

Central Selkirk Caribou Maternity Pen: 2025 Summary

Background

The Central Selkirk Maternity Pen project was developed by the Arrow Lakes Caribou Society (ALCS) to support the recovery of the Central Selkirk herd of Southern Mountain Woodland Caribou (*Rangifer tarandus caribou*). The pen is located in the Kuskanax Creek drainage near the Nakusp Hot Springs, approximately 10 km northeast of the Village of Nakusp, BC. The pen site was selected based on its elevation (875 m), variable terrain, suitable old cedar-hemlock forest, and accessibility. Pen construction began in fall 2019 and was fully completed in winter 2022 with the help of many volunteers, in-kind contributions, grant funding, and additional support from the Provincial Caribou Recovery Program. The maternity penning program began operating in 2022, with 2025 being the fourth year of pen operations.

Capture

Captures occurred on March 30, 2025 under favourable weather conditions. The combined effort of 40 people across three teams, three helicopters and ground transportation vehicles carried out the captures in just over four hours. Each capture crew included a veterinary technician or wildlife health expert to monitor each animal during field capture and transport in the helicopter and to administer oxygen.

Ten adult females, including one 22-month-old caribou, and one 10-month female calf were captured and released in the maternity pen. Four animals were captured from Lew Creek, five cows and the female calf were captured from St Leon, and one cow was captured from Cape Horn.

The caribou were in fair to good body condition and serology results indicated that stress levels were lower during capture than past years. Serology tests later showed that eight of the cows were pregnant, including the young 22-month-old female. Seven animals were fitted with new GPS collars. The 10-month-old pen-born female received a single ear tag.

Pen Operations

A catastrophic wind event in September 2024 caused significant damage to the fence and forest inside the pen. Fence repairs and blowdown cleanup were completed in November 2024 to prepare for penning in March 2025. Other pen maintenance activities included slashing and burning to remove hazards along main animal trails and around feeding area, removal of the raven's nest tree and grass seeding the feeding area.

Funding was secured in 2024 to expand the existing maternity pen to accommodate the increasing herd population. Pen expansion will provide new browsing and foraging area for penned caribou and allow recovery of the existing pen area. The larger pen can also be used for future wild to wild translocation of caribou from other herds to augment the Central Selkirk herd population. Planning and permitting were initiated in July – September 2025, and fence perimeter trail clearing/construction was started in November. The maternity pen expansion project is scheduled to restart in fall 2025/2026, pending funding.

The Kuskanax Forest Service Road (FSR) partially borders the maternity pen and is used by recreationalists throughout the year. ALCS and local recreational groups developed a Road Access Plan to mitigate impacts of road use on the caribou during penning season. A gate was installed on the FSR in 2021, which could be locked during sensitive times at the pen (e.g., immediately after capture and during calving). Since 2022, signage has been improved at the gate and along the FSR to reduce unwanted foot traffic on the FSR and around the pen. Shepherds monitored traffic and disturbances on the road via remote cameras. The FSR was used by recreationalists when the gate was unlocked, however, documented traffic in 2025 was low compared to past years, with no significant incidences recorded.

In 2025, the Kuskanax FSR gate was kept locked for an extended period after calving to reduce potential disturbance to the orphaned calf that was housed in the observation blind and in a small enclosure outside the main pen. The extended closure resulted in questions from local recreationalists, warranting a discussion on improvements to access communications. The Kuskanax Road Access Plan has been revised accordingly.

Two lead shepherds performed the daily duties of monitoring the animals, feeding twice daily, cleaning the feeding area and common bedding areas, maintaining feed and water troughs, monitoring trail cameras, patrolling the pen perimeter, and maintaining the pen. During pre- and post-natal periods in May and July, secondary shepherds provided additional operational support. A wildlife veterinarian and veterinary technician were on staff for three weeks in June during the calving period to perform neonatal examinations and provide any necessary veterinary intervention. ALCS volunteers also supported the project by performing shepherding duties and helping with pen maintenance.

