

Conservation Bulletin

Analyzing Policy and Practice for
Wisconsin Natural Resources

An Analysis of Wisconsin's 2022 Draft Wolf Management Plan

January 2023

Summary Findings

Wisconsin's Green Fire supports these elements of the current Draft Wolf Management Plan:

- **Removing numeric goals** from the wolf plan is appropriate given their current status and consistent with population objectives used for other iconic species such as deer and bear.
- **Redrawing wolf zones across Wisconsin** and creation of **buffer zones around tribal reservations** will improve management effectiveness and help protect reservation wolves.
- The plan appropriately includes **rigorous focus on wolf population monitoring**.
- The plan calls for continued use of a **science-based management** approach to wolf conservation.
- The plan appropriately includes **mandatory harvest registration and in-person certification requirements**.
- The plan appropriately emphasizes **continued education and outreach efforts**.

Wisconsin's Green Fire recommends the following changes or additions to the Draft Wolf Management Plan:

- The plan should **return important core wolf range in western Lincoln County from zone 3 to zone 1 as outlined in the sections below**.
- The plan should **include specific descriptions of how wolf populations in each zone will be managed to achieve goals outlined in the plan**, including specific metrics to determine the health and sustainability of the population.
- The plan should **include a process to ensure enough licenses are issued for any legal hunt to assure quotas can be met in a reasonable time period** in order to avoid overly long hunting and trapping seasons that carry into the breeding season.
- The plan should **limit training of dogs to only the periods when wolf hunting or trapping season is open in the zone**.
- The plan should **include a specific timeline for implementation**.
- The plan should **specifically identify funding allocation and funding sources**.

Additional Recommendations

- **The WDNR should implement a follow-up public attitude survey** after the Plan is finalized, including determining support and understanding of the zone management system.
- **The WDNR should pursue continued education efforts around the Occupancy Modeling wolf population monitoring method**.

About this Work

Wisconsin's Green Fire Conservation Bulletins summarize the science and background of key conservation and environmental issues. Where appropriate, we make policy recommendations that support pro-conservation outcomes. Policy makers, conservation organizations, and concerned citizens are all welcome to use and distribute this and other Wisconsin's Green Fire publications without restrictions. The recommendations outlined here reflect the judgement and consensus of members of WGF's Wildlife Work Group.

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Wolf Plan Summary and Wolf Conservation efforts by Wisconsin's Green Fire

In November 2022, the Wisconsin Department of Natural Resources (WDNR) released a Draft Wisconsin Wolf Management Plan, ("the Plan"). When finalized, the Plan is intended to update Wisconsin's current Wolf Management Plan which was approved in 1999. The Plan is based on updated wolf population data and current biological and social research, and it makes management recommendations and prescriptions based on the current status of wolves in Wisconsin.

The Plan was developed by WDNR Wildlife program staff. The Plan reflects a wide variety of inputs, including recommendations from a Wolf Management Plan Committee the department convened in 2021, consisting of Wisconsin organizations, individuals, tribes, and agencies who provided input for each element of the plan. Wisconsin's Green Fire was represented on this Committee and has provided input on the Plan throughout the entire development process.

Wisconsin's Green Fire has produced two reports analyzing wolf management in Wisconsin. In December 2020, we produced *Opportunities Now 2.0: Creating a Shared Vision for Wolves in Wisconsin*, reflecting hopes for future hopes for wolf conservation in Wisconsin. We examined the potential impact of the February 2021 wolf hunt in May 2021, *The 2021 Wisconsin Wolf Hunt: A Preliminary Assessment*. These reports were authored by experts in wildlife biology and management, and we are thankful to WDNR for incorporating many policy recommendations outlined in these reports into the 2022 Plan.

Wisconsin's Green Fire's perspective on the 2022 Draft Wisconsin Wolf Management Plan reflects the combined opinions and contributions of WGF's Wildlife Work Group members.

Background

The Plan reflects results of biological research, field survey results, population modeling, years of data collection, and public attitude survey results on Wisconsin wolves collected by current and former WDNR scientists. The WDNR also consulted with tribal government representatives and other natural resource professionals across the state with expertise in wolf management.

