

Environment and Climate Change Canada

Environnement et Changement climatique Canada



# The Species at Risk Act and You PROPOSED FINAL RECOVERY STRATEGY FOR PEARY CARIBOU IN CANADA

# Summary

This is a summary of the proposed final recovery strategy for Peary Caribou, a document that sets the goals and objectives for Peary Caribou. Under the federal *Species at Risk Act*, the species was listed in 2011 as Endangered and reassessed in 2015 as Threatened. Peary caribou are found only in the Northwest Territories and Nunavut, distributed across the Canadian Arctic Archipelago.

To develop the recovery strategy, Environment and Climate Change Canada worked with organizations within the range of Peary Caribou including HTC/Os, communities, wildlife management boards, Parks Canada, and territorial governments.

# **Status and Trends**

 From a population high of 22,000 in 1987, the species experienced a catastrophic dieoff in the mid-1990s related to severe icing events in some parts of its range. The



© Morgan Anderson, Government of Nunavut Peary Caribou

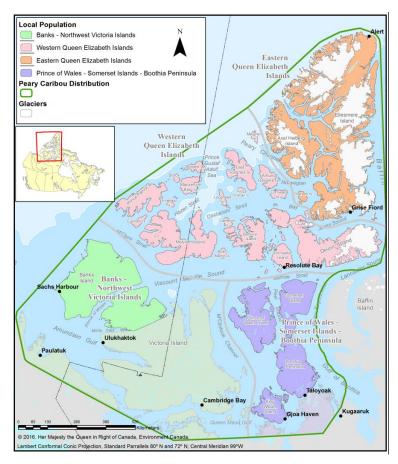
population was approx. 5,400 mature individuals in 1996, its lowest since surveys first commenced in 1961.

- In the 1960s there were approx. 50,000 caribou. The latest population estimate (2015) is approximately 13,200 mature individuals.
- Two of the four local populations, Banks Northwest Victoria Islands (green on the map below), and Western Queen Elizabeth Islands (pink), are currently increasing. The Prince of Wales – Somerset Islands –



Boothia Peninsula local population (purple) is decreasing.

• Peary Caribou population sizes naturally fluctuate and die-offs occur periodically.



# Description

- Smallest caribou in North America: short muzzles and short, wide hooves.
- Winter coat is long and mainly white, while summer coat is white below and slate-coloured above, without the distinctive flank stripe of Barren-ground Caribou.
- Peary Caribou reproduce slowly, so are slow to recover their population numbers after any declines.

## Habitat

- Vast amounts of land are required to fulfill their life cycle, and access to diverse habitats helps them survive in winter months.
- Many Peary Caribou need to travel between Islands in order to access all the resources that they need to survive.
- Peary caribou may not occupy islands at all times. They are also known to return to areas after long periods of absence.

## **Threats**

## High impact threats

## **Climate Change**

- Increased icing events that prevents access to food in winter.
- Reduction of sea ice which could result in drownings or restrict movement between islands.
- Changes to vegetation, wind conditions, and predators.

# Medium impact threats

### **Marine Traffic**

 Icebreaking and marine traffic can disrupt sea ice which is crucial for Peary Caribou to move between islands to access food and escape icing events and predators.

## Parasites and Diseases

- Peary Caribou are currently very healthy.
- Warmer temperatures could allow more insects, parasites and diseases to become a problem.

#### Low impact threats

#### **Resource Extraction**

- Low impact threat over the next ten years.
- However, the impact from this activity has the potential to become a high impact threat if resource extraction activities increase.

#### **Competition and Predation**

- High or increasing numbers of wolves and their impacts on caribou.
- Increased predation from other predators such as polar bears, grizzly bears and wolverines.
- In some parts of the range muskoxen are considered to be a threat to Peary Caribou.

#### **Human Disturbance**

- Disturbance from aircrafts, snow machines, military exercises and tourism.
- Sensitive to human disturbance at critical life stages such as calving or migration.

#### Harvesting

- Harvesting is not considered to be a threat under current management conditions.
- Harvest levels are currently low and voluntary harvest restrictions have been put in place by many communities.

#### Unknown impact threats

#### **Pollution and Contaminants**

- The Arctic may receive pollution from other areas brought in by air currents.
- Past activities have left pollution and contaminants on the land that are thought to affect the health of Peary Caribou.

#### **Introduced Genetic Material**

 Interbreeding with Barren ground caribou and Dolphin and Union Caribou could increase with climate change.



