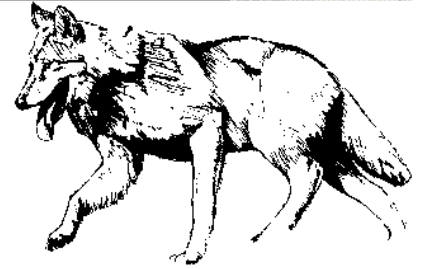




WOLF NOTES



No. 4

Editor: Dean Cluff

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

Removal of Satellite Radio-Collars Ends Phase 1

In June and August 1999, satellite radio-collars deployed last year were removed. These wolves were then fitted with a conventional VHF radio-collar to continue monitoring den site selection. Since 1997 we have captured 58 individual wolves. We deployed 23 Argos-type satellite collars and 2 GPS collars during this time. Other wolves were fitted with conventional VHF radio-collars either upon first capture or when their satellite collar was removed. We now have 40 wolves in the study area with radio-collars, of which 33 are functioning. Eleven wolves have been ear-tagged but are without a radio-collar while another 7 wolves have died, either by harvesting or from unknown causes.

A new proposal is underway to deploy some more VHF radio-collars on wolves in specific areas while continuing to monitor wolf den site fidelity.



Adult female wolf W344 captured and radio-collared in the Aylmer Lake area, NWT

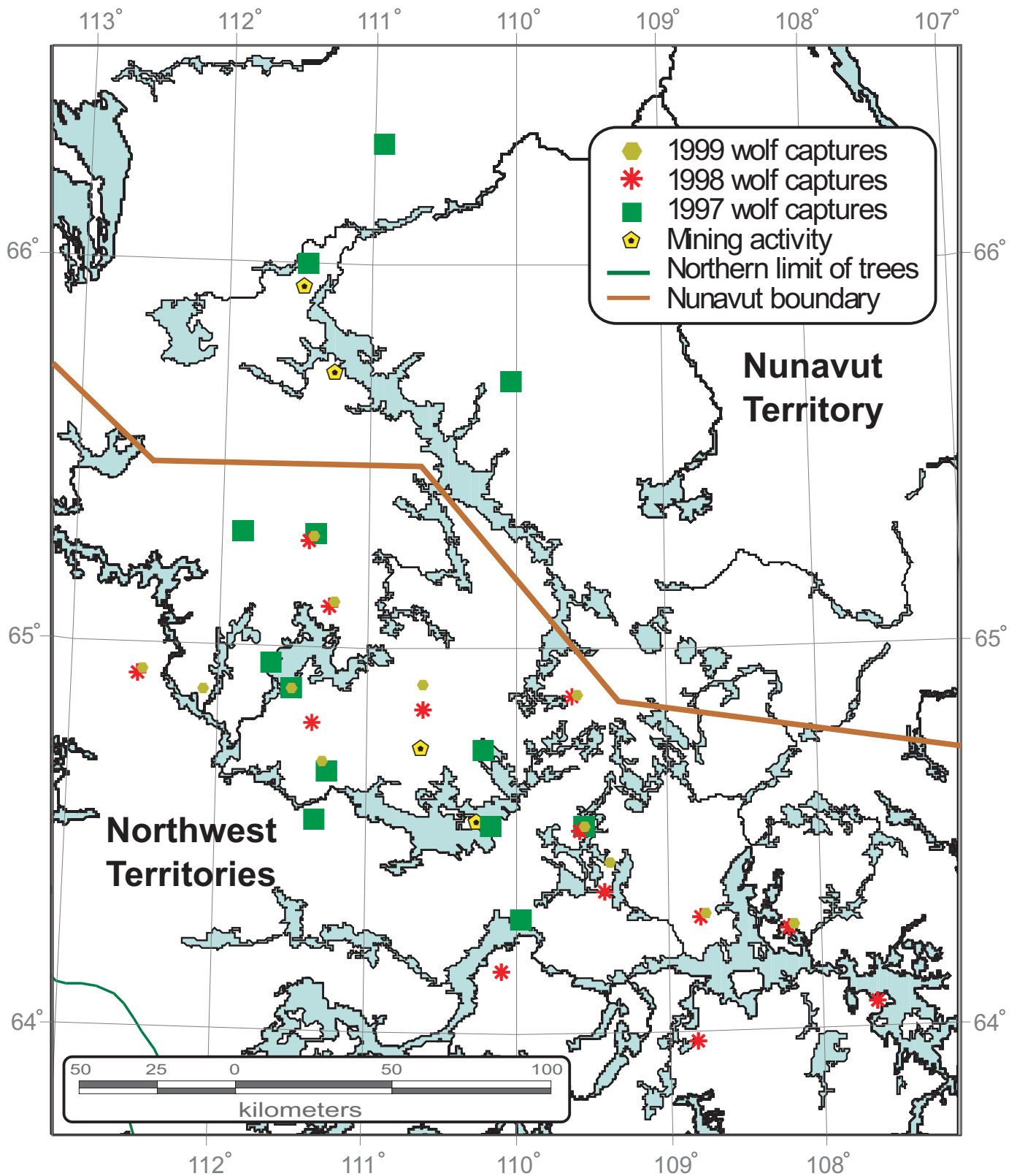
Dean Cluff

Lyle Walton Defends M.Sc. Thesis

Congratulations go to Lyle Walton who successfully defended his thesis on Wednesday, October 13th, 1999 for his Master of Science degree at the University of Saskatchewan in Saskatoon. Lyle's thesis, entitled Investigation into the movements of migratory wolves in the central Canadian Arctic, examined the movements

of wolves during the summer denning period and throughout the winter. He has also submitted two manuscripts for publication in scientific journals and is working on another paper that will examine in more detail, the use of eskers by wolves during denning.

