



Proceedings of the
Arctic Borderlands
Ecological Knowledge Co-op
11th Annual Gathering
Inuvik, Northwest Territories
March 29th & 30th, 2008



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Published by:
Arctic Borderlands Ecological Knowledge Society
91780 Alaska Highway
Whitehorse, Yukon
Canada Y1A 5B7

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Photos courtesy of Michael Svoboda, Jadah Follitt, Terry Chapin, Gary Kofinas, Mary Beckett

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The Arctic Borderlands Ecological Knowledge Society would like to thank the following organizations for their funding support:

Gordon Foundation
Environment Canada
Department of Fisheries and
Oceans
Indian & Northern Affairs -
CIMP Program
Parks Canada
Heritage Canada

Yukon Government
Government of Northwest
Territories
U.S. Fish and Wildlife Service
(Alaska)
Wildlife Management Advisory
Council (North Slope)

11th Annual Gathering - Arctic Borderlands Co-op Meeting Highlights

Opening Remarks by Robert Charlie & Michael Svoboda

Robert welcomed everyone to the 11th Annual Gathering. Alaska delegates were unable to attend this year's gathering, will be joining later via web conference. (our first ever!)

Michael Svoboda reviewed the goals for the meeting:

- Sharing Information
- Listen, record community concerns
- Building partnerships and relationships
- Showcase and celebrate Coop achievements
- Coop Goals
- Understand how Coop products fit needs.

Co-op Overview, History & Year in Review

Michael Svoboda reviewed the history and purpose of the Co-op and gave a brief summary of results of the past year. The Co-op has weathered some financial difficulties which resulted in no Annual Gathering in 2007. By refocusing the finances of the Co-op and redefining goals, new directions should provide a more secure funding base with the support of the Co-op's many partners. New products for the Co-op are being developed by using synthesis and analysis of existing data—putting it into a more user friendly format.

Community Monitor Reports

These notes do not contain the full reports from the Monitors. This information can be obtained by contacting the Co-op's office. This year, the Alaska delegates were unable to attend in person, but were able to participate in the meeting by web conference. This worked fairly well considering it had not been done before and provided a low-cost way for the delegates to see and hear what was happening.

Key Note Address—Terry Chapin, UAF

Terry gave an interesting talk concerning the effects of climate change on the Arctic environment. His photos and graphs gave excellent illustrations of the concerns that warming causes in the North. A copy of the slides from this presentation is included in Appendix 1.

Caribou Data Analysis—Don Russell

As an example of the type of products the Co-op will be developing in the future, Don Russell prepared a presentation using the caribou information from the Co-op database. Working with the data from the past 11 years, Don was able to show trends and begin some of the analysis that makes the Co-op's data more accessible to its partners.

Elders Panel

Elders were invited to the meeting to speak about their experiences on the land and what they have observed changing in our environment. Highlights are included in the Proceeding notes, and more detailed notes are included in Appendix 2.

Management Board & Government Panel

A discussion of how the Co-op can work with its partners provided some good direction for future Strategic Planning.

Strategic Planning Exercise

After identifying the challenges and opportunities that face the Co-op throughout the meeting, there was a breakout session to help identify future priorities. Notes from these sessions are in Appendix 3.

Weather Observations—Case Study by Jadah Follitt

Jadah is a grad student, working with Arctic Net. She reviewed weather information in the Co-op database to analyse trends and draw out information comparing Aklavik and Old Crow. Using the graphs she prepared, she was able to compare weather prevalent in years that Don Russell had identified as "bad" years for caribou. This is another example of the synthesis product the Co-op will be producing more of in future.

Closing Comments

Robert Charlie, Michael Svoboda and Charlie Snowshoe offered closing comments to the Gathering. It was a successful meeting due to the work of many people participating.

Arctic Borderlands Ecological Knowledge Co-op

11th Annual Gathering

Inuvik, NWT

March 29-30, 2008

Saturday, March 29, 2008

Attendance:

Elijah Allen – Inuvik Elder	Mabel Allen – Inuvik Elder	James Andre – Board
Jenny Andre – Tsiigehtchic Monitor	May Andre – Fort McPherson	Billy Archie – Aklavik
Annie Buckle – Aklavik	Jozef Carnogursky – Gwich'in Tribal Council	Robert Charlie – Gwich'in Renewable Resource Board Chair
Michelle Christensen – WMAC	Neil Colin – Fort McPherson	Dorothy Cooley – Board
Allen Firth – Inuvik Monitor	Neil Firth – Inuvik Renewable Resource Council, Coordinator	Jadah Folliott – Student, London ON
Dennis P Frost – Old Crow Renewable Resource Council	Annie B Gordon – Aklavik Monitor	Danny C Gordon – Aklavik
Jerome Gordon – Board	Danny Greenland – Aklavik	Butch Kaglik – Inuvik Monitor
Anna May MacLeod – Tsiigehtchic Renewable Resource Council	David Nasogaluak – Tuktoyaktuk	Melody Nice-Paul – Gwich'in Renewable Resource Board, Executive Director
Natasha Rogers – Inuvik Youth	Terry Semple – Aklavik	Charlie Snowshoe – Board
Michael Svoboda – Environment Canada	Randy Tetlich – Old Crow Monitor	Phares Thomas – Old Crow Elder
Mary Beckett – Minutes	Kathryn Boivin – Meeting Coordinator	

Call to order

The meeting was called to order by Robert Charlie at 9:10 a.m.

