

June 2021

Michigan Managed Pollinator Protection Plan Status, Update, and Future Directions



Background

The purpose of the Michigan Managed Pollinator Protection Plan is to reduce pesticide exposure to managed pollinators through communication, outreach, and education. This program is part of a national effort for states to develop specific plans to reduce pesticide harm to pollinators. More information on the plan, including a [background on why the plan was written](#), [SFIREG Guidance for plan development](#), [plan updates](#), or to read the [copy of the plan](#), visit <https://pollinators.msu.edu/programs/protection-plan/>.

Current steering committee members

- Mike Hansen, Michigan Department of Agriculture and Rural Development
 - Ana Heck, Michigan State University Extension
 - Rufus Issacs, Michigan State University Department of Entomology
 - Meghan Milbrath, Michigan State University Department of Entomology
 - Jamie Ostrowski, Michigan Commercial Beekeepers Association
 - Audrey Sebolt, Michigan Farm Bureau
 - Brian Verhougstraete, Michigan Department of Agriculture and Rural Development
-

2021 Outcomes

Thanks to generous support that the Michigan Department of Agriculture and Rural Development (MDARD) secured from the EPA, MSU Extension implemented strategies in the Michigan Managed Pollinator Protection Plan by developing programs and created resources to improve pollinator health.

Websites

- In coordination with MDARD, MSU Extension created a [webpage to share resources related to the Michigan Managed Pollinator Protection Plan and updates on our work](#).
- MSU also updated its [webpage about the background of the Michigan Managed Pollinator Protection Plan](#).
- MSU Extension also updated pages related to the Michigan Managed Pollinator Protection Plan (MP3), including [Starting and Keeping Bees in Michigan: Rules and Regulations](#) and [What to do if you suspect your honey bee colony has been poisoned by pesticides](#), and a page of [pollinator resources for growers](#).

Crop-specific pollinator stewardship

- The [Blueberry Pollinator Stewardship Guide](#) was developed in 2020 with feedback and support from blueberry growers, commercial beekeepers, MSU Extension Specialists and Educators, and the Michigan Blueberry Commission. Dr. Rufus Isaacs was a co-author and provided technical information and edits.
 - MSU Extension gave two webinar presentations to blueberry growers about pollinator stewardship in 2021, each with about 50 growers in attendance.
 - MSU Extension published an MSU Extension News Article in February 2021 to announce the guide's release: [Pollinator stewardship guide for blueberry growers is now available](#).
 - [Fruit Grower News published our MSU Extension News Article](#).
 - The guide was professionally translated into Spanish.
 - MSU Extension is printing English and Spanish versions of the guide to provide to growers.
 - MSU Extension will provide hard copies of the guide to commercial beekeepers at the Michigan Commercial Beekeepers Association annual meeting in July 2021 and to growers at Great Lakes EXPO in December 2021.
- The [Vegetable Pollinator Stewardship Guide](#) was developed with feedback and support from vegetable growers, commercial beekeepers, Michigan Vegetable

Council. Ron Goldy, Ben Philips, and Ben Werling, MSU Extension Vegetable Educators/Specialists), were co-authors and provided technical content and edits.

- MSU Extension published an MSU Extension News Article to announce the guide's release: [Pollinator stewardship guide for vegetable growers](#).
- [Vegetable Grower News published our MSU Extension News article](#).
- [Bee Culture's Catch the Buzz \(30,000 subscribers\) published the guide's announcement](#).
- The guide was professionally translated into Spanish.
- MSU Extension is printing English and Spanish versions of the guide to provide to growers. (A commercial beekeeper requested 400 copies to hand out to growers! He is from outside of Michigan and will pay for the printing of these copies.)
- MSU Extension will provide hard copies of the guide to commercial beekeepers at the Michigan Commercial Beekeepers Association annual meeting in July 2021 and to growers at Great Lakes EXPO in December 2021.
- **Apple & cherry pollinator stewardship**
 - Ana Heck and Julianna Wilson presented on pollinator stewardship at the MSU Extension 2021 Statewide Spring Tree Fruit Webinar Series.
 - The live webinar had about 125 attendees.
 - [The Pollinator Stewardship in Orchards webinar recording is available online](#).
 - There are plans for a written guide on pollinator stewardship in apples and cherries.

Honey Bee Health Coalition Bee Integrated Demonstration Project

- MSU Extension worked with the Honey Bee Health Coalition Bee Integrated Demonstration Project to create 2 videos highlighting good communication between commercial beekeepers and growers that support pollinator health:
- Mike VanAgtmael (apple/cherry grower), Jim Hilton (commercial beekeeper), and Ana Heck (MSU Extension) were filmed in May 2021.
- Matt Jansen (blueberries and vegetables), Jamie Ostrowski (commercial beekeeper), Bee Informed Partnership, and MSU Extension will be filmed in July 2021.

Pollinator education for certified pesticide applicators

- MSU Extension gave 4 pollinator presentations at recertification credit clinics November 2020-present, reaching 185 applicators

-
- MSU Extension shared the pollinator chapter that it authored for the Michigan Commercial Applicator Core Manual with other states to use in their training and educational materials.

