

Upper Klondike Highway Moose Management Unit

Early-winter Moose Census, October 31 – November 10, 2017

Summary

GMS: 2-52, 2-53, 2-57, 3-09, 3-17, 3-18, 4-01, and 4-02; 8,662 km²

Total No. of Moose: 837 Density: 99 moose/1000 km²

Total No. of Adult Bulls: 198 Bulls / 100 Cows: 57

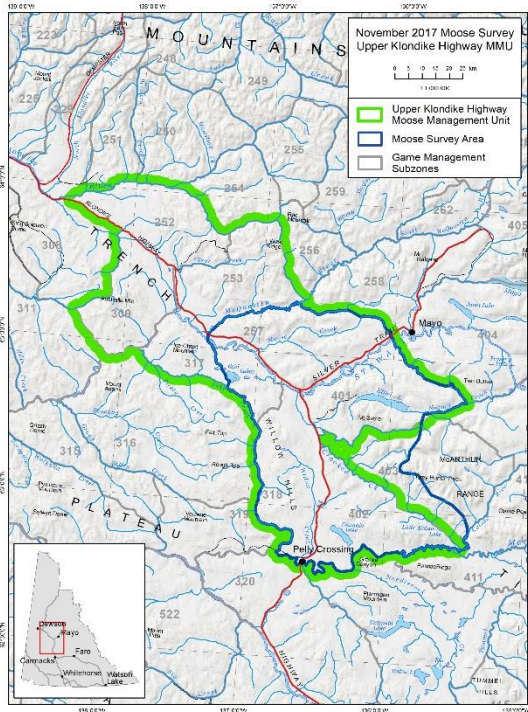
Calves / 100 Cows: 35 Yearlings / 100 Cows: 29

Avg. Licensed Harvest: 13 (2013-17) Sustainable Harvest: 20 bulls

Population Status: Likely declining between 2002 and 2017.

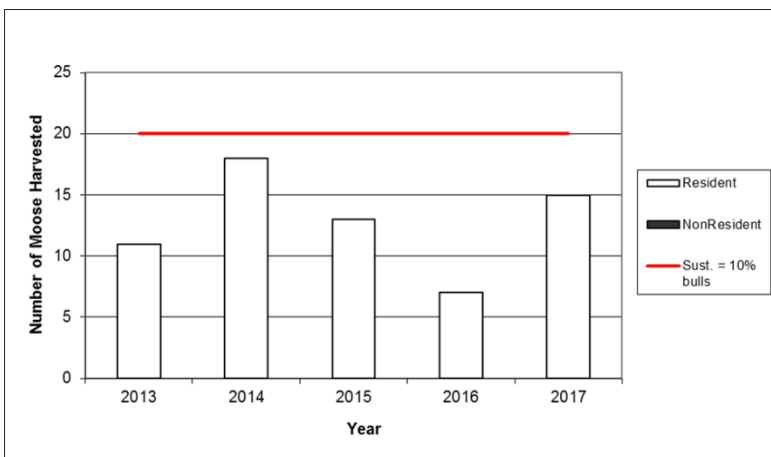
Location

The Upper Klondike Highway Moose Management Unit (MMU) is located west of Mayo and north of Pelly Crossing and is within the traditional territories of the First Nation of Na-Cho Nyäk Dun, Selkirk First Nation, and the Tr'ondëk Hwëch'in.



Harvest

Harvest of moose by licenced hunters in the Upper Klondike Highway MMU averaged about 13 per year in 2013-2017. There has been a declining trend in harvest in this area during the past 15-20 years, with average harvests of 33 in 1998-2002, 22 in 2003-2007, and 20 in 2008-2012. These figures do not include harvest data from First Nation hunters. First Nation harvest rates are generally similar to those of licenced resident hunters. Total harvest is therefore likely above the recommended maximum.



Moose Program Overview

Biologists conduct censuses of moose populations in accessible areas every 5-10 years. Priorities for surveys are determined through working with First Nations and Renewable Resources Councils.

The census method uses a model-based approach that incorporates local knowledge, stratification survey results, and habitat information (for example, fire history, vegetation type and cover, topography, and elevation).

These surveys help determine the status of moose populations and assess harvest sustainability.