The pen fence and remote camera surveillance system continued to effectively safeguard the caribou from predators and outside threats. In early spring, two grizzly bears and several black bears were observed on the perimeter cameras and at the main gate. Several bear spray traps were set up along the fence to haze the bears, but despite being sprayed in the face, the bears returned a few times over the course of a week. As one of the grizzly bears posed a threat to both the maternity pen and the nearby Nakusp Hot Springs, it was reported to the Conservation Officer and a live bear trap was set up. The grizzly was never trapped, however, a large black bear was trapped and removed from the maternity pen site.

Daily weather conditions and temperature within the pen continued to be monitored. Overall, the temperatures were moderate throughout spring and into June. Extended periods of high temperatures were not experienced in 2025 with temperatures above 30°C limited to the last two weeks before release in mid-July. The feeding area misting station continued to operate during periods of high temperature to provide relief from summer heat. In 2025, a small pool was installed using the outflow from the water trough to provide relief from warm temperatures. A remote camera showed the caribou using the pool regularly, especially the calves. One large snow pile insulated with bark mulch was stockpiled in the pen and preserved throughout the entire penning season. Caribou were regularly seen laying on the snow and eating it once snow in the remainder of the pen had melted. A creek running through a portion of the pen was supplemented once freshet had finished, providing cool fresh water throughout the penning season, in addition to the continuous-flow water trough system installed in the feeding area.

The platform scale continued to deliver weight data for most caribou, providing shepherds and veterinarians with valuable health information throughout the penning season. Weight was recorded only when one animal was positioned fully on the scale. The number of successful weigh-ins for each animal varied based on how often each individual stood on the scale platform. However, data showed a steady increase in weight gain for all animals throughout the penning season (Figures 1-2). Pregnant cows showed a drop in weight immediately after calving but gained weight in the final weeks prior to release. Calves gained an average of 0.5kg per day.

