

Annual Report



Photo by Kaitlin Wilson

April 1, 2018 to March 31, 2019

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2018/19 at a Glance

This report highlights the activities of the Wildlife Management Advisory Council (North Slope) over the period of April 2018 – March 2019.

This year saw a complete staff turnover at the Whitehorse office, with Jennifer Smith and Kelly Milner both moving on to explore new opportunities. Kaitlin Wilson joined the Council as Program Manager in July 2018 and Allison Thompson joined as Program Manager in October, after a year and a half with WMAC NWT. Much of this year focused on staff transition, while also supporting major files, like the Draft Environment Impact Assessment for oil and gas leasing in the Arctic National Wildlife Refuge and national and international polar bear research and management initiatives.

Major Focus: Our main focus this year was continuing work on the Wildlife Conservation and Management Plan (WCMP), which guides management on the Yukon North Slope.

Completed Project Highlights:

- The Council completed the Yukon North Slope Muskox Research Plan
- The Council launched its Facebook page

Noteworthy Success: There was plenty of community engagement and consultation this year, particularly in the context of the WCMP. This is a critical and exciting aspect of the Council's work as it ensures that community values and priorities are reflected in major projects, like the WCMP. The Council held multiple meetings in Aklavik and Inuvik over the winter months and looks forward to continuing the conversations!

The Inuvialuit

Inuvialuit are Inuit of the Western Arctic. The land, ice, and water of the Inuvialuit Settlement Region make up the western portion of Inuit Nunangat. The Yukon North Slope has been part of the Inuvialuit homeland since before memory, and this long history has been well documented.

The Inuvialuit Final Agreement (IFA)

The area of land covered by the IFA, the Inuvialuit Settlement Region (ISR), includes a large area in the NWT called the Western Arctic, parts of the Beaufort Sea, and the Yukon North Slope. The Yukon North

Slope receives particular attention in the IFA. Chapter 12 of the agreement establishes a special conservation management regime for the region.

The IFA defines the Inuvialuit rights to harvest wildlife on the North Slope. These rights may only be restricted for conservation or public safety. If development occurs, the IFA has a wildlife compensation system that helps to restore wildlife populations and habitat and to assist Inuvialuit when their harvesting activities are adversely affected. The *Inuvialuit Final Agreement* (IFA) was finalized in 1984.

It provides a way for the Inuvialuit to participate in economic and social development and decisions throughout their homeland.

The agreement also protects and conserves Arctic wildlife and its environment.

The Wildlife Management Advisory Council (North Slope)

The management priorities for the North Slope are the conservation of land, wildlife, and Inuvialuit traditional use of the area. To ensure these goals are met, the Inuvialuit Final Agreement established the

Wildlife Management Advisory Council (North Slope), also known as WMAC NS or the Council.

WMAC NS provides advice to governments and other agencies on all matters related to wildlife management on the North Slope. The Council is responsible for conservation management planning for the Yukon North Slope and advises on planning and management for Ivvavik National Park and Herschel Island – Qikiqtaruk Territorial Park. The Council also determines and recommends appropriate quotas for harvesting of wildlife on the Yukon North Slope. To carry out these tasks, WMAC NS works closely with the



Yukon, Northwest Territories (NWT), and federal governments, other co-management boards, the Aklavik Hunters and Trappers Committee (HTC) and the Inuvialuit Game Council (IGC).



The Yukon North Slope

The Yukon North Slope is an area of land and sea that stretch from Alaska to the Northwest Territories. It includes all of the land in the north Yukon that is drained by rivers and streams flowing into the Beaufort Sea, as well as islands, such as Herschel Island, and both the nearshore and offshore waters.

The Inuvialuit have relied on the region's wildlife for hundreds of years. While most Inuvialuit now live in nearby communities, such as Aklavik and Inuvik, many return to the North Slope on an annual basis to hunt, trap, fish, and connect with family.

