ONTARIO
Western James Bay Area Aboriginal Traditional Knowledge Workshop (Timmins), Boreal Woodland Caribou ATK/TEK
1. Executive Summary

This report contains the re-collections of fourteen elders from the western James Bay area brought together to give acquired knowledge about the Woodland Boreal Caribou. The workshop was coordinated by the author of the report making it possible for the elders to use their language during their discussions.

Prior to European contact the land, the animals and the people remained undisturbed. The land provided sufficient resources to meet the minimal requirements of the people. The animals, like the caribou, established a pattern of movement, based on their need to move, to get away from predators or to seek changes in their dietary needs.

The Mushkegowuk of the western James Bay area or Nakapayhano-Washahebeyow, as they called their land, had a very close relationship with time. The land dictated the rhythm of life to be followed by those that walked or flew on the surface. Both land and time, in turn, were respected and honoured by the people and animals. Without external demands on the labour, the people developed rules of harvesting resources and relationship protocols with their neighbours.

The Woodland Boreal Caribou provided the tools, the food and warmth for the natural harvester. Since the seasons could provide food year-round, there was no need to collect and save. The Creator would provide when things were needed. This faith in the spiritual forces allowed the Mushkegowuk to relax and enjoy life.

When European contact was established, time was speeded up. The rhythm became accelerated and practices long cherished had to be set aside. The population of the caribou decreased dramatically. The migrating passage of the caribou used to be counted in the thousands and unfortunately, has been greatly reduced today.

Politics everywhere must rear its ugly head and the elders make a few statements which may be uncomfortable to read for some of us.
2. Introduction

2.1 Description of Project

As part of the national recovery strategy for the woodland boreal caribou, the project will gather traditional knowledge holders from the Mushkegowuk tribal region or the western James Bay area. A maximum of sixteen elders will be invited to Timmins to participate in a one-day workshop to give input on their past and present experience on caribou. All participant information will be recorded in the Cree language. Information gathered will therefore be free-flowing and uninterrupted by translation necessities.

The “Questionnaire for Aboriginal Traditional Knowledge Interviews on Boreal Caribou” draft November 24, 2009, will be used as a guide to keep the participant discussion within the required parameters. The questions were developed to gain information and understanding related to the following areas: a) Range boundaries and population information, b) Habitat use, c) Population Trends, d) Threats, and e) Traditional practices related to Caribou.

It must be acknowledged and accepted that the Mushkegowuk people have been in this region for a long, long time. It is not their intent to leave because as they say, “the Creator provided this land for us to use and live on.” Their faith in this system is expressed in a common First Nation Article of Truth that says this land is to be kept for the use and benefit for “Those that are not yet born.”

Sustainability in the First Nation sense is making the archaeologist wonder why the Mushkegowuk seldom leave physical evidence that they have been on the western side of Nakapayhano Washahebeyow (western James Bay) for thousands of years. Sustainability in the modern sense is taking out certain quantities of raw material then making an effort to replace or replant what had been taken.

These two opposing definitions point to a philosophy which will be further clarified in the reading of this report. No, the Elders are not happy what has been done to their system. The workshop is a signal for them that perhaps through cooperative efforts, we can save a very important and valuable species.
2.2 Woodland Caribou, Boreal Population

“Mushkego Indigenous knowledge” is the acquired ‘discovery’ obtained after many years of living on the land. It is the understanding that has survived for thousands of years; the understanding about land and man in relation to the animal world. That understanding is so ingrained to the psyche of the people that even young hunters of today have kept this knowledge alive. What do we know about the caribou that remains constant to this day?

First, it is respectfully acknowledged that the animal world sleeps for two months of the year. This is the time for them to energize, regenerate and recuperate from a harsh existence. Before the full onset of winter the caribou will find a high dry area to settle. The area must contain enough food from the trees, the moss covered rocks and small willow. For two months the caribou hardly exerts physical movement preferring to stay on the snow which helps to insulate them from the extreme cold. Since the caribou does not move, their tracks will be non-existent and minimized movement reduces their scent that could be picked up by predators. This sleep is so deep that snow totally covers their bodies.

After two months have elapsed the caribou are desirous of food and movement. In mid-February the Mushkegowuk identify the end of winter and onset of spring by the term “Nakatin”. At this point the temperature will gradually rise to start the thaw. There is movement all around. All animals are “awake” and begin to be active. The Caribou start to search for nutrients or begin to perform their appointed tasks. Consider what would happen to the feces of the otter which is deposited by the lakes at the site of the “Nikik-watam”?

Nikik-watam is that hole on the ice by the lakeshore that allows the otter to come to land or go to water. It is a hole that is kept open all the time. It does not freeze over. On the land, because of the traffic by the otter and because they bring shells from the water which they eat on the land, the area is soon littered with pieces of empty shells and their waste. The caribou will search for these sites. It is their purpose to eat the feces left behind by the otter. They will clean the site of this waste before contamination can happen to the waters of the lake. Sometimes snow will cover these sites and the caribou will work furiously to dig the otter feces and consume them. Like the dog will consume human waste for the nutrients contained therein, the caribou uses the otter waste in the same fashion.
The melting snow soon will expose the green-white moss from the muskeg. The caribou will dig for this “wapaskamik” to eat. This moss will not grow in disturbed areas. It is so fragile that it takes twenty years for it to recover once it is harvested. Usually this type of moss will grow on the northern shores of lakes deep in the muskeg areas. This location is usually not covered in deep snow over the winter and therefore will be exposed to the warming sun earlier in the year. It will also be in direct sunlight longer over the year.

