

British Columbia's Woodland Caribou

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British Columbia Forest Facts

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Image: Garry Beaudry, Ministry of Forests, Lands and Natural Resources

Woodland Caribou are a species of deer. They are associated with northern, cold and snowy climates. Woodland Caribou in B.C. include three ecotypes or groups adapted to specific habitats. These include: Boreal Caribou, Northern Caribou and Mountain Caribou. All three appear to be declining and face significant impacts to their habitat from both land use and climate change in B.C. and beyond. For caribou conservation to succeed, the support of all stakeholders is needed.

With leadership from the governments of Canada and British Columbia; First Nations, the forest industry, other industries, and other groups are working to reduce impacts to caribou and their habitat. Key actions include:

- participating in regional and provincial planning efforts focused on conservation and recovery of declining populations;
- providing leadership to defer or modify harvesting in key habitat areas;
- supporting caribou research, population monitoring and other management to help conserve caribou habitat;
- managing caribou predators and reducing other deer species in caribou habitats; and
- limiting human recreation, commercial, and industrial use in caribou habitat.

Lichens are a plant-like organism. In high elevation old growth forests, lichens growing on trees are the primary winter food of Mountain Caribou.

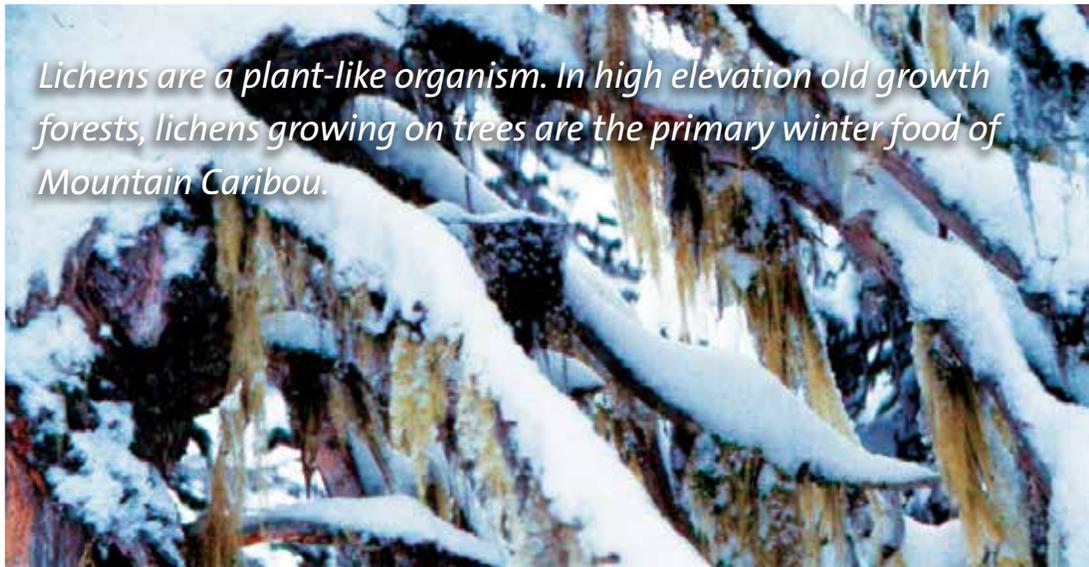
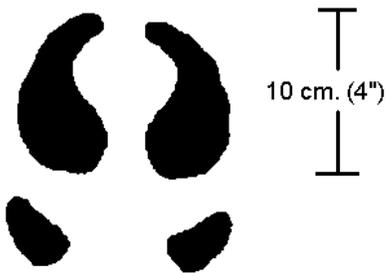




Image: Garry Beaudry, Ministry of Forests, Lands and Natural Resources

Unlike other deer, male caribou are not the only sex that grows antlers. Antlers may help female caribou defend themselves. Caribou also use antlers to dig lichen and other food in snow. Learn more at <http://www.youtube.com/watch?v=7uXdmXVdLnE&feature=related>.

Climate change may increase risks to caribou by altering winter conditions to make travel more difficult. Climate change also favours expansion of other deer species into caribou habitat, which in turn increases predator numbers and the risk of predation on caribou.



