## EASTERN TIMBER WOLF

## A HOWLING SUCCESS FOR THE ENDANGERED SPECIES ACT

The wolf peered over the seat at the pilot. It was the first time a wild wolf had ever ridden in an airplane, and even today, after decades as a wildlife biologist, I am glad the creature was drugged. The four members of the pack lay around me as the pilot aimed our plane toward Michigan. It was March 5, 1974, and the U.S. Fish and Wildlife Service was hoping to bolster Michigan's wolf population with an infusion from Minnesota.

The eastern timber wolf had been on the U.S. list of endangered species since 1967, as a result of the Endangered Species Act of 1966. However, that act only *listed* endangered animals; it did not protect them. Wolves still could be killed legally at any time, but agencies could promote their recovery. The fate of Michigan's wolf population nearly had paralleled that of nearby Wisconsin's, which had been wiped out in the late 1950s. If any wolves remained in Michigan (outside Isle Royale), they were few. They certainly could use reinforcements.

Our experimental transplant in 1974 failed. Within eight months, each of the four transplanted wolves had died at human hands. It was a dramatic demonstration of the public's attitude toward wolves two decades ago and of its power to translate that attitude into action.

Only a few months later, however, the new provisions of the Endangered Species Act of 1973 kicked in. They set into motion a process that eventually accomplished what I had failed to do on that unique March flight. Wolves finally were protected from hunting and taking on all lands, and gradually they returned to Michigan on their own.

The natural return of wolves to Michigan represents one of the great success stories of the U.S. Fish and Wildlife Service's Endangered Species Program. Although the Endangered Species Act of 1973 did protect endangered species legally, this provision came too late for any immediate effect in wolfless Wisconsin or in Michigan where remnant animals did not constitute a viable breeding population. However, in Minnesota where hundreds of wolves still roamed the state's extensive wilderness, the result was powerful.

To some people, of course, prohibitions against killing wolves were absurd. "Why protect the wolf? We used to bounty the varmints only 10 years ago," challenged many Minnesota locals who knew that plenty of the big, furred predators still were left. Protest meetings and dead wolves draped on the steps of government buildings demonstrated the rage that scores of citizens felt.

Another perspective was finding its voice, however. With federal protection of wolves had come increased public interest, awareness and sympathy—a sense that wolves like all predators have a role in nature and that people should foster biodiversity in wilderness areas such as northern Minnesota. Protection in Minnesota could help restore wolves to neighboring states. Already, research had demonstrated that wolves disperse hundreds of miles, so fewer wolves killed around Ely, for example, could boost Wisconsin's population.

U.S. Fish and Wildlife Service research efforts greatly increased, joined by logistical support from the U.S. Forest Service's North Central Forest Experiment Station. Basic information about wolf numbers. movements, predation, mortality, survival, reproduction and general natural history proliferated. Educational programs sprang up, fueled by the information researchers had produced.

This increased public concern, coupled with legal protection, eventually resulted in fewer wolves being killed in Minnesota. Certainly poaching continued. During some earlier years of pro-



## NORTH AMERICAN WOLF RECOVERY FACTS

The objective of the recovery plan for the eastern timber wolf is to reestablish and maintain viable populations of the wolf in as much of its former range as feasible.

Five main factors are critical to the long-term survival of the eastern timber wolf:

- large tracts of wild land with low human densities and minimal accessibility by humans,
- ecologically sound management,
- availability of adequate wild prey,
- adequate understanding of wolf ecology and management, and
- ▲ maintenance of populations that are free of, or resistant to, parasites and diseases new to wolves or are large enough to successfully contend with their adverse effects.

Recovery of the eastern timber wolf will be achieved when the following two criteria are met:

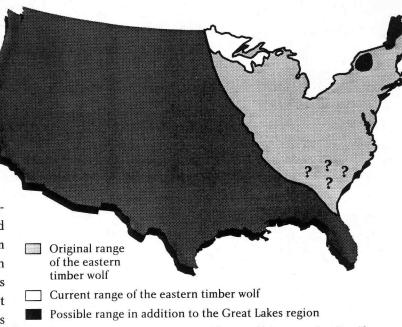
- ▲ the survival of the wolf in Minnesota is assured, and
- at least one viable population of eastern timber wolves outside Minnesota, Isle Royale, and Canada is reestablished.

In practical terms, this means that eastern timber wolf recovery will have been achieved when the wolf population of mainland Michigan and Wisconsin remains at 100 or more for five consecutive years.

tection, possibly 200-300 of the state's growing population of 750-1,000 wolves were killed. But this was a smaller proportion than had been taken before the 1973 Endangered Species Act.

The net result was that wolves colonized parts of Minnesota where they had not lived for decades. As wolf numbers and range expanded, so too did wolf dispersal. By the mid-1970s, wolves had begun recolonizing nearby Wisconsin.

Wolf recolonization of Wisconsin has been an uneven process. Nevertheless, it is progressing and has even allowed dispersers to reach Michigan, over 100 miles away from Minnesota at most points. Probably a few individuals also have entered eastern Michigan from Ontario, Canada. In 1991, a milestone was reached—the first reproduction of wolves in almost 40 years was recorded in Michigan.



??? Poor information on eastern timber wolf history and red wolf original distribution

The recolonization of Wisconsin and Michigan by wolves has not been without its set-backs. Continued illegal and accidental killing of wolves by humans has been a problem. Canine parvovirus, a new disease of dogs, also may have taken its toll. Researchers still are studying this disease as well as two other afflictions new to northern wolves. Lyme disease and heartworm.

Nevertheless, the recovery of the wolf in the Lake Superior region is now so well under way that there appears to be no stopping it. Minnesota wolves have reached a population of 1.550–1,750, saturating just about all available habitat. The total number of wolves in Wisconsin and Michigan is about 60 and increasing.

When will the wolf population in these two states reach 100 animals? That is the number the Eastern Timber Wolf Recovery Team says is necessary before the wolf is recovered in the Lake Superior area and can be removed from the Endangered Species list. This federally appointed committee overseeing wolf recovery also requires that this number persist for five years before delisting.

No one knows when the Wisconsin and Michigan wolves will reach the prescribed 100, of course. What researchers can say is that recovery almost certainly will happen so long as present conditions persist. Thereafter, the wolf population would be maintained by whatever combination of protection and legal hunting or control is necessary to keep it properly adjusted to the available habitat.

Regardless of whenever wolf numbers in the Lake Superior region reach actual recovery level, it is a tribute to the Endangered Species Act that wolves have already returned to so much of their remaining habitat there. One can certainly conclude from this that the Endangered Species Act truly has been a howling success.

—L.D. Mech, wolf biologist, U.S. Fish and Wildlife Service