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United States Department of the Interior

NATIONAL PARK SERVICE

Wrangell-St. Elias National Park / Preserve

P.O. Box 29

Glennallen, Alaska 99588



N2215(WRST-RM)

3 June 1992

MEMO

To: Russell Galipeau, Chief of Resource Management

From: Kurt Jenkins, Research Wildlife Biologist

Subject: Mentasta Caribou Parturition Survey

On June 2, 1992, Bill Route and I conducted a parturition survey of the Mentasta Caribou Herd between 2:00-5:00 pm. The survey was conducted from a Hughes 500D helicopter piloted by Ken Barnes of Soloy Helicopters, Wasilla. The survey focused on groups of caribou containing radio-collared cow caribou, but the calving areas used by Mentasta Caribou were also searched by helicopter and fixed-wing aircraft to locate additional groups of caribou. Responsibilities of counting and classifying caribou were split between the two observers in the aircraft. I focused on classifying all caribou $\geq$ 1-year-old as parous or nonparous cows, based on presence of a distended udder, or as bulls. Bill Route independently classified as many caribou as possible as $\geq$ 1-year-old and calves.

In total, I classified 443 adult caribou ($\geq$ 1-year-old) and Bill Route classified 560 adult and calf caribou, distributed among 22 groups (see data presented below). Eighty one percent of female caribou had distended udders, and 25 calves were observed per 100 females.

Group	Cows/p ¹	Cows/n ²	Bulls	Tot	Adults	Calves	Tot
1	80	9	2	91	106	36	142
2	65	19	8	92	86	12	98
3	39	5	3	47	49	13	62
4	27	9	4	40	56	13	69
5	14	2	1	17	26	9	35
6	1	0	3	4	5	0	5
7	1	0	0	1	1	0	1
8	1	0	3	4	5	0	5
9	20	2	2	24	no data		
10-11	16	2	5	23	21	3	24

(cont.)

Group	Cows/p ¹	Cows/n ²	Bulls	Tot	Adults	Calves	Tot
12	7	2	2	11	12	2	14
13	1	0	0	1	1	1	2
14	6	3	2	11	11	0	11
15	1	1	1	3	3	0	3
16	8	4	2	14	13	1	14
17	5	4	0	9	9	0	9
18	2	3	0	5	5	1	6
19	24	10	4	38	39	10	49
20	4	0	0	4	4	2	6
21	1	0	0	1	1	1	2
22	0	0	3	3	3	0	3
Totals	323	75	45	443	456	104	560
%	73	17	10		81	19	

Parturition Rate = $323/(323+75) = 0.81$

Calves:100 cows = 104 calves:456(.90) cows³
= 104 calves:410 cows
= 25.4 calves:100 cows

¹ p = parous cows

² n = nonparous cows

³ cow base is computed as total number of adults counted multiplied by percentage of adults classified as cows.

cc: Caribou Files, WRST
Layne Adams, ARO
Bob Tobey, ADFG
Tom McCarthey, ADFG