Inuit Knowledge of Ukkusiksalik National Park

"A beautiful and bountiful place"

Summary report of a project led by the Naujaat Inuit Knowledge Working Group Inuit Knowledge Project, Parks Canada

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"Working together and understanding each other will be very important for this project as we tell the stories of the beautiful and bountiful Ukkusiksalik National Park."

Theresie Tungilik (Chairperson Ukkusiksalik Park Management Committee), Inuit Knowledge Working Group Workshop, March 2012

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Cover Photo

Front left to right: Robert Tatty, Honore Aglukka, Pie Sanertanut, Annie Tatty, Paul Sanertanut and David Tuktudjuk. Photo credit M. Manseau

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Dedication to Robert Tatty

The Working Group would like to dedicate the report to the late Robert Tatty who generously contributed knowledge and wisdom of his homeland. His unparalleled commitment to sharing his knowledge with Youth and those who are going to be involved in the management of the Park is an enduring gift. Thank you.



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INTRODUCTION

Setting and brief history

Ukkusiksalik National Park of Canada, a name described in Inuktitut as "the place where there is stone that can be used to carve pots and oil lamps" encompasses approximately 23,500 square kilometers. The park boundary includes Wager Bay in its entirety and almost all of the land within its drainage basin (Figure 1). It is the 41st national park of Canada protecting one of the 39 representative ecological regions of the country. It represents the geology, physiography, vegetation and wildlife of the Central Tundra Natural Region.



Figure 1. Ukkusiksalik National Park and surrounding communities.

To the Inuit of the Kivalliq Region of Nunavut it represents an area that was used by many families and a place for which people maintain strong connections. Theresie Tungilik, Chairperson of the Ukkusiksalik Park Management Committee (UPMC) and one of the last people to have lived in Ukkusiksalik expressed it this way.

Every time I think of Wager Bay I see beautiful landscape, mountainous and hilly and fast rivers flowing. And also living closer to the coast, I guess, where I would really see huge waves splashing against very rugged edge on the land. And then it being so calm. The land was beautiful all the time. And I remember the grass would turn green, so very green, and I recall collecting caterpillars in my hand.

[Theresie Tungilik, November 1991]

The human occupation of the park area goes back to the times of the Thule people who entered the Eastern Arctic from Alaska and the Western Canadian Arctic in the 13th century AD (Friesen and Arnold, 2008). Evidence of earlier, unrelated Arctic peoples of the Pre-Dorset and Dorset cultures has been documented within the broader region of northwest Hudson Bay but not within the park boundary.

In the mid centuries of the last millennium, Thule peoples in the Central and Eastern Arctic responded to a cooling climate by adapting their subsistence strategies and material culture. By the 18th and 19th centuries, the culture of these Thule descendents was greatly changed and they called themselves Inuit (Fossett, 2001: 227). On the west coast of Hudson Bay, Thule culture may have continued until about AD 1750 (Taylor, 1968: 9). The people of the Wager Bay area belonged to a larger group who call themselves the Aivilingmiut.

There are over 440 archaeological sites recorded within the park boundary that attest to the area's rich human history. Surveys and investigations carried out from 1991 to 1993 and 2005 to 2007 documented many, large sites, particularly along the north shore of Wager Bay. People living in these areas in the last few hundred years were able to enjoy the bountiful resources of the land. As yet, no excavation has been conducted on any site within the park boundary and this limits the inferences that can be made about past lifeways.

European history is relatively short; in 1742, Christopher Middleton sailed through Wager Bay to Reversing Falls in search of the Northwest Passage. Throughout the next 130 years, there was sporadic contact between Inuit and Europeans, primarily those who sought the Northwest Passage, the lost Franklin expedition of 1845, fur traders, and occasionally, whalers. That was followed by a more intense period during the early 1900s when the Hudson Bay Company (HBC) set up a trading post in the upper reaches of Wager Bay at Tasiujaq. The Royal Northwest Mounted Police and missionaries also had a presence during this time. In 1910, a Royal Northwest Mounted Police Constable came to Wager Bay, probably around Nuvukliit on the dog team route to Repulse Bay (Pelly, 1992: 22). The HBC post was originally managed by HBC personnel from 1925 to 1933 and was later managed by Iqungayuk, an Inuk from the area, until it was finally abandoned in 1946. Inuit continued to live within the region and the last Inuit families to live permanently in the area left in 1968. There were several periodic camps of several years in duration after that with the last family, the Tatty family, occupying the HBC Post at Tasiujaq from 1978 to 1980.

In addition to the archeological and written historical record, there is an oral history and knowledge of the land that resides with the Inuit families of the region most closely connected to Ukkusiksalik.

Many of those who lived in the Park have now passed away, but some of their stories have been collected and others have been passed to descendents. Charlie Tinashlu expressed the value of the knowledge from his ancestors and the need to continue to teach what has been passed to them and what they know.

... the Inuit that used to teach us, they are no longer with us, ... we know we cannot ask the people before us because they have done their work on this earth and we know we will not hear their voices again, but us we can still teach people - make our voices heard about what we were taught by our parents and our ancestors - what we have learned about the dangers and hazards of the land ... [Charlie Tinashlu - 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)].

In creating Ukkusiksalik National Park, it was recognized that Inuit and Traditional Knowledge would continue to play an intimate role in the management and operation of the Park. The Kivalliq Inuit Association and the Government of Canada signed the Inuit Impact and Benefit Agreement (IIBA) for Ukkusiksalik National Park on August 23rd, 2003 incorporating the continuation of Inuit involvement within the park area at various levels from participation on the Ukkusiksalik Park Management Committee (UPMC) through to the operational level of staff and the inclusion of Elders' knowledge. The agreement captures the purpose of Ukkusiksalik National Park of Canada:

- ⁽²⁾ To protect a representative natural area of Canadian significance of Parks Canada's Central Tundra Natural Region so as to leave it unimpaired for future generations;
- ⁽²⁾ To provide for the maintenance of vital, healthy wildlife populations capable of sustaining Inuit harvesting needs;
- ⁽²⁾ To celebrate the special historical and cultural relationship between Kivalliq Inuit and the land in Ukkusiksalik;
- () To encourage public understanding, appreciation and enjoyment of Ukkusiksalik; and
- ⁽²⁾ To recognize and honour Inuit knowledge, culture and harvesting rights and incorporate them as part of the living legacy of the National Park.

Recognizing that Ukkusiksalik is part of the national parks system of Canada for the protection of areas of Canadian significance and that Inuit of the region possess a large amount of information about the area, the Naujaat Inuit Knowledge Working Group was created to contribute to the achievement of those components of the purpose statements that relate to the recognition, inclusion and use of Inuit Knowledge in the management and operation of the Park. This report summarizes some of the work of the Naujaat Inuit Knowledge Working Group to date and includes information from past oral histories that has been collected from several Elders who are now passed away.

The Project

This project was part of Parks Canada's larger Inuit Knowledge Project which aimed at finding ways to facilitate the participation of Inuit knowledge-holders in park management and implementation and to increase Parks Canada's capacity to work with Inuit knowledge-holders and their knowledge. More specific to Ukkusiksalik National Park, an Inuit Knowledge

Working Group was established in Repulse Bay (or Naujaat) in 2006. The group is made up of Elders, Youth and a representative of the Hunters and Trappers Association; its role is to guide the broad objectives of the project and to facilitate discussions with key experts.

Through meetings and workshops, the work of the Inuit Knowledge Working Group is also critical to gaining community support as well as valuable feedback on appropriate research design and objectives. Without this crucial community involvement, further collaboration would have been difficult, and the project would not have been able to specifically address the needs and interests of the communities. This inclusion of community recommendations, and Inuit expertise, are an important dimension of parks management that is being prioritized through the development of the Inuit Knowledge Project.

Through the initial meetings of the Working Group, three broad research themes emerged and formed the project goals and objectives:

- Theme 1. Community "Land" (including terrestrial, sea ice and marine) Use Patterns – past and current
- ⁽²⁾ <u>Theme 2</u>. Documenting Inuit Knowledge of the Park Area and Environmental Changes
- Theme 3. Linking Inuit Knowledge of Environmental Change to Parks Canada's Risk Assessment/ Public Safety Program.

The project documented the most significant land (including wildlife) features along with Inuktitut place names from the past and the present. Along with the mapping exercises, the Inuit Knowledge Working Group and Inuit experts stressed the importance of recording the traditional ways of behaving on the land and sea ice including how and when to approach floe edges, whirlpools and leads and the relationship between terrestrial and marine/coastal areas. This project also documented changes that the communities neighbouring Ukkusiksalik National Park have seen in recent years and their understanding of the park's ecosystems by taking into account the connections between Inuit and the Land. This report deals primarily with the first two themes and the results have been grouped into three general categories that cut across both themes. The information is reported as observed changes in Weather, Sea Ice Characteristics and Wildlife. Each of these general categories is further summarized with specific observations. Theme 3 – Linking Inuit Knowledge of Environmental Change to Parks Canada's Risk Assessment/ Public Safety Program has not yet been done for Ukkusiksalik but some information reported here may be applicable



Figure 2. Hudson Bay Post, Ukkusiksalik National Park.

METHODS

In-depth Interviews and Mapping

Community researchers, interpreters and translators were hired to conduct the in-depth, semistructured interviews. In Repulse Bay, Carol Nanordluk was hired as the community researcher and Dolly Mablik as the translator. Marie Kringuk and Shauna Dian were hired as interpreters for the meetings and on-the-land activities (see below). A questionnaire was developed in consultation with the Working Group (see Appendix I) and nine interviews were conducted between 2007 and 2009 in Rankin Inlet, Repulse Bay and Coral Harbour. Interviews were all done in Inuktitut because it is more appropriate for Inuit to be able to talk about the area in Inuktitut (and not through an interpreter). As part of the interview process, maps were used to allow for spatial delineations of key sea ice features, hazards, routes, place names and wildlife areas. We also felt that it was culturally appropriate for participants to be interviewed by community members that they know and are comfortable with. We felt that this would elicit richer responses, as well as more culturally appropriate materials to incorporate into the report. Nevertheless, Anne Kendrick, Gary Mouland, Micheline Manseau, Paula Hughson and Bernice Malliki played an ongoing support role, collaborating with the community researchers to ensure adequate training and support for the project. This also took place in conjunction with Elisapee Karetak and Kataisee Attagutsiak, the project coordinators. This was a team approach with members of the local community conducting the primary research, with the staff and academics taking on a support and consultation role where necessary.

Verification Workshops and On-the-land Activities

Following the interviews, two workshops were held in Repulse Bay and two on-the-land activities were scheduled for further discussions on project results and verification. Any publications or material produced as a result of this project were reviewed with the individuals involved and/or the local Inuit Knowledge Working Group. This process aimed to ensure that results were presented and interpreted as accurately as possible.

The workshops consisted of the following:

- 1) September 2009 Workshop in Repulse Bay to review draft maps
- 2) September 2009 On-the-land activity North Pole River
- 3) July 2010 On-the land activity Ukkusiksalik
- 4) March 2012 Workshop to review first draft report.

For a more complete list of workshops and participants, please see Appendices I, II and III.

Research Instruments

The interview sessions were audio-taped and transcribed and participant consent was provided (see Appendices IV and V for a copy of interview questions and the consent form). Research license was obtained from the Nunavut Research Institute and Research Ethics was obtained

from the University of Manitoba. Digital copies of these files are archived with Parks Canada's Nunavut Field Unit in Iqaluit, as well as in the Repulse Bay office of Parks Canada. Copies of all spatial data files were also archived with Parks Canada's Nunavut Field Unit. Throughout the project, and upon completion, all original data, interim reports, and final results were made available to project participants and contributors.



Figure 3. Niurluk workshop with Robert and Annie Tatty, Paul and Pie Sanertanut and David Tuktudjuk.

RESULTS

The results are reported with the observations on changes to weather features first, followed by sea ice characteristics and then wildlife. Weather is considered first because it is fundamental to the subsequent observed changes in sea ice and ultimately wildlife.

WEATHER

Observations on weather and the ability to predict it or anticipate changes would have been key components of survival for Inuit and many changes in atmospheric conditions were reported by almost all of the Elders that were interviewed. Several Elders described the changes as being "dramatic," referring to how current weather differs from that of the past. These changes have occurred within their lifetimes. They emphasized both the large scale and the increased rate of change. Alterations in weather (day to day conditions) were noted in all seasons. A couple of Elders described shifts in the altitude, movement and appearance of celestial bodies (the sun and stars) and the Earth's atmosphere. As with changes to sea ice, the effect of the changes on people and animals was an important part of these observations.

Warming Trend

An increase in air temperature was the most common observation. Temperatures were said to have warmed in several seasons, especially in spring and summer. This warming was said to have also affected the timing and length of the seasons.