Finding rocky-outcrops the caribou finds another delicacy. The moss on the rock is the “wakonamin”. In stories or legends the Mushkegowuk will refer to this caribou food as the “Asini wahkoon” or rock blanket. In the muskeg country rocky outcrops are hard to find. Only the higher elevations will have rocks breaking the surface of the ground. The caribou must then search for these areas in order to get what they need.

Leaving the open spaces for another favourite, the caribou will scratch the bark of the birch tree allowing the running sap to bleed from the open bark. The caribou will lick the “mistasowin” from the tree. This gives them the sugar they need.

3. **Traditional Knowledge within the Region**

3.1 **Aboriginal names and Classification for Boreal Caribou**

“Pimatiquak” come from the north. They are the migrating caribou. It is a much smaller caribou than the ones that have made the western James Bay inland area their home. Migrating each year from the north traveling along the western southern shores of the Hudson Bay into James Bay, they will cross the Kistachowan Sipi (Albany River), turning south along the river for a while then turning north. Going overland, they will eventually encounter the route from the north. Milling around in that area for awhile they then take to the north using the same route.

“Wayapaysis” does not migrate or travel over long distances. This older and bigger caribou has established a movement pattern in the muskeg, within its established territory. Soon it will attract a younger herd that follow it around to find the delicacies
abundant in the area. The bigger caribou inter-mate with the smaller pimatiquak which over time has become the settled caribou that lives in the western James Bay area.

Sequan Atik is a spring time caribou. It may be the same as the Pimatiquak but less likely to be the wayapaysis. It is on the move and because it is new to the area will travel through open muskeg subjecting itself to the glare of the sun and the reflection of the blinding white snow. Although not a different species, it behaves differently because it presents itself as easy prey because of its snow blindness. These are the caribou that travel in herds and run in the open muskeg following the leader whichever it might be and literally run blind. Obviously not in tune to the lifestyle of the wayapaysis, it behaves like the pimatiquak. These are the prey obtained by harvesters and other predators. Only the most skilled and knowledgeable harvesters can get the wayapaysis to come out of their enclave deep within the protection of the brush.

3.2 Legends related to Boreal Caribou

At one time Caribou could run very fast. The Caribou was very proud of its power and skill as a fast runner. The Caribou became so reckless and abusive with its gift that he started to pick on the other animals that were not as fast. The other animals became terrified of the animal that started to kill the slower ones.

By killing another helpless animal the caribou had crossed the line. Using its speed the caribou would chase another and slammed them with its head knocking them down on the ground. Sometimes the caribou would just suddenly appear beside them as they ran and he tormented them on their slow pace.

One day the Caribou saw another to torment and it took off at a very fast run. Turning its head to say something to the slower runner, without warning a tree was standing there and very hard the caribou ran into it. “Tik” went the sound that could be heard very far away. The Caribou from then on could not run as fast anymore nor did it want to.

On another point, what has sadly been obscured by the adoption of foreign religions is the fact that animal relations or totems have been forgotten. One elder said, “no, we do not eat our relations (meaning the caribou).” Her clan, as the caribou clan are not permitted to consume their totem as was the law in the days of old. Only the return of
ceremonies will help re-establish these relations and help the society members take the rules that once were honoured.

3.3. Place names and trails related to boreal caribou

“The Big House” or Nelson River approximates the northern boundary of the Mushkegowuk territory. Our stories say that the ‘Inukshuk’ rock sculptures are old landmarks of boundary lines between autonomous Nations. The Inukshuk in that area or the Nelson River is the boundary line between the Mushkegowuk and the Inuit.

In those times if a Mushkego individual or group wanted to make contact with the Inuit, a trip was made to the closest Inukshuk and the people desiring contact would wait in that area. There would be no attempt to cross over the boundary. Soon an Inuit representative would show up to inquire what the visit was for. It was the Inuit representative who decided if the visitors would be invited past the line or wait there until the desired item is delivered.

The Caribou cross the Nelson and continue along the Hudson Bay coast heading southward. The migrating caribou “pimatiquak” is like a flow of water. It is like a river. Simply by its movement you will know that this caribou will be strong and healthy. At the same time it is like an annual supply train of food that replenishes the diet of the Mushkegowuk.

The herd cross the Nelson heading past the Severn River. Then the trail crosses the Winisk River and towards the highlands in the interior of the Polar Bear Park. There the moss of the exposed rock provides food and still they move southward. The home of the otter and the trees is in the lowlands of James Bay. After crossing the Winisk River the caribou begin to break into smaller groups and drift southward. The drift continues across the Albany River and stop there. Constance Lake reports that they have no caribou in their region. This is now too far south and also the elevation is getting higher. This terrain is not what they are here for. They need the mushkeg region. This is the home of the otter and the birch tree. For whatever reason they will undergo physical exertion to get at the waste of the otter that litters the shoreline of the numerous lakes. In deep snow their effort can be seen by the snow that has been shoved aside and piled until the ground had been exposed.
Spring brings warm weather that will begin to thaw the sap in the trees. The caribou will fight to get at this sap. It is the sugar they need. Using their antlers the lead male will scrape the tree bark until the sap runs outwards.

Mosquitoes and other insects will bring them to the northern coastal area. Their trip will take them back up north. Some would have been lost to the hunt, accidents and adaptation to the James Bay lowlands.

