

State Agency Pollinator Summaries 2019

In 2019, Governor Tim Walz signed Executive Order 19-28: Restoring Healthy, Diverse Pollinator Populations that Sustain and Enhance Minnesota’s Environment, Economy, and Way of Life. The following Minnesota state agencies represented on the Interagency Pollinator Protection Team have made progress on the tasks described in the order and implemented additional measures for pollinators.

Board of Soil and Water Resources

The Board of Soil and Water Resources (BWSR) incorporated pollinator habitat into BWSR programs, implemented a BWSR Pollinator Initiative that focused on increasing awareness about declining pollinator populations, and supported local government partners in enhancing pollinator habitat. BWSR increased outreach on the role of beneficial insects in pollinating 70-80 percent of flowering plants in the Midwest, which led to seed production and to sustaining the ability of natural landscapes and conservation plantings.

BWSR successfully planned and launched the new Lawns to Legumes program focused on establishing pollinator habitat on residential landscapes to benefit the endangered rusty patched bumble bee (Minnesota’s state bee) and other at-risk pollinators.

Collaborating with the Interagency Pollinator Protection Team, BWSR helped to finalize the statewide report on pollinator goals and metrics and implement recommendations. BWSR coordinated with other agencies to maximize statewide effectiveness of pollinator habitat protection and restoration efforts.

Minnesota Department of Administration

The Department of Administration supported pollinators on the State Capitol Complex, other state buildings, and on leased property. The agency maintained 11 pollinator-friendly gardens on the State Capitol Complex grounds and limited the use of neonicotinoid-treated plants and pesticide products in state-funded projects, state contracts, and/or on state-leased properties. Integrated pest management practices were a main component of maintenance activities on the Capitol grounds.

Minnesota Department of Agriculture

The Minnesota Department of Agriculture (MDA) promoted pollinators using a number of avenues in 2019. MDA developed three new best management practices (BMPs) documents that address the impact of neonicotinoid-involved practices on pollinators and identify steps that can be taken to prevent unintended impacts. MDA promoted the guides at various events, fairs, and trainings.

- [Stewardship Guidelines and Best Management Practices for Neonicotinoid Insecticide -Treated Seed](#)
- [Stewardship Guidelines and Best Management Practices for Soil and Foliar-applied Agricultural Neonicotinoid Insecticides](#)
- [Stewardship Guidelines and Best Management Practices for Home and Residential Use of Neonicotinoid Insecticides](#)

Because soybeans often need insecticide applications to control pests, MDA also completed and promoted a guide for this:

- [Recommended IPM \(Integrated Pest Management\) Approach and Treatment Threshold for Soybean Aphid Control in Soybean](#)

Additional MDA efforts included promoting bee-friendly practices and the Minnesota state bee (the endangered rusty patched bumble bee) at the Minnesota State Fair, distributing a new guide (Make your Yard Bee-Friendly), and promoting [DriftWatch \(BeeCheck\)](#) through outreach, presentations, and articles. The MDA took steps to improve online content with a redesign of its [pollinator webpage](#) to improve accessibility of all pollinator-related content.

Minnesota Department of Corrections

The Department of Correction’s 2019 pollinator protection program focused on sustaining existing gardens, orchards and other pollinator-friendly plantings at agency-managed properties.

Minnesota Department of Education

The Minnesota Department of Education (MDE) facilitated circulation of the “Pollinator Exhibit” ten public libraries and other community organizations. MDE estimates that over 120,000 Minnesotans visited the pollinator exhibit in libraries across the state. Book talks, art or science activities and/or science discussions paired with the exhibit at most locations to extend the learning. Of the new science standards adopted in 2019, several touch on topics related to pollinators – life cycles, habitat and reproduction – and two benchmarks specifically mention pollination in their example statements (2L.3.2.2.1 and 7L.4.1.1.2).

Minnesota Department of Health

The Department of Health advised the Interagency Pollinator Protection Team on pollinator issues as they relate to human health, such as pesticide safety, food security, and groundwater quality.

Minnesota Department of Natural Resources

The following summaries highlight the pollinator-focused work of Minnesota Department of Natural Resources' (MNDNR) divisions of Fish and Wildlife/Section of Wildlife, Parks and Trails (PAT), and Ecological and Water Resources (EWR).

Fish and Wildlife

Over the last year the Division of Fish and Wildlife acquired, and is restoring, over 3,800 acres of mixed native prairie and agricultural land for the Wildlife Management Areas (WMA) system. Typically, these lands are not managed for a single species or group of species, but include restoration and management practices that can benefit pollinators. Maintenance practices that benefited pollinator species included burning 21,435, 26,868, and 1,755 acres of grassland, brush land, and forest respectively. Four thousand twenty-nine acres of grassland were restored with diverse native seed mixes and invasive species control was conducted on 4,630 acres. An agreement signed by the MNDNR and the Minnesota Department of Agriculture to bring all MNDNR farming lands up to Minnesota Agricultural Water Quality Certification standards is likely to include cover crops that are beneficial to pollinators.

