ALBERTA

For metadata associated with mapping products found in the following reports, please refer to Annex 2: Metadata Information for Maps in ATK Summary Reports for Manitoba, Saskatchewan, Alberta.

Executive Summary Report on Boreal Caribou Workshop with Environment Canada

Prepared by: Deana Alexis Alexis Nakota Sioux Nation Traditional Land Use Study Department P.O. Box 7 Glenevis, AB TOE 0X0

Prepared for: Canadian Wildlife Service Environment Canada Boreal Caribou National Recovery Strategy

December 3, 2010

Workshop Date: June 30th, 2010 Time: 10AM-2PM Location: Community Hall, Alexis Nakota Sioux Nation Reserve

Alexis Nakota Sioux Nation Traditional Land Use Study Department, along with Environment Canada conducted a workshop on boreal caribou.

This report summarizes the findings of the workshop, from the elders' perspective.

There were 20 participants of the Alexis Nations elders along with the TUS staff. Elders voiced that the boreal caribou has no history of it being used as a source of food for Alexis Nakota Sioux Nation people, history has never proven that these species have roamed in the vicinity of Whitecourt. Historically maybe they would have been seen within the Cadomin area but perhaps the development of oil/gas and and forestry development has had and will always have a great impact on the land and the species living off the land.

Boreal caribou habitat, is it affected by forest fires and do the caribou go back to the same area as where the fire originally happened? The answer was that they are not too sure of that specific concern, they noted that caribou are smart animals that migrate distance away to avoid disturbance and development.

Predation in the area that might threaten the caribou in general are mostly grizzly bears and cougar, whose populations have increased rapidly especially in the Ruby Falls area. The population of white-tailed deer and moose have increased more now as than in the past when they were hardly seen within the reserve boundaries. Deer hunting is occasionally done in the community whereas in the past it was a main food source for the Alexis people- this is due to the chronic wasting disease that has threatened this particular species.

As per caribou parasites and diseases within the region, again it is not known what effect it has on caribou, if any. For other species that are in the specific region it's been cited that animals are less healthy and that they portray signs of illness, by their appearance (skinnier, smaller than usual, coat colouring) and along with the tumours and cysts that are discovered upon skinning and cutting the meat. These species are identified as deer and moose in general and within the vicinity of Swan Hills, Virginia Hills and Fort Assiniboine. This comparison was made in reference to the livelihood of First Nations from the 1950-1960s to present, which was a period of change within our natural environment because it was a long span of disturbance to the land. Again elders commented that maybe historically in past decades there was caribou in the are that other tribes may have used for livelihood but that can't be determined at this point for all our older elders have passed on (this is in the region of Alexis Nakota Sioux Nation Reserve/Whitecourt).

Alexis Nakota Sioux Nation voiced that the hunting outfitters of society today are so advanced in their technology that they create problems for wildlife, including noisy all

terrain vehicles they use and snowmobiles. Also, hunting purposes are for leisure rather than for livelihood. Animal carcasses/bodies are seen left in the bush or on the side of the road because the hunters (non-First Nation) don't take all the meat, etc., and are seen hunting within the First Nations Traditional territory without being reprimanded, whereas First Nations harvesting and rights are restricted by limitations that are put on them by ASRD.

Weather can pose a concern to the watershed for caribou and other species. Climate change could impact the animals' habitat, which again can cause decreases in numbers in a certain region. The animals tend to move up further into the wild, further west where there is less of a threat to them.

The population of caribou could possibly be increased by its migration if left undisturbed.

Chemicals can be a risk factor to animal populations. Waste treatment facilities (i.e. Swan Hills treatment plant), industry activities, noise from all terrain vehicles and snowmobiles, constant movement of heavy equipment and operation of big trucks will always be a concern.

Limitations on noise development and finding a wildlife sanctuary for the animals could be one of the ways to address these issues. Community has concerns about chronic wasting disease in the local deer populations and the people are afraid to eat them because they can create cysts within the human body as well. There are concerns for all animals as a whole because you never know what they have been exposed to and where they have been roaming around.

Boreal Woodland Caribou Elder's Workshop- Aseniwuche Winewak Nation

Date: August 10, 2010.

Background

Environment Canada representatives attended an elders' council meeting on June 3, 2010 to discuss Environment Canada's process for developing a national recovery strategy for boreal woodland caribou. The elders shared concerns over caribou and requested that Environment Canada return for a knowledge/information sharing workshop with the group. Environment Canada hosted a boreal caribou workshop for the elders on August 10, 2010. At the workshop, Environment Canada presented boreal caribou information and asked a series of questions to generate discussion with the elders. Environment Canada also brought in maps to record where elders have seen boreal caribou.

Workshop Summary

The main concern raised during the workshop was a sense of losing the natural environment in its intact state. Elders discussed many changes they have seen on the land including landscape changes related to industrial development and changes in wildlife populations.

Elders indicated that the main threats for caribou include: 1) industrial development (oil & gas development and logging), and 2) predation by wolves and grizzly bears. The elders agreed that Environment Canada should work towards the conservation of caribou herds and made recommendations how this could be achieved. Their suggestions included continued wolf-control efforts, reduction of industrial activity, and repopulation of caribou herds by transplanting animals to the local area. They also would like to see large areas protected for caribou.

Population Trends

There used to be a lot of caribou in the area in the past but now the caribou seem to have disappeared. There is a consensus that industry is forcing out the caribou. The elders used to see caribou and caribou sign (such as tracks and bones), but they hardly see those anymore (not even bones). The elders believe that the caribou have migrated away and that they are not just dying. They believe this because they do not see any bones on the land (from carcasses). Elders are not sure where there caribou have migrated to. They suggested that they might have moved to the mountains (west) or further north.

Elders used to see tracks out by mile 58 (SE of Grande Cache), but last year they did not see any. In the past (long time ago) they used to see large groups of 40-50 caribou, especially around the lakes. Elders used to see (more recently) 3-4 animals per group but now are beginning to see larger groups, sometimes of 6-10 animals. One elder has recently seen a group of 13 caribou. They attributed the larger numbers of caribou to the wolf-control program that has been ongoing in the areas for the past 5-6 years.

Elders also commented that the caribou seem younger now since the wolf cull. They also said that calving seems to have changed- they see young animals later in the season.

Elders said that both boreal and southern mountain caribou (Little Smoky and A la Peche) migrate a lot in the area, although elders seem to be reluctant to distinguish between the two types.

Habitat Use

Caribou eat lichen and moss and need old forest. Elders mentioned that there are calving areas near the BC border (on lower mountain peaks).

<u>Threats</u>

The most important local threats identified by the elders were industrial development (oil and gas and forestry) and predation by wolves and grizzly bears.

Habitat Change

The biggest changes have been related to industrial activity. There is a consensus with the elders that industry is forcing caribou out of the area. The elders used to see caribou and caribou sign (such as tracks and bones), but they hardly see those anymore (not even bones). The elders were concerned that there used to be lots of everything in the area, but now it seems that everything is declining, not just the caribou.

The community used to make grass fires in the region but had to stop that practice when the town of Grande Cache was established. The fire suppression has changed the landscape because there used to be more open areas. They also commented that there is lots of [timber] harvesting and that the willows grow fast making it very bushy now.

The arrival of mountain pine beetle and subsequent burning of forests also causes disturbance for caribou. The elders believe that it takes a long time for caribou to return to burned areas. There was a fire in the Little Smoky area about 100 years ago, and the caribou have since returned to the area. It may take 50 years or more for caribou to come back.

Two or three years ago some of the elders were taken on a flight over the Wilmore area and noticed a lot of burned areas. There were no animals in the burnt areas that day. Grass was growing in the burnt areas, and animals often do well in burned areas that are re-growing.

Industry and Development

There is a consensus that industry is forcing caribou out of the area. The elders believe that there is a loss of food source for caribou due to industry and development and that habitat loss and noise driving them away.

Vehicle accidents were mentioned as a concern, although elders were not sure how many caribou get hit by cars. They were mostly concerned over some of the main industry access roads (Ghost Main, Smoky Main) and Highway 40. They have seen road-killed caribou on the Smoky main line and there have also been vehicle collisions between Muskeg and huckleberry tower. They commented that salt on the highways attracts caribou.

Elders suggest that the caribou must have migrated out of the area to avoid noise and also areas where trees have been taken out (i.e. logging, seismic). Elders have not seen caribou in cut blocks, the caribou don't hang out there. In the elders' opinion caribou tend to be scared away by light and noise, however, caribou tracks have been seen around plants (oil & gas), well pads. They added that the moose especially like these areas as they seem to be attracted to the wastewater. One elder mentioned seeing a caribou while on a skidoo, and the caribou did not run very far (was not very scared).

The elders were concerned about the herbicides that are being sprayed in cut blocks. The herbicides kill all plants so they must have an affect on caribou too.

One elder was concerned that their trapline was no longer accessible- they cannot access it because they require a radio. There is lots of traffic in this area.

Predators and Other Prey Species

Elders agreed that wolf predation is an issue for caribou. They were very vocal about grizzly bears being a source of mortality in the area. The elders said that there has been a large increase in their population over the last 10 years. People even see grizzlies in the Grande Cache town site. It was also suggested that the increasing cougar population is also a problem and source of mortality for caribou. There are wolverines in the area too, but not very many of them.