Caribou have large, 4 clawed hooves. These provide stability and prevent them from sinking into hard winter snow crusts and soft summer soils.

CARIBOU IN THE WORLD & CARIBOU IN B.C.

A northern species with more than a million years of history, wild caribou and their semi-domesticated relative reindeer are found across northern North America, Europe and Russia.

Distinguished by the places they occur and how they behave, there are three major subspecies of caribou in Canada including Woodland, Peary, and Barren-ground Caribou. Of these, only Woodland Caribou live in British Columbia.

B.C.'s Woodland Caribou include three distinct ecotypes including Boreal Caribou, Northern Caribou and Mountain Caribou. Although B.C. caribou do not migrate long distances, some populations travel seasonally to higher or lower elevations. All three types are considered "at risk" of disappearing from Canada.

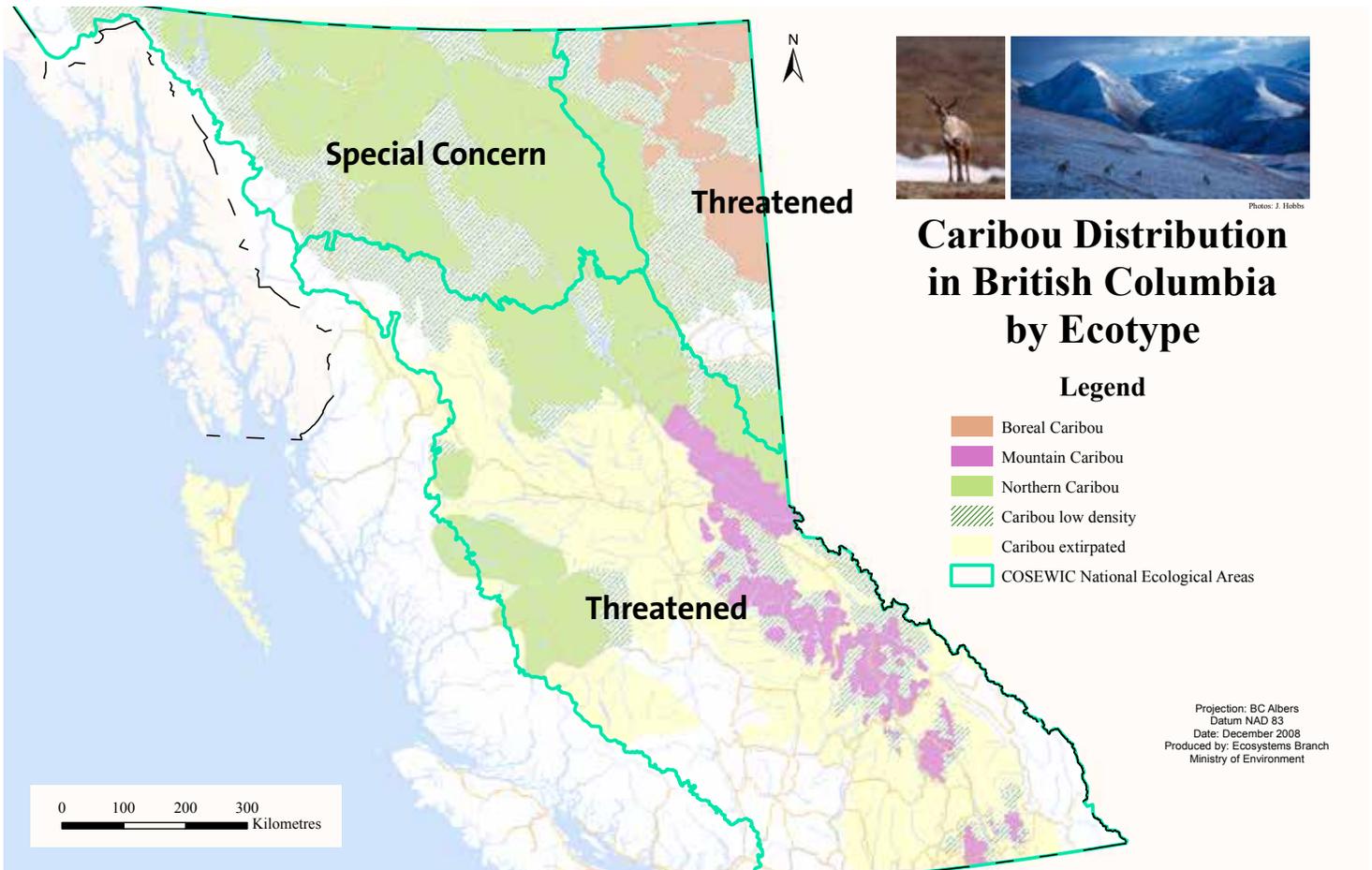
Boreal Caribou are found only in the extreme north-eastern corner of the province. They live in low elevation open forests and boggy sites next to wetlands. They depend on ground lichens as their primary winter food. Like all caribou, Boreal Caribou are considered an umbrella species. This means management

