

Bathurst Caribou Range Plan

Interim Discussion Document

Plain Language Summary



PLAIN LANGUAGE SUMMARY – BATHURST CARIBOU RANGE PLAN - DISCUSSION DOCUMENT

BACKGROUND

Barren-ground caribou are a key northern species. They have shaped the cultural identity of First Nations, Inuit and Métis peoples over millennia through mutual relationships built on respect. Caribou use large expanses of land throughout their seasonal movements often travelling thousands of kilometres annually. As a result, they encounter many features such as roads, communities, mines, camps and burned forests, and can suffer by being disturbed by these features.

The Bathurst caribou range (or use of habitat) extends from southern and central Northwest Territories (NWT) to the Bathurst Inlet in Nunavut. In some years, they have wintered as far south as northern Saskatchewan. The Bathurst caribou herd has suffered a dramatic decline in numbers from a high of roughly 450,000 in the mid-1980s to a low of about 20,000 today.

PURPOSE

Due to concern over pressures on the Bathurst herd a process was started to develop a Bathurst Caribou Range Plan (BCRP) to manage human and natural disturbance, such as wildland fire, across its habitat. A Working Group (WG) consisting of Aboriginal governments and organizations, industry, non-governmental organizations, co-management boards and territorial and federal governments has, over the last two and a half years, brought together scientific and traditional knowledge information to help develop options for habitat management.

The WG is entering a phase of community and decision-maker engagement on these options prior to developing a Draft Range Plan. A Discussion Document has been produced to guide engagement.

GOALS

The overall proposed management goal is to maintain the Bathurst caribou herd annual range in a resilient landscape condition. This goal acknowledges northerners' role as caribou guardians and the responsibility to manage habitat disturbance to allow for a healthy Bathurst caribou herd to sustain itself over time.

Four specific management objectives are proposed to achieve this goal:

- Objective 1 – Maintain the amount of human disturbance below threshold levels.
- Objective 2 – Maintain connectivity between seasonal ranges.
- Objective 3 – Maintain integrity of sensitive habitats.
- Objective 4 – Manage human access.

MANAGEMENT APPROACHES

The habitat management approaches presented in the Discussion Document are meant to be in addition to the measures imposed on individual projects to reduce impacts to caribou. The approaches consider the whole range used by the Bathurst herd and ensure key areas, such as

migratory pathways, water crossings, important seasonal habitat areas, are managed appropriately and sustained into the future. The management approaches under consideration are:

- ***Cumulative disturbance frameworks*** propose thresholds for levels of disturbance in different parts of the range and are based on sensitivity of the caribou and habitat. Setting disturbance thresholds has been requested by the Mackenzie Valley Environmental Impact Review Board and the Wek'eezhii Renewable Resources Board and is viewed as an important management tool. Many community members have also called for setting disturbance limits to manage the number of mines operating at any given time into the future.
- ***Protected areas/Conservation zones*** can be applied to legally protect important migration corridors and sensitive habitats, such as calving grounds and key water crossings (migration routes). Conservation areas can be established through land use plan designations, *Wildlife Act* conservation areas or habitat designations and yet to be developed Conservation Areas legislation.
- ***Land Use Activity Guidelines (Mobile Measures)*** can be used to temporarily halt or reduce the intensity of activity when caribou enter an area of development. These measures offer flexibility to development projects, by only imposing restrictions when caribou are within a certain distance of a site.
- ***Access Management Planning*** could address issues like construction methods and route orientation to reduce barriers to caribou, and controlling the amount and timing of traffic to minimize the disturbance to caribou. It could also be used to manage harvest through community-based rules and protocols if and when it is reinstated for the Bathurst herd.