In November 2020, the United States Fish and Wildlife Service removed gray wolves from the federal Endangered Species List, transferring management to state authorities. Due to Wisconsin law (2011 Act 169), the WDNR was required to mandate a wolf hunt in the fall of 2021. Despite a vote from Wisconsin's Natural Resources Board against holding the hunt, a lawsuit filed by Hunter Nation, represented by the Wisconsin Institute for Law and Liberty, resulted in overturning the decision and holding a hunt in February 2021.

The NRB and WDNR determined a wolf harvest quota of 200 wolves, and after the tribal declaration of wolves in ceded territory, the quota was 119 wolves. However, after three days this quota was exceeded by 99 wolves – with a total of 218 reported wolves harvested. See Wisconsin's Green Fire's preliminary analysis on the February 2021 wolf hunt here: <https://wigreenfire.org/our-publications/>.

The current process to revise Wisconsin's 1999 Wolf Management Plan began in March 2021. In February 2022, gray wolves were placed back on the Endangered Species List, removing management authority from the state.

The Draft Wisconsin Wolf Management Plan was released by the WDNR for public comment in November 2022. The full draft plan document and details for submitting comments are [here](https://dnr.wisconsin.gov/topic/wildlifehabitat/wolfmanagementplan):

<https://dnr.wisconsin.gov/topic/wildlifehabitat/wolfmanagementplan>. This analysis is meant to advise readers and provide relevant information on wolf management in Wisconsin.

Analysis

The return of wolves to Wisconsin is a conservation success story. Wolves now fully occupy Wisconsin's best forested habitats and are doing well in the surrounding secondary range. WGF believes our population is secure at current levels and should be federally delisted. However, this belief is predicated on our state having a strong conservation plan to guide future management actions. The Department's draft plan incorporates the most recent science and provides a needed update to wolf conservation policies developed 24 years ago. We offer our comments in support of these updated policies and to offer suggestions we feel will further improve Wisconsin's next wolf management plan.

Wisconsin's Green Fire recognizes the comprehensive, thorough, and thoughtful work put into developing and producing the Draft Wisconsin Wolf Management Plan. The plan provides an extensive review of the scientific literature, background, and carefully planned management strategies that consider the science and the diverse range of views on the appropriate conservation for wolves in Wisconsin. The social scientists involved in the plan also conducted an extensive, representative, and inclusive public attitude survey on wolves in Wisconsin, and the results from that survey are well reflected in the Plan.

Outlined below are the aspects of the plan which Wisconsin's Green Fire strongly supports, some issues of concern, and specific recommendations requiring policy, executive action, and/or budget changes.

Wisconsin's Green Fire Supports the Following Elements of the Plan:

Wolf Population Goal

- **The removal of numeric goals** from the wolf plan and the focus on ecological benefits and sustainable populations, while addressing conflicts. This is consistent with population objectives used in Wisconsin for other iconic species such as deer and bears.
- We support administrative rules to **protect wolf den sites**.

Wolf Management Zones

- **The wolf zone designations across Wisconsin**, with exception of some core areas being removed from Zone 2 to secondary wolf range in Zone 3 (see Figure 1).
- **The designation of Zones 1, 2, and 5** as core areas of wolf range where ecological benefits and population sustainability are emphasized and where presumably harvest rates will be kept low. **This should generally help result in relatively stable populations near current levels.**

Wolf Management Buffer Zones

- **Creation of subzones 1B and 2B as buffer areas around tribal reservations** to better protect reservation packs and core areas by maintaining low harvest thresholds around the reservations. Such sanctuary areas provide overall benefits for wolf conservation in the region (Mech 2021). *

*If regulations change and the Department regains authority to determine portions of Wisconsin open and closed to wolf harvest, **we recommend that these buffer areas become 0 quota areas**, though we recognize current regulations do not allow this. We agree that normal depredation control activities including lethal controls when wolves are delisted and when appropriate, will continue in these subzone areas.

Wolf Population Monitoring and Research

- **Intense and continued population monitoring**, including the continued use of volunteer tracking and ongoing data-driven evaluation of population estimation techniques and modeling.
- **Research on wolf ecology, population dynamics, wolf depredation management, alternate and auxiliary survey methods, and supporting additional research** by collaborators to assure that the best available science informs state wolf conservation.
- Emphasis on **reducing illegal kill rates** across the state.
- **Commitment to using a scientifically informed adaptive management approach** to wolf conservation in Wisconsin.

