

The 350 Wolf Goal in Wisconsin:

An Assessment by Wisconsin's Green Fire
on Setting Population Goals for
the State's Gray Wolf Population

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About this Work:

Conservation Bulletins are published by Wisconsin's Green Fire to summarize science and background on key conservation and environmental news, issues, and events, and to make policy recommendations that support pro-conservation outcomes. The findings here reflect the judgment and consensus of our contributors, based on available evidence and relevant research.

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Photo: Gray wolves in September in Wisconsin, Photo credit A. Wydeven via UWSP

Executive Summary

Wisconsin's Green Fire (WGF) examines the population goal for 350 gray wolves in the state of Wisconsin termed "the 350 goal." The 350 goal was set 24 years ago in the Wisconsin Department of Natural Resources (WDNR) 1999 wolf management plan. Some would like this goal retained in the WDNR's new 2023 wolf management plan and want the current wolf population reduced to this level. They maintain that the 350 goal is a management cap on the wolf population. Others, including most wildlife biologists in Wisconsin, maintain the 350 goal was never intended to be a cap on the wolf population. Wisconsin's Green Fire supports the targeted and adaptive management approach proposed within the 2022 WDNR draft wolf management plan. We feel the 1999 population goal of 350 wolves is outdated, no longer reflects current wolf science or the desires of most Wisconsin citizens, and, if retained, would require a drastic reduction of the existing population with minimal benefits to reducing human-wolf conflicts.

Key findings from Wisconsin's Green Fire's assessment include:

- Intent of "the 350 goal" for wolf management
 - **The authors of the 1999 wolf plan never intended the 350 goal to be a cap on the state wolf population.** Rather, the 350 goal was a social compromise, and a threshold level above which public harvest and more flexible controls could be authorized.
- Suitable wolf habitat and carrying capacity
 - **Scientific understanding of wolf carrying capacity and suitable habitat have changed dramatically and the limited data that was the basis for setting the 1999 goal is no longer appropriate. The most recent research estimates Wisconsin's wolf population will stabilize near a carrying capacity around 1242 wolves.**
 - WDNR population monitoring indicates that population growth has slowed and Wisconsin's wolf population appears to be stabilizing around 1000 wolves.
- Changing public attitudes toward wolves
 - **Public attitude surveys in 2014 and 2022 show that the majority of the public, including people in wolf range support wolf population levels well above 350.**
 - Ojibwe Tribes support wolf population levels well above 350.
 - Most Wisconsin wildlife professionals do not support a wolf population goal as low as 350.
- Wolf depredation on domestic animals
 - **Wolf depredation on livestock has mostly declined or stabilized since 2010 when wolf populations were well above 350** and is better managed by intense localized controls than population goals across the state.
 - **Wolf depredations on hunting dogs fluctuate but have not changed significantly since there were 300–400 wolves in Wisconsin, despite a current population closer to 1000 wolves.**
- Future management of gray wolves in Wisconsin
 - **The targeted and adaptive options proposed by WDNR for managing six zones and several subzones would be lost with a fixed 350 population goal.**
 - Establishing metrics focused on the health of wolf populations, prey populations, ecological benefits, social benefits, and levels of conflicts provides better means for annual management decisions than an extremely low fixed statewide population goal.

Introduction

The concept of “the 350 goal” for the management of Wisconsin's gray wolves is a contentious issue in the state. In this assessment, we examine how the 350 goal was developed and discuss the evolved understanding of suitable habitat and potential carrying capacity for wolves in Wisconsin. We also examine the growth of the Wisconsin wolf population since 1999 and review the impact of a growing wolf population on depredation of domestic animals. **We examine the origins and original intent of the 350 goal and document that it is no longer useful for managing the state’s gray wolf population.**

Origin of the 350 goal

A target population number for the Wisconsin wolf population was last formally set in the Department of Natural Resources’ 1999 Wisconsin Wolf Management Plan. In 1999, there were about 200 wolves in Wisconsin. The Mladenoff et al. (1997) publication estimated the potential wolf population from two models that had 90% confidence interval of 324-461 and 262-662 wolves. From these estimates the wolf advisory team assumed 500 was a reasonable estimate of the potential carrying capacity in the 1999 wolf plan (Wisconsin DNR 1999). A 1999 population viability analysis determined that wolf populations at 100–200 wolves were at risk of becoming endangered or going extinct, but a population of 300–500 was fairly secure given an estimated carrying capacity of 500 wolves (Rolley et al. 1999).

