

Purcell Mountain Caribou

Historically, caribou gave sustenance to whole cultures of native peoples and fed railway workers, voyageurs, fur traders, and the Klondikers in Canada's vast wilderness. Now, much of this range has been lost, logged or farmed, and there are only about 2,700 mountain caribou left in the world. The question is whether logging plans will leave habitat as well as movement corridors for these precious beasts.

*Written by Paula Rodriguez de la Vega,
East Kootenays Environmental Society Kimberley/Cranbrook Director*

Although mountain caribou are an ecotype of woodland caribou, they are unique in that they eat only tree lichens for most of the winter and are well adapted to very deep snow pack conditions. They are a key indicator for the health of old growth forests of the interior wet belt and are ecologically and symbolically as important to this zone as were buffalo to the prairies.

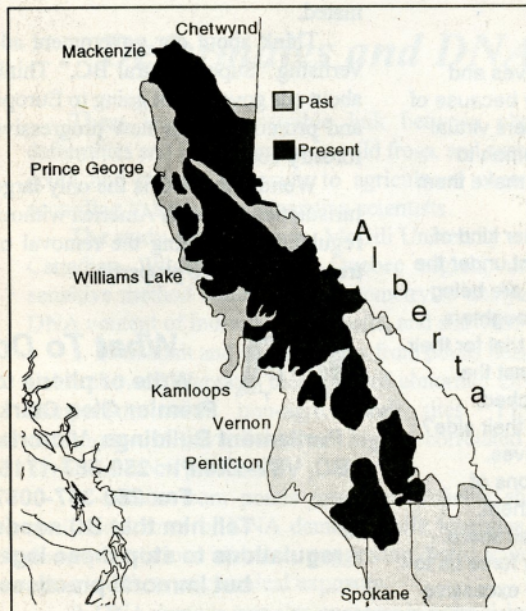
The East Kootenay Environmental Society (EKES) has been coordinating an inventory and research project on the mountain caribou herd of the south-

ern Purcell Mountains since 1992. The research gathers information so that forest managers can maintain habitat and ensure the survival of mountain caribou in the area. This is one of the most extensive research programs in North America on this species.

Before 1900, mountain caribou ranged throughout the Kootenays, into the Okanagan Highlands, north to Prince George, and south into Idaho, Montana, and Washington. Now, much of this range has been lost and there are only about 2,700 mountain caribou left in the world. Within the southern Purcell Mountains, between Invermere and the US border, there are less than a hundred remaining. Mountain caribou have evolved to depend on old growth forests. Because we are cutting down these forests at an unprecedented rate, the caribou are now listed as a threatened ecotype in British Columbia.

Many herds, including the one in the Purcell Mountains, have limited

Mountain caribou are as important to the East Kootenays and the wet interior forest zone as were buffalo to the prairies



MOUNTAIN CARIBOU DISTRIBUTION

reproductive success and a high natural mortality. Any increase in human activity near their habitat can have severe impacts on their populations. Habitat alteration through logging, hydro-reservoirs, human-induced fires, poaching, and poor winter recreational practices also threaten caribou.

In the southern Purcells, mountain caribou spend most of their time in open, higher elevation old growth forests of subalpine fir, Englemann spruce and whitebark pine. During some seasons they also use old growth stands of cedar and hemlock, or lodgepole pine. In summer, they graze on a wide variety of sedges, grasses, and flowers found in alpine meadows and open forests. In early winter, some move to low elevations where the snow is shallow. There, they dig through the snow for evergreen shrubs like false box and grouseberry. Deep into winter, caribou seek stands of trees where the snow is deep and the trees well spaced.

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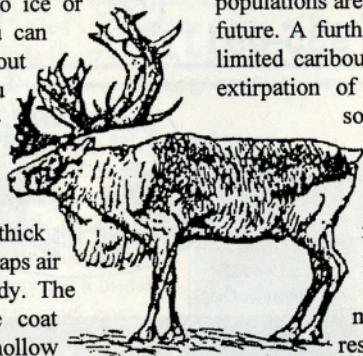
The extra lift of the settled snowcap allows caribou to reach the lichen found on the higher branches of the trees.

Years of evolution have made caribou the ultimate winter walkers. Their hooves and dewclaws are like snowshoes in that they spread out as they walk. By digging the sharp edges of their hooves into ice or hard snow, caribou can walk on ice without slipping! Caribou also sport a double-thick fur coat especially adapted for those frosty days. The inner layer is a thick crimped fur which traps air warmed by the body. The outer layer of the coat consists of long, hollow guard hairs filled with air which provides insulation. In spring, caribou shed their thick winter coat. The fur comes off in great clumps, and a new lightweight coat grows in.

Caribou in the Purcell Mountains travel over large areas. They inhabit portions of the Purcell Wilderness Conservancy and the new Kianuko Park. However, they spend most of their time outside of protected areas in the Invermere, Kootenay Lake, and Cranbrook Forest Districts. In Cranbrook, only 3% of the operable forest is old growth. Caribou Management Guidelines in the Kootenay region now require retention of the subalpine parkland and partial retention of mid-elevation forests in locations that are designated as caribou management areas. However, even with the guidelines, the amount of logging permitted threatens caribou as critical habitat is lost.

Mountain caribou have evolved a defense strategy of spreading out over a large area in habitats having few other prey species, so they seldom encountered predators. As logging is pushed deeper into untouched valleys and into higher elevations that formerly had almost continuous blankets of old

growth, ungulates such as moose, deer and elk follow. With them come the predators such as cougars which find caribou to be easy prey. Forestry-Caribou Management Guidelines must be strengthened, and unsustainable annual allowable cuts lowered, particularly in the mid and low elevation old growth forest habitat, if mountain caribou populations are to be sustained for the future. A further decrease in already limited caribou habitat could lead to extirpation of mountain caribou in southeastern British Columbia.

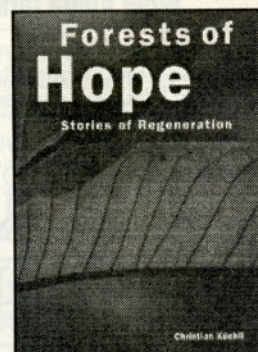


The East Kootenay Environmental Society is working in the community and with government ministries to promote resource extraction and other human activities that respect ecological values. Development decisions made today affect generations to come. By studying the movement patterns and habitat needs of the mountain caribou, a Multivariate Habitat Model has been developed. The model provides a valuable tool in planning for resource extraction while ensuring the survival of the mountain caribou population.

Historically, caribou gave sustenance to whole cultures of native peoples. Caribou meat fed workers during the construction of the CP Railway, the voyageurs, the fur traders, and the Klondikers as they opened up Canada's vast wilderness. They are of such national significance that we have even placed the caribou on the Canadian 25 cent piece. We cannot afford to lose these magnificent creatures. It is going to require a strong effort by concerned people to ensure the continued survival of mountain caribou.

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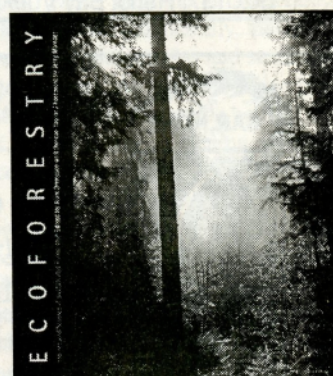
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