

Arctic Borderlands Ecological Knowledge Co-op

Community Reports 2005-2006



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Community Reports
2005-2006**



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The Arctic Borderlands Ecological Knowledge Co-op

The Arctic Borderlands Ecological Knowledge Co-op brings together and uses both local and scientific knowledge to monitor and assess ecosystem changes in an area that covers the range of the Porcupine caribou herd and adjacent coastal and marine areas, in Yukon, Alaska and the Northwest Territories.

The Co-op was founded in 1994 when representatives of different First Nations, Inuvialuit and co-management groups, along with several government agencies, met in Dawson City, Yukon, to start a co-operative ecological monitoring program. Participants at the meeting identified the three main areas of focus for ecological monitoring: climate change, contaminants and regional development. Participants at this founding meeting also decided that an important role of the Co-op should be to bring together science and local/traditional knowledge.

The role of the Borderlands Co-op is to develop and share information about ecosystems for decision makers to use. No management decisions or advocacy positions are taken. Since its beginning the Co-op has encouraged and supported the use of both science-based studies and studies based on local and traditional knowledge in the monitoring and management of ecosystems. The Co-op seeks to improve communications and understanding among governments, aboriginal and non-aboriginal communities and scientists with regard to ecosystem knowledge and management and to foster capacity building and training opportunities in northern communities.

There are currently four main components to the Borderland Co-op's Programs:

1. Indicators: Track and communicate indicators of ecosystem change
2. Community-based ecological monitoring: Record, synthesize and communicate local knowledge about the environment
3. Projects: Facilitate and develop ecological monitoring projects
4. Information sources: Provide a central point for finding information

The Borderlands Co-op has a flat organizational structure, with decisions being reached by consensus at the Annual Gatherings. The Gatherings are an opportunity for participants to discuss and make decisions about the Co-op's programs, in order to maintain and enhance a system of ecological monitoring that is relevant and feasible to the Co-op's members. Sharing information about the Co-op's projects, including the Community-based Monitoring Program, is a major component of the Gatherings. To date, Gatherings have been held in Whitehorse, Inuvik, Old Crow, Aklavik and Fort McPherson.

The Borderlands Co-op is administered by the Arctic Borderlands Ecological Knowledge Society, a non-profit society, incorporated in the Yukon. The Society's Board of Directors is elected each year at the Annual General Meeting. The Directors for 2005 - 2006 were: Randall Tetlich (Old Crow) - President;



Joanne Ahlfs (Fairbanks) - Vice-President; Sheila Nasogaluak (Inuvik) - Secretary-Treasurer; Ian McDonald (Inuvik); William Teya (Fort McPherson); Barney Smith (Whitehorse); Gary Kofinas (Fairbanks); Kenneth Frank (Arctic Village); Robert Charlie (Inuvik).



Environment Canada (Yukon) provides overall coordination and support to the Co-op. Funding is from various sources including government agencies and co-management boards and councils. In-kind support is also provided through staff support from various agencies and the sharing of data and knowledge. Membership is open and includes representatives of government agencies, co-management boards and councils, aboriginal government agencies, and academic institutions from northern Canada and Alaska.

Further information on the Co-op and all of its programs can be found on the Co-op's website www.taiga.net/coop



The Borderlands Co-op Community Reports 2005-2006

The Arctic Borderlands Ecological Knowledge Co-op Community Reports are based on the results of an ongoing community-based monitoring program in the communities of Old Crow, Yukon; Fort McPherson, Aklavik, Tsiigehtchic and Tuktoyaktuk, Northwest Territories; and Arctic Village, Alaska.

The objective of this program is to document observations based on local knowledge of the land, plants, animals, and community life. These observations contribute to a broader regional ecosystem monitoring program, intended to assist in the understanding of what is changing and why. It was the community residents themselves who initiated and who continue to support the inclusion of local knowledge in the regional monitoring.

Each community monitor interviews about 20 experts in their community using a questionnaire which asks for observations about weather, berries, caribou, fish, other animals and life in the communities themselves.

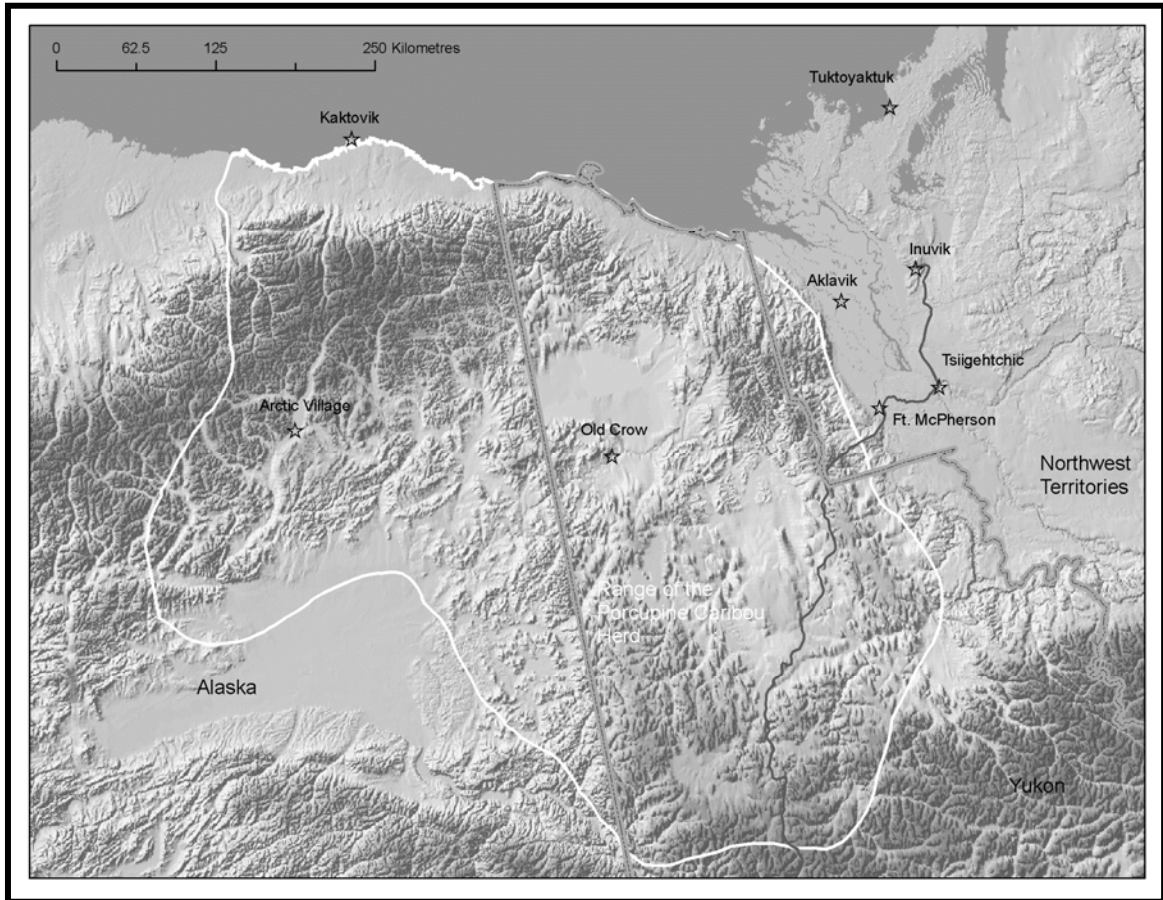
This is the tenth year that the program has been running in Old Crow, Aklavik and Fort McPherson. It is the sixth year in Arctic Village and the third in Tuktoyaktuk. Tsiigehtchic has also participated for two years but were unable to take part in the program in 2005-2006.

This year the Community Monitors were Randall Tetlich (Old Crow), May Andre (Fort McPherson), Annie B. Gordon (Aklavik - Inuvialuit), Audrey Snowshoe (Aklavik - Gwich'in), Mildred Allen (Arctic Village), Butch Kaglik (Inuvik – Inuvialuit) and Steve Cockney (Tuktoyaktuk).