The Wisconsin Department of Natural Resources (WDNR) 1999 wolf plan for Wisconsin established a state delisting population goal and a population goal for expanded management, including public harvest, for Wisconsin’s wolf population. A state delisting goal of 250 wolves outside of Indian reservations in Wisconsin was the **level at which gray wolves could be delisted** from the state list of threatened and endangered species. The expanded management goal of 350 wolves outside of Indian reservations would be a **threshold level when a full array of management activities would be considered** including flexible landowner controls, proactive depredation controls by government agents, and public hunting and trapping seasons, if wolves were delisted by the federal government (Wisconsin DNR 1999, Wydeven et al. 2021). The 350 goal was intended to reflect a late winter count before pups are born in the spring.

In the first draft of the 1999 wolf plan, the proposed management goal was 300-500 wolves, based on estimates of potential carrying capacity and a population viability analysis. In the final 1999 plan approved by the Natural Resources Board, the management goal was reduced to 350 “because of the concerns expressed by many...” (Wisconsin DNR 1999). The following excerpt from the final 1999 wolf plan provides the rationale for choosing the 350 goal:

“The 350 level was intended to be the minimum level at which proactive control and public harvest would occur. This management goal falls about half way between the delisting level (250 wolves) and the perceived biological carrying capacity (500 wolves) for the state. During the review of the second draft of the wolf plan, of persons commenting on the population goal, 38% supported the goal, 38% felt it was too low, and 24% felt it was too high. Therefore, the goal seemed to be a reasonable compromise between population capacity, minimum level of viability, and public acceptance.” (Wisconsin DNR 1999, p.16).

The 350 goal was intended to serve as a threshold level to identify the level at which a full array of management options could be considered, not a cap to hold the population at that level or lower, as recently clarified by the authors of the 1999 wolf plan (Wydeven et al. 2021). Also, the management plan was intended to be in place for only 10–15 years, and the plan was intended to be reviewed every five years. The WDNR is expected to finalize an updated wolf management plan in 2023.

Wolf Habitat and Carrying Capacity in Wisconsin

Scientific understanding of wolf suitable habitat and carrying capacity has changed dramatically over the last several decades. The wolf population has grown from zero, when wolves were extirpated from the state in the 1950s, to late-winter populations in the present that appear to be stabilizing around 1000 wolves. Similarly, scientific understanding of suitable habitat and carrying capacity has changed during these decades.

Biologists refer to suitable habitat for wolves as places where the landscape can support the ecological needs of wolves (wolves may or may not be currently present). Carrying capacity is the estimated population size that a given area can sustainably support. These two ecological concepts are critical to science-based wolf management and require a thorough understanding of wolf ecology and changing environmental conditions over time.

In 1955, wildlife biologist John Keener wrote about wolves as a "**symbol of true wilderness**" suggesting the importance to wolves of large contiguous habitat areas far from human development. During the mid-20th century, 50 or fewer individuals were in Wisconsin, and those last wolves were threatened by "greatly improved access in heretofore untraveled areas." By the end of the 1950s, breeding populations of gray wolves had disappeared from the state (Thiel 1992). Leading researchers like David Mech (1970) still considered wolves a wilderness species when wolves were absent from the state.

After wolves returned to Wisconsin in the mid-1970s, wolf biologist Dick Thiel led a monitoring program of the wolf population (Thiel 2001). In 1985, Thiel published data that demonstrated wolves were **not necessarily a wilderness species, but breeding populations persisted best in areas with less than 1 mile of road per square mile of land**, a density typical of remote areas with low levels of human development. Forestry and wildlife ecology experts led by David Mladenoff continued researching road density and suitable wolf habitat in the 1990s and 2000s (Mladenoff et al., 1995, 1997, 1999, 2009). These studies used geographic information systems (GIS) to determine suitable wolf habitat and found road density as one of the best predictors of suitable wolf habitat, though the ratio changed as the population increased. As time went on, wolves were still more likely to occupy areas with lower road density (<1mi/mi²), but as the population grew, wolves occupied areas with higher road densities. For example, by 2007, average road density in occupied pack territories was 1.5 miles of road per square mile of land (Mladenoff et al. 2009), a higher road density, albeit still typical of more remote areas.