4. Traditional Ecological Knowledge (TEK) of boreal caribou

4.1 Description

The migrating woodland boreal caribou are sleek and muscular. They can outrun a fast snow-machine when the snow does not impede their movement. There is a leader. The strongest caribou becomes the leader of the herd. It is the caribou who has met the other challengers and the one who is aware of the migrating pattern. The herd will expect the leader to show them safe passage and show them where to find food.

The Mushkegowuk however have taken advantage of an observation that during a moment of confusion the ‘pimatiquak’ will follow any of their members who has chosen flight. A skilled harvester will use this knowledge during a hunt by forcing a young member to take flight. Others will follow this panicked stampede and they will be herded towards a ‘pahtagoonigun’, a funnel of trees leading to a narrow opening where the hunters are waiting.

The ‘non-migrating’ caribou have grown bigger. The ‘wayapaysis’ have developed knowledge about the environment. They understand the natural harvester and have discovered ways of retaining their population even as the natural harvester have increased in number. The contemporary young harvester has adopted the snow-machine and set aside the snow-shoe. This observation has helped the ‘wayapaysis’ seek sheltered and treed areas rather than roam over large, open muskeg. They, instead forage within the vicinity of a selected spot deemed suitable for winter settlement.
4.2 Distribution

The Woodland Boreal Caribou’s trail comes from the north. Traveling from the Nelson River area, along the southern coast of Hudson Bay, they drift towards the Polar Bear Park. The big herd disperses into smaller groups that follow a multitude of trails. In effect they have arrived at their destination. They will drift southward in small groups stopping in places where food can be found.

In old days, before the CN Rail was built connecting Winnipeg to Churchill, the caribou migration would number in the thousands. After the herd had passed an area, a black trail was clearly visible where they had passed. Since the rail line has impeded this activity the total population of the caribou that reaches the James Bay lowlands has become much smaller. These days the traveling herds no longer leave a trail of destruction.

From the Polar Bear Park in the north to the area between the Moose River and Albany River the caribou travel through or become attracted to a hospitable area. In summer the caribou have been seen crossing the Albany River. The movement might be caused by horse flies, wolves or search for food. In the Fall, when the land is freezing up, the larger caribou ‘Wayapasis’ will move searching for females. If the females are close by the ‘wayapasis’ will stay put.

Obstacles encountered by the Woodland Boreal Caribou has disrupted the traditional movement of the caribou to where the Mushkegowuk say that sightings, that used to be in the thousands, have today been reduced to sightings of less than one hundred.

The harvesters today look for caribou in the wooded areas with higher elevation. The James Bay lowlands continue to be a place of refuge and small groups of caribou can be found to stay year-round. Migration still happens because Peawanuck, situated west of the Polar Bear Park, will be visited by the caribou on their way east along the bay.

The caribou will stay on the terrain that is muskeg. They have never ventured into those areas that are called the flats. The flats are spongier and wetter. The moss cover is green, stunted tamarack and alders dominating the landscape. There are no rocky outcrops. Birch trees are very sparse, growing in clumps, rather than individually here and there. Summer is not suitable for travel and winter does not provide food.
4.3 Habitat

4.3.1 Habitat requirements

Caribou eat certain kinds of food that determines where they will be found at particular times of the year.

Moss is distributed throughout the James Bay lowlands. This is food. It is also food suitable for human consumption. Prior to contact moss will be collected and boiled in water. Although care must be taken to boil it at a certain temperature and length of time, the broth can be eaten by hunters or families.

Moss-covered rock can be found in higher, drier elevations. The southern section of Hudson Bay to the Sutton Ridges area is ideal for this kind of growth.

Lakes contain many water based animal life. The otter prefer to winter in deep water lakes. Lakes contain fish, clams, snails, mussels and other delicacies for the otter. The lowlands otter keeps a hole at a deep water shoreline all winter. Going in and out of the water, food waste and its own waste litters the area of this hole. It is the otter’s waste that the Woodland Boreal caribou looks for.

Birch sap comes from birch trees. Birch trees line the banks of rivers in the James Bay basin. As the elevation rises away from the bay, more birch trees will be found. In Spring as the sap starts to run caribou will use their antlers to break the bark. They will lick the sap from the trees.

New green poplar shoots and red willow and evergreen needles are available in the higher elevations. These suitable higher elevations are at about the forty to eighty feet above sea level.

4.3.2 Trends in Habitat

The caribou have maintained their movements from the north in winter and back again in the years before the rail line was built between Winnipeg and Churchill. Any infrastructure like the railroad, hydro dams, pipelines which builds a barrier across the land will disrupt traffic for the caribou.
Traveling in large herds is not conducive to survival for the caribou where obstacles are dangerous. By the time the caribou has reach Fort Severn, they have broken up into small herds. Drifting towards the James Bay lowlands, it is here that they find food which satisfies their tastes.

The higher elevation of the coastal Hudson Bay provides food from the moss-covered rocks. Among the drumlins there are ancient pathways still in use going all over. The coastal area of James Bay is not attractive for the caribou. The terrain is too wet and spongy. In the spring, ice on the land will be lifted by water which is seeping towards the bay. The ice lifted off the ground is like a blister of thin ice. It is not very thick and anyone can fall through it. Underneath that thin shell is deep dangerous water and no available solid ground.

The interior is much safer. The ground is muskeg but still solid in the winter. Towards the thaw period, holes in the muskeg marking pipes of water are visible. The caribou’s trails can be seen travelling around the shorelines of lakes and small creeks on the muskeg.

