

WHY PLANT A POLLINATOR GARDEN? PART I

By the Master Gardeners of Frederick County

Imagine you are sitting outside on a warm summer morning with a cool drink and a muffin made with blueberries from your own bushes. You look out over a garden filled with brightly colored flowers and butterflies that flit from blossom to blossom. Listening closely, you hear the low drone of dozens of bees enjoying the blooms. Birds chirp in the shady oak tree above you. You laugh at the antics of a chickadee hunting caterpillars for its hatchlings.

Now imagine the alternative. You are inside, looking out over a boring expanse of green lawn. Nothing stirs. There are no insects because there are no flowers, no birds because there are no insects.

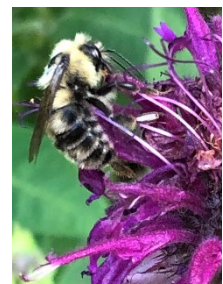
Your garden and its plants can have a positive impact on the environment, supporting the foundation of the food web that sustains all life. More than 95 percent of bird species, as well as fish, reptiles, amphibians and mammals, depend on insects as a source of nutrition, according to Dr. Karin Burghardt, Assistant Professor in the Department of Entomology at the University of Maryland, in a recent lecture to the Frederick County Extension Master Gardeners. It is no accident that the dramatic decline in insect populations closely correlates with the decline in many bird species. We can help slow or halt the decline of pollinators by establishing pollinator-friendly gardens in our own environs.

Insects are critical to our food supply. Insects pollinate many important crops, such as melons, squash, apples and stone fruits. The plants will flower, but if the flowers are not pollinated there will be no production. This applies to the crops you grow in your backyard garden as well as those grown by farmers—the produce we buy every day at the market. Fewer pollinators mean fewer fruits and vegetables, which in turn means higher costs when we shop.

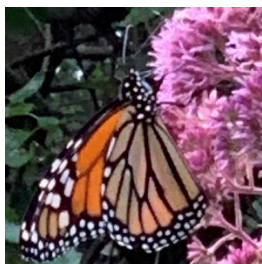
Creating a garden that supports pollinating insects starts by focusing on native plants. Studies have shown that gardens containing native plants support many more insects and a more diverse insect and bird population than gardens containing only non-natives. Because native plants co-evolved with native insects, they are the ideal source of the nectar, pollen and vegetative parts that serve as food for these insects.

Another reason that you might want to use native plants is that once such a garden is established, it requires no pesticides or fertilizer, little or no supplemental water, and relatively little maintenance. Since these plants evolved in our area, they are well adapted to our soils, summer heat and humidity, and late summer droughts.

This doesn't mean that you cannot grow the peony from Grandma's garden. Research has shown that yards with up to 30 percent nonnative plant biomass (trees, shrubs, flowers, vegetables and grass) will still support a healthy population of diverse insects.



BEE BALM



**MONARCH ON
JOE PYE**

When selecting plants, consider the bloom period, as well as flower shape, size, and even color, of each species you plant. There should be flowers blooming from early spring through late fall. While some insects utilize flower nectar, many others have specialized mouthparts that best fit only certain flower shapes. Long-tongued insects reach deep into tubular flowers such as honeysuckle or bee balm, while short-tongued insects prefer shallow flowers such as asters and goldenrod. Bees prefer flowers that are purple, blue, yellow or white. Butterflies are attracted to yellow, orange, pink and purple blossoms. Some flowers have “nectar guides,” stripes that direct an insect into the nectar-rich portion of the bloom. Be sure to include trees, shrubs, perennials of

different heights, and groundcovers—each level plays an important role in providing insects with shelter, nesting sites and cover from predators.

Finally, when you design your pollinator-friendly garden, make sure you provide appropriate water sources; offer year-round shelter for insects, birds, and other animals; and create an environment free from poisons, invasive plants, and other hazards.

Many resources are available to help you design and maintain a pollinator garden. Check below for Web URLs. Your local Frederick County Master Gardeners are always available to help with specific questions. Visit <http://extension.umd.edu/frederick-county/home-gardening>, or call us at 301-600-1596.

Resources for pollinator-friendly gardens

If you would like to have your garden certified as pollinator-friendly, you will need to include both native and non-native plants that support the insect life cycle. Plants that are recommended for local gardens are listed in appendices attached to the Frederick County MG Pollinator Certification Form:

<https://extension.umd.edu/sites/default/files/2021-03/FC-MGPub%20Pollinator%20Friendly%20Garden%20Application%208-24-19.pdf>

General information about pollinator gardens

<https://extension.umd.edu/resource/pollinator-gardens>

<https://extension.umd.edu/programs/environment-natural-resources/program-areas/master-gardener-program/about-program/pollinators>

<https://extension.umd.edu/locations/charles-county/master-gardener/pollinators>

https://mda.maryland.gov/resource_conservation/counties/Tip7.pdf

<https://marylandgrows.umd.edu/2018/04/25/plant-for-pollinators-9-ways-to-attract-and-help-pollinators-in-your-garden-and-yard/>

<https://dnr.maryland.gov/wildlife/Pages/habitat/wahumbutbee.aspx>

https://www.fs.fed.us/wildflowers/pollinators/documents/AttractingPollinatorsEasternUS_V1.pdf

<https://livegreenhoward.com/land/pollinators/>

Information about native plants for this area

<https://extension.umd.edu/resource/why-include-native-plants-your-garden>

<https://extension.umd.edu/locations/charles-county/master-gardener/native-plants>

<https://www.fws.gov/Chesapeakebay/pdf/NativePlantsforWildlifeHabitatandConservationLandscaping.pdf>

<https://mdflora.org/resources/Publications/GardenersGuidelines/Landscaping-Natives.pdf>

<https://mgv.org/plants/>

<https://www.nwf.org/nativeplantfinder/>

<https://www.audubon.org/native-plants>

<https://xerces.org/publications/brochures/bumble-bee-conservation>

<https://xerces.org/publications/brochures/monarch-conservation>



Blueberry Bee



Bee on Coreopsis



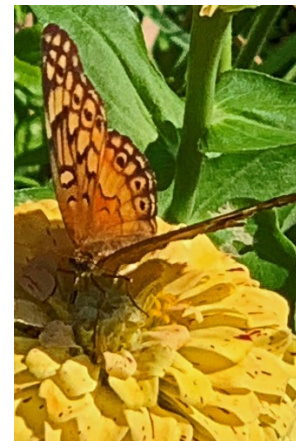
Butterfly Weed



Swallowtail on joe pye



Monarch caterpillar on milkweed



Butterfly on Zinnia

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

Find us on Facebook at <http://www.facebook.com/mastergardenersfrederickcountymaryland>

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