Scientists took note of how wolves were utilizing Wisconsin's landscape and increased their estimates of suitable habitat. As our knowledge of suitable wolf habitat grew, estimates of the potential population or carrying capacity also changed. In the initial wolf recovery plan for Wisconsin in 1989, the goal to down-list wolves from "endangered" to "threatened" at 80 or more wolves was based on a concept of 2,700 square miles of suitable habitat (Wisconsin DNR 1989). The 1989 plan mentioned 720

square miles known at the time to be occupied by 27–29 wolves. Given the existing data at that time, the carrying capacity for all the suitable habitat in the state at full occupancy would have been 101–109 wolves.

However, by the late 1990s, scientific understanding of wolf habitat and populations continued to evolve. Mladenoff et al. (1997) estimated the potential wolf population in the mid-1990s for 5,739 square miles (14,864 km²) of suitable habitat in northern Wisconsin, more than double the suitable habitat area described in the 1989 plan. These researchers used peer-reviewed statistical modeling to estimate the wolf population for this larger habitat area, using a habitat model and a prey-based model. Their habitat model produced a mean estimate of 380 wolves (range of 324–461) while the prey-based model produced a mean estimate of 462 wolves (range of 262–662) wolves. **Thus, the carrying capacity estimates for the wolf population in Wisconsin by the mid-1990s were 4–5 times higher than were predicted a decade earlier in the late 1980s.** The wolf advisory team developing the WDNR's 1999 wolf management plan used 500 wolves as the reasonable estimate of potential biological carrying capacity (Wisconsin DNR 1999).

Another decade later, wildlife scientist T. R. Van Deelen (2009) examined the Michigan/Wisconsin wolf population with several models, estimating carrying capacity of 1300 wolves for the region, estimating that about half of the region's wolf population would be in Wisconsin. In the most recent estimate of potential carrying capacity for the Wisconsin gray wolf population, wildlife biologist Jennifer Stenglein and her research team estimated a potential population of about 1242 wolves in Wisconsin (Stenglein et al. 2015).

Thus, since the 1980s, the estimated number of wolves that could occur in Wisconsin has changed drastically. **The most recent scientific estimates of carrying capacity at about 1200–1300 wolves indicates that the potential wolf population could be 10 to 12 times higher than the initial estimates of about 100 wolves from the 1980s.** For further evidence of efficacy, the estimate from the Stenglein model from 2015 appears consistent with actual wolf populations in Wisconsin's neighboring states of Minnesota and Michigan. These changing population estimates demonstrate how the scientific process builds understanding based in data over time and the importance of ongoing assessment.

Wisconsin and Federal Endangered/Threatened Listing Goals for Wolves

State and federal goals set for the Wisconsin gray wolf population through 1999 are shown in Table 1. Federal goals take precedence for species listed under the Endangered Species Act (ESA). **Full state and tribal management authority can only occur when wolves are federally delisted.** While the numeric goal for federal delisting in Wisconsin is lower than the state goal, federal delisting was generally slower and more complicated because any delisting would be done throughout the entire range of a 'species', 'subspecies', or 'distinct population segment', and generally not by individual states, even though numeric recovery goals may have been achieved. Federal species reclassifications are often challenged in court, especially delistings for gray wolves.

Table 1. State and Federal Listing Goals for the Gray Wolf Population in Wisconsin

Wolf Population	State Listing	Federal Listing
< 80 wolves	Endangered	Endangered
>80 wolves for 3 yrs	Threatened	Threatened*
>100 wolves for 5 yrs in MI & WI	Threatened	Delisted*
>250 wolves**for 1 yr	Delisted/Protected Wild Animal	Delisted*
>350 wolves** for 1 yr	Protected Wild Animal/Game	Delisted*

* also required secure wolf population in MN of $\geq 1251-1400$

** number outside Indian reservations which is usually ~ 5% or less than statewide count.

The federal government has delisted gray wolves in Wisconsin four times between 2007 and 2021. **With each federal delisting, management authority of wolves returned to the state and tribes.** However, each of those de-listings were reversed through federal court actions. Thus, for effective wolf management going forward, the State of Wisconsin needs to develop a sound conservation plan that allows wolves to remain off the federal endangered species list. **Maintaining a goal based on outdated science will do little to promote public confidence in state and tribal control of wolf conservation in Wisconsin.**

