



# Wildlife Watch

*WILDLIFE MANAGEMENT ADVISORY COUNCIL (NORTH SLOPE)  
COMMUNITY NEWSLETTER*

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## **Yukon North Slope Research 2003 – 2004**

WMAC(NS) reviews proposals for research projects related to wildlife management and ecological monitoring on the Yukon North Slope. Some of these projects are funded through the Inuvialuit Final Agreement.

Projects supported by the Council are recommended to Parks Canada, the Yukon Government's Department of Environment, the Government of the Northwest Territories' Department of Resources, Wildlife and Economic Development and the Canadian Wildlife Service. Recommendations are based on research priorities identified in the Yukon North Slope Long Term Research Plan, the Yukon North Slope Wildlife Conservation and Management Plan, the draft Canadian North Slope Muskox Management Plan, the Muskox Management Workshop (Aklavik, October 2001), the Porcupine Caribou Management Plan, the ISR Grizzly Bear Management Plan, meetings with the Aklavik Hunters and Trappers Committee, the Aklavik HTC research priority list, community consultation at public meetings in Aklavik and research priorities identified at the Arctic Borderlands Ecological Knowledge Co-op Annual Gatherings. Reports on the Council's recommendations are conveyed to the Inuvialuit Game Council, the Aklavik HTC and the Environmental Impact Screening Committee.

WMAC(NS) monitors the progress of all recommended projects by requesting status reports and final reports from all agencies that receive funding. This newsletter summarizes research projects that were supported and recommended by the Council for 2003-2004.

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### **Grizzly Bear Studies**

A number of studies will be conducted on Yukon North Slope grizzly bear populations over the next five years. These studies will provide information on population size, birth rate, death rate, and movement.

People are seeing bears more often on the Yukon North Slope. They believe that grizzly bear numbers have increased since the last estimates. In the Barn's Mountains, the last estimate of the grizzly bear population size was made in 1975. Information on birth rates and death rates for the region are also almost 30 years old. Current harvest quotas are based on a combination of these old estimates and estimates from other regions of the ISR with comparable habitat.



In November 2002, members of the Inuvialuit HTC, the WMACs, Yukon and NWT governments and Parks Canada met to talk about needs for managing grizzly bear populations in the ISR. Members of the Aklavik HTC felt that there was a need to update population estimates for the North Slope. The Yukon North Slope Research and Monitoring Plan also indicates a need to update population estimates for grizzly bears, and to review harvest rates using population-specific information. New research is needed.

The proposed studies will include the collection of local knowledge about grizzlies and an analysis of harvest patterns. Some bears will be captured and fitted with collars to monitor their movements. A DNA mark-recapture study will also provide information on movement and population size by collecting hair samples from the bears using special traps. Habitat studies will be conducted to learn more about bear distribution.



## Arctic Borderlands Ecological Knowledge Co-op and Community-base Monitoring in Aklavik

The Borderlands Co-op was founded in 1994 when representatives from a variety of community groups, agencies and governments started an ecological monitoring program for the Yukon, Alaska and NWT, within the range of the Porcupine caribou herd. The focus of this monitoring is on climate change, contaminants and regional development. Co-op activities include the tracking of ecological indicators in the region, community projects and an Annual Gathering to report on its findings and exchange information.

The Co-op's annual community-based monitoring project will continue in 2003-04 in Aklavik (Gwich'in and Inuvialuit), as well as in Old Crow, Fort McPherson, Arctic Village and Kaktovik. The project will also expand to include Inuvik. A local researcher in each community will conduct interviews with community experts, collecting and communicating information about the conditions and changes observed during the year. This will be the seventh year of the program in Aklavik. The Canadian Wildlife Service coordinates this project in partnership with community and government agencies in the region. A summary of the Co-op's activities can be found at [www.taiga.net/coop](http://www.taiga.net/coop). *Photo: Parks Canada*

## Aklavik Harvest Data Collection

The objective of this project is to document the Aklavik Inuvialuit harvest of moose, caribou, sheep, swans and furbearers in the Yukon and NWT. Annual harvest reporting is important to assist in the management of wildlife. It is also important for the assessment and determination of wildlife compensation in the ISR if required. Harvest reporting for some species is done through the mandatory reporting of the harvest of a species under quota. Harvest information is also collected using hunter recall surveys.



