

## **2023 Beverly Calving Ground Survey Report (Key Findings)**

The main objective of barren-ground caribou calving ground photo surveys is to determine the total number of breeding cows returning annually to give birth.

This is based on the knowledge that breeding cows normally return to their respective calving area with a high degree of fidelity.

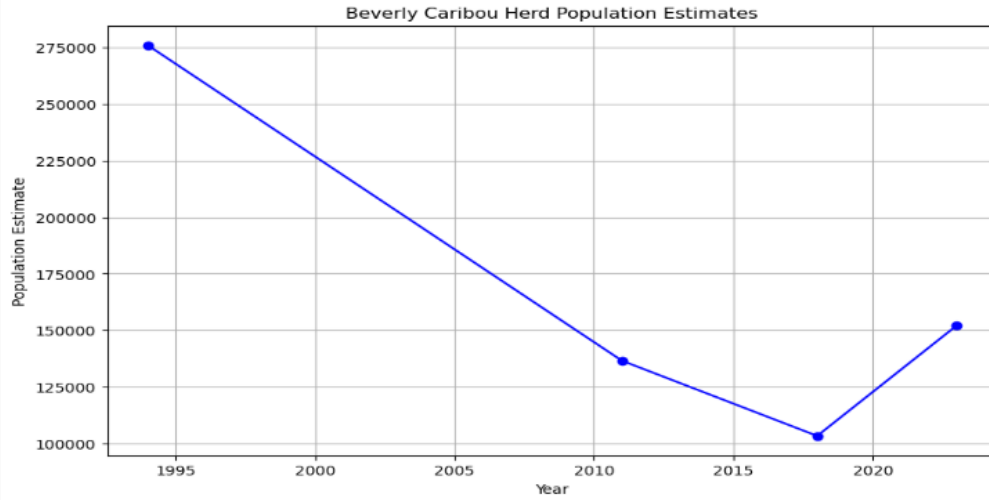
At the peak of calving, the movement rate of the breeding cows is low for about 5-7 days, and this allows for a photo plane to take pictures of the caribou without the risk of double counting caribou which can occur when they are moving fast.

After the survey is completed, the result will provide the total number of breeding cows in the herd. To obtain a total count of all the caribou, we need to also add the number of bulls in the herd and a measure of pregnancy rate. The number of bulls is determined in the fall during the rut when most of the bulls are associated with the adult females to mate. Biologists conduct a fall composition survey to get sense of the number of bulls in the herd, and this number is added to the total number of breeding cows found during the calving ground survey to produce a total count.

### **Breeding cows + number of bulls + pregnancy rate = Population Estimate.**

The Beverly herd showed a **significant increase** in adult female caribou from 2018 to 2023.

- **2018:** ~61,070 adult females
- **2023:** ~88,236 adult females
- **Note that not all adult females give birth annually, below is the total number of breeding cows seen on the calving ground.**
- **Breeding Females (2023 Beverly calving ground survey):**
  - Estimated at **69,900**
- **Total Herd Estimate (2023):**
  - Total Beverly herd estimated at **152,131 adults.**



<b>Year</b>	<b>Population Estimate</b>
1994	276,000
2011	136,608
2018	103,372
2023	152,131

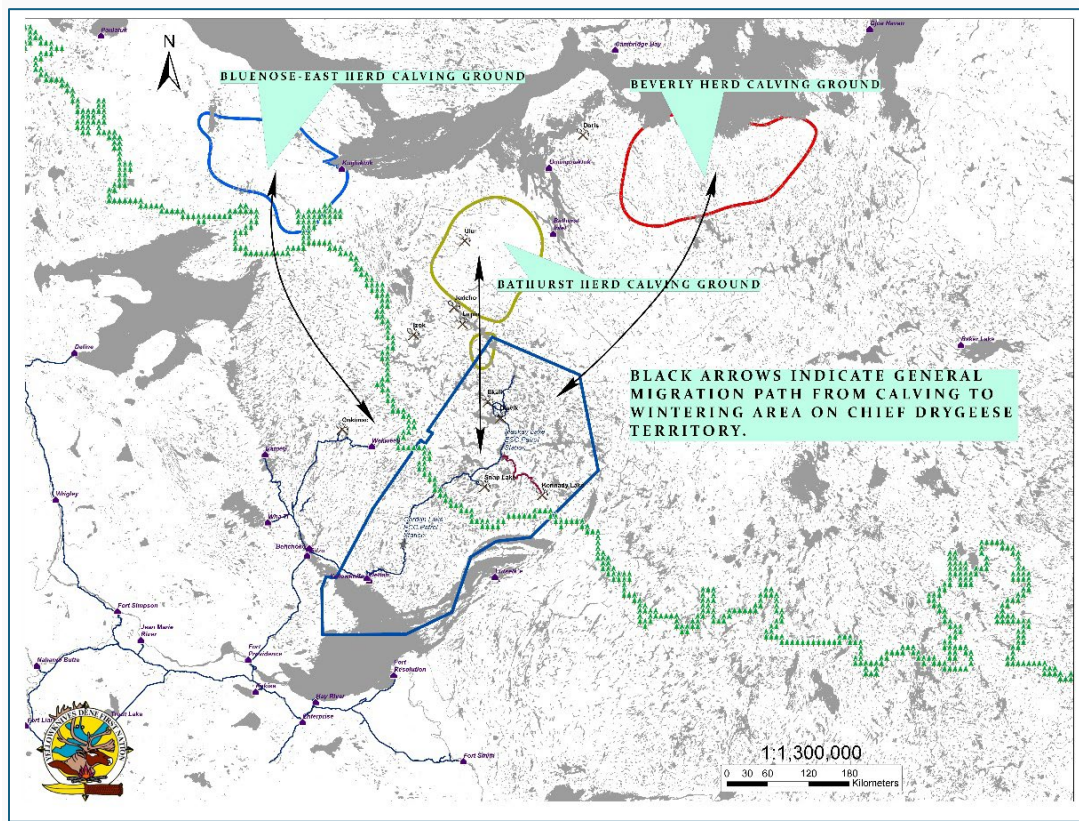
## Possible explanation for this important increase

**1) High productivity** (calf-cow ratios and fecundity) was a major driver of growth. In other words, lots of calves were born in recent years resulting from more cows being pregnant annually.

**2) Movement from other herds.** Evidence of **caribou moving into the Beverly calving range** from neighboring herds (Bathurst and Ahiak).

The movement of breeding cows from the Bathurst to the Beverly herd has increased since 2018 (shifting rate between 17-27%). This is higher than normal. However, although a pattern that cannot be ignored in trying to understand what is happening to the Bathurst caribou, this herd was already at very low number in 2018, so the authors point out that it cannot have possibly contributed significantly to this increase in caribou in the Beverly herd as reported here.

**Main calving area and migration path for the Bluenose-East, Bathurst and Beverly barren-ground caribou herds wintering in Chief Drygeese Territory.**



**Latest population estimates of the main barren-ground caribou population migrating through Chief Drygeese Territory.**

<b>Herd</b>	<b>Latest population estimate</b>	<b>Next population estimate</b>	<b>Status</b>
Bluenose-East	2023: <b>39,525 caribou</b>	Fall 2025*	Increasing
Bathurst	2022: <b>6851 caribou</b>	Fall 2025*	Low
Beverly	2023: <b>152,431 caribou</b>	NA	Increasing

**\*Note that two YKDFN members participated in the Bluenose-East and Bathurst caribou herds calving ground surveys in June of 2025 (Charlie Sangris and Cheyenne Koyina).**