RANGE ASSESSMENT AREAS

To better understand the potential land use and management issues affecting caribou in different parts of the range, the BCRP WG divided the planning area into five different range assessment areas (RAAs). These are show in Figure 1 below:

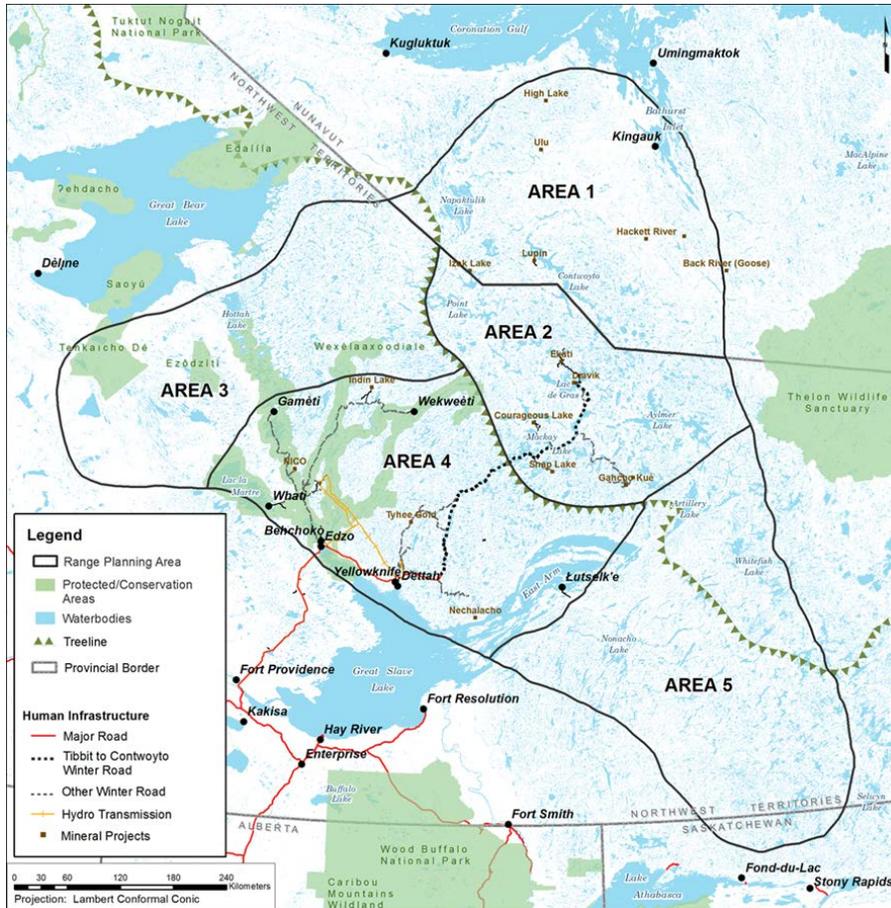


Figure 1: Range Assessment Areas in the Bathurst caribou range planning area

APPLYING MANAGEMENT APPROACHES

The management approaches for the Bathurst caribou range can be applied in various ways and are all necessary to achieve the stated goal and objectives for the BCRP. Possible options for applying the approaches are presented below. Important considerations and questions to guide discussions with communities and organizations involved in the development of the BCRP are also presented.

OBJECTIVE 1 – MAINTAIN THE AMOUNT OF HUMAN DISTURBANCE BELOW THRESHOLD LEVELS.

The key interest of WG members regarding the amount of human disturbance is to establish clear disturbance thresholds that guide management and set limits on habitat loss. While community members have observed many years when caribou numbers were low, it is reported that numbers today are lower than in living memory.

Disturbance includes both direct footprint (changed habitat as a result of a building or a road, for example) and the area around the footprint created by noise, dust, light and activity which might affect caribou behaviour (this is called the zone of influence or ZOI). The sensitivity of caribou through the seasons was considered in setting the thresholds in the tundra and forested regions.

Each framework is comprised of three levels:

1. desirable - within this level there would be an acceptable amount of land disturbance for that region. In this level best management practices are applied to manage impacts on caribou;
2. cautionary - if the amount of disturbance was above the cautionary threshold more strict management of activity would occur; and,
3. critical- if amount of disturbance were anticipated to go above the critical threshold existing disturbances would need to be minimized or removed before any new disturbances took place.