The Yukon North Slope region has no roads or towns, and there are few signs of industrial development. However, there are many seasonal hunting camps used by Inuvialuit and families spend extended periods of the summer on the coast, harvesting, relaxing, and engaging in traditional pursuits.

The Yukon North Slope Wildlife Conservation and Management Plan

Along with the signing of the Inuvialuit Final Agreement came certain requirements and responsibilities, delegated to the Council. The Yukon North Slope Wildlife Conservation and Management Plan (WCMP) was one such requirement, and considerable collaborative work went into the first edition of the Plan (2003). The Plan provides direction for the conservation of wildlife, habitat, and traditional Inuvialuit use

on the Yukon North Slope to our Council members, government, co-management organizations, environmental assessment bodies, Inuvialuit and other indigenous organizations, and the general public. It also helps to inform research priorities and projects.

In recent years, the Council and its partners have been gathering information and completing new research to inform a revision of the 2003 Plan. This latest edition is expected in late 2019 and will provide new guidance for the protection and management of this special region.

In 2018/19, drafting began in earnest. The Council held a number of meetings in Aklavik and Inuvik, including with the Elders' Committee, the Community Corporations, and the Hunters and Trappers Committees. While the winter

WCMP Planning Work Includes:

- Meet and plan with partners
- Gather, collect, compile, synthesize, and analyze scientific information and Traditional Knowledge
- Develop planning tools
- Work with communities
- Liaise and consult

weather cancelled the meeting in Tuktoyaktuk, the intent is to visit in the summer. The Council also held several special meetings to advance plan drafting and to refine the traditional knowledge and science-based analyses that form the foundation of this new version.

Deepening Our Knowledge

The new Plan will be strongly evidence-based. Over the past several years the Council has invested significantly in documenting Inuvialuit traditional knowledge and use to inform this work. The Council has also engaged with researchers, Yukon Government, the Government of Canada, and Round River Conservation Studies to enhance and document science-based knowledge for wildlife and wildlife habitat across the Yukon North Slope. Over the past year, much of the Council's work has focused on weaving these incredible knowledge bases together to form the best possible understanding of the region. In particular, species-specific (caribou, moose, grizzly bear) habitat mapping continued throughout the year; some of these analyses were completed, others will be wrapped up later in 2019.

Indigenous Protected and Conserved Area Funding Application

Parallel to the WCMP process, the Council, after discussion with the communities of Inuvik and Aklavik and other partners, submitted a funding application to the Canada Nature Fund on behalf of the parties to the IFA. This application proposes the development of an establishment agreement for the creation of an Indigenous Protected and Conserved Area (IPCA) on the Eastern Yukon North Slope (ENYS), which is withdrawn from surface and subsurface rights disposition through Orders in Council. An IPCA would provide an enhanced conservation framework for the EYNS and provide greater conservation-oriented economic opportunities for Inuvialuit, particularly the community of Aklavik. Confirmation of funding is expected in mid-2019.

Projects

Special Projects Funded by the Council

A portion of the WMAC (NS) budget is allocated to special projects, including wildlife management, community participation, traditional knowledge, outreach, and education. Below are the highlights of these special projects for 2018/19:

Muskox

Yukon North Slope Muskox Research Plan

With the completion of the *Framework for the Management of Yukon North Slope Muskox*, the Council developed and completed the *Yukon North Slope Muskox Research Plan*. This research plan provides guidance regarding muskox knowledge gaps and research priorities to Environment Yukon, Parks Canada, the Wildlife

Management Advisory Council (North Slope), the Aklavik Hunters and Trappers Committee, and others with responsibilities or interest in the muskox of this region. Implementing the research plan will begin as early as summer 2019 with helicopter-based field work with community members, that will build on an existing data set.

Muskox - Caribou Infographic

To support the communication of science information on key species, the Council worked with a designer to create an infographic comparing and contrasting the ecology of two Yukon North Slope ungulates: caribou and muskox. These types of communications pieces are great for sharing highlights of more technical reports and providing people of a useful summary of research to date. The Council hopes to develop more communications pieces like this infographic in the future.