Opening Prayer, Introductions, Meeting Objectives

Opening Prayer said by Annie Gordon.

The meeting began with each person present introducing themselves.

Michael Svoboda reviewed the meeting objectives for the next two days.

- Sharing Information: Last year there was no gathering because of financial cash flow issues. Will be reviewing information from last two years interview results.
- Listen, record community concerns: Highlight areas of concern for decision makers – local, regional and national level.

- Building partnerships and relationships within and amongst communities, partners, public and other interests.
- Showcase and celebrate the efforts of monitors and those involved in the Coop.
- Coop Direction: Identify and confirm Coop goals for next 5 years.
- Understand how Coop products fit with community needs, decision maker needs and propose solutions to potentially balance areas of effort.

Alaska group had to cancel their travel at the last minute. They are hoping to join the meeting over a webcam.

Discussion & Questions:

Management team people should be at the meeting, they need to hear from us. Dorothy Cooley is here from Yukon Government, but this is a busy time of year for people.

Would especially like to see someone re collaring of caribou and the caribou counts. There is a concern that the collared caribou are being used to develop the count but sometimes the collared caribou are travelling with only a fawn and sometimes in a group with thousands of caribou with them.

Would like to see more local concerns brought up at aboriginal gatherings. This would help see that concerns are addressed, action items can take place. There is a feeling that the meetings are talking about the same thing as 8 years ago without action taking place.

Welcome from Robert Charlie, Acting President

Robert Charlie welcomed everyone to the meeting. He explained that he took over as acting president in January when Charlie Snowshoe had to step down.

The Coop started in 1994 in Dawson City where a group gathered and decided there should be a monitoring program started. One of the issues talked about was climate change – very important Arctic areas of Canada will be affected first. People travelling on the land notice changes first. Another thing was contaminants – a lot ends up in the North. Things that are raised in the communities have to be raised and addressed. Another thing was regional development, development activities and what affect they will have on the local people. Right now Mackenzie Delta is on a development boom. These types of activities – oil exploration, etc., could potentially affect the people that use the land.



Coop collects the data and shares information at the Gatherings. Have attended a lot of meetings, Coop is on the forefront of community based monitoring. We hire local people to conduct interviews and report back.

We have a Board of Directors. The Board is selected from community members – not a formal structure, we just ask people if they will sit as directors. Have talked about having a more formal structure, but maybe that would turn people away from participating. Will be talking about how we want to proceed during the discussion tomorrow.

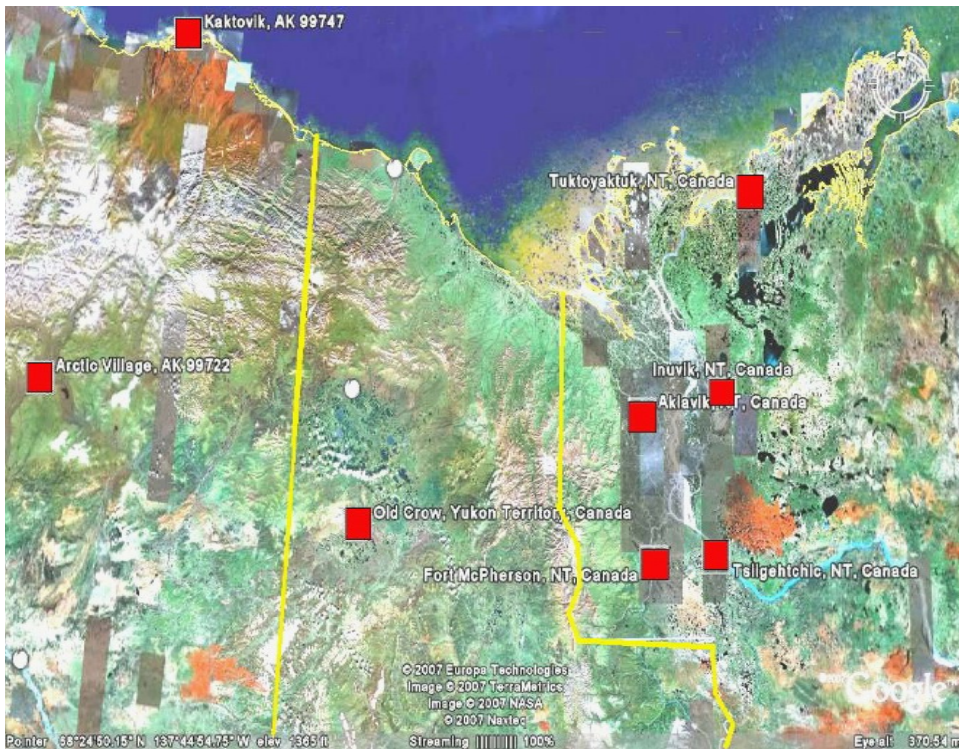
Thank you for being here.

Coop: Overview, History and Year in Review

Michael Svoboda gave a presentation of an Overview of the Co-op, its history and the past year's activities.

Goals:

- To monitor and assess ecosystem changes in the range of the Porcupine Caribou Herd and adjacent coastal and marine areas;
- To encourage use of both science-based studies and studies based on local and traditional knowledge in ecological monitoring and ecosystem management;
- 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 in the context of the above listed goals.



