Book Review

Keepers of the Wolves by Richard Thiel

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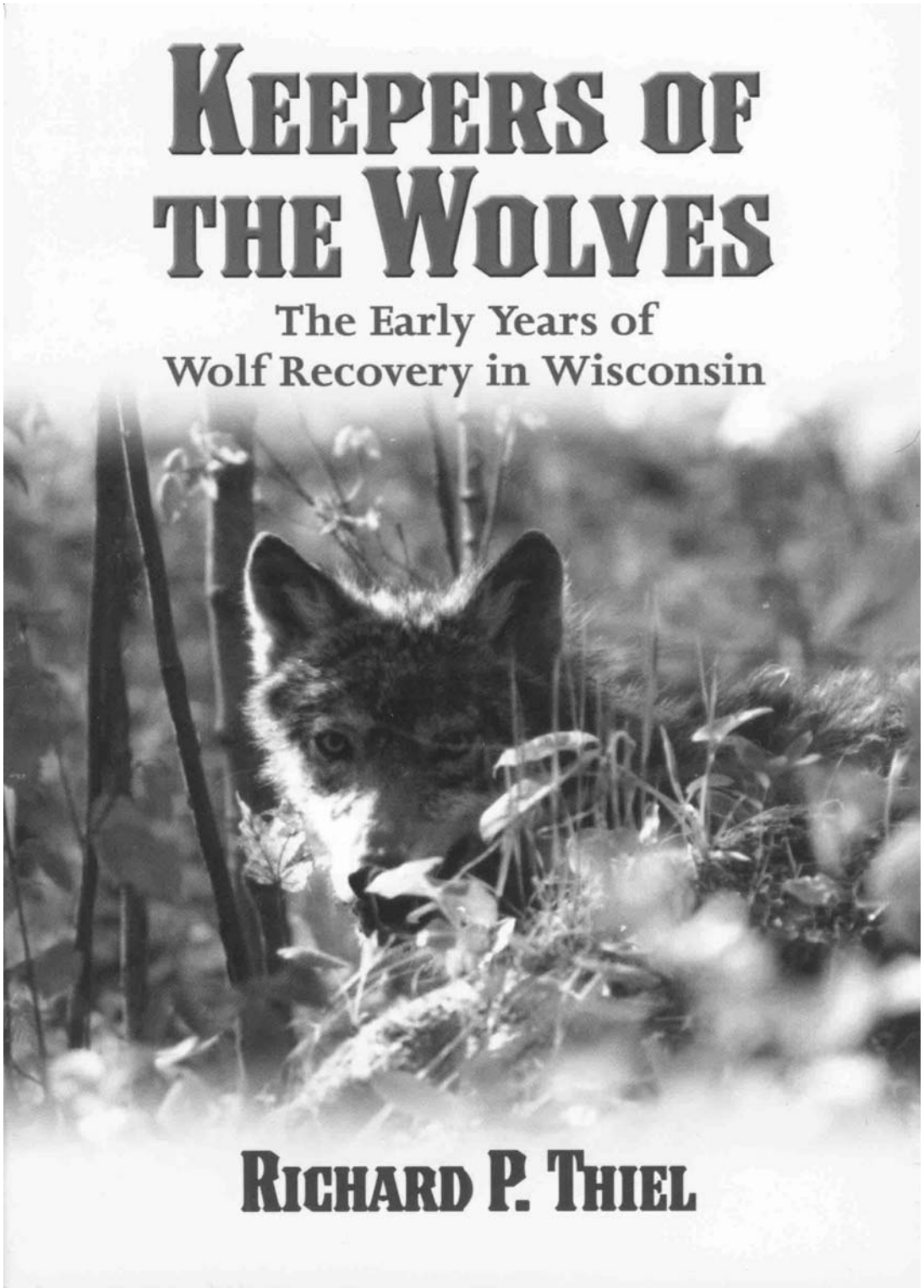


The proposed federal delisting of Midwestern gray wolves from the ESA

The status of the gray wolf, Canis lupus, under the Endangered Species Act (ESA) is currently under review. This short synopsis of the historical and current status of the species, with a focus on the Midwestern population, will review the proposed regulation changes and delisting. The proposed rule changes are available on the United States Fish and Wildlife Service's (USFWS) Region 3 homepage (http://midwest.fws.gov/wolf/). Following this is a book review of *Keepers of the Wolves*, by Richard Thiel. This book makes a fun, quick, and informative read on the reestablishment of the gray wolf in Wisconsin.