Community Engagement

This year also marked the active engagement of a broader digital community through the launch of the WMAC NS Facebook page. Social media, and Facebook in particular, provides a vehicle for active sharing and communication. Major audiences include ISR community members, the research community, and the general Canadian public. Digital media allows staff to monitor and target engagement and review insights in to the effectiveness of posts. This will be particularly important as the draft Wildlife Conservation and Management Plan moves into its consultation phase. One benefit of our digital outreach so far is that the Council has had Inuvialuit students enrolled at Yukon College attend a Council meeting.

IFA-Funded Wildlife Research

Each year, WMAC (NS) reviews proposals for federal and territorial research projects related to wildlife management and ecological monitoring on the Yukon North Slope in order to ensure they support the

goals of the IFA, wildlife conservation and management goals for the North Slope, and the interests and rights of the Inuvialuit. Research priorities are identified by the Aklavik Hunters and Trappers Committee, residents of Aklavik, the Inuvialuit Game Council, Environment Yukon, Parks Canada, and the Canadian Wildlife Service. The Council makes recommendations to Parks Canada, Yukon Government, and the Canadian Wildlife Service for the support of projects on the North Slope through IFA research funds. WMAC (NS) assists, as required, in the implementation of recommended projects and monitors their progress through presentations and final reports from all agencies that receive funding.

The Council recommended IFA funding in 2018-2019 for the following research projects:

Wildlife Monitoring with Remote Cameras in Ivvavik National Park

The purpose of this project, which has been underway for a few years now, is to understand grizzly bear occupancy and habitat use along the Firth Valley. Other predators, such as wolves, wolverine, and lynx, are also captured. Predators have a strong influence on the health of prey populations, such as caribou and moose, which in turn influence plant communities. Healthy large carnivore populations are an indication that other parts of the ecosystem are healthy. Carnivore populations are therefore a meaningful measure of ecological integrity. This project continues the remote camera program to monitor large carnivore populations in the park. The long-term objectives are to:

• Understand current habitat use, occupancy, distribution, and relative abundance of carnivore species in the Firth River corridor;



- Monitor changes in habitat use, distribution, and relative abundance over time that may be related to climate-driven changes in habitat conditions, and report on these trends as a measure of ecological integrity for State of the Park reporting; and,
- Capture candid photographs of wildlife in the park for use in videos or other media for Visitor Experience and External Relations programs.



Avian Diversity and Abundance in Ivvavik National Park

This summer project aimed to increase our understanding of song bird abundance and species richness in INP, building on the bird surveys conducted in the Park over the last ten years. Migratory songbirds are excellent indicators of ecological integrity since they are sensitive to environmental change, common and widespread, and easily surveyed. The project employed bioacoustics recorders at 20 sample plots as well as five autonomous recorders to investigate observed declines.

Early results from this project and the long-term dataset indicate

that abundance and richness have both declined over the last decade. Future work will involve a more indepth review of new data and a comparison between datasets, as well as an exploration of the relationship between habitat, weather, and breeding bird presence in INP.

Dall's Sheep Winter Survey in Ivvavik National Park

This project provided a much-needed update to the existing knowledge base for this species. Summer Dall's sheep surveys were carried out in INP in 2001 and 2017. The last winter survey was carried out in 2002. The summer 2017 survey counted 221 sheep (as compared to 85 in summer 2001) and revealed a wellbalanced composition indicative of a stable population. It is unknown if the recent detection of the M. ovi bacteria in Alaskan Dall's Sheep adjacent to INP will have an effect on the population in the park (which speaks to the importance of continuous monitoring). This latest winter survey helped to confirm the winter range and habitat in INP, while also increasing our understanding of the different habitat needs for Dall's sheep between summer and winter.





