Denali National Park and Preserve

SRC/RAC Updates August 2024

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.

Captures in June and October 2023, successfully deployed collars and we were able to track bear movements and determine locations. A short capture in early May 2024 deployed collars to replace some that failed or fell off.

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.

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).

A full 2024 Denali National Park & Preserve Wildlife Management Report will be completed this fall the Denali Bear Management Plan is being updated.

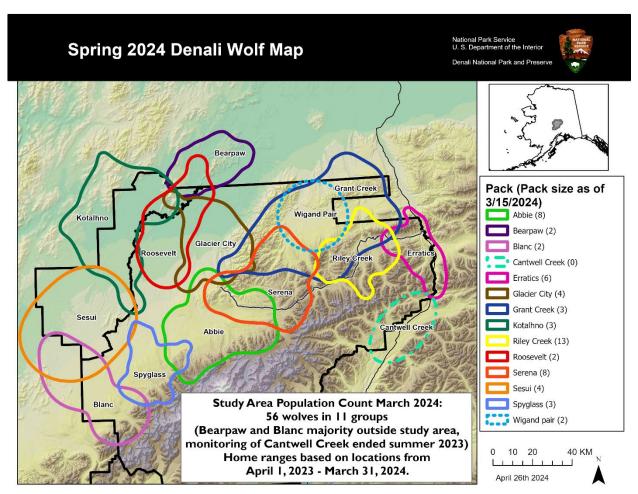
We are seeing an uptick in observations of black bears around entrance area facilities and trails this year and last. One recently resulted in a black bear getting food. Encounters with grizzly bears seems to be on par with other years although an increase in bikers on the park road has resulted in more interactions with that portion of visitors.

Moose Monitoring –The park will receive Inflation Reduction Act funds this year to conduct a moose survey as park of a 3-park food security project. The survey will be conducted in November/December depending on snow condition. Moose monitoring surveys as part of the Central Alaska Network are still on hold as evaluation of protocol is continues.

Wolves - In March 2024, 7 wolves in 4 packs were collared, including 1 new pack. Of the 7 wolves collared, 2 were animals recollared to replace collars at the end of their battery life and 5 were wolves previously uncollared. The spring count of wolves was 54 wolves in 11 packs, with a mean pack size of 5 wolves/pack. The spring territory map 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

Flights this fall will focus on more accurate pups counts as the leaves fall and give more opportunity for visuals.



Sheep – Aerial distance sampling surveys were conducted for Dall's sheep from July 13-19th 2024 in Denali. Sixty nine of 96 transects were surveyed in the main survey area (east of the park to the Muldrow) and over 28 groups of sheep were observed. The observed ratio of lamb to ewe-like was between 0.34 and 0.40. Population estimates from 2023's survey estimated 867 (95% CI: 640 - 1235) and the ratio of lambs to ewe-like was 0.15 (95% CI: 0.08 - 0.15). Population estimates for 2024 will be generated based on the results from the distance sampling survey and available this winter.

An additional "minimum count" aerial survey was conducted July 20th covering high use sheep habitat areas from Mt Margaret to the East Fork. This survey observed 24 groups ranging in size from 1 to 48 sheep and the observed lamb to ewe-like ratio was 0.54. Data from a ground-based survey observed a lamb to ewe-like ratio between 0.29 to 0.34.

A survey in the SW Preserve of the park was conducted on June 28-29, 2024. This survey was the first since the mid-1990s. A total of 94 sheep were counted in 17 groups and the observed ratio of lambs to ewe-like sheep was 0.35.

Overall, while the formal results from the aerial distance sampling survey are not available, there is evidence that this summer's lamb ratio is higher than in previous years and provides cautious optimism for recovery of sheep numbers in the coming years.

This summer a collaborative study of Dall's sheep with the Alaska Department of Fish and Game was started. This interagency and multi-park research project on Dall's sheep is the first of its kind and will compare dynamics of sheep populations among two park units (Denali and Gates of the Arctic) and areas adjacent to the parks on state lands. On June 13-14, 2024, 30 rams were collared from Mt Healy to Toklat. The data from these collars will provide data about sheep movements, health, and demographics and their connectivity with the rest of the population.

Caribou - Annual monitoring on the Denali Caribou Herd began in 1984 and thus this year marks the 40th consecutive year of annual monitoring efforts. The fall 2023 herd size estimate was 1670, down from 1730 in 2022 and down from a high estimate of 3190 in 2018. In 2024, pregnancy surveys were conducted in May 14-16, and a post calving census June 8-10. The herd composition survey will be conducted in late September and an estimate of fall herd size will be calculated following that survey.

Avian Projects -

- Golden eagles Nest occupancy surveys were conducted in April and productivity surveys in July.
 - Egg laying was documented at 32 territories This equates to about 46% of the occupied territories having females that laid at least one egg. This similar to 2022 when hares were nearly absent but ptarmigan were abundant. The hypothesis then is that ptarmigan provided a buffer against the lack of hares during the prelaying and early incubation periods. This seems to be the situation this year as well. Hares are still in the low phase of their cycle, but ptarmigan are seemingly everywhere.
 - Also, while the nesting effort is much higher than last year (when only 12 occupied nests were found), it is far below what would be documented in years when hares are in the higher phase of their cycle.
- On-road Breeding Bird Surveys were conducted in June. The Toklat BBS was conducted this year for the first time since the road closure.

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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