



United States Department of the Interior

NATIONAL PARK SERVICE



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- **Mentasta Caribou Herd**

- A total of 189 (90% CI: 148-278) adult caribou were estimated during a survey on June 26 and July 3, 2024, which is the lowest estimate since 2017 (Table 1).
- From a composition survey conducted on September 3rd, 2024, the calf to 100 cow ratio was similar to the previous 4 surveys since 2017 (4-year survey average = 21 calves vs. 2024 = 26 calves). The bull to 100 cow ratio was lower in 2024 (i.e., 33 bulls) than previous 4-surveys (average = 74 bulls).
- Currently, a total of 20 GPS collars exists on individuals captured on the Mentasta herds' range. Eight of these have emigrated west to the Nelchina herds' range.
- 28 GPS collars will be deployed on both the Mentasta and Chisana herds during October 1-5, 2024, in collaboration with AITRC and ADF&G.
- A competitive science proposal was funded for 2026 to evaluate changes in herd overlap among the Mentasta, Nelchina, and Chisana caribou herds. As these three herds co-occur in time, space, or both within Wrangell-St. Elias, significant concern exists for incidental take and overharvest of the smaller Mentasta and Chisana caribou herds when the larger Nelchina caribou herd is present and being harvested in an easily accessible area. Note the Federal hunt on Nelchina caribou is currently closed, so this actionable science will impact future management decisions. The study will begin in fall-2025 and will conclude in fall-2027.

Table 1. Population parameters for the Mentasta caribou herd.

Year	Estimated Adults (90% CI)	Calf:Cow Ratio	Bull:Cow Ratio
2017	285 (237-385)	20	87
2018	349 (289-475)	22	92
2019	335 (277-459)	28	95
2020	642 (545-833)	-	-
2021	470 (388-629)	12	20
2023	258 (203-374)	-	-
2024	189 (148-278)	26	33

- **Chisana Caribou Herd**

- A composition survey was conducted by Yukon Environment on October 14, 2023, and ADF&G on October 24, 2023, in conjunction with Wrangell-St. Elias. Survey results indicate above average calf to 100 cow ratio (3-year average = 25) and bull to 100 cow ratio (3-year average = 37) that are above the goals stated in Chisana management plan of 15 for calf:cow and 35 for bull:cow ratios.
- Currently twelve GPS collars remain within the herd.
- A composition survey will be conducted in October 2024.

- **Moose**

- A moose survey occurred across a 2.5-million-acre landscape within Wrangell-St. Elias including Unit 11 and portions of Unit 12 during fall-2023.
- The previous survey was conducted in fall 2013. The large time between surveys was due in part to lack of snow in some years, as well as flight restrictions due to the covid pandemic.
- The objectives of this survey were to evaluate spatiotemporal patterns in moose and determine age and gender composition. The estimated population of moose observed in 2023 was at a record low (Table 2), a nearly 40% decline from the previous 2013 survey, and slightly lower than the 2007 and 2010 estimates (Table 2).
- Changes in the spatial distribution of total moose as determine using a spatial model indicates a sharp decline on the north side of the Wrangell Mountains since 2013. Moose on the west and south side of the Wrangell Mountains have showed less of a population decline.

Table 2. Survey results from four moose population surveys, Unit 11 and 12, Wrangell-St. Elias National Park & Preserve, Alaska.

Year	Population Count (90% CrI)	Calf:100 Cow	Bull:100 Cow
2007	1650 (1479-1820)	19	53
2010	1533 (1422-1670)	17	51
2013	2199 (1969-2451)	18	64
2023	1330 (1229-1442)	8	44

- **Dall's Sheep**

- Sheep surveys were conducted across a 2.5-million-acre landscape on the northern Wrangell Mountains including the Nabesna area, and Mentasta and Nutzotin mountain ranges.
- A total of 148 individual 10-mile long transects were flown by two aircraft across 6 days for a total of 48 hours of survey time. Sheep groups including age and gender were recorded.
- Results are not ready to be shared at this time, but we will do so during the spring 2025 meeting.
- In 2025, NPS will resurvey the long-term monitoring area located between the headwaters of the Copper and Nabesna River drainages using an updated distance sampling transect approach, to evaluate recovery in that area with the recent population decline.

- A competitive science proposal was funded to evaluate factors contributing to the recent sheep decline at Wrangell-St. Elias to inform subsistence-harvest and management decisions. This project will occur across all occupied sheep habitats within the park and preserve starting in summers of 2026 and 2027. One hypothesis frequently posited by stakeholders is that heavy snow in recent years has decimated sheep numbers. This funded project leverages a strong south-to-north snow gradient across WRST to ask whether Dall's sheep declines are occurring park-wide, and to identify factors governing sheep abundance in repeat surveys since 2011. The effort will directly inform management decisions in WRST and provide valuable inferences for other Alaskan parks with Dall's sheep.