



**SUBMISSION TO THE**  
**NUNAVUT WILDLIFE MANAGEMENT BOARD**  
**FOR**

**Information:**

**Decision: X**

**Issue: Status of the Southampton Island barren-ground caribou population (July 2020).**

**Background**

- Barren-ground caribou (*Rangifer tarandus*) were introduced onto Southampton Island (SHI) from Coats Island in 1968, following their extirpation from SHI in the early 1950s.
- The herd grew for 30 years and supported a subsistence and commercial harvest through the 1990's.
- Beginning in 2003, the SHI caribou started to decline and by June 2011, had declined to levels unable to sustain the existing subsistence harvest.
- The main cause of the decline was likely a combination of a reproductive disease termed *Brucella suis* (Brucellosis), and a new harvest pressure to meet the demand for caribou meat sales on social media, starting in 2011.
- Brucellosis is known to cause reproductive declines within caribou populations, negatively impacting birth rates in females and male fertility.
- Intra-territorial sales of caribou meat on social media, from SHI to primarily Baffin Communities, accelerated the decline in 2010 and 2011.
- Management actions have proven effective thus far, but all co-management partners are concerned about finding a way to control the intra-territorial sale of caribou meat.
- Since 2011, the SHI caribou herd had declined at an estimated rate of 9% per year up to May 2017 (figure 1), apart from an observed increase between 2013 and 2015. A Total Allowable Harvest (TAH) of 1,000 animals was introduced in 2012 to reduce the rate of decline.
- Following an abundance increase based on 2015 survey results, the Coral Harbour HTO moved to increase the TAH to 1,600 caribou (6 per household and 100 held back by the HTO).
- During consultations in 2017, and based on May 2017 survey results where a significant decline was detected, the Coral Harbour Hunters and Trappers Organization (HTO) supported a motion to reduce the TAH from 1,600 to 1,000. The TAH was to be dispersed amongst the community (4 per household).

## **Current Status**

- The SHI caribou population increased from an estimated 7,284 caribou in May 2013, to 12,319 caribou in May 2015, and then significantly decreased to an estimated 8,436 adults and yearlings by May 2017. May 2019 survey results indicate an increase to 11,992 adults and yearlings, suggesting a stabilization in population abundance between 2015 and 2019 (figure 1).
- Both the Department of Environment (DOE) and the Coral Harbour HTO, believe the increase, initially detected in May 2015, was at least in part, related to an immigration event from mainland Nunavut, reported by Coral Harbour hunters in the winter of 2013-14.
- Declines between the May 2015 and 2017 abundance surveys are thought, by the Coral Harbour HTO, to be due to hard winters and times of significant icing since the 2015 abundance survey.
- An abundance survey flown in May 2019, estimated 11,992 adults and yearlings (figure 1). This result suggests the reduction in harvest (originally initiated in the winter of 2017 by the Coral Harbour HTO), likely had some positive effects in stabilizing population abundance between May 2017 and 2019. The DOE proposes an abundance survey of the Southampton Island barren-ground caribou population in early May 2021 or 2022 to investigate the possibility of the initial stages of recovery of the SHI caribou herd.

## **Consultations:**

- Consultations in January 2019 revealed community and HTO concerns for the status of the herd and a need to maintain a reduced TAH.
- Results of the May 2019 aerial abundance survey were discussed with the KWB in October 2019, and with the Coral Harbour HTO in February 2020. During these consultations, the Coral Harbour HTO recommended current harvest recommendations (1,000 caribou, and the protection of cow/calf pairs) remain in effect until the SHI caribou herd abundance showed clear signs of recovery/growth.
- The Coral Harbour HTO requested the SHI population be re-assessed in May 2021 so that the effectiveness of the current harvest actions can be confirmed, and adjustments made to the current TAH and NQL as appropriate.

## **Recommendation**

- Based on the observed stabilization in abundance between May 2015 and May 2019, the Department of Environment is not recommending any changes to the

current TAH of 1,000 adult (including yearling) caribou for the SHI caribou herd (encompassing both Southampton and White Islands), and the Non-Quota Limitation protecting cow calf pairs that is currently in place.

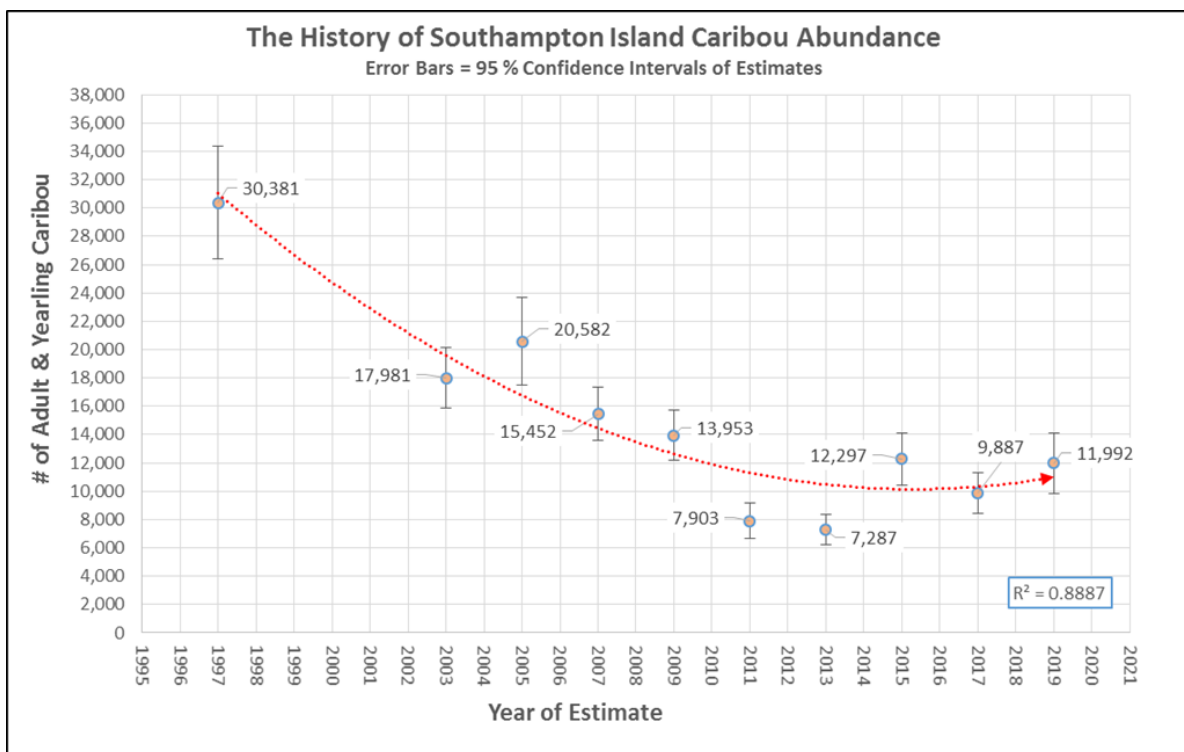


Figure 1. – Trends of the Southampton Island caribou population.