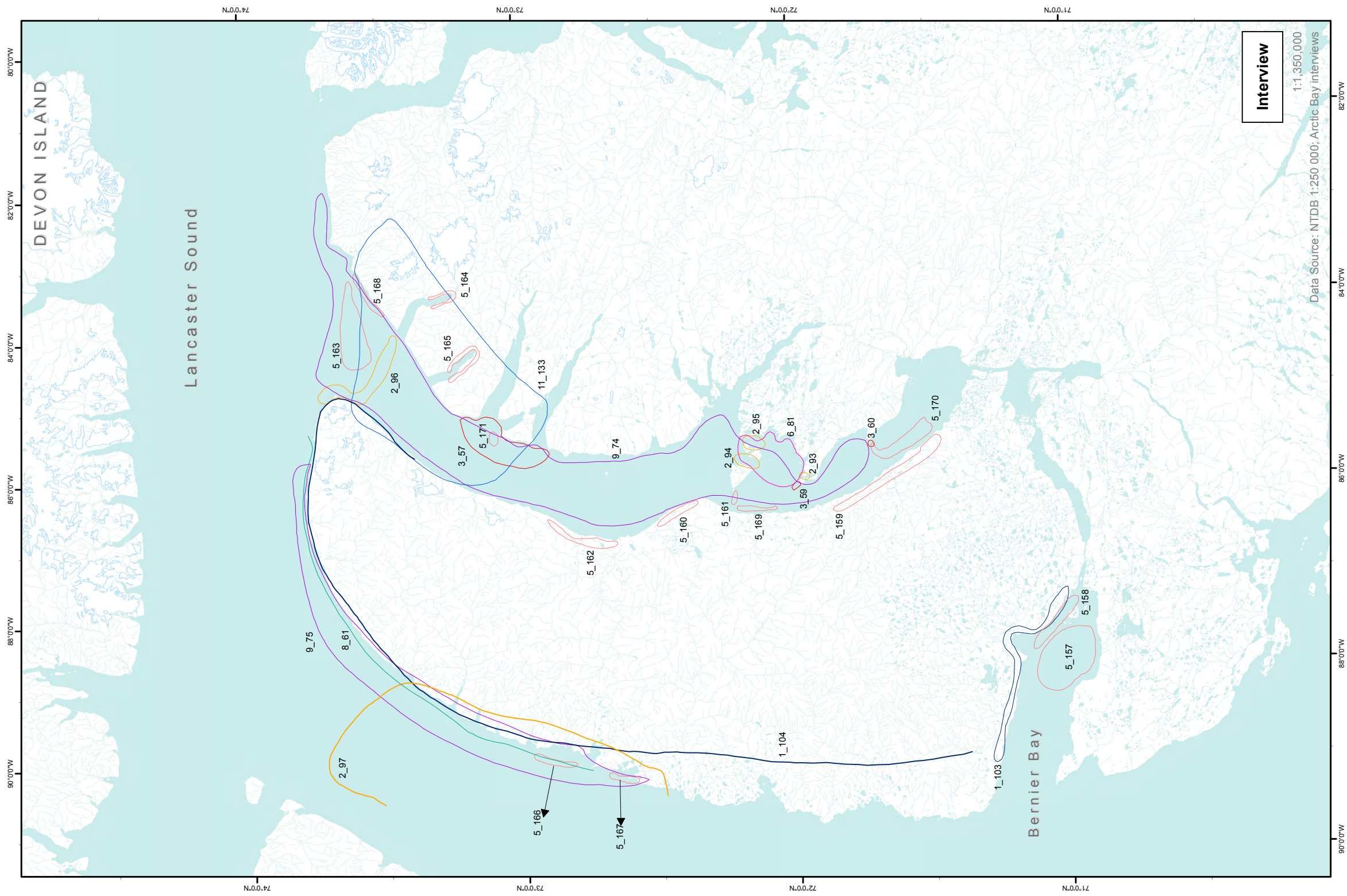




Table 17: Areas of occupation for Polar Bear.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
PB_1_SP	1_103	Polar Bear	P	S	January and December	Polar bears retreat to a den between December and February.
PB_2_SMP	1_104	Polar Bear	P	S, M		
PB_4	2_96	Polar Bear	P		Year round	
PB_3	2_95	Polar Bear	P		Year round	
PB_2	2_94	Polar Bear	P		Year round	
PB_1	2_93	Polar Bear	P		Year round	Polar bear numbers in the inlet are increasing. They are found mostly in areas with strong currents.
PB_5	2_97	Polar Bear	P		Year round	This area is where polar bears are traditionally hunted.
PB_4	3_60	Polar Bear	P		February	
PB_3	3_59	Polar Bear	P		February	
PB_1	3_57	Polar Bear	P		February	
PB_8	5_163	Polar Bear	P		November to the following March	A major hunting ground in March.
PB_13	5_168	Polar Bear	P		March, April and May	
PB_9	5_164	Polar Bear	P		September and October	
PB_10	5_165	Polar Bear	P		September, October and November	
PB_16	5_171	Polar Bear	P			
PB_7	5_162	Polar Bear	P		August and September	
PB_5	5_160	Polar Bear	P		August and September	
PB_6	5_161	Polar Bear	P		November to the following March	
PB_14	5_169	Polar Bear	P			
PB_3_AP	5_158	Polar Bear	P	A	November	
PB_2_AP	5_157	Polar Bear	P	A	March and April	
PB_4_AP	5_159	Polar Bear	P	A	November	
PB_15	5_170	Polar Bear	P		March, April and November	
PB_11	5_166	Polar Bear	P		March, April and May	
PB_12	5_167	Polar Bear	P		March, April and May	
PB_2_AP	6_81	Polar Bear	P	A	Year round	
PB_2_AP	8_61	Polar Bear	P	A		
PB_1	9_74	Polar Bear	P		Year round	
PB_2_AP	9_75	Polar Bear	P	A		
PB_2_AP	11_133	Polar Bear	P	A	January and February	

“Everywhere” Coded Data — Polar Bear.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
3	PB_2_e	Polar Bear	P	February	
4	PB_1_e	Polar Bear	P	Year round	Since the quota system was introduced sighting of polar bears has increased.
5	PB_1_e	Polar Bear	P	Year round	
6	PB_1_e	Polar Bear	P	July to October	Seen more often at seal holes and leads.
7	PB_1_e	Polar Bear	P	Year round	
8	PB_1_e	Polar Bear	P		
10	PB_1_e	Polar Bear	P	Year round	
11	PB_1_e	Polar Bear	P	Year round	

Figure 20: Areas of occupation for Beluga.

Beluga

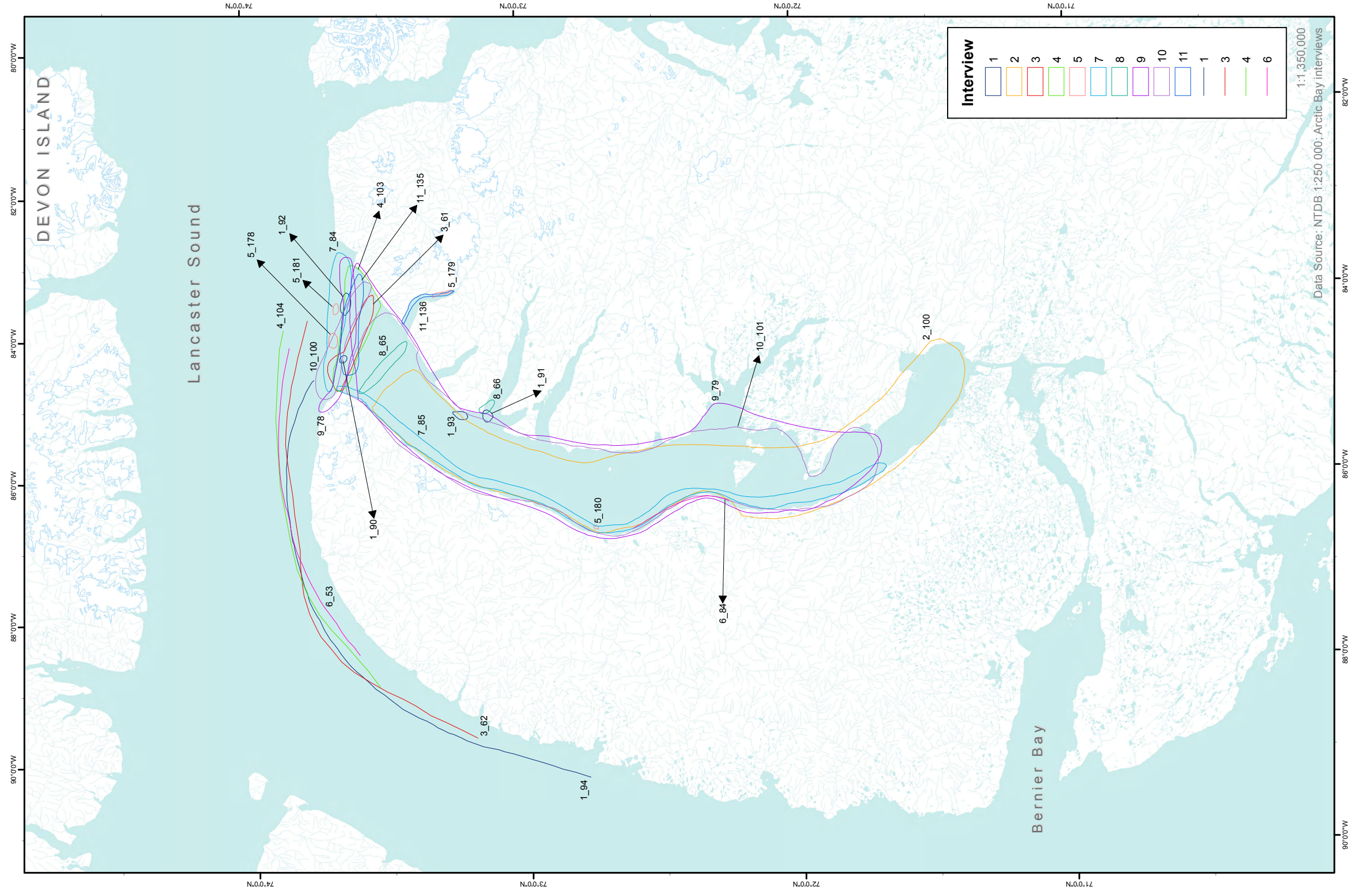




Table 18: Areas of occupation for Beluga.

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
Bel_3	1_92	Beluga	P		April	
Bel_1	1_90	Beluga	P		April	
Bel_2	1_91	Beluga	P		July	The belugas were observed on July 7, 2009.
Bel_4	1_93	Beluga	P			
Bel_5_MP	1_94	Beluga	P	M	April, September and October	
Bel_1	2_100	Beluga	P		June and July	
Bel_1	3_61	Beluga	P		April	Observed at the floe edge while migrating in April.
Bel_2_MP	3_62	Beluga	P	M	April	
Bel_1	4_103	Beluga	P		August	
Bel_2_MP	4_104	Beluga	P	M	June	
Bel_4	5_181	Beluga	P		March	Seen in late March.
Bel_1	5_178	Beluga	P		March	Observed through open cracks in the ice, in mid-March.
Bel_2	5_179	Beluga	P		October	In early October beluga were observed feeding.
Bel_3	5_180	Beluga	P		August	Seen in late August, one beluga traveling with narwhal.
Bel_2	6_84	Beluga	P		August and September	
Bel_1_MP	6_53	Beluga	P	M	May and June	
Bel_1	7_84	Beluga	P		April, May and June	
Bel_2	7_85	Beluga	P		July, August and September	
Bel_1	8_65	Beluga	P		April, May and June	Beluga are the first whales to come in.
Bel_2_AH	8_66	Beluga	H	A		
Bel_1	9_78	Beluga	P		June	
Bel_2	9_79	Beluga	P		July, August and September	
Bel_1	10_100	Beluga	P		July to October	
Bel_2	10_101	Beluga	P		April and May	
Bel_2	11_136	Beluga	P		June, July and August	
Bel_1	11_135	Beluga	P		May, June and July	

Figure 21: Areas of occupation for Bowhead Whale*

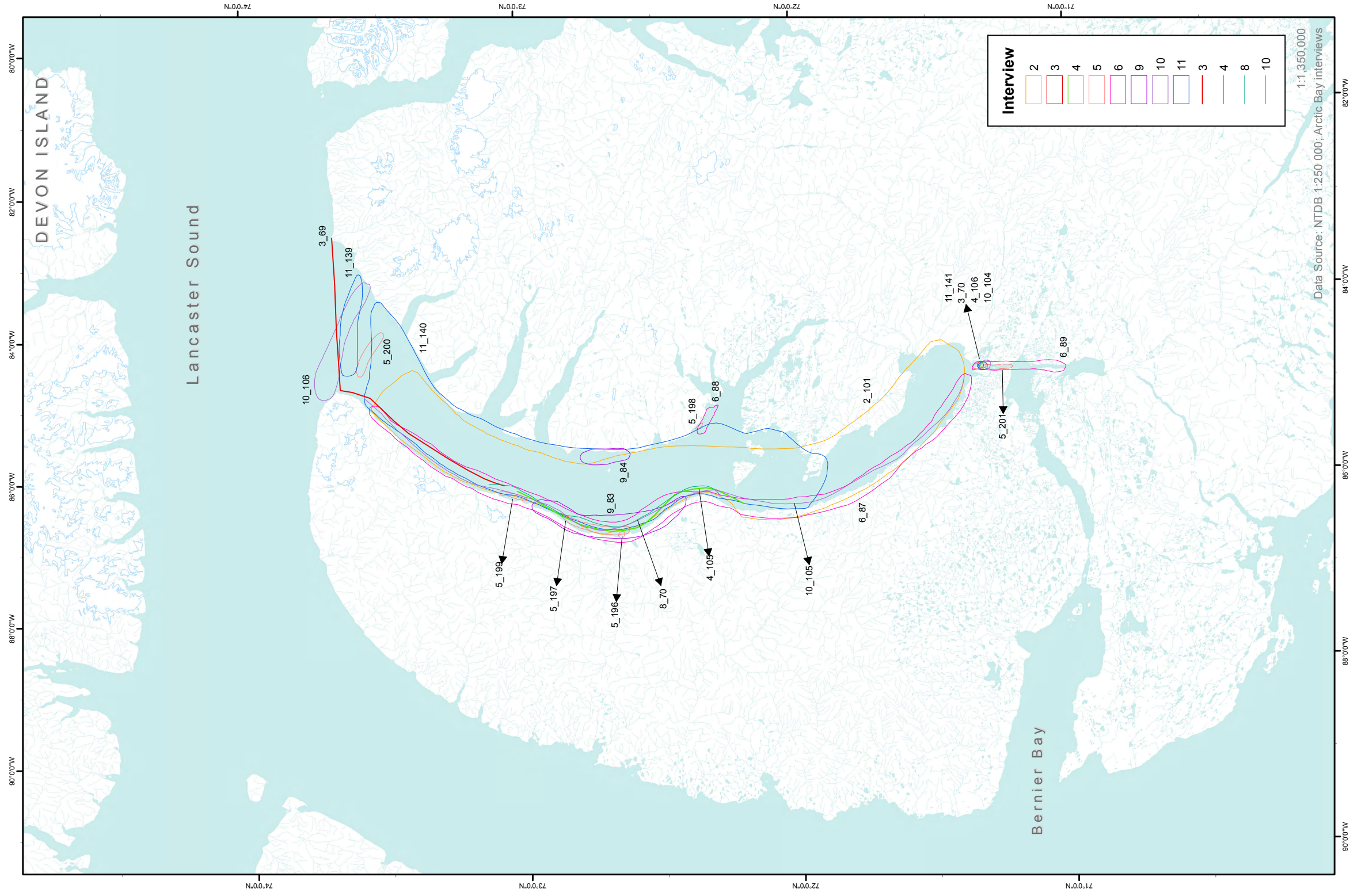




Table 19: Areas of occupation for Bowhead.

Map Code	Map Label	Species	Present – P Historic – H	Months	Comments
BW_1	2_101	Bowhead Whale	P	July, August and September	
BW_2	3_70	Bowhead Whale	P	November to March	Over wintered in a polynya.
BW_1	3_69	Bowhead Whale	P	May	
BW_1	4_105	Bowhead Whale	P	July, August and September	
BW_2_H	4_106	Bowhead Whale	H	November to the following April	
BW_5	5_200	Bowhead Whale	P	June and July	
BW_4	5_199	Bowhead Whale	P	August	Seen in late August.
BW_1	5_196	Bowhead Whale	P	August	
BW_2	5_197	Bowhead Whale	P	August and September	Seen in late August and early September.
BW_3	5_198	Bowhead Whale	P	August	Seen in late August.
BW_6	5_201	Bowhead Whale	P	May	
BW_2	6_88	Bowhead Whale	P	September	
BW_1	6_87	Bowhead Whale	P	July, August and September	
BW_3	6_89	Bowhead Whale	P	August and September	
BW_1	8_70	Bowhead Whale	P		The DFO/IQ was doing a project that involved studying Bowhead Whales when this one was seen.
BW_2	9_84	Bowhead Whale	P	July to October	Not seen very often.
BW_1	9_83	Bowhead Whale	P	July to October	
BW_1	10_104	Bowhead Whale	P	November to the following April	
BW_3	10_106	Bowhead Whale	P	April and May	
BW_2	10_105	Bowhead Whale	P	July, August and September	
BW_1	11_139	Bowhead Whale	P	June	
BW_3_H	11_141	Bowhead Whale	H	November to the following May	
BW_2	11_140	Bowhead Whale	P	July to October	

“Everywhere” Coded Data — Bowhead.

Interview	Map Code	Species	Present – P Historic – H	Months	Comments
7	BW_1_e	Bowhead Whale	P	July to October	Bowhead sighting were rare but are now seen more frequently.

Figure 22: Areas of occupation for Killer Whale and Right Whale.

Killer Whale and Right Whale

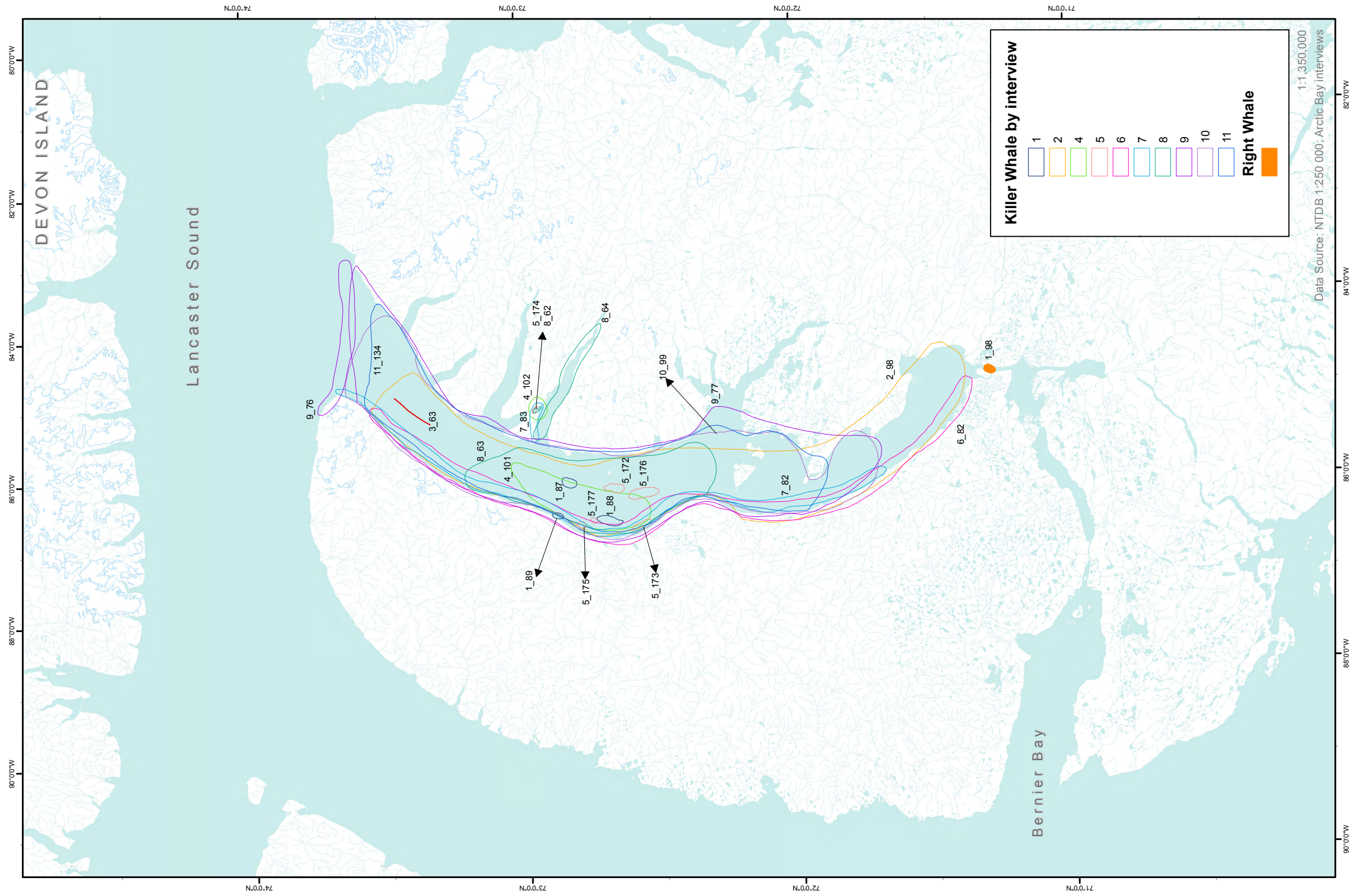


Table 20: Areas of occupation for Killer Whale and Right Whale.

Map Code	Map Label	Species	Present – P Historic – H	Months	Comments
RW_1_H	1_98	Right Whale	H	November to the following July	A Right Whale was stranded in a polynya in 1980.
KW_1	1_87	Killer Whale	P	August	The interviewee observed a pod of Killer whales while returning to Arctic Bay, which forced him to detour.
KW_2	1_88	Killer Whale	P	August	
KW_3	1_89	Killer Whale	P	August	
KW_1	2_98	Killer Whale	P	July, August and September	Killer whales were observed hunting narwhal.
KW_1	3_63	Killer Whale	P	August and September	The killer whales come into the inlet in August and increase in numbers by September.
KW_1	4_101	Killer Whale	P	August	
KW_2	4_102	Killer Whale	P	August	
KW_3	5_174	Killer Whale	P	August	The interviewee saw 8.
KW_6	5_177	Killer Whale	P	September	The interviewee observed more than six to a dozen in late August.
KW_4	5_175	Killer Whale	P	August and September	The interviewee observed three in mid September.
KW_2	5_173	Killer Whale	P	August	The interviewee observed killer whales feeding on narwhal.
KW_5	5_176	Killer Whale	P	August	The interviewee observed killer whales in late August.
KW_1	5_172	Killer Whale	P	March and April	The interviewee observed killer whales hunting and circling narwhal.
KW_1	6_82	Killer Whale	P	August and September	Not seen often.
KW_2	7_83	Killer Whale	P	July, August and September	Seen more often than usual.
KW_1	7_82	Killer Whale	P	July, August and September	Seen more often than usual.
KW_1	8_62	Killer Whale	P	August	
KW_3	8_64	Killer Whale	P	August	
KW_2	8_63	Killer Whale	P	August	
KW_1	9_76	Killer Whale	P	July	
KW_2	9_77	Killer Whale	P	July, August and September	
KW_1	10_99	Killer Whale	P	July to October	
KW_1	11_134	Killer Whale	P	August, September and October	



Figure 23: Areas of occupation for Narwhal.

Narwhal

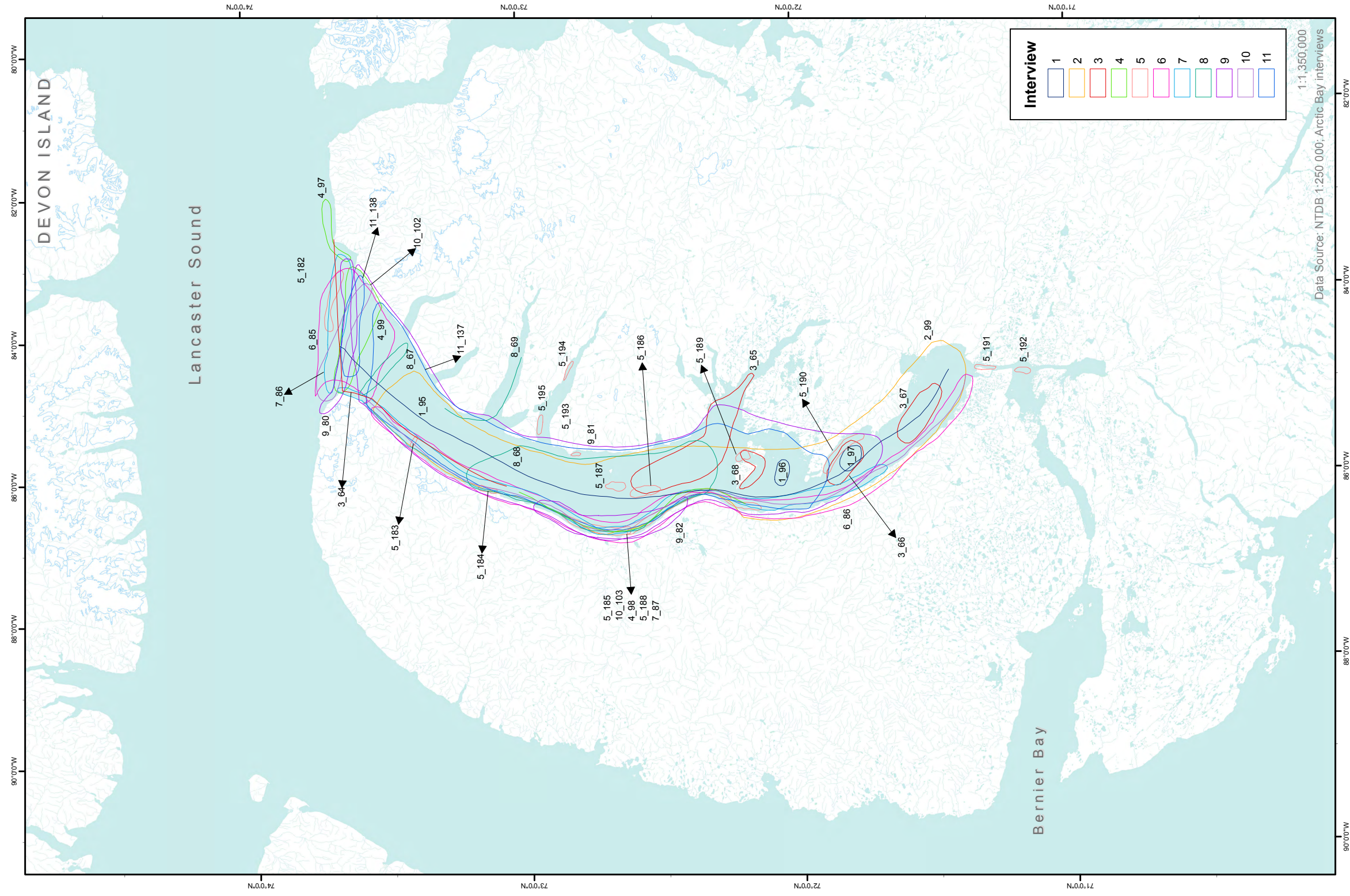




Table 21: Areas of occupation for Narwhal

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
NW_3_SP	1_97	Narwhal	P	S	June	The interviewee observed narwhal feeding, calving, and nursing their young. The narwhal left the inlet in September.
NW_2_SP	1_96	Narwhal	P	S	June	The interviewee observed narwhal feeding, calving, and nursing their young. The narwhal left the inlet in September.
NW_1_MAP	1_95	Narwhal	P	A,M	June	The interviewee observed 15 narwhals at this location.
NW_1	2_99	Narwhal	P		July, August and September	Narwhal are usually found in deep water, and only enter shallow waters when they are hungry.
NW_4_FP	3_67	Narwhal	P	F	August and September	
NW_3_FP	3_66	Narwhal	P	F	August and September	The narwhal were observed feeding in September.
NW_5_FP	3_68	Narwhal	P	F	August and September	
NW_2_FP	3_65	Narwhal	P	F	August and September	The narwhal were observed feeding in September.
NW_1	3_64	Narwhal	P		May	In Late May the narwhal move in as ice breaks up.
NW_2	4_98	Narwhal	P		June	
NW_1_H	4_97	Narwhal	H		August	
NW_3	4_99	Narwhal	P		July, August and September	
NW_1	5_182	Narwhal	P		May, June and July	
NW_3	5_184	Narwhal	P		August and September	Seen in late August and early September of 2004.
NW_5	5_186	Narwhal	P		March and April	
NW_6	5_187	Narwhal	P		August	
NW_12	5_193	Narwhal	P		September	Seen in late September.
NW_4	5_185	Narwhal	P		August and September	Seen in mid September, for the past six years.
NW_8	5_189	Narwhal	P		August	Seen in late August.
NW_7	5_188	Narwhal	P		August and September	Seen in late September, for the past six years.
NW_9	5_190	Narwhal	P		August	Seen in late August.
NW_10_AP	5_191	Narwhal	P	A	August	Seen in late August.
NW_11	5_192	Narwhal	P		August	Seen in late August.
NW_2	5_183	Narwhal	P		June	Seen in late June.
NW_14_H	5_195	Narwhal	H		July	Not seen in the area any longer because of boat traffic. The narwhal used to come into the area in the second week of July.
NW_13	5_194	Narwhal	P		September	Seen in early September.
NW_1	6_85	Narwhal	P		April, May and June	
NW_2	6_86	Narwhal	P		July, August and September	The Narwhal move into the inlet as the ice erodes.
NW_1	7_86	Narwhal	P		April, May and June	
NW_2	7_87	Narwhal	P		July to October	
NW_1	8_67	Narwhal	P			
NW_2	8_68	Narwhal	P			
NW_3_H	8_69	Narwhal	H			
NW_1	9_80	Narwhal	P		July to October	
NW_3_AP	9_82	Narwhal	P	A	July, August and September	
NW_2	9_81	Narwhal	P		July, August and September	
NW_1	10_102	Narwhal	P		April and May	
NW_2	10_103	Narwhal	P		June to October	Leave the inlet in October.
NW_2	11_138	Narwhal	P		May to October	
NW_1	11_137	Narwhal	P		June, July and August	

Figure 24: Areas of occupation for Red Throated Loon, Yellow Billed Loon, King Eider, Common Eider, Long-tailed Duck, Rock Ptarmigan, Willow Ptarmigan, Common Raven and Peregrine Falcon.