Underneath the muskeg areas and in the open, there are islands of trees here and there. Some of these islands are small and others are bigger. This is permafrost underneath. It is a hill in the lowlands. These islands or hills are higher, drier and contain other growth available along banks of river. If the caribou finds one of these areas containing several species of trees, this will be their winter ground.

4.3.3 Caribou use of areas

The migrating caribou are travelling southward from the Nelson River area heading towards the interior of the James Bay lowlands. They will drift south past the Albany River spreading south and westward. If they continue to move they will begin to turn north towards the southern shore of Hudson Bay. The migration will pull them northwards towards the Nelson River.

Many Woodland Boreal Caribou have adopted the James Bay lowlands as home. They will begin the movement cycle in the Spring looking for fresh food after their winter ground has been depleted. The movement will continue until they
encounter another suitable spot for wintering. This they will mark. Travelling in a big circular pattern they will feed all summer. As the winter cold approaches they will return to the area which they had earlier deemed to be a suitable winter stop.

### 4.3.4 Caribou Resilience

The caribou have been on this land for a very long time. They are trusting. They have calves in the Spring. They will teach their calves to move and run. They will take their calves over miles and miles of ground showing them the terrain that will supply a certain kind of food.

As long as the caribou can move and find their food, they will continue to prosper. If left unmolested during sensitive times of the year, especially summer when the calves are growing, the herd will survive.

### 4.3.4 Protection/Ownership

The Creator has given the Mushkegowuk food for thousands of years. In turn the Elders have passed down techniques of food preparation and preservation. Who owns the caribou? It is not the people who have relied on the annual appearance of the migrating caribou for thousands of years. It is not the Ministry of a recently instituted government. Many stories from the Mushkegowuk will not make sense to the scientist. Provisions from the spiritual side cannot always be tabulated and measured. After many years of living on the land the Mushkegowuk will continue to insist that the true owners of the land are not yet born. We are placed here to ensure that when they do arrive, this land and all the gifts on it are in good condition.

Our duty is to ensure that we take what we need from this land. The idea that when something runs out we will think of something else is not sustainable. When something runs out, that is the end of that and future generations will not be able to benefit from its existence (Gulf of Mexico).
The workshop elders are concerned about the behaviour of some of their young people who shoot indiscriminately when they are hunting. They remind us that there should not be kills in the Spring. The mothers are carrying their young. If we force the carrying mothers to run and flee while carrying their young, the spirits that watch over us will not be happy. If we leave carcases on the land, because we cannot carry everything home, we have committed an act against the old law of Respect. If we take the legs, arms and heads of the caribou to the dump, what good spirits do we hope will take care of us?

We protect the animals by examining our behaviour. If what we take is sincere then the animals will be kind to us. If the animals are to stay with us then the Creator must see that the animals are being treated well.

4.4 Biology

4.4.1 General

The Woodland Boreal Caribou have found the Hudson Bay highlands and the lowlands of James Bay ideal for their survival. Winter provides a time of rest from predators. All animals rest during the dead of winter. They rest for two months. The caribou stay in the winter spot and sleep. They sleep in such a way that the snow covers them up giving them added comfort.

In summer the caribou will travel the muskeg areas where again they will be free of predators except the pesky flies. Flies lay their eggs inside their fur. The flies will come out and these flies in turn are food for the birds.

4.4.2 Reproduction

The Caribou settle during the winter months. They congregate in an area where human and predator traffic will be impeded by dense bush. Within this protected area they will minimize their movement and ranging. Movement is confined to eating within a very small enclosure. Lying down on the snow, their
scent that could travel to other animals is kept to a minimum by slowing their body down. They rest by lying down on the snow.

Mating season is in the Fall. In late Spring the caribou will have their young deep in the muskeg. It is in these areas that the young learn to walk and as they get stronger the range will be increased.

4.4.3 Survival Factors

The Mushkegowuk participants from the western James Bay area were quite offended and angry when the question came to the population of the Woodland Boreal Caribou. As people that are on the land the spiritual component is very strong. In order to maintain a peaceful relationship with the spiritual forces it is critical that the people maintain a respectful and harmonious relationship with the animal kingdom. Such is the contract agreed upon when both were placed on the land.

Faith is to believe that the Creator placed us on this world and will not desert us. Faith is believing that man recognize each other as fellow travellers on this planet who will live in harmony and assist each other live in the best way possible. How one treats each other as human beings will be reflected in the way they relate with the animal world.

The first contact with European people was not good. All that follows comes from that first contact. An impression was made and continues to live to this day in the minds of the older people. When the white man arrived in the northern regions of Winisk, they unloaded guns from their boats. They talked to the people in their language not understood by them. One of the older people, not necessarily the leader, replied to inform them that they could not understand they language they were speaking. Immediately, one of the foreign men, took a gun and shot at the speaker, killing him. Would continued attempt to communicate with the strangers have been advisable? No, the elders say they learned to stay away from the white man. “We monitored their location at all times,” they say. The Royal Canadian Mounted Police, with the yellow stripes down their legs were the first to enforce their will on the indigenous people of
the Hudson-James Bay area. The year is 1930. “They confiscated our food, our furs and destroyed them,” they say. “It was their belief, we think,” they say, “that, if we did not have our possessions we would be forced to go back to the community. On our part we knew that the community could not help us. Everyone was already working hard to survive on their own.”