Elk and white-tailed deer arrived in the area during the 1960s (moose and mule deer were always present). They hardly used see any of them (white-tailed deer and elk) before and some elders suggested that this might have pushed caribou out of the area. There used to be greater numbers of mule deer but their numbers went down when the elk and whitetailed deer arrived. More recently, people are starting to see more mule deer. Elders think that the mule deer was likely more affected by the arrival of White-tailed deer whereas caribou probably was not affected as much. Recently there has been a decline in elk populations. The elders asked why people are allowed to have elk farms and how people can get permission to have an elk farm. According to the elders, there are also fewer moose in the area. There used to be a lot of white-tailed deer but they also seem to be disappearing (the elders believe they have left the area). There was a harsh winter a few years ago, but the elders do not think this is what killed them off. They do not see bones on the land or any other signs of die off. The elders also said that elk and white-

tailed deer stink so the moose and mule deer probably moved away because they don't like it (the smell). The elders also said that there are fewer porcupines in the area.

One elder mentioned that there is more elk in the Little Smoky area, and that this might be pushing caribou out of the area. He said that there are fewer animals in general (in the last 6 years) and suggested that they might be moving into the Wilmore Wilderness Area where there is less development.

Caribou parasites and disease

When there are lots of flies it makes the caribou run a lot. The elders have not killed a caribou in a long time (they mostly eat moose and mule deer) so do not have any information about changes in body fat, body condition, or parasites. In 1958 and elders' father killed a caribou and it had lots of fat on it, but they don't know about the present.

There are more ticks, especially north of the area on the other side of cut bank (between Grande Cache and Grande Prairie). This affects animals because it kills off a lot of them. There seems to be less fat on animals than there used to be. People always saw cysts on the meat (which was natural) but now the cysts appear to be a lot larger and they don't think that is natural. The moose used to be really fat, now they are skinny. The meat tastes different. When animals are sick their meat is a different colour- more orange/yellow to it. There are more animals like this now than there were in the past. People see it more often when hunting. The elders have also seen big black warts on moose. They're mostly seen on moose that are in areas near wells and plants. They believe these two elements are related.

Over-harvesting

There is no harvesting of caribou in the area. Aseniwuche Winewak Nation is not part of a treaty and their land claim has not yet been settled- community members are non-status. The elders are not aware of overharvesting or poaching issues in the area. The community prefers moose and mule deer over elk and white-tailed deer.

Climate change and Weather

The winters used to be very cold and had more snow. It seems to be warmer year-round now so things are growing faster and it is making it very dry. The muskegs are drying up. One elder feels that [timber] harvesting is affecting the muskegs. The lakes and rivers had a lot more water before and now the water quality is down too. There is a lot of timber harvesting- the willows grow fast making it very bushy

Wolves sometimes follow tracks made by caribou in the snow, so perhaps more snow is not necessarily good for caribou. Predator can hunt more easily in the deep snow because the caribou make trails for them.

Caribou Recovery/Conservation

'The elders agreed with the population and distribution goals presented at the workshop (keep all caribou herds). They would like to see caribou in the area in the future. They believe that predator control and the reduction of industrial activity will be important in trying to recover the Little Smoky herd.

The elders would like to see the entire (Little Smoky) range protect, and made reference to preserving large trees and old growth forest. They stressed that as much area as possible should be protected.

They talked about the ongoing wolf cull that has worked in the area. They now see 6-10 caribou in groups as opposed to 2-3 (in last 5-6 years). The elders feel that if the caribou like a certain area, that area should be saved for the caribou. They also suggested that caribou could be brought in from other areas to try to build up the population. This would help the population be self-sustaining again.

Mapping Exercise

See attached maps prepared by Environment Canada on behalf of Aseniwuche Winewak Nation.

AWN Elders Workshop on Woodland Caribou- Areas used by caribou

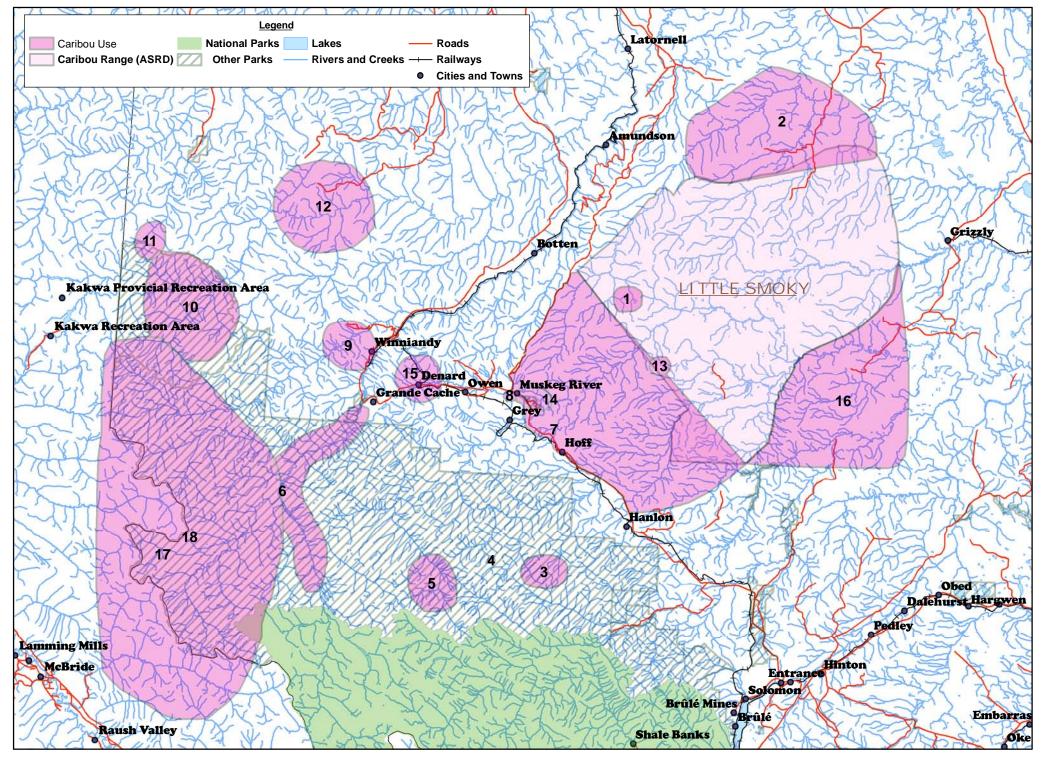


 Table 1: Descriptive information associated with polygons representing areas used by caribou

| LABEL | DETAILS |
|-------|---|
| 1 | Caribou seen in summer |
| 2 | Caribou seen in winter |
| 3 | Caribou seen in fall and winter |
| 4 | Caribou seen in fall and winter |
| 5 | |
| 6 | Caribou seen in summer |
| 7 | Caribou seen in winter |
| 8 | 5 caribou were seen in June 2010 |
| 9 | Caribou seen in fall and winter |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | Elders used to see lots of caribou on the lakes, fewer are seen now |
| 15 | Caribou seen in summer, fall and winter. Travel route across the highway used in summer |
| 16 | |
| 17 | Migration Area |
| 18 | Low mountain peaks are used for calving in spring/early summer |