Red Throated Loon, Yellow Billed Loon, King Eider, Common Eider, Long-tailed Duck, Rock Ptarmigan, Willow Ptarmigan, Common Raven and Peregrine Falcon

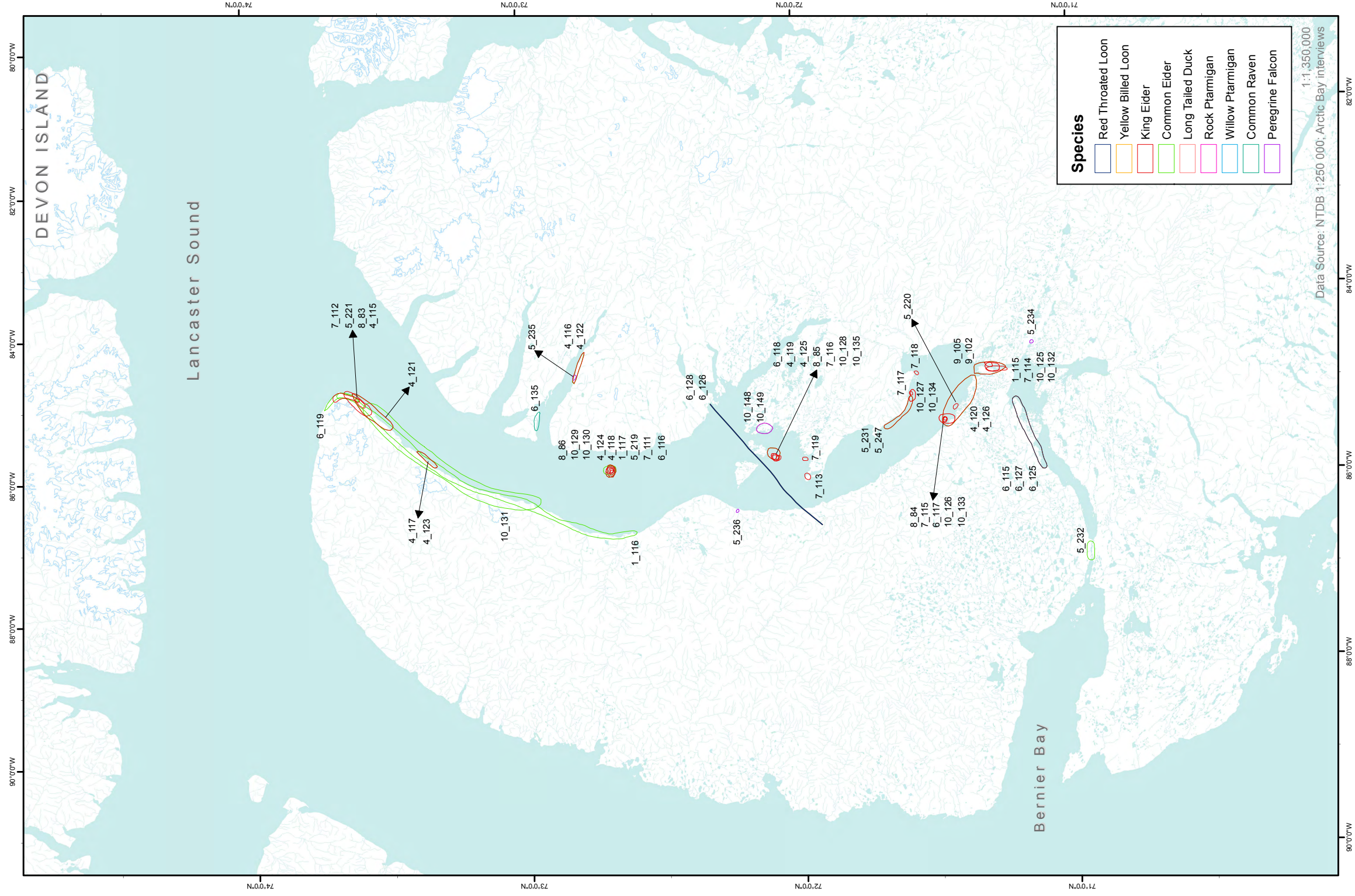


Table 22: Areas of occupation for Red Throated Loon, Yellow Billed Loon, King Eider, Common Eider, Long-tailed Duck, Rock Ptarmigan, Willow Ptarmigan, Common Raven and Peregrine Falcon.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
RTL_1	6_125	Red-Throated Loon	P		June, July and August	
YBL_1	6_127	Yellow-Billed Loon	P		June, July and August	
KE_1_SP	1_115	King Eider	P	S	June, July, August and September	
KE_1_SAP	4_115	King Eider	P	A, S		
KE_3_SAP	4_117	King Eider	P	A, S		
KE_2_SAP	4_116	King Eider	P	A, S		
KE_4_SAP	4_118	King Eider	P	A, S		
KE_5_SAP	4_119	King Eider	P	A, S		
KE_6_SP	4_120	King Eider	P	S		
KE_1_SP	5_219	King Eider	P		June	Nesting King Eider ducks.
KE_4	5_247	King Eider	P		May and June	
KE_2_SP	5_220	King Eider	P	S	June	
KE_3_SP	5_221	King Eider	P	S	June	
KE_2	6_116	King Eider	P		June, July and August	
KE_4_SP	6_118	King Eider	P	S		
KE_3	6_117	King Eider	P			
KE_1	6_115	King Eider	P		June, July and August	
KE_2_SAP	7_112	King Eider	P	A, S		
KE_1_SAP	7_111	King Eider	P	A, S		
KE_7_SP	7_117	King Eider	P	S		
KE_8_SP	7_118	King Eider	P	S		
KE_5_SAP	7_115	King Eider	P	A, S		
KE_6_SAP	7_116	King Eider	P	A, S		
KE_9_SP	7_119	King Eider	P	S		
KE_3_SAP	7_113	King Eider	P	A, S		
KE_4_SAP	7_114	King Eider	P	A, S		
KE_1_SP	8_83	King Eider	P	S		
KE_4_SP	8_86	King Eider	P	S		
KE_3_SP	8_85	King Eider	P	S		
KE_2_SP	8_84	King Eider	P	S		
KE_1_SP	9_102	King Eider	P	S		
KE_5_SP	10_129	King Eider	P	S		
KE_4_SP	10_128	King Eider	P	S		
KE_3_SP	10_127	King Eider	P	S		
KE_1_SP	10_125	King Eider	P	S		
KE_2_SP	10_126	King Eider	P	S		
CE_2_SP	1_117	Common Eider	P	S	June, July, August and September	
CE_1_SP	1_116	Common Eider	P	S	June, July, August and September	
CE_1_SAP	4_121	Common Eider	P	A, S		
CE_3_SAP	4_123	Common Eider	P	A, S		
CE_2_SAP	4_122	Common Eider	P	A, S		
CE_4_SAP	4_124	Common Eider	P	A, S		
CE_5_SAP	4_125	Common Eider	P	A, S		
CE_6_SP	4_126	Common Eider	P	S		
CE_2	5_231	Common Eider	P		May and June	
CG_1	5_232	Common Eider	P			
CE_1_SP	6_119	Common Eider	P	S		
CE_1_SP	9_105	Common Eider	P	S		
CE_1_SP	10_130	Common Eider	P	S		
CE_2_SP	10_131	Common Eider	P	S		
OS_4_SP	10_135	Long-Tailed duck	P	S		
OS_3_SP	10_134	Long-Tailed duck	P	S		
OS_1_SP	10_132	Long-Tailed duck	P	S		
OS_2_SP	10_133	Long-Tailed duck	P	S		
RPtrar_1	10_149	Rock Ptarmigan	P			
WPtrar_1	10_148	Willow Ptarmigan	P			
CR_1	6_135	Common Raven	P			
PF_3_SP	5_236	Peregrine Falcon	P	S	June to September	
PF_2_SP	5_235	Peregrine Falcon	P	S	June to September	
PF_1_SP	5_234	Peregrine Falcon	P	S	June to September	Seen every summer.
RTL_2	6_126	Red-Throated Loon	P		June, July and August	
YBL_2	6_128	Yellow-Billed Loon	P		June, July and August	



Figure 25: Areas of occupation for Snow Goose.

Snow Goose

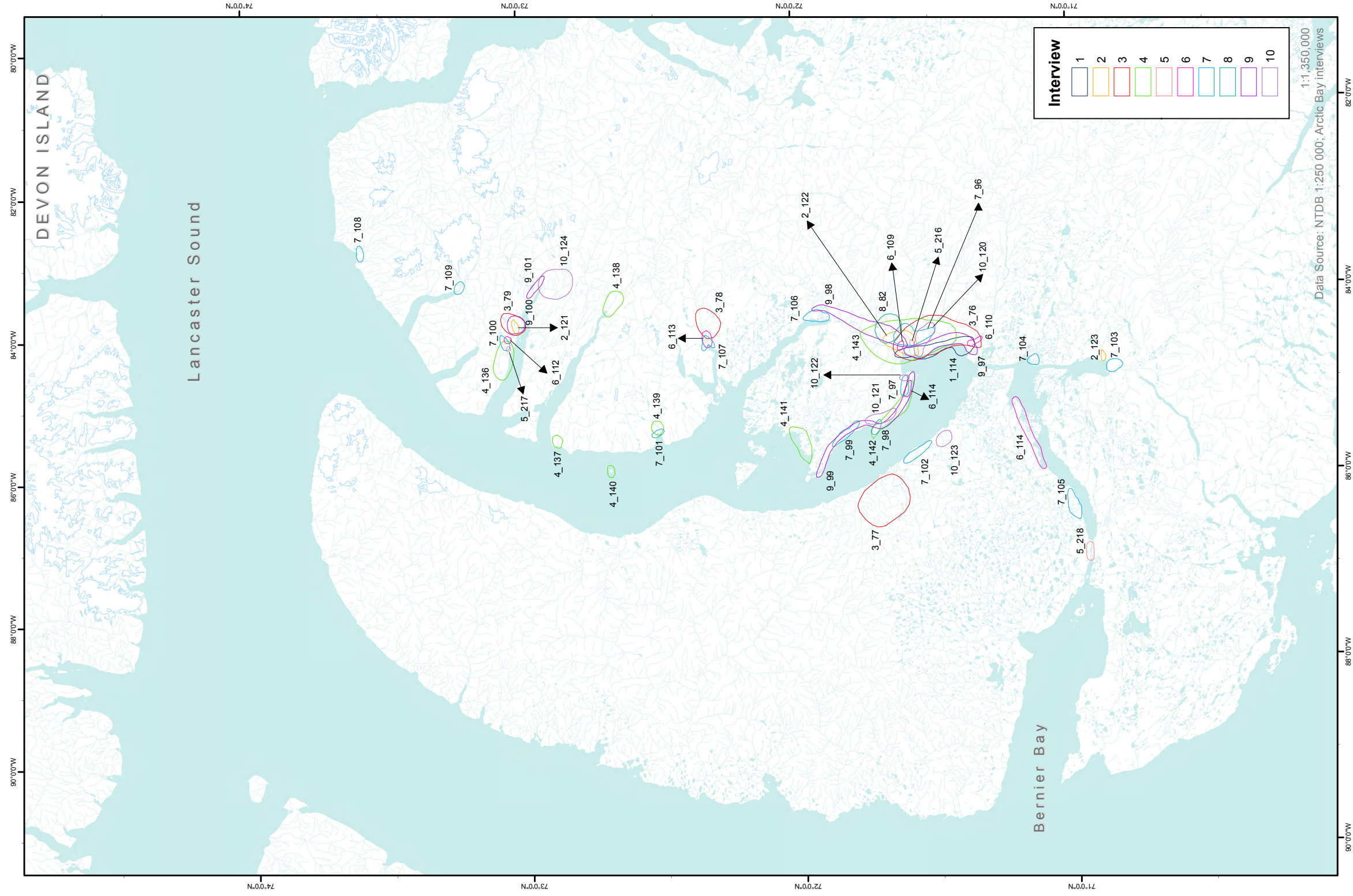




Table 23: Areas of occupation for Snow Goose.

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
SG_1_SP	1_114	Snow Goose	P	S	June to September	The interviewee observed goslings in September.
SG_2_SP	2_122	Snow Goose	P	S	May to September	
SG_3_SP	2_123	Snow Goose	P	S	May to September	
SG_1_SP	2_121	Snow Goose	P	S	May to September	
SG_4_H	3_79	Snow Goose	H		May to September	
SG_3_SAP	3_78	Snow Goose	P	A, S	May to September	
SG_2_SAP	3_77	Snow Goose	P	A, S	May to September	
SG_1_SAP	3_76	Snow Goose	P	A, S	May to September	
SG_1_SP	4_136	Snow Goose	P	S		
SG_2_SP	4_137	Snow Goose	P	S		
SG_3_SP	4_138	Snow Goose	P	S		
SG_5_SAP	4_140	Snow Goose	P	A, S		
SG_4_SP	4_139	Snow Goose	P	S		
SG_6_SP	4_141	Snow Goose	P	S		
SG_7_SP	4_142	Snow Goose	P	S		
SG_8_SAP	4_143	Snow Goose	P	A, S		
SG_2_SP	5_217	Snow Goose	P		May, June and July	
SG_1_SAP	5_216	Snow Goose	P	A, S	May, June and July	The Snow Geese arrive in May and nest in June.
SG_3	5_218	Snow Goose	P		May, June and July	
SG_4	6_112	Snow Goose	P		June, July and August	
SG_5	6_113	Snow Goose	P			
SG_1	6_109	Snow Goose	P		June, July and August	
SG_2	6_110	Snow Goose	P		June, July and August	
SG_6	6_114	Snow Goose	P			
SG_13_SP	7_108	Snow Goose	P	S	June	
SG_14_SP	7_109	Snow Goose	P	S	June	
SG_5_SP	7_100	Snow Goose	P	S	June	Sod house / Camp.
SG_6_SP	7_101	Snow Goose	P	S	June	
SG_12_SP	7_107	Snow Goose	P	S	June	
SG_11_SP	7_106	Snow Goose	P	S	June	
SG_1_SP	7_96	Snow Goose	P	S	June	
SG_2_SP	7_97	Snow Goose	P	S	June	
SG_7_SP	7_102	Snow Goose	P	S	June	
SG_4_SP	7_99	Snow Goose	P	S	June	
SG_3_SP	7_98	Snow Goose	P	S	June	
SG_9_SP	7_104	Snow Goose	P	S	June	
SG_8_SP	7_103	Snow Goose	P	S	June	
SG_10_SP	7_105	Snow Goose	P	S	June	
SG_1_SP	8_82	Snow Goose	P	S		
SG_2_SP	9_98	Snow Goose	P	S		
SG_1_SP	9_97	Snow Goose	P	S		
SG_3_SP	9_99	Snow Goose	P	S		
SG_4_SP	9_100	Snow Goose	P	S		
SG_5_SP	9_101	Snow Goose	P	S		
SG_2_SP	10_121	Snow Goose	P	S		
SG_3_SP	10_122	Snow Goose	P	S		
SG_1_SP	10_120	Snow Goose	P	S		
SG_4_SP	10_123	Snow Goose	P	S		
SG_5_SP	10_124	Snow Goose	P	S		

Table 24: Areas of occupation for Arctic Tern, Thick Billed Murre, Black Guillemot, Northern Fulmar, Ross's Gull, Ivory Gull, Glaucous Gull, and Gulls (unknown species).

Map Code	Map Label	Species	Present - P Historic - H	Special Coding	Months	Comments
AT_1_SAP	4_144	Arctic Tern	P	A, S		
AT_2_SP	4_145	Arctic Tern	P	S		
AT_1_AH	5_227	Arctic Tern	H	A, S	June	Observed in 1999.
AT_4_SP	6_124	Arctic Tern	P	S		
AT_2	6_122	Arctic Tern	P			
AT_3	6_123	Arctic Tern	P			
AT_1	6_121	Arctic Tern	P		July	
AT_5_SP	7_131	Arctic Tern	P	S		
AT_6_SP	7_132	Arctic Tern	P	S		
AT_2_SP	7_128	Arctic Tern	P	S		
AT_3_SP	7_129	Arctic Tern	P	S		
AT_7_SP	7_133	Arctic Tern	P	S		
AT_1_SP	7_127	Arctic Tern	P	S		
AT_4_SP	7_130	Arctic Tern	P	S		
AT_1_SAP	8_92	Arctic Tern	P	A, S		The whole Island is covered with Gulls.
AT_1_SP	9_104	Arctic Tern	P	S		
AT_4_SP	10_139	Arctic Tern	P	S		
AT_3_SP	10_138	Arctic Tern	P	S		
AT_1_SP	10_136	Arctic Tern	P	S		
AT_2_SP	10_137	Arctic Tern	P	S		
TBM_1_AP	1_119	Thick-Billed Murre	P	A		
TBM_1_AP	5_229	Thick-Billed Murre	P	A	May to September	
TBM_1_SP	10_146	Thick-Billed Murre	P	S		
BG_1_SP	3_75	Black Guillemot	P	S	May to September	
BG_1_AP	5_228	Black Guillemot	P	A	May to September	
BG_1_SP	10_147	Black Guillemot	P	S		
NF_1_SP	1_113	Northern Fulmar	P	S	April, May and June	Northern fulmars nest here between mid-April and June.
NF_1_SP	2_117	Northern Fulmar	P	S	May to September	Less numerous in the past summer.
NF_1_SAP	3_80	Northern Fulmar	P	A, S	May to September	
NF_1_SAP	4_113	Northern Fulmar	P	A, S		
NF_2	4_114	Northern Fulmar	P			
NF_2	5_215	Northern Fulmar	P		May, June and July	
NF_1_SP	5_214	Northern Fulmar	P	S	April to August	The Northern Fulmars nest in July.
NF_1_SAP	6_134	Northern Fulmar	P	A, S	June, July and August	
NF_1_SAP	7_110	Northern Fulmar	P	A, S		
NF_1_SP	8_90	Northern Fulmar	P	S		
NF_1_SP	9_106	Northern Fulmar	P	A, S		
NF_1_SAP	10_145	Northern Fulmar	P	A, S		
RG_1	5_233	Ross's Gull	P			
IG_2_H	5_226	Ivory Gull	H		May and June	Used to be Abundant.
IG_1	5_225	Ivory Gull	P			
IG_1_H	9_116	Ivory Gull	H			
GG_1_SP	2_118	Glaucous Gull	P	S	May to September	
GG_2_SP	2_119	Glaucous Gull	P	S	May to September	
GG_3	2_120	Glaucous Gull	P		May to September	
Gulls_1	1_118	Gulls	P			
Gulls_1	4_129	Gulls	P			
Gulls_2	4_130	Gulls	P			
Gulls_5_SAP	4_133	Gulls	P	A, S		
Gulls_3	4_131	Gulls	P			
Gulls_4_SP	4_132	Gulls	P	S		
Gulls_6	4_134	Gulls	P			
Gulls_7_SP	4_135	Gulls	P	S		
Gulls_3	5_224	Gulls	P		May, June and July	
Gulls_2_SP	5_223	Gulls	P	S	June	
Gulls_1_SP	5_222	Gulls	P	S	June	The Gulls inhabit the opposite side of the Island to the ducks.
Gulls_3	6_131	Gulls	P		June, July and August	
Gulls_4	6_132	Gulls	P		June, July and August	
Gulls_2	6_130	Gulls	P		June, July and August	
Gulls_1	6_129	Gulls	P		June, July and August	
Gulls_5_SP	6_133	Gulls	P	S		
Gulls_7_SAP	7_140	Gulls	P	A, S		
Gulls_9_SAP	7_142	Gulls	P	A, S		
Gulls_8_SAP	7_141	Gulls	P	A, S		
Gulls_6_SAP	7_139	Gulls	P	A, S		
Gulls_1_SAP	7_134	Gulls	P	A, S		
Gulls_12_SAP	7_145	Gulls	P	A, S		
Gulls_10_SAP	7_143	Gulls	P	A, S		
Gulls_2_SAP	7_135	Gulls	P	A, S		
Gulls_5_SAP	7_138	Gulls	P	A, S		
Gulls_3_SAP	7_136	Gulls	P	A, S		
Gulls_4_SAP	7_137	Gulls	P	A, S		
Gulls_11_SAP	7_144	Gulls	P	A, S		
Gulls_2_SP	8_88	Gulls	P	S		
Gulls_3_SP	8_89	Gulls	P	S		
Gulls_1_SP	8_87	Gulls	P	S		



Table 24 (continued): Areas of occupation for Arctic Tern, Thick Billed Murre, Black Guillemot, Northern Fulmar, Ross’s Gull, Ivory Gull, Glaucous Gull, and Gulls (unknown species).

Map Code	Map Label	Species	Present – P Historic – H	Special Coding	Months	Comments
Gulls_3_SP	9_109	Gulls	P	S		
Gulls_4_SP	9_110	Gulls	P	S		
Gulls_5_SP	9_111	Gulls	P	S		
Gulls_2_SP	9_108	Gulls	P	S		
Gulls_9_SP	9_115	Gulls	P	S		
Gulls_8_SP	9_114	Gulls	P	S		
Gulls_7_SP	9_113	Gulls	P	S		
Gulls_1	9_107	Gulls	P			
Gulls_6_SP	9_112	Gulls	P	S		
Gulls_5_SP	10_144	Gulls	P	S		
Gulls_3_SP	10_142	Gulls	P	S		
Gulls_4_SP	10_143	Gulls	P	S		
Gulls_1_SP	10_140	Gulls	P	S		
Gulls_2_SP	10_141	Gulls	P	S		





Admiralty Inlet

1. Polar Bears

Polar bears concentrate on the ice along the north coasts of Bylot Island, Borden and Brodeur peninsulas and at the mouth of Admiralty Inlet in spring. The mouths of Navy Board and Admiralty inlets and the offshore areas of Lancaster Sound are important spring habitats where bears hunt seals and breed along the floe edges and in unstable offshore ice.

2. Seabirds

A large numbers of seabirds, which include northern fulmars, thick-billed murres, black guillemots, black-legged kittiwakes, and dovebies, feed intensively during summer and fall throughout the northern marine area.

3. Polar Bears

The north and west coasts of Bylot Island and the northern tips of Borden and Brodeur peninsulas, extending inland for approximately 25 km, are used by polar bears for maternity denning in the fall and winter. These areas also provide summer sanctuary when the disappearance of ice forces bears onto land. Summer sanctuaries maybe part of particular importance to pregnant females and family groups.

4. Seabirds

The high, steep cliffs between Baillarge Bay and Elwin Inlet provide critical nesting habitat for a large population of northern fulmars, estimated at approximately 25,000 breeding pairs.

5. Seabirds

Seabirds, thought to be primarily black-legged kittiwakes of unknown numbers, nest on the cliffs along the southern edge of these cliffs.

6. Seabirds

The steep coastal cliffs west of Cape Hay provide critical nesting habitat for one of the largest colonies of thick-billed murres and black-legged kittiwakes in Lancaster Sound. The colony is estimated to contain approximately 20,000 breeding pairs of murres. Small numbers of glaucous gulls and black guillemots also nest in the area.

7. Waterfowl

Small numbers of greater snow geese often use these areas for nesting and molting. The areas around eclipse sound and Milne Inlet are generally well-vegetated and the coastal portions of these areas may be particularly important as fall staging areas for snow geese.

8. Polar Bears

The east coast of the Brodeur Peninsula and the east and west coasts of Borden Peninsula, extending inland for approximately 20 km, and the ice in Admiralty Inlet, provide summer retreats for polar bears. Milne Inlet is also a summer area for polar bears. Ice remains well into the summer, allowing bears to prolong their hunting of seals.

9. Seabirds

A nesting colony of the rare ivory gull, visited many years ago for egg collection, has been reported by Inuit from Arctic Bay. The colony was thought to be somewhere in this northeastern portion of the Brodeur Peninsula. There is no current information as to its location, size or actual existence.

