# MINNESOTA STATE REPORT

*May, 2015*

Edward K. Boggess, Director

Division of Fish and Wildlife

Minnesota Department of Natural Resources

500 Lafayette Road

St. Paul, MN 55155-4020

## Fish Minnesota

## “Fish Minnesota” is the newest mobile friendly website developed by DNR to put all things fishing at the fingertips of interested anglers. Building off the popular “Lakefinder” application that provides information on fisheries population surveys, special regulations, invasive species, lake maps and other information, Fish Minnesota combines plain language regulations and fishing information to become the one-stop mobile app for accessing DNR fishing information.

## Mille Lacs Lake Management

## Conservation concerns are elevated on Mille Lacs Lake as a declining trend in walleye continues. Mille Lacs’ 2015 walleye safe harvest level was reduced from 60,000 to 40,000 pounds in 2015, for both Tribal and State regulated harvest combined. Mille Lacs Lake anglers will be able to keep one walleye 19- to 21-inches long or one over 28 inches, and an extended night fishing closure will again be in effect.

Extensive work is underway to better understand several fish community changes that may be partly driven by altered physical and chemical dynamics, notably clearer water that started with clean water legislation twenty years ago, longer growing seasons, and several aquatic invasive species, including Eurasian watermilfoil, spiny water flea and zebra mussels. A trend in increasing juvenile walleye mortality has now been documented, while northern pike and smallmouth bass abundance continue to increase. An extensive predator diet study and bioenergetics analysis is underway to determine potential causal mechanisms to explain elevated juvenile walleye mortality. Additionally, DNR asked a panel of fisheries scientists, chaired by Paul Venturelli at University of Minnesota, to independently analyze the data and provide recommendations to DNR. This group released report of their findings in 2015 that can be [accessed online](http://fwcb.cfans.umn.edu/prod/groups/cfans/%40pub/%40cfans/%40fwcb/documents/asset/cfans_asset_494345.pdf).

## Bighead, Black, Grass and Silver Carp

 In June 2015, five adult bighead carp were caught in the St. Croix River, just south of Stillwater. With invasive carps not yet established, MN DNR continues to intensively monitor and to evaluate and implement deterrence measures. A project is currently underway to make improvements to the Coon Rapids Dam, including features to make it a more effective barrier to Asian carp movement upstream. The DNR believes that the best way to keep Asian carp out of the upper Mississippi River watershed is to close the Upper St. Anthony Falls Lock at Minneapolis. Lock closure provisions were included in the *Water Resources Reform and Development Act of 2013 (WRDDA)*, and take effect summer of 2015. The DNR is also exploring alternative barrier technologies to prevent upstream movement of Asian carp, including a potential barrier utilizing new technology for Lock and Dam 1 between Minneapolis and St. Paul. The MN DNR is a partner with the Minnesota Aquatic Invasive Species Research Center at the University of Minnesota, which works closely with the DNR to address invasive aquatic nuisance species through research on prevention, control, detection, and eradication.

## Prairie Plan Implementation and Governor’s Pheasant Summit

 In 2013-14, ten local technical teams (LTTs) were formed across Minnesota’s western landscape to implement the Minnesota Prairie Conservation Plan. LTTs are composed of local resource managers from partner agencies; members coordinate their outreach efforts and then talk directly with landowners to help them become familiar with available conservation options. For more information, see the [online version of the Minnesota Prairie Conservation Plan](http://files.dnr.state.mn.us/eco/mcbs/mn_prairie_conservation_plan.pdf).

In December, 2014 Governor Mark Dayton convened the state's first-ever Minnesota Pheasant Summit in Worthington, Minnesota. This working meeting brought together about 300 hunters, farmers, conservationists, key members of the Governor's Cabinet and others. Summit participants identified five main focus areas:

* Enforcing existing laws - buffers, roadsides, easements;
* Increasing bonding funds for Wildlife Management Area acquisition;
* Targeting funding to specific high-quality habitat areas through state, local, and federal cost-share programs;
* Increasing state and local funding; and
* Creating competitive compensation for long-term/perpetual conservation practices.

## Aquatic Habitat Implementation

 The strategic framework for habitat protection outlined in the [aquatic habitat strategic plan](http://files.dnr.state.mn.us/fish_wildlife/fisheries/habitat/2013_fishhabitatplan.pdf) is being incorporated into funding proposals for protection, enhancement and restoration of aquatic habitat. The plan puts an emphasis on working with partners and using GIS-based tools to identify priorities. Fisheries staff are participating in comprehensive watershed planning led by the MN Pollution Control Agency to identify impairments and prioritize projects to restore and protect water quality. The fisheries component of the Index of Biotic Integrity (IBI) developed by the Fisheries Section is an important indicator used in watershed planning. Refinement of the IBI for most lake classes is near completion, and work on coldwater lakes of NE MN will begin this year. Review of Aquatic Plan Management policies and rules applicable to stakeholder concerns about narrow leaf and hybrid cattails is underway.

