



SUBMISSION TO THE

NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: X

Decision:

Issue: The 2018 Beverly mainland migratory caribou population estimate and herd status.

Background:

- This shared herd is harvested by the communities of Cambridge Bay, Gjoa Haven, Kugaaruk, and Baker Lake within Nunavut, and by several communities within northern Saskatchewan and the NWT.
- Density estimates and a summary trend analysis were made by the Government of Nunavut and Government of the Northwest Territories (GNWT), based on reconnaissance surveys flown over the Queen Maud Gulf calving area in 2006, 2007, 2008, 2009, 2011, 2013, 2016, and 2018. These density estimates have indicated a substantial decline in the Beverly caribou herd.
- In June 2011, the Nunavut Department of Environment (DOE) conducted an estimate of adult female caribou for the Beverly subpopulation on their calving grounds, in the vicinity of the Queen Maud Gulf. This estimate, when combined with fall composition based sex ratios, is then used to estimate the abundance of the entire herd. A re-evaluation of the 2011 survey, conducted in 2018, using additional data not available in 2011, estimated 136,608 adult caribou and yearlings.
- The results of the June 2011 survey suggests a substantial decline in the herd had occurred since June 1994, when the population was estimated at 276,000 adults and yearlings.
- Findings from the 2011 abundance survey confirmed that the Beverly population continued to decline.
- Concerns regarding mineral exploration activities, on the southern calving grounds in the vicinity of Beverly Lake, and the possible negative impacts that development-related disturbance may have on an already vulnerable population, are still being communicated by local hunters.
- Local hunters, jurisdictional biologists from Saskatchewan, Northwest Territories (NWT), and Nunavut, as well as the Beverly and Qamanirjuaq Caribou Management Board (BQCMB), and World Wildlife Fund Canada, have indicated their concern over these declines and would like to see increased monitoring efforts on the Beverly herd.

- Greater attempts must be made by all jurisdictions to monitor and effectively mitigate anthropogenic activities/disturbance in order to determine its role in the declines.
- Most harvest pressure on the Beverly herd occurs in Saskatchewan, followed by the NWT, and then Nunavut.
- The total estimated cash value of the harvest to subsistence harvesters (money in the pocket of local harvesters) of both the Beverly and Qamanirjuaq populations, is in excess of \$15 million dollars annually.

Current Status:

- The final results of the 2018 Beverly caribou survey show an estimated 103,372 (95% CI=9,688; CV= 4.9%) adult and yearling caribou. These results confirm a statistically significant decline in Beverly Caribou abundance from the 2011 estimate of 136,608 (95% CI = 12,506; CV=4.8%) adult and yearling caribou.
- The final survey report for the 2018 Beverly caribou survey has been completed and was shared with co-management partners in October 2019.
- The Beverly Herd of Barren-ground caribou has been in decline since June 1994. Beverly herd abundance has declined from 276,000 in 1994, to 136,608 in 2011, to 103,372 in June 2018.
- An aerial survey to estimate abundance was successfully completed June 2018. There was some confirmed mixing of the Bathurst Herd within the western extents of the Beverly calving area in June 2018, but additional analysis of collar movement data and communications with experts in the Northwest Territories confirmed that mixing was minimal.
- There is confirmation of the Beverly herd mixing with the Ahiak Herd in the Beverly's eastern calving extents on Adelaide Peninsula, but spatial analyses of collar data suggests that this mixing was minimal.
- Three neighboring mainland migratory barren-ground caribou herds, the Bluenose East, Bathurst, and Beverly herds, were all surveyed in June 2018. This multiple survey effort between the Government of Nunavut and the GNWT will offer greater insight and certainty into barren-ground caribou calving distribution and combined abundance west of Chantrey Inlet.

Consultation:

- Initial consultations with Kivalliq Hunters and Trappers Organizations (HTOs) began in January and February 2017, at which time reconnaissance results displaying a steady drop in relative densities of Beverly caribou on their June calving extents was reported and discussed. At that time, communities expressed concern over the indicated declines and requested that an abundance survey be carried out as soon as possible.

- Consultations with Kivalliq community HTOs continued in January and February 2018, at which time the proposed abundance survey was discussed and requests were made to the Baker lake HTO to provide observers. Similar requests were made by the Kitikmeot Biologist to the Cambridge Bay, Kugaaruk, and Gjoa Haven HTOs.
- Consultations with Kivalliq HTOs following the Beverly survey effort took place in January and February, 2019. During these meetings initial survey results were presented and discussed. Due to the low harvest of Beverly caribou within the Kivalliq, both the DOE and Kivalliq HTOs agreed that no management action be sought at this time. Communities did however impress upon DOE staff that monitoring of this herd should be increased so that appropriate management actions can be identified, if the decline steepens.
- The final survey report for the 2018 survey of the Beverly caribou herd was shared with affected communities in Nunavut in October and November, 2019.

Recommendations:

- *The Department of Environment is not making any recommendations for management of the Beverly caribou herd at this time, due to the relatively low level of harvest occurring within Nunavut.*