

**MINNESOTA  
STATE REPORT**  
*June 4, 2020*

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**Update on Constitutionally Dedicated Legacy Funding**

Since 2008, a portion of Minnesota's sales tax has been constitutionally directed to protect, restore, and enhance forests, prairies, wetlands, and habitat for fish, game, and wildlife through the Outdoor Heritage Fund (OHF). The funding must supplement, not substitute for, work funded through traditional sources. The DNR, along with other agencies and organizations, applies for these funds annually on a competitive basis. In 2019, the Legislature approved almost \$130 million in projects statewide, with about \$25 million awarded for DNR projects.

The DNR administers the Conservation Partners Legacy (CPL) small grants program, which awards competitive and non-competitive grants of \$5,000-\$400,000 to conservation groups, non-governmental organizations (NGOs), and local governments for habitat projects. To date, nearly \$80 million has been appropriated to CPL, with \$10 million slated for this year. This program has improved or protected over 250,000 acres of habitat with 760 grants, leveraging more than \$10 million in non-state funding from more than 200 conservation clubs and government entities in Minnesota.

**Ice Fishing Pressure**

Ice fishing continues as the fastest growing sector of sport fishing in Minnesota. The last decade has seen a rapid expansion of wheeled fish houses. Older "permanent" shelters, transported on trailers and moved onto lakes on skids, made it difficult for anglers to change lakes or even fishing spots. Now more mobile, anglers spend many more hours on the lake each trip. Basically hard-sided campers, wheeled houses commonly have generators, kitchens, satellite dishes, flat screen televisions, a biffy, and comfortable beds. This comfort has stimulated family participation, akin to a summer camping trip, albeit in the winter. Minnesota requires licenses for hard-sided fish houses, and of over 43,000 licenses sold in 2019, most were for wheeled houses.

The DNR does not index ice-fishing pressure statewide but conducts creel surveys on important waters. The winter of 2019-20 saw a combined seven million hours of winter fishing pressure on Mille Lacs Lake, Upper Red Lake, and Lake of the Woods. In part, this pressure resulted from high catch rates. In addition, Mille Lacs Lake and Lake of the Woods avoided early snowstorms on thin ice that prevented establishing ice roads on several other large, popular fishing lakes.

**Mille Lacs Lake Management**

Under a "consensus agreement" with the 1837 Treaty Bands, Mille Lacs Lake walleye are managed for a spawning stock biomass (SSB) goal of 20 pounds per gill net lift (fall assessment).

After a year just under target followed by a likely anomalous year well over target, 2019 sampling yielded a more realistic SSB just below target. The SSB increased as the 2013 class recruited. It will likely remain stable or decline as they die, but will be offset by 2017 class recruitment. Since 2013, only the 2014 class is obviously weak, with other classes through 2018 of moderate strength.

The 2019 fishing year had about 30,000 pounds harvested in the winter and May. Thanks to allowing harvest in May, summer 2019 had the highest pressure since 2013, which remained the case through the summer. In turn, an unplanned closure was enacted in September 2019 to stay under allocation. For the 2020 fishing year (December 1, 2019-November 3, 2020), the DNR and the bands again agreed to a safe harvest level of 150,000 pounds, with a state allocation of 87,800 pounds, including hooking mortality. With 30,000 pounds harvested in winter 2019-2020, about 58,000 pounds remains for the 2020 open water period. To avoid another unplanned closure, a planned closure has been enacted during July, with the hope of keeping the fishery open through the fall.

Looking forward, the “consensus agreement” has expired, and new control rules are being considered for the walleye fishery. A lake management plan is also nearly complete.

### **New Brook Trout Strain**

Brook trout are the only stream trout native to Minnesota but experienced habitat degradation in the late 1800s, and were considered extirpated. Hatchery-reared brook trout originating from the northeastern United States were reintroduced. However, genetic testing in southeastern Minnesota identified a strain of brook trout, unique from the eastern origin brook trout that likely represent a remnant “Heritage” population. Genetic testing also revealed the previous hatchery strain, Minnesota Wild (MNW), was mixed with an eastern strain. This finding raised concerns that MNW was becoming domesticated, so disease testing on Heritage brook trout streams began in 2009, to inform developing a new hatchery strain.

