

Annual Report



April 1, 2020 to March 31, 2021

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2020/21 at a Glance

This report highlights the activities of the Wildlife Management Advisory Council (North Slope) over the period of April 2020 - March 2021. The year was an challenging one for the Council, as everyone did their best to continue their work while caring for family and community during the Covid-19 pandemic. Despite the hardships of the year, work progressed in a number of areas, including on the Wildlife Conservation and Management Plan, and in communications and outreach. Another important focus this year was the continued facilitation of the Indigenous Protected and Conserved Area for Aullaviat/Aunguniarvik.



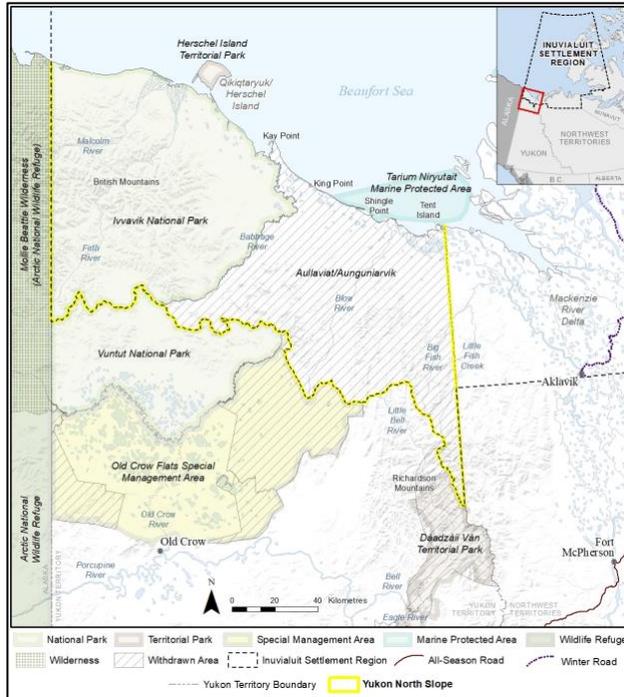
Who We Are

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 Inuvialuit 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 Area

The Yukon North Slope

The Yukon North Slope is an area of land that stretches 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 Qikiqtaruk, and both the nearshore and offshore waters.

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 and there are few signs of industrial development. However, there are many seasonal hunting camps that continue to be used by Inuvialuit.

The Agreement

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 People

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 (or homeland). The Yukon North Slope has been part of the Inuvialuit homeland for generations, and this long history has been well documented.

The Plan

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.

The Plan is a keystone for our Council. It offers guidance and information 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 research to inform a new Plan. This latest edition is expected in mid-2021 and will provide refreshed guidance for the protection and management of this special region.

The 2020-21 year was focused on advancing the draft Plan to the stage of public engagement. This included working closely with partners to make the Plan the best that it can be. It also included a professional copy edit and some early layout and design work.

Plan Goal:

To value and conserve the health of wildlife populations, diversity and productivity, wildlife habitat, and Inuvialuit traditional uses of the Yukon North Slope.

Special Projects

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 2020/21:

Science Chats Episode #1 - Igutchamik tautuktunga
The Yukon North Slope is an incredible place to do research, attracting scientists from around the world. We want to share some of this incredible work with you! Join us in our first of several Science Chats - our first one!
35 weeks ago · 794 Views
You, Kayla Nanmak Arey, Jen Smith and 11 others

Science Chats #2 - Ahklavik
The Yukon North Slope is an incredible place to do research, attracting scientists from around the world. We want to share some of this incredible work with you! Science Chat #2 finds Kayla Nanmak Arey speaking with...
34 weeks ago · 187 Views
Dorothy Cooley, Kayla Nanmak Arey and 12 others

Science Chats #3: Anguniagianiq
The Yukon North Slope is an incredible place to do research, attracting scientists from around the world. We want to share some of this incredible work with you! Science Chat #3 finds Kayla Nanmak Arey in conversation...
33 weeks ago · 163 Views
Kayla Nanmak Arey, Michelle Gruben and 4 others

Science Chat #5 - Tariumi
The Yukon North Slope is an incredible place to do research, attracting scientists from around the world. And, we want to share some of this incredible work with you! Check out the short video between Cameron...
94 weeks ago · 969 Views

Online Presence

With Covid-19 limiting Council travel, our focus was shifted to engaging with communities and the public through our online presence. We used our Facebook page to keep people up to date about our virtual meetings and provided seasonal highlights about major Council projects and news. We also increased the number of blog posts shared to our News page on the Council website. These included informational updates about Council business, but also layperson summaries of new reports, interesting research projects, etc.