This report contains written summaries of the information each of the seven Community Monitors obtained from the interviews they conducted in their communities in January and February 2006. It also includes additional information, primarily in the form of quotes from the local experts, drawn directly from the completed interviews.

More information on the Arctic Borderlands Ecological Knowledge Co-op's Community-based Monitoring Program, including examples of the questionnaires, can be found at www.taiga.net/coop/community/index.html





Map of Arctic Borderlands Ecological Monitoring Co-op Communities



Aklavik, Northwest Territories – Inuvialuit

Community Monitor – Annie. B. Gordon

People still go **out on the land**. It all depends if they have the equipment or if they can go with someone else. Due to price of gas, which is so high, it is getting harder to travel on the land. But we still have a few elders still spending time out on the land and few younger people still hunting and traveling on the land. Local people are still trying to hunt whenever the caribou are migrating. They also hunt for ducks and geese in the fall. So there are people still trying to hunt.



People say the **weather** is very strange. Some say it is cooler, more rain, and lots of over cast and damp. Others say it is very warm too. All depends where you are. I think on the coast it is a bit cooler, with lots of winds. You never know how quick it can change. There's winds, but not really storm winds, and this will last till late fall. There was one report of some young ice in June; this was strange for an elder. Also the water was high. The tide came up almost to the house which is never seen before, except in the fall time. **Freeze-up** was reported to be about normal. Some lakes froze-up quickly.

People are seeing other **changes**. Willows are growing more and taller in some areas. Also some reports of lakes draining out. Channel currents are changing in smaller rivers and there are more sandbars in the rivers. There is more erosion along the river banks, especially right after the ice moves in the spring. There are big holes way back under the banks which usually fall in later on during the summer.

There was a very poor crop of **berries** this year. People say the summer was too cold, too much rain, so the berries never grew. Some say they got very few berries. If it was a good year, people would be all over collecting berries. They go out but, when there's not much to pick, it's a waste of time.

People always **fish** where ever they can set nets. They're sure to catch all mixtures of fishes. Some say there's not much whitefish, while others are able to get some. It all depends where they fish. Coney is being caught in nets or by ice fishing. Jackfish are plentiful and reported to be very big. Some people are finding loche with poor livers with spots on them. They have some kind of lumps on them too. Nobody reported any strange fish. People don't try to get too much



fish, only the people with dogs because they need the fish to feed their dogs. Two people said they caught dog salmon at Shingle Point. They said it was because of climate change.

In the spring, after the ice moves and the river clears up, people always go down river to hunt **caribou**. If they're lucky, the first hunters run into the caribou and would always get fresh meat to bring home. Our caribou are not that close by to the community. We have to go long ways to hunt and it is lots of work. So if people that don't have equipment, meaning boats or guns, it's very hard for them. Some people use their skidoos to hunt. That makes it harder for those that go down later because they have to walk long ways to hunt and sometimes they get nothing. People have to go long ways to hunt in the spring or summer. In the fall, when the migration's going south, if you're lucky, people could get caribou close to the river. After the caribou pass on their migration, then we are out of luck to hunt. If the caribou stay close by, which hasn't been seen for a long time, we could have some caribou around for the winter. Hardly anyone hunts during the winter time, because the caribou are too far back or in the Yukon area. Most people reported that the caribou are in good health. There were very few reports of sick or poor caribou, only if wounded or by infection.

There were not many **grouse** around this but there were more **ptarmigan**. Most people reported seeing **ducks, geese, swans, and cranes**. Very few people said the numbers were the same. Some said there were more and others didn't know. Waterfowls are never in the same place, they're always flying all over. They fly along the hills, going towards the coast. There are some **hawks, falcons, eagles** and **owls** around. Whenever people travel around the delta or coastline, you see them. They are never in one place either. They have to travel around to eat.

There are some **small birds** seen but few people take time to try and identify the birds. One person reported seeing a dark marlin at Herschel Island, so there are some different birds coming north. One person reported seeing a robin in March.

As for **insects**, there are always too many mosquitoes. There's nothing new about them. There are lots of ants, some grasshoppers, and yellow beetles.

Some say there are lots of **mice, moles, and lemmings** around and some say there are few. But there are always mice around. Ground squirrels are seen around the coast only. The **rabbits** seem to be really increasing in number.

Moose are very plentiful all over the delta. As you drive on the ice road, you are sure to see one or two. Some people have seen some **muskox** but not as much as what we saw in the years back. There weren't really any comments on muskox. **Bears** are mostly seen down by the coast. There are very few in the delta, only problem bears. There were hardly any cubs reported. When people travel, they don't wait around. They only report what they see.



There are very few **muskrats**, but people have more time to trap or hunt. There are lots of beavers, maybe too many. There are very few **martin, mink** and **weasels**. For the first time, a martin was seen in town dump. People only see **wolverine** when they hunt in the hills. There were lots of **foxes** this fall and then there were hardly any around. They travel around. People started getting more **lynx** after January, until the end of March. They're good price for those who trap.

Some say there aren't many **wolves** around. This fall there was a pack of wolves traveling around chasing moose. As we have more moose in the delta, we may see more wolves. But nobody really sees them, only the tracks in some places.

Very few people are really **trapping**. There are really only about three or four trappers that are really out there on the land full time. Others go out when the weather is warm. When it is cold, no one really goes out. The few elders that could go trapping go from fall to end of trapping season, for long fur animals. Then they start trapping for muskrats, but only if it is a good muskrat season. Sometimes it is very hard to find muskrat houses. That's how it was this past year. Some people said there was too much snow for trapping.



People still hunt **beluga whales** when they start coming after the ice clears out. This is when they come close to the mainland for feeding. A couple of people reported seeing a few whales washed up on the shore. One was very skinny and had some puss around the eye area. The whale carcasses had to be burned. The people involved say they hadn't seen anything like this for a long time. But for other hunters, who got whales, they say all is good and there was nothing unusual. There were only a couple reports of seeing a few **bowhead whales** on



the north side of Herschel Island. Some people said there are lots of **seals** around but some people said they didn't see any. No one is hunting them.

Some people say airplane and helicopter activity is increasing and there are some that don't know. Again, this depends how much time is spent on the land. Planes fly too low over the caribou. This should be reported to the HTC's. All planes should be reported when they fly over and around the hills. Snowmobile activity is about the same. It's the only means of transportation. We have no choice for traveling any other way. I don't know if ATV use is increasing or decreasing. Very few people are using them. We don't have any sport hunting. Gas and oil and research activity is quiet. If there is any work, it is very short term. Tourism is slowly increasing with Herschel Island getting more tourists in summer.

I enjoyed doing the interviews this year again. Only a couple of people didn't want to be interviewed, so I do have some new people this year. This was very interesting. We don't have too many elders left to give us information so we are lucky to get some information. We're losing all of our elders so we have to be thankful for the people that are willing to share whatever information they share with us. People don't live out on the land year round like long time ago. So we are very fortunate that if they do they are trying to carry on what they were taught by their elders. Our younger people will never really survive off the food we get from the land but they do try whenever they get the chance to go out on the land. The young people today depend on the store bought food so much, so if they don't get anything from the land, they have no choice but to buy it from the store. They don't really see life like we use to see it, but they are trying. Every year it seems to be a bit different, but still we are trying hard to stay out on the land. I like doing these interviews, as I do learn a lot from them.

Thank you to all the people I interviewed. Thank you all for the good information provided. Thanks also to the new people interviewed, these people came forward on their own, which is good. This shows that people are interested in the Arctic Borderlands Project, and that people are still going out on the land and that they care about it.