Community based monitoring in 2006-07 was in Arctic Village, Kaktovik (Hurra!), Old Crow, Aklavik, Ft McPherson, Tsiigehtchic, Inuvik, Tuktoyaktuk.

Gathered and compile indicator information using an ecosystem approach. Weather, animals, plants, permit applications and other activity.

Core Operations: Monitoring ecosystem changes in north Yukon, Alaska, NWT; Science and community knowledge systems; Communications and dialogue; Capacity building at core.

Partner organizations: WMAC, Yukon Government, Government of the NWT, Heritage Canada, Parks Canada, Indian & Northern Affairs Canada, Environment Canada, Department of Fisheries & Oceans, Gwich'in Renewable Resource Board. International collaboration: University of Alaska, US Fish & Wildlife Service. Communities are also partners.

Benefits:

- Coop does coarse monitoring of the environment through the people on the land and is a hub of information of other existing monitoring efforts (the indicators)
- Indicators are observed and monitored and trends may prompt further in depth investigations to ensure healthy and secure resources
- Communities are at the forefront of understanding current environmental conditions which helps them and regional partners ensure the care of those resources.
- The information transfer improves our understanding of how factors, economy or environmental conditions like weather influence decision making at the industrial and resource user level.
- Development of trend and analysis results helps individuals respond appropriately to current and predicted environmental conditions.
- Monitoring of toxins in the environment and getting that information to individuals helps reduce impacts to people living in the North.
- All of these benefits help Canadian adopt sustainable approaches when dealing with use and stewardship of the regions natural resources.

Indicators Measured

- Temperature
- Precipitation
 - Snow
- Permafrost
- River Ice
- Sea Ice
- Forest Fires
- Water Levels
- Storm Frequency
- Plant Growth
- Plant Communities
 - Birds
 - Fish
- Marine Animals
 - Caribou
 - Moose
- Air Traffic
- Development Permits
 - CO2
 - Fuel Spills
 - Fur Prices
- Marine Dredging
- Oil & Gas Activity
- Park Visitors
 - Roads
 - UV Index

Year in review:

Change in last two years in people and financial input.

Focus on surviving transition.

Direction – raise funds to continue work; build up partnership interests; focus on efforts on long term benefits.

Results:

Monitoring occurred in last two years. Was reduced from 20 to 15 surveys in communities.

Changed way of financial funding business – created a cash flow buffer. Had a lot of funders and partners that wanted to give money for contracts after the work was done – but the Coop doesn't have a financial buffer to pay for the work in advance.

Focused on synthesis and analysis efforts – to be presented today. The data and all information since 1996 is in a data base. Started working with some of the data, to look back and do some analysis to look at trends, start processing data.

Started partnership discussions with organization interested in further synthesis of work for Coop members. One of those organizations that funded some of the analysis – Northern Climate Exchange. It was mentioned that we've heard the same concerns for 8 years, challenging when you have so many partners. One of the artful things that has been dealt with in the past, was to get the data, not start getting political. Details will be in presentations in the next two days.

BREAK – To allow the Alaska group to start the web conference.

Alaska joined the meeting via the internet.

Joanne Ahlfs

Mildred Allen, Arctic Village

Archana Bali, University of Alaska Fairbanks (UAF) grad student

Allison Butler, UAF grad student

Terry Chapin, Institute of Arctic Biology, UAF

Craig Gerlach, Dept of Anthropology, UAF

Mary Groat

Gary Kofinas, Dept of Natural Resources and Institute of Arctic Biology, UAF

Marcy Okada, UAF grad student

Flora Rexford, Kaktovik

Rita Roberts, Venetie

Kathy Tritt – Venetie Village Council Office

Taking Stock: Community Based Ecological Monitoring Results

Monitors from each of the communities presented their reports for the past year's results. May Andre presented for Fort McPherson, Flora Rexford for Kaktovik, Annie B. Gordon for Aklavik, Mildred Allen for Arctic Village, Randall Tetlich for Old Crow, Alan Firth for Inuvik, Terry Semple for Aklavik, Marcy Okada, Rita Roberts & Kathy Tritt for Venetie, Jenny Andre for Tsiigehtchic.



Discussion & Questions:

Gas prices in Alaska & NWT. Alaska gas prices are \$3-\$4 per gallon and are supplemented on the North Slope Coast. Cost in Inuvik is \$1.60 per litre which is equivalent to approximately \$6.40 per gallon.

Question: Are river levels lower, lakes drying out there? Depends on the rainfall for the year. People notice that the rivers are changing – channels and depths.

Earth quakes. Neil Colin reported that there was one. Wondered if it was felt in Aklavik. Several people reported feeling the earth quake. Flora Rexford stated that there were a lot of quakes last summer, over 15 reports of quakes in the mountains. There was a small quake in Fort Yukon in February.

Animals going to town. Neil Colin reported that there was a beaver house near the church in Fort McPherson, last fall a cow and calf were seen near Northern Store, fox have been seen right in town.

Polar bear was shot in Fort Yukon yesterday. There was one in Tsiigehtchic 3 years ago. Last year one at Fort McPherson – it was moved to the coast, but it came back again. There was a Polar Bear / Grizzly cross shot in Sachs Harbour last year. In the 40's a couple of hunters shot a polar bear in the Black Mountain area, then the next spring one was shot at Old Crow.

Willow growth James Andre reported that people have to cut their trails out every year. Willows are growing bigger every year.

Caribou all over the area. End of November to now – still lots of caribou. Lots of vegetation growth, so have been around the area all winter.