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## **Population Objectives**

- All local populations are healthy (self-sustaining) and available for future generations.
- Population fluctuates within the normal bounds of population cycles.
- Local populations are able to support a sustainable Inuit/Inuvialuit harvest that is responsive to fluctuations in populations.

A healthy or self-sustaining population will be evaluated based on the following criteria:

- As many or more births as deaths over the long term.
- Large enough to survive and recover from natural events (such as weather events) and human activities.
- Does not need human support (such as feeding or predator management).

## Page 3 of 6

• Can persist over the long-term (over a number of decades).

## **Distribution Objectives**

- Maintain Peary Caribou throughout their current Canadian distribution where they currently exist.
- Peary Caribou are able to move freely on the land and sea ice (within and between islands) to ensure natural habitat use and migration (limit unnatural movements / not forced to move), as well as movements during catastrophic events such as weather.

# **Broad Strategies and Approaches**

Section 6.1 of the recovery strategy outlines actions which have already been completed or are currently underway to manage and conserve Peary Caribou and their habitat.

Section 6.2 outlines four broad strategies to achieve the above Population and Distribution Objectives:

- Monitoring and research;
- Habitat and species conservation and management;
- Education and awareness, stewardship and partnerships;
- Law and policy.

For each strategy, a number of research and management approaches have been identified, for examples:

- Investigate the relationship between Peary Caribou and muskoxen, wolves as well as other caribou and predators.
- Minimize disturbance, especially in calving areas and during sensitive periods.
- Promote education amongst harvesters about traditional and best practices to minimize wastage, use alternative food sources, and raise awareness of illegal harvest.
- Develop, implement and promote beneficial management practices for Peary Caribou and its habitat (eg. wildlife plans for industry).

# **Critical Habitat**

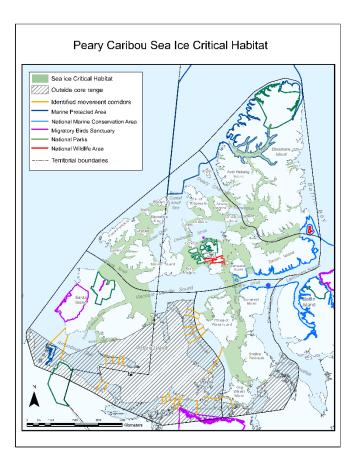
Using Inuit Qaujimajatuqangit, and local and Traditional Knowledge, sea ice crossings have been identified as critical habitat (shown in green on the map below).

As sea ice can promptly reform after disturbance under specific conditions, it may be possible to break some sea ice within areas identified as critical habitat without destroying critical habitat, if the sea ice critical habitat is available to Peary Caribou when needed.



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Page 4 of 6



The recovery strategy identifies Activities Likely to Result in the Destruction of Critical Habitat:

- Icebreaking or marine traffic that would prevent ice formation or break the ice just before caribou need it, or leave an open channel for a length of time that blocks the caribou, would be considered destruction of critical habitat.
- Specific conditions and timing of when the sea ice needs to be protected versus when it can be disturbed with respect to caribou needs will be further defined in an agreement after collaboration with all partners, including HTCs and HTOs.

To date, habitat loss as a result of development activities has been a low threat to Peary Caribou and as such it is not known to currently be limiting the recovery of this caribou. Critical habitat has not yet been identified on the land portion of the species' range.

In order to fully identify critical habitat for Peary Caribou, the schedule of studies outlines the studies required to complete the identification of critical habitat, necessary to meet the population and distribution objectives for this caribou. Existing Inuit Qaujimajatuqangit, and local and Traditional Knowledge will guide the identification of land critical habitat.

In addition, some priority studies that could further inform critical habitat are included in the document.

For example:

 Population studies on Victoria Island in areas outside the core range where Peary Caribou have been reported by the Olohaktomiut Hunters and Trappers Committee.

## **Measuring Progress**

Success of the population and distribution objectives will be evaluated to determine if:

- Distribution and abundance of Peary Caribou in their current range is maintained or enlarged.
- Populations are large enough to survive and recover from natural events and human activities, do not need human support, and can persist over the long-term.
- Populations are monitored and the bounds of population cycles are understood.

- Peary Caribou movement is unrestricted and not hampered by human activity that would otherwise modify their normal behaviour or habitat use.
- Harvest of Peary Caribou is responsive to population fluctuations and is not a mechanism for overall population declines.