Late Winter Moose Survey in Ivvavik National Park

The last Moose survey in INP took place in March 2009. However, only certain valleys in the eastern part of the park were surveyed. Collar data subsequently showed that moose migrate seasonally from the Old Crow Flats into valleys in the south-west of the park that were never surveyed. Population surveys in the North Richardson Mountains indicate an increasing moose population, which may be driving increases in predator populations.

This updated survey provides an indication of the current population status and was carried out at the same time as the Dall's sheep survey, for efficiency.

Polar Bear Den Survey in Ivvavik National Park

Based on USGS data and Inuvialuit Traditional Knowledge, INP and Qikiqtaruk are denning areas for polar bears. A formal survey of dens in this area supports a number of the objectives of the ISR Polar Bear Joint Management Plan. It also supports the 2019 Southern and Northern Beaufort Sea

subpopulation census by providing spatial information on use of terrestrial habitat. The results of the survey did not identify any new den sites, but it is important to note that this is not confirmation that the survey area is unused as den habitat. Evidence of dens can disappear very quickly, depending on weather conditions. In this particular survey year, March 2019 was very warm, with plenty of open water. However, an early reconnaissance survey in 2018 indicted active den locations in both Ivvavik and Qikiqtaruk. Alternatively, the low sign of terrestrial polar bear activity may indicate that the timing of 2019's survey efforts missed the maternal den emergence period, polar bears within the Beaufort Sea Region denned outside of the survey area, or that 2019 was a poor year for that polar bear subpopulation's reproductive success. The formal 2019 survey was the first occurrence of a comprehensive polar bear den survey that has been completed in INP. However, historical data from GPS collars and opportunistic den surveys have identified maternal denning sites within INP in years past.

Identifying Key Wildlife Movement Corridors on Herschel Island-Qikiqtaruk Territorial Park and implications for Park Management

Qikiqtaruk has a long history of wildlife and plant monitoring, which means numerous rich datasets to inform everything from new research questions to park planning to climate change preparedness. The summer of 2018 was no exception with the continuation of the wildlife movement camera trap project that kicked off in 2016. This year, the Yukon Government lead project was also integrated with a parallel Parks Canada initiative. Already, this project has improved knowledge of key wildlife areas on the island, as well as the movement of wildlife through these areas – connecting wildlife use of Herschel Island to Ivvavik National Park on the North Slope mainland. Further, this project identifies specific sites that serve critical life functions for wildlife species. It provides data that inform managers when making decisions about park use and impacts, and is an indicator of ecological integrity. Specifically,

- Movement corridors: Avadlek Spit and Osborn Point are key movement corridors linking Qikiqtaruk to the Yukon mainland;
- Shoreline habitats: The shoreline of Pauline Cove as represented by Fish Creek, is a movement pathway for Grizzly Bears traveling around the island;
- Management of key sites: Avadlek Spit and Osborn Point require special management consideration for potential impacts from activities such as visitor use, tourism, camping, industrial development, infrastructure, or park operations.

Field work in 2018 was supported by Yukon College summer student, Kayla Arey, and the Park Rangers.

Yukon North Slope Muskox Research

Muskox are an important herbivore on the Yukon North Slope and the Yukon Government continues to develop a robust dataset to better understand their ecology and needs. After years of effort, there are individual muskox collared in each group across the region. This makes locating and studying the whole population much easier, as the species is distributed across much of the YNS.

The 2018 muskox composition survey indicated that there was lower productivity relative to the last two years, when



productivity was quite high. Many of last year's calves survived, as well. These factors have resulted in a relatively young muskox population on the North Slope.

Yukon Government muskox work is done in collaboration with the Gwich'in Renewable Resources Board, the Government of the Northwest Territories, and Parks Canada. Sometimes these collaborations also include researchers. In 2018, Laurence Carter joined the muskox team to study the effects of muskox grazing and trampling on various habitats – this work is in response to community concerns regarding interactions with Porcupine caribou and supports the implementation of the *Framework for the Management of Yukon North Slope Muskox Research Plan*.

