

{FEATURE}

LEAVING A L

THE ZOO'S NEW CONSERVATION PROGRAMS FOR MINNESOTA'S DISAPPEARING WILDLIFE

{BY TARA HARRIS, PH.D. DIRECTOR OF CONSERVATION}



LEGACY



Just look around our state and you can tell that Minnesotans love moose and prairies. We fondly name towns, lakes, streets, restaurants, and lodges after them. They hold a special place in our arts and entertainment, from iconic photographs of moose wading in our northern lakes to “A Prairie Home Companion” and “Little House on the Prairie.” They are part of the cultural heritage of Minnesota’s diverse residents and part of our state’s identity. But moose and prairie wildlife are also disappearing from Minnesota.

Thanks to the Minnesota Legacy Amendment’s Arts and Cultural Heritage Fund, the Minnesota Zoo has been able to initiate new programs aimed at conserving Minnesota’s moose and prairie butterflies. We’re just getting started, but we’d like to introduce you to these exciting new initiatives that aim to leave an important legacy for generations to come.

Moose are one of Minnesota's most prized wildlife species. Weighing about 1,000 pounds and standing six feet tall at the shoulders, they are the largest member of the deer family. Adapted to cold climates, the moose is native to the northern forests of North America and Eurasia. Minnesota is toward the southern edge of its North American range. Once a relatively common sight in portions of northern Minnesota, moose are disappearing from our forests.

MOOSE CONSERVATION RESEARCH

In less than 20 years, moose in northwestern Minnesota declined from over 4,000 to fewer than 100. With high levels of calf and adult mortality, the northeastern Minnesota moose population also appears to be declining. Estimated at nearly 9,000 individuals in 2006, the northeastern moose population has decreased to about 4,200 individuals.

There are likely multiple reasons for declines in Minnesota's moose populations. Research studies planned over the next few years should greatly increase our understanding of the relative importance of different factors, such as predation, disease, food availability, and rising temperatures. New research by Minnesota Zoo scientists focuses on understanding how temperature influences moose habitat use and how certain habitat characteristics may help moose dissipate heat during warm periods. This research has been identified as a priority in Minnesota's Moose Research and Management Plan and is critical for identifying long-term moose habitat needs.

Partnering with Dr. Ron Moen of the Natural Resources Research Institute at the University of Minnesota Duluth, the Minnesota Zoo's new Conservation Biologist, Dr. Nick McCann, is working with one of the largest location data sets for any mammal in the world. Over 60 moose in Minnesota and Ontario have been outfitted with satellite tracking devices that take GPS locations every 20 minutes. Nick will be analyzing these data and heading out to the field this summer to better understand the habitats that moose use, especially during hot periods when moose may become heat stressed. This information will help inform management of moose and their habitat in Minnesota, with the ultimate goal of ensuring that these iconic animals will continue to roam our northern forests.



Dr. Nick McCann poses with a wild moose that has been anesthetized and given a tracking collar.



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