Neil Colin has a tape with George Vittrekwa talking about the past. In 1922 or 24 when they got to Fort McPherson told lots of caribou at Rat River. People used to move towards Dawson, Hungry Lake area. Caribou were down at Timber Creek – 1927. Should know about what has happened in the past. At one time the only place to get caribou was Hart River, Blackstone River area.

Extension in fall and spring seasons. David Nasogaluak commented that birds long ago used to come May 15, now May 1. Before, birds went September 15, now to October, there is a month extension in summer. Suggested that there has been a change in the Moon when it's rising. Seasons have changed a lot – caribou rutting season, migrations.

Arctic Tern are nesting around Crow Flats. Neil Colin reported that did not see any last summer and hardly any seagulls.

Caribou Migration Charlie Snowshoe reported that the Dempster Highway causes a lot of problem with caribou. Every year the caribou try to cross the Dempster Highway, there is a big calving ground area around the Peel River. As soon as people spot caribou on the Dempster Highway, the community is there from Inuvik, Tsiigehtchic, Fort McPherson, they don't give them a chance to cross. Then they disappear. Caribou are very touchy. Hunters aren't listening to our advice. We make regulations on the Dempster Highway and they don't agree, listen. Now the caribou are gone, we are hungry for meat, it's the people's fault. When the caribou



start migrating from Aklavik, people chase the caribou with big kickers. Mildred Allen reported that caribou are in small groups with less bulls this year – Elders keep talking about respecting animals. David Nasogaluak stated that migration is really touchy with caribou. Old people and our ancestors, let the first group pass migration. Now we don't follow that any more with the caribou – there is no knowledge.

LUNCH BREAK

Taking Stock: Community Based Ecological Monitoring Results (continued)

Community Monitors continued making their reports.

Discussion & Questions:

Language Use: Neil Colin asked if the people in Alaska speak their language. Venetie reported that about 50% of the village use the language, but the youngest fluent speaker is 35 years old. Younger people don't speak the language, but they hear it spoken. Kaktovik reported there is a culture gap between older people who speak the language and the younger kids that don't. They are trying to teach it more in the schools. Arctic Village is also the same. Robert Charlie commented that although there are efforts in the schools in the Delta, the language here is slowly dying.

Mercury in Caribou: A concern was raised re high levels of mercury in female caribou. Craig Gerlock reported that most of the work on mercury levels has been done on marine mammals, but they have taken bone from paleo and archaeological sources to get base line data for mercury levels. They compared that to reindeer on the Seward Peninsula in Alaska, don't have direct information about caribou. Mercury levels are actually lower than they were 500, 1000, and 1500 years ago. Opposite to what they would have thought. More work needs to be done – East, West, North Slope, Seward and Interior. The work is in progress. Little caribou information they have shows lower levels than reindeer. Don't understand the information right now. Craig Gerlock can pass on a paper through Gary Kofinas. Billy Archie commented that he understands levels are in the females only, not the males, so it may have something to do with the calving grounds. Dorothy Cooley commented that Aurora Research Institute and UNBC have a joint research project on this topic.

IPY Moose Collaring Project Dorothy Cooley was asked when results re contaminants would be available. She commented that the money in this fiscal year is to look for diseases only. There has been a Yukon study going back to 1989, that is ongoing. Hunters are asked to submit samples on any animal they take. Collars are giving the information on where they travel.

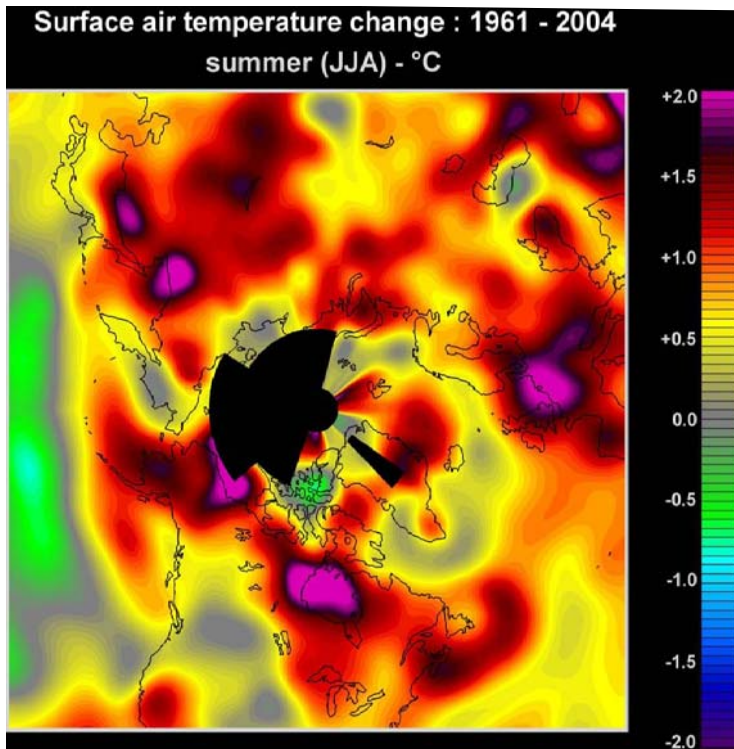
Bennett Damn Concerns were raised re the effects on Great Slave Lake and water levels. There needs to be a way of monitoring when the power company is opening the damn and releasing water.