Updating the 1999 Wolf Plan

Wisconsin's wolves first met the 1999 state management goal in 2004, with a statewide minimum count of 373–410 wolves, and 361–398 wolves outside Indian reservations. Federally, wolves were then listed as a threatened species, allowing some limited lethal controls on problem wolves, but that authority was lost in 2005. In 2004-2005 the wolf advisory committees conducted a review of the 1999 wolf plan. Because the management goal had just been achieved and authority to fully manage the wolf population had yet to occur, the advisory committees did not recommend changes to the management goal. The plan review was partially approved by the Wisconsin Natural Resources Board (NRB) in 2006, with the exceptions of asking the wolf advisory committee to bring the wolf plan update back in one year and include a review of impacts of wolves on livestock beyond livestock depredations. That update was mainly based on information from 2004-2005 and was fully approved by the NRB in 2007.

In 2009, the wolf advisory committees began work on the next review of the WDNR's 1999 wolf plan. By 2009, the wolf population had grown to 599–635 wolves outside Indian reservations. Between 2007 and 2009 wolves had been federally delisted, then re-listed on the federal endangered species list, complicating the management authority for wolves in Wisconsin. **Between 2009 and 2014, several attempts were made to update the Wisconsin wolf plan, but because of federal re-listings and lack of authority for the state to manage the wolf populations, these attempts were tabled by WDNR administrators, despite the need for updates to the state's wolf management goal.**

In the draft wolf plan developed in late 2014, four potential goals were developed (based on late winter minimum counts of the wolf population): 1) existing numeric goal of $350 \pm 10\%$ wolves, 2)

numeric goal of $650 \pm 10\%$ (approximate wolf count in 2014), 3) numeric goal of 300–650 wolves, and 4) outcome-based goal (non-numeric) maintaining the population above 350 wolves. In the 2014 plan review effort, the Wisconsin Wildlife Federation, Wisconsin Bear Hunters Association, Wisconsin Farm Bureau, and other hunting and agricultural groups insisted on maintaining wolf population goals of 350 or less. By 2022, 36 Wisconsin counties, prompted by advocates for maintaining a 350 wolf goal, passed resolutions to limit the state wolf population at 350 wolves or less (Wisconsin Wolf Facts 2023).

Changing Social Attitudes toward a State Wolf Goal

The Timber Wolf Alliance (TWA) conducted a survey of wildlife professionals in the Wisconsin Chapter of The Wildlife Society in September 2016. This survey asked about the population goals for Wisconsin from the WDNR's draft 2014 wolf plan (Olson and Wydeven 2018). **Among state wildlife professionals, the 650 numeric goal received the most support, and the 350 numeric goal received the least support.** The 350 goal was referred to by some respondents as "unscientific and outdated." Only 23% of wildlife professionals in the survey supported the 350 goal, while 67% opposed it.

The Wisconsin DNR surveyed members of the public about wolves in 2014 (Holsman et al. 2014) and again in 2022 (Bradshaw et al. 2022). In 2014, 45% of residents in wolf range wanted as many or more wolves, 38% wanted fewer wolves, and 17% did not know how many wolves they wanted (Holsman et al. 2014). Outside wolf range, 56% of residents wanted as many or more wolves, and 28% were not sure how many wolves they wanted. At the time of the 2014 attitude survey, the known wolf population was 660 wolves, but that information did not go public until after the attitude survey. The most recent wolf count available at the time of the survey was 809, based on 2013 wolf population data.

In the 2022 attitude survey, 55% of residents in wolf range wanted as many or more wolves while 34% wanted fewer wolves (Bradshaw et al. 2022, p. 48). Among animal lovers, environmental advocates, farmers, landowners, outdoor enthusiasts, and tribal members, (categories named in the survey) the majority wanted as many or more wolves. Among hunters and trappers, 60% wanted fewer or no wolves (Bradshaw et al. 2022). Scientific estimates using Patch Occupancy Modeling estimated a wolf population at the time of about 972 wolves (credible interval of 812–1193 wolves).

