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

External: Issued March 18, 2018

In this memo, we provide an update on maternal penning activities within the Klinse-za/ScottEast caribou herd area. The update, and others to come as the mat pen project progresses, are sent to the Nîkanêse Wah tzee Stewardship Society directors and members, Klinse-za caribou recovery program advisors and sponsors, the technical working group members, and field crews.

Much has happened since the last external newsletter (issued prior to release of caribou from the Bickford mat pen in July of 2017):

- We released 9 cows and 7 calves from the Bickford mat pen in late July, 2017 – all 7 penned calves were confirmed to have survived to early March 2018.
- We confirmed that the remaining 21 wild cows had 6 calves in late July 2017 and 5 of those were still alive in early March 2018.
- Two collared cows were confirmed to have been killed by predators; one cow released from the mat pen was killed by a wolf in September and one cow that spent the year in the wild was killed by a wolverine in February.
- The mat pen at the Bickford site was dismantled after the release in July 2017 and a new pen, double the Bickford size, was constructed approximately 40kms northwest of Bickford on Mt. Rochfort.
- Last week, we caught and penned 11 cows and 2 calves.

Table 1. Cumulative results for the Klinse-Za maternity pen.

Year	Wolves removed		Cows In pen	Preg-nant	Failed	Calves born	Deaths in pen[a]	Released[a]	Pen deaths outside[a]	Survived full year[a]	Wild deaths[a]	Wild calf survival	Pop'n size	Collars	
	Ground	Air												Pen	Wild
2013	22												36		04
2014	20		10	10	00	10	0f,1c	10f,09c	2f,5c	08f,04c	2f	2c	40	10	05
2015	20	69	11	09	03	06	0f,1c	11f,05c	0f,0c	11f,05c	0f	4c	42	11	06
2016	46	57	14	13	02	11	1f,0c	13f,11c	0f,4c	13f,07c	4f,2m[b]	5c	54[c]	13	09
2017	35	26	09	09	02	07	0f,0c	09f,07c	1f,0c	09f,07c	1f	5c	61[d]	09	13
2018			11										67-70	11	8

a- Where f is adult females, c is calf, and m is adult male;
b- Includes 1f and 2m unmarked, wild animals
c- Includes 3 immigrants
d- Includes 1 penned calf that was found after the annual population survey was conducted

Rochfort mat pen construction:









The objectives for the change in site were to: a) allow for vegetation recovery at Bickford, b) avoid any pathogen build up that may have occurred at Bickford, c) provide for a larger pen accommodating more caribou and therefore increasing the potential return to the population recruitment, and d) test the notion that mat pens can be used to redistribute caribou into currently unused portions of the historic range.

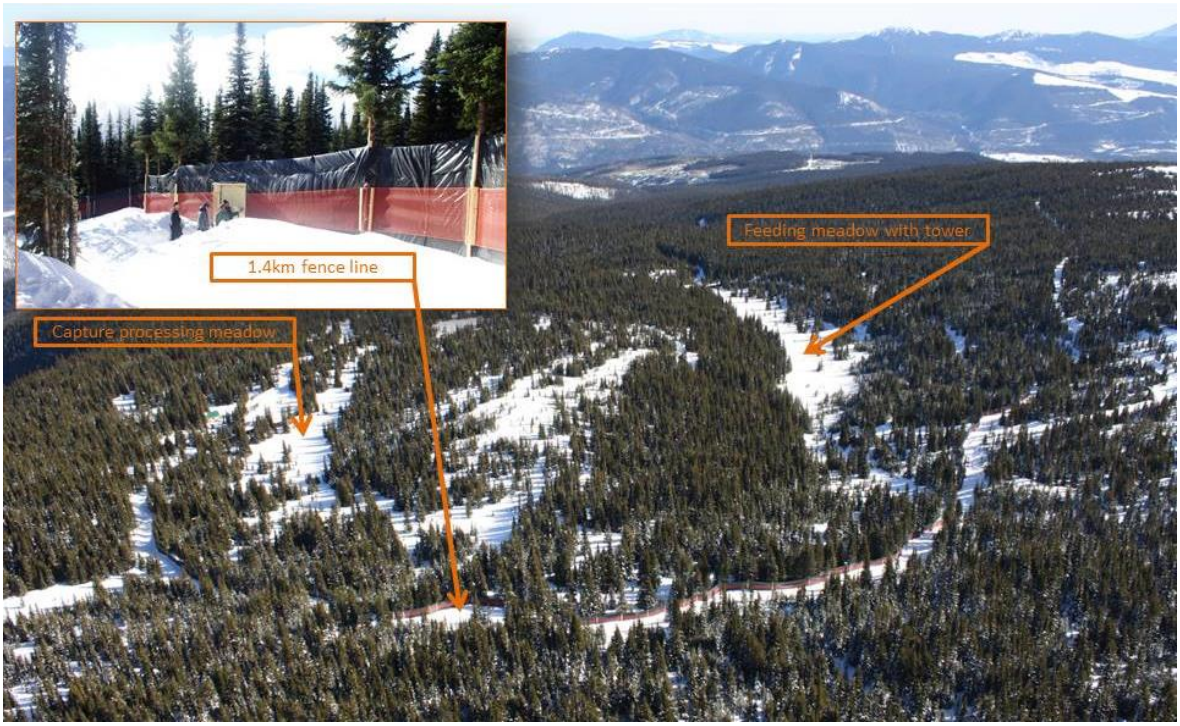

Figure 1. The Rochfort mat pen showing fence line, feeding meadow, and capture processing meadow.

2018 captures:

On March 13-14th we caught 11 cows and 2 calves, transported them to the pen where the cows received radio collars, and released all animals within the pen. See below for pictures of the event.

Days in pen → 5 **Days to release → 127**





Figure 2. A captured cow being prepared for transport to the pen (left) and then relayed into the pen by snowmobile (right).



Figure 3. Caribou C332K being processed. This cow was originally caught in the Klinse-za area in 2015 and gave birth to a male calf in the 2015 mat pen that died 2 days after birth. She was recaptured in 2016 and gave birth to a female calf that survived to the following March (and is still alive today). She lived in the wild since release in 2016 but had no calf with her when recaptured this year. Inset is a picture of the collaring kit prepared for each captured caribou.



Figure 4. Taking measurements of C332K's body fat as a part of the health studies.



Figure 5. Helen Schwantje waiting for C364K to become mobile again. This cow was first caught last year and was taken to the 2017 pen but failed to raise a calf as it was stillborn in the pen. We're wishing her a healthy calf this year.



Figure 6. Some of the team going for a walk inside the pen after captures (left). On the walk, we were able to observe all 13 penned caribou feeding at the feed troughs in the feeding meadow (right).



Figure 7. View of the feeding meadow from the observation tower with Battleship Mountain in the background.



Figure 8. Discussing protocols for guarding the mat pen.

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 Group[1]
  - West Moberly First Nations (Bruce Muir/Jason Lee)
  - Saulteau First Nations (Naomi Owens/Carmen Marshall)
  - Wildlife Infometrics (Scott McNay/Brian Pate, alt - Line Giguere)
- Mat Pen Technical Advisory Team[2]
  - Revelstoke penning trial (Rob Serrouya/Corey Legebokow)
  - FLNRO (Chris Addison/Chis Ritchie/Helen Schwantje/John Surgenor)
  - MOE (Dale Seip)
- Support teams – capture specialists, veterinarian team, shepherds, lichen collectors

Thanks to our sponsors[3]



[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