



July 24, 2015

Sent by email to: Lynda_Yonge@gov.nt.ca

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Dear Linda,

Re: Comments on the Proposed NWT Boreal Caribou Recovery Strategy

We have had the benefit of consulting members of the Chamber of Mines with many years' experience working in the western NWT's boreal caribou range to provide the following thoughts on the draft *Recovery Strategy for the Boreal Caribou in the Northwest Territories*.

First, it is essential that the Strategy be founded in relevant scientific data and to our knowledge, there are no detailed baseline and population statistics yet available for boreal caribou in the Northwest Territories. This means that conclusions that the NWT boreal caribou population is threatened are being made without the appropriate data on which to base this determination. Nor is there detailed historical data to provide a baseline comparison to support it. This begs the question then whether the boreal caribou are actually threatened or even under stress in the NWT, or if in fact their population is healthy and stable.

We do understand that boreal caribou populations in southern jurisdictions are under pressure. These caribou live on the southern fringes of the boreal caribou range, and landscape level changes brought on by such activities as agriculture, forestry, oil and gas development, and population expansion have impacted habitat in those southern fringe areas. For a variety of reasons, we do not believe that boreal caribou in the NWT are under those same pressures:

- The forestry industry cannot develop in the NWT as it has in the southern provinces due to lack of productive forests, and most operations would be marginal.
- Agriculture is also not a concern.
- Oil and gas development is limited to certain geological terrains, but most importantly, modern exploration methods like heli-portable seismic can minimize habitat disturbance.
- Mineral exploration is a point source disturbance and has virtually no negative impact on boreal caribou.
- Mine development, in the event that an economic resource is discovered in the boreal region, can utilize practices that mitigate effects on caribou.

Largely out of our control is climate change. If it is dramatic enough, then ungulate populations such as deer and moose will increase as will the predator population proportionately and there will be pressure on boreal caribou. Fire risk will increase. Perhaps ironically, or not, the mining of “green” minerals for their use in “green” technologies such as batteries and renewable energy technology may great potential to help address it.

Harvesting levels continue to be unknown and contribute to our lack of detailed information on boreal caribou populations and pressures. If detailed investigations indicate the population is in precipitous decline, then harvesting reduction and controls would be appropriate. Collaring data isn’t helping, as we understand collaring has not been embraced yet by communities.

Forest fires are a natural and necessary occurrence for a healthy ecosystem. However, generalized statements and assumptions about their impact on NWT boreal caribou are premature when there are no empirical statistics to support them. Fires and their patterns are extremely variable. For example, if it was a wet year when it burned, or a dry year; how hot the the fire was; whether duff layers were burned; was it a crown fire; how many collared caribou occupied that fire area before the burn, and after the burn? Further there is no habitat study for the NWT population to accurately conclude that certain fires have negatively impacted their range.

To reiterate, a caribou recovery strategy needs detailed, relevant information, and a NWT recovery strategy needs to be informed by pertinent facts and statistics on NWT caribou, statistics which we just don’t have yet.

It is important in building path forward that we remind ourselves that the NWT is pursuing greater self-reliance in this post devolution world. To do so, it must grow its economy so as to sustain and grow socio-economic benefits for its residents and for its government coffers. The NWT must cultivate opportunities from both renewable and non-renewable resource development. Creating a caribou strategy without NWT specific data may needlessly put this at risk, and at great and unnecessary cost. That being said, we do believe that when done properly and responsibly, resource development and caribou protection need not be mutually exclusive, and that we can find ways for the two to co-exist.

Please find attached an Appendix in which we have organized more detailed thoughts and recommendations under each of the six Objectives presented in the Executive Summary of the draft Recovery Strategy. Please note that we have recommended a 7th Objective to identify direct interventions for your consideration in improving caribou population health.

We look forward to continued participation in these discussions.