The air (sila) is not as cold as it used to be. Eating naturally frozen meat used to stick to your mouth when you eat but today the meat we freeze outside is not as frozen. [Honore Aglukka - 2006 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

Long ago it used to be a short summer and the fall would come earlier than now. Around 1940s the winter would come early ... [Jerome Tattuinee - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

No Refreezing in Spring

A couple of the Elders remarked that there is no longer refreezing after an initial melt in the spring. Robert Tatty spent most of his life living in and around Ukkusiksalik. He offers this observation on the spring thaw.

... the weather seems to be different from long ago. In the spring time, first the snow melts on the ground and there would be puddles after this. The ground starts to freeze again and also the puddles freeze again. You can travel on the frozen puddles. We call this Qiqsuqqaq, but nowadays the ground does not seem to Qiqsuqqaq ... [Robert Tatty - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)] Honore Aglukka provides a similar observation on the fact that refreezing does not occur anymore and he adds that the pace of snow melting has accelerated.

Our weather is changing and it seems to be changing fast. In the spring time when the snow starts melting it melts pretty fast, it used to freeze again after it started melting but now it is different. [Honore Aglukka - 2007 Interview, Inuit Knowledge Project (original in Inuktitut)]

Sunshine is Hotter

Many Elders have observed a change in the intensity of the sun. The sun seems more intense and is causing sunburns. John Kaunak commented that sunburns are even occurring in the spring.

Inuit used to get natural tans in the spring but not sunburned as they do now today. [John Kaunak – 2006 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

The increase in the heat of the sun and its damaging effects on skin were reported as both firsthand observations and as something numerous people have observed. Lucy Sanertanut expressed it this way.

...also the sun is a lot hotter and it can now burn. Long ago the sun would not burn. I have heard many people say this many times. [Lucy Sanertanut.- 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

The effects of the increased strength of the sun have also been noted on the process of drying animal skins. As a result, it was said that the method for handling pelts has been adjusted. Annie Tatty made the following comment.

... the sun is much hotter than it used to be. The skins that are left in the sunlight are not good. If its seal skin or caribou skins the sun is too hot nowadays ... It was different long ago ... Nowadays, we have to dry the skins not facing the sun completely. [Annie Tatty - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Sun is Higher and Sunset is Faster, Paler Sky, Stars Less Bright

Changes to celestial bodies were noted by some. The placement of the sun in the sky was noted to be higher than it used to be and its descent is faster. Jerome Tattuinee described changes that he has observed over his lifetime.

... as I'm now an Elder the sun seems to be getting higher and higher. The longer days are here much earlier than it used to be. For example, the month we are in now - the month of March - if it was long ago the sun wouldn't be where it is now.

It would still be lower. It would be much lower in the month of March ... Last week in Rankin Inlet it was very nice out. The snow on top of the house was melting and dripping. It seemed as if it was raining. The snow was melting pretty fast. When it's the month of March it would not start melting if it was long ago. Today it has changed dramatically. The sun is much hotter. [Jerome Tattuinee – 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)]

John Kaunak and Honore Aglukka provided their memories of the stars and the color of the sky.

The atmosphere used to be so blue in our youth, but today it is only a pale color blue. The stars used to sparkle brightly, they seem to have lost some of their sparkle also. [John Kaunak – 2006 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

... when there were no clouds it was blue skies but now it seems to be white even when there are no clouds. [Honore Aglukka – 2007 Interview, Inuit Knowledge Project (original in Inuktitut)]

Wind

Many Elders spoke of how the wind has increased in frequency and in intensity compared to the past. The most reported change to the wind was that nowadays there are fewer calm days. This was reported as both first hand observations and as observed by other people. Lucy Sanertanut summarized it like this.

I have heard people talking about these conditions. They would say the weather never used to be like this but nowadays it is a lot different from the past. I guess a lot of people have noticed the change. They say the weather used to be so calm for days but today it is always windy. [Lucy Sanertanut – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

This same Elder, who was 55 years old when interviewed, recalled calm weather during her childhood. She lived in what is now Ukkusiksalik National Park from 1953-68, so this increase in the amount of wind has occurred over the last 30 years.

... long ago when I was a child in the spring or in summer - when I just started to wake up in the tent, the weather would be great weather, no wind, hearing the birds singing and I would hear my parents doing something outside the tent. That is how I remember. But nowadays it seems to be more windy and cold. It used to be calm weather throughout the day. I do not see that anymore. [Lucy Sanertanut – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Several Elders noted seasonal differences in wind patterns, with more winds in spring and summer. They also spoke about how it used to be calm after the ice melted, but this pattern has altered, with winds occurring now even when there is open water.

The wind does seem to me to have changed from the past. Long ago - I do remember in the spring time the wind would seem to be always calm and also in the summer after the sea ice had left. But nowadays it is a lot different from the past. We now have more windy weather during the spring and summer even after the sea ice has left, it seems to be always windy. [Paul Sanertanut – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

... seems to be more windy nowadays. When I was a child there was hardly any wind in the spring and summer. I have noticed it is always windy in the summer and it used to be calm weather ... [David Tuktudjuk – 2008 Interview, Inuit Knowledge Project (original in Inuktitut)]

Observed modifications to wind patterns included a shift in wind direction. This shift was described for two areas in the region. One 81-year old Elder, who grew up within what is now Ukkusiksalik National Park, had noticed that the wind used to come from the northwest but this has changed to more winds from the north.

... it does not seem to get windy from the northwest. When I was growing up the wind was always coming from the northwest. We hardly had any winds from the southeast and the north but nowadays it seems to be more windy from the north... [Robert Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Annie Tatty elaborated on the same change in predominant wind direction. Winds in the past in Repulse Bay were reported to have been mainly from the north, and sometimes the east.

To me it has changed. Long ago I was raised in Repulse Bay and I knew about the north winds because the wind was always coming from the north. If the wind was coming from the east the weather would become cloudy and after the east winds, the north winds would come. It would be strong winds after this. The weather would be clear and sunny with blue skies. [Annie Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Winds in Repulse Bay were reported by residents to be now mainly coming from the south, and the east. This change in wind direction was observed to have occurred since one Elder, born in 1943, was a child.

Nowadays, here in Repulse Bay the wind is usually coming from the south and east, I noticed that this summer. [Honore Aglukka – 2007 Interview, Inuit Knowledge Project (original in Inuktitut)]

Weather more Unpredictable

A couple of the Elders noted that the altered weather patterns have meant that it has become harder to predict the weather. Jerome Tattuinee spoke of how weather forecasting has become unreliable within his lifetime. ... I used to be good at reading the weather but nowadays I do make mistakes ... long ago people would know about the weather if it was going to be good weather tomorrow but nowadays when we say it will be good weather tomorrow the weather could change and it becomes bad ... nowadays I do make mistakes because the weather is a lot more different from the time I was a child. [Jerome Tattuinee – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)].

SEA ICE CHARACTERISTICS

Sea ice is an important part of the annual cycle of Inuit life. Many types of changes have been observed and the effect of these changes on people and animals was an important part of the observations. Jerome Tattuinee summarized the force that sea ice had on Inuit to unite them at those times of year when the ice was either forming or melting.

When it is early spring it can become dangerous because the ice is melting. Maybe I can use the Inuit saying that the fall and the spring are collectors of the people. The Inuit from the past used to say the fall and the spring are the most dangerous times of the year. [Jerome Tattuinee - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Inuit now live in communities and the past constraints that sea ice imposed on people's movement and in bringing them together is not as important. However, Inuit continue to be greatly dependent on sea ice for travel and harvest activities. The following observations were made with respect to more specific changes that have been and continue to be reported.

Changes in the Timing of Freeze-up and Break-up

Changes in the overall season of sea ice have been a recurring theme noted by several Elders. Most commonly, it has been observed to form later and to melt earlier, no longer forming in late September or early October and melting in mid July.

On the dates of ice formation, Jerome Tattuinee, who was born and grew up at Tasiujaq, provides the following insight about ice formation in the park area. He distinguishes Tasiujaq and Ukkusiksalik with respect to differences in ice formation, Tasiujaq being what we now call Ford Lake and Ukkusiksalik being Wager Bay. Tasiujaq meaning *long lake* in Inuktitut is at the western end of Wager Bay. It is, for the most part, a freshwater lake but can be brackish in areas and is influenced by tides through a connection to Wager Bay through Sarvak (Reversing Falls).

... around 1940's ... in Ukkusiksalik, ice would start forming at the end of September because Tasiujaq [Ford Lake] is not sea water and the ice would form early there ... the sea ice would start forming in the beginning of October ... in the Ukkusiksalik area where there are no currents it would start forming earlier than today. [Jerome Tattuinee - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)] John Kaunak offers the following observation on the change in dates for the formation of sea ice.

As we are getting older, we have noticed changes during freezing ... For example, during the October long weekend, October 10-11, people like to go fishing to Committee Bay. During those times, we used to even have enough snow to make igloo and some years the ice was pretty thick. Today the snow and ice are freezing later and later and today we only talk about the good times we had fishing during the October long weekend. [John Kaunak – 2007 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

Many of the interviewees commented on the timing and rate of melting of sea ice. They consistently observed that the ice is melting earlier and faster. Jerome Tattuinee provides this long term observation.

Long ago the sea ice would melt slowly but today maybe it is not that cold - seems to me the weather is warmer, that is why the sea ice melts earlier than it used to. [Jerome Tattuinee - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Changes in Sea Ice Thickness and Strength

The characteristics of sea ice have been observed to have changed over the years, notably its thickness and strength. Thinner ice was particularly noticeable in the spring but it has also been noted throughout the season. Lake ice has also changed but not as much as sea ice. John Kaunak relates these types of changes to his activities on the ice.

... the sea ice is thinner than it used to be, long ago it used to be thicker, I know about it because in 1969 when we did not have an airstrip we used to make an airstrip on the sea ice. We would have to check it to find out if it was thick enough for the plane to land. When it was at least 5 feet thick a big plane could land on it – that would be before Christmas. I used to go on the sea ice with a loader, today we cannot even go on the sea ice before Christmas, today all through the winter the sea ice is not even five feet anymore because of the climate change. We know the ice is getting thinner because we go seal hunting, through the seal holes we now know it is thinner, we used to go seal hunting when I was a child in the spring. We still do that – that is how we know the difference. [John Kaunak - 2008 Interview, Inuit Knowledge Project (original in Inuktitut)]

Jerome Tattuinee adds his lifetime observations on ice thickness:

... I'll talk about the past - what I have known. I used to use an ice chisel and it was taller than me - the ice would be around 8 feet sometimes. Just a few years ago maybe last year or two years ago, I used one of those ice drills ... this ice drill we didn't have to add an extension to make it longer and it went through just about over three feet. The lake ice was a bit thicker ... We didn't have to add any extension to it as long as there was snow on top of the ice it could go through but if there is no snow on top of the ice - yes it is over three feet. All the lake ices are getting thinner ... this is happening from the bottom, the water underneath is no longer that cold ... I think it doesn't really go over four feet nowadays near the Rankin Inlet area I think a long time ago the ice used to be very thick - the ice used to get taller than me - about eight feet. I would have to dig down in the ice using the ice chisel but today it's very much thinner and that is very noticeable ... [Jerome Tattuinee – 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)]

Presence of Multi-year Ice

Multi-year ice is also now said to be less common. Elders recalled several summers in their youth when multi-year ice in Naujaat (Repulse Bay) did not melt, including three summers in the mid 1950s. It was reported that in the mid 1960s there used to be multi-year ice in Repulse Bay almost every year. In comparison, nowadays, most multi-year ice is farther from the community.

Annie Tatty recalls her observations on multi-year ice from her youth.

I used to notice multi-year ice when we were living in this area (Naujaat). I think it would come inside the bay but not every year. The bay of Naujaat would be full of ice when the ship was supposed to come in. The ship would not go into the bay because of all the ice. The shipments for the store were supposed to come but they would not come in for a long time ... the multi-year ice - the very old ice, it can even be dirty - it used to go inside the bay. Nowadays ... it doesn't seem to be the way it was. It used to be so full of multi-year ice people could not even travel through by boat. Also, they would not travel walking on the ice when the multi-year ice was inside the bay. ... this is where I grew up, that is how I know of this, when we were living in Pitiktarvik area I remembered that the whole bay was full of multi-year ice. [Annie Tatty – 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)]

John Kaunak adds his experience.

... when Honore and I were teenagers - for three summers in a row the ice never really left the bay, the ship couldn't make it into Naujaat. We would go boating only close to shore never really far ... Today we hardly see any multi-year ice. [John Kaunak – 2007 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

Honore Aglukka relates his experience with multi-year ice and the impact on access to Ukkusiksalik.

