



United States Department of Interior

NATIONAL PARK SERVICE
Yukon-Charley Rivers National Preserve
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Fairbanks, Alaska 99709

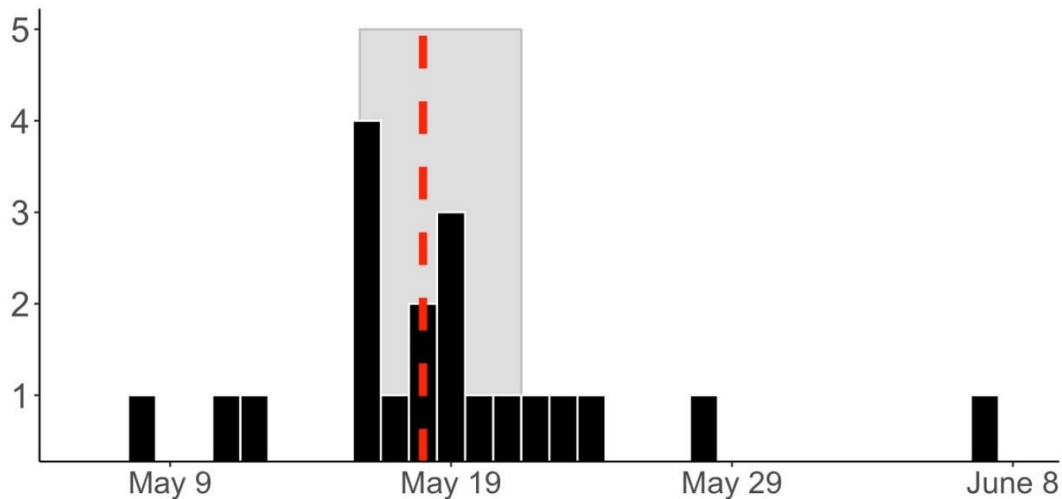


Yukon-Charley Rivers National Preserve Eastern Interior Regional Advisory Council Meeting October 14-15, 2020

- **Moose Calf Survival and Timing:**

In March 2020, NPS biologists began the first moose GPS collar project in Yukon-Charley Rivers National Preserve. Our main goal is to better understand moose survival, reproduction, and movements within the Preserve. We deployed 21 collars on adult, female moose and have tracked their movements. This spring, we conducted calving flights to count how many collared females gave birth and what proportion gave birth to twins. From the calving flights, we found that 81% (17 of 21) gave birth and that the twinning rate was 41% (7 out of 17 cows that calved). We also analyzed the GPS data to determine if and when a female had a calf by using the movement patterns of the collared mother (females that give birth stay in one area for multiple days). The GPS data suggested that of the 4 cows we never saw with a calf, 1 delivered her calf after our last flight and 2 had calves but lost them. So, the GPS data suggests that calving rate was actually 95%. We were also able to determine the timing of calving from the GPS data: the average calving date was May 18, ranging from May 8 – June 7. We plan to monitor survival of these calves by observing them again at the end of summer and in late winter. For more information, contact Kyle Joly at kyle_joly@nps.gov

Calving Dates of Yukon-Charley Moose. The red vertical line indicates the average day of calving and the grey box indicates the middle 50% of calving events.



- **Fortymile Caribou Herd:** A large team of collaborators recently published (<https://www.nps.gov/articles/mappinglichen.htm>) a new map showing the abundance of lichens across the range of the Fortymile Herd. The researchers used the map to test the importance of lichen cover on Fortymile Herd caribou distribution from 2012 to 2018, during summer and winter. In both seasons, caribou avoided areas with little (0-5%) lichen cover and showed stronger selection as lichen cover increased to about 30%. Lichens are an important winter forage but are also used throughout the year to a lesser degree. They can be very slow growing and can take decades to return to their former abundance following disturbance, such as wildfires.

For more information, contact Kyle Joly at kyle_joly@nps.gov

- **Wolf Studies:** NPS is currently monitoring 8 packs within the Preserve, 7 of which denned during the summer. The spring pack count averaged 7.1 wolves, which is higher than the long-term average (5.7 wolves). Over the 2019 biological year (May 2018-May 2019) we tracked 24 GPS-collared wolves. Of the 24 wolves, 5 died and 5 dispersed outside of the Preserve. We are working on studies evaluating how wolf deaths in the pack affects pack structure and productivity, how prevalent disease is, how wolves use the landscape, and what their winter diet consists of.

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