



Maternal Penning to Enhance Survival of Caribou within the Klinse-Za Herd

External: Issued April 18th, 2019



Days in pen → 36

Days until release → 100

Healthy, happy caribou

We breathe a deep sigh of relief as things have calmed down in the maternity pen the last week. There have been no further reports by the guardians of animals having difficulty consuming food. Extensive monitoring trips inside the pen are encouraging as there has been no sign of any health issues.

All 17 caribou are frequently seen in one large group inside the pen; all of the caribou appear to be healthy and happy! That said, there are two cows throwing their weight around and bullying the others... we may have to construct a penalty box in the near future!



We have transitioned the diet entirely to pellets now and the cows are being fed as much food as they would like to eat. Currently the feeding rate is around 50kg each day; guardians ensure that there is some food left in the troughs after each feeding.

Census and Demographics

Through surveys in March, we observed 81 animals (34 adult cows, 27 adult males, 7 unknown adults/juveniles, and 11 calves) but we were unable to find one collared cow and possibly other animals that could have been with her (we believe the collar has stopped functioning, and she has either emigrated or died). Our observations of 66 animals in March 2018 plus the 11 new calves in 2018, minus the known mortalities and another two estimated adult would result in a total population of 73.

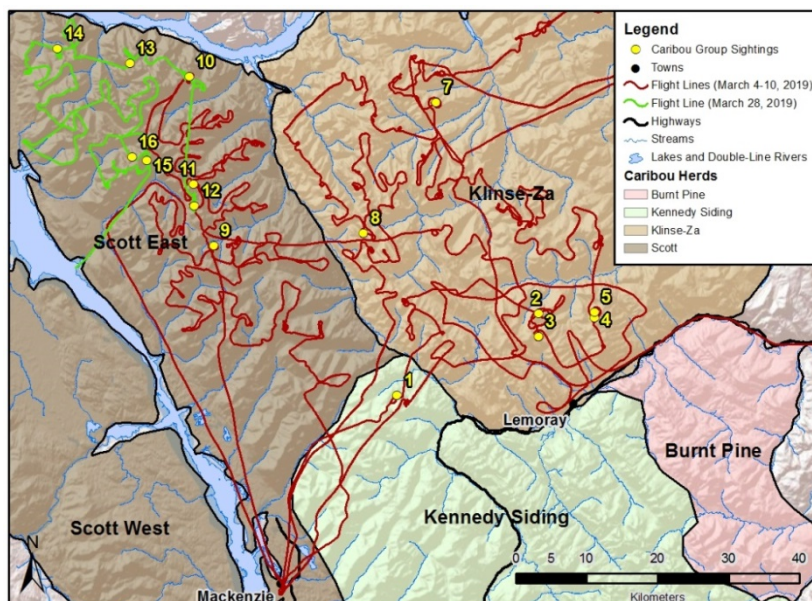


Figure 1. Survey flights for the 2019 March survey. Extra effort was put in this year to fly all of the herd area and try to locate as many caribou as possible to ensure accurate tracking of the population.

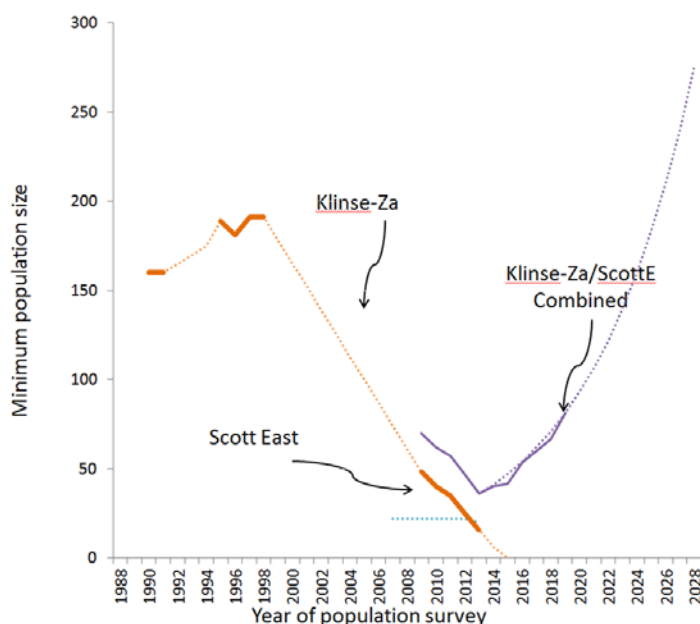


Figure 2. Population trends for Klinse-Za (orange), ScottE (blue), or combined (purple) caribou herds, British Columbia. Dotted lines depict no data (orange/blue) or estimates (purple; assuming $\lambda = 1.13$).

In late March 2019 we flew an additional survey to look for the missing cow covering areas in the Scott herd that we have not surveyed since the pen operations began. We found 3 new groups of animals (7 males, and 1 female). If we treat those animals as “immigrants”, there were 73 anticipated animals found in the survey and 8 immigrants bringing our total to 81 animals and a population increase of about 22.7% from 2018 to 2019. The number of reproductive cows, accounting for annual mortality, has apparently increased from 23 in 2014 to 34 cows.



Avalanche

This past week we were able to search an avalanche that was responsible for the death of at least two caribou. We were first aware of the avalanche on December 15th, when a mortality signal was received from C347K; her calf was also confirmed to be buried alongside her.



It was important to probe and dig out as many animals as possible before the snow melted and before the animals were found by scavengers. We were able to find both animals and to remove the bodies for a full necropsy and health sampling. As far as we know at this point, there are no other animals in the avalanche but time will tell if that is the case for sure.

Figure 2. A helicopter in the process of long lining C347K and her calf away from the avalanche site; a full necropsy will both on both individuals and will greatly benefit the health program.

Pen status

Diligent work by the guardians over the past few weeks has resulted in quick installation of the two electric fences. The outside electric fence is the primary means of defense and is constructed with 5mm electric wiring, 10' high metal T-posts, and a 12,000 volt energizer. The second fence is set right beside the geotextile fence and is constructed of 3mm electric wiring and a 6000 volt energizer.

The guardians recorded the first grizzly bear tracks of the year, in the alpine above the maternity pen. Extra caution is being taken during predator patrols and a close eye is kept on the electric fence each day.



The teams:

- Nîkanêse Wah tzee Stewardship Society
 - West Moberly First Nations (Chief Roland Willson/Tamara Dokkie)
 - Saulteau First Nations (Estelle Lavis/Naomi Owens)
- Caribou Mat Pen Working Group¹
 - West Moberly First Nations (Tamara Dokkie)
 - Saulteau First Nations (Naomi Owens)
 - Wildlife Infometrics (Scott McNay/Matt Erickson, alt - Line Giguere)
- Mat Pen Technical Advisory Team²
 - Revelstoke penning (Rob Serrouya)
 - FLNRO (Helen Schwantje)
 - MOE (Dale Seip)
- Support teams – capture specialists, veterinarian team, guardians, lichen collectors

Thanks to our sponsors³



¹ The Caribou Mat Pen Working Group is a committee appointed by the Nîkanêse Wah tzee Stewardship Society.

² The Mat Pen Technical Advisory Team is an ad hoc committee chosen by the Working Group to obtain technical advice.

³ Current and historic