AWN Elders Workshop on Woodland Caribou- Areas Previously used by caribou

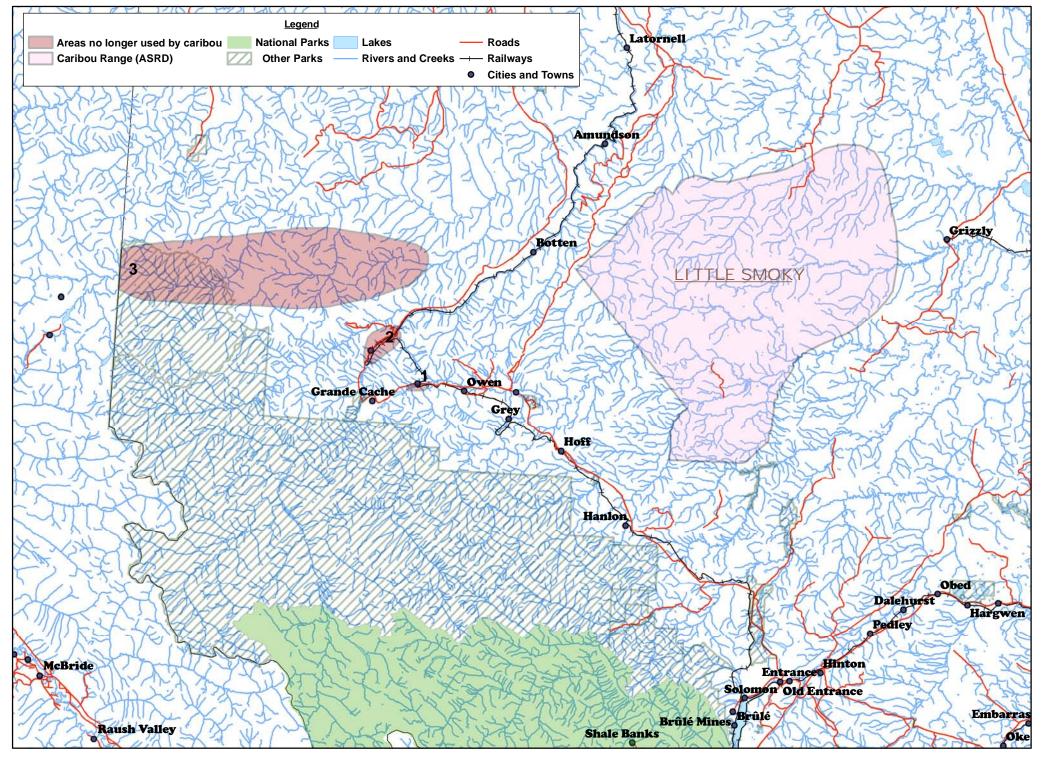
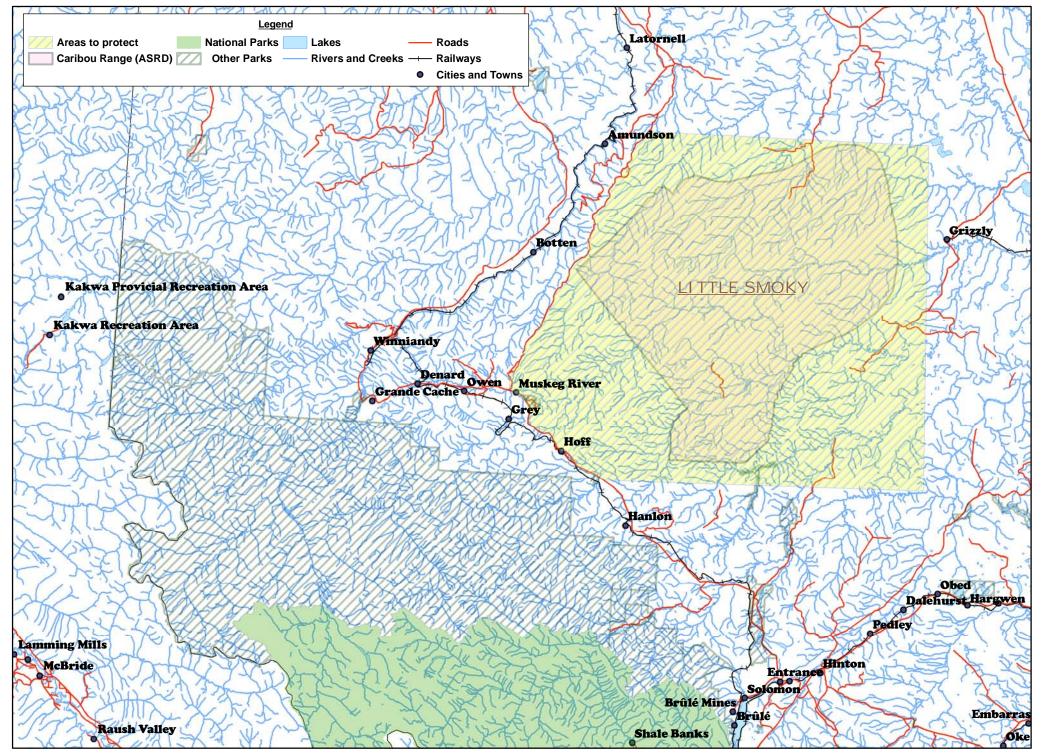


Table 1: Descriptive information associated with polygons representing areas previously used by caribou

| LABEL | DETAILS |
|-------|--|
| 1 | Caribou trail through Suza creek (used in summer) is no longer there |
| 2 | Area was used in winter for travel. The meadown used to have 1000's of caribou in the large meadow |
| 3 | |

AWN Elders Workshop on Woodland Caribou- Areas Important to Protect for Caribou



Athabasca Chipewyan First Nation Acknowledgement

Environment Canada would like to acknowledge Athabasca Chipewyan First Nation for the Aboriginal traditional knowledge they shared to support the development of the national recovery strategy for Woodland caribou, boreal population (boreal caribou). The knowledge shared in their report was used to inform the recovery strategy for boreal caribou but has not been presented in this public compilation report.

BEAVER FIRST NATION: ELDERS WORKSHOP FOR ENVIRONMENT CANADA'S NATIONAL BOREAL CARIBOU RECOVERY STRATEGY AND RECOVERY PLANNING PROCESS

Authored by

Randy Hellwig, Consultation Manager

Boyer River, AB

Prepared for

Canadian Wildlife Service, Environment Canada

National Boreal Caribou Recovery Stratgey

November 17th, 2010

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Introduction

The Beaver First Nation in conjunction with Environment Canada held an Elder's Workshop on November 17, 2010. This is a summary of the workshop, which was attended by 6 elders from the community. The majority of elders had hunting and trapping backgrounds.

The meeting started with Environment Canada representative Christine Robichaud giving some explanations of where the departments knows of different caribou herds in Alberta and an overview of what type of information that they are hoping to gather from the elders. This summary report includes response received to the questions posed by Environment Canada.

<u>Habitat Use</u>

What types of plants and features of land do caribou use?

One elder said that some of the caribou in the Bischu lake area are almost as big as elk.

One trapper said that he used to see about 50 caribou come down Caribou mountains along the seismic cutlines. He said that it was in spring, around April. He also noticed that they had "bull nose", probably fly larva/eggs laid inside the nose, he noticed that within a couple of weeks it went away and it didn't seem to affect the caribou any.

Caribou need areas of lots of moss and muskeg, they move over large areas.

Caribou feed on moss but when burnt there is nothing for them to feed on and they have to leave the area.

Fire and logging change habitat, caribou need shelter and food so if logging destroys these needs, the caribou have to move to another area.

Caribou prefer to eat lichens and live in areas where it exists. They can also be found on areas of hills where there is no snow.

Caribou spend their time where there is moss.

Do they use different plants and landscape features at different times of the year?

Caribou feed on moss but when burnt there is nothing for them to feed on and they have to leave the area.

Elder said that in Feb/Mar there are lots of moose, they come to eat young Saskatoon bushes but then they leave.

One elder's trapline has a lot of logging taking place on it (near Meander River). There is also oil/gas development. And there has been a lot of seismic exploration too. The elder sees caribou on his trapline

in the spring, around April and May. The caribou do a lot of travelling. The caribou have some insect/parasites in their nose in the spring, but they go away later in the spring. These bugs cause the caribou to travel lots because it drives them crazy. He has seen herds of 50 caribou acting like this in the spring.

One elder said that some of the caribou in the Bischu lake area are almost as big as elk.

Population Trends

Have you noticed a change in number of boreal caribou in your area over time?

You don't see caribou in areas that have been logged. Lately it's a lot rarer to see caribou, ever since all the logging has taken place.

The wolves know where the caribou and moose are. They go where they go and they focus their diet on the bigger animals, ungulates. They don't bother with the small and fast animals like rabbits. I've been on my trapline since I was 10 years old with my dad, going on 70 years.

There is hardly any moose around here anymore. A hunter can't even call in moose because as soon as they make a moose call they are surrounded by wolves. The wolves harass the hunters so they can't stay in their cabins.

Fire and logging change habitat, caribou need shelter and food so if logging destroys these needs, the caribou have to move to another area.

One trapper said that he used to see about 50 caribou come down Caribou mountains along the seismic cutlines. He said that it was in spring, around April. He also noticed that they had "bull nose", probably fly larva/eggs laid inside the nose, he noticed that within a couple of weeks it went away and it didn't seem to affect the caribou any.

<u>Threats</u> (e.g. Habitat change, Predation, Disease, Overharvesting, Vehicle collisions, Noise & Light disturbance, Climate change.)

Habitat Change

What changes have you observed on the land in your lifetime that may have changed the way caribou use the land?

Fire and logging change habitat, caribou need shelter and food so if logging destroys these needs, the caribou have to move to another area.

One trapper said that he used to see about 50 caribou come down Caribou mountains along the seismic cutlines. He said that it was in spring, around April. He also noticed that they had "bull nose", probably

fly larva/eggs laid inside the nose, he noticed that within a couple of weeks it went away and it didn't seem to affect the caribou any.

Elders agree that logging and fire are the biggest threats to caribou.

You don't see caribou in areas that have been logged. Lately it's a lot rarer to see caribou, ever since all the logging has taken place.

The caribou hills seem to be an important area for the caribou. Elders say that if there are remote forest fires in the area that the Government just lets them burn and only if they come close to human population then they fight the fires.

Industry and Development

Have you observed boreal caribou using or avoiding areas that have been altered by industrial activity or development?

Fire and logging change habitat, caribou need shelter and food so if logging destroys these needs, the caribou have to move to another area.

Fire and logging cut block affect even birds ie. Prarrie chickens, ducks have decreased in numbers.

You don't see caribou in areas that have been logged. Lately it's a lot rarer to see caribou, ever since all the logging has taken place.

Elders thought that any kind of oil/gas exploration or logging should not be allowed in the Caribou Hills.

Predation

Are there more predators (such as wolves, bears, or lynx) in areas where there are boreal caribou than there were in the past?

One trapper said that he has seen some big wolf packs and that overall there are more wolves along his trapline, he has 70 years experience trapping in the area. He says that wolves follow the game, but couldn't be sure what game the wolves are now following.

One elder said south of High Level there are lots of wolves, says he saw that wolves killed a moose and only are half and then killed another moose close by and only are a little bit of that one.