What the local Inuvialuit experts are saying in Aklavik:

- I noticed that the caribou moved to higher hills earlier this fall. There was more snow this year when traveling up in the hills. We saw less signs of wolves and other animals when we went hunting.
- It's too warm. Everything is changing. The animals are getting less. Maybe they're going somewhere else.



- There's too much snow so when there's frost on willows the animals have a hard time to get food. After it warms up, we start to see more animal tracks. But I never see caribou unless they're way back.
- Sometimes water really drops low but this fall it was good. The willows are growing taller. Some trees are dropping their needles.
- I saw lots more rabbits this year. There's lots of grass growing.
- There was lots of snow all over so you have to be careful traveling.
- There are lots of willows growing. The lakes are draining out. Maybe it doesn't affect the people much now but in a few years we'll see it happening.
- There were hardly any berries growing this year. Everything is late. There are no cranberries or blueberries but lots of willows. Some lakes are drying out.
- We don't see so many caribou as we used to but there are lots more moose. When there's caribou around we have more animals around, like wolves, wolverines or foxes.
- There's lots of erosion. There are lots of willows and even small trees some places. Some lakes are breaking through. Maybe in years to come we'll start feeling the effect of what's happening.
- This year the freeze up was slow then we got lots of snow. In fact, too much snow. Rabbits came late but there were lots of foxes. If we had stayed out on the land the overflow and snow would make it very hard to get around.
- The caribou were in better shape due to less bugs or mosquitoes. There was less moisture so berries were burned.
- Too much snow or overflow early in the fall made it hard to go on trap line. Now it's getting better. Everything freezing up good so it's getting better for traveling now. The snow seems to fall off willows and trees.
- It was very hard for me to get fish this year. I set net for two days and hardly got any fish. We just got enough to use while out in camp. The fish were in good shape. There were even less fish for ice fishing. It was really different this year.
- I only did a very little bit of trapping. If I had a skidoo I would have done a lot of trapping. I had to walk a lot.
- There seems to be more willows and ground erosion. The rivers are getting shallow and some are drying up. There's more moose than there was years



back. The lakes don't even get filled up with fresh water. There are more and more willows and small trees growing further towards the coastline. It gets very shallow when we have lots of south winds. There are different birds coming to north.

- There was lots of wind in the summer. As soon as weather calmed down a bit we would travel. All summer was windy with only very few days it calmed down. December wasn't very cold. It finally got kind of cold end of January.
- On the coast, you can never tell what kind of weather you'll get.
- Most of the fall was not too cold. Once in a while it would get cold then warm up again.



Aklavik, Northwest Territories – Gwich'in

Community Monitor – Audrey Snowshoe

The people interviewed ranged from 82 to 21. The average age was 55. Time on the land was reported as follows: 15 people said they did day trips, three said they took day trips with occasional overnights and two said they were on the land for a week or more at a time. Some people reported they couldn't go for long trips because they had a job. One Elder said he was too afraid to go out this winter because there was too much snow.



There were varied reports on **temperatures**, so it appears the weather was more variable than usual. Everyone seems to agree it's generally getting warmer and snowier.

Compared to last year, the **weather** was a very mild year. Most people said that it rained almost the whole summer. People noticed that the weather was very mild compared to previous years. There was a lot of rain during the summer months, which meant lots and lots of mosquitoes. And when it got hot, it stayed very hot for a number of days. It was always blowing very hard too. During the fall-time, it was very warm. During these months, there were a lot of **mosquitoes**, since it rained a lot over the summer. Not to mention the thousands of little ones in the marshes.

August and September were very warm. It didn't really get cold until October. It never really started **snowing** until late October. And once it did start snowing, it snowed and snowed. We sure got enough snow at the start of winter. During the month of November, we must have had all the snow we had last year. There were also lots of slush and overflow all over, which made it hard for everyone.

Even **freeze-up** was difficult this past year. Freeze-up was slow this year due to the warm weather and lots of overflow. So the winter road was opened very late this year.

The first winter months were not even that cold. But some harvesters said there was too much snow to be doing anything much on the land. This was hard too for



freeze-up. We just couldn't get the cold weather for the river and lakes to freeze good. But, the harvester said that when it did freeze, it really froze up good.

January and February were also not too cold. It was a warm winter, people say. The weather was sure windy during the months of March and April.

Too much slush in some places caused problems. So did all the snow. It was an unusually warm winter, rainy summer and low water. Lots more snow. The ice is thin, making travel dangerous. All these changes are affecting the way of life.

Berries were very dried out this past year. There were only a few blueberries around that were sweet and juicy. Not many people went berry picking. It was a poor year. If you did you were lucky to find a good berry patch. When people went to pick berries, they were already cooked (over-ripe). And this was probably around the month of July. Most ripened so early that people missed them. The berries were ripe before the usual time. They were already spoiled before people got to pick. Most who did go out picked salmonberries and cranberries, but most didn't get enough to meet needs. But some harvesters say that there were a lot of cranberries, so they picked enough for all year. There were few salmonberries. It wasn't a good year. They ripened early and were mushy. Maybe it was too cold. The cranberries ripened early. This produced mixed results. It appears timing had a lot to do with who got enough cranberries and whether they were of good quality. Only a few people met their needs. There were a few blackberries but they were sweet and juicy.

Most people said the **fishing** in the summer was very good this past year. They even had to pull out their nets occasionally, just because they were catching too much fish at different times. Some fishermen say that the egg fish didn't run by, or they missed the run. They say that they only caught a few egg-fish every now and then. Before freeze-up, many harvesters had some fish nets set and people had to remove their nets for a few days when they got too much.

Most people reported good fishing. Most people caught whitefish, coney and loche. Almost everyone met their needs for fish. Someone had to quit fishing because bears were bothering the camp. People fished on the Aklavik River for whitefish, crooked-back, coney, loche, jackfish, and dog salmon. They caught a few of each. The most important were whitefish and coney. People fished on Peel River for whitefish, coney, loche, and jackfish. People reported 40 to 50 percent of their loche catches had unusual livers.

Some dog salmon were caught. They were silvery, firm, good to eat. The water is getting warmer and it's causing salmon to start coming into area. People reported catching about one a week. It's unusual to catch dog salmon.

Most noted normal timing of the fish runs, but some said it was early for whitefish, crooked-back, and coney. Most fish caught were average size and



normal quality. The dog salmon was very good. Whitefish get mushy when they drown in the net.

Lots of people didn't see many **caribou**, but a few did see some. They either missed the migration or the caribou weren't close by. Some said the spring migration it was close; others said it was not close by. Many people had to get meat from RRC. Spring snow and caribou: Hard snow on top made it easy for caribou to travel in spring. They had to dig into deep snow for food. The body condition was reported as fair. There was no calving nearby.

Many said no caribou were around in the fall. Some said the caribou were close by and easily found. One saw over 500 caribou feeding on the plateaus. One monitor saw them coming from Alaska. A few were seen in August by the riverbank, on the ridge tops and valleys. The caribou were scattered around. There was a mix of fat and skinny caribou in the fall. There weren't any caribou close by in the winter.

There is still no caribou around Aklavik yet. Not even where they usually go, there's still nothing. We are hoping that it will come soon. People are very short of meat, and some people have had nothing for some time now. Most people are buying their caribou from different communities that are getting caribou. People are waiting for the caribou to come so that they can get their supply.

Most people reported no **unusual sightings** of animals. People said there is a different kind of mouse around - grey in colour with pointed nose. There are lots running around town. There are lots of otter moving into the delta. People are going to start trapping them. One person reported seeing an animal that looked like a shrew. There are some different looking birds.

People are seeing **grouse** and **ptarmigan** around in willows close to town. The number of waterfowl was reported as normal. Black **ducks** seen by Aklavik in the river but that's nothing unusual. Canada **geese** were flying over Aklavik. Snow geese were seen flying over Aklavik as usual, about the same number of **swans** flying over. There are cranes flying over bush camps. Migrating birds are maybe coming sooner and leaving later. Several people noted eagles flying over Aklavik.

