

In summer 2014, 3 Arctic wolves were fitted with Global Positioning System (GPS) satellite collars near Eureka, Ellesmere Island, and another collar was deployed on a wolf on eastern Axel Heiberg Island. Two collars released prematurely, and in June 2015 2 new collars were deployed, one on the Axel Heiberg pack and one on the previously uncollared Eureka pack. Location data from collars will allow us to define movement and home range parameters for the collared wolves, which have mostly maintained discrete territories over summer and winter seasons since 2014, with occasional forays off-territory. This space use pattern is more consistent with boreal wolves than with tundra wolves, which follow migratory caribou herds. The Eureka pack has made several movements across frozen fiords, and preliminary genetic evidence also supports that eastern Axel Heiberg Island and the northern Fosheim Peninsula function as an interisland population. In contrast, the collared wolves have rarely crossed into the Sawtooth Mountains, south of the study area. Wolf density in the study area appears to be similar to parts of the boreal forest, about 7 wolves per 1,000 km<sup>2</sup>, at least under current conditions and prey densities. The information on movement, relatedness, range use, dispersal, and population definition that this project will provide will be important in supplementing existing local knowledge in development of policy for caribou conservation and management.

[illegible]