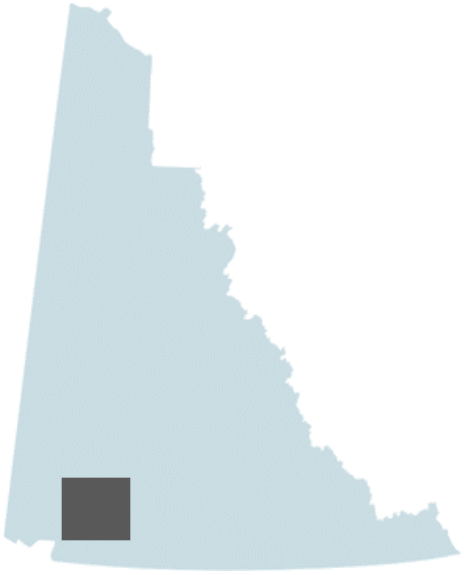
2023 Aishihik Bison Population Survey



Data at a Glance

Region: Southwestern Yukon

Survey Effort: 13.2 hrs; 3,322 km

Survey Timing: June 28-29 2023

Minimum Number Known Alive:
776 Adults, 130 Calves

Survey Cost: ~$24,000

Project objectives

Periodic surveys of the Aishihik bison herd are used to track their population size, as well as to support an annual harvest that is popular among Yukoners.

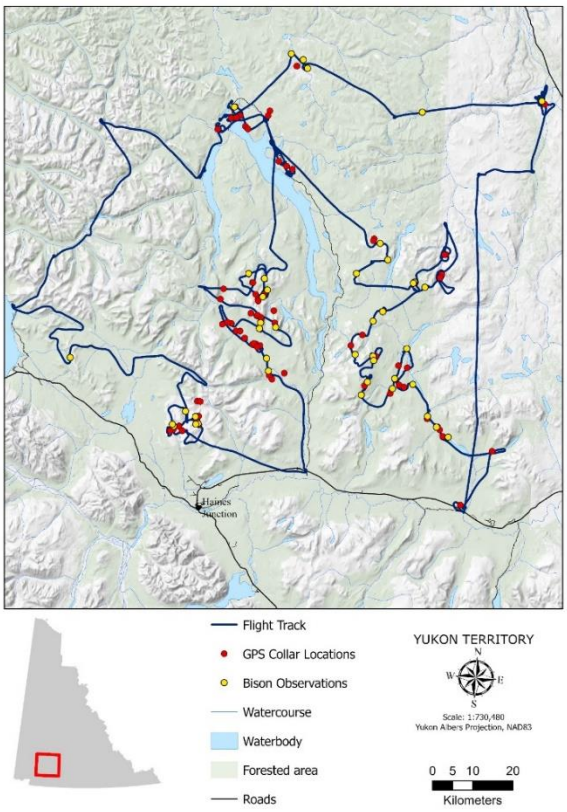
Project background

We conducted the last survey to estimate the population size of Aishihik bison in summer 2022 and estimated 1,951 adults in the herd. Counts of the minimum number known alive were previously conducted in July 2020 and July 2021. These were to assess whether the population was at or near thresholds for management purposes and to obtain key demographic data, such as the percentage of calves and dominant males in the population.

Project overview

In summer 2023, we conducted a minimum count of the herd (also known as a Minimum Number Known Alive [MNKA] survey). A MNKA survey aims to count all the animals we can find in a day or two to get a minimum number of animals in the population. These MNKA surveys allow bison managers to track the population size and demographic parameters, and can serve as an early warning if changes in the harvest regime are required.

We focused our search effort on known locations of GPS-collared bison and other areas known to be seasonally used. We also prioritized flying the east side of Kluane Lake at the request of Kluane First Nation and the Dän Keyi Renewable Resource Council. We recorded the composition and size of all groups seen.



Flight track and bison observations during an MNKA survey conducted on 28-29 June 2023.

Key findings

Our MNKA survey indicates that the size of the Aishihik bison population in June 2023 was a minimum of 776 animals, not including calves. This is a similar MNKA value to 2021, but substantially lower than 2020.

The reduction in bison seen in 2023 may reflect a real decrease in the population. However, given the limitations of the MNKA approach and the population estimate conducted in 2022 using more reliable methods (1,951, 95% CI = 1,688-2,295), this is unlikely. Reasons for the lower number of bison seen in 2023 compared to previous MNKA surveys in 2020 are unknown but likely due to random chance in encountering bison, which is a hazard of MNKA surveys.

We recommend conducting a new mark-resight population survey in summer 2024 or 2025 to clarify the current status of the Aishihik population.