There were more **mosquitoes** and they were reported as being bigger. There are more other types of insects than ever, lots of grasshoppers and more sand flies this fall.

Most people said there were few **rabbits**, but some saw lots. Some people said they are seeing tracks but they haven't seen many rabbits. **Ground squirrels** are seen on the way to mountains and only in the summertime. You can see mice running across road in town once in a while. Ground squirrels run around town, too.



Several people saw **moose** on road to Inuvik. There are a lot more moose around. There are a lot of moose in the delta this year. So some people are lucky to have moose meat, since the caribou is very scarce in the region. One person reported seeing tracks of **wolves** following moose tracks. Most people didn't see **muskoxen**.

There are fewer **muskrats** than normal and they're not as large as used to be. Most people said there were few **beavers** but one person said there were lots.



Most people didn't trap, but it was a good year for **trapping** - good price, lots of animals, and warm weather. There were lots of marten and foxes. There were plenty of red foxes.

And I'm not too sure about it, but some people are afraid and concerned about the avian influenza. They are afraid that the disease might come north with the ducks and geese, and also with the other birds that do come north by migration.

I'd like to thank the harvesters in Aklavik for all the excellent information that I received from them. Mushi-cho

What the local Gwich'in experts are saying in Aklavik:

- Weather is usually cold in the winter, but it's been really warm this winter and in the summertime. It's getting warmer year round.
- Weather is really warming up. It's usually almost 40 below, but we never really get to that yet. It doesn't stay cold for even for a few days. It's always very mild weather.
- There are so many grasshoppers. How come?
- Fishing was really good this year, plentiful. I had to take my nets out some days because there were too many fish.



- I had my nets out all the time because I didn't know timing of run. It was good fishing.
- Berries were cooked by the end of July. They ripened early. Most people went to check too late.
- What's going on? The weather is very strange. Too much snow to even try to travel anywhere, unless you have a good trail and skidoo.

- I noticed lots of rabbits but there's still too much snow on willows. It sure is getting warm already. There are some rabbits but it's too hard to set snares because there's, so much snow. But the rabbits might be in poor shape if there is too much snow on willows that they eat.



- In November, the marten were not prime. The weather really changed. It's too warm. The weather changes too fast. There's lots of snow so I couldn't trap for a while.
- Planes buzzing caribou down at Picnic Lake this August made caribou move further away.
- I never see any bears, but they always seem to wreck my bush camp.
- We're getting more warmer weather but also so much snow. If you made a trail while it was snowing it would be snowed in the next time you went to go through again. So the weather is really changing.
- It sure would be good to trap, but it's too expensive and can't afford to go out.
- The ice is slow to harden. When the ice goes away it hardly makes a noise. Like if you were sleeping, the ice could move without you knowing it. The water doesn't have strong currents anymore. it just happened quietly in Aklavik.
- The Gwich'in should have long ago set up property so families can go there or they can have training sessions there, where there's nothing to distract people and they can work on healthy lifestyles.



- Ice too thin. It didn't freeze as thick as it usually does. There's no more cold weather.
- Everything's changing. The weather and all the animals seem to be coming back - rabbits, ptarmigans, grouse. It must have been weather. It's getting too warm and everything changing. Before the weather was normal and we had hardly any rabbits, ptarmigans, or grouse. Maybe the weather had an effect. I don't know. Friends here always tell me that there are rabbits but they're hard to get.
- There was too much snow this year. It was hard to travel this winter. The weather is already warming. It should be still 25 to 30 below, but now today it's only about 6 below so really warming up.
- The lakes and rivers took long time to freeze. It stayed cold long enough to finally freeze the road to Inuvik in late January. There was so much snow. I can't really travel anywhere. There will be too much overflow and caribou never come this way yet.
- This year it snowed too much and that makes it hard for animals to eat and dig for grass. So there's hardly any rabbits cause they have to dig deep for food. Also there's too much warm weather that are creating overflow. That makes it more difficult to travel.
- The weather is sure changing. It's getting warm earlier. The berries ripened early last year. Most people who went to check were too late. The berries had already cooked or spoiled. There was lots of snow this winter but it was sure warm most of winter months. I never noticed any changes in plants or animals.
- It might be that the warm weather is keeping the caribou from moving or maybe they're taking a different route.
- The weather warming up might affect birds' migration. They may come up early. Also with this really warm winter, we might have an early spring. It's supposed to be minus 30 and it's only minus 7 to 20. It's only cold a few days (1-2 days at a time).
- The weather has really changed in the past few years. It's warming up too much and bringing different bugs, insects, and mice up this way.



Arctic Village, Alaska

Community Monitor – Mildred Allen

We had a nice, warm year so more people spent time **out on the land**. During the last year, seven people made only day trips and seven reported day trips with an overnight. Five spent a week or more out on the land. One person spent one month upriver with daily visitors.



The summer **weather** came early. It was dry with some chilly nights. More people said it was real dry and too warm. There was some wet weather. Forest fires came in the Yukon Flats area by third week of July. Overall it was a good summer. As for the fall weather, it was cloudy and dry with a few storms. There were also some damp and cold evenings. It was warm and smoky. September was an Indian summer. There were a lot of overcast skies. We had an early fall due to heavy smoke. Winter came later than usual. The snow came by first week of November. It was heavy. December was wet with little snow. By January, there was an unusual wind and 50° below came by end of the month. Weather change comes in quickly. It's unpredictable. You have to watch weather when people go out. It can be dangerous for hunters.

Freeze-up and **overflows** came in quickly. Lakes and rivers froze over. Some froze down to ground. Water gushed out of tunnel around first or second week of November. Overflows are usual but you have to watch out for them when you go out.

General **changes** consist of no snow in November which is not good for snow machines. More lakes are drying up. It was warmer than most years. Trees are dryer. The wood haulers say that was good. Vegetation growth is coming in more and more. The permafrost is still thawing rapidly and there is lots of erosion. Permafrost is thawing all over. Research by scientists and native knowledge needs to be communicated so we know what is going on.

The **berries** were mixed. Salmonberries ripen too fast and didn't stay long. It was a bad year for cranberries due to dry smoky summer. They didn't grow, except in Junjik area upriver from the village. It was an excellent year for blueberries. They were sweet and juicy. Everyone met their needs. Blueberries stayed for up to three weeks due to good weather.



Fish are scarce. Some years it is good, other years it is not good. Some catches were good. Fishnets were good to harvest whitefish from June to November. Some people said the whitefish in the river were mushy and some said they saw sores on the nose and head. But at Old John Lake, the whitefish were delicious. The whitefish were of average size. Fishnets at Old John Lake were set later due to no snow and bad traveling conditions for snow machines. There were muddy waters in lakes. Only few people fished for chehluk (burbot). It was good meat and there were no liver problems. Almost all said they did not fish for lake trout. There were only few at Old John Lake. The fish are in good condition. Jackfish fishing was year-round. They were in good condition and came in with grayling. There were average size and no one reported any change. They were hungry all the time. We also harvest grayling in the spring and fall. There were few in spring and they came late in fall due to warm water. They were tasty as usual. Suckerfish were caught in fishnets, along with chum salmon. It's unusual to get them this far north. Maybe they came from the Yukon River because of warm water. They were caught in fishnet in Chandalar River. The salmon run in Flats was good year.

Caribou came in and stayed due to heavy growth of lichen. Someone said it regenerates every five years. The caribou stayed one week last spring, from Old John Lake and Timberling Mountain (dachanLee), before moving north to the calving ground. Some people said the snow was hard but others said it was crystal snow. Some said it was easy for caribou to feed. Some people met their needs. In the fall, the caribou were in an area



upriver. They were hard to get to. Two people said they lived upriver and caught few. The meat was in good condition. Some people said they didn't see any caribou until around the last week of October. They stayed all winter, all around the valley, lakes, river, etc. It was an excellent year for caribou. One person harvested a white caribou. It is very unusual to see one. There were lots of wolves following the caribou in the winter. Maybe it bred with different caribou herd. Some caribou were skinny but overall the meat was good. Lichen growth was excellent.