I was working in Churchill in 63-62. My uncle Akuarjuk still lived in the Ukkusiksalik outpost camp. My uncle came to Churchill for his annual supplies. On his way back there was a lot of multi-year icepacks around Naujaat and it was impossible to get in. They could not get to Ukkusiksalik so they had to stay in the

Naujaat area and travel back to Ukkusiksalik by dog-team in the winter ... Today, there are no more mass ice packs reaching our bay [Repulse Bay], even the multi-year ice has melted each summer. [Honore Aglukka – 2007 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

Floe Edge is Closer, Less Snow on Sea Ice

The location of the floe edge can be variable but many Elders commented that in recent years it has consistently been closer to the land later into the fall (October/November) and into the early winter (December) (Figure 4). They have also observed less snow on the sea ice as the ice is forming. Honore Aglukka summarizes the change that he has observed.

We used to live out on the land and we used to come here to Naujaat for Christmas. The sea ice used to have more snow then, and the floe edge used to be further in December. Right now the floe edge is closer and there is less snow on the sea ice. [Honore Aglukka – 2007 Interview, Inuit Knowledge Project (original in Inuktitut)]

Charlie Tinashlu adds his comments on the lack of snow on the sea ice in the early part of the season.

.... the sea ice used to form earlier than today during the holidays on Christmas we used to have races in the month of December. We used to have races to the Tikiraq area. It used to be frozen solid with snow on top nowadays the Christmas holidays come around and there is no snow on the sea ice. That is how it is now, the sea ice forms later ... [Charlie Tinashlu – 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)]

More Extreme High and Low Tides

A change in the range of tide levels has been observed by a few Elders. They said there are more extreme high and low tides. Jerome Tattuinee, who has observed this change within his lifetime (77 years), commented on how extreme this change is compared to the past.

The high/low tides are a lot different. The sea ice would start to form in October. After the sea ice forms, the high tide goes a lot more onto the shore line where the high tide used to be and the low tide is a lot lower than it used to be when there is a full moon. To me I have seen this change dramatically from the past. [Jerome Tattuinee – 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)]

... we have an outpost camp in Qugjulik area. ... every time when it's high tide the water gets very close to the cabin. The water used to be further down and if it's a low tide the water goes way down. This year it has changed dramatically. [Jerome Tattuinee – 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)]

Figure 4. Sea ice characteristics in and around Ukkusiksalik National Park. Next Page.



WILDLIFE

Ukkusiksalik National Park was described by the interviewees as being rich in wildlife. They spoke of a variety of wildlife species and of the need to live in different areas in order to access the required resources. Fish, caribou, seal, birds, wolf, fox and polar bear were said to be the most abundant species. The populations of other species were reported to fluctuate from year to year or were less common. Polar bear numbers in the Park were observed to have increased in recent years and it was suggested that this was due to their regular movements in and out of the Park. Caribou populations were also reported to have fluctuated between seasons and years but were almost always present. Changes beyond these migrations were not reported for most species within the Park.

Inuit who lived and travelled in Wager Bay possess the knowledge of the land and the animals that lived there. Their knowledge of the area was either learned from living there or passed on to them from their ancestors. They were intimately connected to and depended on the wildlife for their survival. Annie Tatty who lived in the Park for almost 20 years explained the feelings behind why her husband, Robert Tatty, who also grew up in the Park, had wanted to live there.

Maybe because this is where he grew up and it is beautiful and rich with animals. There are seals, caribou and fish up in lakes. [Annie Tatty – 2010 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Octave Sivaniqtoq, who lived at the main body of Wager Bay in the late 1920's and again in the late 1940's, was asked whether the area was special compared to other areas he knows. He replied:

I liked Wager Bay the most, because the game was always within easy reach. There are whales, belugas, caribou, fish, seal, you've got everything there ... Wager Bay had a lot of wolves and there would be some polar bears there too. It is a good spot for hunting. [Octave Sivaniqtoq –Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Wildlife was an important resource for food, fuel and materials for tools. Meat as food, skins for clothing and tents, fat to fuel the qulliq (stone lamp for heat and light) and as food for dog teams. Many uses for animals were described, including seal skin boots, caribou and seal skin clothing and children using fur and animal bones as toys. Annie Tatty describes the use of some animal parts for toys.

We used to play with dolls. We would make a mother a father and their kids. We would make clothing for the dolls. We would dry lemming skins and make clothing for the dolls. We would make amauti [coats] for the woman and also clothing for the man. We were also learning how to make clothing when we were children. ... there was hardly any wood, so sometimes we would have a toy sled made out of caribou jaws. My father did make me real wood toy sleds but not all the time because we did not have wood around. We had toy sleds made out of caribou jaws and we dragged them when we were playing, we did drag those toy sleds around but there were seal bones also. They are called inugait, the ones that can be toys from the seals front flippers. ... the bones of the flippers all have names. The bones that have claws were dogs. I forget which parts of the bones were qamuti [sleds]. Also some bones were napu [cross bar of a sled]. Also there were bones that we used as a igliti [bedding]. [Annie Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

They talked about the times to harvest animals for special purposes. Annie provided this information on the time to harvest caribou when the pelt was just right for parkas.

We would walk inland during the summer when the caribou skins are just right to make as qulittaqs/atigi [qulittaq is a parka with the fur of the caribou on the outside and atigi is with the fur on the inside]. [Annie Tatty – 2010 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Robert Tatty also shared information about uses for animal parts and when to harvest.

In the summer when they're good for clothing is when we would catch them and make parkas and clothing. Ring seals and caribou were warmest. Caribou legs for mitts and sometimes for kamiks[boots] ... landlocked char which is more red, my mother used to put designs on pants... red designs ... she would dry them first. [Robert Tatty – Tatty Oral History Project, 2005 (original in Inuktitut)]

Other Elders described using seal bone and caribou sinew as tools.

We used fishing hooks too, but not these modern types. The ones we had, we had to make - make out of bone. When I was still living down there [Ukkusiksalik], we used to take the metal hooks ... but before that we were using part of the seal bone to make a hook out of. It is part of the hip bone – there is a small hip bone that looks almost like a hook, and we would just take it out without breaking it and that is what we were using before ... we were not using ... the nylon twines, but we used the caribou sinew and we braided them together to make a line. Once those caribou sinew are braided together, they are not going to snap, no matter how hard you try, compared to what we have now. It will stretch, stretch, stretch, but it won't snap.

[Octave Sivaniqtoq - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

After the lakes freeze up they would fish them [char] with kakivak [spear] as well ... where it's frozen ... when there's no current, on the inlets along the river, where the waters not moving ... [fish with a kakivak] with a lure ... made out of ivory [on the end of a string] ... with a little flipper [put down the hole]. [Peter Katokra – Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Honore Aglukka explained some of the uses for polar bear.

In the past especially before trade occurred ... prior to commercial trade of polar bear ... skins were used for bedding as a lower layer because they are waterproof and keeps the rest of the bedding dry, they were also used for loading other things on to the sleds and in fact you can use them as sleds as well ... They also used the meat, along with the fat of the polar bear. If they were low on other types of oil for the qulliq, the stone lamp, they used it. If they did not have oil from seal fat or other types of marine mammals then they would use polar bear fat for the oil. And the skin was also used for clothing especially as pants. [Honore Aglukka – 2007 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

And Mark Tungilik provided this specialized use.

I started carving ivory when I was still up in Pelly Bay. I make them very tiny ... I once made a false tooth for an R.C. priest, out of a polar bear's tooth. [Mark Tungilik- Wager Bay Oral History Project, 1992 (original in Inuktitut)]

The following sections describe in more detail some of the specific information shared with respect to particular types of wildlife or specific changes noted.

Fish

Fish were reported to have been plentiful throughout the Park but several areas were better known or certainly emphasized during the interviews. As Jerome Tattuinee pointed to a map, he provided an overview of the many areas within Ukkusiksalik that have fish and some of the differences that he has observed (Figure 5).

... up there is called Tasiujaq where the old Hudson Bay Post is ... that area has one river where the fish go up to the lake ... the area can become white from all the fish but the fish don't go upstream and if you go to Ukkusiksalik area (Wager Bay) there are many rivers that fish go upstream when you are out of Sarvak area you'll go to Tikirarjuaq and go around it and when you go into the inlet you'll go to Qaungnaq area. When you go into the mouth of Qaungnaq that is where the first river is where fish go upstream ... from Qaungnaq area - if you want to catch many red trout that is where the red trout are ... yeah they're long and they're very wide the red trout of Qaungnaq. When you go out of that area there are rivers going down through the area. There are three more rivers where fish go upstream at Qaungnaq area. In Uumannak area and that Piksimaniq area those are the areas that I know of. The area that is called Uumannak and it's also called Kuugarjuk ... the rivers that fish go upstream are Kigirvik area and when you go out of the area from Kigirvik there's Irittaqtuut and Masivak. These three are the areas that have streams where fish go upstream - that I know of.

... I have talked about how they wanted to have a park because they started to see the place was so beautiful ... my older brother and I we went to the meeting. We went together as we were invited because we used to live in the Ukkusiksalik area. ... I said at that time that I think the fish will never go extinct and the numbers will never change ... but they are different from each other ... the lakes in Tikirvik area - if you fish there the fish scales are dark. They are black in Qaungnaq area. If you caught a fish they are kind of white in Iriptaqtuut area ... it is also little bit different - they are shiny that is how it is noticeable, the fish are a bit different. . [Jerome Tattuinee – 2012 Inuit Knowledge Workshop, Inuit Knowledge Project (original in Inuktitut)]

Other Elders spoke of the areas that they each knew best and the methods they used for fishing. They spoke of fishing with nets, spears (kakivak), hooks and weirs. They explained that the method used depended on the location and season. Octave Sivaniqtoq identified four major fishing areas that he used in the 1930s.

... Piqsimaniq, Masivak, Qaungnak (Bennett Bay) and also Kuugaarjuk, those were the major fishing areas at that time, but Kuugaarjuk was the only place that didn't have as many fish as the others. [Octave Sivaniqtoq – Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Peter Katokra related the presence of resources (primarily fish) to why people chose to live in certain areas within the Park. Peter lived in the Park for about two years from 1948.

The reason why Piqsimaniq was popular is because there's arctic char there and also it's close to caribou. Masivak is also popular for the same reasons ... I believe the reason for Tinittuqtuq is because it's close to caribou and also there is char there, but not as much as Piqsimaniq and Masivak. And Qaurnak here, the main reason is because of the fish. [Peter Katokra – Wager Bay Oral History Project, 1992 (original in Inuktitut)]

One Elder recalled his fishing areas from about 1949 until 1953, while living with his parents within the Park.

We moved to Tinittuqtuq [north side of Wager Bay, north of Kuugaarjuk, below Qaurnak [Bennett Bay] in the summertime because there is a river there and the fishing area was very good [Sila River]. In the Bennett Bay area, at the mouth of the river, we used to catch some fish with a kakivak. [Louis Pilakapsi – Wager Bay Oral History Project, 1992 (original in Inuktiut)]

The fact that fish were present throughout the Park was best summarized by Annie Tatty, who lived in the Park from the 1927 to 1946. She said that wherever they tried, they caught fish.

When it was summer we would fish anywhere where we were. [Annie Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Her husband, Robert Tatty, commented that fish were available near the Hudson's Bay Company trading post (Wager Inlet Post 384), where they lived. This would have also been between 1927 and 1946.

Figure 5. Important fishing areas in and around Ukkusiksalik National Park. Next Page.



... we used to go fishing to that lake [Brown Lake] and it was not far from the store where my father used to be a manager. That lake was the only lake that we used to fish. We never really went to another lake to fish and that lake was pretty close. We could come back in the same day. When I had just starting to travel by myself with the dog team I used to go fishing to that lake. [Robert Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Later, Robert Tatty moved back to the HBC post with his family. His son, John Tatty, made the following comment on the abundance of char during the winter of 1980.

...lots of char. The good char.... [John Tatty – Wager Bay Oral History Project, 1992 (original in English)]

Robert Tatty's knowledge of the Park was extensive. He talks about an area known as Kiggavik (peregrine falcon) and Qaungnaaluk (mountain that looks like a human forehead – qaung) and he related the following information with respect to fish and the lakes where they could be caught.

...this Kiggavik, that area does have fish but not that many fish and this is called Qaungnaaluk and it is very high. Maybe it is because the mountain looks like Qaung. That area does have fish as well but it is a deep lake it is hard to catch fish with nets. [Robert Tatty – Wager Bay Oral History Project, 1992 (original in Inuktitut)]

In an earlier interview, he made the following comments on the areas and the types of fish that could be caught in Ukkusiksalik.