Historically, the gray wolf was found throughout most of the contiguous United States and parts of Central Mexico, but was extirpated soon after European settlement in most areas. The forests of the Northeastern United States and the Upper Midwest were the gray wolf's last refuges. The wolf population in the Northeast is believed to have been extirpated around 1900 (Federal Register 69), while Wisconsin's population was eliminated around 1958 (Thiel 2001). Minnesota maintained the only extant population in the contiguous US, as it remained connected to the Canadian wolf population.

Historically, there were several subspecies of gray wolf in North America (Federal Register 69). There is also an ongoing debate about whether the eastern timber wolf, *Canis lupus lycaon*, still exists, and if so, whether it is a subspecies of the gray wolf or a separate species from *Canis lupus* (Wilson et al. 2003). Currently, it is listed as a subspecies of the gray wolf, but if it is described as a separate species in the future, the listing status for both the gray wolf and timber wolf could be affected.

Today, the U.S. population of gray wolves is limited to three disjunct groups in the lower forty-eight: a population of gray wolves in and around Yellowstone National Park, a population of Mexican wolves, *Canis lupus bailey*, in Arizona and New Mexico, and a population of gray wolves in Minnesota, Wisconsin, and the Upper Peninsula of Michigan. The populations around Yellowstone and in the Upper Midwest are both connected to the Canadian population, which is estimated at 44,000–51,000 individuals, however, they are not directly connected to each other (Musiani and Paquet 2004). As such, the ESA manages these groups separately without consideration of the Canadian animals as the Act only applies to animals on US soil. Alaska also supports a wolf population of 7,500–10,000 individuals that is not covered by the Endangered Species Act since the population is not in danger (Musiani and Paquet 2004).

The gray wolf was listed as a federally endangered species in 1967 by the USFWS and listed again in 1974 when the ESA came into law (USFWS 2004). At the time, gray wolf populations were limited to northern Minnesota in the contiguous US and believed, like the coyote and white-tailed deer, to need unfettered wilderness to survive. During gray wolf recolonization of the Upper Midwest, wolf biologists learned that this was not the case: the gray wolf is capable of living in human-dominated landscapes. In 1992, Mladenoff et al. estimated that

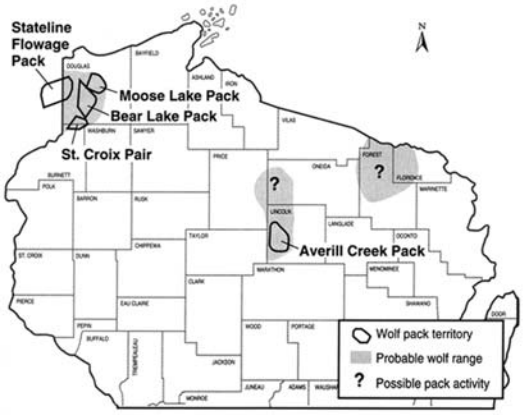


Figure 1. Wisconsin wolf pack locations and boundaries, 1979. (Thiel 2001)

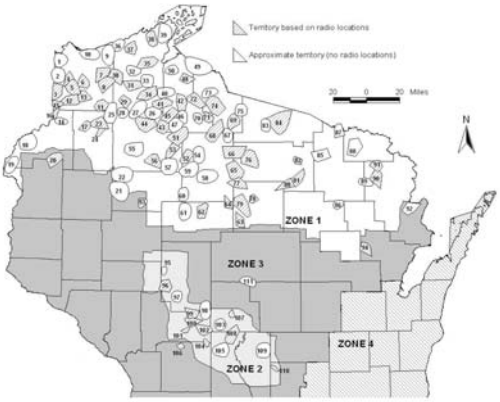


Figure 2. Wisconsin wolf pack locations and boundaries, Winter 2003-04. (Wydeven and Wiedenhoeft, 2004b)