“Later the RCMP had a drowning accident where they lost some of their members on the Winisk River. After this accident, the Ministry people, called Lands and Forests (The Beaver Boss) showed up to replace the RCMP. Their activities did not change. They waited for us to come by and raided our small groups. Like the RCMP they took our food, our furs and burned them. We are sure that the government people were trying to kill us. It was not possible for us to confine ourselves to the communities. In an environment like this we make our living on the land. We get food from the land; we make tools from the land. Yes, we take the fur and turn them into clothing. We are the manufacturers. When we go home we give these gifts, things the land gave us to the people. We give these away, the food, the clothing; we do not sell them. We take the fur and this we trade with the company store.”

This story from the workshop is included on the caribou session because the elders believe the government’s treatment towards the animals must change. A story always helps to explain why certain people say the things they say or do. A letter was sent by one of the elders to the Indian Affairs Agency, located in Moose Factory, outlining these activities by the government agents but, no follow-up was ever initiated. “It is understandable and unfortunate,” they conclude, “that a letter was buried or destroyed because one government agency could not or would not, investigate another government agency.”

Use of needles on members of the herd will weaken the victim and therefore the herd. It does not help to control viruses within the entity. All the elders concur with the following comment; “We have seen needles being used on the animals. We have seen collars put on the animals. We have observed Lands and Forest people spread powder on the (bay) flats where the waterfowl eat and lay their eggs. That powder has successfully chased the birds away from their feeding areas. What was in that powder?”
The Woodland Boreal caribou, the Mushkegowuk people call the Wayapaysis, are free ranging animals. They are free to go where they feel survival is best. Movement is best for their health.

4.4.4 Movement and Dispersal

The migrating caribou will travel many miles. They are sleek and fast. At one time before man began erecting obstacles and barriers, they travelled in big herds towards a far-off destination. The ‘Pimatiquak’ have a twenty-year cycle when they will come back to visit an area where they have been before. Since the Pimatiquak come to eat the moss on the ground and the rock, they know that this moss is very slow to recover. So they will wait twenty-years, before coming back again.

Today the woodland boreal caribou confine their movements within the lowlands of western James Bay. The Wayapaysis do not migrate but instead have opted to circulate within the lowlands searching for new areas to winter.

4.4.5 Nutrition and Inter-specific Interactions

The James Bay lowlands provides the caribou enough variety of food, like the willow, young aspen, tamarack, moss, birch sap and other young vegetation that makes it very healthy and strong. The people have deemed the caribou food very good. Especially those in the northern areas they consider the caribou sacred food provided by the Creator.

The Pimatiquak and Wayapaysis are different kind of caribou but certainly are related. From the words of the elders some of the migrating caribou adopt the lifestyle of the woodland caribou and have become part of the herd.

The moose does not interact very well with other species it being a solitary being. The participants have not observed the caribou and the moose interacting in any way.
4.4.6 Behaviour / Adaptability

The Caribou is an animal of instinct. The pathway of migration is known to each one in the herd. When it is time to move each will follow without question, which may be the weakness that they have. They will follow the leader quickly and without hesitation. If the leader decides to jump into foaming and dangerous waters they will follow.

As obstacles become bigger and more dangerous we will see more of the accidents that saw 10,000 migrating caribou drown while crossing a well-travelled migration route.

The caribou are quick enough to get away from the wolf. The caribou can run for miles without getting tired. The wolf on the other hand can only run for a short distance. All the caribou have to do is run and continue running until the wolf is left far behind. However, the wolf can successfully stalk the caribou and get the weak and the young. They have no other predators other than man.

4.5 Population Size and Trend

The participants in the Woodland Boreal Caribou workshop in Timmins representing the Mushkegowuk people of the western James Bay region, their belief in the Creator is unabated. The caribou provided the Mushkegowuk harvesters many uses. Long before the canvas cloth arrived from the old world, the women prepared the hides from a major harvest. These hides prepared skilfully became so soft in texture that they could be used for clothing. Several hides were sewn together until the size was adequate to cover a tipi or wigwam. Unlike today’s canvas these hides were windproof. They were very warm. Hides were also good for blankets

The caribou provided the thread, the fur scraper, the tissue remover, the hide softener from the brain of the animal, fat and food. The belief is that as long as we need the animal, it will given by a loving entity. We, in turn, must be kind to the animal. We will not kill it needlessly. We will not cause it to suffer. We will not destroy the land upon which it lives. We will make offerings and say prayers of gratitude when our hunters are successful.
4.6 Limiting factors and threats

Threat for the caribou comes in many forms. Protection for the caribou on our part also comes in different forms. It all comes down to what we accept as the normal way of relating to the animal world.

The animal world is passive, very accepting and very willing to adapt to the changing environment in the best way. This passive philosophy also means that they will trust the freedom of others to do the same. Relationships are developed and understood. The caribou knows the intent of the wolf and accepts it to be different from the otter.

Man however has presented a different face from the one known for thousands of years. The First Nation people along the western side of Hudson and James Bay(s) harvested the caribou in much the same way as they have done all along. The methods used to harvest the caribou worked and there was no need to improve the techniques. Harvesting could not exceed the rate of birth of the animals.

The threat for the caribou comes from technology. Technology offers more of a threat than any other predator. The elders in the workshop have memories which are not pleasant. They have seen needles given to the caribou. Their question is why and why are they kept in the dark about the reasons for these needles? If they were told the reasons why, then they would cease to distrust the motivation behind those needles.

Needles and their meaning must be explained briefly. Up to the year 1960, the missionaries (Catholic) were administering hospital services. Hospitals provide a clear function and it helped many people overcome disease and injuries. However there was a hidden and more malicious agenda behind the needle program. The elders can tell you the names of past elders who never came back from the hospital after being told that their ailment required the administration of a needle. These were the same elders who had decided to openly criticize the activities of government representatives or missionaries.