Elders agreed that there are hardly any moose around either anymore. They say that a hunter can't hardly 'call' a moose anymore because they would get surrounded by wolves. Wolves will even come around hunting cabins and surround and watch the hunters.

Elders agree that a wolf hunts by chasing its prey and constantly biting the prey so that the wounds slow it down and when the prey finally has to stop, the wolves then jump on it and kill. One elder saw 2 wolves kill a full grown bull moose in this manner.

Elders have noticed some deer in the area, whitetail and mule deer, but not as many as years past.

Everything goes in cycles, one year there are lots of wolves between Meander and Zama, but then the next year there is nothing.

Elders have noticed cougars in the area, there never were any before. Elders say that Fish & Wildlife brought the cougars to the area to control deer population, that was quite a few years ago (20 maybe).

Trophy hunters are just as bad as cougars. Many elders have noticed deer killed and just the head missing, meat and hide left to rot.

Elders agree that people need to respect hunting traditions to use all parts of the animal.

Have you seen changes in the abundance of prey species, such as beaver, deer, elk, bison, moose, in areas where there are boreal caribou?

All the elders agreed that for Beaver people, the moose and ducks were main staples, but there are not so many of either of those now.

Elders have noticed some deer in the area, whitetail and mule deer, but not as many as years past.

Fire and logging cut block affect even birds ie. Prarrie chickens, ducks have decreased in numbers.

And there are a lot less ducks around here, hardly any this year. Lots of geese though.

30 years ago there was hardly any deer, and now all of sudden there are lots of deer.

Around Manning they would complain about the elk eating all their hay.

Elders say there are elk in the area, some say that farmers in the Manning area complain about the elk eating their hay. This is bad because once the elk sent gets on the hay, the cattle will not eat the hay.

Caribou Parasites and Disease

Have you seen a change in caribou health in your region? (i.e. body condition, size, behavior, parasites, or increased mortality)

Chronic wasting disease, Sustainable Resource Development is putting effort into trying to slow/stop the spread.

Elders have noticed the "bull nose" where flys lay there eggs inside the caribou's nose.

Elders notice that cow and calf moose get ticks the worst, the ticks can even kill the moose. In spring the moose get them so bad that they go into the water as soon as they can to kill the ticks on them.

Caribou get ticks too, they make holes in the hide.

Caribou must be fairly healthy because they seem fat all the time.

One elder suggested that just like buffalo, when hunters are given tags they are also given a diagram of where to take blood samples from the carcass and submit it to SRD, that caribou hunters should also do that to test for diseases.

No elders noticed changes in the taste or color of game meat. The ticks come out every spring and the cow moose and calf get them the worst. Caribou and moose are getting ticks that eat right through the hides.

Over-Harvesting

Are boreal caribou being over-harvested in your area?

Resident hunting of caribou has been closed since 1980.

Elders agree that there are hardly any moose anymore so illegal harvesting has to be an issue.

Elders agree that people need to respect hunting traditions to use all parts of the animal.

Noise and Light Disturbance

Have you observed noise or light disturbance from aircraft, skidoos, or industry affecting boreal caribou in your area?

Most of the elders didn't think that skidoos bother caribou, they initially run away but they slowly come back to look at what was going on.

Climate Change and Weather

Have you observed any changes related to climate change such as changes in snow condition, temperature, or precipitation in your area?

All elders agree that weather has really changed in their lifetime.

The weather patterns have changed in the last 10 years or so. Even bears used to be hibernating by mid-October, we saw one last week (i.e. mid-November).

Traditional Practices

Are there stories, rules or traditional practices that would help us protect and conserve caribou?

There are trophy hunters that just cut the head off of deer. And moose hunters are also letting the hides and heads go to waste. This is not our tradition.

Trophy hunters are just as bad as cougars. Many elders have noticed deer killed and just the head missing, meat and hide left to rot.

Areas Important to Protect

The caribou hills seem to be an important area for the caribou (Refer to map produced by Environment Canada on behalf of Beaver First Nation included at the end of this report)

. Elders say that if there are remote forest fires in the area that the Government just lets them burn and only if they come close to human population then they fight the fires.

One man suggested that no exploration take place in the Caribou Hills.

Importance of Caribou Conservation

Elders agree that we should leave the caribou be, they have been here a long, long time.

Elders agreed that we must think about the future because if anything more happens to the moose then the people will need the caribou.

Caribou should be protected somehow, because every animal in the area is connected to each other somehow and if the caribou disappear from the area then other wildlife will be affected too.

Elders suggested that the band should study the caribou, nobody knows about them. This meeting with Environment Canada is the first time any of them could remember anyone coming to talk with the people about any animal.

Other Comments and Concerns

Is there anything else that you would like to share with us regarding caribou that would help us conserve and protect this species?

One elder suggested would a study of how wolves and caribou help with gathering information

One elder said that we need to learn from our mistakes in trying to save an animal species. i.e. they decided to kill off some wild horses because they were getting too many but when they did, they found that the elk population suffered because the horse pawing the ground to feed also helped the elk to feed, now the wild horses are protected from hunting again.

Caribou need areas of lots of moss and muskeg, they move over large areas.

Everything goes in cycles, one year there are lots of wolves between Meander and Zama, but then the next year there is nothing.

Caribou should be protected somehow, because every animal in the area is connected to each other somehow and if the caribou disappear from the area then other wildlife will be affected too.

In mid July caribou are the first to start mating, then buffalo, then moose, then deer and then elk which ends about the end of Nov

One elder suggested that just like buffalo, when hunters are given tags they are also given a diagram of where to take blood samples from the carcass and submit it to SRD, that caribou hunters should also do that to test for diseases.

Elders suggested that the band should study the caribou, nobody knows about them. This meeting with Environment Canada is the first time any of them could remember anyone coming to talk with the people about any animal.

Elders thought that any kind of oil/gas exploration or logging should not be allowed in the Caribou Hills.

The river at Whitecourt is clear but closer to Edmonton it changes color, looks polluted.

Fort Chipewan there are more people getting cancer, they say that where the river goes into the lake there is a grey strip of water from the river into the lake and it is noticeable because either side is clear water.

No elders noticed changes in the taste or color of game meat. The ticks come out every spring and the cow moose and calf get them the worst. Caribou and moose are getting ticks that eat right through the hides.

Lake Athabasca has an issue of pollution from the tar sands. You can see gray water on the lake because of this.

In Whitecourt, the Athabasca River is clear, but downstream it gets polluted.

The elders are told the water here (around Beaver FN) is not polluted but it is being polluted. There is some concern that the water quality and environment will be destroyed because of development.

Climate change is also an issue because it is as warm north of here as it is here.

The biggest problem in the territories is the forest fires. They let it all burn off and then complain that the caribou is all gone. Wildlife is just like people, if you can't find anything to eat you have to move somewhere you can.

One man suggested that no exploration take place in the Caribou Hills (to be marked on map later).

Elders agree that a wolf hunts by chasing its prey and constantly biting the prey so that the wounds slow it down and when the prey finally has to stop, the wolves then jump on it and kill. One elder saw 2 wolves kill a full grown bull moose in this manner.

Elders have noticed cougars in the area, there never were any before. Elders say that Fish & Wildlife brought the cougars to the area to control deer population, that was quite a few years ago (20 maybe).

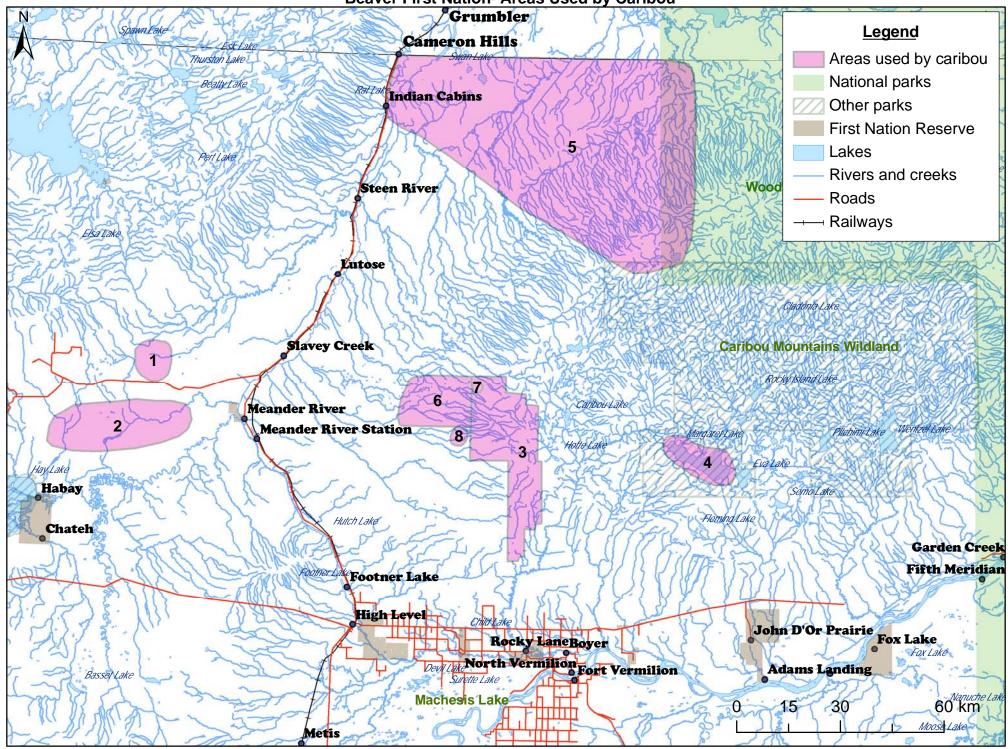
One elder suggested that just like buffalo, when hunters are given tags they are also given a diagram of where to take blood samples from the carcass and submit it to SRD, that caribou hunters should also do that to test for diseases.

