

# Wildlife Watch

Wildlife Management Advisory Council (North Slope)

Community Newsletter

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# **North Slope Wolf Study is Completed**

Wolves are not a major cause of mortality for the Porcupine Caribou herd, says Bob Hayes, biologist with the Yukon Government's Department of Renewable Resources.

That is one conclusion of a study of wolves on the Yukon's North Slope and in the western Northwest Territories. The study was financed by implementation funding provided by the Inuvialuit Final Agreement.

Field work was conducted between 1987 and 1993,

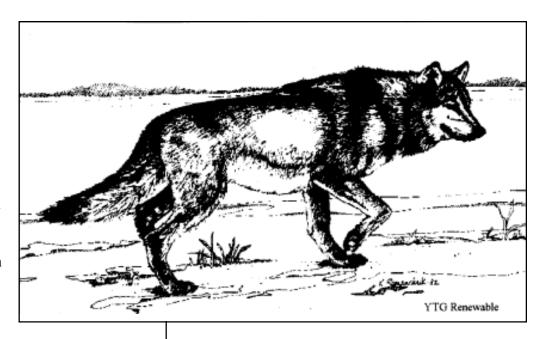
and the final report should be available in January 1997.

Hayes and YTG Wolf Technician Al Baer presented a summary of the study results to the Wildlife Management Advisory Council (North Slope) during its September 1996 meeting.

Wolves kill about three to five percent of the herd each year, Hayes said. The Porcupine herd's long migration makes it difficult for predators like wolves to hunt the caribou heavily.

#### Tundra wolf population low

The researchers found two distinct types of wolves in the northern Yukon. The wolves on the North Slope are migratory, following the caribou. On the other hand, the wolves along the Porcupine River and in the mountains south of the treeline hold territories.



During the six years of the study, there were roughly twice as many wolves in the mountains as on the North Slope tundra.

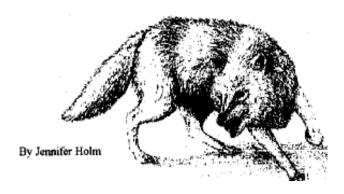
The main prey of the North Slope wolves is the Porcupine Caribou Herd, the researchers report. In April 1989 they followed seven packs for 25 days to study kill rates.

The average kill per wolf was one caribou every two weeks, for a total of about 29 caribou year-round. That means each wolf is eating about five kilograms of meat a day, a normal rate of consumption compared to wolves studied elsewhere, Hayes says.

There was no change in average pack size during the study. The population remained low at one to two wolves for every 1000 square kilometres. The density in the rest of the Yukon is 6 tol 8 wolves in 1000 square kilometres.

#### Wolves tracked by radio collar

The researchers tracked the wolves' movements by means of conventional radio collars. In 1987, they counted 116 wolves in a 50,000-square-kilometre area. Radio collars were placed on 65 wolves, representing 13 of the 20 known packs. In 1989, wolves from 10 packs were collared.



The collared wolves were difficult to follow be cause they moved long distances and, at times, were very spread out. However, it is clear that they move with the seasonal caribou migrations, Hayes says.

The wolves of the North Slope have a relatively low denning success rate of only 53 percent. The normal litter of four to five pups is born in the fall, mainly in dens near the treeline, where the caribou are found at that time of year.

Some disease rates were high, with 29 percent of wolves showing exposure to brucellosis and 71 percent to canine distemper.

Brucellosis is known to affect reproduction and could be responsible for the low denning success, Hayes says.

# Wolf kills recorded during study

During the course of the study, hunters in Aklavik were paid to report their wolf kills and submit carcasses or skulls. Between 1987 and 1993, there were 121 reported wolf kills. Pups and yearlings made up 70 percent of the kill, which matches their proportion of the population.

Hunting was light to moderate during most years of the study. The exception was 1992 when 25 wolves - or 53 percent of the wolves in the North Richardson Mountains - were shot by Aklavik hunters. Otherwise, the hunt remained below the sustainable level of about 40 percent.

### Report recommends no major changes

Hayes says the final report will recommend that current hunting techniques continue but that hunters should avoid killing all the wolves in a pack. Aklavik hunters, he says, should kill no more than 25 wolves a year.

In general, the researchers conclude that the wolf population in the Northern Yukon and adjacent Northwest Temtories is kept low naturally, by seasonal caribou availability, low denning success,

normal natural mortality (one wolf in four, per year), and harvest activity by hunters and trappers.

Because of their small population, the wolves do not have a strong impact on the Porcupine Caribou herd, the researchers say.



# Wildlife Management Advisory Council (North Slope)

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