

Annual Report

April 1, 2015 to March 31, 2016



Wildlife
Management
Advisory Council
North Slope

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Table of Contents

THE YUKON NORTH SLOPE	1
INUVIALUIT FINAL AGREEMENT	1
YUKON NORTH SLOPE WILDLIFE CONSERVATION AND MANAGEMENT PLAN	2
REGIONAL ENVIRONMENTAL AND CULTURAL ASSESSMENT	3
PROJECTS AND RESEARCH	3
IFA FUNDED WILDLIFE RESEARCH	3
<i>Herschel Island Ecological Monitoring Program</i>	4
<i>Arctic Borderlands Ecological Knowledge Coop</i>	4
<i>Porcupine Caribou Herd Research and Management</i>	4
<i>Radio and Satellite Collar Program</i>	5
<i>Porcupine Caribou Use of the Yukon North Slope</i>	5
<i>Wildlife Monitoring with Remote Cameras in Ivvavik National Park</i>	5
<i>Permafrost Monitoring in Ivvavik National Park</i>	6
<i>Peregrine Falcon Survey</i>	6
<i>Ecological Land Classification for the Yukon North Slope</i>	7
<i>Field Guide for Birds of the Yukon North Slope</i>	7
<i>Polar Bear Analysis</i>	7
2015 NORTH SLOPE CONFERENCE	8
SPECIAL PROJECTS FUNDED BY WMAC (NS)	8
OTHER COUNCIL ACTIVITIES	9
WORKING TOGETHER	9
<i>Aklavik Hunters and Trappers Committee</i>	9
<i>Wildlife Management Advisory Council (Northwest Territories)</i>	9
<i>Herschel Island-Qikiqtaruk Territorial Park</i>	9
<i>Parks Canada and Ivvavik National Park</i>	10
SHARING INFORMATION	10
MEETINGS	10
OTHER MEETINGS	10
COUNCIL MEMBERSHIP	11

The Yukon North Slope

The Yukon North Slope stretches from Alaska to the Northwest Territories. It includes all of the land in the north Yukon where the rivers and streams drain into the Beaufort Sea, islands, such as Herschel Island, and both the near shore and offshore waters.

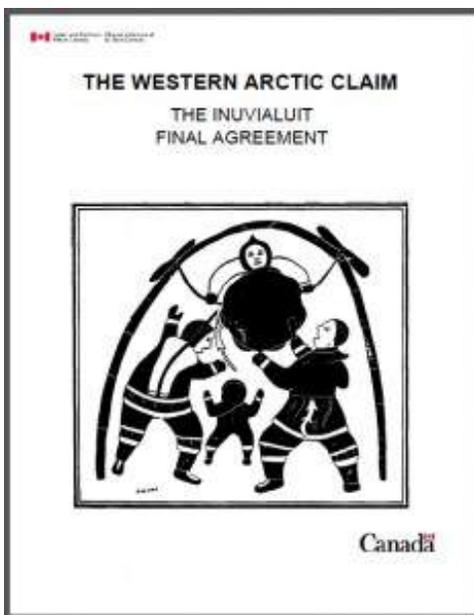
The Inuvialuit have relied on the region's wildlife for hundreds of years. While most Inuvialuit now live in nearby communities such as Aklavik and Inuvik, many return to the North Slope on an annual basis to hunt, trap and fish.

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 the Inuvialuit.



Inuvialuit Final Agreement

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 right 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 in the north.

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

The Wildlife Management Advisory Council (North Slope)

The management priority for the North Slope is the conservation of the land, wildlife and Inuvialuit traditional use of the area. To ensure these goals are met, the IFA established the Wildlife Management Advisory Council (North Slope), which is also known as the 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, NWT and federal governments, other co-management boards, the Aklavik Hunters and Trappers Committee (HTC) and the Inuvialuit Game Council (IGC).



Yukon North Slope Wildlife Conservation and Management Plan

To fulfill a requirement of the IFA, the WMAC (NS) developed the Yukon North Slope Wildlife Conservation and Management Plan. The plan provides direction for the conservation of wildlife, habitat and traditional Inuvialuit use on the Yukon North Slope. The Plan is divided into four volumes, and contains guidance for those with environmental and resource interests on the Yukon North Slope. The existing Plan can be found online at <http://www.wmacns.ca/conservation/wcmp/>, and hard copies are available from the WMAC (NS) Secretariat.



Regional Environmental and Cultural Assessment

The WMAC (NS) is currently revising and updating the original, 2002 plan and creating a Regional Environmental and Cultural Assessment (RECA). In 2015-2016 we completed a project documenting Inuvialuit traditional use of the North Slope. The study updated information about historical and current Inuvialuit use of the area based on interviews with 40 people with extensive knowledge of the North Slope, including place names, important cultural sites, contemporary and historical use, and travel routes. The results from this study have been compiled in maps and will be incorporated into the updated Plan.