... in Wager Bay ... there is char (more char then anything), land lock char like there is in Oamanaaluk [Brown Lake] (large lake with inland bays and rivers or place to go after fish). There are some there but, not many because they are deep, but, another part of the lake is not so deep where there is a lot of land lock char...Qamanaaluk has lake trout all over the place. The one that I said had landlocked char also has trout. Those are the only lakes we would catch fish from for food ... it is close to where we lived, that's where we would try and catch landlocked chars ... we would fish at Qamaniq (inland bay) and lower Qamanaugaq(small inland bay) where we would catch fish too ... white fish? Yes but not many and in another area I would see some too. We didn't catch many there... I don't think there are any cod fish in Tasiujaq, there might be some here but, there does not seem to be any there. There are also sculpins that I would try and catch at an early age ... they were fun to play with. I would sometimes even harpoon them because I could see them on the bottom of the lake. It seems we always caught fish, I don't remember ever not catching any. With spears, hooks, but only for trout. hooks made of bone made by Inuit ... that's all we would use ... With ivory and metal, perhaps old nails or just some old metal. [Robert Tatty – Tatty Oral History Project, 2005 (original in Inuktitut)]

Elizabeth Aglukka recalled her family using a stone weir 350 m or so upstream at Piqsimaniq. She lived there from her birth in 1950 until 1968. She explained that the weir was just below the small rapids by a sand flat. She remembered that every year for about 1 ½ weeks they would catch a lot of fish in the weir. They would block off the river except for a channel into the trap.

We went all together to check the weir. When we got close we could see lots of splashing in the water. That was the best time. [Elizabeth Aglukka - Wager Bay Oral History Project, 1996 (original in Inuktitut)]

Octave Sivaniqtoq identified fishing weir locations several hundred meters upriver (inland) from Masivak. Masivak is on the south shore of Wager Bay across from Nuvukliq (Savage Islands). In an east valley he said there was a fish weir used only in the spring when fish would go up at high tide, they would be caught by the weir as the tide receded. He also remembered that another weir, used in August, was located in the main river.





Figure 6. Fishing and drying fish in Ukkusiksalik National Park.

Felix Kopak also recalled a stone weir at Masivak in the spring and summer of 1922 or 1923. He explained that the name Masivak means *fish gills* – maybe referring to the large number of fish gills that could be seen when the fish were caught in the weir.

... we were going after fish, and the only way we were catching them was with the stone weir, because we did not have any nets ... my step-father, he mentioned the reason why it is called Masivak is because the char go upstream in that river. [Felix Kopak - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Fish were reported to be plentiful in Ukkusiksalik from the distant past to the present day. There were no observations of changes in fish populations in the region. Jerome Tattuinee gave the following general summary.

I don't think the fish will ever change in numbers because there are many lakes that have fish. [Jerome Tattuinee – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)].

Birds and their Habitat

Birds were another important resource within Ukkusiksalik for those that lived there. Robert Tatty provided a general summary of the birds that he had observed, primarily in and around Tasiujaq (Ford Lake), where he lived during the early part of his life.

There really were no geese, only once in a long while, but there were lots of ptarmigans. So there were birds such as peregrine falcons and rough legged hawks, but we didn't hunt them. We would just see them. There were really no ravens, but now a days you see ravens all over the place ... there were a lot of ducks... eider and other ducks. We call them amauliks [common eiders] ... we would eat them every so often because they would be nice and fat. [Robert Tatty Tatty Oral History Project, 2005 (original in Inuktitut)]

Annie Tatty, who was Robert's wife, commented on the lack of geese – both snow geese and Canada geese during the early years. They had lived in the Park from 1927 to 1946 and again in 1978 to 1980.

Long ago there were hardly any white geese (snow geese) and geese (Canada geese). [Annie Tatty - 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Robert provided more detailed information on the area known today as the Reversing Falls. Robert knew it as Sarvak. Sarvak means *rapids* or *fast water*. It is at the entrance to Tasiujaq from Wager Bay (Ukkusiksalik). ...this Sarvak does not freeze up all throughout the year. The eider ducks do nest in the island in that area. The island is pretty small. The seagulls do nest there as well. [Robert Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Still referring to the area around Sarvak, Robert provided this story about harvesting eggs at Sarvak.

Long ago we were traveling by dog team. We had brought a canoe with us. So we went to the island for egg picking. We did not have a motor at that time so we were rowing the canoe. As we went to the island there were many eggs to pick. We just did not have enough containers and we had opened up a barrel for the eggs. As we went home we boiled the eggs and cached the eggs in the sand. That way the eggs would not rot for a while. I know the birds had not laid their eggs fully because ... in the nests were only one, some were two, some were three, four and five. The birds can lay five eggs and up. I knew the birds did not lay their eggs fully. There were so many eggs on that island. We had never gone to that island again after that time. We went to the island only once. The other island that I was talking about is where we used to harvest eggs but there were not as many eggs as on the other island I do not really know, maybe it is called Sarvak Island I do not really know it does not really seem to have a name. [Robert Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Elizabeth Aglukka was a member of the last family to have lived in the Park. They lived in and around the area about half way along the north shore of Wager Bay. To Elizabeth and her family the areas were known as Nuvukliq, Ookkiaq, Tikiraarjuk and Piqsimaniq. Nuvukliq means *becomes a point* and refers to the point of land that is opposite to what we know today as the Savage Islands. Piksimaniq refers to the sudden bend in the river. She described the annual cycle of movement of her family to these four major sites and the presence of nesting seagulls on the islands. The islands are where they collected eggs. Elizabeth left the area in 1968 at the age of 18.

We were at Nuvukliq in December, Oakkiaq in June and Tikiraarjuk in July then we paddled from there to be at Piqsimaniq around August. [Elizabeth Aglukka – Wager Bay Oral History Project, 1992 (original in Inuktitut)]

The little islands (Savage Islands) in front of Nuvukliq is where the main nesting area for seagulls were ... They are called Qikiqtauga ... the second island and the further island, these islands were not nesting areas then but after the people moved from the Nuvukliq area, the islands also started to become nesting areas for seagulls. [Elizabeth Aglukka – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Theresie Tungilik also lived in and around Nuvukliq from the age of two to seven (1953-58). She described her memories of egg picking.

I remember it being springtime and we filled that box with eggs. We used to have eggs upon eggs for days. Then we didn't collect any more after we filled that up or else they started to go bad. I remember practicing to make eggs, because we had so many ... different kinds ... different sizes. [Theresie Tungilik Wager Bay Oral History Project, 1992 (original in English)]

Seals

Seals were an important resource for food, fuel and materials for tools. Several Elders described harvesting seals, for their own use – meat as food, skins for clothing and tents, fat to fuel the qulliq (stone lamp for heat and light) - and as food for their dog teams.

The seal would keep you warm at your feet [as boots] ... we used to eat the meat. [Theresie Tungilik - Wager Bay Oral History Project, 1992 (original in English)].

In that time we used to have, out of seal skin, or bearded seal skin we used to have them for buckets. [Elizabeth Aglukka - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Annie Tatty described the method for storing seal fat for later use.

... the qulliq needed fat to be lit. During the spring time they would catch seals. They would make the seal skin into a bag to store the fat. They would tie it up and cache it and when the winter came they would go get it. We would use the fat to light the qulliq and some of it would be given to people. [Annie Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

As with many types of wildlife, seals were plentiful within Wager Bay. The two Elders quoted below lived in the Park from birth (1932 and 1927 respectively) until 1946. They spoke about seals within what is now Ukkusiksalik National Park.

I was a child ... we would travel to Tinittuqtu where there were people. And also in this area we used to have an outpost camp in the spring to hunt baby ringed seals because all through these areas is where there were a lot of seals. [Jerome Tattuinee – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

... there are many ringed seals as well in any area but there are hardly any bearded seals. There were bearded seals but not that many. [Robert Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

During the season of open water, seals could be hunted almost anywhere but there were some specific locations for harvesting seals when there was ice. The floe edge and at polynyas or cracks throughout Wager Bay (Ukkusiksalik) were common. Polynyas in the winter at both Nuvukliq (Savage Islands) and Sarvak were mentioned. Felix Kopak describes a situation in the summer.

... we got to the edge of Wager Bay ... we got to the other side and we stayed with Qingatoq ... these families were at Masivak. Qingatoq had a boat ... We stayed with them through the whole spring and all through the summer ... They would catch whales and bearded seals from the boat. [Felix Kopak – Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Robert Tatty talks about seal hunting during the winter.

... this is Sarvak, the current goes back and forth like a river and it is a polynya. It never freezes over all through winter and it does have seals in that polynya. I used to hunt seals in that polynya. It does have seals throughout winter. [Robert Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

He identified a spring ringed seal harvesting location.

... at Tasiujaq, before the point is where we would spend spring time catching seals, probably in June. [Robert Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Elizabeth Aglukka described a winter seal harvesting location.

Aukanaqjuq – "place that does not freeze"[a polynya] between two islands off Nuvukliq (Savage Islands) ... sometimes it was there for the whole winter; but sometimes it froze over ... location for most of the seal hunting from Nuvukliq. [Elizabeth Aglukka - Wager Bay Oral History Project, 1996 (original in Inuktitut)]

Living for periods of time near the floe edge was necessary in order to hunt seals and other marine wildlife. Many Elders noted that the areas where they lived were chosen because of that. They recognized this as a long term pattern and one their ancestors had provided direction for. Jerome referred to it like this.

In the winter, the Inuit before us, Pujjuut, Anaqtungnik, Nilaulaak and Tavo, they told us to live in that area, to wait for the winter because they were trying to be near the floe edge. They used to have an outpost camp on that island. ... many people used to live in that area because they were trying to be near the floe edge [to hunt seals].

[Jerome Tattuinee – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Peter Katokra explained that the floe edge at Nuvukliq can be more dangerous than in other areas.

The floe edge near Nuvukliq is different from all the other floe edges because even if there's a strong north wind the ice can come up at a fast pace towards you. And one person almost got drifted away because he didn't know about it being different ... Joe Natar, in Rankin Inlet. He fell in and the ice was going to crush him and his partner, Saniqtaq, yelled to the open space and the ice stopped. They say this is what happened. He did this according to his Inuit ... power. [Peter Katokra - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

During the interviews and mapping, Elders described the locations and seasonal patterns of animal movements, and in particular the relationship of marine mammals to ice or open water. They linked their knowledge of wildlife habitat to their use of these species, especially for seals and beluga whales. Arsene Putulik describes the necessity for most people to move to harvest seals and the importance of Nuvuklik to all those that lived in Wager Bay. The requirement to move for those that lived at Masivak was not as critical – since they lived on the south shore of Wager Bay – close to Nuvuklik.

The families that stayed around Masivak didn't really move around too much. But, the people that were anywhere else around Wager Bay used to go to Nuvukliq. The only source of heat that used to be available was from seal fat [used in the qulliq]. In order to stay warm you had to be at Nuvukliq for the seal fat and in order to feed your dogs. Anybody around Wager Bay used to end up in Nuvukliq for survival ... when the winter comes. [Arsene Putulik - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Anthonese Mablik remembers when he returned to the Park area in late April in 1968 to hunt seal at Aukanaqjuq [an open water hole but distinct from a polynya because it has frozen and then melted] in the Savage Islands (Nuvukliq), he remembered there being an abundance of seals.

We were in Aukanaqjuq just for about two days and the first day we were there we caught 100 seal and the next day we were there just to catch a little bit more, but there were too many seals to skin, so we stopped after two days. [Anthonese Mablik - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Whales

Whales in Ukkusiksalik were another important source of food and oil. Jerome Tatty provided what he knows about belugas in Wager Bay. He passes along the information that he has learned from his uncle - in particular – two places that are located along the south shore of Wager Bay, today, collectively known as the Paliak Islands, where his uncle used to hunt beluga whales in the summer. He calls these areas Iriptaqtuuq and Qinalugalik. Iriptaqtuuq is also referred to as Iriptaqtuq. Iriptaqtuq means *plucked out* and refers to a white area visible at the site.

...if the sea ice has melted the whales [belugas] will go into Ukkusiksalik area in the winter time ...after the sea ice is gone they would start to go into the bay. [Jerome Tattuinee – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

...in the summer my late uncle Siulluk he used to have an outpost camp here in Iriptaqtuut area he would travel by boat and there were a lot of beluga whales and also in Qinalugalik [south shore of Wager Bay] area. [Jerome Tattuinee – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Robert Tatty refers to one of the same areas but calls it Irriptaqtuuq

This area here has many beluga whales. It is called Irriptaqtuuq. The whales do come in this area in the summer time. Yes around that area it is called Irriptaqtuuq. Maybe in that area is where the caribous have their young. That area does have whales in the summer. Also Siulluk used to hunt whales in that area.

[Robert Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

He also refers to belugas occasionally making their way into Tasiujaq where he lived.

Whales would travel up to the area through Iriptaqtuuq and thru Paaliaq, I can't remember what it's called though, but they would go through that way. It was only once in a long while that whales [belugas] would go into Tasiujaq, that is what I would hunt for. [Robert Tatty - Tatty Oral History Project, 2005 (original in Inuktitut)]

David Tuktudjuk has travelled extensively in Wager Bay for many years. He relays both what Robert Tatty has told him along with his own observations with respect to narwhals.