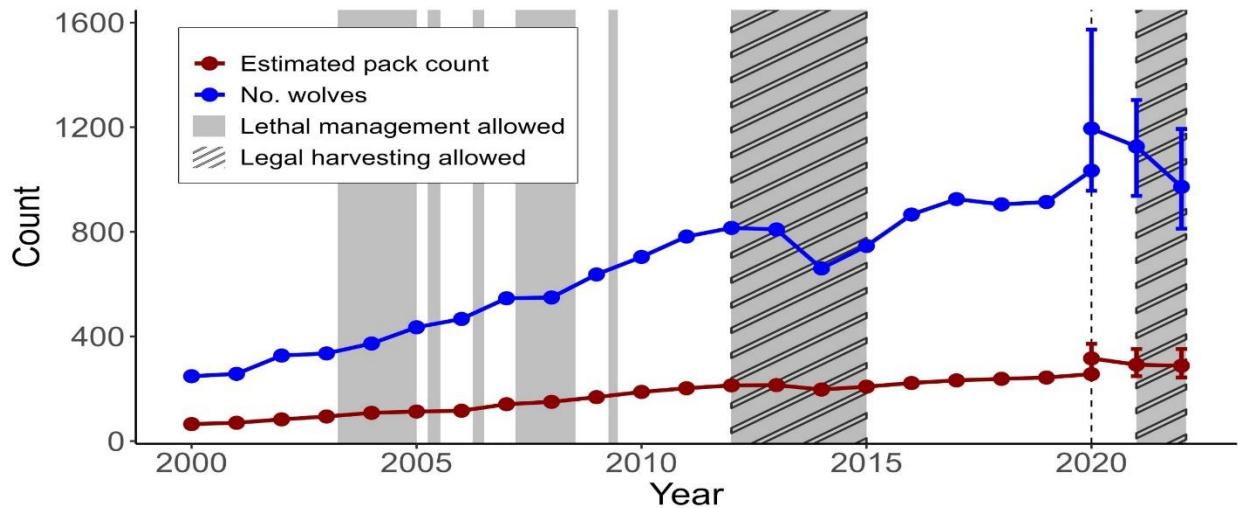
Tribal members in general tended to be more supportive of higher wolf numbers on the landscape. In the 2022 attitude study, 80% of tribal members supported as many or more wolves than currently on the landscape. In an earlier study of the Ojibwe members of the Bad River Band, 74% of tribal members supported 540 or more wolves in Wisconsin (Shelley et al. 2011).

Monitoring Wisconsin Wolf Population Trends

After the completion of the 1999 wolf management plan, the Wisconsin wolf population continued to grow until about 2017, when it appeared to begin to stabilize (Figure 1). The wolf population was estimated by the more conservative minimum counting system through 2020 then replaced in 2020 by patch occupancy modeling (POM). The POM method uses a statistical approach to account for imperfect detection in field data; it is a widely used method in contemporary wildlife research and management. POM had mode or point estimates that averaged about 14.5% higher than minimum counts, but also

had 95%-credible intervals that included the minimum counts within the interval. These estimates indicated the consistency between the two methods for assessing the wolf population.

Figure 1. Growth of the Wisconsin gray wolf population since 2000, by minimum counts through 2020 and patch occupancy method (POM) since 2020. Dots with bars represent mode estimates and 95% credible intervals of POM. Figure from Alejandra Zubiria Perez.



State authority for managing the wolf population (federal delisting) was limited since development of the 1999 plan. Some minor reductions of the wolf population occurred during wolf harvest seasons, but the decline in 2014 was reversed while harvesting continued. The level of population fluctuations observed during harvests was within the range of population fluctuations observed in unexploited wolf populations (Mech and Frieberg 2015). **Figure 1 shows that the wolf population started to stabilize at about 900–1000 wolves by minimum counts, or 1000–1200 wolves by occupancy modelling estimates, thus approaching the estimated carrying capacity of 1242 wolves determined by Stenglein et al. (2015).**

