

CONVERSATIONS WITH THE EARTH



Caribou People

Tracking the consequences of greenhouse gas in the Arctic

Melting permafrost, erratic temperatures, and forest fires—these effects of global climate change are believed to have contributed to the reduction of the Porcupine River caribou herd from a population of 178,000 in 1989 to what may be as few as 100,000 today. These changes directly affect the Gwich'in people, who have relied on the caribou for millennia.

Arctic



Photographer: Nicolas Villaume
Captions: Laird Townsend
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Arctic Village is part of the Gwich'in Nation, an Athabaskan territory stretching across interior Alaska and northwest Canada. According to recent estimates, 75% of the village's diet is composed of wild foods. "When I think back, it was like a land of Shangri-La," says resident Calvin Tritt. "We ate natural food. It's what keeps you warm. That's how we survive."



Calvin Tritt (Gwich'in) | Arctic village, Alaska, USA

The Gwich'in call themselves the People of the Caribou. For thousands of years, this animal has dominated their traditional diet of wild animals and plants. More than 100,000 caribou of the Porcupine Herd (the eighth-largest herd in North America) pass through Arctic Village territory every year, but they depend on an ecosystem based on frigid winters, and those winters are changing.



Caribou tracks on frozen lake, Alaska, USA



Lichen - a staple food for caribou, Alaska, USA

A winter staple of the caribou diet, lichen has suffered from the unusual dryness of recent summers, leaving it vulnerable to wildfires. Decreased lichen yields are just one of many variables working against the caribou. Some are easily visible (deeper and denser snow, a proliferation of obstructive willows, disproportionately swollen streams in the spring), while others are subtler. For example, caribou also depend on food left behind by muskrats, but as Arctic lakes disappear—at least 18 have vanished near Arctic Village alone—so does muskrat habitat, and with it a food supply critical to migrating herds.



Jimmy John (Gwich'in) | winter camp near Arctic village, Alaska, USA

Arctic Village community members, especially elder members, still hunt for caribou, trap muskrat, and fish local streams and ponds. For reasons that may be related to forest fires, the caribou have recently avoided their normal wintering grounds in Canada to winter near Arctic Village. This gives local hunters relatively high access to the caribou, although it may be a temporary condition.



Jimmy John (Gwich'in) | Arctic village, Alaska, USA

Charley Swaney's hunting companion, Jimmy John, echoes Charley's concern about climate stresses. Unless there is a reversal, "I think [the caribou are] going to die out. I think that's beginning," he said.



Gideon James (Gwich'in) | Arctic village, Alaska, USA

"This is the coldest region on Earth," says Gideon James, "and it's covered with permafrost. Over the last 40 to 50 years, it's been melting." According to residents and scientists, warmer temperatures have created an array of complex problems.



Charley Swaney | Arctic village, Alaska, USA

Charley Swaney and other Gwich'in hunters are concerned about new patterns in caribou migration and declining herd numbers. They constantly monitor the landscape and its animals and their movements. "We may not have much," Swaney said, "but what we have is out there."



Allen Tritt (Gwich'in) | Arctic village, Alaska, USA

"We need that cold weather," said Allen Tritt, noting that in the past, winter temperatures regularly dropped to -70° (F). "That's what the elders talked about. The elders said that if it doesn't get cold, in the future everything's gonna be changed."



Sarah James (Gwich'in) | Arctic village, Alaska, USA

"There is a solution. It's not the end of the world yet. One thing we have to do is gain back respect for the animals, for all nature. We pray and give thanks to everything that we use. But if it's going to work, it has to be both Western and traditional. We have to meet halfway—and we need to find balance."

I always talk about clean air, clean water, clean land, clean life. Without that, there won't be no life. And then without the sun, there won't be any life. We disrespect the fire in many ways... We burn gas, we burn oil—out of control—without respecting the spark in the fire. I'm not only talking about the sun, I'm talking about anything that makes fire, makes energy."