YTG will again contract a local person, in partnership with the Aklavik HTC, to conduct recall interviews twice each year. The surveys will be conducted during freeze up and break up. Harvest information recorded will include species, date, location, sex and maturity of the animal, and the hunter's name. This is the second year this data has been conducted in this way.

All identifying information will be confidential, however summary information on total harvest will be made public. Information collected will be added to the data that was collected in previous years, primarily through the Inuvialuit Harvest Study.

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## Muskox Management

A muskox satellite program is being conducted on the North Slope. The objective of this research is to learn more about where the muskox like to live at different times of the year and how much they move around. The study was begun in 1999. There are 8 muskox fitted with satellite collars right now. The satellite automatically records the locations of the muskox throughout the year. The collars are also used to help locate groups of muskox when it is time to count the population.

Another ongoing study is being done by biologists to find out how many calves are born each year and how many live to be a year old. By surveying the population in helicopters, it is also possible to estimate the age of the muskox they see and record the numbers of males and females. All of this information helps biologist make decisions about managing the muskox and assists in determining a sustainable harvest quota. YTG and Parks Canada coordinate these projects. A representative of the Aklavik HTC participates in the field work on a regular basis. *Photo: Wayne Lynch*

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## Studies on the Porcupine Caribou Herd

Caribou are being located using two different types of collars. Ten caribou have been fitted with satellite collars. These collars automatically report the location of the animals and provide biologists with regular information about the timing and routes of the migrations. The location of these ten caribou can be followed on [www.taiga.net/satellite/index.html](http://www.taiga.net/satellite/index.html)

There is also a program to maintain between 80 and 100 conventional radio collars on the herd. These collars are used to locate the caribou during the composition counts and censuses. They also help researchers locate and identify individual caribou and are used to document winter range use. The collars have been very important in showing how important the Arctic National Wildlife Refuge is to calving caribou. Many agencies are co-operating in funding and maintaining these two collaring programs. *Photo: Parks Canada*



## Herschel Island Raptor and Fox Survey

A helicopter survey will be conducted during the summer to document the number and location of raptors and foxes on Herschel Island. Biologists are particularly interested in learning more about rough-legged hawks and peregrine falcons, as well as arctic and red foxes. Sightings of snowy owls, swans and cranes will also be recorded. The results of the survey will be used to set up an ongoing ground-based monitoring project. Every year Herschel Island Park Rangers will visit the sites within walking distance from Pauline Cove to monitor nests and dens. They will record information such as the number of eggs and chicks at each nest site, and the number of dens occupied by the foxes.



photo: C. McEwen

## Additional North Slope Projects and Programs

A number of other projects and programs were recommended by the Council. These include:

- **Herschel Island Permafrost Monitoring.** This is an ongoing program that was begun in 2000. It is being conducted by Chris Burn (Carleton University) and the Herschel Island Park Rangers. Probes have been put into the ground to measure the temperature at different levels below the surface. This study also includes the long-term monitoring of snow depth and measuring the thickness of the layer of permafrost that thaws and freezes each year. The study will be able to determine if the ground is warming up over time.
- **Richardson Mountains Sheep Survey.** The objectives of this project are to obtain a current estimate of the number of the Dall sheep in the Richardson Mountains. Information about the distribution and the growth of the population will also be determined. Biologist will then be able to assess if a harvest of full curl rams in this area is possible. The 2001 estimate was approximately 1,057 sheep.
- **Reproductive Ecology of Tundra Swans in the Mackenzie Delta Region.** This is the third year of this project. It is being conducted by a graduate student of the University of Northern British Columbia. The study has been learning about tundra swan nesting biology and how they use their habitat. Nesting sites are being monitored to see how they are being affected by environmental change and development in the Mackenzie Delta.

### Wildlife Management Advisory Council (North Slope)

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| <ul style="list-style-type: none"><li>• <b>Inuvialuit Game Council:</b> Danny C. Gordon; Herbert Felix; Alternates: Evelyn Storr, and Carol Arey</li><li>• <b>Government of Canada:</b> Martin Raillard, Canadian Wildlife Service; Alternate: Alan Fehr, Parks Canada</li></ul> | <ul style="list-style-type: none"><li>• <b>Government of Yukon:</b> Doug Larsen, Dept of Environment; Alternate: Dorothy Cooley, Dept. of Environment</li><li>• <b>Chairperson:</b> Lindsay Staples</li><li>• <b>Secretariat:</b> Aileen Horler</li></ul> |
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