I used to visit [the late Robert] Tatty when he was still alive. He told me that a long time ago they used to have narwhals in Ukkusiksalik. They weren't there all the time but they would see them sometimes. I started going to Ukkusiksalik in 1974, to Tasiujaq. I go there every year now. Some years we see many, some years we don't see them. I travel by boat up through Tasiujaq [Ford Lake]. [David Tuktudjuk – 2012 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Honore Aglukka explained recent narwhal movements as being related to their predator, the killer whales.

When Tuktudjuk was working in Ukkusiksalik (1992 – 2000) the narwhals started to go into Ukkusiksalik area ... The narwhals are trying to get away from the killer whales. Honore Aglukka (original in Inuktitut) [Honore Aggluka – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

And Jerome Tattuinee added what he has heard and knows about the change in narwhals, belugas and killer whales.

... I now hear that there are narwhals in the area I do know that the belugas used to go to the area but those narwhals never used to be in the area while we were living there. But after we moved out of the area, the narwhals started going there. There are now killer whales and there are now narwhals probably ... [Jerome Tattuinee - 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

The record of bowhead whales in Wager Bay is less common. Robert Tatty offers what he has heard about a site referring to Nuvudlik (Savage Islands). It is located off the north shore of Wager Bay.
Near that Nuvu area I have never really seen it myself but maybe before I was ever born people used to live in that area. There are many bowhead whale bones. [Robert Tatty 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Another Elder who lived within the Park in the main part of Wager Bay as a child with his family in the late 1920's and again for a couple more years in the late 1940's, discussed what he knew about whales and in particular the bowhead, as something from the past.

I haven't heard of any whalers being based in Wager Bay at all, and while I was there nobody even mentioned the white whales while we were there and I never saw any whales, but before that, at an earlier generation, I heard stories that there were some bowhead whales in Wager. The only ones that I heard of were down at Qatitalik [Cape Fullerton]. [Octave Sivaniqtoq - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Walrus

Little information was provided on walrus. The one observation that was provided described the presence of walrus to be associated with the entrance to Wager Bay. In the meeting held in Repulse Bay in March 2012, Elizabeth Aglukka had just sung a walrus song that she recalled vividly from her childhood and Jerome Tattuinee recalled a story about his father and a walrus hunt.

I'm thankful what I've just heard. The song that she sang, that is my father's song. Up near the Ukkusiksalik mouth, the walrus are usually on the ice where the floe edge used to be, where the ice is thinner, they go to the edge of the ice and sit there. My father headed right to a walrus. As he went right beside it he could hear it breathing. He went to the area where he can hear it breathing as he got to the walrus, as he stabbed the walrus - that is what he sang. He was yelling at the people who were hunting with him, he let them know he got the walrus and of course he couldn't pull the walrus all by himself. He stabbed the walrus, the harpoon went inside of the walrus as he was hanging on to the rope of the harpoon. As he was doing that he waited for his fellow hunters - yeah there used to be walrus in the Ukkusiksalik area but maybe there weren't many walrus - but sometimes there would be one. After we were born we never knew about the walrus that's why I'd say there weren't any walrus around [Jerome Tattuinee – 2012 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Wolves and Wolverines

Numerous furbearers were reported to have been within the Ukkusiksalik National Park area.

We used to go hunting in Wager Bay for fox, char, wolf and polar bear [in the 1960s] ... After snowmobiles got introduced, while out hunting [around 1979], I used to go to Tasiujaq [the abandoned HBC buildings at Ford Lake] ... It was a nice place to camp while you're out wolf hunting. [Andreasi Siutinuar - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Robert Tatty provided this account about wolverine and wolves between 1926-1946.

... there were wolverines and people would catch them every so often, but I never caught one during those times. There would be wolves and my dad would catch one every so often. [Robert Tatty - Tatty Oral History Project, 2005 (original in Inuktitut)]

Robert's son, John Tatty, spoke about living with his parents in the abandoned HBC Post area within the Park during the winter of 1980, and travelling by skidoo to harvest wolves nearby. He recalled more wolves being north of Qamanaaluk and Tasiujaq [Brown and Ford Lakes] and fewer wolves to the south.

I never went out overnight ... maybe farthest, forty miles ... around thirty wolves caught that winter ... [John Tatty - Wager Bay Oral History Project, 1992 (original in English)]

Fox

Fox were reported to be variable in numbers; some years they were not many while in other years they were plentiful.

Robert Tatty spoke about there being many foxes within the Park as he grew up and lived at the HBC trading Post (1927 to 1946).

...we would try and catch foxes when winter came, there are a lot more red foxes there [in UNP area] than here [in Rankin Inlet] ... red foxes and all kinds. [Robert Tatty – Tatty Oral History Project, 2005 (original in Inuktitut)]

Octave Sivaniqtoq reported one year that he can remember that there were few foxes in the winter of 1944/45.

Iquangayuk spent a long time as the Post manager and they [HBC] were sending him supplies before, but they stopped sending him supplies ... he bought a peterhead [boat] and then would go down to Chesterfield [Inlet] to get supplies ... [and later] to Repulse [Bay] ... and the Peterhead's motor wasn't running well at a later year and that is when he stopped altogether, and because there was hardly any foxes around.

[Octave Sivaniqtoq - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

After moving to Umiijarvik, about halfway down Roes Welcome Sound towards the inlet in the late summer/early fall of 1945, Robert Tatty (Iquangayuk's son) recalled an increase in the number of fox furs brought to the new trading location. They moved to Repulse Bay in June 1946.

We had more business there than before at Wager Bay [Post at Tasiujaq/Ford Lake]. There was a lot of fox that year [winter 1945/46]. [Robert Tatty - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

In speaking about returning to live from 1978 to 1980 within what is now the Park, Annie Tatty (Robert Tatty's wife) remembered there being numerous foxes at that time.

We did get many fox skins. We have some pictures – the fox skins are hanging. They caught many foxes. [Annie Tatty – 2010 Workshop, Inuit Knowledge Project (original in Inuktitut)]



Figure 7. Arctic fox skins, Repulse Bay, NU.

Muskoxen

Muskoxen have been noted to occur within Ukkusiksalik but were generally not common. Information was provided that related primarily to the area west of Qamanaaluk (Brown Lake). Anny Tatty summarized what she knew. ... we have heard there were muskoxen up further but we never did see any muskoxen here. [Annie Tatty - 2010 Workshop, Inuit Knowledge Project (original in Inuktitut)]

And Robert Tatty, her husband named several families who he had known to harvest muskoxen around Qamanaaluk [Brown Lake].

... we never caught muskoxen, only people over in Qamanaaluk like Qilak and his group, Qapuk's brother stayed up there and Tiinaaq's and Qamukaaq's ... [Robert Tatty - Tatty Oral History Project, 2005 (original in Inuktitut)]

Guy Amarok whose family spent summers at the HBC Post with Iqungayuk's family (Robert Tatty) around 1938 or later, spoke about eating muskoxen that were harvested in the same area. He described an area 100 km northwest of Qamanaaluk (Brown Lake), called Kugajuk, where they harvested caribou and muskoxen during the winter.

In the wintertime we moved up to where other people were living ... I remember that we were eating musk-ox for food. There were musk-ox in that area ... We traveled by dog-team. [Guy Amarok - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

And John Tatty, who lived with his parents at the abandoned HBC Post within the Park during the winter of 1980, also spoke of the lack of muskoxen in the vicinity of the Post.

There used to be [muskoxen there] ... we didn't see any muskoxen at all. [John Tatty - Wager Bay Oral History Project, 1992 (original in English)]

Grizzly Bears

Grizzly bears have recently been reported to occur within the area now known as Ukkusiksalik, but no Elders reported information related to grizzlies from the past. Robert Tatty provided this comment.

I had never heard much about grizzly bears. [Robert Tatty - Tatty Oral History Project, 2005 (original in Inuktitut)]

Polar bears

Polar bears were known by those living there to be within what is now Ukkusiksalik National Park and were reported to have been variable in numbers with an increase in recent years. It was suggested by some Elders that this was part of the polar bears' cycle of using the Park area and then moving elsewhere (Figure 8).

Robert Tatty recalled there being few polar bears during the early years at the Post, but noted that this has changed.

There were hardly any polar bears in Ukkusiksalik area when I was growing up (still a child/young adult) only once I had witnessed someone catch a polar bear but nowadays there are many polar bears in Ukkusiksalik area. [Robert Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Jerome Tattuinee who also grew up in within the Park during that same period provided a similar comment.

There were no polar bears in Ukkusiksalik area when we were living in there but if they did see a Polar Bear they would catch it right away and after years later we would see a polar bear again but nowadays there are many polar bears in Ukkusiksalik area. I have heard it has many polar bears. [Jerome Tattuinee - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

He added that his father had explained to him that polar bears had been known to move in and out of the Park over the years.

... long ago the polar bears were not in Ukkusiksalik area and had probably moved elsewhere. That is ... what the Elders used to say ... I remember that my father when he was younger he said there were many polar bears in Ukkusiksalik area but as they grew older there were no more polar bears in Ukkusiksalik area. [Jerome Tattuinee – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

... but what I think is that the park area will not have polar bears around much longer. What my father used to say is still in me. When he was younger, before he became an Elder, there were so many polar bears in Ukkusiksalik. There were many polar bears around. Later, the area did not have many polar bears. ... when the polar bears migrated back to the area, the people now wait for the polar bears to migrate elsewhere. Today, now it is rich with animals. It now has all the different animals and there are now polar bears roaming in the area again today ... Ukkusiksalik when it's a National Park and it will still be Ukkuksiksalik, maybe the polar bears will migrate elsewhere. When it's the right time for them to migrate, the polar bears will migrate out of the area. That is how all the animals are. That is what the people before us used to say. [Jerome Tattuinee – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Another Elder who lived within the Park area from age 12 to 16 (from 1949 to 1953) also spoke about polar bears in the area during that time.

When I was a child, I remember seeing just one bear, although we lived in Wager Bay about four years, but now there is lots of bear. [Louis Pilakapsi - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Polar bears were reported to be common in the Park area in 1975.

I went by sea ice from Repulse down to Nuvukliq (Savage Islands) ... We got polar bears, seals, lots of seals ... We spent a couple of nights ... in that old church, Iglujuarnaq [large building] ... two guys got a polar bear ... when I got there, there were lots of polar bears ... there were lots of tracks everywhere, when I got there, when I came from Repulse Bay. [John Tatty - Wager Bay Oral History Project, 1992 (original in English)]

He shared a legend related to the change in the polar bear population around Wager Bay.

There is an old saying that there was a woman, her son was killed by a polar bear, and she cursed the place - that there would be no more polar bear. So there was no polar bear - for a long time. But when I got there, there was lots of polar bear.

[John Tatty Wager Bay Oral History Project, 1992 (original in English)]

Mary Tuktudjuk has spent many years travelling and working in Wager Bay. She spoke about the polar bear population within Ukkusiksalik National Park and explained that although polar bear numbers change each year, there are particular seasons when the bears are more numerous.

Every year is different, it fluctuates, there may be more in one season, maybe less in the other season, but when you are there in spring there are sometimes many and towards August or so there is far more bears wandering today than there used to be. [Mary Tuktudjuk – 2007 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

Polar bear always seem to have been in and around Wager Bay – sometimes more numerous than at other times – through time and between seasons. Archeological evidence supports that as well. When shown photos of a stone structure taken within Wager Bay, Octave Sivaniqtoq thought one photo was of a bear trap (pulati). It was 19 feet long with big rocks all around. He explained how a pulati would have been used.

I heard of bear traps down in Wager Bay, and what they did was that they made it so that the bear, instead of the bear going in this way, would go in sort of like this [so it can't move, paws at its side], and when it goes in, this one is covered and there is food in there and this is covered, and when it goes through this, they somehow fixed the stone so that it would just fall down and when it falls down the bear would get stuck in there. Instead of going after it, they would just stab it to death, right there.

[Octave Sivaniqtoq - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Jackie Nanordluk, when shown the photo separately, added,

I have seen one about 2 to $2^{1/2}$ feet high and about 2 feet wide ... a polar bear trap is made so that the bear is not comfortably able to move in there ... when a polar bear crawls in there ... the rock trap door falls, it hits the hind legs so that the bear cannot freely move.

[Jackie Nanordluk - Wager Bay Oral History Project, 1992 (original in Inuktitut)] Figure 8. Polar bear denning areas in Ukkusiksalik National Park. Next Page.



Caribou

Like seal, polar bear and whales – caribou were an important part of the lives of the people of Wager Bay. They were well aware of the pattern of migration of caribou and if they weren't nearby, they travelled to access them. Jerome Tattuinee provides this overall comment on the availability of caribou from what he had heard from Elders when he was young.

