



United States Department of the Interior

NATIONAL PARK SERVICE
Wrangell-St. Elias National Park/Preserve
P.O. Box 29
Glennallen, Alaska 99588



IN REPLY REFER TO:

N2215(WRST-RM)

28 September 1992

MEMO

To: Russell Galipeau, Chief of Resource Management
From: Kurt Jenkins, Research Wildlife Biologist
Subject: Fall Composition of Mentasta Caribou Herd

On 24 September, 1992, Bill Route and I conducted a fall composition count of the Mentasta Caribou Herd. The count was conducted from 10:00 a.m. to 12:40 p.m. Temperatures ranged from approximately 15-20°F during the survey. Winds were light from the south. There were approximately 5" of snow on the ground in Chistochina and approximately 8-12" of snow in the survey area.

The survey was conducted from a Bell 206 helicopter piloted by Ron Warbelo. Patti Happe, piloted by Jim Hannah, assisted in spotting caribou groups from an Arctic Tern. Radio-collared caribou were used to help in locating groups of caribou for the survey. Twenty-one radio-collared Mentasta caribou were available during the survey, but 7 were outside the park/preserve in the Chistochina drainage or west and were not located for the survey.

Caribou were distributed in low elevation forests primarily in flats north and south of Boulder Creek (~ 2200 ft elevation). Additional smaller groups were located and classified near Suslota Lake and lower Drop Creek. Most of the caribou classified were in trees and classification of segments of some groups was not possible due to poor visibility. Data are presented below:

Group	Location	Cows	Calves	Bulls			TOT
				Sm.	Med.	Lg.	
1	Boulder Ck	3	0	1	2	0	6
2	Boulder Ck	180	7	14	34	18	253
3	5 mi SW Boulder Ck	56	6	2	13	9	86
4	3 mi E Billy Lk	3	1	1	2	0	7
5	Billy Lk	11	0	2	0	0	13
6	Betw. Boulder-Drop	50	1	7	9	4	71

continued

Group	Location	Cows	Calves	Sm.	Med.	Lg.	TOT
7	Lower Drop	7	2	0	1	1	11
8	Copper R. SE Slana	2	2	0	0	0	4
9	So. of Suslota Lk	18	0	4	2	0	24
10	" " " "	15	0	7	5	5	32
TOTS		345	19	38	68	37	507
PCTs (%)		68.0	3.7	7.5	13.4	7.3	99.9
:100 cows			5.5	11.0	19.7	10.7	
Total Bulls:100 cows		41.4					

Calculation of Fall Population Estimate for Mentasta Caribou

(computed following Lieb et al. 1989. Population dynamics of the Mentasta Caribou Herd. Alaska Dep. of Fish and Game, Division of Wildlife Conservation, Research Progress Report. Page 39.)

Total Post-calving count (26 June 1992) 1303

Post-calving composition (22 June 1992) 74.5% cows

Post-calving cow base (1303 x 0.745) 971 cows

Fall Bull Composition (24 Sept. 1992) 41.4 bulls:100 cows

Fall Calf Composition (24 Sept. 1992) 5.5 calves:100 cows

Fall Bulls (971 x .414) 402 bulls

Fall Calves (971 x .055) 53 calves

Fall Population Estimate (971 + 402 + 53) 1426 caribou

Methodological assumptions are: (1) cow mortality is zero during summer (2) cows and bulls are randomly mixed during fall composition counts

cc: NPS/WRST Staff
 NPS/ARO Staff
 B. Tobey (ADFG)
 K. Pitcher (ADFG)
 T. Doyle (USFWS)
 C. Gardiner (ADFG)