One elder suggested would a study of how wolves and caribou help with gathering information.

Mapping Information

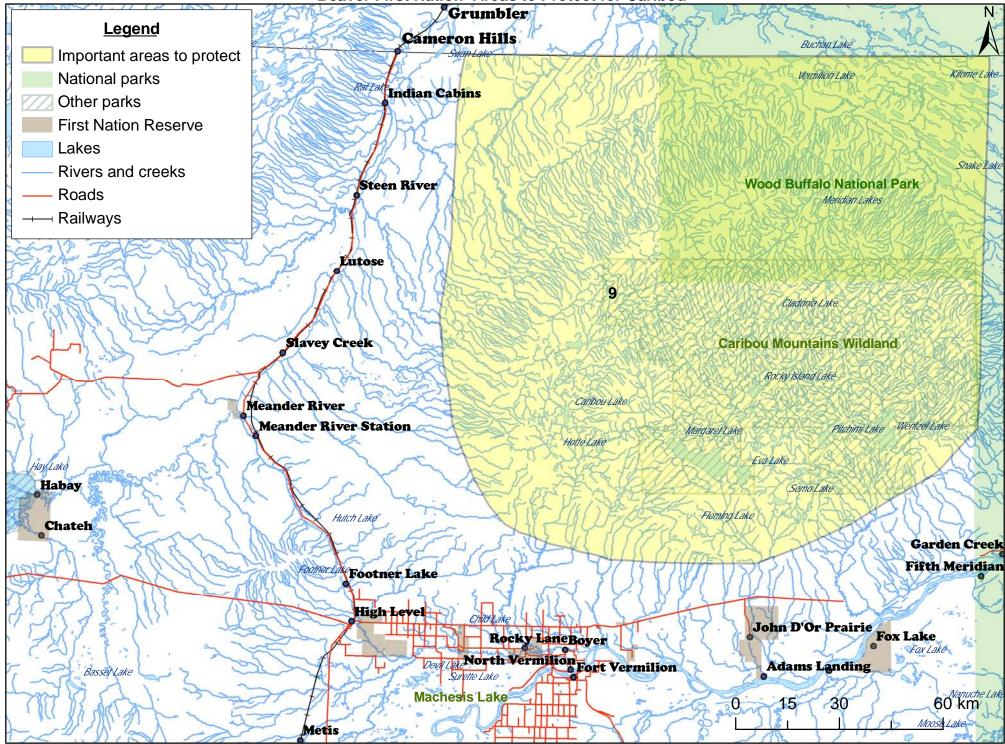
Environment Canada brought maps of the local area to the workshop. Elders were invited to share where they have seen caribou and what areas they think are important to protect (refer to the two appended maps).

Beaver First Nation- Areas Used by Caribou



| Label | Details |
|-------|---|
| 1 | Elder has seen caribou in this area |
| 2 | Caribou travel through the Hay Meadow in Summer |
| 3 | Elder's late husband has seen caribou on his trapline on a number of occasions |
| | One participant saw a caribou around margaret Lake in 1997. Other elders confirmed seeing caribou |
| 4 | year-round in this area. |
| 5 | Participants have seen caribou in this area in the summer |
| 6 | Elder see caribou and tracks on his trapline in spring time (April and May). He has been on this trapline for 70 years. |
| 7 | A herd of approximately 50 caribou was seen in this area about 20 years ago |
| 8 | Elder has seen 7 caribou in this area 15 years ago |

Beaver First Nation- Areas to Protect for Caribou



| Label | Details |
|-------|---|
| 9 | The Caribou Hills area was identified as important to protect by the elders |

REPORT

Caribou Workshop with Bigstone Cree Nation Elders/Trappers

BACKGROUND

Bigstone Cree Nation invited Environment Canada representatives to host a boreal caribou workshop for the trappers/elders on August 23, 2010. At the workshop, Environment Canada presented boreal caribou information and asked a series of questions to generate discussion with the elders regarding: 1) caribou population trends 2) threats to boreal caribou and their habitat, 3) input on the goals of the recovery strategy 4) actions that could be taken to conserve local caribou herds, and 5) critical habitat identification. Environment Canada brought in maps to record where elders have seen boreal caribou.

WORKSHOP SUMMARY

The trappers/elders reported seeing fewer caribou on the land and expressed their concerns over the main threats to the species including industrial development and wolf predation. The elders think it is important to recover and conserve caribou herds. Many suggestions were made on how Environment Canada could recover caribou including predator control, more enforcement and monitoring of industrial activity, caribou reintroduction from other areas and game farming. Elders felt that successful efforts to recover caribou would require cooperative management and monitoring with the locals and willingness to proceed to action. There was lots of interest and discussion surrounding the implementation of a bounty system to allow local trappers to help in predator (wolf) control efforts.

POPULATION TRENDS

The elders said that there used to be lots of caribou in the area. They suggested that caribou are moving out of the area but are not sure where they are moving to. There were suggestions that caribou could be moving to BC, SK or up north.

Elders asked if Environment Canada knew what caribou numbers are like in B.C. Environment Canada said that caribou numbers are declining in BC, and are declining in many parts of the country.

There was a suggestion that caribou populations might cycle and that is why fewer are seen now.

Elders wondered about caribou numbers in Alberta. Environment Canada said that there are about 3,000 boreal caribou in the province and about 30,000 in all of Canada.

The elders asked how the province monitors caribou. Environment Canada explained that

ASRD puts out radio-collars on a subset of female caribou from a herd and can monitor those collared individuals from the air (collars emit a noise that can be heard when using a receiver). The herd numbers are not the actual number of caribou but are estimates of how many caribou are out there. All the monitoring is done by ASRD in Alberta. They use both fixed-wing planes and helicopters to do surveys a few times a year.

Some elders disagreed with the aerial monitoring because they question how many caribou can be seen from the air. It was suggested that provincial surveys likely identified less than ¹/₂ the caribou population. There needs to be more ground work. Helicopter surveys are not effective enough. One elder asked if the caribou biologists live out there in the bush. There was a suggestion that Environment Canada and/or ASRD should meet with trappers regularly (a few times annually) to monitor populations since the trappers are on the land all the time and can often track movements and changes in wildlife populations. The government also needs to pay for this knowledge.

Elders also wondered if the cause of death of a caribou can be determined when a radiocollar is found. Environment Canada explained that the animal carcass has to be investigated to determine how the animal died.

THREATS

Habitat Change

The elders have seen lots of change on the land. They spoke of increasing industrial activity, increased access and changes in the quality of the natural environment (water, air).

The elders said that climate change, air quality, water quality and habitat loss are all affecting caribou. The water levels are low now. Water levels used to be high but not anymore. The caribou are very sensitive and are not adapted to change. Trappers today do not eat caribou; their diet has changed over the years.

The elders said that fire is not an issue in the swamp areas (muskegs) where caribou live.

There is lots of development and activity on the land now, and elders believe there are too many uses on the land.

The elders described a large muskeg that ranges from Athabasca up past Fort McMurray. It is much more developed than 25 years ago and they believe this is disturbing the caribou because there is now people and noise there 24/7.

Industry and Development

The elders said that oil companies are now developing muskeg areas instead of the high ground- and the muskegs are where the caribou live. Caribou live in the muskeg and are not adapted to high ground. It is cheaper for oil companies to drill in the muskeg then on

high ground.

The elders were very concerned about oils spills as many of them have seen spills on the land. They also said that caribou do not like noise. Sometimes they will abandon their calves if they are disturbed. There was a concern that there is too much noise out there. Some elders believe that caribou spook easily and others told stories of caribou using developed areas like pipelines and seismic lines.

One trapper saw a cow caribou go near a buried pipeline and it kept jumping back each time it came near the buried pipeline and wouldn't cross it. It eventually gave up and turned around. The pipeline has the same effect whether or no it is buried. Caribou have sensitive ears and are not adapted to noise.

One participant mentioned chasing 3 caribou down a seismic line once. Another time he saw 7 caribou at a burrow pit and they crossed a pipeline. It was also said that wildlife cameras on some of the oil and gas lease sites show that the caribou follow or cross pipelines.

There was a concern regarding the types of chemicals used by the oil and gas industry. There were major concerns over chemicals and toxins, and oil spills and diesel spills. Participants felt these things are a big issue. Industry does not always follow regulations to clean up and the elders feel that timelines for reclamation are too long. There were concerns that there is not enough monitoring of industry and that chemicals are leaching and spreading in the environment. The elders would like to see better monitoring of industry. There was also a concern over that fact that oil companies make employees sign waivers not to discuss what chemicals are used or spilled. One participant described seeing 3 dead moose all lined in a row within 100 feet of each other on a site. They were likely affected by toxins (from chemicals). The moose were all skin and bones. Another participant added that mud on certain sites must contain chemicals because it does not freeze easily.