10. Seabirds

A small colony of Thayer's gulls is reported to be nesting on the cliffs in this area.

11. Raptors

The numerous cliff faces throughout most of southwestern Borden Peninsula provide optimal nesting habitat for raptors, primarily rough-legged hawks and gyrfalcons.

Small numbers of the rare and endangered peregrine falcons may also be found in the area, and their nesting areas are considered critical. Little is presently known about the raptor populations within this region.

12. Caribou

The barren-ground caribou of northern Baffin Island are thought to be non-migratory although they make local seasonal shifts in their ranges. The entire caribou population of northern Baffin Island is thought to be small and may number at most a few thousand. Only small numbers of caribou are likely to be found throughout this area, with the most being found in Moffet Inlet. On occasion small numbers of caribou may be found in winter along the east coast of Brodeur Peninsula.

13. Polar Bears

The west coast of Steensby Peninsula, extending inland for approximately 15 km, provides suitable habitat for polar bears in fall and winter.

14. Polar Bears

The Ragged Island area in Eclipse Sound provides polar bear fall and winter denning habitat.

15. Waterfowl

The southwest portion of Bylot Island is a well-vegetated outwash plain that supports a large proportion of the world's populations of greater snow geese and a variety of other birds. Thousands of greater snow geese use this critical habitat for nesting and molting. These snow geese nest in small loose colonies, ranging in size from 25-300 nests which are usually located within several kilometers of the coast. During summer, the geese gradually disperse throughout the entire area, whenever suitable feeding meadows are available. Large numbers of red-throated loons, oldsquaws (long-tailed duck), king eiders and many species of shorebirds nest in this area. Snowy owls are particularly abundant within the area. Abundance

and nesting activity of this species are likely regulated by the availability of the cyclic prey species, primarily the lemming.

16. Bowheads

A few bowhead whales summer and feed in the open waters of Lancaster Sound.

17. Seabirds

Small nesting colonies of gulls are found on the cliffs in these areas.

18. Narwhals, Seals, Belugas and Walruses

Narwhals enter Lancaster Sound in small numbers in May and reach peak migration through the area in mid-July. An estimated 8,000-10,000 narwhals move westward past Cape Hay on Bylot Island in late June and July. Their destinations are deep inlets and fiords of northern Baffin Island and the central Arctic Archipelago, such as Admiralty Inlet, Navy Board Inlet, Prince Regent Inlet, and Peel Sound. During migration, about half of the whales travel offshore, while the remainder travels along both coasts of Lancaster Sound. The return eastward movement follows similar routes in September. In addition, as many as 150,000 harp seals may enter Lancaster Sound in summer, traveling westward past Cape Hay in July, and returning eastward in September.

19. Bowheads

A small number of endangered bowhead as well as some killer whales enter Admiralty Inlet in the summer to feed in the deep water. Come concentrate along the ice floe edge. A few of these whales move further west offshore, and return in September or October.

20. Bowheads

Small numbers of endangered bowhead whales occur in the southern Admiralty Inlet in the summer. Killer whales are also encountered in this area in late summer where they hunt narwhals and seals.

Figure 27 (continued): Nunavut Atlas: Admiralty Inlet

21. Narwhals and Seals

A large number of narwhals enter Navy Board Inlet as the ice breaks up in July to summer in this inlet and in Eclipse Sound. Many harp seals follow a similar route in July. Both narwhals and harp seals return to the northeast before freeze-up.

22. Bowheads

Small numbers of endangered bowhead whale and some killer whales move into Eclipse Sound and Milne Inlet from the east each summer. They leave the area before freeze-up in the fall.

23. Bowheads

A small number of endangered bowhead whales move westward past Cape Hay in June and July. Some remain in open waters of Lancaster Sound during the summer while others continue to Navy Board Inlet and Admiralty Inlet. Bowheads return in September and October, moving eastward into Baffin Bay.

24. Narwhals, Belugas, Walruses and Seals

Large numbers of narwhals gather at the ice floe edge near the mouth of Admiralty Inlet in June, while awaiting break-up of the ice in the inlet. Other species which concentrate here in late spring include beluga whales, walruses, ringed seals, bearded seals and harp seals.

25. Narwhals

Thousands of narwhals move south along the west side of Admiralty Inlet in late July and August with the ice break-up. Some narwhals may also migrate along the east side of the inlet. In September these whales return north along similar routes before freeze-up.

26. Narwhals and Seals

Narwhals occur in large numbers in Navy Board Inlet in summer. Many harp seals also are found in the inlet in the summer, particularly near the entrance to the inlet.

27. Narwhals and Seals

Admiralty Inlet supports a major summer concentration of whales (an estimated 8,000-10,000). Calving may occur in these waters. The area is an important post-calving ground and a summer locale for adults. Some narwhals move to the southern end of the inlet and are common around Yeoman Island and also Iglorsuit Island. Intensive feeding with Arctic cod being the main prey, also occurs at this time. Hundreds of harp seals are found in the southern part of the inlet in summer, particularly in the waters adjoining Peter Richards Islands, Moffet Inlet, and Yeoman Island.

28. Seals

Numerous harp seals travel along the east side of Admiralty Inlet towards the southern end of the inlet in summer. The return movement occurs in September before freeze-up.

29. Seals and Narwhals

Several thousand harp seals travel along the east side of Admiralty Inlet in the summer and return along a similar route in fall. Some narwhals also migrate along this route.

30. Seals

Ringed seals are found year-round throughout the marine areas, particularly in the fast ice of the numerous sheltered bays and inlets. They feed on Arctic cod and crustaceans. Smaller numbers of bearded seals occur throughout, but particularly in Navy Board Inlet, during summer. They feed in shallow waters in Arctic cod and benthic organisms such as molluscs and sea cucumbers.

31. Narwhals

Thousands of narwhals concentrate in Milne Inlet, Eclipse Sound, Tremblay Sound and Kotuktoo Bay in July and August. Kotuktoo Bay in particular supports very large numbers of these whales in summer. These areas may function as calving grounds and are important post-calving and feeding grounds. Narwhals feed intensively during this

period, with Arctic cod as the main prey. Squid, shrimps and mysid crustaceans are also important food items.

32. Walruses

walruses are frequently found along the ice edge in the mouth of Navy Board Inlet in July. The Wollaston Islands provide a haul-out site for some walruses in late summer when the ice has disappeared.





Bernier Bay

1. Polar Bears

The northern tip of Steensby Peninsula provides suitable maternity denning habitat for female polar bears in fall and winter.

2. Waterfowl

These large areas are generally well-vegetated lowlands that provide important habitat for birds, particularly waterfowl. Numerous greater snow geese nest and molt in the area. Snowy owls are particularly abundant but the abundance and nesting activity of the species is likely regulated by the availability of cyclic prey species, primarily the lemming. Other birds which likely nest in substantial numbers within the area are red-throated loons, brants, oldsquaws, king eiders, common eiders and several species of shorebirds. The eiders and brants are generally found along the coast.

3. Caribou

The barren-ground caribou of northern Baffin Island are probably thought to be non-migratory although they may make local seasonal shifts in their ranges. The entire caribou population of northern Baffin Island is thought to be small and may number at most a few thousand. Caribou occur regularly in all but the interior regions of the Brodeur Peninsula. Some caribou calving has been documented in the hilly terrain immediately northeast of Phillips Creek.

4. Polar Bears

Polar bears are common in Bernier Bay in spring and summer because persistence of ice in the bay in summer allows bears to prolong their hunting of seals. Milne Inlet is also a summer locale for polar bears.

5. Raptors

The numerous cliff faces in these areas provide optimal nesting habitat for raptors although little is presently

known about the raptor populations within this region. All nesting areas of the rare and endangered peregrine falcon are considered critical.

6. Polar Bears

These areas which include Crown Prince Frederik Island and part of the Baffin Island coast, extend inland for approximately 20km and provide suitable polar bear denning habitat in fall and winter.

7. Polar Bears

Polar bears are present in the Agu Bay area between autumn and spring, when they hunt seals on the ice prior to break-up in summer. Bears concentrate around Crown Prince Frederik Island in early spring and on the ice around Kimakto Peninsula in fall.

8. Seabirds

Numerous gulls and Arctic terns use these islands for nesting.

9. Seals

Numerous ringed and bearded seals are found in the Jungersen Bay area. Lesser numbers of these seals appear in southern Admiralty Inlet and in Bernier Bay.

10. Seals

Ringed seals are found throughout Agu Bay, Autridge Bay and the Gulf of Boothia. They are the main prey of the polar bears. The less common bearded seals are encountered in relatively shallow waters throughout this area.

11. Seals

Ringed seals are common in Murray Maxwell Bay and they occur frequently in the Sikosak Bay area. Both Murray Maxwell Bay and the west coast of Siorarsuk Peninsula provide stable fast ice for pupping. Bearded seals are also encountered in the bay.

12. Narwhals and Seals

Thousands of narwhals concentrate in Milne Inlet in July and August. Calving may occur here. The area also appears to be important as a post-calving and feeding ground with Arctic cod being the primary food source. Ringed seals are found year-round in Milne Inlet.

13. Narwhals

Moderate numbers of narwhals may be found near Agu Bay in late summer. They are also reported to occur in Autridge Bay.

14. Walruses

In summer, walruses have been seen along the coast of Crown Prince Frederik Island.

15. Belugas and Walruses

Beluga whales and walruses occasionally move into Murray Maxwell Bay in summer.

16. Wolves

Wolves are reported from these areas.

FINAL THOUGHTS

INTERVIEW PROCESS

The interview process was judged to be reasonably 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 allowed for future community assessments. Interviews took from 2-6 hours, depending on a number of factors, such as the depth of the individual's knowledge, or 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 mammals considered primarily terrestrial, such as, Caribou, Muskoxen or Arctic Fox, while embracing Polar Bears and a broad array of birds that range widely over both.

Despite general satisfaction with the process, some prior reservations warrant comment. First, the interview process initially was conducted in the present tense, with the implicit assumption that all responses were addressing contemporary, immediate or very recent experience with the organism under discussion. However, unless explicitly excluded, there can be some question as to whether the information offered represents temporal integration over some indeterminate period. Hunters who have traveled and hunted these areas for decades could provide responses drawn from observations made indiscriminately from the short, medium or long term. For these reasons, interviewees were routinely informed that contemporary data was that collected since 2000, 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 was whether the geographic location presented for an organism represents the place at which it was caught or collected or whether it was intended to indicate a much broader range. The former case could lead to an overestimate of abundance and locations while the latter could underestimate the areal coverage. Both ambiguities have subsequently been corrected through adjustments to the survey document and more specifically through the questions addressed to the interviewee.

The final 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". Everywhere 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 4) where it can be located and used to identify what is meant by "everywhere" for a specific interviewee.

MAPS AND DATA

The map format was chosen, given the broad geographic reach of the interviewee's responses, 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 interconnectedness of seeming disparate locations. While for others, especially where distributions were modest or localized, the advantages were less obvious.

The scale used on maps obtained from the Nunavut Atlas (1992) is smaller because the geographic area of interest is also smaller. In addition, one must keep in mind that the data collected for the Nunavut Atlas was actually collected in the early 70's and so it represents conditions that were extant 35 years ago. Some comparisons are possible but they must be handled with caution.

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

The present data set was never conceived as a stand-alone product. It represents a snapshot in time drawn from observations made by individuals within a community who have considerable experience hunting, fishing and trapping in the region surrounding that community. These data have been considered within the comparative context provided by other studies but it has limitations, just as with those that preceded it. For a fully rounded picture it would be necessary to view these findings as one data set of many, all of which are mutually complementary.

GOVERNANCE

Collection of resource information through the process of IQ interviews can have many different values to a community such as cultural, social, historical and economic values. 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 thought given to the subject 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 is attempting to identify the location and abundance of mammals, fish, birds, invertebrates and plants so that this information can be used for a number of reasons, among them economic development. However, the exploitation of a resource requires important 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.

One example of the need for governance emerged from earlier interviews. Shallow areas off Iglulik are known to contain clams in some abundance, which are known to be an important source of food for walrus. Inuit hunters are aware of their presence but acknowledge that they are difficult to obtain because of their inhospitable location on/in sea floor sediment under cold water. Each interviewee was initially asked about their distribution and abundance, then later about whether this was a resource that might be harvested for commercial purposes. Most of the responses supported the concept of a commercial clam fishery, even though almost no information was available on the total size of the resource, its detailed distribution, reproductive capacity, or growth rates. In addition, one must also consider the importance of clams to the walrus and what impact the depletion of clams might have on the distribution and well-being of this large, highly prized mammal. A sustainable approach would ensure a balance between these two apparently competing interests such that both resources would be governed using reliable knowledge about these organisms, an accepted plan and clear responsibilities for all parties.



CLIMATE CHANGE

Over the past 20 years, a growing chorus of arctic researchers has commented on the looming possibility of climate change and global warming, and their expected impacts on the marine environment (Tynan and DeMaster 1997; Michel, C., R. Ingram and L.R. Harris 2006; Ford et al 2008a, 2008b, Moore and Huntington 2008). Many positive and negative changes will occur in recurrent open water sites, undoubtedly influencing many 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, the impacts of tidal mixing and topographic upwelling. The impact of these physical changes could then influence some facet of the marine food web, such as, the relative importance of ice algae, the timing, and magnitude of primary and secondary production, changes in the distribution, abundance, and success of traditional species. In other words, we can expect change to occur in our physical world that will, in turn, 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. Change will be divided between direct human (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 fresh water input, and modified ocean circulation. These will, in turn, directly affect the physical marine environment which will then influence coastal marine resources. 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.

COMBINING TRADITIONAL ECOLOGICAL KNOWLEDGE (IQ) AND SCIENTIFIC KNOWLEDGE

Inuit Qaujimagatuqangit or Traditional Inuit Ecological Knowledge is unique in that it is qualitative, intuitive, holistic, spiritual, empirical, personal, and often based on long time series of observations (Berkes 2002). Some of these characteristics are sometimes cited as limitations, such as a reliance on long-term memory or the fact that it is qualitative and subjective. Conversely, they also qualify as positive since they represent a long time-series unattainable in any other manner. Perhaps as the sole device to fully understand and manage coastal resources traditional knowledge might be found lacking, while a complementary coupling with western science could 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 correctness of the prediction is a measure of the completeness of scientific understanding. 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 symptoms. A critical factor in the scientific method is the availability and reliability of data available for analysis. The arctic, because of size, complexity and manpower limitations, does not

often have a plentiful supply of scientific observations. However, one underutilized data source is in the form of traditional knowledge where species, locations, processes and events have been monitored, sometimes for decades. Bringing traditional knowledge and science together into a complementary working relationship could provide significant benefits for all parties.

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Interviewees – Arctic Bay

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APPENDIX 1 BIOGRAPHIES OF ARCTIC BAY INTERVIEWEES

Interview Code	Interviewee	Profile
AB_1	Tommy Tatatuapik	Chair of the Arctic Bay Elder’s Committee, lay preacher in the Catholic Church, organizer of community country-food feasts and counselor of offenders referred by courts.
AB_2	Ikey and Olayuk Kigutikarjuk	Husband and wife formerly weekend hunters but since retirement, they have become active full-time. Olayuk is a member of the Elder Committee.
AB_3	Issac Shooyook	An Elder and a full-time hunter who often uses an outpost camp. He is the initiator of the sport Polar Bear hunt.
AB_4	Qaumayuq Oyukuluk	Born in the southern end of Admiralty Inlet but raised in Strathcona Sound. An active HTO member, fisherman and full-time hunter who hunts seals and Polar Bear.
AB_5	Olayuk Naqitarvik	Born and raised in area of Admiralty Inlet just south of Yeoman’s Island. Lived in Arctic Bay since 1962. Began hunting at 12 years of age and continues to hunt and fish most available animals over a very wide area. A member of the Hamlet Council, Pastor in the Full Gospel Evangelical Church, full-time hunter that has a special interest in Narwhal and Polar Bears.
AB_6	Jobie and Sarah Issigaitok	Husband and wife active in the community; he is Chair of the Hamlet Housing Association. They are full-time hunters who conduct sport hunts out of their out[post camp for Polar Bears. In addition they hunt seals and Narwhal.
AB_7	Esau Tatauapik	Born at the southern end of Admiralty Inlet near Easter Sound but grew up near Strathcona Sound and has lived in Arctic Bay since 1963. Has been a hunter since about 10 years of age and is presently a year-round hunter seeking seals much of the time and animals with a quota during their season. Active in the community as Chair of the Alcohol Committee, he is also the owner of North Baffin Outfitting, which is used by sport hunters and photographers. He hunts Narwhal and runs a dog team.
AB_8	David Kalluk	Born on western side of Brodeur Peninsula near Cresswell Bay. Lived in Arctic Bay since 1967. Hunted since he was 8 years old he continues to hunt most animals tear round. In addition, he is very involved in community affairs: lay preacher in the Anglican Church, member of Elder’s Committee, HTO, and the economic development committee.
AB_9	Moses Koonoo	Born near Admiralty Inlet just south of Yeoman’s Island but grew up in Arctic Bay and Pond Inlet. He has lived in Arctic Bay since about 30 years old. A younger hunter who hunts most available animals shares with the community. He is involved with regional organizations.
AB_10	Ipeelee Koonoo	Born on Bylot Island but has been a member of Arctic Bay community since 1988. Hunted since 11 years when he killed his first bear. Today he hunts most animals except caribou which are no longer in the area. An outfitter, Elder and full-time hunter who conducts a Polar Bear sport hunt. He also runs a dog team.
AB_11	Koonoo Oyukuluk	Lived in Arctic Bay since 1953. Member of the HTO and a respected advisor on cultural and traditional life. He started hunting at age 12 and remains active year-round with interest in Narwhal, Walrus, seals, Musk Ox and Polar Bear. Bearded seals and Polar Bear not hunted as much due to government restrictions and fewer dog teams. He supports the community by sharing his catch.
AB_12	Clare Kines	Local businessman and former member of the RCMP who is not Inuit but who is an avid and knowledgeable birding enthusiast.



APPENDIX 2

ACRONYMS AND ABBREVIATIONS

CBCRI - Community-Based Coastal Resource Inventory

CLEY - Department of Culture, Language, Elders and Youth

CWS - Canadian Wildlife Service

DFO - Department of Fisheries and Oceans

DOE - Department of the Environment

DSD - Department of Sustainable Development

ED & T - Department of Economic Development and Transportation

GC - Government of Canada

GN - Government of Nunavut

HTO - Hunter/Trapper Organization

INAC - Indian and Northern Affairs, Government of Canada

IQ - Inuit Qaujimagatuqangit

IPCC - Intergovernmental Panel on Climate Change

NRCan - Natural Resources Canada

NRI - Nunavut Research Institute

NTI - Nunavut Tunngavik Incorporated

NWMB - Nunavut Wildlife Management Board

TK - Traditional Knowledge

TEK - Traditional Ecological Knowledge

APPENDIX 3 ARCTIC BAY – BIRD SIGHTINGS COMMENTARY

The following table stacks the community interview findings with several literary sources and consultant expectations. The list begins with those that interviewees stated seeing and has some additional species that were not mentioned but have been reported by others. These have been graded on their range status according to Godfrey, 1986 and occupancy type by Richards and White, 2008. The next column covers the NWT/NU Checklist Survey databank. The next five columns identify species known in the area and identify those that breed. Renaud et al, 1979 is based on Arctic Bay research that took place from May 1st to September 28th, 1976. Bray, 1943, provides information from hours spent in Arctic Bay in May 1936 and September 1937. Ellis, 1956, spent September 1954 to February 1955, not the most productive time of year, in Arctic Bay. Shortt and Peters, 1942, gathered information in Arctic Bay on August 28/29 and September 3/4, 1938. Soper, 1928, covers Arctic Bay on August 18/19, 1932. The second to last column identifies birds that are included in the specimen collection of the Royal Ontario Museum. The final column gives the reaction of Jim Richards to the interview findings with the other sources in mind. The checklist databank is assumed valid. The miscellaneous literature sources are valid.

Hopefully this comparative chart contextualizes the knowledge gained through the Nunavut Coastal Resource Inventory.

Birds reported in interviews:	Is the bird within normal breeding range?	What status does the bird have within the area?	NWT/Nunavut Bird Checklist Survey: CWS	Renaud, et al, 1979	Bray, 1943	Ellis, 1956	Shortt & Peters, 1942	Soper, 1928	Royal Ontario Museum Specimen	Comments from Jim Richards on the likelihood of bird sighting frequency and interview findings.
Buff-breasted Sandpiper	No	Migrant, Breed	Yes							migrant only; likely seen
Stilt Sandpiper	No	Migrant, Breed		Breed						odd the only one reported by locals
White-Rumped Sandpiper	Yes	Migrant, Breed	Breed				Yes			odd the only one reported by locals
Baird’s Sandpiper	Yes	Migrant, Breed		Breed			Yes			seen as expected
Least Sandpiper	No	Migrant, Breed								likely seen
Semi-palmated Sandpiper	No	Migrant, Breed								likely seen
Purple Sandpiper	No	Migrant, Breed								migrant only; likely seen
American Golden-Plover	Yes	Migrant, Breed		Breed						seen as expected
Black-bellied Plover	Yes	Migrant, Breed		Yes						seen as expected
Common Ringed Plover	Yes	Migrant, Breed		Breed	Yes					seen as expected
Semi-palmated Plover	No	Migrant, Breed								likely seen
Wilson’s Snipe	No	Accidental								highly unlikely; perhaps a dowitcher spp.
Sanderling	Yes	Migrant, Breed								migrant only; likely seen
Red Knot	No	Migrant, Breed		Yes						seen as expected
Ruddy Turnstone	No	Migrant, Breed		Yes						seen as expected
Horned Lark	Yes	Migrant, Breed	Breed	Breed			Yes	Yes		surprised only seen by one local
Lapland Longspur	Yes	Migrant, Breed	Breed	Breed			Yes			seen as expected



Birds reported in interviews:	Is the bird within normal breeding range?	What status does the bird have within the area?	NWT/Nunavut Bird Checklist Survey: CWS	Renaud, et al, 1979	Bray, 1943	Ellis, 1956	Shortt & Peters, 1942	Soper, 1928	Royal Ontario Museum Specimen	Comments from Jim Richards on the likelihood of bird sighting frequency and interview findings.
Killdeer	No									doubtful; no Nunavut records
American Bittern	No									doubtful; no Nunavut records
Snow Bunting	Yes	Migrant, Breed	Breed	Breed			Yes			seen as expected
American Pipit	Yes	Migrant, Breed	Yes	Yes		Yes	Breed			can't explain why only seen by one local
Northern Shrike	No									doubtful; no Nunavut records
Fox Sparrow	No	Accidental								highly unlikely
Sandhill Crane	Yes	Migrant, Breed								seen as expected
Pomarine Jaeger	No	Migrant, Breed								migrant only; likely seen
Parasitic Jaeger	Yes	Migrant, Breed, wintertime								seen as expected
Long Tailed Jaeger	Yes	Migrant, Breed		Breed						seen as expected
Rock Ptarmigan	Yes	Permanent, Breed		Breed		Yes	Yes			seen as expected
Willow Ptarmigan	Yes	Permanent, Breed								quite likely seen
Snowy Owl	Yes	Permanent, Breed		Yes		Yes				seen as expected
Short Eared Owl	No	Migrant, Breed								likely seen
European Starling	No	Accidental								doubtful; but possible
Common Raven	Yes	Permanent, Breed	Yes	Breed		Yes	Yes	Yes		seen as expected
Red Phalarope	Yes	Migrant, Breed		Yes						seen as expected
Red-necked Phalarope	No	Migrant, Breed								possible
Peregrine Falcon	Yes	Migrant, Breed	Breed				Yes			surprised not seen by all
Gryfalcon	Yes	Permanent, Breed	Breed	Yes	Breed			Yes		seen as expected
Glaucous Gull	Yes	Migrant, Breed, wintertime	Breed	Breed		Yes				surprised not seen by all
Herring Gull	No	Migrant, Breed					Yes			seen as expected
Thayer's Gull	Yes	Migrant, Breed	Yes	Breed						seen as expected
Mew Gull	No	Accidental								no doubt they saw Iceland Gull

Birds reported in interviews:	Is the bird within normal breeding range?	What status does the bird have within the area?	NWT/Nunavut Bird Checklist Survey: CWS	Renaud, et al, 1979	Bray, 1943	Ellis, 1956	Shortt & Peters, 1942	Soper, 1928	Royal Ontario Museum Specimen	Comments from Jim Richards on the likelihood of bird sighting frequency and interview findings.
Ivory Gull	Yes	Migrant, Breed, wintertime		Yes	Yes					surprised not seen by all
Ross' Gull	No	Migrant, Breed								quite likely seen
Sabine's Gull	No	Migrant, Breed								possible; as a vagrant
Bonaparte's Gull	No	Accidental								highly unlikely, but possible
Iceland Gull	Yes	Migrant, Breed	Yes							seen as expected
Black-legged Kittiwake	Yes	Migrant, Breed				Yes		Yes		should have been seen by all
Snow Goose	Yes	Migrant, Breed	Breed	Breed				Yes		seen as expected
Ross's Goose	No	Migrant, Breed								quite possible
Canada Goose	No	Migrant, Breed	Yes							seen as expected
Cackling Goose	No	Migrant, Breed								seen as expected
White-fronted Goose	No	Migrant, Breed								seen as expected
Tundra Swan	No	Migrant, Breed								seen as expected
Dovekie	No	Migrant, Breed, wintertime				Yes				seen as expected
Arctic Tern	Yes	Migrant, Breed								seen as expected
Thick-Billed Murre	Yes	Migrant, Breed, wintertime						Yes		seen as expected
Black Guillemot	Yes	Migrant, Breed, wintertime		Yes		Yes				seen as expected
Razorbill	No	Migrant, Breed								seen as expected
Northern Fulmar	Yes	Migrant, Breed, wintertime		Yes		Yes	Yes	Yes		seen as expected
King Eider	Yes	Migrant, Breed	Yes	Yes	Yes	Breed				seen as expected
Common Eider	Yes	Migrant, Breed		Yes			Yes			seen as expected
Long Tailed Duck	Yes	Migrant, Breed	Yes	Breed		Yes				seen as expected
Arctic Loon	No									they were seeing Pacific Loons
Common Loon	No	Migrant, Breed								possible



Birds reported in interviews:	Is the bird within normal breeding range?	What status does the bird have within the area?	NWT/Nunavut Bird Checklist Survey: CWS	Renaud, et al, 1979	Bray, 1943	Ellis, 1956	Shortt & Peters, 1942	Soper, 1928	Royal Ontario Museum Specimen	Comments from Jim Richards on the likelihood of bird sighting frequency and interview findings.
Red-throated Loon	Yes	Migrant, Breed		Breed						should have been seen by all
Yellow-billed Loon	No	Migrant, Breed					Yes			seen as expected
Pacific Loon	No	Migrant, Breed					Yes			seen as expected
Species reliably noted by others; not on above list										
Rough-legged Hawk	Yes	Migrant, Breed		Breed						would have expected sightings from interview
Pectoral Sandpiper	Yes	Migrant, Breed		Breed						would have expected sightings from interview
Northern Wheatear	Yes	Migrant, Breed		Yes	Yes	Yes				would have expected sightings from interview
Hoary Redpoll	Yes	Migrant, Breed, wintertime		Yes	Yes					would have expected sightings from interview
Whimbrel	No	Vagrant			Yes					not to be expected
Bank Swallow	No	Accidental							Yes	not to be expected
Wilson's Warbler	No	Accidental							Yes	not to be expected
Barn Swallow	No	Vagrant								not to be expected
White-throated Sparrow	No	Accidental								not to be expected
Species not on above list, but should have been seen										
Brant	Yes	Migrant, Breed	Yes							can't explain why this species was not seen
Red-breasted Merganser	Yes	Migrant, Breed	Yes							can't explain why this species was not seen



APPENDIX 4 NCRI FIELD GUIDE

INTRODUCTION

This Field Guide is a chronological account of tasks conducted during the 2008-2009 project year. In addition, this document can be used as a template to guide actions in future inventories.

