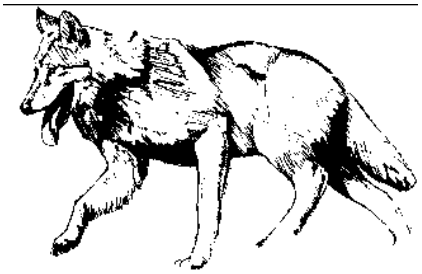
NORTHWEST TERRITORIES

WOLF NOTES



No. 1 Editors: Dean Cluff and Lyle Walton Fall 1997

A Newsletter on Wolf Studies in the Central Arctic, NWT, Canada

Esker/Wolf Study Launched

Last year, an esker/wolf study was initiated to examine the extent of esker use by wolves denning on the tundra. Eskers are important habitat for tundra wolves because they den almost exclusively in eskers and other glacio-fluvial habitat. Wolves also use eskers for travelling, feeding, and resting.

Surveys of eskers were undertaken in 1996 to locate active wolf dens. This spring marked the first year that some of these wolves were radio-collared to monitor their movements.

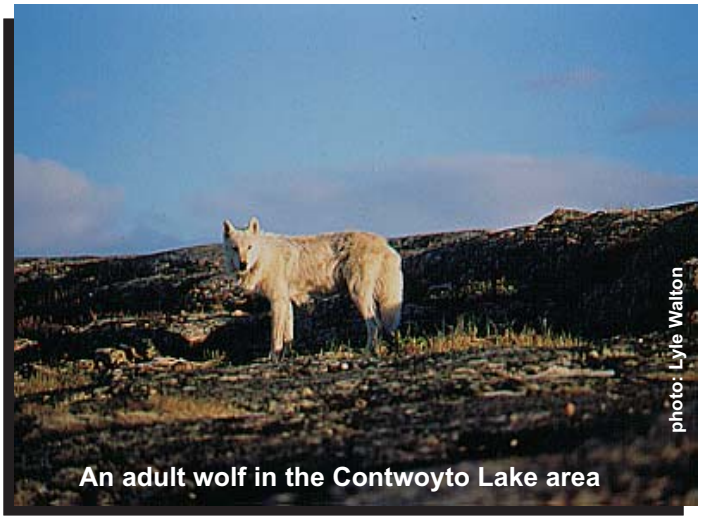


photo: Lyle Walton

An adult wolf in the Contwoyto Lake area

Exploration Activity

Significant diamond, gold, and base metal deposits have been discovered in the Slave Geological Province, a 213,000 km^2 area of the western arctic extending from Great Slave Lake to the Coronation Gulf.

As mining development proceeds, eskers will become an important source of granular material for road and mine construction. Thus, a potential land-use conflict may occur with wildlife.

Given the need by industry to use some eskers in development, it becomes important that we improve our ability to predict esker selection by wildlife. Relatively little research has been carried out on wolves that inhabit the tundra regions of the central arctic, NWT. This study will provide essential, site-specific knowledge about the use of eskers by wolves during denning.

Eskers are used by carnivores such as grizzly bears, red foxes, arctic foxes and wolves for travelling, denning and resting.

Eskers

Eskers are long, linear ridges of glacially deposited rock material and are prominent topographical features on the tundra. However, eskers constitute only 2-3% of the tundra ecosystem.

Eskers vary in length and shape and may be 30 or more kilometers long.

WKSS Project

Exploration and development activities in the Northwest Territories have increased significantly in recent years. Concern has been raised about the cumulative effects of such activities in addition to the lack of baseline data needed for environmental impact studies.

The West Kitikmeot/Slave Study Society (WKSS) was established in 1996 as a five-year regional effort to facilitate the necessary studies to address significant gaps in baseline information. The initiative brings together industry, Aboriginal groups, the territorial and federal governments, and an environmental coalition.

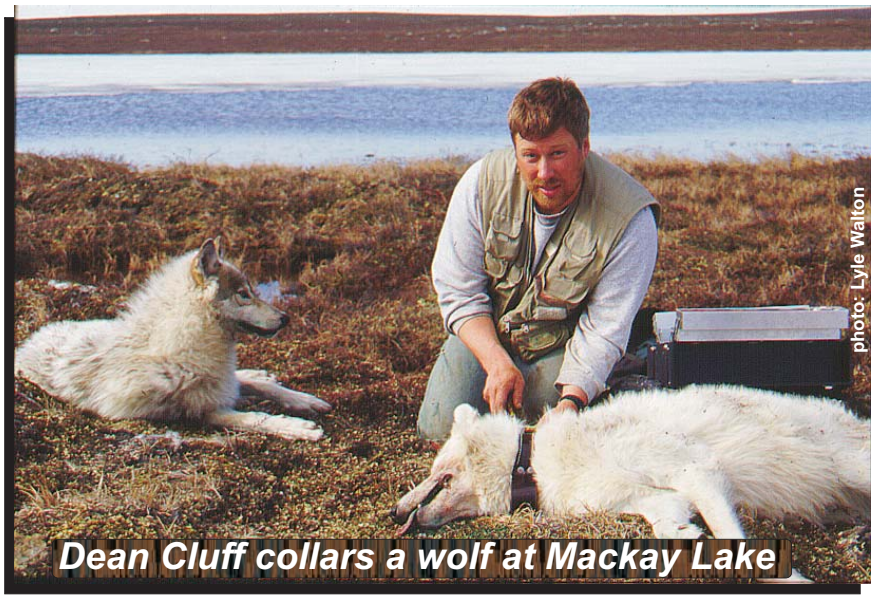
The WKSS has provided funds for the esker/wolf study through their Esker/Habitat Studies program. A companion study examining the physical attributes of eskers is also supported.