Another collaboration to better understand muskox ecology involved the collection and analysis of fecal pellets and plant sampling. From these samples, biologists can learn about diet and health. This work is in partnership with the University of Calgary.



Figure 3. Survey flight lines and locations of polar bear observations.

Polar Bear Genetic Mark Recapture Survey

The purpose of the study was to provide updated abundance estimates for the Southern Beaufort Sea (SB) and Northern Beaufort Sea (NB) polar bear subpopulations. The project was recommended to the Inuvialuit Game Council and the Inuvialuit-Inupiat Polar Bear Joint Commission in June and August 2018, respectively. The Hunters and Trappers Committees (HTCs) in the Inuvialuit Settlement Region and the Hunters and Trappers Organization (HTO) in Kugluktuk, Nunavut were also consulted on the project.

The study is currently planned as a three to fouryear effort, with March 2019 being the first

season. Survey efforts are coordinated in the US and Canada for complete surveying of the entire SB subpopulation management zone. All polar bears encountered – with the exception of cubs-of-the-year –

were biopsy darted from a helicopter in the SB and NB subpopulations in order to collect small biological samples (i.e. a small plug of skin/fat) that can be used to genetically determine individuals. Environmental conditions were also noted.

Following up on the fieldwork, samples were sent to the lab for analysis, and data will be further collated and summarized. Reporting to co-management partners will start in summer 2019, as well to the Inuvialuit-Inupiat Polar Bear Joint Commission at its next meeting. Lessons learned from this season's fieldwork and feedback from the partners will inform planning for the upcoming seasons.



Porcupine Caribou Herd Research and Management

IFA research funds supported several initiatives related to the Porcupine Caribou Herd. WMAC (NS) recognizes the collaborative nature of the research, monitoring, and harvest management efforts for the Porcupine Caribou Herd, and thanks all partners for their ongoing commitment to caribou health and sustainability. All Porcupine Caribou Herd projects address actions in the WCMP "to continue to monitor species of importance to the Inuvialuit, particularly those sensitive to industrial disturbances."

The Porcupine Caribou Herd Satellite Collar program is a multi-year program administered by Yukon Government in close association with partner organizations: Parks Canada, Canadian Wildlife Service, U.S. Fish and Wildlife Service, Alaska Department of Fish and Game, the Porcupine Caribou Management Board, WMAC (NS), the Gwich'in Renewable Resource Board, and the Government of the Northwest Territories.

The program uses radio and satellite collars to locate the herd for different surveys (calf birth and survival, over-winter calf survival, and full composition counts) and to identify particular individuals in the herd to act as a sampling focus.



Porcupine Caribou Use of the Yukon North Slope

The primary objective of this project is to provide site-specific data on Porcupine Caribou use of the Yukon North Slope, particularly during sensitive periods in the herd's annual cycle. The collars also form the basis of monitoring and management of the herd. This project is providing quantitative data by increasing the number of GPS satellite collars deployed on both cow and bulls. Field crews deployed satellite collars over a period of several years by switching out traditional VHF collars.

Other Council Activities

The Council dedicates much of its time to reviewing and providing advice on research, management plans, policies, and legislation affecting conservation and development on the Yukon North Slope. The Council has been involved in the following initiatives over the past year:

- Participation in annual meetings for the management of polar bear, including a meeting of commissioners under the Inuvialuit-Inupiat Polar Bear Agreement, the Polar Bear Technical Committee, and the Polar Bear Administrative Committee.
- Participation in the Porcupine Caribou Management Board Annual Harvest Meeting.
- Addressing matters related to screening of developments on the North Slope by the Environmental Impact Screening Committee.
- Review of the *Herschel Island Qikiqtaruk Territorial Park Management Plan*. This was a scheduled review process. Updates to the Plan will address the evolving management environment on the island, including tourist traffic, Inuvialuit economic advancement, research, and climate change.
- Review of the draft Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program and input into the Scoping of that Environmental Impact Statement
- Continued input into the federal *Species At Risk Act*, including reviewing COSEWIC's draft Polar Bear Status Report
- Participation in the Inuvialuit Settlement Region Shipping Coordination Workshop

Working Together

WMAC (NS) continues to work with its partners toward the conservation of wildlife, habitat, and traditional Inuvialuit use on the Yukon North Slope.