The Guide is organized into four levels:

- Level 1 involves consultations, interviewee selection, and preparations required prior to the start of interviews.
- Level 2 contains interview protocols and all steps that result from their completion.
- Level 3 addresses GIS data digitization and image production.
- Level 4 addresses report completion and delivery back to the community, along with planning follow-up on project outcomes.

Information provided in all four levels must be available in both English and Inuktitut, which means that time required for document translation is an important consideration in the overall project work plan.

In addition, the establishment of a presence in each community is an important contributor to the project's ultimate success. Spending some time on each visit to get to know people, attend community events, and become familiar with local services and community resources (e.g. wharves, schools, government offices, etc.) will greatly reward the process.

LEVEL 1

Level 1 involved the development of a community profile (such as labourers, resources and infrastructure), along with the community consultations, preparation of locally relevant interview materials, selection of interviewees and training of local personnel.

Community Profile

Before beginning work in a community, and preferably before approaching potential interviewees, information about the study site was compiled. This information was used: to assist the literature review; to identify additional data that might be useful in the mapping process; to ensure that data collection would not be duplicated; and, to facilitate the report-writing process.

Information sought, included:

- Demographics
- Geography (location, description of coast)
- History of community, including government presence, points of interest, early settlement, traditional movements
- Current Institutions (local government, HTO, GN, schools, etc.)
- Current community activities, organizations, important events and activities
- Current community projects, e.g., economic development activity
- Land/sea based activities, reliance on traditional food sources, hunting territories
- Occupations and income profiles
- Reports of pollutants or other environmental accidents

- Perceived changes in climate (sea ice, winter camp locations and winter coast line)
- Changes in habitat, bird counts, fish, animals, marine environment
- Tourism resources
- Government reports and wildlife studies
- Common coastal/marine species found in the area

The desired output from such an exercise was a concise summary of the information gathered, that included: an annotated bibliography (using the Chicago Manual of Style) of important documents and data; a detailed contact list (name, contact, affiliation, etc.); a list and/or description of information that would be suitable for mapping; a binder/folder of all hard copies of information and an electronic backup of available files and web links.

Invitation and Consultation

Communities were invited to participate initially, with a letter of invitation that provided a detailed explanation of the coastal inventory, its objectives, timelines, and the manner in which the proposed work would be carried out. The invitation made clear that an initial community consultation was essential and would take place as soon as possible after agreement had been reached.

The initial meeting included all available Inuit hunters/trappers, Government representatives, youth groups, local researchers and non-profit organizations. This event was the first opportunity for the project team to establish a presence in the community, to identify community labour/service providers, to establish a short list of potential interviewees, to assess project risks and to organize administrative procedures related to community participation. In addition, it was important to establish very early the geographic extent of Inuit movement over the land. This information would be used to prepare maps

of the proper size and scale that would later be used in the planned interviews.

Next, the project team spent a minimum of a half-day touring the area that would be considered in the interviews. In most cases, a complete tour was impossible, but at the least, it covered important fishing/hunting areas, popular tourist attractions, and cultural sites within range of the community. Often, the guide was an excellent source of information on the area and its resources, and it provided the project team with a sense of place and involvement that had continuing benefits. It also sent an important message to the community that the project team was making an effort to become familiar with the places that would later be discussed in the interviews. These outings provided important material for the initial trip, and later final reports.

Finally, by end of the initial visit the team identified dates when it would return to the community to conduct the planned interviews. This also permitted the development of a realistic schedule for project deliverables.

Service Providers

Various services were required throughout the project lifecycle. These included interpreters, translators, transcribers, printers, student interns, and local outfitters. It was important that they were identified early and, if possible, used in some capacity before interviews were underway, in order to assess competence and reliability. Establishing early contact helped to identify schedule conflicts and important deadlines.

First Steps:

- When meeting with community organizations and other knowledgeable persons, a list of people was created. Information was gathered on each candidate (e.g. availability, cost, experience, knowledge

- background). Particular attention was paid to their relationship with service providers and other members of the community. Any causes for concern were addressed immediately.
- A determination was made as to appropriate levels of remuneration, which were then used in a standard manner across all communities involved in the inventory.
- Scheduling conflicts or important deadlines that could impact the project were explored in order to prevent unwanted interruptions in the project.
- Training and guidance were provided to those who signed on; for example, interviewers and translators required instructions as to the proper use of the interview survey, interview protocols and other methodologies required during the interview process. This was normally done the day before interviews began so that the information provided was immediate and relevant.

Interviewees

Interviewees are the subject-matter experts that contribute their knowledge to the project, guided by a semi-structured interview that provokes them to draw from their experiences information about species, such as their geographic location, when they occupy those locations, their migration routes, spawning areas or nesting sites. The number of interviewees selected in a community depended on many variables; such as, availability, community size, funding, and the data quality plateau (where information return was minimal with increasing numbers of interviews).

The preliminary selection of potential interviewees was made with the advice of community organizations and local knowledgeable persons. The project team then

created a final list of interviewees who were consistent with the objectives of a coastal resource inventory. Questions asked about each included:

- the nature of their hunting experience;
- their general area of interest;
- their geographic and species familiarity;
- the manner in which they travel over the land;
- the type of gear they use to harvest wildlife;
- their status - elder, experienced youth, retired or active hunter;
- whether they could provide historical or contemporary information;
- whether their focus was primarily terrestrial or marine; and,
- the degree to which they were esteemed within their community.

The final list was first reviewed with people/organizations in the community and then by the project team. Checks were then made to determine if they had previously been interviewed by others, resulting in transcriptions, maps, or audio files. If so, the information was summarized in a word document, noting species and locations so that the information could be included in the GIS project.

The overall objective was to gather as much information as possible about each potential interviewee, to gauge their 'fit' against project objectives, while maintaining awareness of cultural sensitivities.

Once an interviewee had been confirmed then initial contact was guided using the First Contact Calling Protocol (see Appendix 8). These pages were then photocopied for archival purposes while the originals were kept nearby during the interview setup, since they

contain important contact and background information. Whenever possible the interview setup was carried out by a community member, usually the interpreter. This was always done on the assumption that that individual chosen was fully capable of clearly communicating project goals and objectives.

Interview Team

Four essential personnel, in addition to the interviewee, participated in each interview: the Interviewer, Recorder, Scientist, Translator. Whenever possible a local student intern was hired to observe the interviews and take notes, thereby providing useful insights to the team as well as gaining experience and training. All personnel contributed to the setup and takedown of the interview, including maintenance of equipment (e.g. video camera, voice recorders). The role and responsibility of each individual is outlined below:

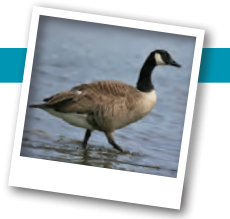
- Interviewer: responsible for posing survey questions to the interviewee via the translator (if necessary); assisting with drawing objects on map, when necessary; assigning codes to mapped items; clarifying questions; and, facilitating the overall interview process.
- Recorder: Throughout the interview, the recorder maintained a continuous written record, bridging information drawn on maps with that which was spoken; sometimes map codes were entered along with the question asked; since the Recorder was Inuktitut-speaking it was possible to provide a preliminary form of quality control during the exchanges between the interviewer, translator and interviewee; and, due to the "real time" nature of this process, this initial detailed account allowed rapid and precise data analysis well before the completion of final transcriptions and translations.

- Scientist: the scientist's role was that of an objective third party capable of focusing on the flow of the interview, identifying problems early, and beginning the process of contextualizing the data, something that proved to be very useful in both the data analysis and report writing phases; ensuring that data regarding species, abundances and location were set within an oceanographic context; and, wherever possible tried to link traditional knowledge and science in a complementary manner.
- Interpreter: the interpreter posed the Interviewer's question as precisely as possible, then translated and delivered the resulting response; clarification was often necessary to avoid unnecessary embellishment in either question or response and to encourage discussion whenever possible.
- Student Intern: local youths played an important role assisting in the interview process by also manually recording as much of the dialogue as possible around the mapping work, especially whenever questions were posed that were not part of the survey format; they also assisted the interpreter and recorder with translation. Intern and Recorder note taking were later consolidated to provide a complete record of the interview.

Interview Kit

The Interview Kit is the assemblage of materials required to conduct an interview (where all documents were available in both English and Inuktitut). Following is a list of materials and documents (most available as appendices) that together comprise an Interview Kit:

- Maps: the maps used in the interview were prepared using GIS and were constructed using freely available NTDB 1: 250 000 data. They were simple in style and included scale, latitude and longitude, lakes, rivers, contours, and key place names for orientation. Large



format maps were considerably easier to draw and print on and allowed the interviewee to see more detail over a larger geographic extent. The standard to date has been 64 inches by 42 inches. A map case was also essential, large enough to hold the blank maps and completed interviews. Folding maps was avoided as creases or tears can adversely impact their ability to be scanned later on.

- Interviewer Binder: contained an interview consent form, copies of the survey, species photos, species list/mapping codes, honorarium receipts, and service contract forms.
- Recorder Binder: contained a copy of the survey, species photos, species list and mapping codes.
- Student Intern Binder: contained a copy of the survey, species photos, species list and mapping codes, as well as a large notepad for documenting non-survey related dialogue.
- Equipment: batteries, battery chargers, user manuals, data cables, digital voice recorder, video camera with external microphone, tripod, card reader, multi-port surge protector, extension cords, markers, erasable color pencils, rubber bands, pencils, pens, tape, and other general office supplies. A computer with internet access to reference materials was helpful but not critical.
- Reference Materials: these documents included relevant research papers, species information sheets, wildlife identification books and community related information.

LEVEL 2

Level II addresses the immediate pre-interview period, the interviews, and the immediate post-interview period.

Pre-Interview

Before the interview began, the following preparations were essential:

- Attendance of the interviewee was confirmed, and transportation or assistance was provided, if needed.
- The interview kit, binders, equipment and maps were available and ready to go.
- Interview codes were entered on each page of the survey and the map sheet was coded. The interview code adhered to the following format - “Community”, “Interview Number”, and “Month and Year”, for example, “IG_3_1207” refers to Igloodik interview #3, during December, 2007. Map codes are similar, but with “Map #” placed before the interview code; for example, “Map_2 of 2_IG_3_1207” would refer to the second of two map sheets used during interview three in Igloodik during December 2007. Names were NOT written on the surveys or maps; names of interviewees were only recorded on the Consent Forms to protect privacy.

Interview

Following introductions, the consent form was reviewed with the interviewee. Once the contents were clear and understood the form was signed by the interviewee and the interview code was written on the document, along with the interviewee’s name in clear print. Assuming the interviewee consented to the use of audio and video recording, the devices were turned on.

The Recorder played an important role in the interview process. Following are some examples of those responsibilities:

- Identifying questions that were unanswered for whatever reason;
- Ensuring chart numbers and map codes were written into the spaces provided.
- Ensuring that “lines” drawn are noted as such;
- Interrupting the interview process whenever clarification was required or if some portion of a question was overlooked;
- Listening to the interview and interrupting if the translation was incorrect, communication was poor or clarity was lacking;
- Ensuring that all responses and corrections were accurately reflected in the survey;
- Ensuring that additional comments were recorded properly in allotted locations and when space was insufficient ensuring that a constant line of continuity was maintained between them and the relevant maps and map codes; and, .
- Providing guidance and assistance to student interns throughout the interview process.

The interviewer and interpreter kept close and continuous communication throughout the interview while strong eye contact was maintained with the interviewee. The language of the interviewee was used as much as possible.

The survey guides the interview process but the interviewer never hesitated to open the discussion in other directions, while still moving the process along. Interviews varied in length from 2-6 hours, but averaged approximately four hours.

Mapping was a key element of the interview process and required attention to detail and proper coding. The interviewer ensured the following:

- Separate codes were required for every area addressed and sometimes multiple codes for specific areas were needed, for example, if a location contains both arctic char and tundra swans the two codes must be affixed to that site;
- Care was taken to clarify whether the information presented was modern or historical. When some doubt existed then the year of observation was requested; and,
- Interviewees were prompted to respond, as much as possible, by drawing on the provided map as opposed to a verbal answer alone.

Post-Interview

The post-interview procedures are summarized in the following checklist:

Interviewee

- Two consent forms signed (one remained with the interviewee).
- Two honorarium receipts signed (one given to interviewee with agreement on method of payment).
- Token gift provided to interviewee.
- Points agreed to with the interviewee have been noted (e.g. provision of reports, contact information).
- Details of every interviewee (e.g. consent form information, address, and biography details) were logged into an excel file.

Translator

- Two Contract Service receipts were updated with hours worked and later signed (one given to translator). This was done at the end of all interviews, rather than after each one, but in either case it is essential to keep track of interview hours.

Maps

- Checked for labelling interview codes.
- Checked for color-coding and darkened where needed.
- Ensured that all areas drawn had codes.
- All codes checked for accuracy in style and numbering.
- Maps scanned into TIFF files and given to the person responsible for the GIS.
- Maps taped along top and bottom edges to protect them, and labelled to ensure reliable recovery once in storage.
- Maps placed in storage location.

Survey

- Interview codes were entered on every page of the survey and any additional pages. Names of interviewees were not recorded on the survey.
- Chart numbers accompanied map codes in the survey, especially if more than one map was used in an interview.
- All information on additional note pages was incorporated into the survey; by placing a check mark and the reviewer's initials on each page to indicate that the notes had been incorporated. Maps were then

reviewed for notes that may have been written directly on the map.

- Survey was checked against video/audio files and transcription.

Audio

- All audio files were properly named and stored on a computer.
- Two sets of CD/DVD copies of audio were created and labelled for each interview; one for project archives and one set to be returned to the community (typically the HTO).
- Audio files/transcriptions were reviewed and any missing information was entered into the survey and final data entry.

Video

- All video files were properly named and stored on a computer.
- Two sets of CD/DVD copies of video were created and labelled for each interview; one for project archives and one set to be returned to the community (typically the HTO).
- Videos were reviewed and missing information was entered into the survey and final data entry.

General

- All data was backed up according to protocols (see end of this section).
- Interview kit was refreshed by inserting new documents.

- A tracking document was created for each community. It records the participant's name, address, email, consent form details (e.g. whether they agreed to be video taped or not) and a brief description of the interviewee. This information can be useful later when attempting to contact an interviewee, readily access the details of their consent, or write up a biography of the person for the final report. This document can also be used to list people who were not interviewed, but recommended, names of translators or students, contact information for community organizations or any other community data.

- A tracking document was created for the final report. This was similar to a draft table of contents that allowed each report section to be tracked for completion, when it was sent for translation, when translation was complete, and finally, when it was sent to the printers for final layout. This document was very useful when compiling and finalizing the report for the community.

Transcription (optional)

- A blank MS Word document was opened and saved using the interview code followed by 'trans'; for example, "IG_4_0108_trans.doc".
- The beginning of each transcription was identified with: Interview Code, Interview Date, Interviewer Name, Duration of Transcription, Duration of Interview Transcribed, identification of all persons on the tape, along with any other general comments.
- Transcriptions were verbatim; English as English and Inuktitut translated into English. Key Inuit words were kept (un-translated) in the body of the text in Inuktitut and a glossary created to append to the transcription. This was done because some words cannot be translated well and/or they have extended

meanings that cannot be captured in the flow of the translation.

- Verbatim translations did not include irrelevant conversation; such as, meaningless cross-talk.
- Additional comments were added to a transcription using Track Changes in MS Word.
- Questions from the survey were used as they were written, as much as possible, to save time and introduce uniformity throughout the process.
- Dialogue was coded in the following way: "I-" to indicate what the Interviewer said, "E-" to indicate what the Interviewee said, "T-" for the Translator, "A-" for additional respondents on the tape (e.g. wife, son, uncle), "O-" for the Observer, and "R-" for what the Recorder said.
- Important passages were highlighted for later data analysis.

Excel Data Entry

- All data recorded on paper during the interview must be entered into an excel spreadsheet (see example template on CD). This spreadsheet should be updated after video/audio files are reviewed, and the GIS and transcription is completed. Complete the data entry as soon as possible following the completion of the interview so that if there are any remaining uncertainties concerning data then the Transcribers (if being used) should be notified so they can check for clarification when completing the transcription. This will also assist the person doing the GIS so that issues or changes can be identified early.
- Ensure that the map data and survey data correlate prior to data entry; for example, do not list four map



- codes in the survey if only one is on the chart). This check should occur immediately after the interview has been completed. To do this, each question, chart number and map code should be double-checked.
- Insert an 'NA' into all cells that were not used in each worksheet so that it is clear it was not left blank mistakenly.
- When recording months please use the month's number, followed by a comma. For example, May, June and July would be "5, 6, 7". No space is required following the commas. If entering a range of months enter "7 to 12", do not write "7-12" as this will be converted to a date in the cell.
- When recording time intervals please use the entire year, e.g. '1980-1985.' If only one year was given write out the entire year, e.g. '1987'.
- Write comments in complete sentences whenever possible as this information will/may be used in reports later on. Put quotation marks around comments that were word-for-word what the interviewee said.
- In cases where a husband and wife are interviewed together, distinguish information about a husband or wife by prefixing the data entered with a "H:" or a "W:". For example; H: born in Arviat; W: born in Rankin Inlet.
- Wherever species names are given in Inuktitut be sure to update the Species List for the project with this information.

Data Backup and Archiving

- Electronic File Back-up: All project related files were backed up in two locations (e.g. Desktop and external hard drive or network) onsite and one offsite (e.g.

external hard drive). In addition, CDs and DVDs were burned as hard copy backups that were included in archive boxes. Note: electronic files, especially audio and video, take up a great deal of space so forethought was given to acquiring the necessary storage capacity (e.g. video files can be 10 to 100 Gigabytes).

- All project documents were copied and stored in an archive box for each community. Originals were stored in the project office.
- Team members were diligent about signing in and out all materials from any storage location. Whenever possible, sign out copies of materials, not originals.

LEVEL 3

The GIS component of a coastal resource inventory is time consuming, technical and must be completed prior to writing the bulk of the final report. Data drawn on the maps must be organized, scanned, geo-referenced, digitized, queried, formatted and exported. The personnel responsible for the GIS work must be trained in the use of the software; otherwise the work will have to be contracted out as it is highly technical. This part of the guide is an outline of what was done to complete the GIS work, but it is also written in a way that it could be followed step-by-step to replicate it. Note that all of the GIS guide that follows is subject to change and is relevant to the coastal inventory and users of ArcGIS 9.3 (later versions of software may not comply).

Getting Started

The maps, surveys and excel data entry is critical to have completed and checked for accuracy before starting the GIS component. The excel data entry in particular is very important since it contains all the data that will become associated with the GIS project. The excel file outlines how many objects are to be drawn for each interview, the necessary labels that will be associated with each object and is also the source for the most complete and up to date assemblage of interview data.

The following checklist will assist in getting the GIS project underway:

- Compile all notes from the project team into the survey document. Notes can also often be made on the paper map itself so ensure that the map is also checked and include any notes in the survey document.
- Double check that the map codes in the paper survey match up with the codes on the interview maps. Address discrepancies and discuss issues with the

project team. Catching mistakes and ensuring the survey data is complete at this stage will save a lot of time in later stages.

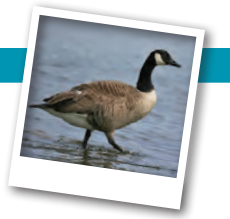
- Using the updated survey document, complete the excel data entry for each interview. The template provided on the CD provides details on what data goes into each column. Ensure that all fields are filled in. Where no data exists enter "na".
- Print the excel data entry for reference when mapping. Check items off as they are digitized and make note of any discrepancies.
 - Note: After mapping is completed update the data entry with any notes/changes that were written on the printed worksheets. For example, if an object was discovered on the map that was not included in the data entry then it must be added to the excel data entry as well. Or if a map code was present in the data entry that did not exist on the map, ensure it is deleted or clarify with the project team.

Digitizing and Exporting Data

Every object drawn during an interview must be digitized into a GIS project. The data is then organized into groups (e.g. by species), formatted and exported as a PDF image to be analyzed and included in the final report. The following is a guideline, listed in chronological order, for how this can be achieved.

- Scan the map into a TIFF file format.
- Create a new GIS project (this should be done for each community's data).
- Set data source pathways to be relative.

- Set the Dataframe Properties for the appropriate coordinate system.
- Import each scanned map image into the GIS project and select 'yes' when prompted to build pyramids.
- Ensure that each imported image is assigned a compatible coordinate system to the Dataframe.
- Georeference the TIFF files by creating control points; this must be done for every map scanned.
- Modify the coordinate system, if necessary.
- Using ArcCatalog, create two shapefiles; one for polygons and one for lines. Migration routes, for example, are typically digitized into the shapefile for lines and all other areas drawn will be digitized into the shapefile for polygons. This is essential for being able to perform the 'join' function with the excel data entry later on.
 - Note! Add the 'Label_Num' and 'Map Code' attribute field to each shapefile; make the fields a text field of at least 50 characters.
- Add the shapefiles to the GIS project.
- Select the target shapefile and digitize the objects drawn in each interview's TIFF file. It is recommended to do all polygons first and then lines.
 - Try to digitize lines in the direction of their arrows, if applicable, as this makes setting the line style easier later on.
 - It is helpful to digitize all objects at the same scale (e.g. 1:250,000) and to keep the lines smooth by using enough vectors to capture the true shape of the object to be drawn.
- After an object is drawn, right click on it and enter the Label Number ('Label_Num') and Map Code (Map_Code) into the available attribute field. These fields must have data entered so that a Join can be performed later on with the excel data entry.
- Once all objects are digitized, review the Attribute tables for both the polygons and lines. Compare the data with the data entry that was printed off and ensure that map codes are entered in the exact same way. For example, Char_1 in the attribute table is Char_1 in the data entry. Address all discrepancies and update the excel data entry or the attribute tables as needed.
- Revisit the Excel data entry and do the following:
 - Modify the original excel data entry so that it is in a format that can be used for joining in the GIS project.
 - Delete all columns before the one labelled 'Res_Num' and after the first one labelled 'Comments'. Leaving columns: Label_Num, Object_Num, Inter_Code, Gen_Com, Chart_Num, mapcode, Species, Category, Pres_Hist, Abund, Year, Months, and Comments.
 - Delete all irrelevant or blank rows.
 - Delete worksheets that do not have mapping codes in them; leaving only Life History, Fish, Invertebrates, Marine Mammals, Marine Plants, Birds, and Special Places
 - Consolidate the remaining worksheets into one worksheet; do this in order by category, not interview (e.g. Life History first, followed by Fish).
 - Save the modified file as "GIS Data_Polygons"
- Very carefully check every record in the file to ensure that numbering and spelling is correct and that all fields have been filled out properly. If any data is missing (e.g. a Category or Label Number) it must be filled out before proceeding; otherwise all other use of the data will be affected.
- Create new excel files by making two copies of the "GIS Data_Polygons" file: rename one to "GIS_Everywhere" for data coded with an appended 'e' indicating that the species are found everywhere; and the other "GIS Data_Lines" for data that is line data.
- Open each of the Excel files and delete all irrelevant data from them. In the "GIS Data_Polygons" file remove all line data and data coded as everywhere. In the "GIS Data_Lines" file remove all data except those areas coded as migration routes or lines. In the "GIS_Everywhere" file remove all data that does not have an "e" in the mapping code.
- Save the line and polygon Excel files as Comma Separated Value files (.csv). This format will be used to import into the GIS project.
- Keep the "GIS_Everywhere" file for use later.
- Use the Join/Relate feature to join the data in the excel data entry for polygons with the polygon shapefile in the GIS project. Do the same for the lines data entry and the lines shapefile.
 - Make sure the shapefile attribute table and the excel file match up and have two fields in common (Map Code and Label Number). Map Code is best to use for a join, but make sure the names are written differently (mapcode in excel, Map_Code in GIS attribute table) so that when the tables are joined the data is not overwritten, it is appended.
- Add the .csv file to the GIS project by right clicking on the target shapefile and selecting Join. In order of appearance in the data window: choose 'Map_Code', choose the appropriate 'CSV' file, choose 'mapcode', and press 'OK'. The join is temporary at this stage.
- To finalize the join: right click on the target shapefile, Export the data, click OK, and say 'Yes' when asked to add the exported data as a new Layer. This new layer is now the file to be used; the original one can be removed from the GIS project (but do not delete it).
- Open the attribute table for the new shapefile and, after checking the map codes, delete the map code column you don't need (i.e. the incomplete column). Repeat this procedure for the excel data entry for lines and the line shapefile in the GIS project.
 - If there are codes that are not linked to data, review the excel data entry and even the maps to address any discrepancies.
 - If data collected was coded with a "u", representing "unsure" data, then decide if this data will be included in the final report. If it is not going to be included, delete each record now from the attribute table for the polygon and line layers so that it is no longer included in any future data processing. Otherwise, move on to the next step.
- Prior to querying out data to build maps from it is helpful to create a list of all the species mentioned and also to create a preliminary outline for how many maps will be created and with what data on them for the final report. This is referred to as creating the "Images List".



- Refer to the three excel data entries that were created (polygons, lines and everywhere) and compile a list, organized by category, of all the species (or data types) mentioned. For example, a list of fish may be made up of Char, Whitefish, Bull Trout, Lake Trout and Land Locked Char.
 - Now organize the list into groups that are most probably going to be represented together in the final report. For example, group Trout together, or put all Sandpipers in a group under birds.
 - Note which species are also listed as “everywhere”. For example, a species may be drawn by 9 of 10 interviewees, but the 10th interviewee codes the species as being “everywhere” they travel. Place an asterisk or note next to this species so that it is clear that it has also been coded as “everywhere”. This helps in ensuring that the text associated with each image in the final report will include data coded as being “everywhere”.
 - In some cases; for example, with Canada Geese, there may be no objects drawn and every participant codes the information as being “everywhere”. Be sure to note these instances as “everywhere only”. Species or data that is referenced as “everywhere only” can still be added to the final report images by creating empty shapefiles of Point type and ensuring that reference is made to the data via the legend and also the image caption.
- Query the polygon file for data that will be represented in the final report; use the Images List, created in the last step, as a guide. For example; query out all Char data and save it as a new layer so that data set can be used to create the final image of all the Char areas in the report. Repeat these queries and layer creation until all the data subsets have been addressed. Data subsets could be “All Char”, “All Historic Clam Locations”, “All Present Denning sites for Polar Bear”, etc. Each data subset created will become part of a map in the final report.
 - Add the necessary base layers to the GIS project. These can come from many sources; the inventory used NTS map sheet data available on the NRCAN (Natural Resources Canada) website. Base layers are the ‘background’ upon which the interview data is displayed.
 - Layout each image, again using the Images List as a guide and modify as needed. In layouts be sure to set the symbology (color, line width etc.), label each object, check titles, legends, scale, data source reference, geographic extent, etc. After each image’s layout is complete it is convenient to save the project as a new project with the same name as the data subset (e.g. All Char_Kugluktuk). Doing so allows the image to be opened and edited later on without having to revisit all the layout tasks.
 - When symbolizing data the important thing is to keep color coding consistent; for example, so that Soft Shell Clams are the same color on all maps showing Soft Shell Clams. This can be a challenge when it comes to the birds, so a suggestion is to group the birds by type and color code within the subcategories (e.g. Sandpipers).
 - The scale and geographic extent used in exported images for the report is a trade off between consistency of the image produced and the detail that can be shown on each image. This can be decided by the project team based on the needs of the report.
 - Use Extent Rectangles to zoom in on areas that need more scrutiny or for areas that are heavily congested with data.

