Wildlife Watch

WILDLIFE MANAGEMENT ADVISORY COUNCIL (NORTH SLOPE)
COMMUNITY NEWSLETTER

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2004 Yukon North Slope Research Updates

Every year, WMAC(NS) reviews proposals for research projects related to wildlife management and ecological monitoring on the Yukon North Slope. Projects supported by the Council are recommended to government departments and agencies who carry out the research - Parks Canada, the Yukon Government's Department of Environment, and the Canadian Wildlife Service. The funding for these projects comes in full or in part through the Inuvialuit Final Agreement. This newsletter gives an update on the results of projects recommended by the Council in 2004.

Porcupine Caribou Satellite Collar Location Program

The satellite collar program started in 1997.The objective of this program is to maintain satellite radio collars on cow caribou so that biologists can document annual migration routes and the winter range use of the Porcupine caribou herd. It is important to maintain the total number of satellite collars in the herd. Every year the Yukon Government needs to put collars on new caribou to replace the collars that are no longer working or are on animals that have died. There are currently eleven cow caribou fitted with satellite collars.

The satellite tracks the animals automatically providing valuable information about the general distribution of the herd, as well as the timing and routes of the migrations. The satellite collars are also used to locate the herd as part of other field work. Location data are used in a variety of projects. For example, the Canadian Wildlife Service has used the information to learn about caribou movements in response to weather. YTG has used the data to understand range use related to the Dempster Highway. Information from the satellite collars and other conventional radio collars shows a loose pattern of shifting winter range use over the years.

Fieldwork summaries are prepared and distributed to relevant agencies. Interested agencies, organizations and schools in the Yukon, Alaska and the NWT are able to track the location of the collared caribou on the internet and through maps that are distributed once a week. YTG maintains a website with information about the program at **www.taiga.net/satellite/index.html**.

This program is funded by a number of agencies in Alaska and in Canada. It will continue as long as there are contributions from participating organizations.

Muskox Ecology Studies

Yukon muskox are being studied and monitored in several ways. Aerial surveys, composition counts, satellite tracking, samples from captured muskox and community observations all contribute to what we know about these animals. It is important to find out about muskox habitat, movements, and population composition in order to ensure proper and effective management and to assist in determining a sustainable harvest quota.

The satellite tracking program was begun on the Yukon North Slope in 1999 in order to learn more about where the muskox like to live at different times of the year and how much they move around. The collars send signals to a satellite that 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. The number of active collars has varied over the years. There are currently two muskox fitted with satellite collars. These collars will be taken off the muskox in the summer of 2005. The movements of the collared muskox can be viewed at **www.taiga.net/wmac/species/muskox/satellitelocations.html**

For several years biologists have completed aerial surveys of the muskox in the spring and summer. These surveys provide information on the size of the muskox population, the numbers of males and females, how many calves are born each year and how many live to be a year old.

The need for ongoing information on muskox population size and distribution was identified as a priority at the Muskox Management Workshop, held in Aklavik, in October 2001. In addition, the Canadian North Slope Muskox Management Plan directs managers to monitor the size of the muskox population by conducting population surveys.

In April 2004, an aerial population count recorded 144 muskox in the North Slope within the survey area. There were about 30 yearlings for every 100 adult cows. No calves had been born at this time.

In July 2004, 66 muskox were counted in the Firth and Malcolm River deltas and along the Babbage River. It is harder to find the muskox in the summer so the counts are usually lower than in the spring. There were about 17 calves and 27 yearlings for every 100 adult cows. This calf ratio is the lowest recorded during the surveys of the last seven summers. The area of the coastal plain between Stokes Point and Kay Point was not flown due to a shortage of helicopter time.

The muskox ecology studies on the Yukon North Slope are conducted by the Yukon Government Department of Environment and Parks Canada. A representative of the Aklavik HTC participates in the field work on a regular basis. *Photos: Government of the Northwest Territories and Parks Canada*

Aklavik Harvest Data Collection

The objective of this program is to collect information on the Aklavik Inuvialuit harvest of moose, caribou, sheep, and furbearers in the Yukon and NWT. Regular harvest reporting is important to assist in the management of wildlife. It is also important to assess wildlife compensation claims in the ISR. Reporting for some species is done using other means, such as the mandatory reporting of the harvest of a species under quota. But information is needed about the harvest of other species as well. The Yukon Government started this program in 2002 after the Inuvialuit Harvest Study stopped operating.

