

The Role of Predator Reduction in Caribou Recovery in B.C.

Over the last few decades, woodland caribou have declined significantly in many parts of British Columbia (B.C.). Scientific evidence indicates that habitat change from natural resource development is a main factor driving these declines. These habitat changes support a greater number of moose, elk, and deer in caribou ranges. This leads to a greater number of wolves, which leads to more caribou being predated by wolves.

Predation rates on caribou are currently unsustainable.

Caribou cannot tolerate high rates of predation and have historically found refuge in habitat with low predator densities (i.e., mature conifer forests, alpine habitats, and peatlands). Research indicates that wolf densities > 6.5 wolves/1000 km² are likely to lead to caribou population declines*. Therefore, the provincial wolf density target in caribou recovery zones is < 3 wolves/1000 km² to maintain or grow caribou populations. Prior to the Government of B.C.'s wolf reduction efforts, certain caribou ranges had wolf densities as much as 2-10 times the target density.

Without emergency intervention, caribou herds will continue to decline rapidly.

Wolf predation is the most significant contributor to caribou mortality in B.C. Prior to wolf reduction in the South Peace, 74% of known caribou mortalities were wolf predation (2002–15). Across boreal herds in northeastern B.C., 72% of mortalities were wolf predation (2013–15). Provincially, predation in general accounted for 69% of known caribou mortalities, of which over half were wolf predation events (2017–21).

* In some Boreal caribou ranges, new research indicates that wolf densities > 1.8 wolves/1000 km² may lead to caribou declines.



Wolves are abundant and widely distributed across B.C. Wolf population dynamics make them resilient to high rates of reduction/mortality. Their ability to reproduce and recolonize reduces the risk of broader population declines of wolves provincially.



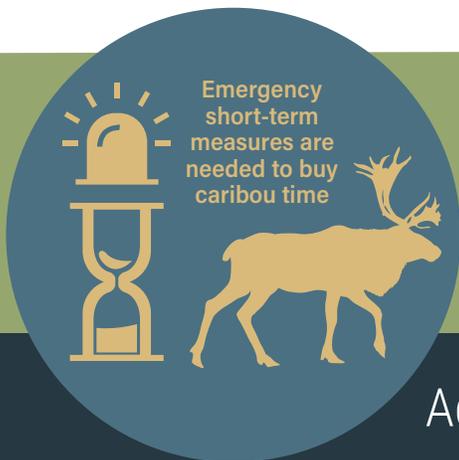
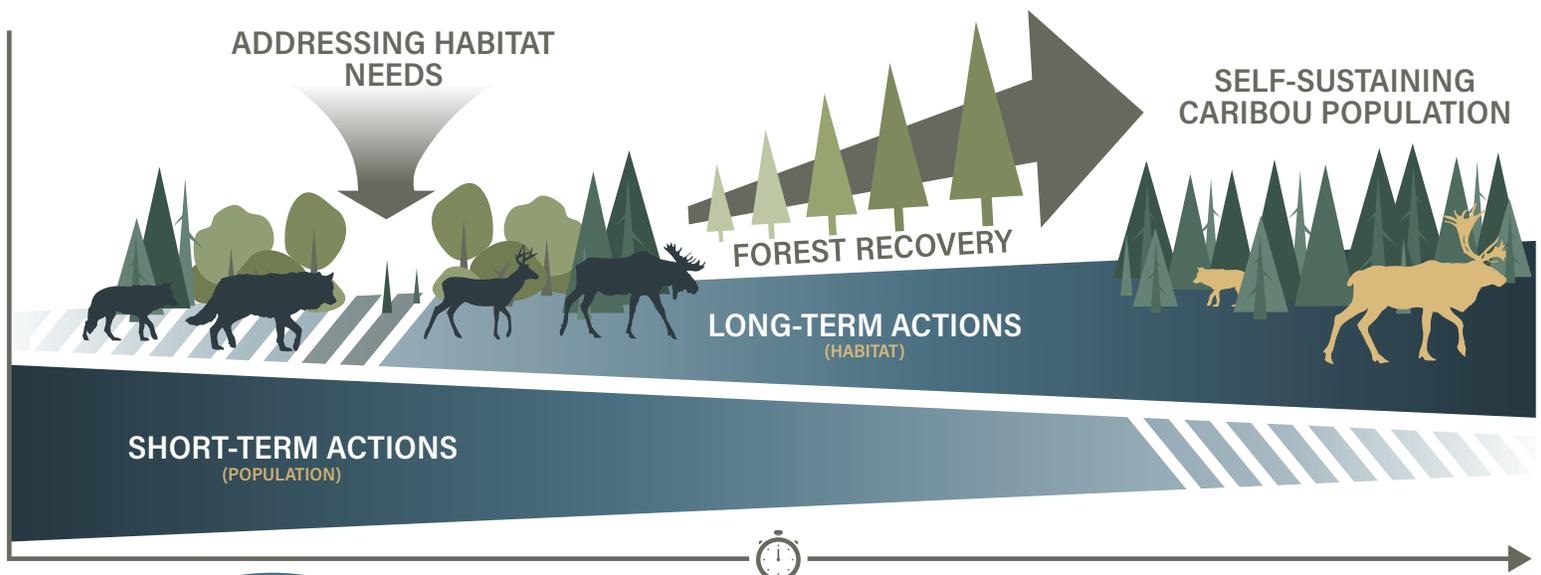
Cougars can also contribute to caribou mortality in some areas. Cougar predation resulted in deaths of three (of nine) collared caribou in the Central Selkirks (2017-2019) and 20% of mortalities in the Itcha-Ilgachuz (2018-2019). In the Columbia North herd, a single cougar killed four caribou in one week.



For these reasons, the Province of B.C. has determined that short-term actions through predator reduction are essential for recovering and maintaining caribou within the province.

Both short and long-term recovery actions are needed

Using multiple management levers is key to reaching the goal of self-sustaining caribou populations. Short-term actions include predator reductions, maternal pens, supplemental feeding, conservation breeding, and translocation. Where feasible, practical, and effective, these actions can maintain or grow caribou herds while long-term habitat recovery actions take effect.



Addressing habitat needs is an essential part of caribou recovery, but without additional recovery measures to stop caribou declines in the short-term, many herds would reach an unrecoverable state before forests can regrow to maturity.

Adaptive management is key to caribou recovery

Caribou recovery is an urgent and complex challenge. An adaptive management approach will be utilized to monitor how caribou, primary prey, and predator populations respond to different recovery actions. Future predator reduction programs may be adapted based on caribou responses. Predator reduction alone will not recover caribou herds to self-sustaining populations and is not proposed as the sole recovery action, rather it is part of a suite of recovery actions available to support caribou recovery. Research has shown that enacting multiple management actions concurrently is the most effective means of reaching and maintaining self-sustaining caribou populations in the long-term, and this is the approach the Government of B.C. is taking.