The **moose** population is more due to forest fire in the Flats. Moose tracks were all over the area. There are **bears** around but that's normal. One person saw six tracks of Dall **sheep** by the river which is unusual. The last time they were seen was back in the 1960s.



It was a good year for **trappers**. Maybe because of the forest fire lots of animals moved up from Venetie and Fort Yukon. The fur was in excellent condition and the price is high. But some people say there's no time to go out and trap. There are more **rabbits** here and in Fort Yukon area. It was a good year for rabbits. There were lots of **wolves** in the area. Some said they breed upriver. There were more small animals than ever before. Lots of marten tracks due to lots of mice this year. Some people said there are less mice, voles and lemmings now. The beavers are coming back again.

Bald eagles and **hawks** are back. No change in the **duck** season. **Ptarmigan** are coming back. There are lots of willows nowadays growing around rivers and lakes. Hundreds and hundreds of snow **geese** came through for 10 days. Other waterfowl are about the same.

Yellow jackets were seen last summer. There were no flies, just some gnats. There were no mosquitoes and hardly any horseflies. There was too much smoke from forest fires and it was too dry.

Airplanes decreased due to forest fire. Almost everyone interviewed said there were no changes in human activity from previous years. Lots of people use ATV and snow machines for collecting wood, setting nets and hunting. It's the only transportation we use. Hikers need to keep the land clean for animals. Not many comments on gas and oil exploration except "no oil drilling" would be good for caribou.

This has been an interesting and good year for the interviewing. More people wanted to be interviewed. They all said this program should be continued to get information on animals and climate change for future generations. Combining knowledge from locals and scientists is good information. Climate change is somewhat good because we had a good year.



What the local experts are saying in Arctic Village:

- The land is drying up. The lakes are shrinking. There are more grassy areas around the lakes and more sandbars are popping up. This year there are more sandbars. More willows are growing thicker and heavier than most years. There are more small animals like rabbits and less big animals. It was a mild year. It was a nice year to enjoy.
- I always go out on the land (hiking) for a one day walk. Ever since 1970s, I have noticed the weather is warmer. I haven't run into animals that are unusual.
- I noticed that the birds are not around as much as they used to be. In the old days, there were so many birds we couldn't hear each other. Especially robins. They were abundant in the old days. When there are no birds, small animals freeze with quick weather change.
- I saw tree squirrel a couple days ago (second week of February). A lot of trees are drier than in most years. There are a lot of changes. Snow machines are breaking down due to no snow on mountains.
- I was planning to go trapping again this year but things didn't work out for me (no snow, overflow, etc.).
- Oil and gas is bad for the future. It's bad for the environment. It makes bad pollution.
- It was a good year for trapping. The snow and weather were just right. It is very enjoyable and the fur is good.
- Airplanes are flying all over the place. There's no respect for us. Some of them fly low.
- I hear more birds singing. They are coming back again.
- Food and fuel prices are very high. We need to go hunting because the food cost from the store is high, but it costs a lot for the gas to go out hunting.
- The fish were mushy. There was no water in the river and creek. Plants were burned from the forest fire.
- It was a good year. All the caribou came back.



- I noticed that the lakes are drying up. Each year it's getting worse animal wise. The moose population went up in fall and summer. The vegetation is thriving. Last summer there were lots of blueberries, the most blueberries I have ever seen.
- Beaver and muskrats are coming back. I see lots of dens. I haven't see that many in 10 to 15 years. There are lots of wolves following caribou.
- There are lots of small animals around. Maybe it's because of forest fire.
- There are lots of animals around when the weather is good. When the weather is changing lots, we have a hard time moving animals and the meat can go bad. Plants were used for healing in old days but plants are unhealthy nowadays.
- The spring was early. This hasn't happened in long time. Things were turning green while there's still snow on mountain.
- July was warmer than June. The plants were dried up and the moose, caribou and sheep were all skinny.
- It's not same. The fish is vanishing. Some years it is good and some it is bad. The caribou are now coming in the winter not the fall.
- Moose are further up river. The plants grow more and there's warmer and wetter weather. There are lots of wolves along the river. A few breed along there, up river, the same as always.
- There was lots of smoke in summer, late June to late August. It affected us and the animals. The moose moved up north from flats. There was too much fire so all moose moved up river. We seen more moose and tracks.
- The blueberries were excellent. But it was hot and sunny which triggered the forest fire. That ruined the cranberry plants and shocked them so they did not grow. We needed rain and wind. It was warmer weather than most years - forest fire weather.
- It was very dry in August. The smoke from the forest fire did a lot of damage to plants and the environment.
- There were lots of caribou in the winter. It looked like the whole Porcupine Herd came here!
- We had good freeze for about 2 weeks then it warmed up and ice in the rivers and creeks got thinner.



Fort McPherson, Northwest Territories

Community Monitor – May Andre

It seems like the same people spend more than half of their time out of town **out on the land**. Others spend a week or more out on the land. Some people said that it was too expensive to go out. Gas and groceries cost too much.

The **weather** in June was cold and windy. In July, it was a mixture of cold and hot weather. In August it was a mixture of cold, rainy and windy to calm and hot. We had our first day of snow August 1st. Most people reported September as warm. October and November was mild with lots of snow. It was warmer than most years. December was unusually warm with lots of snow. According to some Elders, there has never been this much snow in December. In January, it finally started getting very cold with very cold south winds. The overflow finally froze. Most people reported that the lakes and rivers froze later and slower than most years. This fall there was a lot of overflow.



The weather conditions created a lot of problems for people to get out on the land. The snow was very deep in the bushes and on the lakes and rivers. There was a lot of water under snow. If you got off the skidoo trails, your skidoo would get stuck. This made it hard for people to travel or go out on the land to cut wood. A lot of people found this very stressful. Too deep snow also made it hard to hunt and trap. People had to use snowshoes. The weather was too stormy and wet most of the time. The highway was always closed. It was hard to get berries and meat.

The weather is very unpredictable. Elders say they cannot forecast the weather anymore. One Elder reported that this is the worst fall he has seen in his life. Too much snow, overflow and water on rivers and lakes. There was also too much snow and frost on willows and trees. This makes it difficult for wildlife to feed. There are hardly any rabbits, loche and other fish. For a couple of years now, there are hardly any baby ducks, Arctic terns or seagulls seen on the rivers. Due to approximately five feet of snow, moose are going to the river.



The ground took a long time to freeze this fall, due to so much snow. In October, there was a big storm. It blew so hard on the river there were places where there was bare ice.

We usually have Chinook in December, but nothing yet. Finally, on February 8 to 20, we had some strong west winds. This took most of the snow off willows and trees. Some Elders report that the weather seems to be making people sick. A lot of people are seeing significant changes in our weather. Warm temperatures are eroding all rivers and lake banks. Lakes are breaking out and drying out. Willows are growing up fast where the lakes were. Our river waters are getting shallow and there are more sand bars. More willows are growing along the river banks. The **permafrost** is melting fast. This affects us harvesters because the animals have their own way of adapting to climate change. Caribou are taking different migration routes. Warm temperatures may be affecting the Arctic char run. Berries are good one year, then not so good the next year. Some harvesters report lots of otters in our country. These are killing off our muskrats. There are so many beavers that they are even building some houses on sides of rivers. Caribou started rutting too early this fall. Therefore a lot of bulls were shot for nothing. Approximately February 8 through 20, the temperature was unusually warm, about -2 to -10 degrees, with strong west winds.

One observant Elder reported that long ago we usually start seeing the sun on January 6. Now she notices that the dates are getting much earlier every year. Another Elder reported that long ago the weather started getting really cold in November till March (-40 to -65). This year it finally got cold in January and part of February. Then we finally had strong west winds for a long period of time. These winds finally took all the snow and frost off willows and trees.

