



WOODLAND CARIBOU

MOUNTAIN NATIONAL PARKS



2012 Spring Update: Southern Mountain Caribou in the Mountain National Parks

Spring is a time for new beginnings, a time for hope. This spring there are signs of hope for the Southern Mountain population of woodland caribou in Canada's national parks.

In November 2011 Parks Canada released a *Conservation Strategy for Southern Mountain Caribou in Canada's National Parks* to guide conservation actions in the mountain national parks. At the same time a new partnering arrangement was announced between Parks Canada, the province of British Columbia and the Calgary Zoo to pursue a caribou captive breeding program as one of a suite of actions in support of caribou conservation. The hope is that these actions will put Southern Mountain caribou populations on a path to recovery.

Jasper National Park

This spring brings fresh hope for Jasper's caribou herds with positive results from the annual spring calf survey. Parks Canada biologists keep a close eye on Jasper National Park's three southern herds (Maligne, Brazeau and Tonquin) using two key surveys annually to determine the overall state of the population; a fall population survey and a spring calf count.

The first signs of good news appeared in 2011 with the fall population survey. While counting Jasper's caribou numbers, half of all adult female caribou observed had calves. This is the highest ratio of females to calves recorded in the last 20 years! The hope then was for them to make it through the winter as typically only about 2 in 10 caribou calves will survive their first year.

The spring calf count tells us how many calves survive to become adults in the population. In March, Parks Canada biologists, using helicopter, telemetry and volunteer help, located collared female caribou in the three southern Jasper regions and counted the number of females and calves in those groups. As expected, a few calves were lost over the winter but overall survival was high with 4 more calves seen than in the spring of 2011. These additional calves gave us the second highest calf to female ratio (41 calves per 100 females) recorded in the last 8 spring counts.



How does this relate to the survival of a herd?

For a population to remain stable or to increase, the number of female calves that survive their first winter should be equal to or greater than the number of adult female deaths that year. Based on current survival rates in the park this year, Jasper's caribou populations have experienced a slight decline.

While a decline may not seem like a positive result, the survival rate is still higher than it has been in the past few years. We can only hope this upward trend continues and that Jasper's caribou are on a path to recovery.



A La Peche caribou, March 2012
Photo: M. Bradley



Jasper National Park (cont.)

This spring Parks Canada also collaborated with Alberta Sustainable Resources and Development wildlife biologists on a survey of the northern A La Peche herd. Survey results are not yet complete but preliminary results saw a ratio of 26 calves per 100 females. While this is not as high as the southern herds, it is still a good ratio. The telling results however will be how this compares to adult female survival rates.

Mount Revelstoke and Glacier National Parks

Signs of spring may be appearing in the valleys but higher than average snowpack in the Columbia Mountains means that subalpine areas are still firmly in the grip of winter. Mountain caribou use the deep snow to access their main food source, lichen, hanging high in the old growth trees of the subalpine. It also helps them avoid predators. The Mount Klotz area of Mount Revelstoke is important wintering habitat for mountain caribou and is closed to all recreational use in winter. The newly expanded Mount Klotz closure area encompasses all late winter caribou habitat in the vicinity to protect this threatened species. Compliance was excellent this year with no signs of skier activity, and caribou or at least tracks were seen on all three monitoring flights of the area. The high snowpack could see caribou staying in the area longer, taking advantage of the relative isolation. These caribou belong to the Columbia South herd, estimated at 7 caribou in 2011. The census is conducted every two years with the next count scheduled for 2013.

Columbia North caribou, March 2012
Photo: K. Furk

Habitat for the Duncan herd includes the southeast corner of Glacier National Park. Census of this herd was conducted in March 2012 in conjunction with the BC Ministry of Forests, Lands and Natural Resources. Only 2 adult caribou were found in the census area, down from 7 seen in 2010. While this is not promising news, there is always hope that not all caribou were observed during the survey.

This spring Parks Canada wildlife biologists out of Mount Revelstoke and Glacier National Parks also contributed to BC's monitoring of the Columbia North herd. While this herd does not use National Park lands, its range lies between that of the Columbia South herd and the Southern Jasper herds. Monitoring of this herd is important in contributing to the overall objective of recovery of the Southern Mountain population of woodland caribou. The Columbia North herd is subject to the same factors affecting the survival of caribou in the Columbia South herd, and monitoring of both helps better understand changes happening in the ecosystem. In the March 2012 recruitment survey of the herd, 12.9% of caribou seen were calves. For populations to remain stable or increase, we hope to see at least 15% calves. The Columbia North herd has been below that level of calf recruitment since the 1990's.



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Caribou antler, Banff National Park
Photo: J. Whittington

Banff National Park

While there are still many years of work ahead, hopes remain high that caribou will return to Banff National Park. The agreement to pursue a caribou captive breeding program brings this dream one step closer to reality. Dwindling Southern Mountain caribou populations make it difficult to find source animals for a reintroduction program but captive breeding could solve this dilemma. In the meantime, Parks Canada wildlife biologists continue to monitor important caribou habitat to ensure that conditions are favourable for reintroduction. Ground and aerial surveys of the area will be conducted this spring and summer to assess the habitat. Wolves in two of the packs known to use these areas have recently been collared to support on-going research. Understanding this predator's numbers and movements in traditional caribou range is important to gauge potential impacts on caribou reintroduction. Monitoring of local elk populations is also on-going as they can have a significant effect on wolf numbers.

Images captured on remote cameras provide valuable information for wildlife monitoring programs in the mountain national parks.

It also offers unique behind the scenes glimpses of wildlife, capturing rarely seen behaviour and species.

Photo: Remote camera image of wolves in the Red Deer Valley, Banff National Park. March 2012



In all the mountain national parks, on-going research by Parks Canada biologists, partner organizations, universities and governments is helping better understand the factors affecting caribou populations; what conditions would support the recovery, augmentation or reintroduction of caribou; and what actions to take for caribou conservation. Recent, on-going research includes DNA analysis, monitoring of wolf, elk, deer and moose populations, identification of important caribou habitat in and around the mountain parks, and work with fire and vegetation specialists.

For more information on caribou conservation in the mountain national parks:

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