Development in Fort McMurray There is a concern that this development will result in lower water levels on the Mackenzie River.

Common Observations Gary Kofinas commented that a display could be put together showing things that were seen in all communities and how some things are different. It was noted that everyone said it was a good berry year. Everyone except Arctic Village had trouble finding caribou. Possibly this information could be displayed on the website. (www.taiga.net)

Alaska Keynote Address

Terry Chapin – is working at the University of Alaska on Climate Change. A copy of the PowerPoint presentation is attached to the report.



This map of the Northern countries shows that warming in the North is as much or more as anywhere. Everywhere in Alaska is getting warmer. The history of recorded temperature shows warming and the expectation is that it will keep getting warmer for a long time to come. Terry can do a map now showing how warming will be expected to affect any given community in Alaska. Would like to see how these projections can be made useful for planning. Predictions are the warming will be in every month of the year – with particular warming in winter months.

Shrub density has increase significantly with alders and willows. Forests are expanding onto the Tundra. Satellite photos show that the land is getting greener over the years. Areas of continuous forests are getting drier, so there is less forest there. Lakes are getting

smaller as time goes on. It is interesting that the monitors are reporting the changes before the scientists noticed.

Birch forests are dying where permafrost is melting and the land is getting wetter as the permafrost melts.

Fires have increased as things dry out. Hot summer days are increasing over the last ten years and are expected to increase in the future. This will mean more fire weather than in the past. For each community, if you are interested, Terry should be able to give you a map of fire risk based on expected changes of temperature and vegetation in the future. If you are interested in this for planning for your communities you can contact Terry.

People have reported that moose increase after fire within 20-25 years, but it's 85-100 years for the caribou to come back after fire because it takes longer for lichens to come back. That is a real issue with larger forest fire risks.

Fixed communities mean that people cannot move around when a wild fire affects an area. It means that fires have a larger affect than they used to. Smoke from forest fires is a real health problem. Cost to fight forest fires doubles every 10 years – because there are more people, so more human ignitions, more demands for fire suppression. Because of the climate changes, the fire season is longer, now have to compete with southern areas for forest fire personnel. Forest Service spends ½ their budget on fighting fires. Potential problems are expected in the future with limited ability of fire suppression agencies to fight fires.

Discussion & Questions

What affect will the warming and increases in fire risks have on plants and animals? Expect that fires will be really bad for caribou for 50 to 80 years after a fire. Winter range will be really restricted. Caribou don't go through fire area, they go around. If there are large fires close to a community, that is a problem. Even moose take a while to come back after a fire. It would be interesting to work with you folks to record observations of what happens after a fire – looking at moose browse, for caribou, for berries, 10, 20, 30 years after a fire.

Usual winter temperatures One person commented that the temperature was -38 the other morning. This winter is a usual winter with -40 for a long time. Do not believe global warming. Terry replied that there will always be cold years, but it is likely there will be more warm years than cold years from now on that there was in the past.

Lakes drying up. Scientists do not have good records of changes on the land like that. It is useful to get observations from the communities.

Changing temperatures bring new birds and animals, affects animals, plants, oceans and lakes. People are seeing birds and animals not seen before. Salmon are coming further north than they used to.

Extension of the summer season is causing warming and drying. It is useful to look at what is happening to identify opportunities as well as problems such as growing a garden where there wasn't one before.

Government spending on Climate Change. Charlie Snowshoe commented that the government is now spending millions to study climate change while the Co-op has been talking about this for 12 years. Government is spending money on studies that are similar to what the Co-op is doing, but the Co-op is scrambling for funding for meetings. Terry Chapin commented there are a lot of things coming out of the Borderlands monitoring program that is showing things that scientists did not know about. It is also correct that the observations that you make have an important role to play in convincing countries like Canada and the US to reduce the rates of climate warming. The monitoring project is important because it shows the warming has an effect on the land and the people that live here.

BREAK

Synthesis of Coop Data: Preliminary Findings and Next Steps

This portion of the meeting is based on a review of what has been seen. In the past there has been so much reporting, but there has not been much analysis of the information. In order to make the information more useful to our partners, it has to be extracted from the database – otherwise there is so much data, it is overwhelming.

Analysis of Coop Caribou Data 2000-01 to 2006-07, Don Russell

Don Russell has been looking at the data re how available the caribou were to the communities, did you hunt, did you meet your needs, body conditions, abnormalities. Don was not able to attend the meeting, so Michael Svoboda presented the information. Dorothy Cooley was available to answer questions about caribou.

The analysis was done looking at the last seven years of information to compile all the information for

Discussion & Questions

Was there a comparison between body conditions and weather or forest fires? Jadah Follriott did some work with the weather data. Don only worked on the caribou information – or part of the caribou information.

Weather conditions one year prevented cows from getting to the calving area, so all young died. The following year, the females were very fat because they didn't have young with them.

a given year and identify trends. Did not do a community by community analysis or any major statistics. This year's reports will be input this summer.

Body Condition – Don created a “body condition index” to compare condition for one year to the next and from season to season.

Don prepared slides showing how people perceived the body conditions in Fall, Winter, Spring. He also analysed difference in body condition between seasons.



Conclusions:

- Dramatic decline between fall and spring.
- In years where there was dramatic decline, 2001 and 2002, both were deep snow years with very late melt. In both years early calf mortality was high.
- Very little difference between body condition in fall and winter in most years.
- Exception in 04-05 Biologists recorded lowest birth rate in the next spring 64%. This data suggests that late fall, early winter may have been harsh in 04-05.