During the summer and fall of 2020/21, the Council hired Kayla Nanmak Arey on contract to create digital

content aimed at engaging Inuvialuit in YNS research. Kayla developed a video series call *Science Chats*, where she has conversations with a number of YNS researchers. There were seven videos in all. The series is set as playlist on our Facebook page and was well-received and shared. Kayla also wrote up short blog posts with photos for our Website on each of these discussions.

Our Science Chats series was created and developed by Kayla Nanmak Arey. She shares a little about herself below:

Nanmak is a name I share with my granny Jean Arey (my great grandmother). My nanak Nellie (grandmother), and my mom Carol say my granny was stubborn, and so was I. Inuvialuit names are passed down from generation to generation, and I am proud to have the name Nanmak. Translated, *nanmak* means to backpack. Specifically, for a working Inuit dog to carry things in, a *nanmak*.



Polar Bear Research

The Inuvialuit-Inupiat joint commission have prioritized inclusion of Indigenous knowledge in abundance estimates for the Southern Beaufort polar bear subpopulation. WMAC (NS), IGC, WMAC (NWT), Alaska Nannut Co-management Council, and North Slope Borough are working together to support this objective. The organizations have contracted Stephen Braund and Associates for this work. Stephen and his team are assessing ways to incorporate Indigenous knowledge of polar bears into an ongoing effort to produce a new subpopulation estimate for the Southern Beaufort polar bear subpopulation. This will involve looking at how Indigenous knowledge can be used in integrated population models. The project was initiated in 2020 and this work will conclude in the 2021-22 fiscal year.

Grizzly Bear Management

Our Council has been working with WMAC (NWT), Government of Yukon and Government of the Northwest Territories to address Inuvialuit concerns about the relationship between the current quota system for grizzly bears in the ISR and the number of defense of life and property kills (DLPs). These discussions have explored new management ideas to keep both people and bears safe. We are hopeful that adjustments to the ISR grizzly bear quota system will be in place by 2021-22.

In 2020-21, the Council also supported the kick off of a planning process for a new ISR Grizzly Bear Co-management Plan. WMAC (NWT) has led this process, including engagement of a contractor (Chanda Turner). The existing plan was useful, but very much out of date. An updated plan is expected in 2021-22. The timing of this update will coincide with the development of a new federal grizzly bear management plan. The ISR plan will take into consideration the considerable research and knowledge documented for Yukon North Slope grizzly bears, as well as the conservation requirements put forward in the new WCMP.

Student Support

The Council values supporting the next generation of Yukon North Slope researchers, managers, stewards, and knowledge holders. To this end, the Council decided to provide financial support to an Inuvialuk student who has just begun her MSc work. Jessica Norris is attending McGill University and will be studying muskox on the Yukon North Slope. The Regional Biologist (Mike Sutor) is providing project support and the Aklavik Hunters and Trappers Committee will be engaged in the research, as well.

Through the Council's financial support, Jessica was able to participate in leading-edge polar bear field research in the ISR, which fosters her academic and community connections, advances her technical skills as a young biologist, and benefits her graduate work. The Council looks forward to continuing to work with Jessica!



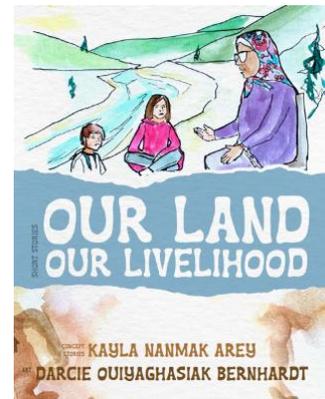


Danny Gordon's Story

Several years ago, Lindsay Staples (previous WMAC NS Chair) sat down with Danny C. Gordon to record his story of moving on foot from Alaska to Aklavik, via Qikiqtaruk, with his family. It's an incredible tale and one that highlights the importance of the Yukon North Slope for Inuvialuit. In 2020-21, the Council, with help from Shot in the Dark Productions, finalized the video and was able to share it on Facebook and our website. An amazing story was made more so with all of Danny's family and friends across the ISR and beyond commenting, sharing and reminiscing online. While it was important to document his experience, it was doubly so to share it – the video brought many people together!

