

National Park Service Update Gates of the Arctic National Park and Preserve North Slope Regional Advisory Council Meeting October 13-14, 2022

Superintendent Introduction

Mark Dowdle is the new Superintendent for Gates of the Arctic National Park and Preserve and Yukon-Charley Rivers National Preserve. Mark is a 22-year veteran of the National Park Service and prior to this appointment, he served in several leadership roles including most recently as the Deputy Superintendent of the Outer Banks Group national park sites in eastern North Carolina, where he worked closely with a large variety of communities, partner groups, and surrounding federal, state, and local agencies. Mark recently served as the acting Superintendent of Western Arctic National Parklands in Alaska.

Subsistence

The Gates of the Arctic National Park Subsistence Resource Commission (SRC) met on April 20, 2022 via teleconference. The SRC received an update on the Ambler Access Road project and there was much discussion on the Western Arctic Caribou Herd, moose survey preliminary results, Dall's sheep surveys, and law enforcement along the eastern boundary of the Park. The next SRC meeting is scheduled for either November 9-10 or November 16-17, 2022 in Fairbanks or via teleconference. At this upcoming meeting, there will be continued discussion on the Western Arctic Caribou Herd, 2022 Dall's sheep survey results including age composition, law enforcement, and climate change and human impacts on low wildlife populations. For more information, contact Marcy Okada: marcy_okada@nps.gov and (907) 455-0639

Western Arctic Caribou Herd

Biologists with NPS and ADF&G worked together to deploy 36 GPS collars on adult, female caribou of the herd this spring from Dahl Creek via helicopter. We currently have 87 active collars in the herd. The next collar deployments are being planned for next spring via helicopter. Contact: kyle_joly@nps.gov

Moose Survey

We completed a moose population survey for the area in and around Gates of the Arctic National Park and Preserve this spring. The population estimate for the entire survey area was 1,308 moose, slightly higher than the previous estimate of 883 moose measured in 2015. The density remains low at 0.21 moose/mi² (0.08 moose/km²) and the calf ratio estimate was 10 calves:100 adults. Our results suggest that there may have been a slight increase in moose abundance in and around the Park since the previous population estimate in 2015, but deeper snow conditions this year compared to 2015 may have had an influence on our estimate. Contact: Matthew cameron@nps.gov

Dall's Sheep

In July, NPS surveyed for Dall's sheep in Gates of the Arctic National Park and Preserve and in collaboration with BLM on BLM lands in the Central Brooks Range. Complete surveys were flown in the Itkillik Preserve, the southeastern portion of Gates of the Arctic, and on BLM



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lands. NPS biologists are currently processing the survey data. Sheep estimates will be presented to the Regional Advisory Councils, if the data is ready during the October meetings. Contact: william_deacy@nps.gov

Arctic Streams

Arctic soils store large amounts of iron and mercury, which can be released as permafrost soils thaw. A new project, funded by the U.S. Geological Survey's Changing Arctic Ecosystems Initiative, aims to measure the effects of iron mobilization on stream water quality and food webs, including resident fish communities. Preliminary observations suggest that orange stream reaches have higher iron concentrations, less dissolved oxygen, and more acidic water than nearby clearwater streams. Further, the conversion of streams from clear to orange water appears to reflect a considerable deterioration of habitat for benthic macroinvertebrates and fish. We are working to better characterize these effects of iron and map their occurrence across the Brooks Range. Contact: Jonathan Odonnell@nps.gov

