

Barren-ground Caribou

Rangifer tarandus grantii

Sometimes called "the deer of the north", the caribou more than any other animal is a symbol of the North Country. No other large North American mammal carries out such extensive and spectacular migrations or occurs in such vast herds as does the caribou. This gregarious creature of the wide open spaces is equally at home on the tundra, taiga, or in the boreal forest. For centuries, entire cultures have relied on caribou as a source of food and clothing. An abundance of caribou meant feasts and good times while a shortage meant famine and real hardships. For while traditional behaviour often determined the migration routes and seasonal ranges used by caribou, the species was and still is no more predictable than the wind.

The caribou is a circumpolar animal. In Scandinavia and Russia, the species occurs as wild or semi-domesticated reindeer. It is in Canada and Alaska that the last great herds of free-ranging caribou are still present.

There are three types, or subspecies, of caribou in North America. The least plentiful is the Peary caribou - a small white caribou that spends the entire year on the treeless tundra of the Canadian high Arctic. In contrast, the Barren-ground Caribou is the most plentiful and the one forming the large herds that migrate each year between the tundra and the trees. The third subspecies is the Woodland, or Mountain Caribou. It does not form vast herds or make extensive migrations. Rather, Woodland Caribou spend most of the year in smaller groups that move between the boreal forest and open mountain habitats.

DISTRIBUTION

Barren-ground Caribou are herd animals and can be found in Yukon in the massive Porcupine Herd (169,000) or the smaller Forty Mile Herd (51,000), making the caribou the most abundant large mammal in Yukon. The porcupine herd migrates between its calving grounds on Yukon and Alaska's North Slope, and its wintering areas in the Richardson and Ogilvie Mountains.

CHARACTERISTICS

Caribou are the only deer of which both males and females have antlers. Antler shape varies greatly and it is said that no two are the same. The large antlers typical of adult bulls are shed in early winter while the cows keep theirs until calving time, the following June. This allows the pregnant females to claim and defend the best feeding areas in late winter when they need high quality food to nourish their rapidly growing foetuses.

There are several important adaptations that allow caribou to survive and even thrive during the long and cold Yukon winters. In fact, they are so highly adapted to life under winter conditions that they have been termed "chionophiles", or snow loving animals.

The compact body is covered by a warm, hollow-haired coat that protects the caribou from extreme temperatures. Even the muzzle, tail and feet are well-furred. The large feet of the caribou almost act as snowshoes and help the animals to "float" on soft snow. The characteristic clicking sound made by moving caribou comes from the tendons slipping over the bones in their feet. The broad, sharp-edged hooves easily break and clear the snow when caribou crater for food. Indeed, the name caribou comes from the Micmac Indian word "xalibu", meaning "the pawner", which describes the habit of digging through the snow for food.

Caribou have a keen sense of smell that they use for detecting danger as well as locating food under the snow cover. In winter, caribou are the only animals that can live almost exclusively on lichen. In summer, their diet is more varied and includes forbs, grasses, sedges, and willows. Mushrooms become a favourite with this hoofed gourmet when they are available in August.

In Yukon, caribou become smaller as you travel north. For example, Woodland Caribou from the Burwash herd in south-western Yukon average 120 kilograms (cows) and 180 kilograms (bulls) in the fall while similar weights of Porcupine caribou are only 90 and 130 kilograms respectively.

A YEAR WITH THE PORCUPINE CARIBOU

Winter

Most Porcupine caribou winter below the tree line, in the Richardson and Ogilvie Mountains. From November to March, they move slowly through their wintering range in the boreal forest. Through the darkest and coldest part of the year, the caribou continue to crater through the snow cover in search of lichens or winter-green vegetation.

After feeding among the trees, the caribou move out into the open to rest and ruminate, usually on frozen lakes, meadows or hill tops where visibility is good. Moving into open areas is a strategy caribou use against wolves. Since their only defense lies in running away, the caribou must see predators approach in time to escape. Once disturbed, caribou show their typical curiosity towards the approaching object by circling downwind in a characteristic trot with tails up, heads held high, and testing the wind. Usually they run off after catching the scent of a predator, rearing on their hind legs just before they disappear.

Spring and Calving

With pregnant cows leading the way, the northward migration begins sometime in April, towards the traditional calving grounds on the coastal plain and adjacent foothills of the Ivvavik National Park and the Arctic National Wildlife Refuge on the Alaskan side. Several hazards face the caribou during their spring migration, including fast-flowing rivers which must be crossed during break-up. However, the cows push on relentlessly and by the time they reach the calving grounds, tens of thousands of pregnant females are scattered across the coastal plain.

Most cows give birth to a single calf in early June. The newborn calves are able to stand and walk within hours of birth and, soon thereafter, can follow their mothers across the tundra. Their first taste of life is

not always sweet; almost half of all the calves die during their first year. Predation by wolves, Grizzly Bears, and Golden Eagles account for most of the deaths. The remainder are caused by pneumonia, drowning, or abandonment.

Summer

After calving, the bulls and other caribou catch up with the cows and calves on the coastal plain. This is also the time when mosquitoes and flies emerge and begin their summer-long harassment of other living things in Yukon.

To caribou, insects can mean madness. During severe harassment, the Porcupine herd forms large aggregations, sometimes 1 or 2 huge groups totalling 70,000-80,000 caribou that move across tundra in search of cool and windswept areas that may provide relief from the insects. No one can ever forget the sights or sounds of such a mass of moving animals: the grunting of cows answered by the bleating of their calves, the snorting and the sneezing, and of course, the clicking of countless hooves.

