



Data at a Glance

Region: Southwestern Yukon

Survey Effort: 23.1 hrs; 3,192 km

Survey Timing: June/July 2022

Estimated Adult Population Size:

1,951 (95% CI = 1,688 to 2,295)

Minimum Number Known Alive:

857 adults, 135 calves

Survey Cost: ~\$48,000

2022 Aishihik Bison Population Survey

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 July 2016 and estimated 1,325 adults in the herd at that time. Counts of the minimum number known alive were conducted in July 2020 and July 2021 to ensure the population was above thresholds for management purposes. However, these surveys did not estimate the total population size.

Project overview

In summer 2022, we used a mark-resight survey methodology that entailed marking a proportion of the population with paint-balls from a helicopter, followed by independent surveys to count the number of marked and unmarked bison. We then modeled the data to generate a population estimate with 95% confidence intervals.

We focused our search effort on known locations of GPS-collared bison and other areas known to be seasonally used. We paint-balled 122 bison, and then flew three independent surveys to locate bison.

Key findings

The 2022 estimated population size was 1,951 (95% confidence intervals [CI] = 1,688–2,295). This is substantially greater than the 2016 estimated population size of 1,325 (95% CI = 1,157–1,552) .

Our data suggest that there has been a 47% increase in population size in the past six years.

While our estimated population size is plausible, there is evidence that it may be an overestimate. For example, if we forecast from the estimated population size in 2016, using an average lambda of 1.0425, the estimated population size in 2022 would be 1,701 animals.

We recommend conducting another mark-resight survey in 2023 or 2024 to provide resolution on the accuracy of our 2022 survey.



For more information, please contact

Thomas Jung: 867-667-5766
Senior Wildlife Biologist
Shawn Taylor: 867-633-2394
Kluane Regional Biologist