Abnormalities – Fewer reports in later years for fall and spring.

When you start looking at the next level of analysis, you can compare other data to try and theorize why this is happening.

Types of abnormalities: Generally poor shape 29, cysts or white spots 4, sores and pus 4, wounded / limping 3, swollen joints/testes/glands 3, bad liver 3.

Why didn't you hunt? Caribou not available was main result (50%). Other responses – No means to hunt, meat elsewhere, no time to hunt, never hunt in (season), weather bad. Bad weather more important in the spring.

Caribou availability: Don created an index as in the previous section.

- Winter availability improved over the years studied.
- Relative availability across all seasons increased.
- Increasing trend in caribou availability in winter and spring.
- Caribou seem to be least available in winter.
- Has implication on communities that focus on hunting in specific seasons.

Meeting needs:

- General increasing trend in meeting needs in both spring and fall.
- Significant but weak relationship between meeting needs and caribou availability in both seasons.

Problems, cautions, limitation of data:

- Communities hunt different herds
- Questions inconsistently asked each year
- Community coverage not consistent
- Sample size too small to do community comparisons.

Overall:

- For the years under review –
- Increasing trend in caribou availability
- Increasing trend in communities meeting their needs
- Generally improved body condition and lower incidence of abnormalities.
- Body condition observations seemed to be consistent with observed measurements of herd productivity – (early calf survival, low birth rate) for a few extreme years.
- The potential relation between early winter body condition loss and low birth rate suggested by the interview data, generates interesting hypothesis for future research.

Discussion & Questions

Neil Colin from a tape of George Vittrekwa. Around 1923 maybe when he got to Ft McPherson, caribou used to go to Hungry Lake, then in the spring moved to Wind River. The white moss they eat takes how many years to grow? Dorothy Cooley reported it takes 50-60 years.

Caribou Availability Data Gary Kofinas commented that the idea of caribou availability data is not to see the number of the harvest, but whether communities have access to animals. This is a way for managers to use Coop data. Another way to look at it is the ratio of abnormalities over total number harvested by each harvester. i.e. if you took 20 caribou with 2 abnormalities, that tells something about the total number of abnormalities. Something we could do with data in future.

Gwich'in Renewable Resource Board harvest information. James Andre commented with the herd size, harvesters were only taking about 3% compared to information re loss re weather and other things. Robert Charlie commented that the harvest study data could be correlated with Co-op data to see if there is a relation between them.

Adjourned for the day at 4:00 p.m.



Sunday, March 30, 2008

Call to Order

Robert Charlie called the meeting to order at 9:10 a.m.

Michael Svoboda reviewed Co-op business that will be coming up later in the meeting, presented a summary of Day 1 and reviewed the objectives for the rest of the Gathering.

Discussion & Questions:

Fish and clams with global warming. James Andre commented that caribou can adapt but wondered about what would happen with fish if the water gets too warm. Is there any place in history where something like this has happened? What happened to the fish? Terry Chapin suggested yesterday that we could look at climates that are now similar to what we are expecting in the future. We can use those areas to see what their species composition and environment looks like to identify what we might expect here.

First ever E-Gathering Michael Svoboda commented that there are things we could have in place for future if we want to do this again such as better speakers, mikes, etc.

Kaktovik and Arctic Village Danny Gordon mentioned that these communities have been reluctant in the past to join the Co-op. Wondering if this has changed? It is important to have them on board because they are in the centre of the caribou calving area of the Porcupine Caribou and use the same caribou as we do. Michael Svoboda visited Kaktovik and Arctic Village – some people were reluctant, some were more interested in development. Tried to explain that the monitoring was needed whether or not you were planning to do more development you need information about the environment. Can include this in our strategic planning.

Compensation for camp areas on the land. There is a concern that there is nothing in place if anything happens to the caribou on the land. Everyone says we'll deal with that if it happens, but that will be too late. For instance, in this area, if a trap line is affected by what is happening on the land, the trapper could lose money. Alaska has a different system – they don't register trap lines and everyone gets oil and gas royalties.

Meeting Objectives for Today: Will highlight areas of concern for decision makers (local, regional and national level). Will be identifying Co-op goals; understand how Co-op products fit with community needs, needs of decision makers.

Discussion & Questions:

Promoting our work, building up what we are doing with others. Charlie Snowshoe asked how that is going? Michael Svoboda commented when we met with partners and tried to raise funds, our strategy was that we would start making products – analysing data (such as Don's report), so that the partners can see how the products will be useful to them. Those results will leverage and bring on board more partners.

Youth James Andre commented that we need to get youth more involved. Was proud of the youth that participated in this meeting. Michael Svoboda sits on BYTE group (Bring Youth Towards Equality). They were talking about having a youth conference at the same time as the Gathering. That didn't happen for this year, but they are interested in following up for next year.

This afternoon, will be making a big list of ideas of what we to look at, then refine it to 4 or 5 ideas to pursue in the next year.

Elders Panel

Annie Gordon, Mabel Allen, Elijah Allen, David Nasogaluak, Charlie Snowshoe, Phares Thomas

Highlights:

Be prepared. For hunting or for development, you have to be one step ahead. Listen to radio, TV, go to meetings to find out what is happening.

Changes are happening faster and faster.

Water levels are changing. Lakes are drying up, river channels and landings are changing, banks are falling in.