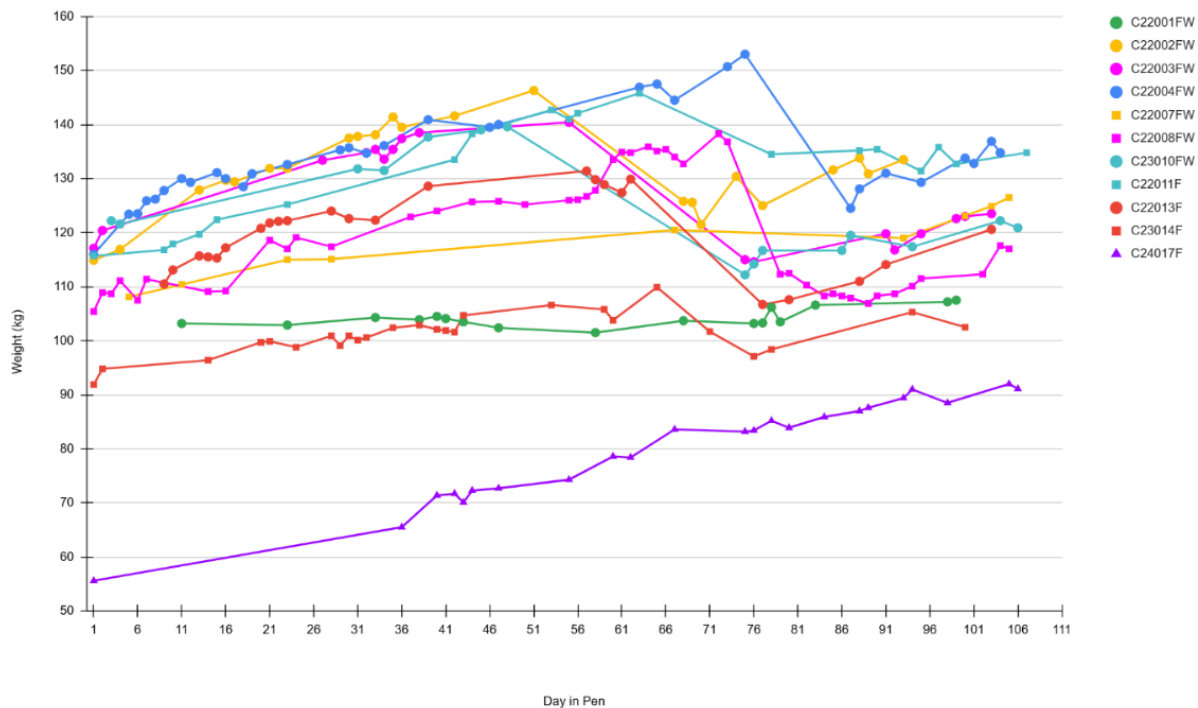


Figure 1-Weight of adult and yearling Southern Mountain Caribou, 2025 Central Selkirk Caribou Maternity Pen

Calving

Four females and three male calves were born in the pen between May 27th and June 15th. One cow experienced a challenging calving that resulted in the stillbirth of a full-term male calf. She subsequently developed a uterine infection but responded well to veterinary care and has since made a full recovery. All calves underwent a neonatal examination at 24 to 36 hours of age, during which they were examined for birth defects, weighed, sexed, and identified with a numbered ear tag. Six of the seven calves were healthy with weights ranging between 8.0 and 10.6 kg at the time of examination. All calves gained weight steadily, and were observed browsing, eating pellets and lichen, and drinking water.

The two-year-old cow delivered a notably small and fragile female calf, weighing just 3.5 kg, well below the average birth weight of 9 kg. The dam did not bond with her newborn and abandoned her shortly after calving. Veterinary personnel and shepherds stepped in to hand-raise the calf and provide supporting care. The calf required 24-hour care in the pen, including bottle feeding every few hours, health assessments and monitoring, and supervised exercise. Detailed health records were maintained throughout her care. Thanks to the intervention, the calf thrived over the five weeks she was in the maternity pen and gained over five kilograms. The calf was transferred to the Caribou Conservation Breeding Centre in Jasper National Park on July 11, 2025. An ALCS shepherd travelled with the calf to Jasper to assist with the transition, feeding regime and general care for five days. The ALCS is thankful to all those who helped facilitate the transfer of Calf 25 to the Jasper centre, including staff from the Caribou Recovery Program, BC Wildlife Health office, and the Caribou Conservation Breeding Centre. This was the best outcome for the calf, and has led to a collaboration between the ALCS and the Caribou Conservation Breeding Centre which can support future recovery efforts.