Most **berry** pickers did not meet their needs this summer and fall. It was a really bad year for salmonberries. There was nothing. It was too cold in the spring and too cold or too hot in July. We even had snow in July. There was also frost on the mountains and hills. There were few and small cranberries and blueberries. Around the Rat River area, it was a good year for cranberries. They were sweet and juicy.

As for **fish**, most people met their needs for whitefish and Coney. There are more jackfish and they are getting bigger. A lot of them have scars on them. Some people reported less jackfish in the Delta. Some people caught dog salmon. These were in good condition. Most people say they do not know why they are coming into our area. Some say it may be change of water temperature. Some people reported unusual livers in loche. The livers were either yellow or had spots on them. All species of fish appear to be fewer in number. There were lots of cuts and scars on some fish.

Some people reported lots of whitefish, some few. Regarding all types of fish, it is reported all runs are different due to temperature change. Some reported mid-



July and end of October as the main run. Some people reported fish average size to smaller than usual. Quality of fish was about as usual. Some people reported grey and mushy fish. Also some eggs were not normal. Most people reported no parasites. Someone reported one-inch worms on gills. If they got on your hands it was hard to take off. Some reported low catch of fish with fish eggs.

Most people reported that there aren't as many Coney as there used to be. The run was reported as early, late, and normal. The main part of run was mid-October and Mid-July. The Coney were reported to be average size to smaller than usual. Quality was about as usual. No parasites reported. Runs were different in different locations.

There were not as many char this fall. Some reported early runs; others reported that it was late. The main part of run was end of August to first week in September. Char were reported to be average in size. Quality was about as usual. No parasites were reported.

From April 1 to June 30, the **caribou** were close by and easily found. Most people met their needs. Caribou migrated north on an unusual route. Numbers in the groups were approximately 50 to 100 or 100 to 500. Most were in mixed groups. Most people reported that the snow was hard and icy making it hard for caribou to travel and feed. Most people reported caribou to be in fair condition. Some said they were in poor condition because they had a hard time traveling and digging for food.

From July 1 to November 1, the caribou were close by and easily found. Some people met their needs, others didn't. Caribou migrated south and took different routes. The numbers seen in groups were really high- more than 500. Group compositions were either mixed, bulls or cows. Most caribou were in good shape. Some caribou were not close and it required lots of effort to get them.

Since November, some people have been lucky and got caribou close by. Others had to travel far for it. Not many people met their needs. Whatever caribou were seen were in small bunches. Too much snow and poor feed areas affected where the caribou were found this winter. Since the beginning of the rut, some caribou were in fair condition and others were in poor shape. Most people think that the caribou herd is healthy, but some say it is poor.

Animals were seen in places where you don't usually see them. A white **fox** was seen in the delta and around Jay Goodies. Two peculiar **birds** were reported that kind of looked like snipes. There were unusual flocks of blackbirds- the kinds that are usually seen around Whitehorse. One magpie was seen. Someone reported a grey bird with a red breast that looks something like a robin or red bird. There was a grayish and colourful bird that resembled a woodpecker. One seagull that's usually seen around the coast was seen at 8 miles.



Some say **grouse** and **ptarmigan** are declining and some say there are more than last year. Depending on your location, most people say the **waterfowl** is declining. Some say there are more **swans** and **cranes** up the river. There are more swans around Carl Betz area. Some people say that they are probably taking a different route, past Anderson River.

Most people say there are more **eagles** and fewer **hawks, falcons** and **owls**. Up the Peel, there are more birds of prey. Some eagles were seen in October. They are usually gone by then. This was probably due to the warm weather. There are lots of hawks and owls at Carl Betz. Most people say there are fewer small birds. Others say there's more than last year.

Most of the people reported fewer **mosquitoes**. There were fewer **insects** like flies, dragonflies, bees and bulldogs. This was because of the cool weather. There were insects that look like wasps; they have red bodies and their bite stings. There were lots of small flying beetles that were seen in different places.

Most people report lots of small **mice** with sharp noses and also lots of normal mice. There were fewer **ground squirrels**. Most of the people reported fewer **rabbits**. Other people say they are coming back slowly. There are lots up river and down river.

There are lots of **moose** all over the country. No one saw any **muskox**. Some people are seeing lots of **black bears** and others say there are fewer around. There are lots of **grizzlies** around the mountains.



As for **muskrats**, most people say there are none to very few. There are lots of **beavers** all over. There are also lots of **marten** but fewer **mink** and weasels.

Otters are probably killing the minks. There are fewer **wolverine** all over. Some people say there are fewer **red fox**, while others say there are more. It depends on your location and amount of rabbits. One white fox was seen in the delta. There are fewer **lynx** than previous years because there are fewer rabbits.

Most people say there are fewer **wolves**. Some people have seen some packs. A lot of tracks have been seen between town and Husky River and in different parts of the delta.

Most people said they didn't trap this year. It was a bad year for **trapping** because the weather made it difficult for access, price of gas is high and there is too much snow. No matter where you went you had to wear snowshoes. Those



who trapped said there were lots of marten. These were in prime condition. Hardly any mink or muskrats, probably because there are too many otters killing them off.

There's no change in airplane and helicopter traffic. The only time we have lots of airplane traffic is in the spring and fall because of spring break-up and fall freeze-up on the Mackenzie River. Some people say there are more skidoos. Other people think there are fewer as they are too expensive. Exhaust fumes, gas and oil spills cause pollution. All this goes on our land and river. Lots of exhaust fumes come from skidoos, ATVs and vehicles. All this causes pollution. All types of traffic may be scaring the caribou away from the highway. This may be causing them to take different routes.

Most people say hunting for food by local people is increasing. This may cause over harvesting of caribou. Tourism is decreasing. Most people say there is no change in the amount of research being done by scientists on the land and water.

Some people said the questionnaire is too long. The program is worthwhile and needs to be continued. Mussi cho to everyone who welcomed me into their homes and gave me such good information. Thank you for your good hospitality.

What the local experts are saying in Fort McPherson:

- We had a late spring and couldn't really hunt beavers and rats. There was too much ice on the lakes so you couldn't paddle.
- This fall and winter there was a lot of snow. That made it hard to hunt caribou as road was always closed and caribou were a long way out. You had to have a skidoo. You couldn't pack and walk. On the river and lakes there was a lot of overflow because of the amount of snow. It has to be a record.
- This winter there was a lot of south wind. It was warm. The first time we got 40 degrees below was the end of January. Caribou started rutting about one week ahead of their normal time. It surprised a lot of hunters. I believe a lot of bulls were shot for nothing.
- There are hardly any birds, ducks, flies, mosquitoes and other insects. There are lots of cracks in sides of highway and lots of erosion.
- Animals are in unusual places. There are caribou on the Northwest Territories side of Dempster Highway and caribou around the Yukon border all winter.



- Over past 20 years I have seen significant changes in our weather. Warm temperatures are eroding our river and lake banks. Our river waters are getting shallow and there are more sand bars. I have noticed more willows along banks. The permafrost now is beginning to melt all due to climate change. It affects us as harvesters because animals have their own way of adapting to climate change. Caribou are taking different migration routes. Warm temperatures may be affecting the Arctic char run. Berries are good one year and then not very good the next year. Now we have lots of otters in our country. They're killing off the muskrat population.
- There's too much snow and lots of overflow. It's hard to check for anything. It's hard to hunt too.
- There's lots of erosion of sides of hills all over. The lakes are breaking open and drying up. There are hardly any berries. They freeze in summer. There are lots of beavers all over. They build their houses anywhere. There are lots of cutbanks and sandbars where there never was any. Barges used to go through these areas but it is impossible now.
- It's too hard to get around in the bush to work with all the snow.
- The climate is a lot warmer than other years.
- The weather is unpredictable. You cannot forecast it. There's too much snow and overflow and water on rivers and lakes.
- There are hardly any rabbits, loche and other fish due to weather. For a couple years now there are hardly any baby ducks, Arctic terns and seagulls seen on the rivers.
- Due to approximately five feet of deep snow, moose are going to the rivers. Two guys went to Trail River in December by skidoo. It took one hour to get there and they saw 14 moose.
- The mud didn't freeze fast this fall. It was very soft. A stick goes through easily.
- In November it blew real hard. Even on the river there were places where there wasn't any snow on the ice. All the trees and willows are covered with snow and frost. The willows are bent over. The weather seems to be getting people sick.