Wolf Harvest Regulations

- **Zone-specific permits** that only allow hunters and trappers to harvest wolves in a single zone until the zone is closed, with some exceptions for Zones 1 and 4.
- **Mandatory harvest registration and in-person certification requirements** that should include requirements to provide biological samples as needed for monitoring and research. We also strongly support harvest registration within 8 hours.

Wolf Education and Outreach

- **Commitment to education and outreach efforts** and working with partners to promote education around wolves.

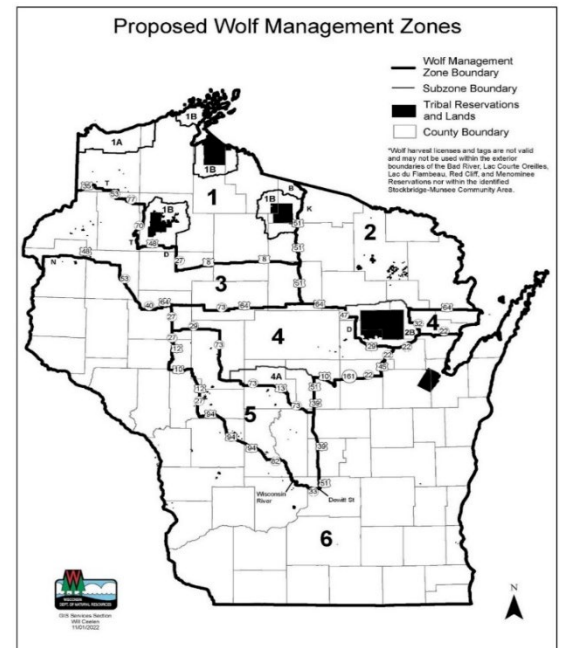


Figure 1: Proposed new wolf management zones including buffer zones around tribal reservations.
 Credit: WDNR

Wisconsin's Green Fire Recommends the Following Changes or Additions to the Plan:

Population Management

- Western Lincoln County was placed from Zone 2 (core wolf area) into Zone 3 (secondary wolf range). This was the first area occupied by wolves in north-central Wisconsin after wolves moved into northwest Wisconsin in Douglas County. Western Lincoln County was always located in the most suitable wolf habitat in the state in wolf habitat assessment (Mladenoff et al. 2009) and has not been mapped as an area with likely wolf livestock conflicts (Treves et al. 2004, 2011). No livestock depredations have occurred in the area in recent times (Fig. 38, p. 120). **We recommend that this area be included with Zone 1, having a western boundary consisting of Co. C, WI 102, WI 86, & Co. D (eastern Taylor and southeast Price Counties), southern boundary of U.S. 64, and eastern boundary of U.S. 51.**
- **We recommend outlining how wolf populations in each zone will be managed to achieve goals outlined in the plan** including defining “sustainable population,” maximizing the potential for ecological benefits, and controlling the spread of diseases like Chronic Wasting Disease (CWD).
- **We recommend identifying specific metrics that will define successful wolf management in Wisconsin.** Example of metrics include pack integrity, average pack size, distribution of CWD in wolf range, the relative distribution of wolves across the state, and genetic connectivity and flow between packs across the state.

Harvest management

- **While we support zone specific permits, we also support adequate issuing of licenses to avoid long extended hunting and trapping seasons.** The plan discusses concern about “accelerated zone closures” (p. 125), concern about “low hunter/trapper satisfaction resulting from very short season lengths” (p. 126) and maximizing “hunter/trapper opportunity and satisfaction” (p. 126) through numbers of licenses issued for each zone. We feel that the number of permits should be adequate so that most zones can be closed by early December to minimize disruption of winter track surveys and disruption of normal pack activity and breeding season.
- **We do not support allowing training of dogs on wolves throughout the state when any wolf harvest zone is open.** We commend the Department in attempting to develop a regular training period for dogs used to hunt wolves but have concerns about the proposed administrative rules (p. 127). Running dogs after wolves throughout the winter and into the wolf breeding season of late January and February is likely to be disruptive to trackers attempting to survey wolves over winter, and disruptive to wolf pack territory maintenance and breeding activity. **We agree that any dog training should begin on the first Monday following Thanksgiving but should be closed when the specific zone is closed to hunting and trapping.***