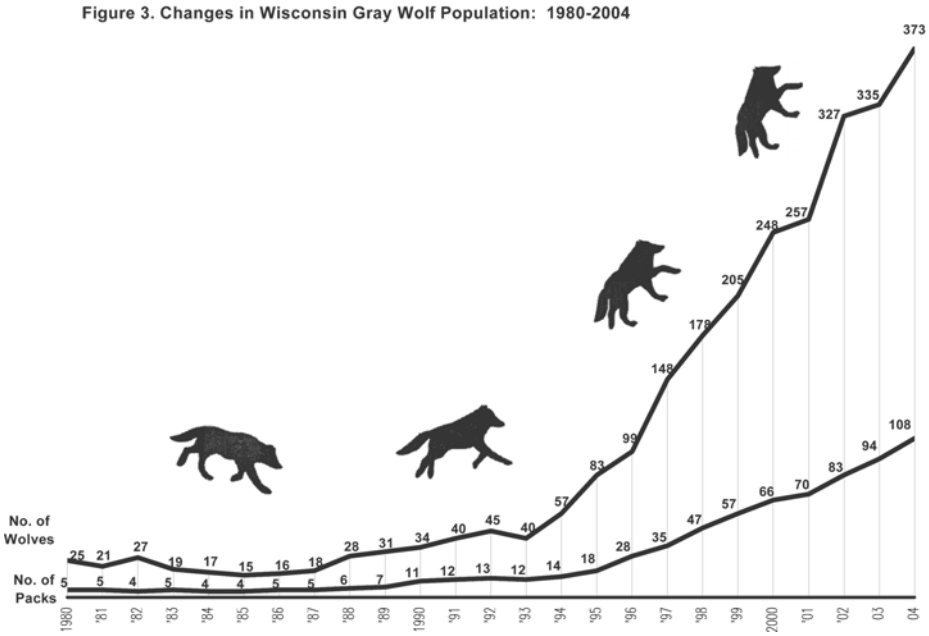


Figure 3. Gray wolf population and pack number in Wisconsin. Wydeven and Wiedenhoeft, 2004b)

Minnesota, Wisconsin, and the Upper Peninsula of Michigan harbored over 94,000 km^2 of forest that had a greater than 50% probability of being suitable gray wolf habitat. A later study (Mladenoff et al. 1995) concluded that as the gray wolf population increased, so would wolf use of substandard habitat; this would then lead to increased contact of wolves with humans and the associated problems. This statement is hard to quantify, because the majority of gray wolf interactions with humans are never reported. Evidence exists, however, to support the idea. The Wisconsin Department of Natural Resources (WIDNR) reported that 13 cases of wolf depredation were reported in 2000, while 31 cases were reported in 2004 (Wydeven and Wiedenhoeft 2000, 2004a). Additionally, wolf sightings were reported in 30 Wisconsin counties in 2000 and in 40 counties in 2004 (Wydeven and Wiedenhoeft 2000, 2004a). Finally, in 2003, 66 wolves were found dead or had to be euthanized in Wisconsin, more than the estimated 1994 state wolf population (Wydeven and Wiedenhoeft 2000, 2004a).

Gray wolves naturally recolonized Wisconsin from Minnesota and Canada in the mid-1970s and naturally recolonized the Upper Peninsula of Michigan from Minnesota and Wisconsin in the mid-1990s (Federal Register 69). In 1979, shortly after recolonization of Wisconsin by the gray wolf, pack locations were limited to sparsely-roaded areas in the northern forests of the state on, primarily, public land (Figure 1). By 2003-2004, the gray wolf was found throughout the northern and central forests of Wisconsin on public, commercial, and private land. Wolves inhabit not only remote areas, but also areas in close proximity to densely populated urban and agricultural centers (Figure 2). Population and pack numbers have also increased dramatically since recolonization in Wisconsin, which suggests a continued spread of wolves to areas of non-idyllic land in close proximity to humans (Figure 3).

Since 1974, gray wolf populations have increased dramatically throughout the Upper Midwest. During the winter of 2003–04, Minnesota had 3,020 wolves (Erb and Benson 2004), the Upper Peninsula of Michigan had 360 wolves (up from zero in the early 1990's), and Wisconsin had 373 wolves (Figure 3) (Federal Register 69). These numbers represent healthy population levels in terms of the number of individuals needed to sustain the current density of wolves according to the state and federal recovery plans. Additionally, in late October 2004, a gray wolf collared in the Upper Peninsula of Michigan was captured in a coyote trap

in the northern Lower Peninsula of Michigan, the first since gray wolves were extirpated in 1910 (Matthews 2004).