After ten years of failed disease testing, it was finally possible to collect gametes in southeastern Minnesota in fall 2019. Fertilized eggs were transferred to the Peterson Hatchery to be incubated, hatched and reared, to be developed and maintained as a captive brood stock of wild brook trout, referred to as Minnesota Driftless (MND). Staff will return to specific streams for three to four years to gather additional gametes to improve genetic diversity. Captive brood fish will provide eggs for future brood and fish for recreational stocking, anticipated in 2023.

### **Forest Management and Coordination**

The DNR is implementing the Sustainable Timber Harvest (STH) initiative. The Division of Fish and Wildlife (FAW) participates in management of over five million acres of state forestlands, for a full spectrum of ecological and economic values. Staff coordinate at the local level on timber and stand development, and contribute to Section Forest Resource Management Planning (SFRMP), currently in northern and northeastern Minnesota. Management opportunity areas allow for site-specific management for moose, deer winter areas, old forest complexes, and other diverse habitat needs. Timber harvest policy incorporates alternative guidelines for species-specific harvest rotation ages and reserve patch allowances to enhance future habitat. Sustainable timber harvest uses ecological section level analysis to ensure harvest targets are distributed across the landscape.

Fish and Wildlife partners with conservation organizations on multiple Outdoor Heritage Fund, sales tax funded projects to enhance wildlife habitat in forested portions of Minnesota, and on enhancing access through a proposal to expand the hunter walking trail network on state managed lands. The DNR has an interdisciplinary Forest Policy Matrix Revision Project to update and clarify operational orders, policies, and guidance documents so that coordination efforts and procedures are more transparent and clear to field staff, stakeholders and partners.

### **White-tailed Deer Management**

Winter 2019-2020 was relatively mild, except for in some areas in northern Minnesota that experienced severe and prolonged snowpack conditions. Consequently, deer populations continued to increase or remain stable, while local deer populations in northern Minnesota remain well below public desires. Reflecting these trends, abundant harvest opportunities will exist in northwestern, central, and southeastern Minnesota for 2020, while more conservative bag limits are planned in the northeast and southwest. Disease management areas will expand south of the Twin Cities, resulting in liberalized harvest opportunities and regulations to control the spread and transmission of Chronic Wasting Disease (CWD).

Implementation of the 2018 White-tailed Deer Management Plan continued, with initiation of the statewide Deer Advisory Committee. Topics discussed included proposed deer hunting regulation changes, improvement of public engagement opportunities, CWD management, and deer population goal setting. Other plan implementation included improvement of “real-time” online deer harvest information, initiation and continuous improvement of deer population goal setting, and initiation of hiring processes to expand deer program staffing.

### **White-tailed Deer Projects Funded through the Deer Initiative**

For the past two winters, the DNR has studied white-tailed deer in the forest zone to enhance wildlife managers’ ability to prescribe forest manipulations that support deer population goals. These manipulations will consider composition, area, edge, edge-to-area ratio, shape, and abundance, as well as juxtaposition and interspersion of cover types. Cutting-edge global positioning system (GPS)-collar, remote sensing and geographic information system (GIS) technologies allow fine-scale measurements of habitat use and selection by 73 adult females at the stand or cover type level under varying winter conditions and deer densities. Compositional and resource selection function analyses are ongoing at multiple orders.

In the southern farmland region, the DNR used an unmanned aerial vehicle with thermal imaging to determine the efficacy of using drones to locate fawns in wildlife management areas (WMAs) and to validate performance of expandable GPS-collar components on free-ranging neonates. Through locating 43 fawns (33 confirmed) at 18 WMAs over ten days in May and June 2019, we found locating fawns via drones worked well during optimal conditions (e.g., nighttime, cloudy) but became difficult under poor conditions (e.g., sunny). We find drone searches are the best approach to locate fawns in the farmland region, compared to the effort of other methods (e.g., opportunistic ground searches, vaginal implant transmitters). We will GPS-collar 75 fawns each of the next two years to determine survival and cause-specific mortality, estimate dispersal, and assess whether landscape and habitat characteristics affect dispersal and migration. Vital rates (e.g., fawn survival) will help improve the deer population model.

