What Is the Farmland Pollinator Protection Project?

The goal of the Farmland Pollinator Protection Project is to provide high-quality pollinator habitat and forage resources on protected farms for managed honey bees and wild pollinators. The project is also a pilot initiative to test the potential for generating investments in pollinator habitat credits that can be marketed by the partners. The project connects willing landowners with sustainably minded corporations, individuals and foundations that want to make a difference by supporting pollinators through the creation of high-quality pollinator habitat on protected farms.

The Farmland Pollinator Protection Project is a special initiative developed by a group of well-respected partners that includes American Farmland Trust, The Grand Traverse Regional Land Conservancy, Kieser & Associates, and Michigan State University Department of Entomology professors Drs. Rufus Isaacs and Doug Landis. The project is funded through a Conservation Innovation Grant (CIG) provided by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

The immediate goals of the Farmland Pollinator Protection Project are:

- Establishment of at least 40 acres of pollinator habitat (40 pollinator credits) on 20 new or existing permanently protected farmland sites.
- Expert training on proven pollinator habitat implementation techniques to local farmers and conservationists.
- Engagement of at least 15 investors to help fund establishment of pollinator habitat on selected sites through purchase of the generated pollinator habitat credits.
- Expansion of the resulting market framework and lessons learned to other states with active farmland protection programs.

Importance of Pollinators

Bees and other native pollinators are a vital component of our ecosystem and food supply. Bees, insects and other animals pollinate an estimated 35 percent of all crops grown throughout the world. While managed honey bees provide the majority of pollinator services, wild pollinators are significant contributors as well. A 2012 Cornell study (Calderone, N.W., May 2012) concluded that insect pollinator services (both managed and native) contributed $29 billion to U.S. farm income in 2010. In many cases these crops are directly dependent on bees and other invertebrates for pollination.

Pollinator Decline

During the fall of 2006, beekeepers began reporting unusually high losses of 30 to 90 percent of their hives. What was termed “Colony Collapse Disorder,” or “CCD,” is now suspected to be caused by a combination of pesticides, parasites, viruses, loss of foraging habitat and a changing climate. In addition to declines in managed bee populations, the U.S. Fish and Wildlife
Service lists more than 50 native pollinator species as being threatened or endangered, and wild honeybee populations have dropped 25 percent since 1990. In January of 2017, the rusty patched bumblebee was listed as endangered—the first such designation for a bumblebee and for a bee species in the continental United States.

**How We Can Help**

Providing high-quality habitat on well-managed farmland is a promising way to attract and increase both managed and native pollinator populations. This same high-quality habitat can also be used by beneficial insects such as predatory beetles and parasitic wasps. A 2006 estimate put the value of natural pest control by beneficial insects at $4.5 billion annually. Pollinators, both managed and native, have three basic needs: 1) nesting habitat; 2) food; and 3) protection from herbicides and insecticides. The varying functions and needs of native versus managed honey bees requires different management strategies.

**Managed Honey Bees Versus Native Pollinators**

European honey bees are social creatures that live in managed hives and produce honey and pollination services to beekeepers. Nests are provided by the beekeeper and inspected regularly for disease or pest problems. Nesting habitat for wild pollinators typically comes in two forms: ground nests (70 percent) and wood tunnel nests (30 percent). Providing high-quality nesting habitat for native pollinators requires undisturbed and untilled ground—more specifically, bare dirt and direct sunlight. In addition, old brush piles can address the habitat needs of the roughly 30 percent of pollinators that nest in wood tunnels.

Food for managed honey bees and other wild pollinators comes from pollen produced by a wide array of flowering plants. These include perennial forbs, legumes, native grasses, and woody shrubs and trees. The primary consideration for developing forage habitat for managed honey bees is volume of food available. Satisfying the food requirements for managed honey bees can be accomplished with legumes such as alfalfa, vetch and clover. Wild pollinators require a diverse mix of flowering plant species that bloom at different times throughout the growing season, ensuring a continuous food supply. Equally important is selecting plants that have diverse colors, flower sizes and growth characteristics.

For managed honey bees and wild pollinators, protection from pesticides is important for the long-term health of their communities. Timing and formulation of the pesticides are important considerations in pollinator habitat management. Toxic substances should never be applied to plants in bloom, and targeting the application to those times when pollinators are not active is a good way to reduce negative impacts.

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If you are interested in learning more about the **Farmland Pollinator Protection Project** and how you can help support pollinators, please visit our website: [www.farmland.org/pollinatorprotection](http://www.farmland.org/pollinatorprotection)

Or contact us at:

**Vic Lane**  
Grand Traverse Regional Land Conservancy  
3860 North Long Lake Road, Suite D  
Traverse City, MI 49684  
231.929.7911  
vlane@gtrlc.org

**Brian Brandt**  
American Farmland Trust  
5655 N. High ST., Suite 203  
Worthington, OH 43085  
614.430.8130  
bbrandt@farmland.org