In Wisconsin, the gray wolf was listed as an endangered species in 1975 (WIDNR 2004a). In 1989, the state enacted a recovery plan for the gray wolf, which intended to have a state population of at least 80 wolves over three consecutive years. If this goal was met, then the gray wolf would be considered for state delisting (WIDNR 2004b). The plan's goal was met and then surpassed by 1997 (Figure 3).

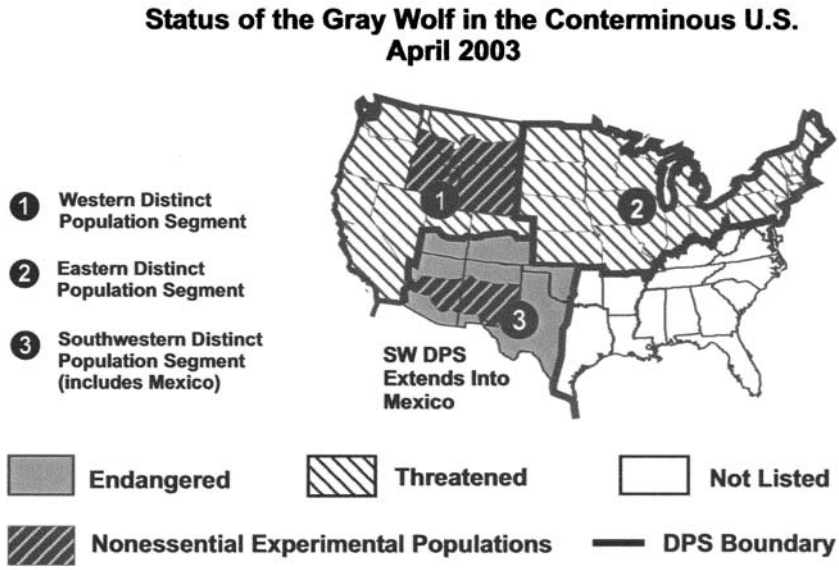
In Michigan, the gray wolf is listed as endangered. In 1997, Michigan enacted a gray wolf recovery plan; at the time Michigan's gray wolf population was 112 individuals (excluding the Isle Royale population) (Federal Register 69). The plan calls for a population of 200 wolves over five consecutive years to consider the gray wolf recovered in Michigan (Michigan 1997). This goal was met and surpassed in 2004 (Federal Register 69).

The federal recovery plan for the gray wolf in the Upper Midwest, as amended in 1992, called for two separate populations: the first was a stable to growing population of 1,251– 1,400 wolves in Minnesota; the second was either a) a population of greater than 100 wolves if located within 100-miles of the Minnesota population or b) a population of greater than 200 wolves if located greater than 100-miles from the Minnesota population. This second population had to be stable or growing for five consecutive years in order for the gray wolf to be considered for delisting (USFWS 1992). The 1992 federal plan estimated that wolf populations in the Upper Midwest would meet this goal by 2005.

In 2000, federal gray wolf management goals were modified to coordinate population, habitat, and management goals. Three distinct management areas were created, each of which corresponds to an extant gray wolf population (Figure 4). The currently considered delisting plan affects only the Eastern Distinct Population Segment (EDPS), where the gray wolf is currently listed as threatened (Federal Register 68). It does not affect the Western or Southern Distinct Population Segments (WDPS and SDPS). The WDPS includes both a population around Yellowstone National Park (classified as a nonessential experimental population (NEP)), and a population along the Canadian border that is classified as threatened (Federal Register 68). The SDPS contains an NEP that is part of an ongoing bi-national reintroduction program with Mexico (Federal Register 68).

In 1999, Wisconsin "downlisted" the gray wolf to a state threatened species; federal downlisting in Wisconsin followed in

Figure 4. Federal gray wolf management zones. (Federal Register 69)



2000 (WIDNR 2004a). Other state and federal listings differed because of state management plans and management areas. In 1978, Minnesota state and federally downlisted the gray wolf to threatened (MNDNR 2001). Michigan downlisted the gray wolf to threatened in 2002 and it was federally downlisted in 2003 (MIDNR 2004).