Census Results

Overview

The purpose of this survey was to estimate the abundance, distribution and composition by age and sex of the moose population in the Upper Klondike Highway MMU. The survey area was the southern two-thirds of the MMU, and we counted moose in approximately 35% of the survey blocks in that area. We observed 483 moose (133 mature bulls; 248 mature and yearling cows; 32 yearling bulls; and 70 calves). The highest numbers of moose were seen in hilly terrain in areas that had burned 13-20 years previously, and in higher altitude open spruce with dense willows. We observed few moose in forested lowlands.

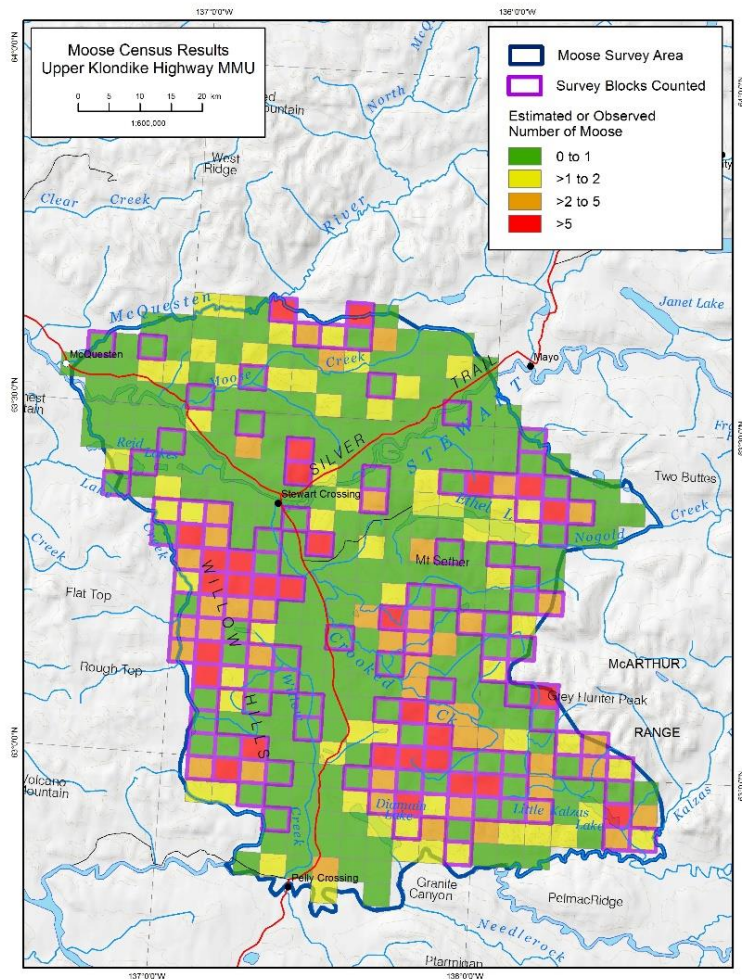
Population Estimate / Density

We Based on our census results, we estimate that there are **837 (90% confident that the number is between 683 and 1029)** moose in the entire Upper Klondike Highway MMU. This equates to a density of **99 moose per 1000 km²** of habitable moose range (not including large lakes and rocky mountain tops) which is at the low end of the typical range of moose densities in Yukon (100-250 per 1000km²).

We estimate there are **35 calves and 29 yearlings per 100 adult cows**, which is near and above the Yukon averages of 29 calves and 18 yearlings per 100 adult cows.

We estimate there are **59-57 adult bulls per 100 adult cows**, which is about equal to the Yukon average and well above the required level to breed all cows.

Population Status: The population has likely declined since 2002, based on our survey and harvest data and local knowledge.



Acknowledgements

Andrew Crane, Melvin Lagerson, and Mark Vansickle flew the aerial surveys safely and efficiently. Eugene Alfred, Jerry Alfred, Mitchell Alfred, Joe Bellmore, Steve Buyck, Alexandra Francis, Jaylene Goorts, Brian Isaac, Darrell Johnnie, Darrell Lucas, Simone MacDonald, Bruce MacGregor, Reggie McGinty, Stewart Moses, and Eddie Tom Tom provided their keen eyesight and knowledge of the area as observers on the aerial survey crews. The Selkirk Renewable Resources Council provided some of the funding and staff for this survey, and the Selkirk First Nation and First Nation of Na-Cho Nyäk Dun provided logistical support and staff.).