...my father never did talk about this area but her (Annie Tatty) father used to talk about this area. What he used to say is that there were many, many caribou, long time ago but after the caribou migrated elsewhere we moved to this area. People had to hunt caribou very far from this area. Sometimes some people wouldn't even catch any caribou and some would catch a caribou ... The sayings, tradition and culture of our Elders are the truth. Some areas that had animals would no longer have any animals after the animals migrate after many years later the animals will migrate back to the area. [Jerome Tattuinee - 2012 Workshop, Inuit Knowledge Project (original in Inuktitut)]

There was also a seasonal pattern of caribou movement and the requirement to move between seasons to harvest caribou and the travel routes they used depended on the areas in which they lived. Robert Tatty explained the seasonal caribou movements he had known around Tasiujaq (Ford Lake).

... in the early spring the caribou do go to the shoreline near the sea ice, but in the winter, the caribou used to be more inland. [Robert Tatty - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

They go to the shoreline to get away from where there are many mosquitoes. The caribou do know it when it is time of the mosquitoes inland, so the inland does not really have many caribous that time of the year. [Robert Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

He returned to live in that same area of the Park (at the now abandoned HBC Post), from 1978-80. He reported that at that time, the caribou were in the same areas as when he was there as a child.

... after we had left the area we went back to the area, when we went back I saw that there were more caribou. The caribou were still in the same areas in the summer and in winter, the caribou would travel further inland. I saw that it was still the same as when we had left the area. [Robert Tatty – 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

He also noted that caribou populations fluctuated over time. Regardless of the annual pattern of movement between seasons, he noted that in some years the caribou were close by, other times they had to travel far to find caribou, so they shifted harvesting locations. He observed that there

were few caribou in the Tasiujaq area sometime between the 1930's and 1950's, and then a lot of caribou throughout the area around 1979.

Long ago when I was growing up it was a lot different from today. For instance, when there were hardly any caribou, we used to travel here to hunt caribou (pointing to the map), my father and I, we used to travel by dog teams to hunt on the other side of Tasiujaq. During the winter, the population of caribou fluctuated and we had to travel long ways to hunt caribous...But after that, there was a time when the caribou population grew, the caribou were everywhere and I did not have to go to that area because the caribou were close enough to hunt...My father and I, we went caribou hunting, we came across her parents (Annie Tatty's parents)... we did not catch any caribou so Qalluituq gave us caribou meat that had been cached in the summer ... this was when my father was a manager for the Hudson's Bay Company. The brothers (of Elizabeth Aglukka) were all there well before Honore and Elizabeth Aglukka were born. After that had happened we were living in Tasiujag area again, I do not remember the year [1978-80] there were caribou everywhere so we went caribou hunting anywhere we wanted to go. [Robert Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

Octave Sivaniqtoq also talked about some of the movement within Wager Bay to follow the caribou.

There were also ... people that had moved from the other Okkusiksalik [near Back River] to this Okkusiksalik [Wager Bay]. My parents moved to this Okkusikalik here, and ... there were a whole bunch or group that went down before ... they had moved down to Wager Bay from Okkusiksalik because there wasn't enough game to support the group. [Octave Sivaniqtoq - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

Robert Tatty spoke about Niurluk (whirlpool), an area located in the entrance to Wager Bay. He noted that this area was used to camp and access caribou during the summer months.

In the winter time there is always open water (polynya) because of that I do think the people did not really live in that area, but in the summer time people would camp near that area to hunt caribou. [Robert Tatty - 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

A few of those interviewed stated that their families had moved to Wager Bay specifically because caribou were more numerous there.

I can recall the reason we moved to Wager Bay. When we lived in Repulse Bay area then the hunting around Repulse in those days [1949] was very limited. There were hardly any wildlife, mainly caribou. My grandparents and my parents decided to move to where the caribou were more plentiful and that's the reason why we moved to Wager Bay area. [Louis Pilakapsi - Wager Bay Oral History Project, 1992 (original in Inuktitut)] Another Elder recalled moving to the Park area in the late 1950s because of a shortage of game around Repulse Bay but they also found a shortage of animals within the Park area. His family lived at Nuvukliq and Tinittuttuq.

[in 1958] We were trying to catch caribou in the summer ... my brother, Arsene Putulik, me and my older brother walked from Tinittuttuq to that area [about 25 kilometres straight north] ... There were not very many caribou, just a fewIn the winter we used to get hungry all the time. The game was scarce in Wager Bay and that's why we moved back to Repulse [Bay in May 1959]. There wasn't enough caribou and enough seal. [Anthonese Mablik - Wager Bay Oral History Project, 1992 (original in Inuktitut)]

One way to mitigate those times when animals were not plentiful was to cache food when hunting was good. Annie Tatty describes caching caribou and fish.

I think it was not long before they would cache meat and they had enough caribou skins. If we were going to the inland somewhere, we would travel by dog team in the spring, when it is still travelable by dog team. We would go to the area and they would dry some fish and caribou. The dried meats would be cached until the winter. They would go get the dried cache meat when the lakes were frozen in the fall. They would go to the lakes where there are fish and they would start catching fish ... [Annie Tatty – 2009 Workshop, Inuit Knowledge Project (original in Inuktitut)]

She explained food sources as being limited, particularly caribou or ringed seal and the need to be mobile.

My father always tried to be where there are fewer people around because the food can run out early if there were too many people and the food was always enough for usThe animals that we ate were the only food that we had at that time, so we had to keep on moving in order to survive. Either if it was caribou or ringed seal. [Annie Tatty - 2010 Workshop, Inuit Knowledge Project (original in Inuktitut)]

When asked about caribou calving grounds, several Elders replied that there were many areas used for calving. Robert Tatty added that caribou also had their young within the Park, in areas that were flat.

Kiggavik area there was many caribou with their young in that area as well because that area is not a rocky area. [Robert Tatty - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)]

Jerome Tattuinee, pointing to the map, summarized that although caribou populations fluctuate, sometimes there were fewer animals moving in and out of the Park, but there were always some within the Park area.

[Caribou] I do not know where they have their young/calves. I do think they have their calves in this area here because the caribou do not migrate elsewhere. The caribou do stay inside the Park area. There would be many caribou. Some years, there would be fewer caribou but they do not completely migrate elsewhere. [Jerome Tattuinee - 2009 Interview, Inuit Knowledge Project (original in Inuktitut)].

In speaking about animals migrating to other areas, one Elder linked available habitat to animal locations.

Our fathers and Elders have always said that animals will congregate where there is good source of food and we believe it to be true. For some years, the beluga whales did not migrate to our bay [Repulse Bay], we had to travel far and wide to hunt them outside of our bay. We were not worried about them coming back, we knew that they would come back one of these years. Then last year they finally came back and it was a healthy population. Inuit know that animals do not disappear. We do not hunt to extinction. [John Kaunak – 2007 Inuit Knowledge Working Group Meeting, Inuit Knowledge Project (original in Inuktitut)]

DISCUSSION

A PULSE ON THE ENVIRONMENT

The general consensus amongst the interviewees is that major changes have been occurring in the climate, particularly with respect to warmer temperatures leading to a shorter season of ice cover, less multi-year ice and thinner ice. Along with the warming trend, it was noted that the weather is also becoming less predictable with respect to a number of factors including wind and storm events. These observations were generally on a regional scale with no specific events or trends directly linked to Wager Bay. These observations are consistent with other regions of the Arctic.

The observations with respect to the abundance and distribution of animal species depict patterns that have been relatively constant over the years in a dynamic and functioning healthy ecosystem. Most species are described within what appears to be normal patterns of variation with the notable exception of polar bear which seem to have increased substantially in recent years. However, even the apparent increase in polar bear was thought by some Elders to be part of a much longer term trend in variation where, in the distant past, the number of polar bears was higher, decreasing during the last century and now again on the rise. Apart from the polar bear, some of the key observations are:

- Caribou are common but generally seem to be present in relatively low densities. There were no comments with respect to unusually low or high numbers. They are accessible in some areas more than in others and there is variation within and between years but they are always there.
- ③ Both red and arctic fox were reported as present during the last century with variation between years consistent with other fox populations. Arctic fox are reported as more abundant but the relative abundance of red fox and arctic fox is not clear.
- ^(b) Walrus have been observed occasionally in Wager Bay usually in or around the entrance from Hudson Bay.
- ⑦ Narwhals were not common but present and could occasionally be found as far west as Tasiujaq (Ford Lake).
- ⁽²⁾ Belugas were common and there were at least two key hunting areas (Iriptaqtuuq and Qinalugalik) located along the south shore of Wager Bay near the Paliak Islands.
- ⁽²⁾ Wolves and wolverine have always been present. There were no unusual locations, trends or variations reported.
- ^(b) There were no reports of grizzly bear from the early 1900s.
- ⑦ Fish (arctic char predominantly) have always been present in large numbers throughout the Park. Several key areas of Inuit occupation were linked to the presence of healthy fish populations.
- A variety of bird species were reported including snowy owls, falcons, seagulls, ptarmigans and ducks. At least one major seagull colony in the Savage Islands (Nuvukliq) was used extensively for egg harvesting.
- ⑦ Muskoxen were rarely seen in the majority of the Park and seem to be relegated to the western end past Brown Lake perhaps beyond the Park boundary.
- ⁽²⁾ Killer whales are a recent phenomenon.

⁽²⁾ Bowhead whales were not reported for Wager Bay but whale bones are known to be present at archeological sites within the Savage Islands (Nuvukliq).

INUIT CONNECTION TO THE LAND

More than a report on the presence, absence or variability of the climate and wildlife populations, the narrative collated in this report provides a sense of place and the human history which was intimately tied to the ecology of the area. In the early part of the 20th century, there were primarily three or four family groups that lived in and around the Wager Bay area. They used key areas of higher productivity at key times of the year - those areas that they could access and rely on to provide food, clothing, tools and oil. They were also able to adapt to the yearly variability of the abundance of different species and ultimately, most of them covered large distances in order to do that. They had adopted different hunting and fishing strategies, taking advantage of landscape features to construct weirs for fish or fences for caribou. And, although the groups resided in different areas and travelled as units on an annual basis, there is one area that stands out where most if not all families eventually travelled.

Nuvukliq (Savage Islands) was an area that during the ice season had at least one polynya (*Aukanaqjuq*) and was close to the floe edge. It was an area where seals could be harvested for a supply of oil, meat and skins. The knowledge of where and when to be during the annual cycle was passed from generation to generation.

These life experiences are captured through the stories and memories that people have of their youth or passed on to them from their ancestors. It is also captured through the many names given to places of ecological and cultural significance. These are still important today as descriptors of the land and indicators of the resources that can be found there. More than 500 place names have been recorded so far. A strong recommendation can be made to the Park for the continued use of the Inuktitut place names as they capture the essence of the place and provide a deep sense of long-term occupation and use that otherwise would take generations to recreate. Learning about how people lived in and around UNP gives us a better appreciation of the rich culture that developed and thrived there – a place they call home. It also gives us a clear sense of the many ecological dimensions of that system.

THE LEGACY OF THE INUIT KNOWLEDGE PROJECT

The Inuit Knowledge Project was initiated in 2005 as an Ecological Integrity Theme Project, one of eight specially funded projects across the parks system. One of the major goals of the IKP was to look at an ongoing structured approach for bringing Inuit Knowledge into planning and decision making. It operated in, Auyuittuq, Sirmilik and Ukkusiksalik National Parks. The fundamental working structure of the project was the Inuit Knowledge Working Group that was composed of two Elders, one representative of the Hunters and Trappers Organisation and a youth member. The project was supported by a full time coordinator, community researchers and transcribers with support from the Nunavut Field Unit and the Western and Northern Service Centre of Parks Canada.

The Working Groups were established to contribute Inuit Knowledge from the associated communities directly to a broad range of project specific issues including State of the Park Reports, Resource Description and Analyses and a variety of cultural and ecological projects. The groups contributed information to projects such as sea ice safety, sea ice travel routes, resource descriptions, cultural places of significance and oral histories. This type of project involvement supports IIBA commitments to consider and include Inuit Knowledge in planning, management and the operations of the Park.

The Working Groups have also contributed to establishing and maintaining strong, ongoing relationships with the communities; these relationships foster a sense of ownership for the parks where meaningful discussions about preservation and visitation can happen at a working level.

The requirement and benefit of seeking and meaningfully using the knowledge that resides within the Inuit of the region with respect to the ecology of Ukkusiksalik National Park was conveyed by David Tuktudjuk.