The Esker/Wolf Study is overseen by the North Slave Region of the Government of the Northwest Territories but involves the University of Saskatchewan and elders and youth from Aboriginal communities in the NWT.

Wolves favor eskers for digging dens

Capture Effort

During the second week of June 1997, we captured and radio-collared 24 wolves in the tundra region of the Slave Geological Province. We deployed 12 standard VHF collars and 12 Argos satellite collars on 12 different wolf packs.



Dean Cluff collars a wolf at Mackay Lake

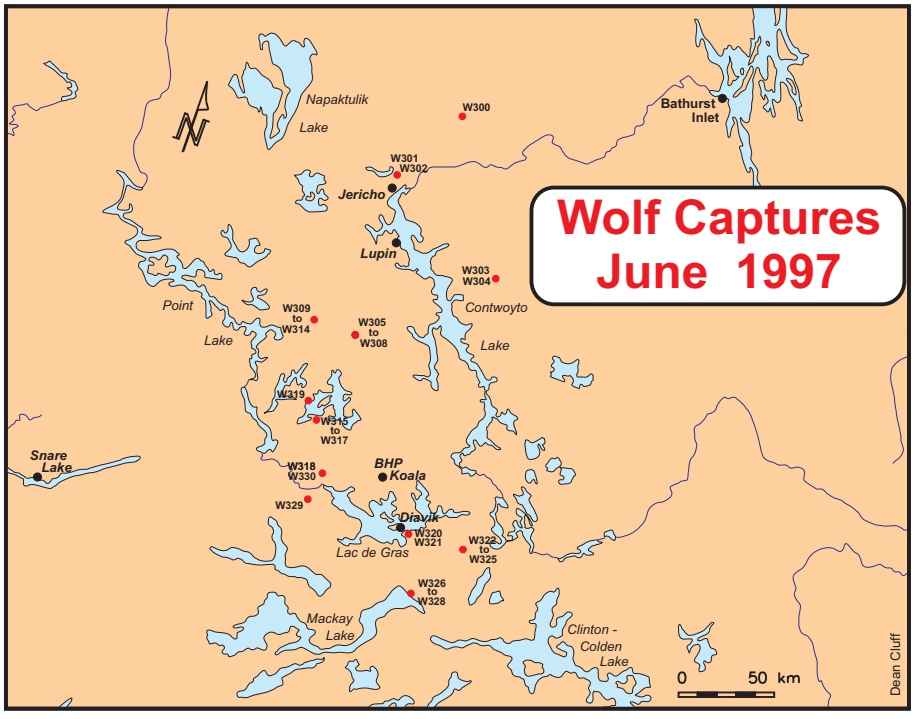
Our strategy was to collar the breeding pair from each pack. We opportunistically captured and marked another 7 adult wolves associated with some of these packs.

Of the captured wolves, 14 were female and 17 were male. Blood samples were taken to determine the prevalence of parasites and disease and also for genetic (DNA) analysis.

M.Sc. Student

Lyle Walton, a Master of Science degree candidate at the University of Saskatchewan, Saskatoon, joined the Esker/Wolf Project this year, and will focus his thesis on the movements, habitat use and denning ecology of wolves in the study area.

Lyle is co-supervised by Dr. Paul Paquet and Dr. Malcolm Ramsay and with assistance from committee members Dr. François Messier and Dr. Gary Wobeser.

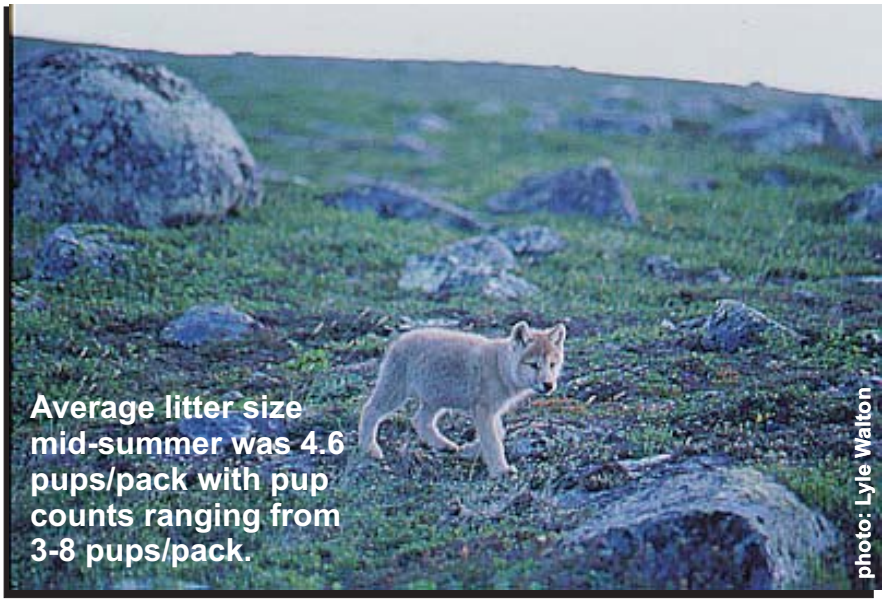


Esker/Wolf Study area

Pack Productivity

Pup counts at wolf dens ranged from 3-8 per pack.

Subsequent monitoring in August showed that pup survival from July- August appears high. The caribou had returned to the area by mid-July, probably contributing to the good pup survival we observed.



Average litter size mid-summer was 4.6 pups/pack with pup counts ranging from 3-8 pups/pack.

photo: Lyle Walton

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