Throughout the summer, caribou are on the move, either from insect harassment, or in search of high-quality food to build up strength for the coming winter.

Fall

On their return to the boreal forest, the herd traditionally crosses the Porcupine River sometime in September. To the Vuntut Gwitchin people of Old Crow, this has always been an important time for caribou hunting. The animals are in prime condition with large amounts of fat, and hides free of warble fly holes. During a few short weeks, a winter's supply of caribou must be harvested and everyone helps out. Downriver from the village, archaeological diggings have shown evidence (a fleshing tool made from caribou antler) that this relationship between man and caribou has lasted for as long as 27,000 years.

As the fall progresses, physiological changes alter the appearance and behaviour of the mature bulls. Their necks swell to twice their normal size and they almost completely stop eating. As the big bulls spar with each other to establish dominance and earn the right to breed, the rut nears its peak. At time, the contests can be violent enough to injure, or even kill, individual bulls. Others head into winter in poor physical condition with most of their fat reserves depleted. However, their job is done and the needs of the species have been served as the embryos growing within the cows have been sired by the largest and most fit of the herd's bulls.

CARIBOU AND PEOPLE

For thousands of years, caribou have provided food and clothing for Yukon First Nations people. All parts of the caribou were traditionally used including the bones (utensils), sinews (thread), and fat (light and heat).

The methods of catching caribou were many but the most common way to get large numbers of animals was by building a caribou fence. Built of poles and brush, the fence could be 1.5 kilometres long, or

more and have numerous openings with snares set at each opening. Caribou were chased into the fence where hunters waited with bows and arrows or spears. Remains of old caribou fences can still be seen in Yukon today. A straight brush fence near Haines Junction was used to snare small bands of caribou coming off the ice at Pine Lake during winter. Broken down fences high above the Fortymile River can still be seen from the road between Dawson and Eagle, Alaska.

Times have changed as have the methods of hunting caribou. Today, caribou are easy prey to hunters with high-powered rifles on snow machines. . In the quest to develop Northern resources, road access has compromised the caribou's need for vast open spaces.

The story began with Fortymile Herd which should have been called "the Goldrush Herd" as it fed many goldseekers along Yukon River from Whitehorse all the way to Klondike, and beyond to Fairbanks. This was once the largest caribou herd in Alaska and Yukon, numbering several hundred thousand animals. It came to winter as far south as Whitehorse and Atlin, B.C. It also became one of the most exploited caribou herds in North America as it went through several sharp declines and slow recoveries during the last century. Its story is largely one of hunters and highways and its former range now includes the Alaska, Top of the World, Steese and Taylor Highways, and a network of mining roads.

Today, many small, isolated populations of woodland caribou are equally vulnerable to overhunting as new roads provide access into their winter range. On the bright side are new management programs that bring First Nations, non-First Nation hunters, and governments together in protecting the resource from overuse. Herds that have benefited from this approach include the Finlayson herd near Ross River and the Porcupine herd. The Porcupine Caribou Management Board has involved First Nations, government agencies, and user communities in Yukon, Northwest Territories, and Alaska in the joint management of that herd.

While caribou are well adapted to survive the rigors of a harsh environment, they need our cooperation to ensure populations continue to thrive in their natural habitats. Hopefully, the recent efforts in sharing the management responsibility for caribou will ensure the continued survival and wise use of this valuable resource.

DID YOU KNOW?

The caribou is the only North American deer species that has established year-round populations north of the tree line.

The earliest fossil evidence of caribou comes from Fort Selkirk, Yukon, and has been dated to around 1.6 million years old.

The breeding and calving periods of caribou are highly synchronized; 80-90% of all calves are born within a 10 day period in early June.

While single calves are the rule, a rare case of twin calves was seen among the Porcupine caribou in northern Yukon.

Mosquitoes and parasitic flies plague caribou each summer; up to 2,000 warble flies have been found on a single caribou.

VIEWING OPPORTUNITIES

One of the best places to view caribou in Yukon is the Dempster Highway during winter, when the traveller may catch a glimpse of caribou or see the tracks and feeding areas along the road side. Other good places are along the Robert Campbell Highway where parts of the Finlayson herd winter, and on the Nahanni Range Road where caribou from, you guessed it, the Nahanni herd may show up.

River travellers, if lucky, may see large number of Porcupine caribou crossing the Firth River in July or the Porcupine River in September. Paddlers on other Yukon rivers might see single or small groups of caribou as they cross the valley on route from one alpine area to another.

During mid-summer, small groups of woodland caribou can be seen in subalpine areas above tree line, where they seek relief from insect harassment. For example, hikers in the Burwash Uplands area of the Kluane Game Sanctuary have a chance of spotting members of the small Burwash herd (400) during that time.

IDENTIFICATION

Once you have seen your first caribou, it is difficult to mistake it for any other mammal. The caribou is the only species of deer that regularly uses the tundra. In Southern Yukon, Woodland Caribou may occur in the same area as Moose, Mule Deer, or even Elk. However, the short furred ears, the long nose and the thick fur usually distinguish caribou from other deer. The large curved, and partly palmated, antlers of the adult bulls are characteristic as is the fact that cows also carry antlers. If you also hear a clicking noise as the animals approach, you know you are on the right track!