

Lower Macmillan River Moose Management Unit (MMU)

Early-winter Moose Census, 01-07 November 2020



MMU - Summary

GMS: 409, 410, 411, 418, and 419; 7,825 km²

Total No. of Moose: 1,893 Density: 253 moose/1,000 km² of moose habitat

Total No. of Adult Bulls: 488 Adult Bulls / 100 Adult Cows: 56

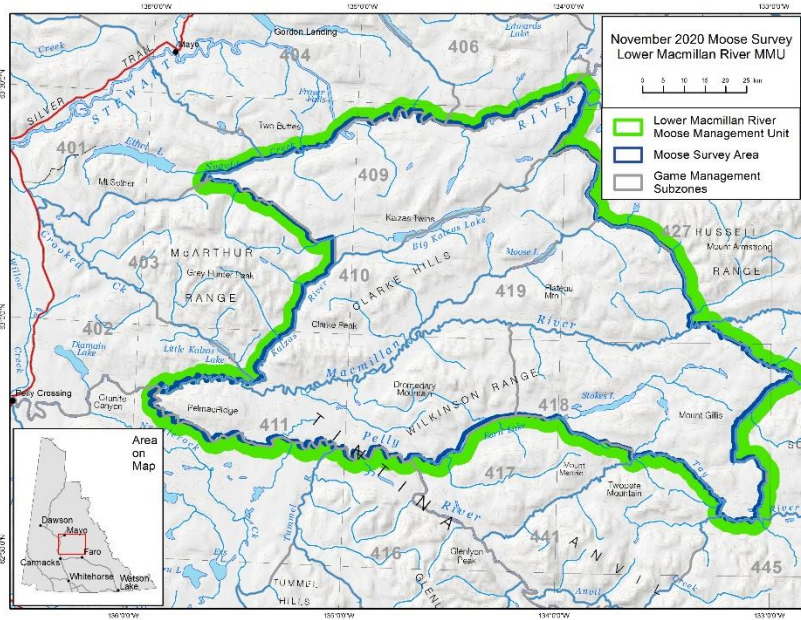
Calves / 100 Adult Cows: 37 Yearlings / 100 Adult Cows: 21

Avg. Licensed Harvest: 22 bulls (2015-19) Sustainable Harvest: 49 bulls

Population Status: Unknown trend (first census in 2020)

Location

The Lower Macmillan River MMU is up the Macmillan River from Pelly Crossing and is within the traditional territories of the Selkirk First Nation, First Nation of Na-Cho Nyäk Dun, and the Kaska Dena.



Moose Program Overview

Biologists with the Yukon Fish & Wildlife Branch aim to 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.

Harvest

Harvest of moose by licenced hunters in the Lower Macmillan River MMU averaged about 22 bulls (7 resident, 15 non-resident) per year in 2015-2019. These figures do not include harvest data from First Nation hunters. First Nation harvest rates are estimated to be similar to those of licenced resident hunters in much of the central Yukon. Total harvest is therefore likely to be below the estimated sustainable harvest, although local hunters have noted increased harvest pressure along the Macmillan and Pelly rivers.





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 Lower Macmillan River MMU. We counted moose in about 34% of the survey blocks in that area. We observed 1,134 moose (304 mature bulls; 592 mature and yearling cows; 63 yearling bulls; and 174 calves). The highest numbers of moose were seen in hilly terrain in areas that had burned 16-31 years previously, and in subalpine willow habitats. We observed few moose in forested lowlands.

Population Estimate / Density

We estimate that there are **1,893 (90% confident that the number is between 1,700 and 2,101)** moose in the Upper Klondike Highway MMU. This equates to a density of **253 moose per 1,000 km²** of habitable moose range (not including large lakes and rocky mountain tops) which is at the high end of the typical range of moose densities in Yukon (100-250 per 1,000km²).

We estimate there are **37 calves and 21 yearlings per 100 adult cows**, which is above and slightly above the Yukon average in surveyed areas of 29 calves and 18 yearlings per 100 adult cows.

We estimate there are **56 adult bulls per 100 adult cows**, which is slightly lower the Yukon average but well above the minimum of 30 bulls per 100 cows