Over the past two years we have been working with Round River Conservation Studies to design and develop the RECA. In June 2015 Round River and WMAC (NS) held a workshop in Aklavik to establish a list of key focal species and their requirements to contribute to the development of the RECA which WMAC(NS) will use to inform it's work of revising the Yukon North Slope Wildlife Conservation and Management plan.



Round River Biologist Kim Heinemeyer and Billy Storr (AHTC) at the focal species workshop

Traditional Use Study

Wolverine and Associates was contracted to carry out the Traditional Use Study for the Yukon North Slope. In this fiscal year the interview dataset was digitized, the methodology document completed, transcripts from interviews were developed and coded using NVivo. A verification workshop was held in Aklavik with interviewees, as well as a community meeting. Individual map biographies have been completed and distributed to all interviewees. Community composite map have been completed and distributed to co-management partners.

This study documents Aklavik Inuvialuit traditional Use of the Yukon North Slope. The primary interviews were concluded in March 31, 2015. This year we supported digitizing individuals' maps, prepared composite maps, undertook data analysis, verified results with the community, created a methods statement and developed a draft report and maps.

Projects and Research

IFA Funded Wildlife Research

Each year the WMAC (NS) reviews proposals for research projects related to wildlife management and ecological monitoring on the Yukon North Slope 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. The 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 WMAC (NS) bases its recommendations on priorities identified in the *Yukon North Slope Wildlife Conservation and Management Plan*, the *Yukon North Slope Long Term Research Plan*, and other applicable plans.

The Council recommended IFA funding in 2015-2016 for the following research projects:

Herschel Island Ecological Monitoring Program

Ecological monitoring is identified as a priority in the *Herschel Island-Ojkiqtaruk Territorial Park Management Plan*. There has been a monitoring program on the island since 1999 to provide information required to protect park values and maintain ecological integrity as set out in the park management plan. The program relies on the integrated involvement of Herschel Island Rangers to identify and address emerging threats and stressors and to ensure standardized data collection.

There are four main components to the monitoring program: wildlife, vegetation, abiotic (permafrost), and human use.

Program activities undertaken in 2015-2016 include: wildlife observations; Arctic Char monitoring; breeding-bird and birds-of-prey surveys; vegetation monitoring; weather records; permafrost and snow depth measurements; slump monitoring for rates of erosion; beach landing strip monitoring; monitoring the impact of of cruise ship visits; and the collection of harvest data and visitor use statistics.

Monitoring program results are presented to the WMAC (NS) and help form key management objectives for the park.

Arctic Borderlands Ecological Knowledge Coop

The Arctic Borderlands Ecological Knowledge Coop (ABEK) is a collaborative ecological monitoring program established in 1994. Goals of the program include: monitoring and assessing ecosystem changes in the range of the Porcupine Caribou Herd and adjacent coastal and marine areas; encouraging the use of both science-based studies and studies based on local and traditional knowledge in ecological monitoring and ecosystem management; improving communications and understanding among governments, Aboriginal and non-Aboriginal communities and scientists with regard to ecosystem knowledge and management; and, fostering capacity-building and training opportunities in northern communities in the context of these goals.

Porcupine Caribou Herd Research and Management

IFA research funds supported several initiatives regarding the Porcupine Caribou Herd. The 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 Action A.2.1 in the WCMP, “to continue to monitor species of importance to the Inuvialuit, particularly those sensitive to industrial disturbances.”

Radio and Satellite Collar Program



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; the 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. The project in 2015 had good success with all collars deployed in March by Alaska Department of Fish and Game owing to caribou distribution. In addition, 14 expandable satellite GPS collars for bull caribou this year (they are generally fitted with VHF collars) for the first time. This is an important addition as bulls are making extensive use of the eastern Yukon North Slope over the past six years, however documentation of this event has been limited. The overall number of caribou collared in the herd remained consistent with about 100 cows and 20 bulls collared. This is the number required to collect a population estimate on the herd.

The program uses radio and satellite collars to locate the herd for different surveys (calf birth and

Caribou for the second year in a row calved in or near 1002 Lands in Alaska although some caribou did calve in the western half of Ivvavik. Movements of the cows included heavy use of the Yukon North Slope from July through September. Observation flights in mid-July identified many of the bulls with VHF collars as they moved south in the Richardson Mountains. Many bulls were located in the Richardson Mountains for most of the summer. This has become a relatively consistent pattern over the past half dozen years.

Porcupine Caribou Use of the Yukon North Slope

The goal of this project is to boost our understanding of how the Porcupine Caribou Herd uses the eastern North Slope, through increasing the number of satellite collars, and through detailed aerial mapping of relative abundance during calving.