## Wolf Management

 The Minnesota DNR completed a wolf population survey in 2014 with an estimated 2013-2014 mid-winter wolf population estimate of 2,400. This compared to a winter 2012-13 population estimate of 2,200 wolves and was not a statistically significant change in the population. Minnesota completed the state’s third regulated wolf hunting and trapping season in December of 2014, shortly before wolves were returned to the Threatened and Endangered Species list by the DC District Court on Dec. 19. A total of 272 wolves were registered in 2014, compared to 238 in 2013-2014 and 413 in 2012-2013. Overall success rates for all hunters and trappers combined ranged from 6.7 to 6.9 percent over the three seasons. Additional information and research updates are available on the [DNR’s wolf webpage](http://www.dnr.state.mn.us/mammals/wolves/mgmt.html).

## Moose

The 2015 annual aerial helicopter survey revealed a point estimate of 3,450 moose in northeastern Minnesota; below the 2014 estimate of 4,350 and above the 2013 estimate of 2,760. The higher estimate in 2014 was believed to be related to ideal survey conditions rather than an actual increase in the population. Radio-collared moose data collected as part of the adult and calf mortality studies and overall population trend data suggests the population is still in decline. Research projects are ongoing investigating the causes of adult moose mortality, calf mortality, calf survival, moose use of existing habitat, and habitat quality. During the first year of the study, 20 percent of collared adult moose died, nearly double the rate of other North American moose populations that have been studied. Causes of death included 11 predator-related (52 percent) and 10 health-related mortalities (48 percent), including brainworm (Parelaphostrongylus tenuis), winter ticks (Dermacentor albipictus), bacterial infections and other undetermined causes. In the second year of the study, only 11 percent of moose have died. Causes of death included six predator-related (55 percent) and five health-related (45 percent) mortalities. Importantly, there were no deaths associated with winter tick infestations, likely due to the prolonged winter of 2013. [DNR’s moose webpage](http://www.dnr.state.mn.us/moose/index.html).

## Northern Long-Eared Bat

DNR staff worked closely with MAFWA and the U.S. Fish and Wildlife Service on the northern long-eared bat and its impending federal listing under the ESA. The bat is being heavily impacted by white-nose syndrome disease around the nation. Based on current biological information, Minnesota, along with several other states where the bat is found, is supporting a threatened designation to allow forest management to continue for the long-term benefit of all forest-dwelling wildlife, including the bat. DNR has obtained a research grant to better understand the distribution, abundance, and roosting habits of this species in the state.

## Deer Population Goal Setting

MN DNR is in the process of revising deer population density goals throughout the state. A number of deer hunters are expressing their dissatisfaction with recent deer hunting success, suggesting that population goals should be increased. Minnesota’s process involves using random public surveys, non-random web-based input, public meetings, and local advisory teams to make recommendations to the Department. Outcomes from SE Minnesota are recommending modest increases to deer density goals in a majority of management units.

**Highly Pathogenic Avian Influenza**

 With discovery of highly pathogenic avian influenza (HPAI) in commercial poultry facilities, the Minnesota DNR has actively been conducting surveillance to determine the extent of wildlife involvement. Through May 2015, DNR staff DNR has carried out a three-pronged approach to HPAI surveillance: 1) Collect waterfowl fecal samples throughout Minnesota both near (treatment) and away from (control) infected poultry facilities; 2) Collect samples from successful turkey hunters from Kandiyohi, Pope, Meeker, Swift and Stearns counties (where the majority of farms are located); and 3) Collect dead birds of various species reported by the public. DNR ultimately collected 3,318 waterfowl fecal samples and found no HPAI. A total of 3% of samples were positive for low pathogenic AI. As of early June, 82 turkeys and 80 dead birds have been tested.for HPAI with the only positive being a Cooper’s hawk in western Minnesota.

## Nongame Wildlife

* The Nongame Wildlife Program has partnered with Audubon Minnesota and the Natural Resources Research Institute to complete a 5-year Breeding Bird Atlas project for Minnesota.
* A Roundtable event was co-sponsored with The Raptor Center for dialogue with stakeholders and DNR about use of lead ammunition for deer hunting related to bald eagle mortality.
* A study of the impact of the Deepwater Horizon oil spill on Minnesota-origin common loons and American white pelicans continues into its third year. The presence of petroleum-based contaminants and dispersants is being determined with blood, feather, and egg assays.
* The MN DNR has just completed the contract with Dr. Dan Janzen of the University of Pennsylvania and the Guanacaste Dry Forest Conservation Fund to initiate a new Southern Wings project to promote conservation of Neotropical migrant birds that utilize habitats in both Minnesota and the Guanacaste province in northwestern Costa Rica.
* The Nongame Wildlife Program has initiated highly popular webcam projects in the Twin Cities, including both a bald eagle nest and a peregrine falcon nest.
* A new book on “Reptiles and Amphibians of Minnesota” is being published in 2014 and a new book on “Birds of Minnesota State Parks” will be published in 2015.