- Before exporting images, check the following: image title, labels, legend, line widths, object colors, legend title, legend contents, scale, scale bar, data source, and geographic extent. Also ensure that the data associated with the image is complete. For example, if 9 char areas are visible, but there are 11 in the attribute table then address these discrepancies. Some areas may be overlapping making them seem invisible on the map.

LEVEL 4

Delivering the report and associated project results back to the community was a ceremonial event that included as many stakeholders as possible (e.g. public officials, interviewees, local government, youth etc.). A formal invitation was made and corresponded with delivery of the report, in both English and Inuktitut, along with supporting project materials (e.g. archive materials) to the HTO.

This can be an excellent opportunity to:

- Request letters of support from key groups for future use which can be included in the project files.
- Address any outstanding project budget or financial details.



APPENDIX 5 NUNAVUT COASTAL RESOURCE INVENTORY SURVEY

Interview code: _____
Interview date: _____
Interview location: _____

This project has been initiated by the Fisheries and Sealing Division. The members of our team here today are _____ (introduce interview team).

Our project is a mapping project to take an inventory of coastal and marine resources. Coastal resources are the animals and plants that live near the coast, on the beaches, on and around islands, above and below the surface of the ocean, above and below sea ice, and on the sea floor. To do this inventory we will be asking you about the location of animals that you know about, where you see them, and what time of year you see them. We will be using different colored pencils to draw on the maps and for each area drawn we will be asking a series of questions.

All of the data we collect here today will come back to the community for use by the community. It will also help government identify economic development and conservation opportunities that can be explored with yourself and the community.

During the interview, there will be regular breaks, about every 20 minutes or so, but feel free to ask for a break at any time.

Do you have any questions before we begin?

Yes.....1

No.....2

Comments:

Interview Start Time: _____

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SECTION 1

Participant History

To begin with we would like to ask you several questions about yourself and your fishing and hunting background.

1. **What year were you born?** _____
2. **Where were you born?** [encourage use of map]_____
3. **Where did you grow up?** [encourage use of map]_____
4. **How long have you lived in** [community name]?_____
5. **How old were you when you started fishing and hunting?** _____
6. **Are you still actively fishing and hunting?** [seasonally or year-round]
 Yes...1 No...2 [go to next question]
 Comments: _____
7. **(optional) If No, when did you stop fishing and hunting** [year]? _____
8. **Can you list all of the animals that you fish and hunt?**
 [since year 2000; recently; capture which ones are commercially harvested]
 Yes...1 No...2
 Comments: _____
9. **Are there any animals that you don't fish and hunt anymore? If so, why?**
 [is it because you can't, you don't want to, or you are not allowed to]
 Yes...1 No...2 Not Sure...3 Skipped...4
 Comments: _____

SECTION 2

Travel Routes, Familiar Areas, Archeological Sites/Camp Sites/Other

10. **Can you circle the area(s) on the map that you are most familiar with** (areas that you have spent a lot of time in, travel routes, hunted frequently, feel you know better than any other areas)?
 Yes...1 No...2 Not Sure...3 Skipped...4
 Chart # Map Code Type Comments

11. **Can you show us the locations of archeological sites** (traditional sites, gathering places, camp sites, or other sites of importance to you and/or your community? [e.g. places where you find good Ulu making material, places with good soap stone, sod houses, rock houses, tenting places, anchoring places]
 Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please draw the area(s) on the map and tell us about each place.
 Chart # Map Code Type Comments



SECTION 3

Species

Now we are going to talk about different animals. There are five parts to this section: fish, invertebrates, marine mammals, birds, and marine plants. I am going to show you photos and ask you to tell me which species you recognize, what you call them and to show me where you see them and at what time of year. I will also be asking you about areas where you find a lot of each species, their spawning areas, nursery areas and possible migration routes.

FISH

12. I'm going to show you some photos of fish. Please let me know if there is any that we do not have a picture of.

LIST OF SPECIES KNOWN:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Comments: _____

13. Can you identify areas where these animals are found in particularly high abundance? Areas where you find more than anywhere else? [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
_____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

14. Can you identify areas where these animals are spawning/nesting? These are areas where animals go to reproduce or have their babies. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
_____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

15. Can you identify nursery areas for these animals? These are areas where animal go to raise their young or where young animals congregate until they are adults/older. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
_____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

16. (optional) Do these animals migrate? If they do, can you draw arrows indicating the direction of their migration and at what time of year? [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
_____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

17. Has anything changed about your harvests (decreased, increased or remained consistent) over the years?

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, why do you think it has changed?

Comments _____ Why _____

18. Has anything changed about the animal itself? Do they taste different or have a different texture; are they smaller, bigger, or skinnier? Are they producing more or fewer young?

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, why do you think they have changed?

Comments Why

19. Do you think there is enough of any of these animals that they could be used to create income or jobs for people in your community? Or is there only enough for personal use?

Yes...1 No...2 Not Sure...3 Skipped...4

Comments Why

20. Would you want to see any of these animals used in a commercial way?

Yes...1 No...2 Not Sure...3 Skipped...4

If not, why?

Comments Why

21. Are there other animals commonly found in these areas?

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

22. Can you describe the habitat that these animals are found in (sandy bottom, high cliffs, high current, islands etc.). [link map codes already used to descriptions of habitat, or use codes]

Yes...1 No...2 Not Sure...3 Skipped...4

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

23. Are there any that we have not asked you about? Describe them/tell us about it.

Yes...1 No...2 Not Sure...3 Skipped...4

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

24. Are you seeing any different types of these animals now than you used to see? Are there any that you have never seen before? Describe them/tell us about it.

Yes...1 No...2 Not Sure...3 Skipped...4

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

INVERTEBRATES

25. I'm going to show you some photos of invertebrates. Please let me know if there is any that we do not have a picture of.

LIST OF SPECIES KNOWN:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
-------	-------	-------	---

_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
-------	-------	-------	---

_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
-------	-------	-------	---

_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
-------	-------	-------	---

_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
-------	-------	-------	---

_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
-------	-------	-------	---

_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
-------	-------	-------	---

Comments



26. **Can you identify areas where these animals are found in particularly high abundance? Areas where you find more than anywhere else?** [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

27. **Can you identify areas where these animals are spawning/nesting? These are areas where animals go to reproduce or have their babies.** [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

28. **Can you identify nursery areas for these animals? These are areas where animal go to raise their young or where young animals congregate until they are adults/older.** [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

29. **(optional) Do these animals migrate? If they do, can you draw arrows indicating the direction of their migration and at what time of year?** [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

30. **Has anything changed about your harvests (decreased, increased or remained consistent) over the years?**

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, why do you think it has changed?

Comments _____ Why _____

31. **Has anything changed about the animal itself? Do they taste different or have a different texture; are they smaller, bigger, or skinnier? Are they producing more or fewer young?**

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, why do you think they have changed?

Comments _____ Why _____

32. **Do you think there is enough of any of these animals that they could be used to create income or jobs for people in your community? Or is there only enough for personal use?**

Yes...1 No...2 Not Sure...3 Skipped...4

Comments _____ Why _____

33. **Would you want to see any of these animals used in a commercial way?**

Yes...1 No...2 Not Sure...3 Skipped...4

If not, why?

Comments _____ Why _____

34. **Are there other animals commonly found in these areas?**

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart # Map Code Species Comments

35. **Can you describe the habitat that these animals are found in (sandy bottom, high cliffs, high current, islands etc.). [link map codes already used to descriptions of habitat, or use codes]**

Yes...1 No...2 Not Sure...3 Skipped...4

Chart # Map Code Species Comments

36. **Are there any that we have not asked you about? Describe them/tell us about it.**

Yes...1 No...2 Not Sure...3 Skipped...4

Chart # Map Code Species Comments

37. Are you seeing any different types of these animals now than you used to see? Are there any that you have never seen before? Describe them/tell us about it.

Yes...1 No...2 Not Sure...3 Skipped...4
 Chart # Map Code Species Comments

MARINE MAMMALS

38. I'm going to show you some photos of marine mammals. Please let me know if there is any that we do not have a picture of.

LIST OF SPECIES KNOWN:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Comments

39. Can you identify areas where these animals are found in particularly high abundance? Areas where you find more than anywhere else? [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

40. Can you identify areas where these animals are spawning/nesting? These are areas where animals go to reproduce or have their babies. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

41. Can you identify nursery areas for these animals? These are areas where animal go to raise their young or where young animals congregate until they are adults/older. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

42. (optional) Do these animals migrate? If they do, can you draw arrows indicating the direction of their migration and at what time of year? [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:

Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

43. Has anything changed about your harvests (decreased, increased or remained consistent) over the years?

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, why do you think it has changed?

Comments _____ Why

44. Has anything changed about the animal itself? Do they taste different or have a different texture; are they smaller, bigger, or skinnier? Are they producing more or fewer young?

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, why do you think they have changed?



Comments Why

45. **Do you think there is enough of any of these animals that they could be used to create income or jobs for people in your community? Or is there only enough for personal use?**

Yes...1 No...2 Not Sure...3 Skipped...4

Comments Why

46. **Would you want to see any of these animals used in a commercial way?**

Yes...1 No...2 Not Sure...3 Skipped...4

If not, why?

Comments Why

47. **Are there other animals commonly found in these areas?**

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

48. **Can you describe the habitat that these animals are found in (sandy bottom, high cliffs, high current, islands etc.).**

[link map codes already used to descriptions of habitat, or use codes]

Yes...1 No...2 Not Sure...3 Skipped...4

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

49. **Are there any that we have not asked you about? Describe them/tell us about it.**

Yes...1 No...2 Not Sure...3 Skipped...4

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

50. **Are you seeing any different types of these animals now than you used to see? Are there any that you have never seen before? Describe them/tell us about it.**

Yes...1 No...2 Not Sure...3 Skipped...4

Chart #	Map Code	Species	Comments
---------	----------	---------	----------

MARINE PLANTS

51. **I'm going to show you some photos of marine plants. Please let me know if there is any that we do not have a picture of.**

LIST OF SPECIES KNOWN:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Comments

52. **Can you identify areas where these animals are found in particularly high abundance? Areas where you find more than anywhere else? [these can be areas they have already identified]**

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

53. Can you identify areas where these animals are spawning/nesting? These are areas where animals go to reproduce or have their babies. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:
 Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

54. Can you identify nursery areas for these animals? These are areas where animal go to raise their young or where young animals congregate until they are adults/older. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:
 Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

55. (optional) Do these animals migrate? If they do, can you draw arrows indicating the direction of their migration and at what time of year? [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:
 Chart # Map Code Year Months
 _____ _____ _____ Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

56. Has anything changed about your harvests (decreased, increased or remained consistent) over the years?

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, why do you think it has changed?
 Comments _____ Why

57. Has anything changed about the animal itself? Do they taste different or have a different texture; are they smaller, bigger, or skinnier? Are they producing more or fewer young?

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, why do you think they have changed?
 Comments _____ Why

58. Do you think there is enough of any of these animals that they could be used to create income or jobs for people in your community? Or is there only enough for personal use?

Yes...1 No...2 Not Sure...3 Skipped...4
 Comments _____ Why

59. Would you want to see any of these animals used in a commercial way?

Yes...1 No...2 Not Sure...3 Skipped...4
 If not, why?
 Comments _____ Why

60. Are there other animals commonly found in these areas?

Yes...1 No...2 Not Sure...3 Skipped...4
 If yes, please list:
 Chart # Map Code Species Comments

61. Can you describe the habitat that these animals are found in (sandy bottom, high cliffs, high current, islands etc.). [link map codes already used to descriptions of habitat, or use codes]

Yes...1 No...2 Not Sure...3 Skipped...4
 Chart # Map Code Species Comments

62. Are there any that we have not asked you about? Describe them/tell us about it.

Yes...1 No...2 Not Sure...3 Skipped...4
 Chart # Map Code Species Comments

63. Are you seeing any different types of these animals now than you used to see? Are there any that you have never seen before? Describe them/tell us about it.

Yes...1 No...2 Not Sure...3 Skipped...4
 Chart # Map Code Species Comments



BIRDS

64. I'm going to show you some photos of birds. Please let me know if there is any that we do not have a picture of.

LIST OF SPECIES KNOWN:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Comments

65. Can you identify areas where these animals are found in particularly high abundance? Areas where you find more than anywhere else? [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

66. Can you identify areas where these animals are spawning/nesting? These are areas where animals go to reproduce or have their babies. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

67. Can you identify nursery areas for these animals? These are areas where animal go to raise their young or where young animals congregate until they are adults/older. [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

68. (optional) Do these animals migrate? If they do, can you draw arrows indicating the direction of their migration and at what time of year? [these can be areas they have already identified]

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please list:

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

69. Has anything changed about your harvests (decreased, increased or remained consistent) over the years?

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, why do you think it has changed?

Comments _____ Why

70. Has anything changed about the animal itself? Do they taste different or have a different texture; are they smaller, bigger, or skinnier? Are they producing more or fewer young?

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, why do you think they have changed?

Comments _____ Why

71. Do you think there is enough of any of these animals that they could be used to create income or jobs for people in your community? Or is there only enough for personal use?

Yes...1 No...2 Not Sure...3 Skipped...4

Comments _____ Why

72. Would you want to see any of these animals used in a commercial way?

Yes...1 No...2 Not Sure...3 Skipped...4

If not, why?

Comments _____ Why



Section 5

Other Reason

Now we are going to ask you about areas that are important to you for any other reason than we have already discussed. These areas could be scenic areas, areas you consider particularly beautiful or pristine (e.g. waterfall, view, secluded).

78. Do you know of areas like these?

Yes...1 No...2 Not Sure...3 Skipped...4

If yes, please draw the area(s) on the map, tell us about them, and tell us what months of the year these areas have a lot of different animals in them.

Chart #	Map Code	Year	Months
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
_____	_____	_____	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Comments

SECTION 6

Economic Development

List of types of businesses or economic development to guide discussion:

- **Guiding: camps, fishing, military, transportation, training, capacity building, knowing the land**
- **Tourism: cultural, landscape, wildlife**
- **Commercial Fishery: infrastructure (e.g. Turbot fishery)**
- **Small Business: local harvest (e.g. clams), crafts**
- **Military: northern rangers**
- **Climate Change/Water Quality etc.: environmental monitoring activities**
- **Education: teachers, youth programs**
- **Mining**
- **Oil and Gas**

79. Describe what the infrastructure is currently like in the community as it relates to the marine environment (e.g. wharves, boats, storage, anchoring sites, freezers).

80. What infrastructure do you think is needed or could be improved in order for your community to continue current hunting, fishing and commercial activities?

81. What do you think would have economic development potential in your community? What are some of your ideas?

82. Do you think Tourism would be a good business to have in your community? Tell us what you think about Tourism.

Yes...1 No...2 Not Sure...3 Skipped...4

SECTION 7

Change and the Future

- 83. Have there been any changes you could discuss that you are concerned about? Change can be related to the animals or your community; such things as climate change, pollution, erosion, sea ice, community, economy or quality of country food.

- 84. How have these changes impacted you and your community?

- 85. What do you think needs to be done about those changes that have had a negative impact? (e.g. erosion, climate change)

- 86. What would you like to see for the future of your community and the animals in the area?

- 87. What concerns do you have about increasing marine transportation? [impacts of ballast water, emissions, garbage, shipping lanes, construction of ports, noise pollution, ice break-up]

Closing Questions

Before we finish, we would like to find out what you think about this kind of research and we would like to give you the opportunity to make any further comments.

- 88. Do you have any questions, comments, or suggestions for us about this interview? (Y/N)

- 89. Is there anything that you would like to discuss that we have not already covered? (Y/N)

- 90. Have you ever done an interview like this before? (Y/N)

- 91. Did you enjoy the interview? (Y/N)

Time Interview Completed: _____

(optional) Time and Date of Second Appointment _____



APPENDIX 6 SPECIES LIST AND MAPPING CODES

The list is divided into fish, invertebrates, marine mammals, marine plants, and birds (note that each division is further separated by a higher level of classification). Not all species are asked about in every community. The information for each species includes the scientific name, common English, Inuktitut (in roman

orthography and syllabics) and Inuinnaqtun names, mapping code and helpful notes. The purpose of the list is to assist during our research and community interviews. This means that all possible names, and sometimes descriptions, of a species are included to make correct identification in any given community more likely. The list

continues to grow and be updated, with primary sources of information ranging from individual interviewees to government publications, books, and independent consultants. Hopefully, some of the complications of regional language differences can be resolved in this way. As a work in progress, effort is made on an on-going

basis to maintain an up-to-date and thorough list; fixing gaps, in terms, spelling and information. Please also refer to Appendix 7 for photos of each species represented in the list.

NUNAVUT COASTAL RESOURCE INVENTORY: SPECIES LIST

*Some species are missing Inuktitut/Inuinnaqtun names

FW= Fresh Water
SW= Salt Water

SARA = Department of Fisheries and Oceans. Aquatic Species at Risk.
COSEWIC = Committee on the Status of Endangered Wildlife in Canada (COSEWIC).
IUCN = International Union for Conservation of Nature (IUCN).

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
FISH							
SQUALIFORMES	DOGFISH SHARK						
<i>Somniosus microcephalus</i>	Greenlandic Shark	Δᶜᵇᵇᶜᶜᶜᶜᶜᶜᶜᶜ; Δᶜᵇᵇᶜᶜᶜᶜᶜᶜᶜᶜᶜ	Iqalukjuaq; Ekalugssuaq; Ekalugssup piara; Eqalugssuaq; Eqaluksuaq; Eqalukuak; Eqalusuaq; Iqalugjuaq; Iqalujjuaq; Iqalukuak	Requin du Groenland, laimargue	Iqalugyuaq	GS	SW; IUCN–Near Threatened.
<i>Centroscyllium fabricii</i>	Black Dogfish	???	???	Aiguillat noir	???	BD	SW
RAJIFORMES	SKATES						
<i>Amblyraja hyperborea</i>	Arctic Skate	Γᵀᵇᵇ	Mitiq	Raie boréale	Iqaluk	Skate	SW
<i>Amblyraja radiata</i>	Thorny Skate						SW

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Coregonus autumnalis</i>	Arctic Cisco	Δ ^ᑦ ᑲᑲ ^ᑲ	Iqaluk; Kakatak; Kapisilik; Kraaktak; Qaqtak	Cisco arctique	Kapihilik	ArcC	FW/SW; May find near Kugluktuk and probably confused with least Cisco; Known to occur in the Queen Maud Gulf, Viscount Melville and Lancaster Sound Ecozones.
<i>Coregonus nigripinnis</i>	Blackfin Cisco	???	???	Cisco à nageoires noires	???	BfC	FW; Possibly only northern Ontario and Manitoba. Not known in Nunavut.
<i>Prosopium cylindraceum</i>	Round Whitefish (Frost Fish)	ᑦᑲᑲᑲᑲ ^ᑲ ; ᑲᑲᑲᑲ ^ᑲ ; ᑲᑲᑲᑲ ^ᑲ	Milugiaq; Kavisilik; Kapisilik; Kavasilik; Okeugnak; Osungnak	Ménomini rond	Kigalik; Kaimalluriktut Kapihiliit	RWh	FW
<i>Prosopium williamsoni</i>	Mountain Whitefish	ᑲᑲᑲᑲ ^ᑲ	Pikuktuuq	Ménomini des montagnes	Pikuktuk; Mayuqqami; Hiuryuktuut; Mayuqqamiuttat Kapihilik	MWh	FW; Not known in Nunavut, but reported by interviewees.
<i>Stenodus leucichthys</i>	Inconnu	???	Si; Si-airryuk; Sierak; Sii; Teirark; Tiktalerk	Inconnu	Anakhiik; Aanakhiiq	Inc	FW/SW; Should not occur in study area Only known to occur in the Beaufort Sea-Amundsen Gulf Ecozone
<i>Thymallus arcticus</i>	Arctic Grayling	ᑲᑲᑲᑲᑲ ^ᑲ	Sulukpaugaq	Ombre arctique	Hulupaugaq	ArcG	FW
CYPRINIFORMES	SUCKERS						
<i>Catostomus commersoni</i>	White Sucker	ᑲᑲᑲᑲᑲ ^ᑲ	Quqsupuq	Meunier noir, mullet	Kapihilik	Wsu	mostly FW; Not known in Nunavut. Reported to be seen occasionally in Kugluktuk area.
<i>Catostomus catostomus</i>	Longnose Sucker	ᑲᑲᑲᑲᑲ ^ᑲ	Qusujuq; Quusujuuq	Meunier rouge	Miluqiak; Quhuyuq	Lsu	mostly FW
<i>Couesius plumbeus</i>	Lake Chub	???	???	Méné de lac	Hiuryuktuut	LCh	FW; A large minnow, likely absent from entire study area.



SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
OSMERIFORMES	SELTS						
<i>Mallotus villosus</i>	Capelin	Δ ⁶ ᑕᑭᑦᑲ; Δ ⁶ ᑕᑭᑦᑲᑦ	Igligaaq (Baffin); Iglinnaq (Chesterfield); Quliiligaq; Amagiak; Angmaggeuck; Angmagsaat; Angmagsak; Anmugrun; Axmagaiak; Holili-gah; Ko le le kuk; Nulilighuk; Qoliiligaq; Qulilirraq; Igliraq	Capelan, capelin	Angmagiaq	Cape	FW/SW
<i>Osmerus mordax</i>	Rainbow Smelt	Δ ⁶ ᑲᑭᑦᑲ	???	Éperlan, éperlan arc-en-ciel, éperlan de lac	Iqaluk	RBS	FW/SW
CULPEIFORMES	HERRINGS						
<i>Clupea harengus</i>	Atlantic Herring	ᑲᑭᑦᑲᑦ	Kapisilik	Hareng, hareng atlantique	Angmagiaq; Kapihilik	AHerr	SW; Not known in Nunavut, but reported by interviewees.
<i>Clupea pallasii</i>	Pacific Herring	ᑲᑭᑦᑲᑦ	Kapihilik	Hareng du Pacifique	Kapihilik	PHerr	SW; Not known in Nunavut, but reported by interviewees.
PERCOPSIFORMES	TROUT-PERCHES						
<i>Percopsis omiscomaycus</i>	Trout-perch	Δ ⁶ ᑲᑭᑦᑲᑦ	Iqalualaaq	Omisco	Hiuryuktuut	TP	FW; Not known in Nunavut.
ESOCIFORMES	PIKES						
<i>Esox lucius</i>	Northern Pike	ᑭᑭᑦᑲᑦ	Siggulik; Siulik; Idlulukak; Ihok; Kikiyuk; Kiqyoq; She; Sheoak; Siilik; Siolik; Siulik; Siun; Sjulik; Tchukvak	Brochet du Nord, grand brochet	Hiulik	NP	FW
GASTEROSTEIFORMES	STICKLEBACKS						
<i>Pungitius pungitius</i>	Ninespine Stickleback	Δ ⁶ ᑲᑭᑦᑲᑦ; ᑲᑭᑦᑲᑦ; ᑲᑭᑦᑲᑦ	Kakilasak; Kakelashuk; Kakidlautidlik; Kakilahaq; Kakilasak; Kakilisak; Kakilishek; Kakilusuk; Kakiva; Kakkilasak; Natagnak	Épinoche à neuf épines	Iqalugaq	NStb	Very small fish
<i>Gasterosteus aculeatus</i>	Threespine Stickleback	Δ ⁶ ᑲᑭᑦᑲᑦ	Kakilasak	Épinoche à trois épines	Iqalugaq	TStb	FW/SW; Chesterfield Inlet only – very small fish; Known to occur in the Queen Maud Gulf, Baffin Bay-Davis Strait Nearshore and the High Arctic ecozones.
MYCTOPHIFORMES	LANTERNFISHES						
<i>Benthoosema glaciale</i>	Glacier Lantern Fish	Δ ⁶ ᑲᑭᑦᑲᑦ	Aulaqiujaq; Kapisalingoak; Kapisilik; Keblernak; Mikiapic kapisilik	Lanterne glaciaire	Iqaluk	GLF	SW

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
ANNELIDA	WORMS						
<i>Chaetopterus variopedatus</i>	Parchment Worm	ᑎᓂᓂᓂᑦᑦᑦᑦᑦ ᑦᑦᑦᑦᑦᑦ	Tinnirmiuq Qupirruq	Ver à tube de parchemin	Imarmaiuttat Nuulaittut Kumaruit	PWorm	
<i>Tomopteris helgolandica</i>	Plankton Worm	ᑕᑦᑦᑦᑦᑦᑦᑦ ᑦᑦᑦᑦᑦᑦᑦᑦ ᑕᑦᑦᑦᑦᑦ	Imarmiutaq Nuugunnangittut Imminik	Ver planctonique	Angmagiaq	PLW	
CNIDARIA	SEA ANENOMES AND JELLYFISH						
<i>Actinaria</i>	Sea Anemone	ᑕᑦᑦᑦᑦ	Itiq	Actinie, anémone de mer	Itiq; Puuqaluaq	San	
<i>Scyphozoa</i>	Jellyfish	ᑕᑦᑦᑦᑦᑦᑦᑦᑦ	Ikpiarjujaq; Nuvaliq; Nuvaqqiq	Méduse	Haittuq; Itquyaq	Jf	
OTHER: CHAETOGNATHA, CTENOPHORA, PORIFERA	WORMS, CTENPHORES AND SPONGES						
<i>Chaetognath</i>	Arrow Worm	ᑦᑦᑦᑦᑦᑦ	Saittuq	Chétognathe	Quipirruq	AWorm	
<i>Ctenophora</i>	Ctenophore	???	Ippiarjuujaq	Cténophores, cténaires	???	Ct	Many different types. First mentioned in Arctic Bay.
<i>Neosperiopsis rigida</i>	Orange Finger Sponge	ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ	Aggajaannguaq	Éponge digitée	Algauyaq	FS	
MARINE MAMMALS							
URSIDAE	BEARS						
<i>Ursus maritimus</i>	Polar Bear	ᑕᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦ	Nanuq; Aatiqtaq; Nanualaaq; Atiqtalik; Angujjujaq	Ours blanc, ours polaire	Nanuq	PB	COSEWIC – Special Concern; IUCN- Vulnerable.
PINNIPEDS	WALRUS, SEALS AND SEA LIONS						
<i>Odobenus rosmarus</i>	Walrus	ᑕᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ	Aiviq; Aivialaaq; Isaugaq; Nukatugarjujaq; Nukatugaq; Tingmiqti; Timmiqti; Uvingiajuq; Qirnaluk	Morse	Aiviq	Wal	
<i>Phoca hispida</i>	Ringed seal	ᑕᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ	Natsiq; Nattiq; Miqquqtulik; Natsiaq; Nattiaq; Paannguliaq; Natsiaviniq; Nattiaviniq; Piviniq; Natsialik; Nattialik; Nuniq; Tiggaq; Miqqiaq; Mamaaqtuq; Najanaq	Phoque annelé	Natiinat; Nattiq	RS	
<i>Phoca groenlandica</i> OR <i>Pagophilus groenlandicus</i>	Harp seal	ᑕᑦᑦᑦᑦᑦᑦᑦᑦ	Qairulik	Phoque du Groenland	Qairulik	HS	
<i>Erignathus barbatus</i>	Bearded seal	ᑕᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑕᑦᑦᑦᑦᑦᑦᑦᑦᑦ	Ugjuk Tirilluk; Tirigluk; Tiriglaaq; Ugjugalaaq	Phoque barbu	Ukyuk; Ugyuk	BS	

