

Making tracks on caribou conservation

Study done in ANC FMA determines animal's preferred habitat



Left photo: A boreal woodland caribou like those found in the ANC FMA. Right photo: An example of a tamarack and black spruce muskeg, the caribou's preferred habitat.

Provided

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Industry-caused habitat loss threatens boreal woodland caribou -- the animal on our quarters -- but new research explains how companies can help caribou by reconnecting the animals' preferred habitat.

Dr. Gilbert Proulx is the director of science at Alpha Wildlife Research and Management and the lead researcher of the Little Smoky caribou habitat study which was published in the Canadian Wildlife and Biology Management journal.

He said the Alberta Newsprint Company wanted to do more about the caribou population in their forestry management agreement area

(FMA), so they approached Proulx to do a study on the types of habitat caribou use in the late winter season of January and February.

"At the time, I was studying caribou populations in western Saskatchewan and we had developed a technique that was relatively inexpensive but allowed us to see what the species preferred for the winter period," Proulx said.

Proulx and a team of researchers conducted the study in the winter season of 2013 and 2014. The team was able to confirm the caribou population prefer mixed tamarack and black spruce muskegs as well as tree stands that are a mix of lodgepole pine, tamarack and black spruce.

There are two major advantages to the caribou's preferred habitat: it provides some cover while still being able to let caribou see around them and keep an eye out for potential predators, and it's able to provide caribou with their main food source of boreal and terrestrial lichens.

Proulx said smaller trees like black spruce and tamarack "are just loaded with that food" for caribou.

He added that these habitats aren't very hospitable and don't have much value from an economic point of view. "They're hard to work in and they not good for forestry. They are used by oil and gas [companies] when they use their seismic lines."

Predators like wolves and

ungulates like moose and deer that may compete with caribou for food tend not to go through muskegs.

"It's a hard place to survive, but caribou have a large foot so they can move through the habitat very easily in the snow and they find everything they require, so they really are protecting themselves by staying in those habitats," said Proulx.

The team determined the importance of the different types of habitat to the caribou by essentially studying caribou tracks and where they went.

"We were going in the field, we did a lot of snowshoeing and we went to all types of habitats and recorded the tracks of the caribou," Proulx said. "Once the tracks were

observed, we were locating them exactly with GPS and transferring them onto maps where we were studying the vegetation accordingly."

The compiled habitat data showed that the most valuable habitat for the caribou was highly fragmented and scattered across the FMA area.

Now that the research has been published, Proulx said the next step is to initiate some kind habitat conservation plan.

"We know the habitat has been damaged in many places, and the damage is disconnected so we can reconnect the habitat," he said. "If muskegs are protected, caribou will take care of themselves."

Proulx also said it's pos-

sible for conservation and industry to work something out for the best of the caribou population.

"I think with the study that we've just published, we can come up with a win-win solution where we can conserve the caribou habitat and work with industry and tell them where they can be active, where they have to either delay their activity or transfer their activity somewhere else."

He added that he helped do something similar in Saskatchewan and it worked.