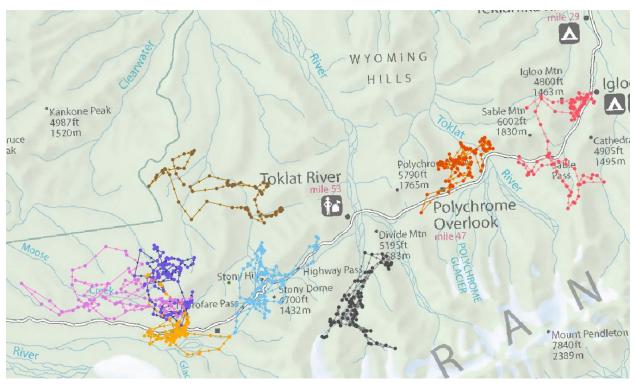
Denali National Park and Preserve Wildlife Updates August 2023

Bear Monitoring –The park road is currently closed due to a landslide at approximately mile 45. In an effort to determine the effect of no traffic/traffic on bears, a project has been started to radio collar 18 bears along the park road corridor to study movements and behavior in relation to the absence and presence of traffic on the road. A capture planned for May was cancelled due to high winds.

Between June 4 and 6, twelve bears (8 females, 4 males) were captured and collared west of the Pretty Rocks landslide as part of the park's Traffic-No Traffic Bear Behavior project. Since then, one female bear, originally collared north of the Toklat Road Camp died later in June in an altercation with another bear. She had traveled some distance from her capture location to the east side of the East Fork River. A second female lost her collar near the road by Stony Creek. She had originally been collared in front of the Eielson Visitor Center. Currently, 8 bears remain collared and project staff can monitor the locations of these collared bears as locations are transmitted over the Iridium satellite network (see map). Not only are bears on the west side using the road corridor, but one bear, a 10-year-old male, travelled east and has been hanging out in the Igloo canyon area. Many staff, bus drivers, and visitors have reported seeing this bear. His original capture location was near the hills about halfway across Polychrome flats, south of the road.

Capture operations are planned for October to deploy the remaining collars.



Bear locations for the first week post-capture.

As part of this study, Road Ecology and Wildlife staff are recording bear observations and behavior along the road, both on the east and west sides of the landslide. On a recent trip west earlier this month, Road Ecology staff primarily observed bears feeding on vegetation, slowly traveling, lying, and loafing. Bears were generally less active, as temperatures were warm, and berries have not yet appeared on the landscape.

Bear Management - Denali's Wildlife Management program strives to educate visitors about how to recreate in areas where bears are present. Tracking interactions between bears and people is organized in the Bear Human Incident Management System (BHIMS). This system provides a way for people to report their interactions with bears and for wildlife staff to rate the severity of those interactions and track patterns. Interactions are divided into back- and front-country locations and fall into three basic categories: observation (seeing a bear), encounter (close proximity, bear aware of people), and incident (bear charge, physical contact with person or property, bear getting human food).

For the 2023 season we have a new crew lead. Jeremy Nicholson came to Denali after 6 years as a bear biologist for the State of Idaho. He also has years of bear management experience at Yellowstone National Park. He is a welcome addition to the team.

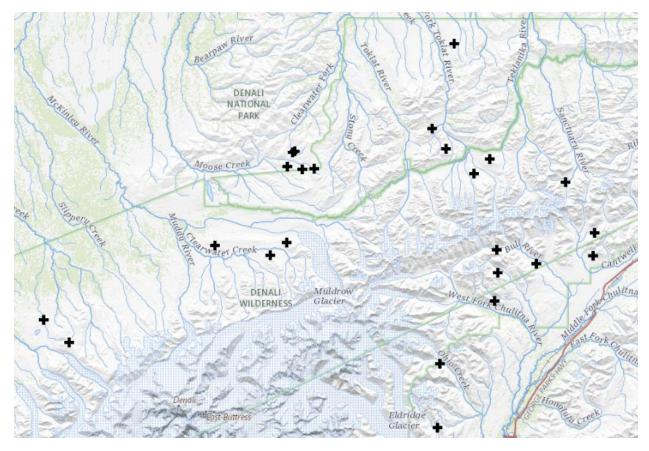
Bears have recently transitioned to eating berries making them very visible along the park road where the crops of both soapberries and blueberries are abundant. In the past few weeks, we have been dealing with a young black bear that likely got into human food and/or trash outside the park based on its behavior. Moose are beginning to group up in the rut area east of the Savage River and a closure has been implemented to keep visitors on the road for viewing. This provides a safer situation for both people and moose.

A full 2023 Denali National Park & Preserve Wildlife Management Report will be available later this Fall.

Moose Monitoring - Moose monitoring surveys are on hold indefinitely. Evaluation of protocol is ongoing.

