

## **Purcells-South caribou herd augmentation project**

### **1st Quarterly report**

**March 28, 2013**

#### **Introduction:**

As part of the B.C. Government's commitment to recover mountain caribou to pre-1995 levels by 2017, 19 caribou were translocated from the Level-Kawdy herd in north-western British Columbia to the Purcell Mountains in south-eastern British Columbia in March 2012. This is the first phase of a multi-year project to move 40 caribou to the Purcells-South herd.

Refer to the June 21, September 14 and December 24, 2012 quarterly reports for additional information on this project.

#### **Monitoring of translocated and resident caribou:**

The movements of the remaining collared caribou in the Level-Kawdy and Purcells-South herds continue to be monitored remotely via a weekly download of data from Iridium GPS collars.

The collared Level-Kawdy caribou have shown dramatic movements; collar data has revealed significant overlaps in habitat use between the Level-Kawdy, Little Rancheria, Swan Lake and Wolf Lake herds. There is also some peripheral overlap with the ranges of the Atlin-Carcross, Horseranch and Tsenglobe herds. Collar data also has helped to identify several obvious seasonal migration corridors. Wildlife biologists in the Skeena region are currently reviewing these data and the results of recent inventory flights, and continue to learn a great deal about the movements of these caribou.

At the time of this report, 16 of the 19 caribou transplanted into the Purcell Mountains have died:

- 5 due to cougar predation
- 2 due to wolf predation
- 3 due to accidents
- 3 from unknown but confirmed non-predation causes
- 2 from unknown causes, predation not ruled out
- 1 from malnutrition (weakened by ticks)

With only one exception, all of the predation mortalities have been caribou that wandered into low elevation areas, outside what is considered to be suitable caribou habitat in the Purcell Mountains.

1 bull and 2 cows remain from the original 19 transplanted animals.

The remaining transplanted bull was in low elevation areas at high risk of predation. This animal was recaptured and released near resident caribou in mid-February and has stayed in the area the residents are in. The collar on one of the remaining transplanted cows has failed; this cow is believed to be in the

Golden area. Since the VHF transmitter may still be working, opportunities are being sought to fly the area and confirm this cow's status and location.

The status and movements of resident caribou in the Purcell Mountains continue to be monitored through aerial surveys, in addition to remote monitoring of their movements through deployment of 6 GPS collars. Surveys conducted in mid-February 2013 indicate that the population of resident caribou in the South Purcells has increased from 15 in 2011 to 20 in 2013. Complete herd composition surveys were not possible, because the survey was conducted by fixed wing, however, helicopter flights for collar replacement in the winter of 2012 indicated there were 3 calves in the larger group of 14 residents.

### **PLANNING FOR 2013-14**

Due to the high mortality of the 2012 transplanted caribou, a second transplant has been deferred to 2014. Logistical planning is underway for the second phase of the transplant, including a review of all aspects of the project. In particular, the donor herd and release methods are being reviewed.

Mountain ecotype caribou herds are being reviewed to determine if there is an opportunity to use this ecotype for future transplants. The hope is that the movements of mountain ecotype caribou will more closely follow the seasonal movements of the resident Purcell South caribou post-release. No decision has yet been made regarding use of a mountain caribou donor herd.

To increase the likelihood that transplanted caribou will bond with residents, a "soft release" is also being considered, in which transplanted animals will be penned for a short period of time in the South-Purcells prior to release. A small number of resident caribou may also be captured and kept in the same pen, in the hopes of promoting this bonding and use of the resident herd area. A suitable site has been identified for a temporary holding pen to enable a soft release to occur.

Advice is being sought from the Mountain Caribou Science Team and other experts to ensure that future transplanted caribou are given the greatest chance for survival.

### **RESEARCH**

Predation-risk research is continuing through the University of Victoria's Laboratory for Landscape and Wildlife Ecology, Department of Geography under Dr. Dennis Jelinski.

#### **Next scheduled report:**

The next quarterly report for this project will be available June 2013.

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