



**SUBMISSION TO THE**  
**NUNAVUT WILDLIFE MANAGEMENT BOARD**  
**FOR**  
**Information:** **Decision: X**

**Issue: Status of the Southampton Island barren-ground caribou population**

**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 has declined at an estimated rate of 9% per year, apart from an observed increase between 2013 and 2015. A TAH of 1000 animals was introduced in 2012 to reduce the rate of decline.
- During consultations in 2015, the Coral Harbour Hunters and Trappers Organization (HTO) supported a motion to increase the Total Allowable Harvest (TAH) from 1,000 to 1,600 caribou: 1,500 to be dispersed amongst the community (6 per household) and an additional 100 to be put aside for special management purposes, as required by the HTO.

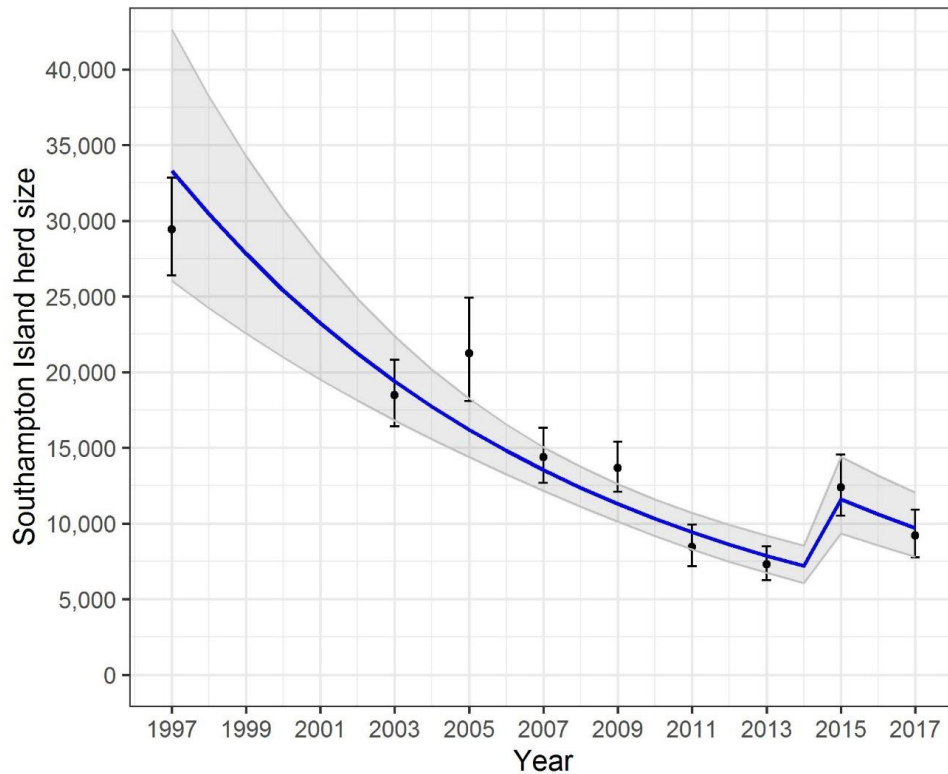


Figure 1. – Trends of the Southampton Island caribou population.

### 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.
- Both the Department of Environment (DOE) and the Coral Harbour HTO, believe the 2015 increase is at least in part related to an immigration event detected by Coral Harbour hunters in the winter of 2013-14 from mainland Nunavut.
- 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.
- DOE is continuing to assess genetic profiles of recent caribou samples with pre-immigration samples, in an attempt to confirm this immigration event and the herd(s) involved.
- The DOE will conduct an abundance survey of the Southampton Island barren-ground caribou population in early May, 2019.

## **Consultations:**

- The 2017 caribou population re-assessment estimated a significant decline though no management action was sought until the fall of 2018 due to delays in the analysis of abundance survey results.
- Once informed of the continued decline, the Coral Harbour HTO moved to have their membership voluntarily reduce their TAH from 1,600 back to 1,000 caribou. This voluntary reduction in TAH had mixed success.
- Consultations in January 2019 revealed community and HTO concerns for the status of the herd and a need to reduce the TAH.
- In February 2019, the Coral Harbour HTO requested the DOE work with the Nunavut Wildlife management Board to have the current TAH reduced to 1,000 and to conduct another abundance estimate in May 2019.

## **Recommendation**

- Based on a continued declining trend, and consultation with the Coral Harbour HTO, the Department of Environment recommends a decrease in the TAH of Southampton Island caribou from 1,600 to 1,000 for the 2019-20 harvest season.