In southeast Minnesota, a study aims to better understand dispersal, movement patterns, and survival of white-tailed deer, particularly in and around the CWD management zone covering Houston, Fillmore, Olmsted, and Winona counties. Deer movement data will identify potential routes of disease spread via wild deer, informing management. Home range size varied greatly among individual deer, but generally increased between summer and fall. Females' home ranges more than doubled in size, from 1.37 km<sup>2</sup> in the summer to 3.35 km<sup>2</sup> in the fall. Males' home ranges also expanded from 1.88 km<sup>2</sup> to 4.29 km<sup>2</sup>. Global positioning system collars include mortality sensors, and staff typically respond within one to two days to alerts to determine cause of death.

### **Chronic Wasting Disease (CWD)**

In 2019, the DNR conducted hunter-harvested surveillance in central, north central, and southeast surveillance areas, in response to CWD-positive cervid farms or detections in wild deer. For central, fall 2019 marked the third year of precautionary surveillance around a depopulated CWD-positive cervid farm. In the southeast, CWD management and control zones respond to the increasing number of positive wild deer in Fillmore County, a depopulated positive cervid farm in Winona County, new cases in wild deer within a mile of the Winona farm, and the encroaching positive wild deer in Wisconsin and Iowa. Finally, a new CWD management zone was created in the north-central Crow Wing County, where a CWD-positive cervid farm remained in business for several years, leading to the discovery of a positive wild deer found dead a half mile from the farm's fences. Chronic wasting disease management zones allow the DNR to impose mandatory testing for all adult deer and enforce carcass movement restrictions to prevent the disease from spreading. The CWD control zone creates a buffer to implement carcass movement restrictions, along with less restrictive mandatory testing requirements.

In fall and winter 2019, 18,543 deer were tested, with 36 CWD-positive detections. During just the fall hunter-harvested surveillance, 17,717 deer were tested, including 544 deer in the central with no new detections; 3,966 deer in the north-central with no new detections; and 13,207 deer in the southeast with 26 CWD-positive detections. In the southeast, additional management actions over the winter included landowner shooting permits (37 deer with no detections) and U.S. Department of Agriculture culling (463 deer with seven CWD-positive detections). Symptomatic deer are tested opportunistically year-round across the state; 356 deer were tested with three positive detections (two found dead in Fillmore and Houston counties and one reported sick from Dakota County). Finally, two new positive CWD-captive cervid farms were announced over the winter in Douglas and Pine counties.

Fall 2019 surveillance included an inaugural, legislatively mandated dumpster program for all CWD management and control zones. Intended to be marketed like Wisconsin's adopt-a-dumpster program, most of the funding came from the DNR, with donations from several deer groups. Dumpsters enabled hunters to quarter their deer and dispose of carcasses within the CWD management and control zones, to abide by carcass movement restrictions. Dumpsters, tables, and quartering tripods were available starting with archery season and expanded during firearms season when most hunters are afield. The program was a roaring success, with more than 200 tons of deer parts brought to certified landfills, costing the DNR and its partners \$170,000.

## **Duck and Pheasant Plans**

In 2019, the DNR updated its 2006 Long-range Duck Recovery Plan and 2015 Minnesota Pheasant Summit Action Plan, incorporating agency expertise and input from partner agencies and NGOs, and the public. Instead of long-term objectives that are often hard to operationalize, both plans focus on shorter-term goals within the DNR's management scope, through both habitat and human dimensions issues strategies. The plans recognize the multifaceted benefits of grassland and wetland conservation and management (e.g., pollinator habitat, clean water, carbon storage), while continuing to support wildlife habitat.

## **Wetland Management Program**

Using Outdoor Heritage Fund dollars and modeled after Minnesota's successful Shallow Lakes Program, the new Wetland Management Program will assess and implement management on small wetlands, with initial work focused on wetland complexes in the prairie region. Two wetland specialists have been hired. Funding is being requested to add another wetland specialist and create a dedicated supervisor to oversee the program's implementation in the field and guide anticipated growth.

