

PP-604 [Pollination and Bee Flora]

Pollinator Protection Education for Farmers and Pesticide Applicators

Ana Heck, Meghan Milbrath

Michigan State University

BRIDGING RESEARCH AND PRACTICE (BRAP)

In the United States of America, Michigan is the second most agriculturally diverse state. Many of the crops grown in Michigan depend on bees for pollination, including apples, blueberries, cherries, and some vegetables. Farmers in Michigan rent honey bee colonies to pollinate fruit and vegetable crops. Depending on the crop and its pest management, honey bees are exposed to pesticides leading to chronic, sublethal effects and occasionally acute bee kills.

Michigan State University Extension (MSU Extension) encourages farmers and other pesticide users to improve pollinator health by learning about bees, installing pollinator habitat, and minimizing pesticide exposure to pollinators. Many farmers enjoy learning about honey bees and how they can support honey bee health. MSU Extension works across different agricultural sectors and shares information at farmer meetings about honey bees. Some of the recommendations to protect pollinators from pesticides align with integrated pest management strategies which aim to reduce costs and manage pests sustainably.

MSU Extension collaborates with educators and other colleagues across the country to develop and deliver education on pollinator protection. This education includes crop-specific recommendations on how to reduce pesticide risk to bees while managing pests. MSU Extension is a member of the Honey Bee Health Coalition, which facilitates a group of professionally diverse organizations in the agriculture sector to support honey bee health. Some of the coalition's work has focused on creating and sharing information about how farmers and pesticide applicators can protect bees from pesticides. MSU Extension also coordinates the Managed Pollinator Protection Working Group, which includes members from over 20 states who work together to develop and promote pollinator protection education. These collaborations have allowed educators to share and co-develop resources on reducing risks of pesticides to honey bees in agricultural settings.

Many beekeepers also have an opportunity to share information with farmers about the importance of bees and how to protect them from pesticides. By understanding pest management needs and strategies to reduce pesticide risk to bees, beekeepers can engage local farmers in conversations about how to improve pollinator health.