The proposed levels of disturbance (direct disturbance footprint and ZOI) for each assessment area, according to size and sensitivity of the RAA, are provided in Table 1 (disturbance from fire is included in RAAs 3, 4 and 5):

Table1: Proposed Disturbance Thresholds for each Range Assessment Area (RAAs 3, 4 and 5 include disturbance from fire)

Range Assessment Area	Proposed Disturbance Thresholds
1	Desirable– less than 3,500 km ² Cautionary– 3,500 km ² - 7,000km ² Critical – above 7,000 km ²
2	Desirable– less than 4,500 km ² Cautionary– 4,500 km ² - 9,000km ² Critical – above 9,000 km ²
3	Desirable– less than 27,000 km ² Cautionary– 27,000 km ² - 44,000km ² Critical – above 44,000 km ²
4	Desirable– less than 30,000 km ² Cautionary– 30,000 km ² - 45,000km ²

	Critical – above 45,000 km ²
5	Desirable– less than 22,000 km ² Cautionary– 22,000 km ² - 48,000km ² Critical – above 48,000 km ²

Based on these proposed cumulative disturbance frameworks, RAAs 2, 4 and 5 are at the Cautionary level and RAAs 1 and 3 are in the Desirable level. RAA 5 is in the cautionary level due to the large amount of fire in that region.

IMPORTANT CONSIDERATIONS:

- If Cumulative Disturbance Frameworks are established, there will be a clearer understanding for northerners and industry on the level of development allowable at any one time.
- The Cumulative Disturbance Frameworks could add costs to industry for more strict management of impacts to caribou and with respect to progressive reclamation and enhanced cumulative effects assessment.

NEXT STEPS:

- Develop a way to assess the entire range condition by using a range-wide threshold or range-wide status report.
- If wildfire is to be considered as part of the thresholds further work is needed in the technical aspects of measuring, tracking and aging fires.

DISCUSSION QUESTIONS:

1. Would these disturbance thresholds represent an appropriate balance between achieving a resilient landscape and supporting sustainable economic development activities?
2. Are the management responses suitable? Are there others to include and consider?
3. How would these thresholds respect caribou and the relationship between caribou and people?

OBJECTIVE 2 – MAINTAIN CONNECTIVITY BETWEEN SEASONAL RANGES.

Mobility is the ultimate adaptation of migratory barren-ground caribou. Migration allows barren-ground caribou to access food, escape predators and to cope with environmental change. The Bathurst caribou use many water crossings and land bridges in the summer and fall. BCRP WG members have identified the Contwoyto Lake/Lac de Gras area as the main route between the calving grounds and fall and winter ranges. The Ekati and Diavik diamond mines are located on or around Lac de Gras.

IMPORTANT CONSIDERATIONS:

- The Draft Nunavut Land Use Plan (DNLUP) has proposed Protected Areas for an extensive area of water crossings in RAA1. At this time, the DNLUP planning process is at an important stage of development and many Bathurst Working Group members are actively engaged in the planning process independent of the BCRP.

NEXT STEPS:

- More work with community members could be done to identify and prioritize the most important migratory corridors including water crossings and land bridges.

DISCUSSION QUESTIONS:

1. Under what conditions are either of the management options (protected/conservation areas vs. mobile caribou protection measures) preferred? How can these options be used together?
2. What is an appropriate zone around migratory corridors, water crossings and land bridges where caribou should not be disturbed? Why?
3. How can transboundary coordination be improved?

OBJECTIVE 3 – MAINTAIN INTEGRITY OF SENSITIVE HABITATS.

Important habitats are areas that are used repeatedly by caribou or areas that are required for use if conditions are poor in other areas (e.g. unburned forested areas). Important habitats can also be used during time periods when caribou are very sensitive to disturbance, such as during calving. Minimizing the loss of important habitats and disturbance to Bathurst caribou in important habitats is a priority.