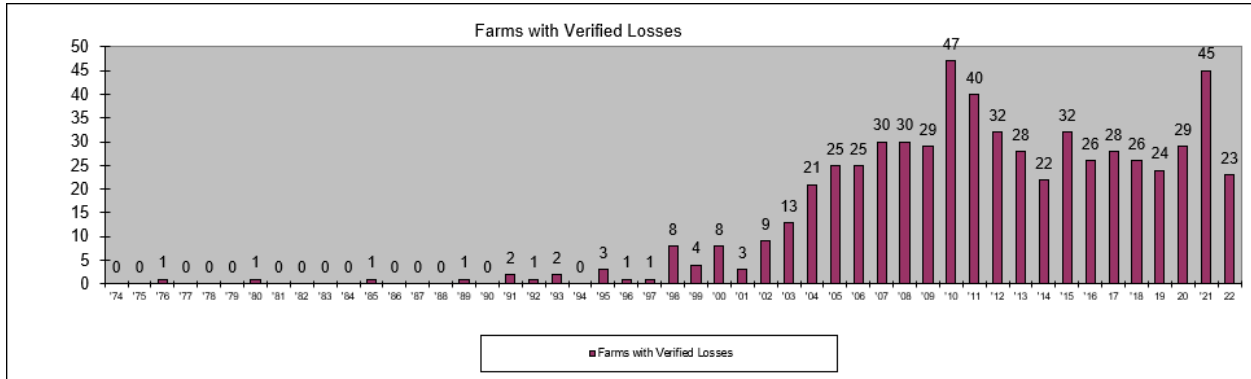
Wolf Populations and Depredation Levels on Domestic Animals

The number of farms with wolf depredations has varied considerably since recolonization of gray wolves in Wisconsin (Figure 2). Levels of depredation on livestock on farms mostly stabilized after 2007 at about 22 to 32 farms, although some higher levels occurred in 2010-2011 and 2021. Through 2010, the rate of depredations on farms seem to follow the growth of the wolf population, but after 2011, the number of farms with depredation remained at 32 or less, except in 2021. Numbers of farms with depredation seem to especially decline during 2012-2014 when the wolves were delisted and the state had flexible management authority. During that period, the wolf population declined by 8%, yet depredations at farms with flexible management declined from 40 farms in 2011 to 22 farms in 2014, a 45% decline.

The de-listing in 2021 did not result in reduced depredation, with 45 farms experiencing depredations. Wisconsin's Green Fire had previously pointed out that the February 2021 wolf harvest was not likely to produce benefits for reducing livestock depredations because hunting was mostly away from farm areas

(Wydeven et al. 2021b). **These data indicate that major wolf population reductions were not needed, and winter wolf harvest with hounds were not likely to reduce depredations on domestic animals.** Rather, the flexibility of delisting and management authority, especially near depredation sites, were needed to reduce these conflicts.

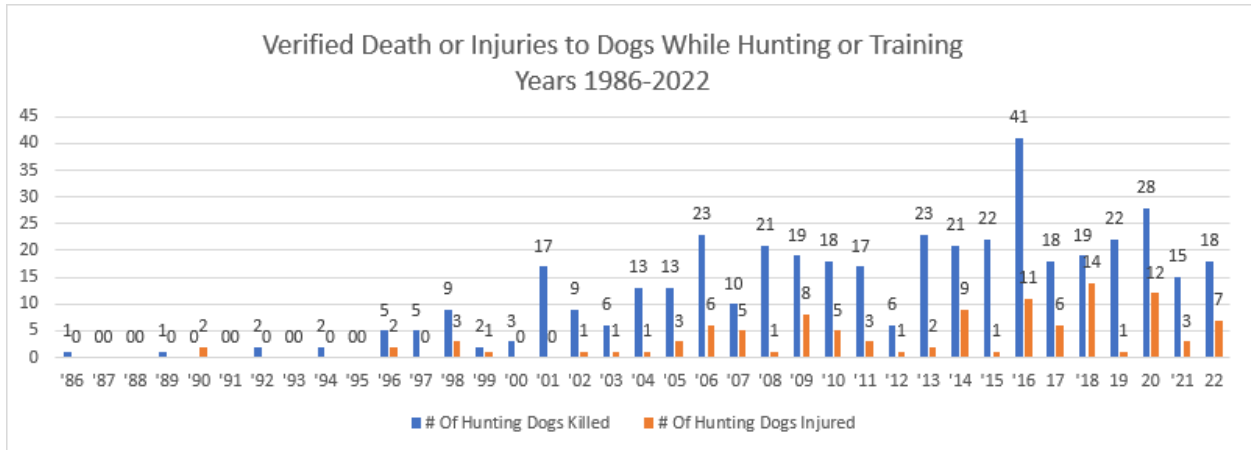
Figure 2. Farms with livestock depredation by wolves in Wisconsin from 1974 through 2022. Data provided by USDA-Wildlife Services in Wisconsin.