New insects, birds, fish and animals are being spotted. Animals that never came this far North are being spotted. Some animals that have always been here in the past are not as plentiful and may disappear.

Caribou are changing their paths. Humans may be at least partly responsible for making the caribou change their migration routes – you have to let the leaders pass or you can make the whole herd change its route.

Funding for the Co-op is important. Government needs to recognize local knowledge is equal to science.

It is important to have the members from Alaska participate in the Co-op.

It is important to teach young people about the land. About traditional skills, how to hunt, how not to waste. How to get food. Language skills. It is important to listen to your elders.

Weather is becoming unpredictable. Storms come up without warning. Hot weather ruins fish.

We need to be careful about development. We don't want to ruin what we have here.

Diseases will go through the animals.

Elders are aboriginal scientists. They know as much as the southern scientists do.



More complete notes from this session are included with the report.

BREAK

Want to thank the Elders for talking to us and telling us your stories. In the past, through the stories the Elders told it guided the younger generation.

Want to thank them for coming yesterday and today.

Billy Archie – Wanted to make a comment, because in the last 80's went to Barrow with Danny C to get the licence for the whaling. Was touching because they stood up and said that brothers and sisters from Canada need our help. Suggest that maybe our elders could talk to their elders to help to resolve the ANWR issue – speak to Barrow elders and Kaktovik Elders to try and keep people out of the ANWAR area.

Robert Charlie – Will put that as an action item. For either ourselves or for other groups to follow up.



Reality Check: Review of Coop Structure, indicators, projects, methods

Have invited government representatives to speak about what their priorities.

Management Board and Government Panel: How can Coop support decision and policy making?

Michelle Christensen, WMAC

WMAC would like to see more accountability between WMAC and Coop. Would like to see more partners to sit on the Board Of Directors, that would give a chance for more funding and more secure funding over the years. All the partners have certain needs and mandates that they need to fulfill. Borderlands is a great way to get these things done. If we can get the partners to invest, will guarantee the future better.

In addition to the review of Borderlands, have a consultant in Winnipeg working on the caribou questions from the last ten years, also looking at interviewee information. What are the ages of the people interviewed, is it the same people year after year? A review of the monitoring program, maybe the other partners can be involved in that. For WMAC the most important thing is to get more partners on board to make sure that Borderlands can fulfill its mandates and goals.

Discussion

Our intentions are good, but we need staff and money. WMAC is making in kind contributions to improve monitoring. Possibly other partners can help to relieve the financial burden.

With the declines in caribou numbers, what we do is essential. James Andre reported there is lots of voluntary compliance, in Fort McPherson the Dempster Highway was closed to hunting for a month – that is helping. Department of Transportation had 3 construction camps working on the migration route – caribou won't go there, so they go around.

Yukon Territorial Government is a management agency Dorothy Cooley reports they would like direction from people. We can give direction for working on regional fish and wildlife plans. They recognize the value of monitoring – some things science is good at, others that people from the communities are good at. Think that the review of the program is really important to Yukon Government to make sure the program is answering questions people have. Synthesis like Jadah and Don have done is really important – some of the most useful information from this program.

The database is too large for busy people to get the information from. We need to generate good information from the data to show as products for our partners.

Gwich'in Renewable Resource Board sees the value of the Co-op. Need to work with the data to develop products. Science information will help us make the story stronger. Jadah's poster and Don's presentation on caribou tells the story we are hearing from the communities.

There should be more interaction between Elders and Youth. To help pass information on to the next generation.

Thank you to dedicated and continuous members. It is hard getting to meetings, but we need to have them.

We can't always live like long ago. We have to improve, make better rules, to keep things strong like the caribou. Sometimes might have to try something new to see if works. Need to look at best practices – what are other groups doing?

Suggestion to pool resources with the PCMB to collect good harvest data. Both groups could benefit – we need the best information possible about the number of caribou harvested, not just the census number.

There is a concern about the three rivers. Water quality, fish stocks, water levels, mining development, contaminants.

Animals are easily disturbed. For caribou, you have to try and not shoot the leading herd. For whales, the elders used to have everyone be very quiet until the first group passed, then they started their hunt. You have to show respect to the animals.

LUNCH BREAK

Strategic Planning Process, Workplan for Next Year. Budget Presentation of Past. Discussion of challenges.

Michael Svoboda made a presentation to introduce a draft strategic plan. Reviewed the existing draft Strategic Plan, drafted April 2007, which compiles core programming with feedback from previous gatherings, reviews, reports.

Administration – human and financial resources that “make the Coop go”. Goal was to review and enhance Board structure. Started working with WMAC, YTG – will be continuing this.

Monitoring and Assessing Ecosystem Change - Central focus over the last 11 years has been community based ecological knowledge interviews. Highlights science and community based monitoring as twin tools to monitor the region. Need to have all the science stuff updated to facilitate the evaluation of the monitoring data. Highlights this year – reviewing the effectiveness of the database and methods.

Communication & Capacity Building – Combination of building capacity in the area as well as strategy to get the information out. Over the last 11 years the Coop has only managed to produce posters, related discussion papers and Annual reports. Attempts to produce “synthesis” reports stalled due to the amount of information involved. Highlight this year – Produce small and manageable synthesis report on themes (report and video). Got some of the reporting done, next step to get this into the communities with videos on DVD so they can see the result in their homes.



