



# United States Department of the Interior

NATIONAL PARK SERVICE  
Wrangell-St. Elias National Park & Preserve  
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## WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE WILDLIFE REPORT

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### SUMMARY OF KEY UPDATES

- **Mentasta Caribou Herd**

- GPS collars were deployed on 10 female Mentasta caribou on September 18, 2022, by wildlife biologists from Gates of the Arctic and Wrangell-St. Elias. This brings the total number of GPS-collared caribou in the herd to 13. Data from GPS collared caribou will be used to assist with estimating population size and to inform the in-season management of hunts that target the Nelchina herd.

- **Chisana Caribou Herd**

- Aerial surveys were flown in Alaska and Yukon on October 14, 2022, to conduct a population census of the Chisana caribou herd for the first time since 2013. Biologists from the Alaska Department of Fish and Game (ADF&G) and the Yukon Department of Environment conducted the surveys in partnership with Wrangell-St. Elias and Gates of the Arctic. The resulting estimate for total population size was 582 caribou (90% Confidence Interval: = 557–706) in 2022, compared with the estimate of 701 caribou (90% Confidence Interval: = 639–763) in 2013. Although the 2022 estimate is lower than the 2013 estimate, the ranges of uncertainty around these estimates overlap, indicating that the population size is likely stable and has not changed significantly since 2013. Seventeen GPS-collared and 40 VHF-collared individuals are currently marked in the herd.

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### **Mentasta Caribou Herd**

- Our goal is to increase the total number of GPS-collared caribou to 30 over the next two years to improve the amount and quality of information used for management decision making.
- Location data for GPS-collared caribou will help inform in-season management of hunts that target the Nelchina herd to avoid incidental harvest of Mentasta caribou when and where the two herds overlap.
- Of the 10 collars deployed in fall 2022, nine currently remain on winter ranges in Alaska, while one individual migrated to Yukon. Fall-to-winter migration distances of individual caribou ranged from 33 to 303 miles.

- In June 2023, we will conduct a post-calving population census. The last Mentasta caribou census was conducted in 2021, resulting in an estimated population size of 672 individuals (Table 1), which is similar to the previous 4-year average of 622 individuals.
- We are currently exploring opportunities for collaboration with local partners centered around the role of ecological and subsistence factors on the habitat use and adult survival of GPS-collared caribou of the Mentasta and Chisana herds.

**Table 1.** Fall population estimates for the Mentasta caribou herd. Population estimate was derived using the June post-calving census and fall sex and age composition count.

Year	Estimated June Cows	Estimated Fall Calves	Estimated Fall Bulls	Fall Population Estimate
2017	263	47	79	389
2018	323	51	96	470
2019	302	77	100	479
2020	590 <sup>1</sup>	106	454	1150 <sup>1</sup>
2021	350 <sup>1</sup>	49	273	672

<sup>1</sup>May include Nelchina caribou.

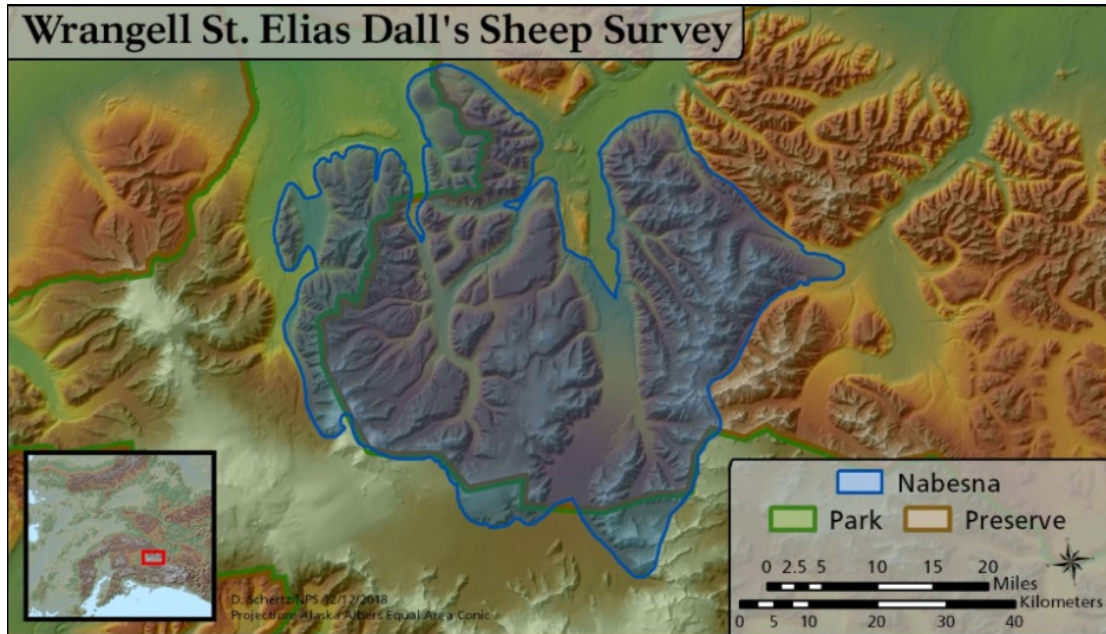
### Chisana Caribou Herd

- Our goal over the next three years is to increase the number of GPS collars to maintain enough collars on the herd to conduct surveys and monitor movements of the herd.
- Fourteen of the 17 GPS collared caribou are currently wintering in Yukon. Fall-to-winter migration distances ranged from 6 to 47 miles.
- The first population census in nine years was conducted on October 14, 2022. Kudos to our partners ADF&G and Yukon Department of Environment for making this happen.
- The 3-year rolling average of calf recruitment is 16.7 calves per 100 cows and the 3-year average adult sex ratio is 46.3 bulls per 100 cows.
- The working group is actively updating the Chisana Caribou Management Plan.

### Other Wildlife Reports:

- Dall's sheep surveys will be conducted in the Nabesna area on the north side of the Wrangell Mountains (Figure 1). From 2023 to 2025, NPS-Central Alaska Network and Wrangell-St. Elias will survey sheep populations and composition using updated distance sampling techniques that stratify survey area based on predicted abundance of sheep. The last sheep survey conducted by NPS in Wrangell-St. Elias occurred in the Nabesna area in 2020 and revealed a healthy and stable population. However, given the severe winter of 2022, it remains unknown if sheep have followed a similar declining trend as observed in neighboring areas. To gain additional insight into local knowledge, we will conduct interviews of local sheep hunters and hunting guides who spend a significant time on the ground each year searching for and observing Dall's sheep to document perceptions in recent trends in sheep abundance and composition (sex and age-class), potential impacts of environmental conditions on sheep numbers, hunter numbers, and hunter success rates.

- Bald eagle nest surveys will occur along Copper River and associated tributaries during the nest and chick rearing stage. Occupancy and productivity patterns of eagle territories have been recorded since 2004.
- Moose population surveys are being discussed to occur along the Nabesna Road in GMU12 and/or along the flanks of Mt. Drum in GMU11.



**Figure 1.** Study area surveyed for Dall's sheep in Wrangell-St. Elias National Park and Preserve, Alaska.