Most years, less than 15% of wolf packs caused depredations on livestock and pets, and the data during the 2012-2014 delisting demonstrate that livestock depredations can be drastically reduced without a need to drastically reduce the wolf population. When wolves were again relisted at the end of 2014, farms with depredations rose, but the increase was not statistically meaningful (average depredations at 27.3 farms for 2012–2014 and 27.5 farms 2015–2020). Between 2012 and 2020, depredations did not return to the high levels observed in 2010–2011, despite a higher wolf population.

Wolf depredations on hunting dogs is a very contentious issue in Wisconsin. Most depredations occur on hounds training and hunting on bears in July, August, and September. This is also the time period when wolves are at rendezvous sites with young pups and are very defensive of their offspring. **Cases of depredations on hunting dogs grew somewhat with the growth of the wolf population into the early 2000s but since 2006 has mostly fluctuated, averaging about 20 dogs killed per year (Figure 3).**

Figure 3. Wolf depredation on hunting dogs in Wisconsin from 1986–2022. Data provided by USDA-Wildlife Services in Wisconsin.



A few unusual extremes in wolf depredations on dogs, such as the low levels in 2012 and high in 2016, may be related to policy changes and not wolf population levels or impacts of wolf hunting seasons. For example, in 2012, use of dogs for wolf hunting was being debated in court, and hunters were perhaps more hesitant to report depredations. In 2016, WDNR eliminated fees for training dogs on bears, and may have encouraged many more hunters to test their dogs. **Outside of these two outlier years, levels of depredations on hunting dogs have not changed drastically since 2001 when the state's wolf population was about 257 wolves.**

Setting a Future Management Goal for Wolves in Wisconsin

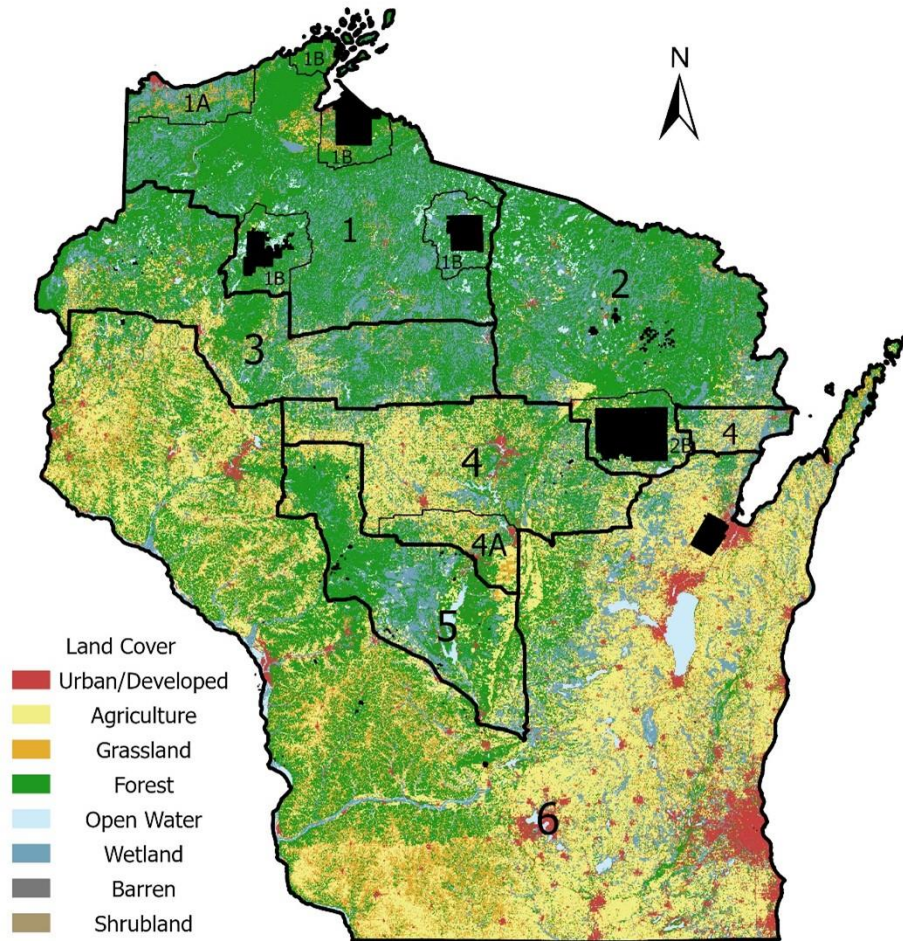
Wisconsin's wolf population appears to be stabilizing near the carrying capacity of 1242 wolves estimated by Stenglein et al. (2015). Evidence from farm depredations suggests that site-specific control actions allowed under federal delisting are effective and don't require range-wide reductions of the wolf population. There is little evidence that wolf harvests or population reductions would reduce levels of depredations on hunting dogs. Because most depredation on hunting dogs occurs in wolf primary habitat areas (Olson et al. 2014), levels of depredations on hunting dogs would not likely change drastically if the statewide wolf population were reduced to 300–400 wolves. The level of wolf population reductions needed to reduce depredation on dogs would reduce the wolf population to unstable conditions, and dramatically reduce ecological benefits of wolves to the landscape (Raynor et al. 2021).