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Megaptera novaeangliae</i>	Humpback Whale	???	???	Rorqual à bosse	???	HW	
SEAWEED AND MARINE PLANTS							
PHAEOPHYCEAE	BROWN SEAWEED						
<i>Alaria marginata</i>	Edible Kelp	ᑕᑦᑎᑦ	Kuanni	Alarie comestible	Kuani; Nirilaat Qiqquat	EK	Ujamiruti (ᑕᑦᑎᑦ) – lower leaf
<i>Saccharina longicururus</i>	Hollow Stemmed Kelp	ᑦᑦᑕᑦᑎᑦ	Qiqquaq	Laminaire à long stipe	Qiqquat; Haalukkaat Qiqquat	HSK	
<i>Agarum clathratum</i>	Sea Colander	ᑦᑕᑦᑎᑦ	Qallunniuti	Agare criblé	Qallunniutit; Taryup Qalunniut	Scol	
<i>Desmarestia aculeata</i>	Spiny Sour Weed	ᑕᑦᑎᑦ	Iquuti	Algue desmarestia	Aqayat; Kuannik	SSW	
<i>Fucus vesiculosus</i>	Bladder Wrack, Rockweed	ᑕᑦᑎᑦ	Iquti	Fucus vésiculeux	Aqayat; Iquutit	BWra	
RHODOPHYTA	RED ALGAE						
<i>Codium fragile</i>	Green sea fingers	ᑕᑦᑎᑦ	Aqaja	Algue codium fragile	Aqayat; Hungayaaqtut Taryup Qikquat	GSF	Was arctic kelp. Reported in deeper waters where freshwater meets salt water.
<i>Palmaria palmata</i>	Dulse	ᑕᑦᑎᑦ	Iquutit	Rodymémie palmé	Aqayat; Quannik	Dul	
LILIOPSIDA	MONOCOT PLANTS						
<i>Zostera marina</i>	Eel Grass	???	???	Zostère marine	???	EG	
<i>Potamogeton robbinsii</i>	Robbin's Pondweed	???	???	Potamot de Robbins	???	RP	
<i>Potamogeton alpinus</i>	Alpine Pondweed	???	???	Potamot alpin	???	APw	
<i>Potamogeton gramineus</i>	Variableleaf Pondweed	???	???	Potamot à feuilles de graminées	???	VP	
<i>Potamogeton praelongus</i>	Whitestem Pondweed	???	???	Potamot à long pédoncule	???	WP	
<i>Pleuropogon sabinei</i>	Semaphore Grass	???	???		???		
<i>Puccinellia phryganodes</i>	Goose Grass	ᑕᑦᑎᑦ	Nakiruat		???		
MAGNOLIOPSIDA	EUDICOT PLANTS						
<i>Mertensia maritima</i>	Sea Lungwort	ᑦᑦᑕᑦᑎᑦ	Qiqquat; Siurap uqaujangit	Mertensia maritime	Qiqquat; Taryup nauttiangit	SL	Color of flower varies.
<i>Ranunculus hyperboreus</i>	Floating Buttercup	???	Iguttait niqingita ajjikasingit		???		
<i>Hippuris vulgaris</i>	Mare's Tail	???	???		???		



SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
BIRDS							
ANATIDAE	GEESE, SWANS & DUCKS						
<i>Anser albifrons</i>	Greater White-fronted Goose	σ^fC^b; σ^fC^Δ^b; σ^fC^αQ^b	Nirlik	Oie rieuse, oie à fronc blanc	Nirlivik	GWFG (WFG)	Orange bill and feet. White patch on face at base of bill. Variable black bars on belly. Generally found near water in open grassy tundra. Widespread breeder on mainland, also present on Victoria Isl.
<i>Chen caerulescens</i>	Snow Goose	b^uJ^b; b^fJ^ΔC^b; bΔ^b; bL^fC^b; b^uJ^b; b^fC^Δ^b; ^fbΔ^b	Kanguq; Kararjuk; Qaviq	Oie des neiges, oie blanche	Kanguq	SNGO (SG)	A white phase with black wingtips with pinkish bill and feet, and a dark (or 'blue') phase; very dark with white head. Grin patch on bill. On open tundra; usually in colonies. Present throughout arctic islands with scattered colonies on mainland.
<i>Chen rossii</i>	Ross's Goose	^fb^fC^fC^b	Qaaraarjak	Oie de Ross	Kakat; Qaqat	ROGO (RG)	Smaller than Snow Goose. No grin patch. Stubby bill. Usually associate with Snow Goose. Breeds mainly in Perry River area on gulf as well as Southampton Isl.
<i>Branta bernicla</i>	Brant	σ^fC^αQ^b; σ^fC^b; σ^fC^fQ^b; σ^fC^fQ^Δ^b	Nirlingnaq; Nirlirnaq; Nirlirnaarjuk	Bernache ctavant	Nirlirnaq	BRAN (Bran)	Black chest, head and neck with white patch on neck. Nests on islets or at water edge. Present along gulf coast and throughout the arctic islands.
<i>Branta hutchinsii</i>	Cackling Goose	σ^fC^fQ^b; σ^fC^fC^Δ^b	Nirliknaq	Bernache de Hutchins	Niklivik; Nirlivinnuaq	CACG (CacG)	Black neck; white chinstrap. Smaller version of a Canada Goose. Usually near water. Found from southern Victoria Isl. south and eastwards on mainland. Also present on Southampton and s.w. Baffin.
<i>Branta canadensis</i>	Canada Goose	σ^fC^b; σ^fC^b; Δ^ΔΔ^ΔC^b; Δ^fC^Δ^b; σ^fC^b; Δ^fC^Δ^b	Nirlik; Nirliq; Ulluagullik	Bernache du Canada, outarde	Nikliknik; Olagalik; Niqlirniq	CANG (CG)	Very large goose. Black neck with white chinstrap. Usually near water. Widespread throughout mainland Nunavut as well as Southampton, Victoria and southern Baffin Isl.

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
PODICIPEDIDAE	GREBES			PODICIPÉDIDÉS			
<i>Podiceps auritus</i>	Horned Grebe	???	???	Grèbe esclavon ; grèbe cornu	Angutiviaq	HOGR (HGr)	Chestnut neck; golden ear tufts. Nests amid tall grasses and willow shrubs in shallow water. Has bred on mainland only.
PROCELLARIIDAE	SHEARWATERS			PROCELLARIIDÉS			
<i>Puffinus gravis</i>	Greater Shearwater	???	???	Puffin majeur; grand puffin	???	GRSH	
<i>Fulmarus glacialis</i>	Northern Fulmar	ᑦᑲᑦᑲᑦᑲᑦ	Qaulluq	Fulmar boréal	Qaulluq; Nauyaq	NOFU (NF)	Grayish in appearance with white undersides.. Dark phase has gray head, light phase has white head. Yellow legs and bill (with tube). Nests on cliff faces. Breeds at specific locations along the coasts of Baffin, Devon and Ellesmere.
SULIDAE	GANNETS			SULIDÉS			
<i>Morus bassanus</i>	Northern Gannet	???	???	Fou de Bassan	Takatagiaq	NOGA (NGan)	Large white bird with yellow on back of head and neck. Black primaries. Grayish bill. Nests on cliff faces. No breeding records for Nunavut; considered accidental/visitor only.
PHALACROCORACIDAE	CORMORANTS			PHALACROCORACIDÉS			
<i>Phalacrocorax auritus</i>	Double-crested Cormorant	???	???	Cormoran à aigrettes	Tingmiaq	DCCO (DCC)	Large black bird, with yellow throat patch and hooked bill. Breeds only in James Bay islands. Accidental/visitor elsewhere.
ARDEIDAE	HERONS & BITTERNS			ARDÉIDÉS			
<i>Botaurus lentiginosus</i>	American Bittern	???	???	Butor d'amérique	Qupanuaq	AMBI (ABit)	Large brown bird with vertical streaks on buffy breast. Greenish legs. Black stripe on neck. Breeding records only from mainland.
ACCIPITRIDAE	HAWKS & EAGLES			ACCIPITRIDÉS			
<i>Haliaeetus leucocephalus</i>	Bald Eagle	ᑲᑦᑲᑦᑲᑦᑲᑦ; ᑲᑦᑲᑦᑲᑦᑲᑦ; ᑲᑦᑲᑦᑲᑦᑲᑦ	Nakturalik	Pygargue à tête blanche	Kopaniupak; Nakturalik	BAEA (BE)	Large brown bird. White head and tail. Birds are generally uniform brown. Yellow bill and feet. Nests on cliff faces. Rare breeder on mainland only.



SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Buteo lagopus</i>	Rough-legged Hawk	ᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ; ᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ; ᑭᑦᑭᑦ	Qinuajuaq; Qinnuajuaq; Kaajuuq	Buse pattue	Kalak; Kilgavigyuaq; Kiglugik	RLHA (RLH)	Light phase is brown with white tail tipped in black and a streaked breast with belly band. Dark phase is charcoal color. Both show a distinctive dark wrist patch on underwing. Nests on high elevated mounds and hills. Widespread breeder throughout Nunavut.
<i>Accipiter striatus</i>	Sharp-Shinned Hawk	???	???	Épervier brun	???	SSHA	
<i>Accipiter gentilis</i>	Northern Goshawk	ᑭᑦᑭᑦ	Kaajuuq	Autour des palombes		NOGO	
<i>Circus cyaneus</i>	Northern Harrier	???	???	Busard St-Martin; busard des marais	???	NOHA	
<i>Aquila chrysaetos</i>	Golden Eagle	ᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ; ᑭᑦᑭᑦᑭᑦ; ᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ; ᑭᑦᑭᑦᑭᑦᑭᑦ; ᑭᑦᑭᑦᑭᑦᑭᑦ	Qupanuaqpak; Qupanuaqpaq; Naktuligaq	Aigle royal; aigle doré	Kopaniupak; Qupanuaqpak; Nakturalik	GOEA (GE)	Large brown bird. Shows a 'golden wash' to head in certain light. Tail shows much white with blackish tips. Nests on cliff faces. Breeds only on mainland.
FALCONIDAE	FALCONS			FALCONIDÉS			
<i>Falco sparverius</i>	American Kestrel	ᑭᑦᑭᑦᑭᑦᑭᑦ	Kiggaviarjuk	Crécelle d'Amérique	Kilgavigyuk	MAKE (AKes)	Small falcon. Both sexes are russet color with lighter and speckled breast/belly and a barred back. They have two sideburns. Tail of male is uniformly rusty with black tip. Female is rusty with horizontal stripes. Has bred on mainland and on bay islands.
<i>Falco columbarius</i>	Merlin	ᑭᑦᑭᑦᑭᑦᑭᑦ	Kilgaviaraq	Faucon émerillon	Kilgaviaraq	MERL (Mer)	Small falcon. Male is gray with a buffy breast/belly; streaked. Female is brownish but otherwise similar. They have a single sideburn. Breeds on mainland and bay islands.
<i>Falco rusticolus</i>	Gyrfalcon	ᑭᑦᑭᑦᑭᑦᑭᑦ; ᑭᑦᑭᑦᑭᑦᑭᑦᑭᑦ; ᑦᑭᑦ ᑭᑦᑭᑦᑭᑦᑭᑦ; ᑦᑭᑦᑭᑦᑭᑦᑭᑦ	Kiggavik; Kayou; Qinnuajuaq; Kiggaviarjuk; Qakuqtaq	Faucon gerfault; gerfault	Kilgavikpak; Kilgavik	GYRF (Gyr)	Large falcon. Dark (blackish) phase, light (gray) phase and a white phase. Nests on cliff faces. Widespread breeder throughout Nunavut.



SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Calidris melanotos</i>	Pectoral Sandpiper	ᑦᑦᑦᑦᑦᑦᑦᑦ	Qulliquliarjuk	Bécasseau à poitrine cendrée	Qulliquliaryuk	PESA (PS)	Fairly large brownish shorebird with yellow legs Dark, striped throat end abruptly to give a 'bib-like' appearance. Medium sized shorebird. Nests in tall grasses, usually in wetter areas. Breeds along gulf coast, Victoria & Southampton islands, with scattered breeding areas throughout the remaining arctic islands.
<i>Calidris maritima</i>	Purple Sandpiper	ᑦᑦᑦᑦᑦᑦᑦᑦ; ᑦᑦᑦᑦᑦᑦᑦᑦ	Sigjariaq; Sigjariarjuk	Bécasseau violet	Higyariaq	PUSA (PurS)	Squatty, with short yellow legs. Medium sized shorebird. Gray/brown color with white eye-ring. Nests in low vegetation in dry areas. Breeds on Baffin and Southampton and at scattered sites throughout the 'high' arctic islands. Large.
<i>Calidris alpina</i>	Dunlin	ᑦᑦᑦᑦᑦᑦᑦᑦ; ᑦᑦᑦᑦᑦᑦᑦᑦ; ᑦᑦᑦᑦᑦᑦᑦᑦ	Tiagajuq	Bécasseau variable	Tiaguyaq	DUNL (Dun)	Rusty back, streaked breast and black belly-patch. Medium sized shorebird. Nests in wet areas. Breeds mainly on the mainland with some records from the arctic and bay islands.
<i>Calidris himantopus</i>	Stilt Sandpiper	ᑦᑦᑦᑦᑦᑦᑦᑦ	Sigjariaq	Bécasseau à échasse	Higyariaq	STSA (StiS)	Brownish bird with streaked breast/belly. Greenish legs. Long black bill. Rusty/orange cheek patch. Medium sized shorebird. Nests in both wet and dry grassy tundra. Breeds along the gulf coast, as well as Victoria Isl. and the Hudson Bay coast. Large.
<i>Tryngites subruficollis</i>	Buff-breasted Sandpiper	ᑦᑦᑦᑦᑦᑦᑦᑦ	Sigjariaq	Bécasseau roussâtre	Higyariaq	BBSA (BBS)	Medium sized shorebird. Generally buffy all over. Back is more brownish, while head, breast and belly are buffy. Bright white underwings. Yellow legs with dark bill. Nests in grassy areas of sometimes sparse vegetation. Breeds on Victoria Isl. and other islands in the central arctic. Large.

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Cephus grylle</i>	Black Guillemot	ᐱᑦᑎᐅᑦᑦᑦ; ᐱᑦᑎᐅᑦᑦᑦ; ᐱᑦᑎᐅᑦᑦᑦᑦᑦᑦᑦ; ᑦᑎᑦᑦᑦᑦᑦᑦᑦ ᑦᑦᑦᑦᑦ	Pittiulaaq; Pitsiulaaq; Pitsiulaaqjuaq	Guillemot à miroir; guillemot noir	Pittuulaaq; Qingnariktuq Akpait	BLGU (BG)	Black with white wing patch. Bright orange/red feet. In/on rocky crags. Mainly confined to the eastern arctic islands and Southampton as well as a few coastal locations on eastern mainland. Floe edge. Winter: pale grey with black wing and white under.
STRIGIDAE	OWLS			STRIGIDÉS			
<i>Bubo scandiacus</i>	Snowy Owl	ᐅᑦᐱᑦᑦᑦᑦᑦᑦ; ᐅᑦᐱᑦᑦᑦᑦᑦᑦ; ᐅᑦᐱᑦᑦ	Ukpikjuaq; Ukpigjuaq	Harfang des neiges	Ukpik	SNOW (Sowl)	Large white owl. Adults are generally white with black flecks. Imm. shows more spotting. Nests in dry tundra on elevated mounds. Widespread breeder throughout Nunavut.
<i>Asio flammeus</i>	Short-eared Owl	ᐃᑦᐱᑦᑦ; ᑦᑦᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᑦᑦᑦᑦᑦᑦᑦ; ᐅᑦᑦᑦᑦᑦᑦᑦᑦᑦ; ᐅᑦᑦᑦᑦᑦᑦᑦᑦᑦ	Masilli; Unnuaqsiuti	Hibou des marais	Ukpik	SEOW (SEO)	COSEWIC–Special Concern; Medium sized owl. Generally brown with vertical streaks Buffy wing linings show a dark wrist patch in flight. Nests in long grass usually in wet areas. Breeds on mainland and at a few arctic island locations.
CAPRIMULGIDAE	GOATSUCKERS			CAPRIMULGIDÉS			
<i>Chordeiles minor</i>	Common Nighthawk	ᑎᑦᑦᑦᑦᑦᑦ	Kiggavik	Engoulevent d'Amérique	Kilgavik	CONI (CNH)	Gray/brown bird with pointed wings. Shows a white throat patch and white bar in wings in flight. Accidental in Nunavut; no breeding records.
LANIIDAE	SHRIKES			LANIIDÉS			
<i>Lanius excubitor</i>	Northern Shrike	ᑦᑦᑦᑦᑦᑦᑦᑦ	Qupanuaq	Pie-grièche grise; pie-grièche boréale	Qupanuaq; Mitilluk	NSHR (NSh)	Grayish bird. Black face mask. Black wings with white wrist mark, and dark tail edged in white. Hooked bill. Nests in trees and is restricted as a breeder to lower mainland, and perhaps bay islands.



SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
CORVIDAE	CROWS & JAYS						
<i>Corvus corax</i>	Common Raven	ᑕᑕᑭᑭᑭᑭᑭᑭ	Tulugaq	Grand corbeau	Tuluqakjuak; Tulugaq	CORA (CR)	Large black bird. Rounded tail. Croaking call. Nests on cliff faces, rocky crags or manmade structures. Extensive and widespread throughout Nunavut.
<i>Perisoreus canadensis</i>	Gray Jay	???	???	Mésangeai du Canada; geai du Canada	???	GRAJ	
ALAUDIDAE	LARKS			ALAUDIDÉS			
<i>Eremophila alpestris</i>	Horned Lark	ᑭᑭᑭᑭᑭᑭᑭᑭ; ᑭᑭᑭᑭᑭᑭᑭᑭ	Qupanuaqpaq; Qupanuarjuk	Alouette hausse-col; alouette cornue	Konaniqpajuk; Qupanuaqpaq; Qupanuaqpak	HOLA (HL)	Generally brownish bird with lighter belly. Black breast band. Dark sideburn on yellowish face. Underside of tail is black. Nests in dry tundra with sparse vegetation. Widespread breeder throughout Nunavut. Open, dry tundra.
HIRUNDINIDAE	SWALLOWS			HIRUNDINIDÉS			
<i>Riparia riparia</i>	Bank Swallow	ᑭᑭᑭᑭᑭᑭᑭᑭ	Qupanuaq	Hirondelle de ravage; hirondelle des sables	Qupanuaq	BANS (BnkS)	Generally brownish bird with white underparts and a brown chest band. Pointed wings and notched tail. Accidental in Nunavut; no breeding records.
<i>Tachycineta bicolor</i>	Tree Swallow	???	???	Hirondelle bicolor	???	TRES	
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow	???	???	Hirondelle à front blanc	???	CLSW	
<i>Hirundo rustica</i>	Barn Swallow	???	???	Hirondelle rustique; hirondelle des granges	Qupanuaq	BARS (BrnS)	Metallic blue on back, buffy/orange underparts. Rusty throat patch. Forked tail. Has nested rarely on mainland and in bay islands.
TURDIDAE	THRUSHES			TURDIDÉS			
<i>Oenanthe oenanthe</i>	Northern Wheatear	ᑭᑭᑭᑭᑭᑭᑭᑭ; ᑭᑭᑭᑭᑭᑭᑭᑭ	Iquligaq	Traquet motteux	Qupanuaqpaq	NOWH (Nwh)	Gray bird with white breast/belly. Black face mask, edged in white. White tail with black tips. White rump patch. Imm. birds are similar but are buffier, with brownish back. Nests in rocky areas. Breeds mainly on Baffin and Ellesmere with infrequent nestings elsewhere in 'high' arctic islands and on mainland.

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Sialia currucoides</i>	Mountain Bluebird	???	???	Merle bleu azuré; merle bleu des montagnes	???	MOBL	
<i>Catharus ustulatus</i>	Swainson's Thrush	???	???	Grive à dos olive	???	SWTH	
<i>Catharus guttatus</i>	Hermit Thrush	???	???	Grive solitaire	???	HETH	
<i>Catharus minimus</i>	Gray-cheeked Thrush	ᑦᑲᑦᑲᑦᑲᑦ	Qupanuaq	Grive à joues grises	Qupanuaq	GCTH (GCT)	Dull, gray-brown thrush with whitish belly. Breast is speckled with dark spots. Shows a gray wash to side of face. Breeds in forested areas on mainland.
<i>Turdus migratorius</i>	American Robin	ᐃᑲᑲᑲᑲᑲᑲ; ᑦᑲᑦᑲᑦᑲᑦᑲᑦ	???	Merle d'Amérique	Naqugik; Qupannuaq	AMRO (ARob)	Generally blackish bird with reddish breast/belly. Broken white eye ring and dark tail. Breeds mainly on mainland but with a few nest records in arctic islands and bay islands.
STURNIDAE	STARLINGS			STURNIDÉS			
<i>Sturnus vulgaris</i>	European Starling	???	???	Étourneau sansonnet	Tulugannuaq	EUST (ESt)	Iridescent black bird with yellow bill and reddish legs in summer. Heavily speckled with cream spots and dark bill in winter. Only breeding records are from mainland communities.
MOTACILLIDAE	WAGTAILS & PIPITS			MOTACILLIDÉS			
<i>Anthus rubescens</i>	American Pipit	ᑲᑲᑲᑲᑲᑲᑲ; ᑲᑲᑲᑲᑲᑲᑲ	Kujamiqtaq; Siusiuk	Pipit d'Amérique	Qupanuaq	AMPI (APip)	Light brown bird with grayish back. Fine streaks on buffy breast. Thin pointed bill. Tail has black central feathers and white outer feathers seen in flight. Nests in rocky areas or steep hillsides and embankments. Widespread breeder throughout most of Nunavut except for the very 'high' arctic islands.
PARULIDAE	WOOD-WARBLERS			PARULIDÉS			
<i>Dendroica petechia</i>	Yellow Warbler	ᑦᑲᑦᑲᑦᑲᑦ	Qupanuaq	Paruline jaune	Qupanuaq; Quriiktaq Qupanuaqpak	YWAR (YW)	Bright yellow above and below. Male has rusty vertical lines. Breeds on mainland and on bay islands.
<i>Setophaga ruticilla</i>	American Redstart	???	???	Paruline flamboyante	???	AMRE	

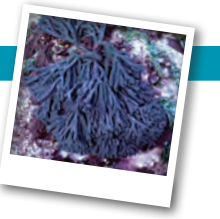


SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Wilsonia pusilla</i>	Wilson's Warbler	???	???	Paruline à calotte noire	???	WIWA	
<i>Dendroica palmarum</i>	Palm Warbler	???	???	Paruline à couronne rousse	???	PAWA	
<i>Dendroica coronata</i>	Yellow-Rumped Warbler	???	???	Paruline à croupion jaune	???	YRWA	
<i>Protonotaria citrea</i>	Prothonotary Warbler	ᖃᑦᑦᑦᑦᑦᑦ	Qupanuaq	Paruline orangée	???	PROW	
<i>Dendroica striata</i>	Blackpoll Warbler	ᖃᑦᑦᑦᑦᑦᑦ	Qupanuaq	Paruline rayée	Qupanuaq; Qingnariktuq Qupanuaqpak	BLPW (BPW)	Grayish bird with stripes on back and sides. Black cap, white cheeks and black whisker mark. Female is paler and lacks whisker and has a dark cap (not black). Breeds on mainland and perhaps on bay islands.
<i>Seiurus noveboracensis</i>	Northern Waterthrush	ᖃᑦᑦᑦᑦᑦᑦ	Qupanuaq	Paruline des ruisseaux	Qupanuaq	NOWA (NWT)	Dark brown back and cap. Yellow/buff breast and sides with vertical streaks. Yellow eyebrow. Vagrant only; no breeding records.
EMBERIZIDAE	SPARROWS & ALLIES	ᐃᖃᑦᑦᑦᑦᑦᑦ; ᐃᖃᑦᑦᑦᑦᑦᑦ		EMBERIZIDÉS			
<i>Spizella arborea</i>	American Tree Sparrow	ᖃᖃᑦᑦᑦᑦᑦᑦ	???	Bruant hudsonnien	Tirinnguaq; Kayuqtaaraq	ATSP (ATSp)	Rufous colored bird with rusty cap. Clear, buffy breast/belly with a black spot in central breast. A treeline species, it only breeds on mainland and on bay islands.
<i>Passerculus sandwichensis</i>	Savannah Sparrow	ᑦᑦᑦᑦᑦᑦᑦᑦ ᖃᑦᑦᑦᑦᑦᑦᑦᑦᑦ	Nunamiutaq Qupanuannaq	Bruant des prés	Tirinnguaq; Kayuqtaaraq	SAVS (SSp)	Generally brownish. Heavily streaked breast/sides. Striped cap. Usually shows a yellow eyeline. Breeds on mainland and on bay islands with few records from arctic islands.
<i>Passerella iliaca</i>	Fox Sparrow	ᖃᑦᑦᑦᑦᑦᑦᑦᑦ	???	Bruant fauve	Kikiniktajok; Tirinnguaq; Qupanuaq	FOSP (FSp)	Large, rusty sparrow with rusty streaks on breast/sides. Treeline species; only breeds on mainland and bay islands.
<i>Zonotrichia querula</i>	Harris's Sparrow	???	???	Bruant à face noire	Nahaolik; Tirinnguaq; Qupanuaq	HASP (HSp)	Large grayish/brown bird with black crown, face and bib. Pink bill. Gray on side of cheek. Few breeding records for mainland only.

SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	ᖃᑦᑲᑦᑲᑦᑲᑦ ᑦᑲᑦᑲᑦᑲᑦ ᑲᑦᑲᑦᑲᑦ	Qupanuannaq niaqua taqsalik	Bruant à couronne blanche	Tirinnguaq; Amauligaaq	WCSP (WCSp)	Large brownish bird with buffy breast and belly. Head is boldly striped with black and white lines. Breeds mainly on mainland and on bay islands. Few breeding records from arctic islands.
<i>Junco hyemalis</i>	Dark-eyed Junco	???	???	Junco ardoisé	Qupanuaq	DEJU (DEJ)	Generally slate gray color with darker head. Belly is white. Dark central tail feathers with white outer tail feathers. Breeds on mainland and on bay islands with a few records from arctic islands.
<i>Calcarius lapponicus</i>	Lapland Longspur	ᖃᑦᑲᑦᑲᑦᑲᑦ; ᖃᑦᑲᑦᑲᑦᑲᑦᑲᑦ; ᖃᑦᑲᑦᑲᑦᑲᑦᑲᑦ	Manuilitalik; Qirniqtaa	Bruant lapon	Nahoalik; Qupanuaq; Nattaalik (male)	LALO (LL)	Brown streaked back. Rusty nape, black face and bib. Yellow bill, dark legs. A white line separates face from nape. White belly. Females are generally brownish and streaked. Males in winter look like summer females, only with a rufous collar and distinct facial pattern. Nests in both wet and dry tundra. Widespread breeder throughout Nunavut.
<i>Calcarius pictus</i>	Smith's Longspur	???	???	Bruant de Smith	???	SMLO	
<i>Plectrophenax nivalis</i>	Snow Bunting	ᖃᑦᑲᑦᑲᑦᑲᑦᑲᑦ; ᖃᑦᑲᑦᑲᑦᑲᑦᑲᑦ; ᖃᑦᑲᑦᑲᑦᑲᑦᑲᑦ; ᖃᑦᑲᑦᑲᑦᑲᑦᑲᑦ; ᖃᑦᑲᑦᑲᑦᑲᑦᑲᑦ	Qaulluqtuq; Amauligaaq; Amauligjuaq; Qaulluqtaa; Qupanuaq; Arnaviaq; Qaulurtaa	Bruant des neiges	Amailikak; Amauligaaq	SNBU (SB)	Males are mainly white with black back and black wing tips; wings are mainly white. Females are generally buffy/brown. Winter males look similar to summer females but show more white in wings. Nests in rocky areas or under embankments. Widespread breeder throughout Nunavut.



SPECIES	COMMON NAME	INUKTITUT	TRANSLITERATION	FRENCH	INUINNAQTUN	MAP CODE	NOTES
FRINGILLIDAE	FINCHES			FRINGILLIDÉS			
<i>Carduelis flammea</i>	Common Redpoll	ᖁᑦᑦᑦᑦᑦᑦ; ᖁᖁᑦᑦᑦᑦᑦᑦ; ᖁᖁᖁᖁᑦᑦᑦᑦ	Qupanuaq; Saququariaq; Siqsigiaq	Sizerin flammé	Hikinitjuak; Qupanuaq. Qupanuaqpak	CORE (CRP)	Brownish bird with heavy streaks on back and sides. Male has a red forehead, black bib and rosy breast. Female is similar but lacks the rosy breast. Both sexes have yellow bills. Nests in willow shrubs in wet areas. Common breeder on mainland as well as southern Baffin and scattered locations elsewhere.
<i>Carduelis hornemanni</i>	Hoary Redpoll	ᖁᑦᑦᑦᑦᑦᑦ; ᖁᖁᑦᑦᑦᑦᑦᑦ; ᖁᖁᖁᖁᑦᑦᑦᑦ	Qupanuaq; Saququariaq; Siqsigiaq	Sizerin blanchâtre	Qupanuaq; Qupanuaqpak	HORE (HRP)	Very similar to Common Redpoll but generally lighter color. Faint to absent streaks on sides and usually shows a distinct white rump patch. Nests in willow shrubs in wet areas. Prolific breeder on mainland as well as on Baffin, Ellesmere, Devon and southern Victoria islands.
<i>Loxia leucoptera</i>	White-Winged Crossbill	???	???	Bec-croisé bifascié; bec-croisé à ailes blanches	???	WWCR	
ICTERIDAE	BLACKBIRDS AND ORIOLES			ICTERIDÉS			
<i>Euphagus carolinus</i>	Rusty Blackbird	???	???	Quiscale rouilleux	???	RUBL	
<i>Xanthocephalus xanthocephalus</i>	Yellow-Headed Blackbird	???	???	Carouge à tête jaune	???	YHBL	
BOMBYCILLIDAE	WAXWINGS			BOMBYCILLIDÉS			
<i>Bombycilla garrulus</i>	Bohemian Waxwing	???	???	Jaseur boréal	???	BOWA	
REGULIDAE	KINGLETS			REGULIDÉS			
<i>Regulus calendula</i>	Ruby-Crowned Kinglet	???	???	Roitelet à couronne rubis	???	RCKI	
CERYLIDAE	KINGFISHERS			CERYLIDÉS			
<i>Megaceryle alcyon</i>	Belted Kingfisher	???	???	Martin-pêcheur d'Amérique	???	BEKI	
PELECANIDAE	PELICANS			PÉLÉCANIDÉS			
<i>Pelecanus erythrorhynchos</i>	American White Pelican	???	???	Pélican d'Amérique; pelican blanc d'Amérique	???	AWPE	



APPENDIX 7 SPECIES PHOTOS

FISH



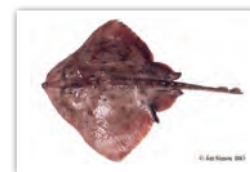
GREENLANDIC SHARK



ARCTIC SKATE



BLACK DOGFISH



THORNY SKATE



ARCTIC CHAR



BROOK TROUT



BULL TROUT



LAKE TROUT



DOLLY-VARDEN



ATLANTIC SALMON



LAKE WHITEFISH



BROAD WHITEFISH



LAKE CISCO



LEAST CISCO



ARCTIC CISCO



BLACKFIN CISCO



ROUND WHITEFISH



MOUNTAIN WHITEFISH



INCONNU



ARCTIC GRAYLING



WHITE SUCKER



LONGNOSE SUCKER



LAKE CHUB



ATLANTIC COD



GREENLAND COD



ARCTIC OR POLAR COD



TOOTHED COD



BURBOT



THREEBEARD ROCKLING



ARCTIC ROCKLING



ROCK GRENADIER



ARCTIC STAGHORN SCULPIN



DEEPWATER SCULPIN



FOURHORN SCULPIN



ARCTIC SCULPIN



SHORTHORN SCULPIN



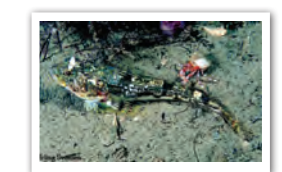
SLIMY SCULPIN



SPOONHEAD SCULPIN



HAMECON



TWOHORN SCULPIN



SPATULATE SCULPIN



BIGEYE SCULPIN



RIBBED SCULPIN



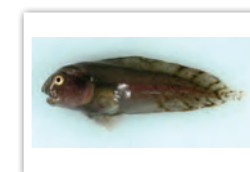
MAILED SCULPIN



VARIEGATED SNAILFISH



BARTAIL SEASNAIL



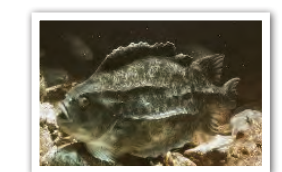
GELATINOUS SEASNAIL



ATLANTIC SEASNAIL



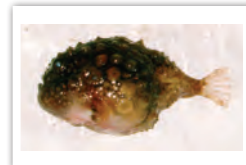
LUMPSUCKER



SMOOTH LUMPFISH



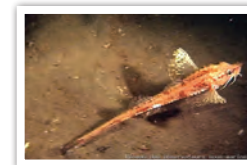
LEATHERFIN LUMPSUCKER



ATLANTIC SPINY LUMPSUCKER



ARCTIC ALLIGATOR FISH



ATLANTIC SEA POACHER



OCEAN PERCH



DEEPWATER REDFISH



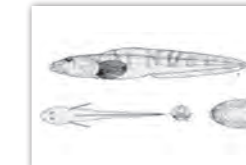
WALLEYE



ARCTIC EELPOUT



MCALLISTER'S EELPOUT



SHULUPAOLUK



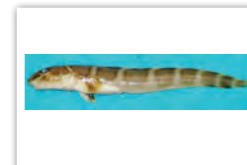
ADOLF'S EELPOUT



SADDLED EELPOUT



PALE EELPOUT



CANADIAN EELPOUT



THREESpot EELPOUT



LONGEAR EELPOUT



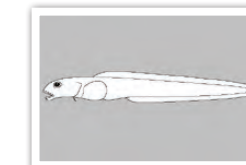
PAAMIUT EELPOUT



POLAR EELPOUT



LUTKEN'S EELPOUT



BARSUKOV'S POUT



FISH DOCTOR



SLENDER EELBLENNY



DAUBED SHANNY



STOUT EELBLENNY



FOURLINE SNAKEBLENNY



PACIFIC SAND LANCE



NORTHERN SAND LANCE



NORTHERN WOLFISH



SPOTTED WOLFISH



ATLANTIC WOLFISH



BANDED GUNNEL



STARRY FLOUNDER



ARCTIC FLOUNDER



WINTER FLOUNDER



GREENLAND HALIBUT



CAPELIN



RAINBOW SMELT



ATLANTIC HERRING



PACIFIC HERRING



TROUT-PERCH



NORTHERN PIKE



NINESPINE STICKLEBACK



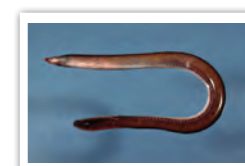
THREESPINE STICKLEBACK



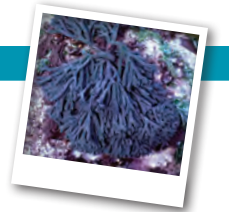
GLACIER LANTERN FISH



ARCTIC LAMPREY



NORTHERN HAGFISH



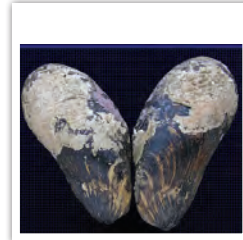
INVERTEBRATES



TRUNCATE SOFTSHELL CLAMS



BLUE MUSSEL



NORTHERN HORSEMUSSEL



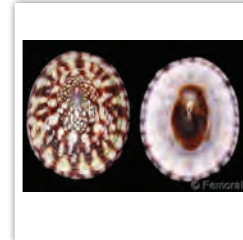
COMMON COCKLE



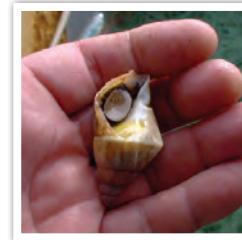
ISLANDIC SCALLOP



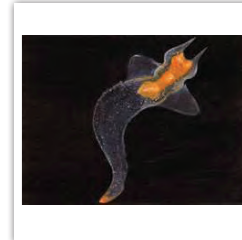
ATLANTIC OYSTER



TORTOISESHELL LIMPET



WHELK



NAKED SEA BUTTERFLY



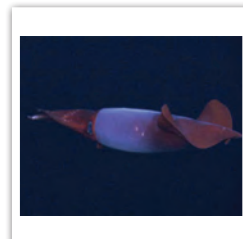
NAKED SHELLED SEA BUTTERFLY



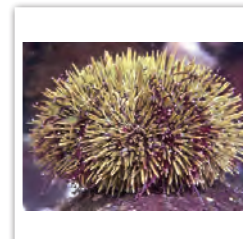
FLEXED GYRO



ARCTIC MOONSNAIL



BOREAL ARMHOOK SQUID



PALE SEA URCHIN



POLAR SEA STAR



MUD STAR



BASKET STAR



NORTH ATLANTIC SEA CUCUMBER



SNOW CRAB



TOAD CRAB



HERMIT CRAB



DEEP SEA KING CRAB



CRAYFISH



NORTHERN SHRIMP



STRIPED SHRIMP



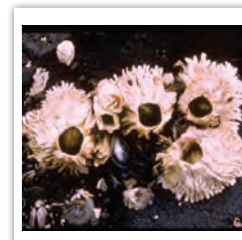
AMPHIPOD



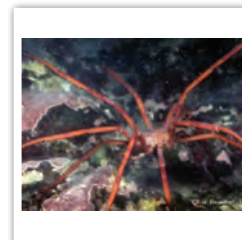
NORTHERN KRILL



MYSID SHRIMP



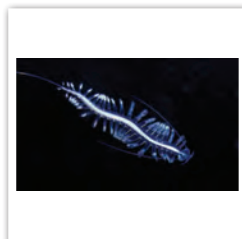
ACORN BARNACLE



SEA SPIDER



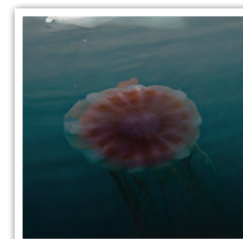
PARCHMENT WORM



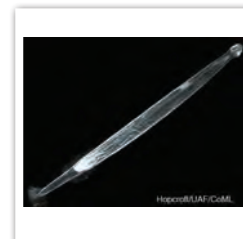
PLANKTON WORM



SEA ANEMONE



JELLYFISH



ARROW WORM

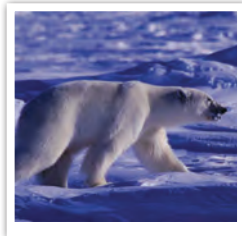


CTENOPHORE

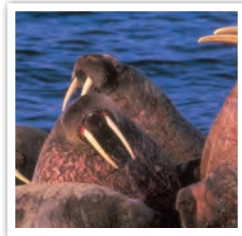


ORANGE FINGER SPONGE

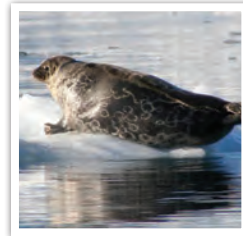
MARINE MAMMALS



POLAR BEAR



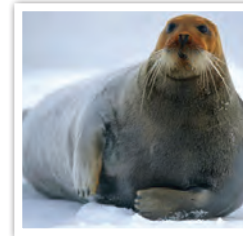
WALRUS



RINGED SEAL



HARP SEAL



BEARDED SEAL



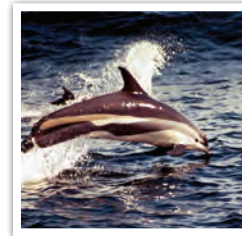
HOODED SEAL



HARBOUR SEAL



HARBOUR PORPOISE



ATLANTIC WHITE-SIDED DOLPHIN



WHITE-BEAKED DOLPHIN



NORTHERN BOTTLENOSE WHALE



LONG-FINNED PILOT WHALE



KILLER WHALE



BELUGA



NARWHAL



BOWHEAD WHALE



NORTH ATLANTIC RIGHT WHALE



COMMON MINKE WHALE



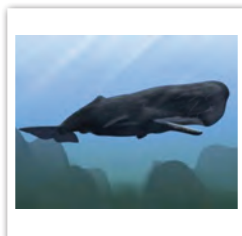
FIN WHALE



BLUE WHALE



SEI WHALE



SPERM WHALE



HUMPBACK WHALE

SEAWEED AND MARINE PLANTS



EDIBLE KELP



HOLLOW STEMMED KELP



SEA COLANDER



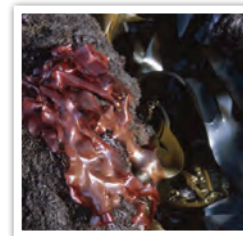
SPINY SOUR WEED



BLADDER WRACK



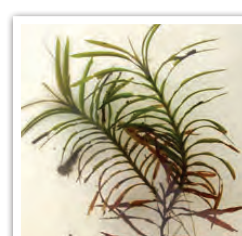
GREEN SEA FINGERS



DULSE



EEL GRASS



ROBBIN'S PONDWEED



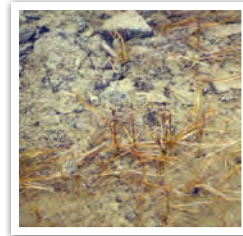
ALPINE PONDWEED



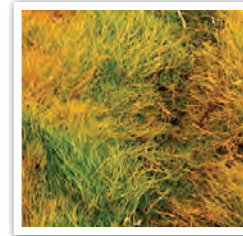
VARIABLELEAF PONDWEED



WHITESTEM PONDWEED



SEMAPHORE GRASS



GOOSE GRASS



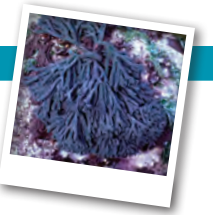
SEA LUNGWORT



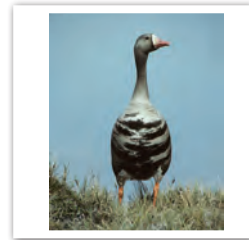
FLOATING BUTTERCUP



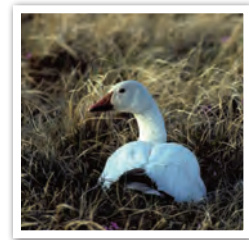
MARE'S TAIL



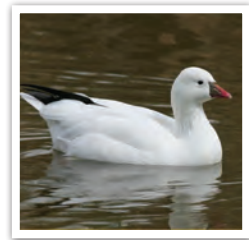
BIRDS



WHITE-FRONTED GOOSE



SNOW GOOSE



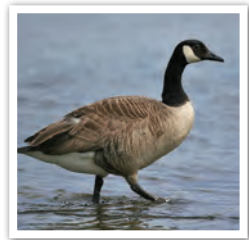
ROSS'S GOOSE



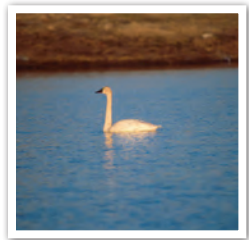
BRANT



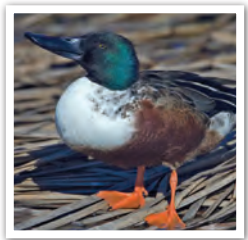
CAKCLING GOOSE



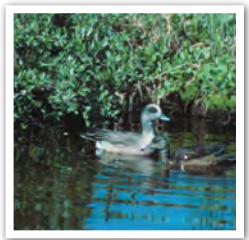
CANADA GOOSE



TUNDRA SWAN



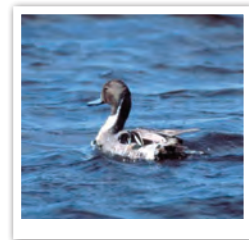
NORTHERN SHOVELER



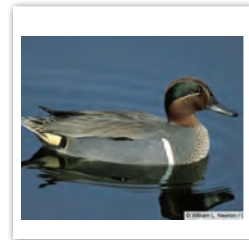
AMERICAN WIGEON



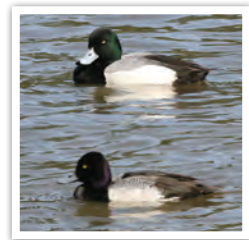
MALLARD



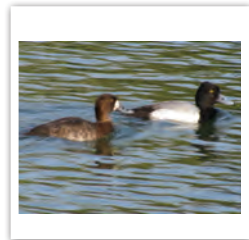
NORTHERN PINTAIL



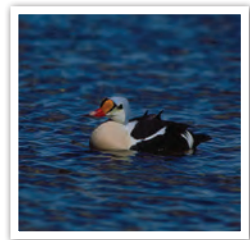
GREEN-WINGED TEAL



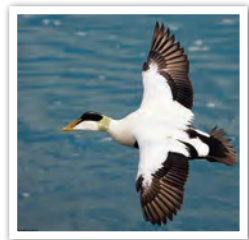
GREATER SCAUP



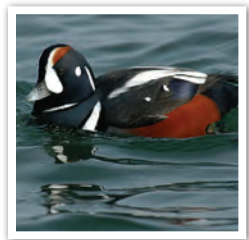
LESSER SCAUP



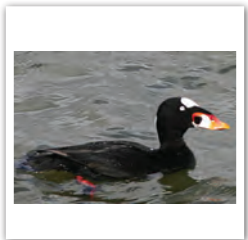
KING EIDER



COMMON EIDER



HARLEQUIN DUCK



SURF SCOTER



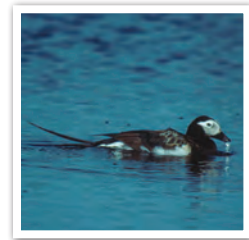
WHITE-WINGED SCOTER



BLACK SCOTER



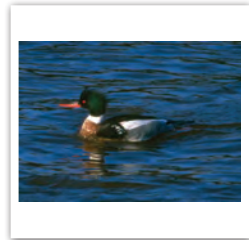
AMERICAN BLACK DUCK



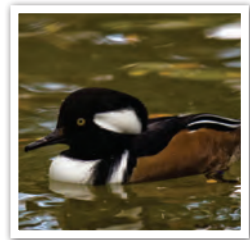
LONG-TAILED DUCK



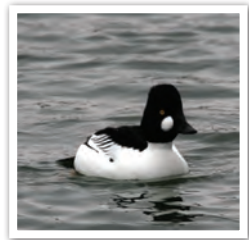
COMMON MERGANSER



RED-BREASTED MERGANSER



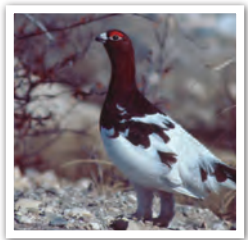
HOODED MERGANSER



COMMON GOLDENEYE (MALE)



BARROW'S GOLDENEYE



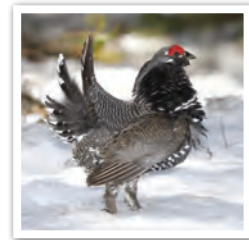
WILLOW PTARMIGAN



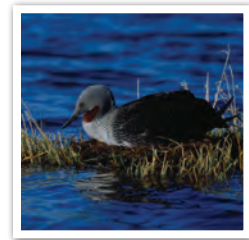
ROCK PTARMIGAN



WHITE-TAILED PTARMIGAN



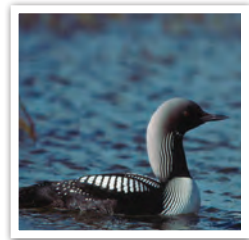
SPRUCE GROUSE (MALE)



RED-THROATED LOON



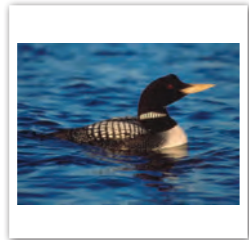
ARCTIC LOON



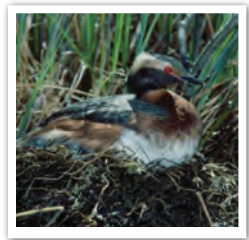
PACIFIC LOON



COMMON LOON



YELLOW-BILLED LOON



HORNED GREBE



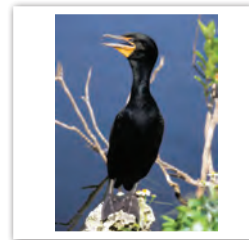
GREATER SHEARWATER



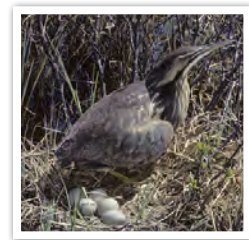
NORTHERN FULMAR



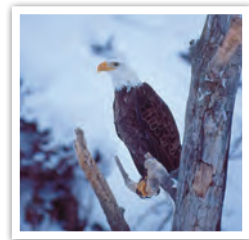
NORTHERN GANNET



DOUBLE-CRESTED CORMORANT



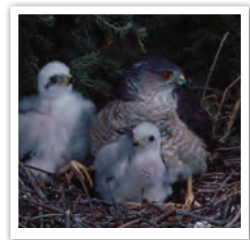
AMERICAN BITTERN



BALD EAGLE



ROUGH-LEGGED HAWK



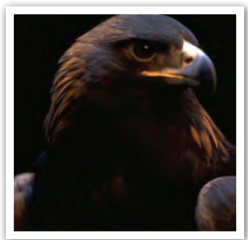
SHARP-SHINNED HAWK



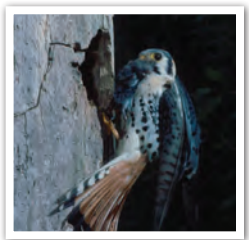
NORTHERN GOSHAWK



NORTHERN HARRIER



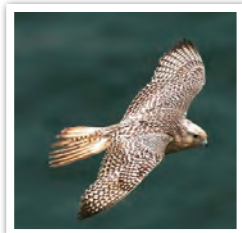
GOLDEN EAGLE



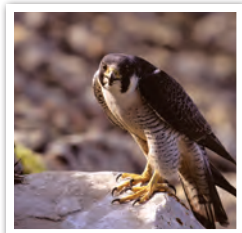
AMERICAN KESTREL



MERLIN



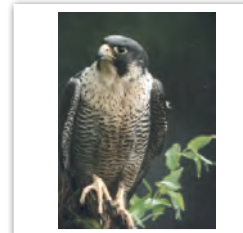
GRYFALCON



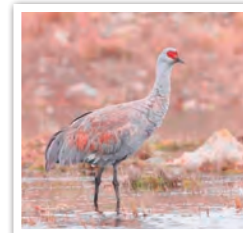
PEREGRINE FALCON



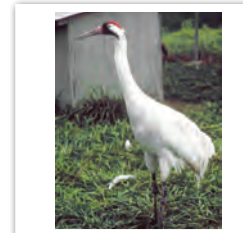
PEREGRINE FALCON ANATUM



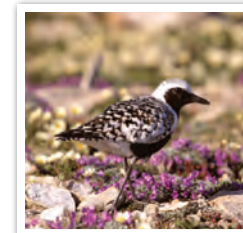
PEALE'S PEREGRINE FALCON



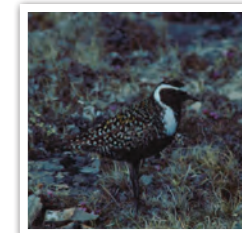
SANDHILL CRANE



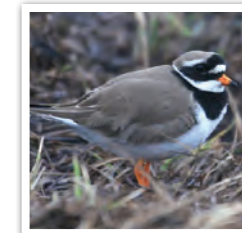
WHOOPING CRANE



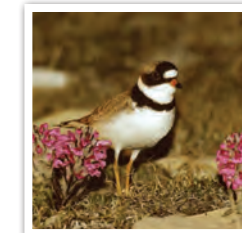
BLACK-BELLIED PLOVER



AMERICAN GOLDEN-PLOVER



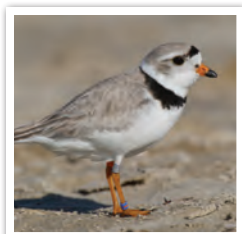
COMMON RINGED PLOVER



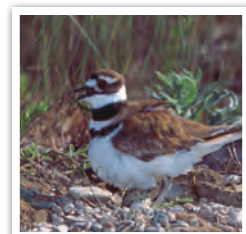
SEMPALMATED PLOVER



PIPING PLOVER MELODUS



PIPING PLOVER



KILLDEER



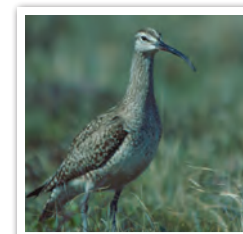
LESSER YELLOWLEGS



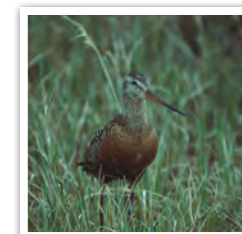
GREATER YELLOWLEGS



ESKIMO CURLEW



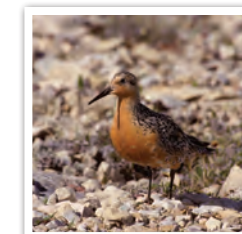
WHIMBREL



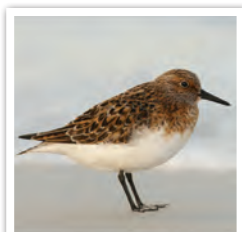
HUDSONIAN GODWIT



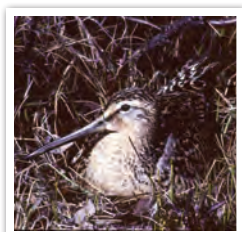
RUDDY TURNSTONE



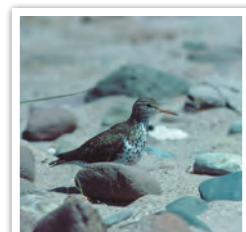
RED KNOT



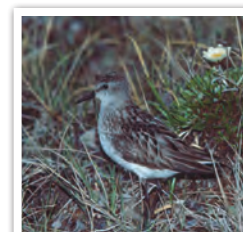
SANDERLING



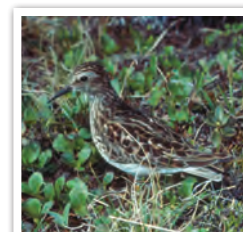
SHORT-BILLED DOWITCHER



SPOTTED SANDPIPER



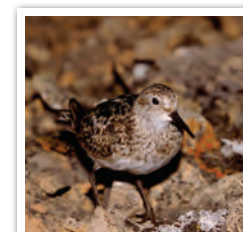
SEMPALMATED SANDPIPER



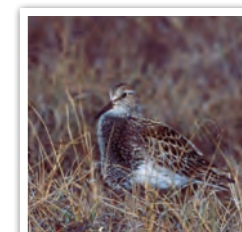
LEAST SANDPIPER



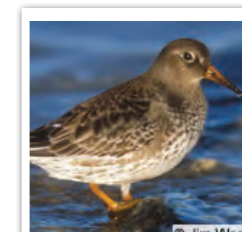
WHITE-RUMPED SANDPIPER



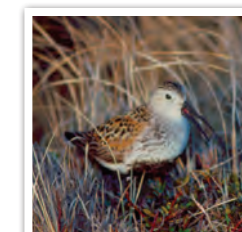
BAIRD'S SANDPIPER



PECTORAL SANDPIPER



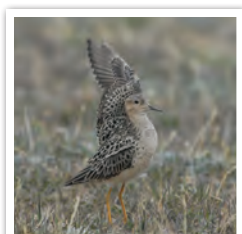
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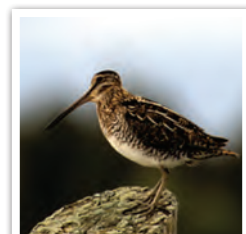
DUNLIN



