

## **POLLINATOR FRIENDLY GARDENS BOOST ENVIRONMENTAL HEALTH**

Margaret Hindman, Frederick County Master Gardener

“It’s like a wonderland,” says Debby Moone of the three-acre Frederick County property she has transformed to attract and support wildlife, particularly pollinators. What was an expansive lawn seven years ago is now planted with native trees, shrubs and perennials that provide wildlife with food and water, shelter, and breeding sites. “It’s satisfying—and fun—to find new ways to garden that are better for the whole ecosystem,” she reflects.

The worldwide decline in the numbers of bees, butterflies, and other insects has been making headlines in scientific journals and the popular press. This is worrisome, because insects are crucial to the health of our environment.

Bees and other pollinators play an essential role in the reproduction of over 85% of the world’s flowering plants, including more than two-thirds of crop species, according to the Xerces Society. In addition, pollinators are a keystone species in most terrestrial ecosystems; they are essential to the survival of many birds and mammals. See <https://xerces.org/pollinator-conservation/> to learn more.

The good news is that anyone with a yard, large or small, can help turn around the decline. Moone is one of 18 county residents who qualified in 2018 for Pollinator Friendly Garden certification from Frederick County Master Gardeners. The program was launched to encourage local residents to increase vitally needed pollinator habitat. You’ll find the application at <https://bit.ly/2tcqbZK>. A \$20 fee helps cover the cost of an attractive, colorful yard sign. So what is a Pollinator Friendly Garden? It’s a landscape that provides sustenance and shelter, with little or no use of toxic substances.

You need a minimum of four native trees and shrubs; groupings of at least six kinds of native perennials that provide pollen and nectar throughout the growing season, with a diversity of blossom shapes and sizes; and two types of non-natives, such as herbs, that support pollinators. The application lists appropriate choices for these categories.

Jan Knox’s Pollinator Friendly Garden, on a small corner lot in Frederick City, is completely covered with plants that sustain bees and butterflies. Something is blooming from early spring to late fall. Although her yard is far from a traditional landscape, Knox says, “It’s amazing how many people stop and say how beautiful it is.”

Even in late winter, Deb and Scott Keimig enjoy seeing bees drawn by the blooms of witch hazels. Their Pollinator Friendly acre in Braddock Heights boasts many native plants, important in supporting pollinators because native insects and native plants have co-evolved and many insects can only eat the plants they co-evolved with. Find out more at <http://extension.umd.edu/hgic/topics/what-can-i-do-help-pollinators>.

Also essential for Pollinator Friendly certification are host plants, which provide food for butterfly caterpillars. “My neighbor’s children are fascinated by the lifecycle of the Monarch,” Deb Keimig says. The eggs are laid on milkweeds—the only plant the caterpillars can eat once they hatch. The caterpillars then transform into a delicate chrysalis, from which a glorious butterfly eventually emerges.

Finally, certification requires that you

- provide water sources;
- offer places for nesting and overwintering, including areas of bare soil for ground-nesting bees;
- reduce invasive non-native plants that can crowd out the plants pollinators depend on; and
- minimize or eliminate pesticide and herbicide use.

The application is a great resource even if you’re not ready to apply for certification.

Most pollinator gardens are works in progress. You can start small, adding a few pollinator-friendly items to your landscape each season. Every little bit helps in providing much-needed habitat for bees and other pollinators.



*A bee collects pollen from Anise hyssop. Pollen collection is facilitated by branched hairs on the thorax that have an electrostatic charge.*

Photo courtesy of Margaret Hindman

*For more information about the Frederick County Master Gardener/Horticulture Program, visit: <http://extension.umd.edu/frederick-county/home-gardening> or call Susan Trice at the University of Maryland Extension Frederick County office, 301-600-1596.*

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