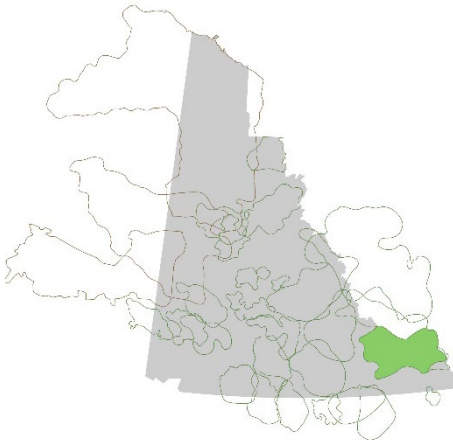




Coal River Caribou Herd Population Survey – 2022



We conducted the first population survey on the Coal River caribou herd in the fall of 2022. The purpose of the survey was to estimate the total population size of the herd and determine its composition. We evaluated abundance, distribution, calf recruitment and adult sex ratios. These measures, when monitored over time, are indicators of herd population trend.

Summary of Results

Dates: Sept. 19–26, 2022

Hours Flown: 68

Calf: Cow Ratio: 9:100

Bull: Cow Ratio: 29:100

Population Estimate: 1,203 (95% CI = 914–1,586)

Caribou herds of Yukon (Coal River highlighted)

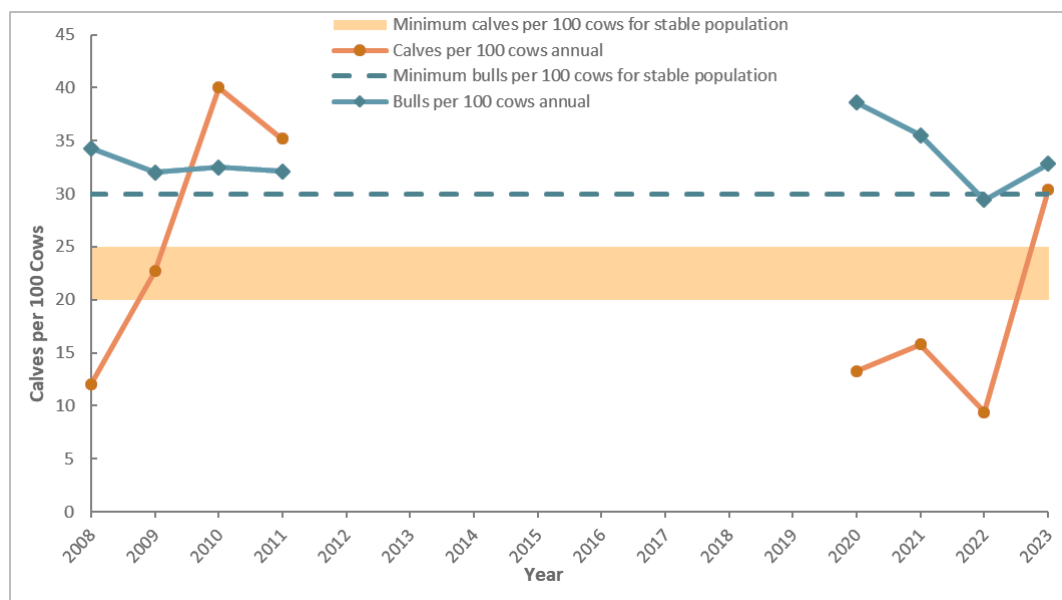


Figure 1. Index of fall calf recruitment as number of calves per 100 adult cows and adult sex ratio as number of bulls per 100 adult cows, estimated from fall composition surveys, 2008–2011 and 2020–2023.

Population Trend: The 2022 population estimate of the Coal River herd is 1,203 (95% CI = 914–1,586) animals. The result is higher than the previous estimate in 2008 of approximately 900 animals; however, this comparison should be interpreted with caution as it was based on a minimum count, not a formal population survey. The fall calf recruitment estimates from 2020, 2021, and 2022 were all lower than what is considered necessary for a stable population; however, the 2023 recruitment estimate was above the recommended level, resulting in an average of 17.2 calves per 100 cows across all four years. An additional year of fall calf recruitment data in 2024 will help to increase confidence in the herd’s trend. The adult sex ratios from the most recent surveys (2020–2023), average 34.1 bulls per 100 cows, above what is considered adequate for a stable population.