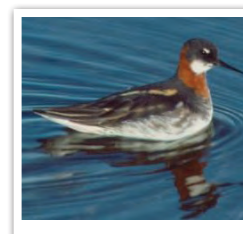
STILT SANDPIPER



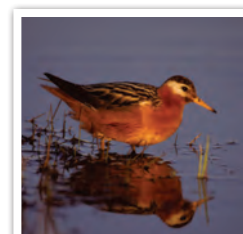
BUFF-BREADED SANDPIPER



WILSON'S SNIPE



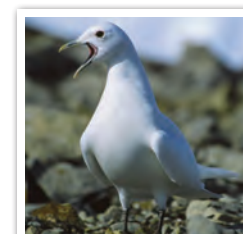
RED-NECKED PHALAROPE



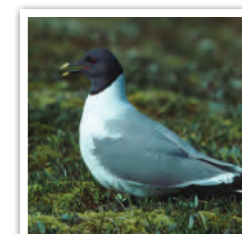
RED PHALAROPE



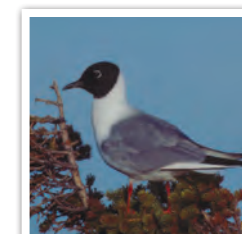
BLACK-LEGGED KITTIWAKE



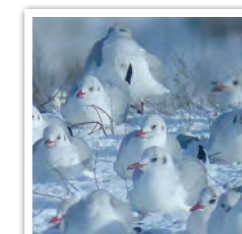
IVORY GULL



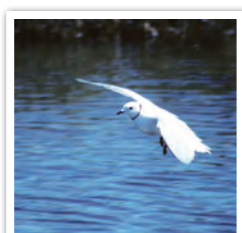
SABINE'S GULL



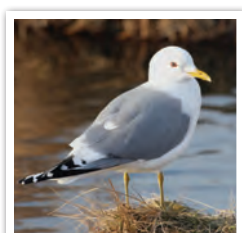
BONAPARTE'S GULL



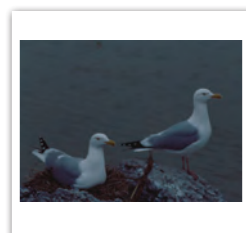
BLACK-HEADED GULL



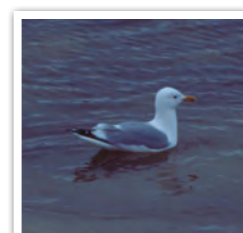
ROSS'S GULL



MEW GULL



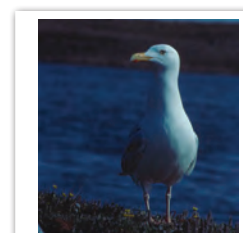
HERRING GULL



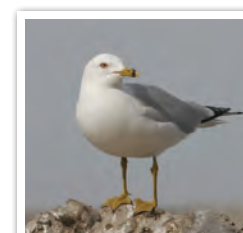
THAYER'S GULL



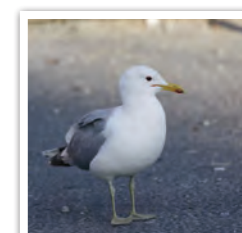
ICELAND GULL



GLAUCOUS GULL



RING-BILLED GULL



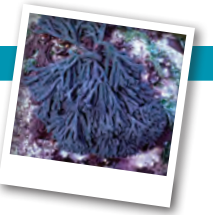
CALIFORNIA GULL



LESSER BLACK-BACKED GULL



GREAT BLACK-BACKED GULL



COMMON TERN



ROSEATE TERN



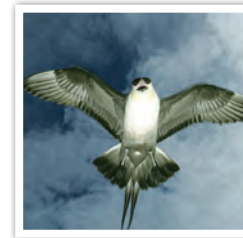
ARCTIC TERN



POMARINE JAEGER



PARASITIC JAEGER



LONG-TAILED JAEGER



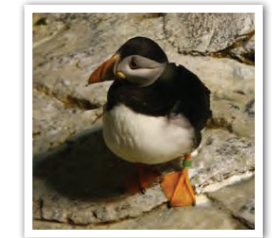
DOVEKIE



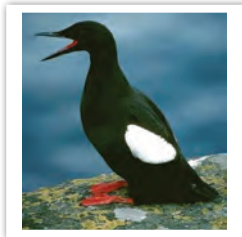
THICK-BILLED MURRE



RAZORBILL



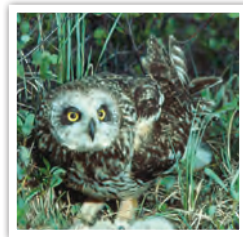
ATLANTIC PUFFIN



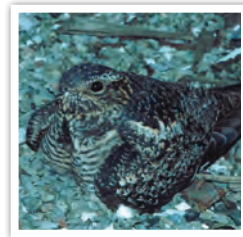
BLACK GUILLEMOT



SNOWY OWL



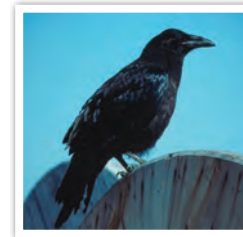
SHORT-EARED OWL



COMMON NIGHTHAWK



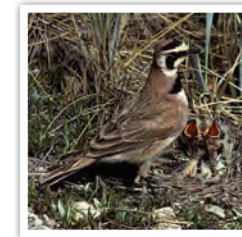
NORTHERN SHRIKE



COMMON RAVEN



GRAY JAY



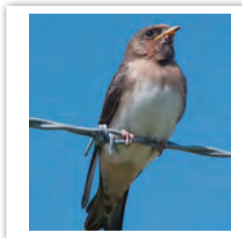
HORNED LARK



BANK SWALLOW



TREE SWALLOW (MALE)



CLIFF SWALLOW



BARN SWALLOW



NORTHERN WHEATEAR



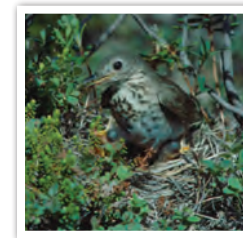
MOUNTAIN BLUEBIRD



SWAINSON'S THRUSH



HERMIT THRUSH



GRAY-CHECKED THRUSH



AMERICAN ROBIN



EUROPEAN STARLING



AMERICAN PIPIT



YELLOW WARBLER



AMERICAN REDSTAR



WILSON'S WARBLER



PALM WARBLER



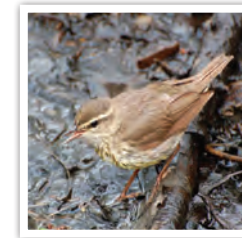
YELLOW-RUMPED WARBLER



PROTHONOTARY WARBLER



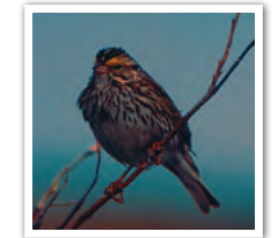
BLACKPOLL WARBLER



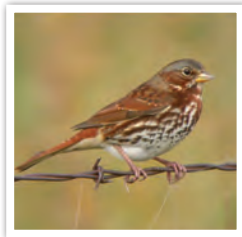
NORTHERN WATERTHRUSH



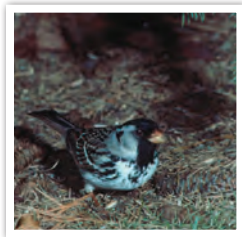
AMERICAN TREE SPARROW



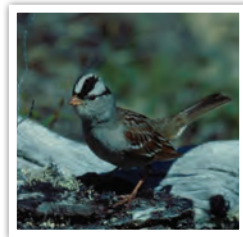
SAVANNAH SPARROW



FOX SPARROW



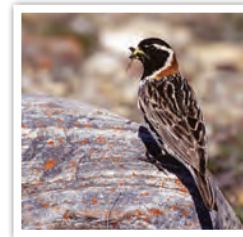
HARRIS'S SPARROW



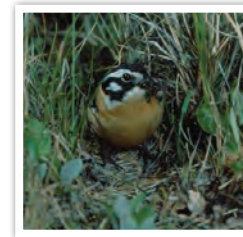
WHITE-CROWNED SPARROW



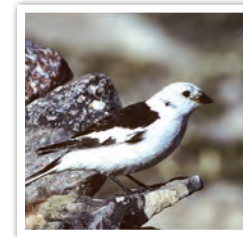
DARK-EYED JUNCO



LAPLAND LONGSPUR



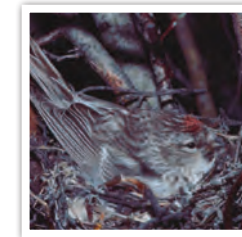
SMITH'S LONGSPUR



SNOW BUNTING



COMMON REDPOLL



HOARY REDPOLL



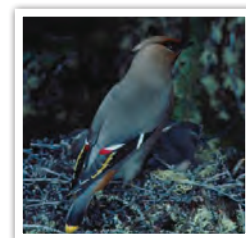
WHITE-WINGED CROSSBILL



RUSTY BLACKBIRD



YELLOW-HEADED BLACKBIRD



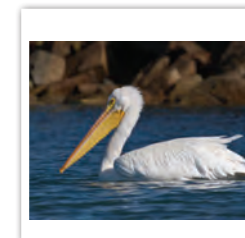
BOHEMIAN WAXWING



RUBY-CROWNED KINGLET



BELTED KINGFISHER



AMERICAN WHITE PELICAN



APPENDIX 8 NCRI FIRST CONTACT CALLING PROTOCOL

INTRODUCTION

Hello, may I please speak to _____?

If they are home then proceed, if not then ask when would be a convenient time to call back ... _____

My name is _____ and I am calling about a Marine Resource Inventory project being undertaken by the Fisheries and Sealing Division. You have been identified by members of your community as someone who is very knowledgeable. We would like to ask you to participate in our project. Do you have a few minutes now so that I can tell you about the project, or is there a better time that I can call you back?

Yes: proceed with the interview

No: determine when would be a better time to call

OK, great.

This project is a multi-community project intended to develop an inventory of coastal resources. To develop such an inventory we will be asking you to discuss a variety of topics; including descriptions and locations of marine animals and habitats. We will be asking you about the location of species that you know about, what

time of year you see them and to describe what habitat they are associated with. We hope the outcomes of the project will be the sustainable use of the coastal resources in your area, the protection of sensitive areas or special places, the preservation of invaluable local knowledge, and also the ability of your community to meet its economic development needs now and in the future. All information that we record and maps we create will remain in the community for the benefit of the community.

Our survey will take a few hours depending upon how much time you have to offer and the amount of knowledge you are willing to share with us. We would ideally begin with a 2 to 3 hour interview and following this it will be your decision as to whether we continue or meet again and complete the survey in more detail.

We recognize that the knowledge you have from your hunting and fishing experience would be a great asset in furthering our overall knowledge of marine resources. We would greatly appreciate any time you could commit to help us in this project and your time will be compensated at a rate of \$50 per hour of interview.

Would you be willing to participate in this survey?

Yes: proceed with rest of protocol

No: ask them... Would you mind telling me why you don't want to participate? _____

Thank you very much for your time. We would like to let you know that if you change your mind or find time to do the survey later then you are more than welcome to still participate. You can contact me at _____ if you change your mind or you are able to find the time.

TRAVEL ARRANGEMENT

We will be coming to _____ from _____ to _____. Can you meet with us on one of these days?

Yes: proceed to set it up

No: ask them when would be a good time to call back and arrange the travel part

What day and time works best for you?

We have a house rented where we will be hosting the interview and we can arrange transportation if you need. We will give you a call in a few days and let you know the address for the house.

No: proceed to arranging time

Do you need transportation? [get address]

Thank you very much for your time today. We will call ahead of our arrival. If for any reason you need to reschedule or cancel our meeting please let us know as soon as possible.

If you have any questions or need to contact me I can be reached at _____. Thank you again for your time today and I am looking forward to our meeting.

APPENDIX 9 WHAT IS A COASTAL RESOURCE INVENTORY?

Community-based coastal inventories are often undertaken by community groups with the support and help of government and other agencies. Since many communities in Nunavut are lacking the resources and capacity to carry out such work, the GN has set out to develop this project and encourage and financially help communities to do so.

A coastal inventory is a collection of information on coastal resources and activities, gained from community interviews, research, reports, maps, etc., which can be mapped, to assist in management, development and conservation of coastal areas. Inventories of coastal and marine resources will allow communities and governments to use the information to better understand and plan future activities in coastal areas.

Coastal Zone: there are many definitions of what the “coastal zone” consists of. In simple terms and for the purpose of this project it is “the coastal waters and adjacent land which are influenced by each other.”

Community-based: This project is described as community-based, and for our purposes this means that the data collected will fall within the area that surrounds a particular community and will be collected with the community and for the communities use.

Community-based coastal inventories are also a way to gather, record and map Inuit Qaujimaqatungit in a central database and link it with other scientific research and knowledge. Due to the social and economic changes over the years, there is a growing need to record, protect and conserve Nunavut’s traditional coastal biological, cultural and ecological knowledge before it disappears with the present generation.

In addition, there is a growing concern over the impact that climate change will have on the Arctic environment and on Nunavut society. Having IQ recorded will allow for monitoring of changes in species populations, patterns and behaviours, as a result of the changes in climate and ice conditions.

What information will be collected?

A community-based coastal inventory for Nunavut will include (but not limited to):

- fishery resources and fish habitat;
- fish species information;
- community infrastructure;
- marine mammals;
- aquatic plants;
- birds;
- shellfish resource information;
- cultural, recreational and tourism-related resources;
- significant or unique coastal features;
- shoreline classification;
- sources of pollution;
- and others.

How will this information be collected?

Interviews

The main source of information and knowledge will be collected through community interviews. There will be a standard list of questions to answer and guide discussion (including information on the items listed above), as well as, any and all information community members feel is important to note.

Community members will also be asked to locate on maps, locations of species and specific activities such as species breeding grounds, hunting routes, etc, and to comment on trends in distribution, abundance, predation, animal behaviour, etc.

The actual number of interviews (group or individual) per community will vary, as the population, scale of traditional hunting areas, and geography is factored in to the sample size. The amount of coastline included in the survey for each community will vary per community and depend on the type/amount of information gathered during interviews and research.

Research

Research will be conducted to identify what information already exists (such as data collected by other organizations, reports, documents, maps, and other materials), as to not duplicate efforts, or over-interview individuals. This inventory will build on what has already been done and will aim to include as much information as available.

Visual Surveys

Site visits will be conducted to identify resources such as wharves, fish plants and other infrastructure, to provide first hand information. This will be necessary to verify

data. Photographs will be taken to document condition of structures.

What will the information be used for and how will it benefit the community?

The information gathered from the coastal inventory can be used for a number of purposes including:

Economic development - fisheries development relies on sound knowledge of the numbers and location of fish stocks and species. Gathering this type of information in one central location will be the foundation for fisheries development. It will help in determining where fish resources are located, areas to conduct test fisheries, where to develop new fisheries, where there is a need to gather more data, etc. Information may also lead to identification and development of coastal parks, and related tourism opportunities and economic development in coastal areas.

Management plans – in order to properly manage resources it is important to know the population and harvest levels, locations of herds/breeding grounds/etc. Having this information collected and mapped will better allow for management of resources (such as the fisheries), developing management zones, and for management of land based activities that may affect coastal resources (location of community dumps, etc.).

Conservation efforts - information collected will be useful in identifying sensitive terrestrial and marine coastal areas, breeding grounds, species locations and populations, habitats, significant landscape features, etc. It will help understand trends in global warming, and the effects on species migration, populations, behaviours, etc. Having this type of information in one central location will better allow for protecting species and the land.



The project itself will also provide direct benefits such as:

Employment – This project will employ members of the community to help conduct the interviews and gather the data (translators, student intern, guides). As well, to oversee and facilitate the entire project across Nunavut a Project Coordinator and Project Liaison will be employed by the GN.

Capacity and Resource Building – It is intended that the communities be involved in the process throughout, and that all final products be available for the community to use for their purposes, including land-use planning, fisheries development, generating maps for community projects, etc.

What are the Objectives and Outcomes of the inventory?

- Identify and obtain existing information and sources about Nunavut's coastal resources from reports, documents, maps, and from agencies, organizations and departments.
- Identify and record IQ through discussion and documentation from local residents.
- Produce a useable database of coastal resources in Nunavut, utilizing GIS (Geographic Information System) capabilities, for resource management, economic development and conservation.
- Identify information gaps in the existing knowledgebase and determine opportunities for future research.
- Attempt to Integrate IQ and modern science using overlays, reference points, and data collaboration.

- Produce and publish informational materials, such as regional summary documents of the project, maps, posters, and report/articles on the project including methodology, results, and analysis of the information collected. An interactive website may also be developed in the future.

What costs are involved in completing an inventory?

Each community varies in the total project costs because of different travel costs. However, on average, each community costs \$150, 000 to complete an inventory. This amount covers partial salary dollars for 2 full time staff (GN), travel costs, equipment, community labour (including honorariums and site visits), consulting fees and consultant travel, production and printing of the final report, and delivery of the report back to the community and other stakeholders.

Currently inventory costs are shared between the community and GN Department of Environment. Secondary funding comes from partnerships with Federal agencies, such as, INAC or DFO.

APPENDIX 10 NUNAVUT CRI PARTICIPANT CONSENT FORM

Thank you for agreeing to participate in our study. This project is an important opportunity for Inuit knowledge to be recognized and included in marine science, planning and management.

Please review this consent form to ensure you understand the purpose of the project and the meaning of your participation. This consent form explains how the data collected is managed and it gives you an opportunity to refuse any aspect of our work. If you have any questions at any time please do not hesitate to ask.

Participant Selection

Participants are selected by asking members of the community who they consider to be local experts on marine animals and plants. Each person nominated is selected based on how long they have been a hunter, how much experience they have in the marine environment and what geographic area they are familiar with. Your participation is voluntary; however an honorarium is offered at a rate of \$50 per hour of interview, which is paid upon completion of the interview.

Expectations

The interview is a series of questions about your local hunting and fishing areas and about the distribution and abundance of fish, invertebrates, mammals, birds and plants. We have brought maps that we will draw the locations of animals on. After something is drawn on the

map we will discuss it and code it properly. We encourage you to discuss the species in as much detail as you can.

Confidentiality of Data

This project has been designed from the outset to benefit the people of Nunavut. The Fisheries and Sealing Division is committed to protecting your knowledge so that it is not used inappropriately, but also acknowledges that it must be shared with others for improved decision-making in support of better management, conservation and economic development.

The data collected in this study will be securely stored indefinitely by the Fisheries and Sealing Division and will also be given to an appropriate organization within the community; such as, the Hunter's and Trapper's Organization. The organization chosen in the community will be capable of storing the materials properly and representing the best interests of the community members.

Data may be used in future projects within the Fisheries and Sealing Division, as well as by the participating members of the project's Steering Committee. Outside of this group (e.g. private companies or non-Nunavut based researchers or organizations) data access may be granted upon written request and only after consultation with the project's Steering Committee. No charges will be levied for these materials when permission has been granted.

The community organization holding copies of data collected can distribute the information as they wish and, if they desire, require fees to be paid to the organization for access to the data.

You will also be given copies of your interview and the maps we create with you, which you can share as you wish.

The results will be published in a public report which is shared with project partners, the project Steering Committee, and the Iqaluit Public Library.

During the interview you may ask us to shut off the video camera and/or turn off the voice recorders at any point in the interview if you feel uncomfortable, or if you feel it inappropriate to record any particular information.

Questions?

If you have any questions regarding this research, please feel free to contact Janelle Kennedy, Project Coordinator, Phone #867.975.7706 or Corenna Nuyalia, Community Liaison, Phone #867.975.7702. Department of Environment, Fisheries and Sealing Division, Box 1000, Station 1390, Iqaluit, NU, X0A 0H0.

CONSENT

I have understood the details of this project and my involvement in it. I have been given the opportunity to ask questions and they have been answered to my satisfaction. I realize that my participation in this survey is voluntary and that I am free to withdraw from the survey at any time. I hereby consent to take part in this study.

I also consent to the following:

Audio recording the interview. Yes.....1 No.....2

Video recording the interview. Yes.....1 No.....2

Including my name in the acknowledgements of this report or any report related to this project? Yes.....1 No.....2

Participant Signature: _____

Witness: _____

To what address should we send you a copy of your interview?



APPENDIX 11 NCRI DATA RELEASE FORM – DRAFT

This project is an important opportunity for Inuit knowledge to be recognized and included in marine science, planning and management. Users of project data must be aware of the project background, scope, data collection process, limitations and context of the information available. Review all details of this data release form to ensure you understand the latter and the limitations, if any, on your use of the data.

Project Background:

What is a Coastal Resource Inventory (as applied to this project)?

This coastal inventory is a collection of information on coastal resources and activities gained from community interviews, research, reports and maps. This data is spatially mapped using a Geographic Information System (GIS) to assist in the management, development and conservation of coastal areas. A coastal inventory could:

- support an integrated coastal management plan;
- provide information to help identify and protect important coastal and marine areas;
- facilitate environmental impact assessments, sensitivity mapping, and community planning; and
- provide communities and governments with the tools to engage in strategic assessments, informed development and enlightened stewardship.

How is the Nunavut Coastal Resource Inventory (NCRI) carried out?

Due to a shortage of information on Nunavut's coastal and marine resources, the principle source of information for these community-based coastal inventories is interviews with community members, usually elders. A semi-structured survey document is used to collect information on coastal landscapes and plant and animal resources on beaches, on and around islands, above and below the surface of the ocean, above and below the sea ice, and on the sea floor. Other sources of information for the inventory include existing reports, maps, and visual surveys of the coastline and community.

Who is asked to participate in the NCRI interviews?

Interview participants are selected in consultation with the local HTO and by polling the community as to who they consider to be local experts on marine animals and plants. Each person nominated is selected based on how long they have been a hunter, how much experience they have in the marine environment and what geographic area they are familiar with.

During the interview, participants may ask to shut off the video camera and/or turn off the voice recorders at any point if they feel uncomfortable, or if they feel it might be inappropriate to record specific information. Participants retain the right to remain anonymous, or to be acknowledged for their contributions, and may withdraw from the study at any time without repercussion.

How can the interview data be used and how is it stored?

This project has been designed from the outset to benefit the people of Nunavut. The Fisheries and Sealing

Division is committed to protecting this traditional knowledge so that it will not be used inappropriately, but also acknowledges that it must be shared with others for improved decision-making in support of better management, conservation and economic development.

The original data collected in this study will be archived indefinitely by the Department of Environment (Fisheries and Sealing Division) and copies will also be provided to an appropriate organization within the community; such as, the Hunter's and Trapper's Organization. This organization will be responsible for storing the materials securely and representing the best interests of the community members. The community organization that holds the collected data can distribute the information as they wish, on behalf of community members, and if they desire can require fees to be paid by any organization that requests the data.

The results of coastal inventories will be published in a public report that will be shared with project partners, the project Steering Committee, and the Iqaluit Public Library. Raw Data (e.g. GIS data, audio tapes) may be used in future projects within the Fisheries and Sealing Division, as well as by the participating members of the project's Steering Committee. Outside of this group (e.g. private companies or non-Nunavut based researchers or organizations) data access may be granted upon written request and only after consultation with the project's Steering Committee. No charges will be levied for these materials when permission has been granted.

The project Steering Committee is an advisory panel that is made up of Territorial and Federal government departments, Inuit Organizations and the NCRI team. The duties of the Steering Committee include reviewing all requests for raw data associated with the NCRI project. The purpose of reviewing requests is to ensure that data is being shared with reputable organizations or individuals

and that the interests of the participants and community involved are considered. If the committee feels that a request may result in a negative impact, or that the person(s) making the request are ill intentioned then they may consult the affected community directly, or deny the request.

DATA RELEASE FORM

Date requested:

Details of Request (attach details if necessary):

Describe, in as much detail as possible, the type(s) of data you require?

How will the data be used?

Who will use the data?

Will any publications include the data?

Date Released:

Details of Release:

Data Types:

Restrictions on Use:

Questions?

If you have any questions regarding this research, please contact the NCRI Project Coordinator, Phone #867.975.7700, Department of Environment (Fisheries and Sealing Division), Box 1000, Station 1390, Iqaluit, NU, X0A 0H0.

Signatures

I have understood the details of this project and the details of the release of this data to me. I have been given the opportunity to ask questions and they have been answered to my satisfaction. All information that I have provided in my request is true and I will notify the NCRI Project Coordinator of any changes.

Researcher: _____

Date: _____

Contact Information: _____

Coordinator: _____

Date: _____

Witness: _____

Date: _____