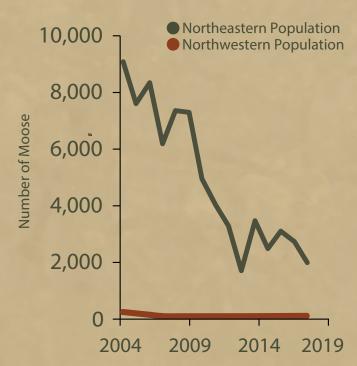
## 

## **Declining** populations

This graph shows the decline of Minnesota's two moose populations over the last two decades. The northwestern population of moose is estimated to be 100 individuals—a number so small that researchers have stopped doing yearly surveys. The northeastern population has declined by 60% since 2006, but there has been a recent short-term trend of the population stabilizing in the study area.



Moose populations are estimated by conducting aerial surveys. Data for the northwestern population are from Murray et al. 2006, and northeastern population estimates were provided by Moen et al. 2011, Lenarz 2012, and DelGuidice 2013, 2014, 2015, 2016, 2017 and 2018.

The Minnesota Zoo has partnered with



Dr. Ron Moen of the Natural Resources Research Institute and the scientists at Voyageurs National Park to conduct research that will inform moose management. The aim is to slow the decline and prevent the loss of northeastern Minnesota's moose population. Dr. Moen and other scientists have deployed GPS tracking devices on moose in northeastern Minnesota in order to monitor their movements. Minnesota Zoo research scientists are using this information, in combination with data on deer and wolves, to understand how and where parasites and predation may be impacting moose. Minnesota Zoo veterinarians are also involved in research to understand causes of moose mortality.