**This recommendation requires administrative rule changes.*

Plan Implementation

- **We recommend outlining a timeline** for plan implementation and revision and identifying mid-point check-ins to assess the plan implementation process.
- **We recommend including a forecast outlining specific budget needs to fully implement the actions outlined in the plan** in addition to the summary of funding and expenditures for plan implementation.
- **We urge the Department to carefully consider the composition of the Wolf Advisory Committee to ensure it is representative of the broad range of wolf concerns across the state, particularly tribal concerns, and adequately represent the science needed to properly manage wolves in Wisconsin.** Along with listed stakeholder groups on page 137, **we recommend also including a new group for Wildlife/Conservation Science organizations:** Organizations whose mission includes protecting wildlife and habitat through scientific and thoughtful management; promoting the use of the best available wildlife/conservation science and management techniques.
- **We recommend that the Department conduct a follow-up public opinion survey** to gather information on changes in public opinion and assess public perception of zone-specific management strategies.

Research Recommendations

- While Occupancy Modeling (OM) is the current preferred method for estimating wolf numbers in Wisconsin, public acceptance and understanding of the method is still poor. **The Department will need to continue to educate people on OM, provide assurance of data used in the method, and support other surveys and auxiliary data on the wolf population.**
- We recommend the following research priorities:
 - **Monitoring the connectivity and gene flow among Wisconsin's wolf zones and interchange with Michigan and Minnesota.** We recommend genetic research like Reding et al. (2012) on bobcats, or Rick et al. (2017) on wolves in Minnesota.
 - **Inter-state collaboration with Minnesota and Michigan.** There is a strong mixing of wolf populations among these states, there should be a unified research agenda to address management issues as cost-effectively as possible.
 - **Documentation of the role that wolves play in regulating the spread of CWD within Wisconsin.** We encourage the Department to indicate in the Draft Plan that temporary, small-scale, local harvest/research/surveillance zones may be established around newly documented Chronic Wasting Disease (CWD) outbreaks within wolf range. Within these temporary Wolf/CWD surveillance zones, wolf harvest would be kept to an absolute minimum in order to maximize the opportunity for wolves to potentially control CWD expansion. These temporary Wolf/CWD surveillance zones would also be focus areas for intensive surveillance and research, to document relationships between wolves, deer, and CWD, an area of research that warrants further study.
 - Predation as a means of natural control has a theoretical basis (Brandell et al 2022, Wild et al 2011), and studies have found predators including mountain lions and coyotes likely select for disease-compromised cervids (Miller et al 2008; Krumm et al 2010; DeVivo et al 2017). Removal of infected animals by predators could complement broader disease management efforts (Baune et al 2021).

- **Establishment of a wolf science advisory committee** to ensure that the best available science is being integrated into operational actions.
- **We recommend that WDNR periodically (possibly every 5 years), convene a scientific panel of experts in the biological and social science disciplines** to review existing estimates of Wisconsin's biological carrying capacity for wolves and develop an updated best estimate based on current population data and science. The panel should provide findings and recommendations to the advisory committee outlined in the above recommendations.
- **We recommend that educational efforts include working with science teachers to effectively convey information on Wisconsin wolves.** The Department should prioritize partnerships with existing educational organizations that have curriculum on wolves.

Statutory Change Recommendations:

- **We strongly recommend the WDNR and NRB request statutory changes in the Wisconsin wolf hunting regulations under 2011 ACT 169.** These regulations limit the Department's ability to fully use an adaptive management approach to managing the state wolf population. ACT169 has created major opposition to state and tribal wolf management, making it difficult to federally delist and keep gray wolves off the Federal Endangered Species Act.

Conclusion

The Wisconsin Department of Natural Resources successfully incorporated many recommendations made by Wisconsin's Green Fire and other conservation groups in the Plan. We encourage the WDNR to retain the elements of the plan outlined above that will support the long-term health and sustainability of Wisconsin's wolf population and ensure that wolves' cultural, social, and ecological roles are protected and respected moving forward. These elements include the lack of a numeric wolf population goal, the implementation of buffer zones around tribal reservations, zone-specific harvest permits, and mandatory harvest registration and in-person certification requirements.

The WDNR should resist efforts to reduce or limit its power to establish harvest quotas and determine the timing, method, and form of wolf harvest. Wolf population monitoring and specific metrics for wolf population health and sustainability should be established and used across the state, and the Plan should include a clear plan for implementation, funding, and collaborative efforts across Wisconsin and the Great Lakes region to maintain a healthy wolf population.

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