Congratulations Lyle !!



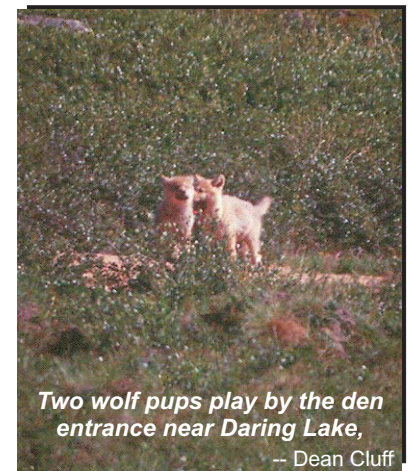
Wolf Capture Sites

Wolves were captured from 1997 to 1999 over a 30,000 km² area north of the treeline in the Northwest Territories. Three of the 1997 capture sites are now located in the new territory of Nunavut, which came into effect April 1999. The boundary, of course, is political, and has no

influence on wolf movements. Captures occurred at den sites for all wolves except one. In most cases, the breeding adults were the ones radio-collared. Repeat captures at den sites between years reflects the replacement of satellite collars with VHF collars.

1999 Pup Counts

Ground-based observations did not occur this year and consequently our information is limited. We had to rely only on one aerial tracking flight and our capture visit. Unfortunately not all pups may be seen at one time, especially when in a helicopter trying to catch specific wolves. Nevertheless, we conservatively estimated an average of 3.7 pups/den based visits to 6 den sites. We also saw in two of these litters a noticeable difference in the size of the pups.



Summer Range Sizes

Minimum summer range sizes for individual radio-collared wolves tracked by satellite in the central Arctic, Northwest Territories, June to September 1997 and 1998. The 95% fixed kernel and minimum convex polygon (MCP) are common methods used to estimate home range size. (from Lyle Walton's thesis)

Females					Males				
Year	Wolf	Summer Range Size			Year	Wolf	Summer Range Size		
		95% MCP (km ²)	95% Fixed kernel (km ²)	Number of locations			95% MCP (km ²)	95% Fixed kernel (km ²)	Number of locations
1997					1997				
	W301	486	686	36		W311	893	1,488	30
	W303	406	568	28		W327	3,629	991	28
	W305	725	990	58					
	W315	1,368	999	30					
	W320	635	1,549	32					
	W322	272	126	41					
1998					1998				
	W303	301	365	32		W338	996	905	98
	W305	1,166	1,733	85		W351	2,572	1,627	50
	W339	3,039	2,728	53					
	W341	164	207	40					
	W342	2,261	2,080	90					
	W344	2,791	2,065	96					
	W349	1,113	2,246	77					
	W353	1,093	1,549	87					
Mean (± S.E.)		1,130 ±251	1,278 ±222		Mean (± S.E.)		2,022 ±659	1,253 ±179	

'Beyond 2000' Wolf Conference

Look for us at the wolf symposium "Beyond 2000. Realities of Global Wolf Restoration" in Duluth, Minnesota, 23-26 February 2000. Lyle Walton



will be headlining our presentation called, "Wolves and eskers: Denning ecology of tundra wolves in Canada's central arctic."

The symposium, sponsored by the International Wolf Center and University College Duluth at the University of Minnesota Duluth, has drawn wolf researchers, educators, and enthusiasts from around the world and is shaping up to be a great conference. Look for program scheduling and additional information at their web site.

<http://www.d.umn.edu/wolf2000>



www.gov.nt.ca/RWED/wf/wildlife_sketches/wolves/index.htm



Acknowledgments

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John/Paul & Associates



For More Information, Contact:

THE NWT ESKER / WOLF PROJECT

Dean Cluff, Department of Resources, Wildlife, & Economic Development, GNWT, Yellowknife, NT X1A2P9
(867) 873-7783 (tel) (867) 873-6230 (fax) email: dean_cluff@gov.nt.ca

Paul Paquet, John/Paul & Associates, Box 150, Meacham, SK S0K 2V0
(306) 376-2065 (tel) (306) 376-2015 (fax) email: ppaquet@sk.sympatico.ca

Lyle Walton, Department of Biology, 112 Science Place, University of Saskatchewan, Saskatoon, SK S7N 5E2
(306) 966-4452 (tel) (306) 966-4461 (fax) email: walton@duke.usask.ca

Marco Musiani, Faculty of Environmental Design, University of Calgary, Calgary, Alberta. T2N 1N4
(403) 222-2169 (tel) (403) 283-6803 (fax) email: mmusiani@ucalgary.ca

Cormack Gates, Faculty of Environmental Design, University of Calgary, Calgary, Alberta. T2N 1N4
(403) 220-3027 (tel) (403) 284-4399 (fax) email: ccgates@nucleus.com

This newsletter is now available on the GNWT's Department of Resources, Wildlife and Economic Development's main web site at: <http://www.rwed.gov.nt.ca/> or at the web address above

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