Based on these data trends in the wolf population and depredations, retaining a 350 goal for wolves would not represent sound conservation or best use of science for managing the wolf population. Public attitude surveys in 2014 and 2022 demonstrate that the public generally supports the abundance of wolves detected on the landscape in recent times.

In the draft wolf plan dated November 9, 2022, the Wisconsin DNR proposed modification of six wolf management zones that had been established in 2012 (Figure 4). The 2022 plan discusses the goals for the management zones (Wisconsin DNR 2022, pp. 103-108).

- Emphasis in wolf zones 1, 2 & 5 would be for wolves fulfilling their ecological role and would maintain the wolf population near current levels.
- In wolf zones 3 and 4, there would be greater emphasis on controlling conflicts and providing wolf harvest opportunities, while also recognizing wolf ecological roles in portions of the zones. Thus, periodic reductions of the wolf population to reduce conflicts would be a more frequent management action in zones 3 and 4.
- Zone 6 represents the least suitable wolf habitat and management would focus on controlling conflict, with recognition that potential for wolves to fulfill ecological roles will be limited. Emphasis would mostly be on reducing wolf numbers if conflicts occur.
- The plan also included subzones 1A and 4A where higher levels of livestock conflict occur, and greater controls would be focused within these small subzones to reduce wolf abundance without the need to reduce wolf abundance throughout the zone.
- Subzones 1B and 2B represent areas around Indian reservations with harvest threshold triggers that allow subzone closures more quickly to avoid overharvest of reservation wolf packs that extend outside reservation boundaries.

Figure 4. Wolf management zones proposed by the Wisconsin DNR in the draft wolf management plan in fall 2022. Zones 1, 2 and 5 represent important core wolf habitat. Subzones 1A and 4A represent areas with higher levels of livestock depredation. Subzones 1B and 2B represent buffer areas around Indian reservations with threshold quota levels to protect reservation packs. Figure from WDNR.



This modified wolf management zone system more closely aligns with habitat suitability and will help the WDNR maintain healthy, sustainable populations in Wisconsin’s most suitable wolf habitat, while allowing targeted controls in areas with wolf-human conflicts. This system does not require a specific numeric population goal for the state. This system is similar to what is currently done for deer and bears and would be the more reasonable way for managing the wolf population.

The goals for each zone would guide annual decisions to maintain, reduce, or allow the population to grow, like current management practices with deer and bear populations in Wisconsin. Under this system, annual population management decisions can be guided by metrics that focus on the health of the wolf population, health of prey populations, ecological benefits and levels of conflict can be used to determine the need to control the wolf population or allow it to fluctuate without human intervention. Some useful metrics may include the following: average pack size; average wolf density; disease issues

in the wolf population; prevalence of chronic wasting disease or other diseases in deer or elk populations; wolf distribution and genetic connectivity within and among zones; numbers of farms and numbers of depredations on livestock; level of depredation on pets; incidents of human safety issues; and any measure of benefits or impacts of wolves on ecosystems.

Wisconsin's Green Fire supports the targeted and adaptive management approach proposed by the 2022 WDNR draft wolf management plan. We feel the 1999 population goal of 350 wolves is outdated, no longer reflects current wolf science or the desires of most Wisconsin citizens, and, if retained, would require a drastic reduction of the existing population with minimal benefits to reducing human-wolf conflicts.

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