

Wildlife Management Advisory Council North Slope

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Yukon North Slope Research 2010/11

Every year government agencies consult the Wildlife Management Advisory Council (North Slope) about their research programming relating to wildlife management and ecological monitoring on the Yukon North Slope.

In early spring of each year the Council reviews research proposals from Parks Canada, the Yukon Government's Department of Environment, and the Canadian Wildlife Service, and makes recommendations as to how Inuvialuit Final Agreement implementation funds should be spent.

Also on an annual basis in the NWT, the Wildlife Management Advisory Council (NWT) and the Fisheries Joint Management Committee review research proposals relating to wildlife and fisheries management in their jurisdiction.

Many of the projects involve local field workers and youth, providing valuable educational and employment opportunities throughout the region.

Recommendations for research on the North Slope are based on research priorities identified in the following:

- Yukon North Slope Long Term Research Plan,
- Yukon North Slope Wildlife Conservation and Management Plan,
- Porcupine Caribou Management Plan,
- Inuvialuit Settlement Region Grizzly Bear Management Plan, and
- Meetings with the Aklavik Hunters and Trappers Committee.

WMAC (NS) monitors the progress of projects and tracks status reports from agencies receiving funding. Full descriptions of projects supported on a yearly basis can be found on the Council's website, www.wmacns.ca, as well as in our annual reports.

Flip through the inside pages to see what projects the Council is recommending support for in 2010/2011.



Herschel Island Tundra Vole. Photo credit Alice Kenney

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Richardson Mountain Sheep Survey

The Yukon and Northwest Territories governments have been monitoring the Dall's sheep population in the Richardon's since 1984. Survey results from 1997 onward have shown that the population is declining.

A draft management plan for the population, which calls for an estimate of population size every three to five years, has been prepared by a regional working group but not finalized.

The last survey of the population was done in 2006 at which time the population was estimated at just over 700 sheep. If the population drops below 500 the draft Plan calls for increased surveys and management actions. The 2010 survey will take place in July.

Porcupine Caribou Breeding Female Survey

The size of the Porcupine Caribou herd was last estimated in 2001 – since then biologists have been trying to get another estimate, by way of a photo census, without success due to poor weather conditions. The estimate in 2001 showed that the herd had continued to decline at a relatively slow rate since the population peaked in 1989.

Not having a population estimate during a period of herd decline is cause for concern. If in 2010 the weather prevents yet another photo census, the Yukon Government is proposing to use the same method used for the Bathurst Herd in the NWT, which estimates the number of breeding females on the calving grounds and is corrected for the estimated numbers of non-breeding females and bulls to get a total population size.

This project will provide an estimated total herd size, a key piece of information needed for management, particularly harvest management under the recommended Porcupine Caribou Herd Harvest Management Plan.

Porcupine Caribou Satellite Tracking

This program has been running since 1985 and is a cooperative project between a number of wildlife agencies and boards. Currently about 12 satellite collars help wildlife managers to locate the herd to conduct over-winter calf survival and composition counts through Alaska, the Yukon, and NWT.

Collars show general herd distribution and have proven valuable in recording routes the caribou travel and timing of migration. Data used to be available online, however at the request of the International Porcupine Caribou Board in 1998 data is no longer posted: information was being used inappropriately by several individuals.

The late winter composition count and capture fieldwork will take place in March 2010.

Yukon North Slope Grizzly Bear Project

Next year will see the wrap up of this six year project that aims to estimate the size of the Yukon North Slope's grizzly population and its growth rate, and to determine the sustainable harvest rate for the population and whether or not there are any conservation concerns relating to contaminants and climate change and other environmental factors.

This research will help in the development of sustainable harvest quotas and to ensure the long term survival of grizzly bears on the North Slope.

In 2010 tracking work will conclude and collars will be removed from all study bears. Lab analyses for various samples will also be completed as will den survey work. A final analysis and report are anticipated some time in 2011 and will be communicated to interested communities and groups.

Beaufort Sea Polar Bear Traditional Knowledge Project

This project proposes to gather local and traditional knowledge about the population status of polar bears and the influences that climate change has had on polar bears and their habitat in the Beaufort Sea.

Though scientific information about polar bears in the area has been collected since the 1970s, very little traditional knowledge on polar bears and their use of sea ice has been documented. When scientific and traditional knowledge are brought together better management decisions are made possible.

In February and March 2010 interviews were held in Aklavik, Inuvik, and Ulukhaktok. In 2011 interviews will take place in Sachs Harbour, Tuktoyaktuk, and Paulatuk. Residents of each community and wherever possible, youth will assist with conducting interviews.

A final report is expected sometime in 2011-2012.



