

# Planting Pollinator Friendly Gardens

One of the most important ways you can help pollinators is by provisioning your yard with many different kinds of plants that provide pollen and nectar. If you want to attract butterflies, you will also need to include a variety of larval host plants for butterfly caterpillars to eat.

**Choose plants native to your region.** Native plants share a long evolutionary history with their pollinators, so including a wide variety of natives will make your garden a favorite destination for pollinators. Chosen carefully to match the site conditions, natives will flourish without the addition of fertilizers and pesticides.

**Choose nectar- and pollen-rich flowers with a range of shapes, sizes, and colors.** Diversity is the key to a good pollinator garden. Because each pollinator has its own techniques for sourcing nectar and pollen, flowers should be as varied as the pollinators that visit them.

Generalist pollinators can visit a wide variety of flowers. Others, referred to as specialists, need a very different diet and may only be able to feed from one or two kinds of plants. Gardeners should strive to provide plants for both generalists and specialists. Choose plants with large, compound inflorescences of flowers, such as Joe Pyes, goldenrods, and milkweeds, to attract the most diversity of pollinators.

**Avoid modern hybrids.** Many garden plants have been manipulated for larger blooms and a show of color and may have lost their ability to produce nectar and pollen. In the breeding process, some flowers may become so complex that pollinators can't locate the nectar. When buying annuals, purchase older heirloom varieties known to have nectar and pollen.

**Have several different plants in bloom from early spring through late fall.** Some pollinators emerge in early spring, while others don't appear until mid-summer, but they all need pollen and nectar while they are active and rearing their young. To maximize



*Plants with compound inflorescences of small flowers attract a diversity of insects*



*A successful pollinator garden includes a diversity of plants.*

the effectiveness of your pollinator habitat, have a variety of plants in bloom throughout the season. Overlapping bloom times will ensure there is always something in your garden to provide nutrition for pollinators.

**Plant in drifts.** Pollinators are more likely to find plants in gardens that provide larger drifts of color. When you purchase plants, get at least three or more of one kind—more if you have the room—and plant them near each other.

**Avoid landscape fabric and mulch.** Instead, place plants closer together. Plants of varying heights planted close together will form a weed barrier far superior to a bed of mulch. The bonus is that you will have room for many more blooms for pollinators.

**Save perennial garden cleanup for spring.** Pollinators overwinter in different life stages: eggs, larvae, pupae, and adults. Some overwinter in hollow stems, while others attach to plants or overwinter in the leaf litter. To protect overwintering pollinators, don't cut down your perennial gardens until spring (early April), and keep beds of leaves intact through the winter.



## Larval Host Plants for Butterflies and Moths

Without host plants for butterfly larvae (caterpillars) to eat, there will be no butterflies! So don't forget to provide this vital food source. Many butterfly larvae can only feed on one or two specific host plants—particularly native trees, shrubs, and perennials—that are vital to their survival. Here are some examples:

- Monarch caterpillars only eat milkweed.
- Spicebush swallowtail caterpillars feed mainly on spicebush and sassafras.
- Black swallowtail caterpillars depend on plants in the parsley family.



*Spicebush swallowtail caterpillar feeding on spicebush.*



*Monarch caterpillar feeding on milkweed.*

*Black swallowtail caterpillar on native Zizia, a member of the parsley family.*

These caterpillars will eat the leaves of their host plants, so don't panic when you see some holes. It just means the plants are doing their job.

Many lists of larval host plant are available online. Dr. Douglas Tallamy of the University of Delaware has compiled a list of plants that support the most butterflies and moths. Go to [www.bringingnaturehome.net](http://www.bringingnaturehome.net).

## Purchasing Native Plants

Because the majority of plants sold at garden centers come from Europe and Asia, you may have to do a little searching to purchase native host plants for butterflies. Call the Master Gardeners at your local Penn State Extension office or go to the Pennsylvania Native Plant Society website for a resource list.

## [extension.psu.edu](http://extension.psu.edu)

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