FALL MOVEMENTS OF THE
PORCUPINE CARIBOU HERD
NEAR THE DEMPSTER HIGHWAY,
AUGUST 2000.

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INTRODUCTION
The Porcupine Caribou Herd (PCH) is the most important traditional food resource for subsistence harvesters in the Gwich’in Settlement Area. During its annual fall migration to its winter range, the PCH crosses the Dempster Highway southwest of Fort McPherson (Russell et al. 1992). Controversy has developed about the hunting practices of some people in this area, in particular, how these practices affect the herd’s traditional migration route. This controversy is based on a concern that shooting the lead animals as they approach and cross the Dempster Highway may cause the herd to change its migration route and possibly abandon areas of important winter range. Russell (1982) notes that caribou quickly associate the Dempster highway with hunting and avoid sections where hunting occurred.

It is important to Gwich’in harvesters to understand where the herd is in the fall and when it is moving through lands bordering the Dempster Highway. In this way, they can allow the “leaders” to pass and pursue their traditional hunting of the caribou in a manner that will not negatively affect the herd’s movements.

The objectives of this study were:
1. to monitor the movements of the PCH as they approach the Dempster Highway.
2. to identify the location and numbers of the lead bands, and record where and how they cross the highway.
3. to document hunter behavior and the behavioral reactions of the caribou to this hunting, and assess how this behavior may affect the larger herd movements.

Objective 3 was not met as harvesters respected a voluntary hunting moratorium as the lead bands of the herd moved through the region.

STUDY AREA
The study area included the Northern Richardson Mountains from the north boundary of the Gwich’in Settlement Area (about 68° 15’ N latitude), west to the Bell River and south to the Dempster Highway. Also, lands bordering the Dempster highway between the Peel River valley and the Eagle River.

METHODS
- We used a Cessna 185 to search for the lead caribou bands.
- Locations, dates and numbers of caribou spotted were marked on 1:250,000 topographic maps.
- Hunters and RRCs from each of the communities were involved in planning this project. The monitoring portion of the project was cancelled due to the voluntary hunting moratorium.
RESULTS

August 14
- about 1500 caribou scattered east of the mountains between Stony Creek and the Dempster Highway.
- we could not fly into the mountains due to a low ceiling.

August 16
- about 2000 caribou scattered east of the mountains between Stony Creek and the Dempster Highway (200 just above the highway).
- scattered groups totaling 35 animals in Stony Creek before the pass to James Creek.
- 90 animals in 2 groups (10 bulls, 80 mixed) just between James Ck and the border.
- no animals observed south of the highway.
- we could not cross the mountains due to a low ceiling.

August 17
- drove the highway with Johnny Charlie and Tim Devine of DRWED.
- 20 bulls, 30 cows and young - east side of mountains and north of highway.
- James Ck. - 1 cow on north side of highway ; 10 bulls, 50 cows and young south of highway.

August 21
- Johnny Charlie reported 640 caribou crossed the highway (500 at the border, 80 just west of the border and 60 a few miles farther on).
- Peter Kaye also reported 400-500 caribou crossed the highway at the border.

August 23
- Johnny Charlie reported 3 caribou crossed the highway just east of the gorge (E side of mtns), about 40 crossed at James Ck, and more than 500 crossed just west of the border.

August 28
- flew the Rat R., Little Bell R., Bell R., Lachute R.
- some tracks crossed the Rat R.
- a few small mixed groups between Rat R and Stony Ck and more between Stony Ck and the highway – about 1500 in total.
- no observations up Stony Ck, down James Ck and south along Dempster Hwy.
- light was bad.

September 3
- west of Aklavik
- no caribou east of the mountains and north of Rat R.
- small groups scattered in uplands around Willow Ck. About 300 in total.
- down Bell R, up Lachute R, then south down the west side of the Dempster Hwy. To Rock R. Several trails suggesting many caribou passed through. Observed about 400 animals in mixed groups of up to 40 caribou scattered throughout the area.

**DISCUSSION**

The Gwich’in Renewable Resource Board funded 4 survey flights to monitor the lead groups of the Porcupine Caribou Herd as they migrated south to their winter range. The flights were intended to assist the community of Fort McPherson and RWED Renewable Resource Officers to decide on appropriate dates to close hunting along the Dempster Highway. The intent of the closure was to give the lead groups of caribou free passage across the highway. Once 200 adult females were observed crossing the highway, the season was opened.

These survey flights were a one-time effort, as RWED officers decided they could make the call on the number of animals crossing the highway by patrolling the highway in trucks.

The study to observe the effects of hunting on the herd’s movement pattern was cancelled as:
- harvesters from Fort McPherson and other Gwich’in communities respected a voluntary hunting closure to allow the lead caribou to pass, and
- during the survey flights we did not observe any hunting along the Dempster Highway corridor.

**LITERATURE CITED**