Participants voiced many concerns over effects of well sites: they attract animals, and are worried that they contain contaminants that are not being monitored.

One participant expressed that what the oil companies are doing is extreme. Not only are the caribou declining but all the animals are declining because of industry and the roads. Elders said that there used to be lots of places where there was no access but now people can go anywhere with a quad or vehicle.

There were also concerns over water usage. One participant expressed that oil and gas say they are not going to use the water (except from underground sources) but they are definitely affecting the water table.

The winter deadlines for industry to get out of an area (outlined in industry's caribou protection plans) are not monitored. Exit is delayed.

The elders wondered if the oil industry has any plans to support the recovery strategy Environment Canada is developing and if Environment Canada is working with the oil companies as well. The elders wanted clarification on whether the federal government has any say regarding the oil industry or if it is the province. Environment Canada said that it is mostly provincial jurisdiction; the federal government is only involved when there is development on federal lands. Most of the land in Alberta is provincial crown land. There was agreement from participants that there needs to be a change in the way development is operating. Elders were concerned about Environment Canada's ability to protect caribou because they said that that oil industry does not stop for people, so what makes Environment Canada think they will stop for caribou?

Predators and Other Prey Species

The group of elders seem to agree that wolves are a large issue for caribou. They also wondered if Environment Canada has looked into issues with other predator (bears, cougar). The elders talked about how there are more wolves, grizzlies, cougars and black bear in the area now. Elders said that bears go after caribou calves and that a full grown bear can easily kill a calf.

The elders were very concerned with the increase in cougar population. According to the elders cougars were not always found in the area- 30 years ago there were no cougars. They said that ASRD brought the cougars in their area (Slave Lake, Wabasca and Chipewyan) 11 years ago. ASRD denies everything. When ASRD started planting animals in the area the government did not and still does not tell people when they release animals. According to a participant, half the problem in declining caribou is the transplantation of animals (predators) because it's not just the caribou that have declined; the deer and moose have declined too.

One participant voice concerns over lower numbers of bears and associated the decline with outfitters in the area. The participant said that each licensed hunter can take between 3-6 bears and was outraged at the number of bears that could get taken when 12 hunters come in with an outfitter.

One participant talked about the increase in northern and timbre wolf populations. The increase in northern wolves is more of a concern because they don't avoid the muskegs as much as timbre wolves.

Participants wondered why the province is not targeting certain predators for control purposes since the province (through outfitters) is doing bear control in the area.

One participant said that the "old-timers" used to say that mule deer used to be more numerous, but now there are more white-tailed deer and fewer mule deer. Participants all agreed that moose have been declining over the past 10 years- this was a large concern. Participants also noticed a decline in deer. There was a suggestion that perhaps they are being hunted by cougar. There used to be lots of mule deer around Buffalo Hills Lake, but now they don't see them anymore. It was also said that the decline in moose is not necessarily hunting related- there are a lot of "dry cows". There is a feeling that relocated animals (cougars, bears) have an effect on the local wildlife (moose, deer).

Caribou parasites and disease

Participants said that they do not eat caribou- maybe their ancestors did but they don't. Elders did not have any specific information about caribou disease but had information on changes they've seen in other species.

Participants have found tape worms in the moose intestines. One participant mentioned seeing large warts all over a moose body killed near a well site. Many elders said they have seen warts on moose bodies- they don't like to eat animals with these kinds of growths. People have seen warts on moose liver and lots of ticks. Elders believe that ticks have a large effect on moose in the area. People also said that the moose meat tastes different- it tastes bad like gunpowder or diesel.

Over-harvesting

Elders said that they do not eat caribou, maybe their ancestors did but they don't. Hunting is not a big issue in the area- most people don't care much for the meat. It was reiterated during the workshop that trapping/hunting is not an issue but caribou are a large part of the local culture so the elders want to see caribou persist.

Climate change and Weather

The biggest change participants discussed was milder weather. The elders said that they don't see -50°C anymore. It is much milder in the winter and it creates slush and packs the snow in the muskegs. The icy snow is not good for caribou because they eat the moss off the ground not in the trees like deer do.

Some participants voiced concerns over decreased water levels. They were concerned that there is less snow and less rain. Another participant said that it depends on the area you're in- some places the muskeg is so deep. Climate change is thought to be a big issue for caribou- muskeg habitat is drying up (and many other water sources are drying up too). The problem is worse this year than it has ever been.

Other Threats

Another factor in the decline of the caribou is the white daisy (chamomile plant). They see a lot more of them now that development has increased. They are toxic to animals, and it has killed animals in the area. Chamomile could have come in on industrial equipment (i.e., mud not cleaned up on the equipment and it brings in lots of seeds from other areas). Caribou might be eating the chamomile plants.

GOALS

Everyone agreed with the proposed goal presented at the workshop, and would like the caribou to stay. They felt that these animals need to be supported and that something must be done. Objectives are good but Environment Canada has to be willing to do something about it. Can development be stopped or slowed-down? If it can't then how is Environment Canada going to save caribou?

One participant urged Environment Canada representatives to explain to the government that killing 1 caribou is like killing 10 natives. Caribou and the land are very important to the people and their way of life. Trapping/hunting is not an issue but caribou are a large part of their culture so they want to see them persist.

CARIBOU RECOVERY AND CONSERVATION ACTIONS

People feel there has been monitoring for a long time but not much is being done to actually solve the problem. Something needs to be done- neither the province nor the provincial governments are doing anything. Elders urged Environment Canada to do something about it rather than just monitor.

Elders also questioned why Environment Canada did not do this study before the oil companies came in. There was concern that caribou will continue declining while the government puts together its recovery documents. There was a feeling that the program is not moving fast enough- waiting 10 years for an action plan is not appropriate. The participants would like to see action now.

There was recognition that recovering caribou will be difficult since there is so much development on the land. Participants were skeptical that recovery would ever be achieved (in their area) because industry does not stop for people, so why would they stop for caribou?

One participant said that drastic measures have to be taken. In order to achieve good results, everyone needs to work together. Elders believed that working with the locals is a good idea. One trapper said that he has been roaming around the forest for 52 years as a hunter and trapper. As hunters and trappers they look for everything and notice everything- they notice the changes throughout the years. Without experience, not much can be done.

The participants said that they would like to see locals involved in the action planning phase. People want to be involved in conservation actions and planning of them. There was a strong desire for governments to work more with locals/aboriginals/trappers when it comes to wildlife. One participant suggested that the government should meet with trappers regularly (a few times a year) to monitor wildlife populations since the trappers are on the land all the time and can often track movements and changes in wildlife populations. Environment Canada needs to pay for this knowledge though.

Participants suggested that the provincial government should have the oil companies pay for some of the costs of monitoring and research. They voiced a concern over the need for better monitoring of industrial development. The elders want more monitoring done before development comes in instead of trying to fix things after development.

There were a few suggestions on how Environment Canada could recover the local populations of caribou. It was very strongly suggested and supported on many occasions during the workshop that wolf control should be implemented. People felt that Environment Canada should be monitoring wolf and cougar populations, and perhaps control both predators. They suggested setting up a bounty system so that trappers could get compensated for trapping wolves. At the moment it is not worth killing wolves when they go for only \$75 a head. The trappers were concerned about the low value of wolf pelts- it is not worth the cost of trapping a wolf. The trappers also said that if there is a bounty on wolves, it should be the trappers that trap/kill wolves on their traplines, not anyone else. Trappers suggested that a price between \$200 and \$500 per wolf would be fair, although \$500 would be more sufficient as they are paying for fuel and other costs-\$100 does not get you very far. The trappers wondered if Environment Canada sets aside money for projects like this (i.e., wolf control done by locals).

Other suggestions included farming caribou (game farming) to bring their numbers up. Some participants suggested transplanting animals from herd to herd. One participant suggested sterilizing the alpha male/female wolves to control predators.

HABITAT USE, MAPPING EXERCISE, AND HABITAT PROTECTION

According to participants, caribou use muskeg areas extensively. They eat moss/lichen on the ground. Caribou is seen as an indicator species of boreal health and Aboriginal health. The elders feel that caribou need to be protected. The elders would like to see protection of berry patches, cultural sites, and salt licks.

See attached maps prepared by Environment Canada on behalf of Bigstone Cree Nation.

OTHER CONCERNS

Increased cougar population was a big concern. People believe that ASRD has been transplanting cougars in the area for 11 year and they continue to deny it. They think the government should inform locals when transplanting animals. ASRD should let the trappers know where they drop off translocated animals because it is dangerous for a trapper if he doesn't know if there are cougars, wolves or bears in the area. One trapper encountered a grizzly track on his trapline. Problem animals are generally not afraid of people and can be a risk for people out on the land. Participants wanted Environment Canada to talk to ASRD about the need for them to communicate with locals when relocating animals, especially predators like bear and cougar. There is a feeling that relocated animals have an effect on the local wildlife (moose, deer).

There was concern over nothing being done by either the provincial or federal

governments on caribou protection. Elders feel that there has been lots of monitoring of caribou but nothing else is being done (about industry or the wolves). There was a strong push for action. The program is not moving fast enough- waiting 10 years for an action plan is not appropriate. The participants would like to see action now.