Quantitative data collection of caribou use on the Yukon North Slope will help demonstrate the continued importance of the YNS to PCH. Data will also form the basis in combination with historical information to identify areas of specific interest for management of the herd on the Yukon North Slope east of Ivvavik.



Wildlife Monitoring with Remote Cameras in Ivvavik National Park

Large carnivore populations are a major gap in the current ecological monitoring program for the Western Arctic National Parks. Predators such as bears, wolves, wolverine and lynx 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 pilot program into 2016 to monitor large carnivore populations in the park. The long-term objectives are to:

- understand current habitat use, 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.

In 2015, 28 cameras were deployed around Sheep Creek, the upper Babbage watershed, and along the Firth River. Of those, 24 were deployed along the Firth River corridor in random locations with the intention of collecting data towards our carnivore monitoring measure.

Permafrost Monitoring in Ivvavik National Park

In northern Parks, climate change is one of the main stressors in ecological integrity. There is substantial evidence that climate change is impacting the active layer in permafrost environments, and that this warmer surface layer is increasing temperatures deeper into the permafrost zone. Several years ago the Western Arctic Field Unit successfully initiated an active layer monitoring program in Aulavik and Tuktoyaktuk national parks to monitor changes in the depth and periodicity of the active layer freeze-thaw cycle. In 2014 the program was expanded to Ivvavik National Park with the installation of two permafrost monitoring sites near Whale Cove.



In 2015, two additional permafrost data loggers were installed in the park, one on the coast 29 kilometres south east of Whale Cove and a second in the interior just east of Margaret Lake. Data collected from these sites will monitor changes in permafrost and help make management decisions for the park.

Peregrine Falcon Survey

Peregrine falcons have been considered a species at risk in Canada had been since 1978. In July 2015, a survey of peregrine falcons was conducted on the Yukon North Slope as part of the National Peregrine Falcon Survey, which is conducted every five years. The helicopter-based survey was a collaborative effort between Parks Canada, Environment Yukon and Yukon College and covered the North Slope, including Ivvavik National Park and Herschel Island Territorial Park. Thirty-eight previously known peregrine falcon territories were visited to see how many had active nests and the number of chicks in each nest.

In total, 42 adult peregrine falcons and 29 chicks were observed. Half of the previously known peregrine falcon territories had evidence of occupancy. An additional four territories were identified bringing the total of occupied falcon territories in the Yukon North Slope to 23, the highest number seen on the North Slope since surveys began in 1975. This suggests that the peregrine falcon population on the Yukon North Slope is growing and their conservation status is improving.



Photo by Cameron Eckert

Ecological Land Classification for the Yukon North Slope

A Predictive Ecosystem Mapping (PEM) project was proposed for the Yukon North Slope east of the Babbage River. The WMAC (NS) supported this work as an important foundation upon which to build the new Wildlife Conservation and Management Plan. A PEM is a map modelling approach that uses computer models and GIS-based approaches to develop an ecosystem map. Ecosystem modeling makes it possible to map ecosystems across large geographic areas in a rapid and cost-effective manner. Bioterrain features (features similar in soils, parent materials, drainage, and nutrient regime, etc.) are mapped manually. Ecosystem units can be mapped using a bioterrain base that is overlaid with vegetation communities, commonly called a Terrestrial Ecosystem Map (TEM). TEMs are costly to produce but, done selectively, they can be used to create inputs for a PEM, over a larger area. Ecosystem units will also be mapped which can be used for regional planning and is an excellent summary of the region's ecosystems (PEM), soils and physiography.

Field Guide for Birds of the Yukon North Slope

Canadian Wildlife Services was supported by IFA research funds in 2014-2015 to develop a field guide to the birds of the Yukon North Slope. Funding was identified in 2015-16 to support the final design and printing of the field guide. This booklet is now printed and being distributed.

Polar Bear Analysis

This project to reanalyze South Beaufort polar bear population estimate put out by the USGS to help inform our own discussions around management of this population. This information was instrumental to

the Polar Bear Technical Committee discussions around status and management of this transboundary population and provided a basis for ongoing collaborative decision-making processes on both sides of the border.

2015 North Slope Conference

The Council and Yukon Government co-hosted the 2015 Yukon North Slope Conference September 29-30. The Conference theme *Best Practices in the Use of Aboriginal Traditional Knowledge in Resource Management* was broken down into three sessions: Mobilizing knowledge, Best Practices and Documenting Traditional Knowledge, Management Decisions-making: Resolving Differences and Addressing Disagreements Between TK and Science.

Over 100 people participated in the working sessions, which were designed to produce tangible guidance and direction for the development of protocols, and standards that will contribute to defining best practices in the treatment of TK.

A summary of breakout sessions is available. A series of podcasts was generated from the conference and a set of proceedings will be available in 2016. These products are all available on the Council's website.

