

**Overview: Monitoring of Bathurst and Bluenose-East Caribou Herds, Sept. 2014
Government of the Northwest Territories, Environment and Natural Resources**

Summary:

This document provides an overview of population trend, other monitoring, and management of the Bathurst and Bluenose-East (BE) caribou herds in NWT and NU, with the emphasis on the last 5 years (2009-2014). Results from a reconnaissance survey conducted in June 2014 on the calving grounds of the Bathurst herd suggests this herd, which had been considered stable 2009-2012, has declined since 2012. Results from calving ground photo surveys of the BE herd indicate this herd has declined substantially 2010-2013. The June 2014 calving ground reconnaissance survey results suggest the BE herd has continued to decline rapidly. Photo surveys are planned for the spring of 2015 to allow more precise trend estimates for both herds.

Two main sections of this overview describe results of population surveys, calving ground reconnaissance surveys, estimates of cow survival rate, spring recruitment surveys, fall composition surveys, pregnancy rates, harvest estimates, movements of collared caribou between neighbouring herds, and the management context for each herd. Information on wolf monitoring on the Bathurst range and recent wolf harvest is included. A section on long-term cycles or fluctuations of migratory caribou herds and demographic indicators of decline (low pregnancy rates, low calf recruitment and low adult cow survival) follows. The overview concludes with assessments of population trend in the Bathurst and Bluenose-East herds 2009-2014 and possible explanations for the June 2014 calving ground reconnaissance survey results.

For the Bathurst herd, the likeliest explanation for the low numbers of caribou on the calving grounds in 2014 is a combination of low natural survival rates, reduced calf productivity and survival, and to some extent harvest. Harvest of the Bathurst herd on its main winter range (management zones RBC02 and RBC03) has been greatly reduced since 2010 but some harvest is unreported and some harvest has likely occurred outside these zones. For example, harvest of Bathurst caribou may be occurring in RBC01, where the Bathurst and BE herds overlap in winter. Issues related to the reconnaissance survey methods may have affected survey results but are unlikely to account for the large apparent drop in numbers of caribou on the calving grounds. Assessment of movements of collared caribou between the Bathurst's calving grounds and its neighbouring herds' calving grounds showed no evidence of large-scale emigration from the Bathurst range 2010-2014.

For the BE herd, a combination of low natural survival, reduced calf recruitment, low pregnancy rates in some years, and a substantial cow harvest are the most probable reasons for the herd's substantial decline 2010-2013 and the continued and potentially accelerated decline to June 2014. Issues related to the reconnaissance survey methods may have affected the survey results but are unlikely to account for the large apparent decrease in caribou on the calving grounds. Assessment of movements of collared caribou between the BE's calving grounds and its neighbouring herds' calving grounds showed no evidence of large-scale emigration from the BE range 2010-2014.