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United States Department of the
NATIONAL PARK SERVICE

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

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N2215(WRST-RM)

28 July 1992

MEMO

To: Russell Galipeau, Chief of Resource Management (WRST)
From: Kurt Jenkins, Research Wildlife Biologist
Subject: Count of Mentasta Caribou Herd

On 28 July, Jim Woolington, Patti Happe and I counted the Mentasta Caribou. The count was conducted from 9:30 a.m -1:30 p.m. Weather consisted of overcast skies and variable winds 5-15 mph. The survey was conducted using two supercubs piloted by Ken Lewis and Gerry Lee, and the WRST Arctic Tern piloted by Jim Hannah.

In light of the previous survey conducted this year, today's survey must be considered unsuccessful. A total of only 571 caribou were sighted (whereas 1303 were sighted previously this year), including 523 that were classified as adults or calves. Of the 523 classified, 21 were calves--or 4% of the sample. Percentage of the herd classified as calves is appreciably lower than the 11% measured on 22 June.

Although the count itself did not produce a reliable estimate of population size, two instructive findings emerged from the exercise. First, the count demonstrates the potential impact of inadequate aggregation behavior of caribou on the population estimate. Today's survey was conducted when caribou were very poorly aggregated. In the two survey zones for which the data have been tallied (Boulder to Drop Creeks, and Sanford to Dadina Rivers) mean group size of caribou was 7 caribou (Range 1-54 caribou). The most frequently observed group size was 1 caribou. Data from today's survey will be incorporated into future studies of impacts of aggregation behavior and group size on visibility bias in caribou surveys.

Secondly, the count demonstrates that for a second year in a row, the Mentasta Caribou Herd has experienced nearly complete failure of recruitment (calves:100 adults). Based on today's finding, we can reasonably expect for the Mentasta caribou herd to decline an additional 10% during the next year.