North Slope Conservation Awards were given out to three recipients. These individuals have all demonstrated commitment to conservation on the Yukon North Slope. Congratulations to Danny C Gordon, Marsha Branigan, Robert Delury.



North Slope Conference 2015. Photo by Craig Machtans

Special Projects Funded by WMAC (NS)

A portion of the WMAC (NS) budget is normally allocated to special projects including wildlife management, community participation, traditional knowledge, outreach and education. In the 2015-2016 fiscal year, the WMAC (NS) required supplemental funding support to meet our obligations. A considerable portion of supplementary funds was used to support the traditional use study (discussed in the WCMP section above), and participation in an increasing number of meetings and initiatives associated with polar bear management. The Council did not undertake other special projects. We look forward to the negotiation and implementation of a new contribution agreement to support our work.

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:

- development of a Species-at-Risk Act (SARA)-compliant, federal management plan for polar bears; review of the Polar Bear Range States' Circumpolar Action Plan for polar bears;
- development of the Northwest Territories SARA-compliant Inuvialuit Settlement Region Polar Bear Management Plan;
- review of United States Geological Service (USGS) publication on Southern Beaufort polar bear population, and subsequent meeting with USGS;
- participation at the annual meeting of commissioners under the Inuvialuit-Inupiat Polar Bear Agreement;
- review of the draft final North Slope Grizzly Bear report;
- participation in the ISR Community Based Monitoring Program and steering committee;
- addressing of matters related to screening of developments on the North Slope by the Environmental Impact Screening Committee;
- participation in the ongoing review by the National Energy Board and the Environmental Impact Review Board of deep water exploration drilling proposals by Imperial Oil Resources and its partners; and,
- participation in discussions and preparation of reports regarding future IFA-implementation funding conditions and requirements.

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 the WMAC (NS) the WMAC (NWT) 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

The WMAC (NS) works with Yukon Government, Parks Branch on wildlife research, management and ecological monitoring in Hershel Island Territorial Park. The Chief Park Ranger for Hershel Island-Qikiqtaruk Territorial Park, Richard Gordon, attends regular Council meetings to provide updates on activities in the Park. Staff at Hershel Island provides updates to the Council in the spring and fall related to that year's activity.

Parks Canada and Ivvavik National Park

The WMAC (NS) works with the Parks Canada Western Arctic Field Unit on wildlife research, management and ecological monitoring in Ivvavik National Park. Christopher Hunter, Parks Canada employee, is currently a member representing the Government of Canada.

Sharing Information

The WMAC (NS) website includes a host of information about the North Slope, the Inuvialuit Final Agreement, Council activities and a North Slope Traditional Knowledge database. WMAC (NS) continually updates the site with all of its publications, meeting minutes, and other relevant information. Visit the website at <http://www.wmacns.ca>.

Meetings

Council Meetings

July 5-10, 2015; Inuvik/Herschel Island, NT

September 15-18, 2015; Whitehorse, YT

December 4-8, 2015; Vancouver, BC

Feb 29-March 3, 2016; Inuvik/Aklavik, NT

Other Meetings

Focal Species Workshop	Aklavik	May 4, 2015
Polar Bear Administrative Committee Meeting		
Inuvialuit- Inupiat Meeting	Anchorage	August 25-27, 2015
Polar Bear Range States meeting		Sept 1-3, 2015
IFA Workshop- Origins and Vision of the IFA	Whitehorse	Sept 28, 2015
Traditional Knowledge Working Group –treatment of ATK in resource management decisions	Whitehorse	Oct 1, 2015
Artic Net	Vancouver	Dec 7-11, 2015
Polar bear technical Committee meeting- TK day	Whitehorse	Feb 1, 2016
Polar bear technical Committee meetings	Whitehorse	Feb 2-4, 2016
Inuvialuit-Inupiat Meeting	Whitehorse	Feb 5-6, 2-16
Joint Secretariat Board meetings		

The Council also participated in ongoing meetings of the Polar Bear Technical Committee; the Polar Bear Administrative Committee; the Inuit Consult Group on polar bear management; the Arctic Borderlands Ecological Knowledge Coop; the Community Based Monitoring Steering Committee; and IFA research funding discussions. Our Chair attended two IGC meetings to provide updates on Council activities.

Council Membership

Members

Danny C. Gordon

Inuvialuit Game Council

Ernest Pokiak

Inuvialuit Game Council

Todd Powell

Yukon Government

Chris Hunter

Government of Canada

Alternates

Evelyn Storr

Inuvialuit Game Council

Michelle Gruban

Inuvialuit Game Council

Mike Sutor

Yukon Government

Craig Machtans

Government of Canada

Chair

Lindsay Staples

Staff

Jennifer Smith
Christine Cleghorn

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