The needle, the collars, the spraying, destroying waterfowl eggs are the same for the elders of the workshop. It is a threat to their livelihood.

When Canadian Wildlife Service asks of them why the Caribou’s population is in decline, they are angry. All memories of past government activities on their livelihood comes to the surface, as if it happened just days ago. They want to scream, ‘it is sciences’ fault!’
4.7 Health

The caribou reminds us of the importance of movement. As long as the caribou is permitted to range and find its own food, it will remain healthy. It will run, it will dig, it will survive the onslaught of the horse-fly and it will have young.

The caribou has a strong sense for life and it will do its utmost to get away from predators or find food. The Wayapaysis and the Pimatiquak are fortunate to find a clean environment in the Hudson-James Bay lowlands. The water is still clean giving the herd good drinking water. The plant life is good and adequate space allows new shoots to continue to full term.

The Mushkegowuk harvest only happens in the winter season, for two months. The herd is left alone for the rest of the seasons.

4.8 Subsistence Use of Boreal Caribou

The people that await the arrival of the caribou have many uses for the caribou. Obtaining the head of the caribou is an occasion for a feast. I suppose, because of the special relationship the Mushkegowuk have with the caribou, the food from the animal offers special treats to different ages of the harvesting group. No outsider can ever enjoy the taste of the eyes or the tongue or the ears because the tradition is not there. But, for the Mushkego elder the head offers very soft meat and texture, prepared in a special way, is mentally and nutritionally rewarding. If there is such a thing as mentally healthy food, the head is such a thing for the elders.

The meat is for the young people. They have the teeth and the hunger. After that is eaten, the bones become available. Any excess bone will be boiled to get to the marrow. Again this is a delicacy enjoyed by all. The brain from the caribou’s skull is used in the softening process of the hide. The hide will become the mittens and footwear of the community. As the fur is sheared off the hide with a sharp object (knife), the fur is saved. The fur is very warm. It will be used to provide insulation for the mattress. This was especially useful when the Mushkegowuk lived on the land and on the move constantly, the fur-insulated blanket provided sufficient protection from the cold snow-covered ground. Mixing the fur and down from waterfowl was even better.
Mikiquan is made from the front lower arms of the caribou. After the lower arm has been freed from the fur and meat, the hoofs and upper arm, this part is allowed to dry. Using an axe, the bone is held by hand with the smaller end pointing downwards it is chiselled to look like the sharp end of an axe head. This is a very useful tool and every harvester owns one.

Tying the hide along a sturdy pole that has been tied between two trees, the mikiquan is used to clean the inside of the hide. The outside will be the side with the fur. The sticky tissue on the hide would make it extremely difficult to soften the hide. That tissue would only harden as the hide dries. It is therefore important to clean off this tissue. Holding the mikiquan in one hand you will pry this tissue off starting from the top and working downwards. The tissue must be sheared off across the hide to be taken off like a plastic sheet. Only then can the other side be worked on.

After the inner side has been cleaned the hide is taken down and transferred to a wooden beam supported by two legs placing down at about a forty five degree angle. The sheared side is then draped over this beam and a pashqua-hegun, designed from the lower hind leg of the caribou, is used to take off the left over fur. This fur is fixed to the hide and a lot of force must be used to clean this stubble off. The pashqua-hegun is made by taking the lower hind leg, minus the hoof and upper portion and cutting one side off using an axe. The design makes it possible to use two hands, one on each hand and applying the sharpened side to the hide to take the stubble off.

Aqua-win (milling bones) is made from the joints to be used when pieces of caribou have to be crushed. A favourite among the young people is cutting the meat into long strips, about as wide as the hands and maybe one inch in thickness. These strips are draped over long sticks. These sticks will be secured horizontally over a hot fire. The fire and smoke will dry the meat to a desired quality. After the meat has been smoke dried, it will be allowed to cool. Using a large aqua-win or milling bone, the meat is pounded with the milling bone against a hard object, maybe a flat rock. As the meat is pounded it turns soft and browny. The soften meat is reserved for the very young whose teeth may not be able to handle the cooked caribou meat.

The pounded meat becomes pemmican when “ahkan-pemmi” is applied to the crushed meat before eating it. The “ahkan-pemmi” is made from boiling the fatty areas of the caribou. This would include the marrow from the bones. As the fat rises to the top, the non-fat broth is separated from it. The rich fat is saved and allowed to cool off. As it
becomes cold it retains the shape of the container and is wrapped in a cloth or birch bark. This can be used later for cooking and/or shared with family members. The high source of protein is useful during the cold winter months.

4.9 Special significance of Boreal Caribou

The Woodland Boreal Caribou is very special to the Mushkegowuk and to the animal world. What is contained or grows amidst the hide of the caribou is not a parasite. The caribou carries many things and accessing or finding these things is very important to the people of the area. These gifts, messages or rewards, helps the young harvester realize that something significant has happened. For example, on the left eye, close to the center, and inside lives a longish worm. Not every male caribou has these “passengers” inside their eye. It is not inside the eye but between the eye and the eye socket. Since the traditional Mushkego harvester makes use of all the parts of the caribou, the eyes are a special delicacy. It is therefore common for a harvester to find something in the caribou. Finding this worm, inside the eye of the older, male caribou is very significant. It raises the esteem level and admiration of the individual among the people. Only the most skilled and knowledgeable hunter can get close enough to the “wayapaysis” to be able to kill it.