... non Inuit don't always believe us because we don't have our knowledge in reports. I always tell other people to start writing reports ... I told the scientist/researcher that the Inuit have so much knowledge. Just start asking the Inuit so you won't have to use so much money on researching and if you just write what you want to know than you'll understand the Inuit do already know about the animals; they already know about some of the things that you need to know. You wouldn't have to use so much money on using helicopters, traveling on the planes. Here, they are still not using the knowledge of the Inuit and I would really want them to listen to the Inuit. I finally believe that this is going to happen in Ukkusiksalik, thank you. [David Tuktudjuk - 2012 Workshop, Inuit Knowledge Project (original in Inuktitut)]

In addition, Inuit often speak about their concern for those that work and visit the parks in their area. David spoke to this practical aspect of Inuit Knowledge with respect to the safety of both park staff and visitors and his willingness to contribute.

Parks Canada can learn a lot about the land and I would teach them about the dangerous areas. I would want the people who are going to work there to travel safely and protect the visitors from dangers of wildlife and the travel routes that are dangerous. I would want them to go through the safe areas and I have heard about the tourists that were in an accident in Baffin Island Park. I would not want them to be in that situation, I would want to ensure that visitors have a good time as if this were to ever happen to the guide and the tourists it would affect their lives. I do not want this to happen to anyone. [David Tuktudjuk - 2012 Workshop, Inuit Knowledge Project (original in Inuktitut)]



Figure 9. David Tuktudjuk guiding the group around Ukkusiksalik National Park, July 2010.

KEY MESSAGES

- 1. The knowledge gained from the Elders indicates that up to now, Ukkusiksalik has been a stable environment with healthy functioning animal populations. Climate change has the potential to alter that state, impacting the length of the seasons, the characteristics of sea ice and influencing change within and among animal and plant populations. This report and additional accounts from the Elders can provide some critical baseline information, important in future monitoring activities.
- 2. Fish are abundant, known and very important to the people. The diversity is not well documented and neither is the population structure. In the project interviews, we were able to capture a few particularities of the system. Jerome Tattuinie provides some insights about the differences he has seen in the fish from the Park area describing both anadromous and landlocked varieties of char. He also describes different colour and scale patterns of fish from different areas within the Park. Aside from the char, there is an indication that there may be trout and possibly white fish present. It would be important to continue work on fish with members of the community to further understand the various fish populations and distribution, identifying the importance of Wager Bay or particular areas of Wager Bay to the larger fish populations and the waters of Hudson Bay.
- **3.** The Park is part of a larger regional ecosystem that includes the habitat of many large species including caribou, polar bear, muskoxen, beluga, seals, wolves and wolverines among others. Understanding the role that Ukkusiksalik plays in the conservation of these transboundary species will be important as development increases within the region.
- **4.** Inuit Knowledge workshops should continue to occur on a regular basis. A particular emphasis could be placed on the origin and roles of place names, where the stories are told (e.g., how Elizabeth Aglukka's family lived, moved from place to place to access resources). This would also be a good starting point for anyone visiting UNP.
- **5.** Current and future use of the park by Inuit provides key information on the state of the environment, including the health of wildlife populations a significant contribution for monitoring environmental changes.
- 6. For future and safe access to the area, it would be important to ensure continued knowledge exchange. Better nautical maps could also be produced. These, aside from improving travel safety, would inform on the ecological nature of Wager Bay and the roles it plays in the larger Hudson Bay complex.

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APPENDIX I People interviewed as part of the Inuit Knowledge Project

Six of the 10 participants spent at least their first 12 years living within what is now Ukkusiksalik National Park. The other four people have extensive on-the-land experience in the Kivalliq region near the Park and travelled around the area, sometimes to or through the Park. Some of the participants still travelled to the Park area seasonally.

Robert Tatty b.1927 Oct 10

Interviewed in 2009 (when 81 years old) – passed away in 2010 lived in Rankin Inlet. Grew up in UNP at HBC Post at Tasiujaq (1926-45) and 1945 at Umiijarvik, and back for s two years in 1978-80. When he returned, he lived at old HBC post. Fished at Qamaniq and lower Qamanaugaq.

Annie Tatty (Robert's wife) b.1929 Apr 7

Interviewed in 2009 (when 80 years old). Residing in Rankin Inlet, she grew up in UNP (1929-1946, and returned with her husband and family for 2 years in 1978-80. She grew up near Piqsimaniq, and visited the HBC Post at Tasiujaq on a number of occasions. In spring of 1945, at 15 years of age, she married Robert Tatty. That summer, they went to Naujaat for supplies, the boat broke down about half way down Roes Welcome Sound toward the inlet, at a place called Umijarvik. In June 1946, they moved to Repulse Bay. When they went back to UNP in 1978-80, they lived at the old HBC post.

Paul Sanertanut b.1949 Dec 23

Interviewed in 2009 (when 59 years old). Residing in Rankin Inlet, he grew up in UNP area at Piqsimaniq. He lived there from 1948-60; they camped in the spring at Kuugaarjuk, in the fall they fished in Nulluk area, in the summer they fished in Qaungnaq area.

Lucy Sanertanut b.1953 Sept 6

Interviewed in 2009 (when 55 years old). Residing in Rankin Inlet, she grew up in UNP and lived there from 1953-68.

Jerome Tattuinee b.1932 March 15

Interviewed in 2009 (when 77 years old). Residing in Rankin Inlet since 1970's, he grew up in UNP and lived there from 1932-45. He lived at the Tinittuqtu outpost camp in the spring where they hunted baby ringed seals and fished in Qaungnaq area. He lived in Repulse Bay from 1945-70s.

Honore Aglukka b.1943 Mar 11

Interviewed in 2007 (when 64 years old). Residing in Repulse Bay, he grew up in Naujaat/Foxe Basin/Community Bay/Ross Inlet/Gore Bay/ then in his 20's moved to Churchill.

Elizabeth Aglukka b.1950

Interviewed in 2009 (when 59 years old). Residing in Repulse Bay, she was born at Tinittuqtuq in Wager Bay and lived in Ukkusiksalik area until from 1950-1968. After 1959-60, they were the last family to live in the Park.

<u>John Kaunak b.1941</u> <u>Dec 24 –</u> Interviewed in 2008 (when 66 years old) - Residing in Repulse Bay, he grew up in Hall Beach/Igloolik/Naujaat.

Apiqsuqtauninga David Tuktudjuk b.1946 May 1

Interviewed in 2008 (when 62 years old). Residing Repulse Bay, he grew up Igloolik (1946-60) and in 1960's moved to Naujaat. He has spent his summers in Wager Bay since 2006.

Appendix II

People interviewed as part of the Wager Bay Oral History Project

The Wager Bay Oral History Project was led by David Pelly. He interviewed 20 people between 1990 and 1991, he did seven on-the-land interviews in 1996 and two additional interviews in 1986 is this the right date?. Information about those people quoted in this report appears below.

Guy Amartok b. 1932. (passed away).

Lived in Chesterfield Inlet. Lived in UNP for 2-3 years. When he was about 6 years old his parents moved to the north side of Wager Bay. Lived by the HBC Post for the summer, then for that winter went 100 km NW of Qamanaaluk (Brown Lake) to Kuugarjuk, then moved to Nuvukliq.

Peter Katokra b. 1931.

Residing in Repulse Bay. Moved to Wager Bay when 15 or 16 years old and lived at Piqsimanik for about two years.

Felix Kopak b. 1918.

Residing in Repulse Bay. Moved to Masivak in the spring of 1924 or 1925 for one year and travelled to the HBC Post. He returned to Wager Bay several times as an adult.

Anthonese Mablik b.1940.

Residing in Repulse Bay. In spring moved to Wager Bay when 17 years old for one year, living around Nuvukliq, then moved inland to Tinittuqtuq for the summer, and back to Nuvukliq for the winter, leaving in the spring for Repulse Bay. He travelled to Tasiujaq/Tushyuyak (Ford Lake). He returned several times to hunt later.

Jackie Nanordluk b.1937 in Pelly Bay.

Residing in Repulse Bay. He travelled to Wager Bay several times in the winter in the mid 1950s and 1970s, including going to the HBC Post.

Louis Pilakapsi b1937.

Residing in Rankin Inlet. Lived at Wager Bay for four years from age 12, in Nuvukliq in the fall, then Tinittuqtuq in summer/NW of HBC Post in Qamanaaluq (Brown Lake) area. Moved there because game more plentiful than in Repulse Bay.

Andreasi Siutinuar b.1946?

Residing in Repulse Bay. Lived at Masivak, Iriptaqtuuq, Nuvukliq, Piqsimaniq, Kuugarjuk and Qaurnaq as a child from 1953 to 1955. Hunted in the Park area in the 1960s and went back to live at Nuvukliq and Piqsimaniq around 1979.

Octave Sivaniqtoq b.1924.

Residing in Repulse Bay. About age two when moved to main body of Wager Bay for a few years and travelled to HBC Post at Tasiujaq/Tushyuyak (Ford Lake). Left after father died. Back to UNP in 19? for two years, then to Repulse Bay. Sometime after 1946 back to UNP for three

years just before he was married, then back with his wife for one yr. He was at Piqsimanik and at fishing weir locations several hundred meters upriver (inland) from Maasivak.

<u>John Tatty (Kakak) born June 7, 1946 at Quinijulik</u> [just inland from the coast at Umiijarvik]. Later that month moved to Repulse Bay. John in Nuvukliq area for a couple of nights in 1975 when skidooing between Repulse Bay and ??. Also for winter of 1980 with his parents at old HBC Post. Son of Annie and the late Robert Tatty. Residing in Rankin Inlet.

Theresie Tungilik b. 1951.

Residing in Rankin Inlet. Lived with parents in Piqsimaniq from about age 2 to 7, until she went away to school in 1958.

Appendix III Audio, text and photos from the Inuit Knowledge Project Nunavut Field Unit, Parks Canada

Inuit Knowledge Project:

Audio files for the 9 people interviewed Audio files for the 5 Repulse Bay Working Group meetings (Nov 2006 through Apr 23 2009) Audio files for the Niurluk Workshop Meeting and on-the-land activity (Sept 2009) Audio files for the UNP trip to the Hudson Bay Post (July 2010) Audio files for the Verification Workshop in Repulse Bay (March 2012)

350 Manseau_Interviews_UNP/

2009-356-Robert Tatty/RT-05-24-09-A1_English.doc 2009-355-Paul Sanertanut/PS-06-25-09-A1_English.doc 2009-354-Lucy Sanertanut/LS-06-25-09-A1_English.doc 2009-353-Jerome Tattuinee/JT-05-21-09-A1_English.doc 2009-352-Elizabeth Aglukka/Elizabeth Aglukka_English.doc 2009-351-Annie Tatty/AT-05-21-09-A1_English.doc 2008-353-John Kaunak/Interviewing John Kaunak_English.doc 2008-351-Apiqsuqtauninga David Tuktudjuk/Interviewing David Tukturjuk_English.doc 2007-351-Honore Aglukka/2007-352-003 Interviewing Honore English.doc

200_Manseau/09202_UNP_NorthPoleRiver/

On the Land (Annie Tatty).doc Niurluk Workshop Meeting Sept-01-2009.doc Niurluk Workshop First day on the land.doc

200_Manseau/10203-Ukkusiksalik_HudsonBayPost_UNP_Wager Bay_2010/2010-203-368_AT-10-07-26-HBP(English)

Audio files for the 5 Repulse Bay Working Group meetings (Nov 2006 through Apr 23 2009)

100 Mouland/2009-100-WG meeting minutes/ NWG-2009-100-13-April 22,23 minutes.doc NWG-2009-100-15-April 24 researchers minutes.doc

100 Mouland/2009-101-WG meeting minutes/ NWG-2009-101-005-October 9 2007.doc NWG-2009-101-001-October 12 2007.doc

 $100 \; Mouland /$

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Interview with Robert Mugjuk Tatty and Annie Tatty Rankin Inlet March – June 2005, 2009, Nunavut Field Unit, Parks Canada

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Verification Workshop, Repulse Bay, Sept 2009.

Appearing on the photo from left to right: David Tuktudjuk, Elizabeth Aglukka, Mary Tuktudjuk, Micheline Manseau, Gary Mouland, David Amaaq, Henry Crawford, Honore Aglukka, Robert Tatty, Pie Sanertanut.

Photo credit Robert Campbell.



Niurluk on-the-land workshop, Sept 2009.

Appearing in the photo from left to right:

Back row: Micheline Manseau, Eric Tatty, Levinia Aglukka, Sam Sanertanut, Kimberley Tegumiar, Annie Tatty, Jason Hudson, Robert Tatty, Bernice Malliki, Paul Sanertanut, Marie Renee Sanertanut, Pie Sanertanut, Mary Tuktudjuk, David Tuktudjuk, Kataisee Attagutsiak, Gary Mouland

Front row: Kelly Tuktudjuk, Shelby Autut, Henry Crawford, Suzanne Alaralak, Celestino Kopak, Elizabeth Aglukka, Honore Aglukka, Paula Hughson and Louisa Kringuk.





The Inuit Knowledge Project receives the Chief Executive Officer Award of Excellence – June 2010.