Yours sincerely,

NWT & NUNAVUT CHAMBER OF MINES



Tom Hoefler
Executive Director

Appendix – Detailed comments on the Objectives of the Draft NWT Boreal Caribou Recovery strategy

Below, find the Chamber of Mines' thoughts on each of the Objectives presented in the Executive Summary of the draft Boreal Caribou Recovery Strategy.

Objective #1) Ensure there is adequate and intact habitat across the NWT range to maintain a healthy and sustainable population of boreal caribou.

Adequate habitat is a good idea in principle, but the objective is overly simplistic. The devil is in the details. We need to better define what type of habitat caribou will likely use. We are not convinced, for example, that such habitat must be 'intact', which is potentially very limiting because it then means nothing can run through it. Therefore, we recommend deleting the words "and intact" from the objective.

Currently, the assumptions are not sufficiently grounded in adequate research. To this end, we must challenge ourselves to conduct further research on the following assumptions:

- That caribou habitat will take 40 years to reverse to the status of "undisturbed" and only then be classified as caribou habitat. This is far too sweeping a generalization and may be unsubstantiated, particularly in cases like seismic lines that often revegetate better than the surrounding lands (see below);
- That caribou won't use a forest fire burn area or a seismic line for 40 years. Forest fires are a natural event that have been occurring for thousands of years during which boreal caribou have been surviving with them. Burned areas can be important habitat as your draft Recovery Strategy states: "burned areas ... are important for avoiding predators and insects in spring and summer".
- That seismic lines are really a habitat loss and for how long. Many seismic lines revegetate very quickly and often with healthier vegetation than the surrounding undisturbed habitat. Low impact seismic lines with limited line-of-sight may have limited impact but are treated the same way as a 1,000 metre wide linear disturbed area. Under the current strategy, low impact seismic is assessed with the same buffer and considered to have the same impact as a 4 lane highway.
- That an area of 500 metres either side of a human disturbance footprint visible on a 1:50,000 scale Landsat image is no longer habitat. This may not be the case, eg, a revegetated seismic line will appear on such an image, but is it really unused caribou habitat? Test the assumption of non-habitat on 500 metres either side of such a disturbance. There is also no mechanism for removing the status of "disturbed". If it is visible on satellite imagery it is considered "disturbed".
- That un-revegetated lines are equal to revegetated lines. If the implication is that an un-revegetated seismic line allows predator access to caribou and therefore is a disturbance, then how could a revegetated seismic line be the same? Yet it fits the criteria by simply showing up on a Landsat image.
- The draft Strategy claims that forest fires are the biggest threat to boreal caribou, however this generalization paints all fires as the same, and all burned areas are considered 100% "disturbed". However, not all fires are created equal and their patterns are extremely variable. For example, was it a wet year when it burned, or a dry year? How hot was the fire? Were duff layers burned? Was it a crown fire? How many collared

caribou occupied that fire area before the burn, and after the burn? Further there is no habitat study for the NWT population to accurately conclude that certain fires have negatively impacted their range. Without more work on fires and their effects, unnecessary costly decisions could be made by fighting forest fires where it is not required.

Objective #2) Ensure that harvest of boreal caribou is sustainable.

Do we know accurately what proportion of animals are lost to harvesting and what proportion to predation? More accurate information on both is essential to help manage populations and make sound decisions.

- Harvest rates are believed to be low, but more reliable information is necessary to determine the size of the harvest.
- Data on population is required in order to make decisions that affect the sustainability of the harvest.
- Harvesting education programs as described, eg, encouraging reporting, harvest practices are a good idea.
- Predation: See our proposed Objective 7.
- We understand that to protect less than 100 boreal caribou in the Little Smoky herd in Alberta, over 1,000 wolves were killed. Do we have similar predation pressures in the NWT and does this represent an economic opportunity for trapping that could see two wins: caribou protection through predator control and renewal of the trapping industry? The anti-fur lobby led to the demise of the NWT's sustainable trapping industry, and has led to the reduction in wolf harvesting and upset a balance that had been established over the past several hundred years. Should we return that balance with renewed wolf trapping so as to benefit caribou?