Parks and Trails

In 2018, the Division of Parks and Trails (PAT) restored 513 acres of prairie/pollinator habitat. Portions of these acres were part of a Legislative-Citizen Commission on Minnesota Resources (LCCMR) project to restore 520 acres of pollinator habitat in state parks within core areas of the MN Prairie Plan by 6/30/2021. The LCCMR project also provided funds to establish or enhance pollinator plantings and accessible pollinator exhibits at ten state parks within the same timeframe. The Division of Parks and Trails collaborated with the Minnesota Zoo on an LCCMR project to optimize habitat for the federally threatened Dakota Skipper at Glacial Lakes State Park in preparation for a re-introduction of the species. Additionally, the division conducted prescribed burns on 3,500 acres and implemented invasive species management on just over 8,000 acres in order to maintain and improve prairie/pollinator habitat on PAT managed lands.

Ecological and Water Resources

The Division of Ecological and Water Resources piloted monitoring protocols for prairie bees and butterflies at sites with established long-term plant monitoring. Seven sites were surveyed three times for butterflies and five times for bees over the course of the season. The goal is to expand the protocols to coincide with ongoing long-term prairie monitoring, with the intention of estimating population trends of prairie bee and butterfly species. The EWR also continued to represent MNDNR in the Mid-America Monarch Conservation Strategy to help recover the eastern population of the monarch butterfly.

The Division of Ecological and Water Resources and Minnesota Biological Survey received LCCMR funds for two pollinator projects:

- The Native Bee Survey forms the foundation upon which future research and monitoring of trends in bee diversity and distribution will be based and includes:

- Conducting bee surveys in the Laurentian Mixed Forest (LMF) Province,
- Completing the statewide baseline bee survey, and
- Delivering outreach programs focused on Minnesota wild bee identification and monitoring.
- The Minnesota Biological Survey project includes surveys for pollinators in Lake of the Woods, St. Louis, and Koochiching counties as part of the completion of the statewide, baseline county-by-county survey started in 1987. Updates and enhancements to 1980s–90s field surveys will be included as well as monitoring data in select native prairies, wetlands, and forests that are important to current collaborative planning and management initiatives or of imminent conservation attention.

Minnesota Department of Transportation

In 2019, the Minnesota Department of Transportation (MnDOT) took a multifaceted approach to pollinator protection. The agency created, protected, and enhanced pollinator habitat on state-managed transportation lands. It supported pollinator research on rights-of-way and regularly attended rights-of-way as habitat working group meetings. MnDOT also participated in the development of the United States Fish and Wildlife Service’s Nationwide Candidate Conservation Agreement for Monarch Butterfly on Energy and Transportation Lands.

Minnesota Environmental Quality Board

The Environmental Quality Board (EQB) convened the Interagency Pollinator Protection Team (IPPT) in 2019 and supported several cross-agency efforts for pollinators. The IPPT collaborated with several external partners to develop the 2019 Minnesota State Agency Pollinator Report, including the creation of a pollinator scorecard and development of recommendations. Additionally, the IPPT worked together to promote National Pollinator Week in Minnesota, including lighting the Interstate 35W bridge with the colors of the rusty patched bumble bee.

The EQB also convened subcommittees of the IPPT to support agency pollinator efforts to offer expertise on pollinator habitat establishment and conduct bumble bee surveys at the Governor’s Residence.

The EQB is hiring a full time pollinator coordinator to continue and expand cross-agency pollinator work and establish a public engagement process to ensure public participation in pollinator policy and program development and build cross-sector partnerships.

Minnesota Pollution Control Agency (MPCA)

The Closed Landfill Program (CLP) created a strategy document that outlines agency plans to create pollinator habitat on CLP-closed landfills.

Minnesota Zoo (MNZOO)

The Minnesota Zoo is a global leader in pollinator conservation through action and outreach, following science-driven actions and sound management of the Zoo’s landscapes. The Prairie Butterfly Conservation Program is

helping to save Minnesota's butterflies through foundational rearing, breeding, and release programs for Minnesota endangered butterflies, and studies of the conditions that they need in the wild. In 2019, the Minnesota Zoo completed a third year of reintroductions of Dakota skippers, releasing a record 450+ adults at a southwest Minnesota prairie preserve where they disappeared from in the late 2000s. Zoo scientists re-sighted many of these released Dakota skippers, and also confirmed successful breeding in the wild again at this preserve. Zoo biologists also released Poweshiek skipperlings back into the wild to support the only known remaining populations in the United States for this critically Endangered species. Additional reintroductions of Zoo-reared butterflies are planned for 2020 to help restore these once widespread but now rare Minnesota pollinators. Partnering with many State, Federal, tribal, international, university, and non-profit agencies and organizations, the Prairie Butterfly Conservation Program is primarily funded through grants from Minnesota's Environment and Natural Resources Trust Fund, the Legacy Amendment's Arts and Cultural Heritage Fund, and the U.S. Fish and Wildlife Service.

The Minnesota Zoo provides pollinator outreach and education to 1.3 million visitors per year, and maintains expanding pollinator-friendly landscaping across its 485-acre campus through public-private partnerships. Minnesota's new State Bee, the endangered rusty patched bumble bee, was again found utilizing new educational wildflower gardens at the Minnesota Zoo, demonstrating that small actions can help endangered species in Minnesota backyards. Zoo scientists are planning formal surveys and research for rusty patched bumble bees and other pollinators on Minnesota Zoo