- There are different types of plants and flowers now. There are less frogs and I saw an unusual type of blackbirds.
- There's lots of snow and snow storms. Leaves stayed on the trees longer. There are more rabbits but still no muskrats. Fall is getting longer. In December some small creeks were still open. Too much snow is acting as insulation.
- There's too much snow. It's too deep. There's too much overflow. It's hard to travel. There's too much frost and snow on willows. This makes it hard for animals and humans to travel. It also makes it hard for animals to feed.
- The weather is unpredictable. There's more snow, overflow, erosions, and water. I'm losing income as I can't go out to trap due to the deep snow and overflow. Some creeks are not frozen solid.
- There are lots of willows. They grow fast. Long ago you could see all over, but now there are so many willows it's hard to see beyond them.
- I was told there were four otters near my camp. That's really unusual. There were also woodland caribou near my camp and that's very unusual.
- It's too warm all fall until December. This makes it hard to trap. There's too much snow, and it's too deep. There's lots of water (overflow). The snow was so deep a person couldn't go anywhere without snowshoes. Now in February the snow is hard making it easy to travel with skidoos.
- Long ago, starting in November, it starts to get cold, like -40 to -65 degrees right until March. Now in February, it was cold for about 6 days (-45).
- Getting out on the land is harder. There are no berries. There's too much snow. Caribou and moose are having a hard time getting around.
- I noticed a couple of things on the land. Lots of permafrost is melting. There are hardly any birds or animals around. The weather changes too fast. I usually take my family out picking berries, hiking, going for picnic, and hunting. We didn't go out very much because of the weather.



Inuvik, Northwest Territories

Community Monitor – Butch Kaglik

I interviewed 20 people, ages 30 to 68. The time they **spent on the land** was from April to December. There were a few, including myself, that spent October to March out on the land. There were quite a few that spent day trips out on the land and others spent a week or more on the land.

Some people said the summer **weather** was warm and very dry. Most people said it was cold and wet, damp, blowing and raining. One even said it was poor weather meaning windy. For some people there were no changes. Most people didn't have anything to say about changes in the weather.



People said it was very slow **freeze up** because it was due to warm weather. After the rivers froze there was lots of snow and overflow. It made it hard for people to travel.

Three people picked **berries**. Two people said it was very poor for berry picking this past summer due to damp, cold weather. One said she met her needs for berries, meaning blueberries and salmonberries.

I interviewed a lot of people about **fish**. They mostly caught whitefish, coney, and loche. Some caught quite a bit. One caught dog salmon and another even caught king salmon, red salmon, silver salmon. It's unusual to catch these fish in the delta. I think it's because of the warm weather we're having this summer.

Caribou in the spring were very few and far distance to hunt. One person interviewed got lots of caribou this spring. No calving this spring. No one saw any. I was in a caribou hunt for the Inuvik HTC in the fall but we had to go to the border to harvest caribou for Inuvialuit elders. It was Bluenose caribou we harvest. Most of the caribou were young bulls and cows.

People said there was lots of increase in snowmobile use. There were very few sightings of planes, helicopters, ATV's at all.



Tuktoyaktuk, Northwest Territories

Community Monitor – Steve Cockney

All or most of the people interviewed spent less **time on the land**, because of the high cost of living, and also this year the weather was very different from most years. Most or all of the hunters traveled a lot of the area. However, not much time was spent on the land for most of them. And that's because less and less depend on the resources of the land.



In the months of June, July, and August it was quite cold. The summer season was very short and at times high winds and a bit stormy. September, October and November was cooling off with some snow in all areas of our region. This part of the season was very different than most years as **freeze-up** was slow and late on the ocean and lakes. When we finally got snow, we had more than expected.

December and January was warm at most times. When it finally froze up, more and more snow was a reality. This made it difficult for people to go out hunting and fishing.

The most common **berries** that we pick are ukpiks and cranberries, with some blackberries and blueberries. But because of the coldness of the weather and shorter season, the berries were very scarce, especially around the Tuk area. Whatever berries were picked, were not at all top quality. They weren't around for too long, because it got cold and less humidity. In summary, not much berries this summer and early fall led to a disappointing season.

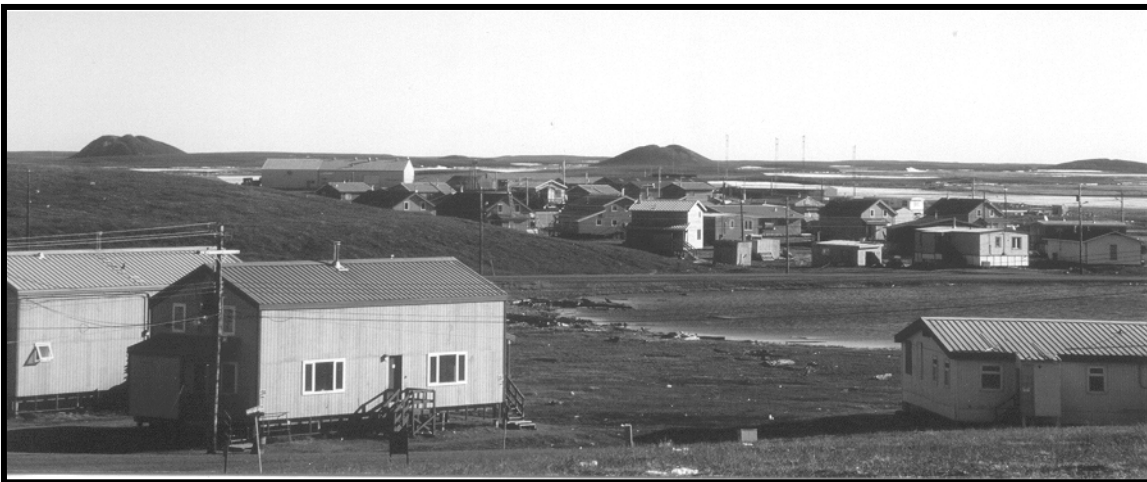
Fishing was very poor this year and of course it was because of bad weather. These past couple of years it has been slow. Our main types of fish are herring (cisco) and lake trout. Although we do get some coney and blue herring, they also weren't plentiful. People had nets out this summer and fall around the harbour (our main fishing area). A few years back, blue herring and cisco were plentiful in the harbour. People would get more than enough for their needs. At that time, they were getting blue herring, coney, whitefish and cisco herring. From the information I got, these fish were top quality back then. Now, because of the shorter season and late coming of the fish, people have to go elsewhere to do their fishing. A few people go to Dupkak (about 4 kilometers north of Tuk) in order to get herring. They are not too plentiful there either. And because of the



shorter spring season, not many people go out to Husky Lakes to catch trout. Only certain times of the day or evening, can they catch some trout. Traveling between Tuk and Husky Lakes was very difficult because when it starts warm up, the ice and snow melts quite rapidly. We don't fish or get any jackfish and loche. There may be a few on the west side of Tuk, but none around our area and Husky Lakes. There were some tapeworms found in some fish, but other parasites were rare, if any.

There were a few **caribou** that were easy to get because they were close to town. However, the main hunters had to go quite a ways out to get caribou. People in our community do not go hunting for caribou in the springtime, as the cows tend to their young ones and bulls are not good quality at any time of the season, except maybe in August. There were a few caribou around in the fall. They were in mixed groups, moving around slowly and feeding.

