

Purcells-South caribou herd augmentation project

Quarterly report

June 21, 2012

Introduction:

As part of the BC 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 2 year project to move 40 caribou to the Purcells-South herd.

Background:

The 2007 Mountain Caribou Recovery Implementation Plan (MCRIP) committed government to several management actions including augmenting specific, high-priority smaller herds with caribou from larger, more robust herds.

The Purcells-South mountain caribou herd in the Kootenay Region has a current population estimated at only 14 animals and has been identified as a priority for augmentation (Kinley 2010). Direct augmentation by trans-locating animals from a donor herd is considered the best opportunity to assist recovery of this herd. Failure to implement an effective translocation program in the near-term will likely lead to extirpation of the Purcells-South herd.

Further information on mountain caribou in British Columbia can be found at:

<http://www.env.gov.bc.ca/wld/speciesconservation/index.html>

Accomplishments to date:

- 20 caribou captured and collared in the Level-Kawdy herd in Oct. 2011 to obtain pre-translocation movement and habitat use data on the donor herd.
- 20 caribou captured, fitted with GPS collars and transported by road from the Level-Kawdy herd to the Kootenay region February 29 – March 2, 2012.
- 19 caribou released into subalpine caribou habitat in the Purcell Mountains March 3, 2012.
- Predation-risk research project initiated with University of Victoria.
- Caribou health research initiated by the University of Calgary.
- Broad public exposure achieved through TV, radio, print and web media coverage¹.

¹ The News Release is available at: <http://www.newsroom.gov.bc.ca/2012/03/transfer-to-save-mountain-caribou.html>

Monitoring of translocated and resident caribou:

The movements of 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 (actual download frequency varies, as data is downloaded once 22 “fixes” are achieved). If a mortality signal is detected, Ministry staff conduct field assessments of the mortality as soon as possible, including field necropsies, sample collection and/or retrieving the entire carcass for analysis by the University of Calgary.

As expected, the transplanted caribou made extensive movements after their release in the Purcell Mountains. During exploratory movements through low elevations, the caribou are at a high risk of predation. At the time of this report, 10 of the 19 transplanted caribou have died: six from direct predation (four by cougars, two by wolves), one due to an accident, one was preyed upon after an injury, and two died of unknown causes (1 of which was scavenged by bears). Given the tendency of transplanted caribou to move a great deal during the first months after transplant, the Project Team made the decision that predator management would only be considered in circumstances where the predation event occurred in high elevation, prime caribou habitat within the recovery area, which in the South Purcells is considered to be above 1400 m elevation. The vast majority of caribou mortalities due to confirmed predation were animals that wandered into unsuitable habitat (i.e. below 1400m in elevation).

While some mortality of transplanted caribou was anticipated (Kinley 2010), the project team is concerned with the level of predation to date and is reviewing options to reduce predation mortality in phase 2 of the transplant. It is encouraging that the transplanted caribou that have moved into alpine habitats have largely avoided predation.

Several of the caribou have made extraordinary movements since their release. One cow wandered into Montana, and a mortality signal was detected. Montana Fish & Game Dept. Biologists volunteered to recover the carcass, but found the cow alive but unable to move due to tick paralysis. They loaded the caribou onto a sled, and brought it to a vet where it was treated. The cow was brought back to B.C. and held temporarily until it had recovered sufficiently to be re-released into the Purcell Mountains. This story was covered in both Cranbrook and Montana media.² Two other cows that subsequently moved into Montana were preyed upon by wolves.

At the time of this report, the transplanted caribou have not linked up with the resident caribou.

² <http://www.dailytownsman.com/article/20120503/CRANBROOK0101/305039997/-1/cranbrook/caribou-travails-an-astonishing-saga>

http://missoulian.com/news/state-and-regional/caribou-that-wandered-into-montana-from-b-c-treated-returned/article_9ad93986-9099-11e1-a4e9-0019bb2963f4.html

RESEARCH

Predation-risk research is ongoing through the University of Victoria's Laboratory for Landscape and Wildlife Ecology, Department of Geography. A graduate student (Heather Leech) is conducting analyses under the direction of Dr. Dennis Jelinski. A poster will be presented on this research project at the 2012 North American Caribou Workshop in Fort Saint John: <http://www.nacw2012.ca/index.php/home>

A partnership with the University of Calgary's Faculty of Veterinary Medicine has enabled physiological research based on blood and tissue samples obtained through the transplant. The U of C is also assisting with necropsies of caribou mortalities.

Next steps:

Planning is underway for the 2nd phase of the transplant of 20 caribou in February – March 2013.

A comprehensive review of the 2012 transplant methods and results is being conducted by the project team to make improvements wherever possible.

As part of ongoing public outreach and fund-raising efforts, Leo DeGroot, Steve Gordon, and Mark Williams will be leading a Conservation North-West "webinar" on August 15, 2012 to discuss the transplant and its relevance to mountain caribou recovery in B.C. and neighbouring states.

Next scheduled report:

The next quarterly report for this project will be available Sept. 2012.

References:

Kinley, T. 2010. Augmentation Plan for the Purcells-South Mountain Caribou Population. Prepared for: BC Ministry of Environment, Ecosystems Branch. 43pp.

Report prepared by:

Steve Gordon, MSc. R.P.Bio.
Strategic Resources Manager
Resource Stewardship Division

Steve.gordon@gov.bc.ca

(250) 751 7126