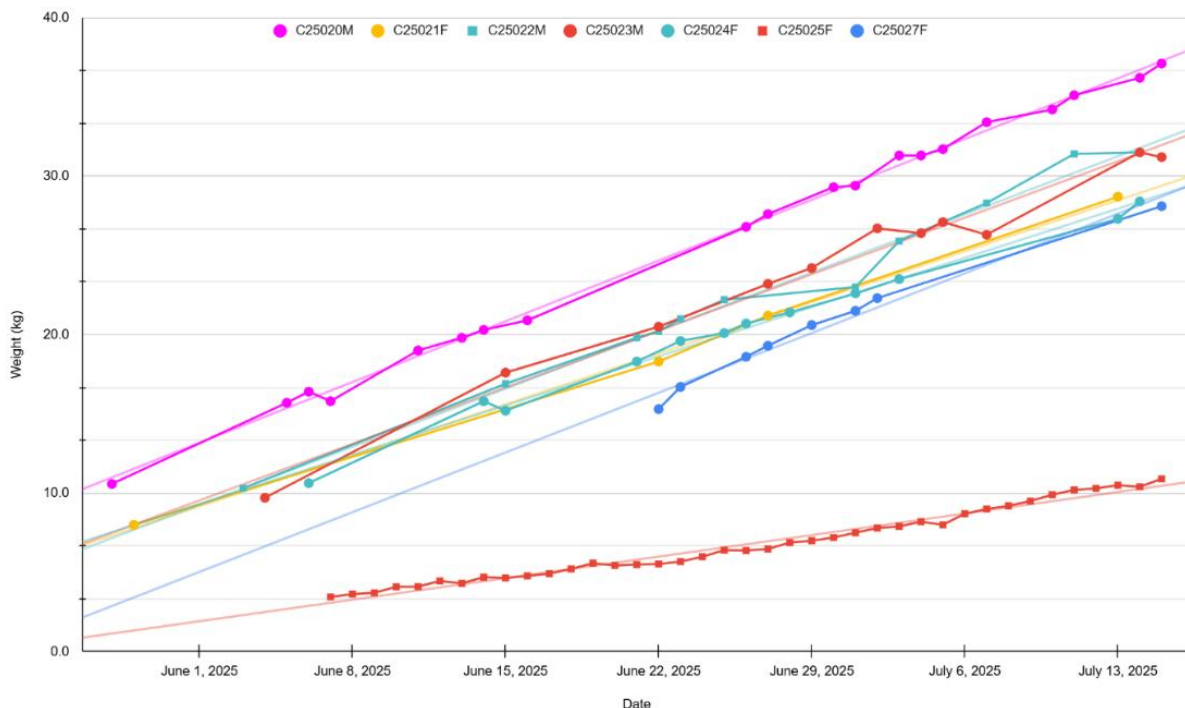


Figure 2- weights of calves born in the Central Selkirk Caribou Maternity Pen, 2025

Release

All cows and calves were released from the maternity pen at 05:15 on July 16, 2025, after spending 109 days in the pen. A team of 10 people were located both inside the pen and along the travel route to monitor caribou movement. The pen gate was opened under cool temperatures and clear skies and all animals had exited the pen by 07:45. Once out the gate, caribou moved up the Raven Creek fire trail and GPS collar data showed that they were in the subalpine habitat within a couple of hours.

The release date was determined after considering the weight, size and age of the calves, current and forecasted temperatures at the maternity pen and the presence of predators in the vicinity of the pen. The youngest calf was 31 days old on release, but as it was a strong, healthy male with a good dam, the chance of it being separated from the group and possible predation were considered to be lower risk. The decision to release on July 16 was also influenced by the forecast for higher temperatures going into the third week of July. The weather on the morning of July 16 was cool (<10°C) and clear.

A black bear was observed on the FSR and on the waterline trail cameras a few days before release, but not considered to be a significant risk. More aggressive hazing of predators prior to release is a recommendation in the future.

Penning Summary 2022 -2025

The following summary shows how we are doing after four years of maternity pen operations:

- 100% of adult females are collared
- We have captured 80-100% of adult females in the herd each year of pen operation. 100% of females are GPS collared, and we need to capture all females in the herd to increase calf survival and adult female survival
- Pregnancy rates have been 67%-100% of penned cows
- Parturition (pregnancy) rates have been 83-89% of penned pregnant adults
- Calf weights at birth average 8-10 kg; calves gain 0.5 kg per day on average
- 100% of the penned calves have survived to release each year
- Calf survival to age of recruitment (at 10 months) averaged 7% from 2017-2021 (pre-penning); in 2023 (with penning) calf survival to age of recruitment was 24%. This indicates that penning during calving and immediately following birth is a critical management tool to increase calf survival and herd population.
- Three pen-born females (2022/2023) have now birthed calves in the pen (2025)
- Adult female health and female calf recruitment are important because of the small and aging female population (four of the 10 adult females in the Central Selkirk herd are thought to be 8+ y/o). Maternity penning is an opportunity to provide adult females, yearling females, and calves with good nutrition, protection from predators, and veterinary care/intervention.

2025 Penning Season Funding and In-Kind Support

We gratefully acknowledge the financial support from:

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BC Caribou Recovery Program	Habitat Conservation Trust Foundation
U.S. Fish and Wildlife Service	Columbus Zoo and Aquarium Conservation Fund
BC Community Gaming Grant	CBT/ RDCK ReDi Grant
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Nakusp and Area Community Forest	BC Forest Employment Program
Regional District of Central Kootenay	First Nations Caribou Recovery Implementation Program
Village of Nakusp	BC Conservation Foundation
Sinixt Confederacy	Kalispel Charitable Fund/ Kalispel Tribe

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Wildsight Youth Climate Corps	Sinixt Confederacy members
Your Green Kitchen	Carol Wallace Art
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