



Muskox and Caribou

Muskox and caribou have lived together and adapted to changing conditions in the Arctic from ice-age times to the present. They were found on the Yukon and Alaskan North Slope until the middle of the 1800's when muskox disappeared, probably due to over-hunting by whalers. These two species began to share this region again after muskox were reintroduced to the Alaskan North Slope in 1969 and 1970. As muskox numbers increased, they expanded the area where they live by several hundred kilometers to the east, west and south. They set up breeding populations in some of these areas, including the Yukon North Slope. Muskox are now found in small numbers throughout much of the range of the Porcupine Caribou Herd.

Muskox and Caribou – Sharing a Home

Although muskox and barren ground caribou can be found living near each other, the two animals are different in many ways. Muskox are large, solid, slow-moving animals who generally remain in one area, making small movements between summer and winter foraging areas. Barren ground caribou are slender, fast-running animals, who make a long annual migration from winter grounds in lichen-rich forests to their calving grounds on the Arctic coast. Caribou can be found almost anywhere on the Arctic coast in summer, while muskox generally stay in one small area. In addition, the caribou are only on the coast for a short time, reducing the chance that they will ever be in the same place at the same time.

Muskox and caribou both eat willows and other plants in the summer. Willow is common and plentiful in the area so they don't have to compete to get



enough food. In winter, muskox do not eat the large quantities of lichens that caribou do. Muskox are able to survive on much poorer quality foods, especially in winter, and are able to remain in exposed northern areas, digging through snow for willow and Labrador tea. In winter, the caribou migrate to treed areas where lichens are abundant. These different survival strategies mean that the two species are not likely to compete with each other for resources or range.

The Bluenose caribou in the NWT have shared habitat with about 5000 muskox for many years, and both populations showed increases in the past few decades.

Biologists in Alaska have watched caribou pass right through muskox range on their way to calving grounds in the Arctic National Wildlife Refuge, year after year, without incident.

Today, the Porcupine herd remains at around 120,000 animals, and the total population of muskox on the Alaskan and Yukon North Slope is less than 700 animals.

Muskox and Caribou on Banks Island

In the past thirty years, muskox populations on Banks Island increased rapidly while the numbers of Peary caribou dropped dramatically. Some people have heard about the changes in numbers of caribou and muskox on Banks Island and worry that the muskox on the Yukon North Slope could affect the number of animals in the Porcupine caribou herd in the same way.

However, the situation on Banks Island is very different from the situation on the mainland, including the North Slope. On Banks Island, there are many things that could be causing the decrease in caribou numbers including increased predation, poor quality food and bad weather over a number of years. It could also be part of a normal cycle. Muskox are better able to survive unfavourable winter conditions than caribou. Conditions such as the formation of an ice layer on the snow in some years have made it difficult for the caribou to dig for their food. Biologists continue to study the situation. Surveys on Banks Island in the summer of 2001 found that the populations of both species are increasing.



Ongoing Studies

There are several ongoing studies taking place on the Yukon North Slope to monitor the behaviour and movements of muskox. These studies include regular population surveys and herd composition counts. Nine Yukon muskox have been fitted with satellite collars to learn more about where the muskox like to live at different times of the year and how much they move around. The Porcupine Caribou Herd is one of the most studied caribou herds in the world. Biologists will continue to work with the Inuvialuit to monitor both muskox and the Porcupine caribou on the Yukon North Slope.

Photos by Ken Madsen

For more information, visit the Wildlife Management Advisory Council (North Slope) web site on muskox of the Yukon and Alaska North Slope at www.taiga.net/wmac/species/muskox