Questions & Discussion

Tie in with school curriculums Would be useful if you could tie in with the Northern Studies curriculum in the schools. Could have the science teachers getting students doing some of the work while they are learning as part of the curriculum. Arctic village had the idea of having school children to ask some of the interview questions – would increase youth involvement.

Would like to see more information extraction presentations at aboriginal gatherings. To get the information out to the public. Could also tie in with IPY more.

When the Co-op was started the motto was Go Slow and Don't Get Complicated. Seems like we are getting away from that.

Break Out Sessions. What type of info should the Coop be generating? (Identify - What should we be monitoring)

Michael Svoboda handed out a set of questions to be considered in the break-out sessions. Dorothy Cooley and Michael Svoboda helped each group go through the ideas for developing priorities for the coming year.

Results:

Michael Svoboda's group talked about what were the most important things to them and made a list. Talked about the Co-op and Treaty. Highlights – asking new partners to join; Education – to get youth involved.

Dorothy Cooley's group suggested that we finish the two analysis projects, but then do fish and water. The group made suggestions about new indicators to look at – such as landscape changes. Couple of communication suggestions came up.

Notes from the breakout groups are attached to the report.

Weather Observations, perceptions and related impacts: Case study of Aklavik and Old Crow – Jadah Foliott

Once the report is done there will be a plain language version as well as a movie clip with pictures and voice over explaining the project.

Jadah reviewed a PowerPoint presentation on her work. Her project is Vulnerabilities and Adaption to Weather and Related Hazards for ArcticNet.

Analyze weather and related hazards and how they impact local communities and how these hazards will change with the climate. To do this she has discussions with northern communities to identify weather hazards from a local perspective. Because the Co-op has weather information already collected in their database, she has shifted focus on the project to use that data.

Jadah looked at data from 1156 interviews have been done from 1996-97 to 2006-07. Weather questions over the last five years have been fairly consistent. From the data, Jadah has produced charts for the various questions – i.e. 2002/03 was a year with more caribou abnormalities (from Don's study), looking at the weather data shows more storms, less snow. Would be interesting to look at differences and similarities between the communities.

Re Fall Snow records – in 06/07 and 02/03 showed that the conditions were very icy - these were years that were identified because of the poor condition of the caribou.

One thing that Jadah's supervisor was interested in was how much do hunters rely on their own information vs. information they get on the news. What other information would be useful?

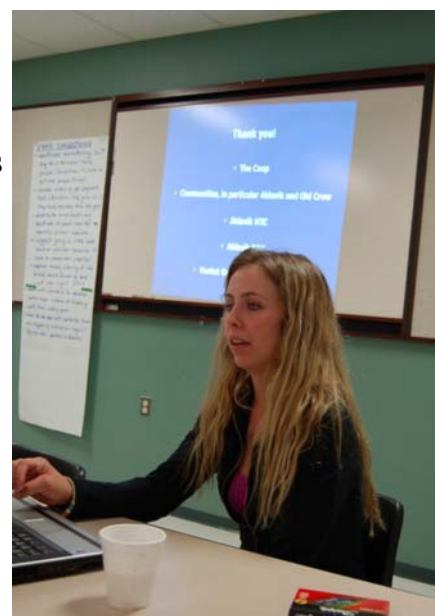
Questions & Discussion:

Differences were noted in responses between Gwich'in and Inuvialuit monitors in Aklavik. Are the trapping in different areas? It depends on the species. Sometimes you need specific information to go with a graph in order to provide interpretation of the results.

Number of active trappers. Possibly could integrate our data with ENR trappers information.

How much do people rely on their own information for weather and how much do they get from the news? Elders used to look at clouds. Today many people check the 5 day forecast or call the airport for weather reports. On the coast, in the summer use high tides – water comes before wind.

Jadah expects to have her report completed within the next couple of months. This is the subject that she will be studying at school in the future. She hopes that will open more doors for



funding.

Could integrate the Co-op's work with Aurora College and Yukon College natural resource programs. This needs to be followed up so that NRTP students can help to develop the information.

Closing Comments

Michael Svoboda - Thank you for all the patience you have had at the meeting. Thank you to Lisa Taylor, Kathryn Boivin and Mary Beckett for helping with the meeting. If you have any suggestions, be sure to let us know.

Thank to everyone for being here, to all the presenters and supporters.

Robert Charlie – Stepped in as chair recently, want to thank everyone for taking the time this weekend for coming here. Know that a lot have been involved for some time. A good example of community based monitoring. Good information. A lot of good work and information has been collected. Now will be using the information to develop some reports. Thank you for coming here to participate in discussions. Will be drafting up the proceedings from this so we can look at the information. If there is anything you think is wrong, or have additional suggestions, let us know.

Charlie Snowshoe – We're sorry to hear that Robert Charlie is going to leave us, because he is a qualified person as our Chair. He is Chair for our Gwich'in Renewable Resource Board. Want to thank the group that nominated me to sit as the chair, wasn't feeling too good at the time and suggested that we nominate Robert to take my place. Sorry to see him go. He is busy. Working hard to keep gas up in our region. Elders say we have to be smart or the Oil & Gas development will run over us and we won't be able to take care of ourselves. That is what happened to our gas this winter – prices in Inuvik are \$1.69 per litre.

James Andre – Want to clarify Robert Charlie is not resigning from Board.

Closing Prayer:

James Andre.

Meeting adjourned at
3:10 p.m.

