



WOODLAND CARIBOU

Jasper National Park takes action for a species at risk

The sight of a woodland caribou (*Rangifer tarandus caribou*) on Jasper's open mountain slopes is a real connection to wild places - like hearing a wolf howl or seeing a grizzly's print on a trail. But woodland caribou populations across Canada are declining. Several herds may disappear altogether.

What's happening to Jasper's caribou?

Jasper National Park is home to two populations of woodland caribou. The northern A la Pêche herd, which spends the winter outside the park, has been stable over the last 10 years at around 150 animals. However, continued deterioration of wintering habitat is cause for concern. The south Jasper Maligne-Brazeau-Tonquin has numbered about 125 animals for the past 5 years. Both herds are now using smaller areas of habitat than they were in the past and their migratory patterns have changed. Biologists think these changes are strongly influenced by human activity: road traffic, forest clearing, and recreation.



Jasper National Park of Canada

Because Jasper's caribou herds are so small, each impact is magnified. And caribou cows have just one calf per year. So the survival of each animal is critically important.

A new relationship with predators

Changing predator-prey relationships are a big concern at the park. Elk are choosing the Jasper town site and campgrounds as feeding areas and refuges. Their main predators, wolves, generally avoid such areas. But as elk numbers have increased, so have wolf numbers, resulting in higher levels of predation on caribou.

Hikers and skiers can disturb and displace caribou from their preferred habitats, increasing stress levels and predation risk. In winter, packed hiking trails and ski tracks give wolves easier access to hunt in the higher elevation caribou ranges. These are areas that would otherwise be inaccessible to wolves due to snow accumulation.



Bull Caribou © Mark Bradley Parks Canada



Caribou © Mark Bradley Parks Canada

Outside the national park, seismic lines, logging, and oil and gas developments have replaced high quality caribou habitat with young forests attractive to elk, deer and moose. These species in turn attract wolves, increasing the threat to caribou.

Our changing climate may affect prey numbers, snow conditions and wolves' access to food, possibly increasing the predation risk.

An ambitious research program

Parks Canada biologists have been intensively monitoring the caribou population since 2001. They are documenting caribou numbers and movements throughout the year. And they are learning how wolves, elk, people, and fire affect caribou population dynamics.

DNA from caribou scat provides identifying information on individual animals and helps track the movement of herds. Hormones from the scats may shed new light on health aspects such as pregnancy and recruitment rates.

A major study with the universities of Montana and Calgary is investigating how the relationships among caribou, fire patterns, wolves and their prey species (elk, moose and deer) influence caribou. One of the ways Parks Canada biologists are contributing is by working with local volunteers to help investigate kill sites.

Concrete actions for the caribou

As the research progresses, the park is taking practical steps to protect the caribou:

- ❧ Winter is a harsh season for woodland caribou. When food is scarce on the wind-swept alpine slopes they move to lower forests where wolves are more plentiful. Ski trails can compound the problem. They compact the snow giving wolves easier access to caribou winter ranges. To reduce the risks, the park, with the help of the skiing community, is setting ski trails only in areas where there are no caribou.
- ❧ With so few caribou, even one animal killed by a vehicle is too many. To reduce deaths on park roads, new speed zones have been established to slow vehicles down at key locations.
- ❧ To reduce stress on the animals, Jasper has limited the use of helicopters over caribou ranges. Designated flight paths for private aircraft direct them away from areas the caribou frequent.
- ❧ The park has developed a caribou-friendly prescribed fire plan. No burns will take place near or within high quality habitat. Burns are designed to attract elk (and their predators) away from caribou habitat, and wildfires that threaten habitat will quickly be extinguished.
- ❧ During the upcoming park management plan consultations, Parks Canada will be working with local, regional, and national stakeholders to arrive at innovative new measures for saving caribou.

For Jasper National Park it's a matter of making the park a better place for caribou, wolves and people to coexist.

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Wolf on elk carcass © Mark Bradley Parks Canada



Caribou highway sign © Mark Bradley Parks Canada



Bull Caribou © Mark Bradley Parks Canada

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