Aklavik Hunters and Trappers Committee

WMAC (NS) works closely with the Aklavik Hunters and Trappers Committee (HTC) to ensure the harvesting needs and wildlife concerns of the Aklavik Inuvialuit are addressed in the Council's decisions. Through meetings with the Aklavik HTC, WMAC (NS) has provided information and shared ideas on wildlife management on the Yukon North Slope.

Wildlife Management Advisory Council (Northwest Territories)



Like WMAC (NS), the Wildlife Management Advisory Council (Northwest Territories) was established under the IFA. It has a mandate "to conserve and protect wildlife, habitat and traditional Inuvialuit use" in the NWT portion of the ISR. The two councils work together on matters related to the management of transboundary species such as polar bear, grizzly bear, and caribou. Maintaining a close relationship helps to create strong, informed, and integrated management decisions across territorial boundaries.

Herschel Island – Qikiqtaruk Territorial Park

WMAC (NS) works with Yukon Government, Parks Branch on wildlife research, management, and ecological monitoring in Herschel Island Territorial Park.

Parks Canada and Ivvavik National Park

WMAC (NS) works with the Parks Canada Western Arctic Field Unit on wildlife research, management and ecological monitoring in Ivvavik National Park.

Sharing Information

The WMAC (NS) website includes information about the North Slope, the Inuvialuit Final Agreement, and the Council. WMAC (NS) continually updates the site with all of its publications, meeting minutes, and other relevant information. In 2018-19, the Council added page highlighting research priorities to the website; the research priorities include: Applying Inuvialuit Knowledge to emerging environmental and wildlife issues on the Yukon North Slope, expanding our understanding of focal species (caribou, beaver, muskox), their ecology and habitat, establishing environmental baselines and proactively gathering knowledge that will support conservation in dynamic, changing ecosystems. Visit the website at www.wmacns.ca.

Meetings

Council Meetings

July 19-21, 2018 – Ivvavik National Park (Imniarvik) August 28-29, 2018 – Whitehorse, YT November 27-29, 2018 – Aklavik/Inuvik, NT February 26-28, 2019 – Whitehorse, YT

Other Meetings

May 13-14, 2018 - Polar Bear Administrative Committee

August 7-8, 2018 – Inuvialuit-Inupiat Southern Beaufort Polar Bear Commission Meetings August 29 – September 1, 2018 – Inuvialuit Game Council November 27, 2018 – WMACs Joint Meeting November 28, 2018 – Joint Meeting with the Aklavik Hunters and Trappers Committee + Aklavik Community Meeting December 4-7, 2018 – Inuvialuit Game Council December 10-14, 2018 – ArcticNet February 5-7, 2019 – Polar Bear Technical Committee Meeting February 11-13, 2019 – Porcupine Caribou Annual Harvest Meeting

February 11-15, 2019 – Community meetings with the Inuvik and Aklavik Hunters and Trappers Committees and Community Corporations

Council Membership

Members

Danny C. Gordon Inuvialuit Game Council

Ernest Pokiak Inuvialuit Game Council

Tyler Kuhn Yukon Government

Dave Tavares Government of Canada <u>Alternates</u>

Gerry Kisoun Inuvialuit Game Council

Michelle Gruben Inuvialuit Game Council

Matt Clarke Yukon Government

Craig Machtans Government of Canada

North Yukon Regional Biologist - Mike Suitor (Yukon Government)

Chair – Lindsay Staples

Staff - Jennifer Smith & Kelly Milner / Allison Thompson & Kaitlin Wilson



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