## **Marketing**

Seasonal direct emails in partnership with our electronic licensing system (ELS) vendor Aspira continue to show great outcomes. Emails sent to past licensed hunters and anglers encourage purchasing a license for the new year. Emails have included seasonal themes like spring turkey hunting, fishing, and deer hunting. Spring fishing emails increased online sales of resident individual angling license by 85 percent from last year. With the February start to the license season, an ELS reminder email was sent to ages 50+ encouraging them to purchase a lifetime license. Resident Individual Lifetime angling sales remain consistent from last year, while non-resident lifetime angling licenses are seeing a slight increase.

A partnership with the national Recreational Boating and Fishing Foundation's Take Me Fishing (TMF) campaign was co-branded with the DNR in 2019. A total of \$50,000 was invested in May and June (\$10K creative, \$6.5K Take 5 emails, \$23.5K digital display, \$10K paid search, \$10k paid social). Paid search alone generated \$321,361 in revenue.

## **Recruitment, Retention, and Reactivation (R3)**

The Minnesota R3 Advisory Council continued to meet, laying the foundation for development of a statewide R3 plan in 2020. The DNR and partners at Minnesota Backcountry Hunters and Anglers, and the Grand Rapids chapter of Minnesota Deer Hunters Association, are expanding Adult Learn to Hunt Deer programs to new regions and participants. In 2019, 20 committed volunteers mentored 25 first, second, and third year hunters at three hunt locations. We also marked the first year one of our new hunters (2014 program) returning as a mentor, and the first year a partner organization (Minnesota Backcountry Hunters and Anglers) supervised a hunt. The DNR also held trainings for the pilot Certified Mentor Training network.

## **Outreach Grants and Education and Skills Programs**

The fifth and currently final-funded round of the capacity-building Angler and Hunter Recruitment and Retention Grants were awarded in 2019, resulting in a cumulative 67 grants and \$990,000 awarded. \$1.2 million was also appropriated for a new "No Child Left Inside" grant

program to support youth natural resource education and outdoor recreation, including fishing, hunting, and shooting. Interest has been high, with almost 100 small and large grants awarded in recent months. Our grantees deliver programs to expanded and diverse audiences.

Becoming an Outdoors Woman and National Archery in the Schools programs continue to receive high interest and participation. The MN DNR Division of Parks and Trails partnered to place summer interns at eight state parks to offer fishing skills programs. The DNR has expanded efforts to reach diverse and new audiences by hiring two community fishing and hunting skills liaisons to build capacity with Latino and Karen communities. Latino outreach resulted in over 24 programs and events, serving over 1,250 participants. Our Southeast Asian programs had over 1,000 participants, with another 1,000 people reached through emails, phone calls, and office visits.

### **Wildlife Action Plan**

The Minnesota Wildlife Action Plan 2015-2025 is a statewide conservation strategy developed with and implemented by conservation partners under the leadership of the MN DNR's Division of Ecological and Water Resources, with goals around habitat, species, and engagement.

- Sustaining and enhancing terrestrial and aquatic habitats is done within the context of the larger landscape/watershed and a changing climate. Stressors like fragmentation, invasive species, and climate change are addressed within a mapped Wildlife Action Network.
- 346 species in greatest conservation need (SGCN) identified in the plan require conservation actions directed at issues like disease, deliberate killing, low reproductive capacity, or poor dispersal ability. Species for which information is needed to assess their conservation status or factors contributing to their decline are also addressed.
- Engagement with conservation partners and citizens involves sharing data, tracking efforts and accomplishments, and other opportunities.

Wildlife Action Plan projects leverage diverse partnerships and funding sources. For several years, the Minnesota River Reptile Project has studied the five-lined skink and gopher snake on public and private land. Both species are listed SGCN and in decline. Findings will identify key habitat features, such as nesting and overwintering sites, and provide information to landowners and managers, with the goal of conserving these and other prairie species in the Minnesota River Valley. Another project, SGCN Enhancement in the Driftless Area, supports a diversity of plants and animals unique to the Upper Midwest. The DNR has restored and enhanced public and private lands (over 7,000 acres) using prescribed burning, conservation grazing, invasive plant control, and prairie plantings. Species including Leonard's Skipper, Rusty Patched Bumble Bee, Blanding's Turtle, and Whip-Poor-Will have increased as a result.