activities to protect Boreal Caribou can benefit many other species that live in the boreal forest.

Northern Caribou are the most common type in B.C. with populations extending from west-central to northern B.C. Like Boreal Caribou, they also depend on a winter diet of ground lichens, but these populations are associated with alpine areas during calving and either low elevation pine forests or wind-swept ridges in winter.

Mountain Caribou are found only in British Columbia except for one population that extends into the United States (eastern Washington and Northern Idaho). Mountain Caribou depend on lichens that grow on trees as their primary winter food and spend winters in higher elevation, old growth forests. Two southern populations of Mountain Caribou have recently been lost, and a further 11 have fewer than 100 animals each.

The historic loss of populations in south and central B.C. helps to reinforce the importance of actions being taken to sustain caribou throughout the province.



Caribou Distribution in British Columbia by Ecotype

- Legend**
- Boreal Caribou
 - Mountain Caribou
 - Northern Caribou
 - Caribou low density
 - Caribou extirpated
 - COSEWIC National Ecological Areas

Projection: BC Albers
Datum NAD 83
Date: December 2008
Produced by: Ecosystems Branch
Ministry of Environment

WHAT THREATENS CARIBOU IN B.C.?

Impacts to habitat are the major concern for all caribou ecotypes in B.C., but the details are different for each.

Boreal Caribou

Boreal Caribou habitat is being altered by industrial land use, agriculture, climate change, and large scale fires. Changes to habitat are particularly affecting caribou survival. Too many newborn calves are killed by predators which are increasing in abundance because of habitat changes.

Construction and human use of roads, trails and linear corridors make it easier for predators to search for prey. Land use also favours expansion of other deer species such as Moose and White-tailed Deer into caribou habitat. This in turn increases predator numbers and the risk of predation on caribou.

Where disturbances are common, Boreal Caribou may not be able to avoid habitat disturbance and thus become more vulnerable to predators. Where possible, all ecotypes of caribou avoid roads, corridors and disturbed areas including oil well sites and forestry cutblocks. Boreal Caribou may select poorer quality habitat to avoid disturbance, potentially affecting the health of females and calves.

Mountain Caribou

Mountain Caribou are threatened by four main factors including habitat alteration, predators,

disturbance and climate change. Forest harvesting, fire, human settlement, roads and reservoirs have all altered habitat.

Management of high suitability forest habitat is vitally important to the survival of this type of caribou because of its dependence on large patches of lichen producing, old growth forest.

Numbers of Mountain Caribou have historically been limited by predators, but similar to Boreal Caribou, habitat alterations tend to favour other more abundant deer species. These other deer species help to support higher wolf and cougar populations which also prey on Mountain Caribou. Wolverines, Grizzly Bears and Black Bears are also predators of mountain caribou.

In the south, popular winter recreation activities including snowmobiling, snow-cat and heli-skiing can threaten Mountain Caribou. Human disturbance may displace Mountain Caribou from preferred habitats.

Northern Caribou

Current trends in Northern Caribou require more detailed study. Primary threats vary between populations, but include habitat alteration due to fire management, forest harvesting, coal mining, predators, disturbance from human activities (noise, people, vehicles), hunting and climate change.

PLANS FOR CARIBOU RECOVERY

Boreal Caribou

With about 1,300 animals in B.C., Boreal Caribou are declining and have been listed as “threatened” under the federal Species at Risk Act. The goal of the national recovery strategy is to seek “self-sustaining local populations throughout their distribution in Canada, to the extent possible”. B.C.’s management objective is focused on decreasing the decline and protecting sufficient habitat to recover existing populations within 50 years.