YNS Conservation Art Booklet

In addition to her work on the *Science Chats* project, Kayla Nanmak Arey worked with Inuvialuk artist, Darcie Ouyaghasiak Bernhardt to create a story booklet that weaves together the conservation priorities in the forthcoming WCMP with the Inuvialuit experience on the Yukon North Slope. While the Council is waiting for the completion of the WCMP to release the final booklet, we are very excited about this collaboration and look forward to sharing it online and in print with the communities and schools in Aklavik, Inuvik, and Tuktoyaktuk.



Using Art to Share Knowledge

The Council worked with science illustrator Rachel Ford to translate existing knowledge about polar bears and Porcupine caribou into easy-to-digest graphic panels. These can be understood as standalone pieces and used as part of a larger narrative or education module online, in



schools, and elsewhere. The polar bear piece draws Inuvialuit knowledge from the 2015 *Inuvialuit and Nanuq*, which is an excellent and comprehensive report, but not entirely accessible to the wider community in its current report format. Similarly, there is an incredible wealth of information about the Porcupine caribou herd, but it is often found in documents and reports. We hope these communications tools enable more people, especially folks in ISR communities, to engage with all of this knowledge.

IFA-Funded Wildlife Research

Each year, WMAC (NS) reviews proposals for 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, the 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 2020-2021 for the following research projects; however, due to Covid-19 travel restrictions, some research did not proceed as planned.

Wildlife monitoring and Inuvialuit student internship on Herschel Island - Qikiqtaruk Territorial Park

The Qikiqtaruk ecological monitoring program builds capacity for Inuvialuit students through a field-based internship. It makes a significant contribution to the goals of the new Qikiqtaruk park management plan by improving wildlife conservation and management on the island while providing field-based career experience for Inuvialuit students. The initiative has received very positive feedback from community members.

In 2020, the Qikiqtaruk ecological monitoring program hoped to prioritize two main projects as part of the internship: 1) initiate a wildlife and habitat inventory of an interior portion of the island that is known to be ecologically rich but lacking baseline information and 2) further integrating the remote camera wildlife monitoring project with Parks Canada's monitoring for Grizzly Bear occupancy in the Firth River valley of Ivvavik National Park.

Unfortunately, this program had to be postponed due to Covid-19 safety requirements, but is planned to run in the summer of 2021.

Yukon North Slope Muskox Survey and Research

This project incorporates population monitoring, diet analysis, genetic investigations and supporting habitat-based research by a graduate student from McGill (Laurence Carter), all of which implements the Yukon North Slope Muskox Management Framework and Research Plan. To monitor the population in 2020-2021, Yukon Government proposed to complete a late winter population survey in April 2020 and a mid-summer aerial composition survey. The intent was to conduct a mark-resight survey of muskox groups using collared muskox as the "marks".



Survey areas were to be identified by mapping areas used by collared muskox previously, observations, and through consultation with the Aklavik HTC and other partners. A survey to assess calf productivity and ideally yearling recruitment was also planned for the summer of 2020. Yukon Government also intended to complete an analysis of diet after collecting fecal samples for the past four years, through collecting fecal samples opportunistically and in collaboration for partners.

Due to Covid-19, the population estimate has been postponed to 2022. Fortunately, the rest of the planned and recommended work was able to go ahead successfully.

Polar Bear Population Estimate

A new population estimate for polar bears in the Beaufort Sea has been requested by the Inuvialuit-Inupiat Polar Bear Commission. This number is needed to inform harvest decisions at annual user-to-user meetings, as well as inform reporting on the status of the species in various forums (e.g., PBAC, PBTC, Polar Bear Specialist Group PBSG, Convention on the International Trade in Endangered Species [CITES], and the Committee on the Status of Endangered Species in Canada [COSEWIC]). Along with subpopulations in

Hudson Bay, the status of polar bears in the Beaufort Sea is likely of greatest interest at the international level. While Indigenous knowledge (IK) suggests that the population is likely stable at this time, a precise population estimate is needed.

This project seeks to estimate the number of polar bears in the Beaufort Sea, including the Southern and Northern Beaufort subpopulations. Indigenous knowledge by local polar bear hunters indicate that separating the two subpopulations in the spring is problematic so it is important to survey both subpopulations at the same time. The estimate involves conducting biopsy darting of bears in both subpopulations across several years. April 2020 would have been the second year of this project, but work was postponed to spring 2021 due to Covid-19. Fortunately, conditions allowed for most of the work to be completed in March of 2021, with some of the flights being shifted into April to accommodate weather requirements.

Assessing the Effects of Climate-induced Variability on the Behaviour, Distribution and Demography of the Porcupine Caribou Herd (Year 1 of 5)



This project is a collaboration between the Canadian Wildlife Service, Government of Yukon, Parks Canada, the US Fish and Wildlife Service, Alaska Department of Fish and Game, Texas A&M University, and the US Geological Survey.

