



SUBMISSION TO THE

NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: X

Decision:

Issue: The Qamanirjuaq Caribou herd population status and management

Background:

- The Qamanirjuaq Caribou Herd is the largest herd in the western arctic, occupying an estimated annual range of 300,000 km².
- Prior to the recorded peak of 495,665 caribou in 1994, the Qamanirjuaq herd showed signs of decline in the early 1950s. Abundance surveys of the Qamanirjuaq herd have documented considerable change from the late 1970s to present.
- An estimated 11,000 Qamanirjuaq caribou are harvested annually in Nunavut, Northwest Territories, Manitoba and Saskatchewan. Kivalliq Inuit are estimated to harvest over 8,000 Qamanirjuaq caribou per year. These values likely represent an underestimate as there remains uncertainty around the actual number of caribou that are harvested.
- The intra-territorial trade in caribou meat over the internet has accelerated harvesting and has become a conservation concern for the Kivalliq Wildlife Board (KWB). The KWB is concerned intra-territorial meat sales will continue to accelerate this decline. This is not currently being tracked or reported.
- A satellite telemetry program was initiated in 1993 and continues today. This program has supported the creation of a comprehensive location and activity database for the Qamanirjuaq herd. This database is the only source of western scientific based information examining the Qamanirjuaq herd's use of their annual range.
- Recent movements (within the last 5 years) of Qamanirjuaq caribou cows have indicated some shifts in calving-grounds, migratory corridors, spring staging areas, and summer range in the vicinity of resource development infrastructure. Additionally, the winter ranges of the Qamanirjuaq, Bathurst and Beverly herd's have shown considerable overlap over the last ten years.

Current Status

- In June 2022, the Government of Nunavut Department of Environment (ENV) completed an abundance survey of the Qamanirjuaq herd to generate estimates of adult females and the whole herd.
- Results from this survey generated an estimate of 156,540 adult female caribou, an estimate of 213,079 caribou on the calving ground and a whole herd estimate of 252,892 adult caribou.
- These results suggest that the herd is likely relatively stable. A comparison of the adult female estimates from 2022 and 2008 indicate a statistically significant decline. However, trend analysis during this period has identified a non-significant declining trend (Figure 1).
- The lack of statistical significance in regression-based trend estimates (that include 2008, 2014, 2017, and 2022 estimates) may be due to stability in the period of 2014-2017, however, it should be noted that precision of estimates (large confidence intervals) makes it difficult to track smaller changes in abundance from survey to survey.
- The whole herd estimate from the June 2022 survey is 35,352 adult and yearling caribou below that observed in June 2017. Though not statistically significant, this reduction in the mean estimate highlights the importance of continued monitoring of the herd.

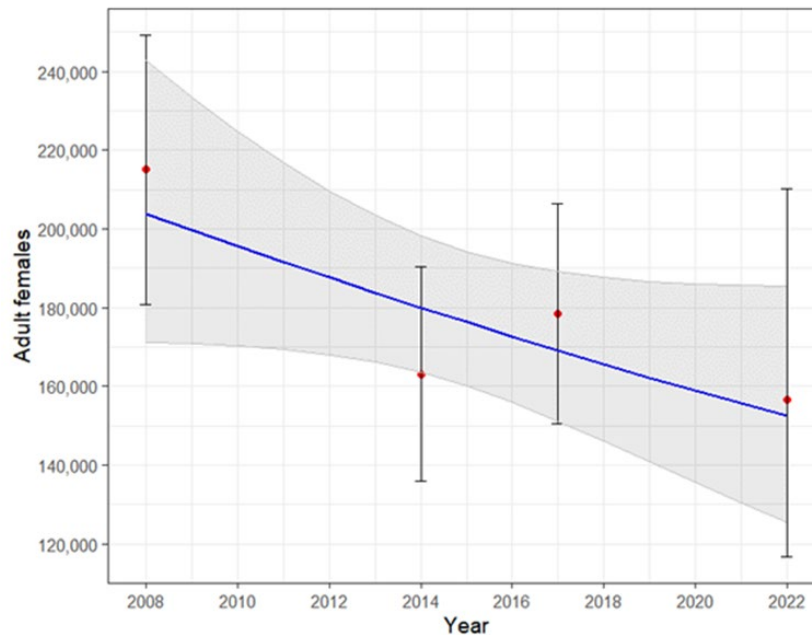


Figure 1. Predicted trends in Qamanirjuaq herd abundance from log-linear regression including the June 2022 estimate. Confidence limits on regression

predictions are given as hashed blue lines. Individual estimates are shown as red points with displayed 95% confidence limits.

Consultations

ENV staff traveled to the communities of the Kivalliq region in January and February 2024 to meet face to face with the Hunters and Trappers Organizations (HTOs) and give an update on the Qamanirjuaq caribou survey results, and other regional research results and issues. Presentations with summary results of recent surveys and other details concerning Kivalliq ungulates were given to the HTO members present.

Recommendation

ENV is not proposing any management actions for the Qamanirjuaq caribou herd at this time but recommends continued monitoring of this herd.