In partnership with the Aklavik HTC, YTG contracted a local person to conduct recall interviews twice during 2004. The surveys were conducted in April and December, during freeze up and break up. Harvest information includes species, date, location, sex and maturity of the animal, and the hunter's name. All information identifying individual harvesters is confidential, however summary information on total community 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.

Of a total of 80 active hunters identified in 2004, 21 were out of town and could not be interviewed for at least one of the two rounds of interviews. Of the 59 who were interviewed 32 hunted successfully and 1 hunter chose not to participate to the study.

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

The Arctic Borderlands Co-op was founded in 1994 when representatives from several different community groups, agencies and governments started an ecological monitoring program. This program was set up to cover areas of the Yukon, Alaska and NWT within the range of the Porcupine caribou herd but has recently expanded to include parts of the Mackenzie River valley and delta as well. The focus of the monitoring is on climate change, contaminants and regional development. Co-op activities include the tracking of ecological indicators and community projects. A Gathering is held each year to report on the Coop's findings and exchange information. The Coop is coordinated by the Canadian Wildlife Service 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**

The Co-op's annual community-based monitoring project continued for its ninth year in Aklavik and included the participation of both Inuvialuit and Gwich'in residents. Other communities participating in 2004-05 were Old Crow, Fort McPherson, Inuvik, Tuktoyaktuk, Tsiigehtchic, and Arctic Village in Alaska. A local researcher in each community interviewed 20 community experts to find out about the conditions and changes they observed during the year. This included observations about caribou movements and condition, fish, berries, weather, and general observations about changes in the health of the environment. A summary of the community interviews will be presented at the Annual Gathering in March and will be available as a report in the spring.

Yukon North Slope Grizzly Bear Research Project

In May 2004, the Yukon Government Department of Environment, in partnership with Parks Canada (Western Arctic Field Unit) and the Aklavik Hunters and Trappers Committee, began a six-year grizzly bear research project on the Yukon North Slope. The focus of the project is on grizzly bears between the Firth and the Blow Rivers. The research project is designed to find out about grizzly bear population size, birth rate, death rate, where bears can be found at different times of the year, and how much they move around. It will also include a review of harvest activity. It is important for wildlife managers, co-management bodies, and HTCs to have all this information when they are determining the conservation requirements of this population and in reviewing harvest quotas.

In early June 2004, Biologists captured six female and four male bears different parts of the study area and fitted them with radio collars. Radio collars are used to follow bear movement and to find out what habitat the bears are using at different times of year. Biologists took several different measurements and samples from each bear, including blood and hair samples. Bears were weighed using a sling hung from the helicopter. The largest bear was a male that weighed 231 kg. (508 pounds) Body fat was measured by sending a very mild electric current through the bear. A number of other body measurements were taken including length, girth and head size. Age was estimated by looking at tooth wear. The oldest bear was estimated to be about 14 to16 years and the youngest about 5 or 6 years old. A tooth was also pulled as a way to determine the exact age later in the laboratory. All captured bears were tattooed for identification.

Later in June, the manufacturers of the radio collars told the researchers that all collars must be replaced due to potential battery failure. In early October, biologists returned to the North Slope and were able to recapture and recollar two of the bears. Both of these bears had gained over 50 kg. since they were originally collared in June. It wasn't possible to recollar the others due to poor weather conditions. Remaining bears will be recollared in the spring of 2005. More information on this program, including the results of the summer research, can be found in the newsletters describing the project, or at **www.taiga.net/wmac/species/grizzly/research.html**

Wildlife Management Advisory Council (North Slope)

- **Inuvialuit Game Council**: Members: Herbert Felix and Ernest Pokiak; Alternates: Evelyn Storr and Lawrence Amos
- **Government of Canada**: Member: Ron Larsen, Parks Canada; Alternate: Wendy Nixon, Environment Canada
- **Government of Yukon**: Member: Doug Larsen, Dept. of Environment; Alternate: Dorothy Cooley, Dept. of Environment
- **Chairperson**: Lindsay Staples
- **Secretariat**: Aileen Horler

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