BCRP WG members have focused on two very sensitive time periods and the important habitats during those time periods for caribou:

- calving (and the area used just after calving) in Nunavut
- summer which includes parts of both Nunavut and NWT

These two habitats were ranked as being the most sensitive parts of the Bathurst range when caribou react strongly to noise, light and smells and when they need to feed a lot to gain the condition needed to get pregnant. The calving grounds are also considered sacred places in Aboriginal culture.

BCRP WG members have concerns regarding the amount of wildfire on the winter range and how this may be impacting caribou. Forests that have not been affected by wildfire for a period of more than 50 years are considered to be the most important parts of the winter range.

IMPORTANT CONSIDERATIONS:

- The Draft Nunavut Land Use Plan (2016) is currently under review. If the draft land use plan is approved without modification, protected areas will be established for much of the calving and post-calving range and parts of the summer range (including freshwater crossings).
- The proposed *Thaidene Nene* protected area is expected to cover a large area of winter range around the East Arm of Great Slave Lake.
- The amount of future wildfire cannot be predicted accurately but is expected to remain similar or at higher levels than experienced in the recent past.

NEXT STEPS:

- Monitor the status of existing planning processes such as the Draft Nunavut Land Use Plan (2016) and the *Thaidene Nene* proposal.
- Further develop wildfire management concepts and better understand the potential effects of wildfire on caribou habitat and population.

DISCUSSION QUESTIONS:

1. Should protected areas be established in the calving and post-calving and summer ranges to assist in maintaining these important habitats? Is it possible to identify locations for protected areas for the summer range?
2. Is it feasible to increase fire suppression effectiveness in the winter range? Is this desirable?
3. Is habitat restoration (e.g., planting trees in recently burned areas) a realistic option for winter range management?

OBJECTIVE 4 – MANAGE HUMAN ACCESS.

Roads are often built in the north to support industrial development and winter roads, in particular, are important for connecting communities and resupplying mines over a period of a few months. Roads and trails increase the ability of people to access remote areas for recreational and other purposes, such as harvesting. Caribou behaviour can change when they near roads and their migratory movements can be altered. Roads with high traffic volumes can restrict the ability of caribou to move from one area to another. Managing industrial activity and human use of roads to reduce noise, dust and other disturbances is an important way to achieve landscape-scale resiliency.

IMPORTANT CONSIDERATIONS:

- The Bathurst caribou herd range is the most accessible barren-ground caribou range in the north.
- Once a road is built, there are few effective means to regulate or prohibit people's use of the road or their activities on it.
- In the Bathurst winter range, caribou are on their winter range at the same time as winter roads are in use. Therefore, winter roads may have a similar impact on caribou as all-season roads in this part of the range.
- The Draft Nunavut Land Use Plan (2016) recognizes the value of winter road-only design to access mineral development in the tundra biome.
- In the future, due to a changing climate the use of winter roads as an access management tool may be reduced, at least in some parts of the range.

NEXT STEPS:

- Further explore opportunities for community guardianship to be used as an effective access management tool in some parts of the Bathurst range planning area.
- Consider winter-only access in the tundra and the effects this may have on mineral development in the calving and post-calving and summer ranges.

DISCUSSION QUESTIONS:

1. Could community guardianship be used as an effective access management tool in some parts of the Bathurst range planning area? How might this work?
2. Are winter roads an effective management tool in the Bathurst winter range?
3. Are other approaches to managing human access possible?

CONCLUSION

Community members today worry about such low numbers of caribou and have called for action to rebuild populations. Caribou are food security, a foundation of the traditional economy, the tether of cultural identity and more. Within the context of the BCRP, community members are weighing threats to these important cornerstones with the potential benefits that industrial development can provide during a time when many community members suggest a threshold has already been exceeded. This is the difficult discussion that must take place.

To support the recovery of barren-ground caribou, human activities and land use should be managed in an effective way. Strategies for managing cumulative effects from land use and habitat disturbance are especially important during low cycles of abundance when caribou may be more vulnerable to human disturbance.