

{FEATURE}

HELPING CONSERVE A MINNESOTA ICON

{BY FRAN HOWARD}

Anyone who has ever camped in the Boundary Waters Canoe Area or hiked the Gunflint Trail has hoped for a chance encounter with Minnesota's largest hoofed animal, the mighty and gangly moose. These coveted meetings could become fewer and further between if current moose population trends aren't stabilized or reversed, according to the findings of a multi-group study.

The study group consists of the Fond du Lac, Grand Portage, Bois Forte Indian bands, the Minnesota Department of Natural Resources, and the United States Geological Survey. The group also enlisted the help of the Minnesota Zoo in its ongoing study of the moose population in northeast Minnesota. Preliminary results show that the region's adult moose mortality rate of 20 percent is much higher than the North American average of 8 to 12 percent. "The pregnancy rate is about 75 percent when it should be closer to 90 percent," says Mike Schrage, wildlife biologist with the Fond du Lac band. "There are stresses on our moose population."



What makes the current findings all the more important is that the once healthy moose population in northwest Minnesota crashed in the late 1980s and early 1990s for similar reasons: low pregnancy rates, disease, and parasites. Today, only about 100 moose remain in northwestern Minnesota. Current estimates for the northeastern population are better, with nearly 7,600 individuals, but this area also appears to be headed for a decline.

To determine how stressed the northeastern moose population is, Minnesota Zoo Veterinarian Tiffany Wolf helped Schrage immobilize moose near Ely last year so she and the rest of the capture team could fit the animals with radio collars and collect biological samples for testing. "We captured 34 moose over four days," notes Wolf. "It was very cold." One morning, temperatures dipped to minus 25° Fahrenheit — temperatures that moose love.

Moose are well adapted to northern Minnesota's harsh winters with their long legs, massive bodies, and heavy coats. It's the hot temperatures that may be causing them problems.

Some scientists believe that climate change is at the root of the state's moose decline. Others believe the expansion of the white-tailed deer population is the cause. Wolf thinks a combination of both factors is responsible. "Moose are susceptible to brain worm. The meningeal worm is normal in white-tailed deer, but it can kill moose," says Wolf. "An increase in temperatures can also stress the moose, and animals that are stressed are more susceptible to diseases that they would normally be able to fight off."

During the capture, Wolf spent most of her time on the ground trudging through snow depths of up to two feet and collecting blood, hair, and fecal samples from the animals. Helicopter pilot Scott Gibson brought Mark Keech, a biologist from Alaska, up with him to locate and dart the animals with an immobilizing drug. "I got pretty close to some awake moose," Wolf recalls. "But it was either shortly after they were darted or as they were recovering."

Despite the harsh and sometimes dangerous conditions, Wolf loved participating in the study. "It was wonderful," she says. "I was on the ground with these wild moose out in the middle of nowhere." The Minnesota Zoo donated Wolf's time to the study and the Fond du Lac band paid for the capture drugs and equipment.



Some scientists believe that climate change is at the

root of the state's moose decline.

Others believe the expansion of the white-tailed deer population is the cause. Zoo

veterinarian Tiffany

Wolf thinks a combination of both factors is responsible.

