

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

External: Issued June 5th, 2020



Days in pen → 84

Days until release → 51

Calving at the pen



Figure 1. Young calf at the pen.

We received the caribou pregnancy results on May 11, 2020, on the eve of the typical start of calving season: nine of the 13 cows are pregnant. The first calf to be born, on May 14th, to cow C315S, was a male. C315S was first collared and penned in 2014 and has been in the pen six times (every year except 2019). The new calf is her fifth male calf, with no females to date. Four more calves were born between May 15th and May 17th (two males and two females). We are expecting four more calves to be born in the next week or two. The four pregnant cows all have large bellies and are developing udders, are generally shy and elusive, and all but one have dropped their antlers.



Now that the calves are a couple weeks old, moms and calves are becoming less evasive and skittish, and are seen more often during morning feeding and observation. The calves are growing and becoming more playful with each other, and have started sampling some pelleted feed from the troughs. One of the cows (C434S) and her calf spend more time apart than other pairs, and are also the most vocal about calling each other. Cow C317S came into the pen with her female calf from last year. The yearling has been driven off when the mom had her (male) calf this year, but they are now once again spending time together. The female yearling has also started spending more time together with another young cow, and is often seen taking advantage of the lichen put out on the weigh scale.



Figure 2. Caribou guardian carefully restraining a calf while samples are taken.

Of the four cows that were not pregnant, one was a new, younger female. The three remaining cows had all been penned previously, and have successfully produced at least one calf in the pen. These cows (nicknamed “the single ladies”) typically spend their time in each other’s company, and are usually the first to arrive at the morning feeding. They are lower-ranking and are pushed around a little by the mama cows, especially the two dominant ones. Three of these ‘single ladies’ cows had already lost their antlers and started developing very noticeable antler “nubs” – interestingly, only one of the fertile cows (currently still pregnant) has started showing antler nubs.



Figure 3. Caribou mom nursing her newborn at the pen.



Calving in the wild



Figure 4. Wild newborn calf, who was found dead 4 days after birth, and still guarded by his mom.

This year we are continuing with frequent calving flights to monitor the calving status of collared, free-ranging females; we feel that this is essential for understanding the discrepancy in calf recruitment between the penned and the free-ranging caribou. We fly approximately every five days between mid-May and mid-June, and have been monitoring fourteen marked free-ranging cows (13 collared and one with eartags only). So far, we have observed four females with a calf, all born between May 19th and May 23rd. One of the calves was observed as a newborn on May 19th. On our next flight on May 23rd, the calf was lying dead only a few meters from where it was last spotted, and the mom was staying close to the body. Upon landing and examining the calf, we could see no abnormalities or signs of attempted predation – we collected and sent the entire calf for laboratory necropsy and analysis to help determine cause of death. We plan to carry out one or two more flights in the next two weeks.

Video collar update

Of the thirteen collared free-ranging cows, six are outfitted with the new Lotek video-collars. The objective of these collars is to provide video footage taken “by the caribou” throughout the calving season, to help round out our understanding of the calving histories of each cow. Two of the currently known, live calves are with moms that have Lotek video collars. We also think that one cow with a Lotek video-collar might have lost a calf to grizzly predation, based on her movement patterns and grizzly scat in the area – we anticipate being able to confirm or reject this prediction once we remove her collar and review the video footage. The only calf confirmed for a caribou with a Vectronic (i.e. non-video) collar was the calf that inexplicably died. One more live calf is with a cow that is marked with eartags but has lost her collar.



Figure 5. Free-ranging cow with her new calf and two juveniles.



Figure 6. Grizzly bear spotted near a cow and calf.



Pen status update



Figure 7. Cow C312K (not pregnant) with the female yearling.

Daily pen operations are continuing on as normal; caribou are currently eating 1.25 to 1.5 bags of pellets per feeding. We are in the process of constructing trough covers for all of the feeders to help keep pellets dry and palatable to the caribou – this helps prevent waste in case of rain, since caribou will not eat soggy pellets. The snow is receding rapidly, such that low-lying areas are currently very wet and swampy. The natural vegetation in the feeding meadow is just starting

to recover, and we are hoping that moving the feeding troughs and the weigh scale to new spots will facilitate better recovery. The caribou have consumed all of the terrestrial lichen in the pen, as well as all arboreal lichen to a height of ~ 6-8 feet. The guardians continue to provide arboreal lichen from inside the pen as a source of additional nutrition and variety for the caribou.

Predators have not been overly active around the pen. However, the guardians did spot a grizzly track going up near the pen and into the alpine this week – this will be closely monitored over the coming days. The only other predator sign has been a lynx track between the pen and the peak of Mt. Rochfort, last week.

Finally, after the winter season, the geotextile fencing is in need of repairs and the team has been stitching up any holes and tears, as well as lowering the geotextile as the snow level melts. The inner electric fence energizer is currently being repaired, but the outer fence is electrified and working well. Look for our next update once all of the pen calves are born and our free-ranging calving flights are completed.



The teams:

- Nîkanêse Wah tzee Stewardship Society
 - West Moberly First Nations (Chief Roland Willson/Tamara Dokkie)
 - Saulteau First Nations (Estelle Lavis/Carmen Richter)
- Caribou Mat Pen Working Group¹
 - West Moberly First Nations (Tamara Dokkie)
 - Saulteau First Nations (Carmen Richter)
 - Wildlife Infometrics (Matt Erickson)
- Mat Pen Technical Advisory Team²
 - Revelstoke penning (Rob Serrouya)
 - FLNRO (Helen Schwantje)
 - FLNRO (Mike Bridger)
- 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