Mountain Caribou

With about 1,700 animals remaining worldwide, Mountain Caribou are declining and listed as “threatened” under the federal Species at Risk Act. The Province of B.C. has prepared a Mountain Caribou Recovery Implementation Plan. Governments, scientists, conservation groups, stakeholders and First Nations are undertaking actions aimed at recovering and sustaining a population of 2,500 animals.

Northern Caribou

There are about 18,000 Northern Caribou in B.C. Under the federal Species at Risk Act, southernmost populations have been combined with Mountain Caribou and are listed as “threatened”. Northernmost populations are listed as “special concern” and a proposed management plan has been prepared. The plan’s goal is to support cooperative management between responsible agencies and prevent populations of “special concern” from becoming threatened or endangered.



Wolves are significant predators of Woodland Caribou.

Image: © Parks Canada



Small populations of caribou are at risk of being lost. B.C., Parks Canada and the Calgary Zoo have agreed to work together on captive breeding and transplanting caribou into National Parks and other areas in B.C.

Image: Courtesy/ D Peel

To reduce the potential for impact from winter recreation, organized snowmobile groups educate their members about Mountain Caribou and work with government to manage snowmobile use where caribou occur.



Image: Courtesy Val Kynoch

CONSERVING FORESTS FOR CARIBOU

National Parks, B.C. provincial parks and protected areas across the province include habitat for caribou. In the central interior, Cariboo Mountains, Wells Gray, and Bowron provincial parks, together protect 760,000 hectares (1.9 million acres) for a variety of wildlife including caribou.

The province also uses protected reserves in combination with areas where industrial practices are modified to protect caribou habitat.

For example, in northern B.C., the provincial Muskwa-Kechika Management Area protects 6.4 million hectares (15.8 million acres) for wilderness and wildlife.

In the central and southern parts of B.C., 2.2 million hectares (5.4 million acres) have been reserved from forest harvesting and road building in high suitability winter habitat. These are just a few examples of habitat conserved for Woodland Caribou in the province of B.C.

RECOVERY DEPENDS ON ALL STAKEHOLDERS

Actions taken by other stakeholders in B.C. and beyond our borders are also important to caribou conservation.

To address potential winter recreation impacts, the heli-skiing and snow-cat skiing industries have developed best management practices for areas where Mountain Caribou occur. Practices include: avoidance of skiing in areas where caribou have been sighted and alteration of flight paths to avoid caribou locations. Approximately one million hectares (2.5 million acres) of Mountain Caribou habitat has been closed to snowmobile use.

With the help of hunters and First Nations, wildlife managers are working to reduce moose and deer numbers in some areas. These reductions should trigger a gradual decline in the

predators that also consume Mountain Caribou. Conservation organizations, stakeholders and First Nations are also working on cooperative recovery and management projects.

To sustain the most endangered populations of Mountain Caribou, small numbers of caribou have been taken from healthy populations and transplanted to increase the receiving population size and support recovery.

Government and the forest industry are helping to fund caribou research aimed at improving understanding of habitat use, and maintaining healthy caribou populations. In addition, some forest companies manage specific sites to maintain caribou mineral licks and travel corridors.

BOREAL FOREST AGREEMENT

In 2010, the Forest Products Association of Canada (FPAC) and leading environmental organizations announced the Canadian Boreal Forest Agreement which applies to 9.8 million hectares (24.2 million acres) of tenures held by FPAC members in B.C.

The FPAC forest companies have suspended harvesting and road construction as an interim measure on 1.4 million hectares (3.5 million acres) in B.C., to allow the two parties to the agreement time for intensive planning to protect caribou.

Sustainable forest management is a cooperative effort between many stakeholders in Canada. The Canadian Boreal Forest Agreement (CBFA) is an example of collaborative spirit between two non-government parties. The provincial government may choose to use any outcomes from the CBFA to inform their decision making.

About 50% of wood products exported from Canada come from British Columbia's sustainably-managed forests. This publication is part of the 'Forest Facts' series, published by Forestry Innovation Investment. Visit www.naturallywood.com for details.

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