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MEMORANDUM

TO: David James
Management Coordinator
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DATE: December 8, 2023

THRU:

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FROM: Craig Gardner
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SUBJECT:

On 1 October 1999 Rod Boertje, Bob Hayes (Yukon Department of Renewable Resources) and I completed the Chisana caribou herd composition and radiocollared 8 5-month female calves. Rod and Bob located 15/16 active collars. Collar distribution was entirely in Alaska. Rod and Bob high graded the Yukon portion of the herd's range and found tracks of 5-6 caribou but observed none. We located 14 groups and compositioned 318 caribou. Group size ranged from 8-54 caribou ($\bar{x}=22.7$, $s.d.=15.67$).

The calf:cow ratio 7.0:100 cows. The Chisana herd has suffered from poor calf recruitment since 1989. The bull:cow ratio was 17.2:100. The bull:cow ratio has declined from 41:100 in 1991. Between 28 September 1998 and 1 October 1999, 3 of 19 radiocollared cows (2 adults and 1 yearling) died (15.8%). Using composition and modeling data, the bull mortality rate was estimated to be 27%. Using Patrick's model, the fall 1999 estimated herd size was 365 caribou down from about 1,900 in fall 1989 (81% decline).

Similar to last year, the few remaining calves in late September-early October are very healthy. We compositioned 18 calves of which 10 were females. We captured 8 of these to radiocollar and to weigh. The average condition index was 4.3 on a scale of 1 to 5 (5 being the highest rank) and the average weight was 139.9 pounds ($s.e.=3.38$).

Between the Yukon Dept. of Renewable Resources and the National Park Service, the herd will be monitored 4-5 times over the winter. I will again conduct surveys during calving and postcalving to document pregnancy and birth rates and early calf mortality.