Appearing on photo above from left to right:

Kigutikajuk Shapp (Arctic Bay Inuit Knowledge Group), Micheline Manseau (Parks Canada), Gary Mouland (Parks Canada), Mary Tuktudjuk (Repulse Bay Inuit Knowledge Working Group), Jukie Nookiguak (Qikiqtarjuaq Inuit Knowledge Working Group, Paniloo Sangoya (Pond Inlet Inuit Knowledge Working Group), Margaret Nowdlak (Parks Canada).

Appearing on the photo below from left to right: Mary Tuktudjuk (Repulse Bay Inuit Knowledge Working Group), Allan Latourelle (CEO Parks Canada).

Photo credit: Bill Pratt



Ukkusiksalik National Park – a visit at the Post with Ms. Annie Tatty, July 2010.

Appearing on the photo from left to right: Micheline Manseau, Simeonie Tatty, Minnie Tatty, Kristy Frampton, Gary Mouland, Kelly Tuktudjuk, Ayalik Pelly, David Pelly, Carol Nanordluk, Annie Tatty, Shawna Dias, Mary Tuktudjuk, David Tuktudjuk, Ray Curtis Tuktudjuk.



Hudson Bay Post with Ms. Annie Tatty, July 2010.



Ms. Annie Tatty and David Tuktudjuk at the Post.



Inuit Knowledge Verification Workshop, March 28-29, 2012. All workshop participants.

Appearing on the photo from left to right:

Back row: Andrew Taqtu (Arctic Bay – Sirmilik National Park, JPMC member), Solomon Malliki, John Kaunak, : Peter Mannik, Jose Tinashlu, Pie Sanertanut, Charlie Tinashlu, Dolly Mablik, Micheline Manseau, Gary Mouland, Elizabeth Aglukka, Maureen Pissuk **Middle row**: David Tuktudjuk , Phillip Kringayark, Annie Tatty, Jerome Tattuinee, David Amaaq

Front row: Paula Hughson, Mary Tuktudjuk, Honore Aglukka



Inuit Knowledge Verification Workshop, March 28-29, 2012. Members of the Repulse Bay Inuit Knowledge Working Group and staff.

Appearing on the photo from left to right: **Back row**: Marie Kringuk, Dolly Mablik, Paula Hughson, Mary Tuktudjuk, Peter Mannik, Micheline Manseau, Gary Mouland, Maureen Pissuk, Robert J. Campbell **Front row:** Solomon Malliki, Honore Aglukka, John Kaunak

Appendix IV Interview Questions

Interviewee Biography

- 1) When were you born?
- 2) Which area are you from?
- 3) When did you move to this community?
- 4) Are you still traveling on the sea ice and land?
- 5) Have you been interviewed in the past about your knowledge of sea ice? (Do you remember who interviewed you and where the results are stored?)
- 6) How would you describe the importance of sea ice to you and to community members?
- 7) Do people use sea ice today in the same ways that they did long ago?

Freezing and Melting: Stages and Terminology

- 8) Can you describe/explain how ice forms in the fall (and time of year)?
- 9) We are interested in the Inuktitut terms used to talk about different ice conditions, such as: when ice starts to freeze/ thickens/ becomes landfast?
- 10) Are there specific ice conditions or dynamic processes that happen at tidal cracks?
- 11) Are there specific ice conditions or dynamic processes that happen at the floe edge?
- 12) Are there specific ice conditions or dynamic processes that happen at polynyas?
- 13) Are there specific ice conditions or dynamic processes that relate to moving or multi-year ice?
- 14) Can you describe the different stages of sea ice melting what are the earliest signs of melting and how does melting progress from this earliest stage to break-up?
- 15) When do these different melting stages happen (What months of the year)? How do ice conditions differ between freeze-up and break-up?
- 16) How do winds from different directions, or of different strengths, affect the formation, movement, or melting of sea ice?
- 17) How do currents/tides affect the formation, movement, or melting of sea ice?

Mapping

- 18) Where were you born? (Mark on Map with a "B")
- 19) Where did/do you travel and camp? (Mark routes in green and camps with "C")
- 20) Can you show us your hunting areas for different seasons? (Mark seasons and hunting activities)
- 21) Are there key places along the coast from which certain individuals in your community check the safety of ice conditions at freeze- up? (mark in green, with a "CI")
- 22) Can you show us on the map where the 'typical' floe edge is? (mark in red and a "FE")
- 23) Can you show us on the map where any polynyas are? (mark in red and a "P")
- 24) Can you show us on the map where any tidal cracks are? (mark in purple and a "TC")

- 25) Can you show us on the map where any 'aukarniit'or"Sarvaks" are? (areas that open up earlier) (mark in blue and put "AU")
- 26) Can you show us the map areas that are dangerous for travel at different seasons? (Mark in black and a F, W, ESPR, SPR, SU) Why are these dangerous?
- 27) Are there names for places or areas of sea ice that link to the wildlife or human uses of the ice? For example, like "sea ice with a concentration of seal holes" or walrus haul-out locations"? Can you show up where these places are located on the map (Mark with "W-P")?
- 28) Can you map the breeding, denning, feeding grounds of different animals? What makes these areas good breeding, denning, feeding grounds (Mark with "W-F")?
- 29) Do these animals migrate throughout the year (and when)? Can you describe these movem ents and why animals make these migratory movements (Mark with "MIG")?
- 30) Where are the main hunting/ fishing areas? (Mark with "T- A")
- 31) Are there routes that are used most frequently to access hunting/ fishing areas (like "highw ays")? (Mark with "T- H")
- 32) Have there been changes in the movements/distribution of animals/fish that you have notic ed? How has this affected your hunting? Please explain.

Community Use and Safety

- 33) Are there any laws/ guidelines that guide your use of the land / sea ice?
- 34) Are you, or people you know, able to predict how ice conditions may change over a day or two? If so, what clues do they (you) use to help you make these predictions?
- 35) How do people read sea ice conditions and what conditions are most important to observe in order to stay safe on the ice?
- 36) What do you feel are the most important safety issues in your community today?
- 37) How do people deal with these hazards?
- 38) Is there a difference in how people deal with hazards now versus in the past?
- 39) Are the hazardous areas the same as they would have been in the past?
- 40) Would these hazardous areas be the same whether traveling by snow machine or dog teams
- 41) Is there a time of year where it is more dangerous to travel?
- 42) How is information with regards to land/ice-use risk/ hazards shared amongst community members?
- 43) Are there any community members who advise and provide guidance on how to deal with these hazards? How is this done?
- 44) When you go out on the land/ice, do you inform anyone of your plans? How do you do this?
- 45) What do you do in case your plans change out on the land/ice or if there is an accident?
- 46) Do you know of any past experiences when accidents have occurred on the land/ice? Can you tell me about these?
- 47) How do you think that type of experience could be prevented?
- 48) Are the indicators that people use to predict changing sea ice conditions the same today as they were long ago?

Climate Events

- 49) Can you tell me about any rare (uncommon) or notable sea ice features or events that you have experienced over your lifetime? (e.g., years the ice did not leave, years ice pile-ups did not happen)
- 50) Have you noticed the climate/weather changing over time?
- 51) How do people deal with these changes?

Recommendations/Questions about Sea Ice and/or for Scientists and Parks Canada

- 52) Parks Canada currently has a process of managing risk and ensuring safety within the Parks boundaries, are you familiar with these?
- 53) Do you have any suggestions on how these might be improved?
- 54) Are there types of scientific studies that you would like to know more about?
- 55) What types of research do you want conducted?
- 56) Is there anything else that you would like to share or ask?

Appendix V CONSENT FORM

Research Project Title:

USING INUIT KNOWLEDGE IN MANAGEMENT, RESEARCH AND MONITORING OF NUNAVUT NATIONAL PARKS

Project Leader: Micheline Manseau, University of Manitoba

Community Researcher:

(write researcher name)

Sponsored By: Parks Canada, Nunavut Field Unit

Informed Consent Form

What is this project as a whole about?

The project is part of an overall Inuit Knowledge Project to explore how to work with Inuit Knowledge to manage protected areas, namely three of Nunavut's four national parks, Sirmilik, Auyuittuq and Ukkusiksalik National Parks. The overall project aims to do this by finding ways to document Inuit knowledge in culturally appropriate ways, and by building relationships and capacity with interested Inuit organizations. The project also aims to make sure that the information collected throughout the life of the overall project is accessible to all Nunavummiut (people of Nunavut) while providing protocols for the sharing of knowledge that communities/ individuals may consider to be of a sensitive nature.

This particular project is meant to document your extensive knowledge of sea ice in relation to the nearby National Park and coastal areas surrounding your community.

Why is this interview session being recorded and video-taped?

This session will be taped with a video camera and/or audio-recorder so that we have an accurate record of all discussion and comments. The material will then be made available to all interested organizations and individuals including Parks Canada and the Nunavut schools system.

The original recordings of the information recorded during the interview session will be stored at the local Parks Canada office with copies stored at Parks Canada's Nunavut Field Unit. These

materials will not be made available to individuals other than Micheline Manseau and park staff, and those individuals contracted to do transcription and editing work on the original material. Such individuals will be required to sign a confidentiality form.

Who is involved?

Researchers from the University of Manitoba (Micheline Manseau) as well as staff from the Western and Northern Service Centre of Parks Canada, the Nunavut Field Unit, Auyuittuq, Sirmilik and Ukkusiksalik National Parks and locally hired community researchers. Any individuals involved with the interview sessions (including interpreters, camera people, facilitators) will be required to sign a confidentiality form stating that they agree not to share information that you consider to be confidential.

What will I be asked during the interview session?

You will be asked to share your knowledge of sea ice and any other knowledge of the nearby National Park and surrounding areas that you would like to share.

Do I have to participate in the interview session?

If, at any time during this recording session, you have changed your mind about continuing with the session, please let us know. You should not feel obligated to continue.

If at any time during this recording session, you have thoughts to share that you would prefer not to be audio or video-recorded, please let us know and we will turn the recording equipment off until you tell us you are comfortable to have the recording equipment turned on again.

You may choose to ask us to stop audio-recording or video-taping any part of the interview without losing your rights as a research participant.

How will the information from the recording session and the video footage be used?

Micheline Manseau and park staff will write reports based on your discussions here as well as discussions in other communities that will help the Parks Canada understand how to manage and protect Nunavut's national parks. Micheline Manseau and park staff will also write some articles to be published in journals or magazines based on the lessons learned from the knowledge you share with us during your recording sessions. It is also possible that a type of educational documentary would be made about the project and results, including audio/video/photo footage according to the stipulations you identify in this consent form. This would be made available to the public to raise broader awareness about the important contributions of Inuit Knowledge, as well as to be used in an educational or government decision-making context. Micheline and park staff will make sure that these articles/videos are verified and approved by the local Inuit Knowledge Working Groups, and that additional comments are incorporated to make sure that the information is being accurately represented. In addition, any quotations used that are based on your statements will be verified directly with you to make sure you approve the accuracy and use of these words. If you would also like to comment on draft articles/videos as a whole, please let the community researcher know, and we will make sure that appropriate information is distributed to you directly. Where these materials are solely in English, a community researcher or an interpreter will translate the material orally to explain what is written or presented. Full translation of all English material is not logistically feasible.

What are the Risks and Benefits of participating in this project?

We realize that there is a certain risk involved that your words will be not translated properly or that we may not understand your thoughts correctly. In order to lower this risk we will commit to reviewing the information that you share with us to make sure that we have recorded it properly and to make sure that we do not share information that you consider confidential. The benefit of participating in this project is gaining the opportunity to document your knowledge so that it is actively used in the management of the nearby National Park and so that youth in the community have the chance to learn from your experiences and knowledge through curriculum materials developed from the information that you share.

What will I receive in return for my participation in this project?

You will receive honoraria at a rate of \$30/hour for your participation in this research project. Copies of all the reports, articles or other materials produced as a result of this project will be archived at the local Parks Canada office and will be available to you at your request.

How much time will be required of me?

Each interview session will last one to two hours. If you become tired or uncomfortable at any time during an interview session please let us know and we will stop the interview and return to work with you when you feel more comfortable.

Your signature below indicates your willingness to participate in the recording session and to have the session recorded and video-taped.

Name:	
Signature:	
Mailing Address:	
Date of Consent:	
Witnessed By:	
Name (print):	
Signature:	
Date:	

For more information about this project, please contact:

Micheline Manseau Parks Canada, 204-983-8885 or University of Manitoba, 204-474-9889 Gary Mouland, Nunavut Field Unit, Parks Canada, 867-975-4672

This research has been approved by the Joint Faculty Research Board at the University of Manitoba. If you have any concerns or complaints about this project you may contact the abovenamed person or the University of Manitoba Human Ethics Secretariat at 204-474-7122, or email <u>margaret_bowman@umanitoba.ca</u>. A copy of this consent form will be left for you to keep for your records and reference