

# ANNEX 1

## **Annex 1**

### **Questionnaire for Aboriginal Traditional Knowledge Interviews on Boreal Caribou**

#### **LONG VERSION**

The following questions have been developed to gain information and understanding related to the following areas: range boundaries and population information, habitat use, population trends, threats and traditional practices related to caribou. It is expected that interviews with knowledge holders will follow their own course depending on the person being interviewed and that not all questions will be posed to every knowledge holder. However, to facilitate the use of ATK in developing the recovery strategy, some degree of consistency regarding the information collected is required. These questions are meant to help guide the person conducting the interview.

#### **Rapport Development/Background Information:**

What is your name? (if they would like to share it)

What year were you born? (if they would like to share it). *This will give some sense of temporal scale to relate to the information they share with us on boreal caribou.*

What community do you live in? Have you always lived here?

How much time do you spend on the land each year? What months do you usually spend on the land?

What types of activities do you do on the land now? What types of activities did you do on the land when you were younger? When/how/what time of year do you usually encounter/observe caribou?

What is the name for boreal caribou in your language?

How important are boreal caribou to you and your community?

#### **Mapping Exercise:**

Can you outline on this map (fine-scale map of the local area that includes any major development footprints):

- the areas where you spend time on the land, now and in the past? Outline the areas that you know best. How long is your experience in these areas?
- areas that you see caribou use now and in the past during the winter OR are important to caribou during the winter.
- areas that you see caribou use now and in the past during summer OR are important to caribou in the summer.
- areas that you see caribou use now and in the past during calving OR are important to caribou during calving.
- any areas that have been burned by a forest fire within the last 50 years.
- any areas that have been burned by a forest fire more than 50 years ago.
- any areas that you feel are the most important to protect for boreal caribou?

## **Range Boundaries**

What herds or populations or “groups of caribou” do you know of in your area? How do you differentiate these from others? If there is more than one herd, do they intermix or overlap? Could you draw the ranges of local populations that you are aware of?

Have you seen boreal caribou outside the known or mapped range shown on this map?

## **Habitat Use**

What types of plants and features of the land do caribou use? Do they use different plants and landscape features at different times of the year?

## **Population Trends:**

Have the number of boreal caribou in your area changed over time?

- a) Do you see more or less caribou now than you did when you were younger?
- b) Compared with what your parents/grandparents said, would you say there are more or less caribou now?

Did you traditionally hunt boreal caribou? If so, have you changed your hunting practices because of a decline or increase in boreal caribou?

Do you still hunt boreal caribou? Are caribou easier or harder to hunt now? Do you prefer to hunt other species – which ones and why?

## **Calf survival** (specific to a given area, based on information from the Scientific Review)

For example, lower than expected (for areas where the calf survival is lower than expected based on amount of disturbance). Western science has estimated that not many calves in this area survive to become a parent. Do you agree with this? Why or why not?

For example, higher than expected (for areas where the calf survival is higher than expected based on amount of disturbance). Western science has estimated that lots calves in this area survive to become a parent. Do you agree with this? Why or why not?

## **Factors that have led to increased/decreased local populations (threats)**

### Habitat

What kinds of activities alter or destroy caribou habitat in your area?

What changes have you observed on the land in your lifetime that may have changed the way caribou use the land?

### Forest fires

How do forest fires change the way boreal caribou use the land?

Do boreal caribou return to burned areas? If yes, how long does it take for the caribou to come back? What kinds of things do you see them doing in areas that have grown back after a burn?

### Industry and Development

Have you observed boreal caribou using or avoiding areas that have been altered by industrial activity or developments? Can you provide specific examples?

### Predation

Are there more predators (such as wolves, bears, or lynx) in areas where there are boreal caribou than there were in the past in your area?

Have you seen changes in the abundance of prey species, such as beaver, deer, muskox, bison, moose, or barren-ground caribou, in areas where there are boreal caribou?

Are any of these prey species new to your area?

If there is a change in the number of predators, do you think these changes are having an effect on boreal caribou?

If there is a change in the number of prey species, do you think these changes are having an effect on boreal caribou?

### Caribou parasites and disease

Have you seen a change in caribou health in your region? For example, body condition, size, behaviour, parasites, or increased mortality.

What do you think is the cause?

