



Gray Wolf Recovery in Minnesota, Wisconsin, and Michigan

Historically, intensive eradication efforts and declining numbers of prey (bison, elk, and white-tailed deer in the south; moose, deer, caribou, and beaver in the north) caused the wolf declines in the western Great Lakes area. Bounties paid for dead wolves began during the 1800s. By 1838, wolves were eliminated from the southern portion of Michigan, by the early 1900s they were eliminated from southern Minnesota and Wisconsin, and by 1960, wolves were also gone from northern Wisconsin and Michigan (except Isle Royale), and from most of Minnesota.

Wisconsin protected the wolf in 1957, after the species was extirpated. Michigan followed suit in 1965, giving the gray wolf endangered species protection. At that time only a few lone wolves remained in the Upper Peninsula, and an isolated population existed on Isle Royale.

In Minnesota, a bounty on all predators, including wolves, continued until 1965. Between 1965 and 1974, Minnesota had an open season on wolves and a Directed Predator Control Program. During this time, about 250 wolves were taken each year and the wolf population was estimated at 350 to 700 animals. The state's control program and open season continued until May 1974 when the gray wolf gained protection under the Endangered Species Act (ESA).

Wolf Recovery

Perhaps the most important factors leading to wolf recovery in the Midwest were ESA prohibitions that made killing and harming wolves illegal and the ESA requirement that a Recovery Plan be prepared. The Recovery Plan focused time, money, and energy on priority conservation actions. Wolves also rebounded because



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their primary prey, white-tailed deer, were doing well. Deer herds in Minnesota, Wisconsin, and Michigan increased through the 1980s and early 1990s because of mild winters and timber harvests that created prime habitat.

Recovery criteria established in the Recovery Plan include the assured survival of the gray wolf population in Minnesota and a population of 100 or more wolves in Wisconsin/Michigan for a minimum of five consecutive years. The Recovery Plan identified 1,250 to 1,400 as a population goal for Minnesota. The state's wolf population has been at or above that level since the late 1970s. The Wisconsin/Michigan wolf population has been above 100 since the winter of 1993-1994, achieving the latter numerical goal in the Recovery Plan.

With this consistent expansion in numbers and range, the robust gray wolf population in the western Great Lakes region is recovered.

Minnesota

During the mid- to late 1970s, the Minnesota Department of Natural

Resources (DNR) estimated their wolf population at about 1,000 to 1,200. Then, in the 1980s researchers documented areas that wolves had recently colonized, suggesting that wolf numbers and range were increasing. A DNR survey conducted during the 1988-1989 winter estimated 1,500 to 1,750 wolves. Subsequent surveys conducted every five years documented that the wolf population grew in size and range until 1998. The most recent survey, conducted during the winter of 2007 to 2008, estimated the state's wolf population at about 2,921 animals. Due to uncertainty inherent in this type of survey, DNR concluded that there had been no significant change in wolf distribution or abundance between 1998 and 2008.

The wolf's range expansion into north central and central Minnesota was due to protection from unregulated killing afforded by the ESA, high deer numbers, and dispersal of individuals from existing packs. Telemetry studies documented wolves dispersing from the major wolf range in northeastern Minnesota to recolonize new areas

as well as wolves dispersing from the few packs in north central Minnesota that had survived the “bounty era.”

Today, wolves live in areas with higher road and human densities than previously believed suitable for wolf survival. Although these two factors still limit suitability for wolf packs, wolves continue to disperse to areas in west-central and east-central Minnesota (just north of Minneapolis/St. Paul), and North and South Dakota.

In May of 2000 the Minnesota Legislature passed a bill that set up a framework for wolf management. Using that guidance, the Minnesota DNR, in consultation with the Minnesota Department of Agriculture, completed the Minnesota Wolf Management Plan in early 2001. It delineates two wolf management zones and provides different levels of protection in the two zones. The Plan also establishes a minimum state population goal of 1,600 wolves and defers any action on allowing a general public taking of wolves for five years following federal delisting.

Wisconsin

From 1960 to 1975 there were no breeding wolves in Wisconsin. But after the wolf was listed as federally endangered, wolves began returning, apparently dispersing from Minnesota. The Wisconsin DNR started monitoring wolves in 1979 by radio-collaring and tracking wolves, surveying for winter tracks, and conducting summer howling surveys.

When monitoring began, 25 wolves were documented in the state. During the mid-1980s wolf numbers reached a low of 15, probably due to an epidemic of canine parvovirus. Wild wolves seemed to develop some degree of natural resistance and wolf numbers increased after 1985. Population estimates between 1985 and 2010 increased from 83 to 782 wolves.

Parvovirus seems to be declining, but is still present in Wisconsin wolves. Lyme disease and mange are also present but their impact,

particularly on pup survival, is not well known.

Wisconsin DNR monitors wolf movements in the Wisconsin-Minnesota border area, as well as the wolf range expansion southward into the central portion of the state.

The Wisconsin DNR developed a state wolf management plan that was approved in October of 1999. That plan sets a management goal of 350 wolves (outside of Indian Reservations). This goal was exceeded and in 2004 Wisconsin changed the wolf’s status from “threatened” to “protected wild animal.” In 2006 the Wisconsin management plan was updated and approved by the Natural Resources Board. The wolf management goal remains 350 wolves outside of reservations.

Michigan

As wolves began getting a foothold in Wisconsin during the late 1970s, biologists documented increasing numbers of single wolves in the Upper Peninsula of Michigan. Finally, in the late 1980s they documented a pair of wolves traveling together in the central Upper Peninsula. This pair had pups in the spring of 1991. During the following summer, Wisconsin and Michigan DNR biologists put a radiocollar on one of the wolves in the only known pack in Michigan. By the end of 1992, Michigan biologists verified at least 20 wolves in the Upper Peninsula. Since then, except for 1996, numbers have steadily increased.

The 1996-97 late-winter count found wolf numbers at 112, down from 116 documented during the previous late-winter count. That decline appears to have been due to two consecutive harsh winters and a high incidence of mange. In some areas of the Upper Peninsula, deer numbers were reduced by 80 percent due to record snowfalls and low temperatures during the previous winter. This provided more prey for wolves during that winter but was followed by another severe winter with unusually deep snow when wolf deaths were high because of fewer deer for prey. Since then, wolf numbers have increased and

Michigan DNR trackers estimate that there were at least 687 wolves in 2010.

Michigan completed a Wolf Recovery and Management Plan in December 1997, which was revised in 2008. The Michigan plan recommends managing for a minimum of 200 wolves on the Upper Peninsula. The DNR’s goal is to ensure the wolf population remains viable and above a level that would require either federal or state reclassification as a threatened or endangered species.

Wolves have been residing on Isle Royale, Michigan, in Lake Superior, since the winter of 1948-49. Their population has moved up and down with that of moose, their prime prey. Disease is also believed to be an important factor in population fluctuations. Following a peak of 50 wolves in 1979, the population plummeted to the low teens in the late 1980s and early 1990s, and as of 2010, numbered 16 wolves. Due to their isolation, these wolves do not contribute to federal wolf recovery goals.

Minnesota Wolf Population

1973	500 to 1,000
1979	1,235
1989	1,500 to 1,750
1998	2,450
2004	3,020
2008	2,921

Wisconsin Wolf Population

1973	0
1980	25
1995	83
2000	248
2005	467
2010	782

Michigan Wolf Population

1973	0
1980	0
1995	80
2000	216
2005	434
2010	687