The current proposed revision of gray wolf ESA status asks for complete delisting of the gray wolf within the EDPS (Federal Register 69). This would remove all federal protection for the gray wolf within only the EDPS and leave further protection to individual states and Indian tribes. The USFWS argues that this is warranted based on the recovery goals set forth in the 1992 federal management plan (Federal Register 69). These federal goals were met in 1999, when the Wisconsin wolf population numbered over 100 wolves for a fourth year. Exceeding 700 individuals, the current wolf population in the Michigan-Wisconsin region continues to grow and appears to be expanding its range. The current state management plans of Michigan, Minnesota, and Wisconsin would not be legally affected by federal delisting, which would ensure continued protection of the gray wolf within state boundaries.

If delisting occurs, there will be a mandatory five-year monitoring period following delisting according to the ESA. This would be undertaken only in Michigan, Minnesota, and Wisconsin, in conjunction with state monitoring (Federal Register 69). If during any period of the five-year monitoring "a significant downward change in the populations or an increase in threats to the degree that population viability may be threatened" are detected normal or emergency listing can be undertaken (Federal Register 69). After five years of monitoring, the gray wolf will be reevaluated, and at that time, it can be considered for listing, continued monitoring, or discontinued monitoring.

The period of public comment on delisting of the gray wolf closed on November 18th, 2004, 120 days after the original listing in the federal register. The date of the final decision has not been released at publishing.

In light of the proposed gray wolf delisting from the Endangered Species Act, I suggest reading *Keepers of the Wolves*. This book is written by Richard Thiel, a wolf biologist for the Wisconsin Department of Natural Resources who was closely involved in the reestablishment of the gray wolf in Wisconsin.

Keepers of the Wolves starts approximately 20 years after the last gray wolf was extirpated from Wisconsin in January of 1958. At that time, the gray wolf once again had a chance, however slim, to survive in the state. One of the first people to see evidence of this return was a young Wisconsin Department of Natural Resources (WIDNR) employee named Richard Thiel. In his memoir, *Keepers of the Wolves*, Thiel recalls over 20 years of joint effort to bring the gray wolf back from the brink of extinction. As a result of these efforts, the gray wolf is undergoing the process of delisting from the Endangered Species Act (ESA). Based from Thiel's own field notes, memories, and contemporary conversations with past conspirators, *Keepers of the Wolves* offers a refreshing perspective on the reestablishment of the gray wolf in Wisconsin–that of a state wildlife

biologist who has interacted with the wolves, public, and government on a daily basis (I'll let him tell you which is the most dangerous).

Written for the general audience, the first person narrative style draws the reader right into the action and emotion of the story. The reader gets to know the wolves, landscape, and people in the book on a personal level. They will learn about the tedium, disappointment, and frustration of the field as Dick finds the third skunk of the day in the trap-line and learns that his funding is (once again) inadequate. But the reader will also share the accomplishments as Dick flies over a pack's den site and discover support from people he would least expect.

Keepers of the Wolves will also be informative on the general process, problems, and excitement of species reintroduction. While the specifics are those of the gray wolf in Northern Wisconsin, the experiences Thiel relates will work as examples to anyone interested in reestablishing threatened and endangered species. However, if you are looking for a cookbook on charismatic mega-fauna reintroduction, you will have to keep searching.

Keepers of the Wolves follows in the footsteps of Aldo Leopold's *A Sand County Almanac*; by relating personal experiences, Richard Thiel brings the interaction of wolves, the land, and the people together. As in Leopold's book, someone with any level of scientific indoctrination can read, understand, and enjoy this work. The scientific and field jargon are explained well; the writing flows well and the illustrations are helpful. Thiel covers numerous and various topics including wolf-deer ecology, basic animal tracking, wolf home territory mapping, and how not to warm a frozen AMC Renault (the company car).

An important aspect of *Keepers of the Wolves* is that it is a quick and entertaining read on a very important and serious subject. The story follows the issues that surround the reestablishment of a historically denigrated large carnivore and presents them in an honest, if at times opinionated, manner. The gray wolf is currently under review by the United States Fish and Wildlife Service for delisting from the Endangered Species Act. Even though gray wolf populations have rebounded, they still face many of the same problems and threats as when they crossed into Wisconsin in the late 1970's. *Keepers of the Wolves* presents an entertaining review of these issues, especially in light of the federal delisting of the gray wolf.

Keepers of the Wolves, by Richard Thiel, is 227 pages long and is available through the University of Wisconsin Press.

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