Webinars for home gardeners & pollinator enthusiasts

- The buzz about native bees: The multiple interacting factors that contribute to recent native bee declines
 - 88 attendees at live webinar
 - [Webinar recording posted on YouTube](#)
- Horticulture Café: Pesticide Use for Home Gardeners
 - Presentation developed with 3 MSU Extension Consumer Horticulture Educators (Christopher Imler, David Lowenstein, and Nathan Walton)
 - 31 attendees at live webinar
 - Formal video in progress
- Native bees of Michigan: How to identify and support our native pollinators with Dr. Rebecca Tonietto, *Thursday, June 17th, 7:00pm*
 - 86 attendees at live webinar

Large-scale pollinator planting article series

- MSU Extension is drafting 6 real life case studies about large-scale pollinator habitat installations intended to demystify the process and provide different examples/options.

Pollinator garden signs

- MSU Extension is working with the MSU Extension Consumer Horticulture Team to design and print educational signs for pollinator gardens.

Printing of resources

- MSU Extension is printing the following materials to share with home gardeners, beekeepers, pesticide applicators, growers, and the public at outreach events, conferences, and fairs:
 - Smart Gardening for Pollinators Tip Sheets
 1. [Smart plants to support pollinators](#)
 2. [Invite pollinators by creating a smart habitat](#)
 3. [Smart lawn alternatives to protect pollinators](#)
 4. [Smart lawn care to protect pollinators](#)
 5. [Pollination in vegetable gardens and backyard fruit](#)
 6. [What makes a pollinator rare or endangered?](#)

-
- [Bee Aware trifold brochure](#) - info about pesticide use for home gardeners (developed with MDARD/EPA funds)
 - [Pollinator Champions](#) flyer
 - [Michigan Pollinator Initiative](#) bookmark

Pollinator Champions Online Course

- MSU Extension continues to maintain and update Pollinator Champions, an online course about pollinators for the public.
- In 2020, 771 people took the free course and 113 chose to pay for certification to receive outreach materials about pollinators.
- Since the course began, the free course has had over 2,700 participants in the free course and more than 300 who chose to become certified.

Generally Accepted Agricultural and Management Practices for the Care of Farm Animals (GAAMPS)

- MSU Extension is drafting and proposing a full revision of the Beekeeping and Apiary Management GAAMPS to update and clarify recommended practices for beekeepers.

Honey bee training for Michigan Department of Agriculture and Rural Development (MDARD) Inspectors

- MSU Extension held an in-hive training for MDARD Right to Farm and Apiary Inspectors at the MSU Pollinator Performance Center.

[Managed Pollinator Protection Plans \(MP3\) Working Group](#)

- MSU received funding from the North Central IPM Center (NCIPMC) in 2020 and 2021 to lead a national [Managed Pollinator Protection Plans \(MP3\) Working Group](#) of people who work on pollinator protection plans.
- MSU Extension facilitates monthly meetings and coordinates group projects, including a presentation and online course about pollinators for pesticide applicators.
- This work is supported by the USDA National Institute of Food and Agriculture, Crop Protection and Pest Management Program through the North Central IPM Center (2018-70006-28883).

Media and press about MSU Apiculture Extension and the Pollinator Performance Center

- [New on-campus center to serve as hub of MSU pollinator research, teaching, outreach - Department of Entomology](#)
- [MSU creates hub for pollinator research | Farm Progress](#)
- [MSU opens pollinator center | 1430 WCMY](#)
- [MSU opens pollinator center | The Voice of LaSalle County since 1952! \(1430wcmv.com\)](#)

Potential future directions

- Continue developing pollinator stewardship guides through collaborative efforts with other MSU Extension Specialists/Educators, growers, and beekeepers
- Provide information about pollinators and pesticides to growers through presentations at meetings, field days, and/or conferences
- Give pollinator presentations to pesticide applicators at recertification credit clinics
- Continue working with MSU Extension Consumer Horticulture Team to provide resources about pollinator habitat and pesticide use to home gardeners
- Provide pesticide sampling for suspected pesticide bee kills and/or chronic pesticide exposure
- Support tribal communities in developing pollinator protection plans if they are interested
- Incorporate pollinator protection education into training programs offered to pesticide applicators
- Incorporate information related to pesticide toxicity, pollinator protection, and pollinator habitat into crop production manuals and industry training activities
- Create outreach material and newsletters to be distributed through social media to educate on proper use of pesticides and management options
- Collaborate with Master Gardeners for pesticide use trainings
- Increase usage of educational materials on MP3 related websites
- Work on outreach through the Michigan Farm News, Fruit Grower News, and Vegetable Grower News, by developing articles that speak to this topic, and at the end of the article, give resources to contact, i.e. trainers, MDARD reps, etc.
- Position a trifold brochure on pesticide risk to bees at areas where crop protection materials are purchased

This report was prepared by Ana Heck and Meghan Milbrath at Michigan State University. Please direct any questions to [Ana Heck](#) at heckanar@msu.edu.