

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



**Information: X**

**Decision:**

**Re: Determination of the Basic Needs Level (BNL) for Southampton Island Caribou**

**Issue**

The Nunavut Wildlife Management Board (NWMB or Board) staff seeks the Board's approval to initiate the process for determining the Coral Harbour Basic Needs Level (BNL) for Southampton Island Caribou.

**Background**

*Southampton Island Caribou*

Caribou were hunted to extirpation on Southampton Island by 1953. In 1967, 48 animals were translocated to Southampton Island from Coats Island. The population quickly grew—benefiting from abundant vegetation, a high female reproductive rate (97% in 1996), and the absence of predators. By 1997, the abundance of caribou on Southampton Island was estimated to be 30,381 animals.

The Southampton Island caribou population started to decline by 2003 due to extremely low pregnancy rates caused by the reproductive disease Brucellosis (50% prevalence in 2006). Other factors that contributed to the decline including a government-regulated commercial harvest introduced between 1993–2009 and extensive icing and extreme freezing events during the winter of 2010/2011 that reduced access to food.

In 2012 and 2013, the Department of Environment, through ministerial orders, established a total allowable harvest of 1,000 caribou, and a non-quota limitation (NQL) restricting the harvest of females with calves. An aerial survey in May 2015 produced a

population estimate of 12,297 caribou, suggesting that the population had increased compared to the 2003 survey (7,287) due in part to immigration from the mainland.

After the 2015 population increase, the NWMB and the Minister of Environment increased the total allowable harvest to 1,600 caribou. However, surveys in May 2017 revealed a decrease in abundance, prompting the modification of the total allowable harvest from 1,600 to 1,000 in an effort to stabilize the trend. The current total allowable harvest remains at 1,000 caribou.

### *Basic Needs Level*

Once the NWMB has determined a total allowable harvest in accordance with Sections 5.6.16 and 5.6.17 of the *Nunavut Agreement*, the Board shall strike a BNL pursuant to Part 6 of Article 5 of the *Nunavut Agreement*.

The BNL shall constitute the first demand on the total allowable harvest. Where the total allowable harvest is equal to or less than the BNL, Inuit shall have the right to the entire total allowable harvest (NA 5.6.20).

In December 2013, the Board initiated a proceeding to consider the Southampton Island caribou BNL for the community of Coral Harbour. During the proceeding, the NWMB adjourned the session to allow the parties time to provide additional submissions.

The NWMB will now resume the determination of the Basic Needs Level for Southampton Island caribou for the community of Coral Harbour.

### **Calculating the Basic Needs Level for Southampton Island Caribou**

In accordance with the NWMB's Basic Needs Levels policy of July 18, 2024 (attached), the determination of the Basic Needs Level for Southampton Island caribou will rely on data from the 2014 Nunavut Wildlife Harvest Study and exclude any commercial harvesting records that may be available.

Where a total allowable harvest is established with respect to a stock or population not previously subject to a total allowable harvest (like Southampton Island caribou), the NWMB shall calculate the BNL in **a two-step process** as the higher of (NA 5.6.23):

- a) An amount based on data from the original five-year NWMB Harvest Study, calculated according to the method described in Sub-section 5.6.21 (a) of the *Nunavut Agreement*, or, where a Hunters & Trappers Organization has previously elected the method described in Sub-section 5.6.21(b), the harvest level of the stock or population in the identified year; or

- b) The aggregate of the greatest amount harvested in any one year during the five years prior to the imposition of a total allowable harvest and the average annual amount taken over the five years of the NWMB Harvest Study, which aggregate is then divided by two.

The Coral Harbour Hunters and Trappers Organization did not nominate a specific year during the NWMB Harvest Study to use in calculation of BNL. So, the method described in S.5.6.23 of the Nunavut Agreement must be used.

### **Step One of Two of BNL Calculation (NA 5.6.21(a))**

The aggregate of the greatest amount harvested in any one year during the NWMB Harvest Study and the average annual amount harvested over the five years of the Study, which aggregate is then divided by two:

$$\text{BNL} = \frac{\text{Max(Harvest)} + \text{Avg(Harvest)}}{2}$$

Where:

- Max(Harvest) = The greatest amount harvested in any one year during the NWMB Harvest Study.
- Avg(Harvest) = The average annual amount harvested over the five years of the NWMB Harvest Study.

The greatest amount of caribou harvested per year recorded during the NWMB Harvest Study in Coral Harbour is 1940 (Table 1, in year 1999).

The average amount of caribou harvested during the 5-year NWMB Harvest Study in Coral Harbour is 1470 (Table 1).

So,

$$\text{BNL} = \frac{\text{Max(Harvest)} + \text{Avg(Harvest)}}{2}$$

Max(Harvest) = 1940 and Avg(Harvest) = 1470:

$$\text{BNL} = \frac{1940 + 1470}{2}$$

$$\text{BNL} = \frac{3410}{2}$$

**BNL = 1705 caribou**

#### **Step Two of Two of BNL Calculation (NA 5.6.23(b))**

The aggregate of the greatest amount harvested in any one year during the five years prior to the imposition of a TAH and the average annual amount taken over the five years of the NWMB Harvest Study, which aggregate is then divided by two:

$$\text{BNL} = \frac{\text{Max(Pre-TAH Harvest)} + \text{Avg(Harvest)}}{2}$$

Where:

- Max(Pre-TAH Harvest) = The greatest amount harvested in any one year during the five years prior to the imposition of a TAH.
- Avg(Harvest) = The average annual amount harvested over the five years of the NWMB Harvest Study.

In making any calculations under Sub-section 5.6.23 (b), the NWMB shall rely on the best evidence available regarding the levels of harvesting by Inuit in the five years before the TAH was established (NA 5.6.24). For Southampton Island caribou, this refers to evidence from 2008 and 2012. NWMB is unaware of any subsistence (non-commercial) records of caribou harvest in Coral Harbour between 2008 and 2012. The NWMB could engage the Coral Harbour Hunters and Trappers Organization to enquire about such records.

## Next steps

As mentioned above, NWMB are seeking the Board's direction to engage the Coral Harbour Hunters and Trappers Organization to find out if any evidence exists regarding the levels of harvesting by Inuit between 2008 and 2012.

If reliable evidence and record of subsistence (non-commercial) caribou harvest is made available by the Coral Harbour Hunters and Trappers Organization, staff will proceed with **Step Two of BNL Calculation**.

If no reliable records exist, the Board shall proceed to establish a Southampton Island caribou BNL of 1705 for Coral Harbour.

**Prepared by:** Denis Ndeloh, NWMB  
**Reviewed by:** Jason Akearok, NWMB  
**Date:** January 07, 2025

Table 1. Caribou records in the community of Coral Harbour during the five-year (1997-2001) Nunavut Wildlife Harvest Study conducted by the NWMB.

NWMB HS Date	Community	Species	# Harvested
Year 1(1997)	Coral Harbour	caribou	1,376
Year 2(1998)	Coral Harbour	caribou	1,213
Year 3(1999)	Coral Harbour	caribou	1,940
Year 4(2000)	Coral Harbour	caribou	1,128
Year 5(2001)	Coral Harbour	caribou	370
5-year Average			1,470