The Woodland Boreal Caribou has a place within the animal and human circle of life in the Mushkegowuk territory. Within the fur the “horse fly” will deposit their eggs before the onset of warm weather. As the eggs hatch the young horse fly leaves their home to seek other animals for food. In hot and dry seasons the horse fly will drive both the moose and the caribou mad with their insistence to clean the inner recesses like the eyes and the ears.

The significance of the caribou for the Mushkegowuk is the varied types of tools, food, shelter and warmth it gives to the people. On top of that, only the best, quickest and accurate persons are able to be called caribou hunters. The animal provides much to the people and it also demands that the people be at their best to acquire its gifts.
5. Management of Boreal Caribou

5.1 Traditional management Practices

The Elders in the Timmins workshop on the Woodland Boreal Caribou insist that the Caribou and the Mushkegowuk have a relationship that has not changed over thousands of years. Today they are proud to report that their grandsons provide them with caribou that they need. Each winter a party of harvesters using snow machines will leave to do their hunt. They only have two months to do so. Like in their day, the caribou was available after their winter sleep and before the caribou started to range into the open.

The female antlers are smaller than the males. It is easy to differentiate between the two even at a fast gallop. In the old days when our advice was still heeded we could instruct the young to follow the traditional management practices.

The wolf will still be able to get at some of the caribou but, the wolf also needs to manage and only get what they need.

Traditional management practices:

1. Let the caribou have their sleep at the dead of winter.
2. Do not advance into their sleeping areas.
3. Harvest only the males during the harvest.
4. Use all parts of the caribou, including the hoofs, the legs, the antlers, the eyes, the ears, the nose, the tongue, the brain, the fur, the hide, spinal ligaments (thread), blood, stomach contents, stomach insides.
5. Teach the youth about the uses of all of the above.
6. Re-establish protocol before and after harvest.
7. Be satisfied with your life.
8. Imitate the qualities that make the caribou such a hardy animal.
9. Share your good fortune with others.
10. Give thanks.
5.2 Moving Forward: Management of Boreal Caribou

There are tears among the participants when talk turns towards management. They have seen mismanagement by those who profess to be experts. They know very well that their words carry no weight among government people, educators, doctors, banks and still they managed their society for thousands of years.

When the ships landed on these shores were there not many mature and giant trees? Didn’t John Cabot say that his journey up the St. Laurence was impeded by the fish in the river? Weren’t there thousands of buffalo? Was not the soil attractive to farmers from the old world?

Now even our children do not heed our words. Strange that policy is only acceptable when the policy maker carries an implementation force behind them. It is up to government to show how serious they are about management. We know the economics of today and yes, a choice must be made.

6. Acknowledgements

Without the sincere and full input of the following individuals, which we call our Elders, this paper would not have been possible.

[Names redacted]

[Names redacted], [Names redacted], [Names redacted], [Names redacted] all from Peawanuck First Nation.

[Names redacted] from the Attawapiskat First Nation

[Names redacted] from the Kashechewan First Nation

[Names redacted] and [Names redacted] from the Fort Albany First Nation

[Names redacted] and [Names redacted] from Constance Lake First Nation.
7. Literature Cited

Mushkegowuk Council Land Use Study

8. Knowledge Experts Consulted

The Elders of James Bay

9. Maps

9.1 Region and Communities within Range of Boreal Caribou

a) Regional movements and patterns of the Woodland Boreal Caribou
Métis Nation of Ontario Acknowledgement

Environment Canada would like to acknowledge Métis Nation of Ontario for preparing a summary report with the Aboriginal traditional knowledge shared by Regions 1, 2, 3, 4, 5, 7, 9 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.
North-Western Ontario Area Aboriginal Traditional Knowledge Workshop (Sioux Lookout), Boreal Woodland Caribou ATK/TEK
Caribou

Introduction

Noble Wolf Consulting and Facilitation services was contracted to facilitate discussion with Elders across the northern part of Ontario. The purpose is to gather information on the Woodland Caribou. It is also to determine if there is a decline in population and to find out if this particular species is at risk. There were two sessions that took place in Sioux Lookout Ontario. These two sessions had some discussions on what the people knew of the caribou, some experiences and what they recommend as a way to help the caribou. In these discussions, there were discussions on habitat, habits, food, culture, some stories they heard, travel or migration, drowning and experiments. With those discussions, they had some difficulty in providing some concrete recommendations but they came up with some things the government should consider.

Habitat

Caribou were found to be in most of North America. As we know it now, caribou were sighted in most of Canada and most of Ontario. Many of the First Nations people remember sighting of caribou near their territory, more specifically along the Great Lakes and Lake of the Woods. Caribou was very common.

Over the decades, caribou have moved more northerly part of the country. Around the 1950s, caribou were sighted along the 50th parallel. Old trees are an attraction to the caribou. The food they carry is what keeps the caribou to keep coming back for more.
Habits

Caribou have shown that they are very sensitive to sound. The wife of one of the Elders who participated remembers being with her grandmother when they came upon a herd of caribou. It was in the middle of winter. They approached them very slowly and cautiously. As soon as they made some sound, a big puff what appeared to be a huge cloud, developed and they caribou disappeared very fast. They disappeared in a cloud of snow and they were gone.

The many and varied sounds of modern technology have been blamed for the movement of the caribou and their reason for not returning to the region. There are roads, railways, airports and logging operations below the 50th parallel. Also, the sound of airplanes is being considered a contributor the movement of the woodland caribou.

