

Backgrounder For Southern Mountain Caribou Habitat Protection in British Columbia

(BC Nature – Background Information for Letters of Support)



**Photo Credit: picmonkey stock.*

Issue Summary

Southern Mountain Caribou (SMC) populations in British Columbia are in steep decline due to extensive habitat loss, fragmentation from forestry and road-building, and increased predation pressures linked to human disturbance. Nearly 6,000 hectares of remaining old-growth and primary forest, formally identified as *critical* habitat for these caribou, are still subject to approved and pending logging and road construction. Without immediate provincial action to halt harvesting, restrict road expansion, and invest in Indigenous-led recovery strategies, several herds face imminent extirpation. BC Nature is requesting clarity on the Province's response and commitment to habitat protection and recovery planning.

Species at Risk Context

Status:

- *Schedule 1 Threatened* under Canada's **Species at Risk Act (SARA)**
- Provincially ranked as **Endangered** under BC's Conservation Data Centre (CDC)

Species:

- **Southern Mountain Caribou (*Rangifer tarandus caribou*)**
- Distinct population unit with unique ecological behaviours (deep-snow ecotype)

Habitat:

- High-elevation **old-growth and mature subalpine forests**
- Low-elevation **winter ranges** with terrestrial and arboreal lichens
- Landscapes requiring **large, intact, continuous habitat blocks**

Primary Threats:

- Logging of old-growth and primary forests
- Road-building that opens habitat to predators and recreation
- Habitat fragmentation increasing wolf/moose dynamics
- Loss of connectivity between seasonal ranges
- Insufficient enforcement of habitat protections
- Slow recovery actions and lack of full SARA compliance

Significance of Area:

- BC holds **>95% of Canada's Southern Mountain Caribou**, making the Province the national steward for recovery.
- The **~6,000 ha** referenced includes some of the most ecologically important remaining old-growth suitable for this ecotype.

Location:

This location list matches federal SARA mapping, and aligns with BC Government caribou herd regions.

- **Columbia Mountains** → Columbia North, Columbia South, Frisby–Boulder, etc.
- **Central Selkirks** → Groundhog herd
- **Hart Ranges** → Multiple herds in the Central Group (Quintette, Pine River, etc.)
- **Revelstoke region** → Columbia North/South
- **Peace region** (for northern SMC subpopulations)

Ecosystem:

- Interior Wet-Belt ecosystems
- Sub-boreal and subalpine forests
- High-elevation spruce–fir forests and Engelmann spruce–subalpine fir zones

Habitat:

- Intact forest landscapes with multi-aged old growth
- Narrow elevational migration corridors
- Lichen-rich forests crucial for winter foraging

Protection Gap:

- A large proportion of **mapped critical habitat** remains unprotected or under weak protection designations.
- Many cut blocks within critical habitat have been approved or are pending.
- Road density thresholds exceed levels compatible with caribou survival.



Cultural Context (First Peoples Impact)

Southern Mountain Caribou hold profound cultural, spiritual, and food-security significance for many First Nations, including:

- Secwepemc
- Ktunaxa
- Dunne-za and Dane-zaa
- Syilx/Okanagan
- Kaska
- Tahltan
- Carrier Sekani Nations

Caribou stewardship is historically central to Indigenous governance, seasonal cycles, and cultural identity.

The decline and disappearance of herds has resulted in:

- Loss of cultural harvesting rights
- Loss of intergenerational knowledge transfer
- Deep community grief tied to species extirpation
- Barriers to exercising UNDRIP-aligned stewardship rights

Indigenous Nations repeatedly call for **co-governance, habitat protection, and recognition of Indigenous law** in caribou recovery.

Ecological Context

- Southern Mountain Caribou are keystone indicators of **intact, functional, large-scale forest ecosystems**.
- They depend on **decades-old arboreal lichen growth**, meaning they cannot adapt quickly to young forests.
- Fragmentation alters predator-prey dynamics: when cut blocks create early seral habitat for moose and deer, wolf populations increase, elevating predation pressure on caribou.
- Road networks accelerate predation and recreational disturbance.
- Climate change intensifies pressures by altering snowpack and vegetation patterns.

Conservation Significance



Protecting these last caribou herds provides widespread ecological benefits:

- Conserves irreplaceable old-growth biodiversity
- Protects carbon-rich forests important for climate mitigation
- Maintains predator–prey balance
- Safeguards freshwater hydrology and watershed stability
- Upholds Indigenous rights and stewardship responsibilities
- Contributes to Canada’s SARA obligations
- Prevents extirpation of entire herds in the next 10–20 years

Without immediate, meaningful habitat protection, several herds will not recover.

Scientific Context:

- Southern Mountain Caribou require large, contiguous tracts of old-growth forest to avoid predators.
- Recovery is only successful when habitat alteration is stopped, and roads are decommissioned or closed.
- Maternal penning and wolf reduction provide only temporary relief—without habitat protection, populations continue declining.
- Long-term recovery depends on restoring low-elevation winter ranges and ensuring connectivity between seasonal areas.
- Road density must be reduced to less than 0.5 km/km² for survival and recruitment.

Core scientific bodies supporting this evidence:

- Environment and Climate Change Canada (ECCC)
- COSEWIC
- BC Government’s own habitat science teams
- Peer-reviewed research from UBC, UNBC, and the University of Alberta
- Indigenous-led monitoring programs

Core References

- **Environment and Climate Change Canada (ECCC) – Recovery Strategy:** *Recovery Strategy for the Woodland Caribou, Southern Mountain Population (2014)*
<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/woodland-caribou-southern-mountain-2014.html>

- **COSEWIC – National Species Status Assessment:** *COSEWIC Assessment and Status Report on Caribou (Rangifer tarandus), Southern Mountain population*
<https://sararegistry.gc.ca/default.asp?lang=En&n=4BA44076-1>
- **Government of British Columbia – Caribou Recovery Program:** *Provincial Caribou Recovery Program – Southern Mountain Caribou*
<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/wildlife-conservation/caribou/recovery/southern-mountain>
- **Indigenous-Led Recovery Example (Gold Standard):** *West Moberly First Nations & Saltee First Nations – Klinze-Za Caribou Partnership*
<https://www.westmo.org/our-programs/land/caribou-recovery>
(Background article): <https://thenarwhal.ca/klinze-za-caribou-recovery-first-nations/>
- **Principles and Guidelines for Ecological Restoration in Canada's Protected Natural Areas:** <https://parks.canada.ca/nature/science/conservation/ie-ei/re-er/pag-pel>
- **Ecological restoration research in Canada: who, what, where, when, why, and how?**
<https://www.fecpl.ca/wp-content/uploads/2023/02/2023-ecological-restoration-research-in-canada-who-what-where-when-why-and-how.pdf>
- **Defining and Quantifying the Ecological Restoration Economy:** https://www.clra.ca/alberta/wp-content/uploads/sites/2/2024/10/MainW1320_Mansuy_DefiningandQuantifyingtheEcologicalRestorationEconomy.pdf