Due to extraordinary snow and rain fall in the area in late December 2021, over-winter mortality seemed high and spring calf survival seemed low.

Caribou Monitoring – Capture operations for the Denali Caribou Herd were conducted in spring. This year we recollared 7 caribou cows to replace collars at the end of their battery life and added collars to 7 calves and 11 cows. Thanks in large part to direct support funding from Alaska Geographic, this year we were able to upgrade the traditionally used VHF-only collars on caribou with collars equipped with GPS and Iridium satellite uplink. All 25 collars deployed this spring were GPS and Iridium equipped collars. This exciting new development allows project staff to monitor the movements of caribou in near real time. A screenshot of recent GPS collar equipped caribou locations shows a wide distribution of the herd at this time, from Hauke Creek to Sanctuary and as far south as Partin Creek (see map below). The most recent count for caribou is 1730.



Caribou locations for the week of August 21, 2023

Sheep Surveys – Ground based surveys along the Denali Park Road (Mt. Margaret east and west, Tattler Creek, Cathedral Mountain, Igloo Mountain, and along the road) were conducted on June 8 and 9, 2023. A total of 114 sheep were counted in 21 bands.

The lamb:ewe-like (including yearlings) ratio showed a decrease (24:100) from both 2021 (27:100) and 2022 (29:100).

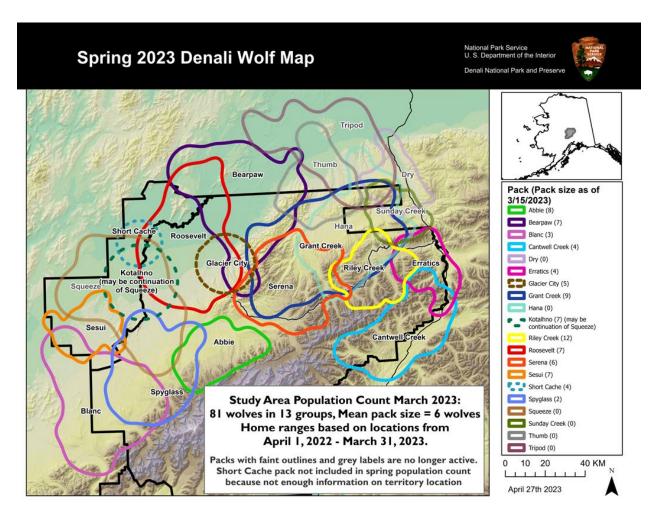
Distance sampling surveys for Dall's sheep were conducted from July 16 to 20, 2023 in Denali National Park. We surveyed 76 out of 94 transects in the main area and counted 24 groups. There was no survey conducted in the southwest preserve unit. Population estimates will be generated and distributed this winter. The observed ratio of lambs: ewe-like was around 12 to 13:100 which is a low.

There is evidence of Dall's sheep population declines throughout their range in recent years. The last survey in Denali occurred in 2020 and estimated a total of 1,154 sheep, a decline from the 2019 estimate of 2,092. Data from this survey is essential to document the current trajectory of the sheep population in the park.

Wolf Monitoring – In March 2023, we collared 13 wolves in 11 packs, including 2 new packs. Of the 13 wolves collared, 6 were animals recollared to replace collars at the end of their battery life and recollars and 7 were wolves previously uncollared. The spring count of wolves was 81 wolves in 13 packs, with a mean pack size of 6 wolves/pack. The spring territory map (below)

which shows the location of wolf pack territories and the spring pack counts are available on our webpage: https://www.nps.gov/dena/learn/nature/wolves.htm

There is evidence that most wolf packs have denned and a few visuals on pups in the park. Flights this fall will focus on more accurate pups counts as the leaves fall and give more opportunity for visual observations.



Spring 2023 Denali Wolf Map

Avian Projects –

- Golden eagles Nest occupancy surveys were conducted in April and productivity surveys were conducted in July. Occupancy of known nesting territories was lower than last year. Reproductive success in terms of females that laid eggs or pairs that raised young was low. This is a factor of low prey abundance and lack of snowshoe hares due to a low in their cycle. Surveys will continue in 2024.
- On-road Breeding Bird surveys were conducted in June. The number of bird species as well as number of individuals detected was as expected. Anecdotal reports from areas to the south (particularly Cantwell) indicate an influx of woodpecker species, nuthatches,

- and brown creepers. The is very likely due to the spread of spruce bark beetles. Surveys will continue in 2024.
- The nest predation study conducted by a crew from USGS finished up in 2023. In this study, camera traps and site visits were utilized to detect nest predation rates and document nest predation events in a wide variety of avian species. A final report is expected this winter.

Please contact Carol McIntyre, Denali wildlife biologist, if you have any questions about any avian programs, projects, or studies. carol_mcintyre@nps.gov, 907-455-0671.

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