Food

Caribou have found that their food source were around the old forest areas. The trees had to be old for the caribou to have their food. During the winter, they liked what is called "lichens". Also, it is where some of the insects stayed during the winter. Caribou liked to eat some insects with the earth around it. They were mostly moistened by their surroundings and some were somewhat fruity.

Some caribou have caught disease through consumption of certain foods. As there have been foreign chemicals introduced to the environment, some foods get some insect or bugs that have been in contact with chemicals. The caribou eat some foods that contain these bugs or insects. They in turn get sick and become unhealthy. They may or may not pass it on to other caribou or their young ones.

Survival
They were also a source of food to many including man and wolves. Wolf was their main predator. When the caribou are on the run, they travel very fast. Their travel range is unknown but all Elders agree that they travel a great distance, especially when they have been spooked from an area. Their fast travel and great distance is an attribute to their ability to survive from their predators and weather conditions.

**Culture**

For many First Nations people, the caribou is a member of their clan family. This fact and belief makes the caribou a very sacred species to First Nations people. Being a member or leader of a clan family is a spiritual matter. Caribou is a spirit and the spirit is a leader of a clan. The caribou is very important to First Nations. It is important that the caribou is feasted throughout the seasons. Caribou is sacred.

The stories, legends and teachings of caribou were an important element in the way people behaved and served as a guide to the ethics of all people. When First Nations people had a successful hunt, they used all the parts of the caribou. Nothing was wasted. It is this type of respect that was shown to, not only the caribou, but to all lands and natural resources that re-enforced the stewardship responsibility of the First Nations people. It is a tool to teach the young about respect and their inherent stewardship responsibility.

It is important that the First Nations people be consulted when the Caribou and other animals or places of cultural and sacred relevance are being placed in protective policies by government or agencies.

**Some Stories**

In the township of Atikokan, the Anishinaabeg have identified the place as “Atikigaaning” (A place of Caribou). When the road was built and there was noisy
commercial activity in the area, the noise was too much for the Caribou and they moved away from the region and moved north.

Many decades ago, there was many Caribou in the English River near the mouth of Winnipeg River. At one time, the rapids just north of the mouth of the River were called “Manitou Pawitig” or Manitou Rapids. One day, while attempting to cross the rapids, a Caribou got swept away through the rapids and drowned. Since that day, the name changed to Caribou Falls or “Atik Webaabigo”.

**Travel**

The movement of the Caribou was more of a lateral movement rather that horizontal. The Caribou moved northerly and southerly rather than westerly and easterly. As there is less technological activity (logging or mining) in the north, it appears that the Caribou are more comfortable with the old forests, growth and less noise. With the abundance of food source, less noise and only wolves and bears to contend with at the moment, it is better for the Caribou to stay in the northern part of Canada. The Caribou is always looking for food.

In some experiments where caribou have been tagged, it appears that the caribou travel in a north – south direction at approximate range of 100 kms. This is when there is no threat of predators or has been spooked by light or foreign sounds. It is usually the commercial industrial activity that spooks the caribou. Also, the clear cutting and how the land is left after logging activity leave the food source to be depleted.

**Drowning**

Some technicians discussed the Caribou and how some had drowned. Since the caribou were very strong swimmers and go long distances, some still drown. The Elders explained that it is the conditions of the water, at times, that contribute to the
drowning. The water is a safe haven for the caribou, especially when predators are on their trail. It is a way to get away from the wolves and bears.

**Experiment**

Some caribou have been tagged so their movements can be tracked. Elders expressed that the caribou is much like any being that knows their body has foreign objects connected to it. They do not like any foreign objects attached to their bodies. The Elders expressed their concern with the manner that caribou have been tagged or have collars on them.

**Recommendations**

1. Natural law or Traditional Knowledge needs to be the basis of First Nations involvement in Caribou population maintenance or retention. Generations of knowledge that has been passed from Elders to youth need to be used. However, it cannot work in isolation, especially with the abundance of wisdom and knowledge that have been accumulated in Western Science. These two methods need to work together and cooperatively if nature or certain animals are to survive in the evolving commercial and technological activities.

2. The First Nations people have their processes that are dormant. Ceremonies have to be re-instituted and practiced. It is important that a proper feasting be done to initiate any process that deals with traditional knowledge or natural laws. These actions invoke the spirit of the sacredness in all beings and nature. Other ceremonies are done through sweats or shaking tents. These provide direction of nature on what needs to be done spiritually and what natural laws need to be invoked. First Nations people have historically used traditional ceremonies and will need to return to those for Mother Earth to provide and care for caribou
and those that need it. Guidance will be provided through those practices.

3. More land has to be put aside for the proper use by the caribou. It could be that the area can be predator free or limited with no modern technology to create lights or noise that will spook the caribou. The food that they require should be readily available with old trees as a natural surrounding. This may provide adequate habitat for the needs of the caribou.

4. There should be a way to monitor the population. When there is more births and survival rate of the caribou as to their deaths, whether it is natural or by predator, there will be some hope for the caribou.

5. People or companies need to respect the environment and work with others to protect the health of the environment. It is important that proper care is given and shown. It is part of the stewardship responsibility.

6. The first session ended with a consensus from the group that “…we came here to discuss the caribou and what we know about them. Yes, they are a sacred part of our culture but we know little. It is our combined knowledge that provides some key points. There are other Elders who may provide more information. That is all we can do at this time; provide information. It is the leadership (government) that can use this information so that they can provide their best analysis and direction to help the caribou. We can help through our ceremony and provide support.”