Objective #3) Obtain information to inform sound management decisions, including boreal caribou ecology, key habitat and population indicators, and cumulative effects.

Obtaining information is absolutely essential, and we have identified a number of areas for further research and information gathering under Objective 1, above that relate to such things as the disturbance-predator-prey dynamic, the natural fire regime, and habitat regeneration in the NWT.

In addition, sharing that information with the public is also absolutely essential. The public needs to be aware what is known, and also what isn't known, if we are to make wise decisions. (See Objective 5).

Additionally:

- Caribou population must be better determined. "Crude estimates" of population aren't good enough. We need to learn more.
- Increased collaring of caribou must be considered in order to assist with population data and range usage.
- We are aware of some DNA study of scat underway in the NWT and across Canada and we look forward to the results to better understand population structure and differentiation across the NWT range. We are also led to believe that what was thought to

be boreal caribou habitat in the Dehcho is occupied by barrenland caribou. What other surprises might we find?

- We must also holistically bring all caribou pressures into one discussion, ie, habitat, harvesting and predation, not separating them as is being done in the GNWT's Bathurst caribou range work.

Objective #4) Manage caribou collaboratively, using adaptive management practices and the best available information.

Fully agree. A feedback loop is needed so that consequences of actions can be measured against benefits, and adjustments made appropriately.

Objective #5) Exchange information with NWT people about boreal caribou in all regions.

We fully support the sharing of information with the public. The public needs to be aware of what we know, and also what we don't know about boreal caribou, their harvest, their habitat, predation, etc. if we are to make wise decisions.

Objective #6) Further to the national recovery strategy, ensure recovery obligations for critical habitat and a self-sustaining population are met or exceeded in NWT.

Immaterial of what others do, we must set high standards for ourselves. To reiterate, these must be high standards for both finding ways to protect the environment AND to support economic development.

NEW! Objective #7) Direct intervention to improve caribou population health

We suggest adding a new Objective to identify and implement actions that can directly help improve caribou populations or habitat.

There is already little to virtually no development in the western NWT within the Sahtu and Dehcho areas, and it is therefore difficult to believe that we would allow ourselves to use a recovery approach that simply delays or halts development activities for 40 years until habitat has naturally returned. What actions can we directly take to accelerate caribou health, eg:

- In northern BC, maternal pens are in use to protect calves at birth and for some time beyond before they are released back into the wild. Can we do something similar in the NWT?
- In regards to predation, consider predator control by various means: direct culling has been used in other jurisdictions. Indirectly may also help, by encouraging traditional trapping and hunting of wolves. The anti-fur lobby decimated the NWT's traditional and sustainable trapping industry. This would have also reduced wolf harvesting, upsetting a balance that had been established over the past several hundred years. Can we return that balance with renewed wolf harvest, perhaps subsidized wolf trapping in the Dehcho, linked to renewal of our local fur industry so as to benefit caribou? Along with other trapping, use it to feed the fur program.
- We also understand that predator control is a slippery slope and consideration must be given to not create an imbalance which sees competition for use of the woodland habitat from other ungulates (moose, deer, musk ox)

- Under the category of fire management, can we find ways to accelerate the conversion of burned areas to habitat in less than 40 years? Can wood harvesting for home heating and conversion to pellets assist? Can revegetating of some burned areas improve food supplies and remove open lines of site to reduce predation help? We need to become smarter managers of land. We cannot afford to simply delay or not approve development activities for 40 years until habitat has naturally returned. In fact, in some areas it might take longer and in some less?
- Given that fighting fires is very costly, might we find ways to help reduce the likelihood of fire, eg, to “fire smart” old growth forest areas by selective harvest to reduce fire risk, and to simultaneously maintain caribou habitat and create economic opportunities?
- Are there ways to restore habitat by, for example, harvesting burned areas, eg, for pellet manufacture, and then to revegetate them so as to create a faster return to useable caribou habitat?
