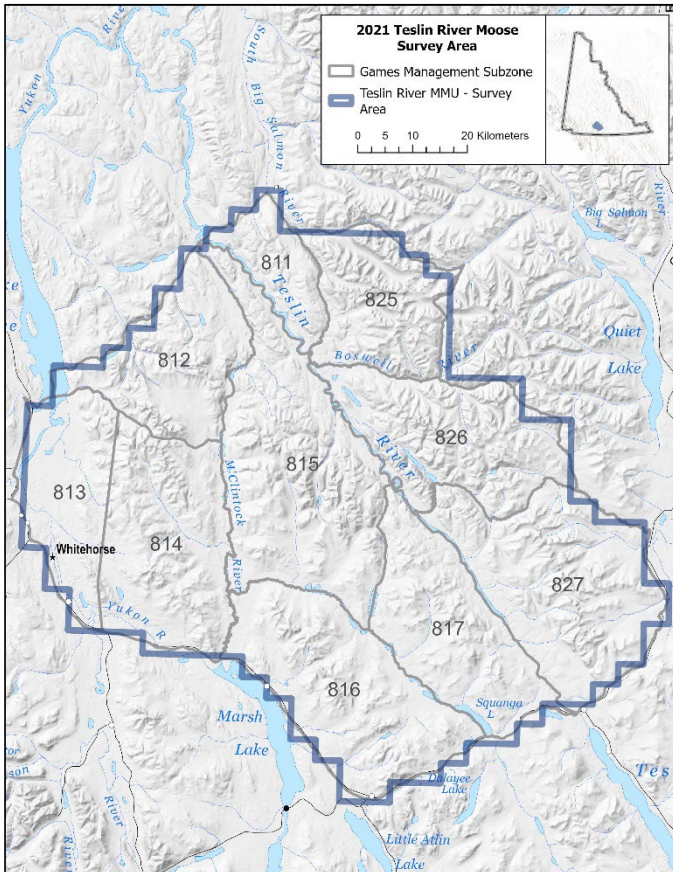




Teslin River Moose Management Unit

Early-Winter Moose Survey – November 22-30, 2021



Moose Management Unit status

GMS

8-11 to 8-17 and 8-25 to 8-27

SURVEY AREA

7,697 KM²

MOOSE DENSITY IN MOOSE HABITAT

172/1,000 KM²

TOTAL MOOSE

1,178

TOTAL ADULT BULLS

349

ADULT BULLS/100 ADULT COWS

57

CALVES/100 ADULT COWS

23

YEARLINGS/100 ADULT COWS

13

Survey overview

The purpose of this survey was to estimate the abundance, distribution and composition of moose in the Teslin River MMU, and to use this information to evaluate current harvest levels. We counted moose in 147 of 457 survey blocks, or about 32% of the total area. A total of 644 moose were observed (189 mature bulls; 355 mature and yearling cows; 23 yearling bulls; 75 calves; and 2 unclassified moose). We observed the highest numbers of moose in subalpine areas where there was abundant willow.

Survey area

The Teslin River Moose Management Unit (MMU) is located northeast of Whitehorse. This survey marks the first comprehensive assessment of the entire Teslin River MMU, though sections of the MMU were previously surveyed in 2011, 2007, and 1999.

Acknowledgments

We thank the Ta'an Kwäch'än Council and Laberge RRC for their support during this survey, as well as the pilots from Horizon Helicopters for their expertise.

Survey method

In the Yukon we use a model-based approach to estimate moose populations that incorporates local knowledge and habitat information (i.e., fire history, land cover, vegetation type and percent cover, and elevation). We use information gathered from surveyed blocks to estimate the number of moose in non-surveyed areas. We adjust the total number of moose observed and estimated to account for moose that were missed.