Billy Archie conducting grizzly bear denning field work. *Photo credit Government of Yukon*

Ecological Monitoring in Ivvavik National Park's Forests

The Arctic is warming fast causing many physical and ecological changes across the landscape. Before many more changes take place, there is a need to develop programs to monitor and conserve the Arctic environment.

This project proposes to collect information about the biodiversity of Ivvavik's forests, paying special attention to vegetation, insects, and birds, as well as to collect data on factors that may influence biodiversity such as air temperatures, soil moisture and nutrients.

The relationships between biodiversity and habitat will be looked at in order to help gain an understanding of ecosystem structure and complexity.

The species of focus in this study are sensitive to change, so they will serve as good indicators of change when assessing the consequences of climate warming over the long term.

By involving local youth, school groups, and community members this project will provide valuable education and career opportunities.

North Slope Raptor Survey

Raptors, especially peregrine falcons, are often used as indicators of ecosystem health. Since 1970 the Canadian Peregrine Falcon Survey has been conducted every five years to track the population and productivity of the species.

Changes in prey abundance, weather conditions and environmental contaminants can strongly influence falcon productivity. The proposed North Slope Raptor Survey will be an important contribution to the Canadian Peregrine Falcon Survey and will improve our understanding of the species.

Peregrine falcon nest site locations will form the major component of the survey and all other raptors will be surveyed if possible.

Surveys will take place in mid July by helicopter and all coastal drainages will be surveyed up to 30 kilometres inland. Herschel Island will also be surveyed.

Herschel Island Ecological Monitoring

The Herschel Island ecological monitoring program represents over two decades of work to measure and track changes in the wildlife and environment.

The program now consists of 11 related projects ranging from thaw slump monitoring to breeding bird surveys to vegetation surveys.

An important new initiative is to implement airstrip monitoring to assess the impacts of the airstrip and airstrip use on wildlife, especially for king eiders, guillemot, and some vegetation.

In 2010/2011 monitoring activities will continue to be conducted by Yukon Park Rangers along with the help of a Yukon Parks Conservation biologist and two university students.



Raptor surveys on Herschel Island. *Photo credit Government of Yukon*

Remembering Andy Carpenter



Photo credit Doug Barber

The members of the Council regret the passing of Andy Carpenter Sr. on February 17, 2010.

Following the Council's establishment, Andy was a strong and wise guiding light throughout the early years of the Council's operation. As a negotiator of the Inuvialuit Final Agreement (IFA) he provided a clear indication of Inuvialuit expectations for the management of the Yukon North Slope and the rights that the Inuvialuit held to the area.

As chairman of the Inuvialuit Game Council, Andy provided generous and thoughtful advice on the workings of the unique joint management system established in the IFA through the Wildlife Management Advisory Councils and Fisheries Joint Management Committee.

On difficult and potentially divisive issues Andy brought an open and creative mind and a gentle touch to resolve and overcome them.

Andy lived an extraordinary life and freely shared with others his broad experience and knowledge gained over his life time. Andy was a rare individual who embodied a truly kind spirit. He will be remembered by the Council and by many others for years to come.



Arctic Borderlands Ecological Knowledge Coop

Since 1996 the Co-op has been monitoring and assessing change in the range of the Porcupine Caribou Herd, Mackenzie Delta and nearby marine areas. Every year interviews with locals in communities investigate conditions and changes observed during the year about the land, plants, animals, and community life. Local observations contribute to a broader regional ecosystem monitoring program which helps understand what is changing and why.

This past winter interviews were cancelled, and funds were re-directed toward program improvement: analyzing data collected over the last 10 years, re-design of the survey, and improved long term data storage. In 2010/2011 the new and improved survey will be used for interviews in all communities and project partners should be better able to use the data for management purposes.

Bird Conservation Region Planning in the ISR and Canada

Environment Canada is currently working on developing a new way to manage migratory birds across the country. They are developing "Bird Conservation Regional Plans" for 12 different regions across the country. The region falling within the ISR is called "Arctic Plains and Mountains" and includes 150 species of ducks, geese, swans, songbirds, hawks and owls, ptarmigan, sandpipers, plovers, loons and cranes.

Plan highlights include the identification of species deserving special attention because of conservation and stewardship concerns, habitat needs, research needs, population targets, threats to birds and their habitat, conservation and management goals and actions, as well as identification of areas of importance in the different regions.

As the regional plans are only advisory in nature they should not infringe on Inuvialuit rights. Implementation plans for the western arctic region will be developed in cooperation with wildlife management boards, including the WMAC (NS) and (NWT) and will be finalized by September 2011.



Photo credit Government of Yukon

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