## Adult “Learn to Hunt” Whitetail Deer and Wild Turkey Programs

 The fish and wildlife Outreach Section developed a new, all inclusive, six-session, scope and sequence hunting recruitment activity. It is innovative because it is gender neutral and targets adults who have little or no hunting experience and are from an urban setting. The program was marketed through Seward Co-op in Minneapolis. The hook for many participants is their desire to harvest a deer for food. The goal of the program is to move a person from a point of low knowledge, skills, and ethics related to deer hunting to a point where they have the basic ethics, skills and knowledge to become a deer hunter if they choose to do so. The program culminates with a two day, guided deer hunt/deer camp experience. Learning objectives were designed and pre- and post-surveys were conducted to measure if the program met its intended purpose. The results will be used to inform and improve future programs. We also piloted an all inclusive, five-session, scope and sequence wild turkey hunting recruitment activity. The program targeted new to hunting adults and used the same goals and metrics described above.

**Trap Shooting Range Development and Rehabilitation Grants**

The DNR Fish and Wildlife and Enforcement divisions have been issuing grants to local clubs to increase trap-shooting opportunities targeted at youth shooters under a $2.16 million appropriation passed in 2014. The program is in response to the unprecedented growth of the High School Clay Target League in Minnesota schools, which has grown from 340 participants in 2010 to over 8,600 this year. It is second only to football in the number of high school participants in the sport. In the recently concluded 2015 legislative session an additional $1.8 million was appropriated for shooting range grants of all types to local clubs and local units of government over the next three years.

**Archery Range Development and Rehabilitation Grants**

The Outreach Section developed grants to help public parks and recreation agencies develop new or rehabilitate existing public recreational archery ranges. Four new archery range development grants and three rehabilitation grants were awarded for just over $30,000.

## Marketing to hunters and anglers

 MN DNR has expanded its reach to hunters and anglers through with formal partnerships with Minnesota Tourism. Efforts include promoting Minnesota as a destination state for grouse hunting and bass fishing. While license sales cannot be directly related to these efforts, the reach of the ads has put us in new media reaches.

## Update on Legacy (Constitutionally Dedicated) Funding

 Since 2008, a portion of Minnesota’s sales tax is directed to conservation projects via the Outdoor Heritage Fund (OHF). The MN DNR, along with other agencies and organizations, applies for these funds on a competitive basis. The seventh year of funding is recommended for consideration by the MN Legislature and Governor, with $32 million slated to come to DNR and $68 million to other agencies or partner organizations. Additionally, 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, NGOs, and local governments for habitat projects. In the first 6 years of OHF, $30 million was appropriated to the CPL grant program, with an additional $8 million slated for the 7th year. This program has positively affected over 150,000 acres through more than 250 CPL grants and leveraged over $10 million in non-state funding.

## Minnesota State Wildlife Action Plan Review and Revision

 The Minnesota State Wildlife Action Plan (MN SWAP) revision process continues to make progress. The updated SGCN list has been reviewed by DNR staff and partners and finalized. Mapping of priority conservation areas for SGCN for the period 2015-2025 has been completed. A draft of the plan will be available for review in July 2015.

## State Wildlife Grants

 MN DNR currently has fourteen active state wildlife grant (SWG) projects, including three SWG competitive grants, which are aimed at implementing the goals of Minnesota’s Wildlife Action Plan. Examples include: a partnership with the MN Department of Commerce to study bat fatalities associated with wind farms in southeast MN, the identification and mapping of grasshopper sparrow distribution and habitat priority areas in southwestern MN, and the development of occupancy models to inform the restoration of oak savanna, prairie and woodlands. Long-term projects include monitoring and restoration of native mussel populations, prairie monitoring, and animal and native plant community surveys and data management. SWG competitive projects include bluffland habitat restoration on private and public lands in southeast MN, and the assessment and improvement of river turtle habitat.

**Climate Change Operational Order**

 In 2014, the Minnesota Department of Natural Resources adopted an agency-wide policy to minimize the negative impacts of climate change and reduce future change. The agency will: 1) develop and implement adaptation strategies, 2) increase carbon sequestration on agency-administered lands, and 3) train and prepare staff to address this challenge. Last year, the Division of Fish and Wildlife collaborated with partners, including the Northern Institute of Applied Climate Science and the National Conservation Training Center, to provide staff with training in vulnerability assessment and climate planning. The Section of Fisheries completed a scenario planning workshop on trout in Northern Minnesota and developed a plan to respond to increasing stream temperatures and altered flows. In fall 2015, Division of Fish and Wildlife will provide staff with detailed guidance on how to address climate change in management plans, technical consolations, infrastructure, land acquisition, and habitat management.

**Fiftieth Wildlife Lake Designated**

 The DNR designated the 50th shallow lake in the state for wildlife management this past year under a statutorily authorized program that enables the DNR to manage the lake’s water levels and surface use for the benefit of wildlife, particularly waterfowl. The wildlife lake designation program was created in the late 1970s to provide a mechanism for DNR to designate and manage shallow lakes for their wildlife benefits for the public good, without the need to obtain flowage easements from each individual riparian landowner.