



## Wolf Lake Caribou Herd Population Survey - 2022

To provide an updated population estimate, a mark-resight survey was flown in fall 2022. The purpose of the survey was to estimate abundance, distribution, calf recruitment and adult sex ratios. These measures, when monitored over time, are indicators of herd population trends.

## **Summary of Results**

**Date:** Sept. 28 – Oct. 6, 2022 **Hours Flown:** 65.5

Calf:Cow ratio: 17:100 Bull:Cow ratio: 47:100

**Population estimate:** 1,184 (95% CIs 808–1,740)

Caribou herds of Yukon (Wolf Lake Highlighted)

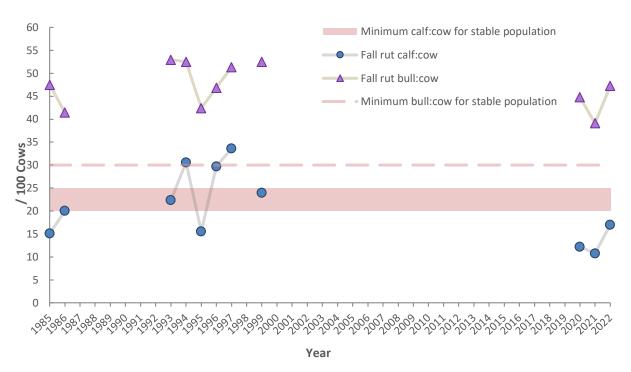


Figure 1. Measure of recruitment as number of calves per 100 adult cows, and adult sex ratio as number of bulls per 100 adult cows, calculated from composition surveys conducted during fall, 1985–2022.

**Management:** Wolf Lake caribou are harvested by Yukon residents, non-residents and First Nations, and recently there are local concerns about current harvest pressure on the herd. The current monitoring program will provide updated population numbers and an indication of herd status to inform harvest management.







**Population Trend:** The Wolf Lake caribou herd was previously surveyed in 1998 when the population was estimated at 1,491 (95% CIs 939–2,042) animals. However, given the length of time between surveys and differing methodology, more information is needed to determine the herd's trajectory (ie. increasing, decreasing, or stable). Recent composition surveys (2020–22), suggest bull:cow ratios are above the minimum threshold (30:100) averaging 44 bulls per 100 cows, but calf:cow ratios have been consistently lower than what is considered necessary for a stable population (20–25:100), averaging 13 calves per 100 cows. This survey is part of a 5-year monitoring program, including GPS collaring and annual composition surveys, which will help clarify the overall population

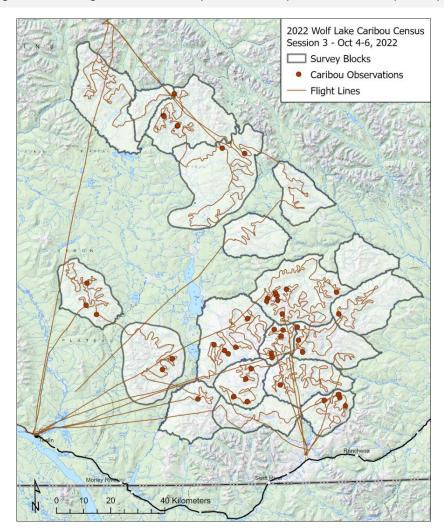


Figure 2. Flight paths and caribou observations from the third session of the 2022 Wolf Lake caribou population survey, conducted on October 4-6, 2022.

## Acknowledgements

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