The caribou were pretty well scattered around the Tuk area. Throughout the caribou hunting season, the hunters had a hard time in their kills. The reason being is there are a lot of hunters going out. And with all the noise from the skidoos, the caribou tend to keep their distance, making it that much harder for the hunters. However, at various times, some hunters got lucky and managed to get a few. Most hunters found that the caribou were skinny with not much feed for them. The reason being is they're on a constant move to find "easier to get at" feeding grounds.



Other than hunters' kill, there was very little disturbance from predators. Some hunters saw signs of wolves killing caribou. Although hunters are still going out, many come back home at times with a few or no kills at all. The change of seasonal weather plays a big factor in the scarcity of our caribou.

There weren't too many mosquitoes around because of short season and it was cooler. One person reported that there were lots of ptarmigan between Tuk and Husky Lakes. There weren't any sightings of any unusual animals in our region.



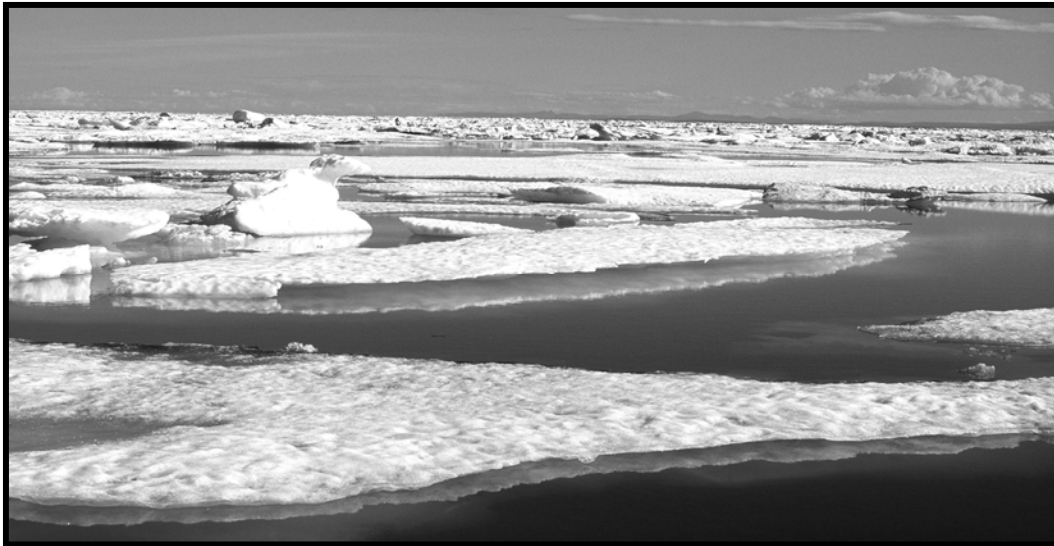
There were many eagles' sightings in Tuk and area. We do have more ravens in our community. In the past we didn't have any ravens during the winter. However, they are visible throughout the year. Some people said the geese are changing their route because of too much noise in hunting areas. Some people reported there are lots of foxes around and you can see their tracks around town.

Whales were normal in the sense that they arrived and left. There was nothing rare. Some skinny whales were caught, but nothing out of the ordinary. One person said there were a lot of seals gathered in harbours (Hutchison Bay).

Human activities were normal most times. However, there were some disruptions of aircraft and snowmobiles, but not very much according to the hunters. There were lots of people out boating on the ocean. Some people said there are more skidoos and a lot of noise around hunting area. That makes it harder to hunt.

The interviews that I've done went very well. Of the people I interviewed, they were all cooperative. The information I got was of great value. Everyone was cooperative except no one wanted to be recorded by tape. They were too shy and leery to go on tape. Each interviewee would like to see this project continued. Some mentioned they'd like to have cash rather than gas. Some mentioned they'd like more gas.

Quyaninni



Old Crow, Yukon

Community Monitor – Randall Tetlich

What the local experts are saying in Old Crow:

- It's a lot warmer than last year and I can get around easily. I see a lot of land slides and a lot of lakes drying up. The water in the rivers is low. There were no berries last year. Everything is drying up.
- There seem to be deeper overflow on lakes. Lots of west wind. It's hard to travel over land because the trail is blown in. There are lots of landslides along the rivers and the water is low. It's getting warmer every year.
- It's really warm. I don't trust the weather. You can't read the weather anymore. Lakes are drying up and there are lots of landslides. The willows are growing faster.
- We're getting much milder weather – warm winds from the west wind. The winter is warmer. The willows are growing faster. The caribou migration is scattered, not like it used to be. There are lots of landslides and the lakes are drying up.
- I notice that the willows are growing bigger and the trees are growing faster. Muskrat push ups are not showing up. The push ups are small. More lakes drying up and water levels are low. There are no beavers to keep water level up.
- Ice is collecting on caribous' feet. There's lots of overflow, even in the land. The ground wasn't frozen in December yet. The weather is warming up. There's lots of water on lakes, creeks and even ground. No summer birds. I got all male marten and very few females. There's lots of smoke.
- This year there's no berries of all kinds. Also climate change has lots to do with plants and growth. What I also notice is the forest fires.



- I saw more animals this year than most years. I think all the animals are moving north. It's getting warmer each year. It was good to see more wildlife.
- Winter is getting warmer. There are no berries because of snow in June and July. No song birds. I saw a fox in town. It's cheaper to buy at the store than go out on the land.
- It's getting warmer every year. It snows before the ground freezes which creates lots of overflow. Willows are growing faster. There are lots of west winds. The caribou are scattered all over the place. The migration is not like it used to be.
- The caribou are scattered all over the place. The hills don't have much snow on them. We might have early spring. The weather is always getting warmer each year. Water in creeks and rivers is always low. There were no berries last year. The berries have hard time to grow because of climate change.
- Weather changes a lot and is unpredictable - cold to warm, warm to cold. There's lots of snow, low water in the river, and lots of landslides. The animals are coming close to town. We never saw that before.
- It's certainly getting warmer each year. The caribou scattered all over the place. I notice that there are more forest fires. There's less water in creeks, rivers, lakes and lots of willows. There are more muskox. It's hard to travel on land, rivers, and lakes. The elders say we should travel in 2's.
- Animals are coming closer to the community. There's lots of marten sign. The weather is unpredictable. It's mix- it's warm, then it's cold. There's lots of overflow. Moose still have their antlers in January.
- It's warmer weather and windy. There are more marten. I think they come north. There are more fox tracks. We only have 2 weeks of cold weather now. There's less water in creeks, rivers and lakes and lots of overflow this year.



- It's getting warmer. There's not much snow for this time of year. There's lots of low water all the time. There are lots of willows and they are growing faster. A few lakes are drying up. I don't see a lot of young people hunting anymore. It depends on jobs. Very few people trap. There are more animals in town.
- Trees are drying up because of spruce beetle. The permafrost is melting fast and there are lots of mudslides and waterholes along the river. The willows are growing and dying too fast. There are no berries. We're getting less and less each year. The banks along river are falling in fast.
- The water levels in rivers, lakes and creeks are all low. It's warming up more. We are having a lot of overflow. I'm seeing small birds in the winter. I don't know why they're here.
- It's hard to predict the weather. The caribou are scattered all over the place. The animals don't know when to migrate. It used to be cold long ago, now it's warm. There's less and less water in rivers. They're drying up. I can't hunt anymore by boat. There are lots of mudslides along river.
- The weather is unpredictable. It can change overnight. There's lots of snow. I see a lot of landslides. The water is low and there's less rain.
- Moose are beginning to be in bunches. Moose are still bumping heads together to get rid of their antlers.
- We had rain late in the summer. The cold is not as cold as we used to get. It's warming up, which creates overflow. It affects the lives of muskrats and water animals.



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