The Porcupine caribou herd migrates through 250,000 km² of northern Alaska, Yukon and the Northwest Territories and is an important source of subsistence food for communities within its range. Climate change is expected to alter the quality, abundance, timing and composition of summer forage for the Porcupine caribou herd, while also likely altering the herd's ability

to consume forage due to longer periods of mosquito harassment. These effects are expected to significantly influence caribou forage opportunities during the calving, post-calving, and summer periods, and therefore may alter the herd's distributions, movements and demographic rates.

The overall objective is to assess the effects of climate-induced variability on the behavior, distribution and demography of the porcupine caribou herd. The five-year project uses a combination of video camera GPS collars, ground surveys, and remote sensing products. In 2020-2021, the plan had been to collect caribou fecal pellets at 30 sites to determine which forage species to intensively sample in future years. Due to the Covid-19 pandemic and specifically travel restrictions, the project team delayed the start of the first year of the research program. The IFA funding allocated in 2019-2020 (\$15,000) was used to pick up GPS and video collars within and adjacent to Ivvavik National Park. Data from these collars are used to examine forage conditions, insect harassment and habitat use in conjunction with the field data, which is a vital aspect of this research program.

Investigating Observed Declines in Song Bird Abundance and Species Richness within Ivvavik National Park using Autonomous Sound Recorders

Birds are great ecological indicators for monitoring changes because they are distributed over a wide range of landscapes, are easy to detect acoustically in comparison to other animal groups and occupy different trophic levels. This project is designed to improve the overall understanding of migratory bird richness and abundance within Ivvavik National Park (INP) and how these populations respond to a changing.

Using autonomous recording units (ARUs) enables us to study species specific songbird migration arrival, seasonal song activity duration, intensity and frequency as well as species diversity. These data are compared with the annual breeding bird survey to optimize the study and provides in-depth analysis of song bird migration and breeding activity over the entire breeding season.

Due to Covid-19 restrictions, only a partial breeding bird season was recorded in INP in 2020 and the annual breeding bird survey was cancelled. Due to the limited data collected in 2020 an additional year of ARU deployment is required before the final report and analysis can be completed. In 2021 it will be imperative to collect a full breeding bird season worth of data, as long as it is safe to do so.



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 Porcupine Caribou Annual Harvest Meeting.
- Addressing matters related to screening of developments on the North Slope by the Environmental Impact Screening Committee.
- Participation in federal *Species at Risk Act*, including reviewing status reports and draft recovery documents. Of note this year was the initiation of process to create the federal grizzly bear management plan.
- Development and implementation of a new WMAC NS Human Resources Manual.

Working Together

Despite travel restrictions this year, 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 “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 - Qikiqtaruk 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. Visit the website at www.wmacns.ca. Our Facebook page (@wmacns) is also a good source of news and information related to Council business.

Meetings

Council Meetings

Council meetings switched from in-person quarterly meetings to half-day monthly meetings via videoconference. Under this model, there were twelve regular meetings over the course of the year, with some special teleconferences, as needed.

Other Meetings

May 25-26, 2020 – Polar Bear Administrative Committee

August 19-21, 2020 – Inuvialuit Game Council

September 16, 2020 – Joint WMAC Meeting

September 21-25, 2020 – Inuvialuit Game Council

October 27, 2020 – Inuvialuit-Inupiat Joint Commission for Polar Bear

December 1-4, 2020 – Inuvialuit Game Council

December 7-11, 2020 – ArcticNet

January 20, 2021 – Joint WMAC (NS) and Aklavik HTC Meeting

February 1-4, 2021 – Polar Bear Technical Committee Meeting

February 9-10, 2021 – Porcupine Caribou Annual Harvest Meeting

March 8-12, 2021 – Inuvialuit Game Council

Council Membership

Members

Danny C. Gordon/ Billy Storr
Inuvialuit Game Council

Billy Archie
Inuvialuit Game Council

Tyler Kuhn
Yukon Government

Dave Tavares
Government of Canada

North Yukon Regional Biologist - Mike Sutor (Yukon Government)

Chair - Lindsay Staples

Staff - Kaitlin Wilson & Allison Thompson

Alternates

Evelyn Storr
Inuvialuit Game Council

Michelle Gruban
Inuvialuit Game Council

Matt Clarke
Yukon Government

Craig Machtans
Government of Canada

