## **Quirks & Quarks**

with Bob McDonald

## Mining activities, not hunting, responsible for northern caribou declines

By Bob McDonald

A new report by Canadian researchers suggest that the dramatic declines of barren-ground caribou herds is due to open access mining in Northern Canada, not, as authorities have assumed, traditional hunting by Indigenous people in the North.

The caribou has been a staple of the north for millennia, providing food, clothing, and many other useful materials for Indigenous people across the vast Arctic territory. But in the last 30 years, herds that once numbered in the millions have declined by more than 70 per cent. The biggest loss has been in the Bathurst herd, north of Great Slave Lake, which once numbered nearly 500,000 animals, and is now down to 20,000 — a decline of more than 95 per cent. This huge loss has prompted drastic restrictions on Indigenous hunting in the region. But this new report provides strong evidence that Indigenous harvesting is not the reason for the decline.

It is easy to blame hunters for the decline of a species, but the authors of the report say that when the numbers are added up, traditional subsistence hunting has had a negligible effect on the caribou population. In fact they maintain that there's good evidence that Indigenous communities historically are very responsible in their harvesting — voluntarily decreasing their take in response to natural fluctuations in caribou numbers in order to preserve the health of the population. But the recent catastrophic drops in caribou population aren't natural. And the evidence suggests the real culprit is the disruption and degradation of habitat due to road construction and mining exploration and operations. This kind of development has expanded dramatically in the north — at exactly the same time that caribou populations have been collapsing. Despite this, the main response of governments has been to put restrictions on Indigenous hunting — while allowing resource development to accelerate.

The North is rich in resources — oil, gas, diamonds and minerals. The area is vast, and the population is sparse — all the people living in the Canadian Arctic could fit into two major league baseball stadiums. With so much wealth at stake, mining companies have been given easy access to the land, without proper consideration for the impact on the ecosystem, and on Indigenous people who depend on it. It has almost been an out of sight, out of mind attitude.

All this activity has disrupted caribou ranges. Caribou seem particularly sensitive to the kind of disturbance mining exploration causes. They shy away from roads and from the dust from those roads that covers the vegetation the animals forage on. They avoid noise from industry, and cleared land from mining and drilling operations. All this stresses the animals, compromising their feeding, their reproduction and calf-rearing, and ultimately causing their numbers to decline.

Pressure for more development and more habitat disturbing and degrading activity will continue to grow in the future. The North will become more accessible thanks to the loss of ice in the Arctic Ocean due to climate change. And of course climate change itself is a major human disturbance for northern ecosystems. All this seems like even more bad news for the caribou — and for the Indigenous people whose traditional lifestyle has depended on them.

In a letter submitted on February 27, 2018, to the Arctic Policy Framework Review, spearheaded by the Ministry of Crown-Indigenous Relations and Northern Affairs, six young Arctic scientists suggest a new way forward: They advocate incorporating more traditional knowledge into scientific research. That traditional knowledge goes back thousands of years and is a rich vein of information that could better inform conservation policy. For example, Indigenous people are aware of seasonal herd movements, and natural fluctuations in their population over time. This kind of knowledge could powerfully extend what scientists see with their often higher-tech, but historically limited, snapshots of arctic ecosystems.

The letter also recommends an Arctic University, similar to those operated in the north by the U.S. Denmark and Norway. It would provide educational and research opportunities for northern people and place Canada on the forefront of the scientific research that monitors the effects of a rapidly changing northern environment.

The top of the world is changing faster than almost any other part of the planet. Retreating sea ice is changing the temperature of the water, permafrost is melting, vegetation is affected, diseases are migrating north. Along with resource development, these changes are affecting both the animals and people who live there.

As shipping companies, tour operators and resource developers take advantage of open waters to penetrate the region, an ethical and respectful relationship is needed between Indigenous people and those from the south to ensure that Indigenous people are not blamed for the problems they too are suffering from, but instead become part of the solution to ensure a healthy northern environment.