Have you seen a relationship between caribou health and the arrival of new species?

### Noise and light disturbance

Have you observed noise or light disturbance from aircraft, skidoos, ATVs, or industry affecting boreal caribou in your area?

If so, how is it affecting the caribou?

Do you notice areas where it is more of a problem?

Do you have suggestions for how to address this?

### Over-harvesting

Are boreal caribou being over-harvested in your area?

Have there been changes in hunting pressure on boreal caribou in your area?

### Vehicle collisions

From your experience or observations, are vehicle collisions with boreal caribou occurring in your area?

To what extent are these collisions occurring? For example, how many or how often are they occurring?

Are there particular areas where vehicle collisions are more of a problem? If so, where are they?

Do you have suggestions for addressing this problem?

#### Climate change

Have you observed any changes related to climate change such as changes in snow condition, temperature, or precipitation in your area?

If so, have you noticed if these changes have affected boreal caribou or their habitat in your area? How?

#### Threats - general

From your experience or observations, are there any other things that negatively affect caribou that we haven't already discussed? If so, what are they?

Which of these threats stand out to you as having the most impact upon boreal caribou in your region?

Are there potential mitigation measures or solutions to these threats?

#### Other observations or beneficial practices

Do you know of any conservation practices or activities that your people, or others, have used to conserve boreal caribou now or in the past?

# ANNEX 2

## **Annex 2**

### **Metadata Information for Maps in ATK summary reports for Manitoba, Saskatchewan, Alberta**

The following is a description of the metadata for all maps present in ATK summary reports from Manitoba, Saskatchewan and Alberta.

#### **Attribute Description:**

Please note; when an attribute is left blank it means that the information was not specified by participants.

#### ***Shape\*-***

Line

Point

Polygon

#### ***ConsultName-*** [ConsultNam]

Name of community/meeting that the information was gathered from.

#### ***(Consult)ID-*** [ConsultID]

A sequential number, beginning at 1, given to each Shape\* for a given ConsultName.

#### ***Type-***

Caribou use: Areas where participants have seen boreal caribou.

Caribou previous use: Areas where participants used to see boreal caribou in the past but have indicated that they no longer do.

Disturbance: Areas where boreal caribou are disturbed by landscape features.

Protection: Areas/features that participants thought were important to protect for boreal caribou.

Other wildlife use: Areas used by other wildlife species (species name is specified)

Caribou absent: Areas where caribou are not believed to using

Caribou range: Area where participants indicated the range boundary for a local population(s) differs from the current range boundary.

Caribou habitat: Areas/features identified by the participants as important habitat for boreal caribou.

Caribou migration: Migration pathway used by boreal caribou.

Other: Any other type of information not identified in the above categories.

***Season-*** Specifies what season observation by participants were made

All: year round

C: calving

F: fall

W: winter

Sp: spring

S: summer

***Caribou Use-*** [CaribouUse] Indicates how (or why) the area identified by polygon is being used by boreal caribou.

Bed Site: Area used for bedding.

Calving: Area is used for calving.

Caribou trail: Trail identified as being used by boreal caribou.

Migration: Area is used by boreal caribou for seasonal movements between areas.

Refuge-bugs: Area offers boreal caribou a refuge from bugs.

Refuge-predator: Area offers boreal caribou a refuge from predators.

Reserve: Area set aside for protection.

Road Crossing: Area where caribou cross the road/highway

Salt lick : Location of a salt lick.

***Disturbance Type-*** [Dist\_Type] Classifies the type of disturbance contained within the area.

Cb: Cutblock/logging

Dr: Drilling

F: Forest fire

Ht: Hunting

L: Light

Mn: Mining

N: Noise

OHV: Off-highway vehicles

O&G: Oil and gas (general), usually indicates presence of multiple features such as seismic lines, well sites, roads, and plants

Pip: Pipeline

Pl: Plant (industrial)

Rd: Road(s)

Rec: Recreational use (general)

Trp: Trapping

SL: Seismic line

WS: Well site

***CWSRegion-*** The CWS Region in which the data was collected: PYR, PNR, OR, QR, AR

***Date-*** Indicates date when information was collected from community members

***Notes-*** [Details] Any other information, or further details that are applicable to a given line/point/polygon file.