FOR MORE INFORMATION, PLEASE CONTACT:

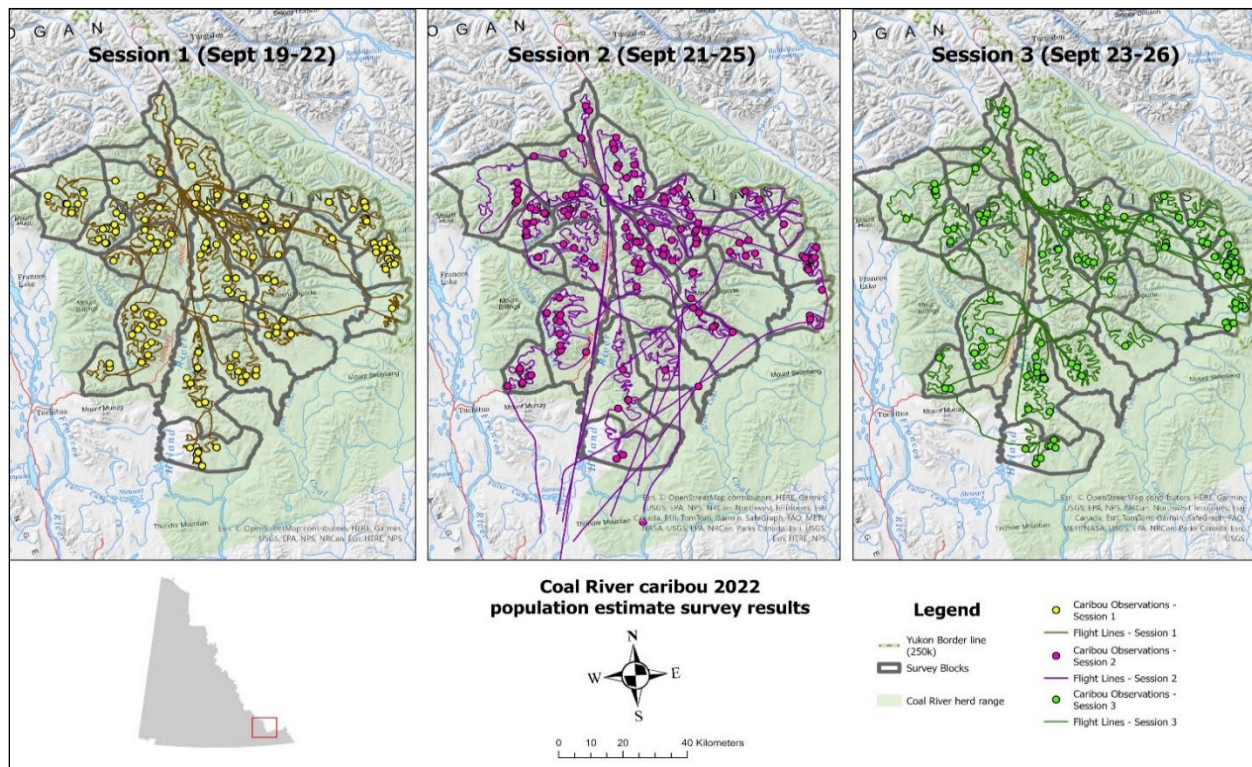
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Management: Yukon residents, non-residents and First Nations harvest Coal River caribou. There are concerns about current harvest pressure on the herd as well as potential effects from proposed upgrades to the Nahanni Range Road (NRR), which bisects the herd's range. Since this is the first formal population estimate for the Coal River caribou herd, herd trend is unknown; however, recent (2020–2023) trends in fall calf recruitment are concerning (17.2 calves per 100 cows), as they are indicative of a decline. However, a full five years of composition data is needed to better understand trend as annual estimates are highly variable. In the fall of 2024, we will undertake a fifth year of composition surveys. Following this survey, composition surveys will occur every other year, which will help increase confidence in our trend information. Potential effects from upgrades to the NRR will be examined more closely once the collaring program is complete and we can conduct an evaluation of animal movements and range use in relation to the road.



Map 1. Flight paths and caribou observations from the three sessions of the Coal River caribou population survey, conducted 19–26 September 2022.

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