Oil companies are developing muskegs (lowland) instead of the high ground because it is cheaper.

Why has this process not happened sooner? Why didn't Environment Canada do this study before the oil companies came in? There was concern over the time it will take for action to take place, and people are worried because caribou will still be declining in the meantime.

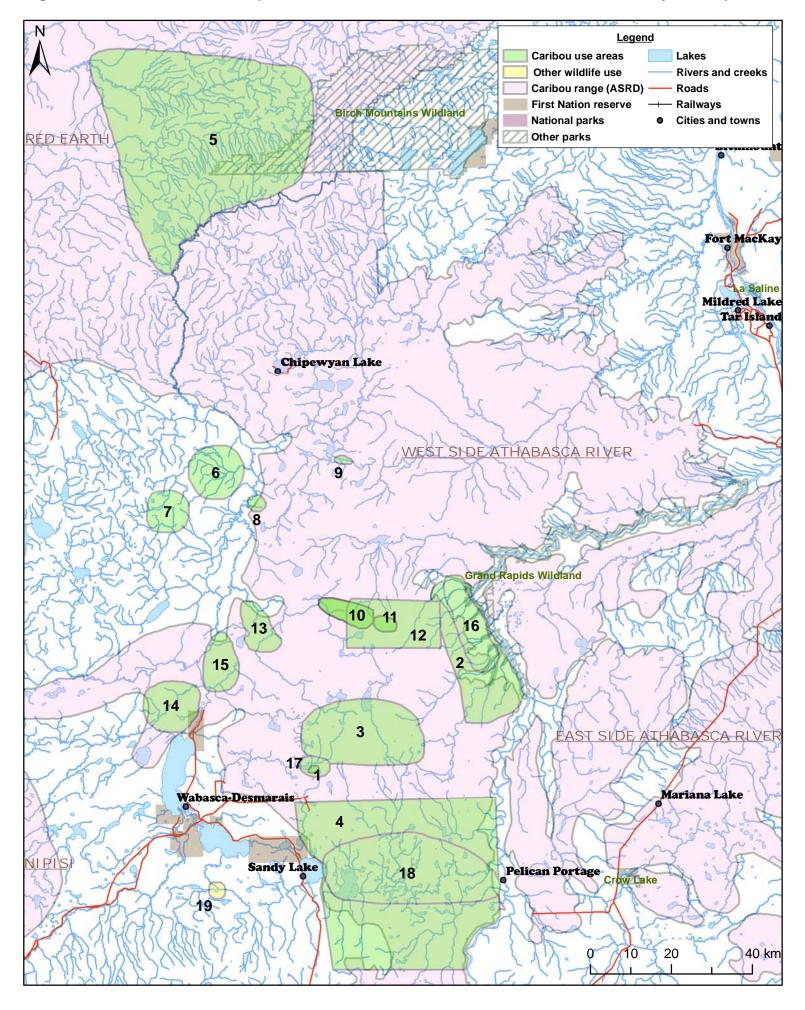
Concern over bears in the area- people were worried about the number of bears being hunted by outfitters.

The workshop participants wondered why ASRD was not present and believe they should have been involved in the meeting. They would like to have the province here talking with them like Environment Canada is.

Concern about how much money has been set aside to complete this work. Need to use Aboriginal knowledge more and be willing to pay for it.

"Oil owns government"

Bigstone Cree Nation Workshop on Boreal Woodland Caribou- Information Shared by Participants



| Label | Details |
|-------|---|
| 1 | A group of 8 females and 1 large male was seen. The bull was shot (1996) |
| 2 | Range goes all the way to the Athabasca River |
| 3 | Trapper makes a horshoe-shaped skidoo trail and caribou use the trails in winter |
| 4 | Caibou seen in winter |
| 5 | There is a caribou herd in this area |
| 6 | Caribou have been seen in winter. Caribou was seen on seismic line in this area |
| 7 | Caribou seen in summer and winter |
| 8 | 6-7 caribou seen near burrow pit (oil and gas) |
| 9 | Caribou seen crossing a pipeline |
| 10 | Caribou tracks seen in the area |
| 11 | Caribou tracks seen in summer |
| 12 | Laricina Energy has wildlife cameras set in the area. Caribou appear on the photos |
| 13 | |
| 14 | Approximately 35 caribou seen in winter 2009-2010 |
| 15 | Tracks seen in the area in winter |
| 16 | |
| | 2 sightings in area in summer: 12 caribou on one occasion and 3 caribou in summer 2010 |
| 17 | were seen |
| | Used to be many caribou in this area but have declined. Trappers believe they moved north |
| | (west of Grand Rapids Wildland). Most highly developed section in area (Husky, |
| 18 | ENCANA, CNRL) |
| 19 | Walleye spawning area |

 Table 1: Descriptive information for polygons drawn by Bigstone Cree Nation participants

Dene Tha' First Nation Acknowledgement

Environment Canada would like to acknowledge Dene Tha' First Nation for the Aboriginal traditional knowledge they shared to support the development of the national recovery strategy for Woodland caribou, boreal population (boreal caribou). The knowledge shared in their report was used to inform the recovery strategy for boreal caribou but has not been presented in this public compilation report.

Fort Chipewyan Métis 125 Acknowledgement

Environment Canada would like to acknowledge Fort Chipewyan Métis 125 for the Aboriginal traditional knowledge they shared to support the development of the national recovery strategy for Woodland caribou, boreal population (boreal caribou). The knowledge shared in their report was used to inform the recovery strategy for boreal caribou but has not been presented in this public compilation report.

Lesser Slave Lake Indian Regional Council Acknowledgement

Environment Canada would like to acknowledge the Lesser Slave Lake Indian Regional Council (Sucker Cree, Driftpile, Sawridge, Kapawe'no and Swan River First Nations) for the Aboriginal traditional knowledge they shared to support the development of the national recovery strategy for Woodland caribou, boreal population (boreal caribou). Aboriginal Funds for Species at Risk provided funding for this report. The knowledge shared in their report was used to inform the recovery strategy for boreal caribou but has not been presented in this public compilation report. Métis Nation of Alberta, Region 2: Boreal Caribou Recovery Strategy Workshop with Harvesters, Knowledge Holders, and Community Members

> French Cultural Centre Bonnyville, Alberta September 7, 2010

> > Report Prepared by Linda Boudreau-Semaganis Bonnyville, AB

Prepared for Canadian Wildlife Service, Environment Canada National Boreal Caribou Recovery Strategy

Workshop Date: September 7, 2010 Location: French Cultural Centre, Bonnyville, AB Time: 5PM-8:30PM

Introduction

The Environment Canada facilitators explained the purpose of the meeting and brought forward the issue of the decline in Caribou herds in Alberta. The purposes of the workshop discussions are to gather Métis peoples input into recovery strategies and the views on the decline in herds. There is a need to examine goals, threats to the caribou population and the critical habitat for caribou. An interactive session followed with the approximately 15 persons in attendance.

Discussions on Threats to Caribou

Participants were advised that only Treaty people could hunt Caribou. Discussion followed on why Treaty people are being allowed to hunt caribou and that not all other resident hunters are allowed to hunt caribou, laws appear contradictory. If animals are threatened or endangered **No One** should be allowed to hunt the species.

Human hunting is not the major threat, development is more damaging – the clearing of land causes hardship to the caribou habitat and eliminates hiding and resting place for the caribou.

Many participants recalled times during their years, when caribou were part of the traditional diet. As herds declined and hunting was banned, many families relied on moose, deer, elk and other wild meats. Balance of population of caribou and wolves, and how wolf populations must be reduced to enhance the caribou population. Wolves are the main predator of the caribou, although caribou are not the main food source for wolves. Habitat and human encroachment has a more damaging effect than that of the wolves. People are no longer using wild meat as a primary food source, and that has set the natural balance out of whack. The oil/gas development and the use of modern vehicles, ATV's, building of trails/cutlines and human presence in the area disturbs natural herd environments and protective foliage and food sources.

Radio collars monitor caribou health; moose herds were dying from ticks a short while ago. Caribou have a natural defensive strategy against wolves, when threatened they circle to protect the young. Caribou herds are sleeping under the steam pipes and grow accustomed to noise and react little to it. Not a lot of Treaty harvesting of caribou in the area, mostly locals take moose and deer when they hunt. People have to have a permit to go on the weapons range, so they do not see the caribou too often.

A half mile north of the bombing range, people observed caribou not reacting to human presence, they just wandered off into the bush. There are lots of wolves in the area and fewer caribou in the herds. The wolves are also bothering farmers, moose and deer – people feel something should be done about the wolf concern.

Treaty people have exclusive hunting access to the caribou – not the Métis. Their input into the discussion would be more knowledgeable, as the Métis cannot harvest caribou. Herds continue to decline, and are not being harvested in significant amounts.

Caribou calves have no scent for about their first 10 days. The high rate of caribou calf deaths has caused the herd numbers to be lower.

Reclamation of the land disturbed by gas/oil development should be done in a timely manner, so there is a natural growth balance in the forestation process, some new and some older. Some companies are not doing reclamation on their pads – just set off a flaring or do a test once in awhile and say the site is still active.