Survey results

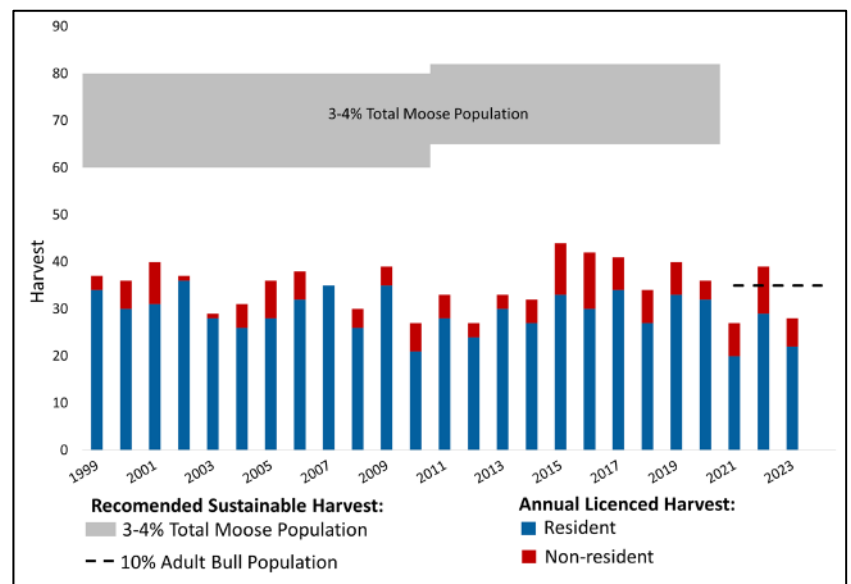
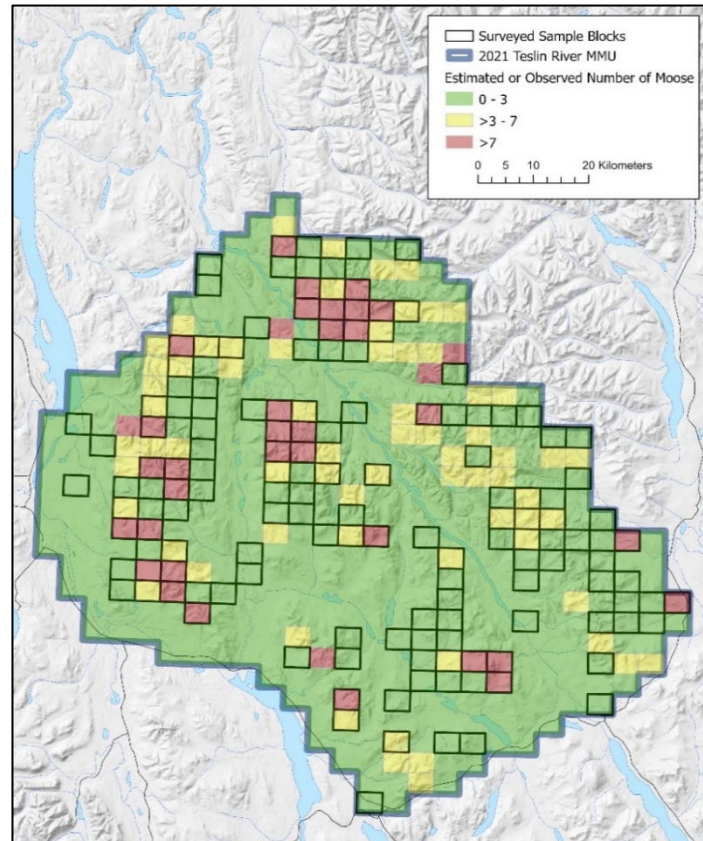
We estimated **1,178 (1,063 to 1,339)** moose in the Teslin River MMU. This equates to a density of **172 moose per 1,000 km² of suitable moose habitat**, which falls within the typical Yukon range (100 to 250 per 1,000 km²). We estimated 349 adult bulls, or **57 adult bulls per 100 adult cows**, which is above the recommended minimum (30 adult bulls per 100 adult cows). Yearling and calf ratios (**13 yearlings** and **23 calves per 100 adult cows**) were both below the Yukon average (18 yearlings and 29 calves per 100 adult cows, respectively; Environment Yukon, 2016).

Population trend

The overall population trend is difficult to assess since the entire MMU has not been previously surveyed. However, 65% of the south-western portion of the MMU was surveyed in 2011 and within this area moose abundance declined.

Harvest

From 1999 to 2020, sustainable harvest levels were estimated at 3–4% of the total moose population, based on surveys conducted in 1999 and 2011. Following the 2021 survey, the sustainable harvest threshold was revised to 10% of the adult bull population* —which equates to 35 bulls per year. Between 2021 and 2023, the average licensed harvest was 31.3 bulls per year (see full report for details). First Nation harvest information is not available and is required to accurately evaluate the level of harvest in this population.



*Science-base guidelines for management of moose in Yukon (2016)

FOR MORE INFORMATION, PLEASE CONTACT:

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