Sites around Muriel Lake do not appear to be in a reclamation process. Cutlines and cleared areas should have the trees rolled back to protect from erosion and limit access to quads, etc., and encourage natural regrowth of the flora and fauna. Mulching is not a natural process and does not encourage regrowth or forestation. Mulching also contaminates water and endangers birds and other water wild life.

Harvesters have noticed an increase in white-tailed deer in this area – the moose population was low, but is now coming back. Wolves are being harvested, but the number of trappers is also declining, our people are not actively continuing this activity. Foreign hunters are harvesting bears and take all the biggest bears, and this practice causes the bear population to rise, as the older boar bears eat smaller bears, thus keeping the population in balance. Bear over population opens the environment to other concerns, for animal populations as well as humans, particularly those who farm.

Climate changes could also be affecting herd survival, as the weather has changed over the years, there is not as much snow, and the winters are warmer than a while back. Lack of snow affects water levels and forest growth as a food source for the herds. One harvester felt there should be wolf culls, in addition, to look at other predators as well, and felt that development is affecting herd size.

Recommendations for Caribou Conservation

The government should look at Caribou farming to increase the population. They have Elk and Reindeer farms as part of maintaining those herds. Importing bulls from other herds could enhance the existing herds, as they do with Elk. This might be a possibility and should be looked into. We need scientific knowledge as well as the bush knowledge to accurately address this issue.

Recommendations and suggestions from participants:

- Relocate caribou
- Transplant caribou to area
- Initiate caribou farms to increase population
- Have wolf hunt around a herd for 2-3 years, keep up during the winter
- No caribou hunting by anyone
- Must do reclamation process on every project site
- Reforestation process, do the "roll back" (i.e. rollback trees and brush

Mapping

Environment Canada provided maps at the workshop marked by participants as to the sighting or finding of bones for caribou in the area. The maps were left with Métis Nation of Alberta, Region 2 staff to allow for the compilation of additional information from harvesters who were unable to attend the workshop.

Maps were digitized by Environment Canada on behalf of the Métis Nation of Alberta, Region 2 and a summary map is appended to this report.

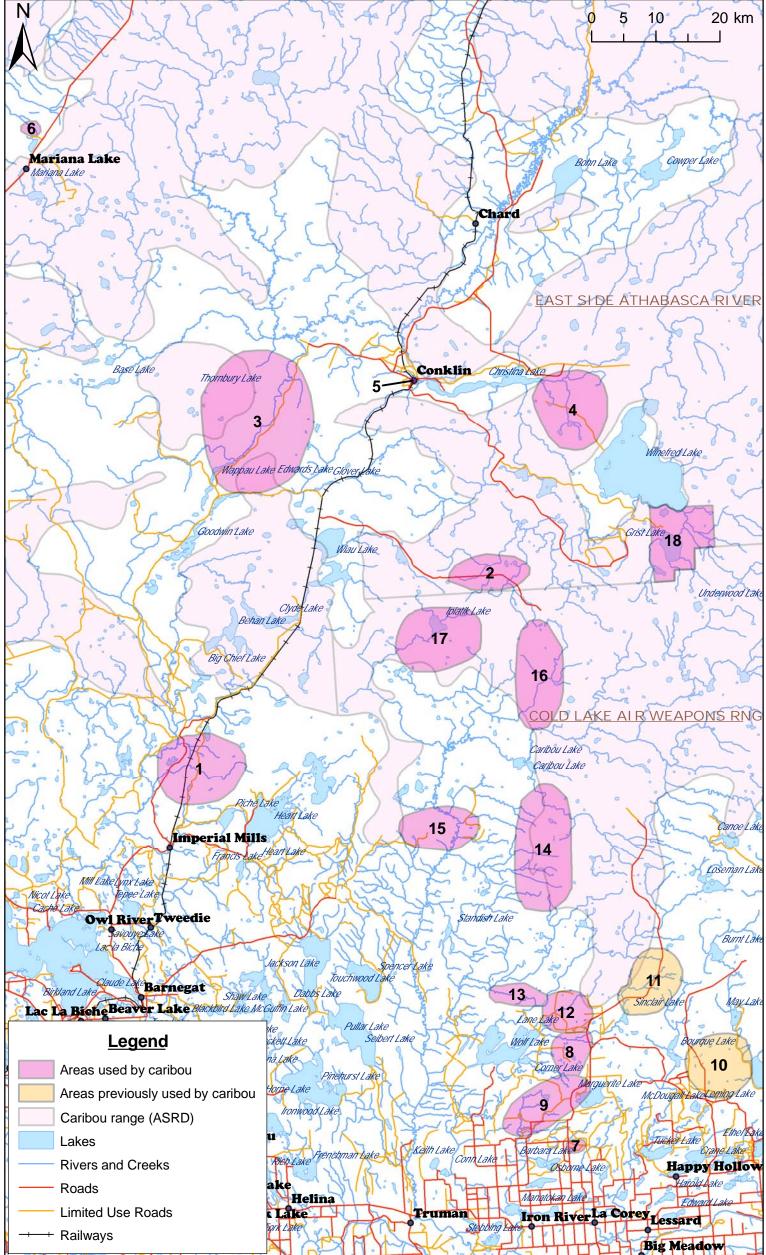
Appendix A- Written Submision by Metis Harvester

In regards to caribou harvesting, my experience is as follows. In 1960 I helped my future father in law haul equipment and materials to build Gristhaven Hunting and Fishing lodge, this was about 4 miles north of the Bombing Range. We made 16 trips from Conklin with the material that was dropped off by rail and hauled in through the bush to Grist Lake (refer to area labelled #18 on Map).

Our first sighting of caribou was in late December with an estimated count of about 300 animals. I shot two animals for camp meat just prior to Christmas in 1960. Construction of the lodge started during spring of 1960 with completion of some out buildings and a small sawmill. The main lodge was completed in 1962. I made many trips with [a co-worker- name has been omitted] during the construction and every winter during the early years we would always see at least two herds of between 200 and 300 animals in December. At that time the migration route was close to Grist Lake and the Bombing Range.

I continued to hunt caribou during the 6-'s and 70's up to the closing of the area to all hunting of caribou around 1978. I also hunted moose and Deer south of the range around the Martineau River with our base camp at [name omitted]'s cabin just south of the range and in the Martineau River area. He had a trapline in the area. I hunted there every winter with 2 others [names omitted]. Moose were always plentiful with some Deer and the occasional Caribou that would wander out of the Bombing Range. During the same time frame were usually good hunting for caribou around grassy Lake, just south of the Bombing Range line and on the Saskatchewan side of the range. We hunted with horses so it was a fair distance from the cabin to the Grassy Lake area but knowing the hunters in the area there were always good caribou hunting there.

Metis Nation of Alberta, Region 2- Information Shared on Boreal Woodland Caribou



| Label | Details |
|-------|--|
| | 1 Caribou seen. Participant tracked some caribou before mile 120 in |
| 1 | September 2010 |
| | 2 caribou seen in fall 2008 and 6 caribou seen in fall 2009 about half a |
| 2 | mile from the bombing range. |
| 3 | 10 caribou were seen in 2005 |
| 4 | A herd of 40 caribou was seen in 2005-2006 |
| 5 | Two caribou were seen in Conklin 25 years ago (~1985) |
| 6 | Caribou have been seen north of Marianna Lake |
| 7 | Two caribou hunted in 1972 |
| 8 | Caribou have been seen in this area |
| 9 | Caribou tracks seen around BP plant |
| | Caribou were seen in this area 30 years ago in winter. Now the area |
| 10 | contains Esso oil wells |
| | There used to be 20 caribou in a herd in this area. No caribou have |
| 11 | been seen in the area for the past 5 years |
| | Caribou have been seen in this area in winter. There are lots of wolves in |
| 12 | this area. |
| 13 | Caribou have been seen in this area in winter |
| | Caribou have been seen while carrying out aerial surveys over the |
| 14 | bombing range |
| 15 | Caribou have been seen in this area in winter. |
| 16 | Caribou have been seen in this area in winter (2006 and prior) |
| 17 | Area was used for caribou hunting in 1958 by participant |
| | Participant has seen and hunted caribou (1960-1978). Has seen herds of |
| | 200-300 caribou between Grist Lake and the bombing range where |
| 18 | caribou have a migration route (see report for more details) |

Métis of Alberta Region 6: Peace River, Fort Vermillion Acknowledgement

Environment Canada would like to acknowledge Métis of Alberta Region 6: Peace River, Fort Vermillion for the Aboriginal traditional knowledge they shared to support the development of the national recovery strategy for Woodland caribou, boreal population (boreal caribou). The knowledge shared in their report was used to inform the recovery strategy for boreal caribou but has not been presented in this public compilation report.

Mikisew Cree First Nation Acknowledgement

Environment Canada would like to acknowledge Mikisew Cree First Nation for the Aboriginal traditional knowledge they shared to support the development of the national recovery strategy for Woodland caribou, boreal population (boreal caribou). The knowledge shared in their report has not been presented in this public compilation report. The information summarized in Mikisew Cree First Nation report is a summary of information obtained from five interviews, focused on one type of caribou – woodland caribou. It therefore does not represent the collective traditional knowledge of Mikisew Cree First Nation regarding woodland caribou, nor reflect the importance of caribou to the Mikisew Cree First Nation culture.